

WORLDWIDE LOCATIONS

Sumitomo Machinery Corporation of America Headquarters & Manufacturing

4200 Holland Boulevard
Chesapeake, VA 23323
Tel: +1-757-485-3355 • 1-800-SMICYCLO
Fax: +1-757-485-7490

www.sumitomodrive.com
E-mail: customercare@suminet.com

U.S. Sales and Support

Chicago (Midwest)
Sumitomo Machinery Corporation of America
175 West Lake Drive
Glendale Heights, IL 60139
Tel: +1-630-752-0200 • 1-800-SMICYCLO
Fax: +1-630-752-0208

Los Angeles (West)
Sumitomo Machinery Corporation of America
2375 Railroad Street
Corona, CA 92880-5411
Tel: +1-951-340-4100 • 1-800-SMICYCLO
Fax: +1-951-340-4108

Canada

Toronto (East)
SM-Cyclo of Canada, Ltd.
1045 South Service Road, West
Oakville, Ontario, Canada L6L 6K3
Tel: +1-905-469-1050 • Fax: +1-905-469-1055

Vancouver (West)
SM-Cyclo of Canada, Ltd.
740 Chester Road, Annacis Island, Delta
B.C., Canada V3M 6J1
Tel: +1-604-525-5403 • Fax: +1-604-525-0879

Montreal
SM-Cyclo of Canada, Ltd.
2862 Blvd. Daniel-Johnson
Laval, Quebec, Canada H7P 5Z7
Tel: +1-450-686-8808 • Fax: +1-450-686-8000

World Headquarters

Japan
Sumitomo Heavy Industries, Ltd.
Power Transmission & Controls Group
ThinkPark Tower, 1-1, Osaki 2-chome,
Shinagawa-ku, Tokyo 141-6025 Japan
Tel: +81-367-37-2511 • Fax: +81-368-66-5160



Mexico

Monterrey
SM-Cyclo de Mexico, S.A. de C.V.
Av. Desarrollo No. 541
Parque Industrial Finsa
Guadalupe, N.L., Mexico CP 67114
Tel: +52-81-8144-5130 • Fax: +52-81-8369-3699

Mexico City
SM-Cyclo de Mexico, S.A. de C.V.
Privada Ceylan No. 59-B Bis
Colonia Industrial Vallejo
Delegacion Azcapotzalco, DF Mexico 02300
Tel: +52-55-5368-7172 • Fax: +52-55-5368-6699

Guadalajara
SM-Cyclo de Mexico S.A. de C.V.
Calle Broca No. 2605, Bodega 4
Parque Alamo Industrial
Tlaquepaque, JAL, Mexico 44490
Tel: +52-33-3675-43-69 • Fax: +52-33-3675-4418

Brazil

São Paulo
SM Cyclo Redutores do Brasil Comércio Ltda.
Av. Marquês de São Vicente, 587 – Cj. 16
Barra Funda – CEP: 01139-001
São Paulo, Brazil
Tel: +55-11-5585-3600 • Fax: +55-11-5585-3600

Chile

Santiago
SM Cyclo de Chile Ltda.
San Pablo 3507
Comuna de Quinta Normal - Santiago, Chile
Tel: +56-2892-7000 • Fax: +56-2892-7001

Antofagasta
SM Cyclo de Chile Ltda.
Calle 8, Manzana N2, Sitio 1
Sector La Negra, Antofagasta, Chile
Tel: +56-5556-1611 • Fax: +56-5556-1616

Concepción
SM Cyclo de Chile Ltda.
Camino a Coronel Km 10, #5580, Modulo 3-A
Comuna: San Pedro de la Paz – Concepción, Chile
Tel: +41-246-98-06/07 • Fax: +41-246-98-08

Argentina

Buenos Aires
SM-Cyclo de Argentina SA
Ing. Delpini #2236
Area de Promocion el Triangulo, Partido Malvinas Argentinas
Grand Bourg, Buenos Aires, Argentina B1615KGB
Tel: +54-11-4765-5332 • Fax: +54-11-4765-5517

Europe

Austria
Belgium
France
Germany
Italy
Spain
Sweden
United Kingdom

Asia

China
Hong Kong
Indonesia
Korea
Malaysia
Philippines
Singapore
Taiwan
Thailand
Vietnam

Other Locations

Australia
India
New Zealand

Sumitomo Drive Technologies

Cyclo® BBB5
BEVEL BUDDYBOX®

Reducers and Gearmotors

Sumitomo Drive Technologies
Always on the Move

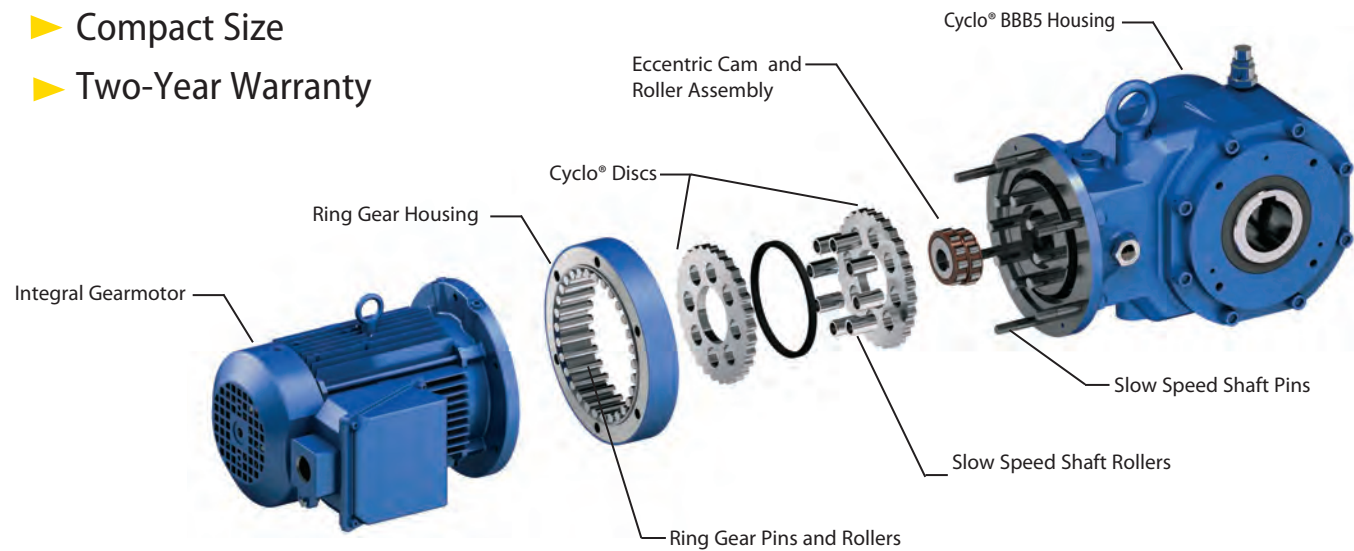
Cyclo® BBB5

BEVEL BUDDYBOX®

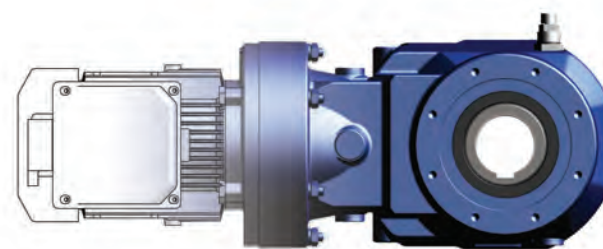
Speed Reducers and Gearmotors



- ▶ Rugged Spiral Bevel Output
- ▶ Modular Cyclo® Input
- ▶ Compact Size
- ▶ Two-Year Warranty



Use our online product configurator to build a Cyclo® BBB5 to fit your application. See inside back cover for further details. Configure your Cyclo® BBB5 today at www.sumitomodrive.com/configurator



Cyclo®
Highly reliable, Torque Dense Cycloidal Speed Reducers and Gearmotors in 23 standard sizes.



Cyclo® BBB4
Right Angle, Spiral Bevel Gearbox with Cyclo® Reducer Input.



Hyponic®
Features all-steel hypoid gear design, maintenance-free grease lubrication and high efficiency operation.



Cyclo® HBB
Parallel Shaft, Helical Gearbox with Cyclo® Reducer Input; features keyless, steel Taper-Grip® Bushing for easy mounting.



HSM
Helical Shaft Mounted Speed Reducer available with CEMA Screw Conveyor Drive Option.



Paramax® 9000
Right Angle and Offset Parallel Industrial Gearboxes in Universal Housing.

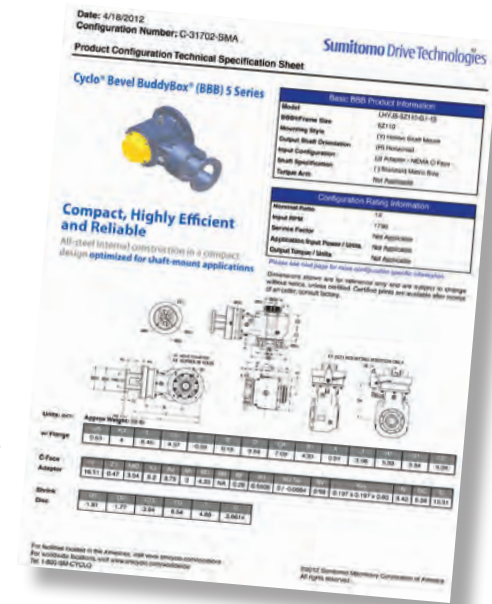
**Trying to select a drive?
Need more technical specifications?
Need pricing?**



Sumitomo Drive Technologies' online product Configurator streamlines the selection process, enabling you to build our power transmission products for your specific application.

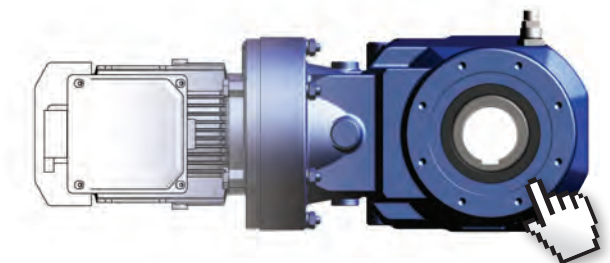
Available 24 hours a day, 7 days a week, registered users quickly receive results that include:

- ▶ Downloadable 2D and 3D CAD files*
- ▶ Product literature
- ▶ Technical specification sheet
- ▶ Product ratings
- ▶ Request for quote**
- ▶ Quotations**



This unique interactive tool is one more reason Sumitomo Drive Technologies is the world's premier power transmission and control solutions provider.

* Not all products are available for configuration
** Not available for all regions.



Configure your Cyclo® BBB5 today at www.sumitomodrive.com/Configurator

To request a catalog, or for more information on any of our high quality products, please visit our website:

www.sumitomodrive.com

Table of Contents

1. General Information

2. Speed Reducers

How to Select	2.2
Configure a Model Number (Nomenclature)	2.4
AGMA Load Classifications	2.6
Selection Tables.....	2.8
Single Reduction, Y1, Y2, Y3, Y5, Y6.....	2.8
Single Reduction, Y4,	2.72
Double Reduction.....	2.88
Dimensions.....	2.96

3. Gearmotors

How to Select	3.2
Configure a Model Number (Nomenclature)	3.4
AGMA Load Classifications	3.6
Selection Tables.....	3.8
1/8 HP - 75 HP.....	3.8
AF-Motor	3.66
Dimensions.....	3.76

4. Options

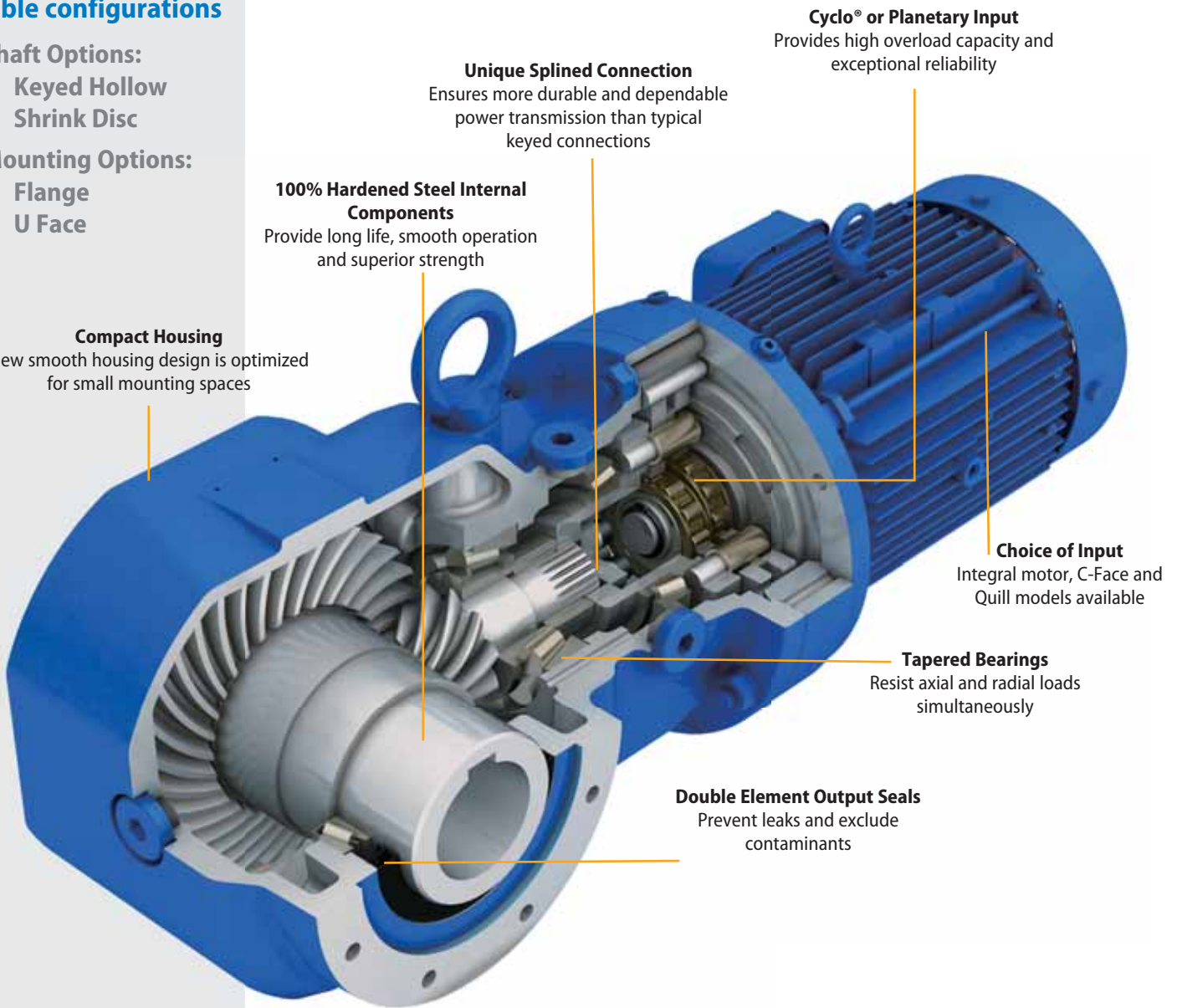
5. Appendices

Special Load Guidelines.....	5.2
Lubrication	5.8
Motor Data	5.10
Standard Wiring.....	5.22
Thermal Duty.....	5.24
Brakemotor Characteristics	5.25
Warranty	5.34



► Flexible configurations

- **Shaft Options:**
Keyed Hollow
Shrink Disc
- **Mounting Options:**
Flange
U Face



Compact Housing
New smooth housing design is optimized for small mounting spaces

100% Hardened Steel Internal Components
Provide long life, smooth operation and superior strength

Unique Splined Connection
Ensures more durable and dependable power transmission than typical keyed connections

Cyclo® or Planetary Input
Provides high overload capacity and exceptional reliability

Choice of Input
Integral motor, C-Face and Quill models available

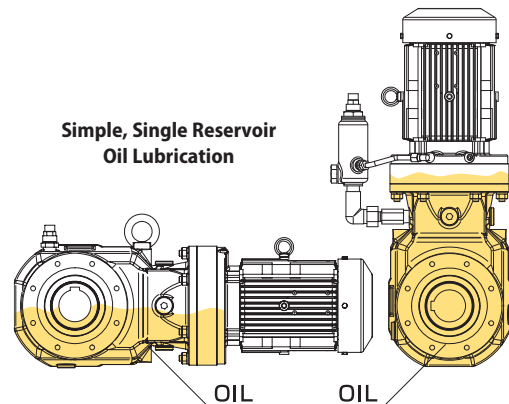
Tapered Bearings
Resist axial and radial loads simultaneously

Double Element Output Seals
Prevent leaks and exclude contaminants

More Compact, Space-Saving Design Than Typical Right-Angle Gearboxes



Simple, Single Reservoir Oil Lubrication



Product Description

The Cyclo® Bevel Buddy Box 5 (Cyclo® BBB5) built by Sumitomo is a versatile, high efficiency right angle unit that shares many of the features of the larger, robust Cyclo® BBB4. The Cyclo® BBB5 has been carefully constructed to take advantage of the inherent design advantages of the Cyclo and planetary inputs. In addition, because the design has been optimized for shaft mounted applications, the exterior dimensions have been minimized, without compromising the ability to transmit torque. The result is an extremely compact, efficient and reliable unit in a very power-dense package. The Cyclo® BBB5 is yet another example of a unique combination of features that produces a highly reliable, long-lived and efficient gearbox. Like the BBB4, the all-steel internal construction, in conjunction with the Cyclo® or planetary gear inputs, results in a gearbox that is truly dependable.

Features & Benefits

- **High performance steel bevel gear sets**
 - ~ Deliver high efficiency and consistent quality
- **Double element output seals**
 - ~ Four seal lips on every unit virtually eliminates the possibility of leaks
- **Robust Input Sections**
 - ~ Cyclo® and planetary inputs ensure year after year dependability
- **Two year warranty**
 - ~ Not limited by hours of operation or duty cycles
- **AGMA Ratings and Selection Methods**
 - ~ Conservative ratings, based on successful industry experience
- **Numerous Ratios**
 - ~ Buy exactly the ratio needed
- **Not thermally limited**
 - ~ Runs cooler and lasts longer

Specifications Summary

Ratios:	11:1 to 26,492:1 and greater
Torque Capacity:	45,450 in. lbs. (5,140 N·m)
HP:	1/8 to 75 (0.1 to 55 kW)
Mounting:	Hollow Shaft, Flange, Face
Options:	Integral Motor, C-Face, Quill, Shrink Disc and Shovel Base
Motor Standards:	NEMA, IEC, JIS, UL, CSA, CE

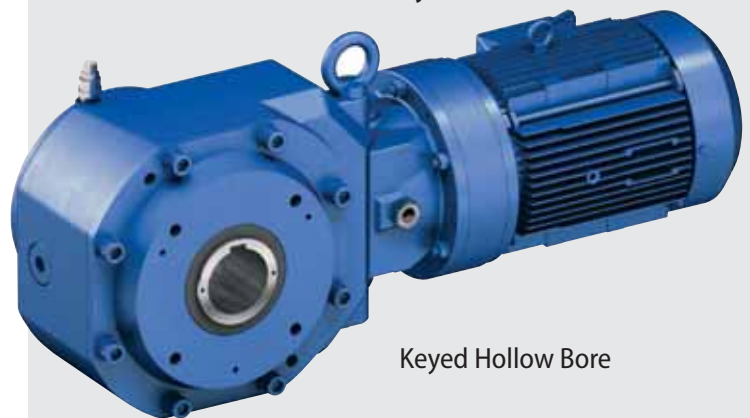
► Two Output Styles

- Easy on and off shrink disc option
- Standard metric sizes



Shrink Disc

- Simple, economical keyed hollow bore
- Inch or metric sizes readily available



Keyed Hollow Bore



Cyclo® Quality and Reliability, Right Angle Design

- High performance steel input components deliver up to 94% efficiency



Product Range (Standard Motor and Reducer Combinations)

Single Reduction Ratios 11 – 305 Combinations with 1750 RPM motor

Output RPM	Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	60	67	74	80	88	102	112	123	151	179	207	249	305	
		50 Hz	138	113	104	90.6	82.9	69.0	64.7	59.2	51.8	41.2	37.7	31.9	27.6	24.4	21.6	19.7	18.1	16.6	14.3	12.9	11.8	9.63	8.12	7.02	5.84	4.76
60 Hz	167	137	125	109	100	83.3	78.1	71.4	62.5	49.7	45.5	38.5	33.3	29.4	26.0	23.8	21.9	20.0	17.2	15.6	14.3	11.6	9.80	8.47	7.04	5.75		
Motor Power	1/4 (0.2)																											
	1/3 (0.25)																											
	1/2 (0.4)																											
	3/4 (0.55)																											
	1 (0.75)																											
	1.5 (1.1)																											
	2 (1.5)																											
	3 (2.2)																											
	5 (3.7)																											
	7.5 (5.5)																											
	10 (7.5)																											
	15 (11)																											
	20 (15)																											
	25 (18.5)																											
	30 (22)																											
	40 (30)																											
	50 (37)																											
60 (45)																												
75 (55)																												

Double Reduction Ratios 364 – 10658 Combinations with 1750 RPM motor

Output RPM	Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	2944	3511	4365	5177	6472	7228	8880	10658
		50 Hz	3.98	3.42	2.90	2.51	2.12	1.79	1.52	1.30	1.10	0.876	0.741	0.638	0.567	0.493	0.413	0.332	0.280	0.224	0.201	0.163
60 Hz	4.81	4.13	3.50	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.894	0.770	0.684	0.595	0.499	0.401	0.338	0.27	0.242	0.197	0.164	
Motor Power	1/8 (0.1)																					
	1/4 (0.2)																					
	1/3 (0.25)																					
	1/2 (0.4)																					
	3/4 (0.55)																					
	1 (0.75)																					
	1.5 (1.1)																					
	2 (1.5)																					
3 (2.2)																						

How do I select a Cyclo® BBB5 speed reducer or gearmotor?

Selection is based on the actual horsepower and/or torque requirements at the output shaft. The Cyclo® BBB5 speed reducer has particularly high efficiencies over a wide range of reduction ratios, which frequently permits the use of reduced input power requirements (smaller HP or kW motor) without sacrificing output shaft torque. The selection procedures in this catalog will guide you in choosing the most efficient reducer for your application.

What information do I need to get started in the selection process?

To select the proper reducer for your application, you will need to know:

- Application: type of driven machine
- Hours of operation per day
- Motor horsepower (HP or kW) and speed (RPM)
- Mounting position
- Environmental conditions
- Ambient temperature range

If there are any special environmental factors or operation requirements, they must also be noted. This information will be important in determining the Service Factor of your application.

What is the difference between BBB4 and BBB5?

The BBB5 is optimized for a minimal space envelope and shaft mounted applications. The BBB4 is more rugged by virtue of its stronger ductile iron housing, which has multiple mounting surfaces and is offered in numerous variants, including foot mounts and solid shafts.

What are Service Factors and how are they used?

In general, reducers and gearmotors are rated for the specific conditions and operating requirements of the application by the use of AGMA-defined Service Factors. There are three AGMA load classifications for reducers: uniform (U), moderate shock (M) and heavy shock (H) (page 2.6) and three AGMA load classifications for gearmotors: I, II and III (pages 3.6–3.7). The Service Factors are used in the product selection process to adjust for the specific conditions and operating requirements of your application.

What do I do if my application has particularly severe operating conditions?

The standard ratings for Cyclo® BBB5 are based on 10-hour daily service under conditions of uniform loads (equivalent to AGMA service factor 1.0). By following the product selection process, you will determine and apply the Service Factors to compensate for the severe operating conditions.

How can I be sure that the reducer can withstand periodic excessive overloads?

Cyclo® BBB5 Speed Reducers can provide solutions with extraordinary shock load capabilities. For applications with high shock loads, consult a Sumitomo Applications Engineer

What are the standard input speeds?

In general terms, the speeds are 1750 and 1450 RPM. The selection tables in this catalog are based on 1750 and 1450 RPM. When non-standard input speeds are used, the horsepower and torque ratings also vary.

What thermal capacity limitations does the Cyclo® BBB5 have?

The Cyclo® speed reducer, by virtue of its smooth, almost frictionless operation (unlike traditional helical gears), has a thermal rating that far exceeds its mechanical capacity and all but eliminates the conventional limitations due to heat.

What are the advantages of a shrink disc?

The shrink disc provides for easy mounting and removal to and from the shaft of the driven machine. Because it requires no keyway, the shaft isn't weakened and maximum torque is transmitted.

What kind of torque arm do I specify? At what position should I mount it?

The standard torque arm assembly supplied is a Flange Mount (Banjo) type as shown on page 4.3. The torque arm should be mounted at 90 degrees to a line from the point of attachment to the reducer and the center of the output bore with up to 30 degrees plus or minus variance. A bracket type torque arm is also offered as a non-stock option.

Standard Specifications

	Standard Specifications	Standard Specifications with Built-In Brake	
3-Phase Integral Motor	Capacity Range:	1/8 ~ 75 HP (0.1 ~ 55 kW), 4P	1/8 ~ 40 HP (0.1 kW ~ 30 kW), 4P: FB Brake 50 ~ 75 HP (37 kW ~ 55 kW), 4P: ESB Brake
	Enclosure:	Totally enclosed fan cooled type (1/8, 0.1 kW), 4P Totally enclosed non ventilated)	Totally enclosed fan cooled type (1/8, 0.1 kW, 4P Totally enclosed non ventilated)
	Power Supply:	230/460 Volts, 60 Hz 575 Volts, 60 Hz	230/460 Volts, 60 Hz 575 Volts, 60 Hz
	Insulation:	Class F	Class F
	Time Rating	Continuous	Continuous

Reducer	Reduction:	Combination of Cyclo® input and right angle spiral bevel gear output.
	Lubrication:	Cyclo® portion is oil lubricated; Bevel portion is oil lubricated.
	Seals:	Nitrile material, dual lipped.
	Material:	Rugged cast iron housings in unit sizes 5A through 5C, and die cast aluminum for unit size 5Z.
	Paint Color:	Blue, Munsell color number 6.5PB 3.6/8.2
	Bearings:	Tapered roller bearings on geared output of unit sizes 5A through 5C and deep groove ball bearings in unit size 5Z. Ball bearings on Cyclo® input.

Ambient Conditions	Installation Location:	Indoors (Minimal dust and humidity)
	Ambient Temperature:	14°~104° F (-10° ~ 40° C)
	Ambient Humidity:	Under 85%
	Elevation:	Under 3,281 ft. (1000 meters)
	Atmosphere:	Well ventilated location, free of corrosive gases, explosive gases, vapors and dust.

Shaft Rotation

On single reduction Cyclo® BBB5 speed reducers, ratios 11 through 417, the slow speed shaft rotates in a reverse direction to that of the high speed shaft.

On double reduction units, ratios 357 through 26,492, both the high speed and the slow speed shaft rotate in the same direction.

Input Speeds

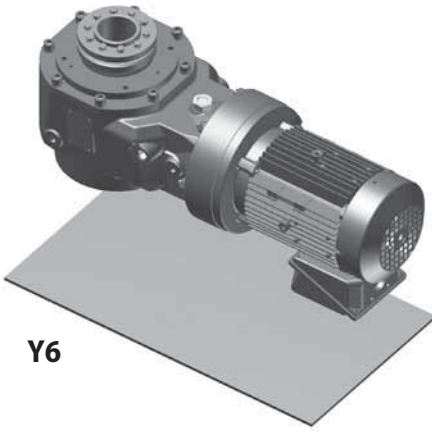
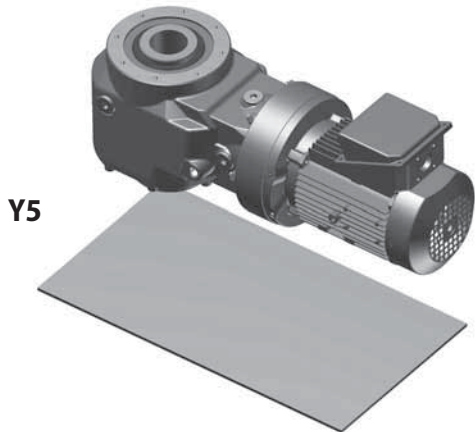
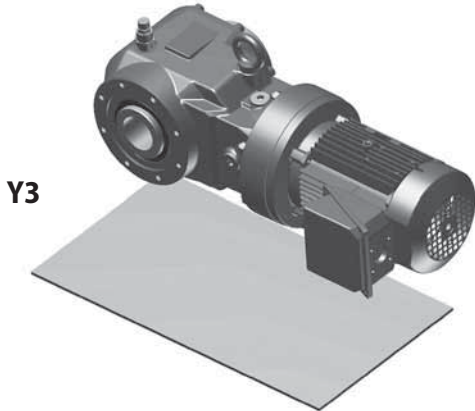
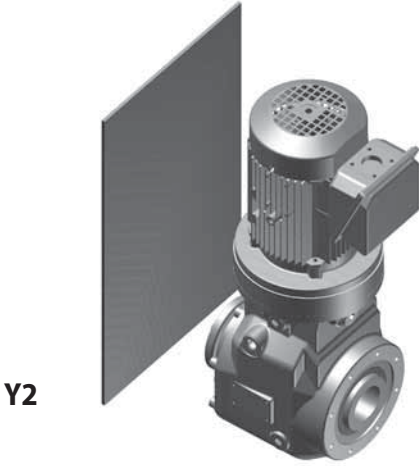
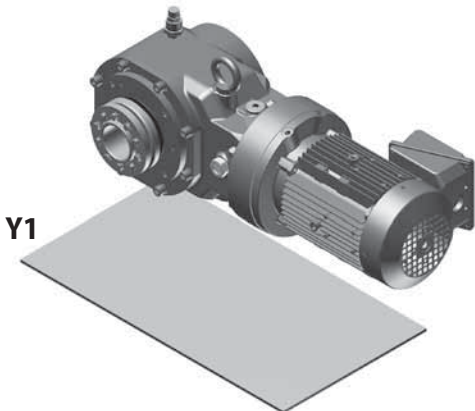
In general terms, the standard input speeds of single reduction units are 1750 and 1450 RPM. When non-standard input speeds are used, the power and torque ratings will also vary.

Thermal Capacity

The Cyclo® BBB5 speed reducer's smooth, almost frictionless operation all but eliminates the conventional limitations due to heat. In all sizes, Cyclo® BBB5 speed reducers have thermal ratings that exceed their mechanical capacity.

Mounting Positions

Note: Y1 position eyebolt provided as standard for all positions. Consult factory for eyebolts shown for positions Y2-Y6.



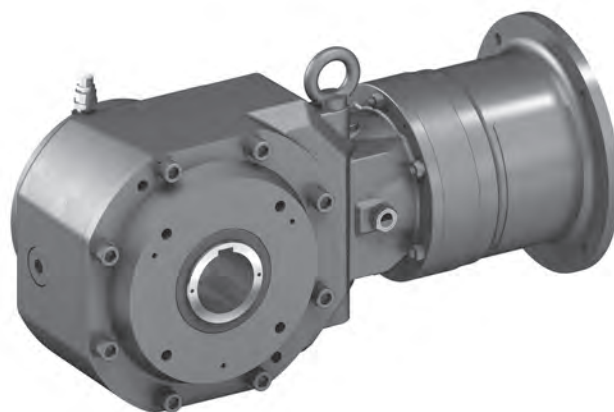
Optional Nominal and Exact Ratios

Single Reduction														
Nominal Ratio	Overall Input	19	26	42	48	54	93	138	163	189	227	278		
	Overall Output	6	8	13	15	17	29	43	51	59	71	87		
Exact Ratio	Overall Input	19.2	25.6	41.6	48	54.4	92.8	137.6	163.2	188.8	227.2	278.4		
	Overall Output	3.2												
		6	8	13	15	17	29	43	51	59	71	87		

Double Reduction															
Nominal Ratio	Overall Input	387	403	420	435	441	458	476	525	528	538	541	557	588	598
	Overall Output	121	126	120	136	126	143	136	150	165	168	169	174	168	187
Exact Ratio	Overall Input	387.2	403.2	420.0	435.2	441.0	457.6	476.0	525.0	528.0	537.6	540.8	556.8	588.0	598.4
	Overall Output	3.2	3.2	3.5	3.2	3.5	3.2	3.5	3.5	3.2	3.2	3.2	3.2	3.5	3.2
		(11 x 11)	(21 x 6)	(15 x 8)	(17 x 8)	(21 x 6)	(13 x 11)	(17 x 8)	(25 x 6)	(15 x 11)	(21 x 8)	(13 x 13)	(29 x 6)	(21 x 8)	(17 x 11)
Nominal Ratio	Overall Input	609	624	640	655	672	707	720	739	774	788	812	816	826	874
	Overall Output	174	195	200	187	210	221	225	231	221	225	232	255	258	273
Exact Ratio	Overall Input	609.0	624.0	640.0	654.5	672.0	707.2	720.0	739.2	773.5	787.5	812.0	816.0	825.6	873.6
	Overall Output	3.5	3.2	3.2	3.5	3.2	3.2	3.2	3.2	3.5	3.5	3.5	3.2	3.2	3.2
		(29 x 6)	(15 x 13)	(25 x 8)	(17 x 11)	(35 x 6)	(17 x 13)	(15 x 15)	(21 x 11)	(17 x 13)	(15 x 15)	(29 x 8)	(17 x 15)	(43 x 6)	(21 x 13)
Nominal Ratio	Overall Input	893	896	903	925	963	980	1008	1012	1021	1040	1071	1103	1138	1142
	Overall Output	255	280	258	289	275	280	315	289	319	325	306	315	325	357
Exact Ratio	Overall Input	892.5	896.0	903.0	924.8	962.5	980.0	1008.0	1011.5	1020.8	1040.0	1071.0	1102.5	1137.5	1142.4
	Overall Output	3.5	3.2	3.5	3.2	3.5	3.5	3.2	3.5	3.2	3.2	3.5	3.5	3.5	3.2
		(17 x 15)	(35 x 8)	(43 x 6)	(17 x 17)	(25 x 11)	(35 x 8)	(21 x 15)	(17 x 17)	(29 x 11)	(25 x 13)	(51 x 6)	(21 x 15)	(25 x 13)	(21 x 17)
Nominal Ratio	Overall Input	1200	1204	1206	1232	1239	1250	1306	1313	1348	1360	1392	1411	1428	1456
	Overall Output	375	344	377	385	354	357	408	375	385	425	435	441	408	455
Exact Ratio	Overall Input	1200.0	1204.0	1206.4	1232.0	1239.0	1249.5	1305.6	1312.5	1347.5	1360.0	1392.0	1411.2	1428.0	1456.0
	Overall Output	3.2	3.5	3.2	3.2	3.5	3.5	3.2	3.5	3.5	3.2	3.2	3.2	3.5	3.2
		(25 x 15)	(43 x 8)	(29 x 13)	(35 x 11)	(59 x 6)	(21 x 17)	(51 x 8)	(25 x 15)	(35 x 11)	(25 x 17)	(29 x 15)	(21 x 21)	(51 x 8)	(35 x 13)
Nominal Ratio	Overall Input	1488	1510	1514	1523	1544	1578	1593	1652	1670	1680	1726	1789	1795	1818
	Overall Output	425	472	473	435	441	493	455	472	522	525	493	559	561	568
Exact Ratio	Overall Input	1487.5	1510.4	1513.6	1522.5	1543.5	1577.6	1592.5	1652.0	1670.4	1680.0	1725.5	1788.8	1795.2	1817.6
	Overall Output	3.5	3.2	3.2	3.5	3.5	3.2	3.5	3.5	3.2	3.2	3.5	3.2	3.2	3.2
		(25 x 17)	(59 x 8)	(43 x 11)	(29 x 15)	(21 x 21)	(29 x 17)	(35 x 13)	(59 x 8)	(87 x 6)	(35 x 15)	(29 x 17)	(43 x 13)	(51 x 11)	(71 x 8)
Nominal Ratio	Overall Input	1827	1838	1904	1949	1964	1988	2000	2064	2077	2083	2132	2188	2227	2258
	Overall Output	522	525	595	609	561	568	625	645	649	595	609	625	696	645
Exact Ratio	Overall Input	1827.0	1837.5	1904.0	1948.8	1963.5	1988.0	2000.0	2064.0	2076.8	2082.5	2131.5	2187.5	2227.2	2257.5
	Overall Output	3.5	3.5	3.2	3.2	3.5	3.5	3.2	3.2	3.2	3.5	3.5	3.5	3.2	3.5
		(87 x 6)	(35 x 15)	(35 x 17)	(29 x 21)	(51 x 11)	(71 x 8)	(25 x 25)	(43 x 15)	(59 x 11)	(35 x 17)	(29 x 21)	(25 x 25)	(87 x 8)	(43 x 15)
Nominal Ratio	Overall Input	2320	2339	2352	2436	2448	2454	2499	2538	2573	2678	2685	2691	2734	2774
	Overall Output	725	731	735	696	765	767	781	725	735	765	767	841	781	867
Exact Ratio	Overall Input	2320.0	2339.2	2352.0	2436.0	2448.0	2454.4	2499.2	2537.5	2572.5	2677.5	2684.5	2691.2	2733.5	2774.4
	Overall Output	3.2	3.2	3.2	3.5	3.2	3.2	3.2	3.5	3.5	3.5	3.5	3.2	3.5	3.2
		(29 x 25)	(43 x 17)	(35 x 21)	(87 x 8)	(51 x 15)	(59 x 13)	(71 x 11)	(29 x 25)	(35 x 21)	(51 x 15)	(59 x 13)	(29 x 29)	(71 x 11)	(51 x 17)
Nominal Ratio	Overall Input	2800	2832	2890	2954	3035	3062	3063	3098	3161	3210	3231	3248	3350	3408
	Overall Output	875	885	903	923	867	957	875	885	903	1003	923	1015	957	1065
Exact Ratio	Overall Input	2800.0	2832.0	2889.6	2953.6	3034.5	3062.4	3062.5	3097.5	3160.5	3209.6	3230.5	3248.0	3349.5	3408.0
	Overall Output	3.2	3.2	3.2	3.2	3.5	3.2	3.5	3.5	3.5	3.2	3.5	3.2	3.5	3.2
		(35 x 25)	(59 x 15)	(43 x 21)	(71 x 13)	(51 x 17)	(87 x 11)	(35 x 25)	(59 x 15)	(43 x 21)	(59 x 17)	(71 x 13)	(35 x 29)	(87 x 11)	(71 x 15)
Nominal Ratio	Overall Input	3427	3440	3553	3619	3728	3749	3763	3862	3920	3965	3990	4080	4176	4225
	Overall Output	1071	1075	1015	1131	1065	1071	1075	1207	1225	1239	1247	1275	1305	1207
Exact Ratio	Overall Input	3427.2	3440.0	3552.5	3619.2	3727.5	3748.5	3762.5	3862.4	3920.0	3964.8	3990.4	4080.0	4176.0	4224.5
	Overall Output	3.2	3.2	3.5	3.2	3.5	3.5	3.5	3.2	3.2	3.2	3.2	3.2	3.2	3.5
		(51 x 21)	(43 x 25)	(35 x 29)	(87 x 13)	(71 x 15)	(51 x 21)	(43 x 25)	(71 x 17)	(35 x 35)	(59 x 21)	(43 x 29)	(51 x 25)	(87 x 15)	(71 x 17)
Nominal Ratio	Overall Input	4288	4337	4463	4568	4720	4771	4816	5163	5219	5268	5475	5680	5712	5846
	Overall Output	1225	1239	1275	1305	1475	1491	1505	1475	1491	1505	1711	1775	1785	1827
Exact Ratio	Overall Input	4287.5	4336.5	4462.5	4567.5	4720.0	4771.2	4816.0	5162.5	5218.5	5267.5	5475.2	5680.0	5712.0	5846.4
	Overall Output	3.5	3.5	3.5	3.5	3.2	3.2	3.2	3.5	3.5	3.5	3.2	3.2	3.2	3.2
		(35 x 35)	(59 x 21)	(51 x 25)	(87 x 15)	(59 x 25)	(71 x 21)	(43 x 35)	(59 x 25)	(71 x 21)	(43 x 35)	(59 x 29)	(71 x 25)	(51 x 35)	(87 x 21)
Nominal Ratio	Overall Input	5917	5989	6213	6248	6395	6589	6608	6960	7018	7207	7613	7676	7952	8074
	Overall Output	1849	1711	1775	1785	1827	2059	2065	2175	2193	2059	2175	2193	2485	2523
Exact Ratio	Overall Input	5916.8	5988.5	6212.5	6247.5	6394.5	6588.8	6608.0	6960.0	7017.6	7206.5	7612.5	7675.5	7952.0	8073.6
	Overall Output	3.2	3.5	3.5	3.5	3.5	3.2	3.2	3.2	3.2	3.5	3.5	3.5	3.2	3.2
		(43 x 43)	(59 x 29)	(71 x 25)	(51 x 35)	(87 x 21)	(71 x 29)	(59 x 35)	(87 x 25)	(51 x 43)	(71 x 29)	(87 x 25)	(51 x 43)	(71 x 35)	(87 x 29)
Nominal Ratio	Overall Input	8118	8323	8698	8831	9104	9629	9744	9770	10532	10686	11139	11587	11971	
	Overall Output	2537	2601	2485	2523	2601	3009	3045	3053	3009	3053	3481	3621	3741	
Exact Ratio	Overall Input	8118.4	8323.2	8697.5	8830.5	9103.5	9628.8	9744.0	9769.6	10531.5	10685.5	11139.2	11587.2	11971.2	
	Overall Output	3.2	3.2	3.5	3.5	3.5	3.2	3.2	3.2	3.5	3.5	3.2	3.2	3.2	
		(59 x 43)	(51 x 51)	(71 x 35)	(87 x 29)	(51 x 51)	(59 x 51)	(87 x 35)	(71 x 43)	(59 x 51)	(71 x 43)	(59 x 59)	(71 x 51)	(87 x 43)	
Nominal Ratio	Overall Input	12674	13094	13405	14198	14662	16131	16426	17644	19766	24221				
	Overall Output	3621	3741	4189	4437	4189	5041	5133	5041	6177	7569				
Exact Ratio	Overall Input	12673.5	13093.5	13404.8	14198.4	14661.5	16131.2	16425.6	17643.5	19766.4	24220.8				
	Overall Output	3.5	3.5	3.2	3.2	3.5	3.2	3.2	3.5	3.2	3.2				
		(71 x 51)	(87 x 43)	(71 x 59)	(87 x 51)	(71 x 59)	(71 x 71)	(87 x 59)	(71 x 71)	(87 x 71)	(87 x 87)				

2

Speed Reducers



Speed Reducers

How to Select

How to select a Speed Reducer

Step 1: Collect data about the application

Before starting you need to know the:

- **Application (e.g. Conveyor, Hoist, etc.)**
- **Hours of Operation per day**
- **Motor Power (HP or kW) and Speed (RPM)**
- **Desired Output Speed**
- **Mounting Position and Style**
- **Overhung or Thrust Loads**
- **Bore Dimensions, inch or metric**

Step 2: Choose a Mounting Position

Find the correct Mounting Position from the *Mounting Positions* shown on page 2.5.

Step 3: Select a Frame Size

3A: Find the **Load Classification** for the application in the *AGMA Load Classification Table* on page 2.6.

3B: Find the recommended Service Factor using the *Recommended Reducer Service Factor Table* on the right.

3C: Determine the **Selection Power** (HP or kW) by multiplying the Motor Power (HP or kW) by the Service Factor.

3D: Select a **Frame size** from the Reducer Selection Tables on pages 2.8–2.95 by matching both the Selection Power (HP or kW) and Desired Output Speed (RPMs) to a frame size model number.

Note: For Mounting Positions Y1, Y2, Y3, Y5, and Y6 see pages 2.8–2.71. For Mounting Position Y4 see pages 2.72–2.87. For all Double Reduction Mounting Positions see pages 2.88–2.95.

Step 4: Verify Dimensions

Use the Dimensions information on pages 2.96–2.110 to verify that the selected Frame Size is appropriate.

Step 5: Choose an Output Connection Method

Select keyed hollow bore or shrink disc, and the associated bore size.

Step 6: Choose Options

The following options may apply:

Washdown Modification
Breather

Please refer to our online Product Configurator at www.sumitomodrive.com/configurator for available modifications.

Step 7: Configure a Model Number

Go to page 2.4 to configure a model number.

Note: You will use the information you gather from the procedure on this page to Configure a Model Number.



Recommended Reducer Service Factors

		AGMA Load Classifications		
		Uniform (U)	Moderate Shock (M)	Heavy Shock (H)
Duration of Service	1/2 hr. per day (Occasional)	0.50 ^[1]	0.80 ^[1]	1.25
	3 hrs. per day (Intermittent)	0.80 ^[1]	1.00	1.50
	Up to 10 hrs. per day	1.00	1.25	1.75
	24 hrs. per day	1.20	1.50	2.00

Note: [1] Maximum momentary or starting load must not exceed 200% of gear reducer rating (rating meaning service factor of 1.0). Time specified for occasional and intermittent service refers to total operating time per day.

Recommended Supplemental Service Factors for Frequent Start-Stop Applications

For **frequent start-stop applications**, use the table below to determine the recommended service factor, and check the Motor Thermal Rating (Table 5.31) in Section 5.

Number of starts (Times/hour)	~ 10 hours/day			~ 24 hours/day		
	Uniform (U)	Moderate Shock (M)	Heavy Shock (H)	Uniform (U)	Moderate Shock (M)	Heavy Shock (H)
~10	1.00	1.15	1.50	1.20	1.30	1.65
~200	1.10	1.35	1.65	1.30	1.50	1.85
~500	1.15	1.50	1.80	1.40	1.65	2.00

The Moment of Inertia (Ratio of Inertia WR^2) = $\frac{\text{Total Moment of Inertia (WR}^2\text{) as seen from motor shaft}}{\text{Moment of Inertia (WR}^2\text{) of motor}}$

- U** = Allowable ratio of Moment of Inertia $(WR^2) \leq 0.3$
- M** = Allowable ratio of Moment of Inertia $(WR^2) 0.3 < WR^2 \leq 3.0$
- H** = Allowable ratio of Moment of Inertia $(WR^2) 3.0 < WR^2 \leq 10.0$

Speed Reducers

How to Select

Determine Selection Power (HP or kW)

$$\text{Motor Power (HP or kW)} \times \text{Service Factor} = \text{Selection Power (HP or kW)}$$

Example: 10 Motor HP X 1.25 Service Factor = 12.5 Selection HP
 11 Motor kW X 1.25 Service Factor = 13.75 Selection kW

This product is designed for shaft mounted installations only. If an output shaft is required, please refer to the Cyclo® BBB4 catalog.



For special circumstances in selecting a Frame Size such as:

- Overhung Load
- Thrust Loads
- Radial Loads
- Shock Loading

Consult Appendix, pages 5.2–5.6.

Select a Frame Size

1 Match your OUTPUT RPM (or RATIO)...

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	3.15						35	39	46	53	
Input Power HP (kW)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)						3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	
Output Torque in-lbs (N-m)	1095 (124)	1335 (151)	1465 (166)	1670 (189)	1830 (207)	2195 (248)	—	—	2925 (331)	3680 (416)	4025 (455)	4760 (538)	5495 (621)	52100
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	—	—	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	—	—	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.02 (3.00)	3.49 (2.60)	
Output Torque in-lbs (N-m)	1485 (168)	1810 (205)	1980 (224)	2265 (256)	2475 (280)	2970 (338)	—	—	3965 (448)	4980 (563)	5450 (616)	6085 (688)	6085 (688)	52105

2 ...to your SELECTION HP (kW)

3 ...to find your FRAME SIZE.

Configure a Model Number

Speed Reducers
Nomenclature

Output Shaft Orientation

Type	Prefix
Horizontal	H
Vertical	V

Mounting Style

Type	Prefix
Shaft Mount (Hollow Shaft)	Y
Flange (Hollow Shaft)	F
Housing Mount (Hollow Shaft)	U

Input Connection

Input Connection	Prefix	
	Reducer	Motor
Free Input Shaft		
Input Motor Adapter	J	JM
w/ Input Motor Flange & Hollow Bore	X	XM

Modification

	Prefix
Unit built with special mods	S
Shrink Disc	S
No special mods applied	

Motor Power (HP or kW)

(if supplied and/or mounted by Sumitomo; applies only to 1750 RPM)

HP	(kW)	Prefix
1/8	(0.1)	01
1/4	(0.2)	02
1/3	(0.25)	03
1/2	(0.4)	05
3/4	(0.55)	08
1	(0.75)	1
1 1/2	(1.1)	1H
2	(1.5)	2
3	(2.2)	3
5	(3.7)	5
7 1/2	(5.5)	8
10	(7.5)	10
15	(11)	15
20	(15)	20
25	(18.5)	25
30	(22)	30
40	(30)	40
50	(37)	50
60	(45)	60
75	(55)	75

Frame Size

Single Reduction			
5Z100	5A110	5B120	5C140
5Z105	5A115	5B125	5C145
5Z110	5A120	5B140	5C160
5Z115	5A125	5B145	5C165
5Z120	5A140	5B160	5C170
5Z125	5A145	5B165	5C175
Double Reduction			
5Z10DA	5A12DA	5B12DA	5C14DA
5Z12DA	5A12DB	5B12DB	5C14DB
5Z12DB		5B14DA	5C14DC
		5B14DB	5C16DA
			5C16DB

Reducer Specifications

Specification	Suffix
Standard	
Shovel Base	SB
Torque Limiter	TL

When ordering, the following information should be included:

- NEMA frame size for C-face adapter, or IEC frame size for IEC motor adapter
- Motor Specification if supplied and/or mounted by Sumitomo (230/460 VAC 60 Hz is supplied in the United States unless otherwise specified)
- Bore size must be supplied

Optional conduit box positions must be specified, otherwise Y1 is supplied.

L H Y J S - **5 A 1 1 0**

K - **Y1** - **28**

Cyclo® BBB5 product code (always "L")
 Output shaft orientation
 Mounting style
 Input connection
 Modification (Special feature)
 Motor Power Symbol (1750 rpm)
 Frame size

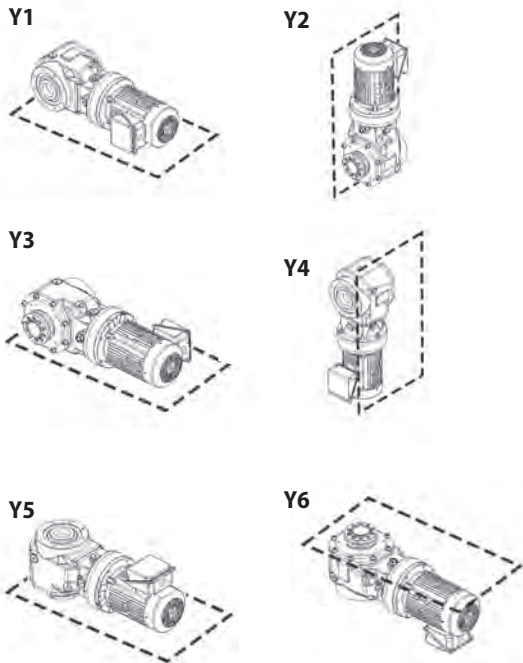
Shaft specification
 Reducer Specifications
 Mounting position and optional specification (as required)
 Ratio

Nomenclature

Shaft Specifications

Input Shaft	OUTPUT SHAFT Hollow	Suffix
mm	Key (mm)	
Inch	Key (Inch)	K

Mounting Positions



Nominal and Exact Ratio

Nomenclature Example:

LHYJS – 5A110K – Y1 – 28

- | | |
|--|---|
| L – Cyclo® Bevel Buddybox | 5A110 – Frame Size |
| H – Horizontal Output Shaft Orientation | K – Inch keyed-hollow shaft output, inch shaft input |
| Y – Shaft Mount (Hollow Shaft) | Y1 – Mounting Position |
| J – Input Motor Adapter | 28 – Ratio |
| S – Modification (Special Feature) | |

Nominal and Exact Ratio

BBB5 with Planetary Input				BBB5 with Cyclo® Input			
Nominal		Frame Size	Actual Ratio	Single Reduction			
Input Ratio	Overall Ratio			Nominal		Frame Size	Exact Ratio
			Input Ratio	Overall Ratio			
3	11	5Z10	All	6	21	21.0	
		5Z11		7	22	22.4	
		5Z12		7	25	24.5	
		5A11		8	28	28.0	
		5B12		11	35	35.2	
		5B16		11	39	38.5	
	5C16	13	46	45.5			
	5C17	15	53	52.5			
	5A14	17	60	59.5			
	5B14	21	67	67.2			
	5C14	21	74	73.5			
	4	13	5Z11	All	25	80	80.0
5Z12			25		88	87.5	
5A11			29		102	101.5	
5A12			35		112	112.0	
5B12			35		123	122.5	
5B16			43		151	150.5	
5C16		51	179	178.5			
5A14		59	207	206.5			
5B14		71	249	248.5			
5C14		87	305	304.5			
5C17		12.99					
5C17		13.09					
5	14	5Z11	All	104	364	364.0	
		5Z12		121	424	423.5	
		5A11		143	501	500.5	
		5A12		165	578	577.5	
		5B12		195	683	682.5	
		5B16		231	809	808.5	
	5C16	273	956	955.5			
	5A14	319	1117	1116.5			
	5B14	377	1320	1319.5			
	5C14	473	1656	1655.5			
	5Z10	559	1957	1956.5			
	5Z10	649	2272	2271.5			
5Z10	731	2559	2558.5				
5Z10	841	2944	2943.5				
5Z10	1003	3511	3510.5				
5Z10	1247	4365	4364.5				
5Z10	1479	5177	5176.5				
5Z10	1849	6472	6471.5				
5Z10	2065	7228	7227.5				
5Z10	2537	8880	8879.5				
5Z10	3045	10658	10657.5				
6	16	5Z11	All	17.38			
		5A11		17.50			
		5B14		17.68			
		5C14		17.78			
		5C17		17.68			
		5B16		17.78			
	18	5Z11	All	17.38			
		5A11		17.50			
		5B14		17.68			
		5C14		17.78			
		5C17		17.68			
		5B16		17.78			
7	18	5Z11	All	17.38			
		5A11		17.50			
		5B14		17.68			
		5C14		17.78			
		5C17		17.68			
		5B16		17.78			
	20	5Z11	All	17.38			
		5A11		17.50			
		5B14		17.68			
		5C14		17.78			
		5C17		17.68			
		5B16		17.78			

Speed Reducers
Nomenclature

AGMA Load Classifications

TYPE OF APPLICATION	TYPE OF LOAD
Agitators	
Pure liquids	U
Liquids and solids	M
Variable-density liquids	M
Blowers	
Centrifugal	U
Lobe	M
Vane	U
Brewing and Distilling	
Bottling machinery	U
Brew kettles, cont. duty	U
Cookers, cont. duty	U
Mash tubs, cont. duty	U
Scale hopper, frequent starts	M
Can Filling Machines	U
Cane Knives	M
Car Dumpers	H
Car Pullers	M
Clarifiers	U
Classifiers	M
Clay Working Machinery	
Brick press	H
Briquette machine	H
Clay working machinery	M
Pug mill	M
Compressors	
Centrifugal	U
Lobe	M
Reciprocating, multi-cylinder	M
Reciprocating, single-cylinder	H
Conveyors — Uniformly Loaded or Fed	
Apron	U
Assembly	U
Belt	U
Bucket	U
Chain	U
Flight	U
Oven	U
Screw	U
Conveyors — Heavy Duty, Not Uniformly Fed	
Apron	M
Assembly	M
Belt	M
Bucket	M
Chain	M
Flight	M
Live roll oven	M
Reciprocating	H
Screw	M
Shaker	H
Cranes (Except for Dry Dock Cranes)	
Main hoists	U
Bridge travel	S
Trolley travel	S
Crusher	
Ore	H
Stone	H
Sugar	M
Dredges	
Cable reels	M
Conveyors	M
Cutter head drives	H
Jig drives	H
Maneuvering winches	M
Pumps	M
Screen drive	H
Stackers	M
Utility winches	M
Dry Dock Cranes	S
Elevators	
Bucket, uniform load	U
Bucket, heavy load	M
Bucket, cont.	U
Centrifugal discharge	U
Escalators	U
Freight	M
Gravity discharge	U
Man lifts	S
Passenger	S
Extruders (Plastics)	
Blow molders	M
Coating	U
Film	U
Pipe	U
Pre-plasticizers	M
Rods	U
Sheet	U
Tubing	U
Fans	
Centrifugal	U
Cooling towers	S
Forced draft	S
Induced draft	M
Large (mine, etc.)	M

TYPE OF APPLICATION	TYPE OF LOAD
Large (industrial)	M
Light (small diameter)	U
Feeders	
Apron	M
Belt	M
Disc	U
Reciprocating	H
Screw	M
Food Industry	
Beet slicer	M
Cereal cooker	U
Dough mixer	M
Meat grinders	M
Generators (Not Welding)	U
Hammer Mills	H
Hoists	
Heavy duty	H
Medium duty	M
Skip	M
Laundry Washers — Reversing	M
Laundry Tumblers	M
Line Shaft	
Drive processing equipment	M
Light	U
Other line shafts	U
Lumber Industry	
Barkers — hydraulic and mechanical	S
Burner conveyor	M
Chain Saw and Drag Saw	
Chain transfer	H
Craneway transfer	H
De-barking drum	S
Edger feed	H
Gang feed	M
Geen chain	M
Live rolls	H
Log haul-lockline	H
Log turning device	H
Main log conveyor	H
Off bearing rolls	M
Planer feed chains	M
Planer floor chains	M
Planer tilting hoist	M
Re-saw merry-go-round conveyor	M
Roll cases	H
Slab conveyor	H
Small waste-conveyor-belt	U
Small waste-conveyor-chain	M
Sorting table	M
Tipple hoist conveyor	M
Tipple hoist drive	M
Transfer conveyors	M
Transfer rolls	M
Tray drive	M
Trimmer feed	M
Waste conveyor	M
Machine Tools	
Bending roll	M
Notching press, belt driven	S
Plate planer	H
Punch press, gear driven	H
Tapping machine	H
Other machine tools	
Main drives	M
Auxiliary drives	U
Metal Mills	
Draw bench carriage and main drive	M
Forming machines	H
Pinch, dryer and scrubber rolls, reversing	S
Slitters	M
Table conveyors, nonreversing	
Group drives	M
Individual drives	H
Table conveyors, reversing	S
Wire drawing and flattening machine	M
Wire winding machine	M
Mills, Rotary Type	
Ball	M
Cement kilns	M
Dryers and coolers	M
Kilns	M
Pebble	M
Rod, plain and wedge bar	M
Tumbling barrels	H
Mixers	
Concrete mixers, cont.	M
Concrete mixers, intermittent	M
Constant density	U
Variable density	M
Oil Industry	
Chillers	M
Oil well pumps	S
Paraffin filter press	M
Rotary kilns	M

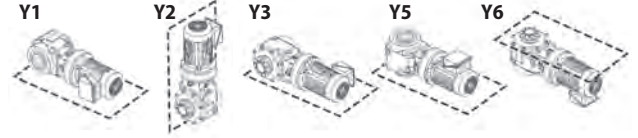
TYPE OF APPLICATION	TYPE OF LOAD
Paper Mills	
Agitators (mixers)	M
Barker, hydraulic	S
Barker, mechanical	S
Barking drum	S
Beater and pulper	M
Bleacher	U
Calenders	M
Calenders, super	H
Converting machine (except cutters, platers)	M
Conveyors	U
Couch	M
Cutters, platers	H
Cylinders	M
Dryers	M
Felt stretcher	M
Felt whipper	H
Jordans	H
Log haul	H
Presses	U
Pulp machine reel	M
Stock chest	M
Suction roll	U
Washers and thickeners	M
Winders	U
Printing Presses	S
Pullers, Barge Haul	H
Pumps	
Centrifugal	U
Proportioning	M
Reciprocating	
Single acting, 3 or more cylinders	M
Double acting, 2 or more cylinders	M
Rotary-gear type	U
Rubber and Plastics Industries	
Crackers	H
Laboratory equipment	M
Mixing mills	H
Refiners	M
Rubber calenders	M
Rubber mill (2 on line)	M
Rubber mill (3 on line)	U
Sheeter	M
Tire building machines	S
Tire and tube press openers	S
Tubers and strainers	M
Warming mills	M
Sand Muller	M
Screens	
Air washing	U
Rotary, stone or gravel	M
Traveling water intake	U
Sewage Disposal Equipment	
Bar screens	U
Chemical fenders	U
Collectors, circuline or straightline	U
Dewatering screens	M
Grit collectors	U
Scum breakers	M
Slow or rapid mixers	M
Sludge collectors	U
Thickeners	M
Vacuum filters	M
Slab Pushers	M
Steering Gear	S
Stokers	U
Sugar Industry	
Cane knives	M
Crushers	M
Mills	H
Textile Industry	
Batchers	M
Calenders	M
Cards	M
Dry cans	M
Dryers	M
Dyeing machinery	M
Knitting machines	S
Looms	M
Mangles	M
Nappers	M
Pads	M
Range drives	S
Slashers	M
Soapers	M
Spinners	M
Tenter frames	M
Washers	M
Winders	M
Windlass	S

U = Uniform Load H = Heavy Shock
M = Moderate Shock S = Contact Sumitomo

This page intentionally left blank.

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

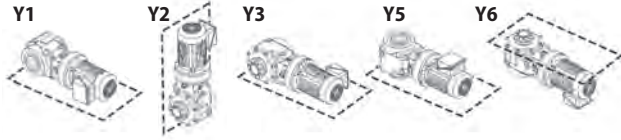


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	—	—	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	5Z100
Output Torque in-lbs <i>(N·m)</i>	1095 <i>(124)</i>	1335 <i>(151)</i>	1465 <i>(166)</i>	1670 <i>(189)</i>	1830 <i>(207)</i>	2195 <i>(248)</i>	—	—	2925 <i>(331)</i>	3680 <i>(416)</i>	4025 <i>(455)</i>	4760 <i>(538)</i>	5495 <i>(621)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	—	—	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.02 (3.00)	3.49 (2.60)	
Output Torque in-lbs <i>(N·m)</i>	1485 <i>(168)</i>	1810 <i>(205)</i>	1980 <i>(224)</i>	2265 <i>(256)</i>	2475 <i>(280)</i>	2970 <i>(336)</i>	—	—	3965 <i>(448)</i>	4980 <i>(563)</i>	5450 <i>(616)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.02 (3.00)	3.49 (2.60)	5Z110
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4900 <i>(554)</i>	5600 <i>(633)</i>	6085 <i>(688)</i>	3315 <i>(375)</i>	3540 <i>(400)</i>	3875 <i>(438)</i>	4425 <i>(500)</i>	5565 <i>(629)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	5.26 (3.92)	5.26 (3.92)	5.26 (3.92)	5.26 (3.92)	5.20 (3.88)	4.76 (3.55)	4.02 (3.00)	3.49 (2.60)	
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4900 <i>(554)</i>	5600 <i>(633)</i>	6085 <i>(688)</i>	3660 <i>(414)</i>	3910 <i>(442)</i>	4275 <i>(483)</i>	4885 <i>(552)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	12.9 (9.60)	12.9 (9.60)	12.9 (9.60)	11.5 (8.54)	10.5 (7.86)	8.73 (6.51)	8.18 (6.10)	7.48 (5.58)	6.54 (4.88)	5.20 (3.88)	4.76 (3.55)	4.02 (3.00)	3.49 (2.60)	5Z120
Output Torque in-lbs <i>(N·m)</i>	4485 <i>(507)</i>	5465 <i>(618)</i>	5980 <i>(676)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1150 <i>(5130)</i>	865 <i>(3850)</i>	775 <i>(3450)</i>	885 <i>(3950)</i>	1075 <i>(4790)</i>	1380 <i>(6150)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	14.8 (11.0)	14.3 (10.7)	13.1 (9.76)	11.5 (8.54)	10.5 (7.86)	8.73 (6.51)	8.18 (6.10)	7.48 (5.58)	6.54 (4.88)	5.20 (3.88)	4.76 (3.55)	4.02 (3.00)	3.49 (2.60)	
Output Torque in-lbs <i>(N·m)</i>	5140 <i>(581)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	6085 <i>(688)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	795 <i>(3540)</i>	545 <i>(2430)</i>	720 <i>(3220)</i>	885 <i>(3950)</i>	1075 <i>(4790)</i>	1380 <i>(6150)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	10.5 (7.86)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	5A110
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4900 <i>(554)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	3315 <i>(375)</i>	3540 <i>(400)</i>	3875 <i>(438)</i>	4425 <i>(500)</i>	5565 <i>(629)</i>	6085 <i>(688)</i>	7195 <i>(813)</i>	8300 <i>(938)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

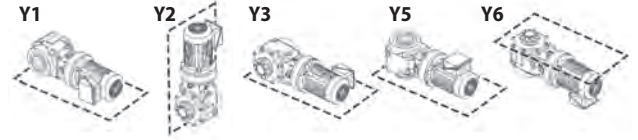
Dimensions on pages 2.96–2.104

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	2.67 (1.99)	2.59 (1.93)	2.49 (1.86)	1.70 (1.27)	1.70 (1.27)	1.62 (1.21)	1.31 (0.975)	1.31 (0.975)	1.05 (0.780)	0.75 (0.56)	0.692 (0.516)	0.585 (0.436)	0.581 (0.433)	5Z100
Output Torque in-lbs (N·m)	5275 (596)	5775 (653)	6085 (688)	4520 (511)	4945 (559)	5465 (618)	4855 (549)	5315 (601)	5230 (591)	4450 (503)	4740 (536)	4820 (545)	5865 (663)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.24 (1.67)	2.09 (1.56)	1.81 (1.35)	1.61 (1.20)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	
Output Torque in-lbs (N·m)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (676)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.29 (1.71)	2.09 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z110
Output Torque in-lbs (N·m)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.29 (1.71)	2.09 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z115
Output Torque in-lbs (N·m)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.29 (1.71)	2.09 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z120
Output Torque in-lbs (N·m)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.29 (1.71)	2.09 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z125
Output Torque in-lbs (N·m)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	6085 (688)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	4.26 (3.18)	3.65 (2.72)	3.65 (2.72)	2.56 (1.91)	2.56 (1.91)	2.55 (1.90)	2.01 (1.50)	2.01 (1.50)	1.74 (1.30)	1.27 (0.944)	1.15 (0.859)	0.897 (0.669)	0.886 (0.661)	5A110
Output Torque in-lbs (N·m)	8420 (951)	8150 (921)	8935 (1010)	6815 (770)	7450 (842)	8600 (972)	7500 (847)	8500 (926)	8705 (984)	7500 (847)	7900 (893)	7395 (836)	8935 (1010)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

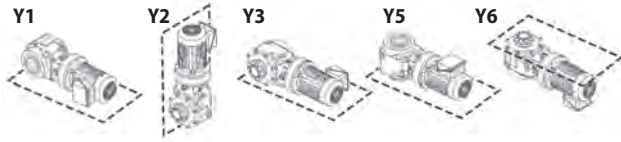


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	10.5 <i>(7.86)</i>	10.5 <i>(7.86)</i>	10.5 <i>(7.86)</i>	10.5 <i>(7.86)</i>	10.5 <i>(7.86)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.23 <i>(3.90)</i>	5.23 <i>(3.90)</i>	5A115
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4900 <i>(554)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	3660 <i>(414)</i>	3910 <i>(442)</i>	4275 <i>(483)</i>	4885 <i>(552)</i>	6140 <i>(694)</i>	6715 <i>(759)</i>	7900 <i>(893)</i>	9115 <i>(1030)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.26 <i>(4.67)</i>	5.43 <i>(4.05)</i>	5A120
Output Torque in-lbs <i>(N·m)</i>	4485 <i>(507)</i>	5465 <i>(618)</i>	5980 <i>(676)</i>	6840 <i>(773)</i>	7475 <i>(845)</i>	6115 <i>(691)</i>	6520 <i>(737)</i>	7130 <i>(806)</i>	8150 <i>(921)</i>	7945 <i>(898)</i>	8690 <i>(982)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	14.8 <i>(11.0)</i>	14.8 <i>(11.0)</i>	14.8 <i>(11.0)</i>	14.8 <i>(11.0)</i>	14.8 <i>(11.0)</i>	10.1 <i>(7.51)</i>	10.1 <i>(7.51)</i>	10.1 <i>(7.51)</i>	10.1 <i>(7.51)</i>	7.94 <i>(5.92)</i>	7.40 <i>(5.52)</i>	6.26 <i>(4.67)</i>	5.43 <i>(4.05)</i>	5A125
Output Torque in-lbs <i>(N·m)</i>	5140 <i>(581)</i>	6265 <i>(708)</i>	6855 <i>(775)</i>	7840 <i>(886)</i>	8575 <i>(969)</i>	7020 <i>(793)</i>	7485 <i>(846)</i>	8190 <i>(925)</i>	9380 <i>(1060)</i>	9290 <i>(1050)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	25.5 <i>(19.0)</i>	22.3 <i>(16.6)</i>	20.4 <i>(15.2)</i>	17.8 <i>(13.3)</i>	16.2 <i>(12.1)</i>	13.5 <i>(10.1)</i>	12.7 <i>(9.48)</i>	11.6 <i>(8.67)</i>	10.2 <i>(7.59)</i>	8.10 <i>(6.04)</i>	7.40 <i>(5.52)</i>	6.26 <i>(4.67)</i>	5.43 <i>(4.05)</i>	5A140
Output Torque in-lbs <i>(N·m)</i>	8850 <i>(1000)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	27.1 <i>(20.2)</i>	22.3 <i>(16.6)</i>	20.4 <i>(15.2)</i>	17.8 <i>(13.3)</i>	16.2 <i>(12.1)</i>	13.5 <i>(10.1)</i>	12.7 <i>(9.48)</i>	11.6 <i>(8.67)</i>	10.2 <i>(7.59)</i>	8.10 <i>(6.04)</i>	7.40 <i>(5.52)</i>	6.26 <i>(4.67)</i>	5.43 <i>(4.05)</i>	5A145
Output Torque in-lbs <i>(N·m)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	9470 <i>(1070)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	4485 <i>(507)</i>	5465 <i>(618)</i>	5980 <i>(676)</i>	6840 <i>(773)</i>	7475 <i>(845)</i>	6115 <i>(691)</i>	6520 <i>(737)</i>	7130 <i>(806)</i>	8150 <i>(921)</i>	7945 <i>(898)</i>	8690 <i>(982)</i>	10250 <i>(1160)</i>	11850 <i>(1340)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	14.8 <i>(11.0)</i>	14.8 <i>(11.0)</i>	14.8 <i>(11.0)</i>	14.8 <i>(11.0)</i>	14.8 <i>(11.0)</i>	10.1 <i>(7.51)</i>	10.1 <i>(7.51)</i>	10.1 <i>(7.51)</i>	10.1 <i>(7.51)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	5140 <i>(581)</i>	6265 <i>(708)</i>	6855 <i>(775)</i>	7840 <i>(886)</i>	8575 <i>(969)</i>	7025 <i>(794)</i>	7485 <i>(846)</i>	8195 <i>(926)</i>	9380 <i>(1060)</i>	9290 <i>(1050)</i>	10150 <i>(1150)</i>	12000 <i>(1360)</i>	13800 <i>(1560)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

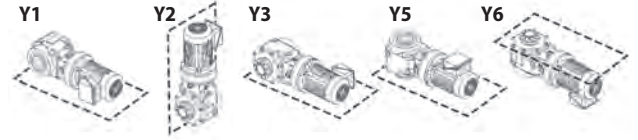
Dimensions on pages 2.96–2.104

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	4.79 (3.57)	4.17 (3.11)	3.88 (2.89)	2.98 (2.22)	2.98 (2.22)	2.80 (2.09)	2.43 (1.81)	2.32 (1.73)	1.89 (1.41)	1.49 (1.11)	1.35 (1.01)	1.02 (0.758)	0.936 (0.698)	5A115
Output Torque in-lbs (N·m)	9470 (1070)	9290 (1050)	9470 (1070)	7910 (894)	8660 (978)	9470 (1070)	9025 (1020)	9470 (1070)	9470 (1070)	8830 (998)	9290 (1050)	8380 (947)	9470 (1070)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.57 (2.66)	3.26 (2.43)	2.80 (2.09)	2.55 (1.90)	2.32 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A120
Output Torque in-lbs (N·m)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.57 (2.66)	3.26 (2.43)	2.80 (2.09)	2.55 (1.90)	2.32 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A125
Output Torque in-lbs (N·m)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.57 (2.66)	3.26 (2.43)	2.80 (2.09)	2.55 (1.90)	2.32 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A140
Output Torque in-lbs (N·m)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.57 (2.66)	3.26 (2.43)	2.80 (2.09)	2.55 (1.90)	2.32 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A145
Output Torque in-lbs (N·m)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	9470 (1070)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	6.80 (5.07)	5.31 (3.96)	5.31 (3.96)	4.14 (3.09)	4.14 (3.09)	4.01 (2.99)	3.34 (2.49)	3.34 (2.49)	2.56 (1.91)	2.31 (1.72)	1.74 (1.30)	1.28 (0.957)	1.27 (0.944)	5B120
Output Torque in-lbs (N·m)	13450 (1520)	11850 (1340)	12900 (1460)	10950 (1240)	12000 (1360)	13500 (1530)	12480 (1410)	13600 (1540)	12800 (1450)	13600 (1540)	12040 (1360)	10600 (1200)	12800 (1450)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	7.59 (5.66)	6.54 (4.88)	6.54 (4.88)	5.31 (3.96)	5.31 (3.96)	5.06 (3.77)	4.26 (3.18)	4.26 (3.18)	3.19 (2.38)	3.06 (2.28)	2.17 (1.62)	1.61 (1.20)	1.52 (1.13)	5B125
Output Torque in-lbs (N·m)	14950 (1690)	14600 (1650)	15900 (1800)	14050 (1590)	15400 (1740)	17050 (1930)	15800 (1790)	17300 (1960)	15900 (1800)	18100 (2050)	14850 (1680)	13250 (1500)	15300 (1730)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

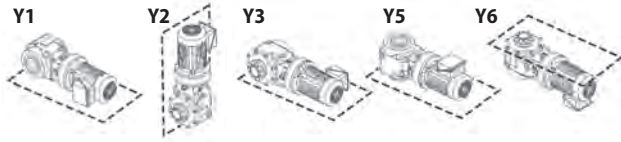


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	25.5 <i>(19.0)</i>	25.5 <i>(19.0)</i>	25.5 <i>(19.0)</i>	25.5 <i>(19.0)</i>	25.5 <i>(19.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	16.1 <i>(12.0)</i>	14.8 <i>(11.0)</i>	12.5 <i>(9.30)</i>	10.8 <i>(8.06)</i>	5B140
Output Torque in-lbs <i>(N·m)</i>	8850 <i>(1000)</i>	10750 <i>(1220)</i>	11850 <i>(1340)</i>	13500 <i>(1530)</i>	14750 <i>(1670)</i>	12210 <i>(1380)</i>	13000 <i>(1470)</i>	14250 <i>(1610)</i>	16150 <i>(1830)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	29.5 <i>(22.0)</i>	29.5 <i>(22.0)</i>	29.5 <i>(22.0)</i>	29.5 <i>(22.0)</i>	29.5 <i>(22.0)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	16.1 <i>(12.0)</i>	14.8 <i>(11.0)</i>	12.5 <i>(9.30)</i>	10.8 <i>(8.06)</i>	5B145
Output Torque in-lbs <i>(N·m)</i>	10250 <i>(1160)</i>	12550 <i>(1420)</i>	13700 <i>(1550)</i>	15650 <i>(1770)</i>	17150 <i>(1940)</i>	14150 <i>(1600)</i>	15130 <i>(1710)</i>	16550 <i>(1870)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	33.9 <i>(25.3)</i>	33.9 <i>(25.3)</i>	33.9 <i>(25.3)</i>	33.9 <i>(25.3)</i>	32.5 <i>(24.2)</i>	27.1 <i>(20.2)</i>	25.3 <i>(18.9)</i>	23.2 <i>(17.3)</i>	20.2 <i>(15.1)</i>	16.1 <i>(12.0)</i>	14.8 <i>(11.0)</i>	12.5 <i>(9.30)</i>	10.8 <i>(8.06)</i>	5B160
Output Torque in-lbs <i>(N·m)</i>	11850 <i>(1340)</i>	14400 <i>(1630)</i>	15750 <i>(1780)</i>	18050 <i>(2040)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	38.9 <i>(29.0)</i>	38.9 <i>(29.0)</i>	38.9 <i>(29.0)</i>	35.5 <i>(26.5)</i>	32.5 <i>(24.2)</i>	27.1 <i>(20.2)</i>	25.3 <i>(18.9)</i>	23.2 <i>(17.3)</i>	20.2 <i>(15.1)</i>	16.1 <i>(12.0)</i>	14.8 <i>(11.0)</i>	12.5 <i>(9.30)</i>	10.8 <i>(8.06)</i>	5B165
Output Torque in-lbs <i>(N·m)</i>	13500 <i>(1530)</i>	16550 <i>(1870)</i>	18050 <i>(2040)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	18850 <i>(2130)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	25.5 <i>(19.0)</i>	25.5 <i>(19.0)</i>	25.5 <i>(19.0)</i>	25.5 <i>(19.0)</i>	25.5 <i>(19.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	17.4 <i>(13.0)</i>	16.1 <i>(12.0)</i>	5C140
Output Torque in-lbs <i>(N·m)</i>	8850 <i>(1000)</i>	10750 <i>(1220)</i>	11850 <i>(1340)</i>	13500 <i>(1530)</i>	14750 <i>(1670)</i>	12100 <i>(1380)</i>	13000 <i>(1470)</i>	14250 <i>(1610)</i>	16150 <i>(1830)</i>	20350 <i>(2300)</i>	22300 <i>(2520)</i>	26350 <i>(2980)</i>	28050 <i>(3170)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	29.5 <i>(22.0)</i>	29.5 <i>(22.0)</i>	29.5 <i>(22.0)</i>	29.5 <i>(22.0)</i>	29.5 <i>(22.0)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	20.2 <i>(15.1)</i>	19.6 <i>(14.6)</i>	5C145
Output Torque in-lbs <i>(N·m)</i>	10250 <i>(1160)</i>	12550 <i>(1420)</i>	13700 <i>(1550)</i>	15650 <i>(1770)</i>	17150 <i>(1940)</i>	14150 <i>(1600)</i>	15130 <i>(1710)</i>	16550 <i>(1870)</i>	18850 <i>(2130)</i>	23720 <i>(2680)</i>	25900 <i>(2930)</i>	30540 <i>(3450)</i>	34050 <i>(3850)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	33.9 <i>(25.3)</i>	33.9 <i>(25.3)</i>	33.9 <i>(25.3)</i>	33.9 <i>(25.3)</i>	33.9 <i>(25.3)</i>	33.9 <i>(25.3)</i>	27.2 <i>(20.3)</i>	27.2 <i>(20.3)</i>	26.4 <i>(19.7)</i>	26.4 <i>(19.7)</i>	26.4 <i>(19.7)</i>	24.9 <i>(18.6)</i>	21.6 <i>(16.1)</i>	5C160
Output Torque in-lbs <i>(N·m)</i>	11850 <i>(1340)</i>	14400 <i>(1630)</i>	15750 <i>(1780)</i>	18050 <i>(2040)</i>	19700 <i>(2230)</i>	23600 <i>(2670)</i>	20250 <i>(2290)</i>	22100 <i>(2500)</i>	24520 <i>(2770)</i>	30850 <i>(3490)</i>	33800 <i>(3820)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

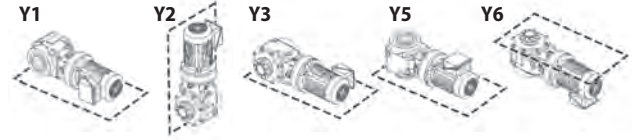
Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	9.53 (7.11)	8.45 (6.30)	7.72 (5.76)	7.09 (5.29)	6.49 (4.84)	5.59 (4.17)	5.07 (3.78)	4.63 (3.45)	3.77 (2.81)	3.18 (2.37)	2.75 (2.05)	2.28 (1.70)	1.86 (1.39)	5B140
Output Torque in-lbs (N·m)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	9.53 (7.11)	8.45 (6.30)	7.72 (5.76)	7.09 (5.29)	6.49 (4.84)	5.59 (4.17)	5.07 (3.78)	4.63 (3.45)	3.77 (2.81)	3.18 (2.37)	2.75 (2.05)	2.28 (1.70)	1.86 (1.39)	
Output Torque in-lbs (N·m)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	9.53 (7.11)	8.45 (6.30)	7.72 (5.76)	7.09 (5.29)	6.49 (4.84)	5.59 (4.17)	5.07 (3.78)	4.63 (3.45)	3.77 (2.81)	3.18 (2.37)	2.75 (2.05)	2.28 (1.70)	1.86 (1.39)	5B160
Output Torque in-lbs (N·m)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	9.53 (7.11)	8.45 (6.30)	7.72 (5.76)	7.09 (5.29)	6.49 (4.84)	5.59 (4.17)	5.07 (3.78)	4.63 (3.45)	3.77 (2.81)	3.18 (2.37)	2.75 (2.05)	2.28 (1.70)	1.86 (1.39)	
Output Torque in-lbs (N·m)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	18850 (2130)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	13.5 (10.1)	11.6 (8.66)	11.6 (8.66)	9.24 (6.89)	9.24 (6.89)	7.98 (5.95)	6.99 (5.21)	6.99 (5.21)	5.28 (3.94)	4.60 (3.43)	3.97 (2.96)	3.26 (2.43)	2.66 (1.98)	5C140
Output Torque in-lbs (N·m)	26400 (3010)	25900 (2930)	28300 (3200)	24500 (2770)	26800 (3030)	26900 (3040)	25930 (2930)	28400 (3210)	26460 (2990)	27250 (3080)	27250 (3080)	26900 (3040)	26800 (3030)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	16.1 (12.0)	14.8 (11.0)	14.8 (11.0)	10.6 (7.91)	10.6 (7.91)	10.1 (7.53)	10.1 (7.53)	9.27 (6.91)	7.23 (5.39)	5.66 (4.22)	4.89 (3.65)	4.06 (3.03)	3.33 (2.48)	
Output Torque in-lbs (N·m)	31750 (3590)	32750 (3700)	35850 (4050)	28100 (3180)	30800 (3480)	34050 (3850)	37620 (4240)	37700 (4260)	36100 (4080)	33500 (3790)	33630 (3800)	33500 (3790)	33600 (3800)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	17.6 (13.1)	16.9 (12.6)	15.4 (11.5)	13.2 (9.86)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C160
Output Torque in-lbs (N·m)	34610 (3910)	37700 (4260)	37700 (4260)	35100 (3970)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

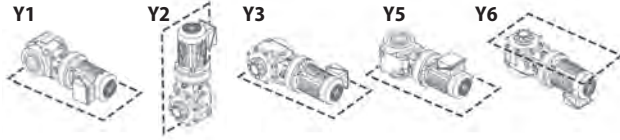


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	32.3 <i>(24.1)</i>	32.3 <i>(24.1)</i>	32.3 <i>(24.1)</i>	32.2 <i>(24.0)</i>	29.5 <i>(22.0)</i>	24.9 <i>(18.6)</i>	21.6 <i>(16.1)</i>	5C165
Output Torque in·lbs <i>(N·m)</i>	13950 <i>(1580)</i>	17050 <i>(1930)</i>	18650 <i>(2110)</i>	21400 <i>(2420)</i>	23350 <i>(2640)</i>	28050 <i>(3170)</i>	23990 <i>(2710)</i>	26200 <i>(2960)</i>	30000 <i>(3390)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	55.7 <i>(41.5)</i>	55.7 <i>(41.5)</i>	55.7 <i>(41.5)</i>	55.7 <i>(41.5)</i>	55.7 <i>(41.5)</i>	45.5 <i>(33.9)</i>	45.5 <i>(33.9)</i>	45.5 <i>(33.9)</i>	40.5 <i>(30.2)</i>	32.2 <i>(24.0)</i>	29.5 <i>(22.0)</i>	24.9 <i>(18.6)</i>	21.6 <i>(16.1)</i>	5C170
Output Torque in·lbs <i>(N·m)</i>	19350 <i>(2190)</i>	23600 <i>(2670)</i>	25800 <i>(2920)</i>	29550 <i>(3340)</i>	32300 <i>(3650)</i>	31650 <i>(3580)</i>	33800 <i>(3820)</i>	36950 <i>(4180)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	60.3 <i>(45.0)</i>	60.3 <i>(45.0)</i>	60.3 <i>(45.0)</i>	60.3 <i>(45.0)</i>	60.3 <i>(45.0)</i>	48.3 <i>(36.0)</i>	48.3 <i>(36.0)</i>	46.3 <i>(34.5)</i>	40.5 <i>(30.2)</i>	32.2 <i>(24.0)</i>	29.5 <i>(22.0)</i>	24.9 <i>(18.6)</i>	21.6 <i>(16.1)</i>	5C175
Output Torque in·lbs <i>(N·m)</i>	21050 <i>(2380)</i>	25650 <i>(2900)</i>	28050 <i>(3170)</i>	32000 <i>(3620)</i>	35000 <i>(3960)</i>	33600 <i>(3800)</i>	35900 <i>(4060)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	37700 <i>(4260)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

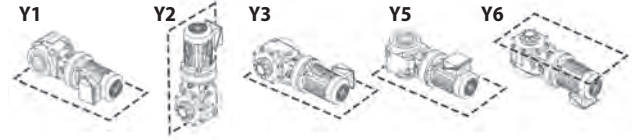
Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	19.0 (14.2)	16.9 (12.6)	15.4 (11.5)	14.2 (10.6)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C165
Output Torque in-lbs (N·m)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	19.0 (14.2)	16.9 (12.6)	15.4 (11.5)	14.2 (10.6)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C170
Output Torque in-lbs (N·m)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	19.0 (14.2)	16.9 (12.6)	15.4 (11.5)	14.2 (10.6)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C175
Output Torque in-lbs (N·m)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	37700 (4260)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

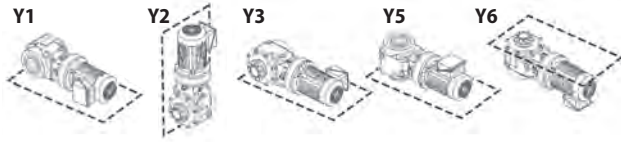


Dimensions on pages 2.96–2.104

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	—	—	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	3.15 (2.35)	5Z100
Output Torque in-lbs <i>(N·m)</i>	1325 <i>(150)</i>	1615 <i>(183)</i>	1770 <i>(200)</i>	2015 <i>(228)</i>	2210 <i>(250)</i>	2655 <i>(300)</i>	—	—	3540 <i>(400)</i>	4440 <i>(502)</i>	4855 <i>(549)</i>	5740 <i>(649)</i>	6625 <i>(749)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	—	—	4.26 (3.18)	4.26 (3.18)	4.26 (3.18)	4.02 (3.00)	3.49 (2.60)	5Z105
Output Torque in-lbs <i>(N·m)</i>	1795 <i>(203)</i>	2185 <i>(247)</i>	2385 <i>(270)</i>	2730 <i>(309)</i>	2990 <i>(338)</i>	3590 <i>(406)</i>	—	—	4785 <i>(541)</i>	6015 <i>(680)</i>	6575 <i>(743)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.02 (3.00)	3.49 (2.60)	5Z110
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	4005 <i>(453)</i>	4275 <i>(483)</i>	4670 <i>(528)</i>	5345 <i>(604)</i>	6715 <i>(759)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6110)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	5.26 (3.92)	5.26 (3.92)	5.26 (3.92)	5.26 (3.92)	5.20 (3.88)	4.76 (3.55)	4.02 (3.00)	3.49 (2.60)	5Z115
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	4425 <i>(500)</i>	4715 <i>(533)</i>	5160 <i>(583)</i>	5900 <i>(667)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6110)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	12.9 (9.6)	12.9 (9.6)	12.9 (9.6)	11.5 (8.54)	10.5 (7.81)	8.73 (6.51)	8.18 (6.10)	7.48 (5.58)	6.54 (4.88)	5.20 (3.88)	4.76 (3.55)	4.02 (3.00)	3.49 (2.60)	5Z120
Output Torque in-lbs <i>(N·m)</i>	5415 <i>(612)</i>	6600 <i>(746)</i>	7220 <i>(816)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	915 <i>(4090)</i>	570 <i>(2540)</i>	455 <i>(2030)</i>	560 <i>(2500)</i>	765 <i>(3420)</i>	1095 <i>(4880)</i>	1160 <i>(5170)</i>	1385 <i>(6180)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	14.8 (11.0)	14.3 (10.7)	13.1 (9.76)	11.5 (8.54)	10.5 (7.81)	8.73 (6.51)	8.18 (6.10)	7.48 (5.58)	6.54 (4.88)	5.20 (3.88)	4.76 (3.55)	4.02 (3.00)	3.49 (2.60)	5Z125
Output Torque in-lbs <i>(N·m)</i>	6200 <i>(701)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	510 <i>(2270)</i>	195 <i>(885)</i>	395 <i>(1760)</i>	560 <i>(2500)</i>	765 <i>(3420)</i>	1095 <i>(4880)</i>	1160 <i>(5170)</i>	1385 <i>(6180)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP (kW)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	4.76 (3.55)	5A110
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	4005 <i>(453)</i>	4275 <i>(483)</i>	4670 <i>(528)</i>	5345 <i>(604)</i>	6715 <i>(759)</i>	7345 <i>(830)</i>	8680 <i>(981)</i>	10000 <i>(1130)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	

Speed Reducers
Selection Tables

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

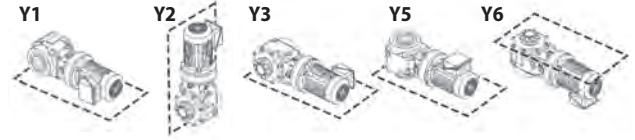
Dimensions on pages 2.96–2.104

Output RPM	24.7	21.6	19.6	18.1	16.5	14.2	12.9	11.8	9.60	8.10	7.00	5.82	4.75	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	2.67 (1.99)	2.55 (1.90)	2.49 (1.86)	1.70 (1.27)	1.70 (1.27)	1.62 (1.21)	1.31 (0.975)	1.31 (0.975)	1.05 (0.783)	0.751 (0.560)	0.692 (0.516)	0.585 (0.436)	0.581 (0.433)	5Z100
Output Torque in-lbs (N·m)	6360 (719)	6855 (775)	7345 (830)	5460 (617)	5970 (675)	6600 (746)	5865 (663)	6415 (725)	6310 (713)	5370 (607)	5725 (647)	5820 (658)	7085 (801)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.24 (1.67)	2.09 (1.56)	1.81 (1.35)	1.61 (1.20)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.679 (0.506)	0.602 (0.449)	
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (811)	7345 (830)	7345 (830)	7345 (816)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	6760 (764)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.29 (1.71)	2.09 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z110
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.29 (1.71)	2.09 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z115
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.29 (1.71)	2.09 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.72 (2.03)	2.49 (1.86)	2.29 (1.71)	2.09 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.908)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	4.26 (3.18)	3.65 (2.72)	3.65 (2.72)	2.56 (1.91)	2.56 (1.91)	2.55 (1.90)	2.01 (1.50)	2.01 (1.50)	1.74 (1.30)	1.27 (0.944)	1.15 (0.859)	0.897 (0.669)	0.886 (0.661)	5A110
Output Torque in-lbs (N·m)	10150 (1150)	9820 (1110)	1800 (1220)	8230 (930)	9030 (1020)	10350 (1170)	9025 (1020)	9910 (1120)	10500 (1190)	9025 (1020)	9555 (1080)	8935 (1010)	10750 (1220)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

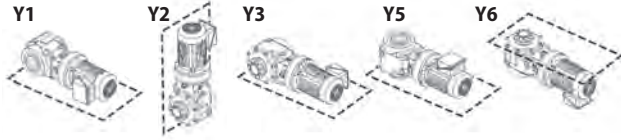


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	8.73 (6.51)	5.26 (3.92)	5.26 (3.92)	5.26 (3.92)	5.26 (3.92)	5.26 (3.92)	5.26 (3.92)	5.23 (3.90)	5.23 (3.90)	5A115
Output Torque in-lbs (N·m)	3670 (415)	4475 (506)	4890 (553)	5600 (633)	6120 (692)	4425 (500)	4715 (533)	5160 (583)	5895 (667)	7415 (838)	8105 (916)	9555 (1080)	10950 (1240)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	12.9 (9.60)	12.9 (9.60)	12.9 (9.60)	12.9 (9.60)	12.9 (9.60)	8.77 (6.54)	8.77 (6.54)	8.77 (6.54)	8.77 (6.54)	6.80 (5.07)	6.80 (5.07)	6.26 (4.67)	5.43 (4.05)	5A120
Output Torque in-lbs (N·m)	5415 (612)	6600 (746)	7220 (816)	8255 (933)	9025 (1020)	7380 (834)	7875 (890)	8610 (973)	9820 (1110)	9555 (1080)	10500 (1190)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	14.8 (11.0)	14.8 (11.0)	14.8 (11.0)	14.8 (11.0)	14.8 (11.0)	10.1 (7.51)	10.1 (7.51)	10.1 (7.51)	10.1 (7.51)	7.94 (5.92)	7.40 (5.52)	6.26 (4.67)	5.43 (4.05)	5A125
Output Torque in-lbs (N·m)	6200 (701)	7565 (855)	8275 (935)	9470 (1070)	10350 (1170)	8475 (957)	9025 (1020)	9910 (1120)	11300 (1280)	11200 (1270)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	24.5 (18.3)	22.3 (16.6)	20.4 (15.2)	17.8 (13.3)	16.2 (12.1)	13.5 (10.1)	12.7 (9.48)	11.6 (8.67)	10.2 (7.59)	8.10 (6.04)	7.40 (5.52)	6.26 (4.67)	5.43 (4.05)	5A140
Output Torque in-lbs (N·m)	10350 (1170)	11510 (1300)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	24.5 (18.3)	22.1 (16.5)	20.4 (15.2)	17.8 (13.3)	16.2 (12.1)	13.5 (10.1)	12.7 (9.48)	11.6 (8.67)	10.2 (7.59)	8.10 (6.04)	7.40 (5.52)	6.26 (4.67)	5.43 (4.05)	5A145
Output Torque in-lbs (N·m)	10350 (1170)	11510 (1300)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	12.9 (9.60)	12.9 (9.60)	12.9 (9.60)	12.9 (9.60)	12.9 (9.60)	8.77 (6.54)	8.77 (6.54)	8.77 (6.54)	8.77 (6.54)	6.80 (5.07)	6.80 (5.07)	6.80 (5.07)	6.80 (5.07)	5B120
Output Torque in-lbs (N·m)	5415 (612)	6600 (746)	7220 (816)	8255 (933)	9025 (1020)	7380 (834)	7875 (890)	8610 (973)	9820 (1110)	9555 (1080)	10500 (1190)	12350 (1400)	14300 (1620)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	14.8 (11.0)	14.8 (11.0)	14.8 (11.0)	14.8 (11.0)	14.8 (11.0)	10.1 (7.51)	10.1 (7.51)	10.1 (7.51)	10.1 (7.51)	7.94 (5.92)	7.94 (5.92)	7.94 (5.92)	7.94 (5.92)	5B125
Output Torque in-lbs (N·m)	6200 (701)	7565 (855)	8275 (935)	9470 (1070)	10350 (1170)	8475 (958)	9025 (1020)	9910 (1120)	11300 (1280)	11200 (1270)	12200 (1380)	14500 (1640)	16700 (1890)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

Output RPM	24.7	21.6	19.6	18.1	16.5	14.2	12.9	11.8	9.60	8.10	7.00	5.82	4.75	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	4.79 (3.57)	4.17 (3.11)	3.88 (2.89)	2.98 (2.22)	2.98 (2.22)	2.80 (2.09)	2.43 (1.81)	2.32 (1.73)	1.89 (1.41)	1.49 (1.11)	1.35 (1.01)	1.02 (0.758)	0.936 (0.698)	5A115
Output Torque in-lbs <i>(N·m)</i>	11400 <i>(1290)</i>	11200 <i>(1270)</i>	11400 <i>(1290)</i>	9555 <i>(1080)</i>	10400 <i>(1180)</i>	11400 <i>(1290)</i>	10850 <i>(1230)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	10600 <i>(1200)</i>	11200 <i>(1270)</i>	10050 <i>(1140)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.57 (2.66)	3.26 (2.43)	2.80 (2.09)	2.55 (1.90)	2.32 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A120
Output Torque in-lbs <i>(N·m)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.57 (2.66)	3.26 (2.43)	2.80 (2.09)	2.55 (1.90)	2.32 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A125
Output Torque in-lbs <i>(N·m)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.57 (2.66)	3.26 (2.43)	2.80 (2.09)	2.55 (1.90)	2.32 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A140
Output Torque in-lbs <i>(N·m)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.57 (2.66)	3.26 (2.43)	2.80 (2.09)	2.55 (1.90)	2.32 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A145
Output Torque in-lbs <i>(N·m)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP (kW)	6.56 (4.89)	5.31 (3.96)	5.31 (3.96)	4.14 (3.09)	4.14 (3.09)	3.85 (2.87)	3.18 (2.37)	3.18 (2.37)	2.56 (1.91)	2.19 (1.63)	1.74 (1.30)	1.28 (0.957)	1.27 (0.944)	5B120
Output Torque in-lbs <i>(N·m)</i>	15650 <i>(1770)</i>	14250 <i>(1610)</i>	15650 <i>(1770)</i>	13250 <i>(1500)</i>	14500 <i>(1640)</i>	15650 <i>(1770)</i>	14250 <i>(1610)</i>	15670 <i>(1770)</i>	15450 <i>(1750)</i>	15650 <i>(1770)</i>	14520 <i>(1640)</i>	12700 <i>(1440)</i>	15450 <i>(1750)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	7.59 (5.66)	6.42 (4.79)	6.42 (4.79)	5.31 (3.96)	5.31 (3.96)	4.65 (3.47)	3.86 (2.88)	3.86 (2.88)	3.14 (2.34)	2.64 (1.97)	2.17 (1.62)	1.53 (1.14)	1.38 (1.03)	5B125
Output Torque in-lbs <i>(N·m)</i>	18100 <i>(2050)</i>	17250 <i>(1950)</i>	18900 <i>(2140)</i>	16950 <i>(1920)</i>	18550 <i>(2100)</i>	18900 <i>(2140)</i>	17300 <i>(1960)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	17950 <i>(2030)</i>	15200 <i>(1720)</i>	16800 <i>(1900)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Speed Reducers
Selection Tables

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

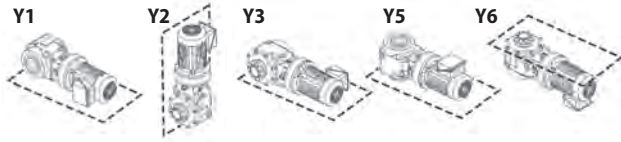


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	25.5 (19.0)	25.5 (19.0)	25.5 (19.0)	25.5 (19.0)	25.5 (19.0)	17.4 (13.0)	17.4 (13.0)	17.4 (13.0)	17.4 (13.0)	16.1 (12.0)	14.8 (11.0)	12.5 (9.30)	10.8 (8.06)	5B140
Output Torque in-lbs (N·m)	10700 (1210)	13050 (1480)	14300 (1620)	16350 (1850)	17850 (2020)	14650 (1660)	15650 (1770)	17050 (1930)	19550 (2210)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	29.5 (22.0)	29.5 (22.0)	29.5 (22.0)	29.5 (22.0)	29.5 (22.0)	20.2 (15.1)	20.2 (15.1)	20.2 (15.1)	20.2 (15.1)	16.1 (12.0)	14.8 (11.0)	12.5 (9.30)	10.8 (8.06)	5B145
Output Torque in-lbs (N·m)	12350 (1400)	15100 (1710)	16550 (1870)	18900 (2140)	20700 (2340)	17050 (1930)	18100 (2050)	19900 (2250)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.3 (24.8)	31.6 (23.6)	27.1 (20.2)	25.3 (18.9)	23.2 (17.3)	20.2 (15.1)	16.1 (12.0)	14.8 (11.0)	12.5 (9.30)	10.8 (8.06)	5B160
Output Torque in-lbs (N·m)	14250 (1610)	17400 (1970)	19000 (2150)	21330 (2410)	22215 (2510)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	38.9 (29.0)	38.9 (29.0)	37.4 (27.9)	33.3 (24.8)	31.6 (23.6)	27.1 (20.2)	25.3 (18.9)	23.2 (17.3)	20.2 (15.1)	16.1 (12.0)	14.8 (11.0)	12.5 (9.30)	10.8 (8.06)	5B165
Output Torque in-lbs (N·m)	16350 (1850)	19900 (2250)	21065 (2380)	21330 (2410)	22700 (2510)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (12300)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	25.5 (19.0)	25.5 (19.0)	25.5 (19.0)	25.5 (19.0)	25.5 (19.0)	17.4 (13.0)	17.4 (13.0)	17.4 (13.0)	17.4 (13.0)	17.4 (13.0)	17.4 (13.0)	17.4 (13.0)	16.1 (12.0)	5C140
Output Torque in-lbs (N·m)	10700 (1210)	13050 (1480)	14300 (1620)	16350 (1850)	17850 (2020)	14650 (1660)	15650 (1770)	17170 (1940)	19550 (2210)	24600 (2780)	26900 (3040)	31860 (3600)	33850 (3830)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	29.5 (22.0)	29.5 (22.0)	29.5 (22.0)	29.5 (22.0)	29.5 (22.0)	20.2 (15.1)	20.2 (15.1)	20.2 (15.1)	20.2 (15.1)	20.2 (15.1)	20.2 (15.1)	20.2 (15.1)	19.4 (14.5)	5C145
Output Torque in-lbs (N·m)	12350 (1400)	15100 (1710)	16550 (1870)	18900 (2140)	20700 (2340)	17050 (1930)	18230 (2060)	19900 (2250)	22830 (2580)	28680 (3240)	31330 (3540)	36820 (4160)	40800 (4610)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	27.2 (20.3)	27.2 (20.3)	26.4 (19.7)	26.4 (19.7)	26.4 (19.7)	24.3 (18.6)	21.6 (16.1)	5C160
Output Torque in-lbs (N·m)	14250 (1610)	17400 (1970)	19000 (2150)	21750 (2460)	23800 (2690)	28550 (3230)	24400 (2760)	26700 (3020)	29650 (3350)	37250 (4210)	40710 (4600)	45490 (5140)	45490 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

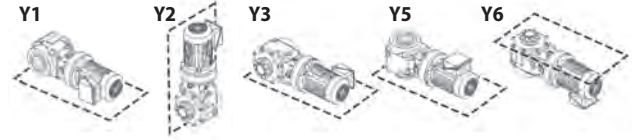
Dimensions on pages 2.96–2.104

Output RPM	24.7	21.6	19.6	18.1	16.5	14.2	12.9	11.8	9.60	8.10	7.00	5.82	4.75	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	9.53 (7.11)	8.45 (6.30)	7.72 (5.76)	7.09 (5.29)	6.49 (4.84)	5.59 (4.17)	5.07 (3.78)	4.63 (3.45)	3.77 (2.81)	3.18 (2.37)	2.75 (2.05)	2.28 (1.70)	1.86 (1.39)	5B140
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	9.53 (7.11)	8.45 (6.30)	7.72 (5.76)	7.09 (5.29)	6.49 (4.84)	5.59 (4.17)	5.07 (3.78)	4.63 (3.45)	3.77 (2.81)	3.18 (2.37)	2.75 (2.05)	2.28 (1.70)	1.86 (1.39)	
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	9.53 (7.11)	8.45 (6.30)	7.72 (5.76)	7.09 (5.29)	6.49 (4.84)	5.59 (4.17)	5.07 (3.78)	4.63 (3.45)	3.77 (2.81)	3.18 (2.37)	2.75 (2.05)	2.28 (1.70)	1.86 (1.39)	5B160
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	9.53 (7.11)	8.45 (6.30)	7.72 (5.76)	7.09 (5.29)	6.49 (4.84)	5.59 (4.17)	5.07 (3.78)	4.63 (3.45)	3.77 (2.81)	3.18 (2.37)	2.75 (2.05)	2.28 (1.70)	1.86 (1.39)	
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	13.5 (10.1)	11.6 (8.66)	11.6 (8.66)	9.24 (6.89)	9.24 (6.89)	7.98 (5.95)	6.99 (5.21)	6.99 (5.21)	5.28 (3.94)	4.60 (3.43)	3.97 (2.96)	3.26 (2.43)	2.66 (1.98)	5C140
Output Torque in-lbs (N·m)	32300 (3640)	31330 (3540)	34250 (3870)	29650 (3350)	32350 (3660)	32450 (3670)	31300 (3540)	34250 (3870)	31850 (3600)	32900 (3720)	32800 (3710)	32450 (3670)	32350 (3660)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	16.1 (12.0)	12.7 (9.49)	12.7 (9.49)	10.6 (7.91)	10.6 (7.91)	10.1 (7.53)	8.39 (6.26)	8.39 (6.26)	6.26 (4.67)	4.96 (3.70)	4.26 (3.18)	3.51 (2.62)	2.90 (2.16)	
Output Torque in-lbs (N·m)	38400 (4340)	34250 (3870)	37440 (4230)	33950 (3840)	37150 (4200)	41050 (4640)	37620 (4250)	41160 (4650)	37750 (4270)	35450 (4010)	35300 (3990)	35050 (3960)	35300 (3990)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	17.6 (13.1)	16.9 (12.6)	15.4 (11.5)	13.2 (9.86)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.36 (4.00)	4.57 (3.41)	3.73 (2.78)	5C160
Output Torque in-lbs (N·m)	41780 (4720)	45450 (5140)	45490 (5140)	42350 (4790)	45490 (5140)	45490 (5140)	45450 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions



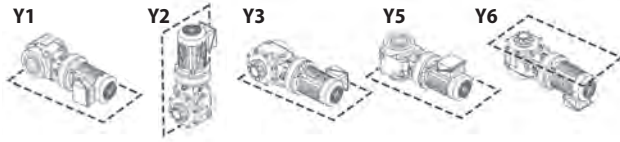
Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	32.3 <i>(24.1)</i>	32.3 <i>(24.1)</i>	32.3 <i>(24.1)</i>	32.2 <i>(24.0)</i>	29.5 <i>(22.0)</i>	24.9 <i>(18.6)</i>	21.6 <i>(16.1)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	16900 <i>(1910)</i>	20600 <i>(2330)</i>	22550 <i>(2550)</i>	25750 <i>(2910)</i>	28200 <i>(3190)</i>	33850 <i>(3830)</i>	28940 <i>(3270)</i>	31690 <i>(3580)</i>	36200 <i>(4090)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	55.7* <i>(41.5)*</i>	55.7* <i>(41.5)*</i>	55.7* <i>(41.5)*</i>	55.7* <i>(41.5)*</i>	55.5* <i>(41.4)*</i>	45.5 <i>(33.9)</i>	45.5 <i>(33.9)</i>	43.3 <i>(32.3)</i>	39.4 <i>(29.4)</i>	32.2 <i>(24.0)</i>	29.5 <i>(22.0)</i>	24.9 <i>(18.6)</i>	21.6 <i>(16.1)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	23450 <i>(2650)</i>	28550 <i>(3230)</i>	31200 <i>(3530)</i>	35650 <i>(4030)</i>	38900 <i>(4400)</i>	38200 <i>(4320)</i>	40800 <i>(4610)</i>	42550 <i>(4810)</i>	44250 <i>(5000)</i>	45450 <i>(5140)</i>	45490 <i>(5140)</i>	45490 <i>(5140)</i>	45490 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(20700)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	60.3* <i>(45.0)*</i>	60.3* <i>(45.0)*</i>	60.3* <i>(45.0)*</i>	60.3* <i>(44.2)*</i>	55.5* <i>(41.4)*</i>	48.3 <i>(36.0)</i>	46.8 <i>(34.9)</i>	43.3 <i>(32.3)</i>	39.4 <i>(29.4)</i>	32.2 <i>(24.0)</i>	29.5 <i>(22.0)</i>	24.9 <i>(18.6)</i>	21.6 <i>(16.1)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	25400 <i>(2870)</i>	30950 <i>(3500)</i>	33850 <i>(3830)</i>	37970 <i>(4290)</i>	38900 <i>(4400)</i>	40600 <i>(4590)</i>	41950 <i>(4740)</i>	42550 <i>(4810)</i>	44250 <i>(5000)</i>	45490 <i>(5140)</i>	45490 <i>(5140)</i>	45490 <i>(5140)</i>	45490 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(20700)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Note: For selections noted with *, the duty cycle for units mounted in the Y2 configuration is limited to 75% Equivalent Duty (10 minute cycle time).

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

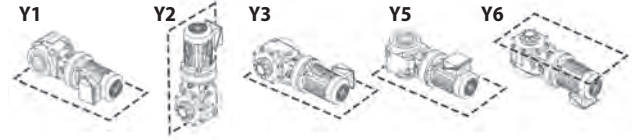
Output RPM	24.7	21.6	19.6	18.1	16.5	14.2	12.9	11.8	9.60	8.10	7.00	5.82	4.75	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	279	305	
Input Power HP (kW)	19.0 (14.2)	16.9 (12.6)	15.4 (11.5)	14.2 (10.6)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C165
Output Torque in-lbs (N·m)	45490 (5140)	45450 (5140)	45490 (5140)	45450 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	19.0 (14.2)	16.9 (12.6)	15.4 (11.5)	14.2 (10.6)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C170
Output Torque in-lbs (N·m)	45490 (5140)	45450 (5140)	45490 (5140)	45450 (5140)	45490 (5140)	45490 (5140)	45450 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	19.0 (14.2)	16.9 (12.6)	15.4 (11.5)	14.2 (10.6)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C175
Output Torque in-lbs (N·m)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 1165 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

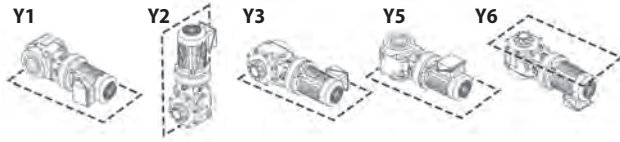


Dimensions on pages 2.96–2.104

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	—	—	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	2.80 <i>(2.09)</i>	5Z100
Output Torque in-lbs <i>(N·m)</i>	1645 <i>(186)</i>	2005 <i>(227)</i>	2200 <i>(249)</i>	2510 <i>(284)</i>	2750 <i>(311)</i>	3300 <i>(373)</i>	—	—	4395 <i>(497)</i>	5530 <i>(625)</i>	6050 <i>(684)</i>	7150 <i>(808)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	—	—	4.26 <i>(3.18)</i>	4.18 <i>(3.12)</i>	3.82 <i>(2.85)</i>	3.23 <i>(2.41)</i>	2.80 <i>(2.09)</i>	5Z105
Output Torque in-lbs <i>(N·m)</i>	2230 <i>(252)</i>	2725 <i>(308)</i>	2970 <i>(336)</i>	3405 <i>(385)</i>	3725 <i>(421)</i>	4465 <i>(505)</i>	—	—	5955 <i>(673)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.18 <i>(3.12)</i>	3.82 <i>(2.85)</i>	3.23 <i>(2.41)</i>	2.80 <i>(2.09)</i>	5Z110
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5590 <i>(632)</i>	6120 <i>(692)</i>	4980 <i>(563)</i>	5315 <i>(601)</i>	5815 <i>(657)</i>	6645 <i>(751)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	4.18 <i>(3.12)</i>	3.82 <i>(2.85)</i>	3.23 <i>(2.41)</i>	2.80 <i>(2.09)</i>	5Z115
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5590 <i>(632)</i>	6120 <i>(692)</i>	5505 <i>(622)</i>	5875 <i>(664)</i>	6425 <i>(726)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.60)</i>	11.5 <i>(8.58)</i>	10.5 <i>(7.84)</i>	9.20 <i>(6.86)</i>	8.42 <i>(6.28)</i>	7.01 <i>(5.23)</i>	6.57 <i>(4.90)</i>	6.01 <i>(4.48)</i>	5.26 <i>(3.92)</i>	4.18 <i>(3.12)</i>	3.82 <i>(2.85)</i>	3.23 <i>(2.41)</i>	2.80 <i>(2.09)</i>	5Z120
Output Torque in-lbs <i>(N·m)</i>	6740 <i>(762)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	575 <i>(2580)</i>	550 <i>(2460)</i>	760 <i>(3390)</i>	940 <i>(4200)</i>	1160 <i>(5180)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	13.8 <i>(10.3)</i>	11.5 <i>(8.58)</i>	10.5 <i>(7.84)</i>	9.20 <i>(6.86)</i>	8.42 <i>(6.28)</i>	7.01 <i>(5.23)</i>	6.57 <i>(4.90)</i>	6.01 <i>(4.48)</i>	5.26 <i>(3.92)</i>	4.18 <i>(3.12)</i>	3.82 <i>(2.85)</i>	3.23 <i>(2.41)</i>	2.80 <i>(2.09)</i>	5Z125
Output Torque in-lbs <i>(N·m)</i>	7255 <i>(820)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	330 <i>(1470)</i>	550 <i>(2460)</i>	760 <i>(3390)</i>	940 <i>(4200)</i>	1160 <i>(5180)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.13 <i>(3.08)</i>	5A110
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5590 <i>(632)</i>	6120 <i>(692)</i>	4980 <i>(563)</i>	5315 <i>(601)</i>	5815 <i>(657)</i>	6645 <i>(751)</i>	8355 <i>(944)</i>	9115 <i>(1030)</i>	10750 <i>(1220)</i>	10750 <i>(1220)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	

Speed Reducers
Selection Tables

Frame Size Selection Tables 1165 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

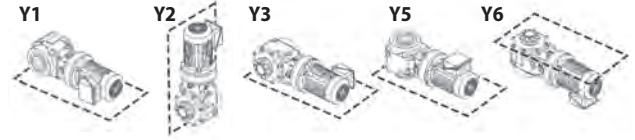
Dimensions on pages 2.96–2.104

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	2.48 (1.85)	2.05 (1.53)	2.00 (1.49)	1.70 (1.27)	1.69 (1.26)	1.45 (1.08)	1.23 (0.917)	1.20 (0.896)	0.979 (0.730)	0.751 (0.560)	0.692 (0.516)	0.585 (0.436)	0.484 (0.361)	5Z100
Output Torque in-lbs (N·m)	7345 (830)	6875 (777)	7345 (830)	6795 (768)	7345 (830)	7345 (830)	6865 (776)	7345 (830)	7345 (830)	6690 (756)	7125 (805)	7245 (819)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.48 (1.85)	2.19 (1.63)	2.00 (1.49)	1.84 (1.37)	1.69 (1.26)	1.45 (1.08)	1.32 (0.981)	1.20 (0.896)	0.979 (0.730)	0.825 (0.615)	0.713 (0.532)	0.593 (0.442)	0.484 (0.361)	5Z105
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.48 (1.85)	2.19 (1.63)	2.00 (1.49)	1.84 (1.37)	1.69 (1.26)	1.45 (1.08)	1.32 (0.981)	1.20 (0.896)	0.979 (0.730)	0.825 (0.615)	0.713 (0.532)	0.593 (0.442)	0.484 (0.361)	5Z110
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.48 (1.85)	2.19 (1.63)	2.00 (1.49)	1.84 (1.37)	1.69 (1.26)	1.45 (1.08)	1.32 (0.981)	1.20 (0.896)	0.979 (0.730)	0.825 (0.615)	0.713 (0.532)	0.593 (0.442)	0.484 (0.361)	5Z115
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.48 (1.85)	2.19 (1.63)	2.00 (1.49)	1.84 (1.37)	1.69 (1.26)	1.45 (1.08)	1.32 (0.981)	1.20 (0.896)	0.979 (0.730)	0.825 (0.615)	0.713 (0.532)	0.593 (0.442)	0.484 (0.361)	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.48 (1.85)	2.19 (1.63)	2.00 (1.49)	1.84 (1.37)	1.69 (1.26)	1.45 (1.08)	1.32 (0.981)	1.20 (0.896)	0.979 (0.730)	0.825 (0.615)	0.713 (0.532)	0.593 (0.442)	0.484 (0.361)	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.65 (2.72)	2.95 (2.20)	2.95 (2.20)	2.48 (1.85)	2.48 (1.85)	2.13 (1.59)	1.77 (1.32)	1.77 (1.32)	1.45 (1.08)	1.21 (0.906)	1.05 (0.784)	0.873 (0.651)	0.712 (0.531)	5A110
Output Torque in-lbs (N·m)	10750 (1220)	9900 (1120)	10750 (1220)	9900 (1120)	10750 (1220)	10750 (1220)	9900 (1120)	10750 (1220)	10850 (1230)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 1165 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

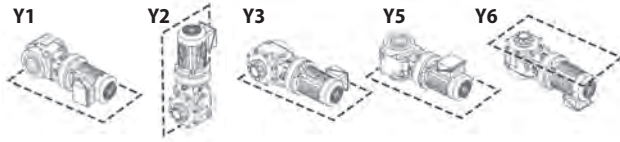


Dimensions on pages 2.96–2.104

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	7.01 <i>(5.23)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.03 <i>(3.75)</i>	4.36 <i>(3.25)</i>	5A115
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5590 <i>(632)</i>	6120 <i>(692)</i>	5505 <i>(622)</i>	5875 <i>(664)</i>	6425 <i>(726)</i>	7345 <i>(830)</i>	9205 <i>(1040)</i>	10050 <i>(1140)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.8 <i>(9.54)</i>	12.8 <i>(9.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	8.18 <i>(6.10)</i>	6.50 <i>(4.85)</i>	5.94 <i>(4.43)</i>	5.03 <i>(3.75)</i>	4.36 <i>(3.25)</i>	5A120
Output Torque in-lbs <i>(N·m)</i>	6740 <i>(762)</i>	8220 <i>(929)</i>	9025 <i>(1020)</i>	10170 <i>(1150)</i>	11500 <i>(1260)</i>	9200 <i>(1040)</i>	9800 <i>(1110)</i>	10700 <i>(1210)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	14.8 <i>(11.0)</i>	13.5 <i>(10.1)</i>	13.5 <i>(10.1)</i>	12.8 <i>(9.54)</i>	12.8 <i>(9.54)</i>	9.79 <i>(7.30)</i>	9.11 <i>(6.79)</i>	9.11 <i>(6.79)</i>	8.18 <i>(6.10)</i>	6.50 <i>(4.85)</i>	5.94 <i>(4.43)</i>	5.03 <i>(3.75)</i>	4.36 <i>(3.25)</i>	5A125
Output Torque in-lbs <i>(N·m)</i>	7725 <i>(873)</i>	8630 <i>(975)</i>	9470 <i>(1070)</i>	10170 <i>(1150)</i>	11150 <i>(1260)</i>	10250 <i>(1160)</i>	10150 <i>(1150)</i>	11150 <i>(1260)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	21.1 <i>(15.7)</i>	17.8 <i>(13.3)</i>	16.4 <i>(12.2)</i>	14.3 <i>(10.7)</i>	13.1 <i>(9.75)</i>	10.9 <i>(8.13)</i>	10.2 <i>(7.62)</i>	9.35 <i>(6.97)</i>	8.18 <i>(6.10)</i>	6.50 <i>(4.85)</i>	5.94 <i>(4.43)</i>	5.03 <i>(3.75)</i>	4.36 <i>(3.25)</i>	5A140
Output Torque in-lbs <i>(N·m)</i>	11050 <i>(1250)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	21.1 <i>(15.7)</i>	17.8 <i>(13.3)</i>	16.4 <i>(12.2)</i>	14.3 <i>(10.7)</i>	13.1 <i>(9.75)</i>	10.9 <i>(8.13)</i>	10.2 <i>(7.62)</i>	9.35 <i>(6.97)</i>	8.18 <i>(6.10)</i>	6.50 <i>(4.85)</i>	5.94 <i>(4.43)</i>	5.03 <i>(3.75)</i>	4.36 <i>(3.25)</i>	5A145
Output Torque in-lbs <i>(N·m)</i>	11050 <i>(1250)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.9 <i>(9.60)</i>	12.8 <i>(9.54)</i>	12.8 <i>(9.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	8.77 <i>(6.54)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.02 <i>(4.49)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	6740 <i>(762)</i>	8220 <i>(929)</i>	9025 <i>(1020)</i>	10170 <i>(1150)</i>	11150 <i>(1260)</i>	9200 <i>(1040)</i>	9800 <i>(1110)</i>	10700 <i>(1210)</i>	12200 <i>(1380)</i>	11900 <i>(1350)</i>	13050 <i>(1480)</i>	15400 <i>(1740)</i>	15750 <i>(1780)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	14.8 <i>(11.0)</i>	13.5 <i>(10.1)</i>	13.5 <i>(10.1)</i>	12.8 <i>(9.54)</i>	12.8 <i>(9.54)</i>	9.79 <i>(7.30)</i>	9.11 <i>(6.79)</i>	9.11 <i>(6.79)</i>	9.15 <i>(6.82)</i>	7.93 <i>(5.91)</i>	7.93 <i>(5.91)</i>	7.16 <i>(5.34)</i>	7.23 <i>(5.39)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	7725 <i>(873)</i>	8630 <i>(975)</i>	9470 <i>(1070)</i>	10170 <i>(1150)</i>	11150 <i>(1260)</i>	10250 <i>(1160)</i>	10150 <i>(1150)</i>	11150 <i>(1260)</i>	12700 <i>(1440)</i>	13850 <i>(1570)</i>	15200 <i>(1720)</i>	16250 <i>(1840)</i>	18900 <i>(2140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Speed Reducers
Selection Tables

Frame Size Selection Tables 1165 RPM



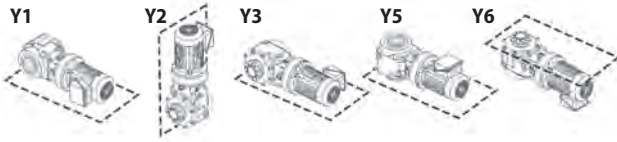
Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	3.85 (2.87)	3.41 (2.54)	3.11 (2.32)	2.86 (2.13)	2.61 (1.95)	2.25 (1.68)	2.04 (1.52)	1.86 (1.39)	1.52 (1.13)	1.28 (0.956)	1.11 (0.827)	0.921 (0.687)	0.752 (0.561)	5A115
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.85 (2.87)	3.41 (2.54)	3.11 (2.32)	2.86 (2.13)	2.61 (1.95)	2.25 (1.68)	2.04 (1.52)	1.86 (1.39)	1.52 (1.13)	1.28 (0.956)	1.11 (0.827)	0.921 (0.687)	0.752 (0.561)	5A120
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.85 (2.87)	3.41 (2.54)	3.11 (2.32)	2.86 (2.13)	2.61 (1.95)	2.25 (1.68)	2.04 (1.52)	1.86 (1.39)	1.52 (1.13)	1.28 (0.956)	1.11 (0.827)	0.921 (0.687)	0.752 (0.561)	5A125
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.85 (2.87)	3.41 (2.54)	3.11 (2.32)	2.86 (2.13)	2.61 (1.95)	2.25 (1.68)	2.04 (1.52)	1.86 (1.39)	1.52 (1.13)	1.28 (0.956)	1.11 (0.827)	0.921 (0.687)	0.752 (0.561)	5A140
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.85 (2.87)	3.41 (2.54)	3.11 (2.32)	2.86 (2.13)	2.61 (1.95)	2.25 (1.68)	2.04 (1.52)	1.86 (1.39)	1.52 (1.13)	1.28 (0.956)	1.11 (0.827)	0.921 (0.687)	0.752 (0.561)	5A145
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	5.27 (3.93)	4.28 (3.19)	4.28 (3.19)	3.62 (2.70)	3.62 (2.70)	3.08 (2.30)	2.59 (1.93)	2.59 (1.93)	2.11 (1.57)	1.77 (1.32)	1.53 (1.14)	1.27 (0.947)	1.04 (0.775)	5B120
Output Torque in-lbs (N·m)	15650 (1770)	14300 (1620)	15650 (1770)	14400 (1630)	15750 (1780)	15650 (1770)	14400 (1630)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	6.38 (4.76)	5.16 (3.85)	5.16 (3.85)	4.34 (3.24)	4.34 (3.24)	3.74 (2.79)	3.10 (2.31)	3.10 (2.31)	2.52 (1.88)	2.13 (1.59)	1.84 (1.37)	1.29 (0.963)	1.16 (0.868)	5B125
Output Torque in-lbs (N·m)	18900 (2140)	17300 (1960)	18900 (2140)	17300 (1960)	18900 (2140)	18900 (2140)	17300 (1960)	18900 (2140)	18900 (2140)	19000 (2150)	18900 (2140)	16000 (1810)	17700 (2000)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 1165 RPM



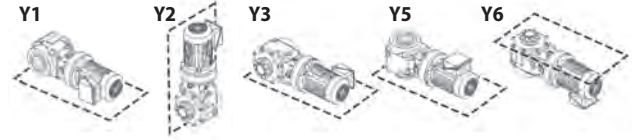
Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	7.66 (5.71)	6.79 (5.06)	6.21 (4.63)	5.70 (4.25)	5.22 (3.89)	4.49 (3.35)	4.08 (3.04)	3.73 (2.78)	3.03 (2.26)	2.55 (1.90)	2.21 (1.65)	1.84 (1.37)	1.50 (1.12)	5B140
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	7.66 (5.71)	6.79 (5.06)	6.21 (4.63)	5.70 (4.25)	5.22 (3.89)	4.49 (3.35)	4.08 (3.04)	3.73 (2.78)	3.03 (2.26)	2.55 (1.90)	2.21 (1.65)	1.84 (1.37)	1.50 (1.12)	5B145
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	7.66 (5.71)	6.79 (5.06)	6.21 (4.63)	5.70 (4.25)	5.22 (3.89)	4.49 (3.35)	4.08 (3.04)	3.73 (2.78)	3.03 (2.26)	2.55 (1.90)	2.21 (1.65)	1.84 (1.37)	1.50 (1.12)	5B160
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	7.66 (5.71)	6.79 (5.06)	6.21 (4.63)	5.70 (4.25)	5.22 (3.89)	4.49 (3.35)	4.08 (3.04)	3.73 (2.78)	3.03 (2.26)	2.55 (1.90)	2.21 (1.65)	1.84 (1.37)	1.50 (1.12)	5B165
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	12.4 (9.25)	10.0 (7.49)	10.0 (7.49)	8.43 (6.29)	8.43 (6.29)	7.27 (5.42)	6.02 (4.49)	6.02 (4.49)	4.91 (3.66)	4.13 (3.08)	3.58 (2.67)	2.98 (2.22)	2.43 (1.81)	5C140
Output Torque in-lbs (N·m)	36800 (4160)	33600 (3800)	36800 (4160)	33600 (3800)	36800 (4160)	36800 (4160)	33600 (3800)	36800 (4160)	36800 (4160)	36800 (4160)	36900 (4160)	36900 (4160)	36900 (4160)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	13.8 (10.3)	10.8 (8.02)	10.8 (8.02)	9.44 (7.04)	9.44 (7.04)	8.14 (6.07)	6.75 (5.03)	6.75 (5.03)	5.30 (3.95)	4.20 (3.13)	3.61 (2.69)	2.98 (2.22)	2.45 (1.83)	5C145
Output Torque in-lbs (N·m)	41150 (4650)	36110 (4080)	39450 (4460)	37620 (4250)	41160 (4650)	41160 (4650)	37620 (4250)	41160 (4650)	39700 (4490)	37350 (4220)	37150 (4200)	36900 (4170)	37150 (4210)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	15.3 (11.4)	13.5 (10.1)	12.4 (9.25)	11.4 (8.50)	10.4 (7.77)	8.98 (6.70)	8.14 (6.07)	7.44 (5.55)	6.06 (4.52)	5.11 (3.81)	4.41 (3.29)	3.67 (2.74)	2.99 (2.23)	5C160
Output Torque in-lbs (N·m)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Frame Size Selection Tables 1165 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

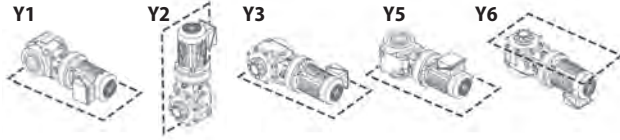


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	38.0 <i>(28.3)</i>	32.3 <i>(24.1)</i>	32.3 <i>(24.1)</i>	31.8 <i>(24.1)</i>	25.9 <i>(19.3)</i>	23.7 <i>(17.7)</i>	20.0 <i>(14.9)</i>	17.4 <i>(13.0)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	21050 <i>(2380)</i>	25650 <i>(2900)</i>	28050 <i>(3170)</i>	32100 <i>(3630)</i>	35100 <i>(3970)</i>	39830 <i>(4500)</i>	36100 <i>(4080)</i>	39450 <i>(4460)</i>	45130 <i>(5100)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	55.7 <i>(41.5)</i>	55.7 <i>(41.5)</i>	55.2 <i>(41.2)</i>	50.8 <i>(37.9)</i>	47.6 <i>(35.5)</i>	38.8 <i>(28.9)</i>	38.8 <i>(28.9)</i>	37.1 <i>(27.7)</i>	32.6 <i>(24.3)</i>	25.9 <i>(19.3)</i>	23.7 <i>(17.7)</i>	20.0 <i>(14.9)</i>	17.4 <i>(13.0)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	29100 <i>(3290)</i>	35450 <i>(4010)</i>	38550 <i>(4360)</i>	40535 <i>(4580)</i>	41550 <i>(4700)</i>	40600 <i>(4590)</i>	43350 <i>(4900)</i>	45450 <i>(5010)</i>	45450 <i>(5010)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21200)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	60.3 <i>(45.0)</i>	58.9 <i>(43.9)</i>	55.2 <i>(41.2)</i>	50.8 <i>(37.9)</i>	47.6 <i>(35.5)</i>	38.8 <i>(28.9)</i>	38.8 <i>(28.9)</i>	37.1 <i>(27.7)</i>	32.6 <i>(24.3)</i>	25.9 <i>(19.3)</i>	23.7 <i>(17.7)</i>	20.0 <i>(14.9)</i>	17.4 <i>(13.0)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	31550 <i>(3570)</i>	38175 <i>(4310)</i>	38550 <i>(4360)</i>	40535 <i>(4680)</i>	41550 <i>(4700)</i>	40600 <i>(4590)</i>	43350 <i>(4900)</i>	45450 <i>(5130)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21200)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Frame Size Selection Tables 1165 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

