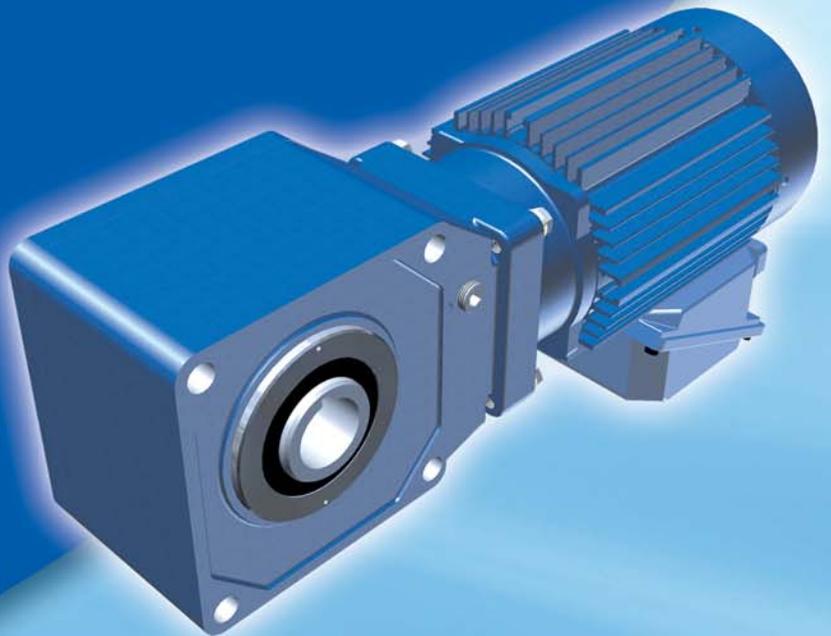


Sumitomo Drive Technologies
Always on the Move

Hyponic®

Hypoid Right Angle
Gearmotor and Reducer





Patented, High-Performance Gearmotors and Reducers Featuring All-Steel Hypoid Gearing



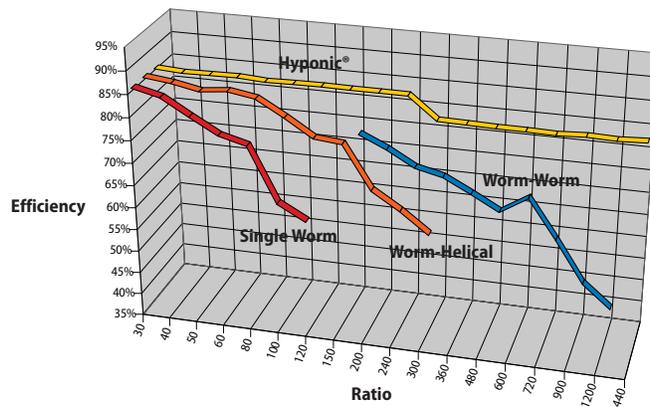
U. S. PAT. NO. 5,203,231; U.S. PAT. NO. 5,375,479

▶ Outstanding Efficiency Saves Money

Efficiencies far higher than worm gearing. Highly efficient across all ratios. No cooling fans required.

Hyponic® hypoid gearing demonstrates efficiencies of 80-85% within the range of 30 to 1440:1.

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



Gearmotors and Speed Reducers

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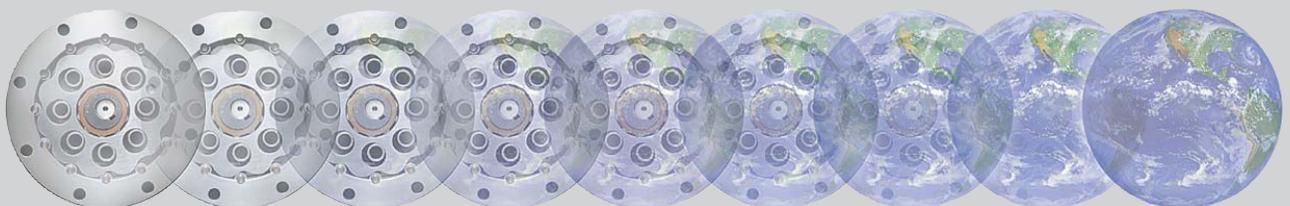
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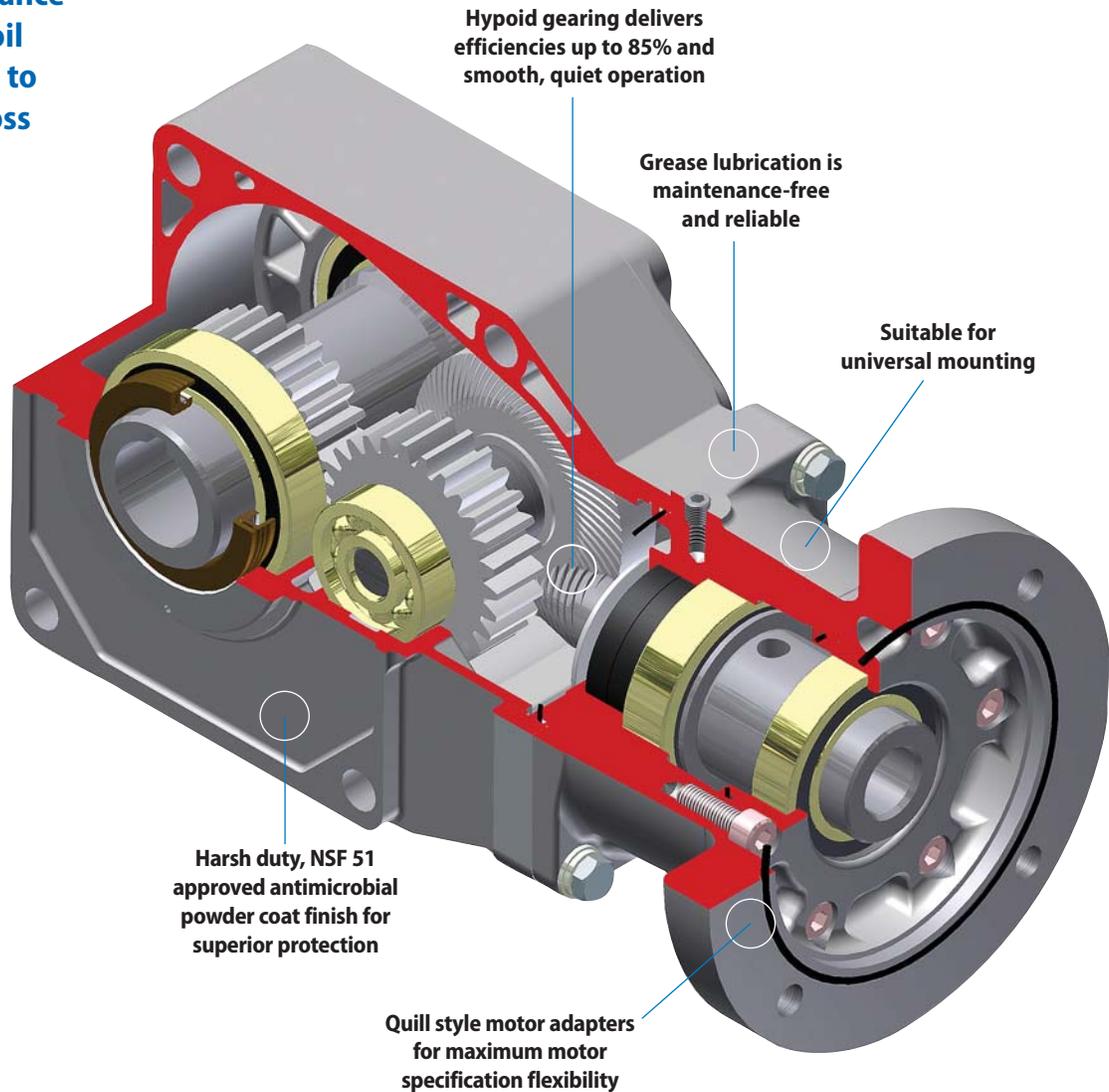
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- ▶ Grease lubricated design is maintenance free, requires no oil changes and is up to 85% efficient across all ratios



Quiet, Compact and Maintenance-Free

- ▶ All-steel hypoid gear design transmits torque more efficiently for more torque density in a compact unit

Product Description

The Sumitomo Hyponic® Gearmotor represents 60 years of excellence in the design and manufacture of premium gearing solutions. With millions of Hyponics currently in service, the product features a compact, modular housing, **maintenance-free grease lubrication and high efficiency operation**. Options include C-face quill design; unique FKM antimicrobial, multi-lipped rotary output seal; corrosion resistant, stainless output shaft and hardware; and synthetic NSF H-1, food-grade lubricant. NSF51 antimicrobial powder coating makes Hyponic® the ideal choice for food, beverage, and pharmaceutical industries. Sumitomo's patented, all-steel hypoid gear technology leads the industry in quiet operation and high efficiency. The Hyponic® significantly outperforms worm gearing across ratios from 30:1 to 1440:1.

Features & Benefits

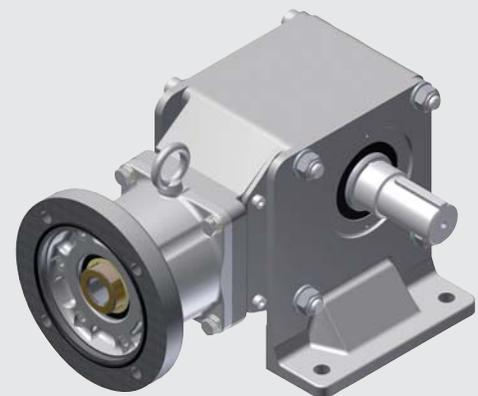
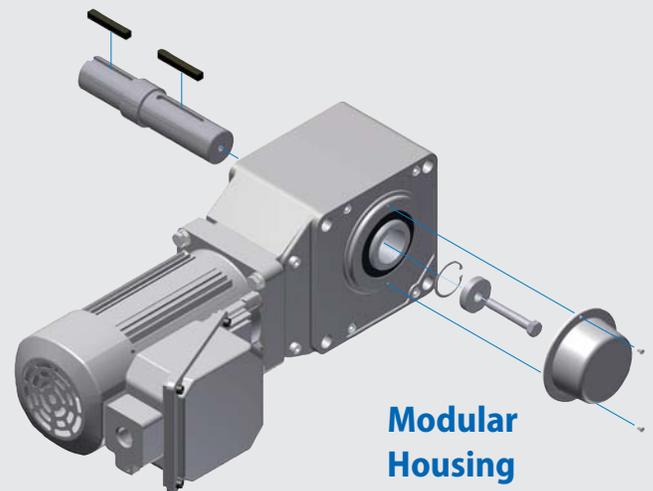
Patented Hyponic gear technology is **up to 85% efficient** across all ratios and requires no cooling fan

- **NSF 51 approved antimicrobial powder coating** protects against the growth of bacteria, mold, and fungus.
- **All-steel hypoid gear design** transmits torque more efficiently for more torque density in a compact unit
- **Maintenance-free grease lubrication** eliminates oil changes
- **Compact, lightweight** design in an aluminum, corrosion resistant housing with optional washdown protection
- Hollow bore makes **installation and retrofit quick and easy**
- **Extremely quiet**, smooth operation is ideal for commercial use
- **Two-Year warranty**
- Optional, popular keyed-hollow bore sizes available from stock: 1-3/16", 1-7/16", 1-15/16", 2-3/16"

Specifications

Ratios:	5:1 up to 1440:1
HP:	1/8 to 15 HP
Maximum Torque:	13,100 in-lbs.
Electrical:	230/460 VAC (Single and 3-Phase)
Housing:	Lightweight, corrosion-resistant aluminum
Mounting:	Flange, Bolt-On Feet
Shafts:	Hollow, Solid
Input:	Quill, C-Face Adapter or Integral Motor

- ▶ **Optional plug-in shaft and bolt-on feet** enhance Hyponic® mounting flexibility



Applications

- Bottling & Food Processing
- Commercial Bakery Lines
- Pharmaceutical Machinery
- Automotive Assembly Plants
- Conveyor Lines & Material Handling
- Wood Processing & Paper Products
- Residential Elevators & Lifts
- Automated Bay & Dock Door Drives
- Crushers
- Dehydrators
- Packaging

Product Range (Standard Motor and Reducer Combinations)

Quill Reducer Options

Frame Size	Ratio (:1)	Standard Bore* (inches)	Output Torque at 1750 RPM Input (in-lb)	Available Motor Frames
1120	5 ~ 60	3/4	57.5 ~ 246	56C
1220	5 ~ 60	1	115 ~ 492	56C
1230	80 ~ 120	1	328 ~ 492	56C
1320	5 ~ 30	1-1/4	230 ~ 985	56C ~ 143TC
	40 ~ 60		657 ~ 985	56C
1330	80~240	1-1/4	657 ~ 918	56C
1340	300 ~ 720	1-1/4	1160 ~ 1730	56C
	5 ~ 30		442 ~ 1900	145TC
1420	40 ~ 60	1-3/8	1310 ~ 1970	56C ~ 143TC
	80 ~ 240		1310 ~ 1840	56C
1430	80 ~ 240	1-3/8	1310 ~ 1840	56C
1440	300 ~ 1440	1-3/8	2320 ~ 3450	56C
	80 ~ 120		2630 ~ 3940	56C ~ 143TC
1530	150 ~ 240	1-1/2	2230 ~ 3670	56C
	40 ~ 80		2530 ~ 5060	145TC
1531	40 ~ 80	1-1/2	2530 ~ 5060	145TC
1540	300 ~ 1440	1-1/2	4640 ~ 6480	56C
1630	10~ 120	2	903 ~ 11000	143TC ~ 182TC
1631	150 ~ 240	2	13100	56C ~ 182TC
1632	10 ~ 60	2	1520 ~ 9180	184TC
1640	300 ~ 720	2	9270 ~ 13100	56C ~ 143TC
	900 ~ 1440		13100	56C

*Optional bore sizes are available

C-Face Reducer with Jaw Coupling Options

Frame Size	Ratio (:1)	Standard Bore* (inches)	Output Torque at 1750 RPM Input (in-lb)	Available Motor Frames
1120	5 – 60	3/4	41 – 246	42C – 56C
1220	5 – 60	1	82.1 – 492	48C – 143TC
1230	80 – 240	1	328 – 867	42C – 56C
1320	5 – 60	1 1/4	164 – 985	56C – 143TC
1330	80 – 240	1 1/4	657 – 918	48C – 56C
1340	300 – 1440	1 1/4	1160 ~ 1730	42C – 56C
1420	5 – 60	1 3/8	316 – 1970	42C – 145TC
1430	80 – 240	1 3/8	1310 ~ 1840	56C
1440	300 – 1440	1 3/8	2320 ~ 3450	48C – 56C
1520	5 – 60	1 1/2	315 ~ 3790	56C ~ 182TC
1530	80 – 240	1 1/2	2630 ~ 3670	42C ~ 143TC
1531	40 – 80	1 1/2	2530 ~ 5060	56C ~ 182TC
1540	300 – 1440	1 1/2	4640 ~ 6480	56C ~ 143TC
1640	300 – 1440	2	9270 – 13100	56C – 143TC

*Optional bore sizes are available

Gearmotor Reduction Ratios 5 — 1440

Combinations with 1750 RPM motor

Ratio	5	7	10	12	15	20	25	30	40	50	60	80	100	120	150	200	240	300	360	480	600	720	900	1200	1440	
Output Speed RPM (60 Hz)	350	250	175	146	117	88	70	58	44	35	29	22	18	15	12	8.8	7.3	5.8	4.9	3.7	3.1	2.3	1.9	1.46	1.22	
3-Phase	1/8	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	1/4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	1/3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	1/2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	3/4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	1.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Motor HP	7.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	10	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	15	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Inverter Duty	1/8	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		1/4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		1/3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		1/2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		3/4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		1.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
5		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
7.5	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
10	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

How do I select a Hyponic® reducer or gearmotor?

Selection is based on the actual horsepower and/or torque requirements at the output shaft. The Hyponic® 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 motor) without sacrificing output shaft torque. The selection procedures in this catalog, Speed Reducers pages 2.2 - 2.3 and Gearmotors pages 3.4 - 3.5, 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) and speed (RPM)
- Loading Conditions
- Mounting Position

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 are service factors and how are they used?

In general, reducers and gearmotors are rated for 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 (page 3.8). 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 Hyponic® 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 severe operating conditions.

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

Hyponic® speed reducers provide 250% momentary intermittent shock load capacity. For applications with shock loads greater than 250%, consult a Sumitomo Application 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 RPM. The reducer selection tables show ratings at 1750 RPM for Quill models, and 1750 and 1450 for C-Face models.

What are the thermal limitations of the Hyponic®?

The Hyponic® 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 is the standard mounting of the Hyponic®?

The Hyponic® is standardly supplied as a shaft mount with a keyed hollow bore. Options are available for a solid shaft with feet and a flange mounting configuration. Since the Hyponic® is grease lubricated as standard, it can be mounted in any position without modifications.

Do you supply a torque arm? At what position should it be mounted?

A torque arm assembly is offered as an option (Section 4). The standard torque arm assembly and standard mounting positions are shown in the Appendix on pages 5.10 - 5.12.

What is the required tolerance of the shaft to be used on the Hyponic®?

Shaft tolerances will depend on the type of load and shock load of the application. Shaft tolerance recommendations are included in the Appendix on page 5.9

What is the rotation of the Hyponic shaft?

The direction of shaft rotation on Hyponic reducers varies according to frame size and ratio. Please refer to page 5.3 in the Appendix for specific data on the shaft rotation of various models.

What C-Face sizes are available for the Hyponic®?

C-Face sizes are based on the Hyponic® size and ratio of the selection. The **C-Face Reducer with Jaw Coupling Options** table on page 1.4 lists available C-Face frame sizes.

What should be considered when connecting to the Hyponic® shaft?

When mounting a pulley, sprocket, or sheave, mount as close to the unit housing as possible; never mount beyond the midpoint of the shaft projection to avoid undue bearing load and shaft deflection. Never overtighten belts or chains. Careful and accurate installation is essential for best results and trouble-free operation. Before installing, the shafts should be checked to make sure they are parallel and level. After mounting, alignment should be checked with a string or straight edge held against the sides of the sprocket or pulley base. Couplings should be properly aligned to the limits specified by the manufacturer. Check alignment prior to initial startup on coupled Hyponic® units. When specifying stainless steel output shafts, consult a Sumitomo Applications Engineer for all applications where overhung load is present.

Should overhung load and thrust load be considered when making a selection?

Yes, loads imposed on the slow speed shaft will vary according to the method used to connect the shaft to the driven machine. Frequently, in addition to the torsional forces, radial (overhung) 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 present. When driving through helical or bevel gears, all three conditions (torsional, radial, and thrust load) may be referred to the reducer shaft. The slow speed shaft and bearings must have sufficient strength to withstand these loads, and it is necessary to determine the allowable limits for each condition. Page 5.5 in the Appendix explains how to calculate the overhung load (radial) applied to the output shaft.

What is meant by load centering?

The reducer's radial load capacities are calculated 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 must be adjusted accordingly. Refer to page 5.5 in the Appendix for load location factors.

What modification features do you offer for the food and beverage industry?

We offer DuPont Alestal Silver Freeze antimicrobial powder coating, harsh duty FKM antimicrobial seals, NSF H1 synthetic lubricant, stainless steel shaft and hardware. Modifications can be added individually or as packages, please see page 4.14 in the Options section for package details.

Standard Specifications

	Standard Specifications	Standard Specifications with Built-In Brake	
3-Phase Integral Motor	Capacity Range:	1/8 HP ~ 15 HP, 4P	1/8 HP ~ 15 HP, 4P: FB Brake
	Enclosure:	Totally enclosed fan cooled type (1/8 HP, 4P Totally enclosed non ventilated)	Totally enclosed fan cooled type (1/8 HP, 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:	1/8 ~ 1/2 HP: Class F 3/4 ~ 15 HP: Class F	1/8 ~ 1/2 HP: Class F, Brake: Class F 3/4 ~ 15 HP: Class F, Brake: Class F
	Time Rating	Continuous	Continuous
Inverter Duty Integral Motor	Capacity Range:	1/8 HP ~ 10 HP, 4P	1/8 HP ~ 10 HP, 4P: FB Brake
	Enclosure:	Totally enclosed fan cooled type	Totally enclosed fan cooled type
	Power Supply:	230/460 Volts, 60 Hz	230/460 Volts, 60 Hz
	Insulation:	Class F	Class F, Brake: Class F
	Time Rating	Continuous (6-60Hz constant torque)	Continuous (6-60Hz constant torque)
Reducer	Reduction:	Combination of hypoid gear input and involute gear output.	
	Lubrication:	Grease lubricated; filled with special high-grade grease prior to shipment.	
	Seals:	Nitrile material, triple lipped output seals.	
	Material:	Casing: aluminum alloy; Gear: chrome-molybdenum steel	
	Paint Color:	Blue, Muenters color number 6.5PB 3.6/8.2 or DuPont Alesta Silver Freeze AM powder coat	
	Bearings:	Ball bearings on input and output.	
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

The direction of shaft rotation on Hyponic reducers varies according to frame size and ratio. Please refer to page 5.3 in the Appendix for specific data on the shaft rotation of various models.

Input Speeds

In general terms, the speeds are 1750 and 1165 RPM. The selection tables in this catalog are based on 1750 RPM. The reducer selection tables show ratings at 1750, 1465, 1165, 980, 870, 720, 580, and 50 RPM.

Thermal Capacity

The Hyponic® 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.

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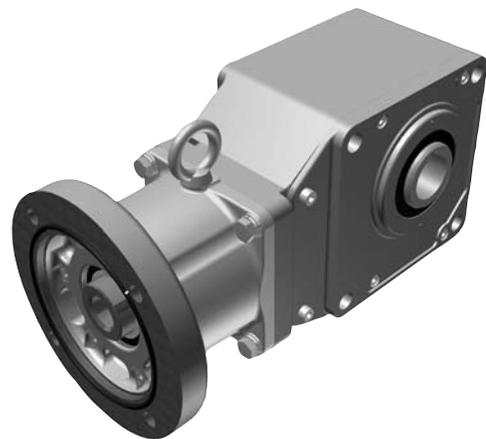
2

Speed Reducers

Hollow Shaft Type

Speed Reducers

How to Select



How to select a Speed Reducer

Step 1: Collect data about your application

Before starting you need to know the:

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

Step 2: Select a Frame Size

2A: Find the **Load Classification** of your application in the *AGMA Load Classification Table* on page 2.6.

2B: Find the recommended **Service Factor** using the *Recommended Reducer Service Factor Table* or *Recommended Service Factors for Frequent Start-Stop Applications Table* on the right.

2C: Determine the **Selection Horsepower** by multiplying the Motor Horsepower by the Service Factor.

2D: Select a **Frame size** from the Reducer Selection Tables on pages 2.8–2.13 by matching both the Selection Horsepower and Desired Output Speed (RPMs) to a frame size model number.

Step 3: Verify Dimensions

Use the Dimensions information on pages 2.14–2.25 to verify that the selected Frame Size is appropriate.

Step 4: Choose Options

The following options may apply:

- Solid Shaft**
- Mounting Feet**
- Output Flange**
- Torque Arm Assembly**
- Washdown Modification**

Please see the Hyponic® pricelist for available modifications, and refer to Section 4 of this catalog for dimension drawings of selected popular options.

Step 5: 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	1.00	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 300% 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 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 5.33) 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	1.40	1.65	2.00

The Moment of Inertia (ratio of Inertia WR²) = $\frac{\text{Total Moment of Inertia (WR}^2\text{) as seen from motor shaft}}{\text{Moment of Inertia (WR}^2\text{) of motor}}$

- I** = Allowable ratio of Moment of Inertia (WR²) ≤ 0.3
- II** = Allowable ratio of Moment of Inertia (WR²) ≤ 3
- III** = Allowable ratio of Moment of Inertia (WR²) ≤ 10

Speed Reducers

How to Select

Determine Selection Horsepower (HP)

$$\text{Motor HP} \times \text{Service Factor} = \text{Selection HP}$$

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

Select a Frame Size

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

Output RPM	350	250	175	146	117	87.5	70.0	58.3	43.8	35.0	29.2	21.9	17.5	Frame Size
Ratio	5	7	10	12	15	20	25	30	40	50	60	80	100	
Input HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.134	0.134	0.134	-	-	
Output Torque in-lbs	41.0	57.5	82.1	98.5	123	164	205	246	164	205	246	-	-	1120
Overhung Load lbs	132	143	165	176	187	209	220	231	254	276	287	-	-	
Input HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	-	-	
Output Torque in-lbs	82.1	115	164	197	246	328	410	492	328	410	492	-	-	1220
Overhung Load lbs	187	209	231	243	265	298	309	331	353	375	386	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.134	0.134	
Output Torque in-lbs	-	-	-	-	-	-	-	-	-	-	-	328	410	1230
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	397	397	
Input HP	1.07	1.07	1.07	1.07	-	-	-	-	-	0.536	0.536	-	-	
Output Torque in-lbs	164	230	328	394	-	-	-	-	-	617	905	-	-	1320
Overhung Load lbs	309	353	386	408	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.268	0.268	
Output Torque in-lbs	-	-	-	-	-	-	-	-	-	-	-	657	821	1330
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	661	683	

2 ...to your SELECTION HP...

3 ...to find your FRAME SIZE

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



For special circumstances affecting **Frame Size** selection such as:

- Overhung Load
- Shock Loading

Consult Appendix, pages 5.5–5.6.

Configure a Model Number

Output Shaft Orientation

Type	Prefix
Universal Direction (Maintenance Free)	N

Mounting Style

Type	Prefix
Shaft Mount (Hollow Shaft)	Y
Flange (Solid Shaft)	F
Foot (Solid Shaft)	H

Input Connection

Input Connection	Prefix
C-Face Adapter with jaw coupling	J
Quill C-Face	X
Motor	JM

Modification

	Prefix
Special	S
Standard	

Frame Size

1120	1520
1220	1530
1230	1531
1320	1540
1330	1630
1340	1631
1420	1632
1430	1640
1440	

Output Shaft Direction (shafted model only)

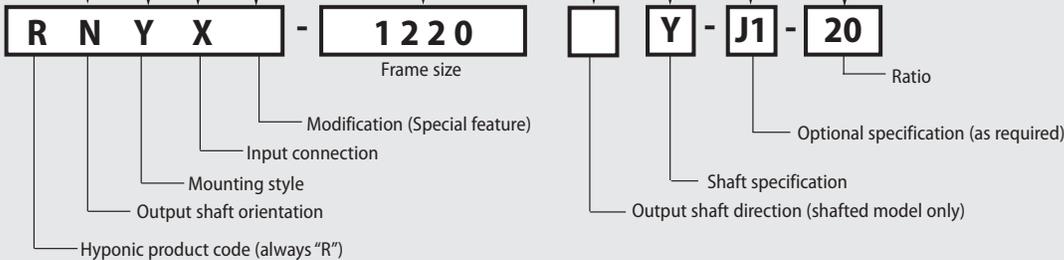
Direction (when viewed from motor end)	Suffix
Projects to Left Side	L
Projects to Right Side	R
Projects to Both Sides	T

Include the following information when ordering:

- Motor Specification (230/460 VAC 60 Hz is supplied, unless otherwise specified)
- NEMA frame size for C-face adapter with jaw coupling or Quill adapter
- Bushing Bore size (must be supplied)
- Optional conduit box positions must be specified, otherwise Y1 is supplied.

