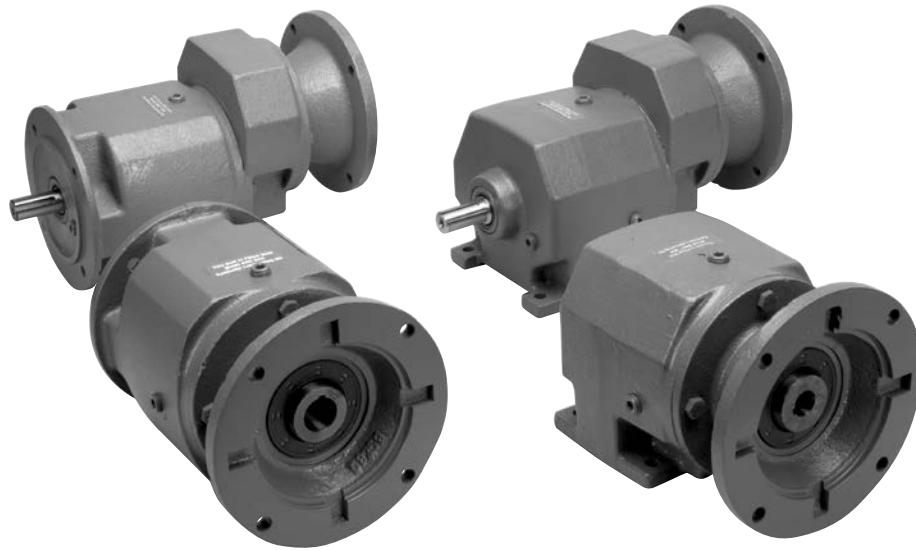




Section Contents

Product Reference Guide	150
Numbering System / How to Order	151
Interchange and Selection Procedure	152-153
Mountings	155
Lubrication	156
Overhung Load / Weights	157-158
Output RPM Selection Tables	159-175
Reducer Ratings	176-185
Dimensions	186-193
Washdown Duty / Parts List	194-195

800 Series Product Selection / Reference Guide

800 Series Inline Helical Gear Drives

F800B Series In-Line Helical Gear Flanged Input



**Double Reduction
Foot Mounted, Flange Input**
Selection Pages 159-175
Dimensions-Page 186



**Triple Reduction
Foot Mounted, Flange Input**
Selection Pages 159-175
Dimensions-Page 187



**Double Reduction
Output Flange Mount, Flange Input**
Selection Pages 159-175
Dimensions-Page 188



**Triple Reduction
Output Flange Mount, Flange Input**
Selection Pages 159-175
Dimensions-Page 189

800B Series In-Line Helical Gear Non-Flanged Input



**Double Reduction
Foot Mounted**
Selection Pages 176-185
Dimensions-Page 190



**Triple Reduction
Foot Mounted**
Selection Pages 176-185
Dimensions-Page 191



**Double Reduction
Output Flange Mount**
Selection Pages 176-185
Dimensions-Page 192



**Triple Reduction
Output Flange Mount**
Selection Pages 176-185
Dimensions-Page 193

800 Series In-Line Helical Gear Drives

Numbering System / How to Order

800 Series In-Line Helical Gear Drives

Clutch/Brake

Motor

*BK F 8 3 2 B F - 45 K T - B5 - S - M1 - CMBA56U-6 - HUTF5/8-IDB - 3

Series

800B Series

Frame Size

3
4
6
7

Base/Mounting Attachment

Blank—Foot Mounted
F—Output Flange

Input Oil Seal

Blank—Standard Seal
T—Two Standard Seals

Nominal Gear Ratio (Rounded Value)

Refer to Selection Tables For Available Ratios

Input Shaft Style

Blank—Solid Projecting Input Shaft
F—Quill Style C-Face Motor Flange

Reduction Type

2—Double
3—Triple

Reducer Material/Paint

Blank—Cast Iron, Std Gray Paint
BK—Cast Iron, White BostKleen Paint
SBK—Cast Iron, Stainless BostKleen Paint

Lubrication

Blank—No Lubrication
K—Klubersynth UH1 6-460
W—Klubersynth GH6
S—Mobil SHC 634
X—Mobil 600W
(Sizes 3 and 4 are non-vented)

NEMA Motor Mounting

BORE CODE	NEMA MOUNTING	INPUT BORE	KEYWAY
B5	56C	.625	3/16 x 3/32
B7	140TC/180C	.875	3/16 x 3/32
B9	180TC/210C	1.125	1/4 x 1/8
B11	210TC/250UC	1.375	5/16 x 5/32

Blank Solid Input Shaft (No Flange)

Output Shaft

Blank—Standard Carbon Steel
S—Stainless Material

Mounting Positions

For Factory Prelubrication Specify Mounting Position

Blank—No Lubrication
M1-M9—Lubrication per Mounting Positions in Catalog

Common C-Face Brakes Installed

115/230 VAC 60hz	Ft-Lb	Bore Code
CMBA56R-3	3	B5
CMBA56R-6	6	B5
CMBA140TR-6	6	B7

208-230/460 VAC 60hz	Ft-Lb	Bore Code
CMBA56U-3	3	B5
CMBA56U-6	6	B5
CMBA140TU-6	6	B7

Other sizes available. See catalog.

Motor Conduit Box Orientation

(When looking at fan end of motor)

0—12 O'clock
3—3 O'clock
6—6 O'clock
9—9 O'clock

Common C-Face Motors Installed

HP Rating	Bore Code	AC Voltage	
		115/208-230-1-60	208-230/460-3-60
1/4 HP	B5	DRTFB	DUTFB
1/3 HP	B5	ERTFB	EUTFB
1/2 HP	B5	FRTFB	FUTFB
	B5		FUT-SS
	B5		FUTF-IDB
3/4 HP	B5	GRTFB	GUTFB
	B5		GUT-SS
	B5		GUTF-IDB
1 HP	B5	HRTF-5/8B	HUTF5/8B
	B5		HUT5/8-SS
	B5		HUTF5/8-IDB
	B7		HUTFB
	B7		HUT-SS
	B7		HUTF-IDB
1.5 HP	B7		JUTFB
	B7		JUTF-SS
	B7		JUTF-IDB
2 HP	B5		KUTF5/8B
	B7		KUTFB
	B7		KUTF-SS
	B7		KUTF-IDB
3 HP	B9		LUTFB
	B9		LUTF-SS
	B9		LUTF-IDB
5 HP	B9		MUTFB

Other motors available, please see catalog pages 333 to 342.

T—Totally enclosed non-ventilated
TF—Totally enclosed fan cooled
SS—Stainless
IDB—Inverter Duty (10:1 turn down constant torque)
B5—56C
B7—140TC
B9—180TC

*Example:

Above listed configuration is an example part number using this numbering system.

How to Order

Example:

Required flange input NEMA 56C, and flanged output, 1/3 HP, Class I, 45:1 ratio, lubricated, and standard mounting position.

Order:

1 pc F832BF-45K-B5

G

800 Series In-Line Helical Gear Drives

Interchange Guide



**Foot Mounted
NEMA C-Face
F800B**



**Foot Mounted
800B**



**Output Flange Mounted
NEMA C-Face
F800BF**



**Output Flange Mounted
800BF**

Boston Gear 800 Series In-Line Helical Gear Drives are designed to be functionally interchangeable with these and many other manufacturer's drives. This chart is intended to be a guide only. Please see appropriate manufacturer's catalogs for exact details regarding ratings and dimensions.

Manufacturers	Size	Foot Mounted NEMA C-Face F800B	Foot Mounted 800B	Output Flange Mounted NEMA C-Face F800BF	Output Flange Mounted 800BF
Boston	830	F832B/F833B	832B/833B	F832BF/F833BF	832BF/833BF
SEW Eurodrive	32	R32LP	Not Available	RF32LP	Not Available
Dodge (Quantis)	NA	Not Available	Not Available	Not Available	Not Available
Falk	03	03UCBN2(3)-A	03UCBN2(3)-N	03UCFN2(3)-A	03UCFN2(3)-N
David Brown	M03	M032(3)BAN	M032(3)BRN	M032(3)FAN	M032(3)FRN
Flender	E20*	E20 (M, G, OR A)*	E20A*	EF20 (M, G OR A)*	EF20A*
Sumitomo	3090	H (C or M) 3090/95/97	H3090/95/97	HF(C or M) 3090/95/97	HF3090/95/97
Stober	C002	C002N-MR	C002N-AW	C002F-MR	C002F-AW
Nord	02	SK02	SK02-W	SK02F	SK02-W
Boston	840	F842B/F843B	842B/843B	F842BF/F843BF	842BF/843BF
SEW Eurodrive	40	R40LP	R40	RF40LP	RF40
Dodge (Quantis)	38	HB382(3)CN	Not Available	HB382(3)CN	Not Available
Falk	04	04UCBN2(3)-A	04UCBN2(3)-N	04UCFN2(3)-A	04UCFN2(3)-N
David Brown	M04	M042(3)BAN	M042(3)BRN	M042(3)FAN	M042(3)FRN
Flender	30	E30/Z30/D30-(M, G, or A)	E30/Z30/D30	EF30/ZF30/DF30 (M, G or A)	EF30/ZF30/DF30
Sumitomo	3100	H(C or M) 3100/05	H3100/05	HF(C or M) 3100/05	HF3100/05
Stober	C100	C102/3N-MR	C102/3N-AW	C102/3F-MR	C102/3F-AW
Nord	12	SK12(3)	SK12(3)-W	SK12(3)F	SK12(3)F-W
Boston	860	F862B/F863B	862B/863B	F862BF/F863BF	862BF/863BF
SEW Eurodrive	60	R60LP/R63LP	R60/R63	RF60LP/RF63LP	RF60/RF63
Dodge (Quantis)	48	HB482(3)CN	Not Available	HB482(3)CN	Not Available
Falk	06	06UCBN2(3)-A	06UCBN2(3)-N	06UCFN2(3)-A	06UCFN2(3)-N
David Brown	M06	M062(3)BAN	M062(3)BRN	M062(3)FAN	M062(3)FRN
Flender	40	E40/Z40/D40-(M, G or A)	E40/Z40/D40	EF40/ZF40/DF40-(M, G or A)	EF40/ZF40/DF40
Sumitomo	3110	H(C or M) 3110/15	H3110/15	HF(C or M) 3110/15	HF3110/15
Stober	C200	C202/3N-MR	C202/3N-AW	C202/3F-MR	C202/3F-AW
Nord	22	SK22	SK22(3)-W	SK22(3)F	SK22(3)F-W
Boston	870	F872B/F873B	872B/873B	F872BF/F873BF	872BF/873BF
SEW Eurodrive	70	R70LP/R73LP	R70/R73	RF70LP/RF73LP	RF70/RF73
Dodge (Quantis)	68	HB682(3)CN	Not Available	HB682(3)CN	Not Available
Falk	07	07UCBN2(3)-A	07UCBN2(3)-N	07UCFN2(3)-A	07UCFN2(3)-N
David Brown	M07	M072(3)BAN	M072(3)BRN	M072(3)FAN	M072(3)FRN
Flender	60	E60/Z60/D60 - (M,D or A)	E60/Z60/D60	EF60/ZF60/DF60 (M, D or A)	EF60/ZF60/DF60
Sumitomo	3140	H(C or M) 3140/45	H3140/45	HF(C or M) 3140/45	HF3140/45
Stober	C400	C402/3N-MR	C402/3N-AW	C402/3F-MR	C402/3F-AW
Nord	32	SK32(3)	SK32(3)-W	SK32(3)F	SK32(3)F-W

* Single reduction models only.

If you require assistance with an interchange, please contact our customer service department at 1-888-999-9860.

Motorized Gear Drives

1. Determine application service factor from page 154, or from Application Classifications on pages 348-349.
2. Determine output speed required.
3. Determine HP or output torque requirement.
4. Select a speed reducer size based on output speed and horsepower requirement for given service class.
5. Check overhung load calculation.

Example

Select an In-line motorized helical gear drive and motor to drive a uniformly loaded line conveyor 24 hours/day requiring 2 HP at 35 RPM.

POWER REQUIREMENT

230/460 volt
3 phase
60 hertz

1. Select Service Factor Class from page 154.
Service Class = II
2. Output RPM = 35
3. 2 HP
4. Select a 2 HP drive that will satisfy minimum of II service class.
5. O.H.L. = 1720 lbs. page 157
6. Order: 1 - F872B-50K-B7 (F01078)
1 - KUTF Motor Ref - page 339 for specific motor manufacturer.

Both a double and triple reduction gear drive is available. The double reduction will have an economic advantage. The triple reduction should be specified when relative rotation is of concern.

Overhung Load

If the output shaft of a gear drive is connected to the driven machine by other than a flexible coupling, an overhung load is imposed on the shaft. This load may be calculated as follows:

$$OHL = \frac{2TK}{D}$$

OHL = Overhung Load (LB.)
T = Shaft Torque (LB.-IN.)
D = Pitch Diameter of Sprocket, Pinion or Pulley (IN.)
K = Load Connection Factor

Load Connection Factor (K)

Sprocket or Timing Belt	1.00
Pinion and Gear Drive	1.25
Pulley and V-Belt Drive.	1.50
Pulley and Flat Belt Drive.	2.50

An overhung load greater than permissible load value may be reduced to an acceptable value by the use of a sprocket, pinion or pulley of a larger PD. Relocation of the load closer to the center of gear drive will also increase OHL capacity.

Permissible Overhung Loads and Output Shaft Thrust Loads are listed for each reducer in the Tables on Page 157.

In-Line Helical Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P		Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
35	50	5216	3.16	872B-50K (F00436)	872BF-50K (F00469)	3	4900	I	F872B-50K-B9 (F01079)	F872BF-50K-B9 (F01125)
						2 1.5	3268 2552	II III	F872B-50K-B7 (F01078)	F872BF-50K-B7 (F01124)
		5290	3.02	873B-50K (F00489)	873BF-50K (F00507)	3	5256	I	F873B-50K-B9 (F01154)	F873BF-50K-B9 (F001182)
						2	3504	II	F873B-50K-B7 (F01153)	F873BF-50K-B7 (F01181)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.
** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service Class III (S.F. = 2.00)
Overhung Load Ratings refer to Page 157.
Indicates Triple Reduction

800 Series In-Line Helical Gear Drives

To properly select a gear drive, the following application information should be known.

1. Service Factor or AGMA Service class.
2. Output Horsepower or Torque
3. Output RPM or Ratio
(Maximum Input Speed 4500 RPM)

Consult Engineering for mounting positions: M2, M3, M4, M6, M7, and M9

Non-Motorized Gear Drives

1. Determine application service factor from the service factor chart on this page, or from Application Classifications on pages 348-349.
2. Determine design Horsepower or Torque.
- Design HP = Application HP x S.F.
- Design Torque = Application Torque x S.F.
3. Select a Gear drive that satisfies output RPM, service class and/or output torque requirement.
Reference rating tables pages 176-185.
4. Overhung shaft load should be checked when belt or chain drives are used, to prevent premature shaft or bearing failure. Reference page 157 for calculations.

Example

Select an In-line 800 Series Gear Drive for a continuous duty concrete mixer requiring 700 lb-in. of torque at approx. 1000 RPM, to operate up to 8 hrs/day. The Gear Drive will be driven at 1450 input RPM.

1. Application Service Factor = 1.25
2. Design Torque = $700 \times 1.25 = 875 \text{ LB-IN.}$
3. Select at speed and torque level of 875 LB-IN. or greater.
4. Order 862B1.5K.

NOTE: The use of an auxiliary drive between the gear drive and the driven machine reduces the torque required at the output shaft in direct proportion to the auxiliary drive ratio.

A 3:1 chain ratio would reduce the torque requirement at the output shaft of the gear drive to one-third, resulting in a smaller unit size selection.

SERVICE FACTOR CHART

AGMA CLASS OF SERVICE	SERVICE FACTOR	OPERATING CONDITIONS
I	1.00	Moderate Shock-not more than 15 minutes in 2 hours Uniform Load-not more than 10 hours per day.
II	1.25	Moderate Shock-not more than 10 hours per day. Uniform Load-more than 10 hours per day.
	1.50	Heavy Shock-not more than 15 minutes in 2 hours. Moderate Shock-more than 10 hours per day.
III	1.75	Heavy Shock-not more than 10 hours per day.
	2.00	Heavy Shock-more than 10 hours per day."

For complete AGMA Service Factors and Load Classifications, see Engineering Pages 348-349.

800 Series In-Line Helical Ratings

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM

Service Factor 1.0

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832B/BF1.5K	1170	288	5.80	970	293	4.82	773	293	3.85
842B/BF1.5K	1170	479	9.08	970	509	8.00	773	549	6.89
862B/BF1.5K	1170	830	16.20	970	884	14.30	773	950	12.30
872B/BF1.5K	1170	1094	21.20	970	1090	17.50	773	1090	14.00

800 Series In-Line Helical Mounting Positions

Foot Mounted Horizontal

STANDARD

M1

M2

M3

M4

Foot Mounted Vertical

M5

M6

Output Flange Mounted

STANDARD

M7

M8

M9

Positions M1 & M8 are standard and will be supplied with oil for this position unless otherwise specified.

CAUTION - Mounting of gear drives in overhead positions may be hazardous. Use of external guides or supports is strongly recommended for overhead mounting.

Avoiding those positions where the high speed oil seal is immersed in oil will provide greater security against high speed input seal wear.

Note: The above drawings will serve to represent both flanged and non-flanged styles

800 Series In-Line Helical Gear Drives

Lubricants

Lubricant and Quantity

Klubersynth Synthetic UH1 6-460 is recommended for the 800 Series gear drives and, at all times, the lubricant must remain free from contamination. Normal operating temperatures range between 150°F - 170°F. During the initial break-in of the gear drive, higher than normal operating temperatures may result.

All gear drives are supplied filled with UH1 6-460 synthetic oil and with the quantity listed below for standard mounting position M1 or M8 or to mounting specified at time of order.

- Sizes 832/833B and 842/843B do not require a vent plug.
- Sizes 862/863B and 872/873B will require an oil change after 20,000 hours of operation. More frequent changes may be required when operating in high temperature ranges or unusually contaminated environments.
- Satisfactory performance may be obtained in some applications with non-synthetic oils and will require more frequent changes.

Recommended Lubricant	Ambient (Room) Temperature	ISO Viscosity Grade No.	Viscosity Range SUS @100°F	Boston Gear Item Code
				Quart
Klubersynth UH1 6-460	-20° to 225°F (-29° to 107°C)	460	1950/2500	65159
Mobile SHC634	-30° to 225°F (-34° to 107°C)	320 / 460	1950/2500	51493

OIL CAPACITIES (PINTS)

UNIT	MOUNTING POSITIONS								
	M1	M2	M3	M4	M5	M6	M7	M8	M9
SIZE	Foot Mounted						Output Flange Mounted		
832B	1.3	1.3	2.3	1.7	2.1	2.1	1.3	2.0	2.2
833B	2.8	1.7	3.0	2.6	3.6	3.2	1.7	3.0	3.3
842B	1.8	2.0	2.6	2.4	3.0	3.0	2.0	3.4	3.4
843B	3.4	3.0	3.4	3.4	4.4	3.8	3.4	4.8	4.8
862B	4.0	4.6	6.0	7.0	8.0	8.0	4.6	8.6	9.4
863B	9.0	5.8	8.0	8.8	11.0	11.0	5.8	11.0	11.0
872B	8.0	8.6	12.0	12.0	14.4	14.4	8.6	16.4	16.0
873B	16.0	11.0	14.0	14.0	19.0	19.0	11.0	19.0	19.0

Refer to mounting positions on page 155.

800 Series In-Line Helical Gear Drives

Overhung Loads

OVERHUNG LOADS (LBS) & AXIAL THRUST (LBS) CAPACITIES ON OUTPUT SHAFT

OUTPUT RPM	832 / 833 OHL	842 / 843 OHL	862 / 863 OHL	872 / 873 OHL
1000	270	425	715	950
500	300	455	805	1065
350	340	465	830	1065
250	360	485	880	1065
200	385	505	900	1065
150	385	525	945	1090
100	385	620	1010	1275
50	385	770	1360	1720
25 & under	385	770	1600	2090

THRUST	390	635	1200	1580
--------	-----	-----	------	------

Overhung loads are calculated at the center of the shaft extension and with no thrust load. For combined loading consult factory.

OVERHUNG LOADS (LBS) ON INPUT SHAFT AT 1750 RPM

SIZE	832	833	842	843	862	863	872	873
OHL	344	390	314	373	310	315	402	371

Overhung loads are calculated at the center of the shaft extension and with no thrust load.