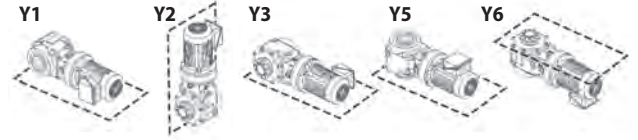
Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP <i>(kW)</i>	15.3 <i>(11.4)</i>	13.5 <i>(10.1)</i>	12.4 <i>(9.25)</i>	11.4 <i>(8.50)</i>	10.4 <i>(7.77)</i>	8.98 <i>(6.70)</i>	8.14 <i>(6.07)</i>	7.44 <i>(5.55)</i>	6.06 <i>(4.52)</i>	5.11 <i>(3.81)</i>	4.41 <i>(3.29)</i>	3.67 <i>(2.74)</i>	2.99 <i>(2.23)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	15.3 <i>(11.4)</i>	13.5 <i>(10.1)</i>	12.4 <i>(9.25)</i>	11.4 <i>(8.50)</i>	10.4 <i>(7.77)</i>	8.98 <i>(6.70)</i>	8.14 <i>(6.07)</i>	7.44 <i>(5.55)</i>	6.06 <i>(4.52)</i>	5.11 <i>(3.81)</i>	4.41 <i>(3.29)</i>	3.67 <i>(2.74)</i>	2.99 <i>(2.23)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	15.3 <i>(11.4)</i>	13.5 <i>(10.1)</i>	12.4 <i>(9.25)</i>	11.4 <i>(8.50)</i>	10.4 <i>(7.77)</i>	8.98 <i>(6.70)</i>	8.14 <i>(6.07)</i>	7.44 <i>(5.55)</i>	6.06 <i>(4.52)</i>	5.11 <i>(3.81)</i>	4.41 <i>(3.29)</i>	3.67 <i>(2.74)</i>	2.99 <i>(2.23)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Speed Reducers

Selection Tables

Frame Size Selection Tables 980 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

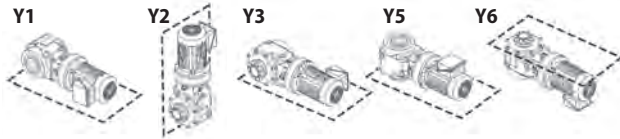


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	—	—	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	2.72 <i>(2.03)</i>	2.36 <i>(1.76)</i>	5Z100
Output Torque in-lbs <i>(N·m)</i>	1960 <i>(222)</i>	2385 <i>(270)</i>	2615 <i>(296)</i>	2990 <i>(338)</i>	3265 <i>(369)</i>	3920 <i>(443)</i>	—	—	5230 <i>(591)</i>	6575 <i>(743)</i>	7195 <i>(813)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	4.05 <i>(3.02)</i>	4.05 <i>(3.02)</i>	4.05 <i>(3.02)</i>	4.05 <i>(3.02)</i>	4.05 <i>(3.02)</i>	4.05 <i>(3.02)</i>	—	—	3.73 <i>(2.78)</i>	3.51 <i>(2.62)</i>	3.22 <i>(2.40)</i>	2.72 <i>(2.03)</i>	2.36 <i>(1.76)</i>	5Z105
Output Torque in-lbs <i>(N·m)</i>	2520 <i>(285)</i>	3070 <i>(347)</i>	3360 <i>(380)</i>	3840 <i>(434)</i>	4200 <i>(475)</i>	5045 <i>(570)</i>	—	—	6185 <i>(699)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	4.67 <i>(3.48)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.43 <i>(3.30)</i>	3.51 <i>(2.62)</i>	3.22 <i>(2.40)</i>	2.72 <i>(2.03)</i>	2.36 <i>(1.76)</i>	5Z110
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	5815 <i>(657)</i>	6315 <i>(714)</i>	6910 <i>(781)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	4.67 <i>(3.48)</i>	5.26 <i>(3.92)</i>	5.06 <i>(3.77)</i>	4.43 <i>(3.30)</i>	3.51 <i>(2.62)</i>	3.22 <i>(2.40)</i>	2.72 <i>(2.03)</i>	2.36 <i>(1.76)</i>	5Z115
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	5815 <i>(657)</i>	6980 <i>(789)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	11.8 <i>(8.80)</i>	9.68 <i>(7.22)</i>	8.85 <i>(6.60)</i>	7.74 <i>(5.77)</i>	7.08 <i>(5.28)</i>	5.90 <i>(4.40)</i>	5.52 <i>(4.12)</i>	5.06 <i>(3.77)</i>	4.43 <i>(3.30)</i>	3.51 <i>(2.62)</i>	3.22 <i>(2.40)</i>	2.72 <i>(2.03)</i>	2.36 <i>(1.76)</i>	5Z120
Output Torque in-lbs <i>(N·m)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	565 <i>(2520)</i>	850 <i>(3800)</i>	1070 <i>(4770)</i>	1265 <i>(5640)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	11.8 <i>(8.80)</i>	9.68 <i>(7.22)</i>	8.85 <i>(6.60)</i>	7.74 <i>(5.77)</i>	7.08 <i>(5.28)</i>	5.90 <i>(4.40)</i>	5.52 <i>(4.12)</i>	5.06 <i>(3.77)</i>	4.43 <i>(3.30)</i>	3.51 <i>(2.62)</i>	3.22 <i>(2.40)</i>	2.72 <i>(2.03)</i>	2.36 <i>(1.76)</i>	5Z125
Output Torque in-lbs <i>(N·m)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	565 <i>(2520)</i>	850 <i>(3800)</i>	1070 <i>(4770)</i>	1265 <i>(5640)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	4.67 <i>(3.48)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.75 <i>(3.54)</i>	4.75 <i>(3.54)</i>	4.01 <i>(2.99)</i>	3.47 <i>(2.59)</i>	5A110
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	5815 <i>(657)</i>	6315 <i>(714)</i>	6910 <i>(781)</i>	7900 <i>(893)</i>	9910 <i>(1120)</i>	10750 <i>(1220)</i>	10750 <i>(1220)</i>	10750 <i>(1220)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	

Frame Size Selection Tables 980 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

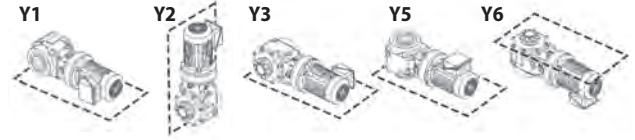
Dimensions on pages 2.96–2.104

Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	2.08 (1.55)	1.73 (1.29)	1.69 (1.26)	1.45 (1.08)	1.42 (1.06)	1.22 (0.91)	1.04 (0.772)	1.01 (0.754)	0.823 (0.614)	0.695 (0.518)	0.599 (0.447)	0.499 (0.372)	0.406 (0.303)	5Z100
Output Torque in-lbs (N·m)	7345 (830)	6890 (779)	7345 (830)	6865 (776)	7345 (830)	7345 (830)	6875 (777)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.08 (1.55)	1.84 (1.37)	1.69 (1.26)	1.54 (1.15)	1.42 (1.06)	1.22 (0.91)	1.11 (0.825)	1.01 (0.754)	0.823 (0.614)	0.695 (0.518)	0.599 (0.447)	0.499 (0.372)	0.406 (0.303)	5Z105
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.08 (1.55)	1.84 (1.37)	1.69 (1.26)	1.54 (1.15)	1.42 (1.06)	1.22 (0.91)	1.11 (0.825)	1.01 (0.754)	0.823 (0.614)	0.695 (0.518)	0.599 (0.447)	0.499 (0.372)	0.406 (0.303)	5Z110
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.08 (1.55)	1.84 (1.37)	1.69 (1.26)	1.54 (1.15)	1.42 (1.06)	1.22 (0.910)	1.11 (0.825)	1.01 (0.754)	0.823 (0.614)	0.695 (0.518)	0.599 (0.447)	0.499 (0.372)	0.406 (0.303)	5Z115
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.08 (1.55)	1.84 (1.37)	1.69 (1.26)	1.54 (1.15)	1.42 (1.06)	1.22 (0.910)	1.11 (0.825)	1.01 (0.754)	0.823 (0.614)	0.695 (0.518)	0.599 (0.447)	0.499 (0.372)	0.406 (0.303)	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.08 (1.55)	1.84 (1.37)	1.69 (1.26)	1.54 (1.15)	1.42 (1.06)	1.22 (0.910)	1.11 (0.825)	1.01 (0.754)	0.823 (0.614)	0.695 (0.518)	0.599 (0.447)	0.499 (0.372)	0.406 (0.303)	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.07 (2.29)	2.48 (1.85)	2.48 (1.85)	2.09 (1.56)	2.09 (1.56)	1.80 (1.34)	1.49 (1.11)	1.49 (1.11)	1.21 (0.904)	1.02 (0.762)	0.884 (0.659)	0.735 (0.548)	0.599 (0.447)	5A110
Output Torque in-lbs (N·m)	10750 (1220)	9900 (1120)	10750 (1220)	9900 (1120)	10850 (1230)	10750 (1220)	9900 (1120)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 980 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

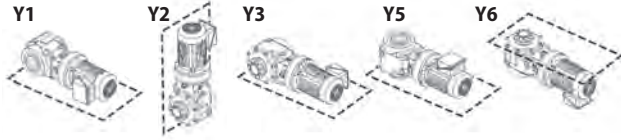


Dimensions on pages 2.96–2.104

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	5.90 <i>(4.40)</i>	4.67 <i>(3.48)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.00 <i>(3.73)</i>	4.24 <i>(3.16)</i>	3.66 <i>(2.73)</i>	5A115
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5600 <i>(633)</i>	6120 <i>(692)</i>	5815 <i>(657)</i>	6980 <i>(789)</i>	7635 <i>(863)</i>	8725 <i>(986)</i>	10950 <i>(1240)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.6)</i>	12.6 <i>(9.36)</i>	12.6 <i>(9.36)</i>	11.9 <i>(8.86)</i>	11.0 <i>(8.20)</i>	8.58 <i>(6.40)</i>	7.98 <i>(5.95)</i>	7.86 <i>(5.86)</i>	6.88 <i>(5.13)</i>	5.47 <i>(4.08)</i>	5.00 <i>(3.73)</i>	4.24 <i>(3.16)</i>	3.66 <i>(2.73)</i>	5A120
Output Torque in-lbs <i>(N·m)</i>	8015 <i>(906)</i>	9555 <i>(1080)</i>	10400 <i>(1180)</i>	11200 <i>(1270)</i>	11400 <i>(1290)</i>	10700 <i>(1210)</i>	10600 <i>(1200)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	13.3 <i>(9.90)</i>	12.0 <i>(8.93)</i>	12.0 <i>(8.93)</i>	11.3 <i>(8.45)</i>	11.0 <i>(8.20)</i>	8.58 <i>(6.40)</i>	7.98 <i>(5.95)</i>	7.86 <i>(5.86)</i>	6.88 <i>(5.13)</i>	5.47 <i>(4.08)</i>	5.00 <i>(3.73)</i>	4.24 <i>(3.16)</i>	3.66 <i>(2.73)</i>	5A125
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	9555 <i>(1080)</i>	10400 <i>(1180)</i>	11200 <i>(1270)</i>	11400 <i>(1290)</i>	10700 <i>(1210)</i>	10600 <i>(1200)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	18.4 <i>(13.7)</i>	15.0 <i>(11.2)</i>	13.8 <i>(10.3)</i>	12.0 <i>(8.97)</i>	11.0 <i>(8.20)</i>	9.17 <i>(6.84)</i>	8.60 <i>(6.41)</i>	7.86 <i>(5.86)</i>	6.88 <i>(5.13)</i>	5.47 <i>(4.08)</i>	5.00 <i>(3.73)</i>	4.24 <i>(3.16)</i>	3.66 <i>(2.73)</i>	5A140
Output Torque in-lbs <i>(N·m)</i>	11150 <i>(1260)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	18.0 <i>(13.7)</i>	15.0 <i>(11.2)</i>	13.8 <i>(10.3)</i>	12.0 <i>(8.97)</i>	11.0 <i>(8.20)</i>	9.17 <i>(6.84)</i>	8.60 <i>(6.41)</i>	7.86 <i>(5.86)</i>	6.88 <i>(5.13)</i>	5.47 <i>(4.08)</i>	5.00 <i>(3.73)</i>	4.24 <i>(3.16)</i>	3.66 <i>(2.73)</i>	5A145
Output Torque in-lbs <i>(N·m)</i>	11150 <i>(1260)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.60)</i>	12.0 <i>(8.93)</i>	12.0 <i>(8.93)</i>	11.3 <i>(8.45)</i>	11.3 <i>(8.45)</i>	8.58 <i>(6.40)</i>	7.98 <i>(5.95)</i>	7.98 <i>(5.95)</i>	8.01 <i>(5.97)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	5.85 <i>(4.36)</i>	5.07 <i>(3.78)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	8015 <i>(906)</i>	9110 <i>(1030)</i>	9910 <i>(1120)</i>	10790 <i>(1220)</i>	11770 <i>(1330)</i>	10700 <i>(1210)</i>	10600 <i>(1200)</i>	11550 <i>(1310)</i>	13250 <i>(1500)</i>	14150 <i>(1600)</i>	15450 <i>(1750)</i>	15750 <i>(1780)</i>	15750 <i>(1780)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	13.3 <i>(9.90)</i>	12.0 <i>(8.93)</i>	12.0 <i>(8.93)</i>	11.3 <i>(8.45)</i>	11.3 <i>(8.45)</i>	8.58 <i>(6.40)</i>	7.98 <i>(5.95)</i>	7.98 <i>(5.95)</i>	8.01 <i>(5.97)</i>	6.95 <i>(5.18)</i>	6.95 <i>(5.18)</i>	6.28 <i>(4.68)</i>	6.09 <i>(4.54)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	9555 <i>(1030)</i>	10400 <i>(1120)</i>	10790 <i>(1220)</i>	11770 <i>(1330)</i>	10700 <i>(1210)</i>	10600 <i>(1200)</i>	11550 <i>(1310)</i>	13250 <i>(1500)</i>	14500 <i>(1640)</i>	15800 <i>(1790)</i>	16900 <i>(1910)</i>	18900 <i>(2140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Speed Reducers
Selection Tables

Frame Size Selection Tables 980 RPM



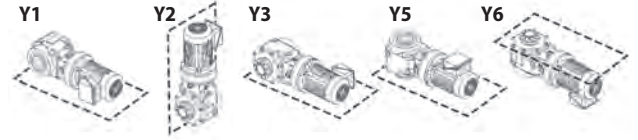
Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	3.23 (2.41)	2.87 (2.14)	2.61 (1.95)	2.40 (1.79)	2.20 (1.64)	1.89 (1.41)	1.72 (1.28)	1.57 (1.17)	1.28 (0.954)	1.08 (0.804)	0.932 (0.695)	0.775 (0.578)	0.633 (0.472)	5A115
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.23 (2.41)	2.87 (2.14)	2.61 (1.95)	2.40 (1.79)	2.20 (1.64)	1.89 (1.41)	1.72 (1.28)	1.57 (1.17)	1.28 (0.954)	1.08 (0.804)	0.932 (0.695)	0.775 (0.578)	0.633 (0.472)	5A120
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.23 (2.41)	2.87 (2.14)	2.61 (1.95)	2.40 (1.79)	2.20 (1.64)	1.89 (1.41)	1.72 (1.28)	1.57 (1.17)	1.28 (0.954)	1.08 (0.804)	0.932 (0.695)	0.775 (0.578)	0.633 (0.472)	5A125
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.23 (2.41)	2.87 (2.14)	2.61 (1.95)	2.40 (1.79)	2.20 (1.64)	1.89 (1.41)	1.72 (1.28)	1.57 (1.17)	1.28 (0.954)	1.08 (0.804)	0.932 (0.695)	0.775 (0.578)	0.633 (0.472)	5A140
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.23 (2.41)	2.87 (2.14)	2.61 (1.95)	2.40 (1.79)	2.20 (1.64)	1.89 (1.41)	1.72 (1.28)	1.57 (1.17)	1.28 (0.954)	1.08 (0.804)	0.932 (0.695)	0.775 (0.578)	0.633 (0.472)	5A145
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	4.43 (3.30)	3.59 (2.68)	3.59 (2.68)	3.04 (2.27)	3.04 (2.27)	2.60 (1.94)	2.17 (1.62)	2.17 (1.62)	1.77 (1.32)	1.49 (1.11)	1.29 (0.961)	1.07 (0.799)	0.874 (0.652)	5B120
Output Torque in-lbs (N·m)	15550 (1760)	14300 (1620)	15650 (1770)	14400 (1630)	15750 (1780)	15650 (1770)	14400 (1630)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	5.36 (4.00)	4.34 (3.24)	4.34 (3.24)	3.65 (2.72)	3.65 (2.72)	3.15 (2.35)	2.60 (1.94)	2.60 (1.94)	2.12 (1.58)	1.78 (1.33)	1.54 (1.15)	1.13 (0.843)	1.02 (0.761)	5B125
Output Torque in-lbs (N·m)	18900 (2140)	17300 (1960)	18900 (2140)	17300 (1960)	18900 (2140)	18900 (2140)	17250 (1950)	18900 (2140)	18900 (2140)	18850 (2130)	18850 (2130)	16600 (1880)	18400 (2080)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Frame Size Selection Tables 980 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

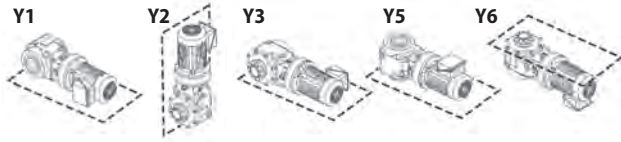


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	16.4 (12.2)	17.2 (12.8)	15.7 (11.7)	13.7 (10.2)	10.9 (8.13)	10.0 (7.43)	8.43 (6.29)	7.31 (5.45)	5B140
Output Torque in-lbs <i>(N·m)</i>	12900 <i>(1460)</i>	15750 <i>(1780)</i>	17250 <i>(1950)</i>	19700 <i>(2230)</i>	21550 <i>(2440)</i>	20350 <i>(2300)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	16.4 (12.2)	17.2 (12.8)	15.7 (11.7)	13.7 (10.2)	10.9 (8.13)	10.0 (7.43)	8.43 (6.29)	7.31 (5.45)	5B145
Output Torque in-lbs <i>(N·m)</i>	12900 <i>(1460)</i>	15750 <i>(1780)</i>	17250 <i>(1950)</i>	19700 <i>(2230)</i>	21550 <i>(2440)</i>	20350 <i>(2300)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	26.3 (19.6)	26.3 (19.6)	26.3 (19.6)	24.0 (17.9)	21.9 (16.3)	18.2 (13.6)	17.2 (12.8)	15.7 (11.7)	13.7 (10.2)	10.9 (8.13)	10.0 (7.43)	8.43 (6.29)	7.31 (5.45)	5B160
Output Torque in-lbs <i>(N·m)</i>	16350 <i>(1850)</i>	19900 <i>(2250)</i>	21850 <i>(2470)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	26.3 (19.6)	26.3 (19.6)	26.3 (19.6)	24.0 (17.9)	21.9 (16.3)	18.2 (13.6)	17.2 (12.8)	15.7 (11.7)	13.7 (10.2)	10.9 (8.13)	10.0 (7.43)	8.43 (6.29)	7.31 (5.45)	5B165
Output Torque in-lbs <i>(N·m)</i>	16350 <i>(1850)</i>	19900 <i>(2250)</i>	21850 <i>(2470)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	16.4 (12.2)	17.4 (13.0)	17.4 (13.0)	15.6 (11.6)	16.1 (12.0)	16.1 (12.0)	13.7 (10.2)	11.8 (8.82)	5C140
Output Torque in-lbs <i>(N·m)</i>	12900 <i>(1460)</i>	15750 <i>(1780)</i>	17250 <i>(1950)</i>	19700 <i>(2230)</i>	21550 <i>(2440)</i>	20350 <i>(2300)</i>	23150 <i>(2620)</i>	25300 <i>(2860)</i>	25800 <i>(2920)</i>	33600 <i>(3800)</i>	36700 <i>(4150)</i>	36900 <i>(4170)</i>	36800 <i>(4160)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP (kW)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	20.8 (15.5)	16.4 (12.2)	18.0 (13.4)	18.0 (13.4)	15.6 (11.6)	16.2 (12.1)	16.2 (12.1)	15.3 (11.4)	13.1 (9.78)	5C145
Output Torque in-lbs <i>(N·m)</i>	12900 <i>(1460)</i>	15750 <i>(1780)</i>	17250 <i>(1950)</i>	19700 <i>(2230)</i>	21550 <i>(2440)</i>	20350 <i>(2300)</i>	23850 <i>(2700)</i>	26100 <i>(2950)</i>	25800 <i>(2920)</i>	33850 <i>(3830)</i>	37050 <i>(4190)</i>	41150 <i>(4650)</i>	40800 <i>(4610)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP (kW)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	31.9 (23.8)	27.2 (20.3)	27.2 (20.3)	26.4 (19.7)	21.9 (16.3)	19.4 (14.5)	16.5 (12.3)	14.2 (10.6)	5C160
Output Torque in-lbs <i>(N·m)</i>	21150 <i>(2390)</i>	25750 <i>(2910)</i>	28100 <i>(3180)</i>	32200 <i>(3640)</i>	35200 <i>(3980)</i>	39700 <i>(4490)</i>	36200 <i>(4090)</i>	39550 <i>(4470)</i>	43900 <i>(4960)</i>	45450 <i>(5140)</i>	44300 <i>(5010)</i>	44300 <i>(5010)</i>	44300 <i>(5010)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Frame Size Selection Tables 980 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

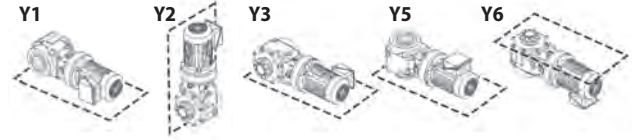
Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	6.45 (4.81)	5.71 (4.26)	5.22 (3.89)	4.80 (3.58)	4.39 (3.27)	3.78 (2.82)	3.42 (2.55)	3.14 (2.34)	2.55 (1.90)	2.15 (1.60)	1.86 (1.39)	1.54 (1.15)	1.26 (0.939)	5B140
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	6.45 (4.81)	5.71 (4.26)	5.22 (3.89)	4.80 (3.58)	4.39 (3.27)	3.78 (2.82)	3.42 (2.55)	3.14 (2.34)	2.55 (1.90)	2.15 (1.60)	1.86 (1.39)	1.54 (1.15)	1.26 (0.939)	5B145
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	6.45 (4.81)	5.71 (4.26)	5.22 (3.89)	4.80 (3.58)	4.39 (3.27)	3.78 (2.82)	3.42 (2.55)	3.14 (2.34)	2.55 (1.90)	2.15 (1.60)	1.86 (1.39)	1.54 (1.15)	1.26 (0.939)	5B160
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	6.45 (4.81)	5.71 (4.26)	5.22 (3.89)	4.80 (3.58)	4.39 (3.27)	3.78 (2.82)	3.42 (2.55)	3.14 (2.34)	2.55 (1.90)	2.15 (1.60)	1.86 (1.39)	1.54 (1.15)	1.26 (0.939)	5B165
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	10.4 (7.78)	8.45 (6.30)	8.45 (6.30)	7.09 (5.29)	7.09 (5.29)	6.11 (4.56)	5.07 (3.78)	5.07 (3.78)	4.13 (3.08)	3.47 (2.59)	3.00 (2.24)	2.49 (1.86)	2.04 (1.52)	5C140
Output Torque in-lbs (N·m)	36800 (4160)	33600 (3800)	36800 (4160)	33600 (3800)	36800 (4160)	36800 (4160)	33600 (3800)	36800 (4160)	36800 (4160)	36700 (4150)	36800 (4160)	36700 (4150)	36800 (4160)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	11.7 (8.70)	9.23 (6.88)	9.23 (6.88)	7.94 (5.92)	7.94 (5.92)	6.84 (5.10)	5.67 (4.23)	5.67 (4.23)	4.61 (3.44)	3.67 (2.74)	3.16 (2.36)	2.60 (1.94)	2.08 (1.55)	5C145
Output Torque in-lbs (N·m)	41150 (4650)	36820 (4160)	40270 (4550)	37620 (4250)	41150 (4650)	41150 (4650)	37620 (4250)	41160 (4650)	41150 (4650)	38940 (4400)	38750 (4380)	38410 (4340)	37500 (4240)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	12.6 (9.61)	11.4 (8.51)	10.2 (7.78)	9.59 (7.15)	8.77 (6.54)	7.56 (5.64)	6.85 (5.11)	6.26 (4.67)	5.10 (3.80)	4.29 (3.20)	3.71 (2.77)	3.08 (2.30)	2.52 (1.88)	5C160
Output Torque in-lbs (N·m)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 980 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

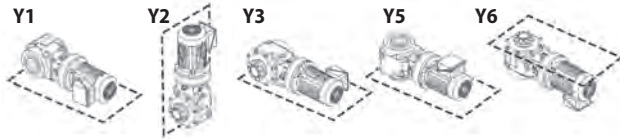


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	31.9 <i>(23.8)</i>	32.3 <i>(24.1)</i>	31.4 <i>(23.4)</i>	24.7 <i>(20.4)</i>	21.9 <i>(16.3)</i>	20.0 <i>(14.9)</i>	16.9 <i>(12.6)</i>	14.6 <i>(10.9)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	25000 <i>(2830)</i>	30500 <i>(3450)</i>	33350 <i>(3770)</i>	38100 <i>(4310)</i>	41750 <i>(4720)</i>	39830 <i>(4500)</i>	42900 <i>(4850)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	55.7 <i>(41.5)</i>	53.2 <i>(38.9)</i>	48.9 <i>(36.5)</i>	45.9 <i>(33.6)</i>	42.2 <i>(31.5)</i>	32.6 <i>(24.3)</i>	32.6 <i>(24.3)</i>	31.4 <i>(23.4)</i>	27.4 <i>(20.4)</i>	21.9 <i>(16.3)</i>	20.0 <i>(14.9)</i>	16.9 <i>(12.6)</i>	14.6 <i>(10.9)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	34650 <i>(3920)</i>	40210 <i>(4540)</i>	40600 <i>(4590)</i>	42750 <i>(4830)</i>	43800 <i>(4950)</i>	40600 <i>(4590)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	56.5 <i>(42.1)</i>	53.2 <i>(38.9)</i>	48.9 <i>(36.5)</i>	45.1 <i>(33.6)</i>	42.2 <i>(31.5)</i>	32.6 <i>(24.3)</i>	32.6 <i>(24.3)</i>	31.4 <i>(23.4)</i>	27.4 <i>(20.4)</i>	21.9 <i>(16.3)</i>	20.0 <i>(14.9)</i>	16.9 <i>(12.6)</i>	14.6 <i>(10.9)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	35100 <i>(3970)</i>	40210 <i>(4540)</i>	40600 <i>(4590)</i>	42750 <i>(4930)</i>	43800 <i>(4950)</i>	40600 <i>(4950)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Frame Size Selection Tables 980 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

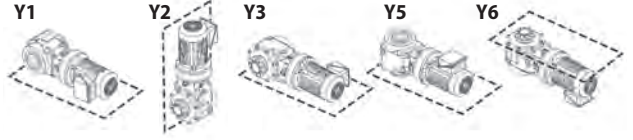
Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP <i>(kW)</i>	12.9 <i>(9.61)</i>	11.4 <i>(8.51)</i>	10.4 <i>(7.78)</i>	9.59 <i>(7.15)</i>	8.77 <i>(6.54)</i>	7.56 <i>(5.64)</i>	6.85 <i>(5.11)</i>	6.26 <i>(4.67)</i>	5.10 <i>(3.80)</i>	4.29 <i>(3.20)</i>	3.71 <i>(2.77)</i>	3.08 <i>(2.30)</i>	2.52 <i>(1.88)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.61)</i>	11.4 <i>(8.51)</i>	10.4 <i>(7.78)</i>	9.59 <i>(7.15)</i>	8.77 <i>(6.54)</i>	7.56 <i>(5.64)</i>	6.85 <i>(5.11)</i>	6.26 <i>(4.67)</i>	5.10 <i>(3.80)</i>	4.29 <i>(3.20)</i>	3.71 <i>(2.77)</i>	3.08 <i>(2.30)</i>	2.52 <i>(1.88)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	12.9 <i>(9.61)</i>	11.4 <i>(8.51)</i>	10.4 <i>(7.78)</i>	9.59 <i>(7.15)</i>	8.77 <i>(6.54)</i>	7.56 <i>(5.64)</i>	6.85 <i>(5.11)</i>	6.26 <i>(4.67)</i>	5.10 <i>(3.80)</i>	4.29 <i>(3.20)</i>	3.71 <i>(2.77)</i>	3.08 <i>(2.30)</i>	2.52 <i>(1.88)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Speed Reducers

Selection Tables

Frame Size Selection Tables 870 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.96–2.104

Selection Tables

Output RPM	79.1	66.9	62.4	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	— —	— —	3.15 <i>(2.35)</i>	2.92 <i>(2.18)</i>	2.86 <i>(2.13)</i>	2.41 <i>(1.80)</i>	2.09 <i>(1.56)</i>	5Z100
Output Torque in-lbs <i>(N·m)</i>	2210 <i>(250)</i>	2690 <i>(304)</i>	2945 <i>(333)</i>	3370 <i>(381)</i>	3680 <i>(416)</i>	4415 <i>(499)</i>	— —	— —	5890 <i>(666)</i>	6875 <i>(777)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	— —	— —	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	3.66 <i>(2.73)</i>	3.66 <i>(2.73)</i>	3.66 <i>(2.73)</i>	3.66 <i>(2.73)</i>	3.66 <i>(2.73)</i>	3.66 <i>(2.73)</i>	— —	— —	3.41 <i>(2.54)</i>	3.12 <i>(2.33)</i>	2.86 <i>(2.13)</i>	2.41 <i>(1.80)</i>	2.09 <i>(1.56)</i>	5Z105
Output Torque in-lbs <i>(N·m)</i>	2565 <i>(290)</i>	3130 <i>(354)</i>	3425 <i>(387)</i>	3910 <i>(442)</i>	4280 <i>(484)</i>	5130 <i>(580)</i>	— —	— —	6370 <i>(720)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	— —	— —	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	4.14 <i>(3.09)</i>	4.76 <i>(3.55)</i>	4.49 <i>(3.35)</i>	3.93 <i>(2.93)</i>	3.12 <i>(2.33)</i>	2.86 <i>(2.13)</i>	2.41 <i>(1.80)</i>	2.09 <i>(1.56)</i>	5Z110
Output Torque in-lbs <i>(N·m)</i>	3680 <i>(416)</i>	4485 <i>(507)</i>	4900 <i>(554)</i>	5600 <i>(633)</i>	6130 <i>(693)</i>	5815 <i>(657)</i>	7125 <i>(805)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	4.14 <i>(3.09)</i>	4.91 <i>(3.66)</i>	4.49 <i>(3.35)</i>	3.93 <i>(2.93)</i>	3.12 <i>(2.33)</i>	2.86 <i>(2.13)</i>	2.41 <i>(1.80)</i>	2.09 <i>(1.56)</i>	5Z115
Output Torque in-lbs <i>(N·m)</i>	3680 <i>(416)</i>	4485 <i>(507)</i>	4900 <i>(554)</i>	5600 <i>(633)</i>	6130 <i>(693)</i>	5815 <i>(657)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	10.5 <i>(7.81)</i>	8.60 <i>(6.41)</i>	7.86 <i>(5.86)</i>	6.88 <i>(5.13)</i>	6.29 <i>(4.69)</i>	5.24 <i>(3.91)</i>	4.91 <i>(3.66)</i>	4.49 <i>(3.35)</i>	3.93 <i>(2.93)</i>	3.12 <i>(2.33)</i>	2.86 <i>(2.13)</i>	2.41 <i>(1.80)</i>	2.09 <i>(1.56)</i>	5Z120
Output Torque in-lbs <i>(N·m)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	765 <i>(3420)</i>	1070 <i>(4770)</i>	1290 <i>(5760)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	10.5 <i>(7.81)</i>	8.60 <i>(6.41)</i>	7.86 <i>(5.86)</i>	6.88 <i>(5.13)</i>	6.29 <i>(4.69)</i>	5.24 <i>(3.91)</i>	4.91 <i>(3.66)</i>	4.49 <i>(3.35)</i>	3.93 <i>(2.93)</i>	3.12 <i>(2.33)</i>	2.86 <i>(2.13)</i>	2.41 <i>(1.80)</i>	2.09 <i>(1.56)</i>	5Z125
Output Torque in-lbs <i>(N·m)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	765 <i>(3420)</i>	1070 <i>(4770)</i>	1290 <i>(5760)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	5.24 <i>(3.91)</i>	4.14 <i>(3.09)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.21 <i>(3.14)</i>	4.21 <i>(3.14)</i>	3.57 <i>(2.66)</i>	3.08 <i>(2.30)</i>	5A110
Output Torque in-lbs <i>(N·m)</i>	3680 <i>(416)</i>	4485 <i>(507)</i>	4900 <i>(554)</i>	5600 <i>(633)</i>	6130 <i>(693)</i>	5815 <i>(657)</i>	7125 <i>(805)</i>	7785 <i>(880)</i>	8935 <i>(1010)</i>	9910 <i>(1120)</i>	10750 <i>(1220)</i>	10750 <i>(1220)</i>	10750 <i>(1220)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	

Frame Size Selection Tables 870 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

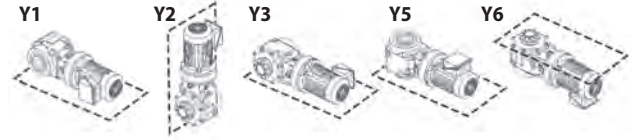
Dimensions on pages 2.96–2.104

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	1.85 (1.38)	1.53 (1.14)	1.50 (1.12)	1.29 (0.959)	1.26 (0.937)	1.08 (0.808)	0.920 (0.685)	0.900 (0.669)	0.730 (0.545)	0.620 (0.459)	0.530 (0.397)	0.440 (0.33)	0.360 (0.269)	5Z100
Output Torque in-lbs (N·m)	7345 (830)	6855 (775)	7345 (830)	6865 (776)	7345 (830)	7345 (830)	6865 (776)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.85 (1.38)	1.64 (1.22)	1.50 (1.12)	1.38 (1.03)	1.26 (0.937)	1.08 (0.808)	0.980 (0.732)	0.900 (0.669)	0.730 (0.545)	0.620 (0.459)	0.530 (0.397)	0.440 (0.330)	0.360 (0.269)	5Z105
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.85 (1.38)	1.64 (1.22)	1.50 (1.12)	1.38 (1.03)	1.26 (0.937)	1.08 (0.808)	0.980 (0.732)	0.900 (0.669)	0.730 (0.545)	0.620 (0.459)	0.530 (0.397)	0.440 (0.330)	0.360 (0.269)	5Z110
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.85 (1.38)	1.64 (1.22)	1.50 (1.12)	1.38 (1.03)	1.26 (0.937)	1.08 (0.808)	0.980 (0.732)	0.900 (0.669)	0.730 (0.545)	0.620 (0.459)	0.530 (0.397)	0.440 (0.330)	0.360 (0.269)	5Z115
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.85 (1.38)	1.64 (1.22)	1.50 (1.12)	1.38 (1.03)	1.26 (0.937)	1.08 (0.808)	0.980 (0.732)	0.900 (0.669)	0.730 (0.545)	0.620 (0.459)	0.530 (0.397)	0.440 (0.330)	0.360 (0.269)	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.85 (1.38)	1.64 (1.22)	1.50 (1.12)	1.38 (1.03)	1.26 (0.937)	1.08 (0.808)	0.980 (0.732)	0.900 (0.669)	0.730 (0.545)	0.620 (0.459)	0.530 (0.397)	0.440 (0.330)	0.360 (0.269)	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.72 (2.03)	2.20 (1.64)	2.20 (1.64)	1.85 (1.38)	1.85 (1.38)	1.60 (1.19)	1.32 (0.986)	1.32 (0.986)	1.08 (0.803)	0.910 (0.677)	0.780 (0.585)	0.650 (0.486)	0.530 (0.397)	5A110
Output Torque in-lbs (N·m)	10750 (1220)	9900 (1120)	10750 (1220)	9900 (1120)	10750 (1220)	10750 (1220)	9900 (1120)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 870 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

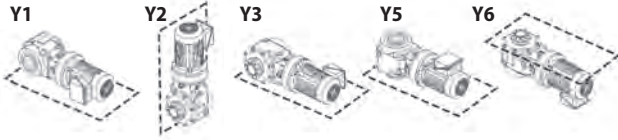


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	79.1	66.9	62.4	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	5.24 (3.91)	5.24 (3.91)	5.24 (3.91)	5.24 (3.91)	5.24 (3.91)	4.14 (3.09)	5.23 (3.90)	5.23 (3.90)	5.24 (3.91)	4.85 (3.62)	4.44 (3.31)	3.75 (2.80)	3.26 (2.43)	5A115
Output Torque in-lbs <i>(N·m)</i>	3680 (416)	4485 (507)	4900 (554)	5600 (633)	6130 (693)	5815 (657)	7820 (884)	8555 (967)	9820 (1110)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	11.8 (8.79)	11.5 (8.21)	11.5 (8.21)	10.4 (7.78)	9.80 (7.28)	7.83 (5.84)	7.28 (5.43)	6.97 (5.20)	6.10 (4.55)	4.85 (3.62)	4.44 (3.31)	3.75 (2.80)	3.26 (2.43)	5A120
Output Torque in-lbs <i>(N·m)</i>	8265 (934)	9380 (1060)	10260 (1160)	11150 (1260)	11400 (1290)	10950 (1240)	10850 (1230)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	11.8 (8.79)	11.0 (8.21)	11.0 (8.21)	10.4 (7.78)	9.80 (7.28)	7.80 (5.84)	7.30 (5.43)	7.00 (5.20)	6.10 (4.55)	4.85 (3.62)	4.44 (3.31)	3.75 (2.80)	3.26 (2.43)	5A125
Output Torque in-lbs <i>(N·m)</i>	8265 (934)	9380 (1060)	10260 (1160)	11150 (1260)	11400 (1290)	10950 (1240)	10850 (1230)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	16.2 (12.1)	13.4 (9.96)	12.2 (9.10)	10.7 (7.97)	9.80 (7.28)	8.10 (6.07)	7.60 (5.69)	6.97 (5.20)	6.10 (4.55)	4.85 (3.62)	4.44 (3.31)	3.75 (2.80)	3.26 (2.43)	5A140
Output Torque in-lbs <i>(N·m)</i>	11150 (1260)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	16.2 (12.1)	13.4 (9.96)	12.2 (9.10)	10.7 (7.97)	9.80 (7.28)	8.10 (6.07)	7.60 (5.69)	6.97 (5.20)	6.10 (4.55)	4.85 (3.62)	4.44 (3.31)	3.75 (2.80)	3.26 (2.43)	5A145
Output Torque in-lbs <i>(N·m)</i>	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	11.8 (8.79)	11.0 (8.21)	11.0 (8.21)	10.7 (7.78)	10.7 (7.78)	7.83 (5.84)	7.28 (5.43)	7.28 (5.43)	7.31 (5.45)	6.14 (4.58)	6.14 (4.58)	5.19 (3.87)	4.51 (3.36)	5B120
Output Torque in-lbs <i>(N·m)</i>	8265 (934)	9380 (1060)	10260 (1160)	11150 (1260)	12210 (1380)	10950 (1240)	10850 (1230)	11900 (1350)	18600 (1550)	14400 (1630)	15750 (1780)	15750 (1780)	15800 (1790)	
Hollow Shaft OHL lbs <i>(N)</i>	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	11.8 (8.79)	11.0 (8.21)	11.0 (8.21)	10.7 (7.78)	10.7 (7.78)	7.80 (5.84)	7.30 (5.43)	7.30 (5.43)	7.30 (5.45)	6.34 (4.73)	6.34 (4.73)	5.73 (4.27)	5.40 (4.03)	5B125
Output Torque in-lbs <i>(N·m)</i>	8265 (934)	9380 (1060)	10260 (1160)	11150 (1260)	12210 (1380)	10950 (1240)	10850 (1230)	11900 (1350)	13600 (1540)	14950 (1690)	16250 (1840)	17400 (1970)	18900 (2140)	
Hollow Shaft OHL lbs <i>(N)</i>	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Frame Size Selection Tables 870 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

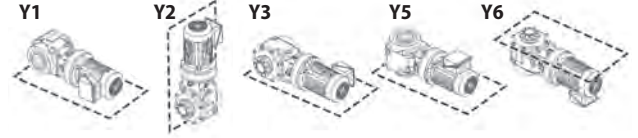
Dimensions on pages 2.96–2.104

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	2.87 (2.14)	2.55 (1.90)	2.32 (1.73)	2.13 (1.59)	1.96 (1.46)	1.69 (1.26)	1.53 (1.14)	1.39 (1.04)	1.14 (0.847)	0.960 (0.714)	0.803 (0.617)	0.690 (0.513)	0.560 (0.419)	5A115
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.87 (2.14)	2.55 (1.90)	2.32 (1.73)	2.13 (1.59)	1.96 (1.46)	1.69 (1.26)	1.53 (1.14)	1.39 (1.04)	1.14 (0.847)	0.960 (0.714)	0.830 (0.617)	0.690 (0.513)	0.560 (0.419)	5A120
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.87 (2.14)	2.55 (1.90)	2.32 (1.73)	2.13 (1.59)	1.96 (1.46)	1.69 (1.26)	1.53 (1.14)	1.39 (1.04)	1.14 (0.847)	0.960 (0.714)	0.830 (0.617)	0.690 (0.513)	0.560 (0.419)	5A125
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.87 (2.14)	2.55 (1.90)	2.32 (1.73)	2.13 (1.59)	1.96 (1.46)	1.69 (1.26)	1.53 (1.14)	1.39 (1.04)	1.14 (0.847)	0.960 (0.714)	0.830 (0.617)	0.690 (0.513)	0.560 (0.419)	5A140
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.87 (2.14)	2.55 (1.90)	2.32 (1.73)	2.13 (1.59)	1.96 (1.46)	1.69 (1.26)	1.53 (1.14)	1.39 (1.04)	1.14 (0.847)	0.960 (0.714)	0.830 (0.617)	0.690 (0.513)	0.560 (0.419)	5A145
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.93 (2.93)	3.19 (2.38)	3.19 (2.38)	2.70 (2.01)	2.70 (2.01)	2.31 (1.72)	1.93 (1.44)	1.93 (1.44)	1.57 (1.17)	1.32 (0.987)	1.14 (0.853)	0.950 (0.709)	0.780 (0.579)	5B120
Output Torque in-lbs (N·m)	15550 (1760)	14300 (1620)	15650 (1770)	14400 (1630)	15750 (1780)	15650 (1770)	14400 (1630)	15800 (1790)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	4.76 (3.55)	3.86 (2.88)	3.86 (2.88)	3.25 (2.42)	3.25 (2.42)	2.79 (2.08)	2.32 (1.73)	2.32 (1.73)	1.88 (1.40)	1.58 (1.18)	1.37 (1.02)	1.03 (0.770)	0.930 (0.694)	5B125
Output Torque in-lbs (N·m)	18900 (2140)	17300 (1960)	18900 (2140)	17300 (1960)	18900 (2140)	18900 (2140)	17300 (1960)	18900 (2140)	18850 (2130)	18850 (2130)	18850 (2130)	17150 (1940)	18900 (2140)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 870 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

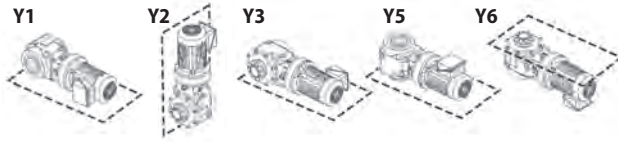


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	79.1	66.9	62.4	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	15.0 (11.2)	15.2 (11.3)	13.9 (10.4)	12.2 (9.07)	9.70 (7.21)	8.09 (6.60)	7.50 (5.58)	6.50 (4.84)	5B140
Output Torque in-lbs (N•m)	12920 (1460)	15755 (1780)	12755 (1950)	19700 (2230)	21550 (2440)	20975 (2370)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	15.0 (11.2)	15.2 (11.3)	13.9 (10.4)	12.2 (9.07)	9.70 (7.21)	8.90 (6.60)	7.50 (5.58)	6.50 (4.84)	5B145
Output Torque in-lbs (N•m)	12920 (1460)	15755 (1780)	12755 (1950)	19700 (2230)	21550 (2440)	20975 (2370)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	23.3 (17.4)	23.3 (17.4)	23.3 (17.4)	21.3 (15.9)	19.4 (14.5)	16.2 (12.1)	15.2 (11.3)	13.9 (10.4)	12.2 (9.07)	9.70 (7.21)	8.90 (6.60)	7.50 (5.58)	6.50 (4.84)	5B160
Output Torque in-lbs (N•m)	16350 (1850)	19900 (2250)	21850 (2470)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	23.3 (17.4)	23.3 (17.4)	23.3 (17.4)	21.3 (15.9)	19.4 (14.5)	16.2 (12.1)	15.2 (11.3)	13.9 (10.4)	12.2 (9.07)	9.70 (7.21)	8.90 (6.60)	7.50 (5.58)	6.50 (4.84)	5B165
Output Torque in-lbs (N•m)	16350 (1850)	19900 (2250)	21850 (2470)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	15.0 (11.2)	16.5 (12.3)	16.5 (12.3)	14.2 (10.6)	14.3 (10.7)	14.3 (10.7)	12.1 (9.04)	10.5 (7.83)	5C140
Output Torque in-lbs (N•m)	12920 (1460)	15755 (1780)	17255 (1950)	19700 (2230)	21550 (2440)	20975 (2370)	24600 (2780)	26900 (3040)	26640 (3010)	33635 (3800)	36800 (4160)	36800 (4160)	36800 (4160)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	18.5 (13.8)	15.0 (11.2)	16.5 (12.3)	16.5 (12.3)	14.2 (10.6)	14.8 (11.0)	14.8 (11.0)	13.5 (10.1)	11.6 (8.68)	5C145
Output Torque in-lbs (N•m)	12920 (1460)	15755 (1780)	17255 (1950)	19700 (2230)	21550 (2440)	20975 (2370)	24600 (2780)	26900 (3040)	26640 (3010)	33635 (3800)	36800 (4160)	36800 (4160)	36800 (4160)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	28.4 (21.2)	27.2 (20.3)	27.2 (20.2)	24.3 (18.1)	19.3 (14.4)	17.7 (13.2)	15.0 (11.2)	13.0 (9.67)	5C160
Output Torque in-lbs (N•m)	23800 (2690)	29000 (3280)	31650 (3580)	36250 (4100)	39650 (4480)	39825 (4500)	40700 (4600)	44520 (5030)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Frame Size Selection Tables 870 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

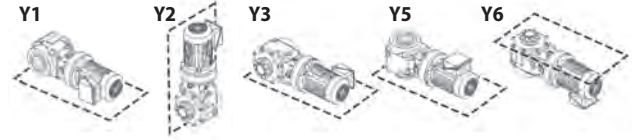
Dimensions on pages 2.96–2.104

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	5.73 (4.27)	5.07 (3.78)	4.63 (3.45)	4.25 (3.17)	3.89 (2.90)	3.35 (2.50)	3.04 (2.27)	2.78 (2.07)	2.27 (1.69)	1.90 (1.42)	1.65 (1.23)	1.37 (1.02)	1.12 (0.834)	5B140
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	5.73 (4.27)	5.07 (3.78)	4.63 (3.45)	4.25 (3.17)	3.89 (2.90)	3.35 (2.50)	3.04 (2.27)	2.78 (2.07)	2.27 (1.69)	1.90 (1.42)	1.65 (1.23)	1.37 (1.02)	1.12 (0.834)	5B145
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	5.73 (4.27)	5.07 (3.78)	4.63 (3.45)	4.25 (3.17)	3.89 (2.90)	3.35 (2.50)	3.04 (2.27)	2.78 (2.07)	2.27 (1.69)	1.90 (1.42)	1.65 (1.23)	1.37 (1.02)	1.12 (0.834)	5B160
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	5.73 (4.27)	5.07 (3.78)	4.63 (3.45)	4.25 (3.17)	3.89 (2.90)	3.35 (2.50)	3.04 (2.27)	2.78 (2.07)	2.27 (1.69)	1.90 (1.42)	1.65 (1.23)	1.37 (1.02)	1.12 (0.834)	5B165
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	9.30 (6.91)	7.50 (5.59)	7.50 (5.59)	6.30 (4.70)	6.30 (4.70)	5.43 (4.05)	4.51 (3.36)	4.51 (3.36)	3.66 (2.73)	3.08 (2.30)	2.67 (1.99)	2.21 (1.65)	1.81 (1.35)	5C140
Output Torque in-lbs (N·m)	36800 (4160)	33600 (3800)	36800 (4160)	33700 (3810)	36800 (4160)	36800 (4160)	33700 (3810)	36900 (4170)	36800 (4160)	36800 (4160)	36800 (4160)	36700 (4150)	36800 (4160)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	10.4 (7.72)	8.20 (6.11)	8.20 (6.11)	7.10 (5.26)	7.10 (5.26)	6.10 (4.53)	5.00 (3.75)	5.03 (3.75)	4.10 (3.06)	3.35 (2.50)	2.88 (2.15)	2.37 (1.77)	1.85 (1.38)	5C145
Output Torque in-lbs (N·m)	41150 (4650)	36800 (4160)	40250 (4550)	37700 (4260)	41200 (4660)	41150 (4650)	37600 (4250)	41150 (4650)	41200 (4660)	40000 (4520)	39700 (4490)	39350 (4450)	37600 (4250)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	11.2 (8.32)	10.1 (7.56)	9.27 (6.91)	8.50 (6.35)	7.78 (5.80)	6.71 (5.00)	6.10 (4.53)	5.57 (4.15)	4.52 (3.37)	3.82 (2.85)	3.30 (2.46)	2.74 (2.04)	2.24 (1.67)	5C160
Output Torque in-lbs (N·m)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 870 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

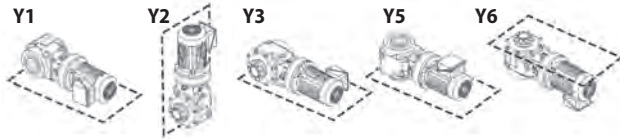


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	79.1	66.9	62.4	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	40.2 <i>(30.0)</i>	37.7 <i>(28.1)</i>	37.7 <i>(28.1)</i>	28.4 <i>(21.2)</i>	29.0 <i>(21.6)</i>	27.8 <i>(20.7)</i>	24.3 <i>(18.1)</i>	19.3 <i>(14.4)</i>	17.7 <i>(13.2)</i>	15.0 <i>(11.2)</i>	13.0 <i>(9.67)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	28200 <i>(3190)</i>	34400 <i>(3890)</i>	37600 <i>(4250)</i>	40270 <i>(4550)</i>	44070 <i>(4980)</i>	39825 <i>(4500)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	50.2 <i>(37.4)</i>	48.0 <i>(36.5)</i>	45.1 <i>(33.6)</i>	41.4 <i>(30.9)</i>	37.5 <i>(28.0)</i>	29.0 <i>(21.6)</i>	29.0 <i>(21.6)</i>	27.8 <i>(20.7)</i>	24.3 <i>(18.1)</i>	19.3 <i>(14.4)</i>	17.7 <i>(13.2)</i>	15.0 <i>(11.2)</i>	13.0 <i>(9.67)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	35100 <i>(3970)</i>	41685 <i>(4710)</i>	42100 <i>(4760)</i>	44250 <i>(5100)</i>	45145 <i>(4590)</i>	40600 <i>(4900)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	50.2 <i>(37.4)</i>	48.9 <i>(32.8)</i>	45.1 <i>(33.6)</i>	41.1 <i>(30.9)</i>	37.5 <i>(28.0)</i>	29.0 <i>(21.6)</i>	29.0 <i>(21.6)</i>	27.8 <i>(20.7)</i>	24.3 <i>(18.1)</i>	19.3 <i>(14.4)</i>	17.7 <i>(13.2)</i>	15.0 <i>(11.2)</i>	13.0 <i>(9.67)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	35100 <i>(3970)</i>	41685 <i>(4710)</i>	42100 <i>(4760)</i>	44250 <i>(5000)</i>	45145 <i>(5100)</i>	40600 <i>(4590)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Frame Size Selection Tables 870 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

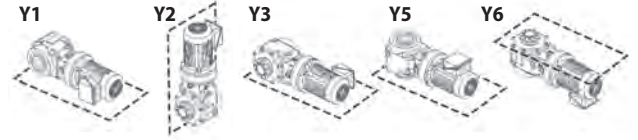
Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	11.5 (8.54)	10.1 (7.56)	9.27 (6.91)	8.50 (6.35)	7.78 (5.80)	6.71 (5.00)	6.10 (4.53)	5.57 (4.15)	4.52 (3.37)	3.82 (2.85)	3.30 (2.46)	2.74 (2.04)	2.24 (1.67)	5C165
Output Torque in-lbs (N·m)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	11.5 (8.54)	10.1 (7.56)	9.27 (6.91)	8.50 (6.35)	7.78 (5.80)	6.71 (5.00)	6.10 (4.53)	5.57 (4.15)	4.52 (3.37)	3.82 (2.85)	3.30 (2.46)	2.74 (2.04)	2.24 (1.67)	5C170
Output Torque in-lbs (N·m)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	11.5 (8.54)	10.1 (7.56)	9.27 (6.91)	8.50 (6.35)	7.78 (5.80)	6.71 (5.00)	6.10 (4.53)	5.57 (4.15)	4.52 (3.37)	3.82 (2.85)	3.30 (2.46)	2.74 (2.04)	2.24 (1.67)	5C175
Output Torque in-lbs (N·m)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 720 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

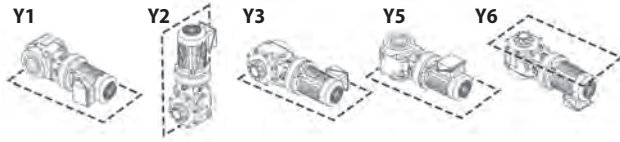


Dimensions on pages 2.96–2.104

Selection Tables

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	3.03 (2.26)	3.03 (2.26)	3.03 (2.26)	3.03 (2.26)	3.03 (2.26)	3.03 (2.26)	— —	— —	2.95 (2.20)	2.41 (1.80)	2.36 (1.76)	2.00 (1.49)	1.73 (1.29)	5Z100
Output Torque in-lbs (N·m)	2565 (290)	3130 (354)	3425 (387)	3910 (442)	4280 (484)	5130 (580)	— —	— —	6660 (753)	6855 (775)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	— —	— —	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.03 (2.26)	3.03 (2.26)	3.03 (2.26)	3.03 (2.26)	3.03 (2.26)	3.03 (2.26)	— —	— —	2.95 (2.20)	2.59 (1.93)	2.36 (1.76)	2.00 (1.49)	1.73 (1.29)	5Z105
Output Torque in-lbs (N·m)	2565 (290)	3130 (354)	3425 (387)	3910 (442)	4280 (484)	5130 (580)	— —	— —	6660 (753)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	— —	— —	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	3.43 (2.56)	4.06 (3.03)	3.71 (2.77)	3.25 (2.42)	2.59 (1.93)	2.36 (1.76)	2.00 (1.49)	1.73 (1.29)	5Z110
Output Torque in-lbs (N·m)	3670 (415)	4475 (506)	4890 (553)	5590 (632)	6115 (691)	5815 (657)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	3.43 (2.56)	4.06 (3.03)	3.71 (2.77)	3.25 (2.42)	2.59 (1.93)	2.36 (1.76)	2.00 (1.49)	1.73 (1.29)	5Z115
Output Torque in-lbs (N·m)	3670 (415)	4475 (506)	4890 (553)	5590 (632)	6115 (691)	5815 (657)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	8.66 (6.46)	7.11 (5.30)	6.50 (4.85)	5.69 (4.24)	5.20 (3.88)	4.33 (3.23)	4.06 (3.03)	3.71 (2.77)	3.25 (2.42)	2.59 (1.93)	2.36 (1.76)	2.00 (1.49)	1.73 (1.29)	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1110 (4940)	1430 (6380)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	8.66 (6.46)	7.11 (5.30)	6.50 (4.85)	5.69 (4.24)	5.20 (3.88)	4.33 (3.23)	4.06 (3.03)	3.71 (2.77)	3.25 (2.42)	2.59 (1.93)	2.36 (1.76)	2.00 (1.49)	1.73 (1.29)	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1110 (4940)	1430 (6380)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	3.43 (2.56)	4.33 (3.23)	4.33 (3.23)	4.33 (3.23)	3.49 (2.60)	3.49 (2.60)	2.95 (2.20)	2.55 (1.90)	5A110
Output Torque in-lbs (N·m)	3670 (415)	4475 (506)	4890 (553)	5590 (632)	6115 (691)	5815 (657)	7830 (885)	8565 (968)	9820 (1110)	10750 (1120)	10750 (1220)	10750 (1220)	10750 (1220)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Frame Size Selection Tables 720 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

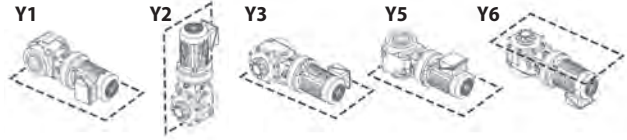
Dimensions on pages 2.96–2.104

Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	1.53 (1.14)	1.27 (0.945)	1.24 (0.923)	1.06 (0.794)	1.04 (0.776)	0.897 (0.669)	0.760 (0.567)	0.743 (0.554)	0.605 (0.451)	0.510 (0.380)	0.441 (0.329)	0.366 (0.273)	0.299 (0.223)	5Z100
Output Torque in-lbs (N·m)	7345 (830)	6875 (777)	7345 (830)	6875 (777)	7345 (830)	7345 (830)	6875 (777)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.53 (1.14)	1.35 (1.01)	1.24 (0.923)	1.14 (0.848)	1.04 (0.776)	0.897 (0.669)	0.813 (0.606)	0.743 (0.554)	0.605 (0.451)	0.510 (0.380)	0.441 (0.329)	0.366 (0.273)	0.299 (0.223)	5Z105
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.53 (1.14)	1.35 (1.01)	1.24 (0.923)	1.14 (0.848)	1.04 (0.776)	0.897 (0.669)	0.813 (0.606)	0.743 (0.554)	0.605 (0.451)	0.510 (0.380)	0.441 (0.329)	0.366 (0.273)	0.299 (0.223)	5Z110
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.53 (1.14)	1.35 (1.01)	1.24 (0.923)	1.14 (0.848)	1.04 (0.776)	0.897 (0.669)	0.813 (0.606)	0.743 (0.554)	0.605 (0.451)	0.510 (0.380)	0.441 (0.329)	0.366 (0.273)	0.299 (0.223)	5Z115
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.53 (1.14)	1.35 (1.01)	1.24 (0.923)	1.14 (0.848)	1.04 (0.776)	0.897 (0.669)	0.813 (0.606)	0.743 (0.554)	0.605 (0.451)	0.510 (0.380)	0.441 (0.329)	0.366 (0.273)	0.299 (0.223)	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.53 (1.14)	1.35 (1.01)	1.24 (0.923)	1.14 (0.848)	1.04 (0.776)	0.897 (0.669)	0.813 (0.606)	0.743 (0.554)	0.605 (0.451)	0.510 (0.380)	0.441 (0.329)	0.366 (0.273)	0.299 (0.223)	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	2.25 (1.68)	1.82 (1.36)	1.82 (1.36)	1.53 (1.14)	1.53 (1.14)	1.32 (0.985)	1.09 (0.816)	1.09 (0.816)	0.890 (0.664)	0.751 (0.560)	0.649 (0.484)	0.539 (0.402)	0.440 (0.328)	5A110
Output Torque in-lbs (N·m)	10750 (1220)	9910 (1120)	10750 (1220)	9910 (1120)	10750 (1220)	10750 (1220)	9910 (1120)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 720 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

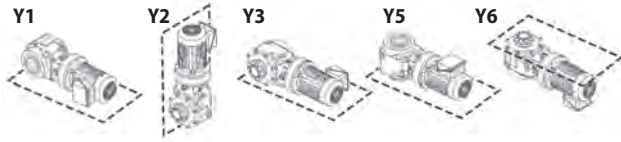


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	4.33 <i>(3.23)</i>	4.33 <i>(3.23)</i>	4.33 <i>(3.23)</i>	4.33 <i>(3.23)</i>	4.33 <i>(3.23)</i>	3.43 <i>(2.56)</i>	4.33 <i>(3.23)</i>	4.33 <i>(3.23)</i>	4.33 <i>(3.23)</i>	4.02 <i>(3.00)</i>	3.67 <i>(2.74)</i>	3.11 <i>(2.32)</i>	2.70 <i>(2.01)</i>	5A115
Output Torque in-lbs <i>(N·m)</i>	3670 <i>(415)</i>	4475 <i>(506)</i>	4890 <i>(553)</i>	5590 <i>(632)</i>	6115 <i>(691)</i>	5815 <i>(657)</i>	7830 <i>(885)</i>	8565 <i>(968)</i>	9820 <i>(1110)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	9.76 <i>(7.28)</i>	9.66 <i>(7.28)</i>	9.66 <i>(7.28)</i>	8.84 <i>(6.59)</i>	8.09 <i>(6.03)</i>	6.50 <i>(4.85)</i>	6.30 <i>(4.70)</i>	5.78 <i>(4.31)</i>	5.06 <i>(3.77)</i>	4.02 <i>(3.00)</i>	3.67 <i>(2.74)</i>	3.11 <i>(2.32)</i>	2.70 <i>(2.01)</i>	5A120
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	10000 <i>(1130)</i>	10880 <i>(1230)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	10980 <i>(1240)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	9.76 <i>(7.28)</i>	9.66 <i>(7.28)</i>	9.66 <i>(7.28)</i>	8.84 <i>(6.59)</i>	8.09 <i>(6.03)</i>	6.50 <i>(4.85)</i>	6.30 <i>(4.7)</i>	5.78 <i>(4.31)</i>	5.06 <i>(3.77)</i>	4.02 <i>(3.00)</i>	3.67 <i>(2.74)</i>	3.11 <i>(2.32)</i>	2.70 <i>(2.01)</i>	5A125
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	10000 <i>(1130)</i>	10880 <i>(1230)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	10980 <i>(1240)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	13.4 <i>(10.0)</i>	11.0 <i>(8.24)</i>	10.1 <i>(7.53)</i>	8.84 <i>(6.59)</i>	8.09 <i>(6.03)</i>	6.73 <i>(5.02)</i>	6.32 <i>(4.71)</i>	5.78 <i>(4.31)</i>	5.06 <i>(3.77)</i>	4.02 <i>(3.00)</i>	3.67 <i>(2.74)</i>	3.11 <i>(2.32)</i>	2.70 <i>(2.01)</i>	5A140
Output Torque in-lbs <i>(N·m)</i>	11410 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	13.4 <i>(10.0)</i>	11.0 <i>(8.24)</i>	10.1 <i>(7.53)</i>	8.84 <i>(6.59)</i>	8.09 <i>(6.03)</i>	6.73 <i>(5.02)</i>	6.32 <i>(4.71)</i>	5.78 <i>(4.31)</i>	5.06 <i>(3.77)</i>	4.02 <i>(3.00)</i>	3.67 <i>(2.74)</i>	3.11 <i>(2.32)</i>	2.70 <i>(2.01)</i>	5A145
Output Torque in-lbs <i>(N·m)</i>	11410 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	9.76 <i>(7.28)</i>	9.76 <i>(7.20)</i>	9.66 <i>(7.20)</i>	9.13 <i>(6.81)</i>	9.13 <i>(6.81)</i>	6.50 <i>(4.85)</i>	6.30 <i>(4.70)</i>	6.30 <i>(4.70)</i>	6.33 <i>(4.72)</i>	5.08 <i>(3.79)</i>	5.08 <i>(3.79)</i>	4.29 <i>(3.20)</i>	3.73 <i>(2.78)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	10000 <i>(1130)</i>	10880 <i>(1230)</i>	11770 <i>(1330)</i>	12920 <i>(1460)</i>	10980 <i>(1240)</i>	11415 <i>(1290)</i>	12480 <i>(1410)</i>	14335 <i>(1620)</i>	14425 <i>(1630)</i>	15755 <i>(1780)</i>	15755 <i>(1780)</i>	15755 <i>(1780)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	9.76 <i>(7.28)</i>	9.76 <i>(7.20)</i>	9.66 <i>(7.20)</i>	9.13 <i>(6.81)</i>	9.13 <i>(6.81)</i>	6.50 <i>(4.85)</i>	6.30 <i>(4.70)</i>	6.30 <i>(4.70)</i>	6.33 <i>(4.72)</i>	5.48 <i>(4.09)</i>	5.48 <i>(4.09)</i>	4.95 <i>(3.69)</i>	4.47 <i>(3.33)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	8276 <i>(935)</i>	10000 <i>(1130)</i>	10880 <i>(1230)</i>	11770 <i>(1330)</i>	12920 <i>(1460)</i>	11060 <i>(1250)</i>	11415 <i>(1290)</i>	12480 <i>(1410)</i>	14335 <i>(1620)</i>	15575 <i>(1760)</i>	17080 <i>(1930)</i>	18145 <i>(2050)</i>	18940 <i>(2140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Frame Size Selection Tables 720 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

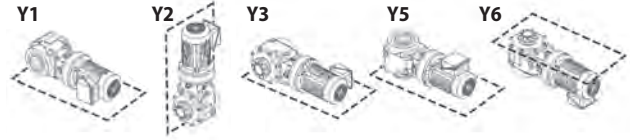
Dimensions on pages 2.96–2.104

Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	2.37 (1.77)	2.11 (1.57)	1.93 (1.44)	1.77 (1.32)	1.62 (1.21)	1.39 (1.04)	1.26 (0.942)	1.15 (0.861)	0.940 (0.701)	0.793 (0.591)	0.685 (0.511)	0.569 (0.424)	0.464 (0.346)	5A115
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.37 (1.77)	2.11 (1.57)	1.93 (1.44)	1.77 (1.32)	1.62 (1.21)	1.39 (1.04)	1.26 (0.942)	1.15 (0.861)	0.940 (0.701)	0.793 (0.591)	0.685 (0.511)	0.569 (0.424)	0.464 (0.346)	5A120
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.37 (1.77)	2.11 (1.57)	1.93 (1.44)	1.77 (1.32)	1.62 (1.21)	1.39 (1.04)	1.26 (0.942)	1.15 (0.861)	0.940 (0.701)	0.793 (0.591)	0.685 (0.511)	0.569 (0.424)	0.464 (0.346)	5A125
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.37 (1.77)	2.11 (1.57)	1.93 (1.44)	1.77 (1.32)	1.62 (1.21)	1.39 (1.04)	1.26 (0.942)	1.15 (0.861)	0.940 (0.701)	0.793 (0.591)	0.685 (0.511)	0.569 (0.424)	0.464 (0.346)	5A140
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.37 (1.77)	2.11 (1.57)	1.93 (1.44)	1.77 (1.32)	1.62 (1.21)	1.39 (1.04)	1.26 (0.942)	1.15 (0.861)	0.940 (0.701)	0.793 (0.591)	0.685 (0.511)	0.569 (0.424)	0.464 (0.346)	5A145
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	3.26 (2.43)	2.64 (1.97)	2.64 (1.97)	2.24 (1.67)	2.24 (1.67)	1.90 (1.42)	1.60 (1.19)	1.60 (1.19)	1.30 (0.969)	1.10 (0.817)	0.947 (0.706)	0.787 (0.587)	0.642 (0.479)	5B120
Output Torque in-lbs (N·m)	15665 (1770)	14335 (1620)	15665 (1770)	14425 (1630)	15840 (1790)	15575 (1760)	14425 (1630)	15755 (1780)	15755 (1780)	15755 (1780)	15755 (1780)	15755 (1780)	15755 (1780)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	3.94 (2.94)	3.19 (2.38)	3.19 (2.38)	2.68 (2.00)	2.68 (2.00)	2.31 (1.72)	1.92 (1.43)	1.92 (1.43)	1.56 (1.16)	1.31 (0.98)	1.14 (0.847)	0.886 (0.661)	0.77 (0.575)	5B125
Output Torque in-lbs (N·m)	18940 (2140)	17345 (1960)	18940 (2140)	17345 (1960)	18940 (2140)	18850 (2130)	17345 (1960)	18940 (2140)	18850 (2130)	18940 (2140)	18940 (2140)	17790 (2010)	18940 (2140)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 720 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

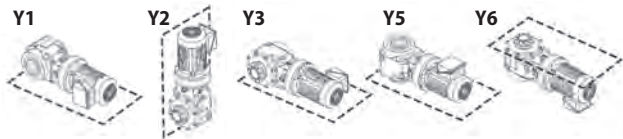


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	12.7 (9.48)	12.6 (9.38)	11.5 (8.58)	10.1 (7.51)	8.01 (5.97)	7.32 (5.46)	6.20 (4.62)	5.36 (4.00)	5B140
Output Torque in-lbs (N·m)	12920 (1460)	15755 (1780)	17255 (1950)	19735 (2230)	21595 (2440)	21505 (2430)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	12.7 (9.48)	12.6 (9.38)	11.5 (8.58)	10.1 (7.51)	8.01 (5.97)	7.32 (5.46)	6.20 (4.62)	5.36 (4.00)	5B145
Output Torque in-lbs (N·m)	12920 (1460)	15755 (1780)	17255 (1950)	19735 (2230)	21595 (2440)	21505 (2430)	22745 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	19.3 (14.4)	19.3 (14.4)	19.3 (14.4)	17.6 (13.1)	16.1 (12.0)	13.4 (10.0)	12.6 (9.38)	11.5 (8.58)	10.1 (7.51)	8.01 (5.97)	7.32 (5.46)	6.20 (4.62)	5.36 (4.00)	5B160
Output Torque in-lbs (N·m)	16350 (1850)	19900 (2250)	21850 (2470)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	19.3 (14.4)	19.3 (14.4)	19.3 (14.4)	17.6 (13.1)	16.1 (12.0)	13.4 (10.0)	12.6 (9.38)	11.5 (8.58)	10.1 (7.51)	8.01 (5.97)	7.32 (5.46)	6.20 (4.62)	5.36 (4.00)	5B165
Output Torque in-lbs (N·m)	16350 (1850)	19900 (2250)	21850 (2470)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	12.7 (9.48)	14.2 (10.6)	14.2 (10.6)	12.3 (9.20)	11.9 (8.84)	11.9 (8.84)	10.0 (7.48)	8.69 (6.48)	5C140
Output Torque in-lbs (N·m)	12920 (1460)	15755 (1780)	17255 (1950)	19735 (2230)	21595 (2440)	21505 (2430)	25665 (2900)	28145 (3180)	27880 (3150)	33720 (3810)	36820 (4160)	36820 (4160)	36820 (4160)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	15.3 (11.4)	12.7 (9.48)	14.2 (10.6)	14.2 (10.6)	12.3 (9.20)	12.5 (9.32)	12.5 (9.32)	11.2 (8.36)	9.63 (7.18)	5C145
Output Torque in-lbs (N·m)	12920 (1460)	15755 (1780)	17255 (1950)	19735 (2230)	21595 (2440)	21505 (2430)	25665 (2900)	28145 (3180)	27880 (3150)	35490 (4010)	38855 (4390)	41155 (4650)	40800 (4610)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	33.9 (25.3)	33.9 (25.3)	33.9 (25.3)	33.0 (24.6)	32.2 (24.0)	23.5 (17.5)	24.0 (17.9)	22.4 (17.2)	19.6 (15.0)	16.0 (11.9)	14.6 (10.9)	12.4 (9.24)	10.7 (8.01)	5C160
Output Torque in-lbs (N·m)	28765 (3250)	35050 (3960)	38325 (4330)	42660 (4820)	45490 (5140)	39825 (4500)	43370 (4900)	45490 (5140)	45490 (5140)	45450 (5140)	45490 (5140)	45490 (5140)	45490 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Frame Size Selection Tables 720 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

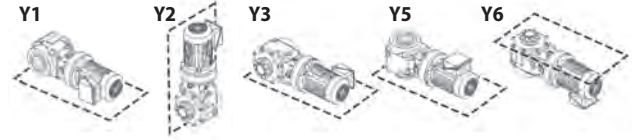
Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	4.73 (3.53)	4.20 (3.13)	3.84 (2.86)	3.53 (2.63)	3.22 (2.40)	2.78 (2.07)	2.52 (1.88)	2.31 (1.72)	1.88 (1.40)	1.58 (1.18)	1.37 (1.02)	1.13 (0.846)	0.925 (0.690)	5B140
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	4.73 (3.53)	4.20 (3.13)	3.84 (2.86)	3.53 (2.63)	3.22 (2.40)	2.78 (2.07)	2.52 (1.88)	2.31 (1.72)	1.88 (1.40)	1.58 (1.18)	1.37 (1.02)	1.13 (0.846)	0.925 (0.690)	
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	5B145
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	4.73 (3.53)	4.20 (3.13)	3.84 (2.86)	3.53 (2.63)	3.22 (2.40)	2.78 (2.07)	2.52 (1.88)	2.31 (1.72)	1.88 (1.40)	1.58 (1.18)	1.37 (1.02)	1.13 (0.846)	0.925 (0.690)	
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	5B160
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	4.73 (3.53)	4.20 (3.13)	3.84 (2.86)	3.53 (2.63)	3.22 (2.40)	2.78 (2.07)	2.52 (1.88)	2.31 (1.72)	1.88 (1.40)	1.58 (1.18)	1.37 (1.02)	1.13 (0.846)	0.925 (0.690)	
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	5B165
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	4.73 (3.53)	4.20 (3.13)	3.84 (2.86)	3.53 (2.63)	3.22 (2.40)	2.78 (2.07)	2.52 (1.88)	2.31 (1.72)	1.88 (1.40)	1.58 (1.18)	1.37 (1.02)	1.13 (0.846)	0.925 (0.690)	
Output Torque in-lbs (N·m)	36820 (4160)	33630 (3800)	36820 (4160)	33720 (3810)	36820 (4160)	36820 (4160)	33720 (3810)	36820 (4160)	36820 (4160)	36905 (4170)	36905 (4170)	36820 (4160)	36905 (4170)	5C140
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	7.67 (5.72)	6.21 (4.63)	6.21 (4.63)	5.22 (3.89)	5.22 (3.89)	4.49 (3.35)	3.73 (2.78)	3.73 (2.78)	3.03 (2.26)	2.56 (1.91)	2.21 (1.65)	1.84 (1.37)	1.50 (1.12)	
Output Torque in-lbs (N·m)	41155 (4650)	36820 (4160)	40270 (4550)	37705 (4260)	41155 (4650)	41155 (4650)	37705 (4260)	41245 (4660)	41245 (4660)	41155 (4650)	41155 (4650)	39830 (4500)	37615 (4250)	5C145
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	8.57 (6.39)	6.79 (5.06)	6.79 (5.06)	5.83 (4.35)	5.83 (4.35)	5.03 (3.75)	4.17 (3.11)	4.17 (3.11)	3.39 (2.53)	2.86 (2.13)	2.47 (1.84)	1.98 (1.48)	1.53 (1.14)	
Output Torque in-lbs (N·m)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	5C160
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	9.24 (7.06)	8.38 (6.25)	7.48 (5.72)	7.04 (5.25)	6.44 (4.80)	5.55 (4.14)	5.03 (3.75)	4.60 (3.43)	3.74 (2.79)	3.15 (2.35)	2.74 (2.04)	2.27 (1.69)	1.85 (1.38)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 720 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

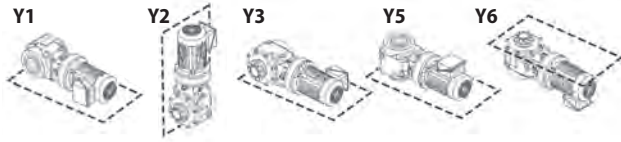


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	34.1 <i>(25.4)</i>	34.1 <i>(25.4)</i>	34.1 <i>(25.4)</i>	33.0 <i>(24.6)</i>	32.2 <i>(24.0)</i>	23.5 <i>(17.5)</i>	24.0 <i>(17.9)</i>	22.4 <i>(17.2)</i>	19.6 <i>(15.0)</i>	16.0 <i>(11.9)</i>	14.2 <i>(10.9)</i>	12.4 <i>(9.24)</i>	10.7 <i>(8.01)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	28850 <i>(3260)</i>	35225 <i>(3980)</i>	38500 <i>(4350)</i>	42660 <i>(4820)</i>	45450 <i>(5140)</i>	39825 <i>(4500)</i>	43370 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	41.4 <i>(30.9)</i>	41.4 <i>(30.9)</i>	38.4 <i>(28.6)</i>	35.3 <i>(26.3)</i>	31.1 <i>(23.2)</i>	24.0 <i>(17.9)</i>	24.0 <i>(17.9)</i>	22.4 <i>(17.2)</i>	19.6 <i>(15.0)</i>	16.0 <i>(11.9)</i>	14.6 <i>(10.9)</i>	12.4 <i>(9.24)</i>	10.7 <i>(8.01)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	35135 <i>(3970)</i>	42835 <i>(4840)</i>	43320 <i>(4895)</i>	45450 <i>(5140)</i>	45200 <i>(5100)</i>	40625 <i>(4590)</i>	43370 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	41.4 <i>(30.9)</i>	41.4 <i>(30.9)</i>	38.4 <i>(28.6)</i>	35.3 <i>(26.3)</i>	31.1 <i>(23.2)</i>	24.0 <i>(17.9)</i>	24.0 <i>(17.9)</i>	22.4 <i>(16.7)</i>	19.6 <i>(14.6)</i>	16.0 <i>(11.9)</i>	14.6 <i>(10.6)</i>	12.4 <i>(9.01)</i>	10.7 <i>(7.81)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	35135 <i>(3970)</i>	42835 <i>(4840)</i>	43320 <i>(4895)</i>	45450 <i>(5140)</i>	45200 <i>(5100)</i>	40625 <i>(4590)</i>	43370 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Frame Size Selection Tables 720 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

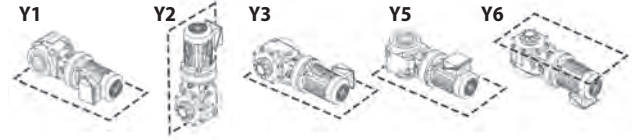
Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP <i>(kW)</i>	9.47 <i>(7.06)</i>	8.38 <i>(6.25)</i>	7.67 <i>(5.72)</i>	7.04 <i>(5.25)</i>	6.44 <i>(4.80)</i>	5.55 <i>(4.14)</i>	5.03 <i>(3.75)</i>	4.60 <i>(3.43)</i>	3.74 <i>(2.79)</i>	3.15 <i>(2.35)</i>	2.74 <i>(2.07)</i>	2.27 <i>(1.69)</i>	1.85 <i>(1.38)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	9.47 <i>(7.06)</i>	8.38 <i>(6.25)</i>	7.67 <i>(5.72)</i>	7.04 <i>(5.25)</i>	6.44 <i>(4.80)</i>	5.55 <i>(4.14)</i>	5.03 <i>(3.75)</i>	4.60 <i>(3.43)</i>	3.74 <i>(2.79)</i>	3.15 <i>(2.35)</i>	2.74 <i>(2.07)</i>	2.27 <i>(1.69)</i>	1.85 <i>(1.38)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	9.47 <i>(7.06)</i>	8.38 <i>(6.25)</i>	7.67 <i>(5.72)</i>	7.04 <i>(5.25)</i>	6.44 <i>(4.80)</i>	5.55 <i>(4.14)</i>	5.03 <i>(3.75)</i>	4.60 <i>(3.43)</i>	3.74 <i>(2.79)</i>	3.15 <i>(2.35)</i>	2.74 <i>(2.07)</i>	2.27 <i>(1.69)</i>	1.85 <i>(1.38)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Speed Reducers

Selection Tables

Frame Size Selection Tables 580 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions



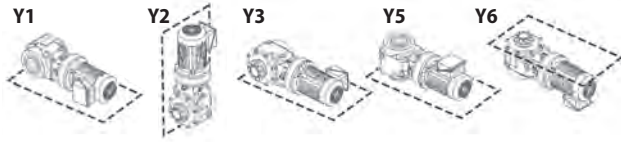
Dimensions on pages 2.96–2.104

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	—	—	2.49 <i>(1.86)</i>	1.94 <i>(1.45)</i>	1.90 <i>(1.42)</i>	1.61 <i>(1.20)</i>	1.39 <i>(1.04)</i>	5Z100
Output Torque in-lbs <i>(N·m)</i>	2565 <i>(290)</i>	3130 <i>(354)</i>	3425 <i>(387)</i>	3910 <i>(442)</i>	4280 <i>(484)</i>	5130 <i>(580)</i>	—	—	7000 <i>(791)</i>	6855 <i>(775)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	2.44 <i>(1.82)</i>	—	—	2.49 <i>(1.86)</i>	2.08 <i>(1.55)</i>	1.90 <i>(1.42)</i>	1.61 <i>(1.20)</i>	1.39 <i>(1.04)</i>	5Z105
Output Torque in-lbs <i>(N·m)</i>	2565 <i>(290)</i>	3130 <i>(354)</i>	3425 <i>(387)</i>	3910 <i>(442)</i>	4280 <i>(484)</i>	5130 <i>(580)</i>	—	—	7000 <i>(791)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	2.76 <i>(2.06)</i>	3.27 <i>(2.44)</i>	2.99 <i>(2.23)</i>	2.61 <i>(1.95)</i>	2.08 <i>(1.55)</i>	1.90 <i>(1.42)</i>	1.61 <i>(1.20)</i>	1.39 <i>(1.04)</i>	5Z110
Output Torque in-lbs <i>(N·m)</i>	3680 <i>(416)</i>	4485 <i>(507)</i>	4910 <i>(555)</i>	5610 <i>(634)</i>	6130 <i>(693)</i>	5815 <i>(657)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	2.76 <i>(2.06)</i>	3.27 <i>(2.44)</i>	2.99 <i>(2.23)</i>	2.61 <i>(1.95)</i>	2.08 <i>(1.55)</i>	1.90 <i>(1.42)</i>	1.61 <i>(1.20)</i>	1.39 <i>(1.04)</i>	5Z115
Output Torque in-lbs <i>(N·m)</i>	3680 <i>(416)</i>	4485 <i>(507)</i>	4910 <i>(555)</i>	5610 <i>(634)</i>	6130 <i>(693)</i>	5815 <i>(657)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	6.99 <i>(5.21)</i>	5.73 <i>(4.27)</i>	5.24 <i>(3.91)</i>	4.59 <i>(3.42)</i>	4.18 <i>(3.12)</i>	3.49 <i>(2.60)</i>	3.27 <i>(2.44)</i>	2.99 <i>(2.23)</i>	2.61 <i>(1.95)</i>	2.08 <i>(1.55)</i>	1.90 <i>(1.42)</i>	1.61 <i>(1.20)</i>	1.39 <i>(1.04)</i>	5Z120
Output Torque in-lbs <i>(N·m)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	6.99 <i>(5.21)</i>	5.73 <i>(4.27)</i>	5.24 <i>(3.91)</i>	4.59 <i>(3.42)</i>	4.18 <i>(3.12)</i>	3.49 <i>(2.60)</i>	3.27 <i>(2.44)</i>	2.99 <i>(2.23)</i>	2.61 <i>(1.95)</i>	2.08 <i>(1.55)</i>	1.90 <i>(1.42)</i>	1.61 <i>(1.20)</i>	1.39 <i>(1.04)</i>	5Z125
Output Torque in-lbs <i>(N·m)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	2.76 <i>(2.06)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	2.80 <i>(2.09)</i>	2.80 <i>(2.09)</i>	2.37 <i>(1.77)</i>	2.05 <i>(1.53)</i>	5A110
Output Torque in-lbs <i>(N·m)</i>	3680 <i>(416)</i>	4485 <i>(507)</i>	4910 <i>(555)</i>	5610 <i>(634)</i>	6130 <i>(693)</i>	5815 <i>(657)</i>	7855 <i>(888)</i>	8590 <i>(971)</i>	9820 <i>(1110)</i>	9910 <i>(1120)</i>	10750 <i>(1220)</i>	10750 <i>(1220)</i>	10750 <i>(1220)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	

Selection Tables

Speed Reducers

Frame Size Selection Tables 580 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

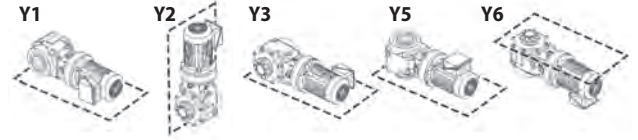
Dimensions on pages 2.96–2.104

Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	1.23 (0.919)	1.02 (0.761)	1.00 (0.744)	0.857 (0.639)	0.838 (0.625)	0.723 (0.539)	0.613 (0.457)	0.598 (0.446)	0.487 (0.363)	0.410 (0.306)	0.355 (0.265)	0.295 (0.220)	0.241 (0.180)	5Z100
Output Torque in-lbs (N·m)	7345 (830)	6865 (776)	7345 (830)	6865 (776)	7345 (830)	7345 (830)	6875 (777)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.23 (0.919)	1.09 (0.814)	1.00 (0.744)	0.916 (0.683)	0.838 (0.625)	0.723 (0.539)	0.654 (0.488)	0.598 (0.446)	0.487 (0.363)	0.410 (0.306)	0.355 (0.265)	0.295 (0.220)	0.241 (0.180)	5Z105
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.23 (0.919)	1.09 (0.814)	1.00 (0.744)	0.916 (0.683)	0.838 (0.625)	0.723 (0.539)	0.654 (0.488)	0.598 (0.446)	0.487 (0.363)	0.410 (0.306)	0.355 (0.265)	0.295 (0.220)	0.241 (0.180)	5Z110
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.23 (0.919)	1.09 (0.814)	1.00 (0.744)	0.916 (0.683)	0.838 (0.625)	0.723 (0.539)	0.654 (0.488)	0.598 (0.446)	0.487 (0.363)	0.410 (0.306)	0.355 (0.265)	0.295 (0.220)	0.241 (0.180)	5Z115
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.23 (0.919)	1.09 (0.814)	1.00 (0.744)	0.916 (0.683)	0.838 (0.625)	0.723 (0.539)	0.654 (0.488)	0.598 (0.446)	0.487 (0.363)	0.410 (0.306)	0.355 (0.265)	0.295 (0.220)	0.241 (0.180)	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.23 (0.919)	1.09 (0.814)	1.00 (0.744)	0.916 (0.683)	0.838 (0.625)	0.723 (0.539)	0.654 (0.488)	0.598 (0.446)	0.487 (0.363)	0.410 (0.306)	0.355 (0.265)	0.295 (0.220)	0.241 (0.180)	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	1.81 (1.35)	1.48 (1.10)	1.48 (1.10)	1.24 (0.921)	1.24 (0.921)	1.06 (0.794)	0.882 (0.658)	0.882 (0.658)	0.717 (0.535)	0.605 (0.451)	0.523 (0.390)	0.434 (0.324)	0.355 (0.265)	5A110
Output Torque in-lbs (N·m)	10750 (1220)	9910 (1120)	110850 (1230)	9910 (1120)	10750 (1220)	10750 (1220)	9910 (1120)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	10750 (1220)	110850 (1230)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 580 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

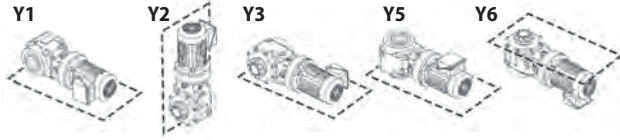


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	2.76 <i>(2.06)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.50 <i>(2.61)</i>	3.23 <i>(2.41)</i>	2.96 <i>(2.21)</i>	2.51 <i>(1.87)</i>	2.17 <i>(1.62)</i>	5A115
Output Torque in-lbs <i>(N·m)</i>	3680 <i>(416)</i>	4485 <i>(507)</i>	4910 <i>(555)</i>	5610 <i>(634)</i>	6130 <i>(693)</i>	5815 <i>(657)</i>	7855 <i>(888)</i>	8590 <i>(971)</i>	9820 <i>(1110)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.12 <i>(5.31)</i>	6.52 <i>(4.86)</i>	5.23 <i>(3.90)</i>	5.08 <i>(3.79)</i>	4.65 <i>(3.47)</i>	4.06 <i>(3.03)</i>	3.23 <i>(2.41)</i>	2.96 <i>(2.21)</i>	2.51 <i>(1.87)</i>	2.17 <i>(1.62)</i>	5A120
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	10050 <i>(1140)</i>	11050 <i>(1250)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	10950 <i>(1240)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.12 <i>(5.31)</i>	6.52 <i>(4.86)</i>	5.23 <i>(3.90)</i>	5.08 <i>(3.79)</i>	4.65 <i>(3.47)</i>	4.06 <i>(3.03)</i>	3.23 <i>(2.41)</i>	2.96 <i>(2.21)</i>	2.51 <i>(1.87)</i>	2.17 <i>(1.62)</i>	5A125
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	10050 <i>(1140)</i>	11050 <i>(1250)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	10950 <i>(1240)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	10.6 <i>(7.91)</i>	8.90 <i>(6.64)</i>	8.14 <i>(6.07)</i>	7.12 <i>(5.31)</i>	6.52 <i>(4.86)</i>	5.43 <i>(4.05)</i>	5.08 <i>(3.79)</i>	4.65 <i>(3.47)</i>	4.06 <i>(3.03)</i>	3.23 <i>(2.41)</i>	2.96 <i>(2.21)</i>	2.51 <i>(1.87)</i>	2.17 <i>(1.62)</i>	5A140
Output Torque in-lbs <i>(N·m)</i>	11150 <i>(1260)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	10.6 <i>(7.91)</i>	8.90 <i>(6.64)</i>	8.14 <i>(6.07)</i>	7.12 <i>(5.31)</i>	6.52 <i>(4.86)</i>	5.43 <i>(4.05)</i>	5.08 <i>(3.79)</i>	4.65 <i>(3.47)</i>	4.06 <i>(3.03)</i>	3.23 <i>(2.41)</i>	2.96 <i>(2.21)</i>	2.51 <i>(1.87)</i>	2.17 <i>(1.62)</i>	5A145
Output Torque in-lbs <i>(N·m)</i>	11150 <i>(1260)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	5.23 <i>(3.90)</i>	5.34 <i>(3.98)</i>	5.34 <i>(3.98)</i>	5.36 <i>(4.00)</i>	4.09 <i>(3.05)</i>	4.09 <i>(3.05)</i>	3.46 <i>(2.58)</i>	3.00 <i>(2.24)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	10050 <i>(1140)</i>	11050 <i>(1250)</i>	12550 <i>(1420)</i>	13800 <i>(1560)</i>	10950 <i>(1240)</i>	11900 <i>(1350)</i>	13050 <i>(1480)</i>	15000 <i>(1700)</i>	14400 <i>(1630)</i>	15750 <i>(1780)</i>	15750 <i>(1780)</i>	15800 <i>(1790)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	7.86 <i>(5.86)</i>	5.23 <i>(3.90)</i>	5.34 <i>(3.98)</i>	5.34 <i>(3.98)</i>	5.36 <i>(4.00)</i>	4.65 <i>(3.47)</i>	4.65 <i>(3.47)</i>	4.16 <i>(3.10)</i>	3.61 <i>(2.69)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	8265 <i>(934)</i>	10050 <i>(1140)</i>	11050 <i>(1250)</i>	12550 <i>(1420)</i>	13800 <i>(1560)</i>	10950 <i>(1240)</i>	11900 <i>(1350)</i>	13050 <i>(1480)</i>	15000 <i>(1700)</i>	16350 <i>(1850)</i>	17950 <i>(2030)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Frame Size Selection Tables 580 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

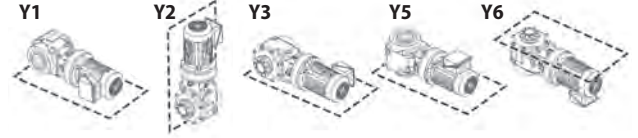
Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	1.92 (1.43)	1.69 (1.26)	1.56 (1.16)	1.42 (1.06)	1.30 (0.971)	1.12 (0.837)	1.02 (0.759)	0.931 (0.694)	0.758 (0.565)	0.638 (0.476)	0.551 (0.411)	0.459 (0.342)	0.374 (0.279)	5A115
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	1.92 (1.43)	1.69 (1.26)	1.56 (1.16)	1.42 (1.06)	1.30 (0.971)	1.12 (0.837)	1.02 (0.759)	0.931 (0.694)	0.758 (0.565)	0.638 (0.476)	0.551 (0.411)	0.459 (0.342)	0.374 (0.279)	5A120
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	1.92 (1.43)	1.69 (1.26)	1.56 (1.16)	1.42 (1.06)	1.30 (0.971)	1.12 (0.837)	1.02 (0.759)	0.931 (0.694)	0.758 (0.565)	0.638 (0.476)	0.551 (0.411)	0.459 (0.342)	0.374 (0.279)	5A125
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	1.92 (1.43)	1.69 (1.26)	1.56 (1.16)	1.42 (1.06)	1.30 (0.971)	1.12 (0.837)	1.02 (0.759)	0.931 (0.694)	0.758 (0.565)	0.638 (0.476)	0.551 (0.411)	0.459 (0.342)	0.374 (0.279)	5A140
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	1.92 (1.43)	1.69 (1.26)	1.56 (1.16)	1.42 (1.06)	1.30 (0.971)	1.12 (0.837)	1.02 (0.759)	0.931 (0.694)	0.758 (0.565)	0.638 (0.476)	0.551 (0.411)	0.459 (0.342)	0.374 (0.279)	5A145
Output Torque in-lbs (N·m)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	2.63 (1.96)	2.13 (1.59)	2.13 (1.59)	1.80 (1.34)	1.80 (1.34)	1.54 (1.15)	1.29 (0.959)	1.29 (0.959)	1.05 (0.781)	0.882 (0.658)	0.763 (0.569)	0.634 (0.473)	0.518 (0.386)	5B120
Output Torque in-lbs (N·m)	15650 (1770)	14300 (1620)	15650 (1770)	14400 (1630)	15750 (1780)	15650 (1770)	14400 (1630)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	3.18 (2.37)	2.57 (1.92)	2.57 (1.92)	2.16 (1.61)	2.16 (1.61)	1.86 (1.39)	1.54 (1.15)	1.54 (1.15)	1.26 (0.937)	1.06 (0.790)	0.916 (0.683)	0.715 (0.533)	0.621 (0.463)	5B125
Output Torque in-lbs (N·m)	18900 (2140)	17300 (1960)	18900 (2140)	17300 (1960)	18900 (2140)	18900 (2140)	17300 (1960)	18900 (2140)	18900 (2140)	18900 (2140)	18900 (2140)	17750 (2010)	18900 (2140)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 580 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

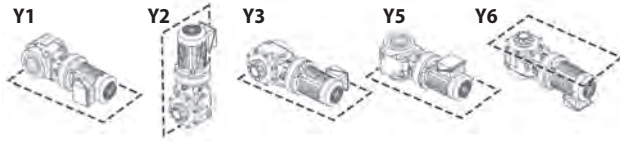


Dimensions on pages 2.96–2.104

Selection Tables

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	10.2 (7.64)	10.1 (7.56)	9.27 (6.91)	8.11 (6.05)	6.45 (4.81)	5.90 (4.40)	4.99 (3.72)	4.32 (3.22)	5B140
Output Torque in-lbs <i>(N·m)</i>	12900 <i>(1460)</i>	15750 <i>(1780)</i>	17250 <i>(1950)</i>	19700 <i>(2230)</i>	21550 <i>(2440)</i>	21550 <i>(2440)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	10.2 (7.64)	10.1 (7.56)	9.27 (6.91)	8.11 (6.05)	6.45 (4.81)	5.90 (4.40)	4.99 (3.72)	4.32 (3.22)	
Output Torque in-lbs <i>(N·m)</i>	12900 <i>(1460)</i>	15750 <i>(1780)</i>	17250 <i>(1950)</i>	19700 <i>(2230)</i>	21550 <i>(2440)</i>	21550 <i>(2440)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	15.6 (11.6)	15.6 (11.6)	15.6 (11.6)	14.2 (10.6)	13.0 (9.67)	10.8 (8.06)	10.1 (7.56)	9.27 (6.91)	8.11 (6.05)	6.45 (4.81)	5.90 (4.40)	4.99 (3.72)	4.32 (3.22)	5B160
Output Torque in-lbs <i>(N·m)</i>	16350 <i>(1850)</i>	19900 <i>(2250)</i>	21850 <i>(2470)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	15.6 (11.6)	15.6 (11.6)	15.6 (11.6)	14.2 (10.6)	13.0 (9.67)	10.8 (8.06)	10.1 (7.56)	9.27 (6.91)	8.11 (6.05)	6.45 (4.81)	5.90 (4.40)	4.99 (3.72)	4.32 (3.22)	
Output Torque in-lbs <i>(N·m)</i>	16350 <i>(1850)</i>	19900 <i>(2250)</i>	21850 <i>(2470)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	10.2 (7.64)	12.1 (9.00)	12.1 (9.00)	10.5 (7.80)	9.55 (7.12)	9.55 (7.12)	8.07 (6.02)	7.00 (5.22)	5C140
Output Torque in-lbs <i>(N·m)</i>	12900 <i>(1460)</i>	15750 <i>(1780)</i>	17250 <i>(1950)</i>	19700 <i>(2230)</i>	21550 <i>(2440)</i>	21550 <i>(2440)</i>	27050 <i>(3060)</i>	29650 <i>(3350)</i>	29350 <i>(3320)</i>	33600 <i>(3800)</i>	36800 <i>(4160)</i>	36800 <i>(4160)</i>	36800 <i>(4160)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP (kW)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	12.3 (9.17)	10.2 (7.64)	12.1 (9.00)	12.1 (9.00)	10.5 (7.80)	10.1 (7.51)	10.1 (7.51)	9.02 (6.73)	7.76 (5.79)	
Output Torque in-lbs <i>(N·m)</i>	12900 <i>(1460)</i>	15750 <i>(1780)</i>	17250 <i>(1950)</i>	19700 <i>(2230)</i>	21550 <i>(2440)</i>	21550 <i>(2440)</i>	27050 <i>(3060)</i>	29650 <i>(3350)</i>	29350 <i>(3320)</i>	35450 <i>(4010)</i>	38850 <i>(4390)</i>	41150 <i>(4650)</i>	40800 <i>(4610)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP (kW)	27.5 (20.5)	27.5 (20.5)	27.5 (20.5)	27.5 (20.5)	24.9 (18.6)	18.9 (14.1)	19.3 (14.4)	18.1 (13.8)	15.8 (12.1)	12.9 (9.62)	11.8 (8.79)	9.98 (7.44)	8.65 (6.45)	5C160
Output Torque in-lbs <i>(N·m)</i>	28900 <i>(3270)</i>	35200 <i>(3980)</i>	38550 <i>(4360)</i>	44050 <i>(4980)</i>	43700 <i>(4940)</i>	39800 <i>(4500)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Output Torque in-lbs <i>(N·m)</i>	28900 <i>(3270)</i>	35200 <i>(3980)</i>	38550 <i>(4360)</i>	44050 <i>(4980)</i>	43700 <i>(4940)</i>	39800 <i>(4500)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	

Frame Size Selection Tables 580 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

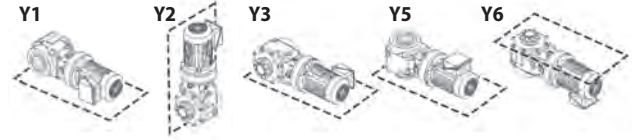
Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	3.82 (2.85)	3.38 (2.52)	3.08 (2.3)	2.84 (2.12)	2.59 (1.93)	2.24 (1.67)	2.02 (1.51)	1.85 (1.38)	1.50 (1.12)	1.27 (0.948)	1.10 (0.820)	0.913 (0.681)	0.746 (0.556)	5B140
Output Torque in-lbs <i>(N·m)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	3.82 (2.85)	3.38 (2.52)	3.08 (2.3)	2.84 (2.12)	2.59 (1.93)	2.24 (1.67)	2.02 (1.51)	1.85 (1.38)	1.50 (1.12)	1.27 (0.948)	1.10 (0.820)	0.913 (0.681)	0.746 (0.556)	
Output Torque in-lbs <i>(N·m)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	3.82 (2.85)	3.38 (2.52)	3.08 (2.3)	2.84 (2.12)	2.59 (1.93)	2.24 (1.67)	2.02 (1.51)	1.85 (1.38)	1.50 (1.12)	1.27 (0.948)	1.10 (0.820)	0.913 (0.681)	0.746 (0.556)	5B160
Output Torque in-lbs <i>(N·m)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	3.82 (2.85)	3.38 (2.52)	3.08 (2.3)	2.84 (2.12)	2.59 (1.93)	2.24 (1.67)	2.02 (1.51)	1.85 (1.38)	1.50 (1.12)	1.27 (0.948)	1.10 (0.820)	0.913 (0.681)	0.746 (0.556)	
Output Torque in-lbs <i>(N·m)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP (kW)	6.18 (4.61)	5.00 (3.73)	5.00 (3.73)	4.20 (3.13)	4.20 (3.13)	3.62 (2.70)	3.00 (2.24)	3.00 (2.24)	2.44 (1.82)	2.07 (1.54)	1.78 (1.33)	1.48 (1.10)	1.21 (0.900)	5C140
Output Torque in-lbs <i>(N·m)</i>	36800 <i>(4160)</i>	33700 <i>(3810)</i>	36800 <i>(4160)</i>	33600 <i>(3800)</i>	36800 <i>(4160)</i>	36800 <i>(4160)</i>	33700 <i>(3810)</i>	36900 <i>(4170)</i>	36800 <i>(4160)</i>	36900 <i>(4170)</i>	36900 <i>(4170)</i>	36700 <i>(4150)</i>	36800 <i>(4160)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP (kW)	6.91 (5.15)	5.46 (4.07)	5.46 (4.07)	4.69 (3.50)	4.69 (3.50)	4.05 (3.02)	3.35 (2.50)	3.35 (2.50)	2.74 (2.04)	2.31 (1.72)	1.98 (1.48)	1.60 (1.19)	1.23 (0.917)	
Output Torque in-lbs <i>(N·m)</i>	41150 <i>(4650)</i>	36815 <i>(4150)</i>	40260 <i>(4550)</i>	37600 <i>(4250)</i>	41150 <i>(4650)</i>	41150 <i>(4650)</i>	36700 <i>(4250)</i>	41150 <i>(4650)</i>	41150 <i>(4650)</i>	41150 <i>(4650)</i>	41150 <i>(4650)</i>	39825 <i>(4500)</i>	37500 <i>(4240)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP (kW)	7.63 (5.69)	6.76 (5.04)	6.18 (4.61)	5.67 (4.23)	5.19 (3.87)	4.48 (3.34)	4.05 (3.02)	3.70 (2.76)	3.02 (2.25)	2.55 (1.90)	2.20 (1.64)	1.82 (1.36)	1.49 (1.11)	5C160
Output Torque in-lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP (kW)	7.63 (5.69)	6.76 (5.04)	6.18 (4.61)	5.67 (4.23)	5.19 (3.87)	4.48 (3.34)	4.05 (3.02)	3.70 (2.76)	3.02 (2.25)	2.55 (1.90)	2.20 (1.64)	1.82 (1.36)	1.49 (1.11)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 580 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions



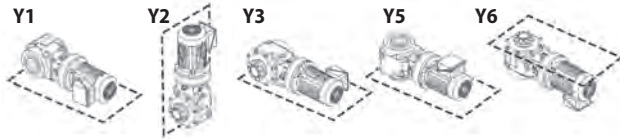
Dimensions on pages 2.96–2.104

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	27.5 <i>(20.5)</i>	27.5 <i>(20.5)</i>	27.5 <i>(20.5)</i>	27.5 <i>(20.5)</i>	25.9 <i>(19.3)</i>	18.9 <i>(14.1)</i>	19.3 <i>(14.4)</i>	18.5 <i>(13.8)</i>	16.2 <i>(12.1)</i>	12.9 <i>(9.62)</i>	11.8 <i>(8.79)</i>	9.98 <i>(7.44)</i>	8.665 <i>(6.45)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	28900 <i>(3260)</i>	35200 <i>(3980)</i>	38495 <i>(4350)</i>	43980 <i>(4970)</i>	45450 <i>(5140)</i>	39800 <i>(4500)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	33.4 <i>(24.9)</i>	33.4 <i>(24.9)</i>	31.0 <i>(23.1)</i>	28.4 <i>(21.2)</i>	25.1 <i>(18.7)</i>	19.3 <i>(14.4)</i>	19.3 <i>(14.4)</i>	18.5 <i>(13.8)</i>	16.2 <i>(12.1)</i>	12.9 <i>(9.62)</i>	11.8 <i>(8.79)</i>	9.98 <i>(7.44)</i>	8.65 <i>(6.45)</i>	5C170
Output Torque in-lbs <i>(N·m)</i>	35100 <i>(3970)</i>	42800 <i>(4840)</i>	43450 <i>(4910)</i>	45450 <i>(5140)</i>	45215 <i>(5110)</i>	40600 <i>(4590)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	33.4 <i>(24.9)</i>	33.4 <i>(24.9)</i>	31.0 <i>(23.1)</i>	28.4 <i>(21.2)</i>	25.1 <i>(18.7)</i>	19.3 <i>(14.4)</i>	19.3 <i>(14.4)</i>	18.5 <i>(13.8)</i>	16.2 <i>(12.1)</i>	12.9 <i>(9.62)</i>	11.8 <i>(8.79)</i>	9.98 <i>(7.44)</i>	8.65 <i>(6.45)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	35100 <i>(3970)</i>	42800 <i>(4840)</i>	43450 <i>(4910)</i>	45450 <i>(5140)</i>	45215 <i>(5110)</i>	40600 <i>(4590)</i>	43350 <i>(4900)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Speed Reducers
Selection Tables

Selections marked with * are limited to 25% Equivalent Duty or operating time based on a 10 minute cycle.

Frame Size Selection Tables 580 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

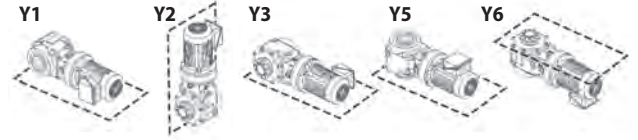
Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP <i>(kW)</i>	7.63 <i>(5.69)</i>	6.76 <i>(5.04)</i>	6.18 <i>(4.61)</i>	5.67 <i>(4.23)</i>	5.19 <i>(3.87)</i>	4.48 <i>(3.34)</i>	4.05 <i>(3.02)</i>	3.70 <i>(2.76)</i>	3.02 <i>(2.25)</i>	2.55 <i>(1.90)</i>	2.20 <i>(1.64)</i>	1.82 <i>(1.36)</i>	1.49 <i>(1.11)</i>	5C165
Output Torque in·lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	7.63 <i>(5.69)</i>	6.76 <i>(5.04)</i>	6.18 <i>(4.61)</i>	5.67 <i>(4.23)</i>	5.19 <i>(3.87)</i>	4.48 <i>(3.34)</i>	4.05 <i>(3.02)</i>	3.70 <i>(2.76)</i>	3.02 <i>(2.25)</i>	2.55 <i>(1.90)</i>	2.20 <i>(1.64)</i>	1.82 <i>(1.36)</i>	1.49 <i>(1.11)</i>	5C170
Output Torque in·lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	7.63 <i>(5.69)</i>	6.76 <i>(5.04)</i>	6.18 <i>(4.61)</i>	5.67 <i>(4.23)</i>	5.19 <i>(3.87)</i>	4.48 <i>(3.34)</i>	4.05 <i>(3.02)</i>	3.70 <i>(2.76)</i>	3.02 <i>(2.25)</i>	2.55 <i>(1.90)</i>	2.20 <i>(1.64)</i>	1.82 <i>(1.36)</i>	1.49 <i>(1.11)</i>	5C175
Output Torque in·lbs <i>(N·m)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Speed Reducers

Selection Tables

Frame Size Selection Tables 50 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

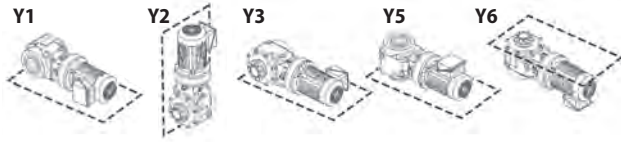


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z100
Output Torque in-lbs (N·m)	2565 (290)	3130 (354)	3425 (387)	3910 (442)	4280 (484)	5140 (581)	— —	— —	7345 (830)	6855 (775)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	— —	— —	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z105
Output Torque in-lbs (N·m)	2565 (290)	3130 (354)	3425 (387)	3910 (442)	4280 (484)	5140 (581)	— —	— —	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	— —	— —	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z110
Output Torque in-lbs (N·m)	3680 (416)	4485 (507)	4910 (555)	5610 (634)	6130 (693)	5820 (658)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z115
Output Torque in-lbs (N·m)	3680 (416)	4485 (507)	4910 (555)	5610 (634)	6130 (693)	5820 (658)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A110
Output Torque in-lbs (N·m)	3680 (416)	4485 (507)	4910 (555)	5610 (634)	6130 (693)	5820 (658)	7855 (888)	8590 (971)	9820 (1110)	9910 (1120)	10750 (1220)	10850 (1230)	10750 (1220)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Frame Size Selection Tables 50 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

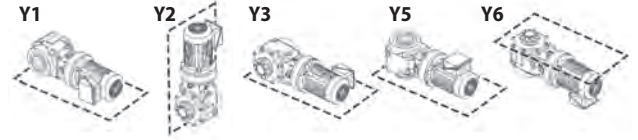
Dimensions on pages 2.96–2.104

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z100
Output Torque in-lbs (N·m)	7345 (830)	6910 (781)	7345 (830)	7345 (775)	7345 (830)	7345 (830)	7345 (769)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z105
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z110
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z115
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z120
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5Z125
Output Torque in-lbs (N·m)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A110
Output Torque in-lbs (N·m)	10750 (1220)	9910 (1120)	10750 (1220)	9910 (1120)	10750 (1220)	10750 (1220)	9910 (1120)	10850 (1230)	10750 (1220)	10850 (1230)	10950 (1240)	10850 (1230)	10850 (1230)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 50 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

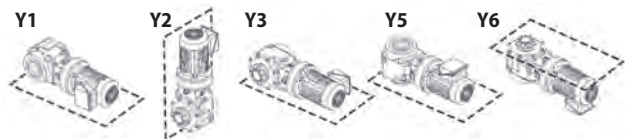


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A115
Output Torque in-lbs <i>(N·m)</i>	3680 (416)	4485 (507)	4910 (555)	5610 (634)	6130 (693)	5820 (658)	7855 (888)	8590 (971)	9820 (1110)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP <i>(kW)</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A120
Output Torque in-lbs <i>(N·m)</i>	8265 (934)	10050 (1140)	11050 (1250)	11415 (1290)	11415 (1290)	10975 (1240)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP <i>(kW)</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A125
Output Torque in-lbs <i>(N·m)</i>	8265 (934)	10050 (1140)	11050 (1250)	11400 (1290)	11400 (1290)	11050 (1250)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP <i>(kW)</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A140
Output Torque in-lbs <i>(N·m)</i>	11150 (1260)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP <i>(kW)</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A145
Output Torque in-lbs <i>(N·m)</i>	11150 (1260)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs <i>(N)</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP <i>(kW)</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5B120
Output Torque in-lbs <i>(N·m)</i>	8265 (934)	10050 (1140)	11050 (1250)	12550 (1420)	13800 (1560)	10975 (1240)	14250 (1610)	15550 (1760)	15750 (1780)	14400 (1630)	15750 (1780)	15800 (1790)	15750 (1780)	
Hollow Shaft OHL lbs <i>(N)</i>	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP <i>(kW)</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5B125
Output Torque in-lbs <i>(N·m)</i>	8265 (934)	10050 (1140)	11050 (1250)	12550 (1420)	13800 (1560)	10975 (1240)	14250 (1610)	15550 (1760)	17250 (1950)	17050 (1930)	18750 (2120)	18900 (2140)	18900 (2140)	
Hollow Shaft OHL lbs <i>(N)</i>	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Frame Size Selection Tables 50 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

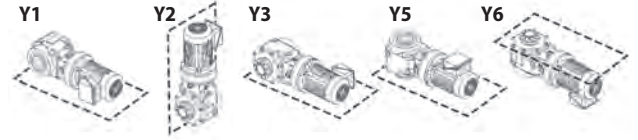
Dimensions on pages 2.96–2.104

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A115
Output Torque in-lbs (N·m)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A120
Output Torque in-lbs (N·m)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A125
Output Torque in-lbs (N·m)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A140
Output Torque in-lbs (N·m)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5A145
Output Torque in-lbs (N·m)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	11415 (1290)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5B120
Output Torque in-lbs (N·m)	15650 (1770)	14300 (1620)	15650 (1770)	14400 (1630)	15750 (1780)	15650 (1770)	14425 (1630)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	15750 (1780)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5B125
Output Torque in-lbs (N·m)	18900 (2140)	17345 (1960)	18900 (2140)	17300 (1960)	18900 (2140)	18900 (2140)	17345 (1960)	18900 (2140)	18900 (2140)	18900 (2140)	18900 (2140)	17750 (2010)	18900 (2140)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	

Speed Reducers
Selection Tables

Frame Size Selection Tables 50 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

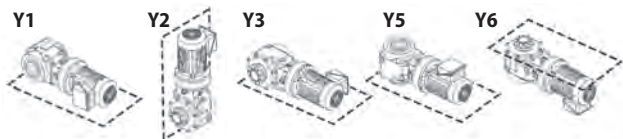


Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5B140
Output Torque in-lbs (N·m)	12900 (1460)	15750 (1780)	17250 (1950)	19700 (2230)	21550 (2440)	21550 (2440)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	12900 (1460)	15750 (1780)	17250 (1950)	19700 (2230)	21550 (2440)	21550 (2440)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5B160
Output Torque in-lbs (N·m)	16350 (1850)	19900 (2250)	21850 (2470)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	16350 (1850)	19900 (2250)	21850 (2470)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C140
Output Torque in-lbs (N·m)	12900 (1460)	15750 (1780)	17250 (1950)	19700 (2230)	21550 (2440)	21550 (2440)	27600 (3120)	30150 (3410)	34500 (3900)	33700 (3810)	36800 (4160)	36800 (4160)	36800 (4160)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	12900 (1460)	15750 (1780)	17250 (1950)	19700 (2230)	21550 (2440)	21550 (2440)	27600 (3120)	30150 (3410)	34500 (3900)	35450 (4010)	38850 (4390)	41150 (4650)	40800 (4610)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C160
Output Torque in-lbs (N·m)	28750 (3260)	35225 (3980)	38500 (4350)	43985 (4970)	44300 (5140)	39825 (4500)	43350 (4900)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	

Frame Size Selection Tables 50 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

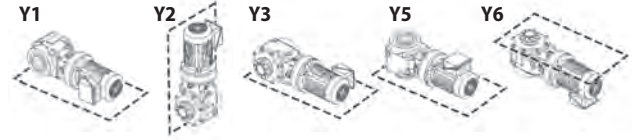
Dimensions on pages 2.96–2.104

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5B140
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	5B145
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	5B160
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5B165
Output Torque in-lbs (N·m)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs (N)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	36800 (4160)	33600 (3800)	36800 (4160)	33600 (3800)	36800 (4160)	36800 (4160)	33600 (3800)	36800 (4160)	36800 (4160)	36800 (4160)	36800 (4160)	36800 (4160)	36800 (4180)	5C140
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	41150 (4650)	36800 (4160)	40270 (4550)	37600 (4250)	41150 (4650)	41150 (4650)	37600 (4260)	41150 (4650)	41150 (4650)	41150 (4650)	41150 (4650)	39825 (4500)	37500 (4240)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	5C145
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Output Torque in-lbs (N·m)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C160
Output Torque in-lbs (N·m)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	

Speed Reducers
Selection Tables

Frame Size Selection Tables 50 RPM

Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

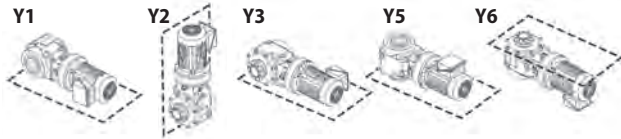


Dimensions on pages 2.96–2.104

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C165
Output Torque in-lbs (N·m)	28850 (3260)	35225 (3980)	38500 (4350)	43985 (4970)	44300 (5140)	39825 (4500)	43350 (4900)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C170
Output Torque in-lbs (N·m)	35200 (3980)	42900 (4850)	43350 (4900)	45450 (5140)	43900 (4960)	40600 (4590)	43350 (4900)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C175
Output Torque in-lbs (N·m)	35200 (3980)	42900 (4850)	43370 (4900)	45450 (5140)	43900 (4960)	40600 (4590)	43350 (4900)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Selection Tables

Frame Size Selection Tables 50 RPM



Single Reduction Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.96–2.104

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C165
Output Torque in-lbs (N·m)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C170
Output Torque in-lbs (N·m)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C175
Output Torque in-lbs (N·m)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	44300 (5140)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers

Selection Tables

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction Y4 Mounting Position^[1]



Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	—	—	—	—	—	3.15 <i>(2.35)</i>	—	—	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	SZ100
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	2195 <i>(248)</i>	—	—	2927 <i>(331)</i>	3658 <i>(413)</i>	4076 <i>(461)</i>	4808 <i>(543)</i>	5540 <i>(626)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	4.26 <i>(3.18)</i>	—	—	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	4.03 <i>(3.01)</i>	3.49 <i>(2.60)</i>	SZ105
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	2973 <i>(336)</i>	—	—	3964 <i>(448)</i>	4955 <i>(560)</i>	5522 <i>(624)</i>	6156 <i>(696)</i>	6147 <i>(695)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	4.76 <i>(3.55)</i>	—	—	—	—	—	—	—	SZ110
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	3319 <i>(375)</i>	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1435 <i>(6390)</i>	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	5.26 <i>(3.92)</i>	—	—	5.26 <i>(3.92)</i>	5.21 <i>(3.88)</i>	4.76 <i>(3.55)</i>	4.03 <i>(3.01)</i>	3.49 <i>(2.60)</i>	SZ115
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	3664 <i>(414)</i>	—	—	4886 <i>(552)</i>	6055 <i>(684)</i>	6168 <i>(697)</i>	6156 <i>(696)</i>	6147 <i>(695)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	6.80 <i>(5.07)</i>	—	—	—	—	—	—	—	SZ120
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	4741 <i>(536)</i>	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1380 <i>(6150)</i>	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	7.80 <i>(5.81)</i>	—	—	6.55 <i>(4.88)</i>	5.21 <i>(3.88)</i>	4.76 <i>(3.55)</i>	4.03 <i>(3.01)</i>	3.49 <i>(2.60)</i>	SZ125
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	5437 <i>(614)</i>	—	—	6089 <i>(688)</i>	6055 <i>(684)</i>	6168 <i>(697)</i>	6156 <i>(696)</i>	6147 <i>(695)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1380 <i>(6150)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction Y4 Mounting Position^[1]

Dimensions on pages 2.96–2.104

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	2.66 (1.99)	2.58 (1.93)	2.49 (1.86)	1.70 (1.27)	1.70 (1.27)	1.62 (1.21)	1.31 (0.98)	1.31 (0.98)	1.05 (0.780)	0.75 (0.560)	0.692 (0.516)	0.584 (0.436)	0.581 (0.433)	5Z100
Output Torque in-lbs (N·m)	5305 (599)	5744 (649)	6131 (693)	4523 (511)	4975 (562)	5496 (621)	4862 (549)	5340 (603)	5245 (593)	4464 (504)	4756 (537)	4832 (546)	5884 (665)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	3.08 (2.30)	2.73 (2.03)	2.49 (1.86)	2.24 (1.67)	2.10 (1.56)	1.81 (1.35)	1.61 (1.20)	1.50 (1.12)	1.22 (0.909)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z105
Output Torque in-lbs (N·m)	6140 (694)	6071 (686)	6131 (693)	5959 (673)	6124 (692)	6119 (691)	5975 (675)	6114 (691)	6109 (690)	6106 (690)	6104 (690)	6101 (689)	6099 (689)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	5Z110
Output Torque in-lbs (N·m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs (N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP (kW)	3.08 (2.30)	2.73 (2.03)	2.49 (1.86)	2.29 (1.71)	2.10 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.909)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z115
Output Torque in-lbs (N·m)	6140 (694)	6071 (686)	6131 (693)	6089 (688)	6124 (692)	6119 (691)	6089 (688)	6114 (691)	6109 (690)	6106 (690)	6104 (690)	6101 (689)	6099 (689)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP (kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	5Z120
Output Torque in-lbs (N·m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs (N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP (kW)	3.08 (2.30)	2.73 (2.03)	2.49 (1.86)	2.29 (1.71)	2.10 (1.56)	1.81 (1.35)	1.64 (1.22)	1.50 (1.12)	1.22 (0.909)	1.03 (0.766)	0.888 (0.662)	0.738 (0.550)	0.602 (0.449)	5Z125
Output Torque in-lbs (N·m)	6140 (694)	6071 (686)	6131 (693)	6089 (688)	6124 (692)	6119 (691)	6089 (688)	6114 (691)	6109 (690)	6106 (690)	6104 (690)	6101 (689)	6099 (689)	
Hollow Shaft OHL lbs (N)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	

Speed Reducers

Selection Tables

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction Y4 Mounting Position^[1]



Dimensions on pages 2.96–2.104

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	—	—	—	—	—	4.76 <i>(3.55)</i>	—	—	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	5A110
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	3319 <i>(375)</i>	—	—	4425 <i>(500)</i>	5531 <i>(625)</i>	6164 <i>(696)</i>	7271 <i>(822)</i>	8378 <i>(947)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	5.26 <i>(3.92)</i>	—	—	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.23 <i>(3.90)</i>	5.23 <i>(3.90)</i>	5A115
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	3664 <i>(414)</i>	—	—	4886 <i>(552)</i>	6107 <i>(690)</i>	6805 <i>(769)</i>	7988 <i>(903)</i>	9204 <i>(1040)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	6.80 <i>(5.07)</i>	—	—	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	—	—	5A120
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	4741 <i>(536)</i>	—	—	6321 <i>(714)</i>	7902 <i>(893)</i>	8805 <i>(995)</i>	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	7.80 <i>(5.81)</i>	—	—	9.31 <i>(6.95)</i>	7.94 <i>(5.92)</i>	7.41 <i>(5.52)</i>	6.27 <i>(4.67)</i>	5.43 <i>(4.05)</i>	5A125
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	5437 <i>(614)</i>	—	—	8660 <i>(979)</i>	9226 <i>(1043)</i>	9593 <i>(1084)</i>	9574 <i>(1082)</i>	9560 <i>(1080)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5A140
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	13.6 <i>(10.1)</i>	—	—	10.2 <i>(7.60)</i>	8.10 <i>(6.04)</i>	7.41 <i>(5.52)</i>	6.27 <i>(4.67)</i>	5.43 <i>(4.05)</i>	5A145
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	9470 <i>(1070)</i>	—	—	9470 <i>(1070)</i>	9416 <i>(1064)</i>	9593 <i>(1084)</i>	9574 <i>(1082)</i>	9560 <i>(1080)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction Y4 Mounting Position^[1]

Dimensions on pages 2.96–2.104

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	4.26 (3.18)	3.65 (2.72)	3.65 (2.72)	2.57 (1.91)	2.57 (1.91)	2.55 (1.90)	2.02 (1.50)	2.02 (1.50)	1.74 (1.30)	1.27 (0.944)	1.15 (0.859)	0.897 (0.669)	0.887 (0.661)	5A110
Output Torque in-lbs (N·m)	8491 (959)	8126 (918)	8975 (1014)	6816 (770)	7497 (847)	8649 (977)	7496 (847)	8233 (930)	8741 (988)	7520 (850)	7919 (895)	7416 (838)	8981 (1015)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	4.79 (3.57)	4.17 (3.11)	3.88 (2.89)	2.98 (2.22)	2.98 (2.22)	2.81 (2.10)	2.42 (1.81)	2.33 (1.74)	1.90 (1.41)	1.49 (1.11)	1.35 (1.01)	1.02 (0.758)	0.937 (0.698)	5A115
Output Torque in-lbs (N·m)	9550 (1079)	9284 (1049)	9535 (1077)	7915 (894)	8707 (984)	9517 (1075)	9018 (1019)	9509 (1074)	9502 (1074)	8855 (1001)	9309 (1052)	8399 (949)	9486 (1072)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	5A120
Output Torque in-lbs (N·m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs (N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.56 (2.66)	3.26 (2.43)	2.81 (2.10)	2.55 (1.90)	2.33 (1.74)	1.90 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.856)	0.937 (0.698)	5A125
Output Torque in-lbs (N·m)	9550 (1079)	9442 (1067)	9535 (1077)	9470 (1070)	9524 (1076)	9517 (1075)	9470 (1070)	9509 (1074)	9502 (1074)	9497 (1073)	9493 (1073)	9489 (1072)	9486 (1072)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	5A140
Output Torque in-lbs (N·m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs (N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.56 (2.66)	3.26 (2.43)	2.81 (2.10)	2.55 (1.90)	2.33 (1.74)	1.90 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.856)	0.937 (0.698)	5A145
Output Torque in-lbs (N·m)	9550 (1079)	9442 (1067)	9535 (1077)	9470 (1070)	9524 (1076)	9517 (1075)	9470 (1070)	9509 (1074)	9502 (1074)	9497 (1073)	9493 (1073)	9489 (1072)	9486 (1072)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers

Selection Tables

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction Y4 Mounting Position^[1]



Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	—	—	—	—	—	6.80 <i>(5.07)</i>	—	—	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	4741 <i>(536)</i>	—	—	6321 <i>(714)</i>	7902 <i>(893)</i>	8805 <i>(995)</i>	10385 <i>(1173)</i>	11965 <i>(1352)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	2965 <i>(13200)</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	7.80 <i>(5.81)</i>	—	—	9.31 <i>(6.95)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	5437 <i>(614)</i>	—	—	8660 <i>(979)</i>	9226 <i>(1043)</i>	10281 <i>(1162)</i>	12126 <i>(1370)</i>	13971 <i>(1579)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	2965 <i>(13200)</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5B140
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	14.9 <i>(11.1)</i>	—	—	14.9 <i>(11.1)</i>	14.9 <i>(11.1)</i>	14.7 <i>(11.0)</i>	10.2 <i>(7.58)</i>	10.2 <i>(7.58)</i>	5B145
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	10389 <i>(1174)</i>	—	—	13852 <i>(1565)</i>	17315 <i>(1956)</i>	19096 <i>(2158)</i>	15516 <i>(1753)</i>	17877 <i>(2020)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	2965 <i>(13200)</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5B160
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	27.0 <i>(20.2)</i>	—	—	20.3 <i>(15.1)</i>	16.1 <i>(12.0)</i>	14.7 <i>(11.0)</i>	12.5 <i>(9.30)</i>	10.8 <i>(8.06)</i>	5B165
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	18852 <i>(2130)</i>	—	—	18852 <i>(2130)</i>	18745 <i>(2118)</i>	19096 <i>(2158)</i>	19059 <i>(2154)</i>	19031 <i>(2150)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	2965 <i>(13200)</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction Y4 Mounting Position^[1]