Speed Reducers

Nomenclature



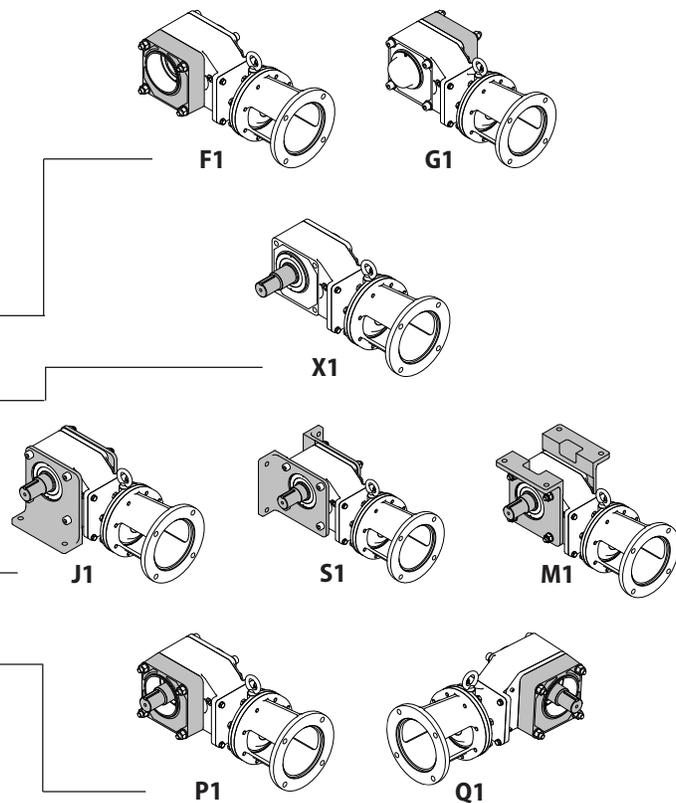
Nomenclature

Shaft Specifications

Input Shaft	Output Shaft		Suffix
	Hollow	Solid	
mm	Key (mm)	Key (mm)	
Inch	Key (Inch)	Key (Inch)	Y

Optional Specifications (as required)

Specification	Suffix
Hollow Bore Options	
Extended Flange (for motor clearance)	
Left (viewed from motor end)	F1
Right (viewed from motor end)	G1
Solid Shaft Options	
Plug-in Shaft	X1
Plug-in Shaft with Bolt-on Feet	
Bottom	J1
Opposite from Motor	S1
Top	M1
Plug-in Shaft with Extended Flange (for motor clearance)	
Left (viewed from motor end)	P1
Right (viewed from motor end)	Q1



Nominal Total Ratio

5	20	60	200	600
7	25	80	240	720
10	30	100	300	900
12	40	120	360	1200
15	50	150	480	1440

Nomenclature Example:

RNYJ – 1220Y – J1 – 20

- R – Hyponic®
- N – Universal Mount
- Y – Shaft Mount (Hollow Shaft)
- X – Quill C-Face Input
- 1220 – Frame Size
- Y – Inch Shaft Specification
- J1 – Bolt-on Feet, Bottom
- 20 – Ratio

Speed Reducers

Nomenclature

AGMA Load Classifications

AGMA Tables

TYPE OF APPLICATION	TYPE OF LOAD	TYPE OF APPLICATION	TYPE OF LOAD	TYPE OF APPLICATION	TYPE OF LOAD
Agitators		Large (industrial)	M	Paper Mills	
Pure liquids	U	Light (small diameter)	U	Agitators (mixers)	M
Liquids and solids	M	Feeders		Barker, hydraulic	S
Variable-density liquids	M	Apron	M	Barker, mechanical	S
Blowers		Belt	M	Barking drum	S
Centrifugal	U	Disc	U	Beater and pulper	M
Lobe	M	Reciprocating	H	Bleacher	U
Vane	U	Screw	M	Calenders	M
Brewing and Distilling		Food Industry		Calenders, super	H
Bottling machinery	U	Beet slicer	M	Converting machine (except cutters, platers)	M
Brew kettles, cont. duty	U	Cereal cooker	U	Conveyors	U
Cookers, cont. duty	U	Dough mixer	M	Couch	M
Mash tubs, cont. duty	U	Meat grinders	M	Cutters, platers	H
Scale hopper, frequent starts	M	Generators (Not Welding)	U	Cylinders	M
Can Filling Machines	U	Hammer Mills	H	Dryers	M
Cane Knives	M	Hoists		Felt stretcher	M
Car Dumpers	H	Heavy duty	H	Felt whipper	H
Car Pullers	M	Medium duty	M	Jordans	H
Clarifiers	U	Skip	M	Log haul	H
Classifiers	M	Laundry Washers — Reversing	M	Presses	U
Clay Working Machinery		Laundry Tumblers — Reversing	M	Pulp machine reel	M
Brick press	H	Line Shaft		Stock chest	M
Briquette machine	H	Drive processing equipment	M	Suction roll	U
Clay working machinery	M	Light	U	Washers and thickeners	M
Pug mill	M	Other line shafts	U	Winders	U
Compressors		Lumber Industry		Printing Presses	S
Centrifugal	U	Barkers — hydraulic and mechanical	S	Pullers, Barge Haul	H
Lobe	M	Burner conveyor	M	Pumps	
Reciprocating, multi-cylinder	M	Chain Saw and Drag Saw		Centrifugal	U
Reciprocating, single-cylinder	H	Chain transfer	H	Proportioning	M
Conveyors — Uniformly Loaded or Fed		Craneway transfer	H	Reciprocating	
Apron	U	De-barking drum	S	Single acting, 3 or more cylinders	M
Assembly	U	Edger feed	H	Double acting, 2 or more cylinders	M
Belt	U	Gang feed	M	Rotary-gear type	U
Bucket	U	Geen chain	M	Rubber and Plastics Industries	
Chain	U	Live rolls	H	Crackers	H
Flight	U	Log haul-lockline	H	Laboratory equipment	M
Oven	U	Log turning device	H	Mixing mills	H
Screw	U	Main log conveyor	M	Refiners	M
Conveyors — Heavy Duty, Not Uniformly Fed		Off bearing rolls	M	Rubber calenders	M
Apron	M	Planer feed chains	M	Rubber mill (2 on line)	M
Assembly	M	Planer floor chains	M	Rubber mill (3 on line)	U
Belt	M	Planer tilting hoist	M	Sheeter	M
Bucket	M	Re-saw merry-go-round conveyor	M	Tire building machines	S
Chain	M	Roll cases	H	Tire and tube press openers	S
Flight	M	Slab conveyor	H	Tubers and strainers	M
Live roll oven	M	Small waste-conveyor-belt	U	Warming mills	M
Reciprocating	H	Small waste-conveyor-chain	M	Sand Muller	M
Screw	M	Sorting table	M	Screens	
Shaker	H	Tipple hoist conveyor	M	Air washing	U
Cranes (Except for Dry Dock Cranes)		Tipple hoist drive	M	Rotary, stone or gravel	M
Main hoists	U	Transfer conveyors	M	Traveling water intake	U
Bridge travel	S	Transfer rolls	M	Sewage Disposal Equipment	
Trolley travel	S	Tray drive	M	Bar screens	U
Crusher		Trimmer feed	M	Chemical fenders	U
Ore	H	Waste conveyor	M	Collectors, circuline or straightline	U
Stone	H	Machine Tools		Dewatering screens	M
Sugar	M	Bending roll	M	Grit collectors	U
Dredges		Notching press, belt driven	S	Scum breakers	M
Cable reels	M	Plate planer	H	Slow or rapid mixers	M
Conveyors	M	Punch press, gear driven	H	Sludge collectors	U
Cutter head drives	H	Tapping machine	H	Thickeners	M
Jig drives	H	Other machine tools		Vacuum filters	M
Maneuvering winches	M	Main drives	M	Slab Pushers	M
Pumps	M	Auxiliary drives	U	Steering Gear	S
Screen drive	H	Metal Mills		Stokers	U
Stackers	M	Draw bench carriage and main drive	M	Sugar Industry	
Utility winches	M	Forming machines	H	Cane knives	M
Dry Dock Cranes	S	Pinch, dryer and scrubber rolls, reversing	S	Crushers	M
Elevators		Slitters	M	Mills	H
Bucket, uniform load	U	Table conveyors, nonreversing		Textile Industry	
Bucket, heavy load	M	Group drives	M	Batchers	M
Bucket, cont.	U	Individual drives	H	Calenders	M
Centrifugal discharge	U	Table conveyors, reversing	S	Cards	M
Escalators	U	Wire drawing and flattening machine	M	Dry cans	M
Freight	M	Wire winding machine	M	Dryers	M
Gravity discharge	U	Mills, Rotary Type		Dyeing machinery	M
Man lifts	S	Ball	M	Knitting machines	S
Passenger	S	Cement kilns	M	Looms	M
Extruders (Plastics)		Dryers and coolers	M	Mangles	M
Blow molders	M	Kilns	M	Nappers	M
Coating	U	Pebble	M	Pads	M
Film	U	Rod, plain and wedge bar	M	Range drives	S
Pipe	U	Tumbling barrels	H	Slashers	M
Pre-plasticizers	M	Mixers		Soapers	M
Rods	U	Concrete mixers, cont.	M	Spinners	M
Sheet	U	Concrete mixers, intermittent	M	Tenter frames	M
Tubing	U	Constant density	U	Washers	M
Fans		Variable density	M	Winders	M
Centrifugal	U	Oil Industry		Windlass	S
Cooling towers	S	Chillers	M		
Forced draft	S	Oil well pumps	S		
Induced draft	M	Paraffin filter press	M		
Large (mine, etc.)	M	Rotary kilns	M		

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

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Quill Frame Size Selection Tables 60 Hz

1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	2.14	1400	2.17
	1200	2.15	1500	2.18
	1300	2.16	1600	2.19

Output RPM	350	250	175	146	117	87.5	70.0	58.3	43.8	35.0	29.2	21.9	17.5	Frame Size
Ratio	5	7	10	12	15	20	25	30	40	50	60	80	100	
Input HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.134	0.134	0.134	-	-	1120
Output Torque in·lbs	41.0	57.5	82.1	98.5	123	164	205	246	164	205	246	-	-	
Overhung Load lbs	132	143	165	176	187	209	220	231	254	276	287	-	-	
Input HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	-	-	1220
Output Torque in·lbs	82.1	115	164	197	246	328	410	492	328	410	492	-	-	
Overhung Load lbs	187	209	231	243	265	298	309	331	353	375	386	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.134	0.134	1230
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	328	410	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	397	397	
Input HP	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.536	0.536	0.536	-	-	1320
Output Torque in·lbs	164	230	328	394	492	657	821	985	657	821	985	-	-	
Overhung Load lbs	309	353	386	408	441	485	507	529	573	617	639	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.268	0.268	1330
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	657	821	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	661	683	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1340
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	1.07	1.07	1.07	-	-	1420
Output Torque in·lbs	316	442	632	758	948	1260	1580	1900	1310	1640	1970	-	-	
Overhung Load lbs	463	518	584	617	661	716	761	805	860	904	937	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.536	0.536	1430
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	1310	1640	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	959	981	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1440
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	1.07	1.07	1530
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	2630	3280	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	1380	1400	
Input HP	-	-	-	-	-	-	-	-	2.06	2.06	2.06	2.06	-	1531
Output Torque in·lbs	-	-	-	-	-	-	-	-	2530	3170	3780	5060	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	1250	1310	1360	1380	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1540
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	1630
Output Torque in·lbs	-	-	903	1090	1350	1810	2260	2720	3620	4520	5430	7350	9190	
Overhung Load lbs	-	-	1330	1420	1500	1650	1740	1820	1910	2000	2060	2170	2200	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1631
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	-	-	1632
Output Torque in·lbs	-	-	1520	1820	2280	3040	3810	4590	6120	7650	9180	-	-	
Overhung Load lbs	-	-	1330	1420	1500	1650	1740	1820	1910	2000	2060	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1640
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	

Speed Reducers Selection Tables

60 Hz Quill Frame Size Selection Tables

1750 RPM

<i>Dimensions:</i>	Frame Size	Page	Frame Size	Page
	1100	2.14	1400	2.17
	1200	2.15	1500	2.18
	1300	2.16	1600	2.19

Output RPM	14.6	11.7	8.75	7.29	5.83	4.86	3.65	2.92	2.43	1.94	1.46	1.22	Frame Size
Ratio	120	150	200	240	300	360	480	600	720	900	1200	1440	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1120
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1220
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.134	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	492	-	-	-	-	-	-	-	-	-	-	-	1230
Overhung Load lbs	408	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1320
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.268	0.125	0.125	0.125	-	-	-	-	-	-	-	-	
Output Torque in·lbs	985	574	765	918	-	-	-	-	-	-	-	-	1330
Overhung Load lbs	694	694	694	694	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.134	0.134	0.125	0.0999	0.0833	-	-	-	
Output Torque in·lbs	-	-	-	-	1160	1390	1730	1730	1730	-	-	-	1340
Overhung Load lbs	-	-	-	-	694	694	694	694	694	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1420
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.536	0.250	0.250	0.250	-	-	-	-	-	-	-	-	
Output Torque in·lbs	1970	1150	1530	1840	-	-	-	-	-	-	-	-	1430
Overhung Load lbs	981	981	981	981	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.268	0.268	0.250	0.200	0.167	0.133	0.0999	0.0833	
Output Torque in·lbs	-	-	-	-	2320	2780	3450	3450	3450	3450	3450	3450	1440
Overhung Load lbs	-	-	-	-	981	981	981	981	981	981	981	981	
Input HP	1.07	0.500	0.500	0.500	-	-	-	-	-	-	-	-	
Output Torque in·lbs	3940	2230	3060	3670	-	-	-	-	-	-	-	-	1530
Overhung Load lbs	1400	1400	1400	1400	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1531
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.536	0.536	0.468	0.375	0.312	0.250	0.187	0.156	
Output Torque in·lbs	-	-	-	-	4640	5560	6480	6480	6480	6480	6480	6480	1540
Overhung Load lbs	-	-	-	-	1400	1400	1400	1400	1400	1400	1400	1400	
Input HP	3.00	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	11000	-	-	-	-	-	-	-	-	-	-	-	1630
Overhung Load lbs	2200	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	2.85	2.14	1.78	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	13100	13100	13100	-	-	-	-	-	-	-	-	1631
Overhung Load lbs	-	2200	2200	2200	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1632
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	1.07	1.07	0.948	0.758	0.632	0.505	0.379	0.316	
Output Torque in·lbs	-	-	-	-	9270	11100	13100	13100	13100	13100	13100	13100	1640
Overhung Load lbs	-	-	-	-	2200	2200	2200	2200	2200	2200	2200	2200	

Speed Reducers

Selection Tables

C-Face Frame Size Selection Tables 60 Hz

1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	2.20	1400	2.23
	1200	2.21	1500	2.24
	1300	2.22	1600	2.25

Output RPM	350	250	175	146	117	87.5	70.0	58.3	43.8	35.0	29.2	21.9	17.5	Frame Size
Ratio	5	7	10	12	15	20	25	30	40	50	60	80	100	
Input HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.134	0.134	0.134	-	-	1120
Output Torque in•lbs	41.0	57.5	82.1	98.5	123	164	205	246	164	205	246	-	-	
Overhung Load lbs	132	143	165	176	187	209	220	231	254	276	287	-	-	
Input HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	-	-	1220
Output Torque in•lbs	82.1	115	164	197	246	328	410	492	328	410	492	-	-	
Overhung Load lbs	187	209	231	243	265	298	309	331	353	375	386	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.134	0.134	1230
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	328	410	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	397	397	
Input HP	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.536	0.536	0.536	-	-	1320
Output Torque in•lbs	164	230	328	394	492	657	821	985	657	821	985	-	-	
Overhung Load lbs	309	353	386	408	441	485	507	529	573	617	639	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.268	0.268	1330
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	657	821	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	661	683	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1340
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	1.07	1.07	1.07	-	-	1420
Output Torque in•lbs	316	442	632	758	948	1260	1580	1900	1310	1640	1970	-	-	
Overhung Load lbs	463	518	584	617	661	716	761	805	860	904	937	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.536	0.536	1430
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	1310	1640	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	959	981	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1440
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	-	-	1520
Output Torque in•lbs	315	442	630	755	948	1260	1580	1900	2530	3160	3790	-	-	
Overhung Load lbs	661	750	838	893	948	1040	1100	1160	1250	1310	1360	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	1.07	1.07	1530
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	2630	3280	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	1380	1400	
Input HP	-	-	-	-	-	-	-	-	2.06	2.06	2.06	2.06	-	1531
Output Torque in•lbs	-	-	-	-	-	-	-	-	2530	3170	3780	5060	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	1250	1310	1360	1380	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1540
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	1640
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	

Speed Reducers Selection Tables

60 Hz C-Face Frame Size Selection Tables

1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	2.20	1400	2.23
	1200	2.21	1500	2.24
	1300	2.22	1600	2.25

Output RPM	14.6	11.7	8.75	7.29	5.83	4.86	3.65	2.92	2.43	1.94	1.46	1.22	Frame Size
Ratio	120	150	200	240	300	360	480	600	720	900	1200	1440	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1120
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1220
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.134	0.134	0.134	0.118	-	-	-	-	-	-	-	-	
Output Torque in·lbs	492	616	821	868	-	-	-	-	-	-	-	-	1230
Overhung Load lbs	408	408	408	408	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1320
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.268	0.125	0.125	0.125	-	-	-	-	-	-	-	-	
Output Torque in·lbs	985	574	765	918	-	-	-	-	-	-	-	-	1330
Overhung Load lbs	694	694	694	694	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.134	0.134	0.125	0.100	0.083	0.067	0.050	0.042	
Output Torque in·lbs	-	-	-	-	1160	1390	1730	1730	1730	1730	1730	1730	1340
Overhung Load lbs	-	-	-	-	694	694	694	694	694	694	694	694	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1420
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.536	0.250	0.250	0.250	-	-	-	-	-	-	-	-	
Output Torque in·lbs	1970	1150	1530	1840	-	-	-	-	-	-	-	-	1430
Overhung Load lbs	981	981	981	981	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.268	0.268	0.250	0.200	0.167	0.133	0.100	0.083	
Output Torque in·lbs	-	-	-	-	2320	2780	3450	3450	3450	3450	3450	3450	1440
Overhung Load lbs	-	-	-	-	981	981	981	981	981	981	981	981	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1520
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	1.07	0.500	0.500	0.500	-	-	-	-	-	-	-	-	
Output Torque in·lbs	3940	2230	3060	3670	-	-	-	-	-	-	-	-	1530
Overhung Load lbs	1400	1400	1400	1400	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1531
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.536	0.536	0.468	0.375	0.312	0.250	0.187	0.156	
Output Torque in·lbs	-	-	-	-	4640	5560	6480	6480	6480	6480	6480	6480	1540
Overhung Load lbs	-	-	-	-	1400	1400	1400	1400	1400	1400	1400	1400	
Input HP	-	-	-	-	1.07	1.07	0.948	0.758	0.632	0.505	0.379	0.316	
Output Torque in·lbs	-	-	-	-	9270	11100	13100	13100	13100	13100	13100	13100	1640
Overhung Load lbs	-	-	-	-	2200	2200	2200	2200	2200	2200	2200	2200	

Speed Reducers

Selection Tables

C-Face Frame Size Selection Tables 50 Hz

1450 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	2.20	1400	2.23
	1200	2.21	1500	2.24
	1300	2.22	1600	2.25

Output RPM Ratio	290 5	207 7	145 10	121 12	96.7 15	72.5 20	58.0 25	48.3 30	36.2 40	29.0 50	24.2 60	18.1 80	14.5 100	Frame Size
Input HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.134	0.134	0.134	-	-	
Output Torque in•lbs	49.5	69.3	99.1	119	149	198	248	297	198	248	297	-	-	1120
Overhung Load lbs	143	154	176	187	198	220	231	243	265	287	298	-	-	
Input HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	-	-	
Output Torque in•lbs	99.1	139	198	238	297	396	495	594	396	495	594	-	-	1220
Overhung Load lbs	198	220	243	254	276	309	331	342	364	386	397	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.134	0.134	
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	396	495	1230
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	397	408	
Input HP	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.536	0.536	0.536	-	-	
Output Torque in•lbs	198	277	396	475	594	792	991	1190	792	991	1190	-	-	1320
Overhung Load lbs	331	375	408	430	463	507	529	551	595	639	661	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.268	0.268	
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	792	991	1330
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	661	694	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	1340
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	1.07	1.07	1.07	-	-	
Output Torque in•lbs	381	534	763	915	1140	1530	1910	2290	1580	1980	2380	-	-	1420
Overhung Load lbs	485	551	617	639	694	750	794	838	893	937	970	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	0.536	0.536	
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	1580	1980	1430
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	970	981	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	1440
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.06	2.06	2.06	-	-	
Output Torque in•lbs	380	533	762	913	1140	1520	1900	2290	3050	3810	4580	-	-	1520
Overhung Load lbs	705	794	882	926	992	1080	1150	1200	1290	1360	1400	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	1.07	1.07	
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	3170	3960	1530
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	1400	1400	
Input HP	-	-	-	-	-	-	-	-	3.00	3.00	3.00	2.06	-	
Output Torque in•lbs	-	-	-	-	-	-	-	-	3040	3800	4570	6100	-	1531
Overhung Load lbs	-	-	-	-	-	-	-	-	1290	1360	1400	1400	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	1540
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in•lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	1640
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	-	

Speed Reducers Selection Tables

50 Hz C-Face Frame Size Selection Tables

1450 RPM

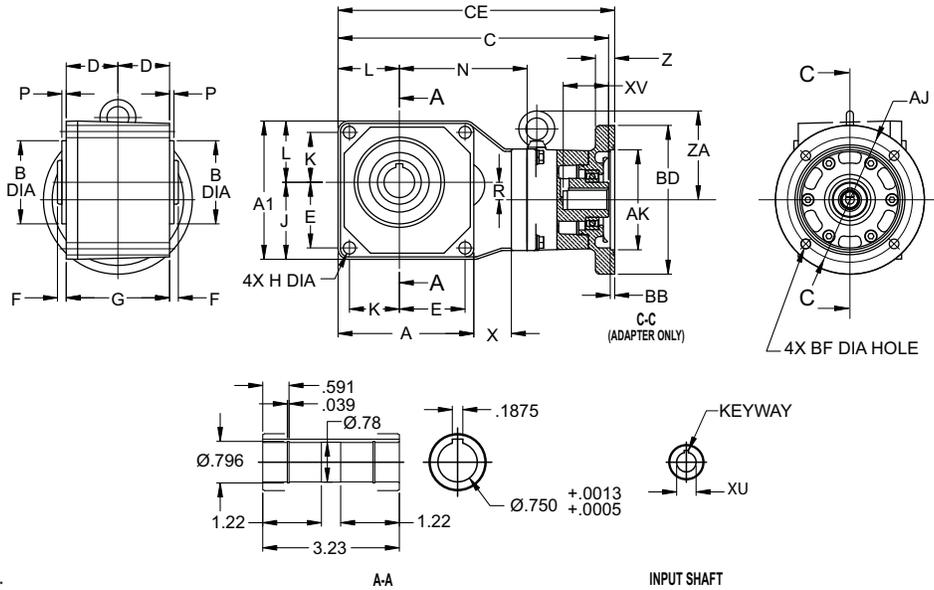
Dimensions:	Frame Size	Page	Frame Size	Page
	1100	2.20	1400	2.23
	1200	2.21	1500	2.24
	1300	2.22	1600	2.25

Output RPM Ratio	12.1 120	9.67 150	7.25 200	6.04 240	4.83 300	4.03 360	3.02 480	2.42 600	2.01 720	1.61 900	1.21 1200	1.01 1440	Frame Size
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1120
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1220
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.134	0.134	0.117	0.098	-	-	-	-	-	-	-	-	
Output Torque in·lbs	594	743	868	868	-	-	-	-	-	-	-	-	1230
Overhung Load lbs	408	408	408	408	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1320
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.268	0.125	0.125	0.125	-	-	-	-	-	-	-	-	
Output Torque in·lbs	1190	695	924	1110	-	-	-	-	-	-	-	-	1330
Overhung Load lbs	694	694	694	694	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.134	0.134	0.103	0.083	0.069	0.055	0.041	0.035	
Output Torque in·lbs	-	-	-	-	1400	1680	1730	1730	1730	1730	1730	1730	1340
Overhung Load lbs	-	-	-	-	694	694	694	694	694	694	694	694	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1420
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	0.536	0.250	0.250	0.250	-	-	-	-	-	-	-	-	
Output Torque in·lbs	2380	1390	1850	2210	-	-	-	-	-	-	-	-	1430
Overhung Load lbs	981	981	981	981	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.268	0.268	0.207	0.166	0.138	0.110	0.083	0.069	
Output Torque in·lbs	-	-	-	-	2800	3360	3450	3450	3450	3450	3450	3450	1440
Overhung Load lbs	-	-	-	-	981	981	981	981	981	981	981	981	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1520
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	1.07	0.500	0.500	0.500	-	-	-	-	-	-	-	-	
Output Torque in·lbs	4750	2780	3700	4440	-	-	-	-	-	-	-	-	1530
Overhung Load lbs	1400	1400	1400	1400	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	-	-	-	-	-	-	-	-	
Output Torque in·lbs	-	-	-	-	-	-	-	-	-	-	-	-	1531
Overhung Load lbs	-	-	-	-	-	-	-	-	-	-	-	-	
Input HP	-	-	-	-	0.536	0.517	0.388	0.310	0.259	0.207	0.155	0.129	
Output Torque in·lbs	-	-	-	-	5590	6480	6480	6480	6480	6480	6480	6480	1540
Overhung Load lbs	-	-	-	-	1400	1400	1400	1400	1400	1400	1400	1400	
Input HP	-	-	-	-	1.07	1.05	0.785	0.628	0.523	0.419	0.314	0.262	
Output Torque in·lbs	-	-	-	-	11200	13100	13100	13100	13100	13100	13100	13100	1640
Overhung Load lbs	-	-	-	-	2200	2200	2200	2200	2200	2200	2200	2200	

Speed Reducers Selection Tables

Quill Dimensions

Frame Size 1100 RNYX-1120Y



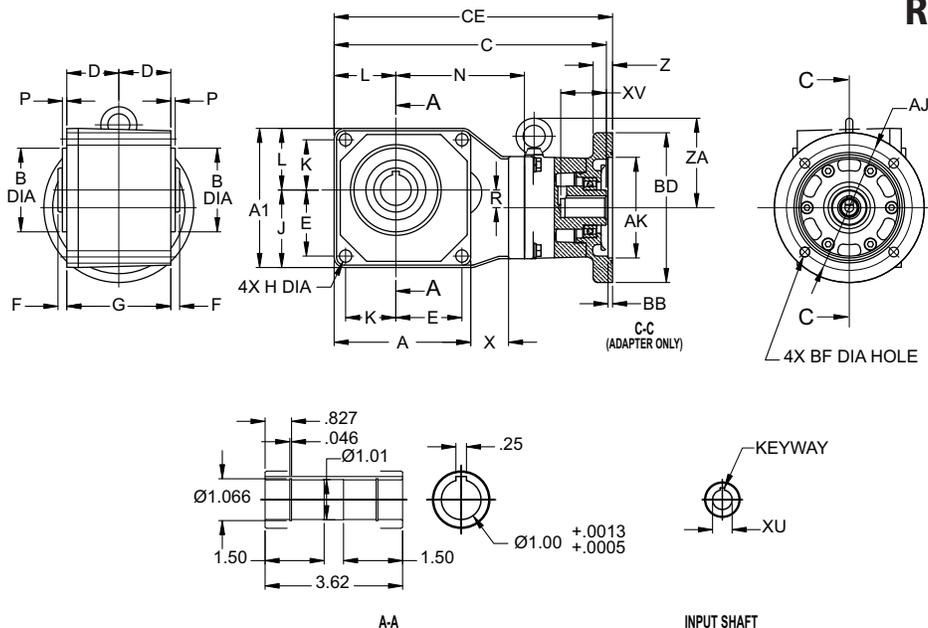
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1120Y	3.54	2.046	2.047	1.30	1.65	0.31	2.60	0.26	1.97	1.26	1.57	3.24	0.24	0.79	0.88

Model	Ratio	NEMA Frame	CE	C	AK	BD	AJ	BF	Z	BB	ZA	Wt. (lbs.)
RNYX-1120Y	5~60	56C	7.98	7.58	4.5	6.69	5.88	0.43	0.39	0.22	-	15

Model	NEMA Frame	XU	XV	KEYWAY
RNYX-1120Y	56C	0.625	1.82	3/16 x 3/16 x 1.82

Quill Dimensions

Frame Size 1200
RNYX-1220/30Y



All dimensions are in inches.