G

800 Series In-Line Helical Gear Drives

Weights

APPROXIMATE WEIGHTS (LBS)

NON-FLANGE		FLANGE				
SIZE	LBS	SIZE	NEMA MOUNTING			
			56C B5	140TC B7	180TC B9	210TC B11
832B	19	F832B	22	22	25	—
832BF	21	F832BF	24	24	27	—
842B	25	F842B	29	29	32	—
842BF	29	F842BF	33	33	36	—
862B	48	F862B	49	49	63	63
862BF	50	F862BF	51	51	66	66
872B	86	F872B	92	92	99	99
872BF	92	F872BF	99	99	105	105
833B	26	F833B	30	—	—	—
833BF	29	F833BF	32	—	—	—
843B	33	F843B	37	—	—	—
843BF	37	F843BF	41	—	—	—
863B	57	F863B	61	61	—	—
863BF	59	F863BF	63	63	—	—
873B	106	F873B	107	107	121	—
873BF	113	F873BF	114	114	128	—

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
1170	1.5	288	5.80	832B-1.5K (F00103)	832BF-1.5K-M8 (F00136)	5 3	251 149	I II	F832B-1.5K-B9-M1 (F00591)	F832BF-1.5K-B9-M8 (F00653)
						2	98	III	F832B-1.5K-B7-M1 (F00590)	F832BF-1.5K-B7-M8 (F00652)
		479	9.08	842B-1.5K (F00205)	842BF-1.5K-M8 (F00238)	5 3	248 146	II III	F842B-1.5K-B9-M1 (F00728)	F842BF-1.5K-B9-M8 (F00787)
		830	16.20	862B-1.5K (F00307)	862BF-1.5K-M8 (F00341)	10 7.5	500 380	II III	F862B-1.5K-B11-M1 (F00871)	F862BF-1.5K-B11-M8 (F00935)
922	1.9	325	4.77	832B-1.9K (F00104)	832BF-1.9K-M8 (F00137)	3	200	II	F832B-1.9K-B9-M1 (F00593)	F832BF-1.9K-B9-M8 (F00655)
						2	133	III	F832B-1.9K-B7-M1 (F00592)	F832BF-1.9K-B7-M8 (F00654)
		643	8.69	842B-1.9K (F00206)	842BF-1.9K-M8 (F00239)	5 3	343 209	II III	F842B-1.9K-B9-M1 (F00729)	F842BF-1.9K-B9-M8 (F00788)
		1100	15.40	862B-1.9K (F00308)	862BF-1.9K-M8 (F00342)	10 7.5	710 535	II III	F862B-1.9K-B11-M1 (F00872)	F862BF-1.9K-B11-M8 (F00936)
760	2.3	333	4.29	832B-2.3K (F00111)	832BF-2.3K-M8 (F00144)	3	234	I	F832B-2.3K-B9-M1 (F00604)	F832BF-2.3K-B9-M8 (F00664)
						2	156	III	F832B-2.3K-B7-M1 (F00603)	F832BF-2.3K-B7-M8 (F00663)
		695	8.52	842B-2.3K (F00213)	842BF-2.3K-M8 (F00246)	5 3	378 226	II III	F842B-2.3K-B9-M1 (F00742)	F842BF-2.3K-B9-M8 (F00801)
		1217	15.00	862B-2.3K (F00315)	862BF-2.3K-M8 (F00349)	10 7.5	800 600	II III	F862B-2.3K-B11-M1 (F00884)	F862BF-2.3K-B11-M8 (F00946)
673 (CONT.)	2.6	350	3.98	832B-2.6K-M1 (F00112)	832BF-2.6K-M8 (F00145)	3	257	I	F832B-2.6K-B9-M1 (F00606)	F832BF-2.6K-B9-M8 (F00666)
						2	171	III	F832B-2.6K-B7-M1 (F00605)	F832BF-2.6K-B7-M8 (F00665)
		715	7.95	842B-2.6K-M1 (F00214)	842BF-2.6K-M8 (F00247)	5 3	416 250	II III	F842B-2.6K-B9-M1 (F00743)	F842BF-2.6K-B9-M8 (F00802)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

G

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
673 (CONT.)	2.6	1320	14.50	862B-2.6K-M1 (F00316)	862BF-2.6K-M8 (F00350)	10 7.5	900 676	II III	F862B-2.6K-B11-M1 (F00885)	F862BF-2.6K-B11-M8 (F00947)
		1800	21.20	872B-2.6K-M1 (F00420)	872BF-2.6K-M8 (F00453)	10	840	III	F872B-2.6K-B11-M1 (F01056)	F872BF-2.6K-B11-M8 (F01102)
605	2.9	533	5.18	832B-2.9K-M1 (F00113)	832BF-2.9K-M8 (F00146)	5 3	508 305	I III	F832B-2.9K-B9-M1 (F00607)	F832BF-2.9K-B9-M8 (F00667)
		840	8.34	842B-2.9K-M1 (F00215)	842BF-2.9K-M8 (F00248)	5 3	500 300	II III	F842B-2.9K-B9-M1 (F00744)	F842BF-2.9K-B9-M8 (F00803)
		1560	15.90	862B-2.9K-M1 (F00317)	862BF-2.9K-M8 (F00351)	10 7.5	972 730	II III	F862B-2.9K-B11-M1 (F00886)	F862BF-2.9K-B11-M8 (F00948)
		2135	21.20	872B-2.9K-M1 (F00421)	872BF-2.9K-M8 (F00454)	10	998	III	F872B-2.9K-B11-M1 (F01057)	F872BF-2.9K-B11-M8 (F01103)
530	3.3	370	3.24	832B-3.3K-M1 (F00118)	832BF-3.3K-M8 (F00151)	3	338	I	F832B-3.3K-B9-M1 (F00615)	F832BF-3.3K-B9-M8 (F00673)
						2 1.5	226 169	II III	F832B-3.3K-B7-M1 (F00613)	F832BF-3.3K-B7-M8 (F00672)
		775	7.03	842B-3.3K-M1 (F00220)	842BF-3.3K-M8 (F00253)	5 3	510 306	I III	F842B-3.3K-B9-M1 (F00757)	F842BF-3.3K-B9-M8 (F00812)
		1550	13.40	862B-3.3K-M1 (F00323)	862BF-3.3K-M8 (F00356)	10 7.5	1145 858	I II	F862B-3.3K-B11-M1 (F00898)	F862BF-3.3K-B11-M8 (F00957)
						5	572	III	F862B-3.3K-B9-M1 (F00899)	F862BF-3.3K-B9-M8 (F00958)
		2398	21.20	872B-3.3K-M1 (F00426)	872BF-3.3K-M8 (F00459)	10	1120	III	F872B-3.3K-B11-M1 (F01064)	F872BF-3.3K-B11-M8 (F01110)
500	3.5	376	3.11	832B-3.5K-M1 (F00119)	832BF-3.5K-M8 (F00152)	3	358	I	F832B-3.5K-B9-M1 (F00617)	F832BF-3.5K-B9-M8 (F00675)
						2 1.5	241 180	II III	F832B-3.5K-B7-M1 (F00616)	F832BF-3.5K-B7-M8 (F00674)
		858	6.46	842B-3.5K-M1 (F00221)	842BF-3.5K-M8 (F00254)	5 3	600 358	I III	F842B-3.5K-B9-M1 (F00758)	F842BF-3.5K-B9-M8 (F00813)
		1665	12.70	862B-3.5K-M1 (F00324)	862BF-3.5K-M8 (F00357)	10 7.5	1298 974	I II	F862B-3.5K-B11-M1 (F00900)	F862BF-3.5K-B11-M8 (F00959)
						5	680	III	F862B-3.5K-B9-M1 (F00901)	F862BF-3.5K-B9-M8 (F00960)
		2704	21.00	872B-3.5K-M1 (F00427)	872BF-3.5K-M8 (F00460)	10	1275	III	F872B-3.5K-B11-M1 (F01065)	F872BF-3.5K-B11-M8 (F01111)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
448	3.9	552	3.97	832B-3.9K-M1 (F00120)	832BF-3.9K-M8 (F00153)	3	412	I	F832B-3.9K-B9-M1 (F00619)	F832BF-3.9K-B9-M8 (F00677)
						2	275	III	F832B-3.9K-B7-M1 (F00618)	F832BF-3.9K-B7-M8 (F00676)
		959	6.96	842B-3.9K-M1 (F00222)	842BF-3.9K-M8 (F00255)	5 3	700 420	I III	F842B-3.9K-B9-M1 (F00759)	F842BF-3.9K-B9-M8 (F00814)
						1835	13.30	862B-3.9K-M1 (F00325)	862BF-3.9K-M8 (F00358)	10 7.5
		5	683	III	F862B-3.9K-B9-M1 (F00903)					F862BF-3.9K-B9-M8 (F00962)
		2902	21.20	872B-3.9K-M1 (F00428)	872BF-3.9K-M8 (F00461)	10	1355	III	F872B-3.9K-B11-M1 (F01066)	F872BF-3.9K-B11-M8 (F01112)
400	4.4	572	3.54	832B-4.4K-M1 (F00123)	832BF-4.4K-M8 (F00156)	3	480	I	F832B-4.4K-B9-M1 (F00625)	F832BF-4.4K-B9-M8 (F00681)
						2 1.5	320 240	II III	F832B-4.4K-B7-M1 (F00624)	F832BF-4.4K-B7-M8 (F00680)
		1000	6.59	842B-4.4K-M1 (F00225)	842BF-4.4K-M8 (F00258)	5 3	773 464	I III	F842B-4.4K-B9-M1 (F00764)	F842BF-4.4K-B9-M8 (F00817)
						1933	12.50	862B-4.4K-M1 (F00328)	862BF-4.4K-M8 (F00361)	10 7.5
		5	766	III	F862B-4.4K-B9-M1 (F00910)					F862BF-4.4K-B9-M8 (F00968)
		3265	21.20	872B-4.4K-M1 (F00431)	872BF-4.4K-M8 (F00464)	10	1524	III	F872B-4.4K-B11-M1 (F01071)	F872BF-4.4K-B11-M8 (F01117)
340	5.1	592	3.31	832B-5.1K-M1 (F00126)	832BF-5.1K-M8 (F00159)	3	531	I	F832B-5.1K-B9-M1 (F00634)	F832BF-5.1K-B9-M8 (F00686)
						2 1.5	354 266	II III	F832B-5.1K-B7-M1 (F00631)	F832BF-5.1K-B7-M8 (F00684)
		1065	5.96	842B-5.1K-M1 (F00228)	842BF-5.1K-M8 (F00261)	5 3	840 504	I III	F842B-5.1K-B9-M1 (F00769)	F842BF-5.1K-B9-M8 (F00820)
						2042	11.60	862B-5.1K-M1 (F00331)	862BF-5.1K-M8 (F00365)	10 7.5
		5	870	III	F862B-5.1K-B9-M1 (F00916)					F862BF-5.1K-B9-M8 (F00974)
		3698	21.20	872B-5.1K-M1 (F00434)	872BF-5.1K-M8 (F00467)	10	1726	III	F872B-5.1K-B11-M1 (F01076)	F872BF-5.1K-B11-M8 (F01122)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

G

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
307	5.7	563	2.91	832B-5.7K-M1 (F00127)	832BF-5.7K-M8 (F00160)	2 1.5	383 287	I II	F832B-5.7K-B7-M1 (F00636)	F832BF-5.7K-B7-M8 (F00688)
						1	191	III	F832B-5.7K-B5-M1 (F00635)	F832BF-5.7K-B5-M8 (F00687)
		1110	5.64	842B-5.7K-M1 (F00229)	842BF-5.7K-M8 (F00262)	5 3	925 555	I II	F842B-5.7K-B9-M1 (F00771)	F842BF-5.7K-B9-M8 (F00822)
						2	370	III	F842B-5.7K-B7-M1 (F00770)	F842BF-5.7K-B7-M8 (F00821)
		2140	10.80	862B-5.7K-M1 (F00332)	862BF-5.7K-M8 (F00366)	10 7.5	1891 1464	I II	F862B-5.7K-B11-M1 (F00918)	F862BF-5.7K-B11-M8 (F00975)
						5	976	III	F862B-5.7K-B9-M1 (F00919)	F862BF-5.7K-B9-M8 (F00976)
4160	21.20	872B-5.7K-M1 (F00435)	872BF-5.7K-M8 (F00468)	10	1942	III	F872B-5.7K-B11-M1 (F01077)	F872BF-5.7K-B11-M8 (F01123)		
273	6.4	588	2.52	832B-6.4K-M1 (F00130)	832BF-6.4K-M8 (F00163)	2 1.5	462 346	I II	F832B-6.4K-B7-M1 (F00642)	F832BF-6.4K-B7-M8 (F00692)
						1	230	III	F832B-6.4K-B5-M1 (F00641)	F832BF-6.4K-B5-M8 (F00691)
		1095	5.34	842B-6.4K-M1 (F00232)	842BF-6.4K-M8 (F00265)	5 3	1014 608	I II	F842B-6.4K-B9-M1 (F00777)	F842BF-6.4K-B9-M8 (F00826)
						2	406	III	F842B-6.4K-B7-M1 (F00776)	F842BF-6.4K-B7-M8 (F00825)
		2248	10.20	862B-6.4K-M1 (F00335)	862BF-6.4K-M8 (F00369)	10 7.5	2182 1636	I II	F862B-6.4K-B11-M1 (F00924)	F862BF-6.4K-B11-M8 (F00980)
						5	1091	III	F862B-6.4K-B9-M1 (F00925)	F862BF-6.4K-B9-M8 (F00981)
4623	20.90	872B-6.4K-M1 (F00438)	872BF-6.4K-M8 (F00471)	10	2189	III	F872B-6.4K-B11-M1 (F01082)	F872BF-6.4K-B11-M8 (F01128)		
246	7.2	576	2.34	832B-7.2K-M1 (F00132)	832BF-7.2K-M8 (F00165)	2 1.5	488 366	I II	F832B-7.2K-B7-M1 (F00646)	F832BF-7.2K-B7-M8 (F00695)
						1	244	III	F832B-7.2K-B5-M1 (F00644)	F832BF-7.2K-B5-M8 (F00694)
		1171	4.88	842B-7.2K-M1 (F00234)	842BF-7.2K-M8 (F00267)	5 3	1171 713	I II	F842B-7.2K-B9-M1 (F00781)	F842BF-7.2K-B9-M8 (F00829)
						2	475	III	F842B-7.2K-B7-M1 (F00780)	F842BF-7.2K-B7-M8 (F00828)
		2380	9.49	862B-7.2K-M1 (F00337)	862BF-7.2K-M8 (F00371)	7.5	1855	I	F862B-7.2K-B11-M1 (F00928)	F862BF-7.2K-B11-M8 (F00984)
						5	1237	III	F862B-7.2K-B9-M1 (F00929)	F862BF-7.2K-B9-M8 (F00985)
4859	19.30	872B-7.2K-M1 (F00440)	872BF-7.2K-M8 (F00473)	10	2492	III	F872B-7.2K-B11-M1 (F01085)	F872BF-7.2K-B11-M8 (F01131)		

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
218	8	560	2.01	832B-8K-M1 (F00134)	832BF-8K-M8 (F00167)	2 1.5	560 415	I II	F832B-8K-B7-M1 (F00649)	F832BF-8K-B7-M8 (F00698)
						1	276	III	F832B-8K-B5-M1 (F00648)	F832BF-8K-B5-M8 (F00697)
		1206	4.54	842B-8K-M1 (F00236)	842BF-8K-M8 (F00269)	3	797	I	F842B-8K-B9-M1 (F00784)	F842BF-8K-B9-M8 (F00832)
						2	526	III	F842B-8K-B7-M1 (F00783)	F842BF-8K-B7-M8 (F00831)
		2480	8.82	862B-8K-M1 (F00339)	862BF-8K-M8 (F00373)	7.5	2087	I	F862B-8K-B11-M1 (F00931)	F862BF-8K-B11-M8 (F00987)
						5 3	1391 835	II III	F862B-8K-B9-M1 (F00932)	F862BF-8K-B9-M8 (F00988)
		5074	18.00	872B-8K-M1 (F00442)	872BF-8K-M8 (F00475)	10 7.5	2790 2092	II III	F872B-8K-B11-M1 (F01088)	F872BF-8K-B11-M8 (F01134)
		636	1.86	832B-9K-M1 (F00135)	832BF-9K-M8 (F00168)	1.5	508	I	F832B-9K-B7-M1 (F00651)	F832BF-9K-B7-M8 (F00700)
						1 .75	338 253	II III	F832B-9K-B5-M1 (F00650)	F832BF-9K-B5-M8 (F00699)
194	9	1275	4.14	842B-9K-M1 (F00237)	842BF-9K-M8 (F00270)	3	924	I	F842B-9K-B9-M1 (F00786)	F842BF-9K-B9-M8 (F00834)
						2	616	III	F842B-9K-B7-M1 (F00785)	F842BF-9K-B7-M8 (F00833)
		2608	8.18	862B-9K-M1 (F00340)	862BF-9K-M8 (F00374)	7.5	2366	I	F862B-9K-B11-M1 (F00933)	F862BF-9K-B11-M8 (F00989)
						5 3	1577 946	II III	F862B-9K-B9-M1 (F00934)	F862BF-9K-B9-M8 (F00990)
		5358	16.70	872B-9K-M1 (F00443)	872BF-9K-M8 (F00476)	10 7.5	3175 2381	II III	F872B-9K-B11-M1 (F01089)	F872BF-9K-B11-M8 (F01135)
		576	1.63	832B-10K-M1 (F00105)	832BF-10K-M8 (F00138)	1.5	524	I	F832B-10K-B7-M1 (F00595)	F832BF-10K-B7-M8 (F00657)
						1 .75	349 262	II III	F832B-10K-B5-M1 (F00594)	F832BF-10K-B5-M8 (F00656)
		1295	3.82	842B-10K-M1 (F00207)	842BF-10K-M8 (F00240)	3	1006	I	F842B-10K-B9-M1 (F00732)	F842BF-10K-B9-M8 (F00791)
						2 1.5	670 503	II III	F842B-10K-B7-M1 (F00730)	F842BF-10K-B7-M8 (F00790)
175	10	2600	7.56	862B-10K-M1 (F00309)	862BF-10K-M8 (F00343)	7.5	2548	I	F862B-10K-B11-M1 (F00873)	F862BF-10K-B11-M8 (F00937)
						5 3	1700 1019	II III	F862B-10K-B9-M1 (F00874)	F862BF-10K-B9-M8 (F00938)
		5360	15.70	872B-10K-M1 (F00413)	872BF-10K-M8 (F00446)	10 7.5	3278 2458	II III	F872B-10K-B11-M1 (F01046)	F872BF-10K-B11-M8 (F01092)
		576	1.63	832B-10K-M1 (F00105)	832BF-10K-M8 (F00138)	1.5	524	I	F832B-10K-B7-M1 (F00595)	F832BF-10K-B7-M8 (F00657)
						1 .75	349 262	II III	F832B-10K-B5-M1 (F00594)	F832BF-10K-B5-M8 (F00656)
		1295	3.82	842B-10K-M1 (F00207)	842BF-10K-M8 (F00240)	3	1006	I	F842B-10K-B9-M1 (F00732)	F842BF-10K-B9-M8 (F00791)
						2 1.5	670 503	II III	F842B-10K-B7-M1 (F00730)	F842BF-10K-B7-M8 (F00790)
		2600	7.56	862B-10K-M1 (F00309)	862BF-10K-M8 (F00343)	7.5	2548	I	F862B-10K-B11-M1 (F00873)	F862BF-10K-B11-M8 (F00937)
						5 3	1700 1019	II III	F862B-10K-B9-M1 (F00874)	F862BF-10K-B9-M8 (F00938)
		5360	15.70	872B-10K-M1 (F00413)	872BF-10K-M8 (F00446)	10 7.5	3278 2458	II III	F872B-10K-B11-M1 (F01046)	F872BF-10K-B11-M8 (F01092)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
159	11	576	1.43	832B-11K-M1 (F00106)	832BF-11K-M8 (F00139)	1 .75 .50	400 300 200	I II III	F832B-11K-B5-M1 (F00596)	F832BF-11K-B5-M8 (F00658)
		1330	3.45	842B-11K-M1 (F00208)	842BF-11K-M8 (F00241)	3 2 1.5	1144 827 572	I II III	F842B-11K-B9-M1 (F00734) F842B-11K-B7-M1 (F00733)	F842BF-11K-B9-M8 (F00793) F842BF-11K-B7-M8 (F00792)
		2680	6.70	862B-11K-M1 (F00310)	862BF-11K-M8 (F00344)	5 3	1975 1186	I III	F862B-11K-B9-M1 (F00875)	F862BF-11K-B9-M8 (F00939)
		5291	13.70	872B-11K-M1 (F00414)	872BF-11K-M8 (F00447)	10 7.5	3822 2866	I II	F872B-11K-B11-M1 (F01047)	F872BF-11K-B11-M8 (F01093)
145	12	550	1.30	832B-12K-M1 (F00107)	832BF-12K-M8 (F00140)	1 .75 .50	418 314 210	I II III	F832B-12K-B5-M1 (F00597)	F832BF-12K-B5-M8 (F00659)
		1419	3.23	842B-12K-M1 (F00209)	842BF-12K-M8 (F00242)	3 2 1.5	1304 870 652	I II III	F842B-12K-B9-M1 (F00736) F842B-12K-B7-M1 (F00735)	F842BF-12K-B9-M8 (F00795) F842BF-12K-B7-M8 (F00794)
		2840	6.49	862B-12K-M1 (F00311)	862BF-12K-M8 (F00345)	5 3	2167 1300	I III	F862B-12K-B9-M1 (F00876)	F862BF-12K-B9-M8 (F00940)
		5439	12.50	872B-12K-M1 (F00415)	872BF-12K-M8 (F00448)	10 7.5	4177 3132	I II	F872B-12K-B11-M1 (F01048)	F872BF-12K-B11-M8 (F01094)
125	14	550	1.14	832B-14K-M1 (F00108)	832BF-14K-M8 (F00141)	1 .75 .50	478 358 239	I II III	F832B-14K-B5-M1 (F00598)	F832BF-14K-B5-M8 (F00660)
		1443	2.89	842B-14K-M1 (F00210)	842BF-14K-M8 (F00243)	2 1.5	988 741	II III	F842B-14K-B7-M1 (F00737)	F842BF-14K-B7-M8 (F00796)
		2910	5.72	862B-14K-M1 (F00312)	862BF-14K-M8 (F00346)	5 3	2519 1512	I III	F862B-14K-B9-M1 (F00877)	F862BF-14K-B9-M8 (F00941)
		5364	10.90	872B-14K-M1 (F00416)	872BF-14K-M8 (F00449)	10 7.5 5	4870 3653 2435	I II III	F872B-14K-B11-M1 (F01049) F872B-14K-B9-M1 (F01050)	F872BF-14K-B11-M8 (F01095) F872BF-14K-B9-M8 (F01096)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
109	16	576	1.06	832B-16K-M1 (F00109)	832BF-16K-M8 (F00142)	1 .75 .50	539 404 270	I II III	F832B-16K-B5-M1 (F00599)	F832BF-16K-B5-M8 (F00661)
		1380	2.49	842B-16K-M1 (F00211)	842BF-16K-M8 (F00244)	2 1.5	1097 823	II II	F842B-16K-B7-M1 (F00739)	F842BF-16K-B7-M8 (F00798)
						1	548	III	F842B-16K-B5-M1 (F00738)	F842BF-16K-B5-M8 (F00797)
		2900	5.12	862B-16K-M1 (F00313)	862BF-16K-M8 (F00347)	5 3	2792 1675	I II	F862B-16K-B9-M1 (F00881)	F862BF-16K-B9-M8 (F00943)
						2	1117	III	F862B-16K-B7-M1 (F00880)	F862BF-16K-B7-M8 (F00942)
		5245	9.60	872B-16K-M1 (F00417)	872BF-16K-M8 (F00450)	7.5	4055	I	F872B-16K-B11-M1 (F01051)	F872BF-16K-B11-M8 (F01097)
						5 3	2703 1639	II III	F872B-16K-B9-M1 (F01052)	F872BF-16K-B9-M8 (F01098)
		590	0.91	832B-18K-M1 (F00110)	832BF-18K-M8 (F00143)	.75 .50 .33	483 322 210	I II III	F832B-18K-B5-M1 (F00600)	F832BF-18K-B5-M8 (F00662)
						2 1.5	1192 894	I II	F842B-18K-B7-M1 (F00741)	F842BF-18K-B7-M8 (F00800)
		1420	2.35	842B-18K-M1 (F00212)	842BF-18K-M8 (F00245)	1	596	III	F842B-18K-B5-M1 (F00740)	F842BF-18K-B5-M8 (F00799)
97	18	2940	4.88	862B-18K-M1 (F00314)	862BF-18K-M8 (F00348)	3	1788	II	F862B-18K-B9-M1 (F00883)	F862BF-18K-B9-M8 (F00945)
						2	1192	III	F862B-18K-B7-M1 (F00882)	F862BF-18K-B7-M8 (F00944)
		5320	8.50	872B-18K-M1 (F00418)	872BF-18K-M8 (F00451)	7.5	4645	I	F872B-18K-B11-M1 (F01053)	F872BF-18K-B11-M8 (F01099)
						5 3	3096 1858	II III	F872B-18K-B9-M1 (F01054)	F872BF-18K-B9-M8 (F01100)
		590	0.85	832B-20K-M1 (F00114)	832BF-20K-M8 (F00147)	.75 .50 .33	526 350 232	I II III	F832B-20K-B5-M1 (F00608)	F832BF-20K-B5-M8 (F00668)
						2 1.5	1420 1065	I II	F842B-20K-B7-M1 (F00748)	F842BF-20K-B7-M8 (F00805)
		1442	2.01	842B-20K-M1 (F00216)	842BF-20K-M8 (F00249)	.75	533	III	F842B-20K-B5-M1 (F00745)	F842BF-20K-B5-M8 (F00804)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.
** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)
Actual Output RPM = Input Speed ÷ Actual Ratio.
For Overhung Load Ratings refer to Page 157.