Dimensions on pages 2.96–2.104

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP <i>(kW)</i>	6.80 <i>(5.07)</i>	5.31 <i>(3.96)</i>	5.31 <i>(3.96)</i>	4.14 <i>(3.09)</i>	4.14 <i>(3.09)</i>	4.02 <i>(2.99)</i>	3.34 <i>(2.49)</i>	3.34 <i>(2.49)</i>	2.57 <i>(1.91)</i>	2.30 <i>(1.72)</i>	1.75 <i>(1.30)</i>	1.28 <i>(0.96)</i>	1.27 <i>(0.944)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	13545 <i>(1531)</i>	11817 <i>(1335)</i>	13051 <i>(1475)</i>	11003 <i>(1243)</i>	12104 <i>(1368)</i>	13601 <i>(1537)</i>	12438 <i>(1405)</i>	13659 <i>(1543)</i>	12869 <i>(1454)</i>	13685 <i>(1546)</i>	12028 <i>(1359)</i>	10608 <i>(1199)</i>	12818 <i>(1448)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	7.59 <i>(5.66)</i>	6.55 <i>(4.88)</i>	6.55 <i>(4.88)</i>	5.30 <i>(3.96)</i>	5.30 <i>(3.96)</i>	5.05 <i>(3.77)</i>	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	3.19 <i>(2.38)</i>	3.06 <i>(2.28)</i>	2.17 <i>(1.62)</i>	1.61 <i>(1.20)</i>	1.52 <i>(1.13)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	15118 <i>(1708)</i>	14573 <i>(1647)</i>	16095 <i>(1819)</i>	14091 <i>(1592)</i>	15500 <i>(1751)</i>	17111 <i>(1933)</i>	15857 <i>(1792)</i>	17415 <i>(1968)</i>	16009 <i>(1809)</i>	18159 <i>(2052)</i>	14932 <i>(1687)</i>	13283 <i>(1501)</i>	15349 <i>(1734)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5B140
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	7.45 <i>(5.56)</i>	7.45 <i>(5.56)</i>	7.45 <i>(5.56)</i>	7.10 <i>(5.29)</i>	6.49 <i>(4.84)</i>	5.01 <i>(3.74)</i>	5.01 <i>(3.74)</i>	4.63 <i>(3.46)</i>	2.98 <i>(2.22)</i>	2.98 <i>(2.22)</i>	2.75 <i>(2.05)</i>	2.03 <i>(1.52)</i>	1.86 <i>(1.39)</i>	5B145
Output Torque in-lbs <i>(N·m)</i>	14841 <i>(1677)</i>	16573 <i>(1873)</i>	18304 <i>(2068)</i>	18852 <i>(2130)</i>	18959 <i>(2142)</i>	16973 <i>(1918)</i>	18637 <i>(2106)</i>	18929 <i>(2139)</i>	14940 <i>(1688)</i>	17711 <i>(2001)</i>	18897 <i>(2135)</i>	16798 <i>(1898)</i>	18883 <i>(2134)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5B160
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	9.54 <i>(7.12)</i>	8.45 <i>(6.30)</i>	7.72 <i>(5.76)</i>	7.10 <i>(5.29)</i>	6.49 <i>(4.84)</i>	5.59 <i>(4.17)</i>	5.07 <i>(3.78)</i>	4.63 <i>(3.46)</i>	3.77 <i>(2.81)</i>	3.18 <i>(2.37)</i>	2.75 <i>(2.05)</i>	2.28 <i>(1.70)</i>	1.86 <i>(1.39)</i>	5B165
Output Torque in-lbs <i>(N·m)</i>	19010 <i>(2148)</i>	18796 <i>(2124)</i>	18980 <i>(2145)</i>	18852 <i>(2130)</i>	18959 <i>(2142)</i>	18945 <i>(2141)</i>	18852 <i>(2130)</i>	18929 <i>(2139)</i>	18914 <i>(2137)</i>	18904 <i>(2136)</i>	18897 <i>(2135)</i>	18890 <i>(2134)</i>	18883 <i>(2134)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Speed Reducers

Selection Tables

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction Y4 Mounting Position^[1]



Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5C140
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	14.9 <i>(11.1)</i>	—	—	14.9 <i>(11.1)</i>	14.9 <i>(11.1)</i>	14.9 <i>(11.1)</i>	10.2 <i>(7.58)</i>	10.2 <i>(7.58)</i>	5C145
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	10389 <i>(1174)</i>	—	—	13852 <i>(1565)</i>	17315 <i>(1956)</i>	19294 <i>(2180)</i>	15516 <i>(1753)</i>	17877 <i>(2020)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	33.9 <i>(25.3)</i>	—	—	—	—	—	—	—	5C160
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	23658 <i>(2673)</i>	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	40.2 <i>(30.0)</i>	—	—	20.3 <i>(15.2)</i>	20.3 <i>(15.2)</i>	20.3 <i>(15.2)</i>	14.9 <i>(11.1)</i>	14.9 <i>(11.1)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	28053 <i>(3170)</i>	—	—	18889 <i>(2134)</i>	23611 <i>(2668)</i>	26309 <i>(2973)</i>	22757 <i>(2571)</i>	26220 <i>(2963)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	45.5 <i>(33.9)</i>	—	—	—	—	—	—	—	5C170
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	31700 <i>(3582)</i>	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	48.3 <i>(36.0)</i>	—	—	40.6 <i>(30.2)</i>	19.1 <i>(14.2)</i>	19.1 <i>(14.2)</i>	19.1 <i>(14.2)</i>	16.1 <i>(12.0)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	33663 <i>(3804)</i>	—	—	37703 <i>(4260)</i>	22198 <i>(2508)</i>	24735 <i>(2795)</i>	29175 <i>(3297)</i>	28267 <i>(3194)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction Y4 Mounting Position^[1]

Dimensions on pages 2.96–2.104

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C140
Output Torque in-lbs (N·m)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs (N)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Input Power HP (kW)	7.45 (5.56)	7.45 (5.56)	7.45 (5.56)	7.45 (5.56)	7.45 (5.56)	5.01 (3.74)	5.01 (3.74)	5.01 (3.74)	2.98 (2.22)	2.98 (2.22)	2.98 (2.22)	2.03 (1.52)	2.03 (1.52)	5C145
Output Torque in-lbs (N·m)	14841 (1677)	16573 (1873)	18304 (2068)	19788 (2236)	21767 (2460)	16973 (1918)	18637 (2106)	20467 (2313)	14940 (1688)	17711 (2001)	20481 (2314)	16798 (1898)	20575 (2325)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C160
Output Torque in-lbs (N·m)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs (N)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Input Power HP (kW)	14.9 (11.1)	10.2 (7.58)	10.2 (7.58)	10.2 (7.58)	10.2 (7.58)	10.2 (7.58)	10.1 (7.56)	9.27 (6.91)	5.01 (3.74)	5.01 (3.74)	5.01 (3.74)	2.98 (2.22)	2.98 (2.22)	5C165
Output Torque in-lbs (N·m)	29682 (3354)	22599 (2554)	24960 (2820)	26984 (3049)	29682 (3354)	34405 (3888)	37703 (4260)	37857 (4278)	25127 (2839)	29786 (3366)	34445 (3892)	24636 (2784)	30177 (3410)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C170
Output Torque in-lbs (N·m)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs (N)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Input Power HP (kW)	13.0 (9.71)	13.0 (9.71)	13.0 (9.71)	14.2 (10.6)	13.0 (9.68)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.63)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C175
Output Torque in-lbs (N·m)	25946 (2932)	28973 (3274)	32000 (3616)	37703 (4260)	37919 (4285)	37889 (4281)	37703 (4260)	37857 (4278)	37829 (4274)	37809 (4272)	37795 (4271)	37779 (4269)	37765 (4267)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers

Selection Tables

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction Y4 Mounting Position^[1]



Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	—	—	—	—	—	3.15 <i>(2.35)</i>	—	—	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	3.15 <i>(2.35)</i>	5Z100
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	2649 <i>(299)</i>	—	—	3532 <i>(399)</i>	4415 <i>(499)</i>	4920 <i>(556)</i>	5803 <i>(656)</i>	6686 <i>(755)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	4.26 <i>(3.18)</i>	—	—	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	4.26 <i>(3.18)</i>	4.03 <i>(3.00)</i>	3.49 <i>(2.60)</i>	5Z105
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	3588 <i>(405)</i>	—	—	4784 <i>(541)</i>	5981 <i>(676)</i>	6664 <i>(753)</i>	7427 <i>(839)</i>	7416 <i>(838)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	4.76 <i>(3.55)</i>	—	—	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	—	—	—	5Z110
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	4005 <i>(453)</i>	—	—	5341 <i>(603)</i>	6676 <i>(754)</i>	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	5.26 <i>(3.92)</i>	—	—	5.26 <i>(3.92)</i>	5.21 <i>(3.88)</i>	4.76 <i>(3.55)</i>	4.03 <i>(3.00)</i>	3.49 <i>(2.60)</i>	5Z115
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	4423 <i>(500)</i>	—	—	5897 <i>(666)</i>	7304 <i>(825)</i>	7441 <i>(841)</i>	7427 <i>(839)</i>	7416 <i>(838)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1435 <i>(6390)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	6.80 <i>(5.07)</i>	—	—	—	—	—	—	—	5Z120
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	5722 <i>(647)</i>	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1095 <i>(4880)</i>	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	8.73 <i>(6.51)</i>	—	—	6.55 <i>(4.88)</i>	5.21 <i>(3.88)</i>	4.76 <i>(3.55)</i>	4.03 <i>(3.00)</i>	3.49 <i>(2.60)</i>	5Z125
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	7346 <i>(830)</i>	—	—	7346 <i>(830)</i>	7304 <i>(825)</i>	7441 <i>(841)</i>	7427 <i>(839)</i>	7416 <i>(838)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1095 <i>(4880)</i>	—	—	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction Y4 Mounting Position^[1]

Dimensions on pages 2.96–2.104

Output RPM	24.7	21.6	19.6	18.1	16.5	14.2	12.9	11.8	9.60	8.10	7.00	5.82	4.75	Frame Size
Nominal Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	
Input Power HP <i>(kW)</i>	2.66 <i>(1.99)</i>	2.55 <i>(1.90)</i>	2.49 <i>(1.86)</i>	1.70 <i>(1.27)</i>	1.70 <i>(1.27)</i>	1.62 <i>(1.21)</i>	1.31 <i>(0.975)</i>	1.31 <i>(0.975)</i>	1.05 <i>(0.780)</i>	0.751 <i>(0.560)</i>	0.692 <i>(0.516)</i>	0.584 <i>(0.436)</i>	0.581 <i>(0.433)</i>	5Z100
Output Torque in-lbs <i>(N·m)</i>	6403 <i>(723)</i>	6851 <i>(774)</i>	7396 <i>(836)</i>	5458 <i>(617)</i>	6004 <i>(678)</i>	6633 <i>(749)</i>	5869 <i>(663)</i>	6445 <i>(728)</i>	6330 <i>(715)</i>	5387 <i>(609)</i>	5740 <i>(649)</i>	5831 <i>(659)</i>	7101 <i>(802)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	3.08 <i>(2.30)</i>	2.73 <i>(2.03)</i>	2.49 <i>(1.86)</i>	2.24 <i>(1.67)</i>	2.09 <i>(1.56)</i>	1.81 <i>(1.35)</i>	1.61 <i>(1.20)</i>	1.50 <i>(1.12)</i>	1.22 <i>(0.908)</i>	1.03 <i>(0.766)</i>	0.888 <i>(0.662)</i>	0.678 <i>(0.506)</i>	0.602 <i>(0.449)</i>	5Z105
Output Torque in-lbs <i>(N·m)</i>	7408 <i>(837)</i>	7324 <i>(828)</i>	7396 <i>(836)</i>	7191 <i>(813)</i>	7388 <i>(835)</i>	7382 <i>(834)</i>	7211 <i>(815)</i>	7376 <i>(833)</i>	7370 <i>(833)</i>	7367 <i>(832)</i>	7364 <i>(832)</i>	6765 <i>(764)</i>	7358 <i>(831)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5Z110
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	3.08 <i>(2.30)</i>	2.73 <i>(2.03)</i>	2.49 <i>(1.86)</i>	2.29 <i>(1.71)</i>	2.09 <i>(1.56)</i>	1.81 <i>(1.35)</i>	1.64 <i>(1.22)</i>	1.50 <i>(1.12)</i>	1.22 <i>(0.908)</i>	1.03 <i>(0.766)</i>	0.888 <i>(0.662)</i>	0.738 <i>(0.550)</i>	0.602 <i>(0.449)</i>	5Z115
Output Torque in-lbs <i>(N·m)</i>	7408 <i>(837)</i>	7324 <i>(828)</i>	7396 <i>(836)</i>	7346 <i>(830)</i>	7388 <i>(835)</i>	7382 <i>(834)</i>	7346 <i>(830)</i>	7376 <i>(833)</i>	7370 <i>(833)</i>	7367 <i>(832)</i>	7364 <i>(832)</i>	7361 <i>(832)</i>	7358 <i>(831)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5Z120
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	3.08 <i>(2.30)</i>	2.73 <i>(2.03)</i>	2.49 <i>(1.86)</i>	2.29 <i>(1.71)</i>	2.09 <i>(1.56)</i>	1.81 <i>(1.35)</i>	1.64 <i>(1.22)</i>	1.50 <i>(1.12)</i>	1.22 <i>(0.908)</i>	1.03 <i>(0.766)</i>	0.888 <i>(0.662)</i>	0.738 <i>(0.550)</i>	0.602 <i>(0.449)</i>	5Z125
Output Torque in-lbs <i>(N·m)</i>	7408 <i>(837)</i>	7324 <i>(828)</i>	7396 <i>(836)</i>	7346 <i>(830)</i>	7388 <i>(835)</i>	7382 <i>(834)</i>	7346 <i>(830)</i>	7376 <i>(833)</i>	7370 <i>(833)</i>	7367 <i>(832)</i>	7364 <i>(832)</i>	7361 <i>(832)</i>	7358 <i>(831)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	

Speed Reducers

Selection Tables

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction Y4 Mounting Position^[1]



Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	—	—	—	—	—	4.76 <i>(3.55)</i>	—	—	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	4.76 <i>(3.55)</i>	5A110
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	4005 <i>(453)</i>	—	—	5341 <i>(603)</i>	6676 <i>(754)</i>	7439 <i>(841)</i>	8776 <i>(992)</i>	10111 <i>(1143)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	5.26 <i>(3.92)</i>	—	—	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.26 <i>(3.92)</i>	5.23 <i>(3.90)</i>	5.23 <i>(3.90)</i>	5A115
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	4423 <i>(500)</i>	—	—	5897 <i>(666)</i>	7371 <i>(833)</i>	8213 <i>(928)</i>	9641 <i>(1089)</i>	11108 <i>(1255)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	6.80 <i>(5.07)</i>	—	—	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	—	—	5A120
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	5722 <i>(647)</i>	—	—	7629 <i>(862)</i>	9536 <i>(1078)</i>	10626 <i>(1201)</i>	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	9.34 <i>(6.96)</i>	—	—	9.31 <i>(6.95)</i>	7.94 <i>(5.92)</i>	7.40 <i>(5.52)</i>	6.26 <i>(4.67)</i>	5.43 <i>(4.05)</i>	5A125
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	7858 <i>(888)</i>	—	—	10452 <i>(1181)</i>	11135 <i>(1258)</i>	11565 <i>(1307)</i>	11543 <i>(1304)</i>	11526 <i>(1302)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5A140
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	13.6 <i>(10.1)</i>	—	—	10.2 <i>(7.59)</i>	8.09 <i>(6.04)</i>	7.40 <i>(5.52)</i>	6.26 <i>(4.67)</i>	5.43 <i>(4.05)</i>	5A145
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	11417 <i>(1290)</i>	—	—	11417 <i>(1290)</i>	11352 <i>(1283)</i>	11565 <i>(1307)</i>	11543 <i>(1304)</i>	11526 <i>(1302)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	1810 <i>(8060)</i>	—	—	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction Y4 Mounting Position^[1]

Dimensions on pages 2.96–2.104

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	4.26 (3.18)	3.65 (2.72)	3.65 (2.72)	2.57 (1.91)	2.57 (1.91)	2.55 (1.90)	2.02 (1.50)	2.02 (1.50)	1.74 (1.30)	1.27 (0.944)	1.15 (0.859)	0.897 (0.669)	0.887 (0.661)	5A110
Output Torque in-lbs (N·m)	10248 (1158)	9807 (1108)	10832 (1224)	8226 (930)	9049 (1022)	10438 (1179)	9047 (1022)	9936 (1123)	10549 (1192)	9076 (1026)	9557 (1080)	8950 (1011)	10839 (1225)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	4.79 (3.57)	4.17 (3.11)	3.88 (2.89)	2.98 (2.22)	2.98 (2.22)	2.81 (2.09)	2.42 (1.81)	2.33 (1.73)	1.89 (1.41)	1.49 (1.11)	1.35 (1.01)	1.02 (0.758)	0.936 (0.698)	5A115
Output Torque in-lbs (N·m)	11513 (1301)	11204 (1266)	11495 (1299)	9553 (1079)	10508 (1187)	11473 (1296)	10884 (1230)	11464 (1295)	11455 (1294)	10687 (1208)	11236 (1270)	10136 (1145)	11436 (1292)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	5A120
Output Torque in-lbs (N·m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs (N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.56 (2.66)	3.26 (2.43)	2.81 (2.09)	2.54 (1.90)	2.33 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A125
Output Torque in-lbs (N·m)	11513 (1301)	11383 (1286)	11495 (1299)	11417 (1290)	11482 (1297)	11473 (1296)	11417 (1290)	11464 (1295)	11455 (1294)	11449 (1294)	11445 (1293)	11440 (1293)	11436 (1292)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP (kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	5A140
Output Torque in-lbs (N·m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs (N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP (kW)	4.79 (3.57)	4.24 (3.16)	3.88 (2.89)	3.56 (2.66)	3.26 (2.43)	2.81 (2.09)	2.54 (1.90)	2.33 (1.73)	1.89 (1.41)	1.60 (1.19)	1.38 (1.03)	1.15 (0.855)	0.936 (0.698)	5A145
Output Torque in-lbs (N·m)	11513 (1301)	11383 (1286)	11495 (1299)	11417 (1290)	11482 (1297)	11473 (1296)	11417 (1290)	11464 (1295)	11455 (1294)	11449 (1294)	11445 (1293)	11440 (1293)	11436 (1292)	
Hollow Shaft OHL lbs (N)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	

Speed Reducers

Selection Tables

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction Y4 Mounting Position^[1]



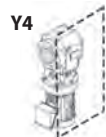
Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	—	—	—	—	—	6.80 <i>(5.07)</i>	—	—	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	6.80 <i>(5.07)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	5722 <i>(647)</i>	—	—	7629 <i>(862)</i>	9536 <i>(1078)</i>	10626 <i>(1201)</i>	12533 <i>(1416)</i>	14441 <i>(1632)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	2965 <i>(13200)</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	9.34 <i>(6.96)</i>	—	—	9.31 <i>(6.95)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	7.94 <i>(5.92)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	7858 <i>(888)</i>	—	—	10452 <i>(1181)</i>	11135 <i>(1258)</i>	12408 <i>(1402)</i>	14635 <i>(1654)</i>	16862 <i>(1905)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	2965 <i>(13200)</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5B140
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	14.9 <i>(11.1)</i>	—	—	14.9 <i>(11.1)</i>	14.9 <i>(11.1)</i>	14.7 <i>(11.0)</i>	10.2 <i>(7.58)</i>	10.2 <i>(7.58)</i>	5B145
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	12538 <i>(1417)</i>	—	—	16718 <i>(1889)</i>	20897 <i>(2361)</i>	23041 <i>(2604)</i>	18726 <i>(2116)</i>	21576 <i>(2438)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	2965 <i>(13200)</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5B160
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	27.0 <i>(20.2)</i>	—	—	20.3 <i>(15.1)</i>	16.1 <i>(12.0)</i>	14.7 <i>(11.0)</i>	12.5 <i>(9.30)</i>	10.8 <i>(8.06)</i>	5B165
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	22746 <i>(2570)</i>	—	—	22746 <i>(2570)</i>	22617 <i>(2556)</i>	23041 <i>(2604)</i>	22996 <i>(2598)</i>	22963 <i>(2595)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	2965 <i>(13200)</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction Y4 Mounting Position^[1]

Dimensions on pages 2.96–2.104

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	6.56 <i>(4.89)</i>	5.31 <i>(3.96)</i>	5.31 <i>(3.96)</i>	4.14 <i>(3.09)</i>	4.14 <i>(3.09)</i>	3.84 <i>(2.87)</i>	3.18 <i>(2.37)</i>	3.18 <i>(2.37)</i>	2.57 <i>(1.91)</i>	2.19 <i>(1.63)</i>	1.75 <i>(1.30)</i>	1.28 <i>(0.957)</i>	1.27 <i>(0.944)</i>	5B120
Output Torque in-lbs <i>(N·m)</i>	15763 <i>(1781)</i>	14250 <i>(1610)</i>	15738 <i>(1778)</i>	13280 <i>(1501)</i>	14608 <i>(1651)</i>	15709 <i>(1775)</i>	14292 <i>(1615)</i>	15696 <i>(1774)</i>	15532 <i>(1755)</i>	15676 <i>(1771)</i>	14517 <i>(1640)</i>	12803 <i>(1447)</i>	15471 <i>(1748)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	7.59 <i>(5.66)</i>	6.43 <i>(4.79)</i>	6.43 <i>(4.79)</i>	5.30 <i>(3.96)</i>	5.30 <i>(3.96)</i>	4.66 <i>(3.47)</i>	3.86 <i>(2.88)</i>	3.86 <i>(2.88)</i>	3.14 <i>(2.34)</i>	2.65 <i>(1.97)</i>	2.17 <i>(1.62)</i>	1.53 <i>(1.14)</i>	1.38 <i>(1.03)</i>	5B125
Output Torque in-lbs <i>(N·m)</i>	18246 <i>(2062)</i>	17264 <i>(1951)</i>	19068 <i>(2155)</i>	17006 <i>(1922)</i>	18707 <i>(2114)</i>	19032 <i>(2151)</i>	17305 <i>(1955)</i>	19004 <i>(2147)</i>	19002 <i>(2147)</i>	18980 <i>(2145)</i>	18021 <i>(2036)</i>	15228 <i>(1721)</i>	16823 <i>(1901)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5B140
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	7.45 <i>(5.56)</i>	7.45 <i>(5.56)</i>	7.45 <i>(5.56)</i>	7.09 <i>(5.29)</i>	6.49 <i>(4.84)</i>	5.01 <i>(3.74)</i>	5.01 <i>(3.74)</i>	4.63 <i>(3.46)</i>	2.98 <i>(2.22)</i>	2.98 <i>(2.22)</i>	2.75 <i>(2.05)</i>	2.03 <i>(1.52)</i>	1.86 <i>(1.39)</i>	5B145
Output Torque in-lbs <i>(N·m)</i>	17912 <i>(2024)</i>	20002 <i>(2260)</i>	22091 <i>(2496)</i>	22746 <i>(2570)</i>	22876 <i>(2585)</i>	20485 <i>(2315)</i>	22493 <i>(2542)</i>	22839 <i>(2581)</i>	18031 <i>(2037)</i>	21375 <i>(2415)</i>	22801 <i>(2576)</i>	20273 <i>(2291)</i>	22783 <i>(2574)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5B160
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	9.54 <i>(7.11)</i>	8.45 <i>(6.30)</i>	7.72 <i>(5.76)</i>	7.09 <i>(5.29)</i>	6.49 <i>(4.84)</i>	5.59 <i>(4.17)</i>	5.07 <i>(3.78)</i>	4.63 <i>(3.46)</i>	3.77 <i>(2.81)</i>	3.18 <i>(2.37)</i>	2.75 <i>(2.05)</i>	2.28 <i>(1.70)</i>	1.86 <i>(1.39)</i>	5B165
Output Torque in-lbs <i>(N·m)</i>	22937 <i>(2592)</i>	22678 <i>(2563)</i>	22901 <i>(2588)</i>	22746 <i>(2570)</i>	22876 <i>(2585)</i>	22858 <i>(2583)</i>	22746 <i>(2570)</i>	22839 <i>(2581)</i>	22821 <i>(2579)</i>	22810 <i>(2577)</i>	22801 <i>(2576)</i>	22792 <i>(2575)</i>	22783 <i>(2574)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	

Speed Reducers

Selection Tables

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction Y4 Mounting Position^[1]



Dimensions on pages 2.96–2.104

Speed Reducers
Selection Tables

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	5C140
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	14.9 <i>(11.1)</i>	—	—	14.9 <i>(11.1)</i>	14.9 <i>(11.1)</i>	14.9 <i>(11.1)</i>	10.2 <i>(7.58)</i>	10.2 <i>(7.58)</i>	5C145
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	12538 <i>(1417)</i>	—	—	16718 <i>(1889)</i>	20897 <i>(2361)</i>	23285 <i>(2631)</i>	18726 <i>(2116)</i>	21576 <i>(2438)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	33.9 <i>(25.3)</i>	—	—	—	—	—	—	—	5C160
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	28553 <i>(3226)</i>	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	40.2 <i>(30.0)</i>	—	—	20.3 <i>(15.2)</i>	20.3 <i>(15.2)</i>	20.3 <i>(15.2)</i>	14.9 <i>(11.1)</i>	14.9 <i>(11.1)</i>	5C165
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	33857 <i>(3826)</i>	—	—	22797 <i>(2576)</i>	28496 <i>(3220)</i>	31753 <i>(3588)</i>	27465 <i>(3103)</i>	31644 <i>(3576)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	45.5 <i>(33.9)</i>	—	—	—	—	—	—	—	5C170
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	38258 <i>(4323)</i>	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	—	48.3 <i>(36.0)</i>	—	—	39.4 <i>(29.4)</i>	19.1 <i>(14.2)</i>	19.1 <i>(14.2)</i>	19.1 <i>(14.2)</i>	16.1 <i>(12.0)</i>	5C175
Output Torque in-lbs <i>(N·m)</i>	—	—	—	—	—	40628 <i>(4591)</i>	—	—	44239 <i>(4999)</i>	26791 <i>(3027)</i>	29853 <i>(3373)</i>	35211 <i>(3979)</i>	34115 <i>(3855)</i>	
Hollow Shaft OHL lbs <i>(N)</i>	—	—	—	—	—	4810 <i>(21400)</i>	—	—	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction Y4 Mounting Position^[1]

Dimensions on pages 2.96–2.104

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C140
Output Torque in-lbs (N·m)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs (N)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Input Power HP (kW)	7.45 (5.56)	7.45 (5.56)	7.45 (5.56)	7.45 (5.56)	7.45 (5.56)	5.01 (3.74)	5.01 (3.74)	5.01 (3.74)	2.98 (2.22)	2.98 (2.22)	2.98 (2.22)	2.03 (1.52)	2.03 (1.52)	5C145
Output Torque in-lbs (N·m)	17912 (2024)	20002 (2260)	22091 (2496)	23882 (2699)	26271 (2968)	20485 (2315)	22493 (2542)	24702 (2791)	18031 (2037)	21375 (2415)	24718 (2793)	20273 (2291)	24832 (2806)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C160
Output Torque in-lbs (N·m)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs (N)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Input Power HP (kW)	14.9 (11.1)	10.2 (7.58)	10.2 (7.58)	10.2 (7.58)	10.2 (7.58)	10.2 (7.58)	10.1 (7.56)	9.27 (6.91)	5.01 (3.74)	5.01 (3.74)	5.01 (3.74)	2.98 (2.22)	2.98 (2.22)	5C165
Output Torque in-lbs (N·m)	35824 (4048)	27275 (3082)	30124 (3404)	32567 (3680)	35824 (4048)	41523 (4692)	45492 (5140)	45678 (5161)	30325 (3427)	35948 (4062)	41572 (4697)	29734 (3360)	36421 (4115)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C170
Output Torque in-lbs (N·m)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs (N)	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Input Power HP (kW)	13.0 (9.71)	13.0 (9.71)	13.0 (9.71)	14.2 (10.6)	13.0 (9.67)	11.2 (8.34)	10.1 (7.56)	9.27 (6.91)	7.54 (5.62)	6.36 (4.74)	5.50 (4.10)	4.57 (3.41)	3.73 (2.78)	5C175
Output Torque in-lbs (N·m)	31314 (3538)	34968 (3951)	38621 (4364)	45492 (5140)	45752 (5170)	45716 (5166)	45492 (5140)	45678 (5161)	45643 (5157)	45619 (5155)	45602 (5153)	45583 (5151)	45567 (5149)	
Hollow Shaft OHL lbs (N)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

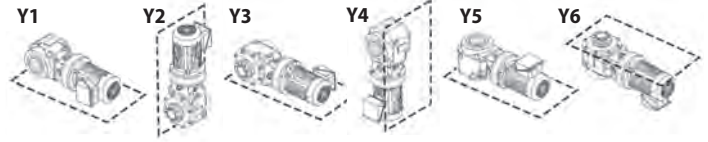
Speed Reducers

Selection Tables

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions



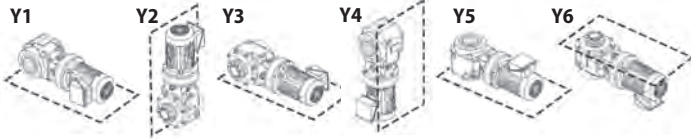
Dimensions on pages 2.106–2.110

Selection Tables

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.894	Frame Size
Nominal Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	
Input Power HP	0.546	0.546	0.465	0.404	0.342	0.288	0.244	0.209	0.177	0.141	0.134	5Z10DA
Input Power kW	(0.407)	(0.407)	(0.347)	(0.301)	(0.255)	(0.215)	(0.182)	(0.156)	(0.132)	(0.105)	(0.100)	
Output Torque in-lbs	6255	7280	7345	7345	7345	7345	7345	7345	7345	7345	7345	
Output Torque N·m	(707)	(823)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	
Hollow Shaft OHL lbs	1435	1435	1435	1435	1435	1435	1435	1435	1435	1435	1435	
Hollow Shaft OHL N	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	
Input Power HP	—	—	—	—	—	0.288	0.244	0.209	0.177	0.141	0.134	5Z12DA
Input Power kW	—	—	—	—	—	(0.215)	(0.182)	(0.156)	(0.132)	(0.105)	(0.100)	
Output Torque in-lbs	—	—	—	—	—	7345	7345	7345	7345	7345	7345	
Output Torque N·m	—	—	—	—	—	(830)	(830)	(830)	(830)	(830)	(830)	
Hollow Shaft OHL lbs	—	—	—	—	—	1435	1435	1435	1435	1435	1435	
Hollow Shaft OHL N	—	—	—	—	—	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	
Input Power HP	0.641	0.550	0.465	0.404	0.342	0.288	0.244	0.209	—	—	—	5Z12DB
Input Power kW	(0.478)	(0.410)	(0.347)	(0.301)	(0.255)	(0.215)	(0.182)	(0.156)	—	—	—	
Output Torque in-lbs	7345	7345	7345	7345	7345	7345	7345	7345	—	—	—	
Output Torque N·m	(830)	(830)	(830)	(830)	(830)	(830)	(830)	(830)	—	—	—	
Hollow Shaft OHL lbs	1435	1435	1435	1435	1435	1435	1435	1435	—	—	—	
Hollow Shaft OHL N	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	(6390)	—	—	—	
Input Power HP	—	—	—	—	—	0.448	0.380	0.325	0.275	0.219	0.185	5A12DA
Input Power kW	—	—	—	—	—	(0.334)	(0.283)	(0.242)	(0.205)	(0.163)	(0.138)	
Output Torque in-lbs	—	—	—	—	—	11400	11400	11400	11400	11400	11400	
Output Torque N·m	—	—	—	—	—	(1290)	(1290)	(1290)	(1290)	(1290)	(1290)	
Hollow Shaft OHL lbs	—	—	—	—	—	1810	1810	1810	1810	1810	1810	
Hollow Shaft OHL N	—	—	—	—	—	(8060)	(8060)	(8060)	(8060)	(8060)	(8060)	
Input Power HP	0.995	0.856	0.724	0.628	0.531	0.448	0.380	0.325	—	—	—	5A12DB
Input Power kW	(0.742)	(0.638)	(0.540)	(0.468)	(0.396)	(0.334)	(0.283)	(0.242)	—	—	—	
Output Torque in-lbs	11400	11400	11400	11400	11400	11400	11400	11400	—	—	—	
Output Torque N·m	(1290)	(1290)	(1290)	(1290)	(1290)	(1290)	(1290)	(1290)	—	—	—	
Hollow Shaft OHL lbs	1810	1810	1810	1810	1810	1810	1810	1810	—	—	—	
Hollow Shaft OHL N	(8060)	(8060)	(8060)	(8060)	(8060)	(8060)	(8060)	(8060)	—	—	—	
Input Power HP	—	—	—	—	—	0.546	0.546	0.539	0.456	0.363	0.307	5B12DA
Input Power kW	—	—	—	—	—	(0.407)	(0.407)	(0.402)	(0.340)	(0.271)	(0.229)	
Output Torque in-lbs	—	—	—	—	—	13850	16450	18900	18900	18900	18900	
Output Torque N·m	—	—	—	—	—	(1570)	(1860)	(2140)	(2140)	(2140)	(2140)	
Hollow Shaft OHL lbs	—	—	—	—	—	2965	2965	2965	2965	2965	2965	
Hollow Shaft OHL N	—	—	—	—	—	(13200)	(13200)	(13200)	(13200)	(13200)	(13200)	
Input Power HP	1.65	1.41	1.20	1.04	0.882	0.744	0.630	0.539	—	—	—	5B12DB
Input Power kW	(1.23)	(1.05)	(0.897)	(0.777)	(0.658)	(0.555)	(0.470)	(0.402)	—	—	—	
Output Torque in-lbs	18900	18900	18900	18900	18900	18900	18900	18900	—	—	—	
Output Torque N·m	(2140)	(2140)	(2140)	(2140)	(2140)	(2140)	(2140)	(2140)	—	—	—	
Hollow Shaft OHL lbs	2965	2965	2965	2965	2965	2965	2965	2965	—	—	—	
Hollow Shaft OHL N	(13200)	(13200)	(13200)	(13200)	(13200)	(13200)	(13200)	(13200)	—	—	—	

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications. A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

Dimensions on pages 2.106–2.110

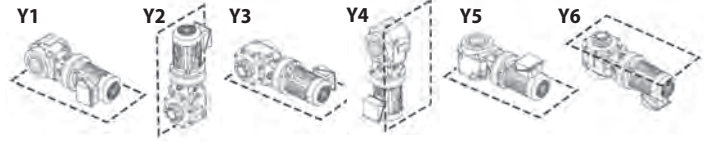
Output RPM	0.770	0.684	0.594	0.498	0.401	0.338	0.270	0.242	0.197	0.164	Frame Size
Nominal Ratio	2272	2559	2944	3511	4365	5177	6472	7228	8880	10658	
Input Power HP <i>kW</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	5Z10DA
Output Torque in-lbs <i>N·m</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>N</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>kW</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	
Output Torque in-lbs <i>N·m</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	5Z12DA
Hollow Shaft OHL lbs <i>N</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>kW</i>	—	—	—	—	—	—	—	—	—	—	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	5Z12DB
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>kW</i>	—	—	—	—	—	—	—	—	—	—	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	5A12DA
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>kW</i>	0.160 <i>(0.119)</i>	0.142 <i>(0.106)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	
Output Torque in-lbs <i>N·m</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	5A12DB
Hollow Shaft OHL lbs <i>N</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>kW</i>	—	—	—	—	—	—	—	—	—	—	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	5B12DA
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>kW</i>	0.266 <i>(0.198)</i>	0.235 <i>(0.175)</i>	0.205 <i>(0.153)</i>	0.172 <i>(0.128)</i>	0.138 <i>(0.103)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	
Output Torque in-lbs <i>N·m</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	5B12DB
Hollow Shaft OHL lbs <i>N</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>kW</i>	—	—	—	—	—	—	—	—	—	—	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	5B12DB
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	

Speed Reducers
Selection Tables

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications. A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions



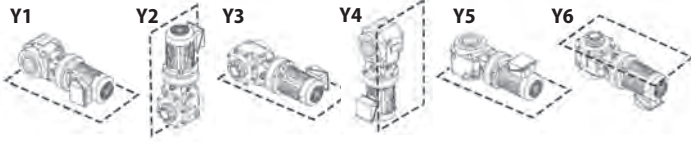
Dimensions on pages 2.106–2.110

Speed Reducers
Selection Tables

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.894	Frame Size
Nominal Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	
Input Power HP	—	—	—	—	—	—	—	—	—	—	0.369	5B14DA
kW	—	—	—	—	—	—	—	—	—	—	(0.275)	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	22700 (2570)	
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	2965 (13200)	
Input Power HP	—	—	1.45	1.25	1.06	0.893	0.755	0.646	0.547	0.436	0.369	5B14DB
kW	—	—	(1.08)	(0.932)	(0.789)	(0.666)	(0.563)	(0.482)	(0.408)	(0.325)	(0.275)	
Output Torque in-lbs <i>N·m</i>	—	—	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs <i>N</i>	—	—	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP	—	—	—	—	—	—	—	—	—	—	0.546	5C14DA
kW	—	—	—	—	—	—	—	—	—	—	(0.407)	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	33600 (3800)	
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	4810 (21400)	
Input Power HP	—	—	2.04	2.04	1.90	1.58	1.34	1.17	0.992	0.791	0.669	5C14DB
kW	—	—	(1.52)	(1.52)	(1.42)	(1.18)	(1.00)	(0.874)	(0.740)	(0.590)	(0.499)	
Output Torque in-lbs <i>N·m</i>	—	—	32000 (3620)	36950 (4180)	40850 (4620)	40250 (4550)	40250 (4550)	41200 (4660)	41200 (4660)	41200 (4660)	41200 (4660)	
Hollow Shaft OHL lbs <i>N</i>	—	—	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP	3.59	2.91	2.61	2.25	—	—	—	—	—	—	—	5C14DC
kW	(2.68)	(2.17)	(1.95)	(1.68)	—	—	—	—	—	—	—	
Output Torque in-lbs <i>N·m</i>	41200 (4660)	38900 (4400)	41200 (4660)	40850 (4620)	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>N</i>	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	2.04	1.78	1.52	1.29	1.09	0.872	0.738	5C16DA
kW	—	—	—	—	(1.52)	(1.33)	(1.13)	(0.96)	(0.82)	(0.650)	(0.550)	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	43700 (4940)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications. A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

Dimensions on pages 2.106–2.110

Output RPM	0.770	0.684	0.594	0.498	0.401	0.338	0.270	0.242	0.197	0.164	Frame Size
Nominal Ratio	2272	2559	2944	3511	4365	5177	6472	7228	8880	10658	
Input Power HP kW	0.318 (0.237)	0.282 (0.210)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	5B14DA
Output Torque in-lbs <i>N·m</i>	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs <i>N</i>	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP kW	0.318 0.237	— —	0.268 (0.200)	— —	— —	— —	— —	— —	— —	— —	5B14DB
Output Torque in-lbs <i>N·m</i>	22700 (2570)	— —	22700 (2570)	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs <i>N</i>	2965 (13200)	— —	2965 (13200)	— —	— —	— —	— —	— —	— —	— —	
Input Power HP kW	0.546 (0.407)	0.512 (0.382)	0.384 (0.286)	0.373 (0.278)	0.300 (0.224)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	5C14DA
Output Torque in-lbs <i>N·m</i>	39000 (4410)	41200 (4660)	35550 (4020)	41200 (4660)	41200 (4660)	37600 (4250)	41200 (4660)	41200 (4660)	41200 (4660)	37600 (4250)	
Hollow Shaft OHL lbs <i>N</i>	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP kW	0.577 (0.430)	— —	0.445 (0.332)	— —	— —	— —	— —	— —	— —	— —	5C14DB
Output Torque in-lbs <i>N·m</i>	41200 (4660)	— —	41200 (4660)	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs <i>N</i>	4810 (21400)	— —	4810 (21400)	— —	— —	— —	— —	— —	— —	— —	
Input Power HP kW	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	5C14DC
Output Torque in-lbs <i>N·m</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Hollow Shaft OHL lbs <i>N</i>	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	
Input Power HP kW	0.636 (0.474)	0.565 (0.421)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	5C16DA
Output Torque in-lbs <i>N·m</i>	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	
Hollow Shaft OHL lbs <i>N</i>	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

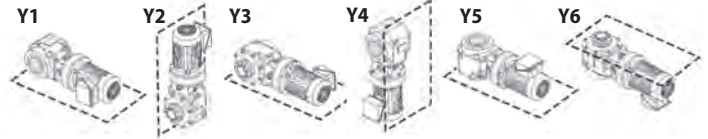
Speed Reducers

Selection Tables

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications. A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions



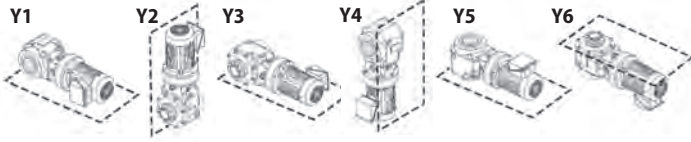
Dimensions on pages 2.106–2.110

Speed Reducers
Selection Tables

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.876	0.741	Frame Size
Nominal Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	
Input Power HP	0.531	0.456	0.386	0.334	0.283	0.239	0.202	0.173	0.146	0.134	0.134	5Z10DA
Input Power kW	(0.396)	(0.340)	(0.288)	(0.249)	(0.211)	(0.178)	(0.151)	(0.129)	(0.109)	(0.100)	(0.100)	
Output Torque in-lbs <i>N·m</i>	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs <i>kg</i>	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP	—	—	—	—	—	0.239	0.202	0.173	0.146	0.134	0.134	5Z12DA
Input Power kW	—	—	—	—	—	(0.178)	(0.151)	(0.129)	(0.109)	(0.100)	(0.100)	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	
Hollow Shaft OHL lbs <i>kg</i>	—	—	—	—	—	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	
Input Power HP	0.531	0.456	0.386	0.334	0.283	0.239	0.202	0.173	—	—	—	5Z12DB
Input Power kW	(0.396)	(0.340)	(0.288)	(0.249)	(0.211)	(0.178)	(0.151)	(0.129)	—	—	—	
Output Torque in-lbs <i>N·m</i>	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	7345 (830)	—	—	—	
Hollow Shaft OHL lbs <i>N</i>	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	1435 (6390)	—	—	—	
Input Power HP	—	—	—	—	—	0.371	0.314	0.268	0.228	0.181	0.153	5A12DA
Input Power kW	—	—	—	—	—	(0.277)	(0.234)	(0.200)	(0.170)	(0.135)	(0.114)	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	
Input Power HP	0.825	0.709	0.599	0.520	0.440	0.371	0.314	0.268	—	—	—	5A12DB
Input Power kW	(0.615)	(0.529)	(0.447)	(0.388)	(0.328)	(0.277)	(0.234)	(0.200)	—	—	—	
Output Torque in-lbs <i>N·m</i>	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	11400 (1290)	—	—	—	
Hollow Shaft OHL lbs <i>N</i>	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	1810 (8060)	—	—	—	
Input Power HP	—	—	—	—	—	0.546	0.522	0.447	0.378	0.302	0.255	5B12DA
Input Power kW	—	—	—	—	—	(0.407)	(0.389)	(0.333)	(0.282)	(0.225)	(0.190)	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	16800 (1900)	18900 (2140)	18900 (2140)	18900 (2140)	18900 (2140)	18900 (2140)	
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP	1.37	1.16	0.996	0.864	0.731	0.617	0.522	0.447	—	—	—	5B12DB
Input Power kW	(1.02)	(0.867)	(0.743)	(0.644)	(0.545)	(0.460)	(0.389)	(0.333)	—	—	—	
Output Torque in-lbs <i>N·m</i>	18900 (2140)	18900 (2120)	18900 (2140)	18900 (2140)	18900 (2140)	18900 (2140)	18900 (2140)	18900 (2140)	—	—	—	
Hollow Shaft OHL lbs <i>N</i>	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	—	—	—	

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications. A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

Dimensions on pages 2.106–2.110

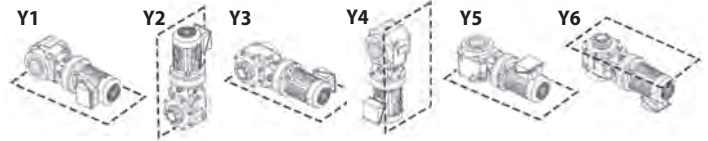
Output RPM	0.638	0.567	0.493	0.413	0.332	0.280	0.224	0.201	0.163	0.136	Frame Size
Nominal Ratio	2272	2559	2944	3511	4365	5177	6472	7228	8880	10658	
Input Power HP <i>(kW)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	5Z10DA
Output Torque in-lbs <i>N·m</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>kg</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	5Z12DA
Output Torque in-lbs <i>N·m</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	7345 <i>(830)</i>	
Hollow Shaft OHL lbs <i>kg</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	1435 <i>(6390)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	5Z12DB
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	5A12DA
Output Torque in-lbs <i>N·m</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	11400 <i>(1290)</i>	
Hollow Shaft OHL lbs <i>N</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	1810 <i>(8060)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	5A12DB
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	0.220 <i>(0.164)</i>	0.194 <i>(0.145)</i>	0.169 <i>(0.126)</i>	0.142 <i>(0.106)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	0.134 <i>(0.100)</i>	5B12DA
Output Torque in-lbs <i>N·m</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	18900 <i>(2140)</i>	
Hollow Shaft OHL lbs <i>N</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	5B12DB
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>N</i>	—	—	—	—	—	—	—	—	—	—	

Speed Reducers
Selection Tables

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications. A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions



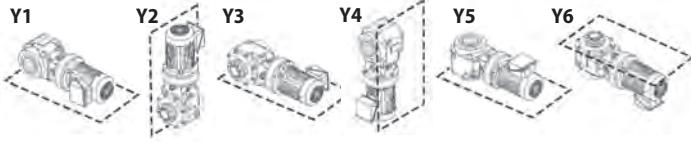
Dimensions on pages 2.106–2.110

Speed Reducers
Selection Tables

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.876	0.741	Frame Size
Nominal Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	0.306 <i>(0.228)</i>	5B14DA
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>kg</i>	—	—	—	—	—	—	—	—	—	—	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	1.19 <i>(0.891)</i>	1.04 <i>(0.772)</i>	0.876 <i>(0.653)</i>	0.740 <i>(0.552)</i>	0.626 <i>(0.467)</i>	0.535 <i>(0.399)</i>	0.453 <i>(0.338)</i>	0.361 <i>(0.269)</i>	0.306 <i>(0.228)</i>	5B14DB
Output Torque in-lbs <i>N·m</i>	—	—	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	22700 <i>(2570)</i>	
Hollow Shaft OHL lbs <i>kg</i>	—	—	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	2965 <i>(13200)</i>	
Input Power HP <i>(kW)</i>	—	—	—	—	—	—	—	—	—	—	0.546 <i>(0.407)</i>	5C14DA
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	40600 <i>(4590)</i>	
Hollow Shaft OHL lbs <i>kg</i>	—	—	—	—	—	—	—	—	—	—	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	—	—	2.04 <i>(1.52)</i>	1.86 <i>(1.39)</i>	1.57 <i>(1.17)</i>	1.31 <i>(0.977)</i>	1.11 <i>(0.827)</i>	0.972 <i>(0.725)</i>	0.822 <i>(0.613)</i>	0.656 <i>(0.489)</i>	0.554 <i>(0.413)</i>	5C14DB
Output Torque in-lbs <i>N·m</i>	—	—	38650 <i>(4370)</i>	40850 <i>(4620)</i>	40850 <i>(4620)</i>	40250 <i>(4550)</i>	40250 <i>(4550)</i>	41200 <i>(4660)</i>	41200 <i>(4660)</i>	41200 <i>(4660)</i>	41200 <i>(4660)</i>	
Hollow Shaft OHL lbs <i>kg</i>	—	—	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	
Input Power HP <i>(kW)</i>	2.98 <i>(2.22)</i>	2.41 <i>(1.80)</i>	2.17 <i>(1.62)</i>	1.86 <i>(1.39)</i>	—	—	—	—	—	—	—	5C14DC
Output Torque in-lbs <i>N·m</i>	41200 <i>(4660)</i>	38900 <i>(4400)</i>	41200 <i>(4660)</i>	40850 <i>(4620)</i>	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs <i>kg</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	—	—	—	—	—	—	—	
Input Power HP <i>(kW)</i>	—	—	—	—	1.76 <i>(1.31)</i>	1.48 <i>(1.10)</i>	1.25 <i>(0.933)</i>	1.07 <i>(0.799)</i>	0.907 <i>(0.676)</i>	0.723 <i>(0.539)</i>	0.611 <i>(0.456)</i>	5C16DA
Output Torque in-lbs <i>N·m</i>	—	—	—	—	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	45450 <i>(5140)</i>	
Hollow Shaft OHL lbs <i>kg</i>	—	—	—	—	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	4810 <i>(21400)</i>	

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications. A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

Dimensions on pages 2.106–2.110

Output RPM	0.638	0.567	0.493	0.413	0.332	0.280	0.224	0.201	0.163	0.136	Frame Size
Nominal Ratio	2272	2559	2944	3511	4365	5177	6472	7228	8880	10658	
Input Power HP (kW)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	5B14DA
Output Torque in-lbs <i>N·m</i>	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	22700 (2570)	
Hollow Shaft OHL lbs <i>kg</i>	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	2965 (13200)	
Input Power HP (kW)	0.268 (0.200)	—	0.268 (0.200)	—	—	—	—	—	—	—	
Output Torque in-lbs <i>N·m</i>	22700 (2570)	—	22700 (2570)	—	—	—	—	—	—	—	5B14DB
Hollow Shaft OHL lbs <i>kg</i>	2965 (13200)	—	2965 (13200)	—	—	—	—	—	—	—	
Input Power HP (kW)	0.477 (0.356)	0.424 (0.316)	0.369 (0.275)	0.308 (0.230)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	0.268 (0.200)	
Output Torque in-lbs <i>N·m</i>	41200 (4660)	41200 (4660)	41200 (4660)	41200 (4660)	41200 (4660)	37600 (4250)	41200 (4660)	41200 (4660)	41200 (4660)	37600 (4250)	5C14DA
Hollow Shaft OHL lbs <i>kg</i>	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	
Input Power HP (kW)	0.477 (0.356)	—	0.369 (0.275)	—	—	—	—	—	—	—	
Output Torque in-lbs <i>N·m</i>	41200 (4660)	—	41200 (4660)	—	—	—	—	—	—	—	5C14DB
Hollow Shaft OHL lbs <i>kg</i>	4810 (21400)	—	4810 (21400)	—	—	—	—	—	—	—	
Input Power HP (kW)	—	—	—	—	—	—	—	—	—	—	
Output Torque in-lbs <i>N·m</i>	—	—	—	—	—	—	—	—	—	—	5C14DC
Hollow Shaft OHL lbs <i>kg</i>	—	—	—	—	—	—	—	—	—	—	
Input Power HP (kW)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	0.536 (0.400)	
Output Torque in-lbs <i>N·m</i>	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	45450 (5140)	5C16DA
Hollow Shaft OHL lbs <i>kg</i>	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	4810 (21400)	

Speed Reducers

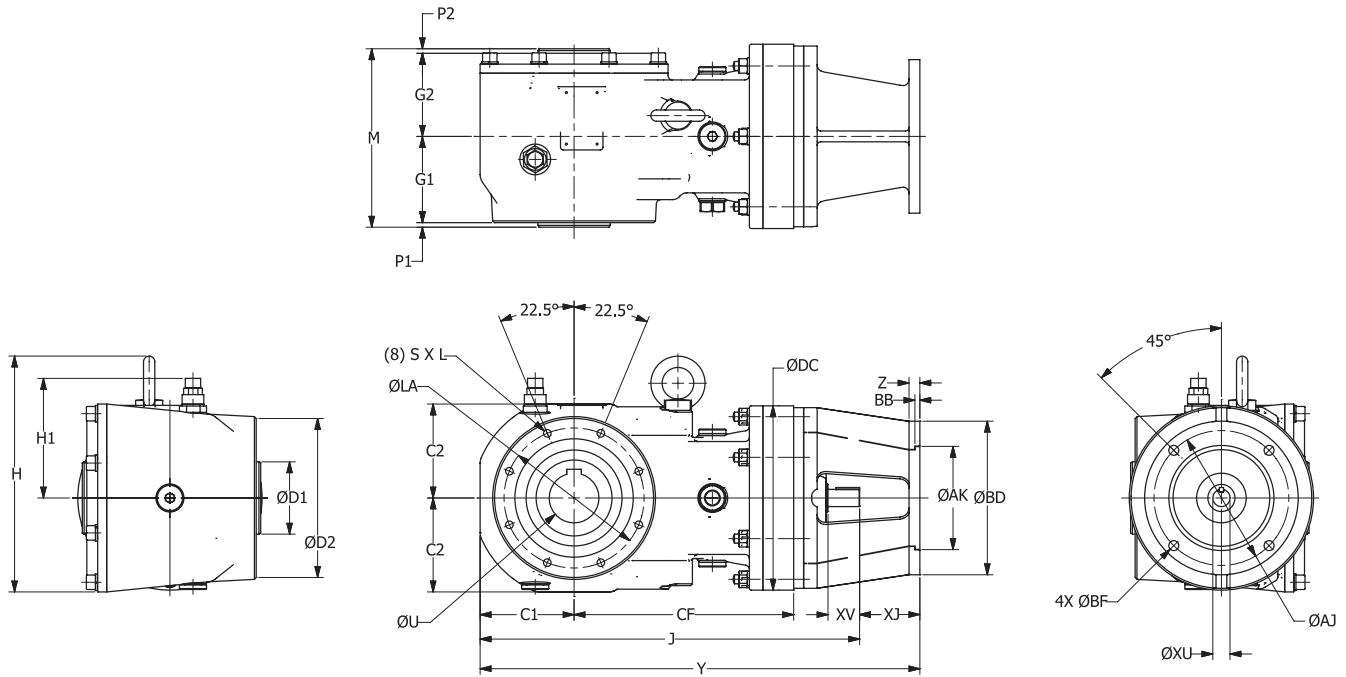
Selection Tables

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications. A torque limiting device is recommended to protect the unit or the driven machine.

Dimensions

Single Reduction LHY(J)-5Z100~5A145

Speed Reducers
Dimensions



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to Page 2.104 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S x L
5Z100, 5Z105 5Z110, 5Z115 5Z120, 5Z125	8.43 (214)	5.33 (135)	2.56 (65.0)	6.30 (160)	7.17 (182)	3.54 (90.0)	3.41 (86.5)	0.12 (3)	0.10 (3)	3.58 (91.0)	3.58 (91.0)	5.59 (142)	M8 x 0.78 (M8 x 20)
5A110, 5A115 5A120, 5A125 5A140, 5A145	10.1 (257)	5.43 (138)	3.15 (80.0)	7.09 (180)	7.78 (198)	3.76 (95.5)	3.62 (92.0)	0.20 (5)	0.20 (5)	4.09 (104)	4.09 (104)	6.10 (155)	M10 x 0.98 (M10 x 25)

Model	Standard Inch Bore Dimension			Standard Metric Bore Dimension		
	ØU	ØU Tolerance	Keyway	ØU	ØU Tolerance	Keyway
5Z	1.500	+0.0015/0	3/8 x 3/8	(45)	(+0.039/0)	(14 x 9)
5A	2.000	+0.0018/0	1/2 x 1/4	(55)	(+0.046/0)	(16 x 10)

Single Reduction LHY(J)-5Z100~5A145 Dimensions

All dimensions are in inches (mm).

With C-Face Adapter						
Model	NEMA C-Face	Y	Z	Min. ID	XJ	Wt lb (kg)
5Z100 5Z105	48C	15.9 (404)	0.47 (12)	2.44 (62)	2.16 (55)	56 (25)
	56C – 145TC	16.4 (417)	0.47 (12)	4.21 (107)	2.63 (67)	58 (26)
	182TC – 184TC	17.2 (437)	0.47 (12)	5.43 (138)	3.45 (88)	62 (28)
5Z110 5Z115	56C	16.5 (420)	0.47 (12)	3.93 (100)	2.62 (67)	66 (30)
	143TC – 145TC	16.5 (419)	0.47 (12)	3.93 (100)	2.62 (67)	66 (30)
	182TC – 184TC	17.3 (439)	0.47 (12)	3.93 (100)	3.44 (87)	71 (32)
5Z120 5Z125	143TC – 145TC	0.47 (12)	4.21 (107)	2.63 (67)	2.63 (67)	73 (33)
	182TC – 184TC	0.47 (12)	5.43 (138)	3.37 (86)	3.37 (86)	77 (35)
	213TC – 215TC	1.47 (37)	5.43 (138)	4.37 (111)	4.37 (111)	86 (39)
5A110 5A115	56C	18.6 (472)	0.47 (12)	3.93 (100)	2.62 (67)	100 (45)
	143TC – 145TC	18.6 (472)	0.47 (12)	3.93 (100)	2.62 (67)	100 (45)
	182TC – 184TC	19.4 (493)	0.47 (12)	3.93 (100)	3.44 (87)	105 (47)
5A120 5A125	143TC – 145TC	19.40 (493)	0.47 (12)	4.21 (107)	2.63 (67)	111 (50)
	182TC – 184TC	20.14 (512)	0.47 (12)	5.43 (138)	3.37 (86)	115 (52)
	213TC – 215TC	21.14 (537)	1.47 (37)	5.43 (138)	4.37 (111)	125 (57)
5A140 5A145	182TC – 184TC	21.33 (542)	0.47 (12)	5.43 (138)	3.37 (86)	129 (58)
	213TC – 215TC	21.95 (558)	1.10 (28)	5.43 (138)	4.00 (102)	135 (61)
	254TC – 256TC	22.88 (581)	0.57 (14)	5.08 (129)	4.93 (125)	137 (62)

Free Shaft Input							
Model	ØXU	XV	Key	CF	ØDC	J	Wt lb (kg)
5Z100 5Z105	0.625 (15.875)	0.98 (25)	3/16 x 3/16 x 0.75 (4.76 x 4.76 x 19)	8.11 (206)	5.91 (150)	15.7 (399)	51 (23)
5Z110 5Z115	0.625 (15.875)	0.98 (25)	3/16 x 3/16 x 0.75 (4.76 x 4.76 x 19)	8.43 (214)	6.38 (162)	16.0 (406)	59 (27)
5Z120 5Z125	0.750 (19.050)	1.38 (35)	3/16 x 3/16 x 1.02 (4.76 x 4.76 x 26)	8.27 (210)	8.03 (204)	16.8 (426)	63 (29)
5A110 5A115	0.625 (15.875)	0.98 (25)	3/16 x 3/16 x 0.75 (4.76 x 4.76 x 19)	9.76 (248)	6.38 (162)	16.0 (406)	93 (42)
5A120 5A125	0.750 (19.050)	1.38 (35)	3/16 x 3/16 x 1.02 (4.76 x 4.76 x 26)	9.57 (243)	8.03 (204)	16.8 (426)	101 (46)
5A140 5A145	0.875 (22.225)	1.57 (40)	3/16 x 3/16 x 1.38 (4.76 x 4.76 x 33)	10.4 (265)	9.06 (230)	18.0 (456)	113 (51)

NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C – 48C	3.75 (95)	3.0 (76)	4.33 (110)	— —	0.28 (7.0)
56C – 145TC	5.87 (149)	4.5 (114)	6.69 (170)	— —	0.43 (11)
182TC – 256TC	7.25 (184)	8.5 (216)	8.98 (228)	0.22 (6.0)	0.55 (14)
284TC – 286TC	9.00 (229)	10.5 (267)	11.1 (282)	0.22 (6.0)	0.55 (14)
324TC – 326TC	11.0 (279)	12.5 (318)	14.2 (360)	0.22 (6.0)	0.71 (18)

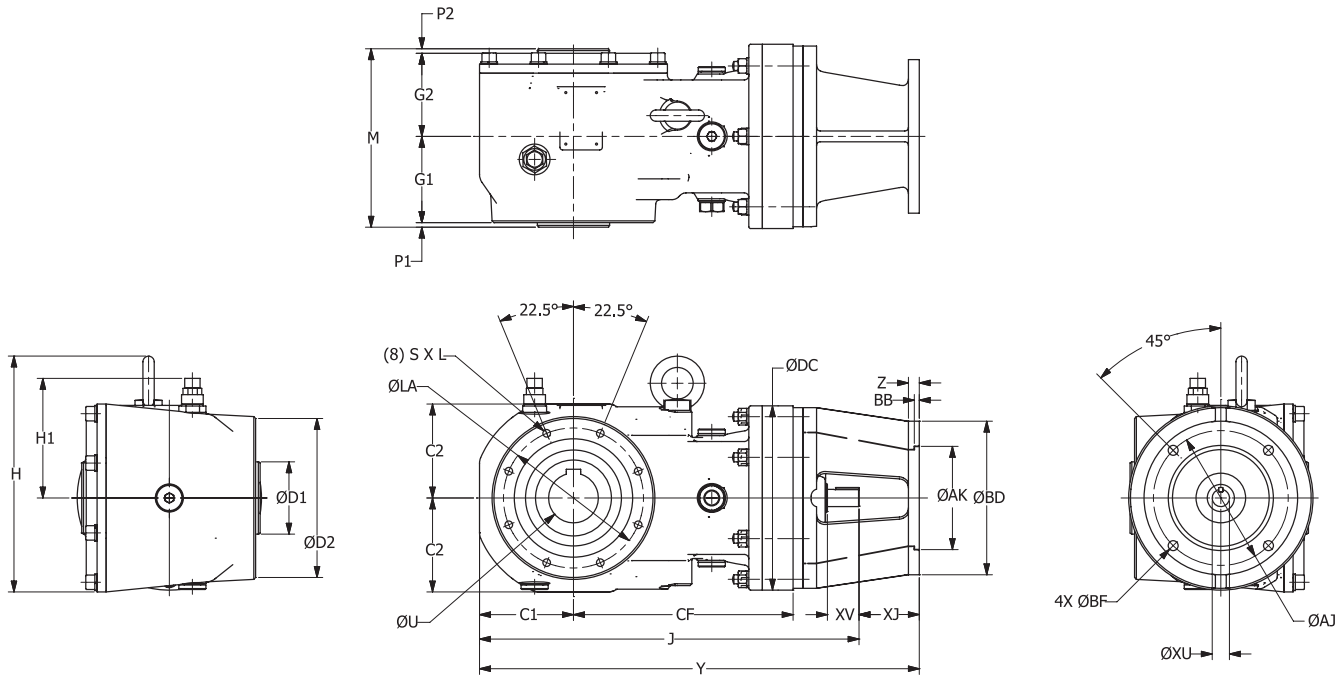
Speed Reducers

Dimensions

Dimensions

Single Reduction LHY(J)-5B120~5C175

Speed Reducers
Dimensions



All dimensions are in inches (mm).
For units ordered in the Y2 mounting configuration, please refer to Page 2.104 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S x L
5B120, 5B125 5B140, 5B145 5B160, 5B165	11.4 (289)	6.06 (154)	3.54 (90)	7.83 (199)	9.82 (250)	4.80 (122)	4.70 (120)	0.20 (5)	0.12 (3)	4.82 (123)	4.82 (123)	6.89 (175)	M12 x 0.78 (M12 x 20)
5C140, 5C145 5C160, 5C165 5C170, 5C175	14.1 (358)	7.60 (193)	3.94 (100)	9.61 (244)	10.8 (275)	4.88 (124)	5.61 (143)	0.20 (5)	0.12 (3)	6.26 (159)	6.26 (159)	8.35 (212)	M16 x 1.02 (M16 x 26)

Model	Standard Inch Bore Dimension			Standard Metric Bore Dimension		
	ØU	ØU Tolerance	Keyway	ØU	ØU Tolerance	Keyway
5B	2.375	+0.0018/0	5/8 x 5/16	(65)	(+0.046/0)	(18 x 11)
5C	2.750	+0.0018/0	5/8 x 5/16	(75)	(+0.046/0)	(20 x 12)

Single Reduction LHY(J)-5B120~5C175 Dimensions

All dimensions are in inches (mm).

With C-Face Adapter						
Model	NEMA C-Face	Y	Z	Min. ID	XJ	Wt lb (kg)
5B120 5B125	56C – 145TC	21.64 (550)	0.47 (12)	4.21 (107)	2.63 (67)	166 (75)
	182TC – 184TC	22.39 (569)	0.47 (12)	5.43 (138)	3.37 (86)	170 (77)
	213TC – 215TC	23.39 (594)	1.47 (37)	5.43 (138)	4.37 (111)	180 (82)
5B140 5B145	143TC – 145TC	22.63 (575)	0.47 (12)	4.21 (107)	2.63 (67)	191 (86)
	182TC – 184TC	23.37 (594)	0.47 (12)	5.43 (138)	3.37 (86)	195 (88)
	213TC – 215TC	24 (610)	1.1 (28)	5.43 (138)	4.02 (102)	201 (91)
	254TC – 256TC	24.93 (633)	0.57 (14)	5.08 (129)	4.93 (125)	204 (92)
5B160 5B165	182TC – 184TC	25.46 (647)	0.57 (14)	5.71 (145)	3.37 (86)	278 (126)
	213TC – 215TC	26.09 (663)	1.20 (30)	5.71 (145)	4.00 (102)	284 (129)
	254TC – 256TC	26.84 (682)	0.57 (14)	5.71 (145)	4.75 (121)	280 (127)
	284TC – 286TC	27.52 (699)	0.57 (14)	7.09 (180)	5.44 (138)	274 (124)
	324TC – 326TC	28.59 (726)	0.57 (14)	7.87 (200)	6.50 (165)	285 (129)
5C140 5C145	143TC – 145TC	26.13 (664)	0.47 (12)	4.21 (107)	2.63 (67)	261 (119)
	182TC – 184TC	26.88 (683)	0.47 (12)	5.43 (138)	3.37 (86)	265 (120)
	213TC – 215TC	27.5 (699)	1.1 (28)	5.43 (138)	4.02 (102)	271 (123)
	254TC – 256TC	28.43 (722)	0.57 (14)	5.08 (129)	4.93 (125)	273 (124)
5C160 5C165	143TC – 145TC	27.90 (709)	0.47 (12)	4.21 (107)	2.63 (67)	346 (157)
	182TC – 184TC	28.65 (728)	0.57 (14)	5.71 (145)	3.37 (86)	350 (159)
	213TC – 215TC	29.28 (744)	1.20 (30)	5.71 (145)	4.00 (102)	357 (162)
	254TC – 256TC	30.03 (763)	0.57 (14)	5.71 (145)	4.75 (121)	353 (160)
	284TC – 286TC	30.71 (780)	0.57 (14)	7.09 (180)	5.44 (138)	347 (157)
	324TC – 326TC	31.78 (807)	0.57 (14)	7.87 (200)	6.50 (165)	357 (162)

With C-Face Adapter (continued)						
Model	NEMA C-Face	Y	Z	Min. ID	XJ	Wt lb (kg)
5C170, 5C175	182TC-184TC	30.07 (764)	0.57 (14)	5.71 (145)	3.38 (86)	393 (178)
	213TC-215TC	30.70 (780)	1.20 (30)	5.71 (145)	4.00 (102)	399 (181)
	254TC-256TC	31.44 (799)	0.57 (14)	5.71 (145)	4.75 (121)	395 (179)
	284TC-286TC	32.13 (816)	0.57 (14)	7.87 (200)	5.44 (138)	406 (184)
	324TC-326TC	32.70 (831)	0.57 (14)	7.87 (200)	6.00 (152)	401 (182)

Free Shaft Input							
Model	ØXU	XV	Key	CF	ØDC	J	Wt lb (kg)
5B120 5B125	0.750 (19.050)	1.38 (35)	3/16 x 3/16 x 1.02 (4.76 x 4.76 x 26)	11.0 (280)	8.03 (204)	19.0 (483)	156 (71)
5B140 5B145	0.875 (22.225)	1.57 (40)	3/16 x 3/16 x 1.38 (4.76 x 4.76 x 33)	11.7 (297)	9.06 (230)	20.0 (508)	179 (81)
5B160 5B165	1.125 (28.575)	1.77 (45)	1/4 x 1/4 x 1.77 (6.35 x 6.35 x 45)	12.8 (326)	11.8 (300)	22.1 (561)	232 (105)
5C140 5C145	0.875 (22.225)	1.57 (40)	3/16 x 3/16 x 1.38 (4.76 x 4.76 x 33)	14.0 (356)	9.06 (230)	23.5 (597)	249 (113)
5C160 5C165	1.125 (28.575)	1.77 (45)	1/4 x 1/4 x 1.77 (6.35 x 6.35 x 45)	14.8 (377)	11.8 (300)	25.3 (642)	304 (138)
5C170 5C175	1.375 (34.925)	2.17 (55)	5/16 x 5/16 x 2.16 (7.94 x 7.94 x 55)	15.5 (393)	13.4 (340)	26.7 (678)	355 (161)

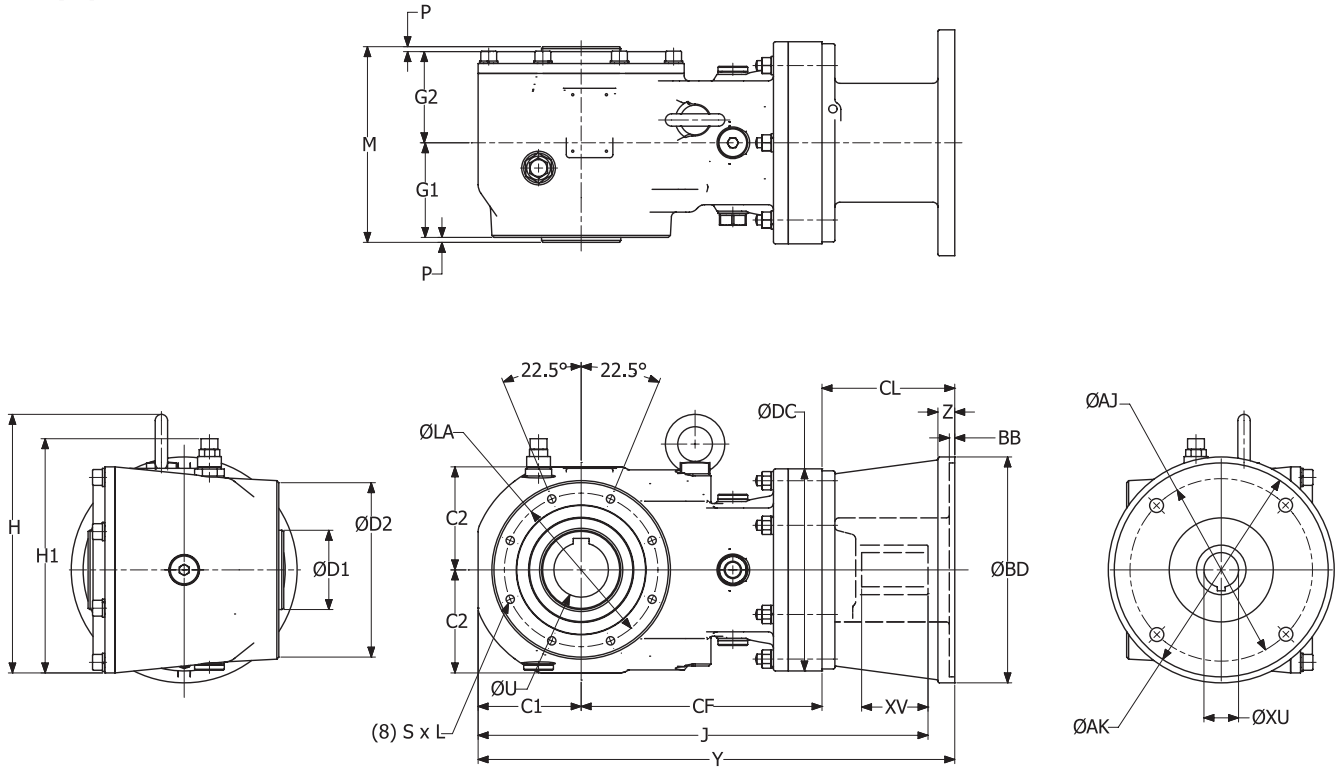
NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C – 48C	3.75 (95)	3.0 (76)	4.33 (110)	— (7)	0.28 (7)
56C – 145TC	5.87 (149)	4.5 (114)	6.69 (170)	— (11)	0.43 (11)
182TC – 256TC	7.25 (184)	8.5 (216)	8.98 (228)	0.22 (5.6)	0.55 (14)
284TC – 286TC	9.0 (229)	10.5 (267)	11.1 (282)	0.22 (5.6)	0.55 (14)
324TC – 326TC	11.0 (279)	12.5 (318)	14.17 (360)	0.22 (5.6)	0.71 (18)

Speed Reducers

Dimensions

Dimensions

Single Reduction – Quill Input Motor Connection LHY(X)-5Z100~5A145



Speed Reducers
Dimensions

All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to Page 2.104 for external lubricant piping dimensions.

Model	CF	ØDC	C1	C2	M	P1	P2	G1	G2	H	H1	ØD1	ØD2	ØLA	S x L
5Z100	8.11	5.91													
5Z105	(206)	(150)													
5Z110	8.43	6.38	3.50	3.58	7.17	0.12	0.12	3.54	3.41	8.66	5.31	2.56	6.30	5.59	M8 x 0.79
5Z115	(214)	(162)	(91)	(91)	(182)	(3)	(3)	(90.0)	(86.5)	(220)	(135)	(65)	(160)	(142)	(M8 x 20)
5Z120	8.27	8.03													
5Z125	(210)	(204)													
5A110	9.76	6.38													
5A115	(248)	(162)													
5A120	9.57	8.03	4.09	4.09	7.78	0.20	0.20	3.76	3.62	10.5	5.83	3.15	7.09	6.10	M10 x 0.98
5A125	(243)	(204)	(104)	(104)	(198)	(5)	(5)	(95.5)	(92.0)	(267)	(148)	(80)	(180)	(155)	(M10 x 25)
5A140	10.4	9.06													
5A145	(265)	(230)													

Model	Standard Inch Bore Dimension			Standard Metric Bore Dimension		
	ØU	ØU Tolerance	Keyway	ØU	ØU Tolerance	Keyway
5Z	1.500	+0.0015/0	3/8 x 3/8	(45)	(+0.039/0)	(14 x 9)
5A	2.000	+0.0018/0	1/2 x 1/4	(55)	(+0.046/0)	(16 x 10)

Single Reduction – Quill Input Motor Connection LHY(X)-5Z100~5A145 Dimensions

All dimensions are in inches (mm).

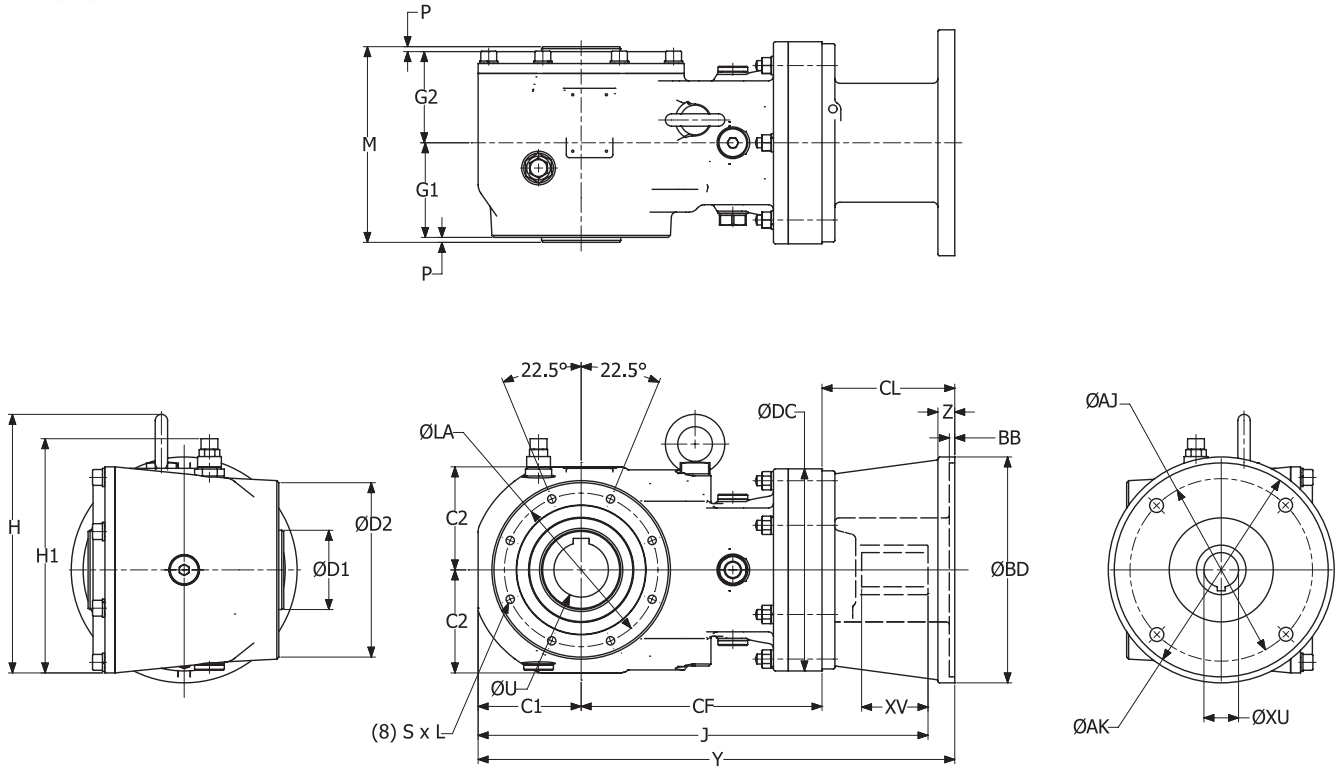
Model	Motor Frame	ØAJ	ØAK	ØBD	BB	Y	J	CL	Z	High Speed Shaft			Approx Wt. lb (kg)	
										ØXU	XV	Keyway		
5Z100 5Z105	56C	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	14.8 (375)	13.7 (348)	3.15 (80)	0.47 (12)	0.625 (15.875)	+0.0007/-0 (+0.018/-0)	1.18 (30)	3/16 x 3/32 (4.75 x 2.38)	55 (25)
	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	14.8 (375)	14.2 (360)	3.15 (80)	0.47 (12)	0.875 (22.225)	+0.0008/-0 (+0.020/-0)	1.65 (42)	3/16 x 3/32 (4.75 x 2.38)	55 (25)
5Z110 5Z115	56C	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	15.2 (386)	14.6 (370)	3.27 (83)	0.47 (12)	0.625 (15.875)	+0.0007/-0 (+0.018/-0)	1.56 (40)	3/16 x 3/32 (4.75 x 2.38)	64 (29)
	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	15.2 (386)	14.6 (370)	3.27 (83)	0.47 (12)	0.875 (22.225)	+0.0008/-0 (+0.020/-0)	1.65 (42)	3/16 x 3/32 (4.75 x 2.38)	64 (29)
	182TC – 184TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	16.0 (405)	14.9 (377)	4.02 (102)	0.69 (18)	1.125 (28.575)	+0.0008/-0 (+0.020/-0)	1.85 (47)	1/4 x 1/8 (6.35 x 3.175)	71 (32)
5Z120 5Z125	56C	5.88 (149)	4.50 (114)	6.69 (170)	0.22 (6)	15.8 (400)	14.7 (373)	3.98 (101)	0.47 (12)	0.625 (15.875)	+0.0007/-0 (+0.018/-0)	1.18 (30)	3/16 x 3/32 (4.75 x 2.38)	71 (32)
	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.22 (6)	15.8 (400)	14.9 (378)	3.98 (101)	0.47 (12)	0.875 (22.225)	+0.0016/+0.0008 (+0.041/+0.020)	1.50 (38)	3/16 x 3/32 (4.75 x 2.38)	71 (32)
	182TC – 184TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	16.9 (429)	16.0 (406)	5.12 (130)	0.67 (17)	1.125 (28.575)	+0.0016/+0.0008 (+0.041/+0.020)	1.97 (50)	1/4 x 1/8 (6.35 x 3.175)	75 (34)
	213TC – 215TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	16.9 (429)	16.1 (409)	5.12 (130)	0.67 (17)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.64 (67)	5/16 x 5/32 (7.938 x 3.969)	75 (34)
5A110 5A115	56C	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	17.2 (436)	16.5 (418)	3.27 (83)	0.47 (12)	0.625 (15.875)	+0.0007/-0 (+0.018/-0)	1.56 (40)	3/16 x 3/32 (4.75 x 2.38)	247 (112)
	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	17.2 (436)	16.5 (418)	3.27 (83)	0.47 (12)	0.875 (22.225)	+0.0008/-0 (+0.020/-0)	1.65 (42)	3/16 x 3/32 (4.75 x 2.38)	247 (112)
	182TC – 184TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	17.9 (454)	16.8 (426)	4.02 (102)	0.69 (18)	1.125 (28.575)	+0.0008/-0 (+0.020/-0)	1.85 (47)	1/4 x 1/8 (6.35 x 3.175)	260 (118)
5A120 5A125	56C	5.88 (149)	4.50 (114)	6.69 (170)	0.22 (6)	17.7 (449)	16.6 (421)	3.98 (101)	0.47 (12)	0.625 (15.875)	+0.0007/-0 (+0.018/-0)	1.18 (30)	3/16 x 3/32 (4.75 x 2.38)	267 (121)
	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.22 (6)	17.7 (449)	16.8 (426)	3.98 (101)	0.47 (12)	0.875 (22.225)	+0.0016/+0.0008 (+0.041/+0.020)	1.50 (38)	3/16 x 3/32 (4.75 x 2.38)	267 (121)
	182TC – 184TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	18.8 (478)	17.9 (454)	5.12 (130)	0.67 (17)	1.125 (28.575)	+0.0016/+0.0008 (+0.041/+0.020)	1.97 (50)	1/4 x 1/8 (6.35 x 3.175)	273 (124)
	213TC – 215TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	18.8 (478)	18.0 (457)	5.12 (130)	0.67 (17)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.64 (67)	5/16 x 5/32 (7.938 x 3.969)	273 (124)
5A140 5A145	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	18.6 (473)	18.0 (457)	4.06 (103)	0.47 (12)	0.875 (22.225)	+0.0008/-0 (+0.020/-0)	1.61 (41)	3/16 x 3/32 (4.75 x 2.38)	311 (141)
	182TC – 184TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	20.5 (521)	19.4 (494)	5.96 (151)	0.67 (17)	1.125 (28.575)	+0.0016/+0.0008 (+0.041/+0.020)	1.91 (49)	1/4 x 1/8 (6.35 x 3.175)	329 (149)
	213TC – 215TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	20.5 (521)	19.1 (485)	5.96 (151)	0.67 (17)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.68 (68)	5/16 x 5/32 (7.938 x 3.969)	326 (148)
	254TC – 256TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	20.5 (521)	19.4 (493)	5.96 (151)	0.67 (17)	1.625 (41.275)	+0.0020/+0.0010 (+0.051/+0.025)	2.99 (76)	3/8 x 3/8 (9.525 x 9.525)	329 (149)

Speed Reducers

Dimensions

Dimensions

Single Reduction – Quill Input Motor Connection LHY(X)-5B120~5C175



Speed Reducers
Dimensions

All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to Page 2.104 for external lubricant piping dimensions.

Model	CF	$\varnothing DC$	C1	C2	M	P1	P2	G1	G2	H	H1	$\varnothing D1$	$\varnothing D2$	$\varnothing LA$	S x L
5B120	11.0	8.03													
5B125	(280)	(204)													
5B140	11.7	9.06	4.96	4.82	9.82	0.12	0.20	4.80	4.70	11.7	6.42	3.54	7.83	6.89	M12 x 0.79
5B145	(297)	(230)	(123)	(123)	(250)	(3)	(5)	(122)	(120)	(298)	(163)	(90)	(199)	(175)	(M12 x 20)
5B160	12.8	11.8													
5B165	(326)	(300)													
5C140	14.0	9.06													
5C145	(356)	(230)													
5C160	14.8	11.8	6.26	6.26	10.8	0.12	0.20	4.88	5.61	14.4	7.83	3.94	9.61	8.35	M16 x 1.02
5C165	(377)	(300)	(159)	(159)	(275)	(3)	(5)	(124)	(143)	(365)	(199)	(100)	(244)	(212)	(M16 x 26)
5C170	15.5	13.4													
5C175	(393)	(340)													

Model	Standard Inch Bore Dimension			Standard Metric Bore Dimension		
	$\varnothing U$	$\varnothing U$ Tolerance	Keyway	$\varnothing U$	$\varnothing U$ Tolerance	Keyway
5B	2.375	+0.0018/0	5/8 x 5/16	(65)	(+0.046/0)	(18 x 11)
5C	2.750	+0.0018/0	5/8 x 5/16	(75)	(+0.046/0)	(20 x 12)

Single Reduction – Quill Input Motor Connection LHY(X)-5B120~5C175 Dimensions

All dimensions are in inches (mm).

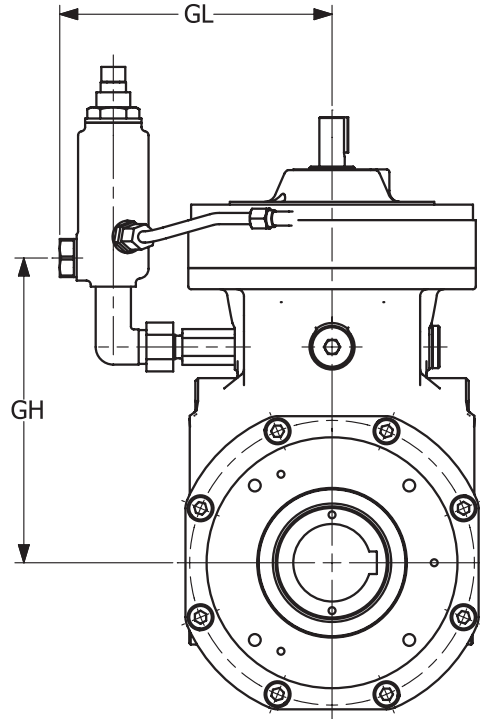
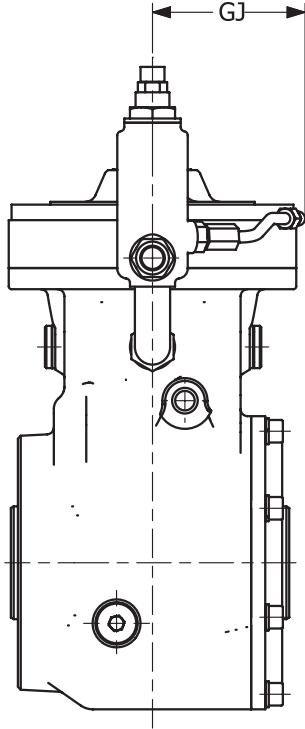
Model	Motor Frame	ØAJ	ØAK	ØBD	BB	Y	J	CL	Z	High Speed Shaft			Approx Wt. lb (kg)	
										ØXU	XV	Keyway		
5B120 5B125	56C	5.88 (149)	4.50 (114)	6.69 (170)	0.22 (6)	19.9 (505)	18.9 (479)	3.98 (101)	0.47 (12)	0.625 (15.875)	+0.0007/-0 (+0.018/-0)	1.18 (30)	3/16 x 3/32 (4.75 x 2.38)	399 (181)
	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.22 (6)	19.9 (505)	19.1 (484)	3.98 (101)	0.47 (12)	0.875 (22.225)	+0.0016/+0.0008 (+0.041/+0.020)	1.50 (38)	3/16 x 3/32 (4.75 x 2.38)	399 (181)
	182TC – 184TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	21.0 (534)	20.2 (512)	5.12 (130)	0.67 (17)	1.125 (28.575)	+0.0016/+0.0008 (+0.041/+0.020)	1.97 (50)	1/4 x 1/8 (6.35 x 3.175)	406 (184)
	213TC – 215TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	21.0 (534)	20.3 (515)	5.12 (130)	0.67 (17)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.64 (67)	5/16 x 5/32 (7.938 x 3.969)	406 (184)
5B140 5B145	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	20.7 (525)	20.2 (512)	4.06 (103)	0.47 (12)	0.875 (22.225)	+0.0008/-0 (+0.020/-0)	1.61 (41)	3/16 x 3/32 (4.75 x 2.38)	454 (206)
	182TC – 184TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	22.6 (573)	21.6 (549)	5.96 (151)	0.67 (17)	1.125 (28.575)	+0.0016/+0.0008 (+0.041/+0.020)	1.91 (49)	1/4 x 1/8 (6.35 x 3.175)	472 (214)
	213TC – 215TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	22.6 (573)	21.3 (540)	5.96 (151)	0.67 (17)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.68 (68)	5/16 x 5/32 (7.938 x 3.969)	470 (213)
	254TC – 256TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	22.6 (573)	21.6 (548)	5.96 (151)	0.67 (17)	1.625 (41.275)	+0.0020/+0.0010 (+0.051/+0.025)	2.99 (76)	3/8 x 3/8 (9.525 x 9.525)	472 (214)
5B160 5B165	182TC – 184TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	23.0 (584)	22.1 (562)	5.26 (134)	0.79 (20)	1.125 (28.575)	+0.0016/+0.0008 (+0.041/+0.020)	2.01 (51)	1/4 x 1/8 (6.35 x 3.175)	556 (252)
	213TC – 215TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	23.0 (584)	22.1 (562)	5.26 (134)	0.79 (20)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.48 (63)	5/16 x 5/32 (7.938 x 3.969)	562 (255)
	254TC – 256TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	23.0 (584)	22.1 (562)	5.26 (134)	0.79 (20)	1.625 (41.275)	+0.0020/+0.0010 (+0.051/+0.025)	3.11 (79)	3/8 x 3/8 (9.525 x 9.525)	560 (254)
5C140 5C145	143TC – 145TC	5.88 (149)	4.50 (114)	6.69 (170)	0.20 (5)	24.2 (614)	23.8 (604)	4.06 (103)	0.47 (12)	0.875 (22.225)	+0.0008/-0 (+0.020/-0)	1.61 (41)	3/16 x 3/32 (4.75 x 2.38)	650 (295)
	182TC – 184TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	26.1 (662)	25.2 (640)	5.96 (151)	0.67 (17)	1.125 (28.575)	+0.0016/+0.0008 (+0.041/+0.020)	1.91 (49)	1/4 x 1/8 (6.35 x 3.175)	668 (303)
	213TC – 215TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	26.1 (662)	24.9 (631)	5.96 (151)	0.67 (17)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.68 (68)	5/16 x 5/32 (7.938 x 3.969)	666 (302)
	254TC – 256TC	7.25 (184)	8.50 (216)	9.00 (229)	0.22 (6)	26.1 (662)	25.2 (639)	5.96 (151)	0.67 (17)	1.625 (41.275)	+0.0020/+0.0010 (+0.051/+0.025)	2.99 (76)	3/8 x 3/8 (9.525 x 9.525)	668 (303)
5C160 5C165	182TC – 184TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	26.2 (665)	25.4 (646)	5.26 (134)	0.79 (20)	1.125 (28.575)	+0.0016/+0.0008 (+0.041/+0.020)	2.01 (51)	1/4 x 1/8 (6.35 x 3.175)	750 (340)
	213TC – 215TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	26.2 (665)	25.4 (646)	5.26 (134)	0.79 (20)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.48 (63)	5/16 x 5/32 (7.938 x 3.969)	756 (343)
	254TC – 256TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	26.2 (665)	25.4 (646)	5.26 (134)	0.79 (20)	1.625 (41.275)	+0.0020/+0.0010 (+0.051/+0.025)	3.11 (79)	3/8 x 3/8 (9.525 x 9.525)	754 (342)
5C170 5C175	213TC – 215TC	7.25 (184)	8.50 (216)	8.98 (228)	0.22 (6)	26.7 (677)	25.8 (654)	4.92 (125)	0.79 (20)	1.375 (34.925)	+0.0020/+0.0010 (+0.051/+0.025)	2.48 (63)	5/16 x 5/32 (7.938 x 3.969)	804 (365)

Speed Reducers

Dimensions

Dimensions

Single Reduction, Y2 Mounting Configuration – External Lubricant Piping LHY(J)-5Z100~5C175



All dimensions are in inches (mm).

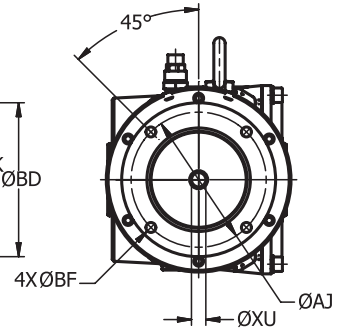
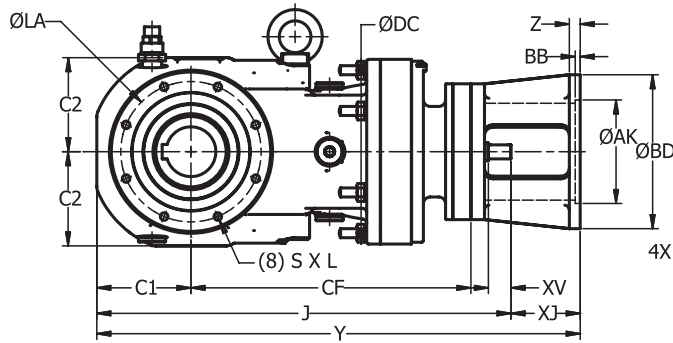
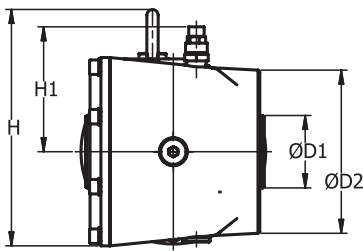
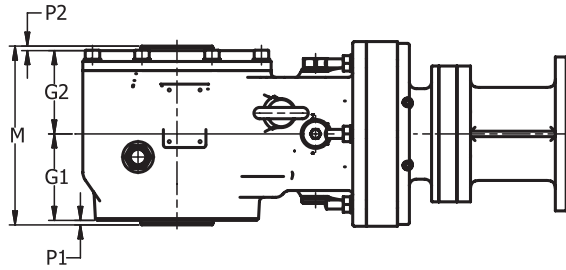
Model	GJ	GL	GH
5Z100	3.66	5.98	7.43
5Z105	(93)	(152)	(189)
5Z110	4.09	6.85	7.63
5Z115	(104)	(174)	(194)
5Z120	4.41	7.99	7.60
5Z125	(112)	(203)	(193)
5A110	4.09	6.85	8.98
5A115	(104)	(174)	(228)
5A120	4.41	7.99	8.90
5A125	(112)	(203)	(226)
5A140	4.88	9.07	9.61
5A145	(124)	(231)	(244)

Model	GJ	GL	GH
5B120	4.41	7.99	10.4
5B125	(112)	(203)	(263)
5B140	4.88	9.07	10.9
5B145	(124)	(231)	(276)
5B160	6.34	10.3	11.5
5B165	(161)	(261)	(293)
5C140	4.88	9.08	13.2
5C145	(124)	(231)	(334)
5C160	6.34	10.2	13.5
5C165	(161)	(260)	(344)
5C170	7.36	11.4	14.1
5C175	(187)	(289)	(358)

This page intentionally left blank.

Dimensions

Double Reduction LHY(J)-5Z10DA~5A12DB



Speed Reducers
Dimensions

All dimensions are in inches (mm).
For units ordered in the Y2 mounting configuration, please refer to Page 2.110 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S x L
5Z10DA 5Z12DA 5Z12DB	8.43 (214)	5.33 (135)	2.56 (65)	6.30 (160)	7.17 (182)	3.54 (90)	3.41 (86.5)	0.12 (3)	0.12 (3)	3.6 (91)	3.6 (91)	5.59 (142)	M8 x 0.78 (M8 x 20)
5A12DA 5A12DB	10.1 (257)	5.43 (138)	3.1 (80)	7.09 (180)	7.78 (198)	3.76 (95.5)	3.6 (92)	0.20 (5)	0.20 (5)	4.09 (104)	4.09 (104)	6.10 (155)	M10 x 0.98 (M10 x 25)

Model	Standard Inch Bore Dimension			Standard Metric Bore Dimension		
	ØU	ØU Tolerance	Keyway	ØU	ØU Tolerance	Keyway
5Z	1.500	+0.0015/0	3/8 x 3/8	(45)	(+0.039/0)	(14 x 9)
5A	2.000	+0.0018/0	1/2 x 1/4	(55)	(+0.046/0)	(16 x 10)

Double Reduction LHY(J)-5Z10DA~5A12DB Dimensions

All dimensions are in inches (mm).

With C-Face Adapter						
Model	NEMA C-Face	Y	Z	Min. ID	XJ	Wt. lb (kg)
5Z10DA	42C	18.8 (478)	0.47 (12)	2.44 (62)	1.78 (45)	68 (31)
	48C	19.2 (488)	0.47 (12)	2.44 (62)	2.16 (55)	68 (31)
	56C	19.6 (498)	0.47 (12)	3.15 (80)	2.56 (65)	73 (33)
5Z12DA	42C	19.2 (487)	0.47 (12)	2.44 (62)	1.78 (45)	84 (38)
	48C	19.6 (497)	0.47 (12)	2.44 (62)	2.16 (55)	84 (38)
	56C	20.0 (507)	0.47 (12)	3.15 (80)	2.56 (65)	86 (39)
5Z12DB	48C	20.3 (516)	0.47 (12)	2.44 (62)	2.16 (55)	95 (43)
	56C – 145TC	20.8 (528)	0.47 (12)	4.21 (107)	2.63 (67)	97 (44)
5A12DA	42C	20.5 (520)	0.47 (12)	2.44 (62)	1.78 (45)	119 (54)
	48C	20.9 (530)	0.47 (12)	2.44 (62)	2.16 (55)	119 (54)
	56C	21.3 (540)	0.47 (12)	3.15 (80)	2.56 (65)	121 (55)
5A12DB	48C	21.6 (549)	0.47 (12)	2.44 (62)	2.16 (55)	130 (59)
	56C – 145TC	22.1 (561)	0.47 (12)	4.21 (107)	2.63 (67)	132 (60)

Free Shaft Input							
Model	ØXU	ØXV	Key	CF	ØDC	J	Wt. lb (kg)
5Z10DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	10.0 (255)	5.91 (150)	17.0 (433)	66 (30)
5Z12DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	10.4 (264)	8.03 (204)	17.4 (442)	82 (37)
5Z12DB	0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	10.9 (276)	8.03 (204)	18.1 (461)	90 (41)
5A12DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	11.7 (297)	9.06 (230)	18.7 (475)	117 (53)
5A12DB	0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	12.2 (309)	9.06 (230)	19.4 (494)	126 (57)

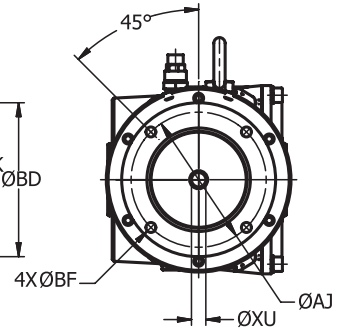
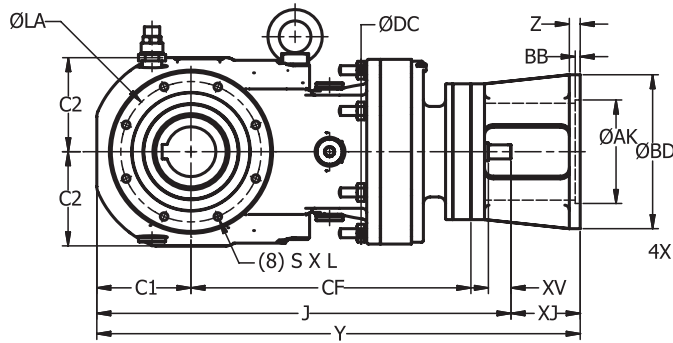
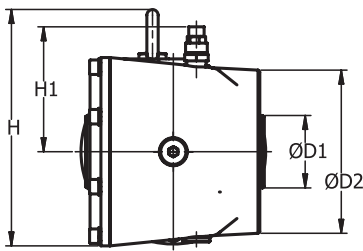
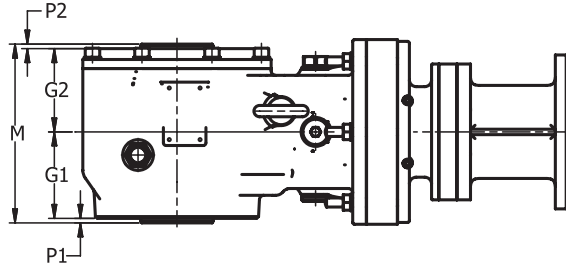
NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C – 48C	3.75 (95)	3.0 (76)	4.33 (110)	—	0.28 (7)
56C – 145TC	5.87 (149)	4.5 (114)	6.69 (170)	—	0.43 (11)
182TC – 256TC	7.25 (184)	8.5 (216)	8.98 (228)	0.22 (5.6)	0.55 (14)
284TC – 286TC	9.0 (229)	10.5 (267)	11.1 (282)	0.22 (5.6)	0.55 (14)
324TC – 326TC	11.0 (279)	12.5 (318)	14.17 (360)	0.22 (5.6)	0.71 (18)

Speed
Reducers

Dimensions

Dimensions

Double Reduction LHY(J)-5B12DA~5C16DA



Speed Reducers
Dimensions

All dimensions are in inches (mm).
For units ordered in the Y2 mounting configuration, please refer to Page 2.110 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S x L
5B12DA 5B12DB 5B14DA 5B14DB	11.4 (289)	6.06 (154)	3.5 (90)	7.83 (199)	9.82 (250)	4.80 (122)	4.70 (120)	0.20 (5)	0.12 (3)	4.82 (123)	4.82 (123)	6.89 (175)	M12 x 0.78 (M12 x 20)
5C14DA 5C14DB 5C14DC 5C16DA	14.1 (358)	7.60 (193)	3.94 (100)	9.61 (244)	10.8 (275)	4.88 (124)	5.61 (143)	0.20 (5)	0.12 (3)	6.26 (159)	6.26 (159)	8.35 (212)	M16 x 1.02 (M16 x 26)

Model	Standard Inch Bore Dimension			Standard Metric Bore Dimension		
	ØU	ØU Tolerance	Keyway	ØU	ØU Tolerance	Keyway
5B	2.375	+0.0018/0	5/8 x 5/16	(65)	(+0.046/0)	(18 x 11)
5C	2.750	+0.0018/0	5/8 x 5/16	(75)	(+0.046/0)	(20 x 12)

Double Reduction LHY(J)-5Z10DA~5A12DB Dimensions

All dimensions are in inches (mm).

With C-Face Adapter						
Model	NEMA C-Face	Y	Z	Min. ID	XJ	Wt lb (kg)
5B12DA	42C	22.9 (582)	0.47 (12)	2.44 (62)	1.78 (45)	174 (79)
	48C	23.3 (592)	0.47 (12)	2.44 (62)	2.16 (55)	174 (79)
	56C	23.7 (602)	0.47 (12)	3.15 (80)	2.56 (65)	176 (80)
5B12DB	48C	24.1 (611)	0.47 (12)	2.44 (62)	2.16 (55)	185 (84)
	56C – 145TC	24.5 (623)	0.47 (12)	4.21 (107)	2.63 (67)	187 (85)
5B14DA	48C	23.9 (608)	0.47 (12)	2.44 (62)	2.16 (55)	198 (90)
	56C	24.4 (619)	0.47 (12)	3.15 (80)	2.56 (65)	201 (91)
5B14DB	48C	24.6 (624)	0.47 (12)	2.44 (62)	2.16 (55)	205 (93)
	56C – 145TC	25.0 (636)	0.47 (12)	4.21 (107)	2.63 (67)	209 (95)
5C14DA	48C	27.2 (692)	0.47 (12)	2.44 (62)	2.16 (55)	276 (125)
	56C	27.7 (703)	0.47 (12)	3.15 (80)	2.56 (65)	278 (126)
5C14DB	48C	27.9 (708)	0.47 (12)	2.44 (62)	2.16 (55)	282 (128)
	56C – 145TC	28.3 (720)	0.47 (12)	4.21 (107)	2.63 (67)	287 (130)
5C14DC	143TC – 145TC	28.6 (726)	0.47 (12)	4.21 (107)	2.63 (67)	291 (132)
	182TC – 184TC	29.4 (747)	0.47 (12)	5.43 (138)	3.45 (88)	295 (134)
5C16DA	56C – 145TC	28.8 (732)	0.47 (12)	4.21 (107)	2.63 (67)	291 (132)

Free Shaft Input							
Model	ØXU	ØXV	Key	CF	ØDC	J	Wt. lb (kg)
5Z10DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	10.0 (255)	5.91 (150)	17.0 (433)	66 (30)
	5Z12DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	10.4 (264)	8.03 (204)	17.4 (442)
5Z12DB		0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	10.9 (276)	8.03 (204)	18.1 (461)
	5A12DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	11.7 (297)	9.06 (230)	18.7 (475)
5A12DB		0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	12.2 (309)	9.06 (230)	19.4 (494)
	5B12DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	13.1 (334)	8.03 (204)	21.1 (537)
5B12DB		0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	13.6 (346)	8.03 (204)	21.9 (556)
	5B14DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	13.8 (351)	9.06 (230)	21.8 (554)
5B14DB		0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	14.2 (360)	9.06 (230)	22.4 (570)
	5C14DA	0.500 (12.7)	0.980 (24.9)	1/8 x 1/8 x 0.71 (3.175 x 3.175 x 18)	16.1 (410)	9.06 (230)	25.1 (638)
5C14DB		0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	16.5 (419)	9.06 (230)	25.7 (654)
	5C14DC	0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	17.0 (433)	9.06 (230)	26.0 (660)
5C16DA		0.625 (15.9)	0.980 (24.9)	3/16 x 3/16 x 0.75 (4.762 x 4.762 x 19.05)	17.4 (442)	11.81 (300)	26.7 (677)

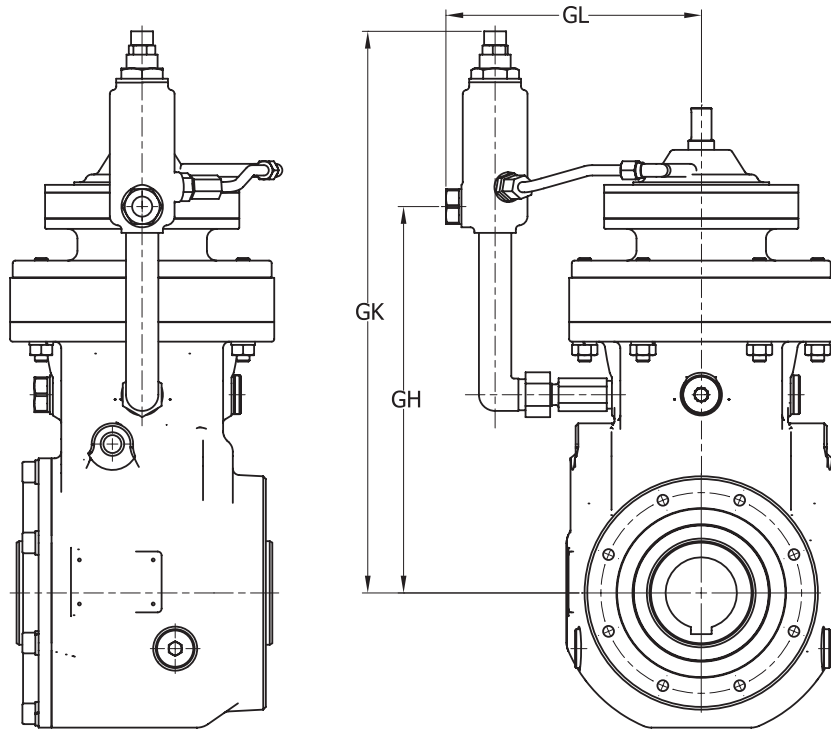
Speed
Reducers

Dimensions

NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C – 48C	3.75 (95)	3.0 (76)	4.33 (110)	—	0.28 (7)
	56C – 145TC	5.87 (149)	4.5 (114)	6.69 (170)	—
182TC – 256TC		7.25 (184)	8.5 (216)	8.98 (228)	0.22 (5.6)
	284TC – 286TC	9.0 (229)	10.5 (267)	11.1 (282)	0.22 (5.6)
324TC – 326TC		11.0 (279)	12.5 (318)	14.17 (360)	0.22 (5.6)

Dimensions

Double Reduction, Y2 Mounting Configuration – External Lubricant Piping LHY(J)-5Z10DA~5C16DA



All dimensions are in inches (*mm*).

Frame Size	GL	GH	GK
5Z10DA	5.98 (152)	9.72 (247)	14.4 (366)
5Z12DA	7.99 (203)	10.1 (256)	15.5 (394)
5Z12DB	7.99 (203)	10.4 (265)	15.9 (403)
5A12DA	7.99 (203)	11.4 (290)	16.9 (428)
5A12DB	7.99 (203)	11.8 (299)	17.2 (437)
5B12DA	7.99 (203)	12.9 (327)	18.3 (465)
5B12DB	7.99 (203)	13.2 (336)	18.7 (474)
5B14DA	9.09 (231)	13.7 (349)	19.9 (506)
5B14DB	9.09 (231)	13.9 (353)	20.1 (510)
5C14DA	9.09 (231)	16.0 (407)	22.2 (564)
5C14DB	9.09 (231)	16.2 (411)	22.4 (568)
5C14DC	9.09 (231)	16.5 (418)	22.6 (575)
5C16DA	10.3 (261)	17.0 (433)	23.2 (590)

This page intentionally left blank.

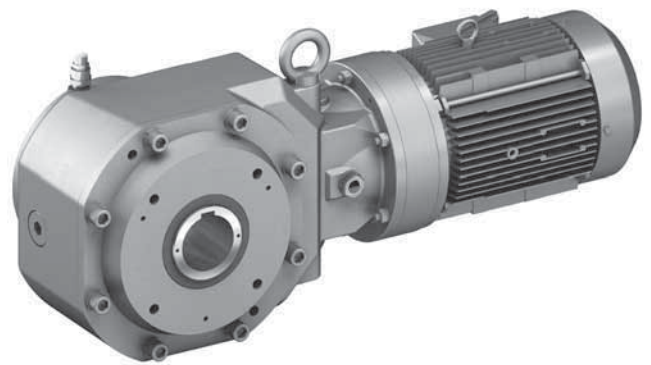
This page intentionally left blank.

Speed Reducers

Dimensions

3

Gearmotors



Gearmotors

How to
Select

How to select a Gearmotor

Step 1: Collect data about your application

Before starting you need to know the:

- **Application (e.g. Conveyor, Hoist, etc.)**
- **Hours of Operation per day**
- **Motor Power (HP or kW) and Speed (RPM)**
- **Desired Output Speed**
- **Mounting Position and Style**
- **Overhung or Thrust Loads**
- **Bore Dimensions, inch or metric**
- **Electrical Specifications**

Step 2: Choose a Mounting Position

Find the correct Mounting Position from the *Mounting Positions Table* on the right.

Step 3: Select a Frame Size

3A: Find the Load Classification of your application in the AGMA Load Classification Tables on pages 3.6 and 3.7.

3B: Go to the Gearmotor Selection Table that corresponds to the desired **Mounting Position** and **Motor Power**. Find the **Output Speed** closest to the desired output speed.

3C: Locate the **Service Class** in the Gearmotor Selection Table for your application and select the **Frame Size Selection** that matches the HP or kW, Output Speed, and Service Class.

Step 4: Verify Dimensions

Use the dimensions information on pages 3.76–3.105 to verify that the selected frame size is appropriate.

Step 5: Choose an Output Bore Size

Choose an Output Bore size from either the Keyed Hollow Bore or Shrink Disc options for the selected unit size.

Step 6: Choose Options

The following options may apply:

Brakemotor

Washdown Modifications

Breather

Please refer to our online Product Configurator at www.sumitomodrive.com/configurator for available modifications.

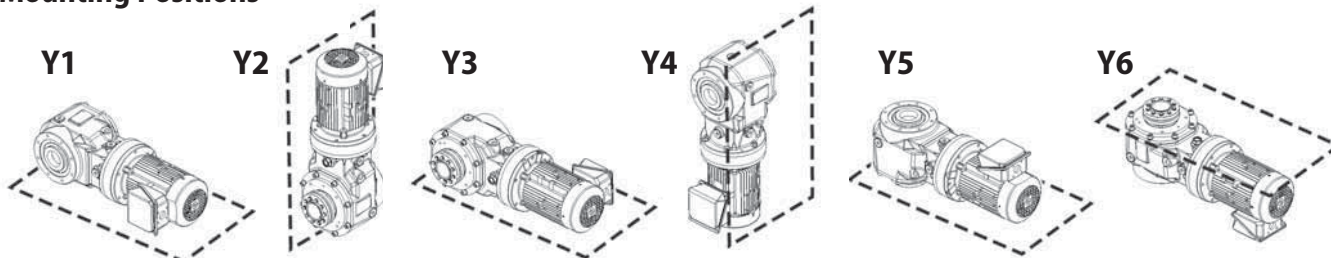
Step 7: Configure a Model Number

Go to page 3.4 to configure a model number.

Note: You will use the information you gather from the procedure on this page to configure a model number.



Mounting Positions

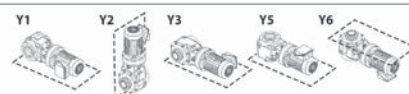


Select a Frame Size

Gearmotors

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

• Mounting Position → Y1, Y2, Y3, Y5, Y6 Mounting Positions



• Motor HP or kW → 1/4 HP (0.2 kW)

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, Inverter Duty 3.100–3.103
 Single Reduction, Inverter Duty 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

• Output Speed

• Service Class

• SELECTION

Output Speed RPM	50 Hz				60 Hz				Unit Selection			
	Output Torque in-lbs (N·m)	Service Factor SF	AGMA Class	Hollow Shaft Overhung Load lbs (N)	Output Speed RPM	Output Torque in-lbs (N·m)	Service Factor SF	AGMA Class	Hollow Shaft Overhung Load lbs (N)	Motor Power Symbol	Frame Size	Ratio
8.12	1920 (217)	2.80	III	1440 (6390)	9.80	1590 (180)	2.80	III	1440 (6390)	02	SZ100	179
7.02	2220 (251)	2.58	III	1440 (6390)	8.47	1840 (208)	2.58	III	1440 (6390)	02	SZ100	207
5.84	2670 (302)	2.18	III	1440 (6390)	7.04	2210 (250)	2.18	III	1440 (6390)	02	SZ100	249
5.84	2670 (302)	2.75	III	1440 (6390)	7.04	2210 (250)	2.75	III	1440 (6390)	02	SZ105	249
5.84	2670 (302)	2.75	III	1440 (6390)	7.04	2210 (250)	2.75	III	1440 (6390)	02	SZ115	249
5.84	2670 (302)	2.75	III	1440 (6390)	7.04	2210 (250)	2.75	III	1440 (6390)	02	SZ125	249
4.76	3270 (370)	2.17	III	1440 (6390)	5.75	2710 (306)	2.17	III	1440 (6390)	02	SZ100	305
4.76	3270 (370)	2.24	III	1440 (6390)	5.75	2710 (306)	2.24	III	1440 (6390)	02	SZ105	305
4.76	3270 (370)	2.24	III	1440 (6390)	5.75	2710 (306)	2.24	III	1440 (6390)	02	SZ115	305
4.76	3270 (370)	2.24	III	1440 (6390)	5.75	2710 (306)	2.24	III	1440 (6390)	02	SZ125	305
3.98	3720 (420)	1.98	II	1440 (6390)	4.81	3080 (348)	2.04	III	1440 (6390)	02	SZ10DA	364
3.98	3720 (420)	1.98	II	1440 (6390)	4.81	3080 (348)	2.04	III	1440 (6390)	02	SZ12DA	364
3.98	3720 (420)	1.98	II	1440 (6390)	4.81	3080 (348)	2.39	III	1440 (6390)	02	SZ12DB	364
3.98	3720 (420)	2.04	III	1810 (8060)	4.81	3080 (348)	2.04	III	1810 (8060)	02	SA12DA	364
3.98	3720 (420)	2.04	III	2970 (13200)	4.81	3080 (348)	2.04	III	2970 (13200)	02	SB12DA	364
3.98	3720 (420)	2.04	III	2970 (13200)	4.81	3080 (348)	2.04	III	2970 (13200)	02	SB14DA	364
3.98	3720 (420)	2.04	III	4810 (21400)	4.81	3080 (348)	2.04	III	4810 (21400)	02	SC14DA	364
3.42	4320 (488)	1.70	II	1440 (6390)	4.13	3580 (404)	2.04	III	1440 (6390)	02	SZ10DA	424
3.42	4320 (488)	1.70	II	1440 (6390)	4.13	3580 (404)	2.04	III	1440 (6390)	02	SZ12DA	424
3.42	4320 (488)	1.70	II	1440 (6390)	4.13	3580 (404)	2.05	III	1440 (6390)	02	SZ12DB	424

Gearmotors Selection Tables

For special circumstances in selecting a **Frame Size** such as:

- Overhung Load
- Thrust Loads
- Radial Loads
- Shock Loading

Consult Appendix, pages 5.2–5.6.

If Overhung Load is present, any Overhung Load must be checked against the capacity of the selection.



Gearmotors

How to Select

Configure a Model Number

Output Shaft Orientation

Type	Prefix
Horizontal	H
Vertical	V

Mounting Style

Type	Prefix
Shaft Mount (Hollow Shaft)	Y
Flange (Hollow Shaft)	F
Housing Mount (Hollow Shaft)	U

Input Connection

Type of Input	Prefix	
	Reducer	Gearmotor
Gearmotor	M	

Modification

Type	Prefix
Unit built with special modificatons	S
Shrink Disc	S
No special modifications applied	

Motor Power

(applies only to 1750 RPM)

HP	kW	Symbol
1/8	(0.1)	01
1/4	(0.2)	02
1/3	(0.25)	03
1/2	(0.4)	05
3/4	(0.55)	08
1	(0.75)	1
1 1/2	(1.1)	1H
2	(1.5)	2
3	(2.2)	3
5	(3.7)	5
7 1/2	(5.5)	8
10	(7.5)	10
15	(11)	15
20	(15)	20
25	(18.5)	25
30	(22)	30
40	(30)	40
50	(37)	50
60	(45)	60
75	(55)	75

Frame Size

Single Reduction			
5Z100	5A110	5B120	5C140
5Z105	5A115	5B125	5C145
5Z110	5A120	5B140	5C160
5Z115	5A125	5B145	5C165
5Z120	5A140	5B160	5C170
5Z125	5A145	5B165	5C175
Double Reduction			
5Z10DA	5A12DA	5B12DA	5C14DA
5Z12DA	5A12DB	5B12DB	5C14DB
5Z12DB		5B14DA	5C14DC
		5B14DB	5C16DA
			5C16DB

AGMA Class

Class	Suffix
I	A
II	B
III	C

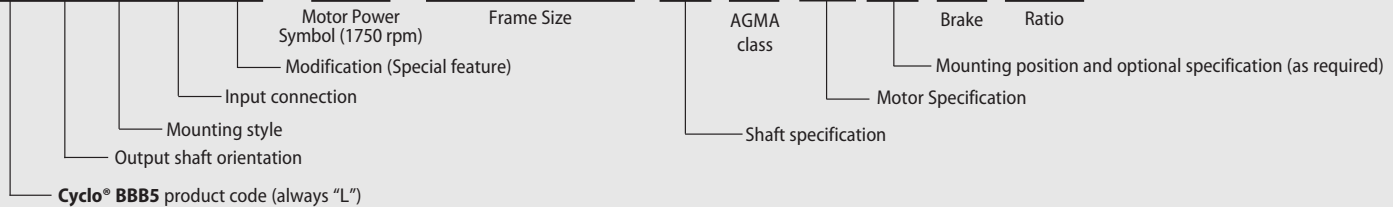
Motor Specification

Specification	Suffix
Three-Phase Motor	
Single-Phase Motor	SG
AF-Motor (Adjustable Frequency)	AV
Servo Motor	SV
DC Motor	DV
Torque Limiter	TL

Brake

	Suffix
With Brake	B
No Brake	-

L H Y M S - **5** - **5A125** - **K** - **B** - **AV** - **Y1** - **B** - **28**



When ordering, the following information should be included:

- Motor Specification (230/460 VAC 60 Hz is supplied, unless otherwise specified)

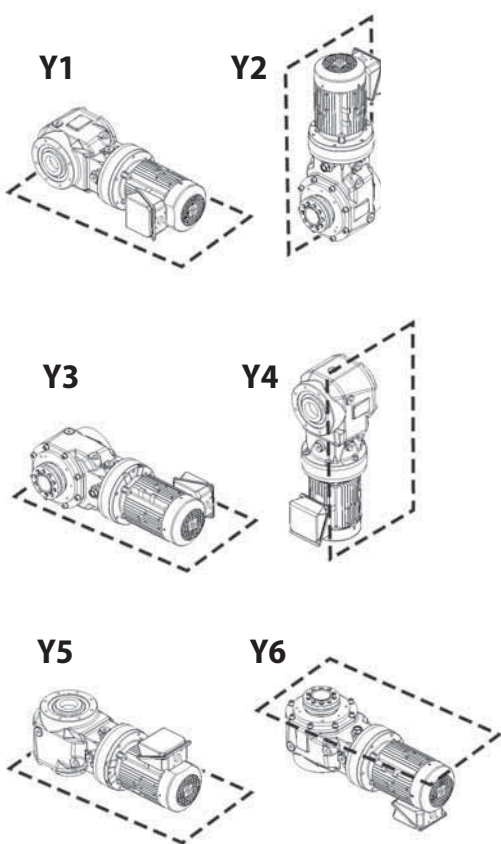
Optional conduit box positions must be specified, otherwise Y1 is supplied.

Nomenclature

Shaft Specifications

Input Shaft	OUTPUT SHAFT Hollow Output Shaft	Suffix
mm	Key (mm)	
Inch	Key (Inch)	K

Mounting Positions



Nominal and Exact Ratio

BBB5 with Planetary Input				BBB5 with Cyclo Input			
Nominal		BBB5 Frame Size	Exact Ratio	Single Reduction			
Input Ratio	Overall Ratio			Nominal		BBB5 Frame Size	Exact Ratio
Input Ratio	Overall Ratio	Input Ratio	Overall Ratio	Input Ratio	Overall Ratio		
3	11	5Z10	10.50	6	21	All	21.0
		5Z11		7	22		22.4
		5A11		25	24.5		
		5A12		28	28.0		
		5B12		35	35.2		
		5B16	39	38.5			
		5C16	46	45.5			
		5C17	53	52.5			
		5A14	60	59.5			
		5B14	74	67.2			
5C14	80	73.5					
4	13	5Z11	12.80	25	80	80.0	
		5Z12		88	87.5		
		5A11		102	101.5		
		5A12		112	112.0		
		5B12		123	122.5		
		5B16	151	150.5			
		5C16	179	178.5			
		5A14	207	206.5			
		5B14	249	248.5			
		5C14	305	304.5			
5	14	5Z10	14.00	43	151	150.5	
		5Z11		179	178.5		
		5Z12		207	206.5		
		5A11		249	248.5		
		5A12		305	304.5		
		5B12	364	364.0			
		5B16	424	423.5			
		5C16	501	500.5			
		5A14	578	577.5			
		5B14	683	682.5			
5	16	5Z10	15.36	231	809	808.5	
		5Z11		956	955.5		
		5Z12		1117	1116.5		
		5A11		1320	1319.5		
		5A12		1656	1655.5		
		5B12	1957	1956.5			
		5B16	2272	2271.5			
		5C16	2559	2558.5			
		5A14	2944	2943.5			
		5B14	3511	3510.5			
5	18	5Z10	16.80	1003	3511	3510.5	
		5Z11		4365	4364.5		
		5Z12		5177	5176.5		
		5A11		6472	6471.5		
		5A12		7228	7227.5		
		5B12	8880	8879.5			
		5B16	10658	10657.5			
		5C16					
		5C17					
		5C17					

Nomenclature Example:

LHYMS5 – 5A125KB – AVY1 – 28

- L – Cyclo® Bevel Buddybox
- H – Horizontal
- Y – Shaft Mount (Hollow Shaft)
- M – Gearmotor
- S – Special
- 5 – 5 HP (3.7 kW), 1750 RPM
- 5A125 – Frame Size
- K – Key (Inch) Hollow Output Shaft
- B – AGMA Class II
- AV – Adjustable Frequency Motor
- Y1 – Mounting Position
- 28 – Ratio

AGMA Load Classifications: Gearmotors

Gearmotor Classification

DURATION OF SERVICE	GEARMOTOR CLASS			
	UNIFORM LOAD	MODERATE SHOCK LOAD	HEAVY SHOCK LOAD	
Intermittent 3 hours per day	Class I	Class I	Class II	Class I For steady loads not exceeding normal motor rating, 8 to 10 hours per day. Moderate shock loads where service is intermittent (AGMA Service Factor: 1.0).
Up to 10 hours per day	Class I	Class II	Class III	Class II For steady loads not exceeding normal motor rating and 24 hours per day service. Moderate shock loads for 8 hours per day (AGMA Service Factor: 1.4).
24 hours per day	Class II	Class III	—	Class III For moderate shock loads for 24 hours per day. Heavy shock loads for 8 hours per day (AGMA Service Factor: 2.0).

Recommended Service Factors for Frequent Start-Stop Applications

For frequent start-stop applications, use the table below to determine the recommended service factor, and check the Motor Thermal Rating (Table 5.31) in Section 5.