Speed Reducers

Dimensions

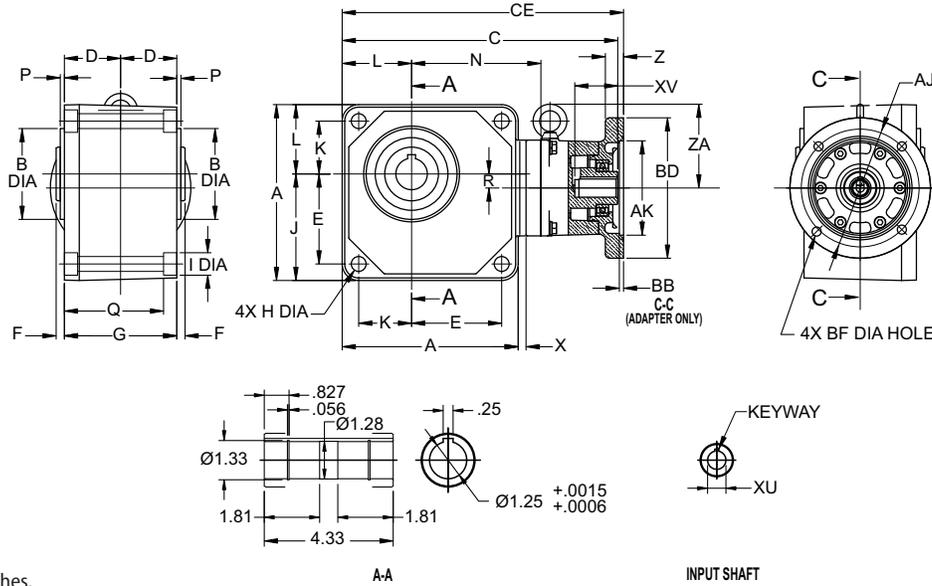
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1220Y	4.53	3.070	3.071	1.46	2.24	0.35	2.91	0.35	2.60	1.58	1.93	3.80	0.20	1.10	0.80
1230Y	5.00	3.070	3.071	1.61	2.56	0.35	3.23	0.35	2.99	1.58	2.01	3.75	0.20	0.51	0.31

Model	Ratio	NEMA Frame	CE	C	AK	BD	AJ	BF	Z	BB	ZA	Wt. (lbs.)
RNYX-1220Y	5~60	56C	9.19	8.87	4.5	6.69	5.88	0.43	0.39	0.22	-	17
RNYX-1230Y	80~120	56C	12.42	9.88	4.5	6.69	5.88	0.43	0.39	0.22	-	18

Model	NEMA Frame	XU	XV	KEYWAY
RNYX-1220Y	56C	0.625	1.82	3/16 x 3/16 x 1.82
RNYX-1230Y	56C	0.625	1.82	3/16 x 3/16 x 1.82

Quill Dimensions

Frame Size 1300 RNYX-1320/30/40Y



All dimensions are in inches.

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1320Y	5.20	3.345	3.346	1.81	2.44	0.35	3.62	0.43	2.91	1.81	2.28	4.68	0.20	1.08	1.33
1330Y	5.98	3.345	3.346	1.81	3.11	0.35	3.62	0.43	3.62	1.85	2.36	4.23	0.20	0.43	0.14
1340Y	5.98	3.345	3.346	1.81	3.11	0.35	3.62	0.43	3.62	1.85	2.36	5.16	0.20	0.35	1.04

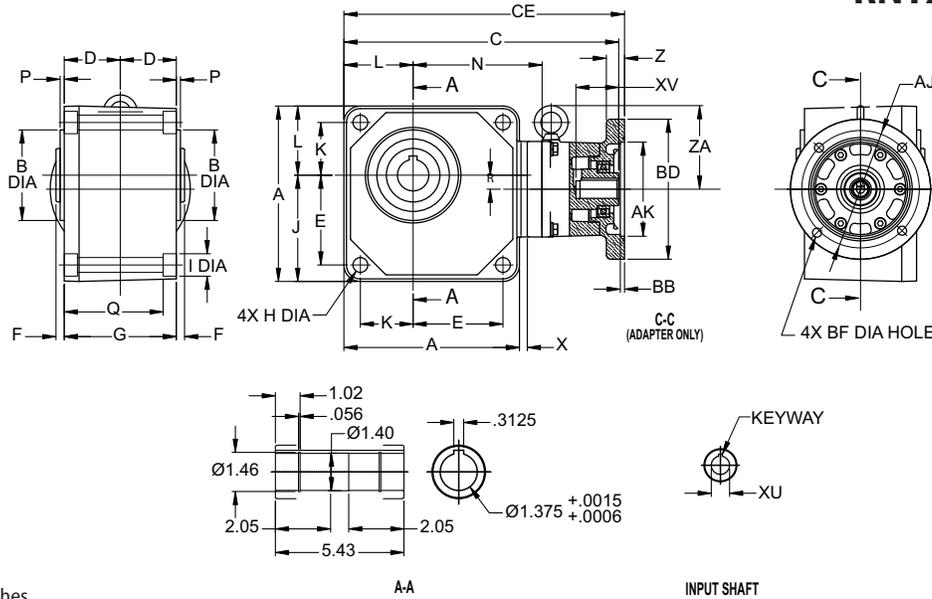
Model	Ratio	NEMA Frame	CE	C	AK	BD	AJ	BF	Z	BB	ZA	Wt. (lbs.)
RNYX-1320Y	5~60	56C	10.58	10.3	4.5	6.69	5.88	0.43	0.87	0.2	4.53	29
RNYX-1320Y	5~30	143TC	10.58	10.3	4.5	6.69	5.88	0.43	0.87	0.2	4.53	29
RNYX-1330Y	80~240	56C	10.01	9.74	4.5	6.69	5.88	0.43	0.39	0.22	-	22
RNYX-1340Y	300~720	56C	10.59	10.28	4.5	6.69	5.88	0.43	0.39	0.22	-	24

Model	NEMA Frame	XU	XV	KEYWAY
RNYX-1320Y	56C	0.625	1.92	3/16 x 3/16 x 1.92
RNYX-1320Y	143TC	0.875	1.92	3/16 x 3/16 x 1.92
RNYX-1330Y	56C	0.625	1.85	3/16 x 3/16 x 1.85
RNYX-1340Y	56C	0.625	1.82	3/16 x 3/16 x 1.82

Speed Reducers Dimensions

Quill Dimensions

Frame Size 1400
RNYX-1420/30/40Y



All dimensions are in inches.

Speed Reducers

Dimensions

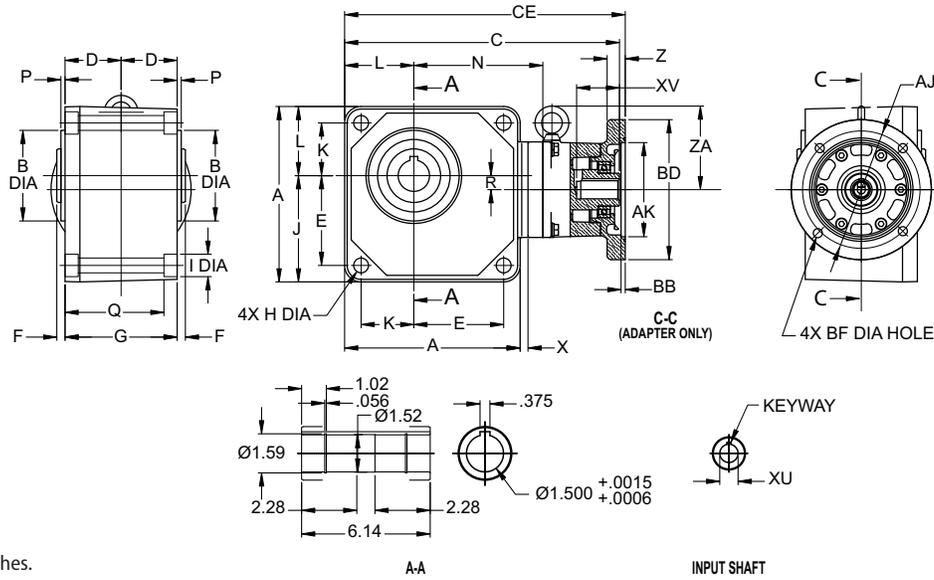
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1420Y	6.22	3.739	3.740	2.32	2.95	0.39	4.65	0.55	3.46	2.24	2.76	5.74	0.20	0.79	1.69
1430Y	7.01	3.739	3.740	2.32	3.62	0.39	4.65	0.55	4.25	2.13	2.76	5.12	0.20	0.55	0.32
1440Y	7.01	3.739	3.740	2.32	3.62	0.39	4.65	0.55	4.25	2.13	2.76	6.42	0.20	0.43	1.73

Model	Ratio	NEMA Frame	CE	C	AK	BD	AJ	BF	Z	BB	ZA	Wt. (lbs.)
RNYX-1420Y	40~60	56C	12.44	12.16	4.5	6.69	5.88	0.43	0.87	0.2	4.53	36
RNYX-1420Y	5~60	143TC	12.44	12.16	4.5	6.69	5.88	0.43	0.87	0.2	4.53	36
RNYX-1430Y	80~240	56C	11.5	11.22	4.5	6.69	5.88	0.43	0.87	0.2	4.53	38
RNYX-1440Y	300~1440	56C	12.64	12.32	4.5	6.69	5.88	0.43	0.39	0.22	-	32

Model	NEMA Frame	XU	XV	KEYWAY
RNYX-1420Y	56C	0.625	1.82	3/16 x 3/16 x 1.82
RNYX-1420Y	143TC	0.875	1.92	3/16 x 3/16 x 1.92
RNYX-1430Y	56C	0.625	1.92	3/16 x 3/16 x 1.92
RNYX-1440Y	56C	0.625	1.85	3/16 x 3/16 x 1.85

Quill Dimensions

Frame Size 1500 RNYX-1520/30/31/40Y



All dimensions are in inches.

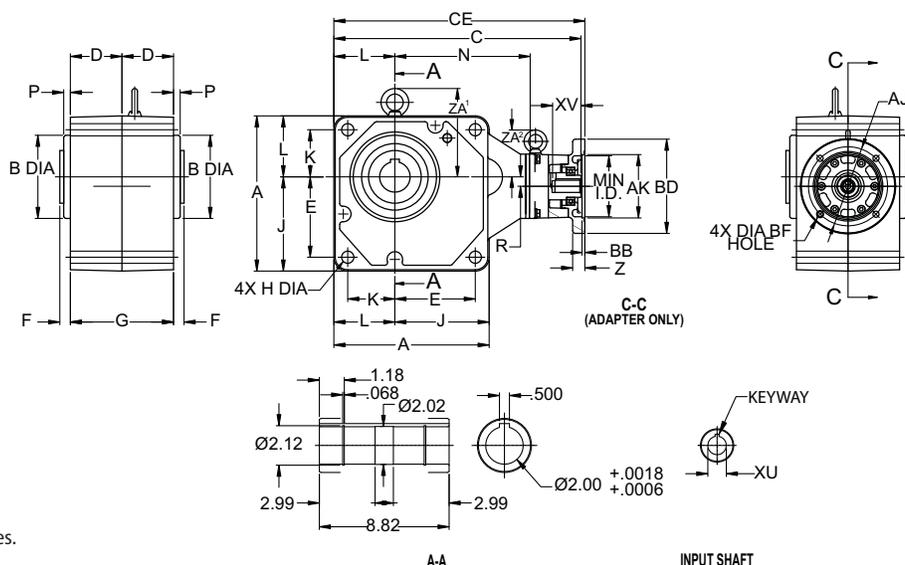
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1530/31Y	8.39	4.329	4.331	2.68	4.29	0.39	5.35	0.71	5.08	2.52	3.31	6.18	0.20	0.67	0.37
1540Y	8.39	4.329	4.331	2.68	4.29	0.39	5.35	0.71	5.08	2.52	3.31	7.76	0.20	0.55	2.13

Model	Ratio	NEMA Frame	CE	C	AK	BD	AJ	BF	Z	BB	ZA	Wt. (lbs.)
RNYX-1530Y	80~240	56C	13.41	13.13	4.5	6.69	5.88	0.43	0.87	0.2	5.12	51
RNYX-1530Y	80~120	143TC	13.41	13.13	4.5	6.69	5.88	0.43	0.87	0.2	5.12	51
RNYX-1531Y	40 ~ 80	145TC	13.41	13.26	4.5	6.69	5.88	0.43	0.87	0.2	5.12	51
RNYX-1540Y	300~1440	56C	14.69	14.41	4.5	6.69	5.88	0.43	0.87	0.2	5.12	61

Model	NEMA Frame	XU	XV	KEYWAY
RNYX-1530Y	56C	0.625	1.92	3/16 x 3/16 x 1.92
RNYX-1530Y	143TC	0.875	1.92	3/16 x 3/16 x 1.92
RNYX-1531Y	145TC	0.875	1.92	3/16 x 3/16 x 1.92
RNYX-1540Y	56C	0.625	1.92	3/16 x 3/16 x 1.92

Quill Dimensions

Frame Size 1600
RNYX-1630/31/32/40Y



All dimensions are in inches.

Speed Reducers

Dimensions

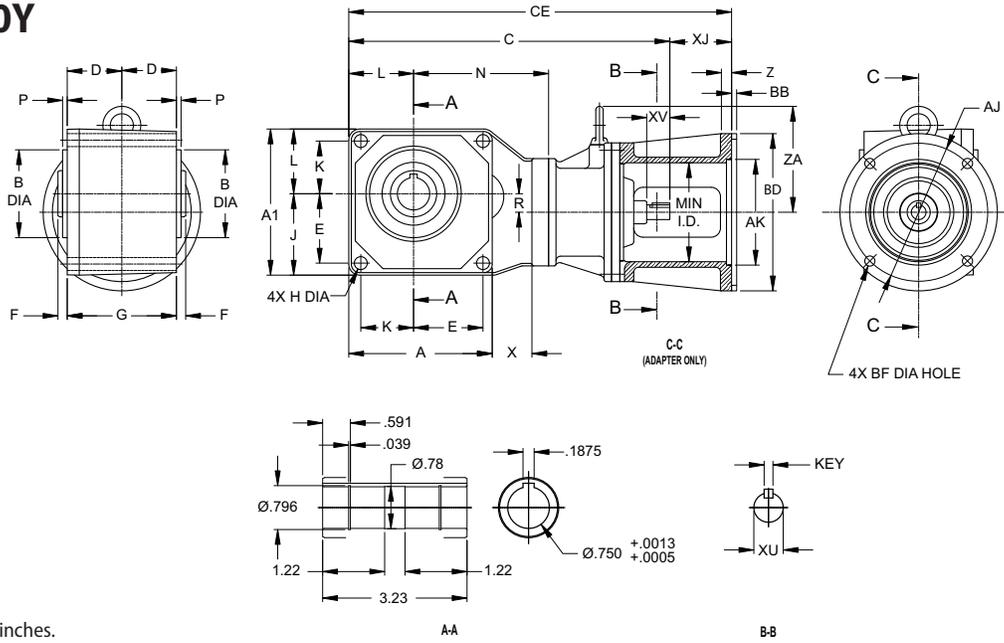
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	ZA'
1630/31/32Y	11.02	5.904	5.906	3.66	5.71	0.75	7.32	0.87	6.69	3.35	4.33	8.37	0.47	1.06	6.26
1640Y	11.02	5.904	5.906	3.66	5.71	0.75	7.32	0.87	6.69	3.35	4.33	9.29	0.47	0.67	6.26

Model	Ratio	NEMA Frame	CE	C	AK	BD	AJ	BF	Z	BB	ZA ²	Wt. (lbs.)
RNYX-1630Y	10~120	143TC	18.15	17.87	4.5	6.69	5.87	0.43	0.91	0.2	-	105
RNYX-1630Y	10~120	182TC	18.45	17.72	8.5	9.02	7.25	0.55	0.86	0.22	-	105
RNYX-1631Y	150~240	56C	18.15	17.87	4.5	6.69	5.87	0.43	0.91	0.2	-	105
RNYX-1631Y	150~240	143TC	18.15	17.87	4.5	6.69	5.87	0.43	0.91	0.2	-	105
RNYX-1631Y	150~240	182TC	18.45	17.72	8.5	9.02	7.25	0.55	0.86	0.22	-	105
RNYX-1632Y	10~60	182TC	18.45	17.72	8.5	9.02	7.25	0.55	0.86	0.22	-	107
RNYX-1640Y	300~1440	56C	17.56	17.24	4.5	6.69	5.87	0.43	0.81	0.2	6.97	146
RNYX-1640Y	300~720	143TC	17.56	17.28	4.5	6.69	5.87	0.43	0.81	0.2	6.97	146

Model	NEMA Frame	XU	XV	KEYWAY
RNYX-1630Y	143TC	0.875	2.36	3/16 x 3/16 x 2.36
RNYX-1630Y	182TC	1.125	2.16	1/4 x 1/4 x 2.16
RNYX-1631Y	56C	0.625	1.86	3/16 x 3/16 x 1.86
RNYX-1631Y	143TC	0.875	2.36	3/16 x 3/16 x 2.36
RNYX-1631Y	182TC	1.125	2.16	1/4 x 1/4 x 2.16
RNYX-1632Y	182TC	1.125	2.16	1/4 x 1/4 x 2.16
RNYX-1640Y	56C	0.625	1.82	3/16 x 3/16 x 1.82
RNYX-1640Y	143TC	0.875	1.92	3/16 x 3/16 x 1.92

C-Face Dimensions

Frame Size 1100 RNYJ-1120Y



All dimensions are in inches.

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1120Y	3.54	2.046	2.047	1.30	1.65	0.31	2.60	0.26	1.97	1.26	1.57	3.23	0.24	0.79	0.87

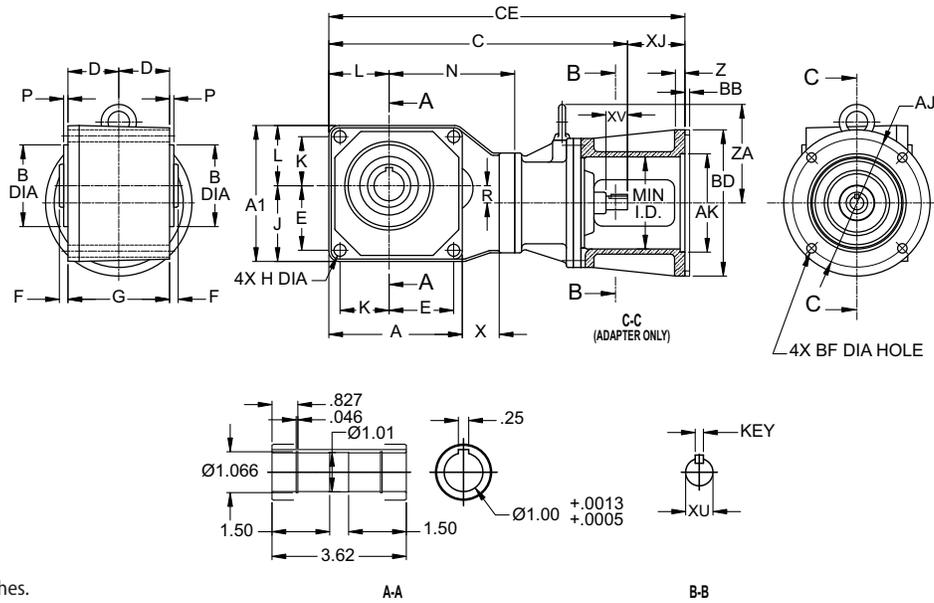
Model	Ratio	NEMA Frame	CE	C	XJ	AK	BD	AJ	BF	Z	BB	Min. ID	ZA	Wt. (lbs.)
RNYJ-1120Y	5~60	42C	10.72	8.94	1.78	3.0	4.33	3.75	0.28	0.47	-	2.44	-	12
RNYJ-1120Y	5~60	48C	11.11	8.94	2.16	3.0	4.33	3.75	0.28	0.47	-	2.44	-	13
RNYJ-1120Y	5~30	56C	11.47	8.94	2.56	4.5	6.69	5.88	0.43	0.47	-	3.15	-	15

Model	XU	XV	KEYWAY
RNYJ-1120Y	0.500	.98	1/8 x 1/8 x 0.71

Speed Reducers
Dimensions

C-Face Dimensions

Frame Size 1200
RNYJ-1220/30Y



All dimensions are in inches.

Speed Reducers

Dimensions

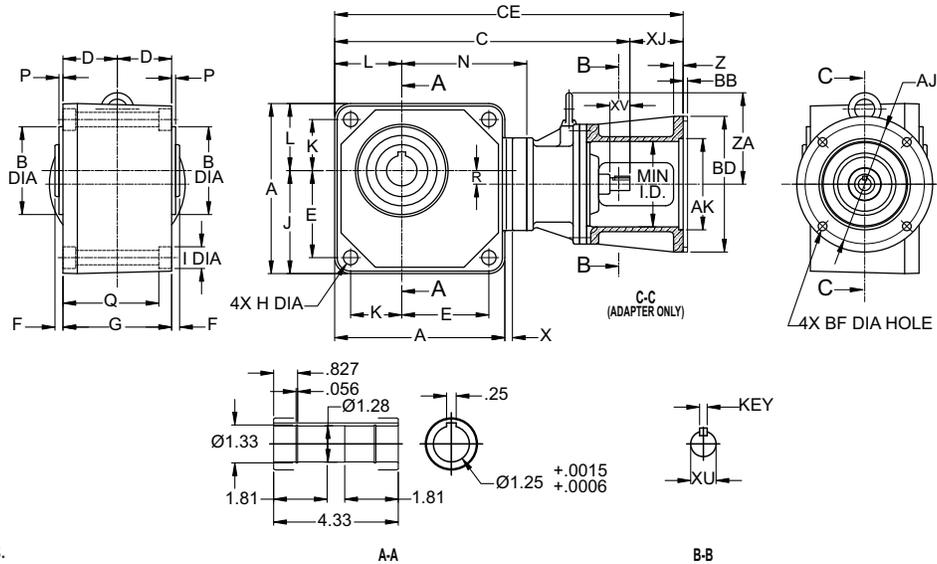
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1220Y	4.53	3.070	3.071	1.46	2.24	0.35	2.91	0.35	2.60	1.57	1.93	3.78	0.20	1.10	0.79
1230Y	5.00	3.070	3.071	1.61	2.56	0.35	3.23	0.35	2.99	1.57	2.01	3.74	0.20	0.51	0.31

Model	Ratio	NEMA Frame	CE	C	XJ	AK	BD	AJ	BF	Z	BB	Min. ID	ZA	Wt. (lbs.)
RNYJ-1220Y	5~60	48C	12.40	10.24	2.16	3.0	4.33	3.75	0.28	0.47	-	2.44	-	16
RNYJ-1220Y	5~60	56C	12.80	10.24	2.56	4.5	6.69	5.88	0.43	0.47	-	3.15	-	17
RNYJ-1220Y	5~60	143TC	12.80	10.24	2.56	4.5	6.69	5.88	0.43	0.47	-	3.15	-	17
RNYJ-1230Y	80~240	42C	11.66	9.88	1.78	3.0	4.33	3.75	0.28	0.47	-	2.44	-	16
RNYJ-1230Y	80~240	48C	12.04	9.88	2.16	3.0	4.33	3.75	0.28	0.47	-	2.44	-	16
RNYJ-1230Y	80~240	56C	12.42	9.88	2.56	4.5	6.69	5.88	0.43	0.47	-	3.15	-	18

Model	XU	XV	KEYWAY
RNYJ-1220Y	0.500	.98	1/8 x 1/8 x 0.71
RNYJ-1230Y	0.500	.98	1/8 x 1/8 x 0.71

C-Face Dimensions

Frame Size 1300 RNYJ-1320/30/40Y



All dimensions are in inches.

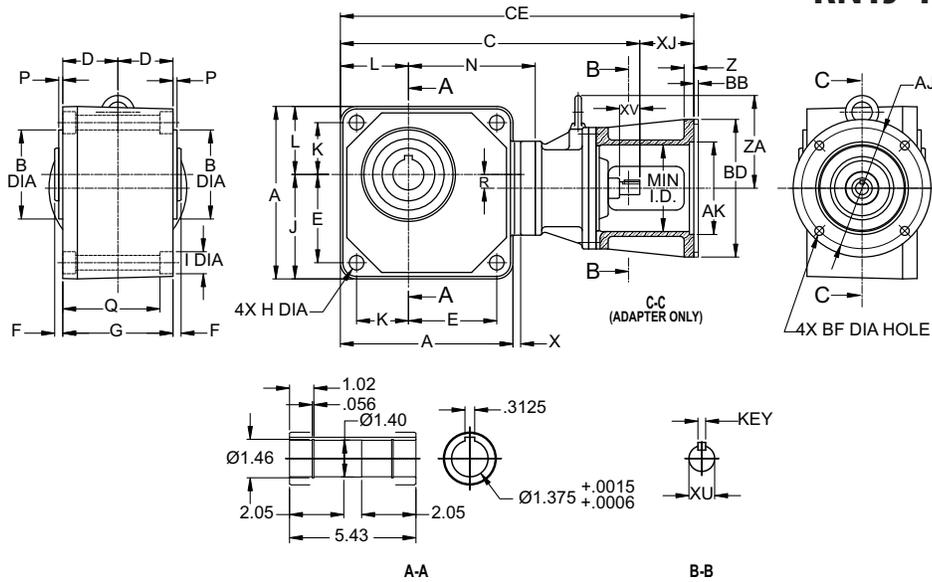
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1320Y	5.20	3.345	3.346	1.81	2.44	0.35	3.62	0.43	2.91	1.81	2.28	4.69	0.20	1.08	1.34
1330Y	5.98	3.345	3.346	1.81	3.11	0.35	3.62	0.43	3.62	1.85	2.36	4.25	0.20	0.43	0.14
1340Y	5.98	3.345	3.346	1.81	3.11	0.35	3.62	0.43	3.62	1.85	2.36	5.16	0.20	0.35	1.04

Model	Ratio	NEMA Frame	CE	C	XJ	AK	BD	AJ	BF	Z	BB	Min. ID	ZA	Wt. (lbs.)
RNYJ-1320Y	5~60	56C	14.52	11.89	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	4.53	29
RNYJ-1320Y	5~30	143TC	14.52	11.89	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	4.53	29
RNYJ-1330Y	80~240	48C	13.30	11.14	2.16	3.0	4.33	3.75	0.28	0.47	-	2.44	-	20
RNYJ-1330Y	80~240	56C	13.68	11.14	2.56	4.5	6.69	5.88	0.43	0.47	-	3.15	-	22
RNYJ-1340Y	300~1440	42C	13.45	11.66	1.78	3.0	4.33	3.75	0.28	0.47	-	2.44	-	22
RNYJ-1340Y	300~720	48C	13.81	11.66	2.16	3.0	4.33	3.75	0.28	0.47	-	2.44	-	22
RNYJ-1340Y	300~720	56C	14.21	11.66	2.56	4.5	6.69	5.88	0.43	0.47	-	3.15	-	24

Model	XU	XV	KEYWAY
RNYJ-1320Y	0.625	0.98	3/16 x 3/16 x 0.75
RNYJ-1330Y	0.500	0.98	1/8 x 1/8 x 0.71
RNYJ-1340Y	0.500	0.98	1/8 x 1/8 x 0.71

C-Face Dimensions

Frame Size 1400 RNYJ-1420/30/40Y



All dimensions are in inches.