G

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
87 (CONT.)	20	3014	4.19	862B-20K-M1 (F00318)	862BF-20K-M8 (F00352)	3	2137	I	F862B-20K-B9-M1 (F00888)	F862BF-20K-B9-M8 (F00950)
						2	1425	III	F862B-20K-B7-M1 (F00887)	F862BF-20K-B7-M8 (F00949)
		5319	7.64	872B-20K-M1 (F00422)	872BF-20K-M8 (F00455)	7.5	5319	I	F872B-20K-B11-M1 (F01058)	F872BF-20K-B11-M8 (F01104)
						5 3	3444 2066	II III	F872B-20K-B9-M1 (F01059)	F872BF-20K-B9-M8 (F01105)
79	22	574	0.72	832B-22K-M1 (F00115)	832BF-22K-M8 (F00148)	.75 .50 .33	574 395 260	I II III	F832B-22K-B5-M1 (F00610)	F832BF-22K-B5-M8 (F00669)
		1443	1.85	842B-22K-M1 (F00217)	842BF-22K-M8 (F00250)	1.5	1158	I	F842B-22K-B7-M1 (F00751)	F842BF-22K-B7-M8 (F00807)
						1 .75	772 579	II III	F842B-22K-B5-M1 (F00750)	F842BF-22K-B5-M8 (F00806)
		3030	3.95	862B-22K-M1 (F00319)	862BF-22K-M8 (F00353)	3	2281	I	F862B-22K-B9-M1 (F00891)	F862BF-22K-B9-M8 (F00952)
						2	1520	III	F862B-22K-B7-M1 (F00889)	F862BF-22K-B7-M8 (F00951)
		5398	6.77	872B-22K-M1 (F00423)	872BF-22K-M8 (F00456)	5 3	3946 2367	I III	F872B-22K-B9-M1 (F01060)	F872BF-22K-B9-M8 (F01106)
70	25	580	0.65	832B-25K-M1 (F00116)	832BF-25K-M8 (F00149)	.50 .33	442 294	I III	F832B-25K-B5-M1 (F00611)	F832BF-25K-B5-M8 (F00670)
		1312	1.64	842B-25K-M1 (F00218)	842BF-25K-M8 (F00251)	1.5	1187	I	F842B-25K-B7-M1 (F00753)	F842BF-25K-B7-M8 (F00809)
						1 .75	791 593	II III	F842B-25K-B5-M1 (F00752)	F842BF-25K-B5-M8 (F00808)
		3070	3.49	862B-25K-M1 (F00320)	862BF-25K-M8 (F00354)	3	2618	I	F862B-25K-B9-M1 (F00893)	F862BF-25K-B9-M8 (F00954)
						2 1.5	1745 1309	II III	F862B-25K-B7-M1 (F00892)	F862BF-25K-B7-M8 (F00953)
		5279	6.17	872B-25K-M1 (F00424)	872BF-25K-M8 (F00457)	5 3	4236 2540	I III	F872B-25K-B9-M1 (F01061)	F872BF-25K-B9-M8 (F01107)
62 (CONT.)	28	580	0.59	832B-28K-M1 (F00117)	832BF-28K-M8 (F00150)	.50 .33 .25	491 327 245	I II III	F832B-28K-B5-M1 (F00612)	F832BF-28K-B5-M8 (F00671)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
62 (CONT.)	28	1467	1.46	842B-28K-M1 (F00219)	842BF-28K-M8 (F00252)	1.5	1467	I	F842B-28K-B7-M1 (F00755)	F842BF-28K-B7-M8 (F00811)
						1 .75	994 746	II III	F842B-28K-B5-M1 (F00754)	F842BF-28K-B5-M8 (F00810)
		3070	3.19	862B-28K-M1 (F00321)	862BF-28K-M8 (F00355)	3	2867	I	F862B-28K-B9-M1 (F00896)	F862BF-28K-B9-M8 (F00956)
						2 1.5	1910 1433	II III	F862B-28K-B7-M1 (F00895)	F862BF-28K-B7-M8 (F00955)
		5287	5.64	872B-28K-M1 (F00425)	872BF-28K-M8 (F00458)	5 3	4639 2783	I II	F872B-28K-B9-M1 (F01063)	F872BF-28K-B9-M8 (F01109)
						2	1855	III	F872B-28K-B7-M1 (F01062)	F872BF-28K-B7-M8 (F01108)
54	32	555	0.52	832B-32K-M1 (F00121)	832BF-32K-M8 (F00154)	.50 .33 .25	528 370 264	I II III	F832B-32K-B5-M1 (F00620)	F832BF-32K-B5-M8 (F00678)
						1 .75 .50	1026 770 513	I II III	F842B-32K-B5-M1 (F00760)	F842BF-32K-B5-M8 (F00815)
		3120	2.79	862B-32K-M1 (F00326)	862BF-32K-M8 (F00359)	2 1.5	2225 1669	II II	F862B-32K-B7-M1 (F00905)	F862BF-32K-B7-M8 (F00964)
						1	1159	III	F862B-32K-B5-M1 (F00904)	F862BF-32K-B5-M8 (F00963)
		5342	4.90	872B-32K-M1 (F00429)	872BF-32K-M8 (F00462)	5 3	5342 3236	I II	F872B-32K-B9-M1 (F01068)	F872BF-32K-B9-M8 (F01114)
						2	2158	III	F872B-32K-B7-M1 (F01067)	F872BF-32K-B7-M8 (F01113)
48 (CONT.)	36	557	0.47	832B-36K-M1 (F00122)	832BF-36K-M8 (F00155)	.50 .33 .25 .16	557 391 294 196	I I II III	F832B-36K-B5-M1 (F00622)	F832BF-36K-B5-M8 (F00679)
						.50 .33 .25 .16	562 400 299 200	I I II III	F833B-36K-B5-M1 (F00705)	F833BF-36K-B5-M8 (F00718)
		1457	1.15	842B-36K-M1 (F00224)	842BF-36K-M8 (F00257)	1 .75 .50	1254 940 627	I II III	F842B-36K-B5-M1 (F00763)	F842BF-36K-B5-M8 (F00816)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

G

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
48 (CONT.)	36	1390	1.17	843B-36K-M1 (F00280)	843BF-36K-M8 (F00298)	1 .75 .50	1190 893 595	I II III	F843B-36K-B5-M1 (F00844)	F843BF-36K-B5-M8 (F00862)
		3120	2.55	862B-36K-M1 (F00327)	862BF-36K-M8 (F00360)	2 1.5	2436 1827	I II	F862B-36K-B7-M1 (F00908)	F862BF-36K-B7-M8 (F00966)
						1	1218	III	F862B-36K-B5-M1 (F00907)	F862BF-36K-B5-M8 (F00965)
		2978	2.51	863B-36K-M1 (F00384)	863BF-36K-M8 (F00402)	2 1.5	2372 1779	I II	F863B-36K-B7-M1 (F01001)	F863BF-36K-B7-M8 (F01025)
						1	1186	III	F863B-36K-B5-M1 (F01000)	F863BF-36K-B5-M8 (F01024)
		5296	4.48	872B-36K-M1 (F00430)	872BF-36K-M8 (F00463)	5 3	5296 3546	I II	F872B-36K-B9-M1 (F01070)	F872BF-36K-B9-M8 (F01116)
						2	2364	III	F872B-36K-B7-M1 (F01069)	F872BF-36K-B7-M8 (F01115)
		5225	4.42	873B-36K-M1 (F00486)	873BF-36K-M8 (F00504)	5 3	5225 3546	I II	F873B-36K-B9-M1 (F01148)	F873BF-36K-B9-M8 (F01176)
						2	2364	III	F873B-36K-B7-M1 (F01147)	F873BF-36K-B7-M8 (F01175)
43 (CONT.)	40	466	0.36	832B-40K-M1 (F00124)	832BF-40K-M8 (F00157)	.33 .25 .16	431 323 216	I I III	F832B-40K-B5-M1 (F00626)	F832BF-40K-B5-M8 (F00682)
		560	0.41	833B-40K-M1 (F00179)	833BF-40K-M8 (F00197)	.33 .25 .16	456 342 228	I II III	F833B-40K-B5-M1 (F00706)	F833BF-40K-B5-M8 (F00719)
		1375	1.00	842B-40K-M1 (F00226)	842BF-40K-M8 (F00259)	1 .75 .50	1254 940 627	I II III	F842B-40K-B5-M1 (F00765)	F842BF-40K-B5-M8 (F00818)
		1390	1.02	843B-40K-M1 (F00281)	843BF-40K-M8 (F00299)	1 .75 .50	1360 1020 680	I I III	F843B-40K-B5-M1 (F00845)	F843BF-40K-B5-M8 (F00863)
		2992	2.18	862B-40K-M1 (F00329)	862BF-40K-M8 (F00362)	2 1.5	2678 2008	I II	F862B-40K-B7-M1 (F00912)	F862BF-40K-B7-M8 (F00970)
						1	1339	III	F862B-40K-B5-M1 (F00911)	F862BF-40K-B5-M8 (F00969)
		2978	2.21	863B-40K-M1 (F00385)	863BF-40K-M8 (F00403)	2 1.5	2695 2022	I II	F863B-40K-B7-M1 (F01003)	F863BF-40K-B7-M8 (F01027)
						1	1348	III	F863B-40K-B5-M1 (F01002)	F863BF-40K-B5-M8 (F01026)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
43 (CONT.)	40	5050	3.83	872B-40K-M1 (F00432)	872BF-40K-M8 (F00465)	3	3955	I	F872B-40K-B9-M1 (F01073)	F872BF-40K-B9-M8 (F01119)
						2	2636	III	F872B-40K-B7-M1 (F01072)	F872BF-40K-B7-M8 (F01118)
		5225	3.80	873B-40K-M1 (F00487)	873BF-40K-M8 (F00505)	3	4125	I	F873B-40K-B9-M1 (F01150)	F873BF-40K-B9-M8 (F01178)
						2	2750	II	F873B-40K-B7-M1 (F01149)	F873BF-40K-B7-M8 (F01177)
38	45	480	0.33	832B-45K-M1 (F00125)	832BF-45K-M8 (F00158)	.33 .25 .16	480 359 239	I I III	F832B-45K-B5-M1 (F00628)	F832BF-45K-B5-M8 (F00683)
		544	0.38	833B-45K-M1 (F00180)	833BF-45K-M8 (F00198)	.33 .25 .16	478 358 239	I I III	F833B-45K-B5-M1 (F00707)	F833BF-45K-B5-M8 (F00720)
		1410	0.90	842B-45K-M1 (F00227)	842BF-45K-M8 (F00260)	.75 .50 .33	1180 788 525	I II III	F842B-45K-B5-M1 (F00767)	F842BF-45K-B5-M8 (F00819)
		1420	0.92	843B-45K-M1 (F00282)	843BF-45K-M8 (F00300)	.75 .50 .33	1158 772 515	I II III	F843B-45K-B5-M1 (F00846)	F843BF-45K-B5-M8 (F00864)
		2950	2.01	862B-45K-M1 (F00330)	862BF-45K-M8 (F00364)	2 1.5	2932 2199	I I	F862B-45K-B7-M1 (F00914)	F862BF-45K-B7-M8 (F00972)
						1	1466	III	F862B-45K-B5-M1 (F00913)	F862BF-45K-B5-M8 (F00971)
		3040	2.01	863B-45K-M1 (F00386)	863BF-45K-M8 (F00404)	2 1.5	3025 2269	I I	F863B-45K-B7-M1 (F01005)	F863BF-45K-B7-M8 (F01029)
						1	1512	III	F863B-45K-B5-M1 (F01004)	F863BF-45K-B5-M8 (F01028)
		5167	3.54	872B-45K-M1 (F00433)	872BF-45K-M8 (F00466)	3	4334	I	F872B-45K-B9-M1 (F01075)	F872BF-45K-B9-M8 (F01121)
						2 1.5	3010 2167	II III	F872B-45K-B7-M1 (F01074)	F872BF-45K-B7-M8 (F01120)
		5300	3.52	873B-45K-M1 (F00488)	873BF-45K-M8 (F00506)	3	4526	I	F873B-45K-B9-M1 (F01152)	F873BF-45K-B9-M8 (F01180)
						2 1.5	3013 2404	II III	F873B-45K-B7-M1 (F01151)	F873BF-45K-B7-M8 (F01179)
35 (CONT.)	50	555	0.34	832B-50K-M1 (F00128)	832BF-50K-M8 (F00161)	.33 .25 .16	540 405 270	I I III	F832B-50K-B5-M1 (F00637)	F832BF-50K-B5-M8 (F00689)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

G

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
35 (CONT.)	50	540	0.33	833B-50K-M1 (F00181)	833BF-50K-M8 (F00199)	.33 .25 .16	540 409 273	I I III	F833B-50K-B5-M1 (F00708)	F833BF-50K-B5-M8 (F00721)
		1500	0.87	842B-50K-M1 (F00230)	842BF-50K-M8 (F00263)	.75 .50 .33	1280 854 592	I II III	F842B-50K-B5-M1 (F00772)	F842BF-50K-B5-M8 (F00823)
		1429	0.81	843B-50K-M1 (F00283)	843BF-50K-M8 (F00301)	.75 .50 .33	1323 882 588	I II III	F843B-50K-B5-M1 (F00847)	F843BF-50K-B5-M8 (F00865)
		3150	1.86	862B-50K-M1 (F00333)	862BF-50K-M8 (F00367)	1.5	2514	I	F862B-50K-B7-M1 (F00921)	F862BF-50K-B7-M8 (F00978)
						1 .75	1676 1257	II III	F862B-50K-B5-M1 (F00920)	F862BF-50K-B5-M8 (F00977)
		3040	1.77	863B-50K-M1 (F00387)	863BF-50K-M8 (F00405)	1.5	2578	I	F863B-50K-B7-M1 (F01007)	F863BF-50K-B7-M8 (F01031)
						1 .75	1718 1289	II III	F863B-50K-B5-M1 (F01006)	F863BF-50K-B5-M8 (F01030)
		5216	3.16	872B-50K-M1 (F00436)	872BF-50K-M8 (F00469)	3	4900	I	F872B-50K-B9-M1 (F01079)	F872BF-50K-B9-M8 (F01125)
						2 1.5	3268 2552	II III	F872B-50K-B7-M1 (F01078)	F872BF-50K-B7-M8 (F01124)
		5290	3.02	873B-50K-M1 (F00489)	873BF-50K-M8 (F00507)	3	5256	I	F873B-50K-B9-M1 (F01154)	F873BF-50K-B9-M8 (F01182)
						2 1.5	3504 2628	II II	F873B-50K-B7-M1 (F01153)	F873BF-50K-B7-M8 (F01181)
31 (CONT.)	56	540	0.29	832B-56K-M1 (F00129)	832BF-56K-M8 (F00162)	.25 .16	460 308	I II	F832B-56K-B5-M1 (F00639)	F832BF-56K-B5-M8 (F00690)
		554	0.30	833B-56K-M1 (F00182)	833BF-56K-M8 (F00200)	.25 .16	462 308	I II	F833B-56K-B5-M1 (F00709)	F833BF-56K-B5-M8 (F00722)
		1392	0.71	842B-56K-M1 (F00231)	842BF-56K-M8 (F00264)	.5 .33	970 647	I III	F842B-56K-B5-M1 (F00775)	F842BF-56K-B5-M8 (F00824)
		1396	0.76	843B-56K-M1 (F00284)	843BF-56K-M8 (F00302)	.75 .50 .33	1378 918 612	I II III	F843B-56K-B5-M1 (F00848)	F843BF-56K-B5-M8 (F00866)
		2460	1.28	862B-56K-M1 (F00334)	862BF-56K-M8 (F00368)	1 .75 .50	2018 1513 1000	I II III	F862B-56K-B5-M1 (F00923)	F862BF-56K-B5-M8 (F00979)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
31 (CONT.)	56	2887	1.54	863B-56K-M1 (F00388)	863BF-56K-M8 (F00406)	1.5	2887	I	F863B-56K-B7-M1 (F01009)	F863BF-56K-B7-M8 (F01033)
						1 .75	1939 1459	II III	F863B-56K-B5-M1 (F01008)	F863BF-56K-B5-M8 (F01032)
		4629	2.50	872B-56K-M1 (F00437)	872BF-56K-M8 (F00470)	2 1.5	3665 2749	I II	F872B-56K-B7-M1 (F01081)	F872BF-56K-B7-M8 (F01127)
						1	1832	III	F872B-56K-B5-M1 (F01080)	F872BF-56K-B5-M8 (F01126)
		5227	2.69	873B-56K-M1 (F00490)	873BF-56K-M8 (F00508)	2 1.5	3886 2915	I II	F873B-56K-B7-M1 (F01156)	F873BF-56K-B7-M8 (F01184)
						1	1941	III	F873B-56K-B5-M1 (F01155)	F873BF-56K-B5-M8 (F01183)
27	63	500	0.25	832B-63K-M1 (F00131)	832BF-63K-M8 (F00164)	.25 .16	500 330	I II	F832B-63K-B5-M1 (F00643)	F832BF-63K-B5-M8 (F00693)
		522	0.25	833B-63K-M1 (F00183)	833BF-63K-M8 (F00201)	.25 .16	502 335	I II	F833B-63K-B5-M1 (F00710)	F833BF-63K-B5-M8 (F00723)
		1475	0.70	842B-63K-M1 (F00233)	842BF-63K-M8 (F00266)	.50 .33	1000 666	I III	F842B-63K-B5-M1 (F00778)	F842BF-63K-B5-M8 (F00827)
		1300	0.65	843B-63K-M1 (F00285)	843BF-63K-M8 (F00303)	.50 .33	1044 696	I III	F843B-63K-B5-M1 (F00849)	F843BF-63K-B5-M8 (F00867)
		3098	1.52	862B-63K-M1 (F00336)	862BF-63K-M8 (F00370)	1.5	3027	I	F862B-63K-B7-M1 (F00927)	F862BF-63K-B7-M8 (F00983)
						1 .75	2018 1576	II III	F862B-63K-B5-M1 (F00926)	F862BF-63K-B5-M8 (F00982)
		2973	1.41	863B-63K-M1 (F00389)	863BF-63K-M8 (F00407)	1.5	2973	I	F863B-63K-B7-M1 (F01011)	F863BF-63K-B7-M8 (F01035)
						1 .75 .50	2109 1582 1054	I II III	F863B-63K-B5-M1 (F01010)	F863BF-63K-B5-M8 (F01034)
		5300	2.64	872B-63K-M1 (F00439)	872BF-63K-M8 (F00472)	2 1.5	3993 2995	I II	F872B-63K-B7-M1 (F01084)	F872BF-63K-B7-M8 (F01130)
						1	2080	III	F872B-63K-B5-M1 (F01083)	F872BF-63K-B5-M8 (F01129)
		5226	2.52	873B-63K-M1 (F00491)	873BF-63K-M8 (F00509)	2 1.5	4149 3112	I II	F873B-63K-B7-M1 (F01158)	F873BF-63K-B7-M8 (F01186)
						1	2075	III	F873B-63K-B5-M1 (F01157)	F873BF-63K-B5-M8 (F01185)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