Number of starts (Times/hour)	~ 10 hours/day			~24 hours/day		
	I	II	III	I	II	III
~10	1.00	1.15	1.50	1.20	1.30	1.65
~200	1.10	1.35	1.65	1.30	1.50	1.85
~500	1.15	1.50	1.80	1.440	1.65	2.00

The Moment of Inertia (ratio of Inertia WR^2) = $\frac{\text{Total Moment of Inertia } (WR^2) \text{ as seen from motor shaft}}{\text{Moment of Inertia } (WR^2) \text{ of motor}}$

I = Allowable ratio of Moment of Inertia (WR^2) ≤ 0.3

II = Allowable ratio of Moment of Inertia (WR^2) $0.3 < WR^2 \leq 3.0$

III = Allowable ratio of Moment of Inertia (WR^2) $3.0 < WR^2 \leq 10.0$

Load Classification by INDUSTRY

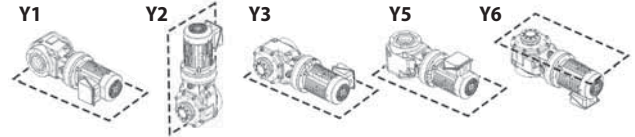
Application	Class		Application	Class		Application	Class		Application	Class	
	Up to 10 hours per day	24 hours per day		Up to 10 hours per day	24 hours per day		Up to 10 hours per day	24 hours per day		Up to 10 hours per day	24 hours per day
Brewing & Distilling			Lumber Industry			Oil Well Pumping	Refer to Factory		Tire Building Machines	Refer to Factory	
Bottling Machinery	I	II	Barkers—			Paraffin Filter Press	II	II	Tire, Tube Press		
Brew Kettles, Cont. Duty	—	II	Spindle Feed	II	III	Rotary Kilns	II	II	Openers	Refer to Factory	
Can Filling Machines	I	II	Barkers—			Paper Mills			Tubers & Stainers	II	II
Cookers—Cont. Duty	—	II	Main Drive	III	III	Agitators (Mixers)	II	II			
Mash Tubs—Cont. Duty	—	II	Carriage Drive	Refer to Factory		Barker—Auxiliaries			Sewage Disposal		
Scale Hoppers—			Conveyors			Hyd.	—	III	Aerators	Refer to Factory	
Frequent Starts	II	II	Burner	II	III	Barker, Mechanical	—	III	Bar Screens	I	II
			Main or Heavy Duty	II	III	Barking Drum	—	III	Chemical Feeders	I	II
			Main Log	III	III	Beater & Pulper	—	II	Collectors	I	II
			Re-Saw	Refer to Factory		Bleacher	—	II	Dewatering Screens	I	II
Clay Working Industry			Merry-Go-Round	II	III	Calenders	—	II	Grit Collectors	I	II
Brick Press	III	III	Slab	III	III	Calenders—Super	—	II	Scum Breakers	II	II
Briquette Machines	III	III	Transfer	II	III	Converting Mach.—	Refer to Factory		Slow or Rapid Mixers	II	II
Clay Working Machinery	II	II	Chains—Floor	II	III	Except Cutters—	Refer to Factory		Sludge Collectors	I	II
Pug Mills	II	II	Chains—Green	II	III	Platers	—	II	Thickeners	II	II
			Cut-Off Saws—Chain	II	III	Conveyors	—	II	Vacuum Filters	II	II
Distilling (See Brewing)			Cut-Off Saws—Drag	II	III	Couch	—	II			
			Debarking Drums	III	III	Cutters, Platers	—	III	Textile Industry		
Dredges			Feeds—Edger	II	III	Cylinders	—	II	Batchers	II	II
Cable Reels	II	—	Feeds—Gang	III	III	Dryers	—	II	Calenders	II	II
Conveyors	II	II	Feeds—Trimmer	II	III	Felt Stretchers	—	II	Card Machines	II	II
Cutter Head Drives	III	III	Log Deck	III	III	Felt Whippers	—	III	Cloth Finishing Machines		
Jig Drives	III	III	Log Hauls—Incline, Well Type	III	III	Jordans	—	II	(Calenders, Dryers, Pads, Tenters, Washers)		
Maneuvering Winches	II	—	Log Turning Devices	III	III	Log Haul	—	III	Dry Cans	II	II
Pumps	II	II	Planer Feed	II	III	Presses	—	II	Dyeing Machinery	II	II
Screen Drives	III	III	Planer Tilting Hoists	II	III	Pulp Machine Reels	—	II	Knitting Machinery	Refer to Factory	
Stackers	II	II	Rolls—Live—Off	III	III	Stock Chests	—	II	Looms, Mangles, Nappers	II	II
Utility Winches	II	—	Bearing—Roll Cases	III	III	Suction Rolls	—	II	Range Drives	Refer to Factory	
			Sorting Table	II	III	Washers & Thickeners	—	II	Soapers, Spinners	II	II
Food Industry			Tipple Hoist	II	III	Winders	—	II	Tenter Frames	II	II
Beet Slicers	II	II	Transfers—Chain	II	III	Rubber Industry			Winders	II	II
Bottlings, Can Filling Mach.	I	II	Transfers—Craneway	II	III	Mixer	III	III	Yarn Preparatory Machinery (Cards, Spinners, Slashers)		
Cereal Cookers	I	II	Tray Drives	II	III	Rubber Calender	II	II			
Dough Mixers	II	II				Rubber Mill	II	II			
Meat Grinders	II	II	Oil Industry			(2 or more)	II	II			
			Chillers	II	II	Sheeter	II	II			

Load Classification by APPLICATION

Application	Class		Application	Class		Application	Class		Application	Class	
	Up to 10 hours per day	24 hours per day		Up to 10 hours per day	24 hours per day		Up to 10 hours per day	24 hours per day		Up to 10 hours per day	24 hours per day
Agitators			Jig Drives	III	III	Tray Drives	II	III	Pullers		
Pure Liquids	I	II	Maneuvering Winches	II	-	Veneer Lathe Drives	Refer to Factory		Barge Haul	III	III
Liquids and Solids	II	II	Pumps	II	II				Pumps		
Liquids - Variable Density	II	II	Screen Drive	III	III	Machine Tools			Centrifugal	I	II
Semi-liquids - Variable Density	II	II	Stackers	II	II	Bending Roll	II	II	Proportioning	II	II
			Utility Winches	II	-	Notching Press - Belt Driven	Refer to Factory		Reciprocating		
Blowers			Elevators			Plate Planer	III	III	Single Acting		
Centrifugal	I	II	Bucket - Uniform Load	I	II	Punch Press - Gear Driven	III	III	3 or more Cylinders	II	II
Lobe	II	II	Bucket - Heavy Load	II	II	Tapping Machines	III	III	Double Acting		
Vane	I	II	Bucket - Continuous	I	II	Other Machine Tools			2 or more Cylinders	II	II
Brewing and Distilling			Centrifugal Discharge	I	II	Main Drives	II	II	Single Acting	Refer to Factory	Refer to Factory
Bottling Machinery	I	II	Escalators	I	II	Auxiliary Drives	I	II	1 or 2 Cylinders	Refer to Factory	Refer to Factory
Brew Kettles - Continuous Duty	-	II	Freight	I	II				Double Actin	Refer to Factory	Refer to Factory
Cookers - Continuous Duty	-	II	Gravity Discharge	Refer to Factory					Single Cylinder	Refer to Factory	Refer to Factory
Mash Tubs - Continuous Duty	-	II	Man Lifts			Metal Mills			Rotary - Gear Type	I	II
Scale Hopper	-	II	Passenger	III	-	Bridle Roll Drives	III	III	- Lobe, Vane	I	II
Frequent Starts	II	II	Service - Hand Lift			Draw Bench - Carriage	III	III	Rubber Industry		
Can Filling Machines	I	II	Fans			Draw Bench - Main Drive	III	III	Mixer	III	III
Cane Knives	II	II	Centrifugal	II	II	Forming Machines	III	III	Rubber Calender	II	II
Car Dumpers	III	-	Cooling Towers	II	II	Pinch Dryer & Scrubber	Refer to Factory		Rubber Mill (2 or more)	II	II
Car Pullers - Intermittent Duty	I	-	Induced Draft	II	II	Rolls, Reversing	II	II	Sheeter	Refer to Factory	Refer to Factory
Clarifiers	I	II	Forced Draft	Refer to Factory		Slitters	II	II	Tire Building Machines	Refer to Factory	Refer to Factory
Classifiers	II	II	Induced Draft	II	II	Table Conveyors			Tire & Tube Press	Refer to Factory	Refer to Factory
Clay Working Machinery	Refer to Factory		Large (Mine, etc.)	II	II	Non-Reversing	II	III	Openers	Refer to Factory	Refer to Factory
Brick Press	III	III	Large Industrial	II	II	Reversing	-	III	Tubers & Strainers	II	II
Briquette Machine	III	III	Light (Small Diameter)	I	II	Winding Reels - Strip	-	III	Sewage Disposal Equipment	Refer to Factory	Refer to Factory
Clay Working Machinery	II	II	Feeders			Wire Drawing & Flattening Machine	II	III	Aerators	Refer to Factory	Refer to Factory
Pug Mill	II	II	Apron	II	II				Bar Screens	I	II
Compressors			Belt	II	II	Mills, Rotary Type	III	III	Chemical Feeders	I	II
Centrifugal	I	II	Disc	I	II	Ball	Refer to Factory		Collectors, Circuline or Straightline	I	II
Lobe	II	II	Reciprocating	III	III	Cement Kilns	II	II	Dewatering Screens	II	II
Reciprocating	II	II	Screw	II	II	Dryers & Coolers	II	II	Grit Collectors	I	II
Multi-Cylinder	II	II	Food Industry			Kilns	III	III	Scum Breakers	II	II
Single Cylinder	III	III	Beet Slicer	I	II	Pebble	III	III	Slow or Rapid Mixers	II	II
Conveyors - Uniformly Loaded or Fed	Refer to Factory		Cereal Cooker	I	II	Rod	III	III	Sludge Collectors	I	II
Apron	I	II	Dough Mixer	II	II	Tumbling Barrels	III	III	Thickeners	II	II
Assembly	I	II	Meat Grinders	II	II				Vacuum Filters	II	II
Belt	I	II	Generators - (Not Welding)	I	II	Mixers			Screens		
Bucket	I	II	Hammer Mills	III	III	Concrete Mixers, Continuous	II	II	Air Washing	I	II
Chain	I	II	Laundry Washers	II	II	Concrete Mixers, Intermittent	I	-	Rotary - Stone or Gravel	II	II
Flight	I	II	Reversing	II	II	Constant Density	II	II	Traveling Water Intake	I	II
Oven	I	II	Laundry Tumblers	II	II	Variable Density	II	II	Slab Pushers	II	II
Screw	I	II	Line Shafts			Oil Industry			Steering Gear	II	II
Conveyors - Heavy Duty Not Uniformly Fed			Heavy Shock Load	III	III	Chillers	II	II	Stokers	I	II
Apron	II	II	Moderate	II	II	Oil Well Pumping	Refer to Factory		Textile Industry		
Assembly	II	II	Shock Load	II	II	Paraffin Filter Press	II	II	Batchers	II	II
Belt	II	II	Uniform Load	I	II	Rotary Kilns	II	II	Calenders	II	II
Bucket	II	II	Lumber Industry			Paper Mills			Card Machines	II	II
Chain	II	II	Barkers - Spindle Feed	Refer to Factory		Aerators	II	II	Cloth Finishing Machines		
Flight	II	II	Barkers - Main Drive	Refer to Factory		Agitators (Mixers)	-	III	(Washers, Pads, Tenters)	Refer to Factory	Refer to Factory
Live Roll (Package)	I	II	Carriage Drive	Refer to Factory		Barker Auxiliaries, Hydraulic	-	III	(Dryers, etc.)	II	II
Oven	III	III	Conveyors - Burner	II	II	Barker, Mechanical	-	III	Dry Cans	II	II
Reciprocating	III	III	Conveyors - Main or Heavy Duty	III	III	Barking Drum	-	III	Dryers	II	II
Screw	III	III	Conveyors - Main Log	III	III	Beater & Pulper	-	II	Dyeing Machinery	II	II
Shaker	III	III	Conveyors - Merry-Go-Round	II	III	Bleacher	-	II	Knitting Machines	II	II
Cranes and Hoists			Conveyors - Slab	III	III	Calenders	-	II	(Looms, etc.)	Refer to Factory	Refer to Factory
Main Hoists	III	III	Conveyors - Transfer	III	III	Calenders - Super	-	II	Looms	II	II
Heavy Duty	II	III	Conveyors - Waste	II	II	Converting Machines, except Cutters, Platers	-	II	Mangles	II	II
Medium Duty	II	III	Chains - Floor	II	III	Conveyors	-	II	Nappers	II	II
Reversing	II	II	Chains - Green	II	III	Conveyors, Log	-	III	Pads	II	II
Skip Hoists	II	II	Chains - Cut-Off Saws - Chain	II	III	Couch	-	II	Range Drives	Refer to Factory	Refer to Factory
Trolley Drive	II	II	Chains - Cut-Off Saws - Drag	II	III	Cutters, Platers	-	III	Slashers	II	II
Bridge Drive	II	II	Chains - Floor	II	III	Cylinders	-	II	Soapers	II	II
Crushers			Chains - Green	II	III	Dryers	-	II	Spinnners	II	II
Ore	III	III	Chains - Cut-Off Saws - Chain	II	III	Felt Stretcher	-	II	Teneter Frames	II	II
Stone	III	III	Chains - Cut-Off Saws - Drag	II	III	Felt Whipper	-	III	Washers	II	II
Dredges			Chains - Floor	II	III	Jordans	-	II	Winders (Other than Batchers)	II	II
Cable Reels	II	-	Chains - Green	II	III	Presses	-	II	Yarn Preparatory Machines (Cards, Spinners, Slashers, etc.)	II	II
Conveyors	II	II	Chains - Cut-Off Saws - Chain	II	III	Pulp Machines, Reel	-	II	Windlass	II	II
Cutter Head Drives	III	III	Chains - Cut-Off Saws - Drag	II	III	Stock Chests	-	II			
			Chains - Floor	II	III	Suction Roll	-	II			
			Chains - Green	II	III	Washers and Thickeners	-	II			
			Chains - Cut-Off Saws - Chain	II	III	Winders	-	II			
			Chains - Cut-Off Saws - Drag	II	III	Printing Presses	I	II			
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						
			Chains - Green	II	III						
			Chains - Cut-Off Saws - Chain	II	III						
			Chains - Cut-Off Saws - Drag	II	III						
			Chains - Floor	II	III						

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1/8 HP (0.1 kW)

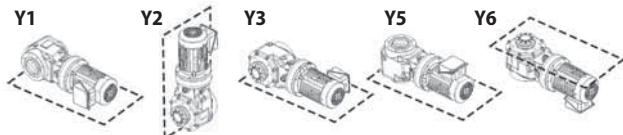
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
2.90	2550	(288)	2.88	III	1440	(6390)	3.50	2120	(239)	3.47	III	1440	(6390)	01	5Z10DA	501
2.90	2550	(288)	2.88	III	1440	(6390)	3.50	2120	(239)	3.47	III	1440	(6390)	01	5Z12DA	501
2.90	2550	(288)	2.88	III	1440	(6390)	3.50	2120	(239)	3.47	III	1440	(6390)	01	5Z12DB	501
2.51	2950	(333)	2.49	III	1440	(6390)	3.03	2440	(276)	3.01	III	1440	(6390)	01	5Z10DA	578
2.51	2950	(333)	2.49	III	1440	(6390)	3.03	2440	(276)	3.01	III	1440	(6390)	01	5Z12DA	578
2.51	2950	(333)	2.49	III	1440	(6390)	3.03	2440	(276)	3.01	III	1440	(6390)	01	5Z12DB	578
2.12	3480	(393)	2.11	III	1440	(6390)	2.56	2890	(326)	2.55	III	1440	(6390)	01	5Z10DA	683
2.12	3480	(393)	2.11	III	1440	(6390)	2.56	2890	(326)	2.55	III	1440	(6390)	01	5Z12DA	683
2.12	3480	(393)	2.11	III	1440	(6390)	2.56	2890	(326)	2.55	III	1440	(6390)	01	5Z12DB	683
1.79	4120	(466)	1.78	II	1440	(6390)	2.16	3420	(386)	2.15	III	1440	(6390)	01	5Z10DA	809
1.79	4120	(466)	1.78	II	1440	(6390)	2.16	3420	(386)	2.15	III	1440	(6390)	01	5Z12DA	809
1.79	4120	(466)	1.78	II	1440	(6390)	2.16	3420	(386)	2.15	III	1440	(6390)	01	5Z12DB	809
1.79	4120	(466)	2.77	III	1810	(8060)	2.16	3420	(386)	3.34	III	1810	(8060)	01	5A12DA	809
1.79	4120	(466)	2.77	III	1810	(8060)	2.16	3420	(386)	3.34	III	1810	(8060)	01	5A12DB	809
1.52	4880	(551)	1.51	II	1440	(6390)	1.83	4040	(456)	1.82	II	1440	(6390)	01	5Z10DA	956
1.52	4880	(551)	1.51	II	1440	(6390)	1.83	4040	(456)	1.82	II	1440	(6390)	01	5Z12DA	956
1.52	4880	(551)	1.51	II	1440	(6390)	1.83	4040	(456)	1.82	II	1440	(6390)	01	5Z12DB	956
1.52	4880	(551)	2.34	III	1810	(8060)	1.83	4040	(456)	2.83	III	1810	(8060)	01	5A12DA	956
1.52	4880	(551)	2.34	III	1810	(8060)	1.83	4040	(456)	2.83	III	1810	(8060)	01	5A12DB	956
1.30	5690	(643)	1.29	I	1440	(6390)	1.57	4720	(533)	1.56	II	1440	(6390)	01	5Z10DA	1117
1.30	5690	(643)	1.29	I	1440	(6390)	1.57	4720	(533)	1.56	II	1440	(6390)	01	5Z12DA	1117
1.30	5690	(643)	1.29	I	1440	(6390)	1.57	4720	(533)	1.56	II	1440	(6390)	01	5Z12DB	1117
1.30	5690	(643)	2.00	III	1810	(8060)	1.57	4720	(533)	2.42	III	1810	(8060)	01	5A12DA	1117
1.30	5690	(643)	2.00	III	1810	(8060)	1.57	4720	(533)	2.42	III	1810	(8060)	01	5A12DB	1117
1.10	6730	(760)	1.09	I	1440	(6390)	1.33	5580	(630)	1.32	I	1440	(6390)	01	5Z10DA	1320
1.10	6730	(760)	1.09	I	1440	(6390)	1.33	5580	(630)	1.32	I	1440	(6390)	01	5Z12DA	1320
1.10	6730	(760)	1.09	I	1440	(6390)	1.33	5580	(630)	1.32	I	1440	(6390)	01	5Z12DB	1320
1.10	6730	(760)	1.70	II	1810	(8060)	1.33	5580	(630)	2.05	III	1810	(8060)	01	5A12DA	1320
1.10	6730	(760)	1.70	II	1810	(8060)	1.33	5580	(630)	2.05	III	1810	(8060)	01	5A12DB	1320
1.10	6730	(760)	2.82	III	2970	(13200)	1.33	5580	(630)	3.40	III	2970	(13200)	01	5B12DA	1320
1.10	6730	(760)	2.82	III	2970	(13200)	1.33	5580	(630)	3.40	III	2970	(13200)	01	5B12DB	1320
0.876	8440	(954)	0.87	—	1440	(6390)	1.06	7000	(791)	1.05	I	1440	(6390)	01	5Z10DA	1656
0.876	8440	(954)	0.87	—	1440	(6390)	1.06	7000	(791)	1.05	I	1440	(6390)	01	5Z12DA	1656
0.876	8440	(954)	0.87	—	1440	(6390)	1.06	7000	(791)	1.05	I	1440	(6390)	01	5Z12DB	1656
0.876	8440	(954)	1.35	I	1810	(8060)	1.06	7000	(791)	1.63	II	1810	(8060)	01	5A12DA	1656
0.876	8440	(954)	1.35	I	1810	(8060)	1.06	7000	(791)	1.63	II	1810	(8060)	01	5A12DB	1656
0.876	8440	(954)	2.25	III	2970	(13200)	1.06	7000	(791)	2.71	III	2970	(13200)	01	5B12DA	1656
0.876	8440	(954)	2.25	III	2970	(13200)	1.06	7000	(791)	2.71	III	2970	(13200)	01	5B12DB	1656
0.876	8440	(954)	2.69	III	2970	(13200)	1.06	7000	(791)	3.25	III	2970	(13200)	01	5B14DA	1656
0.876	8440	(954)	2.69	III	2970	(13200)	1.06	7000	(791)	3.25	III	2970	(13200)	01	5B14DB	1656
0.741	10000	(1130)	1.14	I	1810	(8060)	0.894	8270	(934)	1.38	I	1810	(8060)	01	5A12DA	1957
0.741	10000	(1130)	1.14	I	1810	(8060)	0.894	8270	(934)	1.38	I	1810	(8060)	01	5A12DB	1957
0.741	10000	(1130)	1.90	II	2970	(13200)	0.894	8270	(934)	2.29	III	2970	(13200)	01	5B12DA	1957
0.741	10000	(1130)	1.90	II	2970	(13200)	0.894	8270	(934)	2.29	III	2970	(13200)	01	5B12DB	1957
0.741	10000	(1130)	2.28	III	2970	(13200)	0.894	8270	(934)	2.75	III	2970	(13200)	01	5B14DA	1957
0.741	10000	(1130)	2.28	III	2970	(13200)	0.894	8270	(934)	2.75	III	2970	(13200)	01	5B14DB	1957

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Selection Tables

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

1/8 HP (0.1 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
0.638	11600	(1310)	0.99	—	1810	(8060)	0.770	9560	(1080)	1.19	I	1810	(8060)	01	5A12DA	2272
0.638	11600	(1310)	0.99	—	1810	(8060)	0.770	9560	(1080)	1.19	I	1810	(8060)	01	5A12DB	2272
0.638	11600	(1310)	1.64	II	2970	(13200)	0.770	9560	(1080)	1.98	II	2970	(13200)	01	5B12DA	2272
0.638	11600	(1310)	1.64	II	2970	(13200)	0.770	9560	(1080)	1.98	II	2970	(13200)	01	5B12DB	2272
0.638	11600	(1310)	1.96	II	2970	(13200)	0.770	9560	(1080)	2.37	III	2970	(13200)	01	5B14DA	2272
0.638	11600	(1310)	1.96	II	2970	(13200)	0.770	9560	(1080)	2.37	III	2970	(13200)	01	5B14DB	2272
0.567	13000	(1470)	0.87	—	1810	(8060)	0.684	10800	(1220)	1.06	I	1810	(8060)	01	5A12DA	2559
0.567	13000	(1470)	0.87	—	1810	(8060)	0.684	10800	(1220)	1.06	I	1810	(8060)	01	5A12DB	2559
0.567	13000	(1470)	1.45	II	2970	(13200)	0.684	10800	(1220)	1.75	II	2970	(13200)	01	5B12DA	2559
0.567	13000	(1470)	1.45	II	2970	(13200)	0.684	10800	(1220)	1.75	II	2970	(13200)	01	5B12DB	2559
0.567	13000	(1470)	1.74	II	2970	(13200)	0.684	10800	(1220)	2.10	III	2970	(13200)	01	5B14DA	2559
0.567	13000	(1470)	1.74	II	2970	(13200)	0.684	10800	(1220)	2.10	III	2970	(13200)	01	5B14DB	2559
0.493	15000	(1700)	1.26	I	2970	(13200)	0.595	12500	(1410)	1.53	II	2970	(13200)	01	5B12DA	2944
0.493	15000	(1700)	1.26	I	2970	(13200)	0.595	12500	(1410)	1.53	II	2970	(13200)	01	5B12DB	2944
0.493	15000	(1700)	1.52	II	2970	(13200)	0.595	12500	(1410)	1.83	II	2970	(13200)	01	5B14DA	2944
0.493	15000	(1700)	1.52	II	2970	(13200)	0.595	12500	(1410)	1.83	II	2970	(13200)	01	5B14DB	2944
0.493	15000	(1700)	2.75	III	4810	(21400)	0.595	12500	(1410)	2.86	III	4810	(21400)	01	5C14DA	2944
0.493	15000	(1700)	2.75	III	4810	(21400)	0.595	12500	(1410)	3.32	III	4810	(21400)	01	5C14DB	2944
0.493	15000	(1700)	2.75	III	4810	(21400)	0.595	12500	(1410)	3.32	III	4810	(21400)	01	5C14DC	2944
0.413	17900	(2020)	1.06	I	2970	(13200)	0.499	14900	(1680)	1.28	I	2970	(13200)	01	5B12DA	3511
0.413	17900	(2020)	1.06	I	2970	(13200)	0.499	14900	(1680)	1.28	I	2970	(13200)	01	5B12DB	3511
0.413	17900	(2020)	1.27	I	2970	(13200)	0.499	14900	(1680)	1.53	II	2970	(13200)	01	5B14DA	3511
0.413	17900	(2020)	1.27	I	2970	(13200)	0.499	14900	(1680)	1.53	II	2970	(13200)	01	5B14DB	3511
0.413	17900	(2020)	2.30	III	4810	(21400)	0.499	14900	(1680)	2.78	III	4810	(21400)	01	5C14DA	3511
0.413	17900	(2020)	2.30	III	4810	(21400)	0.499	14900	(1680)	2.78	III	4810	(21400)	01	5C14DB	3511
0.413	17900	(2020)	2.30	III	4810	(21400)	0.499	14900	(1680)	2.78	III	4810	(21400)	01	5C14DC	3511
0.413	17900	(2020)	2.54	III	4810	(21400)	0.499	14900	(1680)	3.07	III	4810	(21400)	01	5C16DA	3511
0.332	22300	(2520)	0.85	—	2970	(13200)	0.401	18400	(2080)	1.03	I	2970	(13200)	01	5B12DA	4365
0.332	22300	(2520)	0.85	—	2970	(13200)	0.401	18400	(2080)	1.03	I	2970	(13200)	01	5B12DB	4365
0.332	22300	(2520)	1.02	I	2970	(13200)	0.401	18400	(2080)	1.23	I	2970	(13200)	01	5B14DA	4365
0.332	22300	(2520)	1.02	I	2970	(13200)	0.401	18400	(2080)	1.23	I	2970	(13200)	01	5B14DB	4365
0.332	22300	(2520)	1.85	II	4810	(21400)	0.401	18400	(2080)	2.24	III	4810	(21400)	01	5C14DA	4365
0.332	22300	(2520)	1.85	II	4810	(21400)	0.401	18400	(2080)	2.24	III	4810	(21400)	01	5C14DB	4365
0.332	22300	(2520)	1.85	II	4810	(21400)	0.401	18400	(2080)	2.24	III	4810	(21400)	01	5C14DC	4365
0.332	22300	(2520)	2.04	III	4810	(21400)	0.401	18400	(2080)	2.47	III	4810	(21400)	01	5C16DA	4365
0.280	26400	(2980)	0.86	—	2970	(13200)	0.338	21900	(2470)	1.04	I	2970	(13200)	01	5B14DA	5177
0.280	26400	(2980)	0.86	—	2970	(13200)	0.338	21900	(2470)	1.04	I	2970	(13200)	01	5B14DB	5177
0.280	26400	(2980)	1.42	II	4810	(21400)	0.338	21900	(2470)	1.72	II	4810	(21400)	01	5C14DA	5177
0.280	26400	(2980)	1.42	II	4810	(21400)	0.338	21900	(2470)	1.72	II	4810	(21400)	01	5C14DB	5177
0.280	26400	(2980)	1.42	II	4810	(21400)	0.338	21900	(2470)	1.72	II	4810	(21400)	01	5C14DC	5177
0.280	26400	(2980)	1.12	I	4810	(21400)	0.338	21900	(2470)	2.08	III	4810	(21400)	01	5C16DA	5177
0.201	36900	(4170)	1.12	I	4810	(21400)	0.242	30500	(3450)	1.35	I	4810	(21400)	01	5C14DC	7228
0.201	36900	(4170)	1.23	I	4810	(21400)	0.242	30500	(3450)	1.49	II	4810	(21400)	01	5C16DA	7228

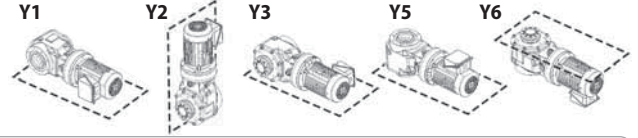
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1/4 HP (0.2 kW)

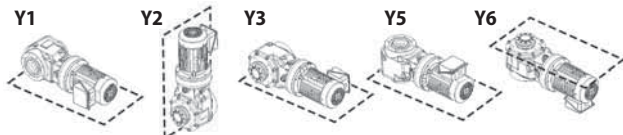
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
8.12	1920	(217)	2.80	III	1440	(6390)	9.80	1590	(180)	2.80	III	1440	(6390)	02	5Z100	179
7.02	2220	(251)	2.58	III	1440	(6390)	8.47	1840	(208)	2.58	III	1440	(6390)	02	5Z100	207
5.84	2670	(302)	2.18	III	1440	(6390)	7.04	2210	(250)	2.18	III	1440	(6390)	02	5Z100	249
5.84	2670	(302)	2.53	III	1440	(6390)	7.04	2210	(250)	2.75	III	1440	(6390)	02	5Z105	249
5.84	2670	(302)	2.75	III	1440	(6390)	7.04	2210	(250)	2.75	III	1440	(6390)	02	5Z115	249
5.84	2670	(302)	2.75	III	1440	(6390)	7.04	2210	(250)	2.75	III	1440	(6390)	02	5Z125	249
4.76	3270	(370)	2.17	III	1440	(6390)	5.75	2710	(306)	2.17	III	1440	(6390)	02	5Z100	305
4.76	3270	(370)	2.24	III	1440	(6390)	5.75	2710	(306)	2.24	III	1440	(6390)	02	5Z105	305
4.76	3270	(370)	2.24	III	1440	(6390)	5.75	2710	(306)	2.24	III	1440	(6390)	02	5Z115	305
4.76	3270	(370)	2.24	III	1440	(6390)	5.75	2710	(306)	2.24	III	1440	(6390)	02	5Z125	305
3.98	3720	(420)	1.98	II	1440	(6390)	4.81	3080	(348)	2.04	III	1440	(6390)	02	5Z10DA	364
3.98	3720	(420)	1.98	II	1440	(6390)	4.81	3080	(348)	2.04	III	1440	(6390)	02	5Z12DA	364
3.98	3720	(420)	1.98	II	1440	(6390)	4.81	3080	(348)	2.39	III	1440	(6390)	02	5Z12DB	364
3.98	3720	(420)	2.04	III	1810	(8060)	4.81	3080	(348)	2.04	III	1810	(8060)	02	5A12DA	364
3.98	3720	(420)	2.04	III	2970	(13200)	4.81	3080	(348)	2.04	III	2970	(13200)	02	5B12DA	364
3.98	3720	(420)	2.04	III	2970	(13200)	4.81	3080	(348)	2.04	III	2970	(13200)	02	5B14DA	364
3.98	3720	(420)	2.04	III	4810	(21400)	4.81	3080	(348)	2.04	III	4810	(21400)	02	5C14DA	364
3.42	4320	(488)	1.70	II	1440	(6390)	4.13	3580	(404)	2.04	III	1440	(6390)	02	5Z10DA	424
3.42	4320	(488)	1.70	II	1440	(6390)	4.13	3580	(404)	2.04	III	1440	(6390)	02	5Z12DA	424
3.42	4320	(488)	1.70	II	1440	(6390)	4.13	3580	(404)	2.05	III	1440	(6390)	02	5Z12DB	424
3.42	4320	(488)	2.04	III	1810	(8060)	4.13	3580	(404)	2.04	III	1810	(8060)	02	5A12DA	424
3.42	4320	(488)	2.65	III	1810	(8060)	4.13	3580	(404)	3.19	III	1810	(8060)	02	5A12DB	424
3.42	4320	(488)	2.04	III	2970	(13200)	4.13	3580	(404)	2.04	III	2970	(13200)	02	5B12DA	424
3.42	4320	(488)	2.04	III	2970	(13200)	4.13	3580	(404)	2.04	III	2970	(13200)	02	5B14DA	424
3.42	4320	(488)	2.04	III	4810	(21400)	4.13	3580	(404)	2.04	III	4810	(21400)	02	5C14DA	424
2.90	5110	(577)	1.44	II	1440	(6390)	3.50	4230	(478)	1.74	II	1440	(6390)	02	5Z10DA	501
2.90	5110	(577)	1.44	II	1440	(6390)	3.50	4230	(478)	1.74	II	1440	(6390)	02	5Z12DA	501
2.90	5110	(577)	1.44	II	1440	(6390)	3.50	4230	(478)	1.74	II	1440	(6390)	02	5Z12DB	501
2.90	5110	(577)	2.04	III	1810	(8060)	3.50	4230	(478)	2.04	III	1810	(8060)	02	5A12DA	501
2.90	5110	(577)	2.24	III	1810	(8060)	3.50	4230	(478)	2.70	III	1810	(8060)	02	5A12DB	501
2.90	5110	(577)	2.04	III	2970	(13200)	3.50	4230	(478)	2.04	III	2970	(13200)	02	5B12DA	501
2.90	5110	(577)	2.04	III	2970	(13200)	3.50	4230	(478)	2.04	III	2970	(13200)	02	5B14DA	501
2.90	5110	(577)	2.04	III	4810	(21400)	3.50	4230	(478)	2.04	III	4810	(21400)	02	5C14DA	501
2.51	5890	(666)	1.25	I	1440	(6390)	3.03	4890	(552)	1.51	II	1440	(6390)	02	5Z10DA	578
2.51	5890	(666)	1.25	I	1440	(6390)	3.03	4890	(552)	1.51	II	1440	(6390)	02	5Z12DA	578
2.51	5890	(666)	1.25	I	1440	(6390)	3.03	4890	(552)	1.51	II	1440	(6390)	02	5Z12DB	578
2.51	5890	(666)	1.94	II	1810	(8060)	3.03	4890	(552)	2.04	III	1810	(8060)	02	5A12DA	578
2.51	5890	(666)	1.94	II	1810	(8060)	3.03	4890	(552)	2.34	III	1810	(8060)	02	5A12DB	578
2.51	5890	(666)	2.04	III	2970	(13200)	3.03	4890	(552)	2.04	III	2970	(13200)	02	5B12DA	578
2.51	5890	(666)	2.04	III	2970	(13200)	3.03	4890	(552)	2.04	III	2970	(13200)	02	5B14DA	578
2.51	5890	(666)	2.04	III	4810	(21400)	3.03	4890	(552)	2.04	III	4810	(21400)	02	5C14DA	578

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

1/4 HP (0.2 kW)

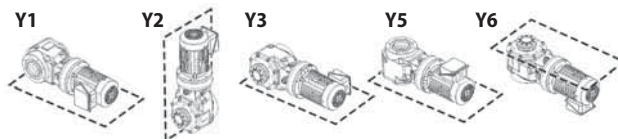
50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
2.12	6970	(787)	1.06	I	1440	(6390)	2.56	5770	(652)	1.28	I	1440	(6390)	02	5Z10DA	683
2.12	6970	(787)	1.06	I	1440	(6390)	2.56	5770	(652)	1.28	I	1440	(6390)	02	5Z12DA	683
2.12	6970	(787)	1.06	I	1440	(6390)	2.56	5770	(652)	1.28	I	1440	(6390)	02	5Z12DB	683
2.12	6970	(787)	1.64	II	1810	(8060)	2.56	5770	(652)	1.98	II	1810	(8060)	02	5A12DA	683
2.12	6970	(787)	1.64	II	1810	(8060)	2.56	5770	(652)	1.98	II	1810	(8060)	02	5A12DB	683
2.12	6970	(787)	2.04	III	2970	(13200)	2.56	5770	(652)	2.04	III	2970	(13200)	02	5B12DA	683
2.12	6970	(787)	2.73	III	2970	(13200)	2.56	5770	(652)	3.29	III	2970	(13200)	02	5B12DB	683
2.12	6970	(787)	2.04	III	2970	(13200)	2.56	5770	(652)	2.04	III	2970	(13200)	02	5B14DA	683
2.12	6970	(787)	2.04	III	4810	(21400)	2.56	5770	(652)	2.04	III	4810	(21400)	02	5C14DA	683
1.79	8250	(932)	0.89	—	1440	(6390)	2.16	6830	(772)	1.08	I	1440	(6390)	02	5Z10DA	809
1.79	8250	(932)	0.89	—	1440	(6390)	2.16	6830	(772)	1.08	I	1440	(6390)	02	5Z12DA	809
1.79	8250	(932)	0.89	—	1440	(6390)	2.16	6830	(772)	1.08	I	1440	(6390)	02	5Z12DB	809
1.79	8250	(932)	1.38	I	1810	(8060)	2.16	6830	(772)	1.67	II	1810	(8060)	02	5A12DA	809
1.79	8250	(932)	1.39	I	1810	(8060)	2.16	6830	(772)	1.67	II	1810	(8060)	02	5A12DB	809
1.79	8250	(932)	2.04	III	2970	(13200)	2.16	6830	(772)	2.04	III	2970	(13200)	02	5B12DA	809
1.79	8250	(932)	2.30	III	2970	(13200)	2.16	6830	(772)	2.78	III	2970	(13200)	02	5B12DB	809
1.79	8250	(932)	2.04	III	2970	(13200)	2.16	6830	(772)	2.04	III	2970	(13200)	02	5B14DA	809
1.79	8250	(932)	2.76	III	2970	(13200)	2.16	6830	(772)	3.33	III	2970	(13200)	02	5B14DB	809
1.79	8250	(932)	2.04	III	4810	(21400)	2.16	6830	(772)	2.04	III	4810	(21400)	02	5C14DA	809
1.52	9740	(1100)	1.17	I	1810	(8060)	1.83	8080	(913)	1.41	II	1810	(8060)	02	5A12DA	956
1.52	9740	(1100)	1.17	I	1810	(8060)	1.83	8080	(913)	1.42	II	1810	(8060)	02	5A12DB	956
1.52	9740	(1100)	1.95	II	2970	(13200)	1.83	8080	(913)	2.04	III	2970	(13200)	02	5B12DA	956
1.52	9740	(1100)	1.95	II	2970	(13200)	1.83	8080	(913)	2.35	III	2970	(13200)	02	5B12DB	956
1.52	9740	(1100)	2.04	III	2970	(13200)	1.83	8080	(913)	2.04	III	2970	(13200)	02	5B14DA	956
1.52	9740	(1100)	2.33	III	2970	(13200)	1.83	8080	(913)	2.82	III	2970	(13200)	02	5B14DB	956
1.52	9740	(1100)	2.04	III	4810	(21400)	1.83	8080	(913)	2.04	III	4810	(21400)	02	5C14DA	956
1.30	11400	(1290)	1.00	I	1810	(8060)	1.57	9470	(1070)	1.21	I	1810	(8060)	02	5A12DA	1117
1.30	11400	(1290)	1.00	I	1810	(8060)	1.57	9470	(1070)	1.21	I	1810	(8060)	02	5A12DB	1117
1.30	11400	(1290)	1.67	II	2970	(13200)	1.57	9470	(1070)	2.01	III	2970	(13200)	02	5B12DA	1117
1.30	11400	(1290)	1.67	II	2970	(13200)	1.57	9470	(1070)	2.01	III	2970	(13200)	02	5B12DB	1117
1.30	11400	(1290)	2.00	III	2970	(13200)	1.57	9470	(1070)	2.04	III	2970	(13200)	02	5B14DA	1117
1.30	11400	(1290)	2.00	III	2970	(13200)	1.57	9470	(1070)	2.41	III	2970	(13200)	02	5B14DB	1117
1.30	11400	(1290)	2.04	III	4810	(21400)	1.57	9470	(1070)	2.04	III	4810	(21400)	02	5C14DA	1117
1.10	13500	(1520)	0.85	—	1810	(8060)	1.33	11200	(1260)	1.03	I	1810	(8060)	02	5A12DA	1320
1.10	13500	(1520)	0.85	—	1810	(8060)	1.33	11200	(1260)	1.03	I	1810	(8060)	02	5A12DB	1320
1.10	13500	(1520)	1.41	II	2970	(13200)	1.33	11200	(1260)	1.70	II	2970	(13200)	02	5B12DA	1320
1.10	13500	(1520)	1.41	II	2970	(13200)	1.33	11200	(1260)	1.70	II	2970	(13200)	02	5B12DB	1320
1.10	13500	(1520)	1.69	II	2970	(13200)	1.33	11200	(1260)	2.04	III	2970	(13200)	02	5B14DA	1320
1.10	13500	(1520)	1.69	II	2970	(13200)	1.33	11200	(1260)	2.04	III	2970	(13200)	02	5B14DB	1320
1.10	13500	(1520)	2.04	III	4810	(21400)	1.33	11200	(1260)	2.04	III	4810	(21400)	02	5C14DA	1320

Gearmotors Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1/4 HP (0.2 kW)

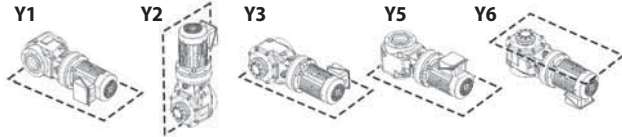
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

Output Speed RPM	50 Hz					60 Hz					Unit Selection					
	Output Torque		Service Factor		Hollow Shaft Overhung Load	Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio		
	in-lbs	(N·m)	SF	AGMA Class	lbs		(N)	in-lbs	(N·m)	SF					AGMA Class	lbs
0.876	16900	(1910)	1.13	I	2970	(13200)	1.06	14000	(1580)	1.36	I	2970	(13200)	02	5B12DA	1656
0.876	16900	(1910)	1.13	I	2970	(13200)	1.06	14000	(1580)	1.36	I	2970	(13200)	02	5B12DB	1656
0.876	16900	(1910)	1.35	I	2970	(13200)	1.06	14000	(1580)	1.63	II	2970	(13200)	02	5B14DA	1656
0.876	16900	(1910)	1.35	I	2970	(13200)	1.06	14000	(1580)	1.63	II	2970	(13200)	02	5B14DB	1656
0.876	16900	(1910)	2.04	III	4810	(21400)	1.06	14000	(1580)	2.04	III	4810	(21400)	02	5C14DA	1656
0.876	16900	(1910)	2.45	III	4810	(21400)	1.06	14000	(1580)	2.95	III	4810	(21400)	02	5C14DB	1656
0.876	16900	(1910)	2.45	III	4810	(21400)	1.06	14000	(1580)	2.95	III	4810	(21400)	02	5C14DC	1656
0.876	16900	(1910)	2.69	III	4810	(21400)	1.06	14000	(1580)	3.25	III	4810	(21400)	02	5C16DA	1656
0.741	20000	(2260)	0.95	—	2970	(13200)	0.894	16600	(1870)	1.15	I	2970	(13200)	02	5B12DA	1957
0.741	20000	(2260)	0.95	—	2970	(13200)	0.894	16600	(1870)	1.15	I	2970	(13200)	02	5B12DB	1957
0.741	20000	(2260)	1.14	I	2970	(13200)	0.894	16600	(1870)	1.38	I	2970	(13200)	02	5B14DA	1957
0.741	20000	(2260)	1.14	I	2970	(13200)	0.894	16600	(1870)	1.38	I	2970	(13200)	02	5B14DB	1957
0.741	20000	(2260)	2.04	III	4810	(21400)	0.894	16600	(1870)	2.04	III	4810	(21400)	02	5C14DA	1957
0.741	20000	(2260)	2.07	III	4810	(21400)	0.894	16600	(1870)	2.50	III	4810	(21400)	02	5C14DB	1957
0.741	20000	(2260)	2.07	III	4810	(21400)	0.894	16600	(1870)	2.50	III	4810	(21400)	02	5C14DC	1957
0.741	20000	(2260)	2.28	III	4810	(21400)	0.894	16600	(1870)	2.75	III	4810	(21400)	02	5C16DA	1957
0.638	23200	(2620)	0.82	—	2970	(13200)	0.770	19200	(2170)	0.99	—	2970	(13200)	02	5B12DA	2272
0.638	23200	(2620)	0.82	—	2970	(13200)	0.770	19200	(2170)	0.99	—	2970	(13200)	02	5B12DB	2272
0.638	23200	(2620)	0.98	—	2970	(13200)	0.770	19200	(2170)	1.19	I	2970	(13200)	02	5B14DA	2272
0.638	23200	(2620)	0.98	—	2970	(13200)	0.770	19200	(2170)	1.19	I	2970	(13200)	02	5B14DB	2272
0.638	23200	(2620)	1.78	II	4810	(21400)	0.770	19200	(2170)	2.04	III	4810	(21400)	02	5C14DA	2272
0.638	23200	(2620)	1.78	II	4810	(21400)	0.770	19200	(2170)	2.15	III	4810	(21400)	02	5C14DB	2272
0.638	23200	(2620)	1.78	II	4810	(21400)	0.770	19200	(2170)	2.15	III	4810	(21400)	02	5C14DC	2272
0.638	23200	(2620)	1.96	II	4810	(21400)	0.770	19200	(2170)	2.37	III	4810	(21400)	02	5C16DA	2272
0.567	26100	(2950)	0.87	—	2970	(13200)	0.684	21600	(2440)	1.05	I	2970	(13200)	02	5B14DA	2559
0.567	26100	(2950)	0.87	—	2970	(13200)	0.684	21600	(2440)	1.05	I	2970	(13200)	02	5B14DB	2559
0.567	26100	(2950)	1.58	II	4810	(21400)	0.684	21600	(2440)	1.91	II	4810	(21400)	02	5C14DA	2559
0.567	26100	(2950)	1.58	II	4810	(21400)	0.684	21600	(2440)	1.91	II	4810	(21400)	02	5C14DB	2559
0.567	26100	(2950)	1.58	II	4810	(21400)	0.684	21600	(2440)	1.91	II	4810	(21400)	02	5C14DC	2559
0.567	26100	(2950)	1.74	II	4810	(21400)	0.684	21600	(2440)	2.10	III	4810	(21400)	02	5C16DA	2559
0.493	30000	(3390)	1.38	I	4810	(21400)	0.595	24900	(2810)	1.43	II	4810	(21400)	02	5C14DA	2944
0.493	30000	(3390)	1.38	I	4810	(21400)	0.595	24900	(2810)	1.66	II	4810	(21400)	02	5C14DB	2944
0.493	30000	(3390)	1.38	I	4810	(21400)	0.595	24900	(2810)	1.66	II	4810	(21400)	02	5C14DC	2944
0.493	30000	(3390)	1.52	II	4810	(21400)	0.595	24900	(2810)	1.83	II	4810	(21400)	02	5C16DA	2944
0.413	35800	(4050)	1.15	I	4810	(21400)	0.499	29600	(3350)	1.39	I	4810	(21400)	02	5C14DA	3511
0.413	35800	(4050)	1.15	I	4810	(21400)	0.499	29600	(3350)	1.39	I	4810	(21400)	02	5C14DB	3511
0.413	35800	(4050)	1.15	I	4810	(21400)	0.499	29600	(3350)	1.39	I	4810	(21400)	02	5C14DC	3511
0.413	35800	(4050)	1.27	I	4810	(21400)	0.499	29600	(3350)	1.53	II	4810	(21400)	02	5C16DA	3511
0.332	44500	(5030)	0.93	—	4810	(21400)	0.401	36900	(4170)	1.12	I	4810	(21400)	02	5C14DA	4365
0.332	44500	(5030)	0.93	—	4810	(21400)	0.401	36900	(4170)	1.12	I	4810	(21400)	02	5C14DB	4365
0.332	44500	(5030)	0.93	—	4810	(21400)	0.401	36900	(4170)	1.12	I	4810	(21400)	02	5C14DC	4365
0.332	44500	(5030)	1.02	I	4810	(21400)	0.401	36900	(4170)	1.23	I	4810	(21400)	02	5C16DA	4365
0.280	52800	(5970)	0.86	—	4810	(21400)	0.338	43700	(4940)	1.04	I	4810	(21400)	02	5C16DA	5177
0.280	52800	(5970)	0.86	—	4810	(21400)	0.338	43700	(4940)	1.04	I	4810	(21400)	02	5C17DA	5177

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

1/3 HP (0.25 kW)

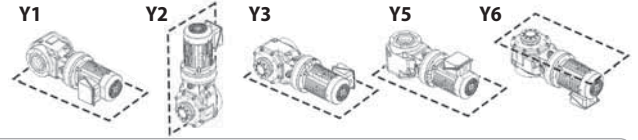
50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in·lbs	(N·m)	SF	AGMA Class	lbs	(N)		in·lbs	(N·m)	SF	AGMA Class	lbs	(N)			
8.12	2400	(271)	2.24	III	1440	(6390)	9.80	1990	(225)	2.24	III	1440	(6390)	03	SZ100	179
7.02	2770	(313)	2.06	III	1440	(6390)	8.47	2300	(260)	2.06	III	1440	(6390)	03	SZ100	207
7.02	2770	(313)	2.65	III	1440	(6390)	8.47	2300	(260)	2.65	III	1440	(6390)	03	SZ105	207
7.02	2770	(313)	2.65	III	1440	(6390)	8.47	2300	(260)	2.65	III	1440	(6390)	03	SZ115	207
7.02	2770	(313)	2.65	III	1440	(6390)	8.47	2300	(260)	2.65	III	1440	(6390)	03	SZ125	207
5.84	3340	(377)	1.74	II	1440	(6390)	7.04	2770	(313)	1.74	II	1440	(6390)	03	SZ100	249
5.84	3340	(377)	2.02	III	1440	(6390)	7.04	2770	(313)	2.20	III	1440	(6390)	03	SZ105	249
5.84	3340	(377)	2.20	III	1440	(6390)	7.04	2770	(313)	2.20	III	1440	(6390)	03	SZ115	249
5.84	3340	(377)	2.20	III	1440	(6390)	7.04	2770	(313)	2.20	III	1440	(6390)	03	SZ125	249
5.84	3340	(377)	2.68	III	1810	(8060)	7.04	2770	(313)	2.68	III	1810	(8060)	03	SA110	249
4.76	4090	(462)	1.73	II	1440	(6390)	5.75	3390	(383)	1.73	II	1440	(6390)	03	SZ100	305
4.76	4090	(462)	1.80	II	1440	(6390)	5.75	3390	(383)	1.80	II	1440	(6390)	03	SZ105	305
4.76	4090	(462)	1.80	II	1440	(6390)	5.75	3390	(383)	1.80	II	1440	(6390)	03	SZ115	305
4.76	4090	(462)	1.80	II	1440	(6390)	5.75	3390	(383)	1.80	II	1440	(6390)	03	SZ125	305
4.76	4090	(462)	2.64	III	1810	(8060)	5.75	3390	(383)	2.64	III	1810	(8060)	03	SA110	305
4.76	4090	(462)	2.79	III	1810	(8060)	5.75	3390	(383)	2.79	III	1810	(8060)	03	SA115	305
4.76	4090	(462)	2.79	III	1810	(8060)	5.75	3390	(383)	2.79	III	1810	(8060)	03	SA125	305
4.76	4090	(462)	2.79	III	1810	(8060)	5.75	3390	(383)	2.79	III	1810	(8060)	03	SA145	305
3.98	4640	(524)	1.58	II	1440	(6390)	4.81	3850	(435)	1.63	II	1440	(6390)	03	SZ10DA	364
3.98	4640	(524)	1.58	II	1440	(6390)	4.81	3850	(435)	1.63	II	1440	(6390)	03	SZ12DA	364
3.98	4640	(524)	1.58	II	1440	(6390)	4.81	3850	(435)	1.91	II	1440	(6390)	03	SZ12DB	364
3.98	4640	(524)	1.63	II	1810	(8060)	4.81	3850	(435)	1.63	II	1810	(8060)	03	SA12DA	364
3.98	4640	(524)	2.46	III	1810	(8060)	4.81	3850	(435)	2.97	III	1810	(8060)	03	SA12DB	364
3.98	4640	(524)	1.63	II	2970	(13200)	4.81	3850	(435)	1.63	II	2970	(13200)	03	SB12DA	364
3.98	4640	(524)	1.63	II	2970	(13200)	4.81	3850	(435)	1.63	II	2970	(13200)	03	SB14DA	364
3.98	4640	(524)	1.63	II	4810	(21400)	4.81	3850	(435)	1.63	II	4810	(21400)	03	SC14DA	364
3.42	5400	(610)	1.36	I	1440	(6390)	4.13	4480	(506)	1.63	II	1440	(6390)	03	SZ10DA	424
3.42	5400	(610)	1.36	I	1440	(6390)	4.13	4480	(506)	1.63	II	1440	(6390)	03	SZ12DA	424
3.42	5400	(610)	1.36	I	1440	(6390)	4.13	4480	(506)	1.64	II	1440	(6390)	03	SZ12DB	424
3.42	5400	(610)	1.63	II	1810	(8060)	4.13	4480	(506)	1.63	II	1810	(8060)	03	SA12DA	424
3.42	5400	(610)	2.11	III	1810	(8060)	4.13	4480	(506)	2.55	III	1810	(8060)	03	SA12DB	424
3.42	5400	(610)	1.63	II	2970	(13200)	4.13	4480	(506)	1.63	II	2970	(13200)	03	SB12DA	424
3.42	5400	(610)	1.63	II	2970	(13200)	4.13	4480	(506)	1.63	II	2970	(13200)	03	SB14DA	424
3.42	5400	(610)	1.63	II	4810	(21400)	4.13	4480	(506)	1.63	II	4810	(21400)	03	SC14DA	424
2.90	6380	(721)	1.15	I	1440	(6390)	3.50	5280	(597)	1.39	I	1440	(6390)	03	SZ10DA	501
2.90	6380	(721)	1.15	I	1440	(6390)	3.50	5280	(597)	1.39	I	1440	(6390)	03	SZ12DA	501
2.90	6380	(721)	1.15	I	1440	(6390)	3.50	5280	(597)	1.39	I	1440	(6390)	03	SZ12DB	501
2.90	6380	(721)	1.63	II	1810	(8060)	3.50	5280	(597)	1.63	II	1810	(8060)	03	SA12DA	501
2.90	6380	(721)	1.79	II	1810	(8060)	3.50	5280	(597)	2.16	III	1810	(8060)	03	SA12DB	501
2.90	6380	(721)	1.63	II	2970	(13200)	3.50	5280	(597)	1.63	II	2970	(13200)	03	SB12DA	501
2.90	6380	(721)	2.97	III	2970	(13200)	3.50	5280	(597)	3.59	III	2970	(13200)	03	SB12DB	501
2.90	6380	(721)	1.63	II	2970	(13200)	3.50	5280	(597)	1.63	II	2970	(13200)	03	SB14DA	501
2.90	6380	(721)	1.63	II	4810	(21400)	3.50	5280	(597)	1.63	II	4810	(21400)	03	SC14DA	501

Gearmotors
Selection
Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1/3 HP (0.25 kW)

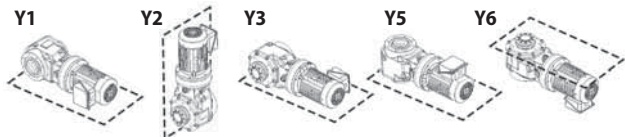
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
2.51	7360	(832)	1.00	—	1440	(6390)	3.03	6100	(689)	1.20	I	1440	(6390)	03	5Z10DA	578
2.51	7360	(832)	1.00	—	1440	(6390)	3.03	6100	(689)	1.20	I	1440	(6390)	03	5Z12DA	578
2.51	7360	(832)	1.00	—	1440	(6390)	3.03	6100	(689)	1.20	I	1440	(6390)	03	5Z12DB	578
2.51	7360	(832)	1.55	II	1810	(8060)	3.03	6100	(689)	1.63	II	1810	(8060)	03	5A12DA	578
2.51	7360	(832)	1.55	II	1810	(8060)	3.03	6100	(689)	1.87	II	1810	(8060)	03	5A12DB	578
2.51	7360	(832)	1.63	II	2970	(13200)	3.03	6100	(689)	1.63	II	2970	(13200)	03	5B12DA	578
2.51	7360	(832)	2.58	III	2970	(13200)	3.03	6100	(689)	3.11	III	2970	(13200)	03	5B12DB	578
2.51	7360	(832)	1.63	II	2970	(13200)	3.03	6100	(689)	1.63	II	2970	(13200)	03	5B14DA	578
2.51	7360	(832)	1.63	II	4810	(21400)	3.03	6100	(689)	1.63	II	4810	(21400)	03	5C14DA	578
2.12	8700	(983)	0.84	—	1440	(6390)	2.56	7210	(815)	1.02	I	1440	(6390)	03	5Z10DA	683
2.12	8700	(983)	0.84	—	1440	(6390)	2.56	7210	(815)	1.02	I	1440	(6390)	03	5Z12DA	683
2.12	8700	(983)	0.84	—	1440	(6390)	2.56	7210	(815)	1.02	I	1440	(6390)	03	5Z12DB	683
2.12	8700	(983)	1.31	I	1810	(8060)	2.56	7210	(815)	1.58	II	1810	(8060)	03	5A12DA	683
2.12	8700	(983)	1.31	I	1810	(8060)	2.56	7210	(815)	1.58	II	1810	(8060)	03	5A12DB	683
2.12	8700	(983)	1.63	II	2970	(13200)	2.56	7210	(815)	1.63	II	2970	(13200)	03	5B12DA	683
2.12	8700	(983)	2.18	III	2970	(13200)	2.56	7210	(815)	2.63	III	2970	(13200)	03	5B12DB	683
2.12	8700	(983)	1.63	II	2970	(13200)	2.56	7210	(815)	1.63	II	2970	(13200)	03	5B14DA	683
2.12	8700	(983)	2.61	III	2970	(13200)	2.56	7210	(815)	3.15	III	2970	(13200)	03	5B14DB	683
2.12	8700	(983)	1.63	II	4810	(21400)	2.56	7210	(815)	1.63	II	4810	(21400)	03	5C14DA	683
1.79	10300	(1160)	1.11	I	1810	(8060)	2.16	8540	(965)	1.34	I	1810	(8060)	03	5A12DA	809
1.79	10300	(1160)	1.11	I	1810	(8060)	2.16	8540	(965)	1.34	I	1810	(8060)	03	5A12DB	809
1.79	10300	(1160)	1.63	II	2970	(13200)	2.16	8540	(965)	1.63	II	2970	(13200)	03	5B12DA	809
1.79	10300	(1160)	1.84	II	2970	(13200)	2.16	8540	(965)	2.22	III	2970	(13200)	03	5B12DB	809
1.79	10300	(1160)	1.63	II	2970	(13200)	2.16	8540	(965)	1.63	II	2970	(13200)	03	5B14DA	809
1.79	10300	(1160)	2.21	III	2970	(13200)	2.16	8540	(965)	2.66	III	2970	(13200)	03	5B14DB	809
1.79	10300	(1160)	1.63	II	4810	(21400)	2.16	8540	(965)	1.63	II	4810	(21400)	03	5C14DA	809
1.52	12200	(1380)	0.94	—	1810	(8060)	1.83	10100	(1140)	1.13	I	1810	(8060)	03	5A12DA	956
1.52	12200	(1380)	0.94	—	1810	(8060)	1.83	10100	(1140)	1.13	I	1810	(8060)	03	5A12DB	956
1.52	12200	(1380)	1.56	II	2970	(13200)	1.83	10100	(1140)	1.63	II	2970	(13200)	03	5B12DA	956
1.52	12200	(1380)	1.56	II	2970	(13200)	1.83	10100	(1140)	1.88	II	2970	(13200)	03	5B12DB	956
1.52	12200	(1380)	1.63	II	2970	(13200)	1.83	10100	(1140)	1.63	II	2970	(13200)	03	5B14DA	956
1.52	12200	(1380)	1.87	II	2970	(13200)	1.83	10100	(1140)	2.25	III	2970	(13200)	03	5B14DB	956
1.52	12200	(1380)	1.63	II	4810	(21400)	1.83	10100	(1140)	1.63	II	4810	(21400)	03	5C14DA	956
1.30	14200	(1610)	1.33	I	2970	(13200)	1.57	11800	(1330)	1.61	II	2970	(13200)	03	5B12DA	1117
1.30	14200	(1610)	1.33	I	2970	(13200)	1.57	11800	(1330)	1.61	II	2970	(13200)	03	5B12DB	1117
1.30	14200	(1610)	1.60	II	2970	(13200)	1.57	11800	(1330)	1.63	II	2970	(13200)	03	5B14DA	1117
1.30	14200	(1610)	1.60	II	2970	(13200)	1.57	11800	(1330)	1.93	II	2970	(13200)	03	5B14DB	1117
1.30	14200	(1610)	1.63	II	4810	(21400)	1.57	11800	(1330)	1.63	II	4810	(21400)	03	5C14DA	1117
1.30	14200	(1610)	2.90	III	4810	(21400)	1.57	11800	(1330)	3.50	III	4810	(21400)	03	5C14DB	1117
1.30	14200	(1610)	2.90	III	4810	(21400)	1.57	11800	(1330)	3.50	III	4810	(21400)	03	5C14DC	1117

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83
Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92
Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103
Double Reduction, Y2 3.104

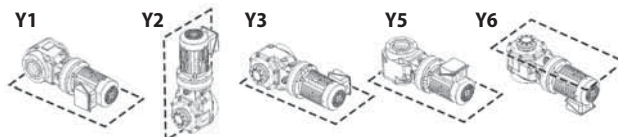
1/3 HP (0.25 kW)

50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in·lbs	(N·m)	SF	AGMA Class	lbs	(N)		in·lbs	(N·m)	SF	AGMA Class	lbs	(N)			
1.10	16800	(1900)	1.13	I	2970	(13200)	1.33	14000	(1580)	1.36	I	2970	(13200)	03	5B12DA	1320
1.10	16800	(1900)	1.13	I	2970	(13200)	1.33	14000	(1580)	1.36	I	2970	(13200)	03	5B12DB	1320
1.10	16800	(1900)	1.35	I	2970	(13200)	1.33	14000	(1580)	1.63	II	2970	(13200)	03	5B14DA	1320
1.10	16800	(1900)	1.35	I	2970	(13200)	1.33	14000	(1580)	1.63	II	2970	(13200)	03	5B14DB	1320
1.10	16800	(1900)	1.63	II	4810	(21400)	1.33	14000	(1580)	1.63	II	4810	(21400)	03	5C14DA	1320
1.10	16800	(1900)	2.45	III	4810	(21400)	1.33	14000	(1580)	2.96	III	4810	(21400)	03	5C14DB	1320
1.10	16800	(1900)	2.45	III	4810	(21400)	1.33	14000	(1580)	2.96	III	4810	(21400)	03	5C14DC	1320
1.10	16800	(1900)	2.70	III	4810	(21400)	1.33	14000	(1580)	3.26	III	4810	(21400)	03	5C16DA	1320
0.876	21200	(2390)	0.90	—	2970	(13200)	1.06	17500	(1980)	1.08	I	2970	(13200)	03	5B12DA	1656
0.876	21200	(2390)	0.90	—	2970	(13200)	1.06	17500	(1980)	1.08	I	2970	(13200)	03	5B12DB	1656
0.876	21200	(2390)	1.08	I	2970	(13200)	1.06	17500	(1980)	1.30	I	2970	(13200)	03	5B14DA	1656
0.876	21200	(2390)	1.08	I	2970	(13200)	1.06	17500	(1980)	1.30	I	2970	(13200)	03	5B14DB	1656
0.876	21200	(2390)	1.63	II	4810	(21400)	1.06	17500	(1980)	1.63	II	4810	(21400)	03	5C14DA	1656
0.876	21200	(2390)	1.96	II	4810	(21400)	1.06	17500	(1980)	2.36	III	4810	(21400)	03	5C14DB	1656
0.876	21200	(2390)	1.96	II	4810	(21400)	1.06	17500	(1980)	2.36	III	4810	(21400)	03	5C14DC	1656
0.876	21200	(2390)	2.16	III	4810	(21400)	1.06	17500	(1980)	2.60	III	4810	(21400)	03	5C16DA	1656
0.741	25000	(2820)	0.91	—	2970	(13200)	0.894	20700	(2340)	1.10	I	2970	(13200)	03	5B14DA	1957
0.741	25000	(2820)	0.91	—	2970	(13200)	0.894	20700	(2340)	1.10	I	2970	(13200)	03	5B14DB	1957
0.741	25000	(2820)	1.63	II	4810	(21400)	0.894	20700	(2340)	1.63	II	4810	(21400)	03	5C14DA	1957
0.741	25000	(2820)	1.65	II	4810	(21400)	0.894	20700	(2340)	2.00	III	4810	(21400)	03	5C14DB	1957
0.741	25000	(2820)	1.65	II	4810	(21400)	0.894	20700	(2340)	2.00	III	4810	(21400)	03	5C14DC	1957
0.741	25000	(2820)	1.82	II	4810	(21400)	0.894	20700	(2340)	2.20	III	4810	(21400)	03	5C16DA	1957
0.638	28900	(3270)	1.42	II	4810	(21400)	0.770	24000	(2710)	1.63	II	4810	(21400)	03	5C14DA	2272
0.638	28900	(3270)	1.42	II	4810	(21400)	0.770	24000	(2710)	1.72	II	4810	(21400)	03	5C14DB	2272
0.638	28900	(3270)	1.42	II	4810	(21400)	0.770	24000	(2710)	1.72	II	4810	(21400)	03	5C14DC	2272
0.638	28900	(3270)	1.57	II	4810	(21400)	0.770	24000	(2710)	1.90	II	4810	(21400)	03	5C16DA	2272
0.567	32700	(3690)	1.26	I	4810	(21400)	0.684	27000	(3050)	1.53	II	4810	(21400)	03	5C14DA	2559
0.567	32700	(3690)	1.26	I	4810	(21400)	0.684	27000	(3050)	1.53	II	4810	(21400)	03	5C14DB	2559
0.567	32700	(3690)	1.26	I	4810	(21400)	0.684	27000	(3050)	1.53	II	4810	(21400)	03	5C14DC	2559
0.567	32700	(3690)	1.39	I	4810	(21400)	0.684	27000	(3050)	1.68	II	4810	(21400)	03	5C16DA	2559
0.493	37500	(4240)	1.10	I	4810	(21400)	0.595	31100	(3510)	1.14	I	4810	(21400)	03	5C14DA	2944
0.493	37500	(4240)	1.10	I	4810	(21400)	0.595	31100	(3510)	1.33	I	4810	(21400)	03	5C14DB	2944
0.493	37500	(4240)	1.10	I	4810	(21400)	0.595	31100	(3510)	1.33	I	4810	(21400)	03	5C14DC	2944
0.493	37500	(4240)	1.21	I	4810	(21400)	0.595	31100	(3510)	1.46	II	4810	(21400)	03	5C16DA	2944
0.413	44800	(5060)	0.92	—	4810	(21400)	0.499	37100	(4190)	1.11	I	4810	(21400)	03	5C14DA	3511
0.413	44800	(5060)	0.92	—	4810	(21400)	0.499	37100	(4190)	1.11	I	4810	(21400)	03	5C14DB	3511
0.413	44800	(5060)	0.92	—	4810	(21400)	0.499	37100	(4190)	1.11	I	4810	(21400)	03	5C14DC	3511
0.413	44800	(5060)	1.02	I	4810	(21400)	0.499	37100	(4190)	1.23	I	4810	(21400)	03	5C16DA	3511
0.332	55700	(6290)	0.82	—	4810	(21400)	0.401	46100	(5210)	0.99	—	4810	(21400)	03	5C16DA	4365

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



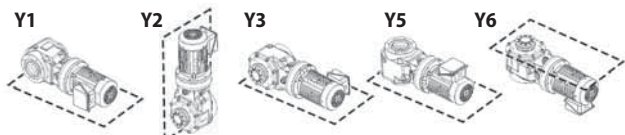
1/2 HP (0.4 kW)

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

50 Hz						60 Hz						Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs (N)		in-lbs	(N·m)	SF	AGMA Class	lbs (N)			
12.9	2410	(272)	2.44	III	1440 (6390)	15.6	1990	(225)	2.44	III	1440 (6390)	05	SZ100	112
12.9	2410	(272)	3.00	III	1440 (6390)	15.6	1990	(225)	3.00	III	1440 (6390)	05	SZ105	112
11.8	2640	(298)	2.44	III	1440 (6390)	14.3	2190	(247)	2.44	III	1440 (6390)	05	SZ100	123
11.8	2640	(298)	2.79	III	1440 (6390)	14.3	2190	(247)	2.79	III	1440 (6390)	05	SZ105	123
11.8	2640	(298)	2.79	III	1440 (6390)	14.3	2190	(247)	2.79	III	1440 (6390)	05	SZ115	123
11.8	2640	(298)	2.79	III	1440 (6390)	14.3	2190	(247)	2.79	III	1440 (6390)	05	SZ125	123
9.63	3240	(366)	1.95	II	1440 (6390)	11.6	2680	(303)	1.95	II	1440 (6390)	05	SZ100	151
9.63	3240	(366)	2.27	III	1440 (6390)	11.6	2680	(303)	2.27	III	1440 (6390)	05	SZ105	151
9.63	3240	(366)	2.27	III	1440 (6390)	11.6	2680	(303)	2.27	III	1440 (6390)	05	SZ115	151
9.63	3240	(366)	2.27	III	1440 (6390)	11.6	2680	(303)	2.27	III	1440 (6390)	05	SZ125	151
8.12	3840	(434)	1.40	II	1440 (6390)	9.80	3180	(359)	1.40	II	1440 (6390)	05	SZ100	179
8.12	3840	(434)	1.91	II	1440 (6390)	9.80	3180	(359)	1.91	II	1440 (6390)	05	SZ105	179
8.12	3840	(434)	1.91	II	1440 (6390)	9.80	3180	(359)	1.91	II	1440 (6390)	05	SZ115	179
8.12	3840	(434)	1.91	II	1440 (6390)	9.80	3180	(359)	1.91	II	1440 (6390)	05	SZ125	179
8.12	3840	(434)	2.36	III	1810 (8060)	9.80	3180	(359)	2.36	III	1810 (8060)	05	SA110	179
8.12	3840	(434)	2.78	III	1810 (8060)	9.80	3180	(359)	2.78	III	1810 (8060)	05	SA115	179
8.12	3840	(434)	2.98	III	1810 (8060)	9.80	3180	(359)	2.98	III	1810 (8060)	05	SA125	179
8.12	3840	(434)	2.98	III	1810 (8060)	9.80	3180	(359)	2.98	III	1810 (8060)	05	SA145	179
7.02	4440	(502)	1.29	I	1440 (6390)	8.47	3680	(416)	1.29	I	1440 (6390)	05	SZ100	207
7.02	4440	(502)	1.65	II	1440 (6390)	8.47	3680	(416)	1.65	II	1440 (6390)	05	SZ105	207
7.02	4440	(502)	1.65	II	1440 (6390)	8.47	3680	(416)	1.65	II	1440 (6390)	05	SZ115	207
7.02	4440	(502)	1.65	II	1440 (6390)	8.47	3680	(416)	1.65	II	1440 (6390)	05	SZ125	207
7.02	4440	(502)	2.15	III	1810 (8060)	8.47	3680	(416)	2.15	III	1810 (8060)	05	SA110	207
7.02	4440	(502)	2.53	III	1810 (8060)	8.47	3680	(416)	2.53	III	1810 (8060)	05	SA115	207
7.02	4440	(502)	2.57	III	1810 (8060)	8.47	3680	(416)	2.57	III	1810 (8060)	05	SA125	207
7.02	4440	(502)	2.57	III	1810 (8060)	8.47	3680	(416)	2.57	III	1810 (8060)	05	SA145	207
5.84	5350	(604)	1.09	I	1440 (6390)	7.04	4430	(500)	1.09	I	1440 (6390)	05	SZ100	249
5.84	5350	(604)	1.27	I	1440 (6390)	7.04	4430	(500)	1.38	I	1440 (6390)	05	SZ105	249
5.84	5350	(604)	1.38	I	1440 (6390)	7.04	4430	(500)	1.38	I	1440 (6390)	05	SZ115	249
5.84	5350	(604)	1.38	I	1440 (6390)	7.04	4430	(500)	1.38	I	1440 (6390)	05	SZ125	249
5.84	5350	(604)	1.67	II	1810 (8060)	7.04	4430	(500)	1.67	II	1810 (8060)	05	SA110	249
5.84	5350	(604)	1.90	II	1810 (8060)	7.04	4430	(500)	1.90	II	1810 (8060)	05	SA115	249
5.84	5350	(604)	2.14	III	1810 (8060)	7.04	4430	(500)	2.14	III	1810 (8060)	05	SA125	249
5.84	5350	(604)	2.14	III	1810 (8060)	7.04	4430	(500)	2.14	III	1810 (8060)	05	SA145	249
5.84	5350	(604)	2.39	III	2970 (13200)	7.04	4430	(500)	2.39	III	2970 (13200)	05	SB120	249
5.84	5350	(604)	2.85	III	2970 (13200)	7.04	4430	(500)	3.00	III	2970 (13200)	05	SB125	249
4.76	6550	(740)	1.08	I	1440 (6390)	5.75	5430	(613)	1.08	I	1440 (6390)	05	SZ100	305
4.76	6550	(740)	1.12	I	1440 (6390)	5.75	5430	(613)	1.12	I	1440 (6390)	05	SZ105	305
4.76	6550	(740)	1.12	I	1440 (6390)	5.75	5430	(613)	1.12	I	1440 (6390)	05	SZ115	305
4.76	6550	(740)	1.12	I	1440 (6390)	5.75	5430	(613)	1.12	I	1440 (6390)	05	SZ125	305
4.76	6550	(740)	1.65	II	1810 (8060)	5.75	5430	(613)	1.65	II	1810 (8060)	05	SA110	305
4.76	6550	(740)	1.74	II	1810 (8060)	5.75	5430	(613)	1.74	II	1810 (8060)	05	SA115	305
4.76	6550	(740)	1.74	II	1810 (8060)	5.75	5430	(613)	1.74	II	1810 (8060)	05	SA125	305
4.76	6550	(740)	1.74	II	1810 (8060)	5.75	5430	(613)	1.74	II	1810 (8060)	05	SA145	305
4.76	6550	(740)	2.36	III	2970 (13200)	5.75	5430	(613)	2.36	III	2970 (13200)	05	SB120	305
4.76	6550	(740)	2.58	III	2970 (13200)	5.75	5430	(613)	2.83	III	2970 (13200)	05	SB125	305

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

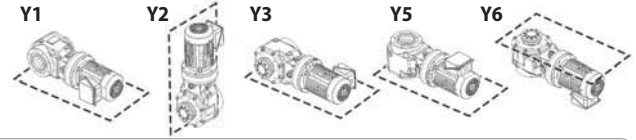
1/2 HP (0.4 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
3.98	7430	(839)	0.99	—	1440	(6390)	4.81	6150	(695)	1.02	I	1440	(6390)	05	5Z10DA	364
3.98	7430	(839)	0.99	—	1440	(6390)	4.81	6150	(695)	1.02	I	1440	(6390)	05	5Z12DA	364
3.98	7430	(839)	0.99	—	1440	(6390)	4.81	6150	(695)	1.20	I	1440	(6390)	05	5Z12DB	364
3.98	7430	(839)	1.02	I	1810	(8060)	4.81	6150	(695)	1.02	I	1810	(8060)	05	5A12DA	364
3.98	7430	(839)	1.54	II	1810	(8060)	4.81	6150	(695)	1.86	II	1810	(8060)	05	5A12DB	364
3.98	7430	(839)	1.02	I	2970	(13200)	4.81	6150	(695)	1.02	I	2970	(13200)	05	5B12DA	364
3.98	7430	(839)	2.55	III	2970	(13200)	4.81	6150	(695)	3.08	III	2970	(13200)	05	5B12DB	364
3.98	7430	(839)	1.02	I	2970	(13200)	4.81	6150	(695)	1.02	I	2970	(13200)	05	5B14DA	364
3.98	7430	(839)	1.02	I	4810	(21400)	4.81	6150	(695)	1.02	I	4810	(21400)	05	5C14DA	364
3.42	8640	(976)	0.85	—	1440	(6390)	4.13	7160	(809)	1.02	I	1440	(6390)	05	5Z10DA	424
3.42	8640	(976)	0.85	—	1440	(6390)	4.13	7160	(809)	1.02	I	1440	(6390)	05	5Z12DA	424
3.42	8640	(976)	0.85	—	1440	(6390)	4.13	7160	(809)	1.03	I	1440	(6390)	05	5Z12DB	424
3.42	8640	(976)	1.02	I	1810	(8060)	4.13	7160	(809)	1.02	I	1810	(8060)	05	5A12DA	424
3.42	8640	(976)	1.32	I	1810	(8060)	4.13	7160	(809)	1.59	II	1810	(8060)	05	5A12DB	424
3.42	8640	(976)	1.02	I	2970	(13200)	4.13	7160	(809)	1.02	I	2970	(13200)	05	5B12DA	424
3.42	8640	(976)	2.17	III	2970	(13200)	4.13	7160	(809)	2.63	III	2970	(13200)	05	5B12DB	424
3.42	8640	(976)	1.02	I	2970	(13200)	4.13	7160	(809)	1.02	I	2970	(13200)	05	5B14DA	424
3.42	8640	(976)	2.63	III	2970	(13200)	4.13	7160	(809)	3.18	III	2970	(13200)	05	5B14DB	424
3.42	8640	(976)	1.02	I	4810	(21400)	4.13	7160	(809)	1.02	I	4810	(21400)	05	5C14DA	424
2.90	10200	(1150)	1.02	I	1810	(8060)	3.50	8460	(956)	1.02	I	1810	(8060)	05	5A12DA	501
2.90	10200	(1150)	1.12	I	1810	(8060)	3.50	8460	(956)	1.35	I	1810	(8060)	05	5A12DB	501
2.90	10200	(1150)	1.02	I	2970	(13200)	3.50	8460	(956)	1.02	I	2970	(13200)	05	5B12DA	501
2.90	10200	(1150)	1.86	II	2970	(13200)	3.50	8460	(956)	2.24	III	2970	(13200)	05	5B12DB	501
2.90	10200	(1150)	1.02	I	2970	(13200)	3.50	8460	(956)	1.02	I	2970	(13200)	05	5B14DA	501
2.90	10200	(1150)	2.23	III	2970	(13200)	3.50	8460	(956)	2.69	III	2970	(13200)	05	5B14DB	501
2.90	10200	(1150)	1.02	I	4810	(21400)	3.50	8460	(956)	1.02	I	4810	(21400)	05	5C14DA	501
2.51	11800	(1330)	0.97	—	1810	(8060)	3.03	9740	(1100)	1.02	I	1810	(8060)	05	5A12DA	578
2.51	11800	(1330)	0.97	—	1810	(8060)	3.03	9740	(1100)	1.17	I	1810	(8060)	05	5A12DB	578
2.51	11800	(1330)	1.02	I	2970	(13200)	3.03	9740	(1100)	1.02	I	2970	(13200)	05	5B12DA	578
2.51	11800	(1330)	1.61	II	2970	(13200)	3.03	9740	(1100)	1.94	II	2970	(13200)	05	5B12DB	578
2.51	11800	(1330)	1.02	I	2970	(13200)	3.03	9740	(1100)	1.02	I	2970	(13200)	05	5B14DA	578
2.51	11800	(1330)	1.93	II	2970	(13200)	3.03	9740	(1100)	2.33	III	2970	(13200)	05	5B14DB	578
2.51	11800	(1330)	1.02	I	4810	(21400)	3.03	9740	(1100)	1.02	I	4810	(21400)	05	5C14DA	578
2.12	13900	(1570)	0.82	—	1810	(8060)	2.56	11500	(1300)	0.99	—	1810	(8060)	05	5A12DA	683
2.12	13900	(1570)	0.82	—	1810	(8060)	2.56	11500	(1300)	0.99	—	1810	(8060)	05	5A12DB	683
2.12	13900	(1570)	1.02	I	2970	(13200)	2.56	11500	(1300)	1.02	I	2970	(13200)	05	5B12DA	683
2.12	13900	(1570)	1.36	I	2970	(13200)	2.56	11500	(1300)	1.65	II	2970	(13200)	05	5B12DB	683
2.12	13900	(1570)	1.02	I	2970	(13200)	2.56	11500	(1300)	1.02	I	2970	(13200)	05	5B14DA	683
2.12	13900	(1570)	1.63	II	2970	(13200)	2.56	11500	(1300)	1.97	II	2970	(13200)	05	5B14DB	683
2.12	13900	(1570)	1.02	I	4810	(21400)	2.56	11500	(1300)	1.02	I	4810	(21400)	05	5C14DA	683
2.12	13900	(1570)	2.93	III	4810	(21400)	2.56	11500	(1300)	3.55	III	4810	(21400)	05	5C14DB	683
2.12	13900	(1570)	2.93	III	4810	(21400)	2.56	11500	(1300)	3.55	III	4810	(21400)	05	5C14DC	683
1.79	16500	(1860)	1.02	I	2970	(13200)	2.16	13600	(1540)	1.02	I	2970	(13200)	05	5B12DA	809
1.79	16500	(1860)	1.15	I	2970	(13200)	2.16	13600	(1540)	1.39	I	2970	(13200)	05	5B12DB	809
1.79	16500	(1860)	1.02	I	2970	(13200)	2.16	13600	(1540)	1.02	I	2970	(13200)	05	5B14DA	809
1.79	16500	(1860)	1.38	I	2970	(13200)	2.16	13600	(1540)	1.66	II	2970	(13200)	05	5B14DB	809

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1/2 HP (0.4 kW)

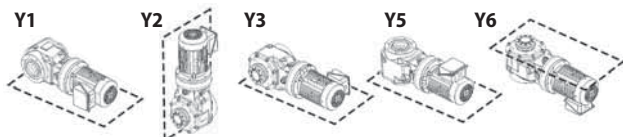
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

		50 Hz				60 Hz				Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio	
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class					lbs
1.79	16500	(1860)	1.02	I	4810	(21400)	2.16	13600	(1540)	1.02	I	4810	(21400)	05	5C14DA	809
1.79	16500	(1860)	2.44	III	4810	(21400)	2.16	13600	(1540)	2.95	III	4810	(21400)	05	5C14DB	809
1.79	16500	(1860)	2.44	III	4810	(21400)	2.16	13600	(1540)	2.95	III	4810	(21400)	05	5C14DC	809
1.79	16500	(1860)	2.75	III	4810	(21400)	2.16	13600	(1540)	3.33	III	4810	(21400)	05	5C16DA	809
1.52	19500	(2200)	0.97	—	2970	(13200)	1.83	16200	(1830)	1.02	I	2970	(13200)	05	5B12DA	956
1.52	19500	(2200)	0.97	—	2970	(13200)	1.83	16200	(1830)	1.18	I	2970	(13200)	05	5B12DB	956
1.52	19500	(2200)	1.02	I	2970	(13200)	1.83	16200	(1830)	1.02	I	2970	(13200)	05	5B14DA	956
1.52	19500	(2200)	1.17	I	2970	(13200)	1.83	16200	(1830)	1.41	II	2970	(13200)	05	5B14DB	956
1.52	19500	(2200)	1.02	I	4810	(21400)	1.83	16200	(1830)	1.02	I	4810	(21400)	05	5C14DA	956
1.52	19500	(2200)	2.07	III	4810	(21400)	1.83	16200	(1830)	2.50	III	4810	(21400)	05	5C14DB	956
1.52	19500	(2200)	2.07	III	4810	(21400)	1.83	16200	(1830)	2.50	III	4810	(21400)	05	5C14DC	956
1.52	19500	(2200)	2.33	III	4810	(21400)	1.83	16200	(1830)	2.83	III	4810	(21400)	05	5C16DA	956
1.30	22700	(2570)	0.83	—	2970	(13200)	1.57	18900	(2130)	1.01	I	2970	(13200)	05	5B12DA	1117
1.30	22700	(2570)	0.83	—	2970	(13200)	1.57	18900	(2130)	1.01	I	2970	(13200)	05	5B12DB	1117
1.30	22700	(2570)	1.00	—	2970	(13200)	1.57	18900	(2130)	1.02	I	2970	(13200)	05	5B14DA	1117
1.30	22700	(2570)	1.00	—	2970	(13200)	1.57	18900	(2130)	1.21	I	2970	(13200)	05	5B14DB	1117
1.30	22700	(2570)	1.02	I	4810	(21400)	1.57	18900	(2130)	1.02	I	4810	(21400)	05	5C14DA	1117
1.30	22700	(2570)	1.81	II	4810	(21400)	1.57	18900	(2130)	2.19	III	4810	(21400)	05	5C14DB	1117
1.30	22700	(2570)	1.81	II	4810	(21400)	1.57	18900	(2130)	2.19	III	4810	(21400)	05	5C14DC	1117
1.30	22700	(2570)	2.00	III	4810	(21400)	1.57	18900	(2130)	2.41	III	4810	(21400)	05	5C16DA	1117
1.10	26900	(3040)	0.85	—	2970	(13200)	1.33	22300	(2520)	1.02	I	2970	(13200)	05	5B14DA	1320
1.10	26900	(3040)	0.85	—	2970	(13200)	1.33	22300	(2520)	1.02	I	2970	(13200)	05	5B14DB	1320
1.10	26900	(3040)	1.02	I	4810	(21400)	1.33	22300	(2520)	1.02	I	4810	(21400)	05	5C14DA	1320
1.10	26900	(3040)	1.53	II	4810	(21400)	1.33	22300	(2520)	1.85	II	4810	(21400)	05	5C14DB	1320
1.10	26900	(3040)	1.53	II	4810	(21400)	1.33	22300	(2520)	1.85	II	4810	(21400)	05	5C14DC	1320
1.10	26900	(3040)	1.69	II	4810	(21400)	1.33	22300	(2520)	2.04	III	4810	(21400)	05	5C16DA	1320
0.876	33800	(3820)	1.02	I	4810	(21400)	1.06	28000	(3160)	1.02	I	4810	(21400)	05	5C14DA	1656
0.876	33800	(3820)	1.22	I	4810	(21400)	1.06	28000	(3160)	1.48	II	4810	(21400)	05	5C14DB	1656
0.876	33800	(3820)	1.22	I	4810	(21400)	1.06	28000	(3160)	1.48	II	4810	(21400)	05	5C14DC	1656
0.876	33800	(3820)	1.35	I	4810	(21400)	1.06	28000	(3160)	1.63	II	4810	(21400)	05	5C16DA	1656
0.741	39900	(4510)	1.02	I	4810	(21400)	0.894	33100	(3740)	1.02	I	4810	(21400)	05	5C14DA	1957
0.741	39900	(4510)	1.03	I	4810	(21400)	0.894	33100	(3740)	1.25	I	4810	(21400)	05	5C14DB	1957
0.741	39900	(4510)	1.03	I	4810	(21400)	0.894	33100	(3740)	1.25	I	4810	(21400)	05	5C14DC	1957
0.741	39900	(4510)	1.14	I	4810	(21400)	0.894	33100	(3740)	1.38	I	4810	(21400)	05	5C16DA	1957
0.638	46400	(5240)	0.89	—	4810	(21400)	0.770	38400	(4340)	1.02	I	4810	(21400)	05	5C14DA	2272
0.638	46400	(5240)	0.89	—	4810	(21400)	0.770	38400	(4340)	1.08	I	4810	(21400)	05	5C14DB	2272
0.638	46400	(5240)	0.89	—	4810	(21400)	0.770	38400	(4340)	1.08	I	4810	(21400)	05	5C14DC	2272
0.638	46400	(5240)	0.98	—	4810	(21400)	0.770	38400	(4340)	1.19	I	4810	(21400)	05	5C16DA	2272
0.567	52200	(5900)	0.87	—	4810	(21401)	0.684	43300	(4890)	1.05	I	4810	(21400)	05	5C16DA	2559

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

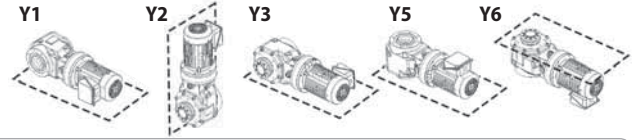
3/4 HP (0.55 kW)

50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
18.1	2360	(267)	2.31	III	1440	(6390)	21.9	1960	(221)	2.31	III	1440	(6390)	08	5Z100	80
16.6	2580	(292)	2.31	III	1440	(6390)	20.0	2140	(242)	2.31	III	1440	(6390)	08	5Z100	88
16.6	2580	(292)	2.84	III	1440	(6390)	20.0	2140	(242)	2.84	III	1440	(6390)	08	5Z105	88
16.6	2580	(292)	2.84	III	1440	(6390)	20.0	2140	(242)	2.84	III	1440	(6390)	08	5Z115	88
16.6	2580	(292)	2.84	III	1440	(6390)	20.0	2140	(242)	2.84	III	1440	(6390)	08	5Z125	88
14.3	3000	(339)	2.20	III	1440	(6390)	17.2	2490	(281)	2.20	III	1440	(6390)	08	5Z100	102
14.3	3000	(339)	2.45	III	1440	(6390)	17.2	2490	(281)	2.45	III	1440	(6390)	08	5Z105	102
14.3	3000	(339)	2.45	III	1440	(6390)	17.2	2490	(281)	2.45	III	1440	(6390)	08	5Z115	102
14.3	3000	(339)	2.45	III	1440	(6390)	17.2	2490	(281)	2.45	III	1440	(6390)	08	5Z125	102
12.9	3310	(374)	1.77	II	1440	(6390)	15.6	2740	(310)	1.77	II	1440	(6390)	08	5Z100	112
12.9	3310	(374)	2.18	III	1440	(6390)	15.6	2740	(310)	2.18	III	1440	(6390)	08	5Z105	112
12.9	3310	(374)	2.22	III	1440	(6390)	15.6	2740	(310)	2.22	III	1440	(6390)	08	5Z115	112
12.9	3310	(374)	2.22	III	1440	(6390)	15.6	2740	(310)	2.22	III	1440	(6390)	08	5Z125	112
12.9	3310	(374)	2.73	III	1810	(8060)	15.6	2740	(310)	2.73	III	1810	(8060)	08	5A110	112
11.8	3620	(409)	1.77	II	1440	(6390)	14.3	3000	(339)	1.77	II	1440	(6390)	08	5Z100	123
11.8	3620	(409)	2.03	III	1440	(6390)	14.3	3000	(339)	2.03	III	1440	(6390)	08	5Z105	123
11.8	3620	(409)	2.03	III	1440	(6390)	14.3	3000	(339)	2.03	III	1440	(6390)	08	5Z115	123
11.8	3620	(409)	2.03	III	1440	(6390)	14.3	3000	(339)	2.03	III	1440	(6390)	08	5Z125	123
11.8	3620	(409)	2.73	III	1810	(8060)	14.3	3000	(339)	2.73	III	1810	(8060)	08	5A110	123
9.63	4450	(503)	1.42	II	1440	(6390)	11.6	3680	(416)	1.42	II	1440	(6390)	08	5Z100	151
9.63	4450	(503)	1.65	II	1440	(6390)	11.6	3680	(416)	1.65	II	1440	(6390)	08	5Z105	151
9.63	4450	(503)	1.65	II	1440	(6390)	11.6	3680	(416)	1.65	II	1440	(6390)	08	5Z115	151
9.63	4450	(503)	1.65	II	1440	(6390)	11.6	3680	(416)	1.65	II	1440	(6390)	08	5Z125	151
9.63	4450	(503)	2.36	III	1810	(8060)	11.6	3680	(416)	2.36	III	1810	(8060)	08	5A110	151
9.63	4450	(503)	2.57	III	1810	(8060)	11.6	3680	(416)	2.57	III	1810	(8060)	08	5A115	151
9.63	4450	(503)	2.57	III	1810	(8060)	11.6	3680	(416)	2.57	III	1810	(8060)	08	5A125	151
9.63	4450	(503)	2.57	III	1810	(8060)	11.6	3680	(416)	2.57	III	1810	(8060)	08	5A145	151
8.12	5280	(596)	1.02	I	1440	(6390)	9.80	4370	(494)	1.02	I	1440	(6390)	08	5Z100	179
8.12	5280	(596)	1.39	I	1440	(6390)	9.80	4370	(494)	1.39	I	1440	(6390)	08	5Z105	179
8.12	5280	(596)	1.39	I	1440	(6390)	9.80	4370	(494)	1.39	I	1440	(6390)	08	5Z115	179
8.12	5280	(596)	1.39	I	1440	(6390)	9.80	4370	(494)	1.39	I	1440	(6390)	08	5Z125	179
8.12	5280	(596)	1.72	II	1810	(8060)	9.80	4370	(494)	1.72	II	1810	(8060)	08	5A110	179
8.12	5280	(596)	2.02	III	1810	(8060)	9.80	4370	(494)	2.02	III	1810	(8060)	08	5A115	179
8.12	5280	(596)	2.16	III	1810	(8060)	9.80	4370	(494)	2.16	III	1810	(8060)	08	5A125	179
8.12	5280	(596)	2.16	III	1810	(8060)	9.80	4370	(494)	2.16	III	1810	(8060)	08	5A145	179
8.12	5280	(596)	2.96	III	2970	(13200)	9.80	4370	(494)	3.13	III	2970	(13200)	08	5B120	179
7.02	6110	(690)	0.94	—	1440	(6390)	8.47	5050	(571)	0.94	—	1440	(6390)	08	5Z100	207
7.02	6110	(690)	1.20	I	1440	(6390)	8.47	5050	(571)	1.20	I	1440	(6390)	08	5Z105	207
7.02	6110	(690)	1.20	I	1440	(6390)	8.47	5050	(571)	1.20	I	1440	(6390)	08	5Z115	207
7.02	6110	(690)	1.20	I	1440	(6390)	8.47	5050	(571)	1.20	I	1440	(6390)	08	5Z125	207
7.02	6110	(690)	1.56	II	1810	(8060)	8.47	5050	(571)	1.56	II	1810	(8060)	08	5A110	207
7.02	6110	(690)	1.84	II	1810	(8060)	8.47	5050	(571)	1.84	II	1810	(8060)	08	5A115	207
7.02	6110	(690)	1.87	II	1810	(8060)	8.47	5050	(571)	1.87	II	1810	(8060)	08	5A125	207
7.02	6110	(690)	1.87	II	1810	(8060)	8.47	5050	(571)	1.87	II	1810	(8060)	08	5A145	207
7.02	6110	(690)	2.36	III	2970	(13200)	8.47	5050	(571)	2.36	III	2970	(13200)	08	5B120	207
7.02	6110	(690)	2.95	III	2970	(13200)	8.47	5050	(571)	2.95	III	2970	(13200)	08	5B125	207

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



3/4 HP (0.55 kW)

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

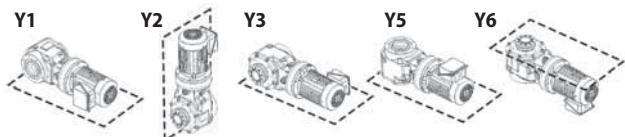
Double Reduction, Y2 3.104

Selection Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
5.84	7350	(830)	0.92	—	1440	(6390)	7.04	6090	(688)	1.00	I	1440	(6390)	08	SZ105	249
5.84	7350	(830)	1.00	I	1440	(6390)	7.04	6090	(688)	1.00	I	1440	(6390)	08	SZ115	249
5.84	7350	(830)	1.00	I	1440	(6390)	7.04	6090	(688)	1.00	I	1440	(6390)	08	SZ125	249
5.84	7350	(830)	1.22	I	1810	(8060)	7.04	6090	(688)	1.22	I	1810	(8060)	08	SA110	249
5.84	7350	(830)	1.38	I	1810	(8060)	7.04	6090	(688)	1.38	I	1810	(8060)	08	SA115	249
5.84	7350	(830)	1.55	II	1810	(8060)	7.04	6090	(688)	1.55	II	1810	(8060)	08	SA125	249
5.84	7350	(830)	1.55	II	1810	(8060)	7.04	6090	(688)	1.55	II	1810	(8060)	08	SA145	249
5.84	7350	(830)	1.74	II	2970	(13200)	7.04	6090	(688)	1.74	II	2970	(13200)	08	SB120	249
5.84	7350	(830)	2.07	III	2970	(13200)	7.04	6090	(688)	2.18	III	2970	(13200)	08	SB125	249
4.76	9030	(1020)	0.82	—	1440	(6390)	5.75	7460	(843)	0.82	—	1440	(6390)	08	SZ105	305
4.76	9030	(1020)	0.82	—	1440	(6390)	5.75	7460	(843)	0.82	—	1440	(6390)	08	SZ115	305
4.76	9030	(1020)	0.82	—	1440	(6390)	5.75	7460	(843)	0.82	—	1440	(6390)	08	SZ125	305
4.76	9030	(1020)	1.20	I	1810	(8060)	5.75	7460	(843)	1.20	I	1810	(8060)	08	SA110	305
4.76	9030	(1020)	1.27	I	1810	(8060)	5.75	7460	(843)	1.27	I	1810	(8060)	08	SA115	305
4.76	9030	(1020)	1.27	I	1810	(8060)	5.75	7460	(843)	1.27	I	1810	(8060)	08	SA125	305
4.76	9030	(1020)	1.27	I	1810	(8060)	5.75	7460	(843)	1.27	I	1810	(8060)	08	SA145	305
4.76	9030	(1020)	1.72	II	2970	(13200)	5.75	7460	(843)	1.72	II	2970	(13200)	08	SB120	305
4.76	9030	(1020)	1.87	II	2970	(13200)	5.75	7460	(843)	2.05	III	2970	(13200)	08	SB125	305
4.76	9030	(1020)	2.53	III	2970	(13200)	5.75	7460	(843)	2.53	III	2970	(13200)	08	SB145	305
4.76	9030	(1020)	2.53	III	2970	(13200)	5.75	7460	(843)	2.53	III	2970	(13200)	08	SB165	305
3.98	10200	(1150)	1.12	I	1810	(8060)	4.81	8460	(956)	1.35	I	1810	(8060)	08	SA12DB	364
3.98	10200	(1150)	1.85	II	2970	(13200)	4.81	8460	(956)	2.24	III	2970	(13200)	08	SB12DB	364
3.98	10200	(1150)	2.23	III	2970	(13200)	4.81	8460	(956)	2.69	III	2970	(13200)	08	SB14DB	364
3.98	10200	(1150)	2.76	III	4810	(21400)	4.81	8460	(956)	2.76	III	4810	(21400)	08	SC14DB	364
3.98	10200	(1150)	2.76	III	4810	(21400)	4.81	8460	(956)	2.76	III	4810	(21400)	08	SC16DA	364
3.42	11900	(1340)	0.96	—	1810	(8060)	4.13	9820	(1110)	1.16	I	1810	(8060)	08	SA12DB	424
3.42	11900	(1340)	1.58	II	2970	(13200)	4.13	9820	(1110)	1.91	II	2970	(13200)	08	SB12DB	424
3.42	11900	(1340)	1.91	II	2970	(13200)	4.13	9820	(1110)	2.31	III	2970	(13200)	08	SB14DB	424
3.42	11900	(1340)	2.76	III	4810	(21400)	4.13	9820	(1110)	2.76	III	4810	(21400)	08	SC14DB	424
3.42	11900	(1340)	2.76	III	4810	(21400)	4.13	9820	(1110)	2.76	III	4810	(21400)	08	SC16DA	424
2.90	14100	(1590)	0.81	—	1810	(8060)	3.50	11600	(1310)	0.98	—	1810	(8060)	08	SA12DB	501
2.90	14100	(1590)	1.35	I	2970	(13200)	3.50	11600	(1310)	1.63	II	2970	(13200)	08	SB12DB	501
2.90	14100	(1590)	1.62	II	2970	(13200)	3.50	11600	(1310)	1.96	II	2970	(13200)	08	SB14DB	501
2.90	14100	(1590)	2.76	III	4810	(21400)	3.50	11600	(1310)	2.76	III	4810	(21400)	08	SC14DB	501
2.90	14100	(1590)	2.95	III	4810	(21400)	3.50	11600	(1310)	3.55	III	4810	(21400)	08	SC14DC	501
2.90	14100	(1590)	2.76	III	4810	(21400)	3.50	11600	(1310)	2.76	III	4810	(21400)	08	SC16DA	501
2.51	16200	(1830)	1.17	I	2970	(13200)	3.03	13500	(1520)	1.41	II	2970	(13200)	08	SB12DB	578
2.51	16200	(1830)	1.40	II	2970	(13200)	3.03	13500	(1520)	1.69	II	2970	(13200)	08	SB14DB	578
2.51	16200	(1830)	2.53	III	4810	(21400)	3.03	13500	(1520)	2.76	III	4810	(21400)	08	SC14DB	578
2.51	16200	(1830)	2.53	III	4810	(21400)	3.03	13500	(1520)	3.05	III	4810	(21400)	08	SC14DC	578
2.51	16200	(1830)	2.76	III	4810	(21400)	3.03	13500	(1520)	2.76	III	4810	(21400)	08	SC16DA	578
2.12	19100	(2160)	0.99	—	2970	(13200)	2.56	15800	(1790)	1.20	I	2970	(13200)	08	SB12DB	683
2.12	19100	(2160)	1.19	I	2970	(13200)	2.56	15800	(1790)	1.43	II	2970	(13200)	08	SB14DB	683
2.12	19100	(2160)	2.13	III	4810	(21400)	2.56	15800	(1790)	2.58	III	4810	(21400)	08	SC14DB	683
2.12	19100	(2160)	2.13	III	4810	(21400)	2.56	15800	(1790)	2.58	III	4810	(21400)	08	SC14DC	683
2.12	19100	(2160)	2.38	III	4810	(21400)	2.56	15800	(1790)	2.76	III	4810	(21400)	08	SC16DA	683

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

Double Reduction, Y2 3.104

3/4 HP (0.55 kW)

50 Hz					60 Hz					Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio	
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class					lbs
1.79	22700	(2560)	0.84	—	2970	(13200)	2.16	18800	(2120)	1.01	I	2970	(13200)	08	5B12DB	809
1.79	22700	(2560)	1.00	I	2970	(13200)	2.16	18800	(2120)	1.21	I	2970	(13200)	08	5B14DB	809
1.79	22700	(2560)	1.78	II	4810	(21400)	2.16	18800	(2120)	2.15	III	4810	(21400)	08	5C14DB	809
1.79	22700	(2560)	1.78	II	4810	(21400)	2.16	18800	(2120)	2.15	III	4810	(21400)	08	5C14DC	809
1.79	22700	(2560)	2.01	III	4810	(21400)	2.16	18800	(2120)	2.42	III	4810	(21400)	08	5C16DA	809
1.52	26800	(3030)	0.85	—	2970	(13200)	1.83	22200	(2510)	1.02	I	2970	(13200)	08	5B14DB	956
1.52	26800	(3030)	1.50	II	4810	(21400)	1.83	22200	(2510)	1.81	II	4810	(21400)	08	5C14DB	956
1.52	26800	(3030)	1.50	II	4810	(21400)	1.83	22200	(2510)	1.81	II	4810	(21400)	08	5C14DC	956
1.52	26800	(3030)	1.70	II	4810	(21400)	1.83	22200	(2510)	2.05	III	4810	(21400)	08	5C16DA	956
1.30	31300	(3540)	1.32	I	4810	(21400)	1.57	25900	(2930)	1.59	II	4810	(21400)	08	5C14DB	1117
1.30	31300	(3540)	1.32	I	4810	(21400)	1.57	25900	(2930)	1.59	II	4810	(21400)	08	5C14DC	1117
1.30	31300	(3540)	1.45	II	4810	(21400)	1.57	25900	(2930)	1.75	II	4810	(21400)	08	5C16DA	1117
1.10	37000	(4180)	1.11	I	4810	(21400)	1.33	30700	(3470)	1.35	I	4810	(21400)	08	5C14DB	1320
1.10	37000	(4180)	1.11	I	4810	(21400)	1.33	30700	(3470)	1.35	I	4810	(21400)	08	5C14DC	1320
1.10	37000	(4180)	1.23	I	4810	(21400)	1.33	30700	(3470)	1.48	II	4810	(21400)	08	5C16DA	1320
0.876	46500	(5250)	0.89	—	4810	(21400)	1.06	38500	(4350)	1.07	I	4810	(21400)	08	5C14DB	1656
0.876	46500	(5250)	0.89	—	4810	(21400)	1.06	38500	(4350)	1.07	I	4810	(21400)	08	5C14DC	1656
0.876	46500	(5250)	0.98	—	4810	(21400)	1.06	38500	(4350)	1.18	I	4810	(21400)	08	5C16DA	1656
0.741	54900	(6200)	0.83	—	4810	(21401)	0.894	45500	(5140)	1.00	I	4810	(21400)	08	5C16DA	1957

Gearmotors

Selection Tables

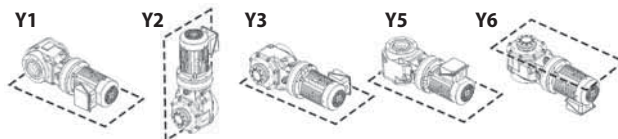
1 HP (0.75 kW)

50 Hz					60 Hz					Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio	
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class					lbs
24.4	2400	(271)	2.65	III	1440	(6390)	29.4	1990	(225)	2.65	III	1440	(6390)	1	5Z100	60
21.6	2710	(306)	2.53	III	1440	(6390)	26.0	2250	(254)	2.57	III	1440	(6390)	1	5Z100	67
21.6	2710	(306)	2.71	III	1440	(6390)	26.0	2250	(254)	2.71	III	1440	(6390)	1	5Z105	67
21.6	2710	(306)	2.71	III	1440	(6390)	26.0	2250	(254)	2.71	III	1440	(6390)	1	5Z115	67
21.6	2710	(306)	2.71	III	1440	(6390)	26.0	2250	(254)	2.71	III	1440	(6390)	1	5Z125	67
19.7	2960	(335)	2.48	III	1440	(6390)	23.8	2450	(277)	2.48	III	1440	(6390)	1	5Z105	74
19.7	2960	(335)	2.48	III	1440	(6390)	23.8	2450	(277)	2.48	III	1440	(6390)	1	5Z115	74
19.7	2960	(335)	2.48	III	1440	(6390)	23.8	2450	(277)	2.48	III	1440	(6390)	1	5Z125	74
18.1	3220	(364)	1.69	II	1440	(6390)	21.9	2670	(302)	1.69	II	1440	(6390)	1	5Z100	80
18.1	3220	(364)	2.23	III	1440	(6390)	21.9	2670	(302)	2.23	III	1440	(6390)	1	5Z105	80
18.1	3220	(364)	2.28	III	1440	(6390)	21.9	2670	(302)	2.28	III	1440	(6390)	1	5Z115	80
18.1	3220	(364)	2.28	III	1440	(6390)	21.9	2670	(302)	2.28	III	1440	(6390)	1	5Z125	80
18.1	3220	(364)	2.55	III	1810	(8060)	21.9	2670	(302)	2.55	III	1810	(8060)	1	5A110	80
18.1	3220	(364)	2.96	III	1810	(8060)	21.9	2670	(302)	2.96	III	1810	(8060)	1	5A115	80

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1 HP (0.75 kW)

Dimension Pages:

Single Reduction 3.76-3.83

Single Reduction, AF-Motor 3.84-3.91

Single Reduction, Y2 3.92

Double Reduction 3.94-3.99

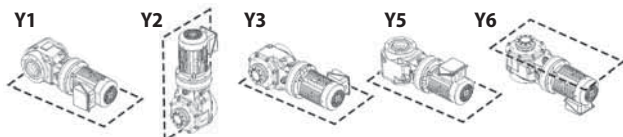
Double Reduction, AF-Motor 3.100-3.103

Double Reduction, Y2 3.104

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
16.6	3530	(399)	1.69	II	1440	(6390)	20.0	2920	(330)	1.69	II	1440	(6390)	1	SZ100	88
16.6	3530	(399)	2.08	III	1440	(6390)	20.0	2920	(330)	2.08	III	1440	(6390)	1	SZ105	88
16.6	3530	(399)	2.08	III	1440	(6390)	20.0	2920	(330)	2.08	III	1440	(6390)	1	SZ115	88
16.6	3530	(399)	2.08	III	1440	(6390)	20.0	2920	(330)	2.08	III	1440	(6390)	1	SZ125	88
16.6	3530	(399)	2.55	III	1810	(8060)	20.0	2920	(330)	2.55	III	1810	(8060)	1	SA110	88
16.6	3530	(399)	2.96	III	1810	(8060)	20.0	2920	(330)	2.96	III	1810	(8060)	1	SA115	88
14.3	4090	(462)	1.61	II	1440	(6390)	17.2	3390	(383)	1.61	II	1440	(6390)	1	SZ100	102
14.3	4090	(462)	1.80	II	1440	(6390)	17.2	3390	(383)	1.80	II	1440	(6390)	1	SZ105	102
14.3	4090	(462)	1.80	II	1440	(6390)	17.2	3390	(383)	1.80	II	1440	(6390)	1	SZ115	102
14.3	4090	(462)	1.80	II	1440	(6390)	17.2	3390	(383)	1.80	II	1440	(6390)	1	SZ125	102
14.3	4090	(462)	2.53	III	1810	(8060)	17.2	3390	(383)	2.53	III	1810	(8060)	1	SA110	102
14.3	4090	(462)	2.79	III	1810	(8060)	17.2	3390	(383)	2.79	III	1810	(8060)	1	SA115	102
14.3	4090	(462)	2.79	III	1810	(8060)	17.2	3390	(383)	2.79	III	1810	(8060)	1	SA125	102
14.3	4090	(462)	2.79	III	1810	(8060)	17.2	3390	(383)	2.79	III	1810	(8060)	1	SA145	102
12.9	4510	(510)	1.30	I	1440	(6390)	15.6	3740	(423)	1.30	I	1440	(6390)	1	SZ100	112
12.9	4510	(510)	1.60	II	1440	(6390)	15.6	3740	(423)	1.60	II	1440	(6390)	1	SZ105	112
12.9	4510	(510)	1.63	II	1440	(6390)	15.6	3740	(423)	1.63	II	1440	(6390)	1	SZ115	112
12.9	4510	(510)	1.63	II	1440	(6390)	15.6	3740	(423)	1.63	II	1440	(6390)	1	SZ125	112
12.9	4510	(510)	2.00	III	1810	(8060)	15.6	3740	(423)	2.00	III	1810	(8060)	1	SA110	112
12.9	4510	(510)	2.41	III	1810	(8060)	15.6	3740	(423)	2.41	III	1810	(8060)	1	SA115	112
12.9	4510	(510)	2.53	III	1810	(8060)	15.6	3740	(423)	2.53	III	1810	(8060)	1	SA125	112
12.9	4510	(510)	2.53	III	1810	(8060)	15.6	3740	(423)	2.53	III	1810	(8060)	1	SA145	112
11.8	4940	(558)	1.30	I	1440	(6390)	14.3	4090	(462)	1.30	I	1440	(6390)	1	SZ100	123
11.8	4940	(558)	1.49	II	1440	(6390)	14.3	4090	(462)	1.49	II	1440	(6390)	1	SZ105	123
11.8	4940	(558)	1.49	II	1440	(6390)	14.3	4090	(462)	1.49	II	1440	(6390)	1	SZ115	123
11.8	4940	(558)	1.49	II	1440	(6390)	14.3	4090	(462)	1.49	II	1440	(6390)	1	SZ125	123
11.8	4940	(558)	2.00	III	1810	(8060)	14.3	4090	(462)	2.00	III	1810	(8060)	1	SA110	123
11.8	4940	(558)	2.31	III	1810	(8060)	14.3	4090	(462)	2.31	III	1810	(8060)	1	SA115	123
11.8	4940	(558)	2.31	III	1810	(8060)	14.3	4090	(462)	2.31	III	1810	(8060)	1	SA125	123
11.8	4940	(558)	2.31	III	1810	(8060)	14.3	4090	(462)	2.31	III	1810	(8060)	1	SA145	123
9.63	6060	(685)	1.04	I	1440	(6390)	11.6	5030	(568)	1.04	I	1440	(6390)	1	SZ100	151
9.63	6060	(685)	1.21	I	1440	(6390)	11.6	5030	(568)	1.21	I	1440	(6390)	1	SZ105	151
9.63	6060	(685)	1.21	I	1440	(6390)	11.6	5030	(568)	1.21	I	1440	(6390)	1	SZ115	151
9.63	6060	(685)	1.21	I	1440	(6390)	11.6	5030	(568)	1.21	I	1440	(6390)	1	SZ125	151
9.63	6060	(685)	1.73	II	1810	(8060)	11.6	5030	(568)	1.73	II	1810	(8060)	1	SA110	151
9.63	6060	(685)	1.88	II	1810	(8060)	11.6	5030	(568)	1.88	II	1810	(8060)	1	SA115	151
9.63	6060	(685)	1.88	II	1810	(8060)	11.6	5030	(568)	1.88	II	1810	(8060)	1	SA125	151
9.63	6060	(685)	1.88	II	1810	(8060)	11.6	5030	(568)	1.88	II	1810	(8060)	1	SA145	151
9.63	6060	(685)	2.55	III	2970	(13200)	11.6	5030	(568)	2.55	III	2970	(13200)	1	SB120	151

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

1 HP (0.75 kW)

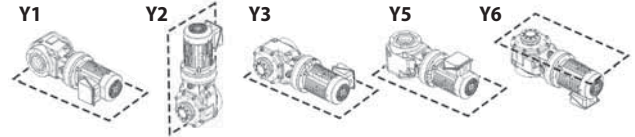
50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
8.12	7200	(813)	1.02	I	1440	(6390)	9.80	5970	(674)	1.02	I	1440	(6390)	1	5Z105	179
8.12	7200	(813)	1.02	I	1440	(6390)	9.80	5970	(674)	1.02	I	1440	(6390)	1	5Z115	179
8.12	7200	(813)	1.02	I	1440	(6390)	9.80	5970	(674)	1.02	I	1440	(6390)	1	5Z125	179
8.12	7200	(813)	1.26	I	1810	(8060)	9.80	5970	(674)	1.26	I	1810	(8060)	1	5A110	179
8.12	7200	(813)	1.48	II	1810	(8060)	9.80	5970	(674)	1.48	II	1810	(8060)	1	5A115	179
8.12	7200	(813)	1.59	II	1810	(8060)	9.80	5970	(674)	1.59	II	1810	(8060)	1	5A125	179
8.12	7200	(813)	1.59	II	1810	(8060)	9.80	5970	(674)	1.59	II	1810	(8060)	1	5A145	179
8.12	7200	(813)	2.17	III	2970	(13200)	9.80	5970	(674)	2.29	III	2970	(13200)	1	5B120	179
8.12	7200	(813)	2.63	III	2970	(13200)	9.80	5970	(674)	3.04	III	2970	(13200)	1	5B125	179
7.02	8320	(940)	0.88	—	1440	(6390)	8.47	6890	(779)	0.88	—	1440	(6390)	1	5Z105	207
7.02	8320	(940)	0.88	—	1440	(6390)	8.47	6890	(779)	0.88	—	1440	(6390)	1	5Z115	207
7.02	8320	(940)	0.88	—	1440	(6390)	8.47	6890	(779)	0.88	—	1440	(6390)	1	5Z125	207
7.02	8320	(940)	1.15	I	1810	(8060)	8.47	6890	(779)	1.15	I	1810	(8060)	1	5A110	207
7.02	8320	(940)	1.35	I	1810	(8060)	8.47	6890	(779)	1.35	I	1810	(8060)	1	5A115	207
7.02	8320	(940)	1.37	I	1810	(8060)	8.47	6890	(779)	1.37	I	1810	(8060)	1	5A125	207
7.02	8320	(940)	1.37	I	1810	(8060)	8.47	6890	(779)	1.37	I	1810	(8060)	1	5A145	207
7.02	8320	(940)	1.73	II	2970	(13200)	8.47	6890	(779)	1.73	II	2970	(13200)	1	5B120	207
7.02	8320	(940)	2.16	III	2970	(13200)	8.47	6890	(779)	2.16	III	2970	(13200)	1	5B125	207
7.02	8320	(940)	2.73	III	2970	(13200)	8.47	6890	(779)	2.73	III	2970	(13200)	1	5B145	207
7.02	8320	(940)	2.73	III	2970	(13200)	8.47	6890	(779)	2.73	III	2970	(13200)	1	5B165	207
5.84	10000	(1130)	0.89	—	1810	(8060)	7.04	8300	(938)	0.89	—	1810	(8060)	1	5A110	249
5.84	10000	(1130)	1.01	I	1810	(8060)	7.04	8300	(938)	1.01	I	1810	(8060)	1	5A115	249
5.84	10000	(1130)	1.14	I	1810	(8060)	7.04	8300	(938)	1.14	I	1810	(8060)	1	5A125	249
5.84	10000	(1130)	1.14	I	1810	(8060)	7.04	8300	(938)	1.14	I	1810	(8060)	1	5A145	249
5.84	10000	(1130)	1.28	I	2970	(13200)	7.04	8300	(938)	1.28	I	2970	(13200)	1	5B120	249
5.84	10000	(1130)	1.52	II	2970	(13200)	7.04	8300	(938)	1.60	II	2970	(13200)	1	5B125	249
5.84	10000	(1130)	2.27	III	2970	(13200)	7.04	8300	(938)	2.27	III	2970	(13200)	1	5B145	249
5.84	10000	(1130)	2.27	III	2970	(13200)	7.04	8300	(938)	2.27	III	2970	(13200)	1	5B165	249
4.76	12300	(1390)	0.88	—	1810	(8060)	5.75	10200	(1150)	0.88	—	1810	(8060)	1	5A110	305
4.76	12300	(1390)	0.93	—	1810	(8060)	5.75	10200	(1150)	0.93	—	1810	(8060)	1	5A115	305
4.76	12300	(1390)	0.93	—	1810	(8060)	5.75	10200	(1150)	0.93	—	1810	(8060)	1	5A125	305
4.76	12300	(1390)	0.93	—	1810	(8060)	5.75	10200	(1150)	0.93	—	1810	(8060)	1	5A145	305
4.76	12300	(1390)	1.26	I	2970	(13200)	5.75	10200	(1150)	1.26	I	2970	(13200)	1	5B120	305
4.76	12300	(1390)	1.37	I	2970	(13200)	5.75	10200	(1150)	1.51	II	2970	(13200)	1	5B125	305
4.76	12300	(1390)	1.85	II	2970	(13200)	5.75	10200	(1150)	1.85	II	2970	(13200)	1	5B145	305
4.76	12300	(1390)	1.85	II	2970	(13200)	5.75	10200	(1150)	1.85	II	2970	(13200)	1	5B165	305
4.76	12300	(1390)	2.64	III	4810	(21400)	5.75	10200	(1150)	2.64	III	4810	(21400)	1	5C140	305
4.76	12300	(1390)	2.88	III	4810	(21400)	5.75	10200	(1150)	3.31	III	4810	(21400)	1	5C145	305

Gearmotors Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1 HP (0.75 kW)

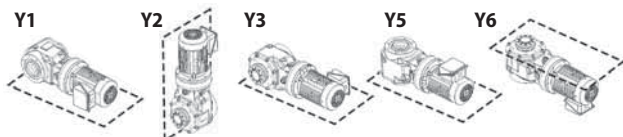
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
3.98	13900	(1570)	0.82	—	1810	(8060)	4.81	11500	(1300)	0.99	—	1810	(8060)	1	5A12DB	364
3.98	13900	(1570)	1.36	I	2970	(13200)	4.81	11500	(1300)	1.64	II	2970	(13200)	1	5B12DB	364
3.98	13900	(1570)	1.63	II	2970	(13200)	4.81	11500	(1300)	1.97	II	2970	(13200)	1	5B14DB	364
3.98	13900	(1570)	2.03	III	4810	(21400)	4.81	11500	(1300)	2.03	III	4810	(21400)	1	5C14DB	364
3.98	13900	(1570)	2.96	III	4810	(21400)	4.81	11500	(1300)	3.57	III	4810	(21400)	1	5C14DC	364
3.98	13900	(1570)	2.03	III	4810	(21400)	4.81	11500	(1300)	2.03	III	4810	(21400)	1	5C16DA	364
3.42	16200	(1830)	1.16	I	2970	(13200)	4.13	13500	(1520)	1.40	II	2970	(13200)	1	5B12DB	424
3.42	16200	(1830)	1.40	II	2970	(13200)	4.13	13500	(1520)	1.69	II	2970	(13200)	1	5B14DB	424
3.42	16200	(1830)	2.03	III	4810	(21400)	4.13	13500	(1520)	2.03	III	4810	(21400)	1	5C14DB	424
3.42	16200	(1830)	2.40	III	4810	(21400)	4.13	13500	(1520)	2.89	III	4810	(21400)	1	5C14DC	424
3.42	16200	(1830)	2.03	III	4810	(21400)	4.13	13500	(1520)	2.03	III	4810	(21400)	1	5C16DA	424
3.42	16200	(1830)	2.81	III	4810	(21400)	4.13	13500	(1520)	3.39	III	4810	(21400)	1	5C16DB	424
2.90	19100	(2160)	0.99	—	2970	(13200)	3.50	15800	(1790)	1.20	I	2970	(13200)	1	5B12DB	501
2.90	19100	(2160)	1.19	I	2970	(13200)	3.50	15800	(1790)	1.43	II	2970	(13200)	1	5B14DB	501
2.90	19100	(2160)	2.03	III	4810	(21400)	3.50	15800	(1790)	2.03	III	4810	(21400)	1	5C14DB	501
2.90	19100	(2160)	2.16	III	4810	(21400)	3.50	15800	(1790)	2.60	III	4810	(21400)	1	5C14DC	501
2.90	19100	(2160)	2.03	III	4810	(21400)	3.50	15800	(1790)	2.03	III	4810	(21400)	1	5C16DA	501
2.90	19100	(2160)	2.38	III	4810	(21400)	3.50	15800	(1790)	2.87	III	4810	(21400)	1	5C16DB	501
2.51	22100	(2500)	0.86	—	2970	(13200)	3.03	18300	(2070)	1.04	I	2970	(13200)	1	5B12DB	578
2.51	22100	(2500)	1.03	I	2970	(13200)	3.03	18300	(2070)	1.24	I	2970	(13200)	1	5B14DB	578
2.51	22100	(2500)	1.85	II	4810	(21400)	3.03	18300	(2070)	2.03	III	4810	(21400)	1	5C14DB	578
2.51	22100	(2500)	1.85	II	4810	(21400)	3.03	18300	(2070)	2.24	III	4810	(21400)	1	5C14DC	578
2.51	22100	(2500)	2.03	III	4810	(21400)	3.03	18300	(2070)	2.03	III	4810	(21400)	1	5C16DA	578
2.51	22100	(2500)	2.06	III	4810	(21400)	3.03	18300	(2070)	2.49	III	4810	(21400)	1	5C16DB	578
2.12	26100	(2950)	0.87	—	2970	(13200)	2.56	21600	(2440)	1.05	I	2970	(13200)	1	5B14DB	683
2.12	26100	(2950)	1.56	II	4810	(21400)	2.56	21600	(2440)	1.89	II	4810	(21400)	1	5C14DB	683
2.12	26100	(2950)	1.56	II	4810	(21400)	2.56	21600	(2440)	1.89	II	4810	(21400)	1	5C14DC	683
2.12	26100	(2950)	1.74	II	4810	(21400)	2.56	21600	(2440)	2.03	III	4810	(21400)	1	5C16DA	683
1.79	30900	(3490)	1.30	I	4810	(21400)	2.16	25700	(2900)	1.57	II	4810	(21400)	1	5C14DB	809
1.79	30900	(3490)	1.30	I	4810	(21400)	2.16	25700	(2900)	1.57	II	4810	(21400)	1	5C14DC	809
1.79	30900	(3490)	1.47	II	4810	(21400)	2.16	25700	(2900)	1.77	II	4810	(21400)	1	5C16DA	809
1.52	36600	(4130)	1.10	I	4810	(21400)	1.83	30300	(3420)	1.33	I	4810	(21400)	1	5C14DB	956
1.52	36600	(4130)	1.10	I	4810	(21400)	1.83	30300	(3420)	1.33	I	4810	(21400)	1	5C14DC	956
1.52	36600	(4130)	1.24	I	4810	(21400)	1.83	30300	(3420)	1.50	II	4810	(21400)	1	5C16DA	956
1.30	42700	(4830)	0.97	—	4810	(21400)	1.57	35400	(4000)	1.17	I	4810	(21400)	1	5C14DB	1117
1.30	42700	(4830)	0.97	—	4810	(21400)	1.57	35400	(4000)	1.17	I	4810	(21400)	1	5C14DC	1117
1.30	42700	(4830)	1.07	I	4810	(21400)	1.57	35400	(4000)	1.29	I	4810	(21400)	1	5C16DA	1117
1.10	50400	(5700)	0.82	—	2090	(9300)	1.33	41900	(4730)	0.99	—	4810	(21400)	1	5C14DB	1320
1.10	50400	(5700)	0.82	—	2090	(9300)	1.33	41900	(4730)	0.99	—	4810	(21400)	1	5C14DC	1320
1.10	50400	(5700)	0.90	—	2090	(9300)	1.33	41900	(4730)	1.09	I	4810	(21400)	1	5C16DA	1320

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

1.5 HP (1.1 kW)

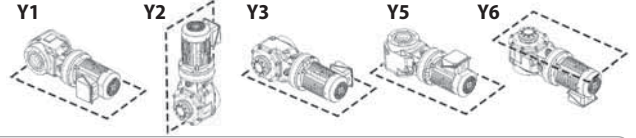
50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	620	(70)	2.14	III	1440	(6390)	167	514	(58)	2.14	III	1440	(6390)	1H	SZ100	11
138	620	(70)	2.89	III	1440	(6390)	167	514	(58)	2.89	III	1440	(6390)	1H	SZ105	11
113	760	(86)	2.14	III	1440	(6390)	137	627	(71)	2.14	III	1440	(6390)	1H	SZ100	13
113	760	(86)	2.89	III	1440	(6390)	137	627	(71)	2.89	III	1440	(6390)	1H	SZ105	13
104	830	(94)	2.14	III	1440	(6390)	125	686	(78)	2.14	III	1440	(6390)	1H	SZ100	14
104	830	(94)	2.89	III	1440	(6390)	125	686	(78)	2.89	III	1440	(6390)	1H	SZ105	14
90.6	950	(107)	2.14	III	1440	(6390)	109	784	(89)	2.14	III	1440	(6390)	1H	SZ100	16
90.6	950	(107)	2.89	III	1440	(6390)	109	784	(89)	2.89	III	1440	(6390)	1H	SZ105	16
82.9	1040	(117)	2.14	III	1440	(6390)	100	858	(97)	2.14	III	1440	(6390)	1H	SZ100	18
82.9	1040	(117)	2.89	III	1440	(6390)	100	858	(97)	2.89	III	1440	(6390)	1H	SZ105	18
75.5	1130	(128)	2.14	III	1440	(6390)	91.1	938	(106)	2.14	III	1440	(6390)	1H	SZ100	19
69.0	1240	(140)	2.14	III	1440	(6390)	83.3	1030	(116)	2.14	III	1440	(6390)	1H	SZ100	21
69.0	1240	(140)	2.89	III	1440	(6390)	83.3	1030	(116)	2.89	III	1440	(6390)	1H	SZ105	21
51.8	1660	(187)	2.14	III	1440	(6390)	62.5	1370	(155)	2.14	III	1440	(6390)	1H	SZ100	28
51.8	1660	(187)	2.89	III	1440	(6390)	62.5	1370	(155)	2.89	III	1440	(6390)	1H	SZ105	28
41.2	2080	(235)	2.14	III	1440	(6390)	49.7	1730	(195)	2.14	III	1440	(6390)	1H	SZ100	35
41.2	2080	(235)	2.89	III	1440	(6390)	49.7	1730	(195)	2.89	III	1440	(6390)	1H	SZ105	35
37.7	2270	(257)	2.14	III	1440	(6390)	45.5	1890	(213)	2.14	III	1440	(6390)	1H	SZ100	39
37.7	2270	(257)	2.89	III	1440	(6390)	45.5	1890	(213)	2.89	III	1440	(6390)	1H	SZ105	39
31.9	2690	(304)	2.14	III	1440	(6390)	38.5	2230	(252)	2.14	III	1440	(6390)	1H	SZ100	46
31.9	2690	(304)	2.73	III	1440	(6390)	38.5	2230	(252)	2.73	III	1440	(6390)	1H	SZ105	46
31.9	2690	(304)	2.73	III	1440	(6390)	38.5	2230	(252)	2.73	III	1440	(6390)	1H	SZ115	46
31.9	2690	(304)	2.73	III	1440	(6390)	38.5	2230	(252)	2.73	III	1440	(6390)	1H	SZ125	46
27.6	3110	(351)	2.14	III	1440	(6390)	33.3	2580	(291)	2.14	III	1440	(6390)	1H	SZ100	53
27.6	3110	(351)	2.37	III	1440	(6390)	33.3	2580	(291)	2.37	III	1440	(6390)	1H	SZ105	53
27.6	3110	(351)	2.37	III	1440	(6390)	33.3	2580	(291)	2.37	III	1440	(6390)	1H	SZ115	53
27.6	3110	(351)	2.37	III	1440	(6390)	33.3	2580	(291)	2.37	III	1440	(6390)	1H	SZ125	53
24.4	3510	(397)	1.81	II	1440	(6390)	29.4	2910	(329)	1.81	II	1440	(6390)	1H	SZ100	60
24.4	3510	(397)	2.09	III	1440	(6390)	29.4	2910	(329)	2.09	III	1440	(6390)	1H	SZ105	60
24.4	3510	(397)	2.09	III	1440	(6390)	29.4	2910	(329)	2.09	III	1440	(6390)	1H	SZ115	60
24.4	3510	(397)	2.09	III	1440	(6390)	29.4	2910	(329)	2.09	III	1440	(6390)	1H	SZ125	60
24.4	3510	(397)	2.89	III	1810	(8060)	29.4	2910	(329)	2.89	III	1810	(8060)	1H	SA110	60
21.6	3970	(449)	1.73	II	1440	(6390)	26.0	3290	(372)	1.75	II	1440	(6390)	1H	SZ100	67
21.6	3970	(449)	1.85	II	1440	(6390)	26.0	3290	(372)	1.85	II	1440	(6390)	1H	SZ105	67
21.6	3970	(449)	1.85	II	1440	(6390)	26.0	3290	(372)	1.85	II	1440	(6390)	1H	SZ115	67
21.6	3970	(449)	1.85	II	1440	(6390)	26.0	3290	(372)	1.85	II	1440	(6390)	1H	SZ125	67
21.6	3970	(449)	2.47	III	1810	(8060)	26.0	3290	(372)	2.47	III	1810	(8060)	1H	SA110	67
21.6	3970	(449)	2.83	III	1810	(8060)	26.0	3290	(372)	2.83	III	1810	(8060)	1H	SA115	67
21.6	3970	(449)	2.87	III	1810	(8060)	26.0	3290	(372)	2.87	III	1810	(8060)	1H	SA125	67
21.6	3970	(449)	2.87	III	1810	(8060)	26.0	3290	(372)	2.87	III	1810	(8060)	1H	SA145	67

Gearmotors Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1.5 HP (1.1 kW)

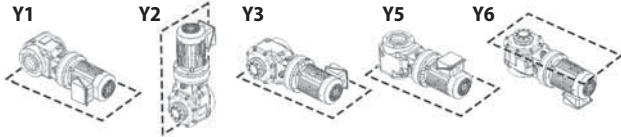
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