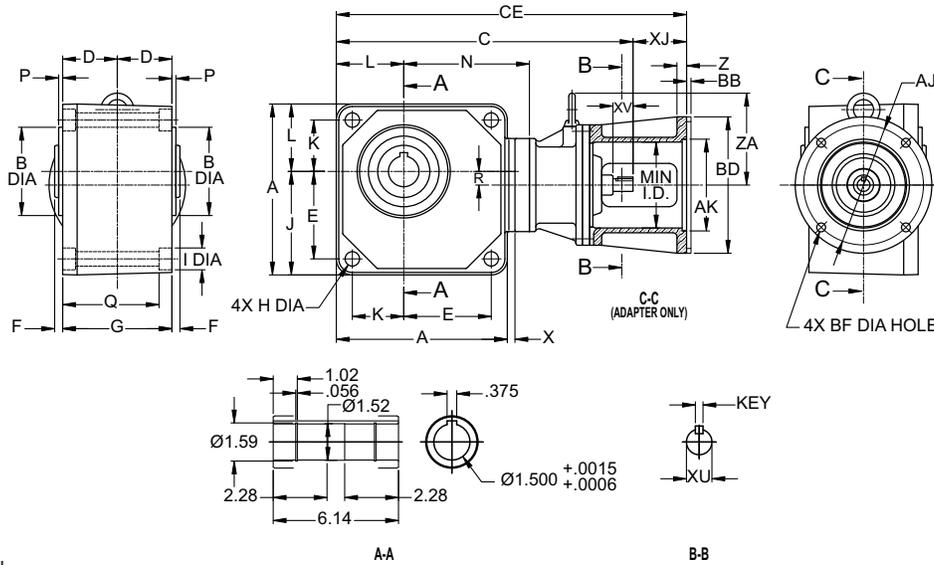
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1420Y	6.22	3.739	3.740	2.32	2.95	0.39	4.65	0.55	3.46	2.24	2.76	5.75	0.20	0.79	1.69
1430Y	7.01	3.739	3.740	2.32	3.62	0.39	4.65	0.55	4.25	2.13	2.76	5.12	0.20	0.55	0.31
1440Y	7.01	3.739	3.740	2.32	3.62	0.39	4.65	0.55	4.25	2.13	2.76	6.42	0.20	0.43	1.73

Model	Ratio	NEMA Frame	CE	C	XJ	AK	BD	AJ	BF	Z	BB	Min. ID	ZA	Wt. (lbs.)
RNYJ-1420Y	40~60	42C	15.08	13.31	1.78	3	4.33	3.75	0.28	0.47	-	2.44	4.53	33
RNYJ-1420Y	40~60	48C	15.46	13.31	2.16	3	4.33	3.75	0.28	0.47	-	2.44	4.53	34
RNYJ-1420Y	40~60	56C	15.93	13.31	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	4.53	36
RNYJ-1420Y	40~60	143TC	15.93	13.31	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	4.53	36
RNYJ-1420Y	5~30	145TC	16.29	13.66	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	4.53	36
RNYJ-1430Y	80~120	56C	15.42	12.80	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	4.53	38
RNYJ-1430Y	150~240	56C	15.46	12.83	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	4.53	38
RNYJ-1440Y	300~1440	48C	15.86	13.70	2.16	3.0	4.33	3.75	0.28	0.47	-	2.44	-	32
RNYJ-1440Y	300~720	56C	16.26	13.70	2.56	4.5	6.69	5.88	0.43	0.47	-	4.21	-	32

Model	XU	XV	KEYWAY
RNYJ-1420Y	0.625	0.98	3/16 x 3/16 x 0.75
RNYJ-1430Y	0.625	0.98	3/16 x 3/16 x 0.75
RNYJ-1440Y	0.500	0.98	1/8 x 1/8 x 0.71

C-Face Dimensions

Frame Size 1500 RNYJ-1520/30/31/40Y



All dimensions are in inches.

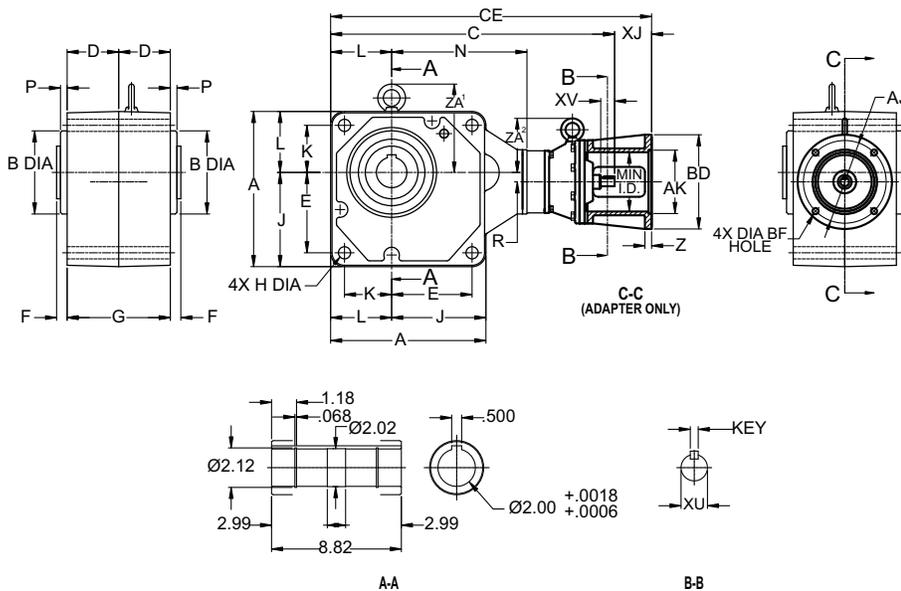
Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1520/21Y	7.01	4.329	4.331	2.68	3.15	0.39	5.35	0.55	3.70	2.76	3.31	7.01	0.20	1.10	2.68
1530/31Y	8.39	4.329	4.331	2.68	4.29	0.39	5.35	0.71	5.08	2.52	3.31	6.18	0.20	0.67	0.37
1540Y	8.39	4.329	4.331	2.68	4.29	0.39	5.35	0.71	5.08	2.52	3.31	7.76	0.20	0.55	2.13

Model	Ratio	NEMA Frame	CE	C	XJ	AK	BD	AJ	BF	Z	BB	Min. ID	ZA	Wt. (lbs.)
RNYJ-1520Y	40~60	56C	19.20	16.57	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	67
RNYJ-1520Y	40~60	145TC	19.20	16.57	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	67
RNYJ-1520Y	5~30	182TC	19.94	16.57	3.37	8.5	8.98	7.25	0.55	0.47	0.22	5.43	5.12	71
RNYJ-1521Y	5~25	56C	19.2	16.57	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	71
RNYJ-1521Y	5~25	145TC	19.2	16.57	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	71
RNYJ-1521Y	5~25	184TC	19.94	16.57	3.37	8.5	8.98	7.25	0.55	0.47	0.22	5.43	5.12	71
RNYJ-1530Y	80~120	56C	16.90	14.27	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	51
RNYJ-1530Y	80~120	143TC	16.90	14.27	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	51
RNYJ-1530Y	150~240	56C	17.17	14.54	2.63	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	51
RNYJ-1530Y	150~240	42C	17.03	14.54	1.78	3	4.33	3.75	0.28	0.47	-	2.44	4.53	60
RNYJ-1531Y	80	56C	17.88	15.28	2.61	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	63
RNYJ-1531Y	80	145TC	17.88	15.28	2.61	4.5	6.69	5.88	0.43	0.47	-	4.21	5.12	63
RNYJ-1531Y	40~60	182TC	18.63	15.28	3.35	8.5	8.98	7.25	0.55	0.47	0.22	5.43	5.12	66
RNYJ-1540Y	300~600	56C	18.61	15.99	2.62	4.5	6.69	5.88	0.43	0.47	-	4.21	-	61
RNYJ-1540Y	300~600	143TC	18.61	15.99	2.62	4.5	6.69	5.88	0.43	0.47	-	4.21	-	61
RNYJ-1540Y	720~1440	56C	18.65	16.01	2.64	4.5	6.69	5.88	0.43	0.47	-	4.21	-	61

Model	XU	XV	KEYWAY
RNYJ-1520/21Y	0.750	1.38	3/16 x 3/16 x 1.02
RNYJ-1530/31Y	0.625	0.98	3/16 x 3/16 x 0.75
RNYJ-1540Y	0.625	0.98	3/16 x 3/16 x 0.75

C-Face Dimensions

Frame Size 1600
RNYJ-1640Y



All dimensions are in inches.

Speed Reducers

Dimensions

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	ZA ¹
1640Y	11.02	5.904	5.906	3.66	5.71	0.75	7.32	0.87	6.69	3.35	4.33	9.29	0.47	0.67	6.30

Model	Ratio	NEMA Frame	CE	C	XJ	AK	BD	AJ	BF	Z	Min. ID	ZA ²	Wt. (lbs.)
RNYJ-1640Y	300~720	56C ~ 143TC	21.09	18.46	2.63	4.5	6.69	5.87	0.43	0.47	4.21	6.97	146
RNYJ-1640Y	900~1440	56C ~ 143TC	21.36	18.74	2.62	4.5	6.69	5.87	0.43	0.47	4.21	6.97	146

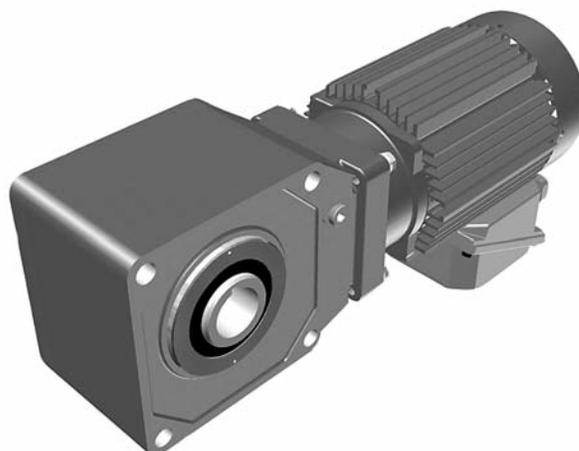
Model	XU	XV	KEYWAY
RNYJ-1640Y	0.625	0.98	3/16 x 3/16 x 0.75

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3

Gearmotors

Hollow Shaft Type



Gearmotors

How to
Select

Product Range

Hollow Shaft Type

Selections shaded in blue offer an increased service factor.
Please refer to the gearmotor selection tables for specific unit service factor details.

Nominal Ratio (:1)		5	7	10	12	15	20	25	30	40	50	60	
Output RPM (1750 rpm input)		350	250	175	145.83	116.67	87.5	70	58.33	43.75	35	29.17	
3-Phase	1/8HP	Size 1120, Bore Ø0.75"								Size 1220, Bore Ø1.00"			
	1/4HP	Size 1120, Bore Ø0.75"								Size 1220, Bore Ø1.00"			
	1/3HP	Size 1220, Bore Ø1.00"								Size 1320, Bore Ø1.25"			
	1/2HP	Size 1220, Bore Ø1.00"								Size 1320, Bore Ø1.25"			
	3/4HP	Size 1320, Bore Ø1.25"								Size 1420, Bore Ø1.375"			
	1HP	Size 1320, Bore Ø1.25"								Size 1420, Bore Ø1.375"			
	1.5HP	Size 1420, Bore Ø1.375"								Size 1520, Bore Ø1.50"			
	2HP	Size 1420, Bore Ø1.375"								Size 1520, Bore Ø1.50"			
	3HP	Size 1520, Bore Ø1.50"								Size 1531, Bore Ø1.50"			
	5HP	Size 1520, Bore Ø1.50"								Size 1531, Bore Ø1.50"			
	7.5HP	Size 1521, Bore Ø1.50"				Size 1632, Bore Ø2.00"							
	10HP	Size 1521, Bore Ø1.50"				Size 1632, Bore Ø2.00"							
	15HP	Size 1522, Bore Ø1.50"				Size 1633, Bore Ø2.00"							
	15HP	Size 1522, Bore Ø1.50"				Size 1633, Bore Ø2.00"							
Inverter Duty 10:1 Constant Torque Speed Range	1/8HP	Size 1120, Bore Ø0.75"								Size 1220, Bore Ø1.00"			
	1/4HP	Size 1120, Bore Ø0.75"								Size 1220, Bore Ø1.00"			
	1/3HP	Size 1220, Bore Ø1.00"								Size 1320, Bore Ø1.25"			
	1/2HP	Size 1220, Bore Ø1.00"								Size 1320, Bore Ø1.25"			
	3/4HP	Size 1320, Bore Ø1.25"								Size 1420, Bore Ø1.375"			
	1HP	Size 1320, Bore Ø1.25"								Size 1420, Bore Ø1.375"			
	1.5HP	Size 1420, Bore Ø1.375"								Size 1520, Bore Ø1.50"			
	2HP	Size 1420, Bore Ø1.375"								Size 1520, Bore Ø1.50"			
	3HP	Size 1520, Bore Ø1.50"								Size 1531, Bore Ø1.50"			
	5HP	Size 1520, Bore Ø1.50"								Size 1531, Bore Ø1.50"			
	7.5HP	Size 1521, Bore Ø1.50"				Size 1632, Bore Ø2.00"							
	10HP	Size 1521, Bore Ø1.50"				Size 1632, Bore Ø2.00"							
	15HP	Size 1522, Bore Ø1.50"				Size 1633, Bore Ø2.00"							
	15HP	Size 1522, Bore Ø1.50"				Size 1633, Bore Ø2.00"							

Note: [1] This frame size is torque limited. Overload may occur if the motor is loaded to its full capacity. Sumitomo recommends the use of a torque limiting device to protect the unit and/or the driven machine.

Gearmotors
Product Range



80	100	120	150	200	240	300	360	480	600	720	900	1200	1440
21.88	17.5	14.58	11.67	8.75	7.29	5.83	4.86	3.65	2.92	2.43	1.94	1.46	1.22
Size 1230, Bore Ø1.00" ^[1]						Size 1340, Bore Ø1.25" ^[1]							
Size 1330, Bore Ø1.25"						Size 1440, Bore Ø1.375" ^[1]							
Size 1330, Bore Ø1.25" ^[1]						Size 1440, Bore Ø1.375" ^[1]							
Size 1430, Bore Ø1.375"						Size 1540, Bore Ø1.50" ^[1]							
Size 1430, Bore Ø1.375"						Size 1540, Bore Ø1.50" ^[1]							
Size 1430, Bore Ø1.375" ^[1]						Size 1540, Bore Ø1.50" ^[1]							
Size 1530, Bore Ø1.375"						Size 1640, Bore Ø2.00" ^[1]							
Size 1530, Bore Ø1.375"						Size 1640, Bore Ø2.00" ^[1]							
Size 1530, Bore Ø1.375"						Size 1640, Bore Ø2.00" ^[1]							
Size 1531 Bore Ø1.50"	Size 1630, Bore Ø2.00"		Size 1631, Bore Ø2.00"			Size 1640, Bore Ø2.00" ^[1]							
Size 1531 Bore Ø1.50"	Size 1630, Bore Ø2.00"		Size 1631, Bore Ø2.00"										
Size 1531 Bore Ø1.50"	Size 1630, Bore Ø2.00"		Size 1631, Bore Ø2.00" ^[1]										
Size 1630, Bore Ø2.00"			Size 1631, Bore Ø2.00" ^[1]										
Size 1630, Bore Ø2.00"		Size 1631, Bore Ø2.00" ^[1]											
Size 1230, Bore Ø1.00" ^[1]						Size 1340, Bore Ø1.25" ^[1]							
Size 1330, Bore Ø1.25"						Size 1440, Bore Ø1.375" ^[1]							
Size 1330, Bore Ø1.25" ^[1]						Size 1440, Bore Ø1.375"		Size 1540, Bore Ø1.50" ^[1]					
Size 1430, Bore Ø1.375"						Size 1540, Bore Ø1.50"		Size 1640, Bore Ø2.00"					
Size 1430, Bore Ø1.375"						Size 1540, Bore Ø1.50"		Size 1640, Bore Ø2.00" ^[1]					
Size 1530, Bore Ø1.50"						Size 1640, Bore Ø2.00" ^[1]							
Size 1531 Bore Ø1.50"	Size 1630, Bore Ø2.00"		Size 1631, Bore Ø2.00"										
Size 1531 Bore Ø1.50"	Size 1630, Bore Ø2.00"		Size 1631, Bore Ø2.00"										
Size 1630, Bore Ø2.00"		Size 1631, Bore Ø2.00"											
Size 1630, Bore Ø2.00"		Size 1631, Bore Ø2.00"											

Gearmotors

Product
Range

How to Select a Gearmotor

Step 1: Collect data about your application

Before starting you need to know the:

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

Step 2: Select a Frame Size

2A: Find the **Load Classification** of your application in the *AGMA Load Classification Tables* on pages 3.8 and 3.9.

2B: Go to the *Gearmotor Selection Table* that corresponds to the desired **Motor HP**. Find the **Output Speed** closest to the desired output speed.

2C: Locate the **Service Class** in the *Gearmotor Selection Table* for your application and select the **Frame Size SELECTION** that matches the HP, Output Speed, and Service Class.

Step 3: Verify Dimensions

Use the Dimensions information on pages 3.28–3.40 to verify that the selected Frame Size is appropriate.

Step 4: Choose Options

The following options may apply:

- Solid Shaft**
- Mounting Feet**
- Output Flange**
- Torque Arm Assembly**
- Washdown Assembly**

Please see the Hyponic® pricelist for available modifications, and refer to Section 4 of this catalog for dimension drawings of selected popular options.

Step 5: Configure a Model Number

Go to page 3.6 to configure a model number.

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



60 Hz Frame Size Selection Tables

Three-Phase, 1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

• Motor HP

• Output Speed

• Service Class

• SELECTION

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	Selection		
					HP Symbol	Frame Size	Ratio
350	38.3	1.07	I	132	02	1120YA	5
		2.14	III	187		1220YC	
250	53.6	1.07	I	143	02	1120YA	7
		2.14	III	209		1220YC	
175	76.5	1.07	I	165	02	1120YA	10
		2.14	III	231		1220YC	
146	91.8	1.07	I	176	02	1120YA	12
		2.14	III	243		1220YC	
117	115	1.07	I	187	02	1120YA	15
		2.14	III	265		1220YC	
87.5	153	1.07	I	209	02	1120YA	20
		2.14	III	298		1220YC	
70	191	1.07	I	220	02	1120YA	25
		2.14	III	309		1220YC	
58.3	230	1.07	I	231	02	1120YA	30
		2.14	III	331		1220YC	
43.8	306	1.07	I	353	02	1220YA	40
		2.14	III	573		1320YC	
35	383	1.07	I	375	02	1220YA	50
		2.14	III	617		1320YC	

1/4 HP

For special circumstances affecting **Frame Size** selection such as:

- Overhung Load
- Shock Loading

Consult Appendix, pages 5.5–5.6.

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



Configure a Model Number

Output Shaft Orientation

Type	Prefix
Universal Direction (Maintenance Free)	N

Mounting Style

Type	Prefix
Shaft Mount (Hollow Shaft)	Y
Flange (Solid Shaft)	F
Foot (Solid Shaft)	H

Input Connection

Input Connection	Prefix
Integral Motor	M

Modification

	Prefix
Special	S
Standard	

Gearmotor HP

(applies only to 1750 RPM)

HP	Prefix
1/8	01
1/4	02
1/3	03
1/2	05
3/4	08
1	1
1 1/2	1H
2	2
3	3
5	5
7 1/2	8

Frame Size

1120	1522
1220	1530
1230	1531
1320	1540
1330	1630
1340	1631
1420	1632
1430	1633
1440	1634
1520	1640
1521	

Output Shaft Direction (shafted model only)

Direction (when viewed from motor end)	Suffix
Projects to Left Side	L
Projects to Right Side	R
Projects to Both Sides	T

AGMA Class

Class	Suffix
I	A
II	B
III	C

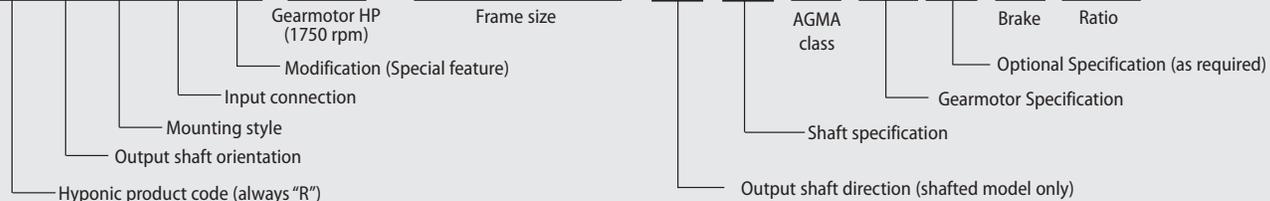
Gearmotor Specification

Specification	Suffix
Three-Phase Motor	
AF Motor (Adjustable Frequency)	AV

Brake

	Suffix
With Brake	B
No Brake	-

R N Y M - **05** - **1220** **L Y A** - **J1** - **20**



Include the following information when ordering:

- Motor Specification (230/460 VAC 60 Hz is supplied, unless otherwise specified)
- NEMA frame size for C-face adaptor
- Optional conduit box positions must be specified, otherwise the standard position is supplied.

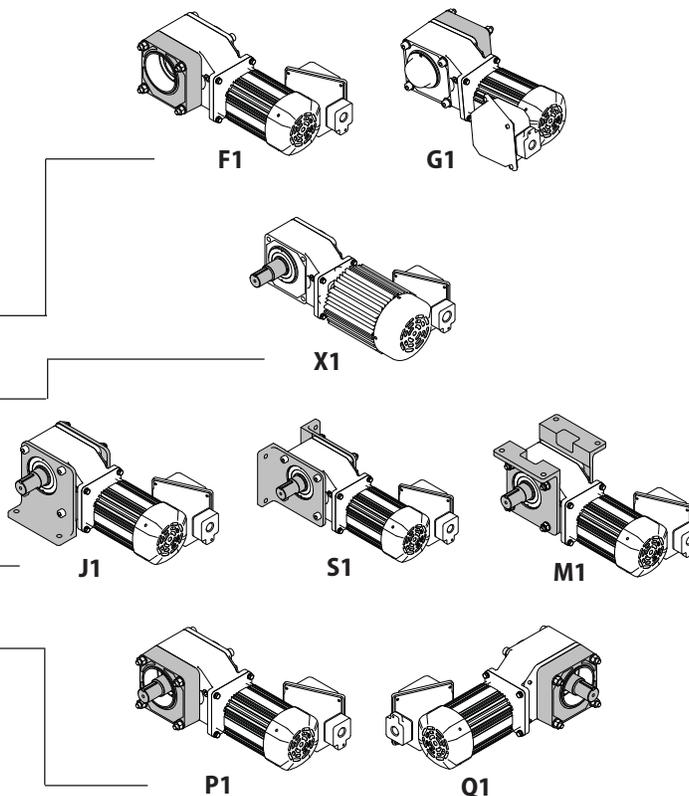
Nomenclature

Shaft Specifications

Input Shaft	Output Shaft		Suffix
	Hollow	Solid	
mm	Key (mm)	Key (mm)	
Inch	Key (Inch)	Key (Inch)	Y

Optional Specifications (as required)

Specification	Suffix
Hollow Bore Options	
Extended Flange (for motor clearance)	
Left (viewed from motor end)	F1
Right (viewed from motor end)	G1
Solid Shaft Options	
Plug-in Shaft	X1
Plug-in Shaft with Bolt-on Feet	
Bottom	J1
Opposite from Motor	S1
Top	M1
Plug-in Shaft with Extended Flange (for motor clearance)	
Left (viewed from motor end)	P1
Right (viewed from motor end)	Q1



Nominal Total Ratio

5	20	60	200	600
7	25	80	240	720
10	30	100	300	900
12	40	120	360	1200
15	50	150	480	1440

Nomenclature Example:

RNHM05 – 1220L YA –J1 – 20

R – Hyponic®
 N – Universal Mount
 H – Foot (Solid Shaft)
 M – Integral Motor
 05 – 1/2 HP, 1750 RPM

1220 – Frame Size
 L – L O/P Shaft Direction
 Y – Inch Shaft Specification
 A – AGMA Class I
 J1 – Bolt-on Feet, Bottom
 20 – Ratio

Gearmotors

Nomenclature

AGMA Load Classifications: Gearmotors

Gearmotor Classification

GEARMOTOR CLASS ⁽¹⁾

DURATION OF SERVICE	UNIFORM LOAD	MODERATE SHOCK LOAD	HEAVY SHOCK LOAD
Intermittent 3 Hr. per day	Class I	Class I	Class II
Up to 10 Hr. per day	Class I	Class II	Class III
24 Hr. per day	Class II	Class III	—

Class I For steady loads not exceeding normal motor rating, 8 to 10 hours a day. Moderate shock loads where service is intermittent (AGMA Service Factor: 1.0).

Class II For steady loads not exceeding normal motor rating and 24 hours a day service. Moderate shock loads for 8 hours a day (AGMA Service Factor: 1.4).

Class III For moderate shock loads for 24 hours a day. Heavy shock loads for 8 hours a day (AGMA Service Factor: 2.0).

Note: [1] For frequent start applications, please refer to Recommended Service Factors for Frequent Start-Stop Applications on page 2.3 and Table 5.33 for motor Thermal Capacity

Gearmotors

Load Classification by INDUSTRY

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



Load Classification by APPLICATION

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

Gearmotors

AGMA Tables

Frame Size Selection Tables 60 Hz

Three-Phase, 1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1/8 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	19.1	2.14	III	130	01	1120YC	5
250	26.8	2.14	III	145	01	1120YC	7
175	38.3	2.14	III	165	01	1120YC	10
146	45.9	2.14	III	175	01	1120YC	12
117	57.4	2.14	III	185	01	1120YC	15
87.5	76.5	2.14	III	210	01	1120YC	20
70	95.7	2.14	III	220	01	1120YC	25
58.3	115	2.14	III	230	01	1120YC	30
43.8	153	1.07	I	255	01	1120YA	40
		2.14	III	355		1220YC	
35	191	1.07	I	275	01	1120YA	50
		2.14	III	375		1220YC	
29.2	230	1.07	I	285	01	1120YA	60
		2.14	III	385		1220YC	
21.9	306	1.07	I	395	01	1230YA	80
		2.14	III	660		1330YC	
17.5	383	1.07	I	395	01	1230YA	100
		2.14	III	685		1330YC	
14.6	459	1.07	I	410	01	1230YA	120
		2.14	III	695		1330YC	
11.7	574	1.07	I	410	01	1230YA	150
		2.14	III	695		1330YC	
8.75	765	1.07	I	410	01	1230YA	200
		2.14	III	695		1330YC	
7.29	868	0.95	-	410	01	1230Y	240
	918	1.88	II	695		1330YB	
5.83	1080	1.07	I	695	01	1340YA	300
		2.14	III	980		1440YC	
4.86	1300	1.07	I	695	01	1340YA	360
		2.14	III	980		1440YC	
3.65	1730	1.00	I	695	01	1340YA	480
		2.00	III	980		1440YC	
2.92	1730	0.80	-	695	01	1340Y	600
		1.60	II	980		1440YB	
2.43	1730	0.67	-	695	01	1340Y	720
	2590	1.33	I	980		1440YA	
1.94	1730	0.53	-	695	01	1340Y	900
	3240	1.07	I	981		1440YA	
1.46	1730	0.40	-	695	01	1340Y	1200
	3450	0.80	-	981		1440Y	
1.22	1730	0.33	-	695	01	1340Y	1440
	3450	0.67	-	981		1440Y	

Gearmotors

Selection Tables

60 Hz Frame Size Selection Tables

Three-Phase, 1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1/4 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	38.3	1.07	I	132	02	1120YA	5
		2.14	III	187		1220YC	
250	53.6	1.07	I	143	02	1120YA	7
		2.14	III	209		1220YC	
175	76.5	1.07	I	165	02	1120YA	10
		2.14	III	231		1220YC	
146	91.8	1.07	I	176	02	1120YA	12
		2.14	III	243		1220YC	
117	115	1.07	I	187	02	1120YA	15
		2.14	III	265		1220YC	
87.5	153	1.07	I	209	02	1120YA	20
		2.14	III	298		1220YC	
70	191	1.07	I	220	02	1120YA	25
		2.14	III	309		1220YC	
58.3	230	1.07	I	231	02	1120YA	30
		2.14	III	331		1220YC	
43.8	306	1.07	I	353	02	1220YA	40
		2.14	III	573		1320YC	
35	383	1.07	I	375	02	1220YA	50
		2.14	III	617		1320YC	
29.2	459	1.07	I	386	02	1220YA	60
		2.14	III	639		1320YC	
21.9	612	1.07	I	661	02	1330YA	80
		2.14	III	959		1430YC	
17.5	765	1.07	I	683	02	1330YA	100
		2.14	III	981		1430YC	
14.6	918	1.07	I	694	02	1330YA	120
		2.14	III	981		1430YC	
11.7	1150	1.07	I	694	02	1330YA	150
		2.14	III	981		1430YC	
8.75	1530	1.07	I	694	02	1330YA	200
		2.14	III	981		1430YC	
7.29	1730	0.94	-	694	02	1330Y	240
	1840	1.88	II	981		1430YB	
5.83	2160	1.07	I	981	02	1440YA	300
		2.14	III	1400		1540YC	
4.86	2590	1.07	I	981	02	1440YA	360
		2.14	III	1400		1540YC	
3.65	3450	1.00	I	981	02	1440YA	480
		1.87	II	1400		1540YB	
2.92	3450	0.80	-	981	02	1440Y	600
	4320	1.50	II	1400		1540YB	
2.43	3450	0.67	-	981	02	1440Y	720
	5190	1.25	I	1400		1540YA	