G

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
24	71	500	0.22	832B-71K-M1 (F00133)	832BF-71K-M8 (F00166)	.25 .16	500 375	I I	F832B-71K-B5-M1 (F00647)	F832BF-71K-B5-M8 (F00696)
		577	0.24	833B-71K-M1 (F00184)	833BF-71K-M8 (F00202)	.25 .16	577 400	I I	F833B-71K-B5-M1 (F00711)	F833BF-71K-B5-M8 (F00724)
		1485	0.62	842B-71K-M1 (F00235)	842BF-71K-M8 (F00268)	.50 .33 .25	1186 709 592	I II III	F842B-71K-B5-M1 (F00782)	F842BF-71K-B5-M8 (F00830)
		1427	0.60	843B-71K-M1 (F00286)	843BF-71K-M8 (F00304)	.50 .33 .25	1189 793 594	I II III	F843B-71K-B5-M1 (F00850)	F843BF-71K-B5-M8 (F00868)
		2966	1.28	862B-71K-M1 (F00338)	862BF-71K-M8 (F00372)	1 .75 .50	2303 1720 1457	I II III	F862B-71K-B5-M1 (F00930)	F862BF-71K-B5-M8 (F00986)
		3040	1.23	863B-71K-M1 (F00390)	863BF-71K-M8 (F00408)	1 .75 .50	2473 1855 1236	I II III	F863B-71K-B5-M1 (F01012)	F863BF-71K-B5-M8 (F01036)
		5385	2.38	872B-71K-M1 (F00441)	872BF-71K-M8 (F00474)	2 1.5	4479 3359	I II	F872B-71K-B7-M1 (F01087)	F872BF-71K-B7-M8 (F01133)
						1	2239	III	F872B-71K-B5-M1 (F01086)	F872BF-71K-B5-M8 (F01132)
		5298	2.14	873B-71K-M1 (F00492)	873BF-71K-M8 (F00510)	2 1.5	4952 3714	I II	F873B-71K-B7-M1 (F01160)	F873BF-71K-B7-M8 (F01188)
						1	2476	III	F873B-71K-B5-M1 (F01159)	F873BF-71K-B5-M8 (F01187)
21	80	565	0.21	833B-80K-M1 (F00185)	833BF-80K-M8 (F00203)	.25 .16	565 448	I I	F833B-80K-B5-M1 (F00712)	F833BF-80K-B5-M8 (F00725)
		1320	0.51	843B-80K-M1 (F00287)	843BF-80K-M8 (F00305)	.50 .33 .25	1294 862 647	I II III	F843B-80K-B5-M1 (F00851)	F843BF-80K-B5-M8 (F00869)
		3038	1.13	863B-80K-M1 (F00391)	863BF-80K-M8 (F00409)	1 .75 .50	2689 2016 1344	I II III	F863B-80K-B5-M1 (F01013)	F863BF-80K-B5-M8 (F01037)
		5315	2.01	873B-80K-M1 (F00493)	873BF-80K-M8 (F00511)	2 1.5	5288 3966	I I	F873B-80K-B7-M1 (F01162)	F873BF-80K-B7-M8 (F01190)
						1	2644	III	F873B-80K-B5-M1 (F01161)	F873BF-80K-B5-M8 (F01189)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

G

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
19	90	575	0.19	833B-90K-M1 (F00186)	833BF-90K-M8 (F00204)	.16	504	I	F833B-90K-B5-M1 (F00713)	F833BF-90K-B5-M8 (F00726)
		1395	0.47	843B-90K-M1 (F00288)	843BF-90K-M8 (F00306)	.50 .33 .25 .16	1398 989 741 494	I I II III	F843B-90K-B5-M1 (F00852)	F843BF-90K-B5-M8 (F00870)
		2745	0.98	863B-90K-M1 (F00392)	863BF-90K-M8 (F00410)	.75 .50	2100 1400	I III	F863B-90K-B5-M1 (F01014)	F863BF-90K-B5-M8 (F01038)
		5252	1.73	873B-90K-M1 (F00494)	873BF-90K-M8 (F00512)	1.5	4554	I	F873B-90K-B7-M1 (F01164)	F873BF-90K-B7-M8 (F01192)
						1 .75	3035 2277	II III	F873B-90K-B5-M1 (F01163)	F873BF-90K-B5-M8 (F01191)
17	100	570	0.17	833B-100K-M1 (F00169)	833BF-100K-M8 (F00187)	.16	560	I	F833B-100K-B5-M1 (F00701)	F833BF-100K-B5-M8 (F00714)
		1400	0.42	843B-100K-M1 (F00271)	843BF-100K-M8 (F00289)	.33 .25 .16	1115 836 557	I II III	F843B-100K-B5-M1 (F00835)	F843BF-100K-B5-M8 (F00853)
		3095	0.88	863B-100K-M1 (F00375)	863BF-100K-M8 (F00393)	.75 .50 .33	2638 1759 1172	I II III	F863B-100K-B5-M1 (F00991)	F863BF-100K-B5-M8 (F01015)
		5252	1.58	873B-100K-M1 (F00477)	873BF-100K-M8 (F00495)	1.5	4986	I	F873B-100K-B7-M1 (F01137)	F873BF-100K-B7-M8 (F01166)
						1 .75	3324 2498	II III	F873B-100K-B5-M1 (F01136)	F873BF-100K-B5-M8 (F01165)
15	112	543	0.15	833B-112K-M1 (F00170)	833BF-112K-M8 (F00188)	.16	543	I	F833B-112K-B5-M1 (F00702)	F833BF-112K-B5-M8 (F00715)
		1340	0.37	843B-112K-M1 (F00272)	843BF-112K-M8 (F00290)	.33 .25 .16	1282 962 641	I II III	F843B-112K-B5-M1 (F00836)	F843BF-112K-B5-M8 (F00854)
		2820	0.79	863B-112K-M1 (F00376)	863BF-112K-M8 (F00394)	.75 .50 .33	2678 1786 1190	I II III	F863B-112K-B5-M1 (F00992)	F863BF-112K-B5-M8 (F01016)
		5300	1.37	873B-112K-M1 (F00478)	873BF-112K-M8 (F00496)	1 .75 .50	3868 2900 1934	I II III	F873B-112K-B5-M1 (F01139)	F873BF-112K-B5-M8 (F01167)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

G

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
14	125	523	0.13	833B-125K-M1 (F00171)	833BF-125K-M8 (F00189)	.16	523	I	F833B-125K-B5-M1 (F00703)	F833BF-125K-B5-M8 (F00716)
		1430	0.33	843B-125K-M1 (F00273)	843BF-125K-M8 (F00291)	.33 .25 .16	1430 1083 722	I I III	F843B-125K-B5-M1 (F00837)	F843BF-125K-B5-M8 (F00855)
		3000	0.70	863B-125K-M1 (F00377)	863BF-125K-M8 (F00395)	.50 .33	2150 1433	I III	F863B-125K-B5-M1 (F00993)	F863BF-125K-B5-M8 (F01017)
		5337	1.26	873B-125K-M1 (F00479)	873BF-125K-M8 (F00497)	1 .75 .50	4236 3177 2118	I II III	F873B-125K-B5-M1 (F01140)	F873BF-125K-B5-M8 (F01168)
12	140	487	0.11	833B-140K-M1 (F00172)	833BF-140K-M8 (F00190)	.16	487	I	F833B-140K-B5-M1 (F00704)	F833BF-140K-B5-M8 (F00717)
		1360	0.29	843B-140K-M1 (F00274)	843BF-140K-M8 (F00292)	.25 .16	1175 783	I II	F843B-140K-B5-M1 (F00838)	F843BF-140K-B5-M8 (F00856)
		2916	0.65	863B-140K-M1 (F00378)	863BF-140K-M8 (F00396)	.50 .33	2443 1495	I III	F863B-140K-B5-M1 (F00994)	F863BF-140K-B5-M8 (F01018)
		5247	1.11	873B-140K-M1 (F00480)	873BF-140K-M8 (F00498)	1 .75 .50	4727 3545 2363	I II III	F873B-140K-B5-M1 (F01141)	F873BF-140K-B5-M8 (F01169)
10	160	490	0.10	833B-160K-M1 (F00173)	833BF-160K-M8 (F00191)	—	—	—	—	—
		1410	0.27	843B-160K-M1 (F00275)	843BF-160K-M8 (F00293)	.25 .16	1325 883	I II	F843B-160K-B5-M1 (F00839)	F843BF-160K-B5-M8 (F00857)
		3130	0.58	863B-160K-M1 (F00379)	863BF-160K-M8 (F00397)	.50 .33 .25	2700 1800 1350	I II III	F863B-160K-B5-M1 (F00995)	F863BF-160K-B5-M8 (F01019)
		5280	1.02	873B-160K-M1 (F00481)	873BF-160K-M8 (F00499)	1 .75 .50	5176 3882 2588	I I III	F873B-160K-B5-M1 (F01142)	F873BF-160K-B5-M8 (F01170)
9.7 (CONT.)	180	555	0.10	833B-180K-M1 (F00174)	833BF-180K-M8 (F00192)	—	—	—	—	—
		1436	0.24	843B-180K-M1 (F00276)	843BF-180K-M8 (F00294)	.25 .16	1436 997	I I	F843B-180K-B5-M1 (F00840)	F843BF-180K-B5-M8 (F00858)
		3146	0.53	863B-180K-M1 (F00380)	863BF-180K-M8 (F00398)	.50 .33	2975 1980	I II	F863B-180K-B5-M1 (F00996)	F863BF-180K-B5-M8 (F01020)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

800 Series Output RPM and Capacity Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 176-185.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Ratio*	Non-Flanged				Flanged (Gearmotors)				
		Gear Capacity		Non-Flange O/P	Output Flange	Ratings			Non-Flange O/P	Output Flange
		Output Torque (LB-IN.)	Input HP	Catalog No. (Item Code)	Catalog No. (Item Code)	Motor HP	Output Torque (LB-IN.)	S.C.**	Catalog No. (Item Code)	Catalog No. (Item Code)
9.7 (CONT.)	180	5362	0.92	873B-180K-M1 (F00482)	873BF-180K-M8 (F00500)	.75 .50 .33	4371 2914 1942	I II III	F873B-180K-B5-M1 (F01143)	F873BF-180K-B5-M8 (F01171)
8.8	200	568	0.09	833B-200K-M1 (F00175)	833BF-200K-M8 (F00193)	—	—	—	—	—
		1428	0.21	843B-200K-M1 (F00277)	843BF-200K-M8 (F00295)	.25 .16	1428 1133	I I	F843B-200K-B5-M1 (F00841)	F843BF-200K-B5-M8 (F00859)
		3173	0.47	863B-200K-M1 (F00381)	863BF-200K-M8 (F00399)	.33 .25 .16	2250 1688 1125	I II III	F863B-200K-B5-M1 (F00997)	F863BF-200K-B5-M8 (F01021)
		5432	0.82	873B-200K-M1 (F00483)	873BF-200K-M8 (F00501)	.75 .50 .33	4968 3216 2208	I II III	F873B-200K-B5-M1 (F01144)	F873BF-200K-B5-M8 (F01172)
7.8	225	544	0.08	833B-225K-M1 (F00176)	833BF-225K-M8 (F00194)	—	—	—	—	—
		1410	0.19	843B-225K-M1 (F00278)	843BF-225K-M8 (F00296)	.16	1219	I	F843B-225K-B5-M1 (F00842)	F843BF-225K-B5-M8 (F00860)
		3146	0.44	863B-225K-M1 (F00382)	863BF-225K-M8 (F00400)	.33 .25 .16	2383 1788 1192	I II III	F863B-225K-B5-M1 (F00998)	F863BF-225K-B5-M8 (F01022)
		5341	0.75	873B-225K-M1 (F00484)	873BF-225K-M8 (F00502)	.75 .50 .33	5341 3561 2375	I II III	F873B-225K-B5-M1 (F01145)	F873BF-225K-B5-M8 (F01173)
7.0	250	540	0.07	833B-250K-M1 (F00177)	833BF-250K-M8 (F00195)	—	—	—	—	—
		1410	0.17	843B-250K-M1 (F00279)	843BF-250K-M8 (F00297)	.16	1385	I	F843B-250K-B5-M1 (F00843)	F843BF-250K-B5-M8 (F00861)
		3110	0.39	863B-250K-M1 (F00383)	863BF-250K-M8 (F00401)	.33 .25 .16	2709 2032 1355	I II III	F863B-250K-B5-M1 (F00999)	F863BF-250K-B5-M8 (F01023)
		5423	0.67	873B-250K-M1 (F00485)	873BF-250K-M8 (F00503)	.50 .33	4047 2698	I III	F873B-250K-B5-M1 (F01146)	F873BF-250K-B5-M8 (F01174)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 176-185.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 157.

□ Indicates Triple Reduction

G

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832B/BF1.5K	1170	288	5.80	970	293	4.82	773	293	3.85
842B/BF1.5K	1170	479	9.08	970	509	8.00	773	549	6.89
862B/BF1.5K	1170	830	16.20	970	884	14.30	773	950	12.30
872B/BF1.5K	1170	1094	21.20	970	1090	17.50	773	1090	14.00
832B/BF1.9K	922	325	4.77	763	325	3.95	610	325	3.16
842B/BF1.9K	922	643	8.69	763	685	7.66	610	738	6.60
862B/BF1.9K	922	1100	15.40	763	1189	13.60	610	1278	11.70
872B/BF1.9K	922	1492	21.20	763	1485	17.50	610	1484	14.00
832B/BF2.3K	760	333	4.29	630	339	3.56	504	339	2.84
842B/BF2.3K	760	695	8.52	630	739	7.51	504	788	6.40
862B/BF2.3K	760	1217	15.00	630	1292	13.20	504	1396	11.40
872B/BF2.3K	760	1680	21.20	630	1680	17.50	504	1680	14.00
832B/BF2.6K	673	350	3.98	560	350	3.30	446	350	2.64
842B/BF2.6K	673	715	7.95	560	762	7.01	446	777	5.72
862B/BF2.6K	673	1320	14.50	560	1408	12.80	446	1498	10.90
872B/BF2.6K	673	1800	21.20	560	1796	17.50	446	1796	14.00
832B/BF2.9K	605	533	5.18	500	544	4.38	400	559	3.60
842B/BF2.9K	605	840	8.34	500	872	7.35	400	939	6.33
862B/BF2.9K	605	1560	15.90	500	1660	14.00	400	1790	12.10
872B/BF2.9K	605	2135	21.20	500	2130	17.50	400	2130	14.00
832B/BF3.3K	530	370	3.24	440	370	2.69	350	370	2.15
842B/BF3.3K	530	775	7.03	440	775	5.83	350	775	4.66
862B/BF3.3K	530	1550	13.40	440	1648	11.80	350	1720	9.85
872B/BF3.3K	530	2398	21.20	440	2390	17.50	350	2390	14.00
832B/BF3.5K	500	376	3.11	414	376	2.57	331	376	2.06
842B/BF3.5K	500	858	6.46	414	832	5.35	331	832	4.28
862B/BF3.5K	500	1665	12.70	414	1751	11.10	331	1814	9.16
872B/BF3.5K	500	2704	21.00	414	2720	17.50	331	2720	14.00
832B/BF3.9K	448	552	3.97	372	563	3.36	297	576	2.75
842B/BF3.9K	448	959	6.96	372	1020	6.13	297	1100	5.28
862B/BF3.9K	448	1835	13.30	372	1950	11.70	297	2110	10.10
872B/BF3.9K	448	2902	21.20	372	2892	17.50	297	2892	14.00
832B/BF4.4K	400	572	3.54	330	585	3.00	264	588	2.41
842B/BF4.4K	400	1000	6.59	330	1066	5.81	264	1146	5.00
862B/BF4.4K	400	1933	12.50	330	2050	11.00	264	2215	9.49
872B/BF4.4K	400	3265	21.20	330	3254	17.50	264	3254	14.00
832B/BF5.1K	340	592	3.31	285	592	2.74	227	592	2.19
842B/BF5.1K	340	1065	5.96	285	1135	5.26	227	1232	4.53
862B/BF5.1K	340	2042	11.60	285	2167	10.20	227	2330	8.78
872B/BF5.1K	340	3698	21.20	285	3685	17.50	227	3685	14.00

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.
Actual Output RPM = Input Speed ÷ Actual Ratio.
For Overhung Load Ratings refer to Page 153.

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
832B/BF1.5K	460	293	2.29	67	293	.33	21	1.440
842B/BF1.5K	460	580	4.34	67	580	.63	29	1.512
862B/BF1.5K	460	1054	8.11	67	1058	1.18	51	1.467
872B/BF1.5K	460	1090	8.30	67	1090	1.20	99	1.479
832B/BF1.9K	363	325	1.87	53	325	.27	21	1.945
842B/BF1.9K	363	767	4.08	53	767	.59	29	2.121
862B/BF1.9K	363	1384	7.53	53	1384	1.09	51	2.074
872B/BF1.9K	363	1500	8.32	53	1500	1.21	99	2.012
832B/BF2.3K	300	337	1.68	43	333	.24	21	2.263
842B/BF2.3K	300	787	3.80	43	787	.55	29	2.337
862B/BF2.3K	300	1494	7.26	43	1492	1.05	51	2.324
872B/BF2.3K	300	1680	8.30	43	1680	1.20	99	2.261
832B/BF2.6K	265	350	1.56	38	350	.23	21	2.506
842B/BF2.6K	265	775	3.39	38	775	.49	29	2.577
862B/BF2.6K	265	1495	6.47	38	1500	.94	51	2.609
872B/BF2.6K	265	1792	8.31	38	1785	1.20	99	2.434
832B/BF2.9K	238	576	2.18	34	576	.32	21	2.945
842B/BF2.9K	238	1080	4.33	34	1080	.63	29	2.814
862B/BF2.9K	238	2018	8.10	34	2018	1.17	51	2.813
872B/BF2.9K	238	2140	8.30	34	2140	1.20	99	2.888
832B/BF3.3K	210	367	1.27	30	367	.18	21	3.268
842B/BF3.3K	210	772	2.76	30	772	.40	29	3.158
862B/BF3.3K	210	1788	6.09	30	1788	.88	51	3.313
872B/BF3.3K	210	2391	8.33	30	2391	1.21	99	3.240
832B/BF3.5K	197	376	1.22	28	376	.18	21	3.455
842B/BF3.5K	197	830	2.54	28	830	.37	29	3.692
862B/BF3.5K	197	1911	5.74	28	1911	.83	51	3.758
872B/BF3.5K	197	2391	7.32	28	2390	1.06	99	3.687
832B/BF3.9K	177	576	1.62	26	576	.23	21	3.978
842B/BF3.9K	177	1277	3.65	26	1277	.53	29	3.948
862B/BF3.9K	177	2540	7.18	26	2540	1.04	51	3.952
872B/BF3.9K	177	2880	8.29	26	2880	1.20	99	3.920
832B/BF4.4K	157	582	1.42	23	582	.21	21	4.630
842B/BF4.4K	157	1187	3.08	23	1187	.45	29	4.351
862B/BF4.4K	157	2374	6.05	23	2374	.88	51	4.429
872B/BF4.4K	157	3243	8.30	23	3243	1.20	99	4.410
832B/BF5.1K	135	585	1.29	20	585	.19	21	5.126
842B/BF5.1K	135	1288	2.84	20	1288	.41	29	5.119
862B/BF5.1K	135	2570	5.70	20	2570	.83	51	5.040
872B/BF5.1K	135	3660	8.27	20	3660	1.20	99	4.995

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Overhung Load Ratings refer to Page 153.