50 Hz					60 Hz					Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
19.7	4350	(491)	1.69	II	1440	(6390)	23.8	3600	(407)	1.69	II	1440	(6390)	1H	SZ105	74
19.7	4350	(491)	1.69	II	1440	(6390)	23.8	3600	(407)	1.69	II	1440	(6390)	1H	SZ115	74
19.7	4350	(491)	1.69	II	1440	(6390)	23.8	3600	(407)	1.69	II	1440	(6390)	1H	SZ125	74
19.7	4350	(491)	2.47	III	1810	(8060)	23.8	3600	(407)	2.47	III	1810	(8060)	1H	SA110	74
19.7	4350	(491)	2.63	III	1810	(8060)	23.8	3600	(407)	2.63	III	1810	(8060)	1H	SA115	74
19.7	4350	(491)	2.63	III	1810	(8060)	23.8	3600	(407)	2.63	III	1810	(8060)	1H	SA125	74
19.7	4350	(491)	2.63	III	1810	(8060)	23.8	3600	(407)	2.63	III	1810	(8060)	1H	SA145	74
18.1	4730	(534)	1.15	I	1440	(6390)	21.9	3920	(443)	1.15	I	1440	(6390)	1H	SZ100	80
18.1	4730	(534)	1.52	II	1440	(6390)	21.9	3920	(443)	1.52	II	1440	(6390)	1H	SZ105	80
18.1	4730	(534)	1.55	II	1440	(6390)	21.9	3920	(443)	1.55	II	1440	(6390)	1H	SZ115	80
18.1	4730	(534)	1.55	II	1440	(6390)	21.9	3920	(443)	1.55	II	1440	(6390)	1H	SZ125	80
18.1	4730	(534)	1.74	II	1810	(8060)	21.9	3920	(443)	1.74	II	1810	(8060)	1H	SA110	80
18.1	4730	(534)	2.02	III	1810	(8060)	21.9	3920	(443)	2.02	III	1810	(8060)	1H	SA115	80
18.1	4730	(534)	2.41	III	1810	(8060)	21.9	3920	(443)	2.41	III	1810	(8060)	1H	SA125	80
18.1	4730	(534)	2.41	III	1810	(8060)	21.9	3920	(443)	2.41	III	1810	(8060)	1H	SA145	80
18.1	4730	(534)	2.81	III	2970	(13200)	21.9	3920	(443)	2.81	III	2970	(13200)	1H	SB120	80
16.6	5170	(584)	1.15	I	1440	(6390)	20.0	4280	(484)	1.15	I	1440	(6390)	1H	SZ100	88
16.6	5170	(584)	1.42	II	1440	(6390)	20.0	4280	(484)	1.42	II	1440	(6390)	1H	SZ105	88
16.6	5170	(584)	1.42	II	1440	(6390)	20.0	4280	(484)	1.42	II	1440	(6390)	1H	SZ115	88
16.6	5170	(584)	1.42	II	1440	(6390)	20.0	4280	(484)	1.42	II	1440	(6390)	1H	SZ125	88
16.6	5170	(584)	1.74	II	1810	(8060)	20.0	4280	(484)	1.74	II	1810	(8060)	1H	SA110	88
16.6	5170	(584)	2.02	III	1810	(8060)	20.0	4280	(484)	2.02	III	1810	(8060)	1H	SA115	88
16.6	5170	(584)	2.21	III	1810	(8060)	20.0	4280	(484)	2.21	III	1810	(8060)	1H	SA125	88
16.6	5170	(584)	2.21	III	1810	(8060)	20.0	4280	(484)	2.21	III	1810	(8060)	1H	SA145	88
16.6	5170	(584)	2.81	III	2970	(13200)	20.0	4280	(484)	2.81	III	2970	(13200)	1H	SB120	88
14.3	6000	(678)	1.10	I	1440	(6390)	17.2	4970	(562)	1.10	I	1440	(6390)	1H	SZ100	102
14.3	6000	(678)	1.22	I	1440	(6390)	17.2	4970	(562)	1.22	I	1440	(6390)	1H	SZ105	102
14.3	6000	(678)	1.22	I	1440	(6390)	17.2	4970	(562)	1.22	I	1440	(6390)	1H	SZ115	102
14.3	6000	(678)	1.22	I	1440	(6390)	17.2	4970	(562)	1.22	I	1440	(6390)	1H	SZ125	102
14.3	6000	(678)	1.73	II	1810	(8060)	17.2	4970	(562)	1.73	II	1810	(8060)	1H	SA110	102
14.3	6000	(678)	1.90	II	1810	(8060)	17.2	4970	(562)	1.90	II	1810	(8060)	1H	SA115	102
14.3	6000	(678)	1.90	II	1810	(8060)	17.2	4970	(562)	1.90	II	1810	(8060)	1H	SA125	102
14.3	6000	(678)	1.90	II	1810	(8060)	17.2	4970	(562)	1.90	II	1810	(8060)	1H	SA145	102
14.3	6000	(678)	2.61	III	2970	(13200)	17.2	4970	(562)	2.72	III	2970	(13200)	1H	SB120	102
12.9	6620	(748)	0.89	—	1440	(6390)	15.6	5490	(620)	0.89	—	1440	(6390)	1H	SZ100	112
12.9	6620	(748)	1.09	I	1440	(6390)	15.6	5490	(620)	1.09	I	1440	(6390)	1H	SZ105	112
12.9	6620	(748)	1.11	I	1440	(6390)	15.6	5490	(620)	1.11	I	1440	(6390)	1H	SZ115	112
12.9	6620	(748)	1.11	I	1440	(6390)	15.6	5490	(620)	1.11	I	1440	(6390)	1H	SZ125	112
12.9	6620	(748)	1.36	I	1810	(8060)	15.6	5490	(620)	1.36	I	1810	(8060)	1H	SA110	112
12.9	6620	(748)	1.65	II	1810	(8060)	15.6	5490	(620)	1.65	II	1810	(8060)	1H	SA115	112
12.9	6620	(748)	1.72	II	1810	(8060)	15.6	5490	(620)	1.72	II	1810	(8060)	1H	SA125	112
12.9	6620	(748)	1.72	II	1810	(8060)	15.6	5490	(620)	1.72	II	1810	(8060)	1H	SA145	112
12.9	6620	(748)	2.15	III	2970	(13200)	15.6	5490	(620)	2.26	III	2970	(13200)	1H	SB120	112
12.9	6620	(748)	2.62	III	2970	(13200)	15.6	5490	(620)	2.89	III	2970	(13200)	1H	SB125	112

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

1.5 HP (1.1 kW)

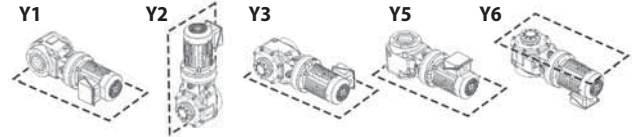
50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in·lbs	(N·m)	SF	AGMA Class	lbs	(N)		in·lbs	(N·m)	SF	AGMA Class	lbs	(N)			
11.8	7240	(818)	0.89	—	1440	(6390)	14.3	6000	(678)	0.89	—	1440	(6390)	1H	SZ100	123
11.8	7240	(818)	1.01	I	1440	(6390)	14.3	6000	(678)	1.01	I	1440	(6390)	1H	SZ105	123
11.8	7240	(818)	1.01	I	1440	(6390)	14.3	6000	(678)	1.01	I	1440	(6390)	1H	SZ115	123
11.8	7240	(818)	1.01	I	1440	(6390)	14.3	6000	(678)	1.01	I	1440	(6390)	1H	SZ125	123
11.8	7240	(818)	1.36	I	1810	(8060)	14.3	6000	(678)	1.36	I	1810	(8060)	1H	SA110	123
11.8	7240	(818)	1.58	II	1810	(8060)	14.3	6000	(678)	1.58	II	1810	(8060)	1H	SA115	123
11.8	7240	(818)	1.58	II	1810	(8060)	14.3	6000	(678)	1.58	II	1810	(8060)	1H	SA125	123
11.8	7240	(818)	1.58	II	1810	(8060)	14.3	6000	(678)	1.58	II	1810	(8060)	1H	SA145	123
11.8	7240	(818)	2.15	III	2970	(13200)	14.3	6000	(678)	2.26	III	2970	(13200)	1H	SB120	123
11.8	7240	(818)	2.62	III	2970	(13200)	14.3	6000	(678)	2.89	III	2970	(13200)	1H	SB125	123
9.63	8940	(1010)	0.83	—	1440	(6390)	11.6	7370	(833)	0.83	—	1440	(6390)	1H	SZ105	151
9.63	8940	(1010)	0.83	—	1440	(6390)	11.6	7370	(833)	0.83	—	1440	(6390)	1H	SZ115	151
9.63	8940	(1010)	0.83	—	1440	(6390)	11.6	7370	(833)	0.83	—	1440	(6390)	1H	SZ125	151
9.63	8940	(1010)	1.18	I	1810	(8060)	11.6	7370	(833)	1.18	I	1810	(8060)	1H	SA110	151
9.63	8940	(1010)	1.28	I	1810	(8060)	11.6	7370	(833)	1.28	I	1810	(8060)	1H	SA115	151
9.63	8940	(1010)	1.28	I	1810	(8060)	11.6	7370	(833)	1.28	I	1810	(8060)	1H	SA125	151
9.63	8940	(1010)	1.28	I	1810	(8060)	11.6	7370	(833)	1.28	I	1810	(8060)	1H	SA145	151
9.63	8940	(1010)	1.74	II	2970	(13200)	11.6	7370	(833)	1.74	II	2970	(13200)	1H	SB120	151
9.63	8940	(1010)	2.13	III	2970	(13200)	11.6	7370	(833)	2.16	III	2970	(13200)	1H	SB125	151
9.63	8940	(1010)	2.56	III	2970	(13200)	11.6	7370	(833)	2.56	III	2970	(13200)	1H	SB145	151
9.63	8940	(1010)	2.56	III	2970	(13200)	11.6	7370	(833)	2.56	III	2970	(13200)	1H	SB165	151
8.12	10500	(1190)	0.86	—	1810	(8060)	9.80	8740	(988)	0.86	—	1810	(8060)	1H	SA110	179
8.12	10500	(1190)	1.01	I	1810	(8060)	9.80	8740	(988)	1.01	I	1810	(8060)	1H	SA115	179
8.12	10500	(1190)	1.08	I	1810	(8060)	9.80	8740	(988)	1.08	I	1810	(8060)	1H	SA125	179
8.12	10500	(1190)	1.08	I	1810	(8060)	9.80	8740	(988)	1.08	I	1810	(8060)	1H	SA145	179
8.12	10500	(1190)	1.48	II	2970	(13200)	9.80	8740	(988)	1.56	II	2970	(13200)	1H	SB120	179
8.12	10500	(1190)	1.79	II	2970	(13200)	9.80	8740	(988)	2.07	III	2970	(13200)	1H	SB125	179
8.12	10500	(1190)	2.16	III	2970	(13200)	9.80	8740	(988)	2.16	III	2970	(13200)	1H	SB145	179
8.12	10500	(1190)	2.16	III	2970	(13200)	9.80	8740	(988)	2.16	III	2970	(13200)	1H	SB165	179
7.02	12200	(1380)	0.92	—	1810	(8060)	8.47	10100	(1140)	0.92	—	1810	(8060)	1H	SA115	207
7.02	12200	(1380)	0.94	—	1810	(8060)	8.47	10100	(1140)	0.94	—	1810	(8060)	1H	SA125	207
7.02	12200	(1380)	0.94	—	1810	(8060)	8.47	10100	(1140)	0.94	—	1810	(8060)	1H	SA145	207
7.02	12200	(1380)	1.18	I	2970	(13200)	8.47	10100	(1140)	1.18	I	2970	(13200)	1H	SB120	207
7.02	12200	(1380)	1.47	II	2970	(13200)	8.47	10100	(1140)	1.47	II	2970	(13200)	1H	SB125	207
7.02	12200	(1380)	1.86	II	2970	(13200)	8.47	10100	(1140)	1.86	II	2970	(13200)	1H	SB145	207
7.02	12200	(1380)	1.86	II	2970	(13200)	8.47	10100	(1140)	1.86	II	2970	(13200)	1H	SB165	207
7.02	12200	(1380)	2.69	III	4810	(21400)	8.47	10100	(1140)	2.69	III	4810	(21400)	1H	5C140	207
7.02	12200	(1380)	2.89	III	4810	(21400)	8.47	10100	(1140)	3.32	III	4810	(21400)	1H	5C145	207
5.84	14700	(1660)	0.87	—	2970	(13200)	7.04	12200	(1380)	0.87	—	2970	(13200)	1H	SB120	249
5.84	14700	(1660)	1.04	I	2970	(13200)	7.04	12200	(1380)	1.09	I	2970	(13200)	1H	SB125	249
5.84	14700	(1660)	1.55	II	2970	(13200)	7.04	12200	(1380)	1.55	II	2970	(13200)	1H	SB145	249
5.84	14700	(1660)	1.55	II	2970	(13200)	7.04	12200	(1380)	1.55	II	2970	(13200)	1H	SB165	249
5.84	14700	(1660)	2.21	III	4810	(21400)	7.04	12200	(1380)	2.21	III	4810	(21400)	1H	5C140	249
5.84	14700	(1660)	2.38	III	4810	(21400)	7.04	12200	(1380)	2.75	III	4810	(21400)	1H	5C145	249

Gearmotors Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1.5 HP (1.1 kW)

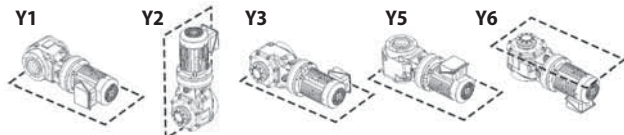
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
4.76	18000	(2030)	0.86	—	2970	(13200)	5.75	15000	(1690)	0.86	—	2970	(13200)	1H	5B120	305
4.76	18000	(2030)	0.94	—	2970	(13200)	5.75	15000	(1690)	1.03	I	2970	(13200)	1H	5B125	305
4.76	18000	(2030)	1.26	I	2970	(13200)	5.75	15000	(1690)	1.26	I	2970	(13200)	1H	5B145	305
4.76	18000	(2030)	1.26	I	2970	(13200)	5.75	15000	(1690)	1.26	I	2970	(13200)	1H	5B165	305
4.76	18000	(2030)	1.80	II	4810	(21400)	5.75	15000	(1690)	1.80	II	4810	(21400)	1H	5C140	305
4.76	18000	(2030)	1.96	II	4810	(21400)	5.75	15000	(1690)	2.25	III	4810	(21400)	1H	5C145	305
4.76	18000	(2030)	2.53	III	4810	(21400)	5.75	15000	(1690)	2.53	III	4810	(21400)	1H	5C165	305
4.76	18000	(2030)	2.53	III	4810	(21400)	5.75	15000	(1690)	2.53	III	4810	(21400)	1H	5C175	305
3.98	20400	(2310)	0.93	—	2970	(13200)	4.81	16900	(1910)	1.12	I	2970	(13200)	1H	5B12DB	364
3.98	20400	(2310)	1.11	I	2970	(13200)	4.81	16900	(1910)	1.34	I	2970	(13200)	1H	5B14DB	364
3.98	20400	(2310)	1.38	I	4810	(21400)	4.81	16900	(1910)	1.38	I	4810	(21400)	1H	5C14DB	364
3.98	20400	(2310)	2.02	III	4810	(21400)	4.81	16900	(1910)	2.44	III	4810	(21400)	1H	5C14DC	364
3.98	20400	(2310)	1.38	I	4810	(21400)	4.81	16900	(1910)	1.38	I	4810	(21400)	1H	5C16DA	364
3.98	20400	(2310)	2.23	III	4810	(21400)	4.81	16900	(1910)	2.69	III	4810	(21400)	1H	5C16DB	364
3.42	23700	(2680)	0.96	—	2970	(13200)	4.13	19600	(2220)	1.16	I	2970	(13200)	1H	5B14DB	424
3.42	23700	(2680)	1.38	I	4810	(21400)	4.13	19600	(2220)	1.38	I	4810	(21400)	1H	5C14DB	424
3.42	23700	(2680)	1.64	II	4810	(21400)	4.13	19600	(2220)	1.97	II	4810	(21400)	1H	5C14DC	424
3.42	23700	(2680)	1.38	I	4810	(21400)	4.13	19600	(2220)	1.38	I	4810	(21400)	1H	5C16DA	424
3.42	23700	(2680)	1.91	II	4810	(21400)	4.13	19600	(2220)	2.31	III	4810	(21400)	1H	5C16DB	424
2.90	28100	(3170)	0.81	—	2970	(13200)	3.50	23300	(2630)	0.98	—	2970	(13200)	1H	5B14DB	501
2.90	28100	(3170)	1.38	I	4810	(21400)	3.50	23300	(2630)	1.38	I	4810	(21400)	1H	5C14DB	501
2.90	28100	(3170)	1.47	II	4810	(21400)	3.50	23300	(2630)	1.77	II	4810	(21400)	1H	5C14DC	501
2.90	28100	(3170)	1.38	I	4810	(21400)	3.50	23300	(2630)	1.38	I	4810	(21400)	1H	5C16DA	501
2.90	28100	(3170)	1.62	II	4810	(21400)	3.50	23300	(2630)	1.96	II	4810	(21400)	1H	5C16DB	501
2.51	32400	(3660)	1.26	I	4810	(21400)	3.03	26800	(3030)	1.38	I	4810	(21400)	1H	5C14DB	578
2.51	32400	(3660)	1.26	I	4810	(21400)	3.03	26800	(3030)	1.53	II	4810	(21400)	1H	5C14DC	578
2.51	32400	(3660)	1.38	I	4810	(21400)	3.03	26800	(3030)	1.38	I	4810	(21400)	1H	5C16DA	578
2.51	32400	(3660)	1.40	II	4810	(21400)	3.03	26800	(3030)	1.69	II	4810	(21400)	1H	5C16DB	578
2.12	38300	(4330)	1.06	I	4810	(21400)	2.56	31700	(3580)	1.29	I	4810	(21400)	1H	5C14DC	683
2.12	38300	(4330)	1.19	I	4810	(21400)	2.56	31700	(3580)	1.38	I	4810	(21400)	1H	5C16DA	683
1.79	45400	(5130)	0.89	—	4810	(21400)	2.16	37600	(4250)	1.07	I	4810	(21400)	1H	5C14DC	809
1.79	45400	(5130)	1.00	I	4810	(21400)	2.16	37600	(4250)	1.21	I	4810	(21400)	1H	5C16DA	809
1.52	53600	(6060)	0.85	—	4810	(21400)	1.83	44400	(5020)	1.03	I	4810	(21400)	1H	5C16DA	956

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, Y2 3.92

Double Reduction, AF-Motor 3.100–3.103

Single Reduction, AF-Motor 3.84–3.91

Double Reduction 3.94–3.99

Double Reduction, Y2 3.104

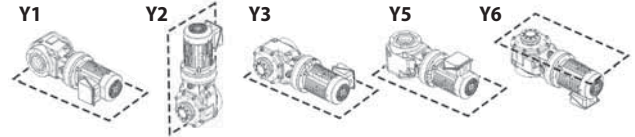
2 HP (1.5 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	850	(96)	1.57	II	1440	(6390)	167	700	(79)	1.57	II	1440	(6390)	2	SZ100	11
138	850	(96)	2.12	III	1440	(6390)	167	700	(79)	2.12	III	1440	(6390)	2	SZ105	11
113	1040	(117)	1.57	II	1440	(6390)	137	850	(97)	1.57	II	1440	(6390)	2	SZ100	13
113	1040	(117)	2.12	III	1440	(6390)	137	850	(97)	2.12	III	1440	(6390)	2	SZ105	13
104	1130	(128)	1.57	II	1440	(6390)	125	940	(106)	1.57	II	1440	(6390)	2	SZ100	14
104	1130	(128)	2.12	III	1440	(6390)	125	940	(106)	2.12	III	1440	(6390)	2	SZ105	14
90.6	1290	(146)	1.57	II	1440	(6390)	109	1070	(121)	1.57	II	1440	(6390)	2	SZ100	16
90.6	1290	(146)	2.12	III	1440	(6390)	109	1070	(121)	2.12	III	1440	(6390)	2	SZ105	16
82.9	1410	(159)	1.57	II	1440	(6390)	100	1170	(132)	1.57	II	1440	(6390)	2	SZ100	18
82.9	1410	(159)	2.12	III	1440	(6390)	100	1170	(132)	2.12	III	1440	(6390)	2	SZ105	18
75.5	1550	(175)	1.57	II	1440	(6390)	91.1	1280	(145)	1.57	II	1440	(6390)	2	SZ100	19
69.0	1690	(191)	1.57	II	1440	(6390)	83.3	1400	(158)	1.57	II	1440	(6390)	2	SZ100	21
69.0	1690	(191)	2.12	III	1440	(6390)	83.3	1400	(158)	2.12	III	1440	(6390)	2	SZ105	21
69.0	1690	(191)	2.37	III	1440	(6390)	83.3	1400	(158)	2.37	III	1440	(6390)	2	SZ110	21
69.0	1690	(191)	2.61	III	1440	(6390)	83.3	1400	(158)	2.61	III	1440	(6390)	2	SZ115	21
69.0	1690	(191)	2.37	III	1810	(8060)	83.3	1400	(158)	2.37	III	1810	(8060)	2	SA110	21
69.0	1690	(191)	2.61	III	1810	(8060)	83.3	1400	(158)	2.61	III	1810	(8060)	2	SA115	21
64.7	1810	(204)	2.37	III	1440	(6390)	78.1	1500	(169)	2.37	III	1440	(6390)	2	SZ110	22
64.7	1810	(204)	2.61	III	1440	(6390)	78.1	1500	(169)	2.61	III	1440	(6390)	2	SZ115	22
64.7	1810	(204)	2.37	III	1810	(8060)	78.1	1500	(169)	2.37	III	1810	(8060)	2	SA110	22
64.7	1810	(204)	2.61	III	1810	(8060)	78.1	1500	(169)	2.61	III	1810	(8060)	2	SA115	22
59.2	1970	(223)	2.37	III	1440	(6390)	71.4	1640	(185)	2.37	III	1440	(6390)	2	SZ110	25
59.2	1970	(223)	2.61	III	1440	(6390)	71.4	1640	(185)	2.61	III	1440	(6390)	2	SZ115	25
59.2	1970	(223)	2.37	III	1810	(8060)	71.4	1640	(185)	2.37	III	1810	(8060)	2	SA110	25
59.2	1970	(223)	2.61	III	1810	(8060)	71.4	1640	(185)	2.61	III	1810	(8060)	2	SA115	25
51.8	2260	(255)	1.57	II	1440	(6390)	62.5	1870	(211)	1.57	II	1440	(6390)	2	SZ100	28
51.8	2260	(255)	2.12	III	1440	(6390)	62.5	1870	(211)	2.12	III	1440	(6390)	2	SZ105	28
51.8	2260	(255)	2.37	III	1440	(6390)	62.5	1870	(211)	2.37	III	1440	(6390)	2	SZ110	28
51.8	2260	(255)	2.61	III	1440	(6390)	62.5	1870	(211)	2.61	III	1440	(6390)	2	SZ115	28
51.8	2260	(255)	2.37	III	1810	(8060)	62.5	1870	(211)	2.37	III	1810	(8060)	2	SA110	28
51.8	2260	(255)	2.61	III	1810	(8060)	62.5	1870	(211)	2.61	III	1810	(8060)	2	SA115	28
41.2	2840	(321)	1.57	II	1440	(6390)	49.7	2350	(266)	1.57	II	1440	(6390)	2	SZ100	35
41.2	2840	(321)	2.12	III	1440	(6390)	49.7	2350	(266)	2.12	III	1440	(6390)	2	SZ105	35
41.2	2840	(321)	2.37	III	1440	(6390)	49.7	2350	(266)	2.37	III	1440	(6390)	2	SZ110	35
41.2	2840	(321)	2.59	III	1440	(6390)	49.7	2350	(266)	2.59	III	1440	(6390)	2	SZ115	35
41.2	2840	(321)	2.59	III	1440	(6390)	49.7	2350	(266)	2.59	III	1440	(6390)	2	SZ125	35
41.2	2840	(321)	2.37	III	1810	(8060)	49.7	2350	(266)	2.37	III	1810	(8060)	2	SA110	35
41.2	2840	(321)	2.61	III	1810	(8060)	49.7	2350	(266)	2.61	III	1810	(8060)	2	SA115	35
37.7	3110	(351)	1.57	II	1440	(6390)	45.5	2580	(291)	1.57	II	1440	(6390)	2	SZ100	39
37.7	3110	(351)	2.12	III	1440	(6390)	45.5	2580	(291)	2.12	III	1440	(6390)	2	SZ105	39
37.7	3110	(351)	2.37	III	1440	(6390)	45.5	2580	(291)	2.37	III	1440	(6390)	2	SZ115	39
37.7	3110	(351)	2.37	III	1440	(6390)	45.5	2580	(291)	2.37	III	1440	(6390)	2	SZ125	39
37.7	3110	(351)	2.37	III	1810	(8060)	45.5	2580	(291)	2.37	III	1810	(8060)	2	SA110	39
37.7	3110	(351)	2.61	III	1810	(8060)	45.5	2580	(291)	2.61	III	1810	(8060)	2	SA115	39

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



2 HP (1.5 kW)

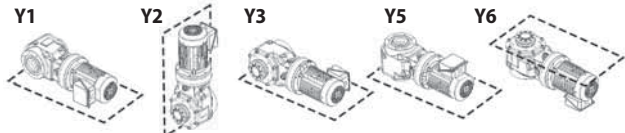
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
31.9	3660	(414)	1.57	II	1440	(6390)	38.5	3040	(343)	1.57	II	1440	(6390)	2	SZ100	46
31.9	3660	(414)	2.00	III	1440	(6390)	38.5	3040	(343)	2.00	III	1440	(6390)	2	SZ105	46
31.9	3660	(414)	2.00	III	1440	(6390)	38.5	3040	(343)	2.00	III	1440	(6390)	2	SZ115	46
31.9	3660	(414)	2.00	III	1440	(6390)	38.5	3040	(343)	2.00	III	1440	(6390)	2	SZ125	46
31.9	3660	(414)	2.37	III	1810	(8060)	38.5	3040	(343)	2.37	III	1810	(8060)	2	SA110	46
31.9	3660	(414)	2.60	III	1810	(8060)	38.5	3040	(343)	2.60	III	1810	(8060)	2	SA115	46
27.6	4230	(478)	1.57	II	1440	(6390)	33.3	3500	(396)	1.57	II	1440	(6390)	2	SZ100	53
27.6	4230	(478)	1.74	II	1440	(6390)	33.3	3500	(396)	1.74	II	1440	(6390)	2	SZ105	53
27.6	4230	(478)	1.74	II	1440	(6390)	33.3	3500	(396)	1.74	II	1440	(6390)	2	SZ115	53
27.6	4230	(478)	1.74	II	1440	(6390)	33.3	3500	(396)	1.74	II	1440	(6390)	2	SZ125	53
27.6	4230	(478)	2.37	III	1810	(8060)	33.3	3500	(396)	2.37	III	1810	(8060)	2	SA110	53
27.6	4230	(478)	2.60	III	1810	(8060)	33.3	3500	(396)	2.60	III	1810	(8060)	2	SA115	53
27.6	4230	(478)	2.70	III	1810	(8060)	33.3	3500	(396)	2.70	III	1810	(8060)	2	SA125	53
27.6	4230	(478)	2.70	III	1810	(8060)	33.3	3500	(396)	2.70	III	1810	(8060)	2	SA145	53
24.4	4800	(542)	1.33	I	1440	(6390)	29.4	3970	(449)	1.33	I	1440	(6390)	2	SZ100	60
24.4	4800	(542)	1.53	II	1440	(6390)	29.4	3970	(449)	1.53	II	1440	(6390)	2	SZ105	60
24.4	4800	(542)	1.53	II	1440	(6390)	29.4	3970	(449)	1.53	II	1440	(6390)	2	SZ115	60
24.4	4800	(542)	1.53	II	1440	(6390)	29.4	3970	(449)	1.53	II	1440	(6390)	2	SZ125	60
24.4	4800	(542)	2.12	III	1810	(8060)	29.4	3970	(449)	2.12	III	1810	(8060)	2	SA110	60
24.4	4800	(542)	2.38	III	1810	(8060)	29.4	3970	(449)	2.38	III	1810	(8060)	2	SA115	60
24.4	4800	(542)	2.38	III	1810	(8060)	29.4	3970	(449)	2.38	III	1810	(8060)	2	SA125	60
24.4	4800	(542)	2.38	III	1810	(8060)	29.4	3970	(449)	2.38	III	1810	(8060)	2	SA145	60
21.6	5420	(612)	1.27	I	1440	(6390)	26.0	4490	(507)	1.29	I	1440	(6390)	2	SZ100	67
21.6	5420	(612)	1.36	I	1440	(6390)	26.0	4490	(507)	1.36	I	1440	(6390)	2	SZ105	67
21.6	5420	(612)	1.36	I	1440	(6390)	26.0	4490	(507)	1.36	I	1440	(6390)	2	SZ115	67
21.6	5420	(612)	1.36	I	1440	(6390)	26.0	4490	(507)	1.36	I	1440	(6390)	2	SZ125	67
21.6	5420	(612)	1.81	II	1810	(8060)	26.0	4490	(507)	1.81	II	1810	(8060)	2	SA110	67
21.6	5420	(612)	2.07	III	1810	(8060)	26.0	4490	(507)	2.07	III	1810	(8060)	2	SA115	67
21.6	5420	(612)	2.11	III	1810	(8060)	26.0	4490	(507)	2.11	III	1810	(8060)	2	SA125	67
21.6	5420	(612)	2.11	III	1810	(8060)	26.0	4490	(507)	2.11	III	1810	(8060)	2	SA145	67
21.6	5420	(612)	2.64	III	2970	(13200)	26.0	4490	(507)	2.64	III	2970	(13200)	2	SB120	67
19.7	5920	(669)	1.24	I	1440	(6390)	23.8	4910	(555)	1.24	I	1440	(6390)	2	SZ105	74
19.7	5920	(669)	1.24	I	1440	(6390)	23.8	4910	(555)	1.24	I	1440	(6390)	2	SZ115	74
19.7	5920	(669)	1.24	I	1440	(6390)	23.8	4910	(555)	1.24	I	1440	(6390)	2	SZ125	74
19.7	5920	(669)	1.81	II	1810	(8060)	23.8	4910	(555)	1.81	II	1810	(8060)	2	SA110	74
19.7	5920	(669)	1.93	II	1810	(8060)	23.8	4910	(555)	1.93	II	1810	(8060)	2	SA115	74
19.7	5920	(669)	1.93	II	1810	(8060)	23.8	4910	(555)	1.93	II	1810	(8060)	2	SA125	74
19.7	5920	(669)	1.93	II	1810	(8060)	23.8	4910	(555)	1.93	II	1810	(8060)	2	SA145	74
19.7	5920	(669)	2.64	III	2970	(13200)	23.8	4910	(555)	2.64	III	2970	(13200)	2	SB120	74

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, Y2 3.92

Double Reduction, AF-Motor 3.100–3.103

Single Reduction, AF-Motor 3.84–3.91

Double Reduction 3.94–3.99

Double Reduction, Y2 3.104

2 HP (1.5 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
18.1	6450	(729)	0.85	—	1440	(6390)	21.9	5350	(604)	0.85	—	1440	(6390)	2	SZ100	80
18.1	6450	(729)	1.11	I	1440	(6390)	21.9	5350	(604)	1.11	I	1440	(6390)	2	SZ105	80
18.1	6450	(729)	1.14	I	1440	(6390)	21.9	5350	(604)	1.14	I	1440	(6390)	2	SZ115	80
18.1	6450	(729)	1.14	I	1440	(6390)	21.9	5350	(604)	1.14	I	1440	(6390)	2	SZ125	80
18.1	6450	(729)	1.27	I	1810	(8060)	21.9	5350	(604)	1.27	I	1810	(8060)	2	5A110	80
18.1	6450	(729)	1.48	II	1810	(8060)	21.9	5350	(604)	1.48	II	1810	(8060)	2	5A115	80
18.1	6450	(729)	1.77	II	1810	(8060)	21.9	5350	(604)	1.77	II	1810	(8060)	2	5A125	80
18.1	6450	(729)	1.77	II	1810	(8060)	21.9	5350	(604)	1.77	II	1810	(8060)	2	5A145	80
18.1	6450	(729)	2.06	III	2970	(13200)	21.9	5350	(604)	2.06	III	2970	(13200)	2	5B120	80
18.1	6450	(729)	2.64	III	2970	(13200)	21.9	5350	(604)	2.64	III	2970	(13200)	2	5B125	80
16.6	7050	(797)	0.85	—	1440	(6390)	20.0	5840	(660)	0.85	—	1440	(6390)	2	SZ100	88
16.6	7050	(797)	1.04	I	1440	(6390)	20.0	5840	(660)	1.04	I	1440	(6390)	2	SZ105	88
16.6	7050	(797)	1.04	I	1440	(6390)	20.0	5840	(660)	1.04	I	1440	(6390)	2	SZ115	88
16.6	7050	(797)	1.04	I	1440	(6390)	20.0	5840	(660)	1.04	I	1440	(6390)	2	SZ125	88
16.6	7050	(797)	1.27	I	1810	(8060)	20.0	5840	(660)	1.27	I	1810	(8060)	2	5A110	88
16.6	7050	(797)	1.48	II	1810	(8060)	20.0	5840	(660)	1.48	II	1810	(8060)	2	5A115	88
16.6	7050	(797)	1.62	II	1810	(8060)	20.0	5840	(660)	1.62	II	1810	(8060)	2	5A125	88
16.6	7050	(797)	1.62	II	1810	(8060)	20.0	5840	(660)	1.62	II	1810	(8060)	2	5A145	88
16.6	7050	(797)	2.06	III	2970	(13200)	20.0	5840	(660)	2.06	III	2970	(13200)	2	5B120	88
16.6	7050	(797)	2.64	III	2970	(13200)	20.0	5840	(660)	2.64	III	2970	(13200)	2	5B125	88
14.3	8190	(925)	0.81	—	1440	(6390)	17.2	6780	(766)	0.81	—	1440	(6390)	2	SZ100	102
14.3	8190	(925)	0.90	—	1440	(6390)	17.2	6780	(766)	0.90	—	1440	(6390)	2	SZ105	102
14.3	8190	(925)	0.90	—	1440	(6390)	17.2	6780	(766)	0.90	—	1440	(6390)	2	SZ115	102
14.3	8190	(925)	0.90	—	1440	(6390)	17.2	6780	(766)	0.90	—	1440	(6390)	2	SZ125	102
14.3	8190	(925)	1.27	I	1810	(8060)	17.2	6780	(766)	1.27	I	1810	(8060)	2	5A110	102
14.3	8190	(925)	1.40	II	1810	(8060)	17.2	6780	(766)	1.40	II	1810	(8060)	2	5A115	102
14.3	8190	(925)	1.40	II	1810	(8060)	17.2	6780	(766)	1.40	II	1810	(8060)	2	5A125	102
14.3	8190	(925)	1.40	II	1810	(8060)	17.2	6780	(766)	1.40	II	1810	(8060)	2	5A145	102
14.3	8190	(925)	1.91	II	2970	(13200)	17.2	6780	(766)	1.99	II	2970	(13200)	2	5B120	102
14.3	8190	(925)	2.31	III	2970	(13200)	17.2	6780	(766)	2.51	III	2970	(13200)	2	5B125	102
14.3	8190	(925)	2.78	III	2970	(13200)	17.2	6780	(766)	2.78	III	2970	(13200)	2	5B145	102
14.3	8190	(925)	2.78	III	2970	(13200)	17.2	6780	(766)	2.78	III	2970	(13200)	2	5B165	102
12.9	9030	(1020)	0.81	—	1440	(6390)	15.6	7480	(845)	0.81	—	1440	(6390)	2	SZ115	112
12.9	9030	(1020)	0.81	—	1440	(6390)	15.6	7480	(845)	0.81	—	1440	(6390)	2	SZ125	112
12.9	9030	(1020)	1.00	I	1810	(8060)	15.6	7480	(845)	1.00	I	1810	(8060)	2	5A110	112
12.9	9030	(1020)	1.21	I	1810	(8060)	15.6	7480	(845)	1.21	I	1810	(8060)	2	5A115	112
12.9	9030	(1020)	1.26	I	1810	(8060)	15.6	7480	(845)	1.26	I	1810	(8060)	2	5A125	112
12.9	9030	(1020)	1.26	I	1810	(8060)	15.6	7480	(845)	1.26	I	1810	(8060)	2	5A145	112
12.9	9030	(1020)	1.58	II	2970	(13200)	15.6	7480	(845)	1.66	II	2970	(13200)	2	5B120	112
12.9	9030	(1020)	1.92	II	2970	(13200)	15.6	7480	(845)	2.12	III	2970	(13200)	2	5B125	112
12.9	9030	(1020)	2.52	III	2970	(13200)	15.6	7480	(845)	2.52	III	2970	(13200)	2	5B145	112
12.9	9030	(1020)	2.52	III	2970	(13200)	15.6	7480	(845)	2.52	III	2970	(13200)	2	5B165	112

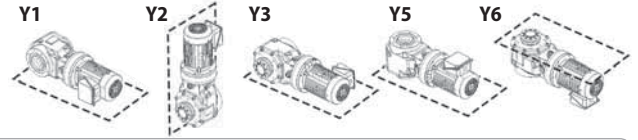
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



2 HP (1.5 kW)

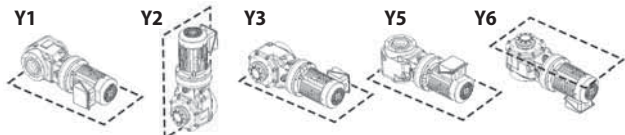
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors Selection Tables

50 Hz						60 Hz						Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs (N)		in-lbs	(N·m)	SF	AGMA Class	lbs (N)			
11.8	9910	(1120)	1.00	I	1810 (8060)	14.3	8190 (925)	1.00	I	1810 (8060)	2	5A110	123	
11.8	9910	(1120)	1.16	I	1810 (8060)	14.3	8190 (925)	1.16	I	1810 (8060)	2	5A115	123	
11.8	9910	(1120)	1.16	I	1810 (8060)	14.3	8190 (925)	1.16	I	1810 (8060)	2	5A125	123	
11.8	9910	(1120)	1.16	I	1810 (8060)	14.3	8190 (925)	1.16	I	1810 (8060)	2	5A145	123	
11.8	9910	(1120)	1.58	II	2970 (13200)	14.3	8190 (925)	1.66	II	2970 (13200)	2	5B120	123	
11.8	9910	(1120)	1.92	II	2970 (13200)	14.3	8190 (925)	2.12	III	2970 (13200)	2	5B125	123	
11.8	9910	(1120)	2.30	III	2970 (13200)	14.3	8190 (925)	2.30	III	2970 (13200)	2	5B145	123	
11.8	9910	(1120)	2.30	III	2970 (13200)	14.3	8190 (925)	2.30	III	2970 (13200)	2	5B165	123	
9.63	12100	(1370)	0.87	—	1810 (8060)	11.6	10100 (1140)	0.87	—	1810 (8060)	2	5A110	151	
9.63	12100	(1370)	0.94	—	1810 (8060)	11.6	10100 (1140)	0.94	—	1810 (8060)	2	5A115	151	
9.63	12100	(1370)	0.94	—	1810 (8060)	11.6	10100 (1140)	0.94	—	1810 (8060)	2	5A125	151	
9.63	12100	(1370)	0.94	—	1810 (8060)	11.6	10100 (1140)	0.94	—	1810 (8060)	2	5A145	151	
9.63	12100	(1370)	1.27	I	2970 (13200)	11.6	10100 (1140)	1.27	I	2970 (13200)	2	5B120	151	
9.63	12100	(1370)	1.56	II	2970 (13200)	11.6	10100 (1140)	1.59	II	2970 (13200)	2	5B125	151	
9.63	12100	(1370)	1.87	II	2970 (13200)	11.6	10100 (1140)	1.87	II	2970 (13200)	2	5B145	151	
9.63	12100	(1370)	1.87	II	2970 (13200)	11.6	10100 (1140)	1.87	II	2970 (13200)	2	5B165	151	
9.63	12100	(1370)	2.63	III	4810 (21400)	11.6	10100 (1140)	2.63	III	4810 (21400)	2	5C140	151	
8.12	14400	(1630)	1.09	I	2970 (13200)	9.80	11900 (1350)	1.15	I	2970 (13200)	2	5B120	179	
8.12	14400	(1630)	1.31	I	2970 (13200)	9.80	11900 (1350)	1.52	II	2970 (13200)	2	5B125	179	
8.12	14400	(1630)	1.58	II	2970 (13200)	9.80	11900 (1350)	1.58	II	2970 (13200)	2	5B145	179	
8.12	14400	(1630)	1.58	II	2970 (13200)	9.80	11900 (1350)	1.58	II	2970 (13200)	2	5B165	179	
8.12	14400	(1630)	2.29	III	4810 (21400)	9.80	11900 (1350)	2.29	III	4810 (21400)	2	5C140	179	
8.12	14400	(1630)	2.47	III	4810 (21400)	9.80	11900 (1350)	2.81	III	4810 (21400)	2	5C145	179	
7.02	16600	(1880)	0.87	—	2970 (13200)	8.47	13800 (1560)	0.87	—	2970 (13200)	2	5B120	207	
7.02	16600	(1880)	1.08	I	2970 (13200)	8.47	13800 (1560)	1.08	I	2970 (13200)	2	5B125	207	
7.02	16600	(1880)	1.37	I	2970 (13200)	8.47	13800 (1560)	1.37	I	2970 (13200)	2	5B145	207	
7.02	16600	(1880)	1.37	I	2970 (13200)	8.47	13800 (1560)	1.37	I	2970 (13200)	2	5B165	207	
7.02	16600	(1880)	1.97	II	4810 (21400)	8.47	13800 (1560)	1.97	II	4810 (21400)	2	5C140	207	
7.02	16600	(1880)	2.12	III	4810 (21400)	8.47	13800 (1560)	2.43	III	4810 (21400)	2	5C145	207	
7.02	16600	(1880)	2.73	III	4810 (21400)	8.47	13800 (1560)	2.73	III	4810 (21400)	2	5C165	207	
7.02	16600	(1880)	2.73	III	4810 (21400)	8.47	13800 (1560)	2.73	III	4810 (21400)	2	5C175	207	
5.84	20000	(2260)	1.14	I	2970 (13200)	7.04	16600 (1880)	1.14	I	2970 (13200)	2	5B145	249	
5.84	20000	(2260)	1.14	I	2970 (13200)	7.04	16600 (1880)	1.14	I	2970 (13200)	2	5B165	249	
5.84	20000	(2260)	1.62	II	4810 (21400)	7.04	16600 (1880)	1.62	II	4810 (21400)	2	5C140	249	
5.84	20000	(2260)	1.75	II	4810 (21400)	7.04	16600 (1880)	2.02	III	4810 (21400)	2	5C145	249	
5.84	20000	(2260)	2.27	III	4810 (21400)	7.04	16600 (1880)	2.27	III	4810 (21400)	2	5C165	249	
5.84	20000	(2260)	2.27	III	4810 (21400)	7.04	16600 (1880)	2.27	III	4810 (21400)	2	5C175	249	
4.76	24500	(2770)	0.93	—	2970 (13200)	5.75	20400 (2300)	0.93	—	2970 (13200)	2	5B145	305	
4.76	24500	(2770)	0.93	—	2970 (13200)	5.75	20400 (2300)	0.93	—	2970 (13200)	2	5B165	305	
4.76	24500	(2770)	1.32	I	4810 (21400)	5.75	20400 (2300)	1.32	I	4810 (21400)	2	5C140	305	
4.76	24500	(2770)	1.44	II	4810 (21400)	5.75	20400 (2300)	1.65	II	4810 (21400)	2	5C145	305	
4.76	24500	(2770)	1.85	II	4810 (21400)	5.75	20400 (2300)	1.85	II	4810 (21400)	2	5C165	305	
4.76	24500	(2770)	1.85	II	4810 (21400)	5.75	20400 (2300)	1.85	II	4810 (21400)	2	5C175	305	

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

Double Reduction, Y2 3.104

2 HP (1.5 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in·lbs	(N·m)	SF	AGMA Class	lbs	(N)		in·lbs	(N·m)	SF	AGMA Class	lbs	(N)			
3.98	27900	(3150)	0.82	—	2970	(13200)	4.81	23100	(2610)	0.99	—	2970	(13200)	2	5B14DB	364
3.98	27900	(3150)	1.01	I	4810	(21400)	4.81	23100	(2610)	1.01	I	4810	(21400)	2	5C14DB	364
3.98	27900	(3150)	1.48	II	4810	(21400)	4.81	23100	(2610)	1.79	II	4810	(21400)	2	5C14DC	364
3.98	27900	(3150)	1.01	I	4810	(21400)	4.81	23100	(2610)	1.01	I	4810	(21400)	2	5C16DA	364
3.98	27900	(3150)	1.63	II	4810	(21400)	4.81	23100	(2610)	1.97	II	4810	(21400)	2	5C16DB	364
3.42	32400	(3660)	1.01	I	4810	(21400)	4.13	26800	(3030)	1.01	I	4810	(21400)	2	5C14DB	424
3.42	32400	(3660)	1.20	I	4810	(21400)	4.13	26800	(3030)	1.45	II	4810	(21400)	2	5C14DC	424
3.42	32400	(3660)	1.01	I	4810	(21400)	4.13	26800	(3030)	1.01	I	4810	(21400)	2	5C16DA	424
3.42	32400	(3660)	1.40	II	4810	(21400)	4.13	26800	(3030)	1.69	II	4810	(21400)	2	5C16DB	424
2.90	38300	(4330)	1.01	I	4810	(21400)	3.50	31700	(3580)	1.01	I	4810	(21400)	2	5C14DB	501
2.90	38300	(4330)	1.08	I	4810	(21400)	3.50	31700	(3580)	1.30	I	4810	(21400)	2	5C14DC	501
2.90	38300	(4330)	1.01	I	4810	(21400)	3.50	31700	(3580)	1.01	I	4810	(21400)	2	5C16DA	501
2.90	38300	(4330)	1.19	I	4810	(21400)	3.50	31700	(3580)	1.43	II	4810	(21400)	2	5C16DB	501
2.51	44200	(4990)	0.93	—	4810	(21400)	3.03	36600	(4140)	1.01	I	4810	(21400)	2	5C14DB	578
2.51	44200	(4990)	0.93	—	4810	(21400)	3.03	36600	(4140)	1.12	I	4810	(21400)	2	5C14DC	578
2.51	44200	(4990)	1.01	I	4810	(21400)	3.03	36600	(4140)	1.01	I	4810	(21400)	2	5C16DA	578
2.12	52200	(5900)	0.87	—	4810	(21400)	2.56	43300	(4890)	1.01	I	4810	(21400)	2	5C16DA	683

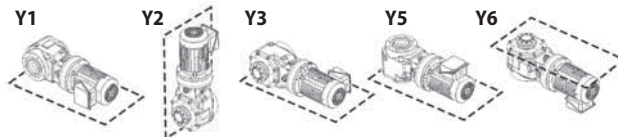
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



3 HP (2.2 kW)

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

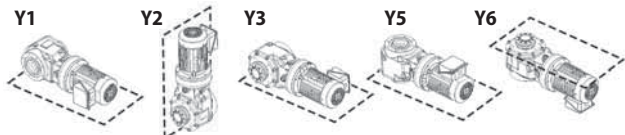
Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	1240	(140)	1.07	I	1440	(6390)	167	1030	(116)	1.07	I	1440	(6390)	3	SZ100	11
138	1240	(140)	1.45	II	1440	(6390)	167	1030	(116)	1.45	II	1440	(6390)	3	SZ105	11
138	1240	(140)	2.96	III	1440	(6390)	167	1030	(116)	3.57	III	1440	(6390)	3	SZ115	11
138	1240	(140)	2.96	III	1810	(8060)	167	1030	(116)	3.57	III	1810	(8060)	3	SA115	11
113	1510	(171)	1.07	I	1440	(6390)	137	1260	(142)	1.07	I	1440	(6390)	3	SZ100	13
113	1510	(171)	1.45	II	1440	(6390)	137	1260	(142)	1.45	II	1440	(6390)	3	SZ105	13
113	1510	(171)	2.96	III	1440	(6390)	137	1260	(142)	3.57	III	1440	(6390)	3	SZ115	13
113	1510	(171)	2.96	III	1810	(8060)	137	1260	(142)	3.57	III	1810	(8060)	3	SA115	13
104	1660	(187)	1.07	I	1440	(6390)	125	1370	(155)	1.07	I	1440	(6390)	3	SZ100	14
104	1660	(187)	1.45	II	1440	(6390)	125	1370	(155)	1.45	II	1440	(6390)	3	SZ105	14
104	1660	(187)	2.96	III	1440	(6390)	125	1370	(155)	3.57	III	1440	(6390)	3	SZ115	14
104	1660	(187)	2.96	III	1810	(8060)	125	1370	(155)	3.57	III	1810	(8060)	3	SA115	14
90.6	1890	(214)	1.07	I	1440	(6390)	109	1570	(177)	1.07	I	1440	(6390)	3	SZ100	16
90.6	1890	(214)	1.45	II	1440	(6390)	109	1570	(177)	1.45	II	1440	(6390)	3	SZ105	16
90.6	1890	(214)	2.96	III	1440	(6390)	109	1570	(177)	3.57	III	1440	(6390)	3	SZ115	16
90.6	1890	(214)	2.96	III	1810	(8060)	109	1570	(177)	3.57	III	1810	(8060)	3	SA115	16
82.9	2070	(234)	1.07	I	1440	(6390)	100	1720	(194)	1.07	I	1440	(6390)	3	SZ100	18
82.9	2070	(234)	1.45	II	1440	(6390)	100	1720	(194)	1.45	II	1440	(6390)	3	SZ105	18
82.9	2070	(234)	2.96	III	1440	(6390)	100	1720	(194)	3.55	III	1440	(6390)	3	SZ115	18
82.9	2070	(234)	2.96	III	1810	(8060)	100	1720	(194)	3.57	III	1810	(8060)	3	SA115	18
75.5	2270	(257)	1.07	I	1440	(6390)	91.1	1890	(213)	1.07	I	1440	(6390)	3	SZ100	19
69.0	2490	(281)	1.07	I	1440	(6390)	83.3	2050	(232)	1.07	I	1440	(6390)	3	SZ100	21
69.0	2490	(281)	1.45	II	1440	(6390)	83.3	2050	(232)	1.45	II	1440	(6390)	3	SZ105	21
69.0	2490	(281)	1.61	II	1440	(6390)	83.3	2050	(232)	1.61	II	1440	(6390)	3	SZ110	21
69.0	2490	(281)	1.78	II	1440	(6390)	83.3	2050	(232)	1.78	II	1440	(6390)	3	SZ115	21
69.0	2490	(281)	2.96	III	1440	(6390)	83.3	2050	(232)	2.96	III	1440	(6390)	3	SZ120	21
69.0	2490	(281)	2.96	III	1440	(6390)	83.3	2050	(232)	2.96	III	1440	(6390)	3	SZ125	21
69.0	2490	(281)	1.61	II	1810	(8060)	83.3	2050	(232)	1.61	II	1810	(8060)	3	SA110	21
69.0	2490	(281)	1.78	II	1810	(8060)	83.3	2050	(232)	1.78	II	1810	(8060)	3	SA115	21
69.0	2490	(281)	2.97	III	1810	(8060)	83.3	2050	(232)	2.97	III	1810	(8060)	3	SA120	21
69.0	2490	(281)	2.97	III	2970	(13200)	83.3	2050	(232)	2.97	III	2970	(13200)	3	SB120	21
64.7	2650	(299)	1.61	II	1440	(6390)	78.1	2190	(248)	1.61	II	1440	(6390)	3	SZ110	22
64.7	2650	(299)	1.78	II	1440	(6390)	78.1	2190	(248)	1.78	II	1440	(6390)	3	SZ115	22
64.7	2650	(299)	2.77	III	1440	(6390)	78.1	2190	(248)	2.77	III	1440	(6390)	3	SZ120	22
64.7	2650	(299)	2.77	III	1440	(6390)	78.1	2190	(248)	2.77	III	1440	(6390)	3	SZ125	22
64.7	2650	(299)	1.61	II	1810	(8060)	78.1	2190	(248)	1.61	II	1810	(8060)	3	SA110	22
64.7	2650	(299)	1.78	II	1810	(8060)	78.1	2190	(248)	1.78	II	1810	(8060)	3	SA115	22
64.7	2650	(299)	2.97	III	1810	(8060)	78.1	2190	(248)	2.97	III	1810	(8060)	3	SA120	22
64.7	2650	(299)	2.97	III	2970	(13200)	78.1	2190	(248)	2.97	III	2970	(13200)	3	SB120	22
59.2	2890	(327)	1.61	II	1440	(6390)	71.4	2400	(271)	1.61	II	1440	(6390)	3	SZ110	25
59.2	2890	(327)	1.78	II	1440	(6390)	71.4	2400	(271)	1.78	II	1440	(6390)	3	SZ115	25
59.2	2890	(327)	2.54	III	1440	(6390)	71.4	2400	(271)	2.54	III	1440	(6390)	3	SZ125	25
59.2	2890	(327)	1.61	II	1810	(8060)	71.4	2400	(271)	1.61	II	1810	(8060)	3	SA110	25
59.2	2890	(327)	1.78	II	1810	(8060)	71.4	2400	(271)	1.78	II	1810	(8060)	3	SA115	25
59.2	2890	(327)	2.97	III	1810	(8060)	71.4	2400	(271)	2.97	III	1810	(8060)	3	SA120	25
59.2	2890	(327)	2.97	III	2970	(13200)	71.4	2400	(271)	2.97	III	2970	(13200)	3	SB120	25

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

3 HP (2.2 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
51.8	3310	(374)	1.07	I	1440	(6390)	62.5	2740	(310)	1.07	I	1440	(6390)	3	SZ100	28
51.8	3310	(374)	1.45	II	1440	(6390)	62.5	2740	(310)	1.45	II	1440	(6390)	3	SZ105	28
51.8	3310	(374)	1.61	II	1440	(6390)	62.5	2740	(310)	1.61	II	1440	(6390)	3	SZ110	28
51.8	3310	(374)	1.78	II	1440	(6390)	62.5	2740	(310)	1.78	II	1440	(6390)	3	SZ115	28
51.8	3310	(374)	2.22	III	1440	(6390)	62.5	2740	(310)	2.22	III	1440	(6390)	3	SZ125	28
51.8	3310	(374)	1.61	II	1810	(8060)	62.5	2740	(310)	1.61	II	1810	(8060)	3	SA110	28
51.8	3310	(374)	1.78	II	1810	(8060)	62.5	2740	(310)	1.78	II	1810	(8060)	3	SA115	28
51.8	3310	(374)	2.97	III	1810	(8060)	62.5	2740	(310)	2.97	III	1810	(8060)	3	SA120	28
51.8	3310	(374)	2.97	III	2970	(13200)	62.5	2740	(310)	2.97	III	2970	(13200)	3	SB120	28
41.2	4160	(470)	1.07	I	1440	(6390)	49.7	3450	(390)	1.07	I	1440	(6390)	3	SZ100	35
41.2	4160	(470)	1.45	II	1440	(6390)	49.7	3450	(390)	1.45	II	1440	(6390)	3	SZ105	35
41.2	4160	(470)	1.61	II	1440	(6390)	49.7	3450	(390)	1.61	II	1440	(6390)	3	SZ110	35
41.2	4160	(470)	1.77	II	1440	(6390)	49.7	3450	(390)	1.77	II	1440	(6390)	3	SZ115	35
41.2	4160	(470)	1.77	II	1440	(6390)	49.7	3450	(390)	1.77	II	1440	(6390)	3	SZ125	35
41.2	4160	(470)	1.61	II	1810	(8060)	49.7	3450	(390)	1.61	II	1810	(8060)	3	SA110	35
41.2	4160	(470)	1.78	II	1810	(8060)	49.7	3450	(390)	1.78	II	1810	(8060)	3	SA115	35
41.2	4160	(470)	2.30	III	1810	(8060)	49.7	3450	(390)	2.30	III	1810	(8060)	3	SA120	35
41.2	4160	(470)	2.69	III	1810	(8060)	49.7	3450	(390)	2.69	III	1810	(8060)	3	SA125	35
41.2	4160	(470)	2.74	III	1810	(8060)	49.7	3450	(390)	2.74	III	1810	(8060)	3	SA145	35
41.2	4160	(470)	2.30	III	2970	(13200)	49.7	3450	(390)	2.30	III	2970	(13200)	3	SB120	35
41.2	4160	(470)	2.69	III	2970	(13200)	49.7	3450	(390)	2.69	III	2970	(13200)	3	SB125	35
37.7	4550	(514)	1.07	I	1440	(6390)	45.5	3770	(426)	1.07	I	1440	(6390)	3	SZ100	39
37.7	4550	(514)	1.45	II	1440	(6390)	45.5	3770	(426)	1.45	II	1440	(6390)	3	SZ105	39
37.7	4550	(514)	1.61	II	1440	(6390)	45.5	3770	(426)	1.61	II	1440	(6390)	3	SZ115	39
37.7	4550	(514)	1.61	II	1440	(6390)	45.5	3770	(426)	1.61	II	1440	(6390)	3	SZ125	39
37.7	4550	(514)	1.61	II	1810	(8060)	45.5	3770	(426)	1.61	II	1810	(8060)	3	SA110	39
37.7	4550	(514)	1.78	II	1810	(8060)	45.5	3770	(426)	1.78	II	1810	(8060)	3	SA115	39
37.7	4550	(514)	2.30	III	1810	(8060)	45.5	3770	(426)	2.30	III	1810	(8060)	3	SA120	39
37.7	4550	(514)	2.51	III	1810	(8060)	45.5	3770	(426)	2.51	III	1810	(8060)	3	SA125	39
37.7	4550	(514)	2.51	III	1810	(8060)	45.5	3770	(426)	2.51	III	1810	(8060)	3	SA145	39
37.7	4550	(514)	2.30	III	2970	(13200)	45.5	3770	(426)	2.30	III	2970	(13200)	3	SB120	39
37.7	4550	(514)	2.69	III	2970	(13200)	45.5	3770	(426)	2.69	III	2970	(13200)	3	SB125	39
31.9	5380	(608)	1.07	I	1440	(6390)	38.5	4460	(504)	1.07	I	1440	(6390)	3	SZ100	46
31.9	5380	(608)	1.37	I	1440	(6390)	38.5	4460	(504)	1.37	I	1440	(6390)	3	SZ105	46
31.9	5380	(608)	1.37	I	1440	(6390)	38.5	4460	(504)	1.37	I	1440	(6390)	3	SZ115	46
31.9	5380	(608)	1.37	I	1440	(6390)	38.5	4460	(504)	1.37	I	1440	(6390)	3	SZ125	46
31.9	5380	(608)	1.61	II	1810	(8060)	38.5	4460	(504)	1.61	II	1810	(8060)	3	SA110	46
31.9	5380	(608)	1.77	II	1810	(8060)	38.5	4460	(504)	1.77	II	1810	(8060)	3	SA115	46
31.9	5380	(608)	2.12	III	1810	(8060)	38.5	4460	(504)	2.12	III	1810	(8060)	3	SA125	46
31.9	5380	(608)	2.12	III	1810	(8060)	38.5	4460	(504)	2.12	III	1810	(8060)	3	SA145	46
31.9	5380	(608)	2.30	III	2970	(13200)	38.5	4460	(504)	2.30	III	2970	(13200)	3	SB120	46
31.9	5380	(608)	2.69	III	2970	(13200)	38.5	4460	(504)	2.69	III	2970	(13200)	3	SB125	46

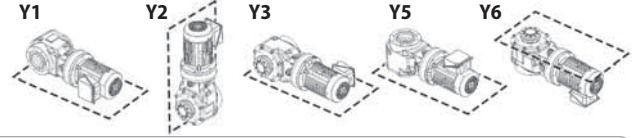
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



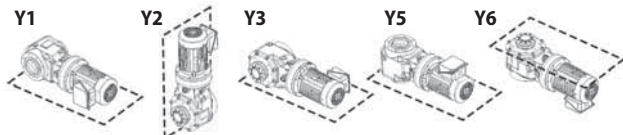
3 HP (2.2 kW)

Dimension Pages:
Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in·lbs	(N·m)	SF	AGMA Class	lbs	(N)		in·lbs	(N·m)	SF	AGMA Class	lbs	(N)			
27.6	6200	(701)	1.07	I	1440	(6390)	33.3	5140	(581)	1.07	I	1440	(6390)	3	SZ100	53
27.6	6200	(701)	1.18	I	1440	(6390)	33.3	5140	(581)	1.18	I	1440	(6390)	3	SZ105	53
27.6	6200	(701)	1.18	I	1440	(6390)	33.3	5140	(581)	1.18	I	1440	(6390)	3	SZ115	53
27.6	6200	(701)	1.18	I	1440	(6390)	33.3	5140	(581)	1.18	I	1440	(6390)	3	SZ125	53
27.6	6200	(701)	1.61	II	1810	(8060)	33.3	5140	(581)	1.61	II	1810	(8060)	3	SA110	53
27.6	6200	(701)	1.77	II	1810	(8060)	33.3	5140	(581)	1.77	II	1810	(8060)	3	SA115	53
27.6	6200	(701)	1.84	II	1810	(8060)	33.3	5140	(581)	1.84	II	1810	(8060)	3	SA125	53
27.6	6200	(701)	1.84	II	1810	(8060)	33.3	5140	(581)	1.84	II	1810	(8060)	3	SA145	53
27.6	6200	(701)	2.30	III	2970	(13200)	33.3	5140	(581)	2.30	III	2970	(13200)	3	SB120	53
27.6	6200	(701)	2.69	III	2970	(13200)	33.3	5140	(581)	2.69	III	2970	(13200)	3	SB125	53
24.4	7040	(795)	0.91	—	1440	(6390)	29.4	5830	(659)	0.91	—	1440	(6390)	3	SZ100	60
24.4	7040	(795)	1.04	I	1440	(6390)	29.4	5830	(659)	1.04	I	1440	(6390)	3	SZ105	60
24.4	7040	(795)	1.04	I	1440	(6390)	29.4	5830	(659)	1.04	I	1440	(6390)	3	SZ115	60
24.4	7040	(795)	1.04	I	1440	(6390)	29.4	5830	(659)	1.04	I	1440	(6390)	3	SZ125	60
24.4	7040	(795)	1.45	II	1810	(8060)	29.4	5830	(659)	1.45	II	1810	(8060)	3	SA110	60
24.4	7040	(795)	1.62	II	1810	(8060)	29.4	5830	(659)	1.62	II	1810	(8060)	3	SA115	60
24.4	7040	(795)	1.62	II	1810	(8060)	29.4	5830	(659)	1.62	II	1810	(8060)	3	SA125	60
24.4	7040	(795)	1.62	II	1810	(8060)	29.4	5830	(659)	1.62	II	1810	(8060)	3	SA145	60
24.4	7040	(795)	2.22	III	2970	(13200)	29.4	5830	(659)	2.30	III	2970	(13200)	3	SB120	60
24.4	7040	(795)	2.57	III	2970	(13200)	29.4	5830	(659)	2.57	III	2970	(13200)	3	SB125	60
21.6	7950	(898)	0.86	—	1440	(6390)	26.0	6580	(744)	0.88	—	1440	(6390)	3	SZ100	67
21.6	7950	(898)	0.93	—	1440	(6390)	26.0	6580	(744)	0.93	—	1440	(6390)	3	SZ105	67
21.6	7950	(898)	0.93	—	1440	(6390)	26.0	6580	(744)	0.93	—	1440	(6390)	3	SZ115	67
21.6	7950	(898)	0.93	—	1440	(6390)	26.0	6580	(744)	0.93	—	1440	(6390)	3	SZ125	67
21.6	7950	(898)	1.24	I	1810	(8060)	26.0	6580	(744)	1.24	I	1810	(8060)	3	SA110	67
21.6	7950	(898)	1.41	II	1810	(8060)	26.0	6580	(744)	1.41	II	1810	(8060)	3	SA115	67
21.6	7950	(898)	1.44	II	1810	(8060)	26.0	6580	(744)	1.44	II	1810	(8060)	3	SA125	67
21.6	7950	(898)	1.44	II	1810	(8060)	26.0	6580	(744)	1.44	II	1810	(8060)	3	SA145	67
21.6	7950	(898)	1.80	II	2970	(13200)	26.0	6580	(744)	1.80	II	2970	(13200)	3	SB120	67
21.6	7950	(898)	2.18	III	2970	(13200)	26.0	6580	(744)	2.22	III	2970	(13200)	3	SB125	67
21.6	7950	(898)	2.86	III	2970	(13200)	26.0	6580	(744)	2.86	III	2970	(13200)	3	SB145	67
21.6	7950	(898)	2.86	III	2970	(13200)	26.0	6580	(744)	2.86	III	2970	(13200)	3	SB165	67
19.7	8690	(982)	0.85	—	1440	(6390)	23.8	7200	(814)	0.85	—	1440	(6390)	3	SZ105	74
19.7	8690	(982)	0.85	—	1440	(6390)	23.8	7200	(814)	0.85	—	1440	(6390)	3	SZ115	74
19.7	8690	(982)	0.85	—	1440	(6390)	23.8	7200	(814)	0.85	—	1440	(6390)	3	SZ125	74
19.7	8690	(982)	1.24	I	1810	(8060)	23.8	7200	(814)	1.24	I	1810	(8060)	3	SA110	74
19.7	8690	(982)	1.31	I	1810	(8060)	23.8	7200	(814)	1.31	I	1810	(8060)	3	SA115	74
19.7	8690	(982)	1.31	I	1810	(8060)	23.8	7200	(814)	1.31	I	1810	(8060)	3	SA125	74
19.7	8690	(982)	1.31	I	1810	(8060)	23.8	7200	(814)	1.31	I	1810	(8060)	3	SA145	74
19.7	8690	(982)	1.80	II	2970	(13200)	23.8	7200	(814)	1.80	II	2970	(13200)	3	SB120	74
19.7	8690	(982)	2.18	III	2970	(13200)	23.8	7200	(814)	2.22	III	2970	(13200)	3	SB125	74
19.7	8690	(982)	2.62	III	2970	(13200)	23.8	7200	(814)	2.62	III	2970	(13200)	3	SB145	74
19.7	8690	(982)	2.62	III	2970	(13200)	23.8	7200	(814)	2.62	III	2970	(13200)	3	SB165	74

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

3 HP (2.2 kW)

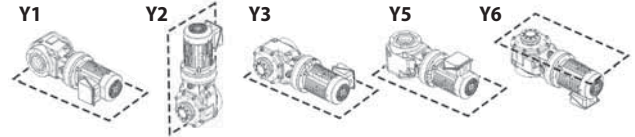
50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
18.1	9470	(1070)	0.87	—	1810	(8060)	21.9	7840	(886)	0.87	—	1810	(8060)	3	5A110	80
18.1	9470	(1070)	1.01	I	1810	(8060)	21.9	7840	(886)	1.01	I	1810	(8060)	3	5A115	80
18.1	9470	(1070)	1.21	I	1810	(8060)	21.9	7840	(886)	1.21	I	1810	(8060)	3	5A125	80
18.1	9470	(1070)	1.21	I	1810	(8060)	21.9	7840	(886)	1.21	I	1810	(8060)	3	5A145	80
18.1	9470	(1070)	1.40	II	2970	(13200)	21.9	7840	(886)	1.40	II	2970	(13200)	3	5B120	80
18.1	9470	(1070)	1.80	II	2970	(13200)	21.9	7840	(886)	1.80	II	2970	(13200)	3	5B125	80
18.1	9470	(1070)	2.40	III	2970	(13200)	21.9	7840	(886)	2.40	III	2970	(13200)	3	5B145	80
18.1	9470	(1070)	2.40	III	2970	(13200)	21.9	7840	(886)	2.40	III	2970	(13200)	3	5B165	80
16.6	10400	(1170)	0.87	—	1810	(8060)	20.0	8580	(969)	0.87	—	1810	(8060)	3	5A110	88
16.6	10400	(1170)	1.01	I	1810	(8060)	20.0	8580	(969)	1.01	I	1810	(8060)	3	5A115	88
16.6	10400	(1170)	1.10	I	1810	(8060)	20.0	8580	(969)	1.10	I	1810	(8060)	3	5A120	88
16.6	10400	(1170)	1.10	I	1810	(8060)	20.0	8580	(969)	1.10	I	1810	(8060)	3	5A125	88
16.6	10400	(1170)	1.10	I	1810	(8060)	20.0	8580	(969)	1.10	I	1810	(8060)	3	5A145	88
16.6	10400	(1170)	1.40	II	2970	(13200)	20.0	8580	(969)	1.40	II	2970	(13200)	3	5B120	88
16.6	10400	(1170)	1.80	II	2970	(13200)	20.0	8580	(969)	1.80	II	2970	(13200)	3	5B125	88
16.6	10400	(1170)	2.20	III	2970	(13200)	20.0	8580	(969)	2.20	III	2970	(13200)	3	5B145	88
16.6	10400	(1170)	2.20	III	2970	(13200)	20.0	8580	(969)	2.20	III	2970	(13200)	3	5B165	88
14.3	12000	(1360)	0.86	—	1810	(8060)	17.2	9910	(1120)	0.86	—	1810	(8060)	3	5A110	102
14.3	12000	(1360)	0.95	—	1810	(8060)	17.2	9910	(1120)	0.95	—	1810	(8060)	3	5A115	102
14.3	12000	(1360)	0.95	—	1810	(8060)	17.2	9910	(1120)	0.95	—	1810	(8060)	3	5A125	102
14.3	12000	(1360)	0.95	—	1810	(8060)	17.2	9910	(1120)	0.95	—	1810	(8060)	3	5A145	102
14.3	12000	(1360)	1.30	I	2970	(13200)	17.2	9910	(1120)	1.36	I	2970	(13200)	3	5B120	102
14.3	12000	(1360)	1.58	II	2970	(13200)	17.2	9910	(1120)	1.71	II	2970	(13200)	3	5B125	102
14.3	12000	(1360)	1.90	II	2970	(13200)	17.2	9910	(1120)	1.90	II	2970	(13200)	3	5B145	102
14.3	12000	(1360)	1.90	II	2970	(13200)	17.2	9910	(1120)	1.90	II	2970	(13200)	3	5B165	102
14.3	12000	(1360)	2.70	III	4810	(21400)	17.2	9910	(1120)	2.70	III	4810	(21400)	3	5C140	102
12.9	13300	(1500)	0.82	—	1810	(8060)	15.6	11000	(1240)	0.82	—	1810	(8060)	3	5A115	112
12.9	13300	(1500)	0.86	—	1810	(8060)	15.6	11000	(1240)	0.86	—	1810	(8060)	3	5A125	112
12.9	13300	(1500)	0.86	—	1810	(8060)	15.6	11000	(1240)	0.86	—	1810	(8060)	3	5A145	112
12.9	13300	(1500)	1.08	I	2970	(13200)	15.6	11000	(1240)	1.13	I	2970	(13200)	3	5B120	112
12.9	13300	(1500)	1.31	I	2970	(13200)	15.6	11000	(1240)	1.45	II	2970	(13200)	3	5B125	112
12.9	13300	(1500)	1.72	II	2970	(13200)	15.6	11000	(1240)	1.72	II	2970	(13200)	3	5B145	112
12.9	13300	(1500)	1.72	II	2970	(13200)	15.6	11000	(1240)	1.72	II	2970	(13200)	3	5B165	112
12.9	13300	(1500)	2.37	III	4810	(21400)	15.6	11000	(1240)	2.37	III	4810	(21400)	3	5C140	112
12.9	13300	(1500)	2.85	III	4810	(21400)	15.6	11000	(1240)	3.42	III	4810	(21400)	3	5C145	112
11.8	14500	(1640)	1.08	I	2970	(13200)	14.3	12000	(1360)	1.13	I	2970	(13200)	3	5B120	123
11.8	14500	(1640)	1.31	I	2970	(13200)	14.3	12000	(1360)	1.45	II	2970	(13200)	3	5B125	123
11.8	14500	(1640)	1.57	II	2970	(13200)	14.3	12000	(1360)	1.57	II	2970	(13200)	3	5B145	123
11.8	14500	(1640)	1.57	II	2970	(13200)	14.3	12000	(1360)	1.57	II	2970	(13200)	3	5B165	123
11.8	14500	(1640)	2.37	III	4810	(21400)	14.3	12000	(1360)	2.37	III	4810	(21400)	3	5C140	123
11.8	14500	(1640)	2.85	III	4810	(21400)	14.3	12000	(1360)	3.14	III	4810	(21400)	3	5C145	123

Gearmotors Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



3 HP (2.2 kW)

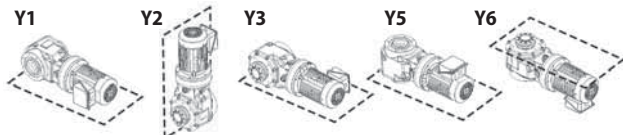
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
9.63	17800	(2010)	0.87	—	2970	(13200)	11.6	14800	(1670)	0.87	—	2970	(13200)	3	5B120	151
9.63	17800	(2010)	1.06	I	2970	(13200)	11.6	14800	(1670)	1.08	I	2970	(13200)	3	5B125	151
9.63	17800	(2010)	1.28	I	2970	(13200)	11.6	14800	(1670)	1.28	I	2970	(13200)	3	5B145	151
9.63	17800	(2010)	1.28	I	2970	(13200)	11.6	14800	(1670)	1.28	I	2970	(13200)	3	5B165	151
9.63	17800	(2010)	1.79	II	4810	(21400)	11.6	14800	(1670)	1.79	II	4810	(21400)	3	5C140	151
9.63	17800	(2010)	2.12	III	4810	(21400)	11.6	14800	(1670)	2.45	III	4810	(21400)	3	5C145	151
9.63	17800	(2010)	2.56	III	4810	(21400)	11.6	14800	(1670)	2.56	III	4810	(21400)	3	5C165	151
9.63	17800	(2010)	2.56	III	4810	(21400)	11.6	14800	(1670)	2.56	III	4810	(21400)	3	5C175	151
8.12	21100	(2380)	0.90	—	2970	(13200)	9.80	17500	(1980)	1.04	I	2970	(13200)	3	5B125	179
8.12	21100	(2380)	1.08	I	2970	(13200)	9.80	17500	(1980)	1.08	I	2970	(13200)	3	5B145	179
8.12	21100	(2380)	1.08	I	2970	(13200)	9.80	17500	(1980)	1.08	I	2970	(13200)	3	5B165	179
8.12	21100	(2380)	1.56	II	4810	(21400)	9.80	17500	(1980)	1.56	II	4810	(21400)	3	5C140	179
8.12	21100	(2380)	1.68	II	4810	(21400)	9.80	17500	(1980)	1.92	II	4810	(21400)	3	5C145	179
8.12	21100	(2380)	2.16	III	4810	(21400)	9.80	17500	(1980)	2.16	III	4810	(21400)	3	5C165	179
8.12	21100	(2380)	2.16	III	4810	(21400)	9.80	17500	(1980)	2.16	III	4810	(21400)	3	5C175	179
7.02	24400	(2760)	0.93	—	2970	(13200)	8.47	20300	(2290)	0.93	—	2970	(13200)	3	5B145	207
7.02	24400	(2760)	0.93	—	2970	(13200)	8.47	20300	(2290)	0.93	—	2970	(13200)	3	5B165	207
7.02	24400	(2760)	1.35	I	4810	(21400)	8.47	20300	(2290)	1.35	I	4810	(21400)	3	5C140	207
7.02	24400	(2760)	1.45	II	4810	(21400)	8.47	20300	(2290)	1.66	II	4810	(21400)	3	5C145	207
7.02	24400	(2760)	1.86	II	4810	(21400)	8.47	20300	(2290)	1.86	II	4810	(21400)	3	5C165	207
7.02	24400	(2760)	1.86	II	4810	(21400)	8.47	20300	(2290)	1.86	II	4810	(21400)	3	5C175	207
5.84	29400	(3320)	1.10	I	4810	(21400)	7.04	24300	(2750)	1.10	I	4810	(21400)	3	5C140	249
5.84	29400	(3320)	1.19	I	4810	(21400)	7.04	24300	(2750)	1.38	I	4810	(21400)	3	5C145	249
5.84	29400	(3320)	1.55	II	4810	(21400)	7.04	24300	(2750)	1.55	II	4810	(21400)	3	5C165	249
5.84	29400	(3320)	1.55	II	4810	(21400)	7.04	24300	(2750)	1.55	II	4810	(21400)	3	5C175	249
4.76	36000	(4070)	0.90	—	4810	(21400)	5.75	29800	(3370)	0.90	—	4810	(21400)	3	5C140	305
4.76	36000	(4070)	0.98	—	4810	(21400)	5.75	29800	(3370)	1.13	I	4810	(21400)	3	5C145	305
4.76	36000	(4070)	1.26	I	4810	(21400)	5.75	29800	(3370)	1.26	I	4810	(21400)	3	5C165	305
4.76	36000	(4070)	1.26	I	4810	(21400)	5.75	29800	(3370)	1.26	I	4810	(21400)	3	5C175	305
3.98	40800	(4610)	1.01	I	4810	(21400)	4.81	33800	(3820)	1.22	I	4810	(21400)	3	5C14DC	364
3.42	47500	(5370)	0.82	—	4450	(19800)	4.13	39400	(4450)	0.99	—	4810	(21400)	3	5C14DC	424

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

Double Reduction, Y2 3.104

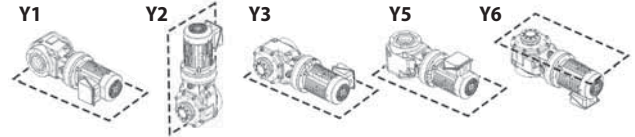
5 HP (3.7 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	2090	(236)	0.86	—	1440	(6390)	167	1730	(195)	0.86	—	1440	(6390)	5	SZ105	11
138	2090	(236)	1.76	II	1440	(6390)	167	1730	(195)	2.12	III	1440	(6390)	5	SZ115	11
138	2090	(236)	2.59	III	1440	(6390)	167	1730	(195)	2.59	III	1440	(6390)	5	SZ120	11
138	2090	(236)	2.97	III	1440	(6390)	167	1730	(195)	2.97	III	1440	(6390)	5	SZ125	11
138	2090	(236)	1.76	II	1810	(8060)	167	1730	(195)	2.12	III	1810	(8060)	5	SA115	11
138	2090	(236)	2.59	III	1810	(8060)	167	1730	(195)	2.59	III	1810	(8060)	5	SA120	11
138	2090	(236)	2.97	III	1810	(8060)	167	1730	(195)	2.97	III	1810	(8060)	5	SA125	11
138	2090	(236)	2.59	III	2970	(13200)	167	1730	(195)	2.59	III	2970	(13200)	5	SB120	11
138	2090	(236)	2.97	III	2970	(13200)	167	1730	(195)	2.97	III	2970	(13200)	5	SB125	11
113	2550	(288)	0.86	—	1440	(6390)	137	2110	(238)	0.86	—	1440	(6390)	5	SZ105	13
113	2550	(288)	1.76	II	1440	(6390)	137	2110	(238)	2.12	III	1440	(6390)	5	SZ110	13
113	2550	(288)	1.76	II	1440	(6390)	137	2110	(238)	2.12	III	1440	(6390)	5	SZ115	13
113	2550	(288)	2.59	III	1440	(6390)	137	2110	(238)	2.59	III	1440	(6390)	5	SZ120	13
113	2550	(288)	2.88	III	1440	(6390)	137	2110	(238)	2.89	III	1440	(6390)	5	SZ125	13
113	2550	(288)	1.76	II	1810	(8060)	137	2110	(238)	2.12	III	1810	(8060)	5	SA115	13
113	2550	(288)	2.59	III	1810	(8060)	137	2110	(238)	2.59	III	1810	(8060)	5	SA120	13
113	2550	(288)	2.97	III	1810	(8060)	137	2110	(238)	2.97	III	1810	(8060)	5	SA125	13
113	2550	(288)	2.59	III	2970	(13200)	137	2110	(238)	2.59	III	2970	(13200)	5	SB120	13
113	2550	(288)	2.97	III	2970	(13200)	137	2110	(238)	2.97	III	2970	(13200)	5	SB125	13
104	2790	(315)	0.86	—	1440	(6390)	125	2310	(261)	0.86	—	1440	(6390)	5	SZ105	14
104	2790	(315)	1.76	II	1440	(6390)	125	2310	(261)	2.12	III	1440	(6390)	5	SZ115	14
104	2790	(315)	2.59	III	1440	(6390)	125	2310	(261)	2.59	III	1440	(6390)	5	SZ120	14
104	2790	(315)	2.64	III	1440	(6390)	125	2310	(261)	2.64	III	1440	(6390)	5	SZ125	14
104	2790	(315)	1.76	II	1810	(8060)	125	2310	(261)	2.12	III	1810	(8060)	5	SA110	14
104	2790	(315)	1.76	II	1810	(8060)	125	2310	(261)	2.12	III	1810	(8060)	5	SA115	14
104	2790	(315)	2.59	III	1810	(8060)	125	2310	(261)	2.59	III	1810	(8060)	5	SA120	14
104	2790	(315)	2.97	III	1810	(8060)	125	2310	(261)	2.97	III	1810	(8060)	5	SA125	14
104	2790	(315)	2.59	III	2970	(13200)	125	2310	(261)	2.59	III	2970	(13200)	5	SB120	14
104	2790	(315)	2.97	III	2970	(13200)	125	2310	(261)	2.97	III	2970	(13200)	5	SB125	14
90.6	3180	(359)	0.86	—	1440	(6390)	109	2640	(298)	0.86	—	1440	(6390)	5	SZ105	16
90.6	3180	(359)	1.76	II	1440	(6390)	109	2640	(298)	2.12	III	1440	(6390)	5	SZ115	16
90.6	3180	(359)	2.31	III	1440	(6390)	109	2640	(298)	2.31	III	1440	(6390)	5	SZ125	16
90.6	3180	(359)	1.76	II	1810	(8060)	109	2640	(298)	2.12	III	1810	(8060)	5	SA115	16
90.6	3180	(359)	2.59	III	1810	(8060)	109	2640	(298)	2.59	III	1810	(8060)	5	SA120	16
90.6	3180	(359)	2.97	III	1810	(8060)	109	2640	(298)	2.97	III	1810	(8060)	5	SA125	16
90.6	3180	(359)	2.59	III	2970	(13200)	109	2640	(298)	2.59	III	2970	(13200)	5	SB120	16
90.6	3180	(359)	2.97	III	2970	(13200)	109	2640	(298)	2.97	III	2970	(13200)	5	SB125	16
82.9	3480	(393)	0.86	—	1440	(6390)	100	2890	(326)	0.86	—	1440	(6390)	5	SZ105	18
82.9	3480	(393)	1.76	II	1440	(6390)	100	2890	(326)	2.11	III	1440	(6390)	5	SZ115	18
82.9	3480	(393)	2.11	III	1440	(6390)	100	2890	(326)	2.11	III	1440	(6390)	5	SZ120	18
82.9	3480	(393)	2.11	III	1440	(6390)	100	2890	(326)	2.11	III	1440	(6390)	5	SZ125	18
82.9	3480	(393)	1.76	II	1810	(8060)	100	2890	(326)	2.12	III	1810	(8060)	5	SA115	18
82.9	3480	(393)	2.59	III	1810	(8060)	100	2890	(326)	2.59	III	1810	(8060)	5	SA120	18
82.9	3480	(393)	2.97	III	1810	(8060)	100	2890	(326)	2.97	III	1810	(8060)	5	SA125	18
82.9	3480	(393)	2.59	III	2970	(13200)	100	2890	(326)	2.59	III	2970	(13200)	5	SB120	18
82.9	3480	(393)	2.97	III	2970	(13200)	100	2890	(326)	2.97	III	2970	(13200)	5	SB125	18

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



5 HP (3.7 kW)

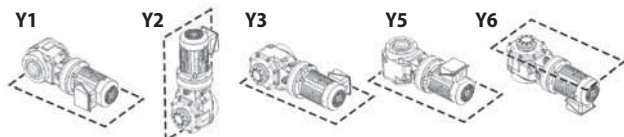
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
69.0	4180	(472)	0.86	—	1440	(6390)	83.3	3460	(391)	0.86	—	1440	(6390)	5	SZ105	21
69.0	4180	(472)	0.96	—	1440	(6390)	83.3	3460	(391)	0.96	—	1440	(6390)	5	SZ110	21
69.0	4180	(472)	1.06	I	1440	(6390)	83.3	3460	(391)	1.06	I	1440	(6390)	5	SZ115	21
69.0	4180	(472)	1.76	II	1440	(6390)	83.3	3460	(391)	1.76	II	1440	(6390)	5	SZ125	21
69.0	4180	(472)	0.96	—	1810	(8060)	83.3	3460	(391)	0.96	—	1810	(8060)	5	SA110	21
69.0	4180	(472)	1.06	I	1810	(8060)	83.3	3460	(391)	1.06	I	1810	(8060)	5	SA115	21
69.0	4180	(472)	1.77	II	1810	(8060)	83.3	3460	(391)	1.77	II	1810	(8060)	5	SA120	21
69.0	4180	(472)	2.03	III	1810	(8060)	83.3	3460	(391)	2.03	III	1810	(8060)	5	SA125	21
69.0	4180	(472)	2.73	III	1810	(8060)	83.3	3460	(391)	2.73	III	1810	(8060)	5	SA145	21
69.0	4180	(472)	1.77	II	2970	(13200)	83.3	3460	(391)	1.77	II	2970	(13200)	5	SB120	21
69.0	4180	(472)	2.03	III	2970	(13200)	83.3	3460	(391)	2.03	III	2970	(13200)	5	SB125	21
64.7	4450	(503)	0.96	—	1440	(6390)	78.1	3690	(417)	0.96	—	1440	(6390)	5	SZ110	22
64.7	4450	(503)	1.06	I	1440	(6390)	78.1	3690	(417)	1.06	I	1440	(6390)	5	SZ115	22
64.7	4450	(503)	1.65	II	1440	(6390)	78.1	3690	(417)	1.65	II	1440	(6390)	5	SZ125	22
64.7	4450	(503)	0.96	—	1810	(8060)	78.1	3690	(417)	0.96	—	1810	(8060)	5	SA110	22
64.7	4450	(503)	1.06	I	1810	(8060)	78.1	3690	(417)	1.06	I	1810	(8060)	5	SA115	22
64.7	4450	(503)	1.77	II	1810	(8060)	78.1	3690	(417)	1.77	II	1810	(8060)	5	SA120	22
64.7	4450	(503)	2.03	III	1810	(8060)	78.1	3690	(417)	2.03	III	1810	(8060)	5	SA125	22
64.7	4450	(503)	2.56	III	1810	(8060)	78.1	3690	(417)	2.56	III	1810	(8060)	5	SA145	22
64.7	4450	(503)	1.77	II	2970	(13200)	78.1	3690	(417)	1.77	II	2970	(13200)	5	SB120	22
64.7	4450	(503)	2.03	III	2970	(13200)	78.1	3690	(417)	2.03	III	2970	(13200)	5	SB125	22
59.2	4870	(550)	0.96	—	1440	(6390)	71.4	4040	(456)	0.96	—	1440	(6390)	5	SZ110	25
59.2	4870	(550)	1.06	I	1440	(6390)	71.4	4040	(456)	1.06	I	1440	(6390)	5	SZ115	25
59.2	4870	(550)	1.51	II	1440	(6390)	71.4	4040	(456)	1.51	II	1440	(6390)	5	SZ125	25
59.2	4870	(550)	0.96	—	1810	(8060)	71.4	4040	(456)	0.96	—	1810	(8060)	5	SA110	25
59.2	4870	(550)	1.06	I	1810	(8060)	71.4	4040	(456)	1.06	I	1810	(8060)	5	SA115	25
59.2	4870	(550)	1.77	II	1810	(8060)	71.4	4040	(456)	1.77	II	1810	(8060)	5	SA120	25
59.2	4870	(550)	2.03	III	1810	(8060)	71.4	4040	(456)	2.03	III	1810	(8060)	5	SA125	25
59.2	4870	(550)	2.34	III	1810	(8060)	71.4	4040	(456)	2.34	III	1810	(8060)	5	SA145	25
59.2	4870	(550)	1.77	II	2970	(13200)	71.4	4040	(456)	1.77	II	2970	(13200)	5	SB120	25
59.2	4870	(550)	2.03	III	2970	(13200)	71.4	4040	(456)	2.03	III	2970	(13200)	5	SB125	25
51.8	5570	(629)	0.86	—	1440	(6390)	62.5	4610	(521)	0.86	—	1440	(6390)	5	SZ105	28
51.8	5570	(629)	0.96	—	1440	(6390)	62.5	4610	(521)	0.96	—	1440	(6390)	5	SZ110	28
51.8	5570	(629)	1.06	I	1440	(6390)	62.5	4610	(521)	1.06	I	1440	(6390)	5	SZ115	28
51.8	5570	(629)	1.32	I	1440	(6390)	62.5	4610	(521)	1.32	I	1440	(6390)	5	SZ125	28
51.8	5570	(629)	0.96	—	1810	(8060)	62.5	4610	(521)	0.96	—	1810	(8060)	5	SA110	28
51.8	5570	(629)	1.06	I	1810	(8060)	62.5	4610	(521)	1.06	I	1810	(8060)	5	SA115	28
51.8	5570	(629)	1.77	II	1810	(8060)	62.5	4610	(521)	1.77	II	1810	(8060)	5	SA120	28
51.8	5570	(629)	2.03	III	1810	(8060)	62.5	4610	(521)	2.03	III	1810	(8060)	5	SA125	28
51.8	5570	(629)	2.05	III	1810	(8060)	62.5	4610	(521)	2.05	III	1810	(8060)	5	SA145	28
51.8	5570	(629)	1.77	II	2970	(13200)	62.5	4610	(521)	1.77	II	2970	(13200)	5	SB120	28
51.8	5570	(629)	2.03	III	2970	(13200)	62.5	4610	(521)	2.03	III	2970	(13200)	5	SB125	28

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, Y2 3.92

Double Reduction, AF-Motor 3.100–3.103

Single Reduction, AF-Motor 3.84–3.91

Double Reduction 3.94–3.99

Double Reduction, Y2 3.104

5 HP (3.7 kW)

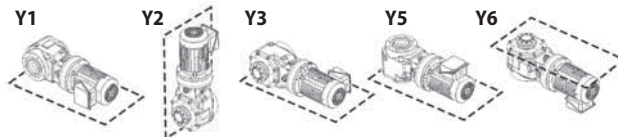
50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
41.2	7000	(791)	0.86	—	1440	(6390)	49.7	5800	(655)	0.86	—	1440	(6390)	5	SZ105	35
41.2	7000	(791)	0.96	—	1440	(6390)	49.7	5800	(655)	0.96	—	1440	(6390)	5	SZ110	35
41.2	7000	(791)	1.05	I	1440	(6390)	49.7	5800	(655)	1.05	I	1440	(6390)	5	SZ115	35
41.2	7000	(791)	1.05	I	1440	(6390)	49.7	5800	(655)	1.05	I	1440	(6390)	5	SZ125	35
41.2	7000	(791)	0.96	—	1810	(8060)	49.7	5800	(655)	0.96	—	1810	(8060)	5	SA110	35
41.2	7000	(791)	1.06	I	1810	(8060)	49.7	5800	(655)	1.06	I	1810	(8060)	5	SA115	35
41.2	7000	(791)	1.37	I	1810	(8060)	49.7	5800	(655)	1.37	I	1810	(8060)	5	SA120	35
41.2	7000	(791)	1.60	II	1810	(8060)	49.7	5800	(655)	1.60	II	1810	(8060)	5	SA125	35
41.2	7000	(791)	1.63	II	1810	(8060)	49.7	5800	(655)	1.63	II	1810	(8060)	5	SA145	35
41.2	7000	(791)	1.37	I	2970	(13200)	49.7	5800	(655)	1.37	I	2970	(13200)	5	SB120	35
41.2	7000	(791)	1.60	II	2970	(13200)	49.7	5800	(655)	1.60	II	2970	(13200)	5	SB125	35
37.7	7660	(865)	0.86	—	1440	(6390)	45.5	6350	(717)	0.86	—	1440	(6390)	5	SZ105	39
37.7	7660	(865)	0.96	—	1440	(6390)	45.5	6350	(717)	0.96	—	1440	(6390)	5	SZ115	39
37.7	7660	(865)	0.96	—	1440	(6390)	45.5	6350	(717)	0.96	—	1440	(6390)	5	SZ125	39
37.7	7660	(865)	0.96	—	1810	(8060)	45.5	6350	(717)	0.96	—	1810	(8060)	5	SA110	39
37.7	7660	(865)	1.06	I	1810	(8060)	45.5	6350	(717)	1.06	I	1810	(8060)	5	SA115	39
37.7	7660	(865)	1.37	I	1810	(8060)	45.5	6350	(717)	1.37	I	1810	(8060)	5	SA120	39
37.7	7660	(865)	1.49	II	1810	(8060)	45.5	6350	(717)	1.49	II	1810	(8060)	5	SA125	39
37.7	7660	(865)	1.49	II	1810	(8060)	45.5	6350	(717)	1.49	II	1810	(8060)	5	SA145	39
37.7	7660	(865)	1.37	I	2970	(13200)	45.5	6350	(717)	1.37	I	2970	(13200)	5	SB120	39
37.7	7660	(865)	1.60	II	2970	(13200)	45.5	6350	(717)	1.60	II	2970	(13200)	5	SB125	39
37.7	7660	(865)	2.97	III	2970	(13200)	45.5	6350	(717)	2.97	III	2970	(13200)	5	SB145	39
37.7	7660	(865)	2.97	III	2970	(13200)	45.5	6350	(717)	2.97	III	2970	(13200)	5	SB165	39
31.9	9030	(1020)	0.81	—	1440	(6390)	38.5	7500	(847)	0.81	—	1440	(6390)	5	SZ105	46
31.9	9030	(1020)	0.81	—	1440	(6390)	38.5	7500	(847)	0.81	—	1440	(6390)	5	SZ115	46
31.9	9030	(1020)	0.81	—	1440	(6390)	38.5	7500	(847)	0.81	—	1440	(6390)	5	SZ125	46
31.9	9030	(1020)	0.96	—	1810	(8060)	38.5	7500	(847)	0.96	—	1810	(8060)	5	SA110	46
31.9	9030	(1020)	1.05	I	1810	(8060)	38.5	7500	(847)	1.05	I	1810	(8060)	5	SA115	46
31.9	9030	(1020)	1.26	I	1810	(8060)	38.5	7500	(847)	1.26	I	1810	(8060)	5	SA125	46
31.9	9030	(1020)	1.26	I	1810	(8060)	38.5	7500	(847)	1.26	I	1810	(8060)	5	SA145	46
31.9	9030	(1020)	1.37	I	2970	(13200)	38.5	7500	(847)	1.37	I	2970	(13200)	5	SB120	46
31.9	9030	(1020)	1.60	II	2970	(13200)	38.5	7500	(847)	1.60	II	2970	(13200)	5	SB125	46
31.9	9030	(1020)	2.51	III	2970	(13200)	38.5	7500	(847)	2.51	III	2970	(13200)	5	SB145	46
31.9	9030	(1020)	2.51	III	2970	(13200)	38.5	7500	(847)	2.51	III	2970	(13200)	5	SB165	46
27.6	10400	(1180)	0.96	—	1810	(8060)	33.3	8650	(977)	0.96	—	1810	(8060)	5	SA110	53
27.6	10400	(1180)	1.05	I	1810	(8060)	33.3	8650	(977)	1.05	I	1810	(8060)	5	SA115	53
27.6	10400	(1180)	1.09	I	1810	(8060)	33.3	8650	(977)	1.09	I	1810	(8060)	5	SA125	53
27.6	10400	(1180)	1.09	I	1810	(8060)	33.3	8650	(977)	1.09	I	1810	(8060)	5	SA145	53
27.6	10400	(1180)	1.37	I	2970	(13200)	33.3	8650	(977)	1.37	I	2970	(13200)	5	SB120	53
27.6	10400	(1180)	1.60	II	2970	(13200)	33.3	8650	(977)	1.60	II	2970	(13200)	5	SB125	53
27.6	10400	(1180)	2.18	III	2970	(13200)	33.3	8650	(977)	2.18	III	2970	(13200)	5	SB145	53
27.6	10400	(1180)	2.18	III	2970	(13200)	33.3	8650	(977)	2.18	III	2970	(13200)	5	SB165	53

Gearmotors Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



5 HP (3.7 kW)

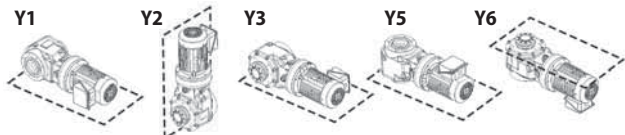
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
24.4	11900	(1340)	0.86	—	1810	(8060)	29.4	9820	(1110)	0.86	—	1810	(8060)	5	5A110	60
24.4	11900	(1340)	0.97	—	1810	(8060)	29.4	9820	(1110)	0.97	—	1810	(8060)	5	5A115	60
24.4	11900	(1340)	0.97	—	1810	(8060)	29.4	9820	(1110)	0.97	—	1810	(8060)	5	5A125	60
24.4	11900	(1340)	0.97	—	1810	(8060)	29.4	9820	(1110)	0.97	—	1810	(8060)	5	5A145	60
24.4	11900	(1340)	1.32	I	2970	(13200)	29.4	9820	(1110)	1.37	I	2970	(13200)	5	5B120	60
24.4	11900	(1340)	1.53	II	2970	(13200)	29.4	9820	(1110)	1.53	II	2970	(13200)	5	5B125	60
24.4	11900	(1340)	1.92	II	2970	(13200)	29.4	9820	(1110)	1.92	II	2970	(13200)	5	5B145	60
24.4	11900	(1340)	1.92	II	2970	(13200)	29.4	9820	(1110)	1.92	II	2970	(13200)	5	5B165	60
24.4	11900	(1340)	2.73	III	4810	(21400)	29.4	9820	(1110)	2.73	III	4810	(21400)	5	5C140	60
21.6	13400	(1510)	0.84	—	1810	(8060)	26.0	11100	(1250)	0.84	—	1810	(8060)	5	5A115	67
21.6	13400	(1510)	0.85	—	1810	(8060)	26.0	11100	(1250)	0.85	—	1810	(8060)	5	5A125	67
21.6	13400	(1510)	0.85	—	1810	(8060)	26.0	11100	(1250)	0.85	—	1810	(8060)	5	5A145	67
21.6	13400	(1510)	1.07	I	2970	(13200)	26.0	11100	(1250)	1.07	I	2970	(13200)	5	5B120	67
21.6	13400	(1510)	1.29	I	2970	(13200)	26.0	11100	(1250)	1.32	I	2970	(13200)	5	5B125	67
21.6	13400	(1510)	1.70	II	2970	(13200)	26.0	11100	(1250)	1.70	II	2970	(13200)	5	5B145	67
21.6	13400	(1510)	1.70	II	2970	(13200)	26.0	11100	(1250)	1.70	II	2970	(13200)	5	5B165	67
21.6	13400	(1510)	2.34	III	4810	(21400)	26.0	11100	(1250)	2.34	III	4810	(21400)	5	5C140	67
21.6	13400	(1510)	2.56	III	4810	(21400)	26.0	11100	(1250)	2.97	III	4810	(21400)	5	5C145	67
19.7	14600	(1650)	1.07	I	2970	(13200)	23.8	12100	(1370)	1.07	I	2970	(13200)	5	5B120	74
19.7	14600	(1650)	1.29	I	2970	(13200)	23.8	12100	(1370)	1.32	I	2970	(13200)	5	5B125	74
19.7	14600	(1650)	1.56	II	2970	(13200)	23.8	12100	(1370)	1.56	II	2970	(13200)	5	5B145	74
19.7	14600	(1650)	1.56	II	2970	(13200)	23.8	12100	(1370)	1.56	II	2970	(13200)	5	5B165	74
19.7	14600	(1650)	2.34	III	4810	(21400)	23.8	12100	(1370)	2.34	III	4810	(21400)	5	5C140	74
19.7	14600	(1650)	2.56	III	4810	(21400)	23.8	12100	(1370)	2.97	III	4810	(21400)	5	5C145	74
18.1	15900	(1800)	0.84	—	2970	(13200)	21.9	13200	(1490)	0.84	—	2970	(13200)	5	5B120	80
18.1	15900	(1800)	1.07	I	2970	(13200)	21.9	13200	(1490)	1.07	I	2970	(13200)	5	5B125	80
18.1	15900	(1800)	1.43	II	2970	(13200)	21.9	13200	(1490)	1.43	II	2970	(13200)	5	5B145	80
18.1	15900	(1800)	1.43	II	2970	(13200)	21.9	13200	(1490)	1.43	II	2970	(13200)	5	5B165	80
18.1	15900	(1800)	1.86	II	4810	(21400)	21.9	13200	(1490)	1.86	II	4810	(21400)	5	5C140	80
18.1	15900	(1800)	2.14	III	4810	(21400)	21.9	13200	(1490)	2.14	III	4810	(21400)	5	5C145	80
18.1	15900	(1800)	2.86	III	4810	(21400)	21.9	13200	(1490)	2.86	III	4810	(21400)	5	5C165	80
18.1	15900	(1800)	2.86	III	4810	(21400)	21.9	13200	(1490)	2.86	III	4810	(21400)	5	5C175	80
16.6	17400	(1970)	0.84	—	2970	(13200)	20.0	14400	(1630)	0.84	—	2970	(13200)	5	5B120	88
16.6	17400	(1970)	1.07	I	2970	(13200)	20.0	14400	(1630)	1.07	I	2970	(13200)	5	5B125	88
16.6	17400	(1970)	1.31	I	2970	(13200)	20.0	14400	(1630)	1.31	I	2970	(13200)	5	5B145	88
16.6	17400	(1970)	1.31	I	2970	(13200)	20.0	14400	(1630)	1.31	I	2970	(13200)	5	5B165	88
16.6	17400	(1970)	1.86	II	4810	(21400)	20.0	14400	(1630)	1.86	II	4810	(21400)	5	5C140	88
16.6	17400	(1970)	2.14	III	4810	(21400)	20.0	14400	(1630)	2.14	III	4810	(21400)	5	5C145	88
16.6	17400	(1970)	2.61	III	4810	(21400)	20.0	14400	(1630)	2.61	III	4810	(21400)	5	5C165	88
16.6	17400	(1970)	2.61	III	4810	(21400)	20.0	14400	(1630)	2.61	III	4810	(21400)	5	5C175	88

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

5 HP (3.7 kW)

50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
14.3	20200	(2280)	0.94	—	2970	(13200)	17.2	16700	(1890)	1.02	I	2970	(13200)	5	5B125	102
14.3	20200	(2280)	1.13	I	2970	(13200)	17.2	16700	(1890)	1.13	I	2970	(13200)	5	5B145	102
14.3	20200	(2280)	1.13	I	2970	(13200)	17.2	16700	(1890)	1.13	I	2970	(13200)	5	5B165	102
14.3	20200	(2280)	1.61	II	4810	(21400)	17.2	16700	(1890)	1.61	II	4810	(21400)	5	5C140	102
14.3	20200	(2280)	2.04	III	4810	(21400)	17.2	16700	(1890)	2.04	III	4810	(21400)	5	5C145	102
14.3	20200	(2280)	2.25	III	4810	(21400)	17.2	16700	(1890)	2.25	III	4810	(21400)	5	5C165	102
14.3	20200	(2280)	2.25	III	4810	(21400)	17.2	16700	(1890)	2.25	III	4810	(21400)	5	5C175	102
14.3	20200	(2280)	0.94	—	2970	(13200)	17.2	16700	(1890)	1.02	I	2970	(13200)	5	5B125	102
14.3	20200	(2280)	1.13	I	2970	(13200)	17.2	16700	(1890)	1.13	I	2970	(13200)	5	5B145	102
14.3	20200	(2280)	1.13	I	2970	(13200)	17.2	16700	(1890)	1.13	I	2970	(13200)	5	5B165	102
14.3	20200	(2280)	1.61	II	4810	(21400)	17.2	16700	(1890)	1.61	II	4810	(21400)	5	5C140	102
14.3	20200	(2280)	2.04	III	4810	(21400)	17.2	16700	(1890)	2.04	III	4810	(21400)	5	5C145	102
14.3	20200	(2280)	2.25	III	4810	(21400)	17.2	16700	(1890)	2.25	III	4810	(21400)	5	5C165	102
14.3	20200	(2280)	2.25	III	4810	(21400)	17.2	16700	(1890)	2.25	III	4810	(21400)	5	5C175	102
12.9	22300	(2520)	1.02	I	2970	(13200)	15.6	18500	(2090)	1.02	I	2970	(13200)	5	5B145	112
12.9	22300	(2520)	1.02	I	2970	(13200)	15.6	18500	(2090)	1.02	I	2970	(13200)	5	5B165	112
12.9	22300	(2520)	1.41	II	4810	(21400)	15.6	18500	(2090)	1.41	II	4810	(21400)	5	5C140	112
12.9	22300	(2520)	1.69	II	4810	(21400)	15.6	18500	(2090)	2.04	III	4810	(21400)	5	5C145	112
12.9	22300	(2520)	2.04	III	4810	(21400)	15.6	18500	(2090)	2.04	III	4810	(21400)	5	5C165	112
12.9	22300	(2520)	2.04	III	4810	(21400)	15.6	18500	(2090)	2.04	III	4810	(21400)	5	5C175	112
11.8	24300	(2750)	0.93	—	2970	(13200)	14.3	20200	(2280)	0.93	—	2970	(13200)	5	5B145	123
11.8	24300	(2750)	0.93	—	2970	(13200)	14.3	20200	(2280)	0.93	—	2970	(13200)	5	5B165	123
11.8	24300	(2750)	1.41	II	4810	(21400)	14.3	20200	(2280)	1.41	II	4810	(21400)	5	5C140	123
11.8	24300	(2750)	1.69	II	4810	(21400)	14.3	20200	(2280)	1.87	II	4810	(21400)	5	5C145	123
11.8	24300	(2750)	1.87	II	4810	(21400)	14.3	20200	(2280)	1.87	II	4810	(21400)	5	5C165	123
11.8	24300	(2750)	1.87	II	4810	(21400)	14.3	20200	(2280)	1.87	II	4810	(21400)	5	5C175	123
9.63	29900	(3380)	1.06	I	4810	(21400)	11.6	24800	(2800)	1.06	I	4810	(21400)	5	5C140	151
9.63	29900	(3380)	1.26	I	4810	(21400)	11.6	24800	(2800)	1.46	II	4810	(21400)	5	5C145	151
9.63	29900	(3380)	1.52	II	4810	(21400)	11.6	24800	(2800)	1.52	II	4810	(21400)	5	5C165	151
9.63	29900	(3380)	1.52	II	4810	(21400)	11.6	24800	(2800)	1.52	II	4810	(21400)	5	5C175	151
8.12	35500	(4010)	0.93	—	4810	(21400)	9.80	29400	(3320)	0.93	—	4810	(21400)	5	5C140	179
8.12	35500	(4010)	1.00	I	4810	(21400)	9.80	29400	(3320)	1.14	I	4810	(21400)	5	5C145	179
8.12	35500	(4010)	1.28	I	4810	(21400)	9.80	29400	(3320)	1.28	I	4810	(21400)	5	5C165	179
8.12	35500	(4010)	1.28	I	4810	(21400)	9.80	29400	(3320)	1.28	I	4810	(21400)	5	5C175	179
7.02	41100	(4640)	0.86	—	4810	(21400)	8.47	34000	(3840)	0.99	—	4810	(21400)	5	5C145	207
7.02	41100	(4640)	1.11	I	4810	(21400)	8.47	34000	(3840)	1.11	I	4810	(21400)	5	5C165	207
7.02	41100	(4640)	1.11	I	4810	(21400)	8.47	34000	(3840)	1.11	I	4810	(21400)	5	5C175	207
5.84	49400	(5580)	0.92	—	4790	(21300)	7.04	41000	(4630)	0.92	—	4810	(21400)	5	5C165	249
5.84	49400	(5580)	0.92	—	4790	(21300)	7.04	41000	(4630)	0.92	—	4810	(21400)	5	5C175	249

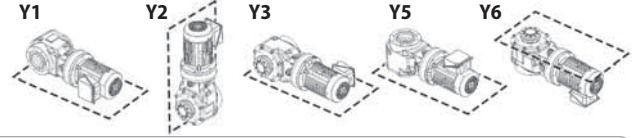
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



7.5 HP (5.5 kW)

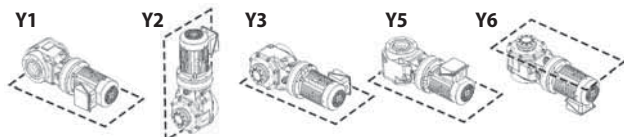
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138.0	3110	(351)	1.18	I	1440	(6390)	167	2580	(291)	1.43	II	1440	(6390)	8	SZ115	11
138.0	3110	(351)	1.75	II	1440	(6390)	167	2580	(291)	1.75	II	1440	(6390)	8	SZ120	11
138.0	3110	(351)	2.00	III	1440	(6390)	167	2580	(291)	2.00	III	1440	(6390)	8	SZ125	11
138.0	3110	(351)	1.18	I	1810	(8060)	167	2580	(291)	1.43	II	1810	(8060)	8	SA115	11
138.0	3110	(351)	1.75	II	1810	(8060)	167	2580	(291)	1.75	II	1810	(8060)	8	SA120	11
138.0	3110	(351)	2.00	III	1810	(8060)	167	2580	(291)	2.00	III	1810	(8060)	8	SA125	11
138.0	3110	(351)	1.75	II	2970	(13200)	167	2580	(291)	1.75	II	2970	(13200)	8	SB120	11
138.0	3110	(351)	2.00	III	2970	(13200)	167	2580	(291)	2.00	III	2970	(13200)	8	SB125	11
113.0	3790	(428)	1.18	I	1440	(6390)	137	3130	(354)	1.43	II	1440	(6390)	8	SZ115	13
113.0	3790	(428)	1.75	II	1440	(6390)	137	3130	(354)	1.75	II	1440	(6390)	8	SZ120	13
113.0	3790	(428)	1.94	II	1440	(6390)	137	3130	(354)	1.94	II	1440	(6390)	8	SZ125	13
113.0	3790	(428)	1.18	I	1810	(8060)	137	3130	(354)	1.43	II	1810	(8060)	8	SA115	13
113.0	3790	(428)	1.75	II	1810	(8060)	137	3130	(354)	1.75	II	1810	(8060)	8	SA120	13
113.0	3790	(428)	2.00	III	1810	(8060)	137	3130	(354)	2.00	III	1810	(8060)	8	SA125	13
113.0	3790	(428)	1.75	II	2970	(13200)	137	3130	(354)	1.75	II	2970	(13200)	8	SB120	13
113.0	3790	(428)	2.00	III	2970	(13200)	137	3130	(354)	2.00	III	2970	(13200)	8	SB125	13
104.0	4140	(468)	1.18	I	1440	(6390)	125	3430	(387)	1.43	II	1440	(6390)	8	SZ115	14
104.0	4140	(468)	1.75	II	1440	(6390)	125	3430	(387)	1.75	II	1440	(6390)	8	SZ120	14
104.0	4140	(468)	1.78	II	1440	(6390)	125	3430	(387)	1.78	II	1440	(6390)	8	SZ125	14
104.0	4140	(468)	1.18	I	1810	(8060)	125	3430	(387)	1.43	II	1810	(8060)	8	SA115	14
104.0	4140	(468)	1.75	II	1810	(8060)	125	3430	(387)	1.75	II	1810	(8060)	8	SA120	14
104.0	4140	(468)	2.00	III	1810	(8060)	125	3430	(387)	2.00	III	1810	(8060)	8	SA125	14
104.0	4140	(468)	2.76	III	1810	(8060)	125	3430	(387)	2.76	III	1810	(8060)	8	SA140	14
104.0	4140	(468)	2.76	III	1810	(8060)	125	3430	(387)	2.76	III	1810	(8060)	8	SA145	14
104.0	4140	(468)	1.75	II	2970	(13200)	125	3430	(387)	1.75	II	2970	(13200)	8	SB120	14
104.0	4140	(468)	2.00	III	2970	(13200)	125	3430	(387)	2.00	III	2970	(13200)	8	SB125	14
90.6	4730	(534)	1.18	I	1440	(6390)	109	3920	(443)	1.43	II	1440	(6390)	8	SZ115	16
90.6	4730	(534)	1.55	II	1440	(6390)	109	3920	(443)	1.55	II	1440	(6390)	8	SZ125	16
90.6	4730	(534)	1.18	I	1810	(8060)	109	3920	(443)	1.43	II	1810	(8060)	8	SA115	16
90.6	4730	(534)	1.75	II	1810	(8060)	109	3920	(443)	1.75	II	1810	(8060)	8	SA120	16
90.6	4730	(534)	2.00	III	1810	(8060)	109	3920	(443)	2.00	III	1810	(8060)	8	SA125	16
90.6	4730	(534)	2.41	III	1810	(8060)	109	3920	(443)	2.41	III	1810	(8060)	8	SA145	16
90.6	4730	(534)	1.75	II	2970	(13200)	109	3920	(443)	1.75	II	2970	(13200)	8	SB120	16
90.6	4730	(534)	2.00	III	2970	(13200)	109	3920	(443)	2.00	III	2970	(13200)	8	SB125	16
82.9	5170	(584)	1.18	I	1440	(6390)	100	4280	(484)	1.42	II	1440	(6390)	8	SZ115	18
82.9	5170	(584)	1.42	II	1440	(6390)	100	4280	(484)	1.42	II	1440	(6390)	8	SZ125	18
82.9	5170	(584)	1.18	I	1810	(8060)	100	4280	(484)	1.43	II	1810	(8060)	8	SA115	18
82.9	5170	(584)	1.75	II	1810	(8060)	100	4280	(484)	1.75	II	1810	(8060)	8	SA120	18
82.9	5170	(584)	2.00	III	1810	(8060)	100	4280	(484)	2.00	III	1810	(8060)	8	SA125	18
82.9	5170	(584)	2.21	III	1810	(8060)	100	4280	(484)	2.21	III	1810	(8060)	8	SA145	18
82.9	5170	(584)	1.75	II	2970	(13200)	100	4280	(484)	1.75	II	2970	(13200)	8	SB120	18
82.9	5170	(584)	2.00	III	2970	(13200)	100	4280	(484)	2.00	III	2970	(13200)	8	SB125	18

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

Double Reduction, Y2 3.104

7.5 HP (5.5 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
69.0	6200	(701)	1.18	I	1440	(6390)	83.3	5140	(581)	1.18	I	1440	(6390)	8	5Z125	21
69.0	6200	(701)	1.19	I	1810	(8060)	83.3	5140	(581)	1.19	I	1810	(8060)	8	5A120	21
69.0	6200	(701)	1.37	I	1810	(8060)	83.3	5140	(581)	1.37	I	1810	(8060)	8	5A125	21
69.0	6200	(701)	1.84	II	1810	(8060)	83.3	5140	(581)	1.84	II	1810	(8060)	8	5A145	21
69.0	6200	(701)	1.19	I	2970	(13200)	83.3	5140	(581)	1.19	I	2970	(13200)	8	5B120	21
69.0	6200	(701)	1.37	I	2970	(13200)	83.3	5140	(581)	1.37	I	2970	(13200)	8	5B125	21
69.0	6200	(701)	2.36	III	2970	(13200)	83.3	5140	(581)	2.36	III	2970	(13200)	8	5B140	21
69.0	6200	(701)	2.75	III	2970	(13200)	83.3	5140	(581)	2.75	III	2970	(13200)	8	5B145	21
69.0	6200	(701)	2.36	III	4810	(21400)	83.3	5140	(581)	2.36	III	4810	(21400)	8	5C140	21
69.0	6200	(701)	2.75	III	4810	(21400)	83.3	5140	(581)	2.75	III	4810	(21400)	8	5C145	21
64.7	6620	(748)	1.11	I	1440	(6390)	78.1	5490	(620)	1.11	I	1440	(6390)	8	5Z125	22
64.7	6620	(748)	1.19	I	1810	(8060)	78.1	5490	(620)	1.19	I	1810	(8060)	8	5A120	22
64.7	6620	(748)	1.37	I	1810	(8060)	78.1	5490	(620)	1.37	I	1810	(8060)	8	5A125	22
64.7	6620	(748)	1.72	II	1810	(8060)	78.1	5490	(620)	1.72	II	1810	(8060)	8	5A145	22
64.7	6620	(748)	1.19	I	2970	(13200)	78.1	5490	(620)	1.19	I	2970	(13200)	8	5B120	22
64.7	6620	(748)	1.37	I	2970	(13200)	78.1	5490	(620)	1.37	I	2970	(13200)	8	5B125	22
64.7	6620	(748)	2.36	III	2970	(13200)	78.1	5490	(620)	2.36	III	2970	(13200)	8	5B140	22
64.7	6620	(748)	2.75	III	2970	(13200)	78.1	5490	(620)	2.75	III	2970	(13200)	8	5B145	22
64.7	6620	(748)	2.36	III	4810	(21400)	78.1	5490	(620)	2.36	III	4810	(21400)	8	5C140	22
64.7	6620	(748)	2.75	III	4810	(21400)	78.1	5490	(620)	2.75	III	4810	(21400)	8	5C145	22
59.2	7240	(818)	1.01	I	1440	(6390)	71.4	6000	(678)	1.01	I	1440	(6390)	8	5Z125	25
59.2	7240	(818)	1.19	I	1810	(8060)	71.4	6000	(678)	1.19	I	1810	(8060)	8	5A120	25
59.2	7240	(818)	1.37	I	1810	(8060)	71.4	6000	(678)	1.37	I	1810	(8060)	8	5A125	25
59.2	7240	(818)	1.58	II	1810	(8060)	71.4	6000	(678)	1.58	II	1810	(8060)	8	5A145	25
59.2	7240	(818)	1.19	I	2970	(13200)	71.4	6000	(678)	1.19	I	2970	(13200)	8	5B120	25
59.2	7240	(818)	1.37	I	2970	(13200)	71.4	6000	(678)	1.37	I	2970	(13200)	8	5B125	25
59.2	7240	(818)	2.36	III	2970	(13200)	71.4	6000	(678)	2.36	III	2970	(13200)	8	5B140	25
59.2	7240	(818)	2.75	III	2970	(13200)	71.4	6000	(678)	2.75	III	2970	(13200)	8	5B145	25
59.2	7240	(818)	2.36	III	4810	(21400)	71.4	6000	(678)	2.36	III	4810	(21400)	8	5C140	25
59.2	7240	(818)	2.75	III	4810	(21400)	71.4	6000	(678)	2.75	III	4810	(21400)	8	5C145	25
51.8	8280	(935)	0.89	—	1180	(5240)	62.5	6860	(775)	0.89	—	1440	(6390)	8	5Z125	28
51.8	8280	(935)	1.19	I	1810	(8060)	62.5	6860	(775)	1.19	I	1810	(8060)	8	5A120	28
51.8	8280	(935)	1.37	I	1810	(8060)	62.5	6860	(775)	1.37	I	1810	(8060)	8	5A125	28
51.8	8280	(935)	1.38	I	1810	(8060)	62.5	6860	(775)	1.38	I	1810	(8060)	8	5A145	28
51.8	8280	(935)	1.19	I	2970	(13200)	62.5	6860	(775)	1.19	I	2970	(13200)	8	5B120	28
51.8	8280	(935)	1.37	I	2970	(13200)	62.5	6860	(775)	1.37	I	2970	(13200)	8	5B125	28
51.8	8280	(935)	2.36	III	2970	(13200)	62.5	6860	(775)	2.36	III	2970	(13200)	8	5B140	28
51.8	8280	(935)	2.75	III	2970	(13200)	62.5	6860	(775)	2.75	III	2970	(13200)	8	5B145	28
51.8	8280	(935)	2.75	III	2970	(13200)	62.5	6860	(775)	2.75	III	2970	(13200)	8	5B165	28
51.8	8280	(935)	2.36	III	4810	(21400)	62.5	6860	(775)	2.36	III	4810	(21400)	8	5C140	28
51.8	8280	(935)	2.75	III	4810	(21400)	62.5	6860	(775)	2.75	III	4810	(21400)	8	5C145	28

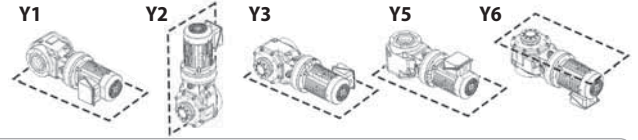
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



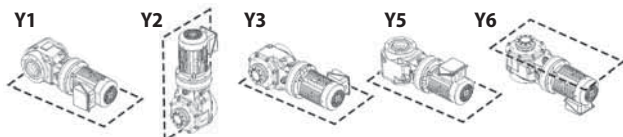
7.5 HP (5.5 kW)

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

50 Hz						60 Hz						Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs (N)		in-lbs	(N·m)	SF	AGMA Class	lbs (N)			
41.2	10400	(1180)	0.92	—	1810 (8060)	49.7	8620	(974)	0.92	—	1810 (8060)	8	5A120	35
41.2	10400	(1180)	1.08	I	1810 (8060)	49.7	8620	(974)	1.08	I	1810 (8060)	8	5A125	35
41.2	10400	(1180)	1.10	I	1810 (8060)	49.7	8620	(974)	1.10	I	1810 (8060)	8	5A145	35
41.2	10400	(1180)	0.92	—	2970 (13200)	49.7	8620	(974)	0.92	—	2970 (13200)	8	5B120	35
41.2	10400	(1180)	1.08	I	2970 (13200)	49.7	8620	(974)	1.08	I	2970 (13200)	8	5B125	35
41.2	10400	(1180)	2.19	III	2970 (13200)	49.7	8620	(974)	2.19	III	2970 (13200)	8	5B145	35
41.2	10400	(1180)	2.19	III	2970 (13200)	49.7	8620	(974)	2.19	III	2970 (13200)	8	5B165	35
41.2	10400	(1180)	2.36	III	4810 (21400)	49.7	8620	(974)	2.36	III	4810 (21400)	8	5C140	35
41.2	10400	(1180)	2.75	III	4810 (21400)	49.7	8620	(974)	2.75	III	4810 (21400)	8	5C145	35
37.7	11400	(1290)	0.92	—	1810 (8060)	45.5	9470	(1070)	0.92	—	1810 (8060)	8	5A120	39
37.7	11400	(1290)	1.00	I	1810 (8060)	45.5	9470	(1070)	1.00	I	1810 (8060)	8	5A125	39
37.7	11400	(1290)	1.00	I	1810 (8060)	45.5	9470	(1070)	1.00	I	1810 (8060)	8	5A145	39
37.7	11400	(1290)	0.92	—	2970 (13200)	45.5	9470	(1070)	0.92	—	2970 (13200)	8	5B120	39
37.7	11400	(1290)	1.08	I	2970 (13200)	45.5	9470	(1070)	1.08	I	2970 (13200)	8	5B125	39
37.7	11400	(1290)	2.00	III	2970 (13200)	45.5	9470	(1070)	2.00	III	2970 (13200)	8	5B145	39
37.7	11400	(1290)	2.00	III	2970 (13200)	45.5	9470	(1070)	2.00	III	2970 (13200)	8	5B165	39
37.7	11400	(1290)	2.36	III	4810 (21400)	45.5	9470	(1070)	2.36	III	4810 (21400)	8	5C140	39
37.7	11400	(1290)	2.75	III	4810 (21400)	45.5	9470	(1070)	2.75	III	4810 (21400)	8	5C145	39
31.9	13500	(1520)	0.85	—	1810 (8060)	38.5	11200	(1260)	0.85	—	1810 (8060)	8	5A125	46
31.9	13500	(1520)	0.85	—	1810 (8060)	38.5	11200	(1260)	0.85	—	1810 (8060)	8	5A145	46
31.9	13500	(1520)	0.92	—	2970 (13200)	38.5	11200	(1260)	0.92	—	2970 (13200)	8	5B120	46
31.9	13500	(1520)	1.08	I	2970 (13200)	38.5	11200	(1260)	1.08	I	2970 (13200)	8	5B125	46
31.9	13500	(1520)	1.69	II	2970 (13200)	38.5	11200	(1260)	1.69	II	2970 (13200)	8	5B145	46
31.9	13500	(1520)	1.69	II	2970 (13200)	38.5	11200	(1260)	1.69	II	2970 (13200)	8	5B165	46
31.9	13500	(1520)	2.36	III	4810 (21400)	38.5	11200	(1260)	2.36	III	4810 (21400)	8	5C140	46
31.9	13500	(1520)	2.75	III	4810 (21400)	38.5	11200	(1260)	2.75	III	4810 (21400)	8	5C145	46
27.6	15500	(1750)	0.92	—	2970 (13200)	33.3	12800	(1450)	0.92	—	2970 (13200)	8	5B120	53
27.6	15500	(1750)	1.08	I	2970 (13200)	33.3	12800	(1450)	1.08	I	2970 (13200)	8	5B125	53
27.6	15500	(1750)	1.47	II	2970 (13200)	33.3	12800	(1450)	1.47	II	2970 (13200)	8	5B145	53
27.6	15500	(1750)	1.47	II	2970 (13200)	33.3	12800	(1450)	1.47	II	2970 (13200)	8	5B165	53
27.6	15500	(1750)	2.18	III	4810 (21400)	33.3	12800	(1450)	2.18	III	4810 (21400)	8	5C140	53
27.6	15500	(1750)	2.64	III	4810 (21400)	33.3	12800	(1450)	2.65	III	4810 (21400)	8	5C145	53
27.6	15500	(1750)	2.93	III	4810 (21400)	33.3	12800	(1450)	2.93	III	4810 (21400)	8	5C165	53
27.6	15500	(1750)	2.93	III	4810 (21400)	33.3	12800	(1450)	2.93	III	4810 (21400)	8	5C175	53
24.4	17600	(1990)	0.89	—	2970 (13200)	29.4	14600	(1650)	0.92	—	2970 (13200)	8	5B120	60
24.4	17600	(1990)	1.03	I	2970 (13200)	29.4	14600	(1650)	1.03	I	2970 (13200)	8	5B125	60
24.4	17600	(1990)	1.29	I	2970 (13200)	29.4	14600	(1650)	1.29	I	2970 (13200)	8	5B145	60
24.4	17600	(1990)	1.29	I	2970 (13200)	29.4	14600	(1650)	1.29	I	2970 (13200)	8	5B165	60
24.4	17600	(1990)	1.84	II	4810 (21400)	29.4	14600	(1650)	1.84	II	4810 (21400)	8	5C140	60
24.4	17600	(1990)	2.18	III	4810 (21400)	29.4	14600	(1650)	2.18	III	4810 (21400)	8	5C145	60
24.4	17600	(1990)	2.38	III	4810 (21400)	29.4	14600	(1650)	2.38	III	4810 (21400)	8	5C160	60
24.4	17600	(1990)	2.59	III	4810 (21400)	29.4	14600	(1650)	2.59	III	4810 (21400)	8	5C165	60
24.4	17600	(1990)	2.59	III	4810 (21400)	29.4	14600	(1650)	2.59	III	4810 (21400)	8	5C175	60

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, Y2 3.92

Double Reduction, AF-Motor 3.100–3.103

Single Reduction, AF-Motor 3.84–3.91

Double Reduction 3.94–3.99

Double Reduction, Y2 3.104

7.5 HP (5.5 kW)

50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
21.6	19800	(2240)	0.87	—	2970	(13200)	26.0	16500	(1860)	0.89	—	2970	(13200)	8	5B125	67
21.6	19800	(2240)	1.15	I	2970	(13200)	26.0	16500	(1860)	1.15	I	2970	(13200)	8	5B145	67
21.6	19800	(2240)	1.15	I	2970	(13200)	26.0	16500	(1860)	1.15	I	2970	(13200)	8	5B165	67
21.6	19800	(2240)	1.57	II	4810	(21400)	26.0	16500	(1860)	1.57	II	4810	(21400)	8	5C140	67
21.6	19800	(2240)	1.73	II	4810	(21400)	26.0	16500	(1860)	2.00	III	4810	(21400)	8	5C145	67
21.6	19800	(2240)	2.29	III	4810	(21400)	26.0	16500	(1860)	2.29	III	4810	(21400)	8	5C165	67
21.6	19800	(2240)	2.29	III	4810	(21400)	26.0	16500	(1860)	2.29	III	4810	(21400)	8	5C175	67
19.7	21700	(2450)	0.87	—	2970	(13200)	23.8	18000	(2030)	0.89	—	2970	(13200)	8	5B125	74
19.7	21700	(2450)	1.05	I	2970	(13200)	23.8	18000	(2030)	1.05	I	2970	(13200)	8	5B145	74
19.7	21700	(2450)	1.05	I	2970	(13200)	23.8	18000	(2030)	1.05	I	2970	(13200)	8	5B165	74
19.7	21700	(2450)	1.57	II	4810	(21400)	23.8	18000	(2030)	1.57	II	4810	(21400)	8	5C140	74
19.7	21700	(2450)	1.73	II	4810	(21400)	23.8	18000	(2030)	2.00	III	4810	(21400)	8	5C145	74
19.7	21700	(2450)	2.09	III	4810	(21400)	23.8	18000	(2030)	2.09	III	4810	(21400)	8	5C165	74
19.7	21700	(2450)	2.09	III	4810	(21400)	23.8	18000	(2030)	2.09	III	4810	(21400)	8	5C175	74
18.1	23600	(2670)	0.96	—	2970	(13200)	21.9	19600	(2210)	0.96	—	2970	(13200)	8	5B145	80
18.1	23600	(2670)	0.96	—	2970	(13200)	21.9	19600	(2210)	0.96	—	2970	(13200)	8	5B165	80
18.1	23600	(2670)	1.25	I	4810	(21400)	21.9	19600	(2210)	1.25	I	4810	(21400)	8	5C140	80
18.1	23600	(2670)	1.44	II	4810	(21400)	21.9	19600	(2210)	1.44	II	4810	(21400)	8	5C145	80
18.1	23600	(2670)	1.79	II	4810	(21400)	21.9	19600	(2210)	1.79	II	4810	(21400)	8	5C160	80
18.1	23600	(2670)	1.92	II	4810	(21400)	21.9	19600	(2210)	1.92	II	4810	(21400)	8	5C165	80
18.1	23600	(2670)	1.92	II	4810	(21400)	21.9	19600	(2210)	1.92	II	4810	(21400)	8	5C175	80
16.6	25800	(2920)	0.88	—	2970	(13200)	20.0	21400	(2420)	0.88	—	2970	(13200)	8	5B145	88
16.6	25800	(2920)	0.88	—	2970	(13200)	20.0	21400	(2420)	0.88	—	2970	(13200)	8	5B165	88
16.6	25800	(2920)	1.25	I	4810	(21400)	20.0	21400	(2420)	1.25	I	4810	(21400)	8	5C140	88
16.6	25800	(2920)	1.44	II	4810	(21400)	20.0	21400	(2420)	1.44	II	4810	(21400)	8	5C145	88
16.6	25800	(2920)	1.76	II	4810	(21400)	20.0	21400	(2420)	1.76	II	4810	(21400)	8	5C165	88
16.6	25800	(2920)	1.76	II	4810	(21400)	20.0	21400	(2420)	1.76	II	4810	(21400)	8	5C175	88
14.3	30000	(3390)	1.08	I	4810	(21400)	17.2	24900	(2810)	1.08	I	4810	(21400)	8	5C140	102
14.3	30000	(3390)	1.37	I	4810	(21400)	17.2	24900	(2810)	1.37	I	4810	(21400)	8	5C145	102
14.3	30000	(3390)	1.52	II	4810	(21400)	17.2	24900	(2810)	1.52	II	4810	(21400)	8	5C165	102
14.3	30000	(3390)	1.52	II	4810	(21400)	17.2	24900	(2810)	1.52	II	4810	(21400)	8	5C175	102
12.9	33100	(3740)	0.95	—	4810	(21400)	15.6	27400	(3100)	0.95	—	4810	(21400)	8	5C140	112
12.9	33100	(3740)	1.14	I	4810	(21400)	15.6	27400	(3100)	1.37	I	4810	(21400)	8	5C145	112
12.9	33100	(3740)	1.37	I	4810	(21400)	15.6	27400	(3100)	1.37	I	4810	(21400)	8	5C165	112
12.9	33100	(3740)	1.37	I	4810	(21400)	15.6	27400	(3100)	1.37	I	4810	(21400)	8	5C175	112
11.8	36200	(4090)	0.95	—	4810	(21400)	14.3	30000	(3390)	0.95	—	4810	(21400)	8	5C140	123
11.8	36200	(4090)	1.14	I	4810	(21400)	14.3	30000	(3390)	1.26	I	4810	(21400)	8	5C145	123
11.8	36200	(4090)	1.26	I	4810	(21400)	14.3	30000	(3390)	1.26	I	4810	(21400)	8	5C165	123
11.8	36200	(4090)	1.26	I	4810	(21400)	14.3	30000	(3390)	1.26	I	4810	(21400)	8	5C175	123
9.63	44500	(5030)	0.85	—	4810	(21400)	11.6	36800	(4160)	0.98	—	4810	(21400)	8	5C145	151
9.63	44500	(5030)	1.02	I	4810	(21400)	11.6	36800	(4160)	1.02	I	4810	(21400)	8	5C165	151
9.63	44500	(5030)	1.02	I	4810	(21400)	11.6	36800	(4160)	1.02	I	4810	(21400)	8	5C175	151
8.12	52800	(5960)	0.86	—	2560	(11400)	9.80	43700	(4940)	0.86	—	4810	(21400)	8	5C165	179
8.12	52800	(5960)	0.86	—	2560	(11400)	9.80	43700	(4940)	0.86	—	4810	(21400)	8	5C175	179