Gearmotors

Selection
Tables

Frame Size Selection Tables 60 Hz

Three-Phase, 1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1/4 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
1.94	3450	0.53	–	981	02	1440Y	900
	6480	1.00	I	1400		1540YA	
1.46	3450	0.40	–	981	02	1440Y	1200
	6480	0.75	–	1400		1540Y	
1.22	3450	0.33	–	981	02	1440Y	1440
	6480	0.62	–	1400		1540Y	

1/3 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	51	1.61	II	187	03	1220YB	5
250	71.4	1.61	II	209	03	1220YB	7
175	102	1.61	II	231	03	1220YB	10
146	122	1.61	II	243	03	1220YB	12
117	153	1.61	II	265	03	1220YB	15
87.5	204	1.61	II	298	03	1220YB	20
70	255	1.61	II	309	03	1220YB	25
58.3	306	1.61	II	331	03	1220YB	30
43.8	408	1.61	II	573	03	1320YB	40
35	510	1.61	II	617	03	1320YB	50
29.2	612	1.61	II	639	03	1320YB	60
21.9	816	1.61	II	959	03	1430YB	80
17.5	1020	1.61	II	981	03	1430YB	100
14.6	1220	1.61	II	981	03	1430YB	120
11.7	1530	1.61	II	981	03	1430YB	150
8.75	2040	1.61	II	981	03	1430YB	200
7.29	2450	1.41	II	981	03	1430YB	240
5.83	2880	1.61	II	1400	03	1540YB	300
4.86	3460	1.61	II	1400	03	1540YB	360
3.65	4610	1.40	II	1400	03	1540YB	480
2.92	5760	1.12	I	1400	03	1540YA	600
2.43	6480	0.94	–	1400	03	1540Y	720
1.94	6480	0.75	–	1400	03	1540Y	900
1.46	6480	0.56	–	1400	03	1540Y	1200
1.22	6480	0.47	–	1400	03	1540Y	1440

60 Hz Frame Size Selection Tables

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

Three-Phase, 1750 RPM

1/2 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	76.5	1.07	I	187	05	1220YA	5
		2.14	III	309		1320YC	
250	107	1.07	I	209	05	1220YA	7
		2.14	III	353		1320YC	
175	153	1.07	I	231	05	1220YA	10
		2.14	III	386		1320YC	
146	184	1.07	I	243	05	1220YA	12
		2.14	III	408		1320YC	
117	230	1.07	I	265	05	1220YA	15
		2.14	III	441		1320YC	
87.5	306	1.07	I	298	05	1220YA	20
		2.14	III	485		1320YC	
70	383	1.07	I	309	05	1220YA	25
		2.14	III	507		1320YC	
58.3	459	1.07	I	331	05	1220YA	30
		2.14	III	529		1320YC	
43.8	612	1.07	I	573	05	1320YA	40
		2.14	III	860		1420YC	
35	765	1.07	I	617	05	1320YA	50
		2.14	III	904		1420YC	
29.2	918	1.07	I	639	05	1320YA	60
		2.14	III	937		1420YC	
21.9	1220	1.07	I	959	05	1430YA	80
		2.14	III	1380		1530YC	
17.5	1530	1.07	I	981	05	1430YA	100
		2.14	III	1400		1530YC	
14.6	1840	1.07	I	981	05	1430YA	120
		2.14	III	1400		1530YC	
11.7	2300	1.07	I	981	05	1430YA	150
		2.14	III	1400		1530YC	
8.75	3060	1.07	I	981	05	1430YA	200
		2.12	III	1400		1530YC	
7.29	3450	0.94	–	981	05	1430Y	240
		1.76	II	1400		1530YB	
5.83	4320	1.07	I	1400	05	1540YA	300
		2.14	III	2200		1640YC	
4.86	5190	1.07	I	1400	05	1540YA	360
		2.14	III	2200		1640YC	
3.65	6480	0.94	–	1400	05	1540Y	480
		1.90	II	2200		1640YB	
2.92	6480	0.75	–	1400	05	1540Y	600
		1.52	II	2200		1640YB	
2.43	6480	0.62	–	1400	05	1540Y	720
		1.26	I	2200		1640YA	

Gearmotors

Selection
Tables

Frame Size Selection Tables 60 Hz

Three-Phase, 1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1/2 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
1.94	6480	0.50	–	1400	05	1540Y	900
	13000	1.01	I	2200		1640YA	
1.46	6480	0.37	–	1400	05	1540Y	1200
	13100	0.76	–	2200		1640Y	
1.22	6480	0.31	–	1400	05	1540Y	1440
	13100	0.63	–	2200		1640Y	

3/4 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	115	1.43	II	309	08	1320YB	5
250	161	1.43	II	353	08	1320YB	7
175	230	1.43	II	386	08	1320YB	10
146	276	1.43	II	408	08	1320YB	12
117	344	1.43	II	441	08	1320YB	15
87.5	459	1.43	II	485	08	1320YB	20
70	574	1.43	II	507	08	1320YB	25
58.3	689	1.43	II	529	08	1320YB	30
43.8	918	1.43	II	860	08	1420YB	40
35	1150	1.43	II	904	08	1420YB	50
29.2	1380	1.43	II	937	08	1420YB	60
21.9	1840	1.43	II	1380	08	1530YB	80
17.5	2300	1.43	II	1400	08	1530YB	100
14.6	2760	1.43	II	1400	08	1530YB	120
11.7	3440	1.43	II	1400	08	1530YB	150
8.75	4590	1.41	II	1400	08	1530YB	200
7.29	5510	1.18	I	1400	08	1530YA	240
5.83	6480	1.43	II	2200	08	1640YB	300
4.86	7780	1.43	II	2200	08	1640YB	360
3.65	10400	1.26	I	2200	08	1640YA	480
2.92	13000	1.01	I	2200	08	1640YA	600
2.43	13100	0.84	–	2200	08	1640Y	720
1.94	13100	0.67	–	2200	08	1640Y	900
1.46	13100	0.51	–	2200	08	1640Y	1200
1.22	13100	0.42	–	2200	08	1640Y	1440

Gearmotors

Selection Tables

60 Hz Frame Size Selection Tables

Three-Phase, 1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	153	1.07	I	309	1	1320YA	5
		2.06	III	463		1420YC	
250	214	1.07	I	353	1	1320YA	7
		2.06	III	518		1420YC	
175	306	1.07	I	386	1	1320YA	10
		2.06	III	584		1420YC	
146	367	1.07	I	408	1	1320YA	12
		2.06	III	617		1420YC	
117	459	1.07	I	441	1	1320YA	15
		2.06	III	661		1420YC	
87.5	612	1.07	I	485	1	1320YA	20
		2.06	III	716		1420YC	
70	765	1.07	I	507	1	1320YA	25
		2.06	III	761		1420YC	
58.3	918	1.07	I	529	1	1320YA	30
		2.06	III	805		1420YC	
43.8	1220	1.07	I	860	1	1420YA	40
		2.06	III	1250		1520YC	
35	1530	1.07	I	904	1	1420YA	50
		2.06	III	1310		1520YC	
29.2	1840	1.07	I	937	1	1420YA	60
		2.06	III	1360		1520YC	
21.9	2450	2.06	III	1380	1	1531YC	80
		1.07	I	1380		1530YA	
17.5	3060	1.07	I	1400	1	1530YA	100
		3.00	III	2200		1630YC	
14.6	3670	1.07	I	1400	1	1530YA	120
		3.00	III	2200		1630YC	
11.7	4590	1.07	I	1400	1	1530YA	150
		2.85	III	2200		1631YC	
8.75	6120	1.06	I	1400	1	1530YA	200
		2.14	III	2200		1631YC	
7.29	6480	0.88	-	1400	1	1530Y	240
		1.78	II	2200		1631YB	
5.83	8640	1.07	I	2200	1	1640YA	300
4.86	10400	1.07	I	2200	1	1640YA	360
3.65	13100	0.95	-	2200	1	1640Y	480
2.92	13100	0.76	-	2200	1	1640Y	600
2.43	13100	0.63	-	2200	1	1640Y	720
1.94	13100	0.51	-	2200	1	1640Y	900
1.46	13100	0.38	-	2200	1	1640Y	1200
1.22	13100	0.32	-	2200	1	1640Y	1440

Gearmotors

Selection
Tables

Frame Size Selection Tables 60 Hz

Three-Phase, 1750 RPM

<i>Dimensions:</i>	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1.5 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	230	1.38	I	463	1H	1420YA	5
250	321	1.38	I	518	1H	1420YA	7
175	459	1.38	I	584	1H	1420YA	10
146	551	1.38	I	617	1H	1420YA	12
117	689	1.38	I	661	1H	1420YA	15
87.5	918	1.38	I	716	1H	1420YA	20
70	1150	1.38	I	761	1H	1420YA	25
58.3	1380	1.38	I	805	1H	1420YA	30
43.8	1840	1.38	I	1250	1H	1520YA	40
35	2300	1.38	I	1310	1H	1520YA	50
29.2	2760	1.38	I	1360	1H	1520YA	60
21.9	3670	1.38	I	1380	1H	1531YA	80
17.5	4590	2.00	III	2200	1H	1630YC	100
14.6	5510	2.00	III	2200	1H	1630YC	120
11.7	6890	1.90	II	2200	1H	1631YB	150
8.75	9180	1.43	II	2200	1H	1631YB	200
7.29	11000	1.19	I	2200	1H	1631YA	240

Gearmotors

Selection Tables

2 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	306	1.03	I	463	2	1420YA	5
		1.50	II	661		1520YB	
250	429	1.03	I	518	2	1420YA	7
		1.50	II	750		1520YB	
175	612	1.03	I	584	2	1420YA	10
		1.50	II	838		1520YB	
146	735	1.03	I	617	2	1420YA	12
		1.50	II	893		1520YB	
117	918	1.03	I	661	2	1420YA	15
		1.50	II	948		1520YB	
87.5	1220	1.03	I	716	2	1420YA	20
		1.50	II	1040		1520YB	
70	1530	1.03	I	761	2	1420YA	25
		1.50	II	1100		1520YB	
58.3	1840	1.03	I	805	2	1420YA	30
		1.50	II	1160		1520YB	
43.8	2450	1.50	II	1250	2	1531YB	40
		1.03	I	1250		1520YA	
35	3060	1.50	II	1310	2	1531YB	50
		1.03	I	1310		1520YA	
29.2	3670	1.50	II	1360	2	1531YB	60
		1.03	I	1360		1520YA	

60 Hz Frame Size Selection Tables

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

Three-Phase, 1750 RPM

2 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
21.9	4900	1.03	I	1380	2	1531YA	80
		1.50	II	2170		1630YB	
17.5	6120	1.50	II	2200	2	1630YB	100
		1.50	II	2200		1630YB	
14.6	7350	1.50	II	2200	2	1630YB	120
11.7	9180	1.43	II	2200	2	1631YB	150
8.75	12200	1.07	I	2200	2	1631YA	200
7.29	13100	0.89	-	2200	2	1631Y	240

3 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	459	1.00	I	661	3	1520YA	5
		1.67	II	661		1521YB	
250	643	1.00	I	750	3	1520YA	7
		1.67	II	750		1521YB	
175	918	1.00	I	838	3	1520YA	10
		1.67	II	838		1521YB	
146	1100	1.00	I	893	3	1520YA	12
		1.67	II	893		1521YB	
117	1380	1.00	I	948	3	1520YA	15
		1.67	II	948		1521YB	
87.5	1840	1.00	I	1040	3	1520YA	20
		1.67	II	1040		1521YB	
70	2300	1.00	I	1100	3	1520YA	25
		1.67	II	1100		1521YB	
58.3	2760	1.00	I	1160	3	1520YA	30
		1.67	II	1820		1632YB	
43.8	3670	1.00	I	1250	3	1531YA	40
		1.67	II	1910		1632YB	
35	4590	1.00	I	1310	3	1531YA	50
		1.67	II	2000		1632YB	
29.2	5510	1.00	I	1360	3	1531YA	60
		1.67	II	2060		1632YB	
21.9	7350	1.00	I	2170	3	1630YA	80
17.5	9180	1.00	I	2200	3	1630YA	100
14.6	11000	1.00	I	2200	3	1630YA	120
11.7	13100	0.95	-	2200	3	1631Y	150
8.75	13100	0.71	-	2200	3	1631Y	200
7.29	13100	0.59	-	2200	3	1631Y	240

Frame Size Selection Tables 60 Hz

Three-Phase, 1750 RPM

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

5 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	765	1.00	I	661	5	1521YA	5
		1.50	II	661		1522YB	
250	1070	1.00	I	750	5	1521YA	7
		1.50	II	750		1522YB	
175	1530	1.00	I	838	5	1521YA	10
		1.50	II	838		1522YB	
146	1840	1.00	I	893	5	1521YA	12
		1.50	II	893		1522YB	
117	2300	1.00	I	948	5	1521YA	15
		1.50	II	948		1522YB	
87.5	3060	1.00	I	1040	5	1521YA	20
		1.50	II	1650		1633YB	
70	3830	1.00	I	1100	5	1521YA	25
		1.50	II	1740		1633YB	
58.3	4590	1.00	I	1820	5	1632YA	30
		1.50	II	1820		1633YB	
43.8	6120	1.00	I	1910	5	1632YA	40
		1.50	II	1910		1633YB	
35	7650	1.00	I	2000	5	1632YA	50
29.2	9180	1.00	I	2060	5	1632YA	60

7.5 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	1150	1.00	I	661	8	1522YA	5
250	1610	1.00	I	750	8	1522YA	7
175	2300	1.00	I	838	8	1522YA	10
146	2760	1.00	I	893	8	1522YA	12
117	3440	1.00	I	948	8	1522YA	15
87.5	4590	1.00	I	1650	8	1633YA	20
70	5740	1.00	I	1740	8	1633YA	25
58.3	6890	1.00	I	1820	8	1633YA	30
43.8	9180	1.00	I	1910	8	1633YA	40

Gearmotors

Selection Tables

60 Hz Frame Size Selection Tables

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

Three-Phase, 1750 RPM

10 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	1530	1.50	II	1050	10	1634YB	5
250	2140	1.50	II	1200	10	1634YB	7
175	3060	1.50	II	1350	10	1634YB	10
146	3670	1.50	II	1400	10	1634YB	12
117	4590	1.50	II	1500	10	1634YB	15
87.5	6120	1.50	II	1650	10	1634YB	20
70	7650	1.43	II	1750	10	1634YB	25

15 HP

Output Speed RPM	Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load lbs	HP Symbol	Selection Frame Size	Ratio
350	2300	1.00	I	1050	15	1634YA	5
250	3210	1.00	I	1200	15	1634YA	7
175	4590	1.00	I	1350	15	1634YA	10
146	5510	1.00	I	1400	15	1634YA	12
117	6890	1.00	I	1500	15	1634YA	15
87.5	9180	1.00	I	1650	15	1634YA	20

Frame Size Selection Tables

Inverter Duty

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1/8 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (120 Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	700	19.1	2.14	III	132	01	1120YC	AV	5
25	250	500	26.8	2.14	III	143	01	1120YC	AV	7
17.5	175	350	38.3	2.14	III	165	01	1120YC	AV	10
14.6	146	292	45.9	2.14	III	176	01	1120YC	AV	12
11.7	117	233	57.4	2.14	III	187	01	1120YC	AV	15
8.75	87.5	175	76.5	2.14	III	209	01	1120YC	AV	20
7	70	140	95.7	2.14	III	220	01	1120YC	AV	25
5.83	58.3	117	115	2.14	III	231	01	1120YC	AV	30
4.38	43.8	87.5	153	1.07	I	254	01	1120YA	AV	40
				2.14	III	353		1220YC		
3.5	35	70	191	1.07	I	276	01	1120YA	AV	50
				2.14	III	375		1220YC		
2.92	29.2	58.3	230	1.07	I	287	01	1120YA	AV	60
				2.14	III	386		1220YC		
2.19	21.9	43.8	306	1.07	I	397	01	1230YA	AV	80
				2.14	III	661		1330YC		
1.75	17.5	35	383	1.07	I	397	01	1230YA	AV	100
				2.14	III	683		1330YC		
1.46	14.6	29.2	459	1.07	I	408	01	1230YA	AV	120
				2.14	III	694		1330YC		
1.17	11.7	23.3	574	1.07	I	408	01	1230YA	AV	150
				2.14	III	694		1330YC		
0.875	8.75	17.5	765	1.07	I	408	01	1230YA	AV	200
				2.14	III	694		1330YC		
0.729	7.29	14.6	868	0.95	-	408	01	1230Y	AV	240
			918	1.88	II	694		1330YB		
0.583	5.83	11.7	1080	1.07	I	694	01	1340YA	AV	300
				2.14	III	981		1440YC		
0.486	4.86	9.72	1300	1.07	I	694	01	1340YA	AV	360
				2.14	III	981		1440YC		
0.365	3.65	7.29	1730	1.00	I	694	01	1340YA	AV	480
				2.00	III	981		1440YC		
0.292	2.92	5.83	2160	1.60	II	981	01	1440YB	AV	600
				3.00	III	1400		1540YC		
0.243	2.43	4.86	2590	1.33	I	981	01	1440YA	AV	720
				2.50	III	1400		1540YC		
0.194	1.94	3.89	3240	1.07	I	981	01	1440YA	AV	900
				2.00	III	1400		1540YC		
0.146	1.46	2.92	3450	0.80	-	981	01	1440Y	AV	1200
			4320	1.50	II	1400		1540YB		
0.122	1.22	2.43	3450	0.67	-	981	01	1440Y	AV	1440
			5190	1.25	I	1400		1540YA		

Gearmotors

Selection Tables

Frame Size Selection Tables

Inverter Duty

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1/4 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	HP Symbol	Selection		Ratio
6 Hz	60 Hz	Max. (120 Hz)						Frame Size	Suffix	
35	350	700	38.3	1.07	I	132	02	1120YA	AV	5
				2.14	III	187		1220YC		
25	250	500	53.6	1.07	I	143	02	1120YA	AV	7
				2.14	III	209		1220YC		
17.5	175	350	76.5	1.07	I	165	02	1120YA	AV	10
				2.14	III	231		1220YC		
14.6	146	292	91.8	1.07	I	176	02	1120YA	AV	12
				2.14	III	243		1220YC		
11.7	117	233	115	1.07	I	187	02	1120YA	AV	15
				2.14	III	265		1220YC		
8.75	87.5	175	153	1.07	I	209	02	1120YA	AV	20
				2.14	III	298		1220YC		
7	70	140	191	1.07	I	220	02	1120YA	AV	25
				2.14	III	309		1220YC		
5.83	58.3	117	230	1.07	I	231	02	1120YA	AV	30
				2.14	III	331		1220YC		
4.38	43.8	87.5	306	1.07	I	353	02	1220YA	AV	40
				2.14	III	573		1320YC		
3.5	35	70	383	1.07	I	375	02	1220YA	AV	50
				2.14	III	617		1320YC		
2.92	29.2	58.3	459	1.07	I	386	02	1220YA	AV	60
				2.14	III	639		1320YC		
2.19	21.9	43.8	612	1.07	I	661	02	1330YA	AV	80
				2.14	III	959		1430YC		
1.75	17.5	35	765	1.07	I	683	02	1330YA	AV	100
				2.14	III	981		1430YC		
1.46	14.6	29.2	918	1.07	I	694	02	1330YA	AV	120
				2.14	III	981		1430YC		
1.17	11.7	23.3	1150	1.07	I	694	02	1330YA	AV	150
				2.14	III	981		1430YC		
0.875	8.75	17.5	1530	1.07	I	694	02	1330YA	AV	200
				2.14	III	981		1430YC		
0.729	7.29	14.6	1730 1840	0.94	-	694	02	1330Y	AV	240
				1.88	II	981		1430YB		
0.583	5.83	11.7	2160	1.07	I	981	02	1440YA	AV	300
				2.14	III	1400		1540YC		
0.486	4.86	9.72	2590	1.07	I	981	02	1440YA	AV	360
				2.14	III	1400		1540YC		
0.365	3.65	7.29	3450	1.00	I	981	02	1440YA	AV	480
				1.87	II	1400		1540YB		
0.292	2.92	5.83	4320	1.50	II	1400	02	1540YB	AV	600
				3.03	III	2200		1640YC		
0.243	2.43	4.86	5190	1.25	I	1400	02	1540YA	AV	720
				2.53	III	2200		1640YC		

Gearmotors

 Selection
Tables

Frame Size Selection Tables

Inverter Duty

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1/4 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (120 Hz)					HP Symbol	Frame Size	Suffix	Ratio
0.194	1.94	3.89	6480	1.00	I	1400	02	1540YA	AV	900
				2.02	III	2200		1640YC		
0.146	1.46	2.92	6480	0.75	-	1400	02	1540Y	AV	1200
			8640	1.52	II	2200		1640YB		
0.122	1.22	2.43	6480	0.62	-	1400	02	1540Y	AV	1440
			10400	1.26	I	2200		1640YA		

1/3 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (120 Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	700	51	1.61	II	187	03	1220YB	AV	5
25	250	500	71.4	1.61	II	209	03	1220YB	AV	7
17.5	175	350	102	1.61	II	231	03	1220YB	AV	10
14.6	146	292	122	1.61	II	243	03	1220YB	AV	12
11.7	117	233	153	1.61	II	265	03	1220YB	AV	15
8.75	87.5	175	204	1.61	II	298	03	1220YB	AV	20
7	70	140	255	1.61	II	309	03	1220YB	AV	25
5.83	58.3	117	306	1.61	II	331	03	1220YB	AV	30
4.38	43.8	87.5	408	1.61	II	573	03	1320YB	AV	40
3.5	35	70	510	1.61	II	617	03	1320YB	AV	50
2.92	29.2	58.3	612	1.61	II	639	03	1320YB	AV	60
2.19	21.9	43.8	816	1.61	II	959	03	1430YB	AV	80
1.75	17.5	35	1020	1.61	II	981	03	1430YB	AV	100
1.46	14.6	29.2	1220	1.61	II	981	03	1430YB	AV	120
1.17	11.7	23.3	1530	1.61	II	981	03	1430YB	AV	150
0.875	8.75	17.5	2040	1.61	II	981	03	1430YB	AV	200
0.729	7.29	14.6	2450	1.41	II	981	03	1430YB	AV	240
0.583	5.83	11.7	2880	1.61	II	1400	03	1540YB	AV	300
0.486	4.86	9.72	3460	1.61	II	1400	03	1540YB	AV	360
0.365	3.65	7.29	4610	1.40	II	1400	03	1540YB	AV	480
0.292	2.92	5.83	5760	2.27	III	2200	03	1640YC	AV	600
0.243	2.43	4.86	6910	1.90	II	2200	03	1640YB	AV	720
0.194	1.94	3.89	8640	1.52	II	2200	03	1640YB	AV	900
0.146	1.46	2.92	11500	1.14	I	2200	03	1640YA	AV	1200
0.122	1.22	2.43	13100	0.95	-	2200	03	1640Y	AV	1440

Frame Size Selection Tables

Inverter Duty

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1/2 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (120)					HP Symbol	Frame Size	Suffix	Ratio
35	350	700	76.5	2.14	III	309	05	1320YC	AV	5
25	250	500	107	2.14	III	353	05	1320YC	AV	7
17.5	175	350	153	2.14	III	386	05	1320YC	AV	10
14.6	146	292	184	2.14	III	408	05	1320YC	AV	12
11.7	117	233	230	2.14	III	441	05	1320YC	AV	15
8.75	87.5	175	306	2.14	III	485	05	1320YC	AV	20
7	70	140	383	2.14	III	507	05	1320YC	AV	25
5.83	58.3	117	459	2.14	III	529	05	1320YC	AV	30
4.38	43.8	87.5	612	2.14	III	860	05	1420YC	AV	40
3.5	35	70	765	2.14	III	904	05	1420YC	AV	50
2.92	29.2	58.3	918	2.14	III	937	05	1420YC	AV	60
2.19	21.9	43.8	1220	2.14	III	1380	05	1530YC	AV	80
1.75	17.5	35	1530	2.14	III	1400	05	1530YC	AV	100
1.46	14.6	29.2	1840	2.14	III	1400	05	1530YC	AV	120
1.17	11.7	23.3	2300	2.14	III	1400	05	1530YC	AV	150
0.875	8.75	17.5	3060	2.12	III	1400	05	1530YC	AV	200
0.729	7.29	14.6	3670	1.76	II	1400	05	1530YB	AV	240
0.583	5.83	11.7	4320	2.14	III	2200	05	1640YC	AV	300
0.486	4.86	9.72	5190	2.14	III	2200	05	1640YC	AV	360
0.365	3.65	7.29	6920	1.90	II	2200	05	1640YB	AV	480
0.292	2.92	5.83	8640	1.52	II	2200	05	1640YB	AV	600
0.243	2.43	4.86	10400	1.26	I	2200	05	1640YA	AV	720
0.194	1.94	3.89	13000	1.01	I	2200	05	1640YA	AV	900
0.146	1.46	2.92	13100	0.76	-	2200	05	1640Y	AV	1200
0.122	1.22	2.43	13100	0.63	-	2200	05	1640Y	AV	1440

Gearmotors

 Selection
Tables

3/4 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (120)					HP Symbol	Frame Size	Suffix	Ratio
35	350	700	115	2.75	III	463	08	1420YC	AV	5
25	250	500	161	2.75	III	518	08	1420YC	AV	7
17.5	175	350	230	2.75	III	584	08	1420YC	AV	10
14.6	146	292	276	2.75	III	617	08	1420YC	AV	12
11.7	117	233	344	2.75	III	661	08	1420YC	AV	15
8.75	87.5	175	459	2.75	III	716	08	1420YC	AV	20
7	70	140	574	2.75	III	761	08	1420YC	AV	25
5.83	58.3	117	689	2.75	III	805	08	1420YC	AV	30
4.38	43.8	87.5	918	2.75	III	1250	08	1520YC	AV	40
3.5	35	70	1150	2.75	III	1310	08	1520YC	AV	50
2.92	29.2	58.3	1380	2.75	III	1360	08	1520YC	AV	60
2.19	21.9	43.8	1840	2.75	III	1380	08	1531YC	AV	80
1.75	17.5	35	2300	4.00	III	2200	08	1630YC	AV	100
1.46	14.6	29.2	2760	4.00	III	2200	08	1630YC	AV	120
1.17	11.7	23.3	3440	3.81	III	2200	08	1631YC	AV	150
0.875	8.75	17.5	4590	2.85	III	2200	08	1631YC	AV	200
0.729	7.29	14.6	5510	2.38	III	2200	08	1631YC	AV	240

Frame Size Selection Tables

Inverter Duty

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

1 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (120 Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	700	153	2.06	III	463	1	1420YC	AV	5
25	250	500	214	2.06	III	518	1	1420YC	AV	7
17.5	175	350	306	2.06	III	584	1	1420YC	AV	10
14.6	146	292	367	2.06	III	617	1	1420YC	AV	12
11.7	117	233	459	2.06	III	661	1	1420YC	AV	15
8.75	87.5	175	612	2.06	III	716	1	1420YC	AV	20
7	70	140	765	2.06	III	761	1	1420YC	AV	25
5.83	58.3	117	918	2.06	III	805	1	1420YC	AV	30
4.38	43.8	87.5	1220	2.06	III	1250	1	1520YC	AV	40
3.5	35	70	1530	2.06	III	1310	1	1520YC	AV	50
2.92	29.2	58.3	1840	2.06	III	1360	1	1520YC	AV	60
2.19	21.9	43.8	2450	2.06	III	1380	1	1531YC	AV	80
1.75	17.5	35	3060	3.00	III	2200	1	1630YC	AV	100
1.46	14.6	29.2	3670	3.00	III	2200	1	1630YC	AV	120
1.17	11.7	23.3	4590	2.85	III	2200	1	1631YC	AV	150
0.875	8.75	17.5	6120	2.14	III	2200	1	1631YC	AV	200
0.729	7.29	14.6	7350	1.78	II	2200	1	1631YB	AV	240