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832B/BF5.7K	307	563	2.91	254	563	2.41	203	563	1.93
842B/BF5.7K	307	1110	5.64	254	1182	4.97	203	1272	4.28
862B/BF5.7K	307	2140	10.80	254	2280	9.56	203	2450	8.23
872B/BF5.7K	307	4160	21.20	254	4146	17.50	203	4146	14.00
832B/BF6.4K	273	588	2.52	226	588	2.08	181	588	1.67
842B/BF6.4K	273	1095	5.34	226	1138	4.60	181	1175	3.80
862B/BF6.4K	273	2248	10.20	226	2400	9.01	181	2501	7.52
872B/BF6.4K	273	4623	20.90	226	4674	17.50	181	4674	14.00
832B/BF7.2K	243	576	2.34	201	576	1.93	161	576	1.55
842B/BF7.2K	243	1171	4.88	201	1206	4.16	161	1246	3.44
862B/BF7.2K	243	2380	9.49	201	2500	8.26	161	2590	6.83
872B/BF7.2K	243	4859	19.30	201	5168	17.00	161	5282	13.90
832B/BF8K	218	560	2.01	181	560	1.66	145	560	1.33
842B/BF8K	218	1206	4.54	181	1254	3.91	145	1299	3.24
862B/BF8K	218	2480	8.82	181	2640	7.77	145	2760	6.49
872B/BF8K	218	5074	18.00	181	5343	15.70	145	5360	12.60
832B/BF9K	194	636	1.86	161	636	1.54	128	636	1.23
842B/BF9K	194	1275	4.14	161	1326	3.53	128	1414	2.92
862B/BF9K	194	2608	8.18	161	2737	7.11	128	2830	5.88
872B/BF9K	194	5358	16.70	161	5384	13.90	128	5375	11.10
832B/BF10K	175	576	1.63	145	576	1.35	116	576	1.08
842B/BF10K	175	1295	3.82	145	1330	3.26	116	1400	2.73
862B/BF10K	175	2600	7.56	145	2680	6.44	116	2780	5.36
872B/BF10K	175	5360	15.70	145	5238	13.10	116	5200	10.40
832B/BF11K	159	576	1.43	131	576	1.18	105	576	0.95
842B/BF11K	159	1330	3.45	131	1380	2.96	105	1420	2.43
862B/BF11K	159	2680	6.70	131	2760	5.72	105	2900	4.79
872B/BF11K	159	5291	13.70	131	5315	11.40	105	5304	9.10
832B/BF12K	145	550	1.30	120	550	1.08	96	550	0.86
842B/BF12K	145	1419	3.23	120	1488	2.72	96	1439	2.17
862B/BF12K	145	2840	6.49	120	2920	5.53	96	2990	4.52
872B/BF12K	145	5439	12.50	120	5300	10.40	96	5300	8.31
832B/BF14K	125	550	1.14	103	554	0.95	82	554	0.76
842B/BF14K	125	1443	2.89	103	1440	2.39	82	1440	1.91
862B/BF14K	125	2910	5.72	103	2970	4.83	82	3030	3.95
872B/BF14K	125	5364	10.90	103	5378	9.05	82	5378	7.24
832B/BF16K	109	576	1.06	90	576	0.88	72	576	0.70
842B/BF16K	109	1380	2.49	90	1380	2.06	72	1380	1.65
862B/BF16K	109	2900	5.12	90	3010	4.42	72	3070	3.60
872B/BF16K	109	5245	9.60	90	5250	7.96	72	5250	6.37

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.
Actual Output RPM = Input Speed ÷ Actual Ratio.
For Overhung Load Ratings refer to Page 153.

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
832B/BF5.7K	121	555	1.13	18	555	.16	21	5.540
842B/BF5.7K	121	1320	2.64	18	1320	.38	29	5.641
862B/BF5.7K	121	2622	5.24	18	2622	.76	51	5.649
872B/BF5.7K	121	4112	8.26	18	4112	1.20	99	5.620
832B/BF6.4K	108	588	0.98	16	588	.14	21	6.685
842B/BF6.4K	108	1222	2.35	16	1222	.34	29	5.970
862B/BF6.4K	108	2674	4.78	16	2674	.69	51	6.313
872B/BF6.4K	108	4653	8.29	16	4653	1.20	99	6.335
832B/BF7.2K	96	576	0.91	14	576	.13	21	7.067
842B/BF7.2K	96	1315	2.16	14	1315	.31	29	6.874
862B/BF7.2K	96	2772	4.37	14	2722	.63	51	7.160
872B/BF7.2K	96	5276	8.26	14	5276	1.20	99	7.210
832B/BF8K	86	560	0.78	12	560	.11	21	8.000
842B/BF8K	86	1328	1.97	12	1328	.29	29	7.610
862B/BF8K	86	2867	4.02	12	2867	.58	51	8.051
872B/BF8K	86	5322	7.44	12	5322	1.08	99	8.073
832B/BF9K	77	633	0.73	11	633	.11	21	9.792
842B/BF9K	77	1366	1.73	11	1366	.25	29	8.913
862B/BF9K	77	2937	3.63	11	2937	.53	51	9.131
872B/BF9K	77	5324	6.54	11	5324	.95	99	9.188
832B/BF10K	69	576	0.64	10	576	.09	21	10.112
842B/BF10K	69	1402	1.63	10	1402	.24	29	9.706
862B/BF10K	69	2935	3.37	10	2935	.49	51	9.832
872B/BF10K	69	5194	6.18	10	5194	.90	99	9.485
832B/BF11K	63	576	0.56	9.1	576	.08	21	11.566
842B/BF11K	63	1420	1.44	9.1	1420	.21	29	11.025
862B/BF11K	63	2900	3.00	9.1	2900	.43	51	11.434
872B/BF11K	63	5272	5.38	9.1	5272	.78	99	11.060
832B/BF12K	57	550	0.51	8.3	550	.07	21	12.101
842B/BF12K	57	1416	1.27	8.3	1416	.18	29	12.584
862B/BF12K	57	3032	2.73	8.3	3032	.40	51	12.537
872B/BF12K	57	5247	4.90	8.3	5247	.71	99	12.087
832B/BF14K	49	539	0.44	7.1	539	.06	21	13.829
842B/BF14K	49	1418	1.12	7.1	1418	.16	29	14.295
862B/BF14K	49	3087	2.39	7.1	3087	.35	51	14.580
872B/BF14K	49	5320	4.26	7.1	5320	.62	99	14.094
832B/BF16K	43	576	0.41	6.2	576	.06	21	15.599
842B/BF16K	43	1363	0.97	6.2	1363	.14	29	15.866
862B/BF16K	43	3035	2.12	6.2	3035	.31	51	16.159
872B/BF16K	43	5212	3.76	6.2	5212	.55	99	15.645

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Overhung Load Ratings refer to Page 153.

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM

Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832B/BF18K	97	590	0.91	80	590	0.75	64	590	0.60
842B/BF18K	97	1420	2.35	80	1420	1.95	64	1420	1.56
862B/BF18K	97	2940	4.88	80	3060	4.20	64	3060	3.37
872B/BF18K	97	5320	8.50	80	5320	7.05	64	5320	5.64
832B/BF20K	87	590	0.85	72	590	0.70	58	590	0.56
842B/BF20K	87	1442	2.01	72	1442	1.67	58	1442	1.33
862B/BF20K	87	3014	4.19	72	3014	3.54	58	3014	2.88
872B/BF20K	87	5319	7.64	72	5266	6.33	58	5266	5.06
832B/BF22K	79	574	0.72	65	590	0.60	52	590	0.48
842B/BF22K	79	1443	1.85	65	1443	1.53	52	1443	1.23
862B/BF22K	79	3030	3.95	65	3090	3.34	52	3120	2.70
872B/BF22K	79	5398	6.77	65	5398	5.61	52	5398	4.48
832B/BF25K	70	580	0.65	58	580	0.54	46	580	0.43
842B/BF25K	70	1312	1.64	58	1312	1.36	46	1312	1.09
862B/BF25K	70	3070	3.49	58	3070	2.89	46	3070	2.31
872B/BF25K	70	5279	6.17	58	5279	5.11	46	5279	4.09
832B/BF28K	62	580	0.59	51	580	0.49	41	580	0.39
842B/BF28K	62	1467	1.46	51	1467	1.21	41	1467	0.97
862B/BF28K	62	3070	3.19	51	3070	2.64	41	3070	2.11
872B/BF28K	62	5287	5.64	51	5287	4.67	41	5287	3.74
832B/BF32K	54	555	0.52	45	555	0.43	36	555	0.34
842B/BF32K	54	1338	1.29	45	1338	1.07	36	1338	0.85
862B/BF32K	54	3120	2.79	45	3120	2.31	36	3120	1.85
872B/BF32K	54	5342	4.90	45	5342	4.06	36	5342	3.25
832B/BF36K	48	557	0.47	40	557	0.39	32	557	0.31
842B/BF36K	48	1457	1.15	40	1457	0.95	32	1457	0.76
862B/BF36K	48	3120	2.55	40	3120	2.11	32	3120	1.69
872B/BF36K	48	5296	4.48	40	5296	3.71	32	5296	2.97
833B/BF36K	48	562	0.47	40	562	0.39	32	562	0.31
843B/BF36K	48	1390	1.17	40	1390	0.97	32	1390	0.77
863B/BF36K	48	2978	2.51	40	2977	2.08	32	2977	1.66
873B/BF36K	48	5225	4.42	40	5225	3.66	32	5225	2.93
832B/BF40K	43	466	0.36	36	484	0.31	29	484	0.25
842B/BF40K	43	1375	1.00	36	1254	0.85	29	1254	0.69
862B/BF40K	43	2992	2.18	36	2930	1.84	29	2930	1.51
872B/BF40K	43	5050	3.83	36	5050	3.24	29	5050	2.63
833B/BF40K	43	560	0.41	36	562	0.34	29	562	0.27
843B/BF40K	43	1390	1.02	36	1390	0.85	29	1390	0.68
863B/BF40K	43	2978	2.21	36	2978	1.83	29	2978	1.46
873B/BF40K	43	5225	3.80	36	5225	3.15	29	5225	2.52

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 153.

□ Indicates Triple Reduction

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
832B/BF18K	38	590	.35	5.5	590	.05	21	18.667
842B/BF18K	38	1420	.92	5.5	1420	.13	29	17.252
862B/BF18K	38	3060	1.99	5.5	3060	.29	51	17.253
872B/BF18K	38	5320	3.33	5.5	5320	.48	99	17.920
832B/BF20K	34	590	.33	5.0	590	.05	21	20.308
842B/BF20K	34	1442	.78	5.0	1442	.11	29	20.548
862B/BF20K	34	3014	1.69	5.0	3014	.25	51	20.606
872B/BF20K	34	5266	2.98	5.0	5266	.43	99	19.936
832B/BF22K	31	590	.28	4.5	590	.04	21	22.848
842B/BF22K	31	1425	.72	4.5	1425	.10	29	22.343
862B/BF22K	31	3120	1.58	4.5	3120	.23	51	22.001
872B/BF22K	31	5398	2.63	4.5	5398	.38	99	22.835
832B/BF25K	28	580	.25	4.0	580	.04	21	25.560
842B/BF25K	28	1312	.64	4.0	1312	.09	29	22.908
862B/BF25K	28	3070	1.36	4.0	3070	.20	51	25.246
872B/BF25K	28	5279	2.41	4.0	5279	.35	99	24.500
832B/BF28K	25	580	.23	3.6	580	.03	21	28.400
842B/BF28K	25	1467	.57	3.6	1467	.08	29	28.777
862B/BF28K	25	3070	1.24	3.6	3070	.18	51	27.643
872B/BF28K	25	5287	2.20	3.6	5287	.32	99	26.845
832B/BF32K	21	555	.20	3.1	555	.03	21	30.587
842B/BF32K	21	1315	.50	3.1	1338	.07	29	29.701
862B/BF32K	21	3120	1.08	3.1	3120	.16	51	32.193
872B/BF32K	21	5342	1.91	3.1	5344	.28	99	31.220
832B/BF36K	19	557	.18	2.8	557	.03	21	33.986
842B/BF36K	19	1457	.44	2.8	1457	.06	29	36.292
862B/BF36K	19	3120	.99	2.8	3120	.14	51	35.249
872B/BF36K	19	5296	1.74	2.8	5296	.25	99	34.208
833B/BF36K	19	562	.18	2.8	562	.03	29	35.393
843B/BF36K	19	1390	.45	2.8	1380	.07	37	35.193
863B/BF36K	19	2977	.97	2.8	2977	.14	59	35.059
873B/BF36K	19	5225	1.71	2.8	5225	.25	114	34.934
832B/BF40K	17	485	.15	2.5	485	.02	21	37.438
842B/BF40K	17	1254	.40	2.5	1254	.06	29	36.292
862B/BF40K	17	2930	.89	2.5	2930	.13	51	38.753
872B/BF40K	17	5050	1.54	2.5	5050	.22	99	38.150
833B/BF40K	17	562	.16	2.5	562	.02	29	40.446
843B/BF40K	17	1390	.39	2.5	1390	.06	37	40.216
863B/BF40K	17	2972	.85	2.5	2978	.12	59	39.830
873B/BF40K	17	5225	1.47	2.5	5225	.22	114	40.631

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Overhung Load Ratings refer to Page 153.
 □ Indicates Triple Reduction

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832B/BF45K	38	480	0.33	32	480	0.28	25	480	0.23
842B/BF45K	38	1410	0.90	32	1410	0.76	25	1450	0.61
862B/BF45K	38	2950	2.01	32	3010	1.70	25	3090	1.39
872B/BF45K	38	5167	3.54	32	5215	2.99	25	5254	2.41
833B/BF45K	38	544	0.38	32	540	0.31	25	540	0.25
843B/BF45K	38	1420	0.92	32	1420	0.76	25	1420	0.61
863B/BF45K	38	3040	2.01	32	3040	1.66	25	3040	1.33
873B/BF45K	38	5300	3.52	32	5300	2.91	25	5300	2.33
832B/BF50K	35	555	0.34	29	536	0.28	23	536	0.22
842B/BF50K	35	1500	0.87	29	1453	0.72	23	1500	0.58
862B/BF50K	35	3150	1.86	29	3150	1.55	23	3150	1.24
872B/BF50K	35	5216	3.16	29	5250	2.66	23	5250	2.10
833B/BF50K	35	540	0.33	29	540	0.27	23	540	0.22
843B/BF50K	35	1429	0.81	29	1429	0.67	23	1429	0.54
863B/BF50K	35	3040	1.77	29	3040	1.46	23	3040	1.17
873B/BF50K	35	5290	3.02	29	5290	2.50	23	5290	2.00
832B/BF56K	31	540	0.29	25	540	0.25	20	540	0.20
842B/BF56K	31	1392	0.71	25	1400	0.60	20	1400	0.49
862B/BF56K	31	2460	1.28	25	2460	1.06	20	2460	0.85
872B/BF56K	31	4629	2.50	25	4647	2.10	20	4700	1.70
833B/BF56K	31	554	0.30	25	540	0.25	20	540	0.20
843B/BF56K	31	1396	0.76	25	1396	0.63	20	1396	0.50
863B/BF56K	31	2887	1.54	25	2987	1.27	20	2987	1.01
873B/BF56K	31	5227	2.69	25	5227	2.23	20	5227	1.78
832B/BF63K	27	500	0.25	23	480	0.20	18	480	0.16
842B/BF63K	27	1475	0.70	23	1475	0.58	18	1425	0.45
862B/BF63K	27	3098	1.52	23	3120	1.29	18	3138	1.02
872B/BF63K	27	5300	2.64	23	5300	2.18	18	5300	1.75
833B/BF63K	27	522	0.26	23	530	0.22	18	530	0.17
843B/BF63K	27	1300	0.65	23	1300	0.54	18	1300	0.43
863B/BF63K	27	2973	1.41	23	2973	1.17	18	2973	0.94
873B/BF63K	27	5226	2.52	23	5228	2.09	18	5228	1.67
832B/BF71K	24	500	0.22	20	500	0.18	16	500	0.15
842B/BF71K	24	1485	0.62	20	1485	0.51	16	1485	0.41
862B/BF71K	24	2966	1.28	20	2966	1.06	16	2966	0.85
872B/BF71K	24	5385	2.38	20	5385	1.97	16	5385	1.58
833B/BF71K	24	577	0.24	20	577	0.20	16	577	0.16
843B/BF71K	24	1427	0.60	20	1427	0.50	16	1427	0.40
863B/BF71K	24	3040	1.23	20	3040	1.02	16	3040	0.81
873B/BF71K	24	5298	2.14	20	5298	1.77	16	5298	1.42

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Overhung Load Ratings refer to Page 153.
 □ Indicates Triple Reduction

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
832B/BF45K	15	480	.13	2.2	480	.02	21	41.599
842B/BF45K	15	1450	.36	2.2	1450	.05	29	45.591
862B/BF45K	15	3090	.82	2.2	3090	.12	51	42.431
872B/BF45K	15	5254	1.41	2.2	5254	.20	99	41.802
833B/BF45K	15	580	.15	2.2	540	.02	29	42.354
843B/BF45K	15	1420	.36	2.2	1420	.05	37	45.630
863B/BF45K	15	3040	.78	2.2	3040	.12	59	44.706
873B/BF45K	15	5300	1.38	2.2	5300	.20	114	44.521
832B/BF50K	14	536	.13	2.0	536	.02	21	46.910
842B/BF50K	14	1500	.34	2.0	1500	.05	29	49.414
862B/BF50K	14	3150	.73	2.0	3150	.10	51	48.501
872B/BF50K	14	5250	1.26	2.0	5250	.18	99	47.276
833B/BF50K	14	540	.12	2.0	540	.02	29	48.400
843B/BF50K	14	1429	.32	2.0	1429	.04	37	52.143
863B/BF50K	14	3040	.70	2.0	3040	.10	59	50.789
873B/BF50K	14	5290	1.19	2.0	5290	.17	114	51.776
832B/BF56K	12	540	.12	2.0	540	.02	21	53.312
842B/BF56K	12	1400	.28	2.0	1400	.04	29	56.158
862B/BF56K	12	2460	.50	2.0	2460	.07	51	55.125
872B/BF56K	12	4700	1.01	2.0	4700	.15	99	53.029
833B/BF56K	12	540	.12	2.0	540	.02	29	54.596
843B/BF56K	12	1396	.30	2.0	1396	.04	37	54.281
863B/BF56K	12	2987	.59	2.0	2987	.09	59	57.321
873B/BF56K	12	5227	1.06	2.0	5227	.15	114	57.422
832B/BF63K	11	480	.09	1.6	480	.01	21	57.390
842B/BF63K	11	1475	.28	1.6	1475	.04	29	60.380
862B/BF63K	11	3138	.61	1.6	3138	.09	51	58.384
872B/BF63K	11	5300	1.03	1.6	5300	.15	99	57.770
833B/BF63K	11	570	.11	1.6	530	.01	29	59.396
843B/BF63K	11	1300	.26	1.6	1300	.04	37	59.054
863B/BF63K	11	2973	.54	1.6	2973	.08	59	62.319
873B/BF63K	11	5226	.98	1.6	5228	.14	114	61.309
832B/BF71K	10	500	.09	1.4	500	.01	21	65.190
842B/BF71K	10	1485	.25	1.4	1485	.03	29	68.619
862B/BF71K	10	2966	.50	1.4	2966	.07	51	66.358
872B/BF71K	10	5385	.94	1.4	5385	.13	99	64.801
833B/BF71K	10	577	.09	1.4	577	.01	29	71.078
843B/BF71K	10	1427	.23	1.4	1427	.03	37	70.302
863B/BF71K	10	3040	.47	1.4	3040	.07	59	73.093
873B/BF71K	10	5298	.85	1.4	5298	.13	114	73.172

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 153.