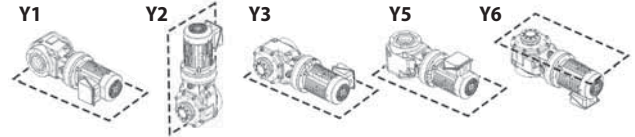
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



10 HP (7.5 kW)

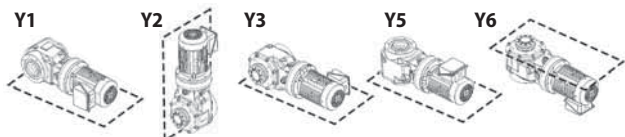
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	4230	(478)	0.87	—	1440	(6390)	167	3500	(396)	1.05	I	1440	(6390)	10	SZ115	11
138	4230	(478)	1.28	I	1440	(6390)	167	3500	(396)	1.28	I	1440	(6390)	10	SZ120	11
138	4230	(478)	1.47	II	1440	(6390)	167	3500	(396)	1.47	II	1440	(6390)	10	SZ125	11
138	4230	(478)	0.87	—	1810	(8060)	167	3500	(396)	1.05	I	1810	(8060)	10	SA115	11
138	4230	(478)	1.28	I	1810	(8060)	167	3500	(396)	1.28	I	1810	(8060)	10	SA120	11
138	4230	(478)	1.47	II	1810	(8060)	167	3500	(396)	1.47	II	1810	(8060)	10	SA125	11
138	4230	(478)	2.44	III	1810	(8060)	167	3500	(396)	2.53	III	1810	(8060)	10	SA140	11
138	4230	(478)	2.44	III	1810	(8060)	167	3500	(396)	2.70	III	1810	(8060)	10	SA145	11
138	4230	(478)	1.28	I	2970	(13200)	167	3500	(396)	1.28	I	2970	(13200)	10	SB120	11
138	4230	(478)	1.47	II	2970	(13200)	167	3500	(396)	1.47	II	2970	(13200)	10	SB125	11
138	4230	(478)	2.53	III	2970	(13200)	167	3500	(396)	2.53	III	2970	(13200)	10	SB140	11
138	4230	(478)	2.93	III	2970	(13200)	167	3500	(396)	2.93	III	2970	(13200)	10	SB145	11
138	4230	(478)	2.53	III	4810	(21400)	167	3500	(396)	2.53	III	4810	(21400)	10	SC140	11
138	4230	(478)	2.93	III	4810	(21400)	167	3500	(396)	2.93	III	4810	(21400)	10	SC145	11
113	5160	(583)	0.87	—	1320	(5860)	137	4270	(483)	1.05	I	1440	(6390)	10	SZ110	13
113	5160	(583)	0.87	—	1320	(5860)	137	4270	(483)	1.05	I	1440	(6390)	10	SZ115	13
113	5160	(583)	1.28	I	1320	(5860)	137	4270	(483)	1.28	I	1440	(6390)	10	SZ120	13
113	5160	(583)	1.42	II	1320	(5860)	137	4270	(483)	1.42	II	1440	(6390)	10	SZ125	13
113	5160	(583)	0.87	—	1810	(8060)	137	4270	(483)	1.05	I	1810	(8060)	10	SA115	13
113	5160	(583)	1.28	I	1810	(8060)	137	4270	(483)	1.28	I	1810	(8060)	10	SA120	13
113	5160	(583)	1.47	II	1810	(8060)	137	4270	(483)	1.47	II	1810	(8060)	10	SA125	13
113	5160	(583)	2.20	III	1810	(8060)	137	4270	(483)	2.21	III	1810	(8060)	10	SA145	13
113	5160	(583)	1.28	I	2970	(13200)	137	4270	(483)	1.28	I	2970	(13200)	10	SB120	13
113	5160	(583)	1.47	II	2970	(13200)	137	4270	(483)	1.47	II	2970	(13200)	10	SB125	13
113	5160	(583)	2.53	III	2970	(13200)	137	4270	(483)	2.53	III	2970	(13200)	10	SB140	13
113	5160	(583)	2.93	III	2970	(13200)	137	4270	(483)	2.93	III	2970	(13200)	10	SB145	13
113	5160	(583)	2.93	III	4810	(21400)	137	4270	(483)	2.93	III	4810	(21400)	10	SC145	13
104	5650	(638)	0.87	—	1250	(5540)	125	4670	(528)	1.05	I	1440	(6390)	10	SZ115	14
104	5650	(638)	1.28	I	1250	(5540)	125	4670	(528)	1.28	I	1440	(6390)	10	SZ120	14
104	5650	(638)	1.30	I	1250	(5540)	125	4670	(528)	1.30	I	1440	(6390)	10	SZ125	14
104	5650	(638)	0.87	—	1810	(8060)	125	4670	(528)	1.05	I	1810	(8060)	10	SA115	14
104	5650	(638)	1.28	I	1810	(8060)	125	4670	(528)	1.28	I	1810	(8060)	10	SA120	14
104	5650	(638)	1.47	II	1810	(8060)	125	4670	(528)	1.47	II	1810	(8060)	10	SA125	14
104	5650	(638)	2.02	III	1810	(8060)	125	4670	(528)	2.02	III	1810	(8060)	10	SA145	14
104	5650	(638)	1.28	I	2970	(13200)	125	4670	(528)	1.28	I	2970	(13200)	10	SB120	14
104	5650	(638)	1.47	II	2970	(13200)	125	4670	(528)	1.47	II	2970	(13200)	10	SB125	14
104	5650	(638)	2.53	III	2970	(13200)	125	4670	(528)	2.53	III	2970	(13200)	10	SB140	14
104	5650	(638)	2.93	III	2970	(13200)	125	4670	(528)	2.93	III	2970	(13200)	10	SB145	14
104	5650	(638)	2.93	III	4810	(21400)	125	4670	(528)	2.93	III	4810	(21400)	10	SC145	14

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76-3.83

Single Reduction, Y2 3.92

Double Reduction, AF-Motor 3.100-3.103

Single Reduction, AF-Motor 3.84-3.91

Double Reduction 3.94-3.99

Double Reduction, Y2 3.104

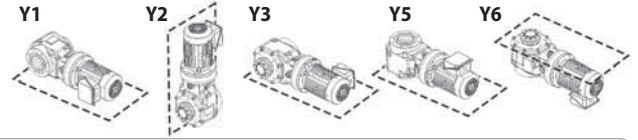
10 HP (7.5 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
90.6	6450	(729)	0.87	—	1010	(4500)	109	5350	(604)	1.05	I	1270	(5670)	10	SZ115	16
90.6	6450	(729)	1.14	I	1010	(4500)	109	5350	(604)	1.14	I	1270	(5670)	10	SZ125	16
90.6	6450	(729)	0.87	—	1810	(8060)	109	5350	(604)	1.05	I	1810	(8060)	10	SA115	16
90.6	6450	(729)	1.28	I	1810	(8060)	109	5350	(604)	1.28	I	1810	(8060)	10	SA120	16
90.6	6450	(729)	1.47	II	1810	(8060)	109	5350	(604)	1.47	II	1810	(8060)	10	SA125	16
90.6	6450	(729)	1.77	II	1810	(8060)	109	5350	(604)	1.77	II	1810	(8060)	10	SA145	16
90.6	6450	(729)	1.28	I	2970	(13200)	109	5350	(604)	1.28	I	2970	(13200)	10	SB120	16
90.6	6450	(729)	1.47	II	2970	(13200)	109	5350	(604)	1.47	II	2970	(13200)	10	SB125	16
90.6	6450	(729)	2.53	III	2970	(13200)	109	5350	(604)	2.53	III	2970	(13200)	10	SB140	16
90.6	6450	(729)	2.93	III	2970	(13200)	109	5350	(604)	2.93	III	2970	(13200)	10	SB145	16
90.6	6450	(729)	2.93	III	4810	(21400)	109	5350	(604)	2.93	III	4810	(21400)	10	SC145	16
82.9	7050	(797)	0.87	—	913	(4060)	100	5840	(660)	1.04	I	1200	(5330)	10	SZ115	18
82.9	7050	(797)	1.04	I	913	(4060)	100	5840	(660)	1.04	I	1200	(5330)	10	SZ125	18
82.9	7050	(797)	0.87	—	1810	(8060)	100	5840	(660)	1.05	I	1810	(8060)	10	SA115	18
82.9	7050	(797)	1.28	I	1810	(8060)	100	5840	(660)	1.28	I	1810	(8060)	10	SA120	18
82.9	7050	(797)	1.47	II	1810	(8060)	100	5840	(660)	1.47	II	1810	(8060)	10	SA125	18
82.9	7050	(797)	1.62	II	1810	(8060)	100	5840	(660)	1.62	II	1810	(8060)	10	SA145	18
82.9	7050	(797)	1.28	I	2970	(13200)	100	5840	(660)	1.28	I	2970	(13200)	10	SB120	18
82.9	7050	(797)	1.47	II	2970	(13200)	100	5840	(660)	1.47	II	2970	(13200)	10	SB125	18
82.9	7050	(797)	2.53	III	2970	(13200)	100	5840	(660)	2.53	III	2970	(13200)	10	SB140	18
82.9	7050	(797)	2.93	III	2970	(13200)	100	5840	(660)	2.93	III	2970	(13200)	10	SB145	18
82.9	7050	(797)	2.53	III	4810	(21400)	100	5840	(660)	2.53	III	4810	(21400)	10	SC140	18
82.9	7050	(797)	2.93	III	4810	(21400)	100	5840	(660)	2.93	III	4810	(21400)	10	SC145	18
69.0	8460	(956)	0.87	—	524	(2330)	83.3	7010	(792)	0.87	—	922	(4100)	10	SZ125	21
69.0	8460	(956)	0.87	—	1810	(8060)	83.3	7010	(792)	0.87	—	1810	(8060)	10	SA120	21
69.0	8460	(956)	1.00	I	1810	(8060)	83.3	7010	(792)	1.00	I	1810	(8060)	10	SA125	21
69.0	8460	(956)	1.35	I	1810	(8060)	83.3	7010	(792)	1.35	I	1810	(8060)	10	SA145	21
69.0	8460	(956)	0.87	—	2970	(13200)	83.3	7010	(792)	0.87	—	2970	(13200)	10	SB120	21
69.0	8460	(956)	1.00	I	2970	(13200)	83.3	7010	(792)	1.00	I	2970	(13200)	10	SB125	21
69.0	8460	(956)	1.73	II	2970	(13200)	83.3	7010	(792)	1.73	II	2970	(13200)	10	SB140	21
69.0	8460	(956)	2.01	III	2970	(13200)	83.3	7010	(792)	2.01	III	2970	(13200)	10	SB145	21
69.0	8460	(956)	2.69	III	2970	(13200)	83.3	7010	(792)	2.69	III	2970	(13200)	10	SB165	21
69.0	8460	(956)	1.73	II	4810	(21400)	83.3	7010	(792)	1.73	II	4810	(21400)	10	SC140	21
69.0	8460	(956)	2.01	III	4810	(21400)	83.3	7010	(792)	2.01	III	4810	(21400)	10	SC145	21
64.7	9030	(1020)	0.81	—	301	(1340)	78.1	7480	(845)	0.81	—	749	(3330)	10	SZ125	22
64.7	9030	(1020)	0.87	—	1810	(8060)	78.1	7480	(845)	0.87	—	1810	(8060)	10	SA120	22
64.7	9030	(1020)	1.00	I	1810	(8060)	78.1	7480	(845)	1.00	I	1810	(8060)	10	SA125	22
64.7	9030	(1020)	1.26	I	1810	(8060)	78.1	7480	(845)	1.26	I	1810	(8060)	10	SA145	22
64.7	9030	(1020)	0.87	—	2970	(13200)	78.1	7480	(845)	0.87	—	2970	(13200)	10	SB120	22
64.7	9030	(1020)	1.00	I	2970	(13200)	78.1	7480	(845)	1.00	I	2970	(13200)	10	SB125	22
64.7	9030	(1020)	1.73	II	2970	(13200)	78.1	7480	(845)	1.73	II	2970	(13200)	10	SB140	22
64.7	9030	(1020)	2.01	III	2970	(13200)	78.1	7480	(845)	2.01	III	2970	(13200)	10	SB145	22
64.7	9030	(1020)	2.52	III	2970	(13200)	78.1	7480	(845)	2.52	III	2970	(13200)	10	SB165	22
64.7	9030	(1020)	1.73	II	4810	(21400)	78.1	7480	(845)	1.73	II	4810	(21400)	10	SC140	22
64.7	9030	(1020)	2.01	III	4810	(21400)	78.1	7480	(845)	2.01	III	4810	(21400)	10	SC145	22
64.7	9030	(1020)	2.71	III	4810	(21400)	78.1	7480	(845)	2.71	III	4810	(21400)	10	SC160	22

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



10 HP (7.5 kW)

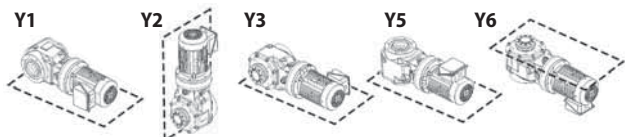
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
59.2	9910	(1120)	0.87	—	1810	(8060)	71.4	8190	(925)	0.87	—	1810	(8060)	10	5A120	25
59.2	9910	(1120)	1.00	I	1810	(8060)	71.4	8190	(925)	1.00	I	1810	(8060)	10	5A125	25
59.2	9910	(1120)	1.16	I	1810	(8060)	71.4	8190	(925)	1.16	I	1810	(8060)	10	5A145	25
59.2	9910	(1120)	0.87	—	2970	(13200)	71.4	8190	(925)	0.87	—	2970	(13200)	10	5B120	25
59.2	9910	(1120)	1.00	I	2970	(13200)	71.4	8190	(925)	1.00	I	2970	(13200)	10	5B125	25
59.2	9910	(1120)	1.73	II	2970	(13200)	71.4	8190	(925)	1.73	II	2970	(13200)	10	5B140	25
59.2	9910	(1120)	2.01	III	2970	(13200)	71.4	8190	(925)	2.01	III	2970	(13200)	10	5B145	25
59.2	9910	(1120)	2.30	III	2970	(13200)	71.4	8190	(925)	2.30	III	2970	(13200)	10	5B165	25
59.2	9910	(1120)	1.73	II	4810	(21400)	71.4	8190	(925)	1.73	II	4810	(21400)	10	5C140	25
59.2	9910	(1120)	2.01	III	4810	(21400)	71.4	8190	(925)	2.01	III	4810	(21400)	10	5C145	25
59.2	9910	(1120)	2.71	III	4810	(21400)	71.4	8190	(925)	2.71	III	4810	(21400)	10	5C160	25
51.8	11300	(1280)	0.87	—	1810	(8060)	62.5	9380	(1060)	0.87	—	1810	(8060)	10	5A120	28
51.8	11300	(1280)	1.00	I	1810	(8060)	62.5	9380	(1060)	1.00	I	1810	(8060)	10	5A125	28
51.8	11300	(1280)	1.01	I	1810	(8060)	62.5	9380	(1060)	1.01	I	1810	(8060)	10	5A145	28
51.8	11300	(1280)	0.87	—	2970	(13200)	62.5	9380	(1060)	0.87	—	2970	(13200)	10	5B120	28
51.8	11300	(1280)	1.00	I	2970	(13200)	62.5	9380	(1060)	1.00	I	2970	(13200)	10	5B125	28
51.8	11300	(1280)	1.73	II	2970	(13200)	62.5	9380	(1060)	1.73	II	2970	(13200)	10	5B140	28
51.8	11300	(1280)	2.02	III	2970	(13200)	62.5	9380	(1060)	2.02	III	2970	(13200)	10	5B145	28
51.8	11300	(1280)	2.02	III	2970	(13200)	62.5	9380	(1060)	2.02	III	2970	(13200)	10	5B165	28
51.8	11300	(1280)	1.73	II	4810	(21400)	62.5	9380	(1060)	1.73	II	4810	(21400)	10	5C140	28
51.8	11300	(1280)	2.01	III	4810	(21400)	62.5	9380	(1060)	2.01	III	4810	(21400)	10	5C145	28
51.8	11300	(1280)	2.63	III	4810	(21400)	62.5	9380	(1060)	2.63	III	4810	(21400)	10	5C160	28
41.2	14200	(1600)	0.81	—	1810	(8060)	49.7	11800	(1330)	0.81	—	1810	(8060)	10	5A145	35
41.2	14200	(1600)	1.60	II	2970	(13200)	49.7	11800	(1330)	1.60	II	2970	(13200)	10	5B145	35
41.2	14200	(1600)	1.60	II	2970	(13200)	49.7	11800	(1330)	1.60	II	2970	(13200)	10	5B165	35
41.2	14200	(1600)	1.73	II	4810	(21400)	49.7	11800	(1330)	1.73	II	4810	(21400)	10	5C140	35
41.2	14200	(1600)	2.01	III	4810	(21400)	49.7	11800	(1330)	2.01	III	4810	(21400)	10	5C145	35
41.2	14200	(1600)	2.63	III	4810	(21400)	49.7	11800	(1330)	2.63	III	4810	(21400)	10	5C160	35
37.7	15500	(1750)	1.47	II	2970	(13200)	45.5	12800	(1450)	1.47	II	2970	(13200)	10	5B145	39
37.7	15500	(1750)	1.47	II	2970	(13200)	45.5	12800	(1450)	1.47	II	2970	(13200)	10	5B165	39
37.7	15500	(1750)	1.73	II	4810	(21400)	45.5	12800	(1450)	1.73	II	4810	(21400)	10	5C140	39
37.7	15500	(1750)	2.01	III	4810	(21400)	45.5	12800	(1450)	2.01	III	4810	(21400)	10	5C145	39
37.7	15500	(1750)	2.63	III	4810	(21400)	45.5	12800	(1450)	2.63	III	4810	(21400)	10	5C160	39
37.7	15500	(1750)	2.93	III	4810	(21400)	45.5	12800	(1450)	2.93	III	4810	(21400)	10	5C165	39
37.7	15500	(1750)	2.93	III	4810	(21400)	45.5	12800	(1450)	2.93	III	4810	(21400)	10	5C175	39
31.9	18300	(2070)	1.24	I	2970	(13200)	38.5	15200	(1720)	1.24	I	2970	(13200)	10	5B145	46
31.9	18300	(2070)	1.24	I	2970	(13200)	38.5	15200	(1720)	1.24	I	2970	(13200)	10	5B165	46
31.9	18300	(2070)	1.73	II	4810	(21400)	38.5	15200	(1720)	1.73	II	4810	(21400)	10	5C140	46
31.9	18300	(2070)	2.01	III	4810	(21400)	38.5	15200	(1720)	2.01	III	4810	(21400)	10	5C145	46
31.9	18300	(2070)	2.48	III	4810	(21400)	38.5	15200	(1720)	2.48	III	4810	(21400)	10	5C165	46
31.9	18300	(2070)	2.48	III	4810	(21400)	38.5	15200	(1720)	2.48	III	4810	(21400)	10	5C175	46

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

10 HP (7.5 kW)

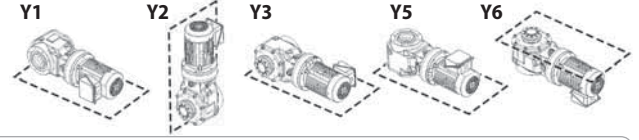
50 Hz						60 Hz						Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs (N)		in-lbs	(N·m)	SF	AGMA Class	lbs (N)			
27.6	21200	(2390)	1.07	I	2970 (13200)	33.3	17500	(1980)	1.07	I	2970 (13200)	10	5B145	53
27.6	21200	(2390)	1.07	I	2970 (13200)	33.3	17500	(1980)	1.07	I	2970 (13200)	10	5B165	53
27.6	21200	(2390)	1.60	II	4810 (21400)	33.3	17500	(1980)	1.60	II	4810 (21400)	10	5C140	53
27.6	21200	(2390)	1.93	II	4810 (21400)	33.3	17500	(1980)	1.94	II	4810 (21400)	10	5C145	53
27.6	21200	(2390)	2.15	III	4810 (21400)	33.3	17500	(1980)	2.15	III	4810 (21400)	10	5C165	53
27.6	21200	(2390)	2.15	III	4810 (21400)	33.3	17500	(1980)	2.15	III	4810 (21400)	10	5C175	53
24.4	24000	(2710)	0.95	—	2970 (13200)	29.4	19900	(2250)	0.95	—	2970 (13200)	10	5B145	60
24.4	24000	(2710)	0.95	—	2970 (13200)	29.4	19900	(2250)	0.95	—	2970 (13200)	10	5B165	60
24.4	24000	(2710)	1.35	I	4810 (21400)	29.4	19900	(2250)	1.35	I	4810 (21400)	10	5C140	60
24.4	24000	(2710)	1.60	II	4810 (21400)	29.4	19900	(2250)	1.60	II	4810 (21400)	10	5C145	60
24.4	24000	(2710)	1.75	II	4810 (21400)	29.4	19900	(2250)	1.75	II	4810 (21400)	10	5C160	60
24.4	24000	(2710)	1.90	II	4810 (21400)	29.4	19900	(2250)	1.90	II	4810 (21400)	10	5C165	60
24.4	24000	(2710)	1.90	II	4810 (21400)	29.4	19900	(2250)	1.90	II	4810 (21400)	10	5C175	60
21.6	27100	(3060)	0.84	—	2970 (13200)	26.0	22500	(2540)	0.84	—	2970 (13200)	10	5B145	67
21.6	27100	(3060)	0.84	—	2970 (13200)	26.0	22500	(2540)	0.84	—	2970 (13200)	10	5B165	67
21.6	27100	(3060)	1.15	I	4810 (21400)	26.0	22500	(2540)	1.15	I	4810 (21400)	10	5C140	67
21.6	27100	(3060)	1.27	I	4810 (21400)	26.0	22500	(2540)	1.47	II	4810 (21400)	10	5C145	67
21.6	27100	(3060)	1.68	II	4810 (21400)	26.0	22500	(2540)	1.68	II	4810 (21400)	10	5C165	67
21.6	27100	(3060)	1.68	II	4810 (21400)	26.0	22500	(2540)	1.68	II	4810 (21400)	10	5C175	67
19.7	29600	(3350)	1.15	I	4810 (21400)	23.8	24500	(2770)	1.15	I	4810 (21400)	10	5C140	74
19.7	29600	(3350)	1.27	I	4810 (21400)	23.8	24500	(2770)	1.47	II	4810 (21400)	10	5C145	74
19.7	29600	(3350)	1.54	II	4810 (21400)	23.8	24500	(2770)	1.54	II	4810 (21400)	10	5C165	74
19.7	29600	(3350)	1.54	II	4810 (21400)	23.8	24500	(2770)	1.54	II	4810 (21400)	10	5C175	74
18.1	32200	(3640)	0.92	—	4810 (21400)	21.9	26700	(3020)	0.92	—	4810 (21400)	10	5C140	80
18.1	32200	(3640)	1.05	I	4810 (21400)	21.9	26700	(3020)	1.05	I	4810 (21400)	10	5C145	80
18.1	32200	(3640)	1.31	I	4810 (21400)	21.9	26700	(3020)	1.31	I	4810 (21400)	10	5C160	80
18.1	32200	(3640)	1.41	II	4810 (21400)	21.9	26700	(3020)	1.41	II	4810 (21400)	10	5C165	80
18.1	32200	(3640)	1.41	II	4810 (21400)	21.9	26700	(3020)	1.41	II	4810 (21400)	10	5C175	80
16.6	35300	(3990)	0.92	—	4810 (21400)	20.0	29200	(3300)	0.92	—	4810 (21400)	10	5C140	88
16.6	35300	(3990)	1.05	I	4810 (21400)	20.0	29200	(3300)	1.05	I	4810 (21400)	10	5C145	88
16.6	35300	(3990)	1.29	I	4810 (21400)	20.0	29200	(3300)	1.29	I	4810 (21400)	10	5C165	88
16.6	35300	(3990)	1.29	I	4810 (21400)	20.0	29200	(3300)	1.29	I	4810 (21400)	10	5C175	88
14.3	40900	(4620)	1.00	I	4810 (21400)	17.2	33900	(3830)	1.00	I	4810 (21400)	10	5C145	102
14.3	40900	(4620)	1.11	I	4810 (21400)	17.2	33900	(3830)	1.11	I	4810 (21400)	10	5C165	102
14.3	40900	(4620)	1.11	I	4810 (21400)	17.2	33900	(3830)	1.11	I	4810 (21400)	10	5C175	102
12.9	45100	(5100)	0.84	—	4810 (21400)	15.6	37400	(4230)	1.00	I	4810 (21400)	10	5C145	112
12.9	45100	(5100)	1.01	I	4810 (21400)	15.6	37400	(4230)	1.01	I	4810 (21400)	10	5C165	112
12.9	45100	(5100)	1.01	I	4810 (21400)	15.6	37400	(4230)	1.01	I	4810 (21400)	10	5C175	112
11.8	49400	(5580)	0.84	—	4810 (21400)	14.3	40900	(4620)	0.92	—	4810 (21400)	10	5C145	123
11.8	49400	(5580)	0.92	—	4810 (21400)	14.3	40900	(4620)	0.92	—	4810 (21400)	10	5C165	123
11.8	49400	(5580)	0.92	—	4810 (21400)	14.3	40900	(4620)	0.92	—	4810 (21400)	10	5C175	123

Gearmotors Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



15 HP (11 kW)

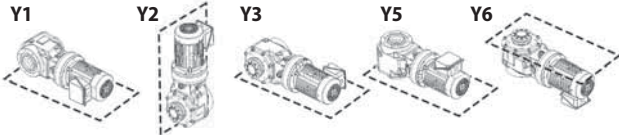
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	6200	(701)	0.87	—	513	(2280)	167	5140	(581)	0.87	—	798	(3550)	15	SZ120	11
138	6200	(701)	1.00	I	513	(2280)	167	5140	(581)	1.00	I	798	(3550)	15	SZ125	11
138	6200	(701)	0.87	—	1810	(8060)	167	5140	(581)	0.87	—	1810	(8060)	15	SA120	11
138	6200	(701)	1.00	I	1810	(8060)	167	5140	(581)	1.00	I	1810	(8060)	15	SA125	11
138	6200	(701)	1.66	II	1810	(8060)	167	5140	(581)	1.73	II	1810	(8060)	15	SA140	11
138	6200	(701)	1.66	II	1810	(8060)	167	5140	(581)	1.84	II	1810	(8060)	15	SA145	11
138	6200	(701)	0.87	—	2970	(13200)	167	5140	(581)	0.87	—	2970	(13200)	15	SB120	11
138	6200	(701)	1.00	I	2970	(13200)	167	5140	(581)	1.00	I	2970	(13200)	15	SB125	11
138	6200	(701)	1.73	II	2970	(13200)	167	5140	(581)	1.73	II	2970	(13200)	15	SB140	11
138	6200	(701)	2.00	III	2970	(13200)	167	5140	(581)	2.00	III	2970	(13200)	15	SB145	11
138	6200	(701)	2.30	III	2970	(13200)	167	5140	(581)	2.30	III	2970	(13200)	15	SB160	11
138	6200	(701)	2.64	III	2970	(13200)	167	5140	(581)	2.64	III	2970	(13200)	15	SB165	11
138	6200	(701)	1.73	II	4810	(21400)	167	5140	(581)	1.73	II	4810	(21400)	15	SC140	11
138	6200	(701)	2.00	III	4810	(21400)	167	5140	(581)	2.00	III	4810	(21400)	15	SC145	11
138	6200	(701)	2.30	III	4810	(21400)	167	5140	(581)	2.30	III	4810	(21400)	15	SC160	11
138	6200	(701)	2.73	III	4810	(21400)	167	5140	(581)	2.73	III	4810	(21400)	15	SC165	11
113	7570	(855)	0.87	—	81.6	(363)	137	6270	(708)	0.87	—	452	(2010)	15	SZ120	13
113	7570	(855)	0.97	—	81.6	(363)	137	6270	(708)	0.97	—	452	(2010)	15	SZ125	13
113	7570	(855)	0.87	—	1810	(8060)	137	6270	(708)	0.87	—	1810	(8060)	15	SA120	13
113	7570	(855)	1.00	I	1810	(8060)	137	6270	(708)	1.00	I	1810	(8060)	15	SA125	13
113	7570	(855)	1.50	II	1810	(8060)	137	6270	(708)	1.51	II	1810	(8060)	15	SA140	13
113	7570	(855)	1.50	II	1810	(8060)	137	6270	(708)	1.51	II	1810	(8060)	15	SA145	13
113	7570	(855)	0.87	—	2970	(13200)	137	6270	(708)	0.87	—	2970	(13200)	15	SB120	13
113	7570	(855)	1.00	I	2970	(13200)	137	6270	(708)	1.00	I	2970	(13200)	15	SB125	13
113	7570	(855)	1.73	II	2970	(13200)	137	6270	(708)	1.73	II	2970	(13200)	15	SB140	13
113	7570	(855)	2.00	III	2970	(13200)	137	6270	(708)	2.00	III	2970	(13200)	15	SB145	13
113	7570	(855)	2.30	III	2970	(13200)	137	6270	(708)	2.30	III	2970	(13200)	15	SB160	13
113	7570	(855)	2.64	III	2970	(13200)	137	6270	(708)	2.64	III	2970	(13200)	15	SB165	13
113	7570	(855)	1.73	II	4810	(21400)	137	6270	(708)	1.73	II	4810	(21400)	15	SC140	13
113	7570	(855)	2.00	III	4810	(21400)	137	6270	(708)	2.00	III	4810	(21400)	15	SC145	13
113	7570	(855)	2.30	III	4810	(21400)	137	6270	(708)	2.30	III	4810	(21400)	15	SC160	13
113	7570	(855)	2.73	III	4810	(21400)	137	6270	(708)	2.73	III	4810	(21400)	15	SC165	13

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

15 HP (11 kW)

50 Hz							60 Hz							Unit Selection		
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
104	8280	(935)	0.87	—	339	(1510)	125	6860	(775)	0.87	—	339	(1510)	15	5Z120	14
104	8280	(935)	0.89	—	339	(1510)	125	6860	(775)	0.89	—	339	(1510)	15	5Z125	14
104	8280	(935)	0.87	—	1810	(8060)	125	6860	(775)	0.87	—	1810	(8060)	15	5A120	14
104	8280	(935)	1.00	I	1810	(8060)	125	6860	(775)	1.00	I	1810	(8060)	15	5A125	14
104	8280	(935)	1.38	I	1810	(8060)	125	6860	(775)	1.38	I	1810	(8060)	15	5A145	14
104	8280	(935)	0.87	—	2970	(13200)	125	6860	(775)	0.87	—	2970	(13200)	15	5B120	14
104	8280	(935)	1.00	I	2970	(13200)	125	6860	(775)	1.00	I	2970	(13200)	15	5B125	14
104	8280	(935)	1.73	II	2970	(13200)	125	6860	(775)	1.73	II	2970	(13200)	15	5B140	14
104	8280	(935)	2.00	III	2970	(13200)	125	6860	(775)	2.00	III	2970	(13200)	15	5B145	14
104	8280	(935)	2.30	III	2970	(13200)	125	6860	(775)	2.30	III	2970	(13200)	15	5B160	14
104	8280	(935)	2.54	III	2970	(13200)	125	6860	(775)	2.64	III	2970	(13200)	15	5B165	14
104	8280	(935)	1.73	II	4810	(21400)	125	6860	(775)	1.73	II	4810	(21400)	15	5C140	14
104	8280	(935)	2.00	III	4810	(21400)	125	6860	(775)	2.00	III	4810	(21400)	15	5C145	14
104	8280	(935)	2.30	III	4810	(21400)	125	6860	(775)	2.30	III	4810	(21400)	15	5C160	14
104	8280	(935)	2.73	III	4810	(21400)	125	6860	(775)	2.73	III	4810	(21400)	15	5C165	14
90.6	9470	(1070)	0.87	—	1810	(8060)	109	7840	(886)	0.87	—	1810	(8060)	15	5A120	16
90.6	9470	(1070)	1.00	I	1810	(8060)	109	7840	(886)	1.00	I	1810	(8060)	15	5A125	16
90.6	9470	(1070)	1.10	I	1810	(8060)	109	7840	(886)	1.10	I	1810	(8060)	15	5A145	16
90.6	9470	(1070)	0.87	—	2970	(13200)	109	7840	(886)	0.87	—	2970	(13200)	15	5B120	16
90.6	9470	(1070)	1.00	I	2970	(13200)	109	7840	(886)	1.00	I	2970	(13200)	15	5B125	16
90.6	9470	(1070)	1.73	II	2970	(13200)	109	7840	(886)	1.73	II	2970	(13200)	15	5B140	16
90.6	9470	(1070)	2.00	III	2970	(13200)	109	7840	(886)	2.00	III	2970	(13200)	15	5B145	16
90.6	9470	(1070)	2.25	III	2970	(13200)	109	7840	(886)	2.30	III	2970	(13200)	15	5B160	16
90.6	9470	(1070)	2.25	III	2970	(13200)	109	7840	(886)	2.40	III	2970	(13200)	15	5B165	16
90.6	9470	(1070)	1.73	II	4810	(21400)	109	7840	(886)	1.73	II	4810	(21400)	15	5C140	16
90.6	9470	(1070)	2.00	III	4810	(21400)	109	7840	(886)	2.00	III	4810	(21400)	15	5C145	16
90.6	9470	(1070)	2.30	III	4810	(21400)	109	7840	(886)	2.30	III	4810	(21400)	15	5C160	16
90.6	9470	(1070)	2.73	III	4810	(21400)	109	7840	(886)	2.73	III	4810	(21400)	15	5C165	16
82.9	10400	(1170)	0.87	—	1810	(8060)	100	8580	(969)	0.87	—	1810	(8060)	15	5A120	18
82.9	10400	(1170)	1.00	I	1810	(8060)	100	8580	(969)	1.00	I	1810	(8060)	15	5A125	18
82.9	10400	(1170)	1.10	I	1810	(8060)	100	8580	(969)	1.10	I	1810	(8060)	15	5A145	18
82.9	10400	(1170)	0.87	—	2970	(13200)	100	8580	(969)	0.87	—	2970	(13200)	15	5B120	18
82.9	10400	(1170)	1.00	I	2970	(13200)	100	8580	(969)	1.00	I	2970	(13200)	15	5B125	18
82.9	10400	(1170)	1.73	II	2970	(13200)	100	8580	(969)	1.73	II	2970	(13200)	15	5B140	18
82.9	10400	(1170)	2.00	III	2970	(13200)	100	8580	(969)	2.00	III	2970	(13200)	15	5B145	18
82.9	10400	(1170)	2.15	III	2970	(13200)	100	8580	(969)	2.20	III	2970	(13200)	15	5B160	18
82.9	10400	(1170)	2.15	III	2970	(13200)	100	8580	(969)	2.20	III	2970	(13200)	15	5B165	18
82.9	10400	(1170)	1.73	II	4810	(21400)	100	8580	(969)	1.73	II	4810	(21400)	15	5C140	18
82.9	10400	(1170)	2.00	III	4810	(21400)	100	8580	(969)	2.00	III	4810	(21400)	15	5C145	18
82.9	10400	(1170)	2.30	III	4810	(21400)	100	8580	(969)	2.30	III	4810	(21400)	15	5C160	18
82.9	10400	(1170)	2.73	III	4810	(21400)	100	8580	(969)	2.73	III	4810	(21400)	15	5C165	18

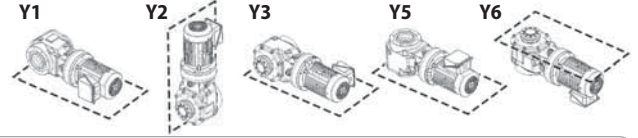
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



15 HP (11 kW)

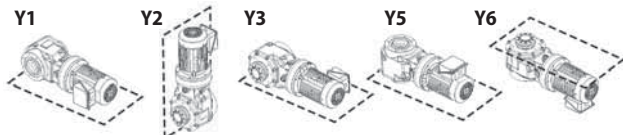
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
69.0	12400	(1400)	0.92	—	1810	(8060)	83.3	10300	(1160)	0.92	—	1810	(8060)	15	5A145	21
69.0	12400	(1400)	1.18	I	2970	(13200)	83.3	10300	(1160)	1.18	I	2970	(13200)	15	5B140	21
69.0	12400	(1400)	1.37	I	2970	(13200)	83.3	10300	(1160)	1.37	I	2970	(13200)	15	5B145	21
69.0	12400	(1400)	1.83	II	2970	(13200)	83.3	10300	(1160)	1.83	II	2970	(13200)	15	5B165	21
69.0	12400	(1400)	1.18	I	4810	(21400)	83.3	10300	(1160)	1.18	I	4810	(21400)	15	5C140	21
69.0	12400	(1400)	1.37	I	4810	(21400)	83.3	10300	(1160)	1.37	I	4810	(21400)	15	5C145	21
69.0	12400	(1400)	2.30	III	4810	(21400)	83.3	10300	(1160)	2.30	III	4810	(21400)	15	5C160	21
69.0	12400	(1400)	2.73	III	4810	(21400)	83.3	10300	(1160)	2.73	III	4810	(21400)	15	5C165	21
64.7	13300	(1500)	0.86	—	1810	(8060)	78.1	11000	(1240)	0.86	—	1810	(8060)	15	5A145	22
64.7	13300	(1500)	1.18	I	2970	(13200)	78.1	11000	(1240)	1.18	I	2970	(13200)	15	5B140	22
64.7	13300	(1500)	1.37	I	2970	(13200)	78.1	11000	(1240)	1.37	I	2970	(13200)	15	5B145	22
64.7	13300	(1500)	1.72	II	2970	(13200)	78.1	11000	(1240)	1.72	II	2970	(13200)	15	5B165	22
64.7	13300	(1500)	1.18	I	4810	(21400)	78.1	11000	(1240)	1.18	I	4810	(21400)	15	5C140	22
64.7	13300	(1500)	1.37	I	4810	(21400)	78.1	11000	(1240)	1.37	I	4810	(21400)	15	5C145	22
64.7	13300	(1500)	1.85	II	4810	(21400)	78.1	11000	(1240)	1.85	II	4810	(21400)	15	5C160	22
64.7	13300	(1500)	2.19	III	4810	(21400)	78.1	11000	(1240)	2.19	III	4810	(21400)	15	5C165	22
59.2	14500	(1640)	1.18	I	2970	(13200)	71.4	12000	(1360)	1.18	I	2970	(13200)	15	5B140	25
59.2	14500	(1640)	1.37	I	2970	(13200)	71.4	12000	(1360)	1.37	I	2970	(13200)	15	5B145	25
59.2	14500	(1640)	1.57	II	2970	(13200)	71.4	12000	(1360)	1.57	II	2970	(13200)	15	5B165	25
59.2	14500	(1640)	1.18	I	4810	(21400)	71.4	12000	(1360)	1.18	I	4810	(21400)	15	5C140	25
59.2	14500	(1640)	1.37	I	4810	(21400)	71.4	12000	(1360)	1.37	I	4810	(21400)	15	5C145	25
59.2	14500	(1640)	1.85	II	4810	(21400)	71.4	12000	(1360)	1.85	II	4810	(21400)	15	5C160	25
59.2	14500	(1640)	2.19	III	4810	(21400)	71.4	12000	(1360)	2.19	III	4810	(21400)	15	5C165	25
59.2	14500	(1640)	2.94	III	4810	(21400)	71.4	12000	(1360)	3.08	III	4810	(21400)	15	5C170	25
59.2	14500	(1640)	2.94	III	4810	(21400)	71.4	12000	(1360)	3.14	III	4810	(21400)	15	5C175	25
51.8	16600	(1870)	1.18	I	2970	(13200)	62.5	13700	(1550)	1.18	I	2970	(13200)	15	5B140	28
51.8	16600	(1870)	1.37	I	2970	(13200)	62.5	13700	(1550)	1.37	I	2970	(13200)	15	5B145	28
51.8	16600	(1870)	1.37	I	2970	(13200)	62.5	13700	(1550)	1.37	I	2970	(13200)	15	5B165	28
51.8	16600	(1870)	1.18	I	4810	(21400)	62.5	13700	(1550)	1.18	I	4810	(21400)	15	5C140	28
51.8	16600	(1870)	1.37	I	4810	(21400)	62.5	13700	(1550)	1.37	I	4810	(21400)	15	5C145	28
51.8	16600	(1870)	1.79	II	4810	(21400)	62.5	13700	(1550)	1.79	II	4810	(21400)	15	5C160	28
51.8	16600	(1870)	2.19	III	4810	(21400)	62.5	13700	(1550)	2.19	III	4810	(21400)	15	5C165	28
51.8	16600	(1870)	2.67	III	4810	(21400)	62.5	13700	(1550)	2.75	III	4810	(21400)	15	5C175	28
41.2	20800	(2350)	1.09	I	2970	(13200)	49.7	17300	(1950)	1.09	I	2970	(13200)	15	5B145	35
41.2	20800	(2350)	1.09	I	2970	(13200)	49.7	17300	(1950)	1.09	I	2970	(13200)	15	5B165	35
41.2	20800	(2350)	1.18	I	4810	(21400)	49.7	17300	(1950)	1.18	I	4810	(21400)	15	5C140	35
41.2	20800	(2350)	1.37	I	4810	(21400)	49.7	17300	(1950)	1.37	I	4810	(21400)	15	5C145	35
41.2	20800	(2350)	1.79	II	4810	(21400)	49.7	17300	(1950)	1.79	II	4810	(21400)	15	5C160	35
41.2	20800	(2350)	2.19	III	4810	(21400)	49.7	17300	(1950)	2.19	III	4810	(21400)	15	5C165	35
41.2	20800	(2350)	2.19	III	4810	(21400)	49.7	17300	(1950)	2.19	III	4810	(21400)	15	5C175	35

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

15 HP (11 kW)

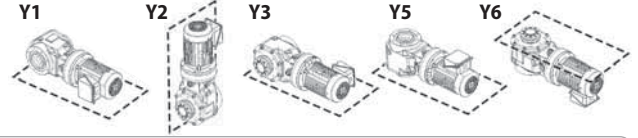
50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
37.7	22700	(2570)	1.00	—	2970	(13200)	45.5	18900	(2130)	1.00	—	2970	(13200)	15	5B145	39
37.7	22700	(2570)	1.00	—	2970	(13200)	45.5	18900	(2130)	1.00	—	2970	(13200)	15	5B165	39
37.7	22700	(2570)	1.18	I	4810	(21400)	45.5	18900	(2130)	1.18	I	4810	(21400)	15	5C140	39
37.7	22700	(2570)	1.37	I	4810	(21400)	45.5	18900	(2130)	1.37	I	4810	(21400)	15	5C145	39
37.7	22700	(2570)	1.79	II	4810	(21400)	45.5	18900	(2130)	1.79	II	4810	(21400)	15	5C160	39
37.7	22700	(2570)	2.00	III	4810	(21400)	45.5	18900	(2130)	2.00	III	4810	(21400)	15	5C165	39
37.7	22700	(2570)	2.00	III	4810	(21400)	45.5	18900	(2130)	2.00	III	4810	(21400)	15	5C175	39
31.9	26900	(3040)	0.85	—	2970	(13200)	38.5	22300	(2520)	0.85	—	2970	(13200)	15	5B145	46
31.9	26900	(3040)	0.85	—	2970	(13200)	38.5	22300	(2520)	0.85	—	2970	(13200)	15	5B165	46
31.9	26900	(3040)	1.18	I	4810	(21400)	38.5	22300	(2520)	1.18	I	4810	(21400)	15	5C140	46
31.9	26900	(3040)	1.37	I	4810	(21400)	38.5	22300	(2520)	1.37	I	4810	(21400)	15	5C145	46
31.9	26900	(3040)	1.69	II	4810	(21400)	38.5	22300	(2520)	1.69	II	4810	(21400)	15	5C165	46
31.9	26900	(3040)	1.69	II	4810	(21400)	38.5	22300	(2520)	1.69	II	4810	(21400)	15	5C175	46
27.6	31100	(3510)	1.09	I	4810	(21400)	33.3	25800	(2910)	1.09	I	4810	(21400)	15	5C140	53
27.6	31100	(3510)	1.32	I	4810	(21400)	33.3	25800	(2910)	1.33	I	4810	(21400)	15	5C145	53
27.6	31100	(3510)	1.47	II	4810	(21400)	33.3	25800	(2910)	1.47	II	4810	(21400)	15	5C165	53
27.6	31100	(3510)	1.47	II	4810	(21400)	33.3	25800	(2910)	1.47	II	4810	(21400)	15	5C175	53
24.4	35100	(3970)	0.92	—	4810	(21400)	29.4	29100	(3290)	0.92	—	4810	(21400)	15	5C140	60
24.4	35100	(3970)	1.09	I	4810	(21400)	29.4	29100	(3290)	1.09	I	4810	(21400)	15	5C145	60
24.4	35100	(3970)	1.19	I	4810	(21400)	29.4	29100	(3290)	1.19	I	4810	(21400)	15	5C160	60
24.4	35100	(3970)	1.29	I	4810	(21400)	29.4	29100	(3290)	1.29	I	4810	(21400)	15	5C165	60
24.4	35100	(3970)	1.29	I	4810	(21400)	29.4	29100	(3290)	1.29	I	4810	(21400)	15	5C175	60
21.6	39700	(4490)	0.86	—	4810	(21400)	26.0	32900	(3720)	1.00	I	4810	(21400)	15	5C145	67
21.6	39700	(4490)	1.15	I	4810	(21400)	26.0	32900	(3720)	1.15	I	4810	(21400)	15	5C165	67
21.6	39700	(4490)	1.15	I	4810	(21400)	26.0	32900	(3720)	1.15	I	4810	(21400)	15	5C175	67
19.7	43500	(4910)	0.86	—	4810	(21400)	23.8	36000	(4070)	1.00	I	4810	(21400)	15	5C145	74
19.7	43500	(4910)	1.05	I	4810	(21400)	23.8	36000	(4070)	1.05	I	4810	(21400)	15	5C160	74
19.7	43500	(4910)	1.05	I	4810	(21400)	23.8	36000	(4070)	1.05	I	4810	(21400)	15	5C165	74
19.7	43500	(4910)	1.05	I	4810	(21400)	23.8	36000	(4070)	1.05	I	4810	(21400)	15	5C175	74
18.1	47300	(5340)	0.90	—	4810	(21400)	21.9	39200	(4430)	0.90	—	4810	(21400)	15	5C160	80
18.1	47300	(5340)	0.96	—	4810	(21400)	21.9	39200	(4430)	0.96	—	4810	(21400)	15	5C165	80
18.1	47300	(5340)	0.96	—	4810	(21400)	21.9	39200	(4430)	0.96	—	4810	(21400)	15	5C175	80
16.6	51700	(5840)	0.88	—	3420	(15200)	20.0	42800	(4840)	0.88	—	4810	(21400)	15	5C165	88
16.6	51700	(5840)	0.88	—	3420	(15200)	20.0	42800	(4840)	0.88	—	4810	(21400)	15	5C175	88

Gearmotors Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



20 HP (15 kW)

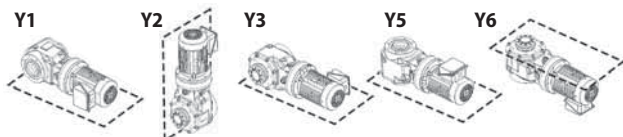
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables
Gearmotors

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio ^[2]
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	8460	(956)	1.22	I	1810	(8060)	167	7010	(792)	1.27	I	1810	(8060)	20	5A140	11
138	8460	(956)	1.22	I	1810	(8060)	167	7010	(792)	1.35	I	1810	(8060)	20	5A145	11
138	8460	(956)	1.27	I	2970	(13200)	167	7010	(792)	1.27	I	2970	(13200)	20	5B140	11
138	8460	(956)	1.47	II	2970	(13200)	167	7010	(792)	1.47	II	2970	(13200)	20	5B145	11
138	8460	(956)	1.69	II	2970	(13200)	167	7010	(792)	1.69	II	2970	(13200)	20	5B160	11
138	8460	(956)	1.93	II	2970	(13200)	167	7010	(792)	1.93	II	2970	(13200)	20	5B165	11
138	8460	(956)	1.27	I	4810	(21400)	167	7010	(792)	1.27	I	4810	(21400)	20	5C140	11
138	8460	(956)	1.47	II	4810	(21400)	167	7010	(792)	1.47	II	4810	(21400)	20	5C145	11
138	8460	(956)	1.69	II	4810	(21400)	167	7010	(792)	1.69	II	4810	(21400)	20	5C160	11
138	8460	(956)	2.00	III	4810	(21400)	167	7010	(792)	2.00	III	4810	(21400)	20	5C165	11
138	8460	(956)	2.77	III	4810	(21400)	167	7010	(792)	2.77	III	4810	(21400)	20	5C170	11**
113	10400	(1170)	1.10	I	1810	(8060)	137	8550	(966)	1.11	I	1810	(8060)	20	5A145	13
113	10400	(1170)	1.27	I	2970	(13200)	137	8550	(966)	1.27	I	2970	(13200)	20	5B140	13
113	10400	(1170)	1.47	II	2970	(13200)	137	8550	(966)	1.47	II	2970	(13200)	20	5B145	13
113	10400	(1170)	1.69	II	2970	(13200)	137	8550	(966)	1.69	II	2970	(13200)	20	5B160	13
113	10400	(1170)	1.93	II	2970	(13200)	137	8550	(966)	1.93	II	2970	(13200)	20	5B165	13
113	10400	(1170)	1.27	I	4810	(21400)	137	8550	(966)	1.27	I	4810	(21400)	20	5C140	13
113	10400	(1170)	1.47	II	4810	(21400)	137	8550	(966)	1.47	II	4810	(21400)	20	5C145	13
113	10400	(1170)	1.69	II	4810	(21400)	137	8550	(966)	1.69	II	4810	(21400)	20	5C160	13
113	10400	(1170)	2.00	III	4810	(21400)	137	8550	(966)	2.00	III	4810	(21400)	20	5C165	13
113	10400	(1170)	2.77	III	4810	(21400)	137	8550	(966)	2.77	III	4810	(21400)	20	5C170	13**
104	11300	(1280)	1.01	I	1780	(7910)	125	9380	(1060)	1.01	I	1810	(8060)	20	5A145	14
104	11300	(1280)	1.27	I	2970	(13200)	125	9380	(1060)	1.27	I	2970	(13200)	20	5B140	14
104	11300	(1280)	1.47	II	2970	(13200)	125	9380	(1060)	1.47	II	2970	(13200)	20	5B145	14
104	11300	(1280)	1.69	II	2970	(13200)	125	9380	(1060)	1.69	II	2970	(13200)	20	5B160	14
104	11300	(1280)	1.86	II	2970	(13200)	125	9380	(1060)	1.93	II	2970	(13200)	20	5B165	14
104	11300	(1280)	1.27	I	4810	(21400)	125	9380	(1060)	1.27	I	4810	(21400)	20	5C140	14
104	11300	(1280)	1.47	II	4810	(21400)	125	9380	(1060)	1.47	II	4810	(21400)	20	5C145	14
104	11300	(1280)	1.69	II	4810	(21400)	125	9380	(1060)	1.69	II	4810	(21400)	20	5C160	14
104	11300	(1280)	2.00	III	4810	(21400)	125	9380	(1060)	2.00	III	4810	(21400)	20	5C165	14
104	11300	(1280)	2.77	III	4810	(21400)	125	9380	(1060)	2.77	III	4810	(21400)	20	5C170	14**
90.6	12900	(1460)	0.89	—	1670	(7420)	109	10700	(1210)	0.89	—	1810	(8060)	20	5A145	16
90.6	12900	(1460)	1.27	I	2970	(13200)	109	10700	(1210)	1.27	I	2970	(13200)	20	5B140	16
90.6	12900	(1460)	1.47	II	2970	(13200)	109	10700	(1210)	1.47	II	2970	(13200)	20	5B145	16
90.6	12900	(1460)	1.65	II	2970	(13200)	109	10700	(1210)	1.69	II	2970	(13200)	20	5B160	16
90.6	12900	(1460)	1.65	II	2970	(13200)	109	10700	(1210)	1.76	II	2970	(13200)	20	5B165	16
90.6	12900	(1460)	1.27	I	4810	(21400)	109	10700	(1210)	1.27	I	4810	(21400)	20	5C140	16
90.6	12900	(1460)	1.47	II	4810	(21400)	109	10700	(1210)	1.47	II	4810	(21400)	20	5C145	16
90.6	12900	(1460)	1.69	II	4810	(21400)	109	10700	(1210)	1.69	II	4810	(21400)	20	5C160	16
90.6	12900	(1460)	2.00	III	4810	(21400)	109	10700	(1210)	2.00	III	4810	(21400)	20	5C165	16
90.6	12900	(1460)	2.77	III	4810	(21400)	109	10700	(1210)	2.77	III	4810	(21400)	20	5C170	16**

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.
[2] For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, Y2 3.92

Double Reduction, AF-Motor 3.100–3.103

Single Reduction, AF-Motor 3.84–3.91

Double Reduction 3.94–3.99

Double Reduction, Y2 3.104

20 HP (15 kW)

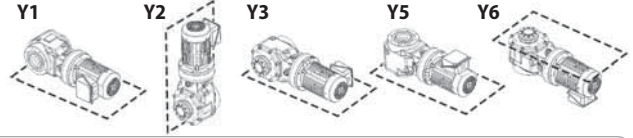
50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio ^[1]
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
82.9	14100	(1590)	0.81	—	1580	(7010)	100	11700	(1320)	0.81	—	1750	(7800)	20	5A145	18
82.9	14100	(1590)	1.27	I	2970	(13200)	100	11700	(1320)	1.27	I	2970	(13200)	20	5B140	18
82.9	14100	(1590)	1.47	II	2970	(13200)	100	11700	(1320)	1.47	II	2970	(13200)	20	5B145	18
82.9	14100	(1590)	1.58	II	2970	(13200)	100	11700	(1320)	1.61	II	2970	(13200)	20	5B165	18
82.9	14100	(1590)	1.27	I	4810	(21400)	100	11700	(1320)	1.27	I	4810	(21400)	20	5C140	18
82.9	14100	(1590)	1.47	II	4810	(21400)	100	11700	(1320)	1.47	II	4810	(21400)	20	5C145	18
82.9	14100	(1590)	1.69	II	4810	(21400)	100	11700	(1320)	1.69	II	4810	(21400)	20	5C160	18
82.9	14100	(1590)	2.00	III	4810	(21400)	100	11700	(1320)	2.00	III	4810	(21400)	20	5C165	18
82.9	14100	(1590)	2.76	III	4810	(21400)	100	11700	(1320)	2.77	III	4810	(21400)	20	5C170	18**
82.9	14100	(1590)	2.76	III	4810	(21400)	100	11700	(1320)	3.00	III	4810	(21400)	20	5C175	18**
69.0	16900	(1910)	0.87	—	2970	(13200)	83.3	14000	(1580)	0.87	—	2970	(13200)	20	5B140	21
69.0	16900	(1910)	1.01	I	2970	(13200)	83.3	14000	(1580)	1.01	I	2970	(13200)	20	5B145	21
69.0	16900	(1910)	1.34	I	2970	(13200)	83.3	14000	(1580)	1.34	I	2970	(13200)	20	5B165	21
69.0	16900	(1910)	0.87	—	4810	(21400)	83.3	14000	(1580)	0.87	—	4810	(21400)	20	5C140	21
69.0	16900	(1910)	1.01	I	4810	(21400)	83.3	14000	(1580)	1.01	I	4810	(21400)	20	5C145	21
69.0	16900	(1910)	1.69	II	4810	(21400)	83.3	14000	(1580)	1.69	II	4810	(21400)	20	5C160	21
69.0	16900	(1910)	2.00	III	4810	(21400)	83.3	14000	(1580)	2.00	III	4810	(21400)	20	5C165	21
69.0	16900	(1910)	2.26	III	4810	(21400)	83.3	14000	(1580)	2.26	III	4810	(21400)	20	5C170	21
69.0	16900	(1910)	2.40	III	4810	(21400)	83.3	14000	(1580)	2.47	III	4810	(21400)	20	5C175	21
64.7	18100	(2040)	0.87	—	2970	(13200)	78.1	15000	(1690)	0.87	—	2970	(13200)	20	5B140	22
64.7	18100	(2040)	1.01	I	2970	(13200)	78.1	15000	(1690)	1.01	I	2970	(13200)	20	5B145	22
64.7	18100	(2040)	1.26	I	2970	(13200)	78.1	15000	(1690)	1.26	I	2970	(13200)	20	5B165	22
64.7	18100	(2040)	0.87	—	4810	(21400)	78.1	15000	(1690)	0.87	—	4810	(21400)	20	5C140	22
64.7	18100	(2040)	1.01	I	4810	(21400)	78.1	15000	(1690)	1.01	I	4810	(21400)	20	5C145	22
64.7	18100	(2040)	1.35	I	4810	(21400)	78.1	15000	(1690)	1.35	I	4810	(21400)	20	5C160	22
64.7	18100	(2040)	1.61	II	4810	(21400)	78.1	15000	(1690)	1.61	II	4810	(21400)	20	5C165	22
64.7	18100	(2040)	2.26	III	4810	(21400)	78.1	15000	(1690)	2.26	III	4810	(21400)	20	5C170	22
64.7	18100	(2040)	2.32	III	4810	(21400)	78.1	15000	(1690)	2.47	III	4810	(21400)	20	5C175	22
59.2	19700	(2230)	0.87	—	2970	(13200)	71.4	16400	(1850)	0.87	—	2970	(13200)	20	5B140	25
59.2	19700	(2230)	1.01	I	2970	(13200)	71.4	16400	(1850)	1.01	I	2970	(13200)	20	5B145	25
59.2	19700	(2230)	1.15	I	2970	(13200)	71.4	16400	(1850)	1.15	I	2970	(13200)	20	5B165	25
59.2	19700	(2230)	0.87	—	4810	(21400)	71.4	16400	(1850)	0.87	—	4810	(21400)	20	5C140	25
59.2	19700	(2230)	1.01	I	4810	(21400)	71.4	16400	(1850)	1.01	I	4810	(21400)	20	5C145	25
59.2	19700	(2230)	1.35	I	4810	(21400)	71.4	16400	(1850)	1.35	I	4810	(21400)	20	5C160	25
59.2	19700	(2230)	1.61	II	4810	(21400)	71.4	16400	(1850)	1.61	II	4810	(21400)	20	5C165	25
59.2	19700	(2230)	2.15	III	4810	(21400)	71.4	16400	(1850)	2.26	III	4810	(21400)	20	5C170	25
59.2	19700	(2230)	2.15	III	4810	(21400)	71.4	16400	(1850)	2.30	III	4810	(21400)	20	5C175	25
51.8	22600	(2550)	0.87	—	2970	(13200)	62.5	18700	(2110)	0.87	—	2970	(13200)	20	5B140	28
51.8	22600	(2550)	1.01	I	2970	(13200)	62.5	18700	(2110)	1.01	I	2970	(13200)	20	5B145	28
51.8	22600	(2550)	1.01	I	2970	(13200)	62.5	18700	(2110)	1.01	I	2970	(13200)	20	5B165	28
51.8	22600	(2550)	0.87	—	4810	(21400)	62.5	18700	(2110)	0.87	—	4810	(21400)	20	5C140	28
51.8	22600	(2550)	1.01	I	4810	(21400)	62.5	18700	(2110)	1.01	I	4810	(21400)	20	5C145	28
51.8	22600	(2550)	1.31	I	4810	(21400)	62.5	18700	(2110)	1.31	I	4810	(21400)	20	5C160	28
51.8	22600	(2550)	1.61	II	4810	(21400)	62.5	18700	(2110)	1.61	II	4810	(21400)	20	5C165	28
51.8	22600	(2550)	1.96	II	4810	(21400)	62.5	18700	(2110)	2.02	III	4810	(21400)	20	5C175	28

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

[2] For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



20 HP (15 kW)

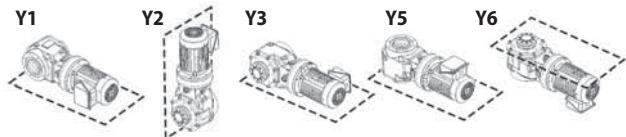
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
41.2	28400	(3210)	0.80	—	2970	(13200)	49.7	23500	(2660)	0.80	—	2970	(13200)	20	5B145	35
41.2	28400	(3210)	0.80	—	2970	(13200)	49.7	23500	(2660)	0.80	—	2970	(13200)	20	5B165	35
41.2	28400	(3210)	0.87	—	4810	(21400)	49.7	23500	(2660)	0.87	—	4810	(21400)	20	5C140	35
41.2	28400	(3210)	1.01	I	4810	(21400)	49.7	23500	(2660)	1.01	I	4810	(21400)	20	5C145	35
41.2	28400	(3210)	1.31	I	4810	(21400)	49.7	23500	(2660)	1.31	I	4810	(21400)	20	5C160	35
41.2	28400	(3210)	1.60	II	4810	(21400)	49.7	23500	(2660)	1.60	II	4810	(21400)	20	5C165	35
41.2	28400	(3210)	1.60	II	4810	(21400)	49.7	23500	(2660)	1.60	II	4810	(21400)	20	5C175	35
37.7	31100	(3510)	0.87	—	4810	(21400)	45.5	25800	(2910)	0.87	—	4810	(21400)	20	5C140	39
37.7	31100	(3510)	1.01	I	4810	(21400)	45.5	25800	(2910)	1.01	I	4810	(21400)	20	5C145	39
37.7	31100	(3510)	1.31	I	4810	(21400)	45.5	25800	(2910)	1.31	I	4810	(21400)	20	5C160	39
37.7	31100	(3510)	1.47	II	4810	(21400)	45.5	25800	(2910)	1.47	II	4810	(21400)	20	5C165	39
37.7	31100	(3510)	1.47	II	4810	(21400)	45.5	25800	(2910)	1.47	II	4810	(21400)	20	5C175	39
31.9	36600	(4140)	0.87	—	4810	(21400)	38.5	30400	(3430)	0.87	—	4810	(21400)	20	5C140	46
31.9	36600	(4140)	1.01	I	4810	(21400)	38.5	30400	(3430)	1.01	I	4810	(21400)	20	5C145	46
31.9	36600	(4140)	1.24	I	4810	(21400)	38.5	30400	(3430)	1.24	I	4810	(21400)	20	5C165	46
31.9	36600	(4140)	1.24	I	4810	(21400)	38.5	30400	(3430)	1.24	I	4810	(21400)	20	5C175	46
27.6	42300	(4780)	0.97	—	4810	(21400)	33.3	35000	(3960)	0.97	—	4810	(21400)	20	5C145	53
27.6	42300	(4780)	1.07	I	4810	(21400)	33.3	35000	(3960)	1.07	I	4810	(21400)	20	5C165	53
27.6	42300	(4780)	1.07	I	4810	(21400)	33.3	35000	(3960)	1.07	I	4810	(21400)	20	5C175	53
24.4	48000	(5420)	0.87	—	4810	(21400)	29.4	39700	(4490)	0.87	—	4810	(21400)	20	5C160	60
24.4	48000	(5420)	0.95	—	4810	(21400)	29.4	39700	(4490)	0.95	—	4810	(21400)	20	5C165	60
24.4	48000	(5420)	0.95	—	4810	(21400)	29.4	39700	(4490)	0.95	—	4810	(21400)	20	5C175	60
21.6	54200	(6120)	0.84	—	4810	(21400)	26.0	44900	(5070)	0.84	—	4810	(21400)	20	5C165	67
21.6	54200	(6120)	0.84	—	4810	(21400)	26.0	44900	(5070)	0.84	—	4810	(21400)	20	5C175	67

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

Double Reduction, Y2 3.104

25 HP (18.5 kW)

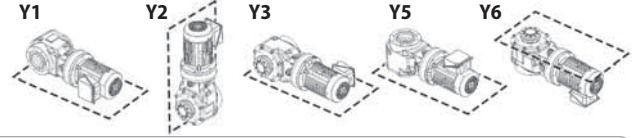
50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio ^[2]
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	10400	(1180)	0.99	—	1620	(7200)	167	8650	(977)	1.03	I	1720	(7670)	25	5A140	11
138	10400	(1180)	0.99	—	1620	(7200)	167	8650	(977)	1.09	I	1720	(7670)	25	5A145	11
138	10400	(1180)	1.03	I	2970	(13200)	167	8650	(977)	1.03	I	2970	(13200)	25	5B140	11
138	10400	(1180)	1.19	I	2970	(13200)	167	8650	(977)	1.19	I	2970	(13200)	25	5B145	11
138	10400	(1180)	1.37	I	2970	(13200)	167	8650	(977)	1.37	I	2970	(13200)	25	5B160	11
138	10400	(1180)	1.57	II	2970	(13200)	167	8650	(977)	1.57	II	2970	(13200)	25	5B165	11
138	10400	(1180)	1.03	I	4810	(21400)	167	8650	(977)	1.03	I	4810	(21400)	25	5C140	11
138	10400	(1180)	1.19	I	4810	(21400)	167	8650	(977)	1.19	I	4810	(21400)	25	5C145	11
138	10400	(1180)	1.37	I	4810	(21400)	167	8650	(977)	1.37	I	4810	(21400)	25	5C160	11
138	10400	(1180)	1.62	II	4810	(21400)	167	8650	(977)	1.62	II	4810	(21400)	25	5C165	11
138	10400	(1180)	2.24	III	4810	(21400)	167	8650	(977)	2.24	III	4810	(21400)	25	5C170	11**
138	10400	(1180)	2.43	III	4810	(21400)	167	8650	(977)	2.43	III	4810	(21400)	25	5C175	11**
113	12700	(1440)	0.90	—	1450	(6470)	137	10500	(1190)	0.90	—	1610	(7160)	25	5A145	13
113	12700	(1440)	1.03	I	2970	(13200)	137	10500	(1190)	1.03	I	2970	(13200)	25	5B140	13
113	12700	(1440)	1.19	I	2970	(13200)	137	10500	(1190)	1.19	I	2970	(13200)	25	5B145	13
113	12700	(1440)	1.37	I	2970	(13200)	137	10500	(1190)	1.37	I	2970	(13200)	25	5B160	13
113	12700	(1440)	1.57	II	2970	(13200)	137	10500	(1190)	1.57	II	2970	(13200)	25	5B165	13
113	12700	(1440)	1.03	I	4810	(21400)	137	10500	(1190)	1.03	I	4810	(21400)	25	5C140	13
113	12700	(1440)	1.19	I	4810	(21400)	137	10500	(1190)	1.19	I	4810	(21400)	25	5C145	13
113	12700	(1440)	1.37	I	4810	(21400)	137	10500	(1190)	1.37	I	4810	(21400)	25	5C160	13
113	12700	(1440)	1.62	II	4810	(21400)	137	10500	(1190)	1.62	II	4810	(21400)	25	5C165	13
113	12700	(1440)	2.24	III	4810	(21400)	137	10500	(1190)	2.24	III	4810	(21400)	25	5C170	13**
113	12700	(1440)	2.43	III	4810	(21400)	137	10500	(1190)	2.43	III	4810	(21400)	25	5C175	13**
104	13900	(1570)	0.82	—	1360	(6040)	125	11500	(1300)	0.82	—	1540	(6860)	25	5A145	14
104	13900	(1570)	1.03	I	2970	(13200)	125	11500	(1300)	1.03	I	2970	(13200)	25	5B140	14
104	13900	(1570)	1.19	I	2970	(13200)	125	11500	(1300)	1.19	I	2970	(13200)	25	5B145	14
104	13900	(1570)	1.37	I	2970	(13200)	125	11500	(1300)	1.37	I	2970	(13200)	25	5B160	14
104	13900	(1570)	1.51	II	2970	(13200)	125	11500	(1300)	1.57	II	2970	(13200)	25	5B165	14
104	13900	(1570)	1.03	I	4810	(21400)	125	11500	(1300)	1.03	I	4810	(21400)	25	5C140	14
104	13900	(1570)	1.19	I	4810	(21400)	125	11500	(1300)	1.19	I	4810	(21400)	25	5C145	14
104	13900	(1570)	1.37	I	4810	(21400)	125	11500	(1300)	1.37	I	4810	(21400)	25	5C160	14
104	13900	(1570)	1.62	II	4810	(21400)	125	11500	(1300)	1.62	II	4810	(21400)	25	5C165	14
104	13900	(1570)	2.24	III	4810	(21400)	125	11500	(1300)	2.24	III	4810	(21400)	25	5C170	14**
104	13900	(1570)	2.43	III	4810	(21400)	125	11500	(1300)	2.43	III	4810	(21400)	25	5C175	14**
90.6	15900	(1800)	1.03	I	2970	(13200)	109	13200	(1490)	1.03	I	2970	(13200)	25	5B140	16
90.6	15900	(1800)	1.19	I	2970	(13200)	109	13200	(1490)	1.19	I	2970	(13200)	25	5B145	16
90.6	15900	(1800)	1.34	I	2970	(13200)	109	13200	(1490)	1.37	I	2970	(13200)	25	5B160	16
90.6	15900	(1800)	1.34	I	2970	(13200)	109	13200	(1490)	1.43	II	2970	(13200)	25	5B165	16
90.6	15900	(1800)	1.03	I	4810	(21400)	109	13200	(1490)	1.03	I	4810	(21400)	25	5C140	16
90.6	15900	(1800)	1.19	I	4810	(21400)	109	13200	(1490)	1.19	I	4810	(21400)	25	5C145	16
90.6	15900	(1800)	1.37	I	4810	(21400)	109	13200	(1490)	1.37	I	4810	(21400)	25	5C160	16
90.6	15900	(1800)	1.62	II	4810	(21400)	109	13200	(1490)	1.62	II	4810	(21400)	25	5C165	16
90.6	15900	(1800)	2.24	III	4810	(21400)	109	13200	(1490)	2.24	III	4810	(21400)	25	5C170	16**
90.6	15900	(1800)	2.43	III	4810	(21400)	109	13200	(1490)	2.43	III	4810	(21400)	25	5C175	16**

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

[2]: For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



25 HP (18.5 kW)

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

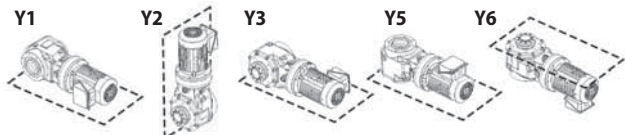
Gearmotors
Selection
Tables

50 Hz					60 Hz					Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio ^[2]
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
82.9	17400	(1970)	1.03	I	2970	(13200)	100	14400	(1630)	1.03	I	2970	(13200)	25	5B140	18
82.9	17400	(1970)	1.19	I	2970	(13200)	100	14400	(1630)	1.19	I	2970	(13200)	25	5B145	18
82.9	17400	(1970)	1.28	I	2970	(13200)	100	14400	(1630)	1.31	I	2970	(13200)	25	5B165	18
82.9	17400	(1970)	1.03	I	4810	(21400)	100	14400	(1630)	1.03	I	4810	(21400)	25	5C140	18
82.9	17400	(1970)	1.19	I	4810	(21400)	100	14400	(1630)	1.19	I	4810	(21400)	25	5C145	18
82.9	17400	(1970)	1.37	I	4810	(21400)	100	14400	(1630)	1.37	I	4810	(21400)	25	5C160	18
82.9	17400	(1970)	1.62	II	4810	(21400)	100	14400	(1630)	1.62	II	4810	(21400)	25	5C165	18
82.9	17400	(1970)	2.24	III	4810	(21400)	100	14400	(1630)	2.24	III	4810	(21400)	25	5C170	18**
82.9	17400	(1970)	2.24	III	4810	(21400)	100	14400	(1630)	2.43	III	4810	(21400)	25	5C175	18**
69.0	20900	(2360)	0.82	—	2970	(13200)	83.3	17300	(1950)	0.82	—	2970	(13200)	25	5B145	21
69.0	20900	(2360)	1.09	I	2970	(13200)	83.3	17300	(1950)	1.09	I	2970	(13200)	25	5B165	21
69.0	20900	(2360)	0.82	—	4810	(21400)	83.3	17300	(1950)	0.82	—	4810	(21400)	25	5C145	21
69.0	20900	(2360)	1.37	I	4810	(21400)	83.3	17300	(1950)	1.37	I	4810	(21400)	25	5C160	21
69.0	20900	(2360)	1.62	II	4810	(21400)	83.3	17300	(1950)	1.62	II	4810	(21400)	25	5C165	21
69.0	20900	(2360)	1.83	II	4810	(21400)	83.3	17300	(1950)	1.83	II	4810	(21400)	25	5C170	21
69.0	20900	(2360)	1.95	II	4810	(21400)	83.3	17300	(1950)	2.00	III	4810	(21400)	25	5C175	21
64.7	22300	(2520)	0.82	—	2970	(13200)	78.1	18500	(2090)	0.82	—	2970	(13200)	25	5B145	22
64.7	22300	(2520)	1.02	I	2970	(13200)	78.1	18500	(2090)	1.02	I	2970	(13200)	25	5B165	22
64.7	22300	(2520)	0.82	—	4810	(21400)	78.1	18500	(2090)	0.82	—	4810	(21400)	25	5C145	22
64.7	22300	(2520)	1.10	I	4810	(21400)	78.1	18500	(2090)	1.10	I	4810	(21400)	25	5C160	22
64.7	22300	(2520)	1.30	I	4810	(21400)	78.1	18500	(2090)	1.30	I	4810	(21400)	25	5C165	22
64.7	22300	(2520)	1.83	II	4810	(21400)	78.1	18500	(2090)	1.83	II	4810	(21400)	25	5C170	22
64.7	22300	(2520)	1.90	II	4810	(21400)	78.1	18500	(2090)	1.95	II	4810	(21400)	25	5C175	22
59.2	24300	(2750)	0.82	—	2970	(13200)	71.4	20200	(2280)	0.82	—	2970	(13200)	25	5B145	25
59.2	24300	(2750)	0.93	—	2970	(13200)	71.4	20200	(2280)	0.93	—	2970	(13200)	25	5B165	25
59.2	24300	(2750)	0.82	—	4810	(21400)	71.4	20200	(2280)	0.82	—	4810	(21400)	25	5C145	25
59.2	24300	(2750)	1.10	I	4810	(21400)	71.4	20200	(2280)	1.10	I	4810	(21400)	25	5C160	25
59.2	24300	(2750)	1.30	I	4810	(21400)	71.4	20200	(2280)	1.30	I	4810	(21400)	25	5C165	25
59.2	24300	(2750)	1.75	II	4810	(21400)	71.4	20200	(2280)	1.83	II	4810	(21400)	25	5C170	25
59.2	24300	(2750)	1.75	II	4810	(21400)	71.4	20200	(2280)	1.87	II	4810	(21400)	25	5C175	25
51.8	27900	(3150)	0.82	—	2970	(13200)	62.5	23100	(2610)	0.82	—	2970	(13200)	25	5B145	28
51.8	27900	(3150)	0.82	—	2970	(13200)	62.5	23100	(2610)	0.82	—	2970	(13200)	25	5B165	28
51.8	27900	(3150)	0.82	—	4810	(21400)	62.5	23100	(2610)	0.82	—	4810	(21400)	25	5C145	28
51.8	27900	(3150)	1.06	I	4810	(21400)	62.5	23100	(2610)	1.06	I	4810	(21400)	25	5C160	28
51.8	27900	(3150)	1.30	I	4810	(21400)	62.5	23100	(2610)	1.30	I	4810	(21400)	25	5C165	28
51.8	27900	(3150)	1.59	II	4810	(21400)	62.5	23100	(2610)	1.63	II	4810	(21400)	25	5C175	28
41.2	35000	(3950)	0.82	—	4810	(21400)	49.7	29000	(3280)	0.82	—	4810	(21400)	25	5C145	35
41.2	35000	(3950)	1.06	I	4810	(21400)	49.7	29000	(3280)	1.06	I	4810	(21400)	25	5C160	35
41.2	35000	(3950)	1.30	I	4810	(21400)	49.7	29000	(3280)	1.30	I	4810	(21400)	25	5C165	35
41.2	35000	(3950)	1.30	I	4810	(21400)	49.7	29000	(3280)	1.30	I	4810	(21400)	25	5C175	35
37.7	38300	(4330)	0.82	—	4810	(21400)	45.5	31700	(3580)	0.82	—	4810	(21400)	25	5C145	39
37.7	38300	(4330)	1.06	I	4810	(21400)	45.5	31700	(3580)	1.06	I	4810	(21400)	25	5C160	39
37.7	38300	(4330)	1.19	I	4810	(21400)	45.5	31700	(3580)	1.19	I	4810	(21400)	25	5C165	39
37.7	38300	(4330)	1.19	I	4810	(21400)	45.5	31700	(3580)	1.19	I	4810	(21400)	25	5C175	39

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

[2]: For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

25 HP (18.5 kW)

50 Hz					60 Hz					Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio	
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class					lbs
31.9	45200	(5110)	0.82	—	4810	(21400)	38.5	37500	(4240)	0.82	—	4810	(21400)	25	5C145	46
31.9	45200	(5110)	1.01	I	4810	(21400)	38.5	37500	(4240)	1.01	I	4810	(21400)	25	5C165	46
31.9	45200	(5110)	1.01	I	4810	(21400)	38.5	37500	(4240)	1.01	I	4810	(21400)	25	5C175	46
27.6	52200	(5900)	0.87	—	3060	(13600)	33.3	43300	(4890)	0.87	—	4810	(21400)	25	5C165	53
27.6	52200	(5900)	0.87	—	3060	(13600)	33.3	43300	(4890)	0.87	—	4810	(21400)	25	5C175	53

30 HP (22 kW)

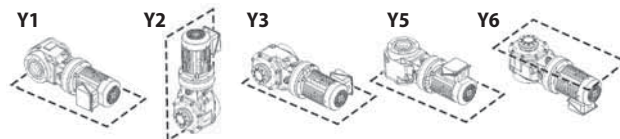
50 Hz					60 Hz					Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio ^[2]	
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class					lbs
138	12400	(1400)	0.83	—	1300	(5800)	167	10300	(1160)	0.86	—	1460	(6500)	30	5A140	11
138	12400	(1400)	0.83	—	1300	(5800)	167	10300	(1160)	0.92	—	1460	(6500)	30	5A145	11
138	12400	(1400)	0.86	—	2970	(13200)	167	10300	(1160)	0.86	—	2970	(13200)	30	5B140	11
138	12400	(1400)	1.00	I	2970	(13200)	167	10300	(1160)	1.00	I	2970	(13200)	30	5B145	11
138	12400	(1400)	1.15	I	2970	(13200)	167	10300	(1160)	1.15	I	2970	(13200)	30	5B160	11
138	12400	(1400)	1.32	I	2970	(13200)	167	10300	(1160)	1.32	I	2970	(13200)	30	5B165	11
138	12400	(1400)	0.86	—	4810	(21400)	167	10300	(1160)	0.86	—	4810	(21400)	30	5C140	11
138	12400	(1400)	1.00	I	4810	(21400)	167	10300	(1160)	1.00	I	4810	(21400)	30	5C145	11
138	12400	(1400)	1.15	I	4810	(21400)	167	10300	(1160)	1.15	I	4810	(21400)	30	5C160	11
138	12400	(1400)	1.36	I	4810	(21400)	167	10300	(1160)	1.36	I	4810	(21400)	30	5C165	11
138	12400	(1400)	1.89	II	4810	(21400)	167	10300	(1160)	1.89	II	4810	(21400)	30	5C170	11**
138	12400	(1400)	2.05	III	4810	(21400)	167	10300	(1160)	2.05	III	4810	(21400)	30	5C175	11**
113	15100	(1710)	0.86	—	2970	(13200)	137	12600	(1420)	0.86	—	2970	(13200)	30	5B140	13
113	15100	(1710)	1.00	I	2970	(13200)	137	12600	(1420)	1.00	I	2970	(13200)	30	5B145	13
113	15100	(1710)	1.15	I	2970	(13200)	137	12600	(1420)	1.15	I	2970	(13200)	30	5B160	13
113	15100	(1710)	1.32	I	2970	(13200)	137	12600	(1420)	1.32	I	2970	(13200)	30	5B165	13
113	15100	(1710)	0.86	—	4810	(21400)	137	12600	(1420)	0.86	—	4810	(21400)	30	5C140	13
113	15100	(1710)	1.00	I	4810	(21400)	137	12600	(1420)	1.00	I	4810	(21400)	30	5C145	13
113	15100	(1710)	1.15	I	4810	(21400)	137	12600	(1420)	1.15	I	4810	(21400)	30	5C160	13
113	15100	(1710)	1.36	I	4810	(21400)	137	12600	(1420)	1.36	I	4810	(21400)	30	5C165	13
113	15100	(1710)	1.89	II	4810	(21400)	137	12600	(1420)	1.89	II	4810	(21400)	30	5C170	13**
113	15100	(1710)	2.05	III	4810	(21400)	137	12600	(1420)	2.05	III	4810	(21400)	30	5C175	13**
104	16600	(1870)	0.86	—	2970	(13200)	125	13700	(1550)	0.86	—	2970	(13200)	30	5B140	14
104	16600	(1870)	1.00	I	2970	(13200)	125	13700	(1550)	1.00	I	2970	(13200)	30	5B145	14
104	16600	(1870)	1.15	I	2970	(13200)	125	13700	(1550)	1.15	I	2970	(13200)	30	5B160	14
104	16600	(1870)	1.27	I	2970	(13200)	125	13700	(1550)	1.32	I	2970	(13200)	30	5B165	14
104	16600	(1870)	0.86	—	4810	(21400)	125	13700	(1550)	0.86	—	4810	(21400)	30	5C140	14
104	16600	(1870)	1.00	I	4810	(21400)	125	13700	(1550)	1.00	I	4810	(21400)	30	5C145	14
104	16600	(1870)	1.15	I	4810	(21400)	125	13700	(1550)	1.15	I	4810	(21400)	30	5C160	14
104	16600	(1870)	1.36	I	4810	(21400)	125	13700	(1550)	1.36	I	4810	(21400)	30	5C165	14
104	16600	(1870)	1.89	II	4810	(21400)	125	13700	(1550)	1.89	II	4810	(21400)	30	5C170	14**
104	16600	(1870)	2.05	III	4810	(21400)	125	13700	(1550)	2.05	III	4810	(21400)	30	5C175	14**

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

[2]: For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



30 HP (22 kW)

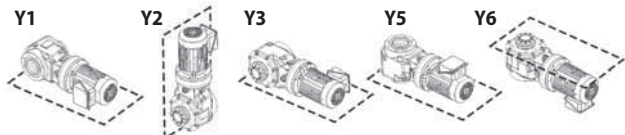
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio ^[2]
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
90.6	18900	(2140)	0.86	—	2970	(13200)	109	15700	(1770)	0.86	—	2970	(13200)	30	5B140	16
90.6	18900	(2140)	1.00	I	2970	(13200)	109	15700	(1770)	1.00	I	2970	(13200)	30	5B145	16
90.6	18900	(2140)	1.13	I	2970	(13200)	109	15700	(1770)	1.15	I	2970	(13200)	30	5B160	16
90.6	18900	(2140)	1.13	I	2970	(13200)	109	15700	(1770)	1.20	I	2970	(13200)	30	5B165	16
90.6	18900	(2140)	0.86	—	4810	(21400)	109	15700	(1770)	0.86	—	4810	(21400)	30	5C140	16
90.6	18900	(2140)	1.00	I	4810	(21400)	109	15700	(1770)	1.00	I	4810	(21400)	30	5C145	16
90.6	18900	(2140)	1.15	I	4810	(21400)	109	15700	(1770)	1.15	I	4810	(21400)	30	5C160	16
90.6	18900	(2140)	1.36	I	4810	(21400)	109	15700	(1770)	1.36	I	4810	(21400)	30	5C165	16
90.6	18900	(2140)	1.89	II	4810	(21400)	109	15700	(1770)	1.89	II	4810	(21400)	30	5C170	16**
90.6	18900	(2140)	2.05	III	4810	(21400)	109	15700	(1770)	2.05	III	4810	(21400)	30	5C175	16**
82.9	20700	(2340)	0.86	—	2970	(13200)	100	17200	(1940)	0.86	—	2970	(13200)	30	5B140	18
82.9	20700	(2340)	1.00	I	2970	(13200)	100	17200	(1940)	1.00	I	2970	(13200)	30	5B145	18
82.9	20700	(2340)	1.07	I	2970	(13200)	100	17200	(1940)	1.10	I	2970	(13200)	30	5B165	18
82.9	20700	(2340)	0.86	—	4810	(21400)	100	17200	(1940)	0.86	—	4810	(21400)	30	5C140	18
82.9	20700	(2340)	1.00	I	4810	(21400)	100	17200	(1940)	1.00	I	4810	(21400)	30	5C145	18
82.9	20700	(2340)	1.15	I	4810	(21400)	100	17200	(1940)	1.15	I	4810	(21400)	30	5C160	18
82.9	20700	(2340)	1.36	I	4810	(21400)	100	17200	(1940)	1.36	I	4810	(21400)	30	5C165	18
82.9	20700	(2340)	1.88	II	4810	(21400)	100	17200	(1940)	1.89	II	4810	(21400)	30	5C170	18**
82.9	20700	(2340)	1.88	II	4810	(21400)	100	17200	(1940)	2.05	III	4810	(21400)	30	5C175	18**
69.0	24900	(2810)	0.92	—	2970	(13200)	83.3	20500	(2320)	0.92	—	2970	(13200)	30	5B165	21
69.0	24900	(2810)	1.15	I	4810	(21400)	83.3	20500	(2320)	1.15	I	4810	(21400)	30	5C160	21
69.0	24900	(2810)	1.36	I	4810	(21400)	83.3	20500	(2320)	1.36	I	4810	(21400)	30	5C165	21
69.0	24900	(2810)	1.54	II	4810	(21400)	83.3	20500	(2320)	1.54	II	4810	(21400)	30	5C170	21
69.0	24900	(2810)	1.64	II	4810	(21400)	83.3	20500	(2320)	1.68	II	4810	(21400)	30	5C175	21
64.7	26500	(2990)	0.86	—	2970	(13200)	78.1	21900	(2480)	0.86	—	2970	(13200)	30	5B165	22
64.7	26500	(2990)	0.92	—	4810	(21400)	78.1	21900	(2480)	0.92	—	4810	(21400)	30	5C160	22
64.7	26500	(2990)	1.10	I	4810	(21400)	78.1	21900	(2480)	1.10	I	4810	(21400)	30	5C165	22
64.7	26500	(2990)	1.54	II	4810	(21400)	78.1	21900	(2480)	1.54	II	4810	(21400)	30	5C170	22
64.7	26500	(2990)	1.59	II	4810	(21400)	78.1	21900	(2480)	1.68	II	4810	(21400)	30	5C175	22
59.2	28900	(3270)	0.92	—	4810	(21400)	71.4	24000	(2710)	0.92	—	4810	(21400)	30	5C160	25
59.2	28900	(3270)	1.10	I	4810	(21400)	71.4	24000	(2710)	1.10	I	4810	(21400)	30	5C165	25
59.2	28900	(3270)	1.47	II	4810	(21400)	71.4	24000	(2710)	1.54	II	4810	(21400)	30	5C170	25
59.2	28900	(3270)	1.47	II	4810	(21400)	71.4	24000	(2710)	1.57	II	4810	(21400)	30	5C175	25
51.8	33100	(3740)	0.90	—	4810	(21400)	62.5	27400	(3100)	0.90	—	4810	(21400)	30	5C160	28
51.8	33100	(3740)	1.10	I	4810	(21400)	62.5	27400	(3100)	1.10	I	4810	(21400)	30	5C165	28
51.8	33100	(3740)	1.34	I	4810	(21400)	62.5	27400	(3100)	1.37	I	4810	(21400)	30	5C175	28
41.2	41600	(4700)	0.90	—	4810	(21400)	49.7	34500	(3900)	0.90	—	4810	(21400)	30	5C160	35
41.2	41600	(4700)	1.09	I	4810	(21400)	49.7	34500	(3900)	1.09	I	4810	(21400)	30	5C165	35
41.2	41600	(4700)	1.09	I	4810	(21400)	49.7	34500	(3900)	1.09	I	4810	(21400)	30	5C175	35
37.7	45500	(5140)	0.90	—	4450	(19800)	45.5	37700	(4260)	0.90	—	4810	(21400)	30	5C160	39
37.7	45500	(5140)	1.00	—	4450	(19800)	45.5	37700	(4260)	1.00	—	4810	(21400)	30	5C165	39
37.7	45500	(5140)	1.00	—	4450	(19800)	45.5	37700	(4260)	1.00	—	4810	(21400)	30	5C175	39
31.9	53800	(6080)	0.85	—	1110	(4950)	38.5	44600	(5040)	0.85	—	4650	(20700)	30	5C165	46
31.9	53800	(6080)	0.85	—	1110	(4950)	38.5	44600	(5040)	0.85	—	4650	(20700)	30	5C175	46

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.
[2]: For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

Double Reduction, Y2 3.104

40 HP (30 kW)

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio ^[2]
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	16900	(1910)	0.84	—	2970	(13200)	167	14000	(1580)	0.84	—	2970	(13200)	40	5B160	11
138	16900	(1910)	0.97	—	2970	(13200)	167	14000	(1580)	0.97	—	2970	(13200)	40	5B165	11
138	16900	(1910)	0.84	—	4810	(21400)	167	14000	(1580)	0.84	—	4810	(21400)	40	5C160	11
138	16900	(1910)	1.00	I	4810	(21400)	167	14000	(1580)	1.00	I	4810	(21400)	40	5C165	11
138	16900	(1910)	1.38	I	4810	(21400)	167	14000	(1580)	1.38	I	4810	(21400)	40	5C170	11**
138	16900	(1910)	1.50	II	4810	(21400)	167	14000	(1580)	1.50	II	4810	(21400)	40	5C175	11**
113	20600	(2330)	0.84	—	2970	(13200)	137	17100	(1930)	0.84	—	2970	(13200)	40	5B160	13
113	20600	(2330)	0.97	—	2970	(13200)	137	17100	(1930)	0.97	—	2970	(13200)	40	5B165	13
113	20600	(2330)	0.84	—	4810	(21400)	137	17100	(1930)	0.84	—	4810	(21400)	40	5C160	13
113	20600	(2330)	1.00	I	4810	(21400)	137	17100	(1930)	1.00	I	4810	(21400)	40	5C165	13
113	20600	(2330)	1.38	I	4810	(21400)	137	17100	(1930)	1.38	I	4810	(21400)	40	5C170	13**
113	20600	(2330)	1.50	II	4810	(21400)	137	17100	(1930)	1.50	II	4810	(21400)	40	5C175	13**
104	22600	(2550)	0.84	—	2970	(13200)	125	18700	(2110)	0.84	—	2970	(13200)	40	5B160	14
104	22600	(2550)	0.97	—	2970	(13200)	125	18700	(2110)	0.97	—	2970	(13200)	40	5B165	14
104	22600	(2550)	0.84	—	4810	(21400)	125	18700	(2110)	0.84	—	4810	(21400)	40	5C160	14
104	22600	(2550)	1.00	I	4810	(21400)	125	18700	(2110)	1.00	I	4810	(21400)	40	5C165	14
104	22600	(2550)	1.38	I	4810	(21400)	125	18700	(2110)	1.38	I	4810	(21400)	40	5C170	14**
104	22600	(2550)	1.50	II	4810	(21400)	125	18700	(2110)	1.50	II	4810	(21400)	40	5C175	14**
90.6	25800	(2910)	0.84	—	2470	(11000)	109	21400	(2420)	0.84	—	2970	(13200)	40	5B160	16
90.6	25800	(2910)	0.88	—	2470	(11000)	109	21400	(2420)	0.88	—	2970	(13200)	40	5B165	16
90.6	25800	(2910)	0.84	—	4810	(21400)	109	21400	(2420)	0.84	—	4810	(21400)	40	5C160	16
90.6	25800	(2910)	1.00	I	4810	(21400)	109	21400	(2420)	1.00	I	4810	(21400)	40	5C165	16
90.6	25800	(2910)	1.38	I	4810	(21400)	109	21400	(2420)	1.38	I	4810	(21400)	40	5C170	16**
90.6	25800	(2910)	1.50	II	4810	(21400)	109	21400	(2420)	1.50	II	4810	(21400)	40	5C175	16**
82.9	28200	(3190)	0.81	—	1430	(6350)	100	23400	(2640)	0.81	—	2790	(12400)	40	5B165	18
82.9	28200	(3190)	0.84	—	4810	(21400)	100	23400	(2640)	0.84	—	4810	(21400)	40	5C160	18
82.9	28200	(3190)	1.00	I	4810	(21400)	100	23400	(2640)	1.00	I	4810	(21400)	40	5C165	18
82.9	28200	(3190)	1.38	I	4810	(21400)	100	23400	(2640)	1.38	I	4810	(21400)	40	5C170	18**
82.9	28200	(3190)	1.38	I	4810	(21400)	100	23400	(2640)	1.50	II	4810	(21400)	40	5C175	18**
69.0	33900	(3830)	0.84	—	4810	(21400)	83.3	28100	(3170)	0.84	—	4810	(21400)	40	5C160	21
69.0	33900	(3830)	1.00	I	4810	(21400)	83.3	28100	(3170)	1.00	I	4810	(21400)	40	5C165	21
69.0	33900	(3830)	1.13	I	4810	(21400)	83.3	28100	(3170)	1.13	I	4810	(21400)	40	5C170	21
69.0	33900	(3830)	1.20	I	4810	(21400)	83.3	28100	(3170)	1.20	I	4810	(21400)	40	5C175	21
64.7	36100	(4080)	0.80	—	4810	(21400)	78.1	29900	(3380)	0.80	—	4810	(21400)	40	5C165	22
64.7	36100	(4080)	1.13	I	4810	(21400)	78.1	29900	(3380)	1.13	I	4810	(21400)	40	5C170	22
64.7	36100	(4080)	1.16	I	4810	(21400)	78.1	29900	(3380)	1.23	I	4810	(21400)	40	5C175	22
59.2	39500	(4460)	0.80	—	3980	(17700)	71.4	32700	(3700)	0.80	—	4810	(21400)	40	5C165	25
59.2	39500	(4460)	1.08	I	3980	(17700)	71.4	32700	(3700)	1.13	I	4810	(21400)	40	5C170	25
59.2	39500	(4460)	1.08	I	3980	(17700)	71.4	32700	(3700)	1.15	I	4810	(21400)	40	5C175	25
51.8	45100	(5100)	0.80	—	2790	(12400)	62.5	37400	(4230)	0.80	—	4410	(19600)	40	5C165	28
51.8	45100	(5100)	0.98	—	2790	(12400)	62.5	37400	(4230)	1.01	I	4410	(19600)	40	5C170	28
51.8	45100	(5100)	0.98	—	2790	(12400)	62.5	37400	(4230)	1.01	I	4410	(19600)	40	5C175	28
41.2	56700	(6410)	0.80	—	2790	(12400)	49.7	47000	(5310)	0.80	—	3100	(13800)	40	5C165	35
41.2	56700	(6410)	0.80	—	2790	(12400)	49.7	47000	(5310)	0.80	—	3100	(13800)	40	5C175	35

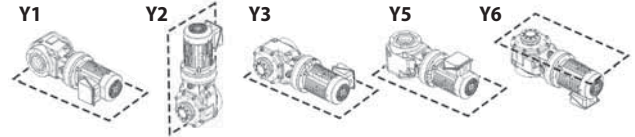
Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

[2]: For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

Gearmotors Selection Tables

Gearmotor Selection Tables 50/60 Hz, 1450/1750 RPM

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



50 HP (37 kW)

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

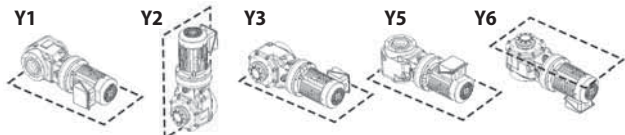
Gearmotors
Selection
Tables

50 Hz						60 Hz						Unit Selection				
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Motor Power Symbol	Frame Size	Ratio ^[2]
	in-lbs	(N·m)	SF	AGMA Class	lbs	(N)		in-lbs	(N·m)	SF	AGMA Class	lbs	(N)			
138	20900	(2360)	0.81	—	4770	(21200)	167	17300	(1950)	0.81	—	4790	(21300)	50	5C165	11
138	20900	(2360)	1.12	I	4770	(21200)	167	17300	(1950)	1.12	I	4790	(21300)	50	5C170	11**
138	20900	(2360)	1.22	I	4770	(21200)	167	17300	(1950)	1.22	I	4790	(21300)	50	5C175	11**
113	25500	(2880)	0.81	—	4740	(21100)	137	21100	(2380)	0.81	—	4810	(21400)	50	5C165	13
113	25500	(2880)	1.12	I	4740	(21100)	137	21100	(2380)	1.12	I	4810	(21400)	50	5C170	13**
113	25500	(2880)	1.22	I	4740	(21100)	137	21100	(2380)	1.22	I	4810	(21400)	50	5C175	13**
104	27900	(3150)	0.81	—	4590	(20400)	125	23100	(2610)	0.81	—	4720	(21000)	50	5C165	14
104	27900	(3150)	1.12	I	4590	(20400)	125	23100	(2610)	1.12	I	4720	(21000)	50	5C170	14**
104	27900	(3150)	1.22	I	4590	(20400)	125	23100	(2610)	1.22	I	4720	(21000)	50	5C175	14**
90.6	31800	(3590)	0.81	—	4520	(20100)	109	26400	(2980)	0.81	—	4700	(20900)	50	5C165	16
90.6	31800	(3590)	1.12	I	4520	(20100)	109	26400	(2980)	1.12	I	4700	(20900)	50	5C170	16**
90.6	31800	(3590)	1.22	I	4520	(20100)	109	26400	(2980)	1.22	I	4700	(20900)	50	5C175	16**
82.9	34800	(3930)	0.81	—	3910	(17400)	100	28900	(3260)	0.81	—	4560	(20300)	50	5C165	18
82.9	34800	(3930)	1.12	I	3910	(17400)	100	28900	(3260)	1.12	I	4560	(20300)	50	5C170	18**
82.9	34800	(3930)	1.12	I	3910	(17400)	100	28900	(3260)	1.22	I	4560	(20300)	50	5C175	18**
69.0	41800	(4720)	0.81	—	2430	(10800)	83.3	34600	(3910)	0.81	—	3960	(17600)	50	5C165	21
69.0	41800	(4720)	0.92	—	2430	(10800)	83.3	34600	(3910)	0.92	—	3960	(17600)	50	5C170	21
69.0	41800	(4720)	0.97	—	2430	(10800)	83.3	34600	(3910)	0.97	—	3960	(17600)	50	5C175	21
64.7	44500	(5030)	0.92	—	2500	(11100)	78.1	36900	(4170)	0.92	—	4050	(18000)	50	5C170	22
64.7	44500	(5030)	0.95	—	2500	(11100)	78.1	36900	(4170)	0.97	—	4050	(18000)	50	5C175	22
59.2	48700	(5500)	0.87	—	861	(3830)	71.4	40400	(4560)	0.92	—	2740	(12200)	50	5C170	25
59.2	48700	(5500)	0.87	—	861	(3830)	71.4	40400	(4560)	0.93	—	2740	(12200)	50	5C175	25

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

[2]: For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

50/60 Hz, 1450/1750 RPM Gearmotor Selection Tables



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, Y2 3.92

Double Reduction, AF-Motor 3.100–3.103

Single Reduction, AF-Motor 3.84–3.91

Double Reduction 3.94–3.99

Double Reduction, Y2 3.104

60 HP (45 kW)

50 Hz					60 Hz					Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio ^[2]	
	in·lbs	(N·m)	SF	AGMA Class	lbs	(N)		in·lbs	(N·m)	SF	AGMA Class					lbs
138	25400	(2870)	0.92	—	4230	(18800)	167	21100	(2380)	0.92	—	4340	(19300)	60	5C170	11**
138	25400	(2870)	1.00	I	4230	(18800)	167	21100	(2380)	1.00	I	4340	(19300)	60	5C175	11**
113	31000	(3500)	0.92	—	4090	(18200)	137	25700	(2900)	0.92	—	4290	(19100)	60	5C170	13**
113	31000	(3500)	1.00	I	4090	(18200)	137	25700	(2900)	1.00	I	4290	(19100)	60	5C175	13**
104	33900	(3830)	0.92	—	3210	(14300)	125	28100	(3170)	0.92	—	4140	(18400)	60	5C170	14**
104	33900	(3830)	1.00	I	3210	(14300)	125	28100	(3170)	1.00	I	4140	(18400)	60	5C175	14**
90.6	38700	(4370)	0.92	—	2770	(12300)	109	32000	(3620)	0.92	—	4050	(18000)	60	5C170	16**
90.6	38700	(4370)	1.00	I	2770	(12300)	109	32000	(3620)	1.00	I	4050	(18000)	60	5C175	16**
82.9	42300	(4780)	0.92	—	1360	(6050)	100	35000	(3960)	0.92	—	2940	(13100)	60	5C170	18**
82.9	42300	(4780)	0.92	—	1360	(6050)	100	35000	(3960)	1.00	I	2940	(13100)	60	5C175	18**

75 HP (55 kW)

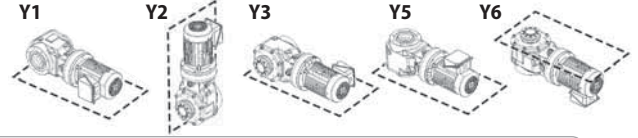
50 Hz					60 Hz					Unit Selection						
Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load		Output Speed RPM	Output Torque		Service Factor		Hollow Shaft Overhung Load	Motor Power Symbol	Frame Size	Ratio ^[2]	
	in·lbs	(N·m)	SF	AGMA Class	lbs	(N)		in·lbs	(N·m)	SF	AGMA Class					lbs
138	31100	(3510)	0.82	—	2940	(13100)	167	25800	(2910)	0.82	—	3800	(16900)	75	5C175	11**
113	37900	(4280)	0.82	—	2060	(9170)	137	31300	(3540)	0.82	—	3370	(15000)	75	5C175	13**
104	41400	(4680)	0.82	—	663	(2950)	125	34300	(3870)	0.82	—	2250	(10000)	75	5C175	14**
90.6	47300	(5340)	0.82	—	—	—	109	39200	(4430)	0.82	—	1780	(7900)	75	5C175	16**

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

[2]: For the selections marked with "**", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

Gearmotor Selection Table – AF-Motor

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1/8 HP (0.1 kW)

Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Motor Power Symbol	Selection		
6 Hz	60 Hz	Maximum (120 Hz)	in·lbs	(N·m)			lbs	(N)		Model	Suffix	Ratio
0.183	1.83	3.66	4035	(456)	1.82	II	1440	(6390)	01	5Z10DA	AV	956
0.157	1.57	3.14	4717	(533)	1.82	II	1440	(6390)	01	5Z10DA	AV	1117
0.133	1.33	2.65	5575	(630)	1.32	I	1440	(6390)	01	5Z10DA	AV	1320
0.106	1.06	2.11	7000	(791)	1.05	I	1440	(6390)	01	5Z10DA	AV	1656
0.077	0.770	1.54	9558	(1080)	1.19	I	1810	(8060)	01	5A12DA	AV	2272
0.077	0.770	1.54	9558	(1080)	1.98	II	2970	(13200)	01	5B12DA	AV	2272
0.068	0.684	1.37	10796	(1220)	1.06	I	1810	(8060)	01	5A12DA	AV	2559
0.068	0.684	1.37	10796	(1220)	1.75	II	2970	(13200)	01	5B12DA	AV	2559
0.059	0.595	1.19	12478	(1410)	1.53	II	2970	(13200)	01	5B12DA	AV	2944
0.050	0.499	0.997	14867	(1680)	1.28	I	2970	(13200)	01	5B12DA	AV	3511
0.040	0.401	0.802	18407	(2080)	1.03	I	2970	(13200)	01	5B12DA	AV	4365

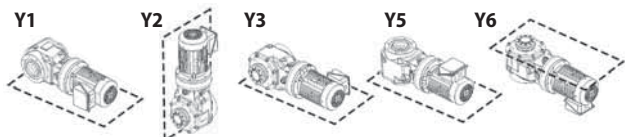
1/4 HP (0.2 kW)

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Motor Power Symbol	Selection		
6 Hz	60 Hz	Maximum (120 Hz)	in·lbs	(N·m)			lbs	(N)		Model	Suffix	Ratio
0.350	3.50	7.00	4230	(478)	1.74	II	1440	(6390)	02	5Z10DA	AV	501
0.303	3.03	6.06	4885	(552)	1.51	II	1440	(6390)	02	5Z10DA	AV	578
0.256	2.56	5.13	5770	(652)	1.28	I	1440	(6390)	02	5Z10DA	AV	683
0.216	2.16	4.33	6832	(772)	1.08	I	1440	(6390)	02	5Z10DA	AV	809
0.183	1.83	3.66	8080	(913)	1.41	II	1810	(8060)	02	5A12DA	AV	956
0.157	1.57	3.13	9469	(1070)	1.21	I	1810	(8060)	02	5A12DA	AV	1117
0.157	1.57	3.13	9469	(1070)	2.01	III	2970	(13200)	02	5B12DA	AV	1117
0.133	1.33	2.65	11150	(1260)	1.02	I	1810	(8060)	02	5A12DA	AV	1320
0.133	1.33	2.65	11150	(1260)	1.70	II	2970	(13200)	02	5B12DA	AV	1320
0.106	1.06	2.11	13982	(1580)	1.36	I	2970	(13200)	02	5B12DA	AV	1656
0.089	0.894	1.79	16549	(1870)	1.15	I	2970	(13200)	02	5B12DA	AV	1957
0.077	0.770	1.54	19200	(2170)	0.99	—	2970	(13200)	02	5B12DA	AV	2272
0.068	0.684	1.37	21593	(2440)	1.05	I	2970	(13200)	02	5B14DA	AV	2559
0.068	0.684	1.37	21593	(2440)	1.91	II	4810	(21400)	02	5C14DA	AV	2559
0.059	0.595	1.19	24867	(2810)	1.43	II	4810	(21400)	02	5C14DA	AV	2944
0.050	0.499	0.997	29646	(3350)	1.39	I	4810	(21400)	02	5C14DA	AV	3511
0.040	0.401	0.802	36903	(4170)	1.12	I	4810	(21400)	02	5C14DA	AV	4365
0.034	0.338	0.676	43717	(4940)	1.04	I	4810	(21400)	02	5C16DA	AV	5177

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Selection Tables

Gearmotor Selection Table – AF-Motor



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83
Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92
Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103
Double Reduction, Y2 3.104

1/2 HP (0.4 kW)

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum (120 Hz)	in-lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
1.16	11.6	23.2	2681	(303)	1.86	II	1440	(6390)	05	5Z100	AV	151
0.980	9.80	19.6	3177	(359)	1.40	II	1440	(6390)	05	5Z100	AV	179
0.847	8.47	16.9	3681	(416)	1.29	I	1440	(6390)	05	5Z100	AV	207
0.704	7.04	14.1	4425	(500)	1.09	I	1440	(6390)	05	5Z100	AV	249
0.575	5.75	11.5	5425	(613)	1.08	I	1440	(6390)	05	5Z100	AV	305
0.481	4.81	9.62	6150	(695)	1.02	I	1440	(6390)	05	5Z10DA	AV	364
0.481	4.81	9.62	6150	(695)	1.86	II	1810	(8060)	05	5A12DB	AV	364
0.413	4.13	8.26	7159	(809)	1.02	II	1440	(6390)	05	5Z10DA	AV	424
0.413	4.13	8.26	7159	(809)	1.59	I	1810	(8060)	05	5A12DB	AV	424
0.350	3.50	6.99	8460	(956)	1.02	I	1810	(8060)	05	5A12DA	AV	501
0.350	3.50	6.99	8460	(956)	2.24	III	2970	(13200)	05	5B12DB	AV	501
0.303	3.03	6.06	9735	(1100)	1.17	I	1810	(8060)	05	5A12DB	AV	578
0.303	3.03	6.06	9735	(1100)	1.94	II	2970	(13200)	05	5B12DB	AV	578
0.256	2.56	5.13	11504	(1300)	0.99	—	1810	(8060)	05	5A12DB	AV	683
0.256	2.56	5.13	11504	(1300)	1.65	II	2970	(13200)	05	5B12DB	AV	683
0.216	2.16	4.33	13628	(1540)	1.39	I	2970	(13200)	05	5B12DB	AV	809
0.183	1.83	3.66	16195	(1830)	1.18	I	2970	(13200)	05	5B12DB	AV	956
0.157	1.57	3.13	18850	(2130)	1.21	I	2970	(13200)	05	5B14DB	AV	1117
0.157	1.57	3.13	18850	(2130)	2.19	III	4810	(21400)	05	5C14DB	AV	1117
0.133	1.33	2.65	22301	(2520)	1.02	I	2970	(13200)	05	5B14DB	AV	1320
0.133	1.33	2.65	22301	(2520)	1.85	II	4810	(21400)	05	5C14DB	AV	1320
0.106	1.06	2.11	27965	(3160)	1.48	II	4810	(21400)	05	5C14DB	AV	1656
0.089	0.894	1.79	33097	(3740)	1.25	I	4810	(21400)	05	5C14DB	AV	1957
0.068	0.684	1.37	43274	(4890)	1.05	I	4810	(21400)	05	5C16DA	AV	2559

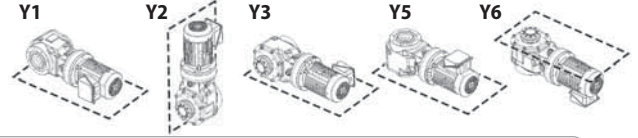
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Table – AF-Motor

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



1 HP (0.75 kW)

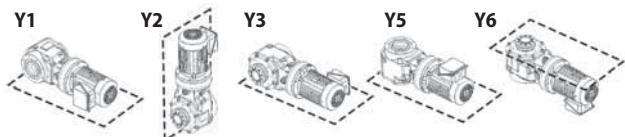
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Gearmotors
Selection
Tables

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Motor Power Symbol	Selection		
6 Hz	60 Hz	Maximum (120 Hz)	in·lbs	(N·m)			lbs	(N)		Model	Suffix	Ratio
2.19	21.9	43.8	2673	(302)	1.69	II	1440	(6390)	1	5Z100	AV	80
2.00	20.0	40.0	2920	(330)	1.69	II	1440	(6390)	1	5Z100	AV	88
1.72	17.2	34.4	3389	(383)	1.61	II	1440	(6390)	1	5Z100	AV	102
1.56	15.6	31.3	3743	(423)	1.30	I	1440	(6390)	1	5Z100	AV	112
1.43	14.3	28.6	4088	(462)	1.30	I	1440	(6390)	1	5Z100	AV	123
1.16	11.6	23.3	5027	(568)	1.04	I	1440	(6390)	1	5Z100	AV	151
0.980	9.80	19.6	5965	(674)	1.04	I	1440	(6390)	1	5Z105	AV	179
0.980	9.80	19.6	5965	(674)	1.26	I	1810	(8060)	1	5A110	AV	179
0.847	8.47	16.9	6894	(779)	1.15	I	1810	(8060)	1	5A110	AV	207
0.847	8.47	16.9	6894	(779)	1.35	I	1810	(8060)	1	5A115	AV	207
0.704	7.04	14.1	8301	(938)	1.01	I	1810	(8060)	1	5A115	AV	249
0.575	5.75	11.5	10177	(1150)	1.26	I	2970	(13200)	1	5B120	AV	305
0.481	4.81	9.62	11504	(1300)	0.99	—	1810	(8060)	1	5A12DB	AV	364
0.481	4.81	9.62	11504	(1300)	1.64	II	2970	(13200)	1	5B12DB	AV	364
0.413	4.13	8.26	13451	(1520)	1.40	II	2970	(13200)	1	5B12DB	AV	424
0.350	3.50	6.99	15841	(1790)	1.20	I	2970	(13200)	1	5B12DB	AV	501
0.303	3.03	6.06	18319	(2070)	1.04	I	2970	(13200)	1	5B12DB	AV	578
0.256	2.56	5.13	21593	(2440)	1.05	I	2970	(13200)	1	5B14DB	AV	683
0.256	2.56	5.13	21593	(2440)	1.89	II	4810	(21400)	1	5C14DB	AV	683
0.216	2.16	4.33	25664	(2900)	1.57	II	4810	(21400)	1	5C14DB	AV	809
0.183	1.83	3.66	30265	(3420)	1.33	I	4810	(21400)	1	5C14DB	AV	956
0.157	1.57	3.13	35398	(4000)	1.17	I	4810	(21400)	1	5C14DB	AV	1117
0.157	1.57	3.13	35398	(4000)	1.29	I	4810	(21400)	1	5C16DA	AV	1117
0.133	1.33	2.65	41858	(4730)	1.09	I	4810	(21400)	1	5C16DA	AV	1320

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Table – AF-Motor



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

Double Reduction, Y2 3.104

2 HP (1.5 kW)

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum (120 Hz)	in-lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
16.7	167	334	701	(79.2)	1.57	II	1440	(6390)	2	5Z100	AV	11
13.7	137	274	855	(96.6)	1.57	II	1440	(6390)	2	5Z100	AV	13
12.5	125	250	938	(106)	1.57	II	1440	(6390)	2	5Z100	AV	14
10.9	109	218	1071	(121)	1.57	II	1440	(6390)	2	5Z100	AV	16
10.0	100	200	1168	(132)	1.57	II	1440	(6390)	2	5Z100	AV	18
8.33	83.3	167	1398	(158)	1.57	II	1440	(6390)	2	5Z100	AV	21
7.81	78.1	156	1496	(169)	1.57	II	1440	(6390)	2	5Z100	AV	22
7.14	714	143	1637	(185)	1.57	II	1440	(6390)	2	5Z100	AV	25
6.25	62.5	125	1867	(211)	1.57	II	1440	(6390)	2	5Z100	AV	28
4.97	49.7	99.4	2354	(266)	1.57	II	1440	(6390)	2	5Z100	AV	35
4.55	45.5	90.9	2575	(291)	1.57	II	1440	(6390)	2	5Z100	AV	39
3.85	38.5	76.9	3035	(343)	1.57	II	1440	(6390)	2	5Z100	AV	46
3.33	33.3	66.7	3504	(396)	1.57	II	1440	(6390)	2	5Z100	AV	53
2.94	29.4	58.8	3973	(449)	1.33	I	1440	(6390)	2	5Z100	AV	60
2.60	26.0	52.1	4487	(507)	1.29	I	1440	(6390)	2	5Z100	AV	67
2.38	23.8	47.6	4912	(555)	1.24	I	1440	(6390)	2	5Z100	AV	74
2.19	21.9	43.8	5345	(604)	1.11	I	1440	(6390)	2	5Z105	AV	80
2.19	21.9	43.8	5345	(604)	1.27	I	1810	(8060)	2	5A110	AV	80
2.00	20.0	40.0	5841	(660)	1.27	I	1810	(8060)	2	5A110	AV	88
1.72	17.2	34.5	6779	(766)	1.27	I	1810	(8060)	2	5A110	AV	102
1.56	15.6	31.3	7478	(845)	1.00	I	1810	(8060)	2	5A110	AV	112
1.56	15.6	31.3	7478	(845)	1.21	I	1810	(8060)	2	5A115	AV	112
1.43	14.3	28.6	8186	(925)	1.16	I	1810	(8060)	2	5A115	AV	123
1.16	11.6	23.3	10088	(1140)	1.27	I	2970	(13200)	2	5B120	AV	151
0.980	9.80	19.6	11947	(1350)	1.15	I	2970	(13200)	2	5B120	AV	179
0.847	8.47	16.9	13805	(1560)	1.08	I	2970	(13200)	2	5B125	AV	207
0.704	7.04	14.1	16637	(1880)	1.14	I	2970	(13200)	2	5B140	AV	249
0.704	7.04	14.1	16637	(1880)	1.62	II	4810	(21400)	2	5C140	AV	249
0.575	5.75	11.5	20354	(2300)	1.32	I	4810	(21400)	2	5C140	AV	305
0.481	4.81	9.62	23097	(2610)	1.79	II	4810	(21400)	2	5C14DC	AV	364
0.413	4.13	8.26	26814	(3030)	1.45	II	4810	(21400)	2	5C14DC	AV	424
0.350	3.50	6.99	31681	(3580)	1.30	I	4810	(21400)	2	5C14DC	AV	501
0.303	3.03	6.06	36637	(4140)	1.12	I	4810	(21400)	2	5C14DC	AV	578
0.303	3.03	6.06	36637	(4140)	1.24	I	4810	(21400)	2	5C16DB	AV	578
0.256	2.56	5.13	43274	(4890)	1.05	I	4810	(21400)	2	5C16DB	AV	683

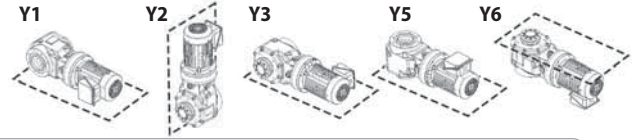
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Gearmotor Selection Table – AF-Motor

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



3 HP (2.2 kW)

Dimension Pages:
 Single Reduction 3.76–3.83
 Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92
 Double Reduction 3.94–3.99

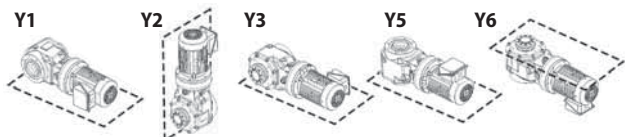
Double Reduction, AF-Motor 3.100–3.103
 Double Reduction, Y2 3.104

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Motor Power Symbol	Selection		
6 Hz	60 Hz	Maximum (120 Hz)	in·lbs	(N·m)			lbs	(N)		Model	Suffix	Ratio
16.7	167	333	1027	(116)	1.07	I	1440	(6390)	3	5Z100	AV	11
16.7	167	333	1027	(116)	4.36	III	1810	(8060)	3	5A120	AV	11
13.7	137	273	1257	(142)	1.07	I	1440	(6390)	3	5Z100	AV	13
13.7	137	273	1257	(142)	4.36	III	1810	(8060)	3	5A120	AV	13
12.5	125	250	1372	(155)	1.07	I	1440	(6390)	3	5Z100	AV	14
12.5	125	250	1372	(155)	4.36	III	1810	(8060)	3	5A120	AV	14
10.9	109	219	1566	(177)	1.07	I	1440	(6390)	3	5Z100	AV	16
10.9	109	219	1566	(177)	4.36	III	1810	(8060)	3	5A120	AV	16
10.0	100	200	1717	(194)	1.07	I	1440	(6390)	3	5Z100	AV	18
10.0	100	200	1717	(194)	4.36	III	1810	(8060)	3	5A120	AV	18
8.33	83.3	167	2053	(232)	1.07	I	1440	(6390)	3	5Z100	AV	21
8.33	83.3	167	2053	(232)	1.61	II	1810	(8060)	3	5A110	AV	21
7.81	78.1	156	2195	(248)	1.61	II	1440	(6390)	3	5Z110	AV	22
7.81	78.1	156	2195	(248)	2.97	III	1810	(8060)	3	5A120	AV	22
7.14	71.4	143	2398	(271)	1.61	II	1440	(6390)	3	5Z110	AV	25
7.14	71.4	143	2398	(271)	2.97	III	1810	(8060)	3	5A120	AV	25
6.25	62.5	125	2743	(310)	1.07	I	1440	(6390)	3	5Z100	AV	28
6.25	62.5	125	2743	(310)	1.61	II	1810	(8060)	3	5A110	AV	28
4.97	49.7	99.4	3451	(390)	1.07	I	1440	(6390)	3	5Z100	AV	35
4.97	49.7	99.4	3451	(390)	1.61	II	1810	(8060)	3	5A110	AV	35
4.55	45.5	90.9	3770	(426)	1.07	I	1440	(6390)	3	5Z100	AV	39
4.55	45.5	90.9	3770	(426)	1.61	II	1810	(8060)	3	5A110	AV	39
3.85	38.5	76.9	4460	(504)	1.07	I	1440	(6390)	3	5Z100	AV	46
3.85	38.5	76.9	4460	(504)	1.61	II	1810	(8060)	3	5A110	AV	46
3.33	33.3	66.7	5142	(581)	1.07	I	1440	(6390)	3	5Z100	AV	53
3.33	33.3	66.7	5142	(581)	1.61	II	1810	(8060)	3	5A110	AV	53
2.94	29.4	58.8	5832	(659)	1.07	I	1440	(6390)	3	5Z105	AV	60
2.94	29.4	58.8	5832	(659)	1.45	II	1810	(8060)	3	5A110	AV	60
2.60	26.0	52.1	6584	(744)	1.24	I	1810	(8060)	3	5A110	AV	67
2.38	23.8	47.6	7204	(814)	1.24	I	1810	(8060)	3	5A110	AV	74
2.19	21.9	43.8	7841	(886)	1.01	I	1810	(8060)	3	5A115	AV	80
2.19	21.9	43.8	7841	(886)	1.40	II	2970	(13200)	3	5B120	AV	80
2.00	20.0	40.0	8575	(969)	1.01	I	1810	(8060)	3	5A115	AV	88
2.00	20.0	40.0	8575	(969)	1.40	II	2970	(13200)	3	5B120	AV	88
1.72	17.2	34.5	9912	(1120)	1.36	I	2970	(13200)	3	5B120	AV	102
1.56	15.6	31.3	10973	(1240)	1.13	I	2970	(13200)	3	5B120	AV	112
1.56	15.6	31.3	10973	(1240)	1.45	II	2970	(13200)	3	5B125	AV	112
1.43	14.3	28.6	12035	(1360)	1.13	I	2970	(13200)	3	5B120	AV	123
1.43	14.3	28.6	12035	(1360)	1.45	II	2970	(13200)	3	5B125	AV	123
1.16	11.6	23.3	14779	(1670)	1.08	I	2970	(13200)	3	5B125	AV	151
0.980	9.80	19.6	17522	(1980)	1.08	I	2970	(13200)	3	5B140	AV	179
0.980	9.80	19.6	17522	(1980)	1.56	II	4810	(21400)	3	5C140	AV	179
0.847	8.47	16.9	20265	(2290)	1.35	I	4810	(21400)	3	5C140	AV	207
0.704	7.04	14.1	24336	(2750)	1.10	I	4810	(21400)	3	5C140	AV	249
0.704	7.04	14.1	24336	(2750)	1.38	I	4810	(21400)	3	5C145	AV	249
0.575	5.75	11.5	29823	(3370)	1.13	I	4810	(21400)	3	5C145	AV	305

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.

Selection Tables

Gearmotor Selection Table – AF-Motor



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83

Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92

Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103

Double Reduction, Y2 3.104

5 HP (3.7 kW)

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum ^[2] (120 Hz)	in·lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
16.7	167	333	1726	(195)	2.12	III	1440	(6390)	5	5Z110	AV	11
16.7	167	333	1726	(195)	2.59	III	1810	(8060)	5	5A120	AV	11
13.7	137	273	2106	(238)	2.12	III	1440	(6390)	5	5Z110	AV	13
13.7	137	273	2106	(238)	2.59	III	1810	(8060)	5	5A120	AV	13
12.5	125	250	2310	(261)	2.12	III	1440	(6390)	5	5Z110	AV	14
12.5	125	250	2310	(261)	2.59	III	1810	(8060)	5	5A120	AV	14
10.9	109	219	2637	(298)	2.12	III	1440	(6390)	5	5Z110	AV	16
10.9	109	219	2637	(298)	2.59	III	1810	(8060)	5	5A120	AV	16
10.0	100	200	2885	(326)	2.12	III	1440	(6390)	5	5Z110	AV	18
10.0	100	200	2885	(326)	2.59	III	1810	(8060)	5	5A120	AV	18
8.33	83.3	167	3460	(391)	1.06	I	1440	(6390)	5	5Z115	AV	21
8.33	83.3	167	3460	(391)	1.77	II	1810	(8060)	5	5A120	AV	21
7.81	78.1	156	3690	(417)	1.06	I	1440	(6390)	5	5Z115	AV	22
7.81	78.1	156	3690	(417)	1.77	II	1810	(8060)	5	5A120	AV	22
7.14	71.4	143	4035	(456)	1.06	I	1440	(6390)	5	5Z115	AV	25
7.14	71.4	143	4035	(456)	1.77	II	1810	(8060)	5	5A120	AV	25
6.25	62.5	125	4611	(521)	1.06	I	1440	(6390)	5	5Z115	AV	28
6.25	62.5	125	4611	(521)	1.77	II	1810	(8060)	5	5A120	AV	28
4.97	49.7	99.4	5796	(655)	1.06	I	1440	(6390)	5	5Z115	AV	35
4.97	49.7	99.4	5796	(655)	1.37	I	1810	(8060)	5	5A120	AV	35
4.55	45.5	90.9	6345	(717)	1.37	I	1810	(8060)	5	5A120	AV	39
3.85	38.5	76.9	7496	(847)	1.26	I	1810	(8060)	5	5A120	AV	46
3.33	33.3	66.7	8646	(977)	1.09	I	1810	(8060)	5	5A120	AV	53
3.33	33.3	66.7	8646	(977)	1.37	I	2970	(13200)	5	5B120	AV	53
2.94	29.4	58.8	9823	(1110)	1.37	I	2970	(13200)	5	5B120	AV	60
2.60	26.0	52.1	11062	(1250)	1.07	I	2970	(13200)	5	5B120	AV	67
2.60	26.0	52.1	11062	(1250)	1.32	I	2970	(13200)	5	5B125	AV	67
2.38	23.8	47.6	12124	(1370)	1.07	I	2970	(13200)	5	5B120	AV	74
2.38	23.8	47.6	12124	(1370)	1.32	I	2970	(13200)	5	5B125	AV	74
2.19	21.9	43.8	13186	(1490)	1.07	I	2970	(13200)	5	5B125	AV	80
2.00	20.0	40.0	14425	(1630)	1.07	I	2970	(13200)	5	5B125	AV	88
1.72	17.2	34.5	16726	(1890)	1.02	I	2970	(13200)	5	5B125	AV	102
1.56	15.6	31.3	18496	(2090)	1.02	I	2970	(13200)	5	5B140	AV	112
1.56	15.6	31.3	18496	(2090)	1.41	II	4810	(21400)	5	5C140	AV	112
1.43	14.3	28.6	20177	(2280)	1.41	II	4810	(21400)	5	5C140	AV	123
1.16	11.6	23.3*	24779	(2800)	1.06	I	4810	(21400)	5	5C140	AV	151
1.16	11.6	23.3*	24779	(2800)	1.46	II	4810	(21400)	5	5C145	AV	151
0.980	9.80	19.6	29381	(3320)	1.14	I	4810	(21400)	5	5C145	AV	179
0.847	8.47	16.9	33982	(3840)	1.11	I	4810	(21400)	5	5C160	AV	207

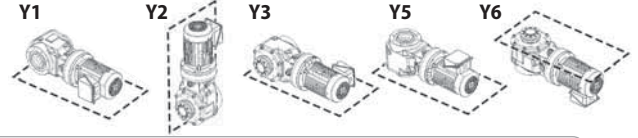
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position
[2]: For the selections marked with "*", it is recommended that these units not be run at input speeds greater than 60 Hz for extended periods of time.