Gearmotors

Selection Tables

1.5 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (120 Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	700	230	2.00	III	661	1H	1520YC	AV	5
25	250	500	321	2.00	III	750	1H	1520YC	AV	7
17.5	175	350	459	2.00	III	838	1H	1520YC	AV	10
14.6	146	292	551	2.00	III	893	1H	1520YC	AV	12
11.7	117	233	689	2.00	III	948	1H	1520YC	AV	15
8.75	87.5	175	918	2.00	III	1040	1H	1520YC	AV	20
7	70	140	1150	2.00	III	1100	1H	1520YC	AV	25
5.83	58.3	117	1380	2.00	III	1160	1H	1520YC	AV	30
4.38	43.8	87.5	1840	2.00	III	1250	1H	1531YC	AV	40
3.5	35	70	2300	2.00	III	1310	1H	1531YC	AV	50
2.92	29.2	58.3	2760	2.00	III	1360	1H	1531YC	AV	60
2.19	21.9	43.8	3670	2.00	III	2170	1H	1630YC	AV	80
1.75	17.5	35	4590	2.00	III	2200	1H	1630YC	AV	100
1.46	14.6	29.2	5510	2.00	III	2200	1H	1630YC	AV	120
1.17	11.7	23.3	6890	1.90	II	2200	1H	1631YB	AV	150
0.875	8.75	17.5	9180	1.43	II	2200	1H	1631YB	AV	200
0.729	7.29	14.6	11000	1.19	I	2200	1H	1631YA	AV	240

Frame Size Selection Tables

Inverter Duty

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

2 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (120 Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	700	306	1.50	II	661	2	1520YB	AV	5
25	250	500	429	1.50	II	750	2	1520YB	AV	7
17.5	175	350	612	1.50	II	838	2	1520YB	AV	10
14.6	146	292	735	1.50	II	893	2	1520YB	AV	12
11.7	117	233	918	1.50	II	948	2	1520YB	AV	15
8.75	87.5	175	1220	1.50	II	1040	2	1520YB	AV	20
7	70	140	1530	1.50	II	1100	2	1520YB	AV	25
5.83	58.3	117	1840	1.50	II	1160	2	1520YB	AV	30
4.38	43.8	87.5	2450	1.50	II	1250	2	1531YB	AV	40
3.5	35	70	3060	1.50	II	1310	2	1531YB	AV	50
2.92	29.2	58.3	3670	1.50	II	1360	2	1531YB	AV	60
2.19	21.9	43.8	4900	1.50	II	2170	2	1630YB	AV	80
1.75	17.5	35	6120	1.50	II	2200	2	1630YB	AV	100
1.46	14.6	29.2	7350	1.50	II	2200	2	1630YB	AV	120
1.17	11.7	23.3	9180	1.43	II	2200	2	1631YB	AV	150
0.875	8.75	17.5	12200	1.07	I	2200	2	1631YA	AV	200
0.729	7.29	14.6	13100	0.89	–	2200	2	1631Y	AV	240

3 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	350 (60)	459	1.67	II	661	3	1521YB	AV	5
25	250	250 (60)	643	1.67	II	750	3	1521YB	AV	7
17.5	175	175 (60)	918	1.67	II	838	3	1521YB	AV	10
14.6	146	146 (60)	1100	1.67	II	893	3	1521YB	AV	12
11.7	117	117 (60)	1380	1.67	II	948	3	1521YB	AV	15
8.75	87.5	87.5 (60)	1840	1.67	II	1040	3	1521YB	AV	20
7	70	70 (60)	2300	1.67	II	1100	3	1521YB	AV	25
5.83	58.3	117 (120)	2760	1.67	II	1820	3	1632YB	AV	30
4.38	43.8	87.5 (120)	3670	1.67	II	1910	3	1632YB	AV	40
3.5	35	70 (120)	4590	1.67	II	2000	3	1632YB	AV	50
2.92	29.2	58.3 (120)	5510	1.67	II	2060	3	1632YB	AV	60

Gearmotors

 Selection
Tables

Frame Size Selection Tables

Inverter Duty

Dimensions:	Frame Size	Page	Frame Size	Page
	1100	3.28	1400	3.34
	1200	3.30	1500	3.36
	1300	3.32	1600	3.38

5 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	350 (60)	765	1.50	II	661	5	1522YB	AV	5
25	250	250 (60)	1070	1.50	II	750	5	1522YB	AV	7
17.5	175	175 (60)	1530	1.50	II	838	5	1522YB	AV	10
14.6	146	146 (60)	1840	1.50	II	893	5	1522YB	AV	12
11.7	117	117 (60)	2300	1.50	II	948	5	1522YB	AV	15
8.75	87.5	117 (80)	3060	1.50	II	1650	5	1633YB	AV	20
7	70	93.3 (80)	3830	1.50	II	1740	5	1633YB	AV	25
5.83	58.3	77.8 (80)	4590	1.50	II	1820	5	1633YB	AV	30
4.38	43.8	58.3 (80)	6120	1.50	II	1910	5	1633YB	AV	40

7.5 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	350	1150	2.00	III	1050	8	1634YC	AV	5
25	250	250	1610	2.00	III	1200	8	1634YC	AV	7
17.5	175	175	2300	2.00	III	1350	8	1634YC	AV	10
14.6	146	146	2760	2.00	III	1400	8	1634YC	AV	12
11.7	117	117	3440	2.00	III	1500	8	1634YC	AV	15
8.75	87.5	87.5	4590	2.00	III	1650	8	1634YC	AV	20
7	70	70	5740	1.90	II	1750	8	1634YB	AV	25

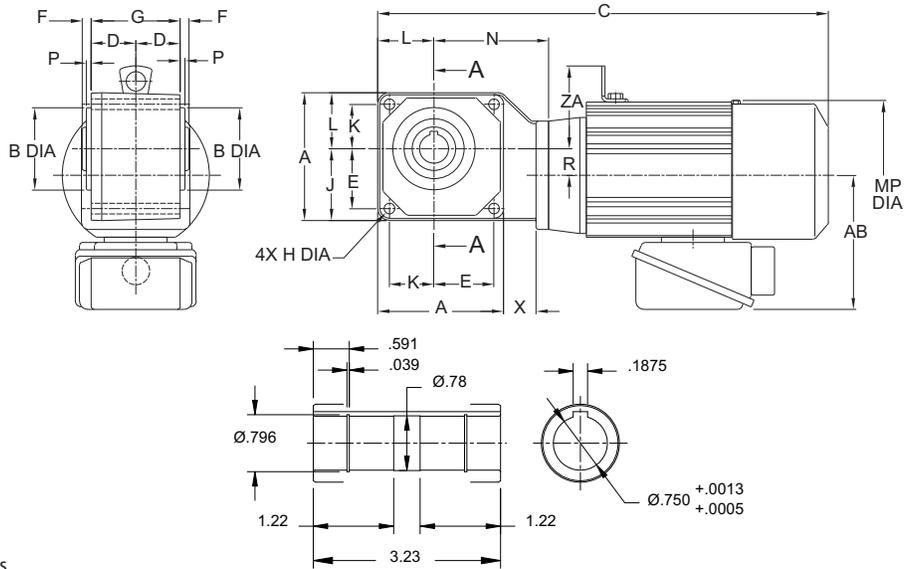
10 HP

Output Speed RPM			Output Torque in-lbs	Service Factor	AGMA Class	Overhung Load (60Hz) lbs	Selection			
6 Hz	60 Hz	Max. (Hz)					HP Symbol	Frame Size	Suffix	Ratio
35	350	350	1530	1.50	II	1050	10	1634YB	AV	5
25	250	250	2140	1.50	II	1200	10	1634YB	AV	7
17.5	175	175	3060	1.50	II	1350	10	1634YB	AV	10
14.6	146	146	3670	1.50	II	1400	10	1634YB	AV	12
11.7	117	117	4590	1.50	II	1500	10	1634YB	AV	15
8.75	87.5	87.5	6120	1.50	II	1650	10	1634YB	AV	20

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Dimensions

Frame Size 1100 RNYM-1120Y



All dimensions are in inches.

Gearmotors

Dimensions

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1120	3.54	2.046	2.047	1.30	1.65	0.31	2.60	0.26	1.97	1.26	1.57	3.23	0.24	0.79	0.87

Standard Three-Phase Motor

Model	Motor HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM01-1120Y(-B)-5~60	1/8	5.04	-	10.55	4.69	13	11.93	4.88	17
RNYM02-1120Y(-B)-5~30	1/4	5.04	-	12.20	4.88	15	13.46	4.88	19

Dimensions

Frame Size 1100 RNYM-1120Y (cont.)

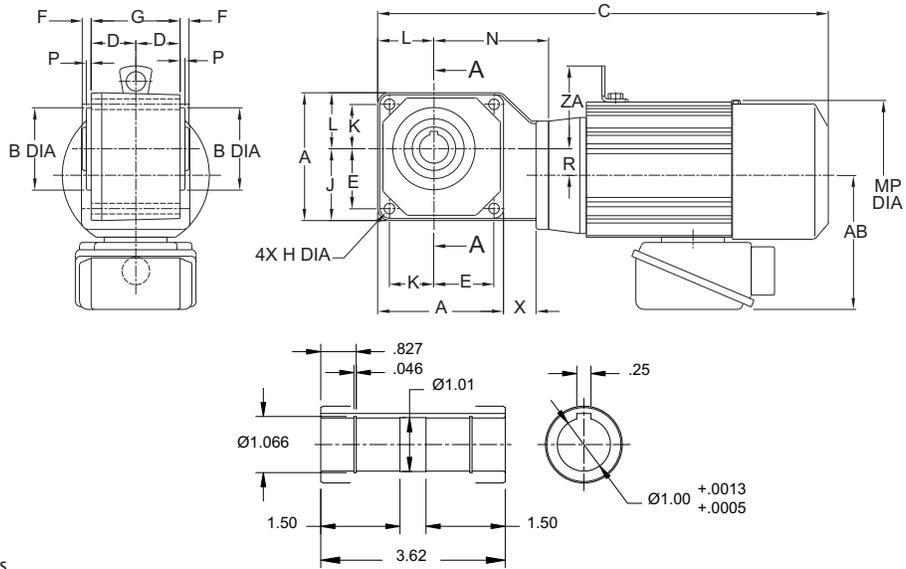
All dimensions are in inches.

AF-Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM02-1120Y-AV(-B)-5~60	1/8	5.04	–	12.20	4.88	15	13.46	4.88	19
RNYM02-1120Y-AV(-B)-5~30	1/4	5.04	–	12.99	4.88	18	14.25	4.88	20

Dimensions

Frame Size 1200 RNYM-1220/30Y



All dimensions are in inches.

Gearmotors

Dimensions

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1220	4.53	3.07	3.071	1.46	2.24	0.35	2.91	0.35	2.60	1.57	1.93	3.78	0.20	1.10	0.79
1230	5	3.07	3.071	1.61	2.56	0.35	3.23	0.35	2.99	1.57	2.01	3.74	0.20	0.51	0.31

Standard Three-Phase Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM01-1220Y(-B)-40~60	1/8	5.04	-	11.46	4.69	15	12.83	4.88	19
RNYM02-1220Y(-B)-5~60	1/4	5.04	-	13.11	4.88	19	14.37	4.88	22
RNYM03-1220Y(-B)-5~60	1/3	5.04	-	13.9	4.88	21	15.16	4.88	24
RNYM05-1220Y(-B)-5~30	1/2	5.04	-	13.9	4.88	21	15.16	4.88	24
RNYM01-1230Y(-B)-80~240	1/8	5.04	-	11.5	4.69	17	12.87	4.88	20

Dimensions

Frame Size 1200 RNYM-1220/30Y (cont.)

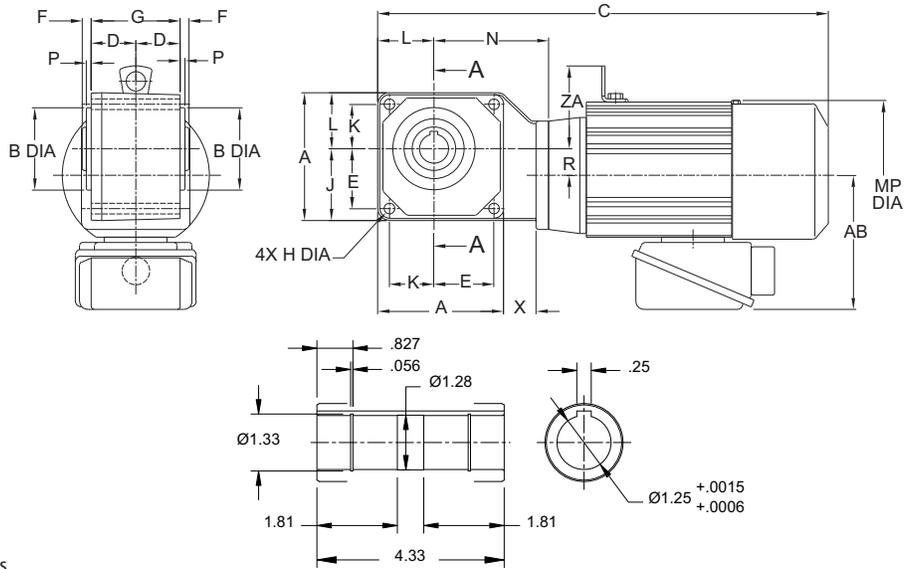
All dimensions are in inches.

AF-Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM01-1220Y-AV(-B)-40~60	1/8	5.04	-	13.11	4.88	19	14.37	4.88	22
RNYM02-1220Y-AV(-B)-5~60	1/4	5.04	-	13.9	4.88	21	15.16	4.88	24
RNYM03-1220Y-AV(-B)-5~30	1/2	5.04	-	13.9	4.88	21	15.16	4.88	24
RNYM01-1230Y-AV(-B)-80~240	1/8	5.04	-	13.15	4.88	19	14.41	4.88	22

Dimensions

Frame Size 1300 RNYM-1320/30/40Y



All dimensions are in inches.

Gearmotors

Dimensions

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1320	5.20	3.345	3.346	1.81	2.44	0.35	3.62	0.43	2.91	1.81	2.28	4.69	0.20	1.08	1.34
1330	5.98	3.345	3.346	1.81	3.11	0.35	3.62	0.43	3.62	1.85	2.36	4.25	0.20	0.43	0.14
1340	5.98	3.345	3.346	1.81	3.11	0.35	3.62	0.43	3.62	1.85	2.36	5.16	0.20	0.35	1.04

Standard Three-Phase Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM02-1320Y(-B)-40~60	1/4	5.04	-	14.21	4.88	22	15.47	4.88	24
RNYM03-1320Y(-B)-40~60	1/3	5.04	-	15	4.88	24	16.26	4.88	29
RNYM05-1320Y(-B)-5~60	1/2	5.04	-	15	4.88	24	16.26	4.88	29
RNYM08-1320Y(-B)-5~30	3/4	5.43	3.41	16.65	6.10	29	18.35	6.10	35
RNYM1-1320Y(-B)-5~30	1	5.43	3.41	16.65	6.10	33	18.35	6.10	38
RNYM01-1330Y(-B)-80~240	1/8	5.04	-	12.36	4.69	20	13.74	4.88	22
RNYM02-1330Y(-B)-80~240	1/4	5.04	-	14.02	4.88	22	15.28	4.88	24
RNYM01-1340Y(-B)-300~1440	1/8	5.04	-	13.27	4.69	22	14.65	4.88	24

Dimensions

Frame Size 1300 RNYM-1320/30/40Y (cont.)

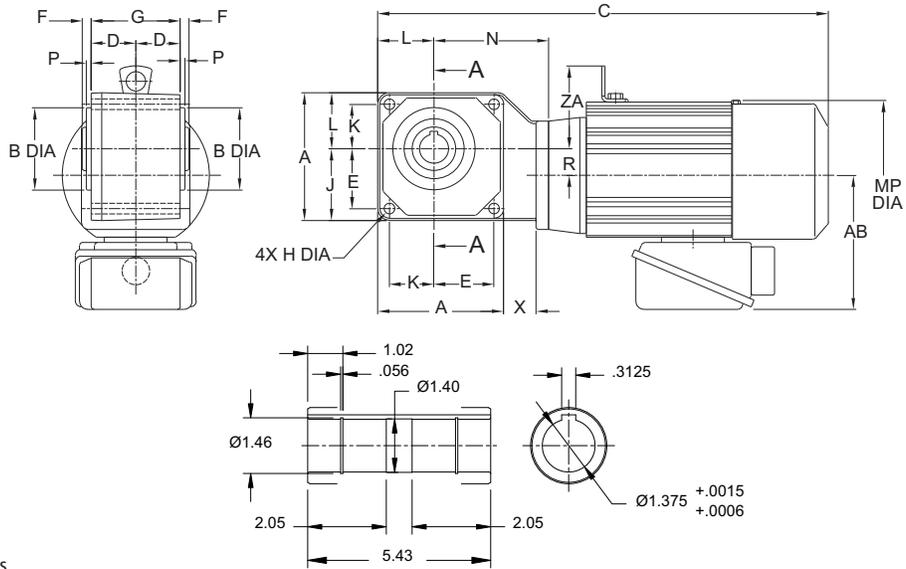
All dimensions are in inches.

AF-Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM02-1320Y-AV(-B)-40~60	1/4	5.04	–	15	4.88	24	16.26	4.88	29
RNYM03-1320Y-AV(-B)-40~60	1/2	5.04	–	15	4.88	24	16.26	4.88	29
RNYM05-1320Y-AV(-B)-5~30	1/2	5.43	3.37	16.65	6.10	33	18.35	6.10	38
RNYM02-1330Y-AV(-B)-80~240	1/4	5.04	–	14.8	4.88	24	16.06	4.88	27
RNYM01-1330Y-AV(-B)-80~240	1/8	5.04	–	14.02	4.88	22	15.28	4.88	24
RNYM01-1340Y-AV(-B)-300~480	1/8	5.04	–	14.92	4.88	24	16.18	4.88	27

Dimensions

Frame Size 1400 RNYM-1420/30/40Y



All dimensions are in inches.

Gearmotors

Dimensions

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1420	6.22	3.739	3.74	2.32	2.95	0.39	4.65	0.55	3.46	2.24	2.76	5.75	0.20	0.79	1.69
1430	7.01	3.739	3.74	2.32	3.62	0.39	4.65	0.55	4.25	2.13	2.76	5.12	0.20	0.55	0.31
1440	7.01	3.739	3.74	2.32	3.62	0.39	4.65	0.55	4.25	2.13	2.76	6.42	0.20	0.43	1.73

Standard Three-Phase Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM05-1420Y(-B)-40~60	1/2	5.04	-	16.22	4.88	33	17.48	4.88	35
RNYM08-1420Y(-B)-40~60	3/4	5.43	3.66	18.66	6.10	38	20.35	6.10	42
RNYM1-1420Y(-B)-5~60	1	5.43	3.66	18.66	6.10	40	20.35	6.10	44
RNYM1H-1420Y(-B)-5~30	1.5	5.63	3.86	19.84	6.57	46	22.28	6.57	55
RNYM2-1420Y(-B)-5~30	2	5.63	3.86	19.84	6.57	49	22.28	6.57	57
RNYM02-1430Y(-B)-80~240	1/4	5.04	-	15.12	4.88	33	16.38	4.88	35
RNYM03-1430Y(-B)-80~240	1/3	5.04	-	15.91	4.88	35	17.17	4.88	38
RNYM05-1430Y(-B)-80~240	1/2	5.04	-	15.91	4.88	35	17.17	4.88	38
RNYM01-1440Y(-B)-300~1440	1/8	5.04	-	14.92	4.69	32	16.3	4.88	35
RNYM02-1440Y(-B)-300~1440	1/4	5.04	-	16.57	4.88	34	17.83	4.88	38

Dimensions

Frame Size 1400 RNYM-1420/30/40Y (cont.)

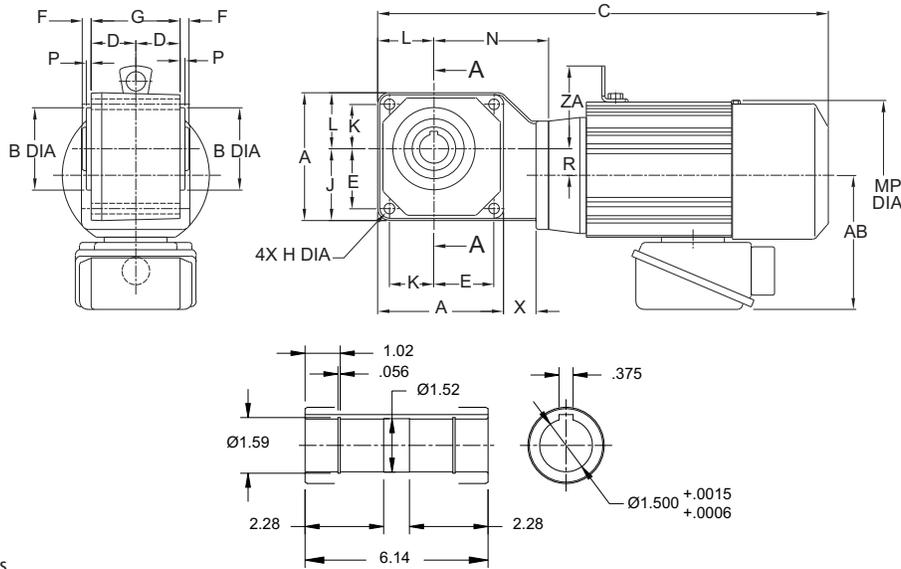
All dimensions are in inches.

AF-Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM05-1420Y-AV(-B)-40~60	1/2	5.43	3.66	18.66	6.10	40	20.35	6.10	44
RNYM08-1420Y-AV(-B)-5~30	3/4	5.63	3.86	19.84	6.57	46	22.28	6.57	55
RNYM1-1420Y-AV(-B)-5~30	1	5.63	3.86	19.84	6.57	49	22.28	6.57	57
RNYM02-1430Y-AV(-B)-80~240	1/4	5.04	–	15.91	4.88	35	17.17	4.88	38
RNYM03-1430Y-AV(-B)-80~240	1/2	5.04	–	15.91	4.88	35	17.17	4.88	38
RNYM01-1440Y-AV(-B)-300~1440	1/8	5.04	–	16.57	4.88	34	17.83	4.88	38
RNYM02-1440Y-AV(-B)-300~480	1/4	5.04	–	17.36	4.88	38	18.62	4.88	40

Dimensions

Frame Size 1500 RNYM-1520/21/22/30/31/40Y



All dimensions are in inches.

Gearmotors

Dimensions

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	X
1520/21/22	7.01	4.329	4.331	2.68	3.15	0.39	5.35	0.55	3.70	2.76	3.31	7.01	0.20	1.10	2.68
1530/31	8.39	4.329	4.331	2.68	4.29	0.39	5.35	0.71	5.08	2.52	3.31	6.18	0.20	0.67	0.37
1540	8.39	4.329	4.331	2.68	4.29	0.39	5.35	0.71	5.08	2.52	3.31	7.76	0.20	0.55	2.13

Standard Three-Phase Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM1-1520Y(-B)-40~60	1	5.43	3.66	19.61	6.10	57	21.30	6.10	62
RNYM1H-1520Y(-B)-40~60	1.5	5.63	3.58	21.02	6.57	64	23.46	6.57	73
RNYM2-1520Y(-B)-5~60	2	5.63	3.58	21.02	6.57	68	23.46	6.57	77
RNYM3-1520Y(-B)-5~30	3	5.91	3.78	21.77	7.09	75	24.25	7.09	86
RNYM3-1521Y(-B)-5~25	3	5.91	4.88	21.77	7.09	75	24.25	7.09	86
RNYM5-1521Y(-B)-5~25	5	6.54	4.57	24.09	8.74	110	26.93	8.74	134
RNYM5-1522Y(-B)-5~15	5	6.54	4.57	24.09	8.74	110	26.93	8.74	134
RNYM8-1522Y(-B)-5~15	7.5	6.54	4.57	25.83	8.74	126	28.66	8.74	150
RNYM05-1530Y(-B)-80~240	1/2	5.04	-	17.2	4.88	51	18.46	4.88	53
RNYM08-1530Y(-B)-80~240	3/4	5.43	3.78	19.61	6.10	53	21.30	6.10	57
RNYM1-1530Y(-B)-80~240	1	5.43	3.78	19.61	6.10	55	21.30	6.10	62
RNYM1-1531Y(-B)-80	1	5.43	3.78	19.61	6.10	57	21.30	6.10	62
RNYM1H-1531Y(-B)-80	1.5	5.63	3.98	20.79	6.57	64	23.23	6.57	73
RNYM2-1531Y(-B)-40~80	2	5.63	3.98	20.79	6.57	66	23.23	6.57	75
RNYM3-1531Y(-B)-40~60	3	5.91	4.21	21.57	7.09	75	24.06	7.09	86
RNYM02-1540Y(-B)-300~1440	1/4	5.04	-	18.31	4.88	54	19.57	4.88	56
RNYM03-1540Y(-B)-300~1440	1/3	5.04	-	19.09	4.88	57	20.35	4.88	61
RNYM05-1540Y(-B)-300~1440	1/2	5.04	-	19.09	4.88	57	20.35	4.88	61

Dimensions

Frame Size 1500 RNYM-1520/21/22/30/31/40Y (cont.)

All dimensions are in inches.

AF-Motor

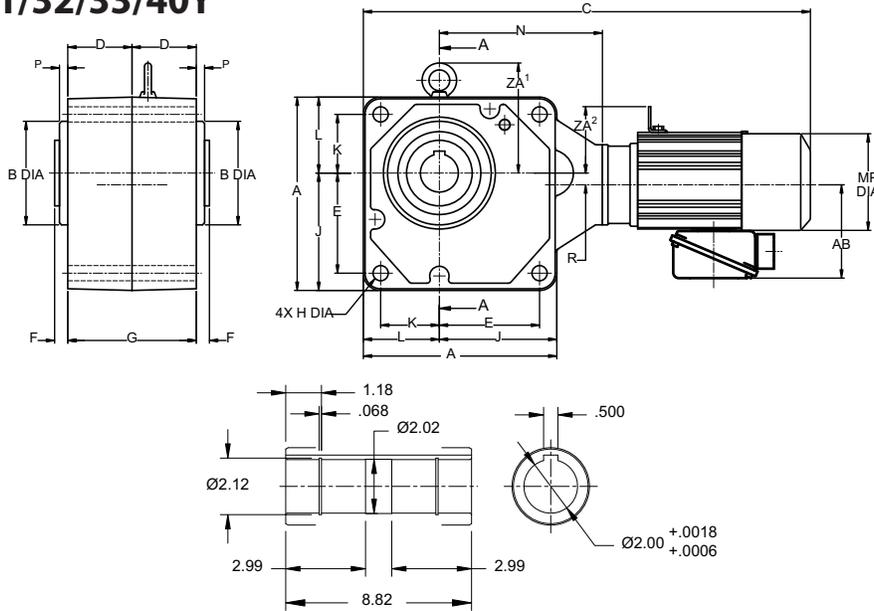
Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM08-1520Y-AV(-B)-40~60	3/4	5.63	3.583	21.02	6.57	64	23.46	6.57	73
RNYM1-1520Y-AV(-B)-40~60	1	5.63	3.583	21.02	6.57	68	23.46	6.57	77
RNYM1H-1520Y-AV(-B)-5~30	1.5	5.91	3.780	21.77	7.09	75	24.25	7.09	86
RNYM2-1520Y-AV(-B)-5~30	2	5.91	3.780	21.77	7.09	75	24.25	7.09	86
RNYM3-1521Y-AV(-B)-5~25	3	6.5	4.567	24.09	8.74	110	26.93	8.74	134
RNYM5-1522Y-AV(-B)-5~15	5	6.5	4.567	25.83	8.74	126	28.66	8.74	150
RNYM05-1530Y-AV(-B)-80~240	1/2	5.43	3.780	19.61	6.10	55	21.3	6.10	62
RNYM08-1531Y-AV(-B)-80	3/4	5.63	3.976	20.79	6.57	64	23.23	6.57	73
RNYM1-1531Y-AV(-B)-80	1	5.63	3.976	20.79	6.57	66	23.23	6.57	75
RNYM1H-1531Y-AV(-B)-40~60	1.5	5.91	4.213	21.57	7.09	75	24.06	7.09	86
RNYM2-1531Y-AV(-B)-40~60	2	5.91	4.213	21.57	7.09	75	24.06	7.09	86
RNYM01-1540Y-AV(-B)-600~1440	1/8	5.04	–	18.31	4.88	54	19.57	4.88	57
RNYM02-1540Y-AV(-B)-300~1440	1/4	5.04	–	19.09	4.88	57	20.35	4.88	61
RNYM03-1540Y-AV(-B)-300~480	1/2	5.04	–	19.09	4.88	57	20.35	4.88	62

Gearmotors

Dimensions

Dimensions

Frame Size 1600 RNYM-1630/31/32/33/40Y



All dimensions are in inches.