□ Indicates Triple Reduction

G

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM

Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
833B/BF80K	21	565	0.21	18	565	0.17	14	565	0.14
843B/BF80K	21	1320	0.51	18	1320	0.42	14	1320	0.34
863B/BF80K	21	3038	1.13	18	3038	0.94	14	3038	0.75
873B/BF80K	21	5315	2.01	18	5315	1.66	14	5315	1.33
833B/BF90K	19	575	0.19	16	575	0.15	12	575	0.12
843B/BF90K	19	1395	0.47	16	1395	0.39	12	1395	0.31
863B/BF90K	19	2745	0.98	16	2745	0.82	12	2745	0.65
873B/BF90K	19	5252	1.73	16	5252	1.43	12	5252	1.14
833B/BF100K	17	570	0.17	14	575	0.14	11	575	0.11
843B/BF100K	17	1400	0.42	14	1400	0.35	11	1400	0.28
863B/BF100K	17	3095	0.88	14	3095	0.72	11	3095	0.58
873B/BF100K	17	5252	1.58	14	5252	1.31	11	5252	1.05
833B/BF112K	15	543	0.15	12	540	0.12	10	540	0.10
843B/BF112K	15	1340	0.37	12	1340	0.30	10	1340	0.24
863B/BF112K	15	2820	0.79	12	2820	0.65	10	2820	0.52
873B/BF112K	15	5300	1.37	12	5300	1.14	10	5300	0.91
833B/BF125K	14	523	0.13	11	520	0.11	9.3	520	0.09
843B/BF125K	14	1430	0.33	11	1430	0.27	9.3	1430	0.22
863B/BF125K	14	3000	0.70	11	3000	0.58	9.3	3000	0.46
873B/BF125K	14	5337	1.26	11	5337	1.04	9.3	5337	0.83
833B/BF140K	12	487	0.11	10	487	0.09	8.3	467	0.08
843B/BF140K	12	1360	0.29	10	1360	0.24	8.3	1360	0.20
863B/BF140K	12	2916	0.65	10	2916	0.54	8.3	2916	0.43
873B/BF140K	12	5247	1.11	10	5247	0.92	8.3	5247	0.74
833B/BF160K	10	490	0.10	9.1	490	0.09	7.2	490	0.07
843B/BF160K	10	1410	0.27	9.1	1410	0.22	7.2	1410	0.18
863B/BF160K	10	3130	0.58	9.1	3130	0.48	7.2	3130	0.39
873B/BF160K	10	5280	1.02	9.1	5280	0.84	7.2	5280	0.67
833B/BF180K	9.7	555	0.10	8.0	555	0.08	6.4	555	0.06
843B/BF180K	9.7	1436	0.24	8.0	1436	0.20	6.4	1436	0.16
863B/BF180K	9.7	3146	0.53	8.0	3148	0.44	6.4	3148	0.35
873B/BF180K	9.7	5362	0.92	8.0	5362	0.76	6.4	5362	0.61
833B/BF200K	8.8	568	0.09	7.3	555	0.07	5.8	555	0.06
843B/BF200K	8.8	1428	0.21	7.3	1428	0.17	5.8	1428	0.14
863B/BF200K	8.8	3173	0.47	7.3	3173	0.39	5.8	3173	0.31
873B/BF200K	8.8	5432	0.82	7.3	5432	0.68	5.8	5432	0.55
833B/BF225K	7.8	544	0.08	6.4	544	0.07	5.2	544	0.05
843B/BF225K	7.8	1410	0.19	6.4	1410	0.16	5.2	1410	0.13
863B/BF225K	7.8	3146	0.44	6.4	3146	0.36	5.2	3146	0.29
873B/BF225K	7.8	5341	0.75	6.4	5341	0.62	5.2	5341	0.50
833B/BF250K	7.0	540	0.07	5.8	540	0.06	4.6	540	0.05
843B/BF250K	7.0	1410	0.17	5.8	1410	0.14	4.6	1410	0.11
863B/BF250K	7.0	3110	0.39	5.8	3110	0.32	4.6	3110	0.26
873B/BF250K	7.0	5423	0.67	5.8	5423	0.56	4.6	5423	0.45

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 153.

□ Indicates Triple Reduction

800 Series Ratio and Capacity Selection Tables

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
833B/BF80K	8.6	565	.08	1.25	565	.01	29	79.506
843B/BF80K	8.6	1320	.19	1.25	1320	.03	37	76.483
863B/BF80K	8.6	3038	.43	1.25	3038	.06	59	79.466
873B/BF80K	8.6	5315	.77	1.25	5315	.11	114	78.141
833B/BF90K	7.7	575	.07	1.25	575	.01	29	89.460
843B/BF90K	7.7	1395	.18	1.25	1395	.03	37	87.686
863B/BF90K	7.7	2745	.38	1.25	2745	.05	59	82.764
873B/BF90K	7.7	5252	.66	1.25	5252	.10	114	89.712
833B/BF100K	6.9	575	.06	1.25	575	.01	29	99.401
843B/BF100K	6.9	1400	.16	1.25	1400	.02	37	98.820
863B/BF100K	6.9	3095	.33	1.25	3095	.05	59	103.962
873B/BF100K	6.9	5252	.61	1.25	5252	.09	114	98.233
833B/BF112K	6.2	540	.06	.89	540	.01	29	107.054
843B/BF112K	6.2	1340	.14	.89	1340	.02	37	113.691
863B/BF112K	6.2	2820	.30	.89	2820	.04	59	105.536
873B/BF112K	6.2	5300	.53	.89	5300	.08	114	114.319
833B/BF125K	5.5	520	.05	.80	520	.01	29	118.950
843B/BF125K	5.5	1430	.13	.80	1430	.02	37	128.128
863B/BF125K	5.5	3000	.27	.80	3000	.04	59	127.052
873B/BF125K	5.5	5337	.48	.80	5337	.07	114	125.178
833B/BF140K	5.0	487	.05	.71	487	.01	29	131.034
843B/BF140K	5.0	1360	.11	.71	1360	.02	37	138.931
863B/BF140K	5.0	2916	.25	.71	2916	.04	59	132.567
873B/BF140K	5.0	5247	.43	.71	5247	.06	114	139.695
833B/BF160K	4.3	490	.04	.62	490	.01	29	145.595
843B/BF160K	4.3	1410	.10	.62	1410	.01	37	156.574
863B/BF160K	4.3	3130	.22	.62	3130	.03	59	159.582
873B/BF160K	4.3	5280	.40	.62	5280	.06	114	152.964
833B/BF180K	3.8	555	.04	.55	555	.01	29	164.184
843B/BF180K	3.8	1436	.09	.55	1436	.01	37	176.854
863B/BF180K	3.8	3148	.20	.55	3148	.03	59	175.553
873B/BF180K	3.8	5362	.36	.55	5362	.05	114	172.231
833B/BF200K	3.4	555	.03	.50	555	.01	29	186.590
843B/BF200K	3.4	1428	.08	.50	1428	.01	37	200.989
863B/BF200K	3.4	3173	.18	.50	3173	.03	59	199.528
873B/BF200K	3.4	5432	.33	.50	5432	.05	114	195.757
833B/BF225K	3.1	544	.03	.44	544	.01	29	200.962
843B/BF225K	3.1	1410	.07	.44	1410	.01	37	216.098
863B/BF225K	3.1	3146	.17	.44	3146	.02	59	211.326
873B/BF225K	3.1	5341	.29	.44	5341	.41	114	210.462
833B/BF250K	2.76	540	.03	.40	540	.01	29	228.387
843B/BF250K	2.76	1410	.06	.40	1410	.01	37	245.633
863B/BF250K	2.76	3110	.15	.40	3110	.02	59	240.188
873B/BF250K	2.76	5423	.26	.40	5423	.04	114	239.210

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 350-352.

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 153.

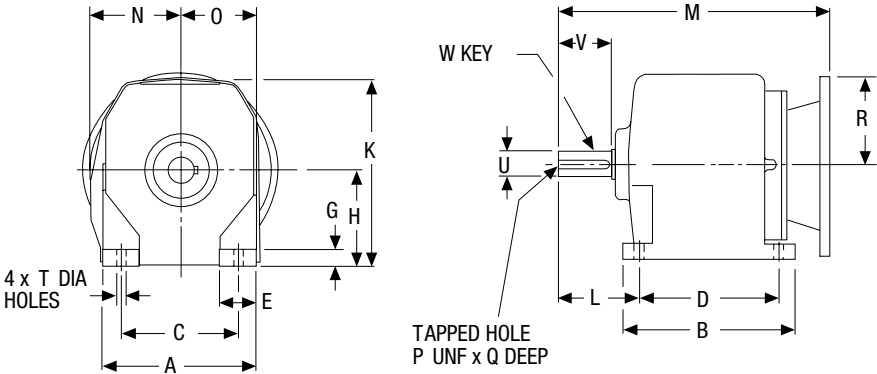
□ Indicates Triple Reduction

G

800 Series In-Line Helical Gear Drive Dimensions

F800B Series Double Reduction; NEMA C-Face Input Foot Mounted

G



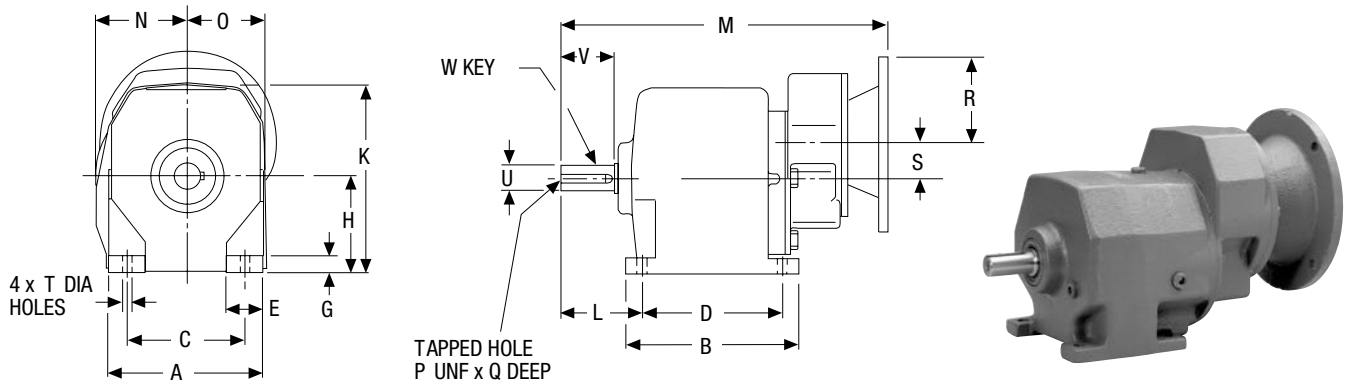
Size	A	B	C	D	E	G	H	K	L	N	O	P	Q	T
F832B	5.44	4.33	4.33	3.35	1.05	.48	2.95	5.79	2.28	3.16	2.84	1/4	.63	.39
F842B	5.71	6.30	4.33	5.12	1.48	.67	3.54	6.99	2.95	3.31	2.95	1/4	.63	.39
F862B	7.48	7.87	5.31	6.50	2.19	.81	4.53	9.06	3.54	4.13	3.87	3/8	.87	.59
F872B	9.06	9.65	6.69	8.07	2.64	1.03	5.51	10.83	4.53	5.12	4.69	5/8	1.38	.75

Size	Low Speed Shaft				M				R			
	U +.000 -.001	V	W-Key		NEMA Mounting				NEMA Mounting			
			Sq.	Lgth.	56C	140TC	180TC	210TC	56C	140TC	180TC	210TC
					B5	B7	B9	B11	B5	B7	B9	B11
F832B	.750	1.57	.19	1.28	9.82	9.82	10.65	—	3.31	3.31	4.63	—
F842B	1.000	1.97	.25	1.75	10.73	10.73	11.55	—	3.31	3.31	4.63	—
F862B	1.250	2.36	.25	2.00	12.26	12.26	14.61	14.61	3.31	3.31	4.63	4.63
F872B	1.625	3.15	.38	2.37	15.15	15.15	16.76	16.76	3.31	3.31	4.63	4.63

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

800 Series In-Line Helical Gear Drives Dimensions

F800B Series Triple Reduction; NEMA C-Face Input Foot Mounted



G

Size	A	B	C	D	E	G	H	K	L	N	O	P	Q	S
F833B	5.44	4.33	4.33	3.35	1.05	.48	2.95	5.79	2.28	3.16	2.84	1/4	.63	1.40
F843B	5.71	6.30	4.33	5.12	1.48	.67	3.54	6.99	2.95	3.31	2.95	1/4	.63	1.40
F863B	7.48	7.87	5.31	6.50	2.19	.81	4.53	9.06	3.54	4.13	3.87	3/8	.87	1.83
F873B	9.06	9.65	6.69	8.07	2.64	1.03	5.51	10.83	4.53	5.12	4.69	5/8	1.38	2.34

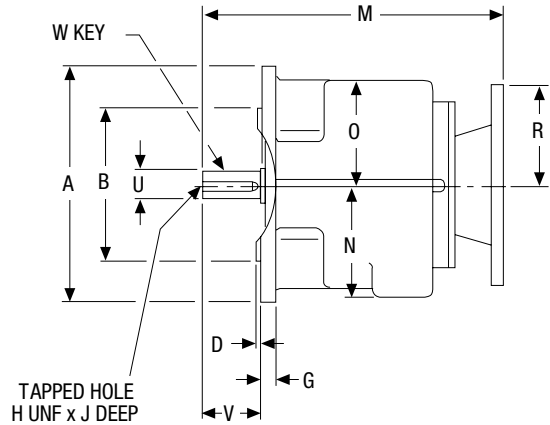
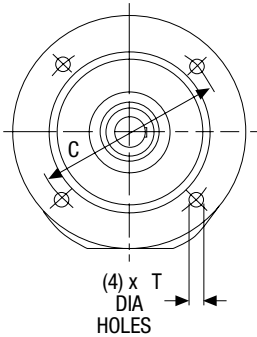
Size	T	Low Speed Shaft				M			R		
		U +.000 -.001	V	W-Key		NEMA Mounting			NEMA Mounting		
				Sq.	Lgth.	56C	140TC	180TC	56C	140TC	180TC
						B5	B7	B9	B5	B7	B9
F833B	.39	.750	1.57	.19	1.28	12.03	—	—	3.31	—	—
F843B	.39	1.000	1.97	.25	1.75	12.94	—	—	3.31	—	—
F863B	.59	1.250	2.36	.25	2.00	15.38	15.38	—	3.31	3.31	—
F873B	.75	1.625	3.15	.38	2.37	18.28	18.28	20.63	3.31	3.31	4.63

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

800 Series In-Line Helical Gear Drive Dimensions

F800BF Series Double Reduction; NEMA C-Face Input Output Flange Mounted

G



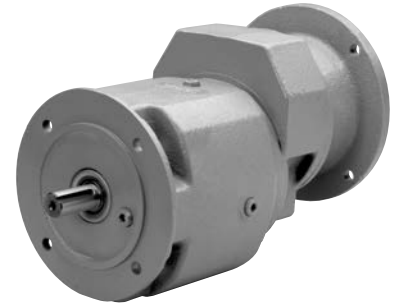
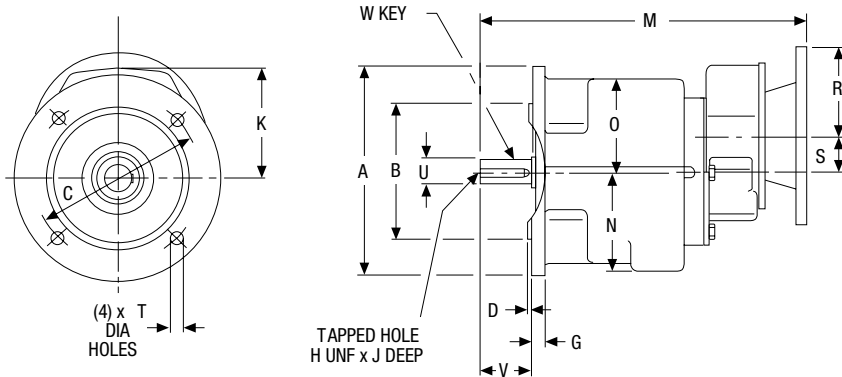
Size	A	B +.000 -.003	C	D	G	H	J	N	O	T
F832BF	6.30	4.330	5.12	.14	.28	1/4	.63	3.15	2.76	.39
F842BF	7.87	5.118	6.50	.14	.47	1/4	.63	3.74	3.46	.47
F862BF	9.84	7.086	8.46	.16	.47	3/8	.87	4.45	4.53	.59
F872BF	11.81	9.055	10.43	.16	.55	5/8	1.38	5.43	5.43	.59

Size	Low Speed Shaft				M				R			
	U +.000 -.001	V	W-Key		NEMA Mounting				NEMA Mounting			
			Sq.	Lgth.	56C	140TC	180TC	210TC	56C	140TC	180TC	210TC
					B5	B7	B9	B11	B5	B7	B9	B11
F832BF	.750	1.57	.19	1.28	9.82	9.82	10.65	—	3.31	3.31	4.63	—
F842BF	1.000	1.97	.25	1.75	10.73	10.73	11.55	—	3.31	3.31	4.63	—
F862BF	1.250	2.36	.25	2.00	12.26	12.26	14.61	14.61	3.31	3.31	4.63	4.63
F872BF	1.625	3.15	.38	2.37	15.15	15.15	16.76	16.76	3.31	3.31	4.63	4.63

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

800 Series In-Line Helical Gear Drives Dimensions

F800BF Series Triple Reduction; NEMA C-Face Input Output Flange Mounted



G

Size	A	B +.000 -.003	C	D	G	H	J	K	N	O	S
F833BF	6.30	4.330	5.12	.14	.28	1/4	.63	4.17	3.15	2.76	1.40
F843BF	7.87	5.118	6.50	.14	.47	1/4	.63	4.17	3.74	3.46	1.40
F863BF	9.84	7.086	8.46	.16	.47	3/8	.87	4.45	4.45	4.53	1.83
F873BF	11.81	9.055	10.43	.16	.55	5/8	1.38	5.43	5.43	5.43	2.34

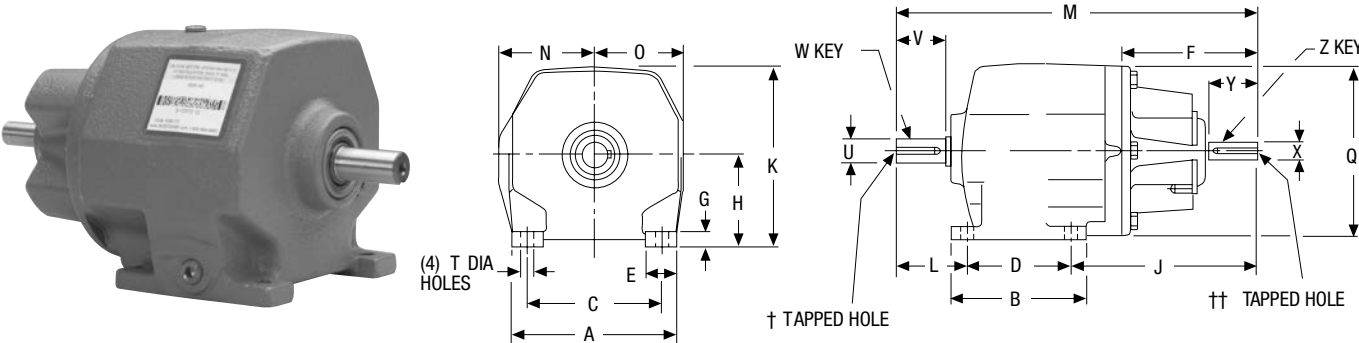
Size	T	Low Speed Shaft				M			R		
		U +.000 -.001	V	W-Key		NEMA Mounting			NEMA Mounting		
				Sq.	Lgth.	56C B5	140TC B7	180TC B9	56C B5	140TC B7	180TC B9
F833BF	.39	.750	1.57	.19	1.28	12.03	—	—	3.31	—	—
F843BF	.47	1.000	1.97	.25	1.75	12.94	—	—	3.31	—	—
F863BF	.59	1.250	2.36	.25	2.00	15.38	15.38	—	3.31	3.31	—
F873BF	.59	1.625	3.15	.38	2.37	18.28	18.28	20.63	3.31	3.31	4.63

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

800 Series In-Line Helical Gear Drive Dimensions

800B Series Double Reduction; Non-Flanged Foot Mounted

G



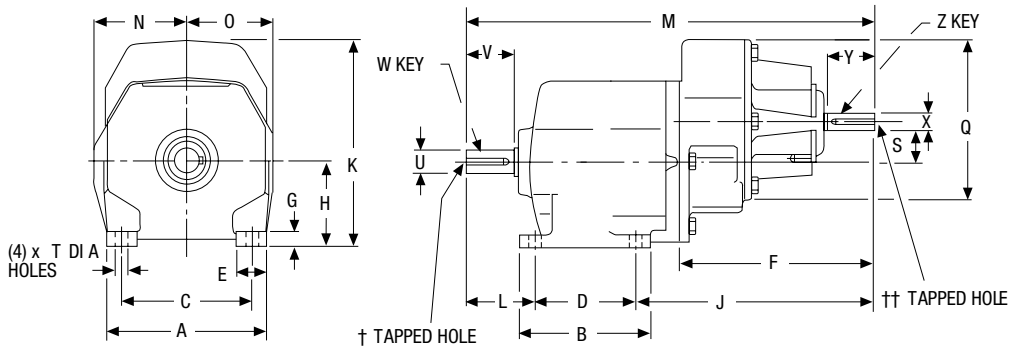
Size	A	B	C	D	E	F	G	H	J	K	L	M	N
832B	5.44	4.33	4.33	3.35	1.05	4.37	.48	2.95	5.94	5.79	2.28	11.57	3.16
842B	5.71	6.30	4.33	5.12	1.48	4.37	.67	3.54	4.41	6.99	2.95	12.48	3.31
862B	7.48	7.87	5.31	6.50	2.19	4.37	.81	4.53	4.49	9.06	3.54	14.53	4.13
872B	9.06	9.65	6.69	8.07	2.64	4.53	1.03	5.51	4.72	10.83	4.53	17.32	5.12

Size	O	Q	T	Low Speed Shaft				High Speed Shaft			
				U +.000 -.001	V	W-Key		X +.000 -.001	Y	Z-Key	
						Sq.	Lgth.			Sq.	Lgth.
832B	2.84	5.51	.39	.750	1.57	.19	1.28	.625	1.57	.19	1.28
842B	2.95	5.51	.39	1.000	1.97	.25	1.75	.625	1.57	.19	1.28
862B	3.87	7.09	.59	1.250	2.36	.25	2.00	.750	1.57	.19	1.28
872B	4.69	8.46	.75	1.625	3.15	.38	2.37	.875	1.97	.19	1.28

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.
† 832B 1/4 UNF x 0.63 DP, 842B 1/4UNF x 0.63 DP. Size 862B 3/8 UNF x 0.87 DP. Size 872B 5/8 UNF x 1.38 DP.
††832B 1/4 UNF x 0.49 DP, 842B 1/4 UNF x 0.49 DP. Size 862B 1/4 UNF x 0.63 DP. Size 872B 5/16 UNF x 0.63 DP.