Gearmotor Selection Table – AF-Motor

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



7.5 HP (5.5 kW)

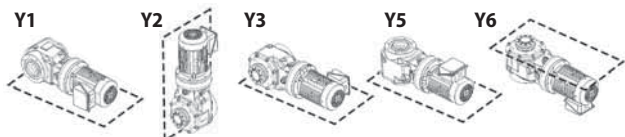
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum ^[2] (120 Hz)	in·lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
16.7	167	333	2575	(291)	3.45	III	1810	(8060)	8	5A140	AV	11
13.7	137	273	3133	(354)	3.02	III	1810	(8060)	8	5A140	AV	13
12.5	125	250	3425	(387)	2.76	III	1810	(8060)	8	5A140	AV	14
10.9	109	219	3920	(443)	2.41	III	1810	(8060)	8	5A140	AV	16
10.0	100	200	4283	(484)	2.21	III	1810	(8060)	8	5A140	AV	18
8.33	83.3	167	5142	(581)	1.84	II	1810	(8060)	8	5A140	AV	21
7.81	78.1	156	5487	(620)	1.72	II	1810	(8060)	8	5A140	AV	22
7.14	71.4	143	6000	(678)	1.58	II	1810	(8060)	8	5A140	AV	25
6.25	62.5	125	6858	(775)	1.38	I	1810	(8060)	8	5A140	AV	28
4.97	49.7	99.4	8619	(974)	1.10	I	1810	(8060)	8	5A140	AV	35
4.97	49.7	99.4	8619	(974)	2.19	III	2970	(13200)	8	5B140	AV	35
4.55	45.5	90.9	9469	(1070)	1.00	I	1810	(8060)	8	5A140	AV	39
4.55	45.5	90.9	9469	(1070)	2.00	III	2970	(13200)	8	5B140	AV	39
3.85	38.5	76.9	11150	(1260)	1.69	II	2970	(13200)	8	5B140	AV	46
3.33	33.3	66.7	12832	(1450)	1.47	II	2970	(13200)	8	5B140	AV	53
2.94	29.4	58.8	14602	(1650)	1.29	I	2970	(13200)	8	5B140	AV	60
2.60	26.0	52.1	16460	(1860)	1.15	I	2970	(13200)	8	5B140	AV	67
2.60	26.0	52.1	16460	(1860)	1.57	II	4810	(21400)	8	5C140	AV	67
2.38	23.8	47.6	17965	(2030)	1.05	I	2970	(13200)	8	5B140	AV	74
2.38	23.8	47.6	17965	(2030)	1.57	II	4810	(21400)	8	5C140	AV	74
2.19	21.9	43.8	19558	(2210)	1.25	I	4810	(21400)	8	5C140	AV	80
2.00	20.0	40.0	21416	(2420)	1.25	I	4810	(21400)	8	5C140	AV	88
1.72	17.2	34.5	24867	(2810)	1.08	I	4810	(21400)	8	5C140	AV	102
1.72	17.2	34.5	24867	(2810)	1.37	I	4810	(21400)	8	5C145	AV	102
1.56	15.6	31.3*	27434	(3100)	1.37	I	4810	(21400)	8	5C145	AV	112
1.43	14.3	28.6	30000	(3390)	1.26	I	4810	(21400)	8	5C145	AV	123
1.16	11.6	23.3*	36814	(4160)	1.02	I	4810	(21400)	8	5C160	AV	151

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position
[2]: For the selections marked with "*", it is recommended that these units not be run at input speeds greater than 60 Hz for extended periods of time.

Gearmotor Selection Table – AF-Motor



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83
Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92
Double Reduction 3.94–3.99

Double Reduction, AF-Motor 3.100–3.103
Double Reduction, Y2 3.104

10 HP (7.5 kW)

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum ^[2] (120 Hz)	in-lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
16.7	167	333	3504	(396)	2.53	III	1810	(8060)	10	5A140	AV	11
13.7	137	273	4274	(483)	2.21	III	1810	(8060)	10	5A140	AV	13
12.5	125	250	4673	(528)	2.02	III	1810	(8060)	10	5A140	AV	14
10.9	109	219	5345	(604)	1.77	II	1810	(8060)	10	5A140	AV	16
10.0	100	200	5841	(660)	1.62	II	1810	(8060)	10	5A140	AV	18
8.33	83.3	167	7009	(792)	1.35	I	1810	(8060)	10	5A140	AV	21
7.81	78.1	156	7478	(845)	1.26	I	1810	(8060)	10	5A140	AV	22
7.14	71.4	143	8186	(925)	1.16	I	1810	(8060)	10	5A140	AV	25
7.14	71.4	143	8186	(925)	1.73	II	2970	(13200)	10	5B140	AV	25
6.25	62.5	125	9381	(1060)	1.01	I	1810	(8060)	10	5A140	AV	28
6.25	62.5	125	9381	(1060)	1.73	II	2970	(13200)	10	5B140	AV	28
4.97	49.7	99.4	11770	(1330)	1.60	II	2970	(13200)	10	5B140	AV	35
4.55	45.5	90.9	12832	(1450)	1.47	II	2970	(13200)	10	5B140	AV	39
3.85	38.5	76.9	15221	(1720)	1.24	I	2970	(13200)	10	5B140	AV	46
3.33	33.3	66.7	17522	(1980)	1.07	I	2970	(13200)	10	5B140	AV	53
3.33	33.3	66.7	17522	(1980)	1.60	II	4810	(21400)	10	5C140	AV	53
2.94	29.4	58.8	19912	(2250)	1.35	I	4810	(21400)	10	5C140	AV	60
2.60	26.0	52.1	22478	(2540)	1.15	I	4810	(21400)	10	5C140	AV	67
2.60	26.0	52.1	22478	(2540)	1.47	II	4810	(21400)	10	5C145	AV	67
2.38	23.8	47.6	24513	(2770)	1.15	I	4810	(21400)	10	5C140	AV	74
2.38	23.8	47.6	24513	(2770)	1.47	II	4810	(21400)	10	5C145	AV	74
2.19	21.9	43.8	26726	(3020)	1.05	I	4810	(21400)	10	5C145	AV	80
2.19	21.9	43.8	26726	(3020)	1.31	I	4810	(21400)	10	5C160	AV	80
2.00	20.0	40.0	29204	(3300)	1.05	I	4810	(21400)	10	5C145	AV	88
2.00	20.0	40.0	29204	(3300)	1.29	I	4810	(21400)	10	5C160	AV	88
1.72	17.2	34.5	33894	(3830)	1.00	I	4810	(21400)	10	5C145	AV	102
1.56	15.6	31.3*	37434	(4230)	1.00	I	4810	(21400)	10	5C145	AV	112

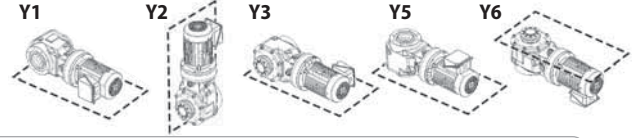
Gearmotors

Selection Tables

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position
[2]: For the selections marked with "*", it is recommended that these units not be run at input speeds greater than 60 Hz for extended periods of time.

Gearmotor Selection Table – AF-Motor

Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]



15 HP (11 kW)

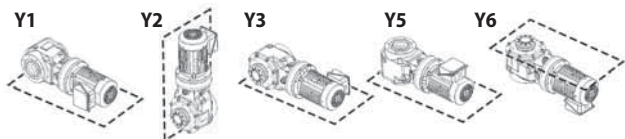
Dimension Pages:
 Single Reduction 3.76–3.83 Single Reduction, Y2 3.92 Double Reduction, AF-Motor 3.100–3.103
 Single Reduction, AF-Motor 3.84–3.91 Double Reduction 3.94–3.99 Double Reduction, Y2 3.104

Selection Tables

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum ^[2] (120 Hz)	in·lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
16.7	167	333	5142	(581)	1.73	II	1810	(8060)	15	5A140	AV	11
13.7	137	273	6265	(708)	1.51	II	1810	(8060)	15	5A145	AV	13
12.5	125	250	6858	(775)	1.38	I	1810	(8060)	15	5A140	AV	14
10.9	109	219	7841	(886)	1.21	I	1810	(8060)	15	5A140	AV	16
10.9	109	219	7841	(886)	1.73	II	2970	(13200)	15	5B140	AV	16
10.0	100	200	8575	(969)	1.10	I	1810	(8060)	15	5A140	AV	18
10.0	100	200	8575	(969)	1.73	II	2970	(13200)	15	5B140	AV	18
8.33	83.3	167	10265	(1160)	1.18	I	2970	(13200)	15	5B140	AV	21
8.33	83.3	167	10265	(1160)	1.37	I	2970	(13200)	15	5B145	AV	21
7.81	78.1	156	10973	(1240)	1.18	I	2970	(13200)	15	5B140	AV	22
7.81	78.1	156	10973	(1240)	1.37	I	2970	(13200)	15	5B145	AV	22
7.14	71.4	143	12035	(1360)	1.18	I	2970	(13200)	15	5B140	AV	25
7.14	71.4	143	12035	(1360)	1.37	I	2970	(13200)	15	5B145	AV	25
6.25	62.5	125	13717	(1550)	1.18	I	2970	(13200)	15	5B140	AV	28
6.25	62.5	125	13717	(1550)	1.37	I	2970	(13200)	15	5B145	AV	28
4.97	49.7	99.4	17257	(1950)	1.09	I	2970	(13200)	15	5B140	AV	35
4.97	49.7	99.4	17257	(1950)	1.37	I	4810	(21400)	15	5C145	AV	35
4.55	45.5	90.9	18850	(2130)	1.00	I	2970	(13200)	15	5B140	AV	39
4.55	45.5	90.9	18850	(2130)	1.37	I	4810	(21400)	15	5C145	AV	39
3.85	38.5	76.9	22301	(2520)	1.18	I	4810	(21400)	15	5C140	AV	46
3.85	38.5	76.9	22301	(2520)	1.37	I	4810	(21400)	15	5C145	AV	46
3.33	33.3	66.7	25752	(2910)	1.09	I	4810	(21400)	15	5C140	AV	53
3.33	33.3	66.7	25752	(2910)	1.33	I	4810	(21400)	15	5C145	AV	53
2.94	29.4	58.8	29115	(3290)	1.09	I	4810	(21400)	15	5C145	AV	60
2.60	26.0	52.1	32920	(3720)	1.00	I	4810	(21400)	15	5C145	AV	67
2.38	23.8	47.6	36018	(4070)	1.00	I	4810	(21400)	15	5C145	AV	74

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position.
[2]: For the selections marked with "*", if mounted in the Y2 configuration, the allowable motion cycle (load time ratio) is 75% Equivalent Duty, or operating time, based on a 10 minute cycle.

Gearmotor Selection Table – AF-Motor



Y1, Y2, Y3, Y5, Y6 Mounting Positions^[1]

Dimension Pages:

Single Reduction 3.76–3.83
Single Reduction, AF-Motor 3.84–3.91

Single Reduction, Y2 3.92
Double Reduction 3.94–3.99
Double Reduction, AF-Motor 3.100–3.103
Double Reduction, Y2 3.104

20 HP (15 kW)

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum ^[2] (120 Hz)	in-lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
16.7	167	333*	7009	(792)	1.69	II	2970	(13200)	20	5B160	AV	11
13.7	137	273*	8549	(966)	1.69	II	2970	(13200)	20	5B160	AV	13
12.5	125	250*	9381	(1060)	1.69	II	2970	(13200)	20	5B160	AV	14
10.9	109	219*	10708	(1210)	1.69	II	2970	(13200)	20	5B160	AV	16
10.0	100	200*	11681	(1320)	1.61	II	2970	(13200)	20	5B160	AV	18
8.33	83.3	167*	13982	(1580)	1.34	I	2970	(13200)	20	5B160	AV	21
7.81	78.1	156*	14956	(1690)	1.26	I	2970	(13200)	20	5B160	AV	22
7.14	71.4	143*	16372	(1850)	1.15	I	2970	(13200)	20	5B160	AV	25
7.14	71.4	143*	16372	(1850)	1.35	I	4810	(21400)	20	5C160	AV	25
6.25	62.5	125*	18673	(2110)	1.01	I	2970	(13200)	20	5B160	AV	28
6.25	62.5	125*	18673	(2110)	1.31	I	4810	(21400)	20	5C160	AV	28
4.97	49.7	99.4*	23540	(2660)	1.31	I	4810	(21400)	20	5C160	AV	35
4.55	45.5	90.9*	25752	(2910)	1.31	I	4810	(21400)	20	5C160	AV	39
3.85	38.5	76.9*	30354	(3430)	1.24	I	4810	(21400)	20	5C160	AV	46
3.33	33.3	66.7*	35044	(3960)	1.07	I	4810	(21400)	20	5C160	AV	53

25 HP (18.5 kW)

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum ^[2] (120 Hz)	in-lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
8.33	83.3	167*	17257	(1950)	1.83	II	4810	(21400)	25	5C170	AV	21
7.81	78.1	156*	18496	(2090)	1.83	II	4810	(21400)	25	5C170	AV	22
7.14	71.4	143*	20177	(2280)	1.83	II	4810	(21400)	25	5C170	AV	25
6.25	62.5	125*	23097	(2610)	1.63	II	4810	(21400)	25	5C170	AV	28
4.97	49.7	99.4*	29027	(3280)	1.30	I	4810	(21400)	25	5C170	AV	35
4.55	45.5	90.9*	31681	(3580)	1.19	I	4810	(21400)	25	5C170	AV	39
3.85	38.5	76.9*	37522	(4240)	1.01	I	4810	(21400)	25	5C170	AV	46

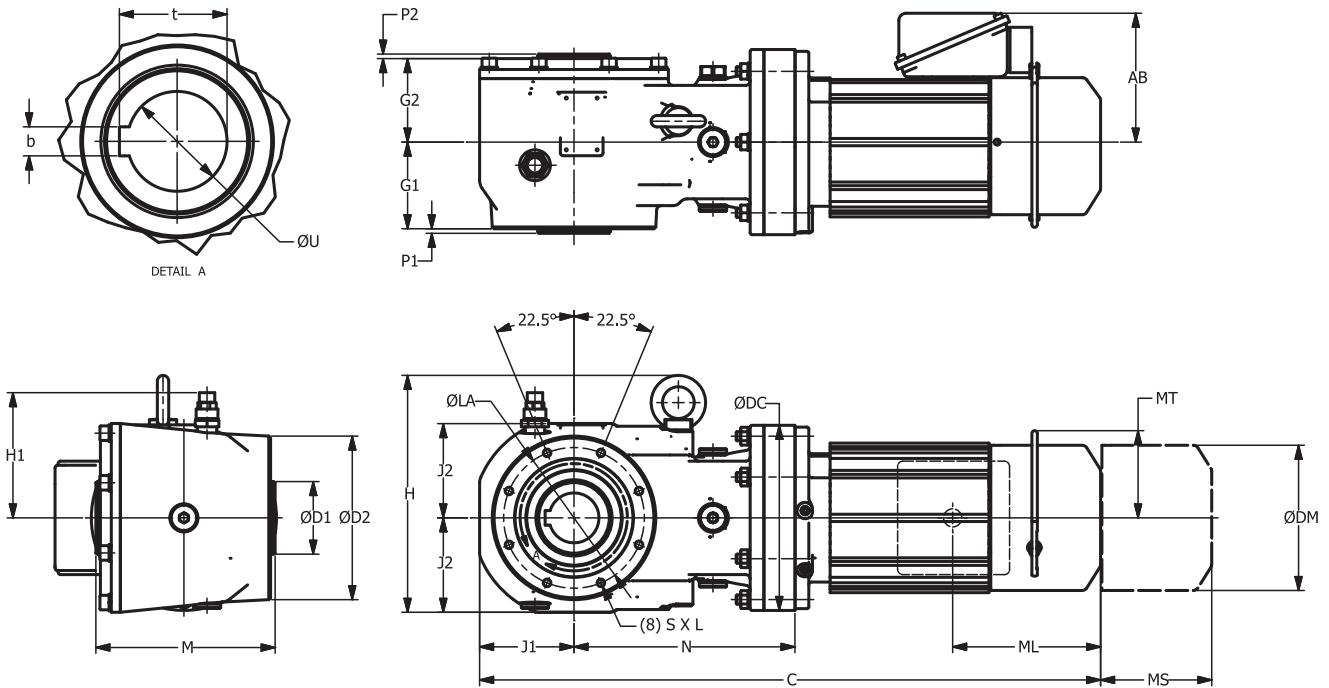
30 HP (22 kW)

Output Speed (RPM)			Output Torque		Service Factor	AGMA Class	Hollow Shaft Overhung Load		Selection			
6 Hz	60 Hz	Maximum ^[2] (120 Hz)	in-lbs	(N·m)			lbs	(N)	Motor Power Symbol	Model	Suffix	Ratio
8.33	83.3	167*	20531	(2320)	1.54	II	4810	(21400)	30	5C170	AV	21
7.81	78.1	156*	21947	(2480)	1.54	II	4810	(21400)	30	5C170	AV	22
7.14	71.4	143*	23982	(2710)	1.54	II	4810	(21400)	30	5C170	AV	25
6.25	62.5	125*	27434	(3100)	1.37	I	4810	(21400)	30	5C170	AV	28
4.97	49.7	99.4*	34513	(3900)	1.09	I	4810	(21400)	30	5C170	AV	35
4.55	45.5	90.9*	37699	(4260)	1.00	I	4810	(21400)	30	5C170	AV	39

Note [1]: Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for gearmotor selections in the Y4 mounting position
[2]: For the selections marked with “*”, it is recommended that these units not be run at input speeds greater than 60 Hz for extended periods of time.

Dimensions Gearmotors

Single Reduction LHYM-5Z100~5Z125



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.92 for external lubricant piping dimensions.

Model	N	$\varnothing DC$	J1	J2	M	P1	P2	G1	G2	H	H1	$\varnothing D1$	$\varnothing D2$	$\varnothing LA$	S x L
5Z100, 5Z105	8.11 (206)	5.91 (150)													
5Z110, 5Z115	8.43 (214)	6.38 (162)	3.50 (89.0)	3.58 (91.0)	7.17 (182)	0.118 (3.00)	0.098 (2.50)	3.54 (90.0)	3.41 (86.5)	8.66 (220)	5.31 (135)	2.56 (65.0)	6.30 (160)	5.59 (142)	M8 x 0.787 (M8 x 20)
5Z120, 5Z125	8.27 (210)	8.03 (204)													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	$\varnothing U$	$\varnothing U$ Tolerance	b	t	$\varnothing U$	$\varnothing U$ Tolerance	b	t
5Z	1.500	+0.0015/0	0.375	1.67	(45)	(+0.039/0)	(14)	(48.8)

Gearmotors
Dimensions

Single Reduction LHYM-5Z100~5Z125 Dimensions

All dimensions are in inches (mm).

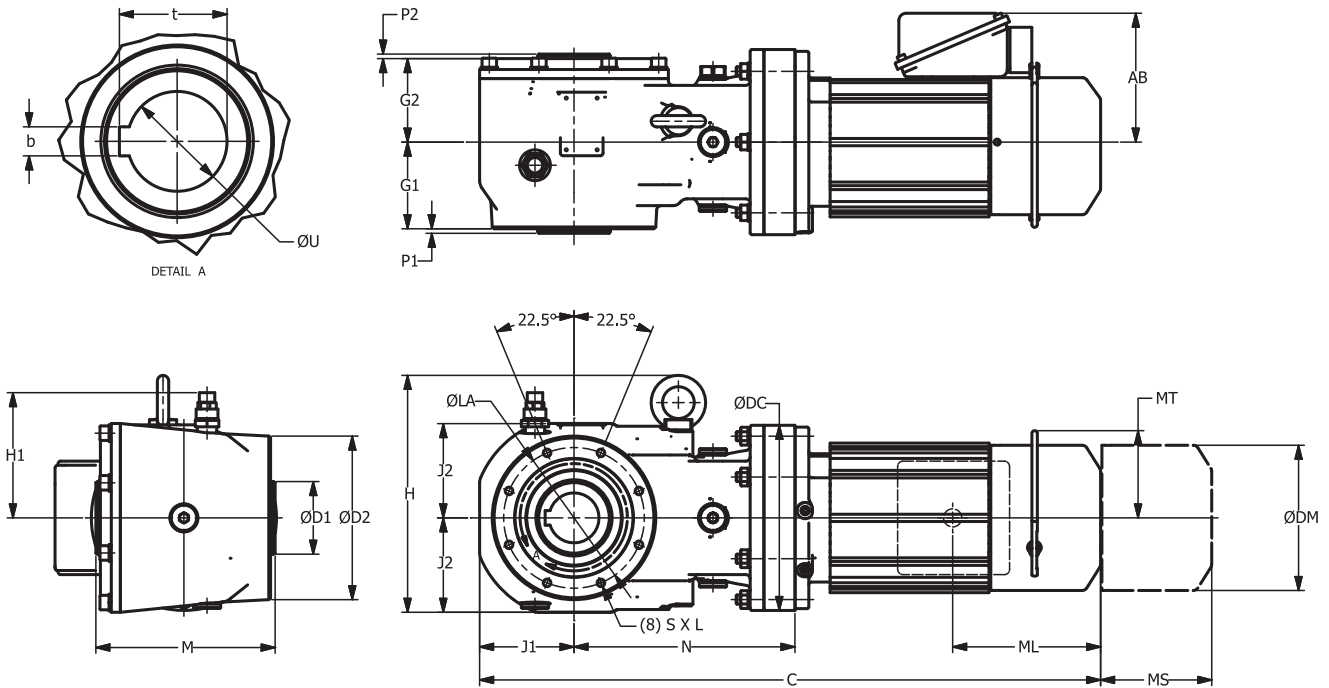
Model	4-Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lbs (kg)	C	ØDM	AB	ML	MS	MT	W lbs (kg)
5Z100 5Z105	1/4 (0.20)	18.5 (471)	4.88 (124)	5.04 (128)	2.3 (59)	55 (25)	19.8 (503)	4.88 (124)	5.04 (128)	3.58 (90.9)	2.40 (61.0)	— —	60 (27)
	1/3 (0.25)	18.5 (471)	4.88 (124)	5.04 (128)	2.3 (59)	55 (25)	19.8 (503)	4.88 (124)	5.04 (128)	3.58 (90.9)	2.40 (61.0)	— —	60 (27)
	1/2 (0.40)	19.3 (491)	4.88 (124)	5.04 (128)	2.3 (59)	60 (27)	20.6 (523)	4.88 (124)	5.04 (128)	3.58 (90.9)	2.40 (61.0)	— —	62 (28)
	3/4 (0.55)	20.9 (532)	6.29 (160)	5.63 (143)	3.8 (97)	68 (31)	22.6 (575)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93.0)	4.17 (106)	75 (34)
	1 (0.75)	20.9 (532)	6.29 (160)	5.63 (143)	3.8 (97)	68 (31)	22.6 (575)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93.0)	4.17 (106)	75 (34)
	1.5 (1.1)	22.2 (565)	6.65 (169)	5.83 (148)	3.94 (100)	77 (35)	24.7 (627)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	88 (40)
	2 (1.5)	22.2 (565)	6.65 (169)	5.83 (148)	3.94 (100)	77 (35)	24.7 (627)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	88 (40)
	3 (2.2)	23.0 (585)	7.16 (182)	6.10 (155)	4.13 (105)	86 (39)	25.5 (648)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	99 (45)
	5 (3.7)	25.3 (644)	8.73 (222)	6.54 (166)	5.00 (127)	110 (50)	28.2 (716)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	135 (61)
5Z110 5Z115	1/2 (0.40)	19.5 (495)	4.88 (124)	5.04 (128)	2.3 (59)	68 (31)	20.7 (527)	4.88 (124)	5.04 (128)	3.58 (90.9)	2.40 (61.0)	— —	71 (32)
	3/4 (0.55)	21.1 (536)	6.29 (160)	5.63 (143)	3.8 (97)	73 (33)	22.8 (579)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93.0)	4.17 (106)	79 (36)
	1 (0.75)	21.1 (536)	6.29 (160)	5.63 (143)	3.8 (97)	73 (33)	22.8 (579)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	79 (36)
	1.5 (1.1)	22.4 (569)	6.65 (169)	5.83 (148)	3.94 (100)	82 (37)	24.8 (631)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	93 (42)
	2 (1.5)	22.4 (569)	6.65 (169)	5.83 (148)	3.94 (100)	82 (37)	24.8 (631)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	93 (42)
	3 (2.2)	23.2 (589)	7.16 (182)	6.10 (155)	4.13 (105)	90 (41)	25.6 (652)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	106 (48)
	5 (3.7)	24.5 (624)	8.73 (222)	6.54 (166)	5.00 (127)	110 (50)	27.4 (696)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	132 (60)
	7.5 (5.5)	26.3 (668)	8.73 (222)	6.54 (166)	5.00 (127)	126 (57)	29.1 (740)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	146 (66)
	10 (7.5)	26.8 (681)	9.88 (251)	8.31 (211)	5.63 (143)	159 (72)	30.5 (776)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	198 (90)
5Z120 5Z125	1/2 (0.4)	19.7 (500)	4.88 (124)	5.04 (128)	2.3 (59)	75 (34)	20.9 (532)	4.88 (124)	5.04 (128)	3.58 (90.9)	2.40 (61.0)	— —	79 (36)
	3/4 (0.55)	21.1 (536)	6.29 (160)	5.63 (143)	3.8 (97)	82 (37)	22.8 (579)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93.0)	4.17 (106)	88 (40)
	1 (0.75)	21.1 (536)	6.29 (160)	5.63 (143)	3.8 (97)	82 (37)	22.8 (579)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93.0)	4.17 (106)	88 (40)
	1.5 (1.1)	22.4 (569)	6.65 (169)	5.83 (148)	3.94 (100)	90 (41)	24.8 (631)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	101 (46)
	2 (1.5)	22.4 (569)	6.65 (169)	5.83 (148)	3.94 (100)	90 (41)	24.8 (631)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	101 (46)
	3 (2.2)	23.2 (589)	7.16 (182)	6.10 (155)	4.13 (105)	99 (45)	25.6 (652)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	115 (52)
	5 (3.7)	24.1 (612)	8.73 (222)	6.54 (166)	5.00 (127)	121 (55)	26.9 (684)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	141 (64)
	7.5 (5.5)	25.8 (656)	8.73 (222)	6.54 (166)	5.00 (127)	137 (62)	28.6 (728)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	157 (71)
	10 (7.5)	26.9 (684)	9.87 (251)	8.31 (211)	5.63 (143)	168 (76)	30.6 (779)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	207 (94)
	15 (11)	29.3 (744)	9.87 (251)	8.31 (211)	5.63 (143)	198 (90)	33.0 (839)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	238 (108)

Gearmotors

Dimensions

Dimensions Gearmotors

Single Reduction LHYM-5A110~5A145



All dimensions are in inches (mm).
For units ordered in the Y2 mounting configuration, please refer to page 3.92 for external lubricant piping dimensions.

Model	N	ØDC	J1	J2	M	P1	P2	G1	G2	H	H1	ØD1	ØD2	ØLA	S x L
5A110, 5A115	9.76 (248)	6.38 (162)													
5A120, 5A125	9.57 (243)	8.03 (204)	4.09 (104)	4.09 (104)	7.78 (198)	0.197 (5.00)	0.197 (5.00)	3.76 (95.5)	3.62 (92.0)	10.5 (267)	5.83 (148)	3.15 (80.0)	7.09 (180)	6.10 (155)	M10 x 0.984 (M10 x 25)
5A140, 5A145	10.4 (265)	9.06 (230)													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5A	2.000	+0.0018/0	0.500	2.22	(55)	(+0.046/0)	(16)	(59.3)

Gearmotors
Dimensions

Single Reduction LHYM-5A110~5A145 Dimensions

All dimensions are in inches (mm).

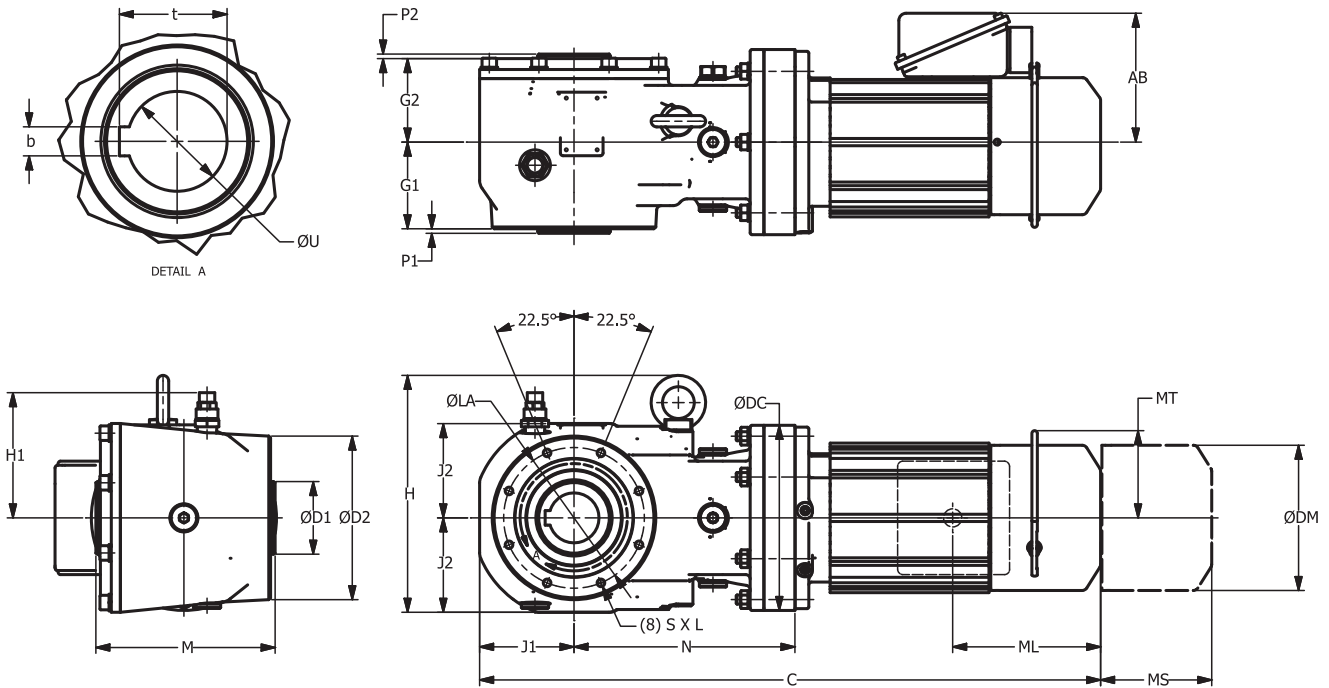
Model	4-Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lbs (kg)	C	ØDM	AB	ML	MS	MT	W lbs (kg)
5A110 5A115	1/2 (0.40)	21.4 (544)	4.88 (124)	5.04 (128)	2.3 (59)	97 (44)	22.7 (576)	4.88 (124)	5.04 (128)	3.58 (91)	2.40 (61)	— —	101 (46)
	3/4 (0.55)	23.0 (585)	6.29 (160)	5.63 (143)	3.8 (97)	104 (47)	24.7 (628)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	110 (50)
	1 (0.75)	23.0 (585)	6.29 (160)	5.63 (143)	3.8 (97)	104 (47)	24.7 (628)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	110 (50)
	1.5 (1.1)	24.3 (618)	6.65 (169)	5.83 (148)	3.94 (100)	112 (51)	26.7 (680)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	123 (56)
	2 (1.5)	24.3 (618)	6.65 (169)	5.83 (148)	3.94 (100)	112 (51)	26.7 (680)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	123 (56)
	3 (2.2)	25.1 (638)	7.16 (182)	6.10 (155)	4.13 (105)	121 (55)	27.6 (701)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	137 (62)
	5 (3.7)	26.5 (673)	8.73 (222)	6.54 (166)	5.00 (127)	141 (64)	29.3 (745)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	163 (74)
5A120 5A125	1/2 (0.40)	21.5 (548)	4.88 (124)	5.04 (128)	2.3 (59)	110 (50)	22.8 (580)	4.88 (124)	5.04 (128)	3.58 (91)	2.40 (61)	— —	112 (51)
	3/4 (0.55)	23.0 (584)	6.29 (160)	5.63 (143)	3.8 (97)	115 (52)	24.7 (627)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	121 (55)
	1 (0.75)	23.0 (584)	6.29 (160)	5.63 (143)	3.8 (97)	115 (52)	24.7 (627)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	121 (55)
	1.5 (1.1)	24.3 (617)	6.65 (169)	5.83 (148)	3.94 (100)	123 (56)	26.7 (679)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	135 (61)
	2 (1.5)	24.3 (617)	6.65 (169)	5.83 (148)	3.94 (100)	123 (56)	26.7 (679)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	135 (61)
	3 (2.2)	25.0 (637)	7.16 (182)	6.10 (155)	4.13 (105)	132 (60)	27.5 (700)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	148 (67)
	5 (3.7)	26.0 (660)	8.73 (222)	6.54 (166)	5.00 (127)	154 (70)	28.8 (732)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	174 (79)
	7.5 (5.5)	27.7 (704)	8.73 (222)	6.54 (166)	5.00 (127)	170 (77)	30.5 (776)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	190 (86)
	10 (7.5)	28.8 (732)	9.87 (251)	8.31 (211)	5.63 (143)	201 (91)	32.5 (827)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	240 (109)
	15 (11)	31.1 (792)	9.87 (251)	8.31 (211)	5.63 (143)	232 (105)	34.9 (887)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	271 (123)
5A140 5A145	1.5 (1.1)	25.1 (639)	6.65 (169)	5.83 (148)	3.94 (100)	141 (64)	27.6 (701)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	152 (69)
	2 (1.5)	25.1 (639)	6.65 (169)	5.83 (148)	3.94 (100)	141 (64)	27.6 (701)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	152 (69)
	3 (2.2)	25.9 (659)	7.16 (182)	6.10 (155)	4.13 (105)	148 (67)	28.4 (722)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	163 (74)
	5 (3.7)	26.8 (682)	8.73 (222)	6.54 (166)	5.00 (127)	170 (77)	29.7 (754)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	190 (86)
	7.5 (5.5)	28.5 (726)	8.73 (222)	6.54 (166)	5.00 (127)	185 (84)	31.4 (798)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	207 (94)
	10 (7.5)	29.5 (749)	9.87 (251)	8.31 (211)	5.63 (143)	218 (99)	33.2 (844)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	258 (117)
	15 (11)	31.8 (809)	9.87 (251)	8.31 (211)	5.63 (143)	249 (113)	35.5 (904)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	289 (131)
	20 (15)	35.4 (899)	12.7 (324)	10.3 (262)	11.6 (295)	364 (165)	39.5 (1004)	12.7 (324)	10.3 (262)	15.2 (385)	8.66 (220)	— —	441 (200)

Gearmotors

Dimensions

Dimensions Gearmotors

Single Reduction LHYM-5B120~5B165



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.92 for external lubricant piping dimensions.

Model	N	ØDC	J1	J2	M	P1	P2	G1	G2	H	H1	ØD1	ØD2	ØLA	S x L
5B120, 5B125	11.0 (280)	8.03 (204)													
5B140, 5B145	11.7 (297)	9.06 (230)	4.96 (126)	4.82 (123)	9.82 (250)	0.118 (3.00)	0.197 (5.00)	4.80 (122)	4.70 (120)	11.7 (298)	6.42 (163)	3.54 (90.0)	7.83 (199)	6.89 (175)	M12 x 0.787 (M12 x 20)
5B160, 5B165	12.8 (326)	11.8 (300)													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5B	2.375	+0.0018/0	0.625	2.65	(65)	(+0.046/0)	(18)	(69.4)

Single Reduction LHYM-5B120~5B165 Dimensions

All dimensions are in inches (mm).

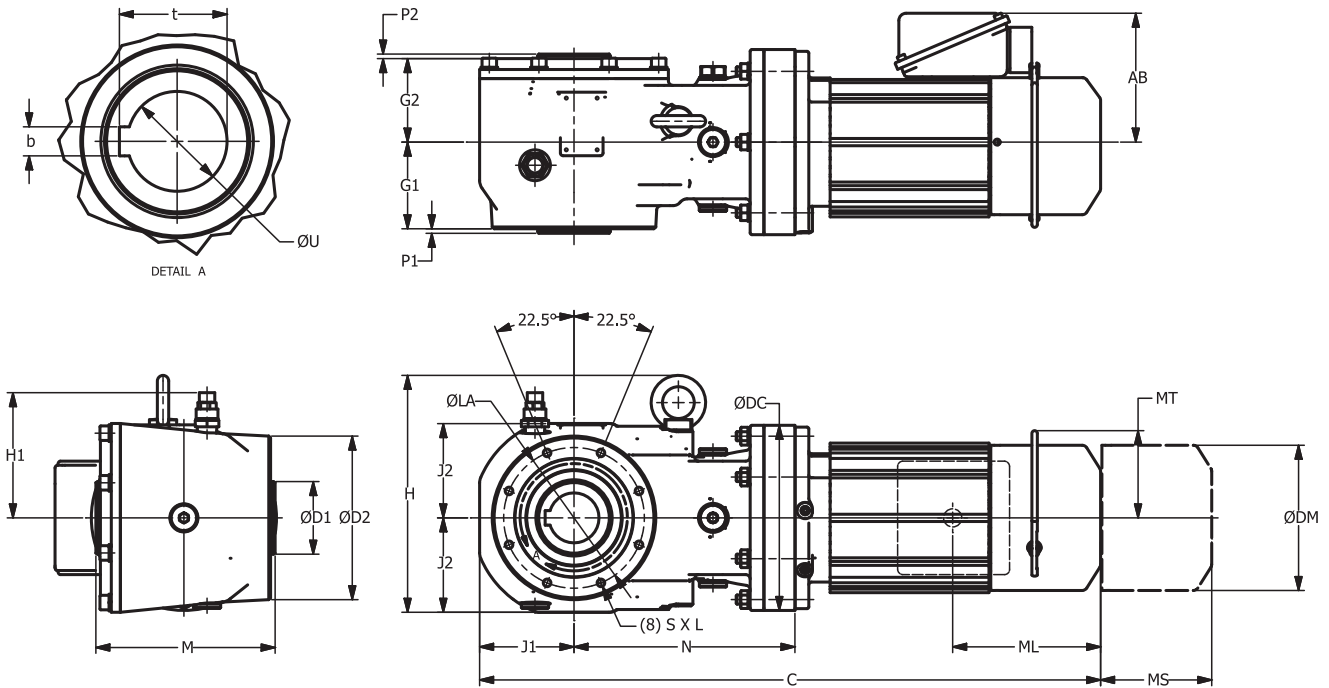
Model	4-Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lbs (kg)	C	ØDM	AB	ML	MS	MT	W lbs (kg)
5B120 5B125	1/2 (0.40)	23.9 (607)	4.88 (124)	5.04 (128)	2.3 (59)	157 (71)	25.1 (639)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	161 (73)
	3/4 (0.55)	25.3 (643)	6.29 (160)	5.63 (143)	3.8 (97)	161 (73)	27.0 (686)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	168 (76)
	1 (0.75)	25.3 (643)	6.29 (160)	5.63 (143)	3.8 (97)	161 (73)	27.0 (686)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	168 (76)
	1.5 (1.1)	26.6 (676)	6.65 (169)	5.83 (148)	3.94 (100)	170 (77)	29.0 (738)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	181 (82)
	2 (1.5)	26.6 (676)	6.65 (169)	5.83 (148)	3.94 (100)	170 (77)	29.0 (738)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	181 (82)
	3 (2.2)	27.4 (696)	7.16 (182)	6.10 (155)	4.13 (105)	179 (81)	29.8 (759)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	194 (88)
	5 (3.7)	28.3 (719)	8.73 (222)	6.54 (166)	5.00 (127)	201 (91)	31.1 (791)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	221 (100)
	7.5 (5.5)	30.0 (763)	8.73 (222)	6.54 (166)	5.00 (127)	216 (98)	32.8 (835)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	236 (107)
5B140 5B145	3/4 (0.55)	26.0 (660)	6.29 (160)	5.63 (143)	3.8 (97)	185 (84)	27.6 (703)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	192 (87)
	1 (0.75)	26.0 (660)	6.29 (160)	5.63 (143)	3.8 (97)	185 (84)	27.6 (703)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	192 (87)
	1.5 (1.1)	27.3 (693)	6.65 (169)	5.83 (148)	3.94 (100)	194 (88)	29.7 (755)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	205 (93)
	2 (1.5)	27.3 (693)	6.65 (169)	5.83 (148)	3.94 (100)	194 (88)	29.7 (755)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	205 (93)
	3 (2.2)	28.0 (713)	7.16 (182)	6.10 (155)	4.13 (105)	201 (91)	30.5 (776)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	216 (98)
	5 (3.7)	28.9 (736)	8.73 (222)	6.54 (166)	5.00 (127)	223 (101)	31.8 (808)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	243 (110)
	7.5 (5.5)	30.7 (780)	8.73 (222)	6.54 (166)	5.00 (127)	238 (108)	33.5 (852)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	260 (118)
	10 (7.5)	31.6 (803)	9.87 (251)	8.31 (211)	5.63 (143)	271 (123)	35.3 (898)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	311 (141)
	15 (11)	33.9 (863)	9.87 (251)	8.31 (211)	5.63 (143)	302 (137)	37.7 (958)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	342 (155)
	20 (15)	37.5 (953)	12.7 (324)	10.3 (262)	11.6 (295)	417 (189)	41.6 (1058)	12.7 (324)	10.3 (262)	15.2 (385)	8.66 (220)	—	494 (224)
5B160 5B165	2 (1.5)	28.6 (727)	6.65 (169)	5.83 (148)	3.94 (100)	240 (109)	31.0 (789)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	251 (114)
	3 (2.2)	29.2 (742)	7.16 (182)	6.10 (155)	4.13 (105)	247 (112)	31.7 (805)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	260 (118)
	5 (3.7)	30.1 (765)	8.73 (222)	6.54 (166)	5.00 (127)	267 (121)	32.9 (837)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	287 (130)
	7.5 (5.5)	31.8 (809)	8.73 (222)	6.54 (166)	5.00 (127)	282 (128)	34.6 (881)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	304 (138)
	10 (7.5)	32.9 (837)	9.87 (251)	8.31 (211)	5.63 (143)	318 (144)	36.6 (932)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	355 (161)
	15 (11)	35.3 (897)	9.87 (251)	8.31 (211)	5.63 (143)	348 (158)	39.0 (992)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	386 (175)
	20 (15)	38.6 (982)	12.7 (324)	10.3 (262)	11.6 (295)	465 (211)	42.7 (1087)	12.7 (324)	10.3 (262)	15.2 (385)	8.66 (220)	—	540 (245)
	25 (18.5)	42.4 (1077)	15.5 (394)	13.5 (342)	13.4 (340)	626 (284)	48.8 (1242)	15.5 (394)	13.5 (342)	21.7 (550)	14.5 (367)	—	734 (333)
	30 (22)	42.4 (1077)	15.5 (394)	13.5 (342)	13.4 (340)	626 (284)	48.8 (1242)	15.5 (394)	13.5 (342)	21.7 (550)	14.5 (367)	—	734 (333)

Gearmotors

Dimensions

Dimensions Gearmotors

Single Reduction LHYM-5C140~5C175



All dimensions are in inches (mm).
For units ordered in the Y2 mounting configuration, please refer to page 3.92 for external lubricant piping dimensions.

Model	N	ØDC	J1	J2	M	P1	P2	G1	G2	H	H1	ØD1	ØD2	ØLA	S x L
5C140, 5C145	14.0 (356)	9.06 (230)													
5C160, 5C165	14.8 (377)	11.8 (300)	6.26 (159)	6.26 (159)	10.8 (275)	0.118 (3.00)	0.197 (5.00)	4.88 (124)	5.61 (143)	14.4 (365)	7.83 (199)	3.94 (100)	9.61 (244)	8.35 (212)	M16 x 1.02 (M16 x 26)
5C170, 5C175	15.5 (393)	13.4 (340)													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5C	2.750	+0.0018/0	0.625	3.03	(75)	(+0.046/0)	(20)	(79.9)

Single Reduction LHYM-5C140~5C175 Dimensions

All dimensions are in inches (mm).

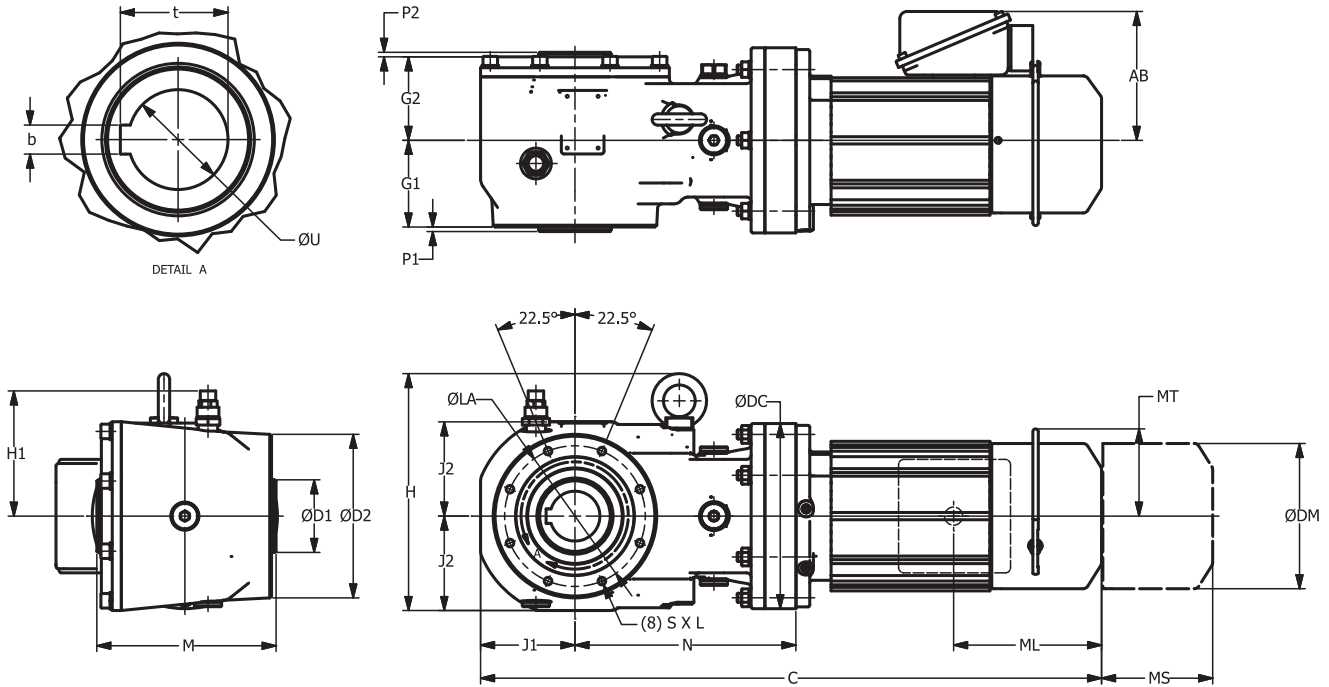
Model	4-Pole Motor HP (kW)	Without Brake					With Brake							
		C	ØDM	AB	ML	W lbs (kg)	C	ØDM	AB	ML	MS	MT	W lbs (kg)	
5C140 5C145	1 (0.75)	29.6 (752)	6.29 (160)	5.63 (143)	3.82 (97)	251 (114)	31.3 (795)	6.29 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	258 (117)	
	1.5 (1.1)	30.9 (785)	6.65 (169)	5.83 (148)	3.94 (100)	260 (118)	33.3 (847)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	271 (123)	
	2 (1.5)	30.9 (785)	6.65 (169)	5.83 (148)	3.94 (100)	260 (118)	33.3 (847)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	271 (123)	
	3 (2.2)	31.7 (805)	7.16 (182)	6.10 (155)	4.13 (105)	267 (121)	34.1 (868)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	282 (128)	
	5 (3.7)	32.6 (828)	8.73 (222)	6.54 (166)	5.00 (127)	289 (131)	35.4 (900)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	309 (140)	
	7.5 (5.5)	34.3 (872)	8.73 (222)	6.54 (166)	5.00 (127)	304 (138)	37.1 (944)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	326 (148)	
	10 (7.5)	35.2 (895)	9.87 (251)	8.31 (211)	5.63 (143)	337 (153)	38.9 (990)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	377 (171)	
	15 (11)	37.6 (955)	9.87 (251)	8.31 (211)	5.63 (143)	368 (167)	41.3 (1050)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	408 (185)	
	20 (15)	41.1 (1045)	12.7 (324)	10.3 (262)	11.6 (295)	483 (219)	45.2 (1150)	12.7 (324)	10.3 (262)	15.2 (385)	8.66 (220)	—	—	560 (254)
5C160 5C165	1.5 (1.1)	31.9 (811)	6.65 (169)	5.83 (148)	3.94 (100)	304 (138)	34.3 (873)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	315 (143)	
	2 (1.5)	31.9 (811)	6.65 (169)	5.83 (148)	3.94 (100)	304 (138)	34.3 (873)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	315 (143)	
	3 (2.2)	32.5 (826)	7.16 (182)	6.10 (155)	4.13 (105)	311 (141)	35.0 (889)	7.16 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	324 (147)	
	5 (3.7)	33.4 (849)	8.73 (222)	6.54 (166)	5.00 (127)	331 (150)	36.2 (921)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	351 (159)	
	7.5 (5.5)	35.1 (893)	8.73 (222)	6.54 (166)	5.00 (127)	346 (157)	37.9 (965)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	368 (167)	
	10 (7.5)	36.2 (921)	9.87 (251)	8.31 (211)	5.63 (143)	381 (173)	40.0 (1016)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	419 (190)	
	15 (11)	38.6 (981)	9.87 (251)	8.31 (211)	5.63 (143)	412 (187)	42.3 (1076)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	450 (204)	
	20 (15)	41.9 (1066)	12.7 (324)	10.3 (262)	11.6 (295)	529 (240)	46.1 (1171)	12.7 (324)	10.3 (262)	15.2 (385)	8.66 (220)	—	—	604 (274)
	25 (18.5)	45.7 (1161)	15.5 (394)	13.5 (342)	13.4 (340)	690 (313)	52.1 (1326)	15.5 (394)	13.5 (342)	21.7 (550)	14.5 (367)	—	—	798 (362)
	30 (22)	45.7 (1161)	15.5 (394)	13.5 (342)	13.4 (340)	690 (313)	52.1 (1326)	15.5 (394)	13.5 (342)	21.7 (550)	14.5 (367)	—	—	798 (362)
5C170 5C175	5 (3.7)	34.6 (880)	8.73 (222)	6.54 (166)	5.00 (127)	381 (173)	37.4 (952)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	404 (183)	
	7.5 (5.5)	36.3 (924)	8.73 (222)	6.54 (166)	5.00 (127)	397 (180)	39.2 (996)	8.73 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	419 (190)	
	10 (7.5)	37.0 (942)	9.87 (251)	8.31 (211)	5.63 (143)	430 (195)	40.8 (1037)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	470 (213)	
	15 (11)	39.4 (1002)	9.87 (251)	8.31 (211)	5.63 (143)	461 (209)	43.1 (1097)	9.87 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	501 (227)	
	20 (15)	42.6 (1082)	12.7 (324)	10.3 (262)	11.6 (295)	580 (263)	46.7 (1187)	12.7 (324)	10.3 (262)	15.2 (385)	8.66 (220)	—	—	653 (296)
	25 (18.5)	46.3 (1177)	15.5 (394)	13.5 (342)	13.4 (340)	745 (338)	52.8 (1342)	15.5 (394)	13.5 (342)	21.7 (550)	14.5 (367)	—	—	845 (383)
	30 (22)	46.3 (1177)	15.5 (394)	13.5 (342)	13.4 (340)	745 (338)	52.8 (1342)	15.5 (394)	13.5 (342)	21.7 (550)	14.5 (367)	—	—	845 (383)
	40 (30)	46.3 (1177)	15.5 (394)	13.5 (342)	13.4 (340)	772 (350)	52.8 (1342)	15.5 (394)	13.5 (342)	21.7 (550)	14.6 (370)	—	—	871 (395)

Gearmotors

Dimensions

Dimensions Gearmotors

Single Reduction - AF-Motor LHYM-5Z100~5Z125



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.92 for external lubricant piping dimensions.

Model	N	$\varnothing DC$	J1	J2	M	P1	P2	G1	G2	H	H1	$\varnothing D1$	$\varnothing D2$	$\varnothing LA$	S x L
5Z100	8.11	5.91													
5Z105	(206)	(150)													
5Z110	8.43	6.38	3.50	3.58	7.17	0.12	0.10	3.54	3.41	8.66	5.31	2.56	6.30	5.59	M8 x 0.787
5Z115	(214)	(162)	(89)	(91)	(182)	(3.0)	(2.5)	(90)	(87)	(220)	(135)	(65)	(160)	(142)	(M8 x 20)
5Z120	8.27	8.03													
5Z125	(210)	(204)													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	$\varnothing U$	$\varnothing U$ Tolerance	b	t	$\varnothing U$	$\varnothing U$ Tolerance	b	t
5Z	1.500	+0.0015/0	0.375	1.67	(45)	(+0.039/0)	(14)	(48.8)

Single Reduction - AF-Motor LHYM-5Z100~5Z125 Dimensions

All dimensions are in inches (mm).

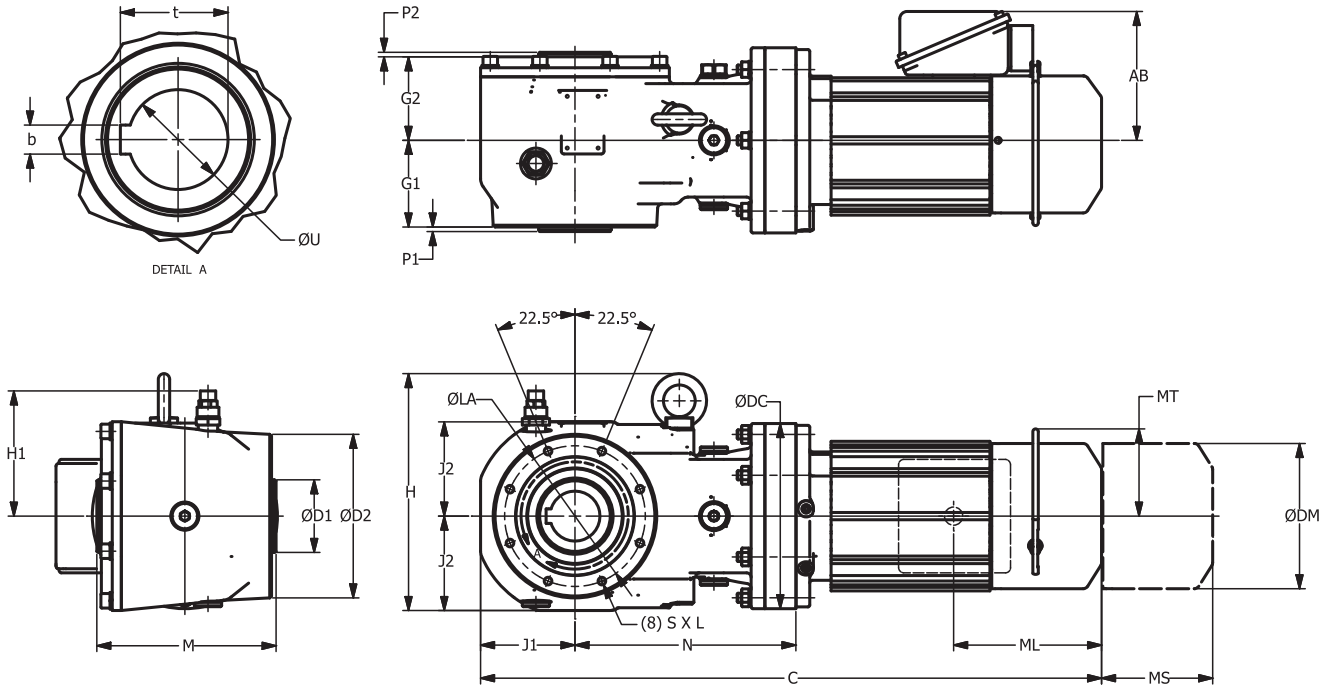
Model	4 Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)
5Z100 5Z105	1/4 (0.19)	19.3 (491)	4.88 (124)	5.04 (128)	2.32 (59)	60 (27)	20.6 (523)	4.88 (124)	5.04 (128)	3.58 (91)	2.40 (61)	—	62 (28)
	1/2 (0.37)	20.9 (532)	6.30 (160)	5.63 (143)	3.82 (97)	68 (31)	22.6 (575)	6.30 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	75 (34)
	1 (0.75)	22.2 (565)	6.65 (169)	5.83 (148)	3.94 (100)	77 (35)	24.7 (627)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	88 (40)
	2 (1.5)	23.0 (585)	7.17 (182)	6.10 (155)	4.13 (105)	86 (39)	25.5 (648)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	99 (45)
	3 (2.2)	25.4 (644)	8.74 (222)	6.54 (166)	5.00 (127)	110 (50)	28.2 (716)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	135 (61)
5Z110 5Z115	1/2 (0.37)	21.1 (536)	6.30 (160)	5.63 (143)	3.82 (97)	73 (33)	22.8 (579)	6.30 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	79 (36)
	1 (0.75)	22.4 (569)	6.65 (169)	5.83 (148)	3.94 (100)	82 (37)	24.8 (631)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	93 (42)
	2 (1.5)	23.2 (589)	7.17 (182)	6.10 (155)	4.13 (105)	90 (41)	25.7 (652)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	106 (48)
	3 (2.2)	24.6 (624)	8.74 (222)	6.54 (166)	5.00 (127)	110 (50)	27.4 (696)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	132 (60)
	5 (3.7)	26.3 (668)	8.74 (222)	8.31 (211)	5.63 (143)	126 (57)	29.1 (740)	8.74 (222)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	146 (66)
	7.5 (5.6)	26.8 (681)	9.88 (251)	8.31 (211)	5.63 (143)	159 (72)	30.6 (776)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	198 (90)
5Z120 5Z125	1/2 (0.37)	21.1 (536)	6.30 (160)	5.63 (143)	3.82 (97)	82 (37)	22.8 (579)	6.30 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	88 (40)
	1 (0.75)	22.4 (569)	6.65 (169)	5.83 (148)	3.94 (100)	90 (41)	24.8 (631)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	101 (46)
	2 (1.5)	23.2 (589)	7.17 (182)	6.10 (155)	4.13 (105)	99 (45)	25.7 (652)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	115 (52)
	3 (2.2)	24.1 (612)	8.74 (222)	6.54 (166)	5.00 (127)	121 (55)	26.9 (684)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	141 (64)
	5 (3.7)	25.8 (656)	8.74 (222)	8.31 (211)	5.63 (143)	137 (62)	28.7 (728)	8.74 (222)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	157 (71)
	7.5 (5.6)	26.9 (684)	9.88 (251)	8.31 (211)	5.63 (143)	168 (76)	30.7 (779)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	207 (94)
	10 (7.5)	29.3 (744)	9.88 (251)	8.31 (211)	5.63 (143)	198 (90)	33.0 (839)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	238 (108)

Gearmotors

Dimensions

Dimensions Gearmotors

Single Reduction - AF-Motor LHYM-5A110~5A145



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.92 for external lubricant piping dimensions.

Model	N	ØDC	J1	J2	M	P1	P2	G1	G2	H	H1	ØD1	ØD2	ØLA	S x L
5A110	9.76	6.38	4.09 (104)	4.09 (104)	7.78 (198)	0.20 (5.0)	0.20 (5.0)	3.76 (96)	3.62 (92)	10.5 (267)	5.83 (148)	3.15 (80)	7.09 (180)	6.10 (155)	M10 x 0.984 (M10 x 25)
5A115	(248)	(162)													
5A120	9.57	8.03													
5A125	(243)	(204)													
5A140	10.4	9.06													
5A145	(265)	(230)													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5A	2.000	+0.0018/0	0.500	2.22	(55)	(+0.046/0)	(16)	(59.3)

Single Reduction - AF-Motor LHYM-5A110~5A145 Dimensions

All dimensions are in inches (mm).

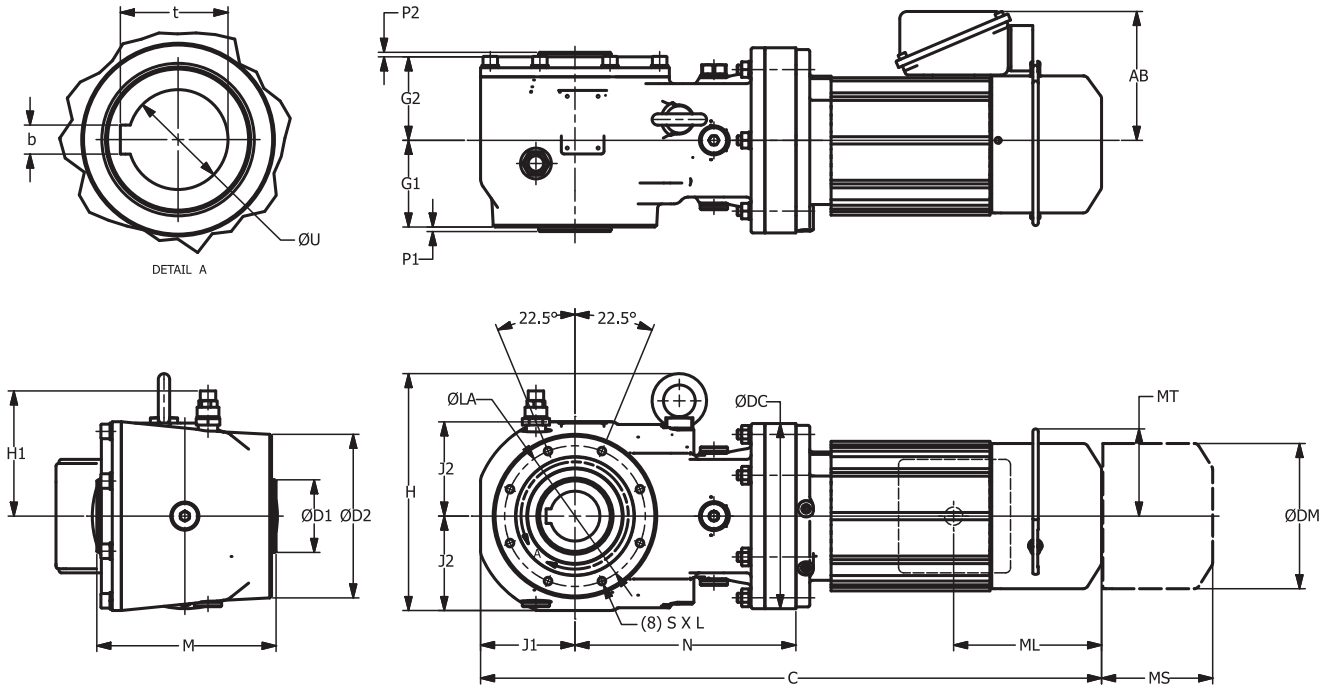
Model	4 Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)
5A110 5A115	1/2 (0.37)	23.0 (585)	6.30 (160)	5.63 (143)	3.82 (97)	104 (47)	24.7 (628)	6.30 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	110 (50)
	1 (0.75)	24.3 (618)	6.65 (169)	5.83 (148)	3.94 (100)	112 (51)	26.8 (680)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	123 (56)
	2 (1.5)	25.1 (638)	7.17 (182)	6.10 (155)	4.13 (105)	121 (55)	27.6 (701)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	137 (62)
	3 (2.2)	26.5 (673)	8.74 (222)	6.54 (166)	5.00 (127)	141 (64)	29.3 (745)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	163 (74)
5A120 5A125	1/2 (0.37)	23.0 (584)	6.30 (160)	5.63 (143)	3.8 (97)	115 (52)	24.7 (627)	6.30 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	121 (55)
	1 (0.75)	24.3 (617)	6.65 (169)	5.83 (148)	3.94 (100)	123 (56)	26.7 (679)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	135 (61)
	2 (1.5)	25.1 (637)	7.17 (182)	6.10 (155)	4.13 (105)	132 (60)	27.6 (700)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	148 (67)
	3 (2.2)	26.0 (660)	8.74 (222)	6.54 (166)	5.00 (127)	154 (70)	28.8 (732)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	174 (79)
	5 (3.7)	27.7 (704)	8.74 (222)	8.31 (211)	5.63 (143)	170 (77)	30.6 (776)	8.74 (222)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	190 (86)
	7.5 (5.6)	28.8 (732)	9.88 (251)	8.31 (211)	5.63 (143)	201 (91)	32.6 (827)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	240 (109)
	10 (7.5)	31.2 (792)	9.88 (251)	8.31 (211)	5.63 (143)	232 (105)	34.9 (887)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	271 (123)
5A140 5A145	2 (1.5)	25.9 (659)	7.17 (182)	6.10 (155)	4.13 (105)	148 (67)	28.4 (722)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	163 (74)
	3 (2.2)	26.9 (682)	8.74 (222)	6.54 (166)	5.00 (127)	170 (77)	29.7 (754)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	190 (86)
	5 (3.7)	28.6 (726)	8.74 (222)	8.31 (211)	5.63 (143)	185 (84)	31.4 (798)	8.74 (222)	8.31 (211)	7.83 (199)	5.20 (132)	6.18 (157)	207 (94)
	7.5 (5.6)	29.5 (749)	9.88 (251)	8.31 (211)	5.63 (143)	218 (99)	33.2 (844)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	258 (117)
	10 (7.5)	31.9 (809)	9.88 (251)	8.31 (211)	5.63 (143)	249 (113)	35.6 (904)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	289 (131)
	15 (11)	35.4 (899)	12.8 (324)	9.13 (232)	11.6 (295)	364 (165)	39.53 (1004)	12.8 (324)	9.13 (232)	15.16 (385)	8.66 (220)	—	—

Gearmotors

Dimensions

Dimensions Gearmotors

Single Reduction - AF-Motor LHYM-5B120~5B165



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.92 for external lubricant piping dimensions.

Model	N	ØDC	J1	J2	M	P1	P2	G1	G2	H	H1	ØD1	ØD2	ØLA	S x L
5B120	11.0	8.03	4.96 (126)	4.82 (123)	9.82 (250)	0.12 (3.0)	0.20 (5.0)	4.80 (122)	4.70 (120)	11.7 (298)	6.42 (163)	3.54 (90)	7.83 (199)	6.89 (175)	M12 x 0.787 (M12 x 20)
5B125	(280)	(204)													
5B140	11.7	9.06													
5B145	(297)	(230)													
5B160	12.8	11.8													
5B165	(326)	(300)													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5B	2.375	+0.0018/0	0.625	2.65	(65)	(+0.046/0)	(18)	(69.4)

Single Reduction - AF-Motor LHYM-5B120~5B165 Dimensions

All dimensions are in inches (mm).

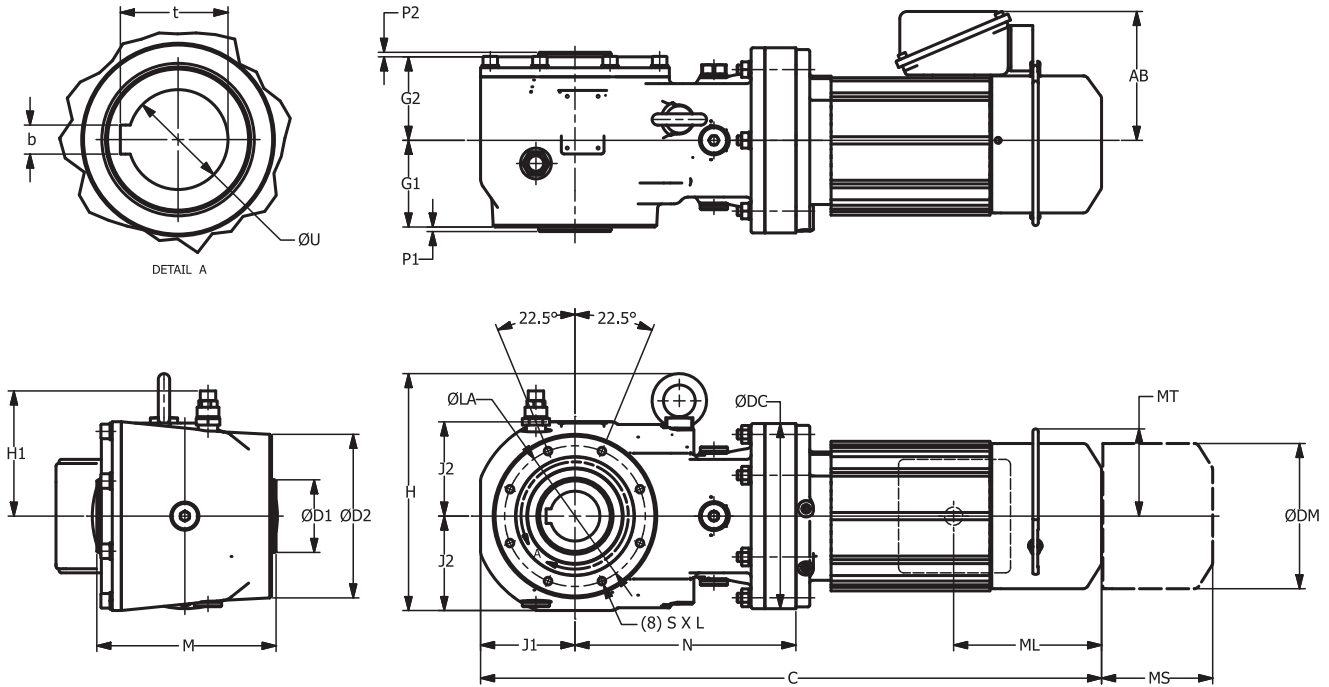
Model	4 Pole Motor HP (kW)	Without Brake					With Brake							
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)	
5B120 5B125	1/2 (0.37)	25.3 (643)	6.30 (160)	5.63 (143)	3.82 (97)	161 (73)	27.0 (686)	6.30 (160)	5.63 (143)	5.51 (140)	3.66 (93)	4.17 (106)	168 (76)	
	1 (0.75)	26.6 (676)	6.65 (169)	5.83 (148)	3.94 (100)	170 (77)	29.1 (738)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	181 (82)	
	2 (1.5)	27.4 (696)	7.17 (182)	6.10 (155)	4.13 (105)	179 (81)	29.9 (759)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	194 (88)	
	3 (2.2)	28.3 (719)	8.74 (222)	6.54 (166)	5.00 (127)	201 (91)	31.1 (791)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	221 (100)	
	5 (3.7)	30.0 (763)	8.74 (222)	8.31 (211)	5.63 (143)	216 (98)	32.9 (835)	8.74 (222)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	236 (107)	
5B140 5B145	1 (0.75)	27.3 (693)	6.65 (169)	5.83 (148)	3.94 (100)	194 (88)	29.7 (755)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	205 (93)	
	2 (1.5)	28.1 (713)	7.17 (182)	6.10 (155)	4.13 (105)	201 (91)	30.6 (776)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	216 (98)	
	3 (2.2)	29.0 (736)	8.74 (222)	6.54 (166)	5.00 (127)	223 (101)	31.8 (808)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	243 (110)	
	5 (3.7)	30.7 (780)	8.74 (222)	6.54 (166)	5.00 (127)	238 (108)	33.5 (852)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	260 (118)	
	7.5 (5.6)	31.6 (803)	9.88 (251)	8.31 (211)	5.63 (143)	271 (123)	35.4 (898)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	311 (141)	
	10 (7.5)	34.0 (863)	9.88 (251)	8.31 (211)	5.63 (143)	302 (137)	37.7 (958)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	342 (155)	
	15 (11)	37.5 (953)	12.8 (324)	9.13 (232)	11.6 (295)	417 (189)	41.65 (1058)	12.8 (324)	9.13 (232)	15.2 (385)	8.66 (220)	—	—	494 (224)
5B160 5B165	2 (1.5)	29.2 (742)	7.17 (182)	6.10 (155)	4.13 (105)	247 (112)	31.7 (805)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	260 (118)	
	3 (2.2)	30.1 (765)	8.74 (222)	6.54 (166)	5.00 (127)	267 (121)	33.0 (837)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	287 (130)	
	5 (3.7)	31.9 (809)	8.74 (222)	6.54 (166)	5.00 (127)	282 (128)	34.7 (881)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	304 (138)	
	7.5 (5.6)	33.0 (837)	9.88 (251)	8.31 (211)	5.63 (143)	318 (144)	36.7 (932)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	355 (161)	
	10 (7.5)	35.3 (897)	9.88 (251)	8.31 (211)	5.63 (143)	348 (158)	39.1 (992)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	386 (175)	
	15 (11)	38.7 (982)	12.8 (324)	9.13 (232)	11.6 (295)	465 (211)	42.8 (1087)	12.8 (324)	9.13 (232)	15.2 (385)	8.66 (220)	—	—	540 (245)
	20 (15)	42.4 (1077)	15.5 (394)	11.7 (297)	13.4 (340)	626 (284)	48.9 (1242)	15.5 (394)	11.7 (297)	21.7 (550)	14.5 (367)	—	—	734 (333)

Gearmotors

Dimensions

Dimensions Gearmotors

Single Reduction - AF-Motor LHYM-5C140~5C175



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.92 for external lubricant piping dimensions.

Model	N	ØDC	J1	J2	M	P1	P2	G1	G2	H	H1	ØD1	ØD2	ØLA	S x L
5C140 5C145	14.0 (356)	9.06 (230)	6.26 (159)	6.26 (159)	10.8 (275)	0.12 (3.0)	0.20 (5.0)	4.88 (124)	5.61 (143)	14.4 (365)	7.83 (199)	3.94 (100)	9.61 (244)	8.35 (212)	M16 x 1.02 (M16x26)
5C160 5C165	14.8 (377)	11.8 (300)													
5C170 5C175	15.5 (393)	13.4 (340)													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5C	2.750	+0.0018/0	0.625	3.03	(75)	(+0.046/0)	(20)	(79.9)

Single Reduction - AF-Motor LHYM-5C140~5C175 Dimensions

All dimensions are in inches (mm).

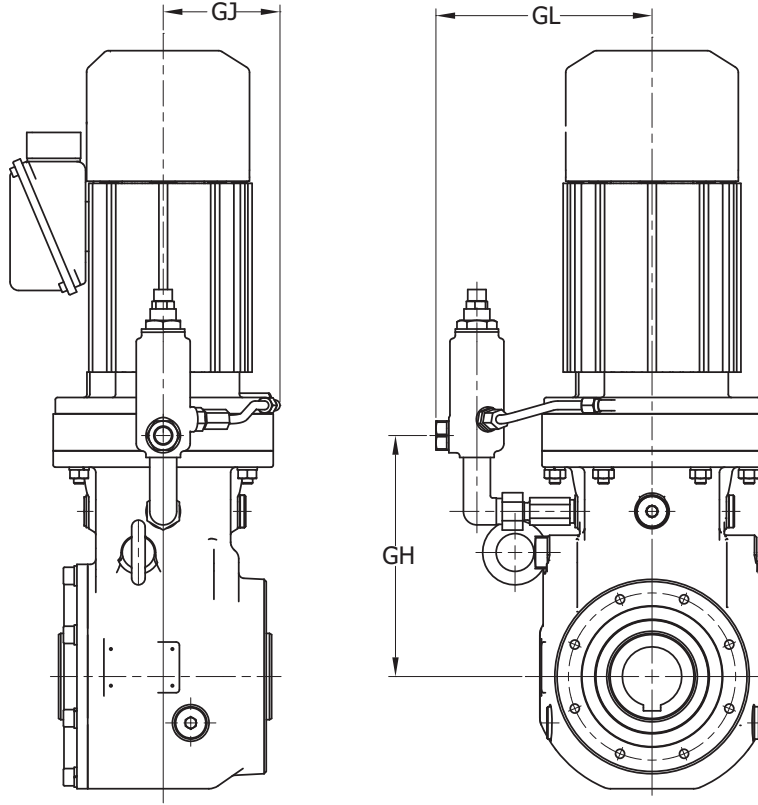
Model	4 Pole Motor HP (kW)	Without Brake					With Brake							
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)	
5C140 5C145	1 (0.75)	30.9 (785)	6.65 (169)	5.83 (148)	3.94 (100)	260 (118)	33.3 (847)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	271 (123)	
	2 (1.5)	31.7 (805)	7.17 (182)	6.10 (155)	4.13 (105)	267 (121)	34.2 (868)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	282 (128)	
	3 (2.2)	32.6 (828)	8.74 (222)	6.54 (166)	5.00 (127)	289 (131)	35.4 (900)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	309 (140)	
	5 (3.7)	34.3 (872)	8.74 (222)	6.54 (166)	5.00 (127)	304 (138)	37.2 (944)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	326 (148)	
	7.5 (5.6)	35.2 (895)	9.88 (251)	8.31 (211)	5.63 (143)	337 (153)	39.0 (990)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	377 (171)	
	10 (7.5)	37.6 (955)	9.88 (251)	8.31 (211)	5.63 (143)	368 (167)	41.3 (1050)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	408 (185)	
	15 (11)	41.1 (1045)	12.8 (324)	9.13 (232)	11.6 (295)	483 (219)	45.3 (1150)	12.8 (324)	9.13 (232)	15.2 (385)	8.66 (220)	—	—	560 (254)
5C160 5C165	2 (1.5)	32.5 (826)	7.17 (182)	6.10 (155)	4.13 (105)	311 (141)	35.0 (889)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	324 (147)	
	3 (2.2)	33.4 (849)	8.74 (222)	6.54 (166)	5.00 (127)	331 (150)	36.3 (921)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	351 (159)	
	5 (3.7)	35.2 (893)	8.74 (222)	6.54 (166)	5.00 (127)	346 (157)	38.0 (965)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	368 (167)	
	7.5 (5.6)	36.3 (921)	9.88 (251)	8.31 (211)	5.63 (143)	381 (173)	40.00 (1016)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	419 (190)	
	10 (7.5)	38.6 (981)	9.88 (251)	8.31 (211)	5.63 (143)	412 (187)	42.36 (1076)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	450 (204)	
	15 (11)	42.0 (1066)	12.8 (324)	9.13 (232)	11.6 (295)	529 (240)	46.10 (1171)	12.8 (324)	9.13 (232)	15.16 (385)	8.66 (220)	—	—	604 (274)
	20 (15)	45.7 (1161)	15.5 (394)	11.7 (297)	13.4 (340)	690 (313)	52.20 (1326)	15.5 (394)	11.7 (297)	21.65 (550)	14.45 (367)	—	—	798 (362)
	25 (19)	45.7 (1161)	15.5 (394)	11.69 (297)	13.39 (340)	712 (323)	52.20 (1326)	15.5 (394)	11.69 (297)	21.65 (550)	14.57 (370)	—	—	822 (373)
	30 (22)	45.7 (1161)	15.5 (394)	11.69 (297)	13.39 (340)	712 (323)	52.20 (1326)	15.5 (394)	11.69 (297)	21.65 (550)	14.57 (370)	—	—	822 (373)
5C170 5C175	5 (3.7)	36.4 (924)	8.74 (222)	6.54 (166)	5.00 (127)	397 (180)	39.2 (996)	8.74 (222)	6.54 (166)	7.83 (199)	5.20 (132)	6.18 (157)	419 (190)	
	7.5 (5.6)	37.1 (942)	9.88 (251)	8.31 (211)	5.63 (143)	430 (195)	40.83 (1037)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	470 (213)	
	10 (7.5)	39.45 (1002)	9.88 (251)	8.31 (211)	5.63 (143)	461 (209)	43.19 (1097)	9.88 (251)	8.31 (211)	9.37 (238)	6.69 (170)	7.17 (182)	501 (227)	
	15 (11)	42.6 (1082)	12.8 (324)	9.13 (232)	11.6 (295)	580 (263)	46.73 (1187)	12.8 (324)	9.13 (232)	15.2 (385)	8.66 (220)	—	—	653 (296)
	20 (15)	46.34 (1177)	15.5 (394)	11.7 (297)	13.4 (340)	745 (338)	52.83 (1342)	15.5 (394)	11.7 (297)	21.7 (550)	14.5 (367)	—	—	845 (383)
	25 (19)	46.34 (1177)	15.5 (394)	11.7 (297)	13.4 (340)	772 (350)	52.83 (1342)	15.5 (394)	11.7 (297)	21.7 (550)	14.6 (370)	—	—	871 (395)
	30 (22)	46.34 (1177)	15.5 (394)	11.7 (297)	13.4 (340)	772 (350)	52.83 (1342)	15.5 (394)	11.7 (297)	21.7 (550)	14.6 (370)	—	—	871 (395)

Gearmotors

Dimensions

Dimensions Gearmotors

Single Reduction, Y2 External Lubricant Piping LHYM-5Z100~5C175



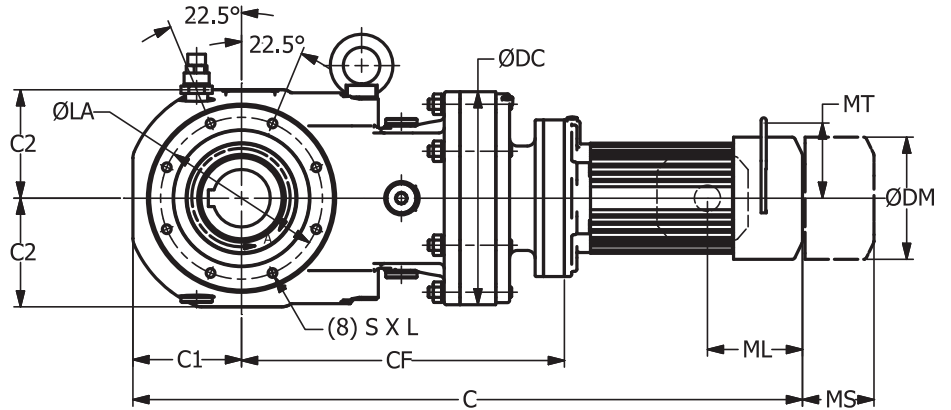
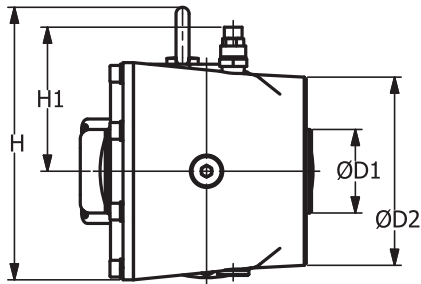
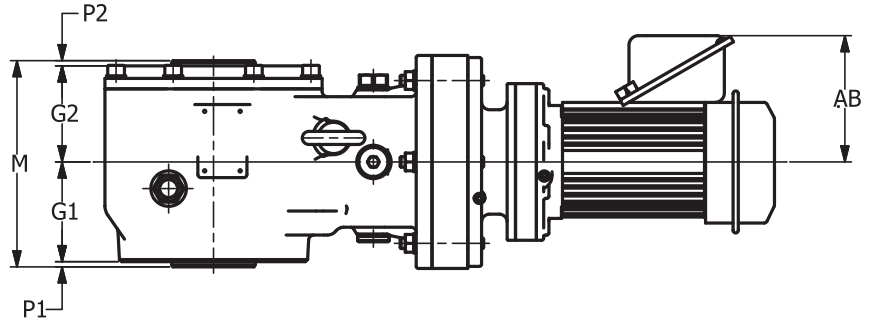
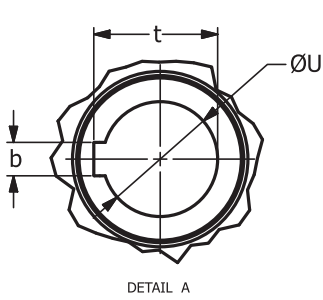
All dimensions are in inches (mm).

Frame Size	GL	GH	GJ
5Z100	5.98	7.44	3.8
5Z105	(152)	(189)	(96)
5Z110	6.85	7.64	4.02
5Z115	(174)	(194)	(102)
5Z120	7.99	7.60	5.28
5Z125	(203)	(193)	(134)
5A110	6.85	8.98	4.02
5A115	(174)	(228)	(102)
5A120	7.99	8.90	5.28
5A125	(203)	(226)	(134)
5A140	9.09	9.61	5.28
5A145	(231)	(244)	(134)
5B120	7.99	10.4	5.28
5B125	(203)	(263)	(134)
5B140	9.09	10.9	5.28
5B145	(231)	(276)	(134)
5B160	10.28	11.5	6.61
5B165	(261)	(293)	(168)
5C140	9.09	13.1	5.28
5C145	(231)	(334)	(134)
5C160	10.2	13.5	6.61
5C165	(260)	(344)	(168)
5C170	11.4	14.1	7.32
5C175	(289)	(358)	(186)

This page intentionally left blank.

Dimensions Gearmotors

Double Reduction LHYM-5Z10DA~5A12DB



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.104 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S x L
5Z10DA 5Z12DA 5Z12DB	8.43 (214)	5.33 (135)	2.56 (65)	6.30 (160)	7.17 (182)	3.54 (90.0)	3.41 (86.5)	0.12 (3.0)	0.10 (2.5)	3.58 (91)	3.58 (91)	5.59 (142)	M8 x 0.78 (M8 x 20)
5A12DA 5A12DB	10.1 (257)	5.43 (138)	3.15 (80)	7.09 (180)	7.78 (198)	3.76 (95.5)	3.62 (92.0)	0.20 (5.0)	0.20 (5.0)	4.09 (104)	4.09 (104)	6.10 (155)	M10 x 0.98 (M10 x 25)

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5Z	1.500	+0.0015/0	0.375	1.67	(45)	(+0.039/0)	(14)	(48.8)
5A	2.000	+0.0018/0	0.500	2.22	(55)	(+0.046/0)	(16)	(59.3)

Double Reduction LHYM-5Z10DA~5A12DB Dimensions

All dimensions are in inches (mm).

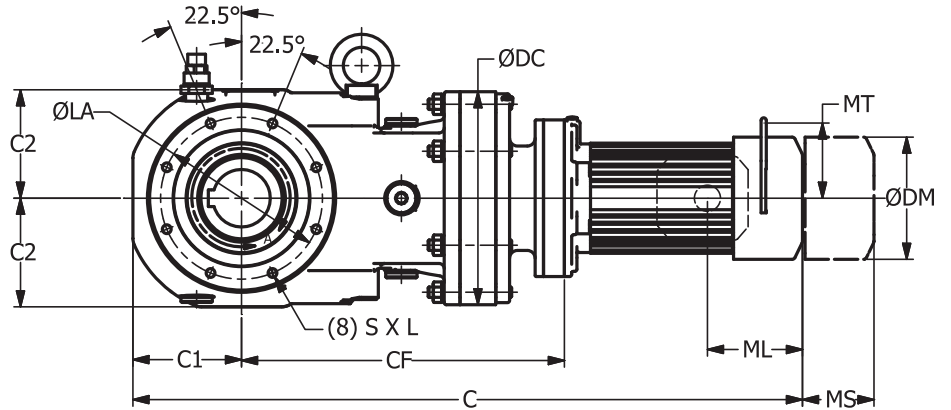
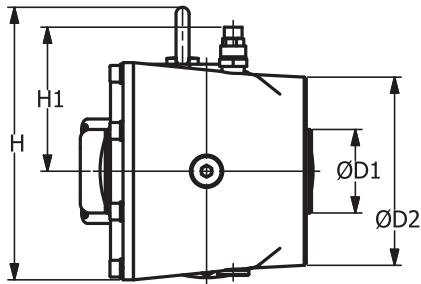
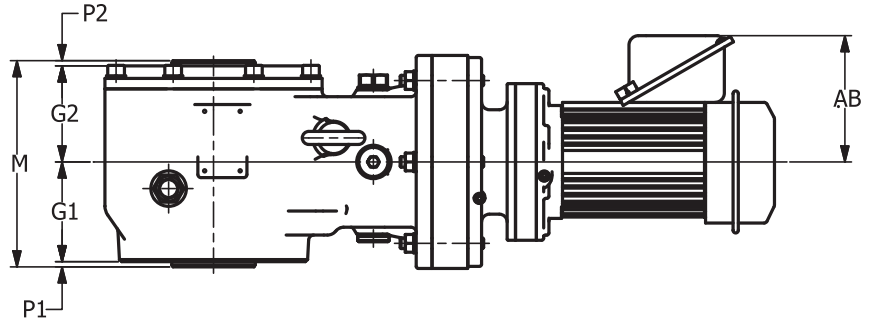
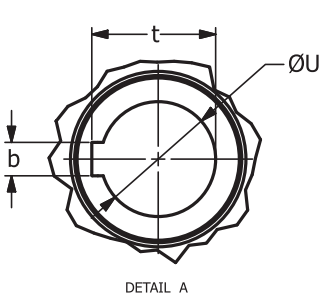
Model	4 Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)
5Z10DA	1/8 (0.09)	18.8 (478)	4.69 (119)	5.04 (128)	2.3 (59)	60 (27)	20.2 (513)	4.69 (119)	5.04 (128)	2.76 (70)	2.4 (61)	—	64 (29)
	1/4 (0.19)	20.5 (520)	4.88 (124)	5.04 (128)	2.3 (59)	62 (28)	21.7 (552)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	66 (30)
	1/3 (0.25)	20.5 (520)	4.88 (124)	5.04 (128)	2.3 (59)	62 (28)	21.7 (552)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	66 (30)
	1/2 (0.37)	21.3 (540)	4.88 (124)	5.04 (128)	2.3 (59)	64 (29)	22.5 (572)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	68 (31)
5Z12DA	1/8 (0.09)	19.2 (487)	4.69 (119)	5.04 (128)	1.4 (35)	75 (34)	20.6 (522)	4.88 (124)	5.04 (128)	2.76 (70)	2.4 (61)	—	77 (35)
	1/4 (0.19)	20.8 (529)	4.88 (124)	5.04 (128)	2.3 (59)	77 (35)	22.1 (561)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	79 (36)
	1/3 (0.25)	20.8 (529)	4.88 (124)	5.04 (128)	2.3 (59)	77 (35)	22.1 (561)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	79 (36)
	1/2 (0.37)	21.6 (549)	4.88 (124)	5.04 (128)	2.3 (59)	79 (36)	22.9 (581)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	84 (38)
5Z12DB	1/8 (0.09)	19.6 (499)	4.69 (119)	5.04 (128)	1.4 (35)	82 (37)	21.0 (534)	4.69 (119)	5.04 (128)	2.76 (70)	2.4 (61)	—	86 (39)
	1/4 (0.19)	21.3 (541)	4.88 (124)	5.04 (128)	2.3 (59)	84 (38)	22.6 (573)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	88 (40)
	1/3 (0.25)	21.3 (541)	4.88 (124)	5.04 (128)	2.3 (59)	84 (38)	22.6 (573)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	88 (40)
	1/2 (0.37)	22.1 (561)	4.88 (124)	5.04 (128)	2.3 (59)	88 (40)	23.3 (593)	4.88 (124)	5.04 (128)	3.58 (91)	2.4 (61)	—	90 (41)
5A12DA	1/8 (0.09)	21.1 (535)	4.69 (119)	5.04 (128)	1.4 (35)	108 (49)	22.4 (570)	4.88 (124)	5.04 (128)	2.8 (70)	2.4 (61)	—	112 (51)
	1/4 (0.19)	22.7 (577)	4.88 (124)	5.04 (128)	2.3 (59)	110 (50)	24.0 (609)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	115 (52)
	1/3 (0.25)	22.7 (577)	4.88 (124)	5.04 (128)	2.3 (59)	110 (50)	24.0 (609)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	115 (52)
	1/2 (0.37)	23.5 (597)	4.88 (124)	5.04 (128)	2.3 (59)	115 (52)	24.8 (629)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	117 (53)
5A12DB	1/8 (0.09)	21.5 (547)	4.69 (119)	5.04 (128)	1.4 (35)	117 (53)	22.9 (582)	4.88 (124)	5.04 (128)	2.8 (70)	2.4 (61)	—	119 (54)
	1/4 (0.19)	23.2 (589)	4.88 (124)	5.04 (128)	2.3 (59)	119 (54)	24.4 (621)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	121 (55)
	1/3 (0.25)	23.2 (589)	4.88 (124)	5.04 (128)	2.3 (59)	119 (54)	24.4 (621)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	121 (55)
	1/2 (0.37)	24.0 (609)	4.88 (124)	5.04 (128)	2.3 (59)	121 (55)	25.2 (641)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	123 (56)
	3/4 (0.56)	25.6 (650)	5.83 (148)	5.63 (143)	3.8 (97)	130 (59)	27.3 (693)	5.83 (148)	5.63 (143)	5.5 (140)	3.7 (93)	4.17 (106)	137 (62)
	1 (0.75)	25.6 (650)	5.83 (148)	5.63 (143)	3.8 (97)	130 (59)	27.3 (693)	5.83 (148)	5.63 (143)	5.5 (140)	3.7 (93)	4.17 (106)	137 (62)

Gearmotors

Dimensions

Dimensions Gearmotors

Double Reduction LHYM-5B12DA~5B14DB



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.104 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S x L
5B12DA	11.4	6.06	3.54	7.83	9.82	4.80	4.70	0.20	0.12	4.82	4.82	6.89	M12 x 0.78
5B12DB	(289)	(154)	(90)	(199)	(250)	(122)	(119.5)	(5.0)	(3.0)	(123)	(123)	(175)	(M12 x 20)
5B14DA													
5B14DB													

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5B	2.375	+0.0018/0	0.625	2.65	(65)	(+0.046/0)	(18)	(69.4)

Double Reduction LHYM-5B12DA~5B14DB Dimensions

All dimensions are in inches (mm).

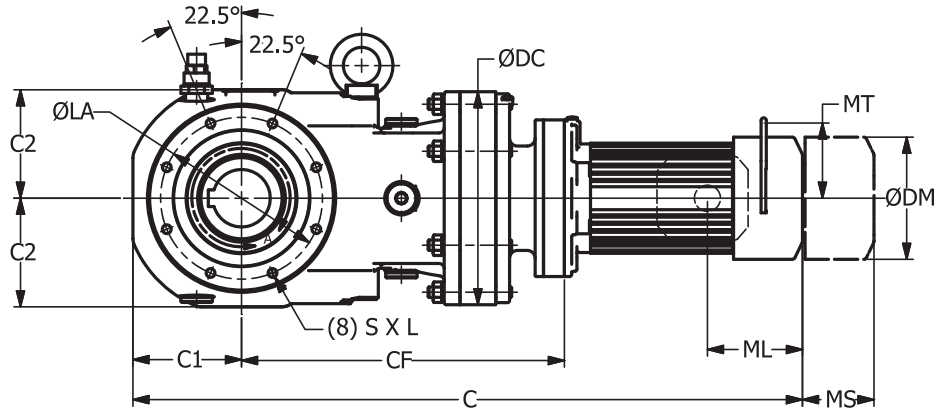
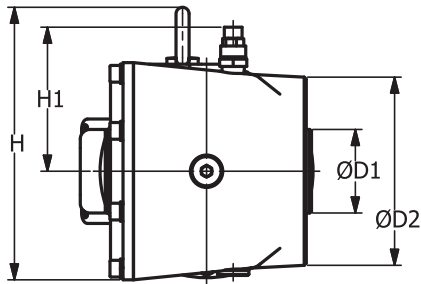
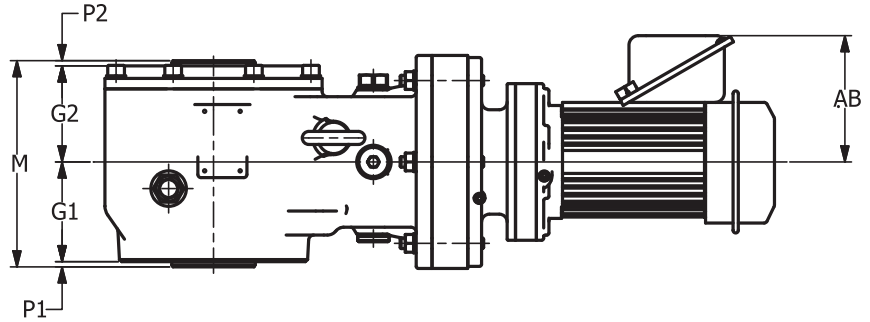
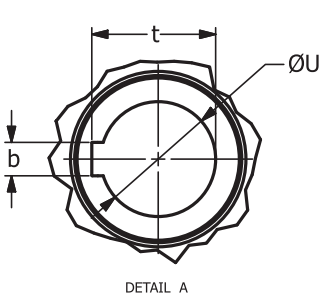
Model	4 Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)
5B12DA	1/8 (0.09)	23.4 (594)	4.69 (119)	5.04 (128)	1.38 (35)	157 (71)	24.8 (629)	4.88 (124)	5.04 (128)	2.8 (70)	2.4 (61)	—	159 (72)
	1/4 (0.19)	25.0 (636)	4.88 (124)	5.04 (128)	2.32 (59)	159 (72)	26.3 (668)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	161 (73)
	1/3 (0.25)	25.0 (636)	4.88 (124)	5.04 (128)	2.32 (59)	159 (72)	26.3 (668)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	161 (73)
	1/2 (0.37)	25.8 (656)	4.88 (124)	5.04 (128)	2.32 (59)	161 (73)	27.1 (688)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	163 (74)
5B12DB	1/8 (0.09)	23.9 (606)	4.69 (119)	5.04 (128)	1.38 (35)	163 (74)	25.2 (641)	4.69 (119)	5.04 (128)	2.8 (70)	2.4 (61)	—	168 (76)
	1/4 (0.19)	25.5 (648)	4.88 (124)	5.04 (128)	2.32 (59)	165 (75)	26.8 (680)	4.88 (124)	5.04 (128)	3.58 (91)	2.40 (61)	—	170 (77)
	1/3 (0.25)	25.5 (648)	4.88 (124)	5.04 (128)	2.32 (59)	165 (75)	26.8 (680)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	170 (77)
	1/2 (0.37)	26.3 (668)	4.88 (124)	5.04 (128)	2.32 (59)	168 (76)	27.6 (700)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	172 (78)
	3/4 (0.56)	27.9 (709)	6.30 (160)	5.63 (143)	3.82 (97)	176 (80)	29.6 (752)	6.30 (160)	5.63 (143)	5.5 (140)	3.7 (93)	4.17 (106)	183 (83)
	1 (0.75)	27.9 (709)	6.30 (160)	5.63 (143)	3.82 (97)	176 (80)	29.6 (752)	6.30 (160)	5.63 (143)	5.5 (140)	3.7 (93)	4.17 (106)	183 (83)
	1.5 (1.1)	29.2 (742)	6.65 (169)	5.83 (148)	3.94 (100)	185 (84)	31.7 (804)	6.65 (169)	5.83 (148)	6.4 (162)	4.5 (115)	4.49 (114)	196 (89)
5B14DA	1/8 (0.09)	24.1 (612)	4.69 (119)	5.04 (128)	1.38 (35)	176 (80)	25.5 (647)	4.69 (119)	5.04 (128)	2.8 (70)	2.4 (61)	—	181 (82)
	1/4 (0.19)	25.7 (654)	4.88 (124)	5.04 (128)	2.32 (59)	179 (81)	27.0 (686)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	183 (83)
	1/3 (0.25)	25.7 (654)	4.88 (124)	5.04 (128)	2.32 (59)	179 (81)	27.0 (686)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	183 (83)
	1/2 (0.37)	26.5 (674)	4.88 (124)	5.04 (128)	2.32 (59)	181 (82)	27.8 (706)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	185 (84)
5B14DB	1/8 (0.09)	24.4 (621)	4.69 (119)	5.04 (128)	1.38 (35)	183 (83)	25.8 (656)	4.69 (119)	5.04 (128)	2.8 (70)	2.4 (61)	—	185 (84)
	1/4 (0.19)	26.1 (663)	4.88 (124)	5.04 (128)	2.32 (59)	185 (84)	27.4 (695)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	187 (85)
	1/3 (0.25)	26.1 (663)	4.88 (124)	5.04 (128)	2.32 (59)	185 (84)	27.4 (695)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	187 (85)
	1/2 (0.37)	26.9 (683)	4.88 (124)	5.04 (128)	2.32 (59)	187 (85)	28.1 (715)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	192 (87)
	3/4 (0.56)	28.5 (724)	6.30 (160)	5.63 (143)	3.82 (97)	196 (89)	30.2 (767)	6.30 (160)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	203 (92)
	1 (0.75)	28.5 (724)	6.30 (160)	5.63 (143)	3.82 (97)	196 (89)	30.2 (767)	6.30 (160)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	203 (92)
	1.5 (1.1)	29.8 (757)	6.65 (169)	5.83 (148)	3.94 (100)	205 (93)	32.2 (819)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	216 (98)
	2 (1.5)	29.8 (757)	6.65 (169)	5.83 (148)	3.94 (100)	205 (93)	32.2 (819)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	216 (98)

Gearmotors

Dimensions

Dimensions Gearmotors

Double Reduction LHYM-5C14DA~5C16DB



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.104 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S x L
5C14DA 5C14DB 5C14DC 5C16DA 5C16DB	14.1 (358)	7.60 (193)	3.94 (100)	9.61 (244)	10.8 (275)	4.88 (124)	5.61 (143)	0.20 (5.0)	0.12 (3.0)	6.26 (159)	6.26 (159)	8.35 (212)	M16 x 1.02 (M16 x 26)

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5C	2.750	+0.0018/0	0.625	3.03	(75)	(+0.046/0)	(20)	(79.9)

Selection Tables

Double Reduction LHYM-5C14DA~5C16DB Dimensions

All dimensions are in inches (mm).

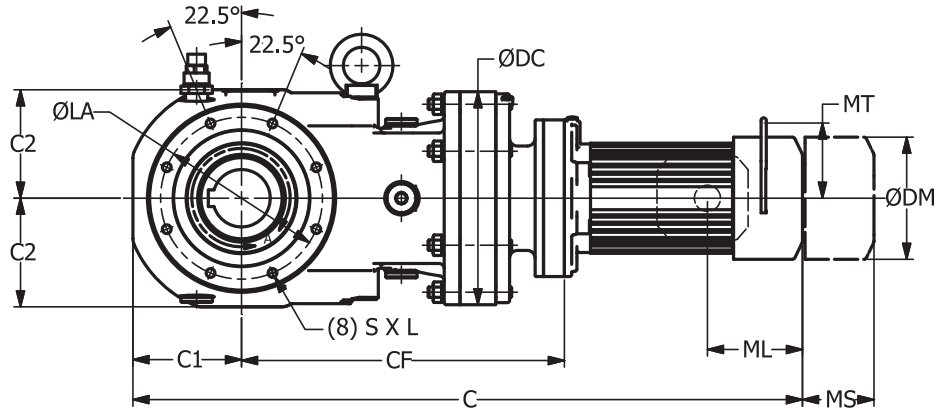
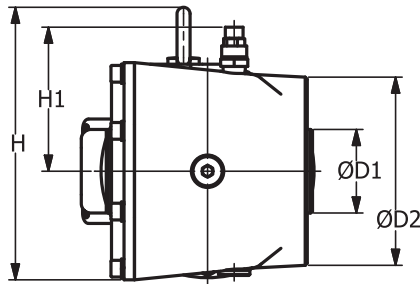
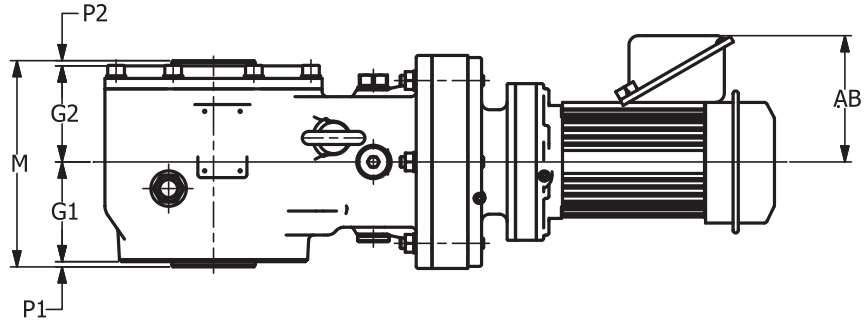
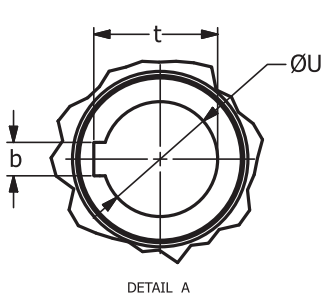
Model	4 Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)
5C14DA	1/8 (0.09)	27.7 (704)	4.69 (119)	5.04 (128)	1.38 (35)	245 (111)	29.1 (739)	4.69 (119)	5.04 (128)	2.8 (70)	2.4 (61)	—	247 (112)
	1/4 (0.19)	29.4 (746)	4.88 (124)	5.04 (128)	2.32 (59)	247 (112)	30.6 (778)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	249 (113)
	1/3 (0.25)	29.4 (746)	4.88 (124)	5.04 (128)	2.32 (59)	247 (112)	30.6 (778)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	249 (113)
	1/2 (0.37)	30.2 (766)	4.88 (124)	5.04 (128)	2.32 (59)	249 (113)	31.4 (798)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	251 (114)
5C14DB	1/8 (0.09)	28.1 (713)	4.69 (119)	5.04 (128)	1.38 (35)	249 (113)	29.4 (748)	4.69 (119)	5.04 (128)	2.8 (70)	2.4 (61)	—	254 (115)
	1/4 (0.19)	29.7 (755)	4.88 (124)	5.04 (128)	2.32 (59)	251 (114)	31.0 (787)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	256 (116)
	1/3 (0.25)	29.7 (755)	4.88 (124)	5.04 (128)	2.32 (59)	251 (114)	31.0 (787)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	256 (116)
	1/2 (0.37)	30.5 (775)	4.88 (124)	5.04 (128)	2.32 (59)	256 (116)	31.8 (807)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	258 (117)
	0.75 (0.56)	32.1 (816)	5.83 (148)	5.63 (143)	3.82 (97)	265 (120)	33.8 (859)	5.83 (148)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	271 (123)
	1 (0.75)	32.1 (816)	5.83 (148)	5.63 (143)	3.82 (97)	265 (120)	33.8 (859)	5.83 (148)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	271 (123)
	1 1/2 (1.1)	33.4 (849)	6.30 (160)	5.83 (148)	3.94 (100)	273 (124)	35.9 (911)	6.30 (160)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	284 (129)
	2 (1.5)	33.4 (849)	6.30 (160)	5.83 (148)	3.94 (100)	273 (124)	35.9 (911)	6.30 (160)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	284 (129)
5C14DC	1/4 (0.19)	30.3 (769)	4.88 (124)	5.04 (128)	2.32 (59)	254 (115)	31.5 (801)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	258 (117)
	1/3 (0.25)	30.3 (769)	4.88 (124)	5.04 (128)	2.32 (59)	254 (115)	31.5 (801)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	258 (117)
	1/2 (0.37)	31.1 (789)	4.88 (124)	5.04 (128)	2.32 (59)	258 (117)	32.3 (821)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	260 (118)
	0.75 (0.56)	32.7 (830)	5.83 (148)	5.63 (143)	3.82 (97)	267 (121)	34.4 (873)	5.83 (148)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	273 (124)
	1 (0.75)	32.7 (830)	5.83 (148)	5.63 (143)	3.82 (97)	267 (121)	34.4 (873)	5.83 (148)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	273 (124)
	1.5 (1.1)	34.0 (863)	6.30 (160)	5.83 (148)	3.94 (100)	276 (125)	36.4 (925)	6.30 (160)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	287 (130)
	2 (1.5)	34.0 (863)	6.30 (160)	5.83 (148)	3.94 (100)	276 (125)	36.4 (925)	6.30 (160)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	287 (130)
	3 (2.2)	34.8 (883)	6.81 (173)	6.10 (155)	4.13 (105)	284 (129)	37.2 (946)	6.81 (173)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	298 (135)
5C16DA	1/8 (0.09)	29.0 (736)	4.69 (119)	5.04 (128)	1.38 (35)	295 (134)	30.4 (771)	4.69 (119)	5.04 (128)	2.8 (70)	2.4 (61)	—	300 (136)
	1/4 (0.19)	30.6 (778)	4.88 (124)	5.04 (128)	2.32 (59)	298 (135)	31.9 (810)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	302 (137)
	1/3 (0.25)	30.6 (778)	4.88 (124)	5.04 (128)	2.32 (59)	298 (135)	31.9 (810)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	302 (137)
	1/2 (0.37)	31.4 (798)	4.88 (124)	5.04 (128)	2.32 (59)	300 (136)	32.7 (830)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	304 (138)
	3/4 (0.56)	33.0 (839)	5.83 (148)	5.63 (143)	3.82 (97)	309 (140)	34.7 (882)	5.83 (148)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	315 (143)
	1 (0.75)	33.0 (839)	5.83 (148)	5.63 (143)	3.82 (97)	309 (140)	34.7 (882)	5.83 (148)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	315 (143)
	1.5 (1.1)	34.3 (872)	6.30 (160)	5.83 (148)	3.94 (100)	318 (144)	36.8 (934)	6.30 (160)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	329 (149)
	2 (1.5)	34.3 (872)	6.30 (160)	5.83 (148)	3.94 (100)	318 (144)	36.8 (934)	6.30 (160)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	329 (149)
5C16DB	1 (0.75)	33.6 (853)	5.83 (148)	5.63 (143)	3.82 (97)	313 (142)	35.3 (896)	5.83 (148)	5.63 (143)	5.51 (140)	3.7 (93)	4.17 (106)	320 (145)
	1.5 (1.1)	34.9 (886)	6.30 (160)	5.83 (148)	3.94 (100)	322 (146)	37.3 (948)	6.30 (160)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	333 (151)
	2 (1.5)	34.9 (886)	6.30 (160)	5.83 (148)	3.94 (100)	322 (146)	37.3 (948)	6.30 (160)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	333 (151)

Gearmotors

Dimensions

Dimensions Gearmotors

Double Reduction, AF-Motor LHYM-5Z10DA~5B14DB



Dimensions

All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.104 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S X L
5Z10DA 5Z12DA 5Z12DB	8.43 (214)	5.33 (135)	2.56 (65)	6.30 (160)	7.17 (182)	3.54 (90.0)	3.41 (86.5)	0.12 (3.0)	0.10 (2.5)	3.6 (91)	3.6 (91)	5.59 (142)	M8 x 0.78 (M8 x 20)
5A12DA 5A12DB	10.1 (257)	5.43 (138)	3.1 (80)	7.09 (180)	7.78 (198)	3.76 (95.5)	3.62 (92.0)	0.20 (5.0)	0.20 (5.0)	4.1 (104)	4.1 (104)	6.1 (155)	M10 x 0.98 (M10 x 25)
5B12DA 5B12DB 5B14DA 5B14DB	11.4 (289)	6.1 (154)	3.5 (90)	7.83 (199)	9.8 (250)	4.80 (122)	4.70 (119.5)	0.20 (5.0)	0.12 (3.0)	4.82 (123)	4.82 (123)	6.89 (175)	M12 x 0.78 (M12 x 20)

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5Z	1.500	+0.0015/0		1.67	(45)	(+0.039/0)	(14)	(48.8)
5A	2.000	+0.0018/0	0.500	2.22	(55)	(+0.046/0)	(16)	(59.3)
5B	2.375	+0.0018/0	0.625	2.65	(65)	(+0.046/0)	(18)	(69.4)

Double Reduction - AF-Motor LHYM-5Z10DA~5B14DB Dimensions

All dimensions are in inches (mm).

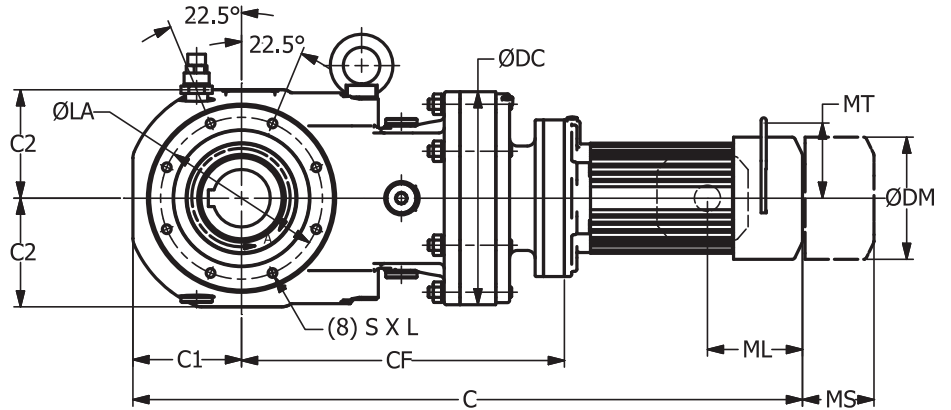
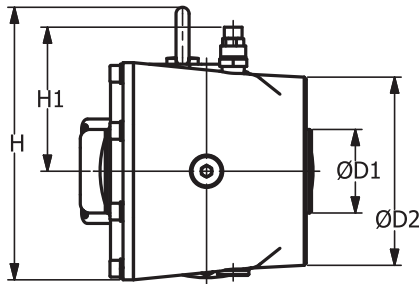
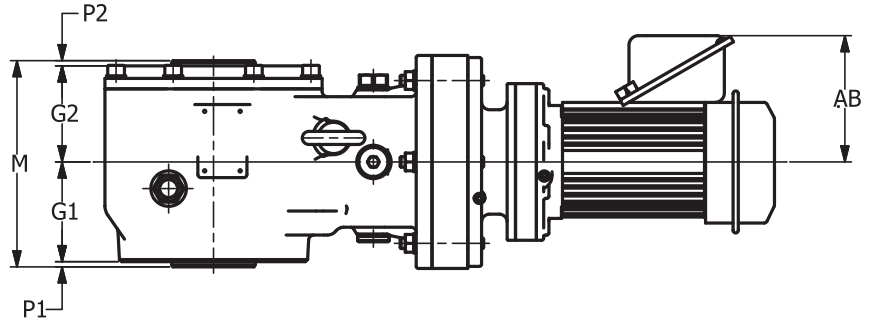
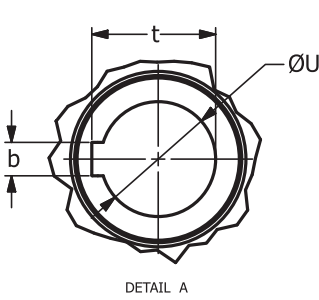
Model	4 Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)
5Z10DA	1/8 (0.09)	21.9 (556)	4.88 (124)	5.04 (128)	2.3 (59)	75 (34)	23.1 (588)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	77 (35)
	1/4 (0.19)	22.7 (576)	4.88 (124)	5.04 (128)	2.3 (59)	77 (35)	23.9 (608)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	79 (36)
5Z12DA	1/8 (0.09)	22.2 (565)	4.88 (124)	5.04 (128)	2.3 (58)	90 (41)	23.5 (597)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	93 (42)
	1/4 (0.19)	23.0 (585)	4.88 (124)	5.04 (128)	2.3 (59)	93 (42)	24.3 (617)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	95 (43)
5Z12DB	1/8 (0.09)	22.7 (577)	4.88 (124)	5.04 (128)	2.3 (58)	97 (44)	24.0 (609)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	99 (45)
	1/4 (0.19)	23.5 (597)	4.88 (124)	5.04 (128)	2.3 (59)	99 (45)	24.8 (629)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	101 (46)
5A12DA	1/8 (0.09)	23.5 (598)	4.88 (124)	5.04 (128)	2.3 (58)	126 (57)	24.8 (630)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	128 (58)
	1/4 (0.19)	24.3 (618)	4.88 (124)	5.04 (128)	2.3 (59)	128 (58)	25.6 (650)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	130 (59)
5A12DB	1/8 (0.09)	24.0 (610)	4.88 (124)	5.04 (128)	2.3 (58)	132 (60)	25.2 (641)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	137 (62)
	1/4 (0.19)	24.8 (630)	4.88 (124)	5.04 (128)	2.3 (59)	135 (61)	26.1 (662)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	139 (63)
	1/2 (0.37)	26.4 (671)	6.30 (160)	5.63 (143)	3.8 (97)	143 (65)	28.1 (714)	6.30 (160)	5.63 (143)	5.51 (140)	3.7 (93)	— (106)	150 (68)
5B12DA	1/8 (0.09)	26.0 (660)	4.88 (124)	5.04 (128)	2.3 (58)	181 (82)	27.2 (692)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	185 (84)
	1/4 (0.19)	26.8 (680)	4.88 (124)	5.04 (128)	2.3 (59)	183 (83)	28.0 (712)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	187 (85)
5B12DB	1/8 (0.09)	26.5 (672)	4.88 (124)	5.04 (128)	2.3 (58)	190 (86)	27.7 (704)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	192 (87)
	1/4 (0.19)	27.2 (692)	4.88 (124)	5.04 (128)	2.3 (59)	192 (87)	28.5 (724)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	194 (88)
	1/2 (0.37)	28.9 (733)	6.30 (160)	5.63 (143)	3.8 (97)	201 (91)	30.6 (776)	6.30 (160)	5.63 (143)	5.51 (140)	3.7 (93)	—	207 (94)
5B14DA	1/8 (0.09)	26.7 (678)	4.88 (124)	5.04 (128)	2.3 (58)	203 (92)	28.0 (710)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	205 (93)
	1/4 (0.19)	27.5 (698)	4.88 (124)	5.04 (128)	2.3 (59)	205 (93)	28.7 (730)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	207 (94)
5B14DB	1/8 (0.09)	27.0 (687)	4.88 (124)	5.04 (128)	2.3 (58)	207 (94)	28.3 (719)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	212 (96)
	1/4 (0.19)	27.8 (707)	4.88 (124)	5.04 (128)	2.3 (59)	212 (96)	29.1 (739)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	214 (97)
	1/2 (0.37)	29.4 (748)	6.30 (160)	5.63 (143)	3.8 (97)	221 (100)	31.1 (791)	6.30 (160)	5.63 (143)	5.51 (140)	3.7 (93)	—	227 (103)
	1 (0.75)	30.7 (781)	6.65 (169)	5.83 (148)	3.94 (100)	229 (104)	33.2 (843)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	240 (109)

Gearmotors

Dimensions

Dimensions Gearmotors

Double Reduction, AF-Motor LHYM-5C14DA~5C16DB



All dimensions are in inches (mm).

For units ordered in the Y2 mounting configuration, please refer to page 3.104 for external lubricant piping dimensions.

Model	H	H1	ØD1	ØD2	M	G1	G2	P1	P2	C1	C2	ØLA	S X L
5C14DA 5C14DB 5C14DC 5C16DA 5C16DB	14.1 (358)	7.6 (193)	3.94 (100)	9.61 (244)	10.8 (275)	4.9 (124)	5.61 (142.5)	0.20 (5.0)	0.12 (3.0)	6.26 (159)	6.26 (159)	8.35 (212)	M16 x 1.02 (M16 x 26)

Model	Standard Inch Bore Dimension				Standard Metric Bore Dimension			
	ØU	ØU Tolerance	b	t	ØU	ØU Tolerance	b	t
5C	2.750	+0.0018/0	0.625	3.03	(75)	(+0.046/0)	(20)	(79.9)

Gearmotors
Dimensions

Double Reduction - AF-Motor LHYM-5C14DA~5C16DB Dimensions

All dimensions are in inches (mm).

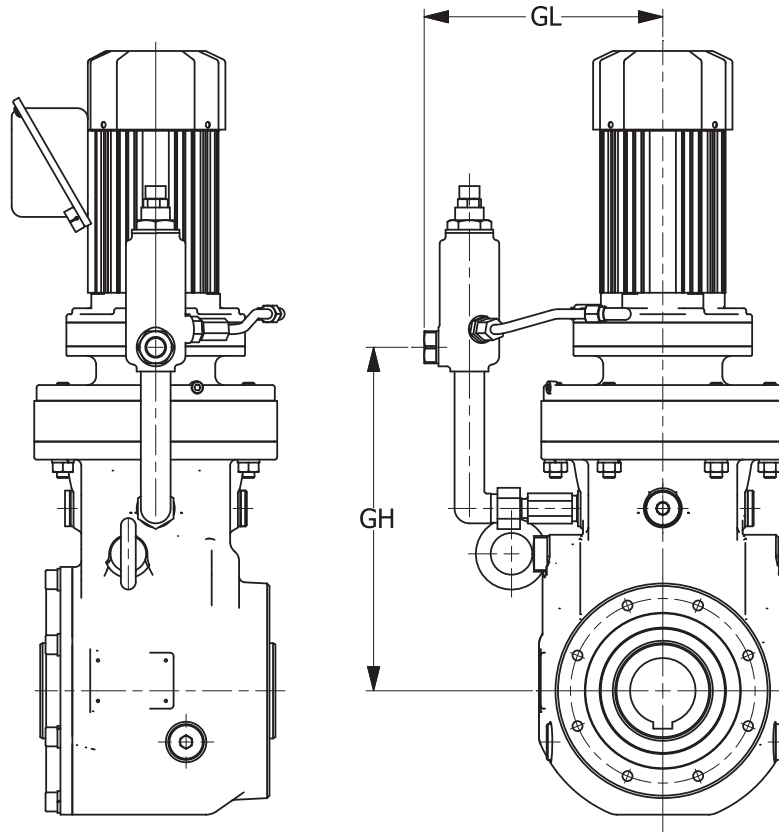
Model	4 Pole Motor HP (kW)	Without Brake					With Brake						
		C	ØDM	AB	ML	W lb (kg)	C	ØDM	AB	ML	MS	MT	W lb (kg)
5C14DA	1/8 (0.09)	30.0 (762)	4.88 (124)	5.04 (128)	2.3 (58)	280 (127)	31.3 (794)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	282 (128)
	1/4 (0.19)	30.8 (782)	4.88 (124)	5.04 (128)	2.3 (59)	282 (128)	32.0 (814)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	284 (129)
5C14DB	1/8 (0.09)	30.4 (771)	4.88 (124)	5.04 (128)	2.3 (58)	284 (129)	31.6 (803)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	289 (131)
	1/4 (0.19)	31.1 (791)	4.88 (124)	5.04 (128)	2.3 (59)	289 (131)	32.4 (823)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	291 (132)
	1/2 (0.37)	32.8 (832)	6.30 (160)	5.63 (143)	3.8 (97)	298 (135)	34.4 (875)	6.30 (160)	5.63 (143)	5.51 (140)	3.7 (93)	—	304 (138)
	1 (0.75)	34.1 (865)	6.65 (169)	5.83 (148)	3.94 (100)	306 (139)	36.5 (927)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	318 (144)
5C14DC	1/8 (0.09)	30.9 (785)	4.88 (124)	5.04 (128)	2.3 (58)	287 (130)	32.2 (817)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	290 (132)
	1/4 (0.19)	31.7 (805)	4.88 (124)	5.04 (128)	2.3 (59)	291 (132)	33.0 (837)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	293 (133)
	1/2 (0.37)	33.3 (846)	6.30 (160)	5.63 (143)	3.8 (97)	300 (136)	35.0 (889)	6.30 (160)	5.63 (143)	5.51 (140)	3.7 (93)	—	306 (139)
	1 (0.75)	34.6 (879)	6.65 (169)	5.83 (148)	3.94 (100)	309 (140)	37.0 (941)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	320 (145)
	2 (1.5)	35.4 (899)	7.17 (182)	6.10 (155)	4.13 (105)	318 (144)	37.9 (962)	7.17 (182)	6.10 (155)	6.61 (168)	4.76 (121)	4.88 (124)	331 (150)
5C16DA	1/8 (0.09)	31.3 (794)	4.88 (124)	5.04 (128)	2.3 (58)	331 (150)	32.5 (826)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	335 (152)
	1/4 (0.19)	32.0 (814)	4.88 (124)	5.04 (128)	2.3 (59)	333 (151)	33.3 (846)	4.88 (124)	5.04 (128)	3.6 (91)	2.4 (61)	—	337 (153)
	1/2 (0.37)	33.7 (855)	6.30 (160)	5.63 (143)	3.8 (97)	342 (155)	35.4 (898)	6.30 (160)	5.63 (143)	5.51 (140)	3.7 (93)	—	348 (158)
	1 (0.75)	35.0 (888)	6.65 (169)	5.83 (148)	3.94 (100)	351 (159)	37.4 (950)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	362 (164)
5C16DB	1 (0.75)	35.5 (902)	6.65 (169)	5.83 (148)	3.94 (100)	355 (161)	38.0 (964)	6.65 (169)	5.83 (148)	6.38 (162)	4.53 (115)	4.49 (114)	366 (166)

Gearmotors

Dimensions

Dimensions Gearmotors

Double Reduction, Y2 External Lubricant Piping LHYM-5Z10DA~5C16DB



All dimensions are in inches (mm).

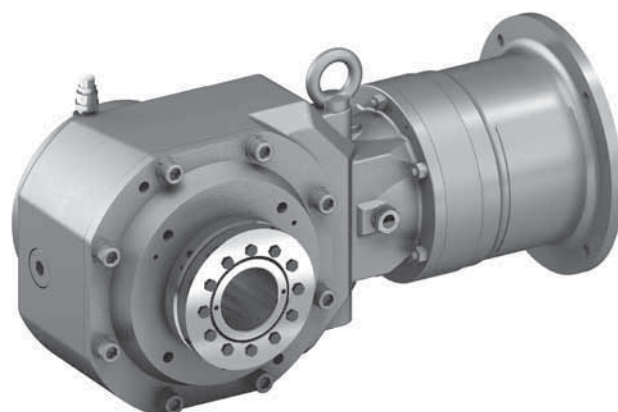
Frame Size	GL	GH
5Z10DA	5.98 (152)	9.72 (247)
5Z12DA	7.99 (203)	10.1 (256)
5Z12DB	7.99 (203)	10.4 (265)
5A12DA	7.99 (203)	11.4 (290)
5A12DB	7.99 (203)	11.8 (299)
5B12DA	7.99 (203)	12.9 (327)
5B12DB	7.99 (203)	13.2 (336)
5B14DA	9.09 (231)	13.7 (349)
5B14DB	9.09 (231)	13.7 (349)
5C14DA	9.09 (231)	16.0 (407)
5C14DB	9.09 (231)	16.2 (411)
5C14DC	9.09 (231)	16.5 (418)
5C16DA	10.3 (261)	17.0 (433)
5C16DB	10.3 (261)	17.3 (440)

This page intentionally left blank.

This page intentionally left blank.

4

Options



Cyclo BB5

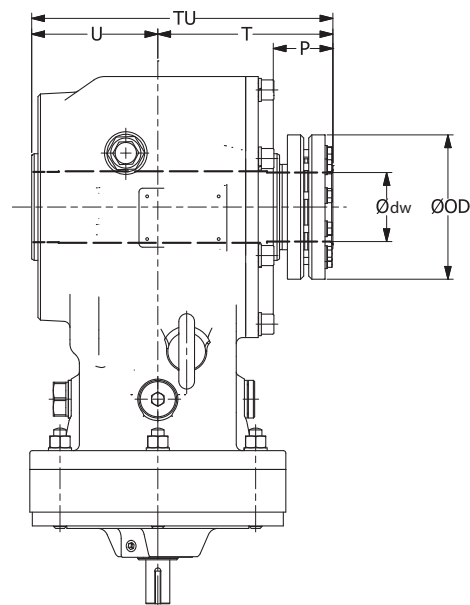
Options

Options

Shrink Disc

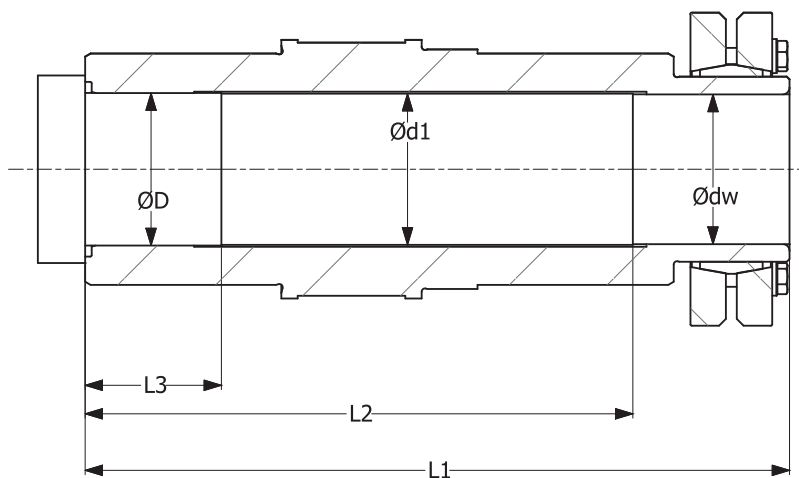
All dimensions are in inches (mm).

Model	T	U	TU	P	Ødw	ØOD
5Z100, 5Z105 5Z110, 5Z115 5Z120, 5Z125	4.88 (124.0)	3.66 (93.0)	8.54 (217)	1.48 (37.5)	1.77 (45.0)	3.94 (100)
5A110, 5A115 5A120, 5A125 5A140, 5A145	5.49 (139.5)	4.15 (106)	9.45 (240)	1.87 (47.5)	2.17 (55.0)	4.53 (115)
5B120, 5B125 5B140, 5B145 5B160, 5B165	6.65 (169.0)	5.00 (127)	11.7 (296)	1.95 (49.5)	2.56 (65.0)	5.71 (145)
5C140, 5C145 5C160, 5C165 5C170, 5C175	7.83 (199.0)	5.08 (129)	12.9 (328)	2.22 (56.5)	2.95 (75.0)	6.69 (170)



Shrink Disc Recommended Driven Shaft Dimensions

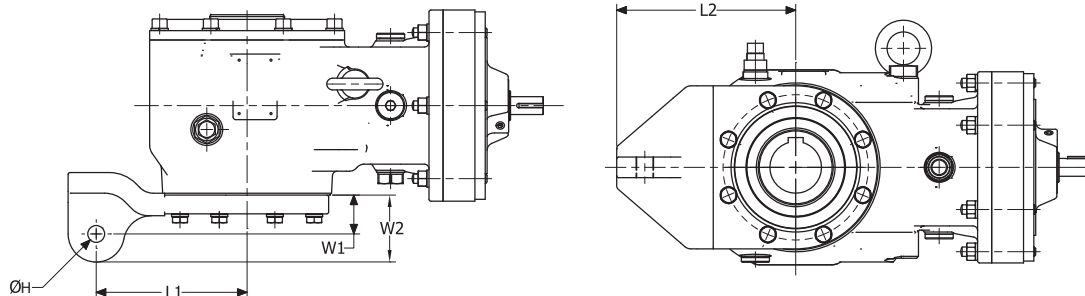
When designing the driven shaft to be inserted into the shrink disc, refer to the Recommended Driven Shaft Dimensions chart below for shaft design recommendations.