Gearmotors

Dimensions

Model	A	B min	B max	D	E	F	G	H	J	K	L	N	P	R	ZA ¹
1630/31/32/33	11	5.904	5.906	3.66	5.71	0.75	7.32	0.87	6.69	3.35	4.33	8.37	0.47	1.06	6.30
1640	11	5.904	5.906	3.66	5.71	0.75	7.32	0.87	6.69	3.35	4.33	9.29	0.47	0.67	6.30

Standard Three-Phase Motor

Model	HP	AB	ZA ²	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM1-1630Y(-B)-100~120	1	5.43	3.39	21.97	6.10	101	23.66	6.10	106
RNYM1H-1630Y(-B)-100~120	1.5	5.63	3.58	23.35	6.57	115	25.79	6.57	123
RNYM2-1630Y(-B)-80~120	2	5.63	3.58	23.35	6.57	115	25.79	6.57	123
RNYM3-1630Y(-B)-80~120	3	5.91	3.58	24.57	7.09	126	27.05	7.09	139
RNYM1-1631Y(-B)-150~240	1	5.43	3.39	21.97	6.10	101	23.66	6.10	106
RNYM1H-1631Y(-B)-150~240	1.5	5.63	3.58	23.82	6.57	117	26.26	6.57	126
RNYM2-1631Y(-B)-150~240	2	5.63	3.58	23.82	6.57	117	26.26	6.57	126
RNYM3-1631Y(-B)-150~240	3	5.91	3.58	24.57	7.09	126	27.05	7.09	139
RNYM3-1632Y(-B)-30~60	3	5.91	3.58	24.57	7.09	121	27.05	7.09	134
RNYM5-1632Y(-B)-30~60	5	6.54	4.61	26.65	8.74	152	29.49	8.74	176
RNYM5-1633Y(-B)-20~40	5	6.54	4.61	26.65	8.74	154	29.25	8.74	179
RNYM8-1633Y(-B)-20~40	7.5	6.54	4.61	28.39	8.74	170	31.22	8.74	194
RNYM05-1640Y(-B)-300~1440	1/2	5.04	-	21.38	4.88	139	22.64	4.88	141
RNYM08-1640Y(-B)-300~1440	3/4	5.43	3.70	23.78	6.10	148	25.47	6.10	152
RNYM1-1640Y(-B)-300~1440	1	5.43	3.70	23.78	6.10	150	25.47	6.10	154

Dimensions

Frame Size 1600 RNYM-1630/31/32/33/40Y (cont.)

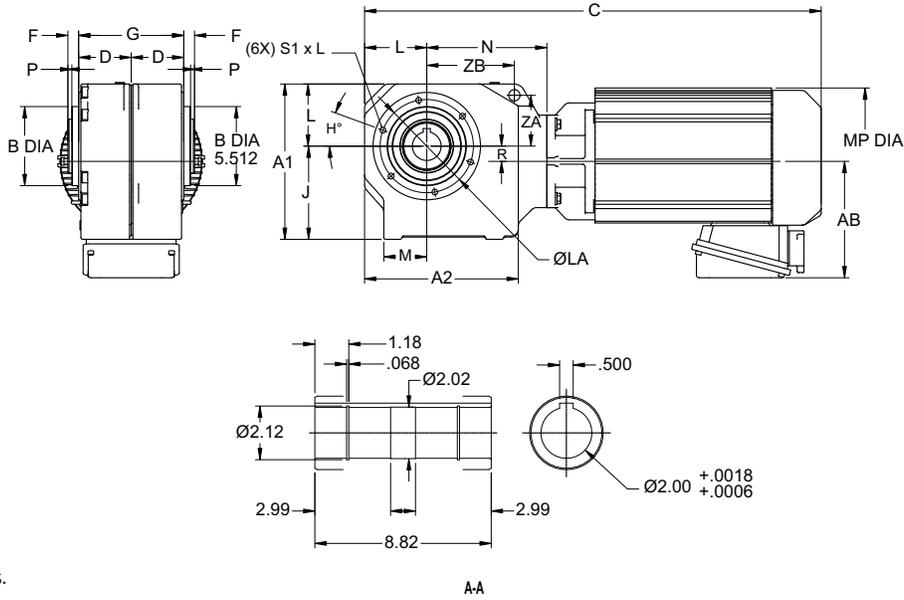
All dimensions are in inches.

AF-Motor

Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM08-1630Y-AV(-B)-100~120	3/4	5.63	3.58	23.35	6.57	115	25.79	6.57	123
RNYM1-1630Y-AV(-B)-100~120	1	5.63	3.58	23.35	6.57	115	25.79	6.57	123
RNYM1H-1630Y-AV(-B)-100~120	1.5	5.91	3.82	24.57	7.09	126	27.05	7.09	139
RNYM2-1630Y-AV(-B)-100~120	2	5.91	3.82	24.57	7.09	126	27.05	7.09	139
RNYM08-1631Y-AV(-B)-150~240	3/4	5.63	3.58	23.82	6.57	117	26.26	6.57	126
RNYM1-1631Y-AV(-B)-150~240	1	5.63	3.58	23.82	6.57	117	26.26	6.57	126
RNYM1H-1631Y-AV(-B)-150~240	1.5	5.91	3.82	24.57	7.09	126	27.05	7.09	139
RNYM2-1631Y-AV(-B)-150~240	2	5.91	3.82	24.57	7.09	126	27.05	7.09	139
RNYM3-1632Y-AV(-B)-30~60	3	6.5	4.61	26.65	8.74	152	29.49	8.74	176
RNYM5-1633Y-AV(-B)-20~40	5	6.5	4.61	28.39	8.74	170	31.22	8.74	194
RNYM02-1640Y-AV(-B)-600~1440	1/4	5.04	–	21.38	4.88	139	22.64	4.88	141
RNYM03-1640Y-AV(-B)-600~1440	1/2	5.04	–	21.38	4.88	139	22.64	4.88	141
RNYM05-1640Y-AV(-B)-300~1440	1/2	5.43	3.78	23.78	6.10	139	25.47	6.10	143

Dimensions

Frame Size 1600 RNYM-1634



All dimensions are in inches.

Gearmotors

Dimensions

Model	A1	A2	B min	B max	D	F	G	H	J	L	M	N	P	R	ZA	ZB	LA	SxL
1634	10.83	10.71	5.510	5.512	3.66	0.75	7.32	20	6.5	4.33	2.99	8.37	0.28	1.06	3.54	6.1	6.5	M12 x 0.87

Standard Three-Phase Motor

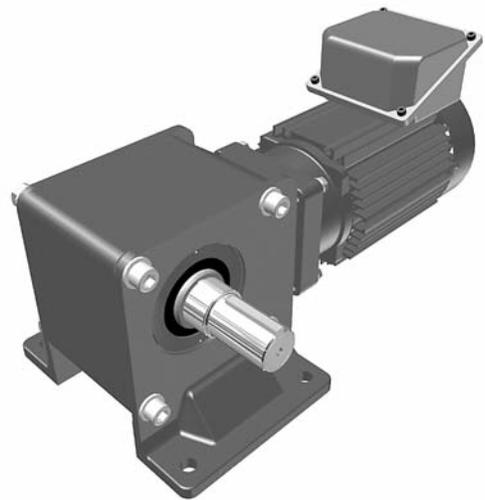
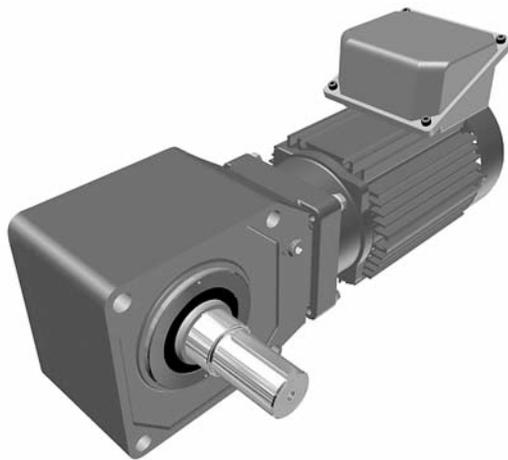
Model	HP	AB	Motor			Brakemotor		
			C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM8-1630Y(-B)	7.5	6.53	28.22	8.38	170	31.06	8.36	194
RNYM10-1630Y(-B)	10	8.39	29.44	9.90	245	33.18	9.9	284
RNYM15-1640Y(-B)	15	8.11	31.80	9.90	276	35.54	9.9	315

AF-Motor (-AV)

Model	HP	AB	Motor			Brakemotor		
			C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNYM8-1630Y(-B)	7.5	8.39	29.44	9.90	245	33.18	9.9	284
RNYM10-1630Y(-B)	10	8.11	31.80	9.90	276	35.54	9.9	315

4

Options

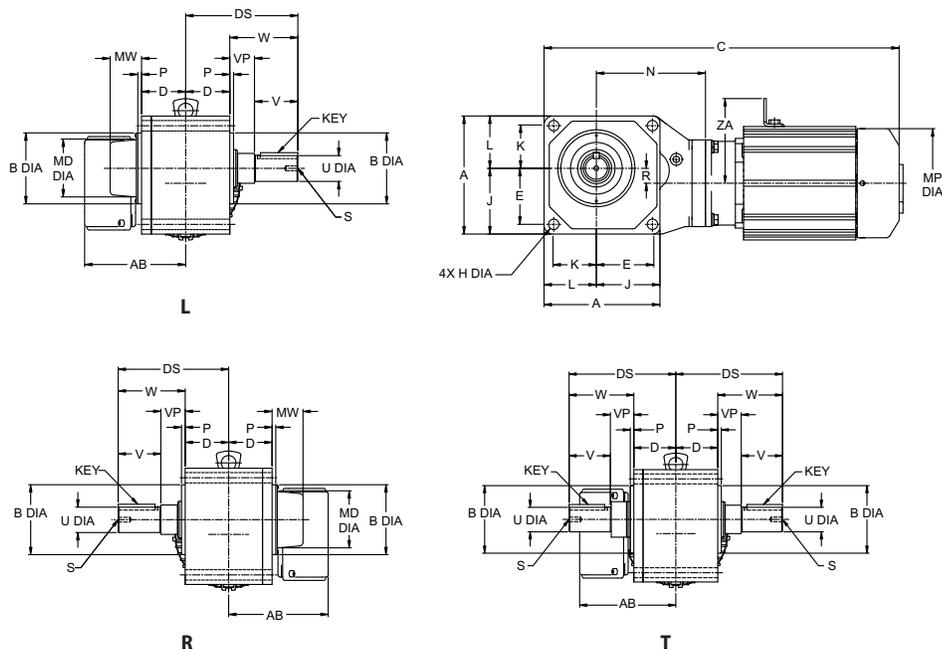


Hyponic®

Options

Plug-in Solid Output Shaft

Frame Size 1100 ~ 1300



All dimensions are in inches.

Model	A	B min	B max	D	DS	E	H	J	K	L	N	P	R	MD	MW
1120L/R/TY-X1	3.54	2.046	2.047	1.30	3.27	1.65	0.26	1.97	1.26	1.57	3.23	0.24	0.79	2.20	0.79
1220L/R/TY-X1	4.53	3.070	3.071	1.46	3.96	2.24	0.35	2.60	1.57	1.93	3.78	0.20	1.10	2.32	1.26
1230L/R/TY-X1	5.00	3.070	3.071	1.61	4.11	2.56	0.35	2.99	1.57	2.01	3.74	0.20	0.51	2.32	1.26
1320L/R/TY-X1	5.20	3.345	3.346	1.81	4.61	2.44	0.43	2.91	1.81	2.28	4.69	0.20	1.08	2.64	1.26
1330L/R/TY-X1	5.98	3.345	3.346	1.81	4.61	3.11	0.43	3.62	1.85	2.36	4.25	0.20	0.43	2.64	1.26
1340L/R/TY-X1	5.98	3.345	3.346	1.81	4.61	3.11	0.43	3.62	1.85	2.36	5.16	0.20	0.35	2.64	1.26

Model	Output Shaft						
	U min	U max	W	V	VP	S	Key
1120L/R/TY-X1	0.749	0.750	1.97	1.10	0.87	10-32 UNF x 0.630	3/16 x 3/16
1220L/R/TY-X1	0.999	1.000	2.50	1.42	1.08	5/16-18 UNC x 0.630	1/4 x 1/4
1230L/R/TY-X1	0.999	1.000	2.50	1.42	1.08	5/16-18 UNC x 0.630	1/4 x 1/4
1320L/R/TY-X1	1.249	1.250	2.80	1.65	1.14	5/16-18 UNC x 0.630	1/4 x 1/4
1330L/R/TY-X1	1.249	1.250	2.80	1.65	1.14	5/16-18 UNC x 0.630	1/4 x 1/4
1340L/R/TY-X1	1.249	1.250	2.80	1.65	1.14	5/16-18 UNC x 0.630	1/4 x 1/4

Plug-in Solid Output Shaft

Frame Size 1100 ~ 1300 (cont.)

All dimensions are in inches.

Standard Three-Phase Motor

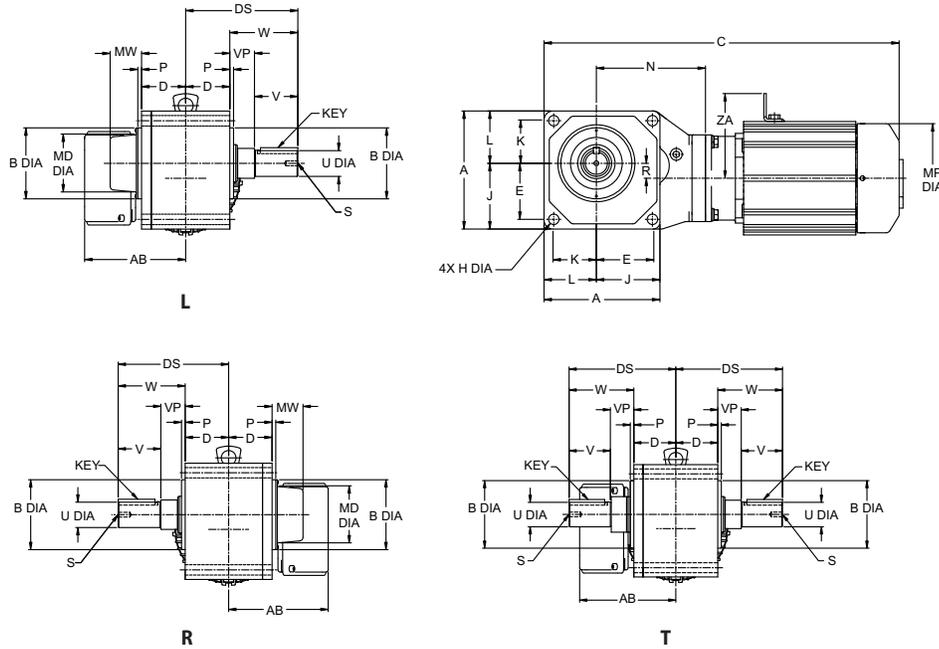
Model	Motor HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNFM01-1120L/R/TY-X1(-B)-5~60	1/8	5.04	–	10.55	4.69	14	11.93	4.88	18
RNFM02-1120L/R/TY-X1(-B)-5~30	1/4	5.04	–	12.20	4.88	17	13.46	4.88	20
RNFM01-1220L/R/TY-X1(-B)-40~60	1/8	5.04	–	11.46	4.69	17	12.83	4.88	20
RNFM02-1220L/R/TY-X1(-B)-5~60	1/4	5.04	–	13.1	4.88	20	14.37	4.88	23
RNFM03-1220L/R/TY-X1(-B)-5~30	1/3	5.04	–	13.90	4.88	22	15.16	4.88	25
RNFM05-1220L/R/TY-X1(-B)-5~30	1/2	5.04	–	13.90	4.88	22	15.16	4.88	25
RNFM01-1230L/R/TY-X1(-B)-80~240	1/8	5.04	–	11.50	4.69	18	12.87	4.88	21
RNFM02-1320L/R/TY-X1(-B)-40~60	1/4	5.04	–	14.21	4.88	24	15.47	4.88	27
RNFM03-1320L/R/TY-X1(-B)-40~60	1/3	5.04	–	15.00	4.88	27	16.26	4.88	31
RNFM05-1320L/R/TY-X1(-B)-5~60	1/2	5.04	–	15.00	4.88	27	16.26	4.88	31
RNFM08-1320L/R/TY-X1(-B)-5~30	3/4	5.43	3.41	16.65	6.10	31	18.35	6.10	38
RNFM1-1320L/R/TY-X1(-B)-5~30	1	5.43	3.41	16.65	6.10	35	18.35	6.10	40
RNFM01-1330L/R/TY-X1(-B)-80~240	1/8	5.04	–	12.36	4.69	22	13.74	4.88	24
RNFM02-1330L/R/TY-X1(-B)-80~240	1/4	5.04	–	14.02	4.88	24	15.28	4.88	27
RNFM01-1340L/R/TY-X1(-B)-300~1440	1/8	5.04	–	13.27	4.69	24	14.65	4.88	27

Hyponic®

Options

Plug-in Solid Output Shaft

Frame Size 1400 ~ 1600



All dimensions are in inches.

Model	A	B min	B max	D	DS	E	H	J	K	L	N	P	R	MD	MW
1420L/R/TY-X1	6.22	3.739	3.740	2.32	5.91	2.95	0.55	3.46	2.24	2.76	5.75	0.20	0.79	3.03	1.65
1430L/R/TY-X1	7.01	3.739	3.740	2.32	5.91	3.62	0.55	4.25	2.13	2.76	5.12	0.20	0.55	3.03	1.65
1440L/R/TY-X1	7.01	3.739	3.740	2.32	5.91	3.62	0.55	4.25	2.13	2.76	6.42	0.20	0.43	3.03	1.65
1520/21/22/L/R/TY-X1	7.01	4.329	4.331	2.68	7.40	3.15	0.55	3.70	2.76	3.31	7.01	0.20	1.10	3.54	1.65
1530/31/L/R/TY-X1	8.39	4.329	4.331	2.68	7.40	4.29	0.71	5.08	2.52	3.31	6.18	0.20	0.67	3.54	1.65
1540L/R/TY-X1	8.39	4.329	4.331	2.68	7.40	4.29	0.71	5.08	2.52	3.31	7.76	0.20	0.55	3.54	1.65
1630/31/32/33/L/R/TY-X1	11.02	5.904	5.906	3.66	8.58	5.71	0.87	6.69	3.35	4.33	8.37	0.47	1.06	4.49	2.40
1640L/R/TY-X1	11.02	5.904	5.906	3.66	8.58	5.71	0.87	6.69	3.35	4.33	9.29	0.47	0.67	4.49	2.40

Model	Output Shaft						
	U min	U max	W	V	VP	S	Key
1420L/R/TY-X1	1.374	1.375	3.58	2.28	1.30	5/16-18 UNC x 0.630	5/16 x 5/16
1430L/R/TY-X1	1.374	1.375	3.58	2.28	1.30	5/16-18 UNC x 0.630	5/16 x 5/16
1440L/R/TY-X1	1.374	1.375	3.58	2.28	1.30	5/16-18 UNC x 0.630	5/16 x 5/16
1520/21/22/L/R/TY-X1 ^[1]	1.749	1.750	4.72	3.23	1.50	3/8-16 UNC x 0.709	3/8 x 3/8
1530/31/L/R/TY-X1 ^[1]	1.749	1.750	4.72	3.23	1.50	3/8-16 UNC x 0.709	3/8 x 3/8
1540L/R/TY-X1 ^[1]	1.749	1.750	4.72	3.23	1.50	3/8-16 UNC x 0.709	3/8 x 3/8
1630/31/32/33/L/R/TY-X1	1.999	2.000	4.92	3.23	1.69	3/8-16 UNC x 18	1/2 x 1/2
1640L/R/TY-X1	1.999	2.000	4.92	3.23	1.69	3/8-16 UNC x 18	1/2 x 1/2

Note: [1] For double extended output shaft, U min=1.499, U max = 1.500.

Plug-in Solid Output Shaft

Frame Size 1400 ~ 1600 (cont.)

All dimensions are in inches.

Standard Three-Phase Motor

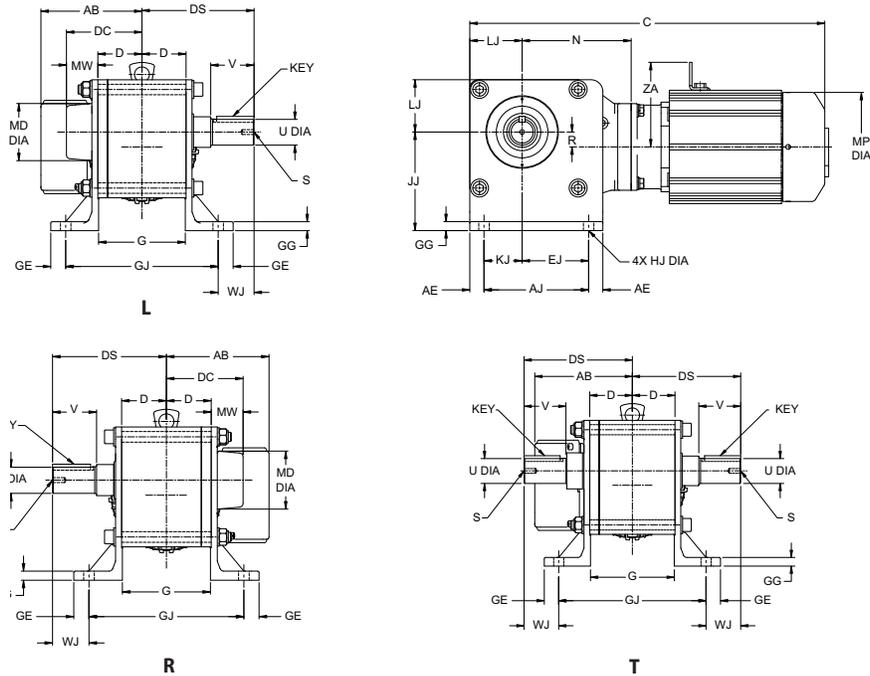
Model	Motor HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNFM05-1420L/R/TY-X1(-B)-40~60	1/2	5.04	–	16.22	4.88	36	17.48	4.88	39
RNFM08-1420L/R/TY-X1(-B)-40~60	3/4	5.43	3.66	18.66	6.10	41	20.35	6.10	45
RNFM1-1420L/R/TY-X1(-B)-5~60	1	5.43	3.66	18.6	6.10	43	20.35	6.10	47
RNFM1H-1420L/R/TY-X1(-B)-5~30	1.5	5.63	3.86	19.84	6.57	50	22.28	6.57	58
RNFM2-1420L/R/TY-X1(-B)-5~30	2	5.63	3.86	19.84	6.57	51.8	22.28	6.57	60.6
RNFM02-1430L/R/TY-X1(-B)-80~240	1/4	5.04	–	15.12	4.88	36.4	16.38	4.88	38.6
RNFM03-1430L/R/TY-X1(-B)-80~240	1/3	5.04	–	15.91	4.88	38.6	17.17	4.88	40.8
RNFM05-1430L/R/TY-X1(-B)-80~240	1/2	5.04	–	15.91	4.88	38.6	17.17	4.88	40.8
RNFM01-1440L/R/TY-X1(-B)-300~1440	1/8	5.04	–	14.92	4.69	35.3	16.30	4.88	38.6
RNFM02-1440L/R/TY-X1(-B)-300~1440	1/4	5.04	–	16.57	4.88	37.5	17.83	4.88	40.8
RNFM1-1520L/R/TY-X1(-B)-40~60	1	5.43	3.66	19.61	6.10	62.8	21.30	6.10	67.2
RNFM1H-1520L/R/TY-X1(-B)-40~60	1.5	5.63	3.58	21.02	6.57	69.4	23.46	6.57	78.3
RNFM2-1520L/R/TY-X1(-B)-5~60	2	5.63	3.58	21.02	6.57	73.9	23.46	6.57	82.7
RNFM3-1520L/R/TY-X1(-B)-5~30	3	5.91	3.78	21.77	7.09	80.5	24.25	7.09	91.5
RNFM3-1521L/R/TY-X1(-B)-5~25	3	5.91	4.88	21.77	7.09	80.5	24.25	7.09	91.5
RNFM5-1521L/R/TY-X1(-B)-5~25	5	6.54	4.57	24.09	8.74	116	26.93	8.74	140
RNFM5-1522L/R/TY-X1(-B)-5~15	5	6.54	4.57	24.09	8.74	116	26.93	8.74	140
RNFM8-1522L/R/TY-X1(-B)-5~15	7.5	6.54	4.57	25.83	8.74	131	28.66	8.74	155
RNFM05-1530L/R/TY-X1(-B)-80~240	1/2	5.04	–	17.20	4.88	56.2	18.46	4.88	58.4
RNFM08-1530L/R/TY-X1(-B)-80~240	3/4	5.43	3.78	19.61	6.10	58.4	21.30	6.10	62.8
RNFM1-1530L/R/TY-X1(-B)-80~240	1	5.43	3.78	19.61	6.10	60.6	21.30	6.10	67.2
RNFM1-1531L/R/TY-X1(-B)-80	1	5.43	3.78	19.61	6.10	62.8	21.30	6.10	67.2
RNFM1H-1531L/R/TY-X1(-B)-80	1.5	5.63	3.98	20.79	6.57	69.4	23.23	6.57	78.3
RNFM2-1531L/R/TY-X1(-B)-40~80	2	5.63	3.98	20.79	6.57	71.6	23.23	6.57	80.5
RNFM3-1531L/R/TY-X1(-B)-40~60	3	5.91	4.21	21.57	7.09	80.5	24.06	7.09	91.5
RNFM02-1540L/R/TY-X1(-B)-300~1440	1/4	5.04	–	18.31	4.88	59.5	19.57	4.88	61.7
RNFM03-1540L/R/TY-X1(-B)-300~1440	1/3	5.04	–	19.09	4.88	62.8	20.35	4.88	66.1
RNFM05-1540L/R/TY-X1(-B)-300~1440	1/2	5.04	–	19.09	4.88	62.8	20.35	4.88	66.1
RNFM1-1630L/R/TY-X1(-B)-100~120	1	5.43	3.39	21.97	6.10	111	23.66	6.10	116
RNFM1H-1630L/R/TY-X1(-B)-100~120	1.5	5.63	3.58	23.35	6.57	125	25.79	6.57	133
RNFM2-1630L/R/TY-X1(-B)-80~120	2	5.63	3.58	23.35	6.57	125	25.79	6.57	133
RNFM3-1630L/R/TY-X1(-B)-80~120	3	5.91	3.58	24.57	7.09	136	27.05	7.09	149
RNFM1-1631L/R/TY-X1(-B)-150~240	1	5.43	3.39	21.97	6.10	111	23.66	6.10	116
RNFM1H-1631L/R/TY-X1(-B)-150~240	1.5	5.63	3.58	23.82	6.57	127	26.26	6.57	136
RNFM2-1631L/R/TY-X1(-B)-150~240	2	5.63	3.58	23.82	6.57	127	26.26	6.57	136
RNFM3-1631L/R/TY-X1(-B)-150~240	3	5.91	3.58	24.57	7.09	136	27.05	7.09	149
RNFM3-1632L/R/TY-X1(-B)-30~60	3	5.91	3.58	24.57	7.09	131	27.05	7.09	144
RNFM5-1632L/R/TY-X1(-B)-30~60	5	6.54	4.61	26.65	8.74	162	29.49	8.74	186
RNFM5-1633L/R/TY-X1(-B)-20~40	5	6.54	4.61	26.65	8.74	164	29.25	8.74	188
RNFM8-1633L/R/TY-X1(-B)-20~40	7.5	6.54	4.61	28.39	8.74	180	31.22	8.74	204
RNFM05-1640L/R/TY-X1(-B)-300~1440	1/2	5.04	–	21.38	4.88	149	22.64	4.88	151
RNFM08-1640L/R/TY-X1(-B)-300~1440	3/4	5.43	3.70	23.78	6.10	158	25.47	6.10	162
RNFM1-1640L/R/TY-X1(-B)-300~1440	1	5.43	3.70	23.78	6.10	160	25.47	6.10	164

Hyponic®

Options

Plug-in Shaft with Bolt-on Feet

Frame Size 1100 ~ 1500



All dimensions are in inches.