800 Series In-Line Helical Gear Drives Dimensions

800B Series Triple Reduction; Non-Flanged Foot Mounted



G

Size	A	B	C	D	E	F	G	H	J	K	L	M	N
833B	5.44	4.33	4.33	3.35	1.05	6.57	.48	2.95	8.15	7.13	2.28	13.78	3.16
843B	5.71	6.30	4.33	5.12	1.48	6.57	.67	3.54	6.61	7.72	2.95	14.69	3.31
863B	7.48	7.87	5.31	6.50	2.19	6.97	.81	4.53	7.09	9.13	3.54	17.13	4.13
873B	9.06	9.65	6.69	8.07	2.64	7.76	1.03	5.51	7.95	11.42	4.53	20.55	5.12

Size	O	Q	S	T	Low Speed Shaft				High Speed Shaft			
					U +.000 -.001	V	W-Key		X +.000 -.001	Y	Z-Key	
							Sq.	Lgth.			Sq.	Lgth.
833B	2.84	5.51	1.40	.39	.750	1.57	.19	1.28	.625	1.57	.19	1.28
843B	2.95	5.51	1.40	.39	1.000	1.97	.25	1.75	.625	1.57	.19	1.28
863B	3.87	5.51	1.83	.59	1.250	2.36	.25	2.00	.625	1.57	.19	1.28
873B	4.69	7.09	2.34	.75	1.625	3.15	.38	2.37	.750	1.57	.19	1.28

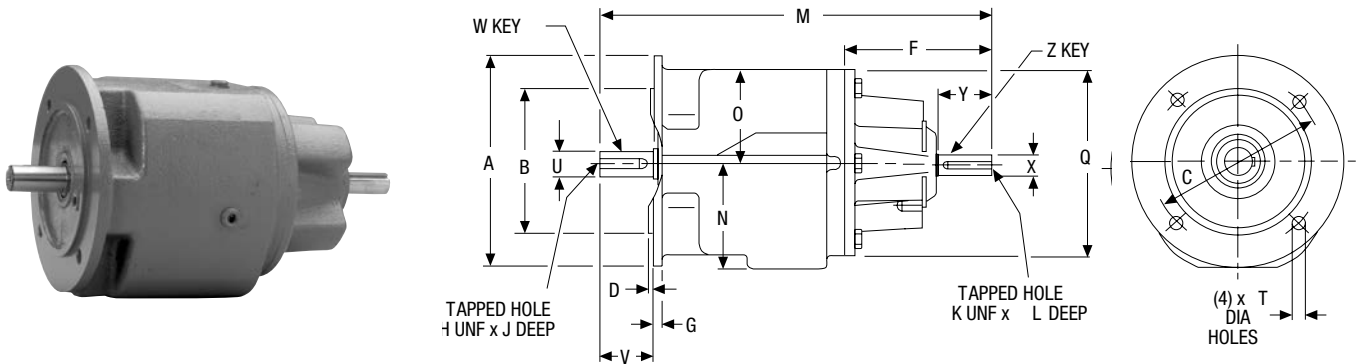
Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

† Size 833B 1/4 UNF x 0.63 DP, 843 1/4 UNF x 0.63 DP, 863B 3/8 UNF x 0.87 DP. Size 873B 5/8 UNF x 1.38 DP.

†† Size 833B 1/4 UNF x 0.49 DP, 843 1/4 UNF x 0.49 DP, 863B 1/4 UNF x 0.63 DP. Size 873B 5/16 UNF x 0.63 DP.

800 Series In-Line Helical Gear Drive Dimensions

800BF Series Double Reduction; Non-Flanged Output Flange Mounted



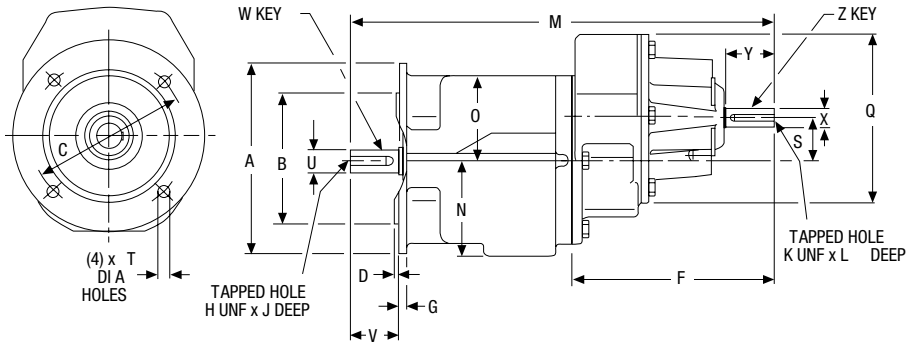
Size	A	B +.000 -.003	C	D	F	G	H	J	K	L	M	N
832BF	6.30	4.331	5.12	.14	4.37	.28	1/4	.63	1/4	.49	11.57	3.15
842BF	7.87	5.118	6.50	.14	4.37	.47	1/4	.63	1/4	.49	12.48	3.74
862BF	9.84	7.087	8.46	.16	4.37	.47	3/8	.87	1/4	.63	14.53	4.45
872BF	11.81	9.055	10.43	.16	4.53	.55	5/8	1.38	5/16	.63	17.32	5.43

Size	O	Q	T	Low Speed Shaft				High Speed Shaft			
				U +.000 -.001	V	W-Key		X +.000 -.001	Y	Z-Key	
						Sq.	Lgth.			Sq.	Lgth.
832BF	2.76	5.51	.39	.750	1.57	.19	1.28	.6250	1.57	.19	1.28
842BF	3.46	5.51	.47	1.000	1.97	.25	1.75	.6250	1.57	.19	1.28
862BF	4.53	7.09	.59	1.250	2.36	.25	2.00	.7500	1.57	.19	1.28
872BF	5.43	8.35	.59	1.625	3.15	.38	2.37	.8750	1.97	.19	1.28

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

800 Series In-Line Helical Gear Drives Dimensions

800BF Series Triple Reduction; Non-Flanged Output Flange Mounted



G

Size	A	B +.000 -.003	C	D	F	G	H	J	K	L	M	N
833BF	6.30	4.331	5.12	.14	6.57	.28	1/4	.63	1/4	.49	13.78	3.15
843BF	7.87	5.118	6.50	.14	6.57	.47	1/4	.63	1/4	.49	14.69	3.74
863BF	9.84	7.087	8.46	.16	6.97	.47	3/8	.87	1/4	.63	17.13	4.45
873BF	11.81	9.055	10.43	.16	7.76	.55	5/8	1.38	5/16	.63	20.55	5.43

Size	O	Q	S	T	Low Speed Shaft				High Speed Shaft			
					U +.000 -.001	V	W-Key		X +.000 -.001	Y	Z-Key	
							Sq.	Lgth.			Sq.	Lgth.
833BF	2.76	5.51	1.40	.39	.750	1.57	.19	1.28	.625	1.57	.19	1.28
843BF	3.46	5.51	1.40	.47	1.000	1.97	.25	1.75	.625	1.57	.19	1.28
863BF	4.53	5.51	1.83	.59	1.250	2.36	.25	2.00	.625	1.57	.19	1.28
873BF	5.43	7.09	2.34	.59	1.625	3.15	.38	2.37	.750	1.57	.19	1.28

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

800 Series Washdown Duty



Boston Gear's Bost-Kleen and Stainless Bost-Kleen reducers assure contamination-safe operation in the most stringent environmental conditions.

White Bost-Kleen™

- Washable and Scrubbable
- Corrosion Resistant
- Durable White Epoxy Finish
- Includes all the standard 800 features
- Limited Lifetime Warranty
- Cast Iron Housing
- Plated Pressure Relief Valves Standard
- Standard NEMA C-face or projecting input shaft configurations
- Single, Double and Triple reduction ratios from 1:5:1 to 250:1



Available options on BK and SBK

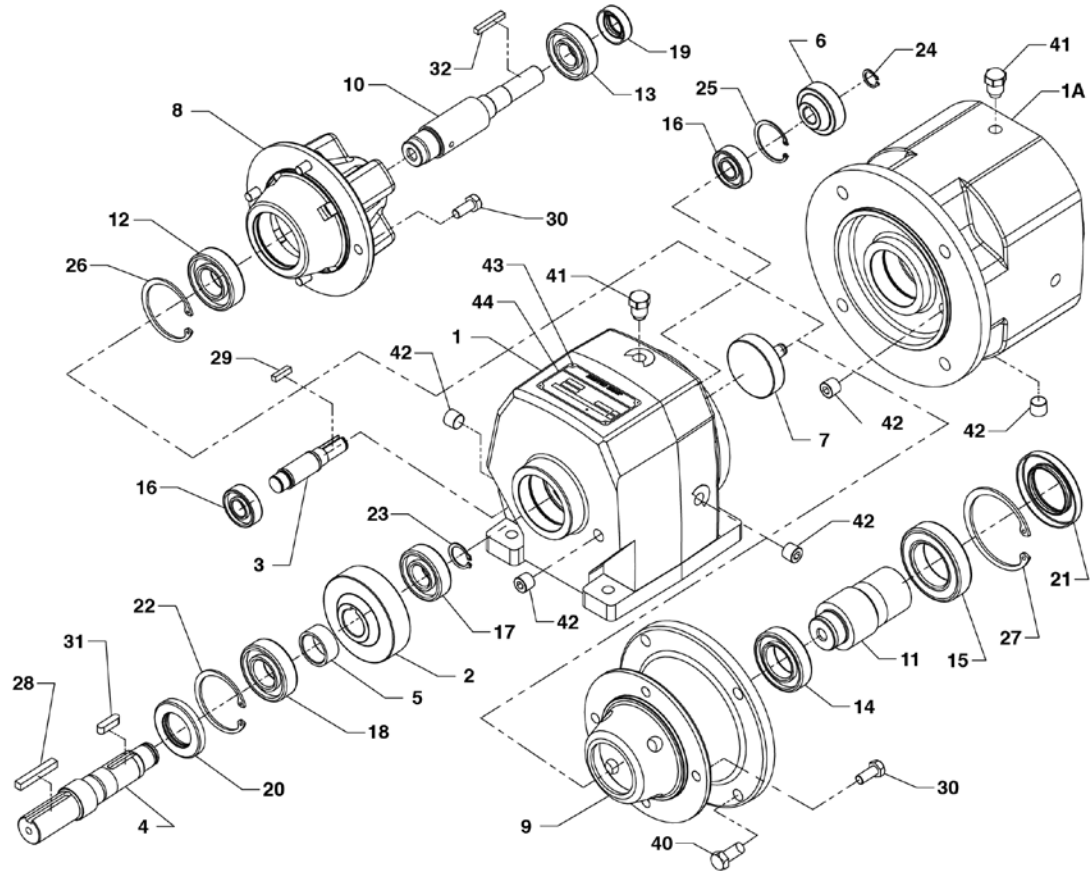
- Stainless Steel Output Shafts
- Premounted Stainless Washdown Motors
- Prelubrication from the factory see page 16 for a complete list of lubrication options
- Exposed hardware made of stainless steel.

Stainless Bost-Kleen

- Includes all the features of the standard white Bost-Kleen reducers
- U.S.D.A. approved for use in food processing and handling industry where incidental food contact may occur
- Excluder seal on solid output shaft units
- Durable stainless steel epoxy coating system utilizes a unique #316L stainless steel leafing pigment. This catalyzed system creates a hard, non-toxic metallic finish

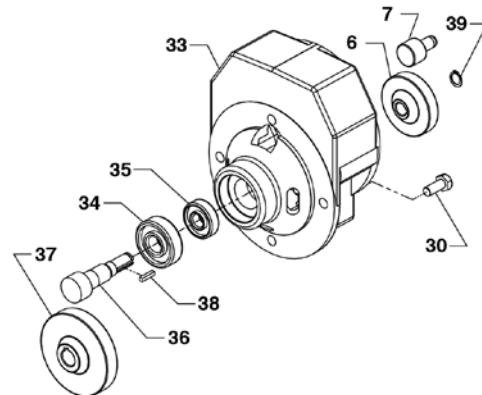


800 Series Parts List – In-Line Helical Gear Drives



Item No.	Description of Part
1	HOUSING, BASE MOUNT
1A	HOUSING, FLANGE MOUNT
2	HELICAL GEAR OUTPUT
3	HELICAL PINION, OUTPUT
4	OUTPUT SHAFT
5	OUTPUT SPACER
6	HELICAL GEAR, 1ST RED
7	HELICAL PINION, 1ST RED
8	INPUT BEARING CARRIER
9	MOTOR FLANGE (B5/B7-B9/B11)
10	INPUT REDUCER SHAFT
11	INPUT MOTOR SHAFT
12	BEARING, INPUT SHAFT (INBOARD)
13	BEARING, INPUT SHAFT (OUTBOARD)
14	BEARING, MOTOR SHAFT (INBOARD)
15	BEARING, MOTOR SHAFT (OUTBOARD)
16	BEARING, OUTPUT PINION
17	BEARING, OUTPUT SHAFT (INBOARD)
18	BEARING, OUTPUT SHAFT (OUTPUT)
19	OIL SEAL, INPUT REDUCTOR SHAFT
20	OIL SEAL, OUTPUT SHAFT
21	OIL SEAL, INPUT MOTOR SHAFT
22	RETAINING RING, OUTPUT (HOUSING)
23	RETAINING RING, OUTPUT (SHAFT)
24	RETAINING RING, OUTPUT PINION
25	RETAINING RING, OUTPUT PINION BORE
26	RETAINING RING, INPUT CARRIER
27	RETAINING RING, B5/B7-B9/B11 FLANGE
28	KEY, OUTPUT SHAFT PROJECTION
29	KEY, OUTPUT PINION
30	HEX HEAD CAP SCREWS

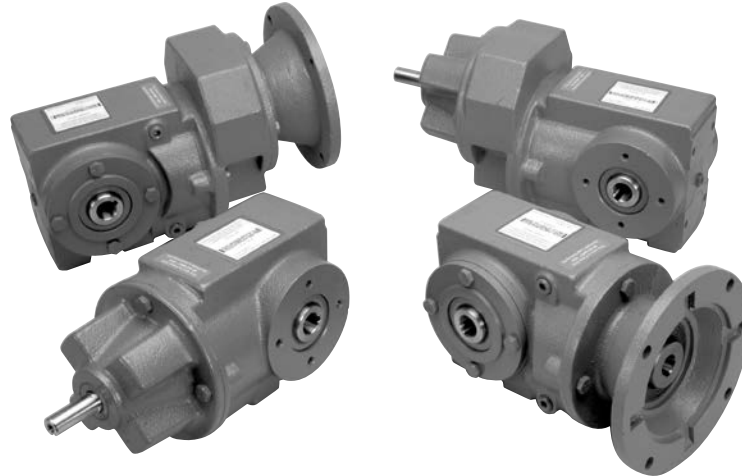
Triple Module



Item No.	Description of Part
31	KEY, OUTPUT SHAFT
32	KEY, INPUT REDUCTOR
33	TRIPLE HOUSING ADAPTER
34	BEARING
35	BEARING
36	HELICAL PINION, 2ND REDUCTOR
37	HELICAL GEAR, 2ND REDUCTOR
38	KEY
39	RING
40	HEX HEAD CAP SCREW
41	PLUG, OIL VENT
42	PLUG, PIPE
43	NAMEPLATE TAPE
44	NAMEPLATE



800 Series Right Angle Helical Worm Gear Drives



Easy to Select, Easy to Apply, Easy to Obtain

The Boston Gear 800BR Series contains a broad selection of compact, heavy-duty helical gear drives, with long life performance features and simplified maintenance. Models include double and triple reduction units in flanged or foot mounted arrangements. You can choose from a wide range of reduction ratios to suit specific applications and a variety of input shaft configurations for maximum positioning flexibility. All units are adaptable to floor, sidewall or ceiling mounting.

Two Available USDA Approved Finishes

- Durable non-absorbent, non-toxic white (BK) or stainless epoxy finish (SBK)
- Washable & Scrubbable
- Includes all the standard 800BR features



H

Section Contents

Product Reference Guide	198
Interchange / How to Order.....	199-201
Selection Procedure.....	202-203
Overhung Load / Weights	204
Lubrication / Mounting.....	205-206
Flanged Gear Drive Ratings.....	207-221
Non-Flanged Gear Drive Ratings	222-231
Flanged Gear Drive Dimensions	232-233
Non-Flanged Gear Drive Dimensions.....	234-235
Accessories / Parts List.....	236-238

Product Selection / Reference Guide

800 Series Helical Gear Drives

SF800BR Series Right Angle Helical Worm Flanged



**Double Reduction
Flange Input**
Selection Pages 207-221
Dimensions-Page 232



**Triple Reduction
Flange Input**
Selection Pages 207-221
Dimensions-Page 233

SF800BR Series Right Angle Helical Worm Non-Flanged



Double Reduction
Selection Pages 207-221
Dimensions-Page 234



Triple Reduction
Selection Pages 207-221
Dimensions-Page 235

SF/S800BR Series Accessories and Options



Output Flange Kits
Dimensions-Page 236



Torque Arm Kits
Dimensions-Page 236



Base Kits
Dimensions-Page 237



Output Shaft Kits
Dimensions-Page 237

800 Series Right Angle Helical Worm Gear Drives

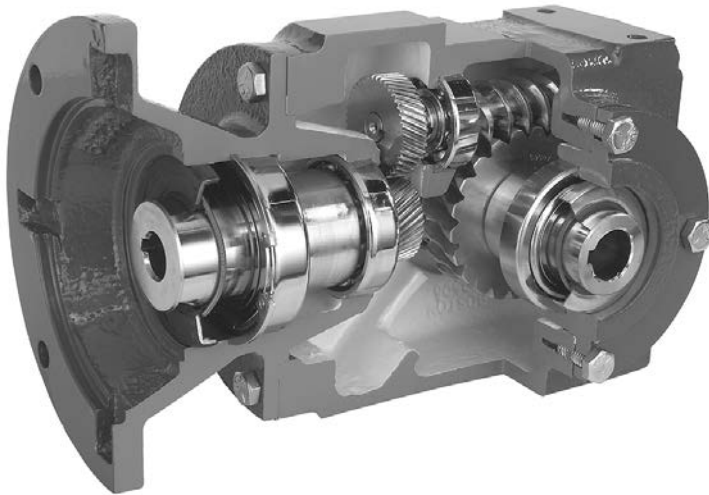
The Inside Story

Available in USDA approved finish for washdown applications

Oil seal location provides easy, access for routine product maintenance. Additionally, all sizes can be double sealed on the high speed shaft for severe applications.

All units shipped prelubricated for your particular mounting position.

Available in both standard NEMA C-Face flanged and direct input non-flanged configurations. NEMA C-Face units allow for direct assembly of the reducer and motor.



Rugged housing of fine grained, gear quality cast iron provides maximum strength and durability.

The use of state of the art helical and worm gear combinations affords optimum performance fulfilling a wide variety of ratio requirements.

Available in both hollow and projecting output shaft styles.

Modular base allows dimensional interchangeability with major European manufacturers.

A wide range of available gear reduction ratios, from 8:1 to 900:1, allows the 800BR Series to fulfill a broad range of output speed requirements.

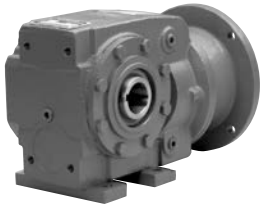
Super finished oil seal diameter on both input and output shafts provide extended life for double lipped seals.

**REDUCER
EXPRESS**
**SAME DAY
GUARANTEED
SHIPMENT**

See page 356 for conditions.

800 Series Right Angle Helical Worm Gear Drives

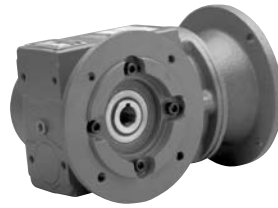
Interchange Guide



**Base Mounted
NEMA C-Face
SF800BRB**



**Base Mounted
S800BRB**



**Output Flange Mount
NEMA C-Face
SF800BRF**



**Output Flange Mount
S800BRF**

Boston Gear 800BR Series Right Angle Helical-Worm Gear Drives are designed to be functionally interchangeable with these and many other manufacturer's drives. This chart is intended to be a guide only. Please see appropriate manufacturer's catalogs for exact details regarding ratings and dimensions.