All dimensions are in inches (mm).

Model	Recommended Driven Shaft Dimensions							
	Ødw	Ødw Tolerance	Ød1	ØD	ØD Tolerance	L1	L2	L3
5Z100, 5Z105 5Z110, 5Z115 5Z120, 5Z125	1.77 (45)	h6: +0/-0.0006 (h6: +0/-0.016)	1.79 (45.5)	1.8 (46)	h7: +0/-0.0010 (h7: +0/-0.025)	8.54 (217)	6.57 (167)	1.97 (50)
5A110, 5A115 5A120, 5A125 5A140, 5A145	2.17 (55)	h6: +0/-0.0007 (h6: +0/-0.019)	2.19 (55.5)	2.2 (56)	h7: +0/-0.0012 (h7: +0/-0.030)	9.45 (240)	7.09 (180)	1.97 (50)
5B120, 5B125 5B140, 5B145 5B160, 5B165	2.56 (65)	h6: +0/-0.0007 (h6: +0/-0.019)	2.58 (65.5)	2.6 (66)	h7: +0/-0.0012 (h7: +0/-0.030)	11.7 (296)	9.29 (236)	1.97 (50)
5C140, 5C145 5C160, 5C165 5C170, 5C175	2.95 (75)	h6: +0/-0.0007 (h6: +0/-0.019)	2.97 (75.5)	3.0 (76)	h7: +0/-0.0012 (h7: +0/-0.030)	12.8 (326)	10.2 (259)	1.97 (50)

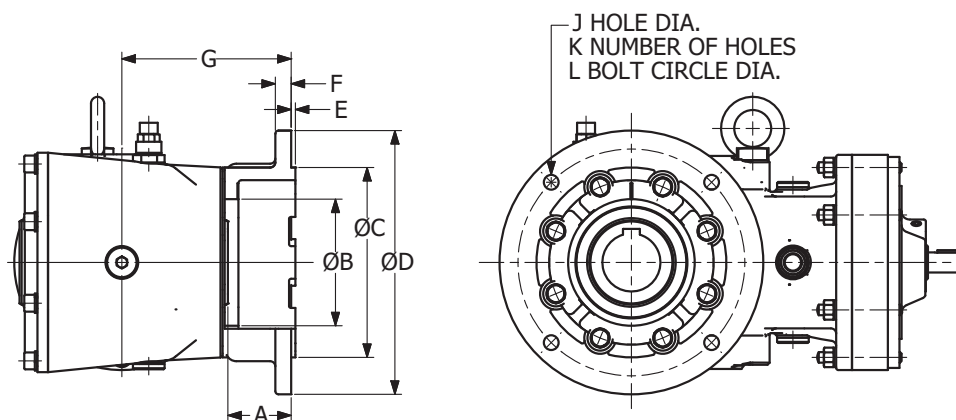
Options

Torque Arm
Flange Mount
(Banjo) Type

All dimensions are in inches (mm).

Model	ØH	L1	L2	W1	W2
5Z100, 5Z105 5Z110, 5Z115 5Z120, 5Z125	0.71 (18)	5.12 (130)	6.30 (160)	1.45 (37)	2.63 (67)
5A110, 5A115 5A120, 5A125 5A140, 5A145	0.71 (18)	6.30 (160)	7.39 (188)	1.47 (37)	2.65 (67)
5B120, 5B125 5B140, 5B145 5B160, 5B165	0.87 (22)	7.68 (195)	9.02 (229)	1.61 (41)	3.03 (77)
5C140, 5C145 5C160, 5C165 5C170, 5C175	1.02 (26)	9.45 (240)	11.2 (284)	2.32 (59)	4.29 (109)

Output Flange



All dimensions are in inches (mm).

Model	A	ØB	ØC	ØD	E	F	G	J	K	L
5Z100, 5Z105 5Z110, 5Z115 5Z120, 5Z125	0.91 (23)	4.33 (110)	7.09 (180)	9.84 (250)	0.16 (4)	0.59 (15)	4.57 (116)	0.53 (14)	4	8.46 (215)
5A110, 5A115 5A120, 5A125 5A140, 5A145	2.36 (60)	4.92 (125)	7.09 (180)	9.84 (250)	0.16 (4)	0.59 (15)	6.32 (161)	0.55 (14)	4	8.46 (215)
5B120, 5B125 5B140, 5B145 5B160, 5B165	2.40 (61)	6.38 (162)	9.06 (230)	11.81 (300)	0.16 (4)	0.63 (16)	7.40 (188)	0.55 (14)	4	10.4 (265)
5C140, 5C145 5C160, 5C165 5C170, 5C175	2.87 (73)	8.11 (206)	9.84 (250)	13.78 (350)	0.20 (5)	0.71 (18)	7.95 (202)	0.71 (18)	4	11.8 (300)

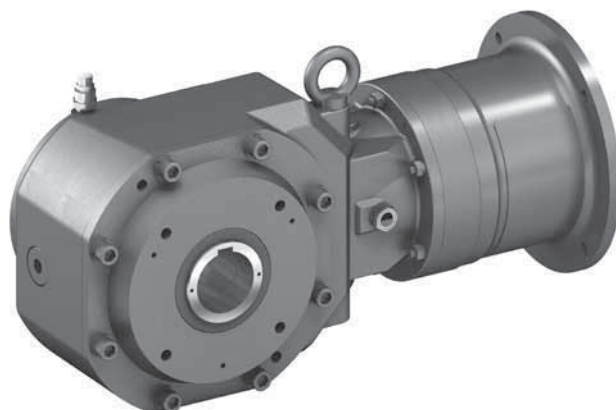
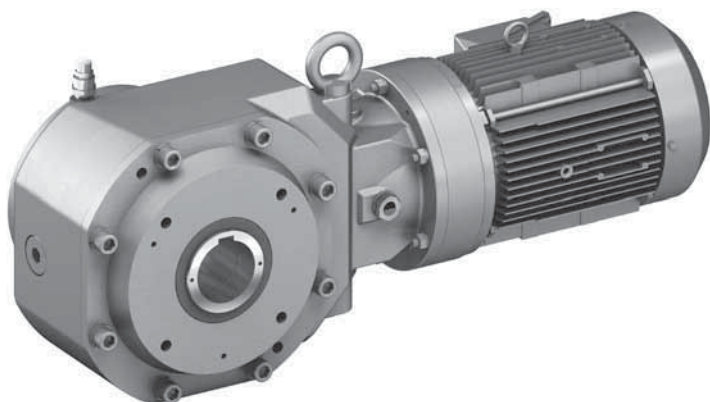
Cyclo BBB5

Options

This page intentionally left blank.

5

Appendix



Cyclo® BBB5

Appendix

Special Load Guidelines Input Shaft Overhung Load

Reducer Allowable Input Shaft Overhung Load

The radial load acting on the high speed shaft may be calculated with the following formula:

$$Pr \leq \frac{Pro}{Lf \cdot Cf \cdot Sf}$$

LEGEND

- Pr** = Actual Radial Load (lbs, N)
- Pro** = Allowable radial load (lbs, N) (Table 5.4)
- Lf** = Load Location factor (Table 5.3)
- Cf** = Coupling factor (Table 5.1)
- Sf** = Service factor (Table 5.2)

Figure 5.1: Input Shaft Load Location Factor (Lf)

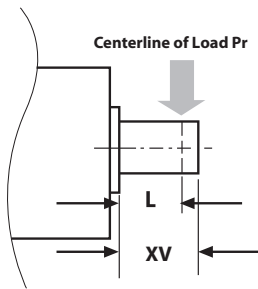


Table 5.1: Load Connection Factor

Type of Connection	Cf
General Purpose Chain	1.0
Machined Gear, Pinion or Synchronous Belt	1.25
V-Belt	1.5
Flat Belt	2.5

Table 5.2: Service Factor

Shock Factor	Sf
No Shock	1.0
Moderate Shock	1.5
Heavy Shock	2.0

Table 5.3: Input Shaft Load Location Factor (Lf)

Model	L inch (mm)															
	0.20 (5)	0.39 (10)	0.59 (15)	0.79 (20)	0.98 (25)	1.18 (30)	1.38 (35)	1.57 (40)	1.77 (45)	1.97 (50)	2.36 (60)	2.76 (70)	3.54 (90)	3.54 (90)	3.94 (100)	
SZ10DA, SZ12DA, 5A12DA, 5B12DA, 5B14DA, 5C14DA	0.73	0.91	1.20	1.60	2.00	—	—	—	—	—	—	—	—	—	—	
SZ12DB, 5A12DB, 5B12DB, 5B14DB, 5C14DB, 5C16DA, 5C17DA	0.88	0.96	1.20	1.59	2.00	2.38	—	—	—	—	—	—	—	—	—	
SZ100, SZ105, 5C14DC, 5C16DB, 5C17DB	0.91	0.97	1.20	1.59	2.00	2.38	—	—	—	—	—	—	—	—	—	
SZ110, SZ115, 5A110, 5A115	0.91	0.97	1.20	1.59	2.00	2.38	—	—	—	—	—	—	—	—	—	
SZ120, SZ125, 5A120, 5A125, 5B120, 5B125, 5C17DC	—	0.81	0.93	1.14	1.41	1.67	1.96	2.22	—	—	—	—	—	—	—	
5A140, 5A145, 5B140, 5B145, 5C140, 5C145	—	0.78	0.89	1.00	1.23	1.45	1.69	1.92	2.13	—	—	—	—	—	—	
5B160, 5B165, 5C160, 5C165	—	0.92	0.95	0.98	1.05	1.18	1.28	1.41	1.52	1.64	1.85	—	—	—	—	
5C170, 5C175	—	—	0.93	0.96	0.99	1.05	1.16	1.28	1.39	1.49	1.72	1.92	2.17	—	—	

Special Load Guidelines Input Shaft Overhung Load continued

Table 5.4: Input Shaft Overhung Load Capacity Pro (Lf, Cf, Sf = 1)

Units: lbs (N)

Model	Reduction Ratio	Input Speed (RPM)						
		1750	1450	1165	980	870	720	580
5Z10DA, 5Z12DA, 5A12DA, 5B12DA, 5B14DA, 5C14DA	364 - 5177, 7228	44 (196)	33 (147)	33 (147)	44 (196)	44 (196)	44 (196)	44 (196)
	1849, 2537	11 (49)	11 (49)	11 (49)	11 (49)	11 (49)	33 (147)	44 (196)
5A12DB, 5B12DB, 5B14DB, 5C14DB, 5C16DA, 5C17DA	All Ratios	44 (196)	44 (196)	44 (196)	44 (196)	55 (245)	55 (245)	66 (294)
5Z100, 5Z105, 5C14DC, 5C16DB, 5C17DB	11 - 39, 54 - 578, 809, 1117, 1656, 2272 - 7228	99 (441)	99 (441)	110 (491)	121 (540)	132 (589)	132 (589)	132 (589)
	42, 46, 48, 53, 683, 956, 1320, 1957	99 (441)	77 (343)	99 (441)	110 (491)	110 (491)	121 (540)	132 (589)
5Z110, 5Z115, 5A110, 5A115	19 - 28, 67 - 305	99 (441)	77 (343)	99 (441)	110 (491)	110 (491)	121 (540)	132 (589)
	35 - 60	44 (196)	44 (196)	44 (196)	44 (196)	55 (245)	55 (245)	66 (294)
5Z120, 5Z125, 5A120, 5A125, 5B120, 5B125, 5C17DC	11 - 60, 364 - 2559, 3511, 5177	133 (590)	155 (690)	166 (740)	175 (780)	198 (880)	198 (880)	198 (880)
	67-305, 2944, 4365, 6472 - 7228	121 (540)	99 (440)	110 (490)	121 (540)	133 (590)	198 (880)	198 (880)
5A140, 5A145, 5B140, 5B145, 5C140, 5C145	11 - 28	308 (1370)	308 (1370)	308 (1370)	342 (1520)	364 (1620)	387 (1720)	418 (1860)
	35 - 74	277 (1230)	220 (980)	243 (1080)	265 (1180)	277 (1230)	297 (1320)	330 (1470)
	80, 88	243 (1080)	254 (1130)	265 (1180)	288 (1280)	297 (1320)	308 (1370)	330 (1470)
	93 - 305	121 (540)	133 (590)	133 (590)	155 (690)	155 (690)	155 (690)	243 (1080)
5B160, 5B165, 5C160, 5C165	11 - 88, 163 - 207	398 (1770)	398 (1770)	441 (1960)	463 (2060)	486 (2160)	486 (2160)	486 (2160)
	93 - 151, 227 - 305	243 (1080)	265 (1180)	288 (1280)	308 (1370)	308 (1370)	353 (1570)	398 (1770)
5C170, 5C175	All Ratios	463 (2060)	463 (2060)	508 (2260)	508 (2260)	528 (2350)	551 (2450)	596 (2650)

Cyclo® BBB5

Appendix

Special Load Guidelines Inertia

Table 5.5: Reducer Moment of Inertia on Motor Shaft of Gearmotor⁽¹⁾

Units: lb-inch² (x 10⁻⁴ kg-m²)

Model	Nominal Reduction Ratio												
	11	13	14	16	18	21	22	25	28	35	39	46	53
SZ100	1.50	0.885	0.858	0.547	0.530	0.444	—	—	0.29	0.17	0.17	0.16	0.14
SZ105	(4.39)	(2.59)	(2.51)	(1.60)	(1.55)	(1.30)	—	—	(0.85)	(0.51)	(0.50)	(0.46)	(0.40)
SZ110	1.90	0.995	0.967	0.660	0.639	0.690	0.646	0.636	0.478	0.345	0.34	0.30	0.27
SZ115	(5.57)	(2.91)	(2.83)	(1.93)	(1.87)	(2.02)	(1.89)	(1.86)	(1.40)	(1.01)	(1.00)	(0.88)	(0.80)
SZ120	3.76	2.24	2.21	1.63	1.61	1.24	1.39	1.39	0.964	0.591	0.588	0.622	0.581
SZ125	(11.0)	(6.56)	(6.48)	(4.77)	(4.72)	(3.63)	(4.08)	(4.06)	(2.82)	(1.73)	(1.72)	(1.82)	(1.70)
5A110	1.98	1.09	1.01	0.721	0.673	0.711	0.680	0.653	0.492	0.359	0.349	0.30	0.28
5A115	(5.80)	(3.19)	(2.96)	(2.11)	(1.97)	(2.08)	(1.99)	(1.91)	(1.44)	(1.05)	(1.02)	(0.89)	(0.81)
5A120	3.86	2.36	2.29	1.71	1.66	1.28	1.44	1.42	0.988	0.608	0.598	0.632	0.588
5A125	(11.3)	(6.91)	(6.69)	(5.00)	(4.85)	(3.75)	(4.22)	(4.15)	(2.89)	(1.78)	(1.75)	(1.85)	(1.72)
5A140	8.34	5.30	5.23	3.76	3.73	3.38	3.49	3.45	2.27	1.61	1.60	1.29	1.16
5A145	(24.4)	(15.5)	(15.3)	(11.0)	(10.9)	(9.88)	(10.2)	(10.1)	(6.65)	(4.71)	(4.68)	(3.78)	(3.40)
5B120	5.23	3.24	3.05	2.30	2.17	1.62	1.73	1.67	1.18	0.725	0.701	0.704	0.643
5B125	(15.3)	(9.48)	(8.93)	(6.72)	(6.36)	(4.75)	(5.06)	(4.88)	(3.45)	(2.12)	(2.05)	(2.06)	(1.88)
5B140	9.71	6.22	6.05	4.37	4.24	3.76	3.79	3.73	2.48	1.74	1.71	1.37	1.22
5B145	(28.4)	(18.2)	(17.7)	(12.8)	(12.4)	(11.0)	(11.1)	(10.9)	(7.27)	(5.08)	(5.01)	(4.01)	(3.58)
5B160	27.7	17.8	17.6	12.1	12.0	8.92	10.1	10.0	6.15	4.41	4.37	3.86	3.45
5B165	(81.0)	(52.1)	(51.6)	(35.5)	(35.1)	(26.1)	(29.5)	(29.3)	(18.0)	(12.9)	(12.8)	(11.3)	(10.1)
5C140	13.5	8.89	8.27	6.12	5.74	4.78	4.68	4.48	3.07	2.10	2.02	1.59	1.39
5C145	(39.5)	(26.0)	(24.2)	(17.9)	(16.8)	(14.0)	(13.7)	(13.1)	(8.98)	(6.15)	(5.91)	(4.66)	(4.06)
5C160	31.7	20.6	20.0	13.9	13.5	9.91	10.9	10.7	6.73	4.75	4.68	4.07	3.62
5C165	(92.8)	(60.4)	(58.6)	(40.6)	(39.5)	(29.0)	(32.0)	(31.4)	(19.7)	(13.9)	(13.7)	(11.9)	(10.6)
5C170	54.7	34.9	34.2	26.3	25.9	23.8	23.3	23.1	17.5	13.3	13.2	12.3	10.9
5C175	(160)	(102)	(100)	(76.9)	(75.8)	(69.6)	(68.2)	(67.6)	(51.3)	(38.8)	(38.6)	(36.1)	(31.9)

Model	Nominal Reduction Ratio												
	60	67	74	80	88	102	112	123	151	179	207	249	305
SZ100	0.10	0.10	0.10	0.09	0.09	0.06	0.06	0.06	0.05	0.07	0.05	0.07	0.04
SZ105	(0.29)	(0.30)	(0.30)	(0.27)	(0.27)	(0.19)	(0.17)	(0.17)	(0.15)	(0.21)	(0.14)	(0.20)	(0.13)
SZ110	0.26	0.23	0.22	0.22	0.21	0.21	0.19	0.19	0.19	0.18	0.18	0.18	0.18
SZ115	(0.75)	(0.66)	(0.65)	(0.63)	(0.62)	(0.60)	(0.57)	(0.57)	(0.56)	(0.54)	(0.54)	(0.53)	(0.52)
SZ120	0.437	0.492	0.489	0.451	0.451	0.32	0.30	0.30	0.29	0.40	0.27	0.38	0.26
SZ125	(1.28)	(1.44)	(1.43)	(1.32)	(1.32)	(0.93)	(0.88)	(0.88)	(0.84)	(1.16)	(0.79)	(1.12)	(0.76)
5A110	0.26	0.23	0.23	0.22	0.22	0.21	0.20	0.19	0.19	0.18	0.18	0.18	0.18
5A115	(0.76)	(0.67)	(0.66)	(0.63)	(0.63)	(0.61)	(0.58)	(0.57)	(0.56)	(0.54)	(0.54)	(0.53)	(0.53)
5A120	0.441	0.496	0.492	0.455	0.455	0.32	0.30	0.30	0.29	0.40	0.27	0.38	0.26
5A125	(1.29)	(1.45)	(1.44)	(1.33)	(1.33)	(0.94)	(0.89)	(0.88)	(0.84)	(1.16)	(0.79)	(1.12)	(0.76)
5A140	1.03	0.875	0.875	0.813	0.813	0.745	0.721	0.718	0.673	0.656	0.653	0.636	0.632
5A145	(3.01)	(2.56)	(2.56)	(2.38)	(2.38)	(2.18)	(2.11)	(2.10)	(1.97)	(1.92)	(1.91)	(1.86)	(1.85)
5B120	0.485	0.526	0.519	0.478	0.472	0.335	0.314	0.311	0.294	0.400	0.277	0.386	0.263
5B125	(1.42)	(1.54)	(1.52)	(1.40)	(1.38)	(0.98)	(0.92)	(0.91)	(0.86)	(1.17)	(0.81)	(1.13)	(0.77)
5B140	1.07	0.913	0.906	0.837	0.834	0.762	0.731	0.731	0.680	0.660	0.660	0.639	0.636
5B145	(3.14)	(2.67)	(2.65)	(2.45)	(2.44)	(2.23)	(2.14)	(2.14)	(1.99)	(1.93)	(1.93)	(1.87)	(1.86)
5B160	2.92	2.66	2.66	2.48	2.47	2.19	2.10	2.10	2.01	1.97	1.98	1.89	1.87
5B165	(8.53)	(7.79)	(7.77)	(7.25)	(7.23)	(6.41)	(6.15)	(6.14)	(5.88)	(5.77)	(5.80)	(5.54)	(5.46)
5C140	1.20	1.01	0.988	0.909	0.892	0.807	0.769	0.759	0.701	0.673	0.670	0.646	0.639
5C145	(3.52)	(2.96)	(2.89)	(2.66)	(2.61)	(2.36)	(2.25)	(2.22)	(2.05)	(1.97)	(1.96)	(1.89)	(1.87)
5C160	3.04	2.76	2.73	2.55	2.53	2.24	2.14	2.13	2.03	1.99	1.99	1.90	1.87
5C165	(8.89)	(8.07)	(8.00)	(7.45)	(7.40)	(6.54)	(6.25)	(6.23)	(5.93)	(5.82)	(5.82)	(5.56)	(5.47)
5C170	10.4	9.71	9.67	9.33	9.30	8.78	8.68	8.68	8.41	8.31	8.17	8.13	8.10
5C175	(30.5)	(28.4)	(28.3)	(27.3)	(27.2)	(25.7)	(25.4)	(25.4)	(24.6)	(24.3)	(23.9)	(23.8)	(23.7)

Note: [1] The inertia tables do not include the inertia of the integral motors. Total unit inertia is obtained by adding the reducer inertia (Table 5.5) to the motor inertia (Table 5.6 or 5.7).

Special Load Guidelines Inertia continued

Table 5.6: Moment of Inertia on Motor Shaft of Three-Phase Integral Motor

Units: lb·inch² ($\times 10^{-4}$ kg·m²)

1/8 HP (0.1 kW) x 4 Pole		1/4 HP (0.2 kW) x 4 Pole		1/3 HP (0.25 kW) x 4 Pole		1/2 HP (0.37 kW) x 4 Pole		3/4 HP (0.55 kW) x 4 Pole	
Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake
1.11 (3.25)	1.20 (3.50)	1.71 (5.00)	1.88 (5.50)	1.71 (5.00)	1.88 (5.50)	2.22 (6.50)	2.31 (6.75)	3.45 (10.1)	3.79 (11.1)
1 HP (0.75 kW) x 4 Pole		1.5 HP (1.1 kW) x 4 Pole		2 HP (1.5 kW) x 4 Pole		3 HP (2.2 kW) x 4 Pole		5 HP (3.7 kW) x 4 Pole	
Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake
4.10 (12.0)	4.44 (13.0)	6.32 (18.5)	7.11 (20.8)	7.28 (21.3)	8.03 (23.5)	11.4 (33.3)	12.7 (37.3)	29.0 (84.8)	32.7 (95.8)
7.5 HP (5.5 kW) x 4 Pole		10 HP (7.5 kW) x 4 Pole		15 HP (11 kW) x 4 Pole		20 HP (15 kW) x 4 Pole		25 HP (18 kW) x 4 Pole	
Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake
39.0 (114)	42.7 (125)	91.6 (268)	104 (303)	128 (375)	140 (410)	307 (898)	366 (1070)	769 (2251)	830 (2430)
30 HP (22 kW) x 4 Pole		40 HP (30 kW) x 4 Pole		50 HP (37 kW) x 4 Pole		60 HP (45 kW) x 4 Pole		75 HP (55 kW) x 4 Pole	
Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake
769 (2250)	830 (2430)	855 (2500)	895 (2620)	1053 (3080)	1097 (3210)	1172 (3430)	1217 (3560)	2307 (6750)	— —

Table 5.7: Moment of Inertia on Motor Shaft of AF Motor Three-Phase Integral Motor

Units: lb·inch² ($\times 10^{-4}$ kg·m²)

1/8 HP (0.1 kW) x 4 Pole		1/4 HP (0.2 kW) x 4 Pole		1/2 HP (0.37 kW) x 4 Pole		1 HP (0.75 kW) x 4 Pole		2 HP (1.5 kW) x 4 Pole	
Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake
1.71 (5.00)	1.88 (5.50)	2.22 (6.50)	2.31 (6.75)	4.10 (12.0)	4.44 (13.0)	7.28 (21.3)	8.03 (23.5)	11.4 (33.3)	12.7 (37.3)
3 HP (2.2 kW) x 4 Pole		5 HP (3.7 kW) x 4 Pole		7.5 HP (5.5 kW) x 4 Pole		10 HP (7.5 kW) x 4 Pole		15 HP (11 kW) x 4 Pole	
Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake
29.0 (84.8)	32.7 (95.8)	39.0 (114)	42.7 (125)	91.6 (268)	104 (303)	128 (375)	140 (410)	307 (898)	365 (1070)
20 HP (15 kW) x 4 Pole		25 HP (18 kW) x 4 Pole		30 HP (22 kW) x 4 Pole		40 HP (30 kW) x 4 Pole		50 HP (37 kW) x 4 Pole	
Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake	Standard	w/ Brake
769 (2250)	830 (2430)	854 (2500)	895 (2620)	855 (2500)	878 (2620)	1053 (3080)	1097 (3210)	1172 (3430)	1217 (3560)

Special Load Guidelines Misc.

Excessive Overloads

Cyclo® BBB5 Speed Reducers provide 200% momentary intermittent shock load capacity and are warranted for two years from date of shipment. Refer to our standard terms and conditions for our complete warranty.

Selection for Applications Involving Shock Loading

For applications involving frequent start-stop, braking or reversing, or quick starting of load having large inertia, consult factory for model selection or recommended modifications.

Allowable Radial and Thrust Loads

The loads imposed on the reducer shafts vary with the method of connecting the shaft to the driven machine. Frequently, in addition to torsional forces, radial and thrust loads are applied to the slow speed shaft at the same time. For example, coupling connections normally involve torsional forces only. However, when power is transmitted through spur gears, belts, pulleys or chains, both torsional

and radial forces may be applied to the reducer shafts. When driving through helical or bevel gears, all three conditions (torsional, radial and thrust load) may be referred to the reducer shaft.

The reducer shafts and bearings must have sufficient strength to withstand these loads, and it is, therefore, necessary to determine the allowable limits for each condition. Please consult factory for further information.

Load Centering

The radial load capacities are calculated with the load concentrated at the midpoint of the slow speed shaft extension. Radial load capacities decrease if the center of the load is moved farther from the reducer and the values obtained from the charts must be adjusted accordingly..

Special Load Guidelines Inertia

Table 5.8: Moment of Inertia on High Speed Shaft of Reducer

Units: lb·inch² (x 10⁻⁴ kg·m²)

Model	Nominal Reduction Ratio												
	11	13	14	16	18	21	22	25	28	35	39	46	53
5Z100	1.54	0.926	0.899	0.588	0.571	0.485	—	—	0.332	0.214	0.208	0.198	0.178
5Z105	(4.51)	(2.71)	(2.63)	(1.72)	(1.67)	(1.42)	—	—	(0.970)	(0.625)	(0.610)	(0.580)	(0.522)
5Z110	1.94	1.04	1.01	0.697	0.680	0.728	0.687	0.677	0.519	0.386	0.383	0.342	0.314
5Z115	(5.69)	(3.03)	(2.95)	(2.04)	(1.99)	(2.13)	(2.01)	(1.98)	(1.52)	(1.13)	(1.12)	(1.00)	(0.920)
5Z120	3.96	2.46	2.43	1.85	1.83	1.46	1.61	1.61	1.18	0.81	0.807	0.841	0.800
5Z125	(11.6)	(7.20)	(7.12)	(5.41)	(5.36)	(4.27)	(4.72)	(4.70)	(3.46)	(2.37)	(2.36)	(2.46)	(2.34)
5A110	2.02	1.13	1.05	0.762	0.711	0.752	0.721	0.694	0.533	0.400	0.390	0.345	0.318
5A115	(5.92)	(3.30)	(3.08)	(2.23)	(2.08)	(2.20)	(2.11)	(2.03)	(1.56)	(1.17)	(1.14)	(1.01)	(0.931)
5A120	4.10	2.58	2.50	1.93	1.88	1.50	1.66	1.64	1.21	0.827	0.817	0.851	0.807
5A125	(12.0)	(7.55)	(7.32)	(5.64)	(5.49)	(4.39)	(4.86)	(4.79)	(3.53)	(2.42)	(2.39)	(2.49)	(2.36)
5A140	8.82	5.78	5.71	4.24	4.20	3.86	3.96	3.93	2.75	2.09	2.08	1.77	1.64
5A145	(25.8)	(16.9)	(16.7)	(12.4)	(12.3)	(11.3)	(11.6)	(11.5)	(8.06)	(6.12)	(6.09)	(5.18)	(4.81)
5B120	5.47	3.45	3.27	2.52	2.39	1.84	1.95	1.89	1.40	0.943	0.919	0.923	0.861
5B125	(16.0)	(10.1)	(9.57)	(7.36)	(7.00)	(5.39)	(5.70)	(5.52)	(4.09)	(2.76)	(2.69)	(2.70)	(2.52)
5B140	10.2	6.70	6.53	4.85	4.72	4.24	4.27	4.20	2.96	2.22	2.19	1.85	1.70
5B145	(29.8)	(19.6)	(19.1)	(14.2)	(13.8)	(12.4)	(12.5)	(12.3)	(8.67)	(6.49)	(6.41)	(5.41)	(4.98)
5B160	32.2	22.3	22.1	16.6	16.5	13.4	14.6	14.5	10.7	8.92	8.89	8.37	7.96
5B165	(94.2)	(65.3)	(64.7)	(48.6)	(48.3)	(39.3)	(42.7)	(42.5)	(31.2)	(26.1)	(26.0)	(24.5)	(23.3)
5C140	14.0	9.36	8.78	6.60	6.22	5.26	5.16	4.96	3.55	2.58	2.50	2.07	1.87
5C145	(40.9)	(27.4)	(25.7)	(19.3)	(18.2)	(15.4)	(15.1)	(14.5)	(10.4)	(7.55)	(7.32)	(6.06)	(5.47)
5C160	36.6	25.3	24.5	18.4	18.0	14.4	15.5	15.2	11.2	9.26	9.16	8.58	8.13
5C165	(107)	(74.0)	(71.8)	(53.8)	(52.7)	(42.2)	(45.2)	(44.6)	(32.8)	(27.1)	(26.8)	(25.1)	(23.8)
5C170	60.2	40.0	39.3	31.3	30.9	28.8	28.3	28.1	22.6	18.3	18.2	17.4	15.9
5C175	(176)	(117)	(115)	(91.6)	(90.5)	(84.3)	(82.9)	(82.3)	(66.0)	(53.5)	(53.3)	(50.8)	(46.6)

Model	Nominal Reduction Ratio												
	60	67	74	80	88	102	112	123	151	179	207	249	305
5Z100	0.139	0.144	0.143	0.132	0.131	0.104	0.097	0.097	0.092	0.110	0.087	0.107	0.084
5Z105	(0.407)	(0.421)	(0.418)	(0.386)	(0.383)	(0.303)	(0.285)	(0.284)	(0.270)	(0.322)	(0.254)	(0.313)	(0.247)
5Z110	0.297	0.264	0.263	0.254	0.254	0.246	0.236	0.236	0.231	0.225	0.223	0.221	0.219
5Z115	(0.869)	(0.772)	(0.769)	(0.744)	(0.742)	(0.719)	(0.691)	(0.690)	(0.675)	(0.657)	(0.652)	(0.646)	(0.642)
5Z120	0.653	0.707	0.707	0.670	0.670	0.537	0.519	0.519	0.502	0.615	0.489	0.602	0.478
5Z125	(1.91)	(2.07)	(2.07)	(1.96)	(1.96)	(1.57)	(1.52)	(1.52)	(1.47)	(1.80)	(1.43)	(1.76)	(1.40)
5A110	0.300	0.268	0.265	0.257	0.255	0.247	0.238	0.237	0.231	0.225	0.223	0.221	0.219
5A115	(0.878)	(0.783)	(0.775)	(0.752)	(0.746)	(0.722)	(0.695)	(0.692)	(0.676)	(0.658)	(0.653)	(0.646)	(0.642)
5A120	0.660	0.714	0.711	0.673	0.673	0.537	0.523	0.519	0.506	0.615	0.489	0.602	0.478
5A125	(1.93)	(2.09)	(2.08)	(1.97)	(1.97)	(1.57)	(1.53)	(1.52)	(1.48)	(1.80)	(1.43)	(1.76)	(1.40)
5A140	1.51	1.36	1.35	1.30	1.29	1.22	1.20	1.20	1.15	1.13	1.13	1.12	1.11
5A145	(4.41)	(3.97)	(3.96)	(3.79)	(3.78)	(3.58)	(3.51)	(3.51)	(3.37)	(3.32)	(3.32)	(3.27)	(3.26)
5B120	0.701	0.745	0.738	0.697	0.690	0.554	0.533	0.530	0.513	0.619	0.492	0.605	0.482
5B125	(2.05)	(2.18)	(2.16)	(2.04)	(2.02)	(1.62)	(1.56)	(1.55)	(1.50)	(1.81)	(1.44)	(1.77)	(1.41)
5B140	1.56	1.39	1.38	1.32	1.31	1.24	1.21	1.21	1.16	1.14	1.14	1.12	1.11
5B145	(4.55)	(4.07)	(4.05)	(3.86)	(3.84)	(3.63)	(3.55)	(3.54)	(3.39)	(3.34)	(3.33)	(3.27)	(3.26)
5B160	7.42	7.14	7.14	6.97	6.97	6.70	6.60	6.60	6.49	6.46	6.49	6.39	6.36
5B165	(21.7)	(20.9)	(20.9)	(20.4)	(20.4)	(19.6)	(19.3)	(19.3)	(19.0)	(18.9)	(19.0)	(18.7)	(18.6)
5C140	1.68	1.49	1.47	1.39	1.37	1.29	1.25	1.24	1.18	1.16	1.15	1.13	1.12
5C145	(4.92)	(4.36)	(4.30)	(4.06)	(4.02)	(3.76)	(3.65)	(3.63)	(3.45)	(3.38)	(3.36)	(3.30)	(3.28)
5C160	7.52	7.25	7.25	7.04	7.04	6.73	6.63	6.63	6.53	6.49	6.49	6.39	6.36
5C165	(22.0)	(21.2)	(21.2)	(20.6)	(20.6)	(19.7)	(19.4)	(19.4)	(19.1)	(19.0)	(19.0)	(18.7)	(18.6)
5C170	15.4	14.7	14.7	14.3	14.3	13.8	13.7	13.7	13.4	13.3	13.2	13.2	13.1
5C175	(45.1)	(43.0)	(43.0)	(41.9)	(41.9)	(40.3)	(40.1)	(40.1)	(39.3)	(38.9)	(38.6)	(38.5)	(38.4)

Cyclo® BBBS

Appendix

This page intentionally left blank.

Lubrication

Oil lubricated models are not filled with oil prior to shipping.

Before operating, fill the unit with the appropriate amount of the correct lubricant for the mounting position (see Table 5.9 and Table 5.10).

When operating in winter or other relatively low ambient temperatures, use the lower viscosity oil specified for each ambient temperature range. Please consult the factory if the unit will be operated consistently in ambient temperatures other than 14°F–104°F (-10° to 40°C).

Grease lubricated models are lubricated with grease prior to shipment from the factory.

NOTE: For units supplied in the Y4 mounting position (input shaft vertical down), the Cyclo® portion is filled at the factory with grease. For these units, the Cyclo® portion does not need to be filled with lubricant before start-up. The Bevel Gear portion of models built for the Y4 mounting configuration still requires filling with gear oil before start-up. Refer to the unit Operating and Maintenance manual for further details.

Adding grease prior to initial start-up is not required. If grease must be replenished or changed avoid using greases other than those shown in the Table 5.11. Please consult the factory when the units will be used in widely fluctuating temperatures, ambient temperatures other than those specified in Table 5.11, or when other special conditions exist for the application. When motors from another manufacturer will be used, please consult and adhere to the associated motor maintenance manual for the appropriate lubrication instructions.

Table 5.9 Lubrication Type

Unit Size	Output (Bevel Gear Portion)	Input (Cyclo® Portion)		
		Motor Horizontal	Motor Vertical Up	Motor Vertical Down
All	Oil	Oil	Oil	Grease

Table 5.10 Standard Oils

Ambient Temperature °F (°C)	ChevronTexaco	Exxon Oil	Mobil Oil	Shell Oil	BP Oil
14° to 41°F (-10° to 5°C)	EP Gear Compound 68	Spartan EP 68	Mobilgear 600 XP 68 (ISO VG 68)	Omala S2 G Oil 68	Energol GR-XP 68
32° to 95°F (0° to 35°C)	EP Gear Compound 100, 150	Spartan EP 100 EP 150	Mobilgear 600 XP 100, 150 (ISO VG 100, 150)	Omala S2 G Oil 100, 150	Energol GR-XP 100 GR-XP 150
86° to 122°F (30° to 50°C)	EP Gear Compound 220, 320, 460	Spartan EP 220 EP 320 EP 460	Mobilgear 600 XP 200 320, 460 (ISO VG 220–460)	Omala S2 G Oil 220, 320 460	Energol GR-XP 220 GR-XP 320 GR-XP 460

Table 5.11 Standard Greases

Ambient Temperature °F (°C)	Reduction Ratio	Input (Cyclo® Portion)
14° to 122°F (-10° to 50°C)	11 through 18:1	Shell Gadus S2 V220 NLG 100
	19:1 and higher	Exxon Unirex N2

Lubrication continued

Table 5.12 Oil Fill Quantities Single Reduction Units: U.S. liquid gallons (*liters*)

Model	Mounting Positions					
	Y1,Y3	Y2	Y4		Y5	Y6
			BBB5	Input		
5Z100	0.21	0.42	0.18		0.17	0.24
5Z105	(0.80)	(1.58)	(0.67)	G	(0.66)	(0.90)
5Z110	0.22	0.44	0.18		0.19	0.25
5Z115	(0.85)	(1.65)	(0.67)	G	(0.71)	(0.95)
5Z120	0.25	0.47	0.18		0.21	0.27
5Z125	(0.93)	(1.79)	(0.67)	G	(0.79)	(1.03)
5A110	0.42	0.81	0.22		0.36	0.49
5A115	(1.59)	(3.05)	(0.83)	G	(1.35)	(1.85)
5A120	0.44	0.85	0.22		0.38	0.51
5A125	(1.68)	(3.23)	(0.83)	G	(1.44)	(1.94)
5A140	0.50	0.95	0.22		0.44	0.57
5A145	(1.90)	(3.58)	(0.83)	G	(1.66)	(2.16)
5B120	0.70	1.37	0.42		0.61	0.81
5B125	(2.66)	(5.17)	(1.60)	G	(2.29)	(3.06)
5B140	0.76	1.46	0.42		0.66	0.86
5B145	(2.86)	(5.52)	(1.60)	G	(2.49)	(3.26)
5B160	0.88	1.63	0.42		0.78	0.99
5B165	(3.33)	(6.17)	(1.60)	G	(2.96)	(3.73)
5C140	1.41	2.84	0.93		1.33	1.50
5C145	(5.35)	(10.7)	(3.53)	G	(5.05)	(5.66)
5C160	1.61	3.07	0.93		1.53	1.69
5C165	(6.08)	(11.6)	(3.53)	G	(5.78)	(6.39)
5C170	1.72	3.20	0.93		1.64	1.80
5C175	(6.52)	(12.1)	(3.53)	G	(6.22)	(6.83)

Table 5.13 Oil Fill Quantities Double Reduction Units: U.S. liquid gallons (*liters*)

Model	Mounting Positions					
	Y1, Y3	Y2	Y4		Y5	Y6
			BBB5	Input		
5Z10DA	0.24	0.42	0.18		0.24	0.26
	(0.89)	(1.60)	(0.68)	G	(0.91)	(1.00)
5Z12DA	0.24	0.47	0.18		0.29	0.29
	(0.89)	(1.78)	(0.70)	G	(1.10)	(1.10)
5Z12DB	0.26	0.47	0.18		0.29	0.29
	(0.99)	(1.78)	(0.70)	G	(1.11)	(1.10)
5A12DA	0.44	0.85	0.22		0.38	0.49
	(1.68)	(3.23)	(0.83)	G	(1.44)	(1.84)
5A12DB	0.42	0.85	0.22		0.38	0.49
	(1.58)	(3.23)	(0.83)	G	(1.44)	(1.84)
5B12DA	0.70	1.37	0.42		0.58	0.78
	(2.66)	(5.17)	(1.60)	G	(2.19)	(2.96)
5B12DB	0.68	1.34	0.42		0.58	0.78
	(2.56)	(5.07)	(1.60)	G	(2.19)	(2.96)
5B14DA	0.76	1.46	0.42		0.63	0.83
	(2.86)	(5.52)	(1.60)	G	(2.39)	(3.16)
5B14DB	0.73	1.46	0.42		0.63	0.83
	(2.76)	(5.52)	(1.60)	G	(2.39)	(3.16)
5C14DA	1.39	2.81	0.93		1.33	1.50
	(5.25)	(10.6)	(3.53)	G	(5.05)	(5.66)
5C14DB	1.39	2.81	0.93		1.31	1.50
	(5.25)	(10.6)	(3.53)	G	(4.95)	(5.66)
5C14DC	1.39	2.78	0.93		1.31	1.47
	(5.25)	(10.5)	(3.53)	G	(4.95)	(5.56)
5C16DA	1.61	3.07	0.93		1.50	1.66
	(6.08)	(11.6)	(3.53)	G	(5.68)	(6.29)
5C16DB	1.58	3.04	0.93		1.47	1.66
	(5.98)	(11.5)	(3.53)	G	(5.58)	(6.29)

Oil lubricated units are shipped without oil. Prior to initial start-up, the unit must be filled with the correct amount of oil (see Table 5.12).

Grease lubricated models are lubricated at the factory. Additional grease does not need to be added prior to initial start-up.

Oil Replenishment and Change Interval

- Maintain proper oil levels at all times.
- An oil change after the first 500 hours of operation is highly recommended.
- For units with case oil temperatures over 158°F (70°C) after the first oil change, Sumitomo recommends an oil change every 2500 hours, or six months, whichever comes first.
For units with case oil temperatures below 158°F (70°C), after the first oil change, Sumitomo recommends an oil change every 5000 hour, or one year, whichever comes first.
- If a proper preventive maintenance program is implemented and maintained, a longer change period may be acceptable.
- If the unit is running in a high ambient, high humidity, or corrosive environment, the lubricant will have to be changed more frequently. Consult factory for recommendations.

Grease Replenishment and Change Interval

For units ordered for mounting in the Y4 configuration (motor vertical down), please consult the Operating and Maintenance manual for proper grease replenishment and change interval for the Cyclo® portion.

Motor

Motor Cover Mounting Specifications

Refer to dimension FA or FB when designing the mounting space into which the gearmotor is to fit.

Dimension FA: The space necessary to remove the fan cover or brake cover without removing the motor from the equipment.

Dimension FB: Minimum space required for adequate ventilation.

Notes:

1. Non-CSA AF motors of 40 HP (30kW) or greater blower cooled type

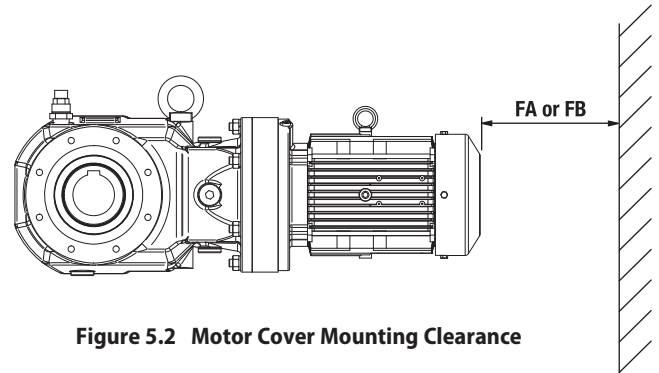


Figure 5.2 Motor Cover Mounting Clearance

Table 5.14 Space Requirements

Units: inches (mm)

Motor HP (kW) x P	Non-Brake Motor				Brake Motor			
	Three Phase		AF Motor		Three Phase		AF Motor	
	FA	FB	FA	FB	FA	FB	FA	FB
1/8 (0.1) x 4	—	—	1.9 (48)	0.8 (20)	2.0 (49)	—	2.5 (61)	0.8 (20)
1/4 (0.2) x 4	1.9 (48)	0.8 (20)	1.9 (48)	0.8 (20)	2.5 (61)	0.8 (20)	2.5 (61)	0.8 (20)
1/3 (0.25) x 4	1.9 (48)	0.8 (20)	1.9 (48)	0.8 (20)	2.5 (61)	0.8 (20)	2.5 (61)	0.8 (20)
1/2 (0.4) x 4	1.9 (48)	0.8 (20)	2.0 (49)	0.8 (20)	2.5 (61)	0.8 (20)	3.7 (93)	0.8 (20)
3/4 (0.55) x 4	2.0 (49)	0.8 (20)	2.1 (52)	0.8 (20)	3.7 (93)	0.8 (20)	4.6 (115)	0.8 (20)
1 (0.75) x 4	2.0 (49)	0.8 (20)	2.1 (52)	0.8 (20)	3.7 (93)	0.8 (20)	4.6 (115)	0.8 (20)
1.5 (1.1) x 4	2.1 (52)	0.8 (20)	2.2 (56)	0.8 (20)	4.6 (115)	0.8 (20)	4.8 (121)	0.8 (20)
2 (1.5) x 4	2.1 (52)	0.8 (20)	2.2 (56)	0.8 (20)	4.6 (115)	0.8 (20)	4.8 (121)	0.8 (20)
3 (2.2) x 4	2.2 (56)	0.8 (20)	2.4 (60)	0.8 (20)	4.8 (121)	0.8 (20)	5.2 (132)	0.8 (20)
5 (3.7) x 4	2.4 (60)	0.8 (20)	2.4 (60)	0.8 (20)	5.2 (132)	0.8 (20)	5.2 (132)	0.8 (20)
7.5 (5.5) x 4	2.4 (60)	0.8 (20)	3.0 (75)	1.0 (25)	5.2 (132)	0.8 (20)	6.7 (170)	1.0 (25)
10 (7.5) x 4	3.0 (75)	1.0 (25)	3.0 (75)	1.0 (25)	6.7 (170)	1.0 (25)	6.7 (170)	1.0 (25)
15 (11) x 4	3.0 (75)	1.0 (25)	5.2 (130)	1.2 (30)	6.7 (170)	1.0 (25)	8.7 (220)	1.2 (30)
20 (15) x 4	5.2 (130)	1.2 (30)	6.2 (155)	1.2 (30)	8.7 (220)	1.2 (30)	14.5 (367)	1.2 (30)
25 (18.5) x 4	6.2 (155)	1.2 (30)	6.7 (170)	1.2 (30)	14.5 (367)	1.2 (30)	14.6 (370)	1.2 (30)
30 (22) x 4	6.2 (155)	1.2 (30)	6.7 (170)	1.2 (30)	14.5 (367)	1.2 (30)	14.6 (370)	1.2 (30)
40 (30) x 4	6.7 (170)	1.2 (30)	5.6 (140)	1.2 (30)	14.6 (370)	1.2 (30)	11.7 (295)	1.2 (30)
50 (37) x 4	9.1 (230)	1.2 (30)	5.6 (140)	1.2 (30)	17.6 (445)	1.2 (30)	11.7 (295)	1.2 (30)

Conduit Box Dimensions

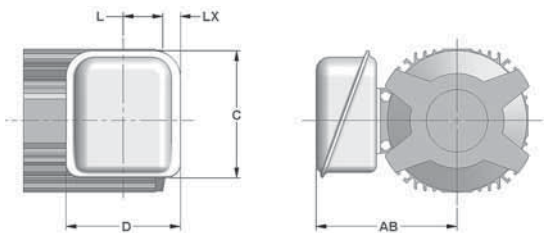


Figure 5.3 Non-UL Indoor Duty

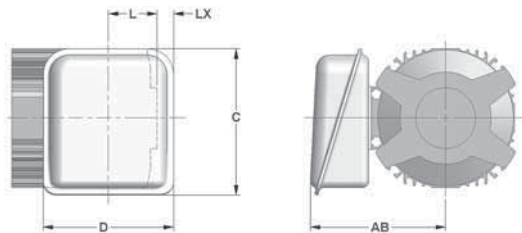


Figure 5.4 UL Indoor Duty

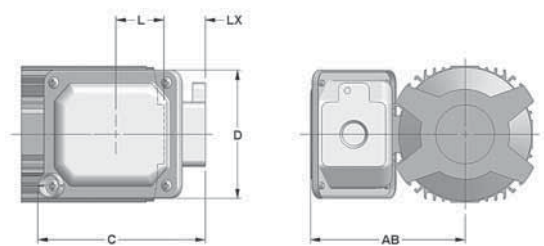


Figure 5.5 Non-UL & UL Washdown Duty

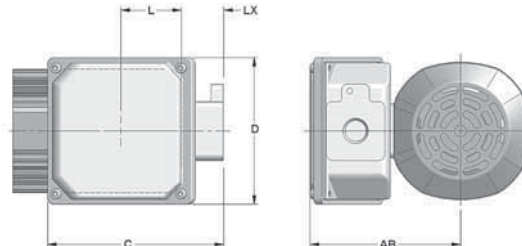


Figure 5.6 Global

Table 5.15 Terminal Box Mounting Centers

Units: inches (mm)

Frame Size	Duty Rating	Without Brake					With Brake					Conduit Opening
		AB	C	D	L	LX	AB	C	D	L	LX	
V-63S	Non-UL Indoor Duty	4.13 (105)	3.78 (96.0)	3.35 (85.1)	1.38 (35.0)	0.30 (7.6)	5.20 (132)	5.67 (144)	4.80 (122)	2.76 (70.1)	—	Ø0.90 (Ø23)
	UL Indoor Duty	5.20 (132)	5.67 (144)	4.80 (122)		1.02 (25.9)	5.20 (132)	5.67 (144)	4.80 (122)		—	Ø0.90 (Ø23)
	Non-UL & UL Washdown Duty	5.00 (127)	5.16 (131)	3.94 (100)		1.58 (40.1)	5.00 (127)	5.16 (131)	3.94 (100)		0.20 (5.1)	PF1/2
	Global	5.04 (128)	5.91 (150)	4.92 (125)		2.05 (52.1)	5.04 (128)	5.91 (150)	4.92 (125)		0.67 (17)	NPT1/2
	Small Global	4.45 (113)	4.41 (112)	4.09 (104)		0.80 (20)	4.45 (113)	4.41 (112)	4.09 (104)		—	NPT1/2
	Small Global CE	4.45 (113)	4.41 (112)	4.09 (104)		0.80 (20)	4.45 (113)	4.41 (112)	4.09 (104)		—	M16, M25
V-63M V-71M VA-63S VA-63M	Non-UL Indoor Duty	4.13 (105)	3.78 (96.0)	3.35 (85.1)	2.34 (59.4)	—	5.20 (132)	5.67 (144)	4.80 (122)	3.58 (90.9)	—	Ø0.90 (Ø23)
	UL Indoor Duty	5.20 (132)	5.67 (144)	4.80 (122)		0.06 (1.52)	5.20 (132)	5.67 (144)	4.80 (122)		—	Ø0.90 (Ø23)
	Non-UL & UL Washdown Duty	5.00 (127)	5.16 (131)	3.94 (100)		0.62 (15.7)	5.00 (127)	5.16 (131)	3.94 (100)		—	PF1/2
	Global	5.04 (128)	5.91 (150)	4.92 (125)		1.09 (27.7)	5.04 (128)	5.91 (150)	4.92 (125)		—	NPT1/2
	Small Global	4.45 (113)	4.41 (112)	4.09 (104)		—	4.45 (113)	4.41 (112)	4.09 (104)		—	NPT1/2
	Small Global CE	4.45 (113)	4.41 (112)	4.09 (104)		—	4.45 (113)	4.41 (112)	4.09 (104)		—	M16, M25
V-80S V-80M VA-71M	Non-UL Indoor Duty	4.69 (119)	3.78 (96.0)	3.35 (85.1)	3.82 (97.0)	—	5.79 (147)	5.67 (144)	4.80 (122)	5.53 (140)	—	Ø0.90 (Ø23)
	UL Indoor Duty	5.79 (147)	5.67 (144)	4.80 (122)		—	5.79 (147)	5.67 (144)	4.80 (122)		—	Ø0.90 (Ø23)
	Non-UL & UL Washdown Duty	5.55 (141)	5.16 (131)	3.94 (100)		—	5.55 (141)	5.16 (131)	3.94 (100)		—	PF3/4
	Global	5.63 (143)	5.91 (150)	4.92 (125)		—	5.63 (143)	5.91 (150)	4.92 (125)		—	NPT3/4
	Global CE	5.63 (143)	4.97 (126)	4.92 (125)		—	5.63 (143)	4.97 (126)	4.92 (125)		—	2 - M25

Motor continued

Conduit Box Dimensions

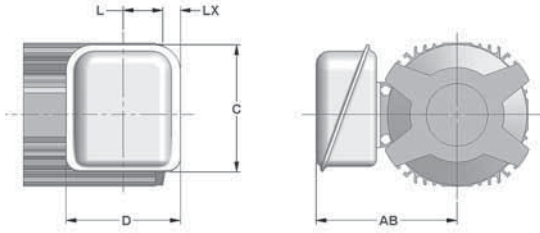


Figure 5.3 Non-UL Indoor Duty

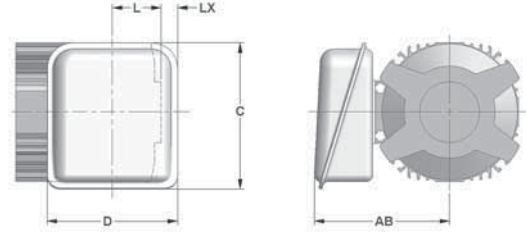


Figure 5.4 UL Indoor Duty

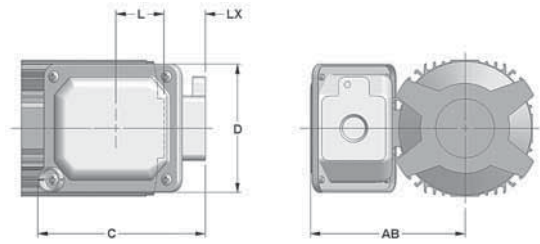


Figure 5.5 Non-UL & UL Washdown Duty

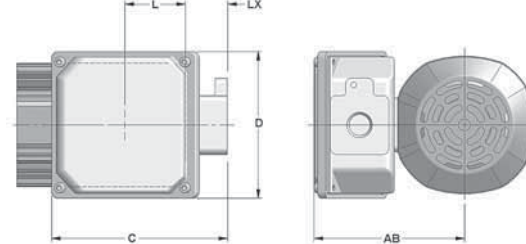


Figure 5.6 Global

Table 5.15 Terminal Box Mounting Centers (continued)

Units: inches (mm)

Frame Size	Duty Rating	Without Brake					With Brake					Conduit Opening
		AB	C	D	L	LX	AB	C	D	L	LX	
V-90S V-90L VA-80S VA-80M	Non-UL Indoor Duty	4.88 (124)	3.78 (96.0)	3.35 (85.1)	3.98 (101)	—	5.98 (152)	5.67 (144)	4.80 (122)	6.42 (163)	—	Ø0.90 (Ø23)
	UL Indoor Duty	5.98 (152)	5.67 (144)	4.80 (122)		—	5.98 (152)	5.67 (144)	4.80 (122)		—	Ø0.90 (Ø23)
	Non-UL & UL Washdown Duty	5.75 (146)	5.16 (131)	3.94 (100)		—	5.75 (146)	5.16 (131)	3.94 (100)		—	PF3/4
	Global	5.83 (148)	5.91 (150)	4.92 (125)		—	5.83 (148)	5.91 (150)	4.92 (125)		—	NPT3/4
	Global CE	5.83 (148)	4.97 (126)	4.92 (125)		—	5.83 (148)	4.97 (126)	4.92 (125)		—	2 - M25
V-100S V-100L VA-90S VA-90L	Non-UL Indoor Duty	5.16 (131)	3.78 (96.0)	3.35 (85.1)	4.17 (106)	—	6.26 (159)	5.67 (144)	4.80 (122)	6.65 (169)	—	Ø0.90 (Ø23)
	UL Indoor Duty	6.26 (159)	5.67 (144)	4.80 (122)		—	6.26 (159)	5.67 (144)	4.80 (122)		—	Ø0.90 (Ø23)
	Non-UL & UL Washdown Duty	6.02 (153)	5.16 (131)	3.94 (100)		—	6.02 (153)	5.16 (131)	3.94 (100)		—	PF3/4
	Global	6.10 (155)	5.91 (150)	4.92 (125)		—	6.10 (155)	5.91 (150)	4.92 (125)		—	NPT3/4
	Global CE	6.10 (155)	4.97 (126)	4.92 (125)		—	6.10 (155)	4.97 (126)	4.92 (125)		—	2 - M25
V-112M VA-100L	Non-UL Indoor Duty	5.80 (147)	4.41 (112)	3.94 (100)	5.00 (127)	—	6.69 (170)	5.67 (144)	4.80 (122)	7.83 (199)	—	Ø0.90 (Ø23)
	UL Indoor Duty	6.69 (170)	5.67 (144)	4.80 (122)		—	6.69 (170)	5.67 (144)	4.80 (122)		—	Ø0.90 (Ø23)
	Non-UL & UL Washdown Duty	7.20 (183)	6.02 (153)	4.84 (123)		—	7.20 (183)	6.02 (153)	4.84 (123)		—	PF3/4
	Global	6.54 (166)	5.91 (150)	4.92 (125)		—	6.54 (166)	5.91 (150)	4.92 (125)		—	NPT3/4
	Global CE	6.54 (166)	4.97 (126)	4.92 (125)		—	6.54 (166)	4.97 (126)	4.92 (125)		—	2 - M25

Appendix
Cyclo® BBBS

Motor continued

Table 5.15 Terminal Box Mounting Centers (continued)

Units: inches (mm)

Frame Size	Duty Rating	Without Brake					With Brake					Conduit Opening
		AB	C	D	L	LX	AB	C	D	L	LX	
V-132S VA-112M	Non-UL Indoor Duty	5.80 (147)	4.41 (112)	3.94 (100)	5.00 (127)	—	6.69 (170)	5.67 (144)	4.80 (122)	7.83 (199)	—	Ø0.90 (Ø23)
	UL Indoor Duty	6.69 (170)	5.67 (144)	4.80 (122)		—	6.69 (170)	5.67 (144)	4.80 (122)		—	Ø0.90 (Ø23)
	Non-UL & UL Washdown Duty	7.20 (183)	6.02 (153)	4.84 (123)		—	7.20 (183)	6.02 (153)	4.84 (123)		—	PF1
	Global	6.54 (166)	5.91 (150)	4.92 (125)		—	6.54 (166)	5.91 (150)	4.92 (125)		—	NPT1
	Global CE	6.54 (166)	4.97 (126)	4.92 (125)		—	6.54 (166)	4.97 (126)	4.92 (125)		—	2 - M25
V-132M VA-132S	UL Indoor Duty	7.40 (188)	5.44 (138)	4.80 (122)	5.63 (143)	—	7.40 (188)	5.44 (138)	4.80 (122)	9.37 (238)	—	Ø1.69 (Ø42.9)
	Non-UL & UL Washdown Duty	8.74 (222)	7.37 (187)	6.06 (154)		—	8.74 (222)	7.37 (187)	6.06 (154)		—	PF1
	Global	8.31 (211)	7.83 (199)	6.69 (170)		—	8.31 (211)	7.83 (199)	6.69 (170)		—	NPT1
	Global CE	8.31 (211)	6.91 (176)	6.69 (170)		—	8.31 (211)	6.91 (176)	6.69 (170)		—	2 - M32
V-160M VA-132M	UL Indoor Duty	7.40 (188)	5.44 (138)	4.80 (122)	5.63 (143)	—	7.40 (188)	5.44 (138)	4.80 (122)	9.37 (238)	—	Ø1.69 (Ø42.9)
	Non-UL & UL Washdown Duty	8.74 (222)	7.37 (187)	6.06 (154)		—	8.74 (222)	7.37 (187)	6.06 (154)		—	PF1-1/4
	Global	8.31 (211)	7.83 (199)	6.69 (170)		—	8.31 (211)	7.83 (199)	6.69 (170)		—	NPT1-1/4
	Global CE	8.31 (211)	6.91 (176)	6.69 (170)		—	8.31 (211)	6.91 (176)	6.69 (170)		—	2 - M32

This page intentionally left blank.

Cydo® BBB5

Appendix

Motor continued

U.S. Standard Motor Data

Table 5.16 Three Phase, 230/460v, 60Hz, 1800 RPM Synchronous Speed, TEFC

Units: inches (mm)

Motor Power HP (kW)	Motor Frame Size	Full Load		Current (A)			Starting Torque % of FL	Break-down Torque % of FL	Efficiency %	Power Factor %	NEMA Code Letter	Inertia WR ² lb·in ² (kg·m ²)	
		Rated Speed (RPM)	Torque in·lbs (N·m)	Full Load 115V	Full Load 230V	No Load % of FL							Starting % of FL
1/8 ^[1] (0.10)	V-63S	1730	4.55 (0.514)	0.66	0.33	86.1%	424%	326%	308%	63.3	60.0	K	1.11 (0.00032)
1/4 (0.20)	V-63M	1730	9.10 (1.03)	1.12	0.56	79.6%	464%	300%	287%	69.2	65.1	K	1.71 (0.00050)
1/3 (0.25)	V-63M	1700	12.2 (1.38)	1.24	0.62	72%	419%	237%	226%	70.1	72.0	G	1.71 (0.00050)
1/2 (0.37)	V-71M	1750	18.0 (2.03)	2.15	1.08	77.7%	456%	295%	276%	71.5	65.4	J	2.22 (0.00065)
3/4 (0.56)	V-80S	1720	27.5 (3.11)	2.47	1.24	68.4%	500%	266%	261%	76.5	73.1	H	3.45 (0.0010)
1 (0.75)	V-80M	1740	36.2 (4.09)	3.38	1.69	69.8%	521%	278%	303%	76.9	72.4	H	4.10 (0.0012)
1.5 (1.1)	V-90S	1720	54.9 (6.20)	4.66	2.33	64.4%	614%	273%	290%	79.8	74.3	J	6.32 (0.0018)
2 (1.5)	V-90L	1740	72.4 (8.18)	6.07	3.04	61.6%	606%	263%	275%	81.9	75.8	J	7.28 (0.0021)
3 (2.2)	V-100L	1730	109 (12.3)	8.50	4.25	57.2%	645%	277%	311%	83.9	77.4	J	11.4 (0.0033)
5 (3.7)	V-112M	1730	182 (20.6)	13.1	6.55	47.8%	702%	278%	293%	85.8	82.7	J	29.0 (0.0085)
7.5 (5.6)	V-132S	1710	276 (31.2)	18.2	9.08	32.4%	661%	223%	252%	86.2	88.3	H	39.0 (0.0014)
10 (7.5)	V-132M	1750	360 (40.7)	23.7	11.9	27.8%	620%	212%	228%	88.9	89.7	G	91.6 (0.0268)
15 (11)	V-160M	1750	540 (61.0)	34.1	17.1	27.6%	677%	248%	258%	90.1	90.0	G	128 (0.0375)
20 (15)	G-160L	1750	720 (81.4)	45.7	22.9	22.3%	595%	222%	220%	90.8	90.7	F	307 (0.0895)
25 (19)	F-180MG	1770	890 (101)	58.0	29.0	36.1%	917%	361%	328%	92	86.9	K	769 (0.225)
30 (22)	F-180MG	1760	1090 (123)	67.8	33.9	30.5%	785%	303%	275%	92.1	88.5	J	769 (0.225)
40 (30)	F-180L	1760	1430 (162)	93.3	46.7	31.4%	755%	310%	274%	92.2	87.6	H	854 (0.250)
50 (37)	F-200L	1760	1790 (202)	113	56.7	30.5%	800%	340%	286%	92.6	88.5	J	1050 (0.307)
60 (45)	F-200L	1740	2170 (245)	137	68.7	28.5%	793%	344%	282%	92.4	89.0	J	1170 (0.342)
75 (55)	F-225S	1760	2680 (302)	166	83	28.6%	758%	277%	282%	92.4	90.0	H	2310 (0.676)

Note: [1] 1/8 HP (0.10 kW) is TENV
 [2] FL= Full Load.

Motor continued

U.S. Standard AF Motor Motor Data

Table 5.17 Three Phase, 230/460v, 60Hz, 1200 RPM Synchronous Speed, TEFC

Units: inches (mm)

Motor Power HP (kW)	Motor Frame Size	Full Load		Current (A)				Starting Torque % of FL	Break-down Torque % of FL	Efficiency %	Power Factor %	NEMA Code Letter	Inertia WR ² lb·in ² (kg·m ²)
		Rated Speed (RPM)	Torque in·lbs (N·m)	Full Load 115V	230V	No Load % of FL	Starting % of FL						
20 (15)	F-180MG	1180	1070 (121)	48.4	24.2	39.5%	748%	273%	306%	92.3	84.3	J	1090 (0.319)
25 (19)	F-180L	1180	1330 (150)	58.5	29.3	35.4%	704%	261%	286%	91.7	86.6	J	1240 (0.363)
30 (22)	F-180L	1180	1600 (181)	71.0	35.6	39.1%	713%	273%	297%	92.0	84.4	H	1240 (0.363)
40 (30)	F-200L	1180	2130 (241)	95.4	47.7	36.3%	738%	318%	305%	92.6	85.4	H	1620 (0.474)
50 (37)	F-200L	1170	2690 (304)	119	59.6	39.1%	776%	348%	327%	92.8	84.1	J	2050 (0.600)
60 (45)	F-225S	1180	3200 (362)	141	70.4	33.4%	683%	290%	267%	92.8	86.6	H	3420 (1.00)

Table 5.18 Three Phase, 230/460v, 60Hz, 1800 RPM Synchronous Speed, 10:1 Constant Torque Speed Range, TEFC

Units: inches (mm)

Motor Power HP (kW)	Frame Size	Full Load Torque in·lbs (N·m)	Wiring	60 Hz			6 Hz			No Load Current @ 60Hz (A)	Inertia WR ² lb·in ² (kg·m ²)
				Voltage (V)	Current (A)	Speed (RPM)	Voltage (V)	Current (A)	Speed (RPM)		
1/8 ^[1] (0.10)	VA-63S	4.77 (0.54)	High Voltage Low Voltage	460 230	0.49 0.98	1770	68 34	0.37 0.74	125	0.46 0.92	1.71 (0.0005)
1/4 (0.20)	VA-63M	9.60 (1.08)	High Voltage Low Voltage	460 230	0.91 1.80	1765	68 34	0.79 1.60	125	0.87 1.74	2.22 (0.0006)
1/3 (0.25)	VA-63M	12.0 (1.36)	High Voltage Low Voltage	460 230	0.94 1.90	1755	78 34	0.87 1.70	125	0.87 1.74	2.22 (0.0006)
1/2 (0.37)	VA-71M	19.2 (2.17)	High Voltage Low Voltage	460 230	1.30 2.60	1750	70 35	1.10 2.30	115	1.21 2.42	4.10 (0.0012)
3/4 (0.56)	VA-80S	26.3 (2.97)	High Voltage Low Voltage	460 230	1.60 3.30	1760	62 31	1.60 3.10	125	1.54 3.07	6.32 (0.0018)
1 (0.75)	VA-80M	35.8 (4.05)	High Voltage Low Voltage	460 230	2.10 4.30	1755	62 31	1.90 3.80	120	1.92 3.85	7.28 (0.0021)
1.5 (1.1)	VA-90L	52.6 (5.94)	High Voltage Low Voltage	460 230	2.90 5.80	1755	66 33	2.70 5.40	145	2.51 5.01	11.4 (0.0033)
2 (1.5)	VA-90L	72.4 (8.18)	High Voltage Low Voltage	460 230	3.40 6.70	1740	66 33	3.20 6.40	105	2.52 5.03	11.4 (0.0033)
3 (2.2)	VA-100L	105 (11.9)	High Voltage Low Voltage	460 230	4.60 9.20	1760	62 31	4.60 9.30	140	3.28 6.56	29.0 (0.0085)
5 (3.7)	VA-112M	178 (20.1)	High Voltage Low Voltage	460 230	6.50 13.1	1740	64 32	7.30 14.7	100	3.14 6.28	39.0 (0.0114)
7.5 (5.6)	VA-132S	265 (29.9)	High Voltage Low Voltage	460 230	9.30 18.6	1750	68 34	9.30 18.6	130	3.78 7.55	91.6 (0.0268)
10 (7.5)	VA-132M	359 (40.6)	High Voltage Low Voltage	460 230	12.6 25.2	1755	64 32	12.9 25.8	135	5.54 12.1	128 (0.0375)
15 (11)	G-160L	526 (59.4)	High Voltage Low Voltage	460 230	18.1 36.2	1760	64 32	19.6 39.3	130	6.03 10.2	307 (0.0898)
20 (15)	F-180MG	710 (80.2)	High Voltage Low Voltage	460 230	25.6 51.0	1780	64 32	26.3 53.0	165	11.3 22.6	769 (0.2250)
25 (19)	F-180L	877 (99.1)	High Voltage Low Voltage	460 230	30.8 62.0	1785	60 30	34.3 68.6	170	16.2 32.4	854 (0.2499)
30 (22)	F-180L	1040 (118)	High Voltage Low Voltage	460 230	37.5 75.0	1780	64 32	39.3 79.0	160	16.2 32.5	854 (0.2499)

Note: [1] 1/8 HP (0.10 kW) is TENV

[2] FL= Full Load.

CSA Approved Motor Data

Table 5.19 Three Phase, 230/460v, 60Hz, 1800 RPM Synchronous Speed, TEFC

Units: inches (mm)

Motor Power HP (kW)	Motor Frame Size	Full Load		Current (A)				Starting Torque % of FL	Break-down Torque % of FL	Efficiency %	Power Factor %	NEMA Code Letter	Inertia WR^2 lb·in ² (kg·m ²)
		Rated Speed (RPM)	Torque in-lbs (N·m)	Full Load 115V	Full Load 230V	No Load % of FL	Starting % of FL						
1/8 ^[1] (0.10)	V-63S	1720	4.58 (0.518)	0.71	0.35	91.4%	457%	378%	393%	65.5	54.1	M	1.11 (0.00032)
1/4 (0.20)	V-63M	1730	9.10 (1.03)	1.20	0.60	86.0%	450%	309%	343%	69.4	60.1	K	1.71 (0.00050)
1/3 (0.25)	V-63M	1710	12.2 (1.38)	1.30	0.65	79.4%	415%	244%	272%	71.3	67.5	H	1.71 (0.00050)
1/2 (0.37)	V-71M	1700	18.5 (2.09)	2.10	1.10	81.0%	481%	343%	331%	75.2	63.1	K	2.22 (0.00065)
3/4 (0.56)	V-80S	1700	27.8 (3.14)	2.60	1.30	70.8%	515%	263%	272%	75.4	71.4	H	3.45 (0.00101)
1 (0.75)	V-80M	1700	37.0 (4.18)	3.60	1.80	75.6%	572%	341%	315%	78	66.9	K	4.10 (0.00120)



Dimensions for units with CSA approved motors may be different than those specified in Section 3. Please consult factory for details.

Table 5.20 Three Phase, 230/460V, 60Hz, 1800 RPM Synchronous Speed, TEFC, NRCAN Energy Efficient

Units: inches (mm)

Motor Power HP (kW)	Motor Frame Size	Full Load		Current (A)				Starting Torque % of FL	Break-down Torque % of FL	Efficiency %	Power Factor %	NEMA Code Letter	Inertia WR^2 lb·in ² (kg·m ²)
		Rated Speed (RPM)	Torque in-lbs (N·m)	Full Load 115V	Full Load 230V	No Load % of FL	Starting % of FL						
1 (0.75)	VA-80M	1740	36.2 (4.09)	3.2	1.6	70.0%	700%	320%	379%	84.8	68.2	K	7.28 (0.0021)
1.5 (1.1)	VA-90S	1740	54.3 (6.14)	4.6	2.3	64.6%	678%	319%	364%	85.7	71.1	K	9.53 (0.0028)
2 (1.5)	VA-90L	1730	72.8 (8.23)	5.8	2.9	60.3%	717%	271%	306%	86.6	74.9	K	11.4 (0.0033)
3 (2.2)	VA-100L	1750	108 (12.2)	8.1	4.1	56.9%	879%	310%	406%	89.1	76.4	L	29.0 (0.0085)
5 (3.7)	VA-112M	1740	181 (20.5)	12.7	6.4	45.1%	781%	302%	330%	89.5	81.6	J	39.0 (0.0114)
7.5 (5.6)	VA-132S	1750	270 (30.5)	18.5	9.2	46.6%	801%	309%	345%	90.7	82.5	J	91.6 (0.0268)
10 (7.5)	VA-132M	1750	360 (40.7)	24.5	12.2	38.9%	828%	284%	303%	90.4	85.1	K	128 (0.0375)
15 (11)	G-160L	1770	534 (60.3)	35.9	18.0	41.8%	928%	335%	335%	92.9	82.7	K	307 (0.0898)
20 (15)	G-160L	1770	712 (80.5)	48.7	24.3	41.6%	984%	351%	354%	92.8	83.5	L	362 (0.1059)
25 (19)	F-180L	1780	885 (100)	61.0	30.4	40.1%	803%	336%	305%	92.4	82.7	J	854 (0.2499)
30 (22)	F-180L	1780	1060 (120)	71.0	35.4	34.5%	689%	282%	256%	92.4	84.5	H	854 (0.2499)
40 (30)	F-200L	1780	1420 (160)	98.0	49.1	38.3%	740%	288%	279%	93.4	82.1	J	1050 (0.3072)
50 (37)	F-200L	1780	1770 (200)	116	58.0	30.6%	683%	203%	250%	93.2	85.5	H	1230 (0.3599)

Cyclo® BBB5

Appendix

Note: [1] 1/8 HP (0.10 kW) is TENV

[2] FL= Full Load.

Motor continued

CSA Approved Motor Data

Table 5.21 Three Phase, 575v, 60Hz, 1800 RPM Synchronous Speed, TEFC, Standard Efficiency

Units: inches (mm)

Motor Power HP (kW)	Motor Frame Size	Full Load		Current [A]			Starting Torque % of FL	Breakdown Torque % of FL	Efficiency %	Power Factor %	NEMA Code Letter	Inertia WR ² lb·in ² (kg·m ²)
		Rated Speed (RPM)	Torque in·lbs (N·m)	Full Load	No Load % of FL	Starting % of FL						
1/8 ^[1] (0.10)	V-63S	1720	4.58 (0.52)	0.28	91.8%	464%	376%	391%	65.3	54.1	M	1.11 (0.00032)
1/4 (0.20)	V-63M	1730	9.10 (1.03)	0.48	85.4%	458%	316%	340%	69.4	60.3	K	1.71 (0.00050)
1/3 (0.25)	V-63M	1710	12.2 (1.38)	0.52	78.8%	423%	250%	270%	71.3	67.7	H	1.71 (0.00050)
1/2 (0.37)	V-71M	1700	18.5 (2.09)	0.79	75.8%	468%	309%	300%	75.8	67.4	J	2.22 (0.00065)
3/4 (0.56)	V-80S	1700	27.8 (3.14)	1.0	74.0%	530%	260%	268%	75.1	71.6	H	3.45 (0.00101)
1 (0.75)	V-80M	1700	37.0 (4.18)	1.3	65.4%	508%	252%	256%	78.1	74.9	H	4.10 (0.00120)



Dimensions for units with CSA approved motors may be different than those specified in Section 4. Please consult factory for details.

Table 5.22 Three Phase, 575v, 60Hz, 1800 RPM Synchronous Speed, TEFC, NRCAN Energy Efficient

Units: inches (mm)

Motor Power HP (kW)	Motor Frame Size	Full Load		Current [A]			Starting Torque % of FL	Breakdown Torque % of FL	Efficiency %	Power Factor %	NEMA Code Letter	Inertia WR ² lb·in ² (kg·m ²)
		Rated Speed (RPM)	Torque in·lbs (N·m)	Full Load	No Load % of FL	Starting % of FL						
1 (0.75)	VA-80M	1740	36.2 (4.09)	1.3	66.5%	685%	320%	379%	84.8	68.2	K	7.28 (0.0021)
1.5 (1.1)	VA-90S	1740	54.3 (6.14)	1.8	62.2%	689%	319%	364%	85.7	71.1	K	9.53 (0.0033)
2 (1.5)	VA-90L	1730	72.8 (8.23)	2.4	56.7%	692%	326%	371%	86.1	73.6	K	11.4 (0.0033)
3 (2.2)	VA-100L	1750	108 (12.2)	3.3	53.9%	833%	354%	417%	87.9	78.5	L	29.0 (0.0085)
5 (3.7)	VA-112M	1740	181 (20.5)	5.2	45.6%	769%	295%	346%	88.7	81.7	J	39.0 (0.0114)
7.5 (5.6)	FA-132S	1750	270 (30.5)	7.5	45.2%	709%	288%	331%	89.9	83.6	H	91.6 (0.0268)
10 (7.5)	FA-132M	1760	358 (40.5)	9.7	39.5%	849%	314%	340%	91.5	84.5	K	128 (0.0375)
15 (11)	G-160L	1770	534 (60.3)	14.7	41.5%	925%	338%	338%	92.8	82.7	L	307 (0.0898)
20 (15)	G-160L	1770	712 (80.5)	19.2	38.5%	927%	327%	330%	93	84.5	K	362 (0.1059)
25 (19)	F-180L	1780	885 (100)	24.5	38.8%	776%	330%	285%	92.7	82.9	J	854 (0.2499)
30 (22)	F-180L	1780	1060 (120)	28.9	32.9%	657%	275%	237%	92.5	84.5	H	854 (0.2499)
40 (30)	F-200L	1780	1420 (160)	38.8	37.9%	714%	283%	274%	93.5	83	H	1050 (0.3072)
50 (37)	F-200L	1770	1780 (201)	46.1	31.7%	685%	203%	250%	93.8	85.8	G	1230 (0.3599)

Note: [1] 1/8 HP (0.10 kW) is TENV
[2] FL= Full Load.

Cyclo® BBBS

Appendix

Motor continued

CSA Approved, AF-Motor Data

Table 5.23 Three Phase, 230/460v, 60Hz, 1800 RPM Synchronous Speed, 10:1 Constant Torque Speed Range, TEFC

Units: inches (mm)

Motor Power HP (kW)	Frame Size	Full Load Torque in-lbs (N·m)	Wiring	60 Hz			6 Hz			No Load Current @ 60Hz (A)	Inertia WR2 lb-in ² (kg·m ²)
				Voltage (V)	Current (A)	Speed (RPM)	Voltage (V)	Current (A)	Speed (RPM)		
1/8 ^[1] (0.10) ^[1]	VA-63S	4.77 (0.54)	High Voltage	460	0.49	1770	68	0.37	125	0.46	1.71 (0.0005)
			Low Voltage	230	0.98		34	0.74		0.92	
1/4 (0.20)	VA-63M	9.57 (1.08)	High Voltage	460	0.91	1765	68	0.79	125	0.87	2.22 (0.0006)
			Low Voltage	230	1.8		34	1.6		1.74	
1/3 (0.25)	VA-63M	12.0 (1.36)	High Voltage	460	0.94	1755	78	0.87	125	0.87	2.22 (0.0006)
			Low Voltage	230	1.9		34	1.7		1.74	
1/2 (0.37)	VA-71M	19.3 (2.18)	High Voltage	460	1.3	1750	70	1.1	115	1.21	4.10 (0.0012)
			Low Voltage	230	2.6		35	2.3		2.42	
3/4 (0.56)	VA-90S	26.3 (2.97)	High Voltage	460	1.7	1765	62	1.5	145	1.54	9.53 (0.0028)
			Low Voltage	230	3.3		31	2.9		3.08	
1 (0.75)	VA-90S	36.2 (4.09)	High Voltage	460	1.9	1750	62	1.7	110	1.54	9.53 (0.0028)
			Low Voltage	230	3.7		31	3.4		3.08	
1.5 (1.1)	VA-90S	54.0 (6.10)	High Voltage	460	2.3	1720	76	2.2	105	1.54	9.53 (0.0028)
			Low Voltage	230	4.6		38	4.4		3.08	
2 (1.5)	VA-90L	73.6 (8.32)	High Voltage	460	2.8	1720	75	2.9	110	1.56	11.4 (0.0033)
			Low Voltage	230	5.6		38	5.7		3.12	
3 (2.2)	VA-100L	107 (12.1)	High Voltage	460	4.2	1740	66	4.2	115	2.41	29.0 (0.0085)
			Low Voltage	230	8.4		33	8.3		4.83	
5 (3.7)	VA-112M	181 (20.5)	High Voltage	460	6.5	1730	74	6.1	125	2.51	39.0 (0.0114)
			Low Voltage	230	12.9		37	12.2		5.02	
7.5 (5.6)	VA-132S	265 (29.9)	High Voltage	460	9.3	1750	70	9.0	135	3.78	91.6 (0.0268)
			Low Voltage	230	18.6		35	17.9		7.55	
10 (7.5)	VA-132M	362 (40.9)	High Voltage	460	11.7	1750	70	10.5	140	3.23	128 (0.0375)
			Low Voltage	230	23.5		35	21.0		6.46	
15 (11)	G-160L	528 (59.7)	High Voltage	460	18.2	1760	62	17.7	155	7.11	307 (0.0898)
			Low Voltage	230	36.3		31	35.4		14.2	
20 (15)	G-160L	717 (81.0)	High Voltage	460	24.2	1765	62	23.8	155	9.72	362 (0.1059)
			Low Voltage	230	48.3		31	47.6		19.4	
25 (19)	F-180L	877 (99.1)	High Voltage	460	30.9	1780	60	30.7	165	12.3	854 (0.2499)
			Low Voltage	230	61.8		30	61.3		24.7	
30 (22)	F-180L	1050 (119)	High Voltage	460	36.6	1775	62	35.4	160	12.4	854 (0.2499)
			Low Voltage	230	73.2		30	70.8		24.7	
40 (30)	F-200L	1430 (162)	High Voltage	460	49.3	1775	58	49.5	160	18.5	1050 (0.3072)
			Low Voltage	230	81.5		29	80.1		37.1	
50 (37)	F-200L	1760 (199)	High Voltage	460	60.6	1775	64	58.5	160	19.2	1230 (0.3599)
			Low Voltage	230	121		32	117		38.4	



Dimensions for units with CSA approved motors may be different than those specified in Section 4. Please consult factory for details.

Note: [1] 1/8 HP (0.10 kW) is TENV
[2] FL= Full Load.

Motor continued

CSA Approved, AF-Motor Data

Table 5.24 Three Phase, 575v, 60Hz, 1800 RPM Synchronous Speed, 10:1 Constant Torque Speed Range, TEFC

Units: inches (mm)

Motor Power HP (kW)	Frame Size	Full Load Torque in-lbs (N·m)	60 Hz			6 Hz			No Load Current @ 60Hz (A)	Inertia WR ² lb·in ² (kg·m ²)
			Voltage (V)	Current (A)	Speed (RPM)	Voltage (V)	Current (A)	Speed (RPM)		
1/8 ^[1] (0.10)	VA-63S	4.77 (0.539)	575	0.40	1770	85	0.30	130	0.40	1.71 (0.0005)
1/4 (0.20)	VA-63M	9.57 (1.08)	575	0.70	1765	77	0.50	85	0.62	2.22 (0.0006)
1/3 (0.25)	VA-63M	12.0 (1.36)	575	0.70	1755	95	0.70	120	0.62	2.22 (0.0006)
1/2 (0.37)	VA-71M	19.4 (2.19)	575	0.94	1745	88	0.86	110	0.86	4.10 (0.0012)
3/4 (0.56)	VA-90S	26.3 (2.97)	575	1.3	1765	76	1.1	140	0.98	9.53 (0.0028)
1 (0.75)	VA-90S	36.2 (4.09)	575	1.4	1750	82	1.3	120	0.98	9.53 (0.0028)
1.5 (1.1)	VA-90S	54.0 (6.10)	575	1.8	1720	97	1.8	90	0.98	9.53 (0.0028)
2 (1.5)	VA-90L	73.6 (8.32)	575	2.4	1720	95	1.8	115	1.42	11.4 (0.0033)
3 (2.2)	VA-100L	107 (12.1)	575	3.3	1740	90	3.3	135	1.74	29.0 (0.0085)
5 (3.7)	VA-112M	181 (20.5)	575	5.2	1730	92	5.2	110	2.17	39.0 (0.0114)
7.5 (5.6)	VA-132S	265 (29.9)	575	7.6	1750	86	7.5	135	3.26	91.6 (0.0268)
10 (7.5)	VA-132M	362 (40.9)	575	9.9	1750	88	9.5	140	3.82	128 (0.0375)
15 (11)	G-160L	526 (59.4)	575	14.9	1765	79	15.1	140	6.31	307 (0.0898)
20 (15)	G-160L	715 (80.8)	575	19.1	1770	78	18.5	155	7.00	362 (0.1059)
25 (19)	F-180L	877 (99.1)	575	24.6	1780	77	24.6	165	9.51	854 (0.2499)
30 (22)	F-180L	1050 (119)	575	29.2	1775	80	28.3	165	9.55	854 (0.2499)
40 (30)	F-200L	1430 (162)	575	39.4	1775	77	39.2	160	14.4	1050 (0.3072)
50 (37)	F-200L	1760 (199)	575	48.5	1775	81	47.1	160	15.4	1230 (0.3599)

Note: [1] 1/8 HP (0.10 kW) is TENV

[2] FL= Full Load.

Motor continued

CE Motor Data

Table 5.25 Three Phase, 220/380v or 380v, 50Hz, 1500 RPM Synchronous Speed, TEFC

Units: inches (mm)

Motor Power HP (kW)	Frame Size	Full Load		Current (A)			Starting Torque % of FL	Breakdown Torque % of FL	Efficiency %	Power Factor %	NEMA Code Letter	Inertia WR ² lb-in ² (kg-m ²)	
		Rated Speed (RPM)	Torque in-lbs (N·m)	Full Load 220V	380V	No Load % of FL							
1/8 ^[1] (0.1) ^[1]	V-63S	1400	6.04 (0.682)	0.6	0.35	78.3%	371%	230%	226%	63.3	69.1	H	1.11 (0.0003)
1/4 (0.20)	V-63M	1390	12.1 (1.37)	1.05	0.61	71.5%	361%	206%	206%	67.6	73.7	F	1.71 (0.0005)
1/3 (0.25)	V-63M	1360	15.5 (1.75)	1.22	0.71	61.4%	338%	195%	181%	69.1	77.8	E	1.71 (0.0005)
1/2 (0.40)	V-71M	1410	24.0 (2.71)	2.06	1.19	68.3%	353%	201%	204%	69.7	73.5	F	2.22 (0.0007)
3/4 (0.55)	V-80S	1400	33.2 (3.75)	2.45	1.42	58.5%	373%	206%	196%	73.4	80.2	E	3.45 (0.0010)
1 (0.75)	V-80M	1410	45.0 (5.08)	3.35	1.94	60.8%	392%	193%	210%	73.9	79.4	E	4.10 (0.0012)
1.5 (1.1)	V-90S	1410	65.9 (7.45)	4.62	2.68	54.9%	466%	200%	220%	77.5	80.6	F	6.32 (0.0019)
2 (1.5)	V-90L	1410	90.3 (10.2)	6.11	3.53	51.6%	456%	192%	207%	79.1	81.7	F	7.28 (0.0021)
3 (2.2)	V-100L	1420	131 (14.8)	8.60	4.99	47.7%	487%	213%	239%	81.8	82.1	F	11.4 (0.0033)
5.0 (3.7)	V-112M	1420	220 (24.9)	13.5	7.8	39.4%	588%	218%	234%	83.9	86	G	29.0 (0.0085)
7.5 (5.5)	V-132S	1420	327 (37.0)		11.4	36.4%	605%	227%	255%	84.7	86.8	G	39.0 (0.0114)
10 (7.5)	V-132M	1460	434 (49.0)		15	35.9%	620%	232%	246%	87.8	87	G	91.6 (0.0268)
15 (11)	V-160M	1450	641 (72.4)		21.3	33.5%	653%	250%	261%	88.8	88.2	G	128 (0.0375)
20 (15)	G-160L	1460	868 (98.1)		28	25.6%	607%	235%	241%	90.7	89.8	F	307 (0.0898)
25 (18.5)	F-180MG	1470	1062 (120)		34.7	29.4%	706%	277%	262%	92.3	87.8	H	769 (0.2250)
30 (22)	F-180MG	1460	1275 (144)		41.4	24.6%	594%	232%	219%	91.6	88.2	F	769 (0.2250)
40 (30)	F-180L	1460	1735 (196)		56.8	25.2%	572%	236%	218%	92.3	87.6	F	854 (0.2500)

Note: [1] 1/8 HP (0.10 kW) is TENV
 [2] FL= Full Load.

Motor continued

U.S. Standard Wiring Diagrams

Illustrated below are the wiring diagrams for U.S. standard motors. For additional information please refer to the motor name plate. Due to changes in design features, the wiring diagrams included in this catalog may not always agree with the diagram found inside the conduit box cover. In such cases, connection diagram found inside the conduit box of the motor should be used.

Three-Phase Motors (230/460V, 60Hz)

Table 5.26 Typical 230/460v, Three Phase, Wiring Configuration by Motor Type

Motor Power HP (kW) x P	Motor		Duty	
	U.S. Standard	CSA	AF Motor	CSA AF -Motor
1/8 (0.1) x 4	WYE	WYE	WYE	WYE
1/4 (0.2) x 4				
1/3 (0.25) x 4				
1/2 (0.4) x 4				
3/4 (0.55) x 4				
1 (0.75) x 4				
1.5 (1.1) x 4				
2 (1.5) x 4				
3 (2.2) x 4				
5 (3.7) x 4				
7.5 (5.5) x 4	DELTA	DELTA	DELTA	DELTA
10 (7.5) x 4				
15 (11) x 4				
20 (15) x 4				
25 (18.5) x 4				
30 (22) x 4				
40 (30) x 4				
50 (37) x 4				
60 (60) x 4				
75 (56) x 4				
		—		—

Figure 5.7 Three-Phase WYE Connection Motor

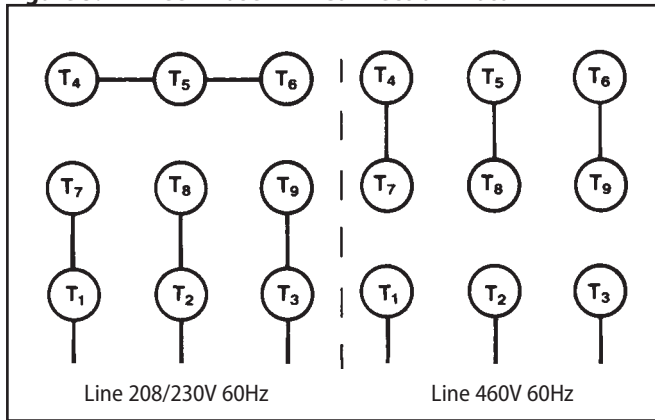


Figure 5.8 Three-Phase DELTA connection Motor

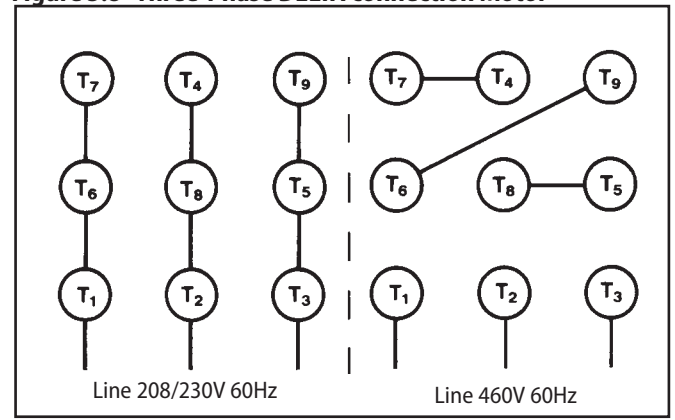
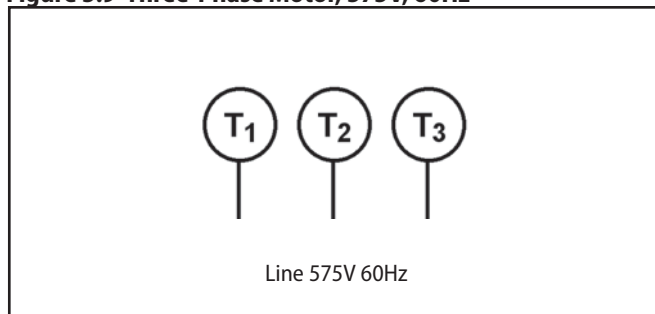


Figure 5.9 Three-Phase Motor, 575V, 60Hz



Appendix

Motor continued

Three-Phase CE Motors (220/380V, 50Hz or 380V, 50Hz)

Table 5.27 Wiring Configuration by Motor Type for CE Motor

Motor Power HP (kW) x P	Voltage Configuration	Wiring Configuration
1/8 (0.1) x 4	220/380V, 50H Three Phase	DELTA-WYE
1/4 (0.2) x 4		
1/3 (0.25) x 4		
1/2 (0.4) x 4		
3/4 (0.55) x 4		
1 (0.75) x 4		
1.5 (1.1) x 4		
2 (1.5) x 4		
3 (2.2) x 4		
5 (3.7) x 4		
7.5 (5.5) x 4	380V, 50Hz Three Phase	WYE-Start DELTA-Run
10 (7.5) x 4		
15 (11) x 4		
20 (15) x 4		
25 (18.5) x 4		
30 (22) x 4		
40 (30) x 4		

Figure 5.10 DELTA-WYE Wiring

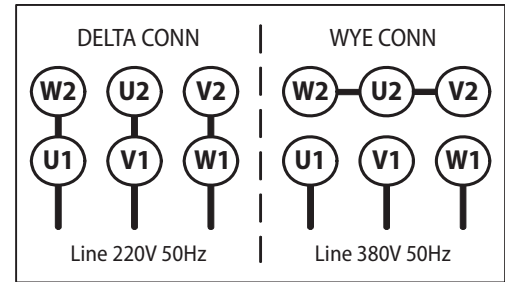
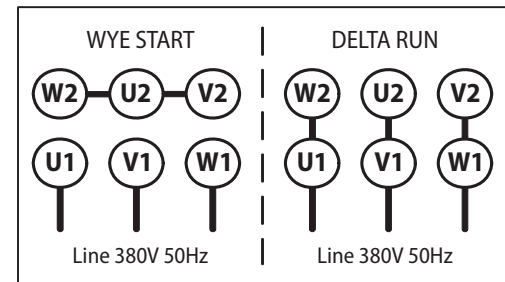


Figure 5.11 WYE-DELTA Start Wiring



Motor continued

Motor Thermal Rating (C x Z)

Table 5.28 Motor Thermal Rating Table

Motor Power HP (kW)	Allowable C x Z				Motor Moment of Inertia lb·in ² (kg·m ²)	
	below 35% ED ^[1]	35% ~ 50% ED ^[1]	50% ~ 80% ED ^[1]	80% ~ 100% ED ^[1]	Standard	with Brake
1/8 (0.1)	3200	3000	2000	1200	1.11 (0.0003)	1.20 (0.0004)
1/4 (0.2)	2200	2800	2800	2500	1.71 (0.0005)	1.88 (0.0006)
1/3 (0.25)	2200	2800	2800	2500	1.71 (0.0005)	1.88 (0.0006)
1/2 (0.4)	1800	2200	1500	1500	2.22 (0.0006)	2.31 (0.0007)
3/4 (0.55)	1800	2200	1500	1500	3.45 (0.0010)	3.79 (0.0011)
1 (0.75)	1400	1400	800	500	4.10 (0.0012)	4.44 (0.0013)
1.5 (1.1)	1400	1400	800	500	6.32 (0.0018)	7.11 (0.0021)
2 (1.5)	1200	1200	500	400	7.28 (0.0021)	8.03 (0.0023)
3 (2.2)	1000	900	400	200	11.4 (0.0033)	12.7 (0.0037)
5 (3.7)	800	800	800	700	29.0 (0.0085)	32.7 (0.0096)
7.5 (5.5)	300	300	200	150	39.0 (0.0114)	42.7 (0.0125)
10 (7.5)	400	350	300	300	91.6 (0.0268)	104 (0.0304)
15 (11)	200	200	150	150	128 (0.0375)	140 (0.0410)

Note: [1] % ED = Duty Cycle.

The calculated C x Z value (Steps 1 – 3 outlined below) should be less than the allowable value listed in Motor Thermal Rating table above.

1. Obtain the C value:

$$C = \frac{I_M + I_L}{I_M}$$

I_M = Moment of Inertia of Motor.
 I_L = Total Moment of Inertia of Load as seen from the motor.

2. Obtain the Z value (number of starts per hour):

- (a) Assume that one operating period consists of “on-time” t_a [second], “off-time” t_b [second] and the motor is started nr [times/second].

$$Z_r = \frac{3600nr}{t_a + t_b} \text{ [times/hour]}$$

- (b) When inching, ni [times/cycle] is included in 1 cycle ($t_a + t_b$), the number of inching times per hour Z_i , is then included in the number of starts.

$$Z_i = \frac{3600ni}{t_a + t_b} \text{ [times/hour]}$$

- (c) Calculate Z by adding Z_r to Z_i .

$$Z = Z_r + \frac{1}{2} Z_i = \frac{3600}{t_a + t_b} \cdot \left(nr + \frac{1}{2} ni \right) \text{ [times/hour]}$$

3. Calculate C multiplied by Z:

Use the value of C obtained in Step (1) and Z from Step (2).

4. Obtain the duty cycle %ED and check with Motor Thermal Rating table above.

$$\%ED = \frac{t_a}{t_a + t_b} \times 100$$

t_a = on-time
 t_b = off-time

Motor continued

Brakemotor Characteristics

The brakemotor on Cyclo® BBB5 gearmotors operates with direct current supplied by a dual voltage rectifier for 230/460V, or single voltage rectifier/power module for other noted voltages. Rectifier or power module is mounted in the motor conduit box.

When used for outdoor installations, standard brakemotor must be protected by a cover. Such covers are available from the factory, please inquire when ordering.

Note: Advise the factory when ordering if you require brake torque greater or lesser than those shown as standard in the Brakemotor Characteristics table below.

Brake Characteristics

Table 5.29 Standard Brake Models

Brake Model	Motor Capacity ^[1] HP (kW) x 4P				Braking Torque ft-lbs (N·m)			Braking Delay Time seconds		
	U.S. Standard		AF-Motor		Minimum	Standard	Maximum	Normal Braking Action		Fast Braking Action
								Standard Wiring	Inverter Wiring ^[2]	
FB-01A	1/8 (0.10)		—		0.24 (0.33)	0.70 (0.95)	0.96 (1.3)	0.15 ~ 0.2	—	0.015 ~ 0.02
FB-02A	1/4 (0.20)	1/3 (0.25)	1/8 (0.10)		0.48 (0.65)	1.4 (1.9)	1.9 (2.6)		0.08 ~ 0.12	
FB-05A	1/2 (0.4)		1/4 (0.20)	1/3 (0.25)	0.96 (1.3)	2.9 (3.9)	2.9 (3.9)	0.1 ~ 0.15	0.03 ~ 0.07	0.01 ~ 0.015
FB-1D	3/4 (0.55)	1 (0.75)	1/2 (0.4)		1.9 (2.6)	5.8 (7.9)	7.7 (10)	0.2 ~ 0.3	0.1 ~ 0.15	
FB-2D	1.5 (1.1)	2 (1.5)	3/4 (0.55)	1 (0.75)	3.6 (4.9)	11 (15)	14 (19)			
FB-3D	3 (2.2)		1.5 (1.1)	2 (1.5)	5.3 (7.2)	16 (22)	21 (28)	0.3 ~ 0.4	0.15 ~ 0.2	0.01 ~ 0.02
FB-5B	5 (3.7)		3 (2.2)		9 (12)	27 (37)	36 (49)	0.4 ~ 0.5	0.2 ~ 0.25	
FB-8B	7.5 (5.5)		5 (3.7)		13 (18)	40 (54)	55 (75)	0.3 ~ 0.4	0.1 ~ 0.15	
FB-10B	10 (7.5)		7.5 (5.5)		18 (24)	54 (73)	72 (98)	0.7 ~ 0.8	0.25 ~ 0.3	0.03 ~ 0.04
FB-15B	15 (11)		10 (7.5)		27 (37)	80 (108)	108 (146)	0.5 ~ 0.6	0.15 ~ 0.2	
CMB-20	20 (15)		15 (11)		58 (79)	72 (98)	72 (98)	0.6 ~ 0.8 (other) 0.4 ~ 0.5 (460V)	0.3 ~ 0.35 (other) 0.1 ~ 0.15 (460V)	0.1 ~ 0.15
FB-20	20 (15)		15 (11)		40 (54)	110 (149)	160 (217)	1.7 ~ 1.8	0.65 ~ 0.75	0.03 ~ 0.06
FB-30	25 (18.5)		20 (15)		40 (54)	140 (190)	160 (217)	1.4 ~ 1.5	0.45 ~ 0.55	0.03 ~ 0.06
	30 (22)		—		40 (54)	160 (217)	160 (217)			
	40 (30)		30 (22)		40 (54)	160 (217)	160 (217)			
ESB250 ^[3]	50 (37)		40 (30)			180 (244)		—	—	0.065

Notes: [1] May not apply to CSA Approved motors. Identify applicable brake model to motor frame size in Combination table (Table 5.33) on next page.
 [2] Also applies to wiring where brake is powered separately from the motor leads.
 [3] Available only with power module rated for use at 200VAC or 220VAC.

Cyclo® BBB5

Appendix

Motor continued

Brake Characteristics

Table 5.30 Standard Brake Current [A]

Brake Model	Brake Voltage <small>(Vac)</small>								
	200VAC	220VAC	230VAC	380VAC	400VAC	440VAC	460VAC	575VAC	
FB-01A	—	0.12	0.06	—	—	—	0.04	0.03	
FB-02A		0.2	0.1				0.1	0.06	0.07
FB-05A									
FB-1D		0.5	0.2				0.2	0.1	0.1
FB-2D									
FB-3D									
FB-5B									
FB-8B									
FB-10B		0.9	0.3				0.4	0.3	0.2
FB-15B									
CMB-20		—	0.5				0.6	0.5	0.4
FB-20									
FB-30		1.4/0.7 ^[1]	1.6/0.8 ^[1]				1.5/0.7 ^[1]	0.9/0.4 ^[1]	0.9/0.4 ^[1]
ESB250 ^[4]									
	1.6/0.8 ^[1]	1.8/0.9 ^[1]	—	—	—	—	—	—	

Table 5.31 Combination Table with Brakemotor Inertia

Brake Model	Motor Frame Sizes	Inertia WR ² lb·in ² (kg·m ²)
FB-01A	V-63S	1.20 (0.0004)
FB-02A	V-63M, VA-63S	1.88 (0.0006)
FB-05A	V-71M, VA-63M	2.31 (0.0007)
FB-1D	V-80S	3.79 (0.0011)
	V-80M, VA-71M	4.44 (0.0013)
FB-2D	V-90S, VA-80S	7.11 (0.0021)
	V-90L, VA-80M	8.03 (0.0023)
FB-3D	V-100S, VA-90S	10.8 (0.0032)
	V-100L, VA-90L	12.7 (0.0037)
FB-5B	V-112M, VA-100L	32.7 (0.0096)

Brake Model	Motor Frame Sizes	Inertia WR ² lb·in ² (kg·m ²)
FB-8B	V-132S, VA-112M	42.7 (0.0125)
FB-10B	V-132M, VA-132S	104 (0.0304)
FB-15B	V-160M, VA-132M	140 (0.0410)
CMB-20	G-160L, GA-160M	454 (0.1328)
	GA-160L	509 (0.1489)
FB-20	G-160L, GA-160M	366 (0.1071)
	GA-160L	420 (0.1229)
FB-30	F-180MG	830 (0.2429)
	F-180L	895 (0.2619)
ESB-250	F-200L	1100 (0.3218)

Notes: [1] Two brake current values shown. First is the excitation current during initial power up. Second is the holding current.

Motor U.S. Standard & CSA Approved Motor Brake Wiring

U.S. Standard and CSA Approved Motor Brake Wiring

Table 5.32 Varistor Specifications Table

Operating Voltage		190-230V	380-460V	575V
Varistor Rated Voltage		AC260-300V	AC510V	AC604V
Varistor Voltage		430-470V	820V	1000V
Rated Watt	FB01A, 02A	Over 0.4W	Over 0.4W	Over 0.4W
	FB-05A	Over 0.4W	Over 0.4W	Over 0.4W
	FB-1D	Over 0.6W	Over 0.6W	Over 0.4W
	FB-2D, 3D	Over 1.5W	Over 1.5W	Over 0.6W
	FB-5B, 8B	Over 1.5W	Over 1.5W	Over 1.5W
	FB10B, 15B	Over 1.5W	Over 1.5W	Over 1.5W

Models FB-01A through FB-15B

Figure 5.12 Normal Brake Action, 230V, 575V

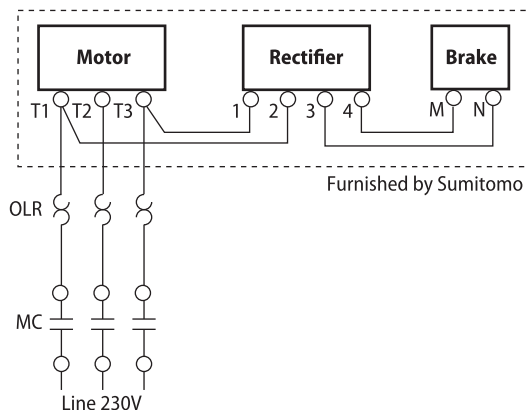


Figure 5.13 Fast Brake Action, 230V

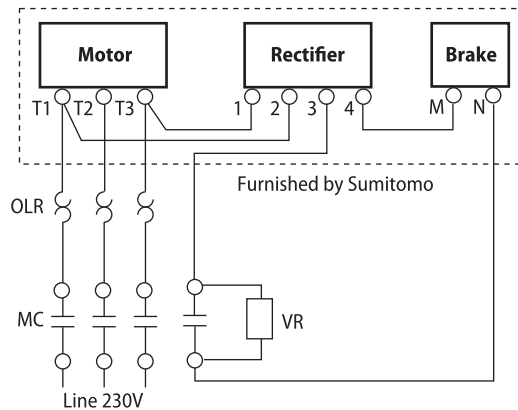


Figure 5.14 Normal Brake Action, 460V

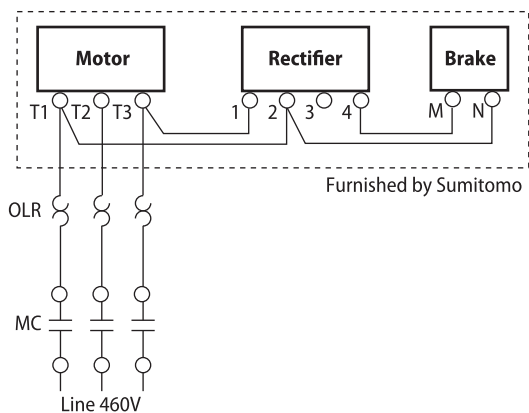
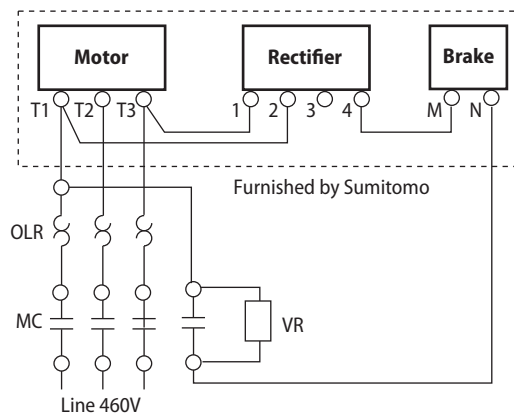


Figure 5.15 Fast Brake Action, 460V, 575V



Key:
MC: Electromagnetic Relay
OLR: Overload or Thermal Relay
MCB: Magnetic Circuit Breaker
VR: Varistor (protective device)^[1]

Note: [1] Refer to Varistor Specifications Table

Motor U.S. Standard & CSA Approved Motor Brake Wiring continued

U.S. Standard Motors and CSA Approved Motor Brake Wiring (continued)

Models FB-20 / FB-30 Brakes

Figure 5.16 Normal Brake Action, 230V, 460V

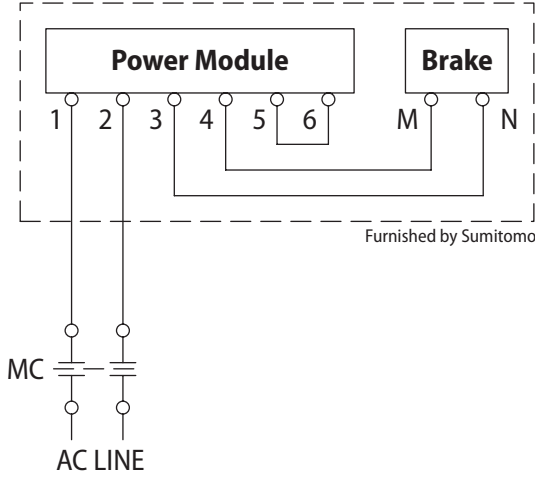
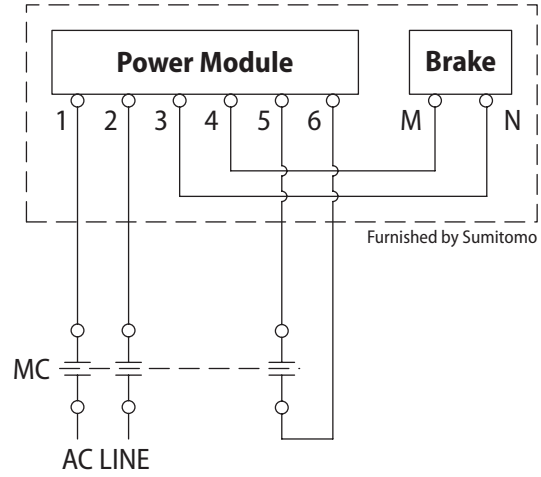


Figure 5.17 Fast Brake Action, 230V, 460V



Models CMB-20

Figure 5.18 Normal Brake Action, 230V

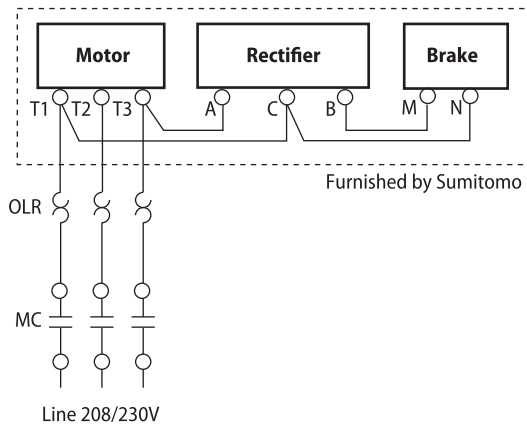
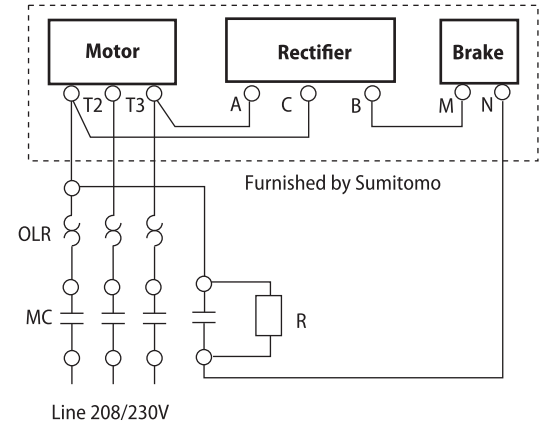


Figure 5.19 Fast Brake Action, 230V



- Key:**
MC: Electromagnetic Relay
OLR: Overload or Thermal Relay
MCB: Magnetic Circuit Breaker
VR: Varistor (protective device)^[1]

Note: [1] Refer to Varistor Specifications Table

Motor U.S. Standard & CSA Approved Motor Brake Wiring continued

U.S. Standard Motors and CSA Approved Motor Brake Wiring (continued)

Models CMB-20

Figure 5.20 Normal Brake Action, 460V

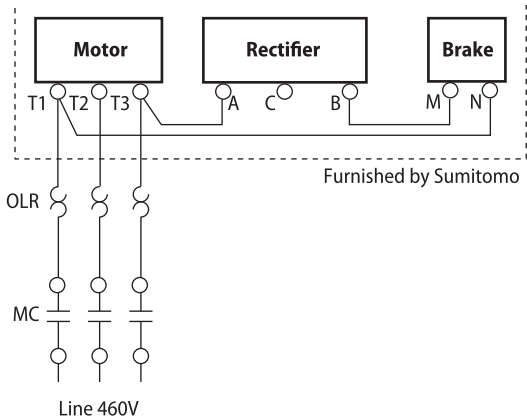


Figure 5.21 Fast Brake Action, 460V

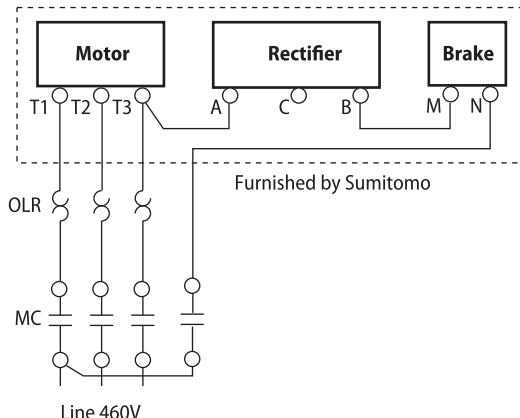


Figure 5.22 Normal Brake Action, 575V

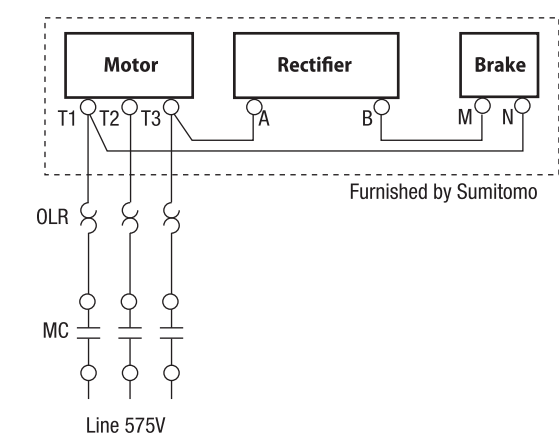
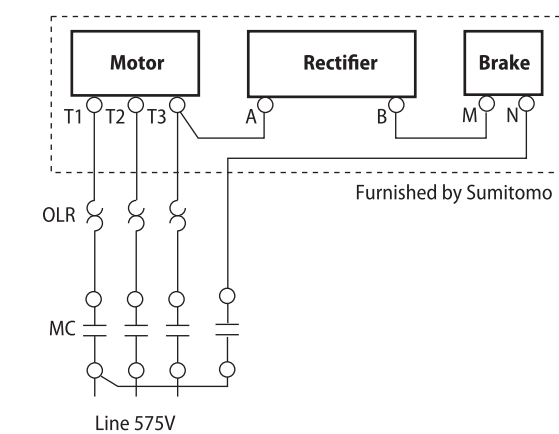


Figure 5.23 Fast Brake Action, 575V



Key:
MC: Electromagnetic Relay
OLR: Overload or Thermal Relay
MCB: Magnetic Circuit Breaker
VR: Varistor (protective device)^[1]

Note: [1] Refer to Varistor Specifications Table

Motor Standard Wiring Connection for CE Motor

Standard Wiring Connection for CE Motors

Models FB-01A through FB-5B, 220/380V, 50Hz

Figure 5.24 Normal Brake Action, 220V Motor, 220V Brake

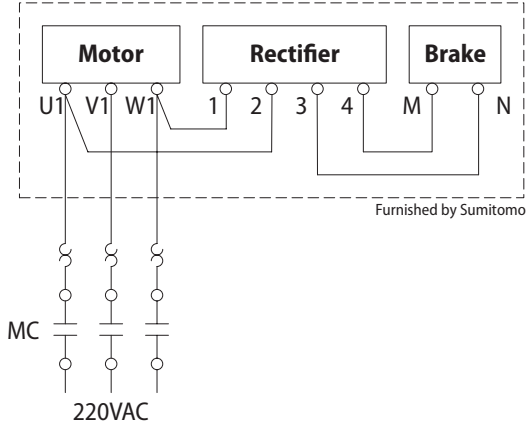


Figure 5.25 Fast Brake Action, 220V Motor, 220V Brake

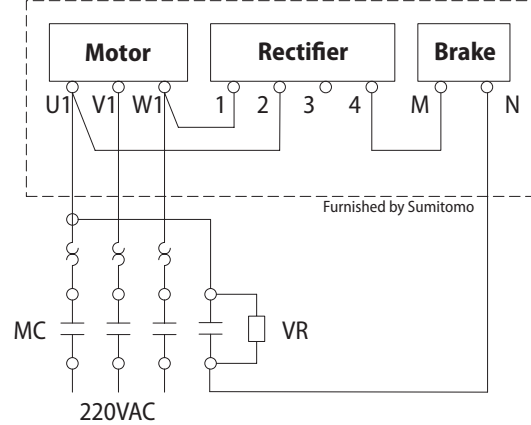


Figure 5.26 Normal Brake Action, 380V Motor, 220V Brake, Tapped

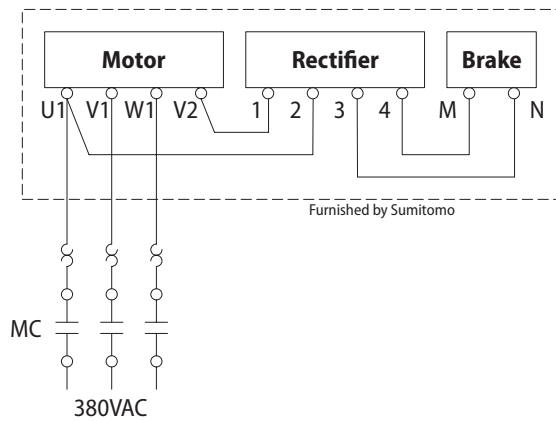


Figure 5.27 Fast Brake Action, 380V Motor, 220V Brake, Tapped

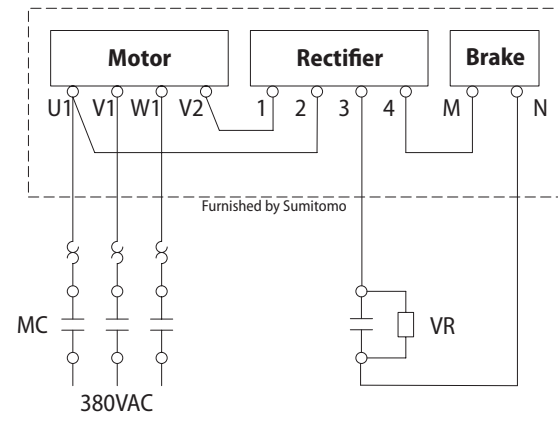


Figure 5.28 Normal Brake Action, 380V Motor, 220V Brake, Separated

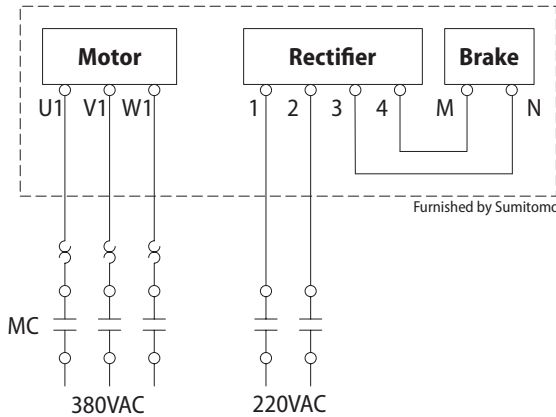
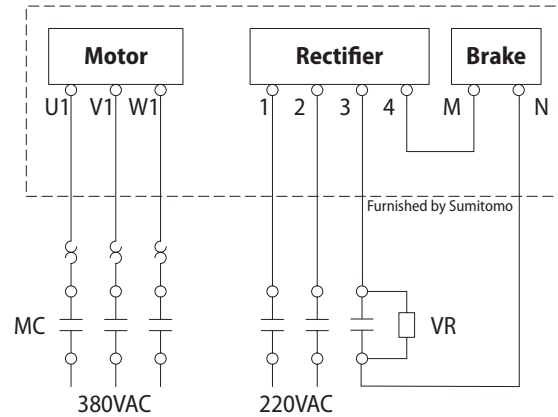


Figure 5.29 Fast Brake Action, 380V Motor, 220V Brake, Separated



Key:

- MC: Electromagnetic Relay
- OLR: Overload or Thermal Relay
- MCB: Magnetic Circuit Breaker
- VR: Varistor (protective device)^[1]

Note: [1] Refer to Varistor Specifications Table

Motor Standard Wiring Connection for CE Motor continued

Standard Wiring Connection for CE Motors (continued)

Models FB-8B through FB-15B, 380V, 50Hz

Figure 5.30 Normal Brake Action, 380V Motor, 380V Brake

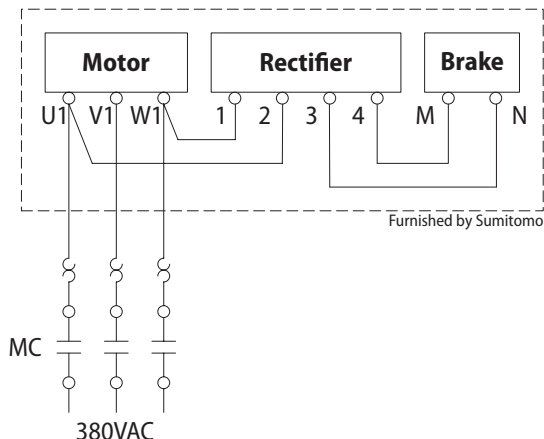
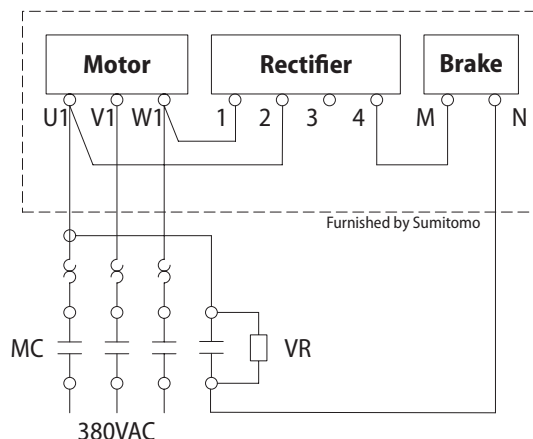


Figure 5.31 Fast Brake Action, 380V Motor, 380V Brake



Models FB-01A through FB-15B with Inverter

Figure 5.32 Normal Brake Action

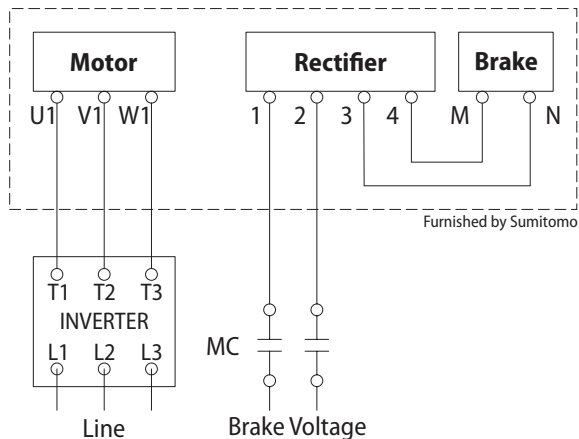


Figure 5.33 Fast Brake Action

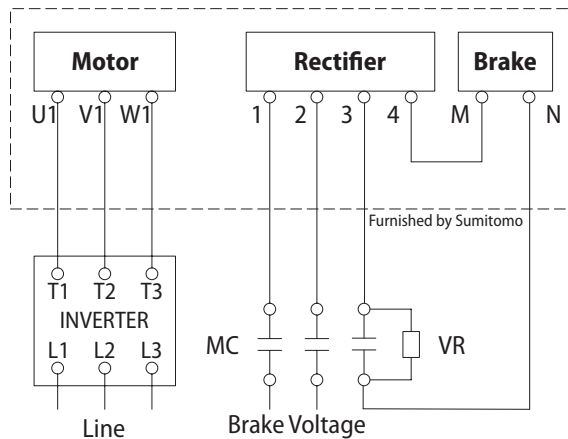


Table 5.33 Standard CE Motor, Motor/Brake Voltage Table

Motor Power HP (kW) x P	Brake Model	Motor Voltage	Brake Voltage
1/8 (0.1) x 4	FB-01A	220/380V, 50Hz	220V, 50Hz
1/4 (0.2) x 4	FB-02A		
1/3 (0.25) x 4	FB-05A		
1/2 (0.4) x 4	FB-1D		
3/4 (0.55) x 4			
1 (0.75) x 4			
1.5 (1.1) x 4			
2 (1.5) x 4	FB-2D		
3 (2.2) x 4	FB-3D		
4 (3) x 4	FB-5B		
5 (3.7) x 4			
7.5 (5.5) x 4			
10 (7.5) x 4	FB-8B	380V, 50Hz	380V, 50Hz
15 (11) x 4	FB-10B		
	FB-15B		

Key:
MC: Electromagnetic Relay
OLR: Overload or Thermal Relay
MCB: Magnetic Circuit Breaker
VR: Varistor (protective device)^[1]

Note: [1] Refer to Varistor Specifications Table

Motor Brake Rectifiers and Power Modules

Brake Rectifiers and Power Modules

Table 5.34 Standard Brake Rectifiers

Brake Type	Motor Power HP (kW) x P	230V/460V Rectifier		575V Rectifier	
		Model Number	Part Number	Model Number	Part Number
FB-01A	1/8 (0.1) x 4	25FW-4FB3	EW107WW-01	10F-6FB3	EW104WW-01
FB-02A	1/4 (0.2) x 4				
	1/3 (0.25) x 4				
FB-05A	1/2 (0.4) x 4				
FB-1D	3/4 (0.55) x 4 1 (0.75) x 4				
FB-2D	1.5 (1.1) x 4 2 (1.5) x 4				
FB-3D	3 (2.2) x 4				
FB-5B	5 (3.7) x 4				
FB-8B	7.5 (5.5) x 4				
FB-10B	10 (7.5) x 4				
FB-15B	15 (11) x 4				
CMB-20	20 (15) x 4	SB25F-3HS	DN937WW-G01	SB25-6H	DN934WW-01

Table 5.35 Brake Rectifiers for CE Motors

Brake Type	Motor Power HP (kW) x P	220V Rectifier		380V Rectifier	
		Model Number	Part Number	Model Number	Part Number
FB-01A	1/8 (0.1) x 4	10F-2FB2	MP983WW-01	See Note ⁽¹⁾	See Note ⁽¹⁾
FB-02A	1/4 (0.2) x 4				
	1/3 (0.25) x 4				
FB-05A	1/2 (0.4) x 4				
FB-1D	3/4 (0.55) x 4 1 (0.75) x 4				
FB-2D	1.5 (1.1) x 4 2 (1.5) x 4				
FB-3D	3 (2.2) x 4				
FB-5B	4 (3.0) x 4 5 (3.7) x 4	See Note ⁽¹⁾	See Note ⁽¹⁾	05F-4FB2	MP985WW-01
FB-8B	7.5 (5.5) x 4				
FB-10B	10 (7.5) x 4				
FB-15B	15 (11) x 4			15F-4FB1	EW397WW-01

Table 5.36 Brake Power Modules

Brake Type	Motor Power HP (kW) x P	170 ~ 300VAC Module		380 ~ 480VAC Module	
		Model Numbers	Part Number	Model Numbers	Part Number
FB-20	20 (15) x 4	13SR-2	ES075WW-01	10SR-4	MQ003WW-01
FB-30	25 (18.5) x 4				
	30 (22) x 4 40 (30) x 4				

Notes: [1] Consult Factory

This page intentionally left blank.

Warranty

Sumitomo warrants that its Cyclo® BBB5 Speed Reducers will deliver their continuous catalog ratings and up to 200% intermittent SHOCK LOAD CAPACITY, provided they are properly installed, maintained and operated within the limits of speed, torque or other load conditions under which they were sold. Sumitomo further states that Cyclo® BBB5 Speed Reducers are warranted to be free from defects in material or workmanship for a period of two years from the date of shipment. Sumitomo assumes no liability beyond product repair or replacement under this limited warranty.

For construction purposes, be sure to obtain certified dimension sheets or drawings. Although Sumitomo takes every precaution to include accurate data in our catalog, Sumitomo cannot guarantee such accuracy. If performance guarantees are required, they should be obtained in writing from the factory. Full consideration will be given to such requests when complete details are given of the proposed installation.