Model	AJ	AE	D	DS	DC	G	GJ	GE	JJ	LJ	GG	KJ	EJ	HJ	N	R	MD	MW
1120L/R/TY-J1	2.76	0.39	1.30	3.27	2.09	2.52	4.72	0.39	3.54	1.57	0.39	1.26	1.50	0.35	3.23	0.79	2.20	0.79
1220L/R/TY-J1	4.13	0.43	1.46	3.96	2.72	2.83	5.35	0.59	4.33	2.01	0.39	1.57	2.56	0.35	3.78	1.10	2.32	1.26
1230L/R/TY-J1	4.13	0.43	1.61	4.11	2.87	3.15	5.67	0.59	4.33	2.01	0.39	1.57	2.56	0.35	3.74	0.51	2.32	1.26
1320L/R/TY-J1	4.96	0.51	1.81	4.61	3.07	3.54	6.46	0.59	4.41	2.36	0.47	1.85	3.11	0.43	4.69	1.08	2.64	1.26
1330L/R/TY-J1	4.96	0.51	1.81	4.61	3.07	3.54	6.46	0.59	4.41	2.36	0.47	1.85	3.11	0.43	4.25	0.43	2.64	1.26
1340L/R/TY-J1	4.96	0.51	1.81	4.61	3.07	3.54	6.46	0.59	4.41	2.36	0.47	1.85	3.11	0.43	5.16	0.35	2.64	1.26
1420L/R/TY-J1	5.51	0.75	2.32	5.91	3.98	4.57	8.03	0.79	5.20	2.76	0.47	2.01	3.50	0.55	5.75	0.79	3.03	1.65
1430L/R/TY-J1	5.51	0.75	2.32	5.91	3.98	4.57	8.03	0.79	5.20	2.76	0.47	2.01	3.50	0.55	5.12	0.55	3.03	1.65
1440L/R/TY-J1	5.51	0.75	2.32	5.91	3.98	4.57	8.03	0.79	5.20	2.76	0.47	2.01	3.50	0.55	6.42	0.43	3.03	1.65
1520L/R/TY-J1	6.81	0.79	2.68	7.40	4.33	5.28	9.61	0.79	6.30	3.31	0.59	2.52	4.29	0.71	7.01	1.10	3.54	1.65
1530/31/L/R/TY-J1	6.81	0.79	2.68	7.40	4.33	5.28	9.61	0.79	6.30	3.31	0.59	2.52	4.29	0.71	6.18	0.67	3.54	1.65
1540L/R/TY-J1	6.81	0.79	2.68	7.40	4.33	5.28	9.61	0.79	6.30	3.31	0.59	2.52	4.29	0.71	7.76	0.55	3.54	1.65

Model	Output Shaft					
	U min	U max	WJ	V	S	Key
1120L/R/TY-J1	0.749	0.750	0.91	1.10	10-32 UNF x 0.630	3/16 x 3/16
1220L/R/TY-J1	0.999	1.000	1.28	1.42	5/16-18 UNC x 0.630	1/4 x 1/4
1230L/R/TY-J1	0.999	1.000	1.28	1.42	5/16-18 UNC x 0.630	1/4 x 1/4
1320L/R/TY-J1	1.249	1.250	1.38	1.65	5/16-18 UNC x 0.630	1/4 x 1/4
1330L/R/TY-J1	1.249	1.250	1.38	1.65	5/16-18 UNC x 0.630	1/4 x 1/4
1340L/R/TY-J1	1.249	1.250	1.38	1.65	5/16-18 UNC x 0.630	1/4 x 1/4
1420L/R/TY-J1	1.374	1.375	1.89	2.28	5/16-18 UNC x 0.630	5/16 x 5/16
1430L/R/TY-J1	1.374	1.375	1.89	2.28	5/16-18 UNC x 0.630	5/16 x 5/16
1440L/R/TY-J1	1.374	1.375	1.89	2.28	5/16-18 UNC x 0.630	5/16 x 5/16
1520L/R/TY-J1	1.749	1.750	2.60	3.23	3/8-16 UNC x 0.709	3/8 x 3/8
1530/31/L/R/TY-J1	1.749	1.750	2.60	3.23	3/8-16 UNC x 0.709	3/8 x 3/8
1540L/R/TY-J1	1.749	1.750	2.60	3.23	3/8-16 UNC x 0.709	3/8 x 3/8

Plug-in Shaft with Bolt-on Feet

Frame Size 1100 ~ 1500 (cont.)

All dimensions are in inches.

Standard Three-Phase Motor

Model	Motor HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNHM01-1120L/R/TY-J1(-B)-5~60	1/8	5.04	-	10.55	4.69	17	11.93	4.88	20
RNHM02-1120L/R/TY-J1(-B)-5~30	1/4	5.04	-	12.20	4.88	19	13.46	4.88	22
RNHM01-1220L/R/TY-J1(-B)-40~60	1/8	5.04	-	11.54	4.69	21	12.91	4.88	24
RNHM02-1220L/R/TY-J1(-B)-5~60	1/4	5.04	-	13.19	4.88	24	14.45	4.88	28
RNHM03-1220L/R/TY-J1(-B)-5~30	1/3	5.04	-	13.98	4.88	26	15.24	4.88	30
RNHM05-1220L/R/TY-J1(-B)-5~30	1/2	5.04	-	13.98	4.88	26	15.24	4.88	30
RNHM01-1230L/R/TY-J1(-B)-80~240	1/8	5.04	-	11.50	4.69	23	12.87	4.88	26
RNHM02-1320L/R/TY-J1(-B)-40~60	1/4	5.04	-	14.29	4.88	32	15.55	4.88	34
RNHM03-1320L/R/TY-J1(-B)-40~60	1/3	5.04	-	15.08	4.88	34	16.34	4.88	39
RNHM05-1320L/R/TY-J1(-B)-5~60	1/2	5.04	-	15.08	4.88	34	16.34	4.88	39
RNHM08-1320L/R/TY-J1(-B)-5~30	3/4	5.43	3.41	16.73	6.10	39	18.43	6.10	45
RNHM1-1320L/R/TY-J1(-B)-5~30	1	5.43	3.41	16.73	6.10	43	18.43	6.10	47
RNHM01-1330L/R/TY-J1(-B)-80~240	1/8	5.04	-	12.36	4.69	30	6.61	4.88	32
RNHM02-1330L/R/TY-J1(-B)-80~240	1/4	5.04	-	14.02	4.88	32	15.28	4.88	34
RNHM01-1340L/R/TY-J1(-B)-300~1440	1/8	5.04	-	13.27	4.69	32	14.65	4.88	34
RNHM05-1420L/R/TY-J1(-B)-40~60	1/2	5.04	-	16.22	4.88	47	6.85	4.88	50
RNHM08-1420L/R/TY-J1(-B)-40~60	3/4	5.43	3.66	18.66	6.10	52	20.35	6.10	56
RNHM1-1420L/R/TY-J1(-B)-5~60	1	5.43	3.66	18.66	6.10	54	20.35	6.10	58
RNHM1H-1420L/R/TY-J1(-B)-5~30	1.5	5.63	3.86	19.84	6.57	61	22.28	6.57	69
RNHM2-1420L/R/TY-J1(-B)-5~30	2	5.63	3.86	19.84	6.57	63	22.28	6.57	72
RNHM02-1430L/R/TY-J1(-B)-80~240	1/4	5.04	-	15.12	4.88	47	6.89	4.88	50
RNHM03-1430L/R/TY-J1(-B)-80~240	1/3	5.04	-	15.91	4.88	50	17.17	4.88	52
RNHM05-1430L/R/TY-J1(-B)-80~240	1/2	5.04	-	15.91	4.88	50	17.17	4.88	52
RNHM01-1440L/R/TY-J1(-B)-300~1440	1/8	5.04	-	14.92	4.69	46	16.30	4.88	50
RNHM02-1440L/R/TY-J1(-B)-300~1440	1/4	5.04	-	16.57	4.88	49	17.83	4.88	52
RNHM1-1520L/R/TY-J1(-B)-40~60	1	5.43	3.66	19.61	6.10	83	7.68	6.10	87
RNHM1H-1520L/R/TY-J1(-B)-40~60	1.5	5.63	3.58	21.02	6.57	89	23.46	6.57	98
RNHM2-1520L/R/TY-J1(-B)-5~60	2	5.63	3.58	21.02	6.57	94	23.46	6.57	103
RNHM3-1520L/R/TY-J1(-B)-5~30	3	5.91	3.78	21.77	7.09	100	24.25	7.09	111
RNHM05-1530L/R/TY-J1(-B)-80~240	1/2	5.04	-	17.20	4.88	76	18.46	4.88	78
RNHM08-1530L/R/TY-J1(-B)-80~240	3/4	5.43	3.78	19.61	6.10	78	21.30	6.10	83
RNHM1-1530L/R/TY-J1(-B)-80~240	1	5.43	3.78	19.61	6.10	80	21.30	6.10	87
RNHM1-1531L/R/TY-J1(-B)-80	1	5.43	3.78	19.61	6.10	83	21.30	6.10	87
RNHM1H-1531L/R/TY-J1(-B)-80	1.5	5.63	3.98	20.79	6.57	89	23.23	6.57	98
RNHM2-1531L/R/TY-J1(-B)-40~80	2	5.63	3.98	20.79	6.57	91	23.23	6.57	100
RNHM3-1531L/R/TY-J1(-B)-40~60	3	5.91	4.21	21.57	7.09	100	24.06	7.09	111
RNHM02-1540L/R/TY-J1(-B)-300~1440	1/4	5.04	-	18.31	4.88	79	19.57	4.88	82
RNHM03-1540L/R/TY-J1(-B)-300~1440	1/3	5.04	-	19.09	4.88	83	20.35	4.88	86
RNHM05-1540L/R/TY-J1(-B)-300~1440	1/2	5.04	-	19.09	4.88	83	20.35	4.88	86

Hyponic®

Options

Plug-in Shaft with Extended Flange

Frame Size 1100 ~ 1500 (cont.)

All dimensions are in inches.

Standard Three-Phase Motor

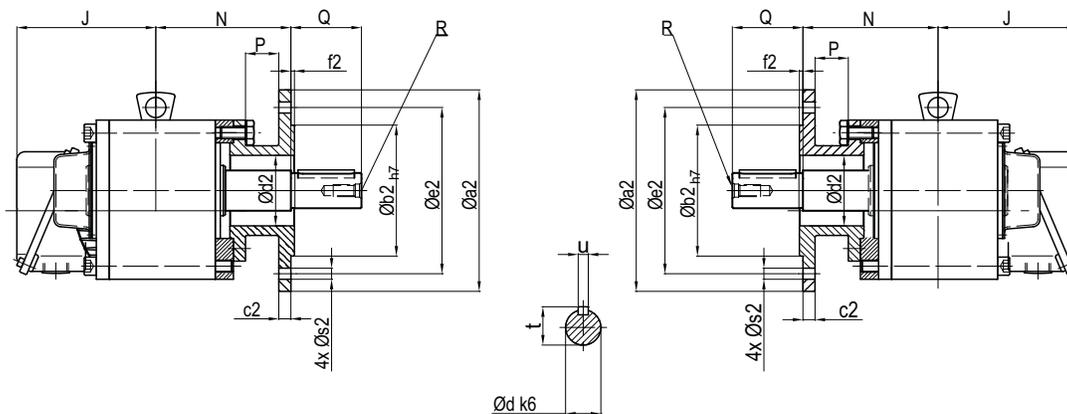
Model	HP	AB	ZA	Motor			Brakemotor		
				C	MP	Wt. (lbs.)	C	MP	Wt. (lbs.)
RNFM01-1120L/RYP1/Q1(-B)-5~60	1/8	5.04	-	10.55	4.69	15	11.93	4.88	19
RNFM02-1120L/RYP1/Q1(-B)-5~30	1/4	5.04	-	12.20	4.88	18	13.46	4.88	21
RNFM01-1220L/RYP1/Q1(-B)-40~60	1/8	5.04	-	11.46	4.69	20	12.83	4.88	23
RNFM02-1220L/RYP1/Q1(-B)-5~60	1/4	5.04	-	13.11	4.88	23	14.37	4.88	26
RNFM03-1220L/RYP1/Q1(-B)-5~30	1/3	5.04	-	13.90	4.88	25	15.16	4.88	29
RNFM05-1220L/RYP1/Q1(-B)-5~30	1/2	5.04	-	13.90	4.88	25	15.16	4.88	29
RNFM01-1230L/RYP1/Q1(-B)-80~240	1/8	5.04	-	11.50	4.69	20	12.87	4.88	23
RNFM02-1320L/RYP1/Q1(-B)-40~60	1/4	5.04	-	14.21	4.88	28	15.47	4.88	30
RNFM03-1320L/RYP1/Q1(-B)-40~60	1/3	5.04	-	15.00	4.88	30	16.26	4.88	34
RNFM05-1320L/RYP1/Q1(-B)-5~60	1/2	5.04	-	15.00	4.88	30	16.26	4.88	34
RNFM08-1320L/RYP1/Q1(-B)-5~30	3/4	5.43	3.41	16.65	6.10	34	18.35	6.10	41
RNFM1-1320L/RYP1/Q1(-B)-5~30	1	5.43	3.41	16.65	6.10	39	18.35	6.10	43
RNFM01-1330L/RYP1/Q1(-B)-80~240	1/8	5.04	-	12.36	4.69	24	13.74	4.88	26
RNFM02-1330L/RYP1/Q1(-B)-80~240	1/4	5.04	-	14.02	4.88	26	15.28	4.88	29
RNFM01-1340L/RYP1/Q1(-B)-300~1440	1/8	5.04	-	13.27	4.69	26	14.65	4.88	29
RNFM05-1420L/RYP1/Q1(-B)-40~60	1/2	5.04	-	16.22	4.88	40	17.48	4.88	42
RNFM08-1420L/RYP1/Q1(-B)-40~60	3/4	5.43	3.66	18.66	6.10	44	20.35	6.10	49
RNFM1-1420L/RYP1/Q1(-B)-5~60	1	5.43	3.66	18.66	6.10	46	20.35	6.10	51
RNFM1H-1420L/RYP1/Q1(-B)-5~30	1.5	5.63	3.86	19.84	6.57	53	22.28	6.57	62
RNFM2-1420L/RYP1/Q1(-B)-5~30	2	5.63	3.86	19.84	6.57	55	22.28	6.57	64
RNFM02-1430L/RYP1/Q1(-B)-80~240	1/4	5.04	-	15.12	4.88	40	16.38	4.88	42
RNFM03-1430L/RYP1/Q1(-B)-80~240	1/3	5.04	-	15.91	4.88	42	17.17	4.88	44
RNFM05-1430L/RYP1/Q1(-B)-80~240	1/2	5.04	-	15.91	4.88	42	17.17	4.88	44
RNFM01-1440L/RYP1/Q1(-B)-300~1440	1/8	5.04	-	14.92	4.69	39	16.30	4.88	42
RNFM02-1440L/RYP1/Q1(-B)-300~1440	1/4	5.04	-	16.57	4.88	41	17.83	4.88	44
RNFM1-1520L/RYP1/Q1(-B)-40~60	1	5.43	3.66	19.61	6.10	66	21.30	6.10	71
RNFM1H-1520L/RYP1/Q1(-B)-40~60	1.5	5.63	3.58	21.02	6.57	73	23.46	6.57	82
RNFM2-1520L/RYP1/Q1(-B)-5~60	2	5.63	3.58	21.02	6.57	77	23.46	6.57	86
RNFM3-1520L/RYP1/Q1(-B)-5~30	3	5.91	3.78	21.77	7.09	84	24.25	7.09	95
RNFM05-1530L/RYP1/Q1(-B)-80~240	1/2	5.04	-	17.20	4.88	63	18.46	4.88	65
RNFM08-1530L/RYP1/Q1(-B)-80~240	3/4	5.43	3.78	19.61	6.10	65	21.30	6.10	69
RNFM1-1530L/RYP1/Q1(-B)-80~240	1	5.43	3.78	19.61	6.10	67	21.30	6.10	74
RNFM1-1531L/RYP1/Q1(-B)-80	1	5.43	3.78	19.61	6.10	69	21.30	6.10	74
RNFM1H-1531L/RYP1/Q1(-B)-80	1.5	5.63	3.98	20.79	6.57	76	23.23	6.57	85
RNFM2-1531L/RYP1/Q1(-B)-40~80	2	5.63	3.98	20.79	6.57	78	23.23	6.57	87
RNFM3-1531L/RYP1/Q1(-B)-40~60	3	5.91	4.21	21.57	7.09	87	24.06	7.09	98
RNFM02-1540L/RYP1/Q1(-B)-300~1440	1/4	5.04	-	18.31	4.88	66	19.57	4.88	68
RNFM03-1540L/RYP1/Q1(-B)-300~1440	1/3	5.04	-	19.09	4.88	69	20.35	4.88	73
RNFM05-1540L/RYP1/Q1(-B)-300~1440	1/2	5.04	-	19.09	4.88	69	20.35	4.88	73

Hyponic®

Options

Metric Flange

Frame Size 1120 ~ 1531



All dimensions are in mm.

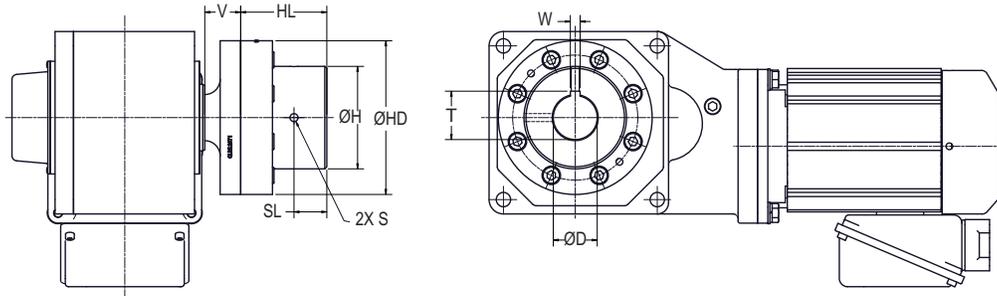
Size	HP	a2	b2	c2	d2	e2	f2	s2	J	N	d k6	P	Q	R	t	u
1120	1/8 1/4	120	80	8	38	100	3	6.6	128	81	20	22	40	M6x15	22.5	6
1220	1/8 1/4 1/3 1/2	120	80	8	55	100	3	6.6	128	87	25	22	50	M10x22	28	8
1320	1/4 1/3 1/2 3/4 1	160	110	10	60	130	3.5	9	128 128 128 138 138	111	30	30	60	M210x22	33	8
1420	1/2 3/4 1 1.5 2	200	130	12	70	165	3.5	11	128 138 138 143 143	134	35	33	70	M12x28	38	10
1520	1 1.5 2 3	250	180	15	85	215	4	13.5	138 143 143 150	167	40	51	80	M12x28	43	12
1521	3/5	250	180	15	85	215	4	13.5	150 166	167	40	51	80	M12x28	43	12
1522	5/7.5	250	180	15	85	215	4	13.5	166	167	40	51	80	M12x28	43	12
1230	1/8	120	80	8	55	100	3	6.6	128	91	25	22	50	M10x22	28	8
1330	1/8 1/4	160	110	10	60	130	3.5	9	128	111	30	30	60	M10x22	33	8
1430	1/4 1/3 1/2	200	130	12	70	165	3.5	11	128	134	35	33	70	M12x28	38	10
1530	1/2 3/4 1	250	180	15	85	215	4	13.5	128 138 138	169	40	49	80	M12x28	43	12
1531	1 1.5 2 3	250	180	15	85	215	4	13.5	138 143 143 150	169	40	49	80	M12x28	43	12

Hyponic®

Options

Flange Shaft

Frame Size 1420 ~ 1531



All dimensions are in inches.

Model	H	HD	HL	SL	V
1420Y					
1520Y	3.94	5.91	3.31	1.26	1.38
1530Y					
1531Y					

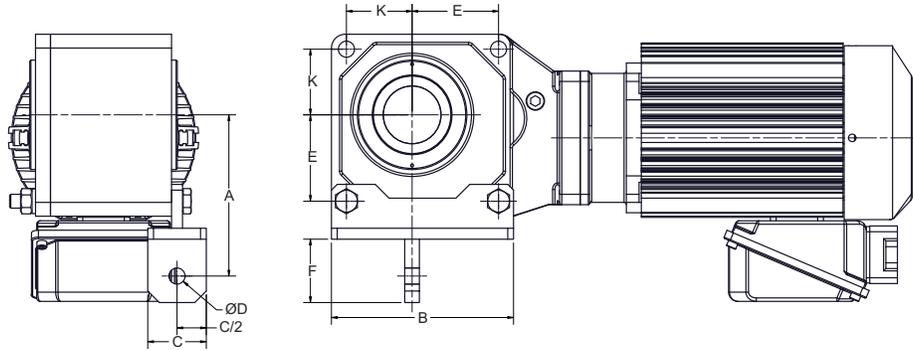
Shaft Diameter	D	S	T	W
1-3/8	1.375 0.0015 -0	1/4"-20UNC	1.518 +0.010 -0.000	0.3125 +0.002 -0.000
1-7/16	1.4375 0.0015 -0	5/16"-18UNC	1.605 +0.010 -0.000	0.3750 +0.002 -0.000
1-11/16	1.6875 0.0015 -0	5/16"-18UNC	1.859 +0.010 -0.000	0.3750 +0.002 -0.000
1-15/16	1.9375 0.0015 -0	3/8"-16UNC	2.160 +0.010 -0.000	0.5000 +0.002 -0.000

Hyponic®

Options

T-Type Torque Arm

Frame Size 1420 ~ 1531



All dimensions are in inches.

Model	A	B	C	ØD	E	F	G
1420Y	5.51	6.22	2.00	0.55	2.95	2.17	2.24
1520Y	5.67	7.00	2.00	0.55	3.15	2.28	2.76
1530Y	7.83	8.39	2.50	0.71	4.29	2.76	2.52
1531Y	7.83	8.39	2.50	0.71	4.29	2.76	2.52

Shrink Disk

A shrink disc provides a reliable, keyless, high-strength connection to the driven shaft with zero backlash. It is ideal for applications that typically require an interference between the shaft and hollow bore. Sumitomo strongly recommends a shrink disc for applications involving frequent starts per hour.

When ordering, use the **Special Specification Code R61** for right side (when viewed from the motor end), or **R62** for left side (when viewed from the motor end).

The user shaft should conform to JIS h6 tolerances. Shafts outside that range may not develop sufficient clamping force. The shaft surface finish should be between 63 to 125 micro-inches RMS.

Shrink Disc Availability:

Not available for 5:1 ratio, frame sizes 1120~1521.

Not available for 10:1 ratio, frame sizes 1630 to 1633.

Table 4.1 Shrink Disc Availability

Symbols: ● Standard ○ Option

Bore Size (in.)	Shaft Tolerance (JIS h6)	Frame Size													
		1120	1220	1230	1320	1330 1340	1420	1430	1440	1520 1521 1522	1530 1540	1531	1630 1632 1633 1634	1631 1640	
3/4	+0.0000 -0.0051	●	○												
13/16	+0.0000 -0.0051		○												
7/8	+0.0000 -0.0051		○	○	○										
15/16	+0.0000 -0.0051		○	○	○										
1	+0.0000 -0.0051		●	●	○										
1-1/8	+0.0000 -0.0051				○	○	○								
1-3/16	+0.0000 -0.0063				○	○	○	○	○						
1-1/4	+0.0000 -0.0063				●	●	○	○	○	○					
1-5/16	+0.0000 -0.0063						○	○	○	○		○			
1-3/8	+0.0000 -0.0063						●	●	●	○	○	○			
1-7/16	+0.0000 -0.0063							○		○	○	○			
1-1/2	+0.0000 -0.0063									●	●	●			
1-5/8	+0.0000 -0.0063									○	○	○			
1-11/16	+0.0000 -0.0063									○	○	○			
1-3/4	+0.0000 -0.0063									○	○	○	○		
1-7/8	+0.0000 -0.0063												○		
1-15/16	+0.0000 -0.0063												○		
2	+0.0000 -0.0075												●	●	
2-1/16	+0.0000 -0.0075												○	○	
2-1/8	+0.0000 -0.0075												○	○	
2-3/16	+0.0000 -0.0075												○	○	

Hyponic®

Options

Food Industry Option Packages

Four **food-grade packages** are available for use in machinery where there is incidental food contact.

When ordering, choose the **Special Specification Code (SSC)** that meets your requirements to obtain the features listed below.

Table 4.2 Available Food Industry Option Packages

Feature	SSC-YBA0 High Pressure Washdown	SSC-YBA1 Food-Grade	SSC-YBA2 Food-Grade and Washdown IP55	SSC-YBA3 Food-Grade and High Pressure Washdown
DuPont Alesta Silver Freeze AM Antimicrobial powder-coating	X	X	X	X
Harsh Duty FKM Antimicrobial Seal	X		X	X
Stainless Steel Nameplate	X			X
Stainless Steel or Plated Hardware	X			X
Stainless Steel Shaft and Key	X			X
NSF H1 Synthetic Lubricant		X	X	X
Less Lifting Lug		X	X	X

Hyponic®

Options

Stainless Steel Hollow Shaft - ratings with stainless steel hollow shaft are the same as those listed in this catalog for standard models

Stainless Steel Solid Shaft - maximum torque ratings with standard solid shaft diameters are the same as those listed in this catalog for standard models. Consult the factory when ordering smaller than standard diameters, or if there will be overhung load.

Stainless Output Shaft Availability:

Not available for 5:1 ratio, frame sizes 1120~1521.

Not available for 10:1 ratio, frame sizes 1630 to 1633.

Bottling/Baking



Steel hypoid gear technology, maintenance-free grease lubrication and a compact modular housing makes the Hyponic® an efficient performer in the food industry.



A 15-hp Beier mechanical variable speed drive with electric remote control provides an adjustable, steady speed range for this 350-ft. oven band conveyor.

Water Treatment



Each of these Sumitomo Paramax® speed reducers helps pump up to 13 million gallons a day at this state-of-the-art wastewater treatment facility in the City of Clearwater, Florida.

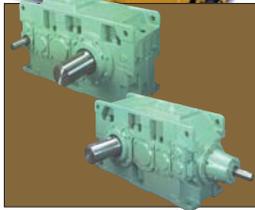


Cyclo® mixer drives are a key component of this award-winning water treatment facility in Hillsborough County, Florida.

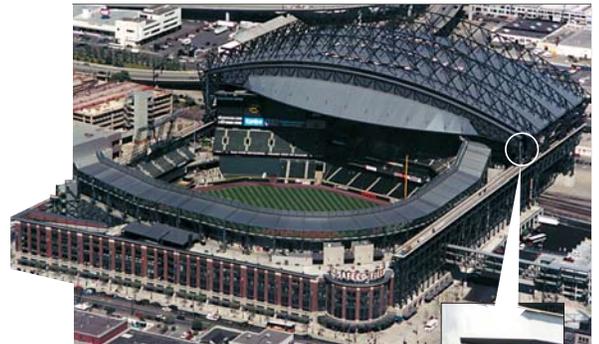
Material Handling



Sumitomo Paramax® reducers provide quiet, reliable operation for both the hoist and trolley drive systems in this 35-ton capacity DC Trolley Hoist used for heavy-duty coil handling service.



Custom Designs



In less than 20 minutes, 96 Sumitomo Cyclo® Bevel Buddybox gearmotors help retract the 13,000-ton roof on Seattle's new Safeco Field.



The Sumitomo gearmotors, on eight travel truck assemblies, turn 128 36" wheels.

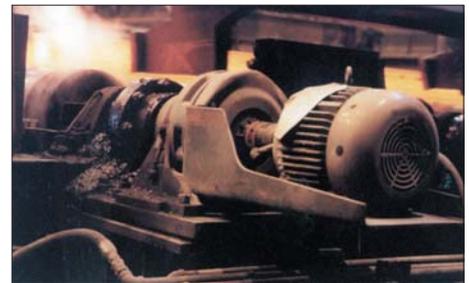
Wood Products

Sumitomo Cyclo® drives are an integral part of this manufacturing plant which produces 150,000 board feet of unfinished strip and plank hardwood flooring each week.



Once flooring is side-matched, it is inspected for defects. This conveyor, driven by Sumitomo Cyclo® drives, carries defective material to the hammer mill.

Steel



After molten steel is formed in the five-strand continuous caster at this steel mill, it is conveyed by Sumitomo Cyclo® drives on the auto-torch conveyors where the steel is cut into billets.

WORLDWIDE LOCATIONS

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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
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South America

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SM-Cyclo de Argentina SA
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Catalog 12.001.50.006; Supersedes Catalog 12.001.50.005
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