Manufacturers	Size	Base Mounted* NEMA C-Face SF800BRB	Base Mounted* S800BRB	Output Flange Mount NEMA C-Face SF800BRF	Output Flange Mount S800BRF
Boston	830	SF832BRB/SF833BRB	S832BRB/S833BRB	SF832BRF/SF833BRF	S832BRF/S833BRF
SEW Eurodrive	32	SA32LP	SA32	SAF32LP	SAF32
Falk	03	UWCQ2(3)-A	UWCQ2(3)-N	UWCQ2(3)-A	UWCQ2(3)-N
David Brown	C03	C032(3)BAN	C032(3)BRN	C032(3)BAF	C032(3)BRF
Flender	NA	Not Available	Not Available	Not Available	Not Available
Stober	S102	S102VN-MR	S102VN-AW	S102AF-MR	S102AF-AW
Nord	N/A	Not Available	Not Available	Not Available	Not Available
Boston	840	SF842BRB/SF843BRB	S842BRB/S843BRB	SF842BRF/SF843BRF	S842BRF/S843BRF
SEW Eurodrive	42	SA42LP	SA42	SAF42LP	SAF42
Falk	04	UWCQ2(3)-A	UWCQ2(3)-N	UWCQ2(3)-A	UWCQ2(3)-N
David Brown	C04	C042(3)BAN	C042(3)BRN	C042(3)BAF	C042(3)BRF
Flender	21	CA21- (M,G, or A)	CA21A	CF21- (M, G or A)	CF21A
Stober	S200	S202/3VN-MR	S202/3VN-AW	S202/3AF-MR	S202/3AF-AW
Nord	SK04	SK02040A	SK02040A	SK02040AF	SK02040AF-W
Boston	850	SF852BRB/SF853BRB	S852BRB/S853BRB	SF852BRF/SF853BRF	S852BRF/S853BRF
SEW Eurodrive	52	SA52LP	SA52	SAF52LP	SAF52
Falk	05	UWCQ2(3)-A	UWCQ2(3)-N	UWCQ2(3)-A	UWCQ2(3)-N
David Brown	C05	C052(3)BAN	C052(3)BRN	C052(3)BAF	C052(3)BRF
Flender	41	CA41- (M,G, or A)	CA41A	CF41-(M, G or A)	CF41A
Stober	S300	S302/3VN-MR	S302/3VN-AW	S302/3AF-MR	S302/3AF-AW
Nord	SK05	SK02(13)050A	SK02(13)050A-W	SK02(13)050AF	SK02(13)050AF
Boston	860	SF862BRB/SF863BRB	S862BRB/S863BRB	SF862BRF/SF863BRF	S862BRF/S863BRF
SEW Eurodrive	62	SA62LP	SA62	SAF62LP	SAF62
Falk	06	UWCQ2(3)-A	UWCQ2(3)-N	UWCQ2(3)-A	UWCQ2(3)-N
David Brown	C06	C062(3)BAN	C062(3)BRN	C062(3)BAF	C062(3)BRF
Flender	61	CA61- (M,G or A)	CA61A	CF61-(M, G or A)	CF61A
Stober	S400	S402/3VN-MR	S402/3VN-AW	S402/3AF-MR	S402/3AF-AW
Nord	SK06	SK12(3)063A	SK12(3)063A-W	SK23(3)063AF-W	SK23(3)063AF-W

* Detachable base kit required. See page 237.

If you require assistance with an interchange, please contact our interchange hotline at 1-888-999-9860 ext 5335.

800 Series Right Angle Helical Worm Selection Tables

Numbering System / How to Order

800 Series Right Angle Helical Worm Gear Drives

Clutch/Brake

Motor

BK SF 8 3 2 BR F - 45 K T - B5 - G-M2 -

CMBA56U-6 -

HUTF5/8-IDB - 3

Series

800BR Series

Frame Size

3
4
5
6

Input Shaft Style

S - Solid Projecting Input Shaft
SF - Quill Style C-Face Motor Flange

Base/Mounting Attachment

Blank - Foot Mounted
B - Detachable Base
F - Output Flange
T - Torque Arm

Nominal Gear Ratio (Rounded Value)

Refer to Selection Tables For Available Ratios

Input Oil Seal

Blank - Standard Seal
T - Two Standard Seals

Reduction Type

2 - Double
3 - Triple

Lubrication

Blank - No Lubrication
K - Klubersynth UH1 6-460
W - Klubersynth GH6
S - Mobil SHC 634
X - Mobil 600W
(Sizes 3 and 4 are non-vented)

Reducer Material/Paint

Blank - Cast Iron, Std Gray Paint
BK - Cast Iron, White BostKleen Paint
SBK - Cast Iron, Stainless BostKleen Paint

NEMA Motor Mounting

BORE CODE	NEMA MOUNTING	INPUT BORE	KEYWAY
B5	56C	.625	3/16 x 3/32
B7	140TC/180C	.875	3/16 x 3/32
B9	180TC/210C	1.125	1/4 x 1/8
B11	210TC/250UC	1.375	5/16 x 5/32

Blank Solid Input Shaft (No Flange)

Common C-Face Brake Installed

115/230 VAC 60hz	Ft-Lb	Bore Code
CMBA56R-3	3	B5
CMBA56R-6	6	B5
CMBA140TR-6	6	B7
208-230/460 VAC 60hz	Ft-Lb	Bore Code
CMBA56U-3	3	B5
CMBA56U-6	6	B5
CMBA140TU-6	6	B7
Other sizes available. See catalog.		

Motor Conduit Box Orientation

(When looking at fan end of motor)

0 - 12 O'clock
3 - 3 O'clock
6 - 6 O'clock
9 - 9 O'clock

Common C-Face Motors Installed

HP Rating	Bore Code	AC Voltage	
		115/208-230-1-60	208-230/460-3-60
1/4 HP	B5	DRTFB	DUTFB
1/3 HP	B5	ERTFB	EUTFB
1/2 HP	B5	FRTFB	FUTFB
	B5		FUT-SS
	B5		FUTF-IDB
3/4 HP	B5	GRTFB	GUTFB
	B5		GUT-SS
	B5		GUTF-IDB
1 HP	B5	HRTF-5/8B	HUTF5/8B
	B5		HUT5/8-SS
	B5		HUTF5/8-IDB
	B7		HUTFB
	B7		HUT-SS
	B7		HUTF-IDB
1.5 HP	B7		JUTFB
	B7		JUTF-SS
	B7		JUTF-IDB
2 HP	B5		KUTF5/8B
	B7		KUTFB
	B7		KUTF-SS
	B7		KUTF-IDB
3 HP	B9		LUTFB
	B9		LUTF-SS
	B9		LUTF-IDB
5 HP	B9		MUTFB

Other motors available, please see catalog pages 333 to 342.

T - Totally enclosed non-ventilated
TF - Totally enclosed fan cooled
SS - Stainless
IDB - Inverter Duty (10:1 turn down constant torque)
B5 - 56C
B7 - 140TC
B9 - 180TC

How to Order

EXAMPLE:

Required flange input, NEMA 56C, 3/4 HP, Class I, detachable base, 45:1 ratio, lubricated, with double output shaft and standard mounting position.

Order:

1 pc SF832BR-45K-B5
or item code F01425

1 pc XS830BR-11K (Base Kit)
or 5 digit item code 59610

1 pc XS830BR-3PBK (Output Shaft)
or 5 digit item code 59609

If components are to be factory assembled specify as SF832BRB-45K B5 H.

Output Shaft Projection

Blank - Carbon Steel Hollow Shaft
G - Carbon Steel Left Projection
H - Carbon Steel Double Projection
J - Carbon Steel Right Projection
S - Stainless Hollow Shaft
GS - Stainless Left Projection
HS - Stainless Double Projection
JS - Stainless Right Projection

Mounting Positions

Blank - No Lubrication
M1-M6 - Lubrication per Mounting Positions in Catalog

800 Series Right Angle Helical Worm Gear Drives

Motorized Gear Drives

1. Determine application service factor from page 203 or from Application Classifications on page 348-349.
2. Determine output speed required.
3. Determine HP or output torque requirement.
4. Select based on output speed and horsepower requirement for given service class.
5. Check overhung load Ref. calculation.

Example

Select a right angle motorized helical-worm shaft mounted gear drive and motor to drive a uniformly loaded line conveyor 24 hours/day requiring 2 HP at 35 RPM.

Power Requirement

230/460 volt
3 phase
60 hertz

1. Select Service Factor Class from page 203.
Service Class = II
2. Output RPM = 35
3. 2 HP
4. Select a 2 HP drive that will satisfy min. of II service class.
5. Order: 1 - SF862BR-50K-B7 (F01613) Ref. Page 201
1 - KUTF Motor

Overhung Load (Not Required for Example)

If the output shaft of a gear drive is connected to the driven machine by other than a flexible coupling, an overhung load is imposed on the shaft. This load may be calculated as follows:

$$OHL = \frac{2 TK}{D}$$

OHL = Overhung Load (LB.)
T = Shaft Torque (LB.-INS.)
D = PD of Sprocket, Pinion or Pulley (IN.)
K = Load Connection Factor

Load Connection Factor (K)

Sprocket or Timing Belt 1.00
Pinion and Gear Drive 1.25
Pulley and V-Belt Drive 1.50
Pulley and Flat Belt Drive 2.50

An overhung load greater than permissible load value may be reduced to an acceptable value by the use of a sprocket, pinion or pulley of a larger PD. Relocation of the load closer to the center of gear drive will also increase OHL capacity.

Permissible Overhung Loads and Output Shaft Thrust Loads are listed for each gear drive in the Tables on Page 204.

800 Series Right Angle Helical-Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS

Approx. Output RPM	Nominal Ratio*	NON-FLANGED			FLANGED (GEARMOTORS)			
		GEAR Capacity		Catalog Number (Item Code)	Motor HP	Ratings Output Torque	Service Class**	Catalog Number (Item Code) Shaft Mounted
		Output Torque	HP Input					
35	50	3248	2.24	S852BR-50K (F01304)	2	2899	I	SF852BR-50K-B7 (F01547)
					1.5	2174	II	
		5930	3.79	S862BR-50K (F01349)	1	1499	III	SF852BR-50K-B5 (F01546)
					3	4692	I	SF862BR-50K-B9 (F01614)
					2	3128	II	SF862BR-50K-B7 (F01613)
					1.5	2346	III	

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service Class III (S.F. = 2.00)

Overhung Load Ratings refer to Page 204.

800 Series Right Angle Helical Worm Gear Drives

To properly select a gear drive, the following application information should be known.

1. Service Factor or AGMA Service class.
2. Output Horsepower or Torque
3. Output RPM or Ratio
(Maximum Input Speed 4500 RPM)

Consult Engineering for mounting positions: M2, M3, M4, and M6.

Non-Motorized Gear Drives

1. Determine application service factor from the service factor chart on this page, or from Application Classifications on pages 348-349.
2. Determine design Horsepower or Torque.
 - Design HP = Application HP x S.F.
 - Design Torque = Application Torque x S.F.
3. Select a Gear drive that satisfies output RPM, service class and/or output torque requirement.
4. Overhung shaft load should be checked when belt or chain drives are used, to prevent premature shaft or bearing failure. Ref. page 204 for calculations.

Example

Select a right angle 800BR Series Gear Drive for a continuous duty concrete mixer requiring 2800 lb-in. of torque at approx. 140 RPM, to operate up to 8 hrs/day. The Gear Drive will be driven at 1160 input RPM.

1. Application Service Factor = 1.25
2. Design Torque = $2800 \times 1.25 = 3500$
3. Select at speed and torque level of 3500 lb-ins. or greater.
4. Order 862BR-8K.

Order solid projecting shaft, output mounting flange or reaction torque arms from available kits reference pages 236 and 237.

NOTE: The use of an auxiliary drive between the gear drive and the driven machine reduces the torque required at the output shaft in direct proportion to the auxiliary drive ratio.

A 3:1 chain ratio would reduce the torque requirement at the output shaft of the gear drive to one-third, resulting in a smaller unit size selection.

SERVICE FACTOR CHART

AGMA Class of Service	Service Factor	Operating Conditions
I	1	Moderate Shock-not more than 15 minutes in 2 hours Uniform Load-not more than 10 hours per day.
II	1.25	Moderate Shock-not more than 10 hours per day. Uniform Load-more than 10 hours per day.
	1.5	Heavy Shock-not more than 15 minutes in 2 hours. Moderate Shock-more than 10 hours per day.
III	1.75	Heavy Shock-not more than 10 hours per day.
	2.00	Heavy Shock-more than 10 hours per day.

For complete AGMA Service Factors and Load Classifications, see Engineering Pages 348-349.

H

800 Series Right Angle Helical-Worm Ratings

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM
Service Factor 1.0

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832BR-8K	218	689	2.65	181	717	2.30	145	751	1.95
842BR-8K	218	1100	4.39	181	1152	3.81	145	1209	3.23
852BR-8K	218	1678	6.66	181	1829	6.00	145	1991	5.28
862BR-8K	218	2910	11.40	181	3292	10.20	145	3607	8.98

800 Series Right Angle Helical Worm Gear Drives

Overhung Loads (lbs) & Axial Thrusts (lbs)

Overhung Loads & Axial Thrust Capacities on Output Shaft

Output RPM	832 / 833		842 / 843		852 / 853		862 / 863	
	OHL	Thrust	OHL	Thrust	OHL	Thrust	OHL	Thrust
180	440	1650	1770	2570	1670	3420	1730	3920
125	440	1840	1770	2830	1670	3720	1720	4220
80	440	2260	1770	3410	1670	4220	1700	4990
50	440	2740	1770	4160	1670	5220	1660	5850
32	440	3000	1770	4530	1670	5540	1640	6400
25	440	3000	1770	4670	1670	5860	1620	6550
10	430	3890	1770	6160	1670	7760	1570	8550
5	430	4620	1770	7090	1670	9000	1560	10500
1	430	4840	1770	7130	1660	8950	1560	10500

Overhung Loads (LBS) on Input Shaft at 1750 RPM

Ratio	Size			
	832	842	852	862
8.0	290	270	255	300
14.0	300	280	260	315
20.0	300	285	265	320
32.0	305	290	265	320
50.0	310	290	270	320
71.0	310	295	265	315
112.0	310	305	280	320
160.0	320	305	280	335
250.0	320	310	290	345

Ratio	Size			
	833	843	853	863
100.0	315	310	295	280
180.0	315	315	300	285
280.0	315	315	305	285
400.0	315	315	305	290
560.0	320	315	305	295
900.0	320	315	305	300

Approximate Weights (LBS)

NON-FLANGE Reducers		FLANGE Reducers				
		Size	NEMA Mounting			
Size	Lbs		56C B5	140TC B7	180TC B9	210TC B11
S832BR	24	SF832BR	26	26	—	—
S842BR	32	SF842BR	31	31	34	—
S852BR	39	SF852BR	—	35	38	—
S862BR	70	SF862BR	—	—	80	80
S833BR	32	SF833BR	33	—	—	—
S843BR	40	SF843BR	39	—	—	—
S853BR	47	SF853BR	43	—	—	—
S863BR	83	SF863BR	78	78	—	—

800 Series Right Angle Helical Worm Gear Drives

Lubricant and Quantity

Klubersynth UH1 6-460 is recommended for the 800BR Series gear drives and at all times, the lubricant must remain free from contamination. Normal operating temperatures range between 150°F - 170°F. During the initial break-in of the gear drive, higher than normal operating temperatures may result.

All gear drives are supplied filled with UH1 6-460 synthetic oil and with the quantity listed below for standard mounting position M1 or to mounting specified at time of order.

- Sizes 832/833BR and 842/843BR do not require a vent plug.
- Sizes 852/853BR and 862/863BR will require an oil change after 20,000 hours of operation. More frequent changes may be required when operating in high temperature ranges or unusually contaminated environments.
- Satisfactory performance may be obtained in some applications with non-synthetic oils and will require more frequent changes.

Recommended Lubricant	Ambient (Room) Temperature	ISO Viscosity Grade No.	Viscosity Range SUS @100°F	Boston Gear Item Code
				Quart
Klubersynth UH1 6-460	-20° to 225°F (-29° to 107°C)	460	1950/2500	65159
Mobil SHC634	-30° to 225°F (-34° to 107°C)	320 / 460	1950/2500	51493

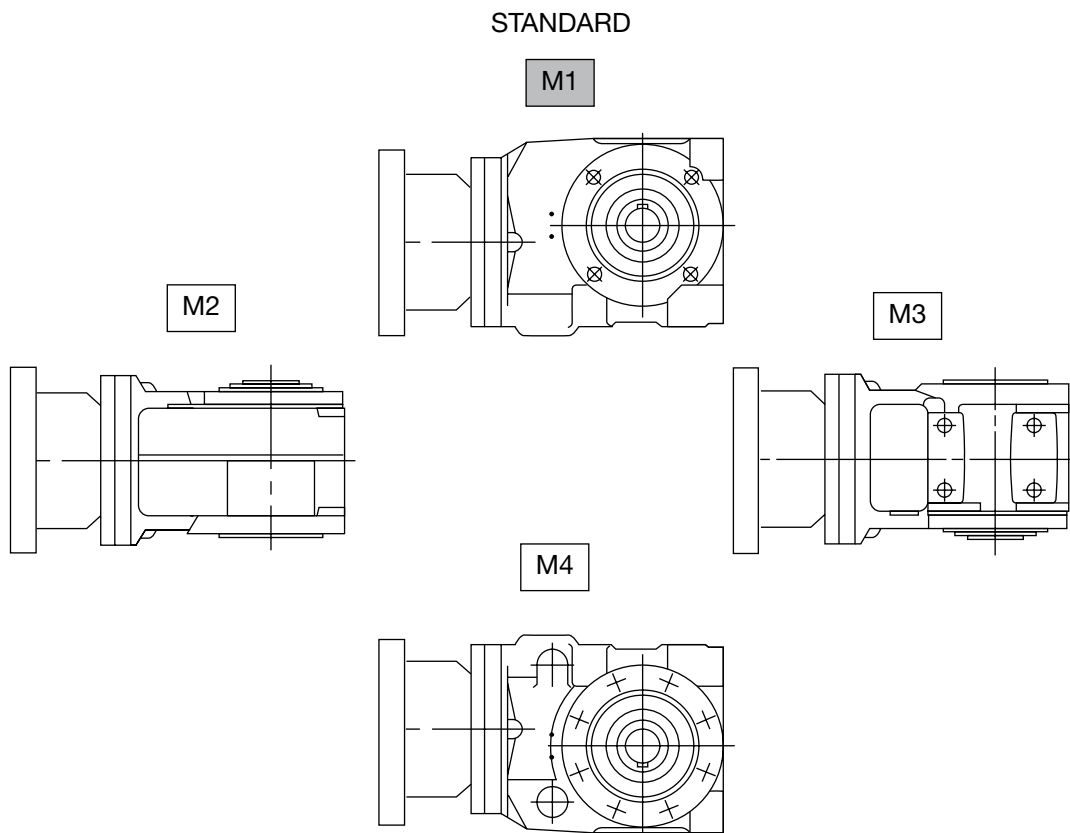
Oil Capacities (PINTS)

Unit Size	Mounting Positions					
	M1	M2	M3	M4	M5	M6
832BR	.80	1.0	1.0	1.7	1.7	1.7
833BR	2.3	1.3	1.3	2.8	2.8	2.8
842BR	1.2	1.6	1.6	2.0	2.0	2.0
843BR	2.6	1.8	1.8	3.2	3.4	3.4
852BR	1.8	2.3	2.3	2.7	3.8	3.8
853BR	3.2	2.8	2.8	4.4	4.8	4.8
862BR	4.0	4.6	4.6	7.0	7.0	7.0
863BR	7.0	5.8	5.8	8.8	9.6	10.0

H

800 Series Right Angle Helical Worm Mounting Positions

Horizontal Mountings



Vertical Mountings



- Position M1 is standard and will be supplied with oil for this position unless otherwise specified.

CAUTION: Mounting of gear drives in overhead positions may be hazardous. Use of external guides or supports is strongly recommended for overhead mounting. Avoiding those positions where the high speed oil seal is immersed in oil will provide greater security against high speed input seal wear.

Note: The above drawings will serve to represent both flanges and non-flanged styles.

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
218	8	689	2.65	S832BR-8K-M1 (F01218)	2 1.5	519 389	I II	SF832BR-8K-B7-M1 (F01432)
					1	260	III	SF832BR-8K-B5-M1 (F01431)
		1160	4.39	S842BR-8K-M1 (F01263)	3	751	II	SF842BR-8K-B9-M1 (F01491)
					2	500	III	SF842BR-8K-B7-M1 (F01490)
		1678	6.66	S852BR-8K-M1 (F01309)	5 3	1260 755	I III	SF852BR-8K-B9-M1 (F01558)
		2940	11.40	S862BR-8K-M1 (F01354)	10 7.5	2578 1933	I II	SF862BR-8K-B11-M1 (F01622)
					5	1289	III	SF862BR-8K-B9-M1 (F01623)
159	11	742	2.14	S832BR-11K-M1 (F01195)	2 1.5	694 520	I II	SF832BR-11K-B7-M1 (F01404)
					1	347	II	SF832BR-11K-B5-M1 (F01403)
		1194	3.57	S842BR-11K-M1 (F01240)	3	1003	I	SF842BR-11K-B9-M1 (F01453)
					2 1.5	668 501	II III	SF842BR-11K-B7-M1 (F01452)
		1930	5.52	S852BR-11K-M1 (F01285)	5 3	1746 1048	I II	SF852BR-11K-B9-M1 (F01517)
					2	666	III	SF852BR-11K-B7-M1 (F01516)
		3480	9.38	S862BR-11K-M1 (F01331)	7.5	2780	I	SF862BR-11K-B11-M1 (F01584)
					5 3	1853 1112	II III	SF862BR-11K-B9-M1 (F01585)
145 (CONT.)	12	787	1.95	S832BR-12K-M1 (F01197)	1.5	605	I	SF832BR-12K-B7-M1 (F01407)
					1 .75	403 302	II III	SF832BR-12K-B5-M1 (F01406)
		1264	3.25	S842BR-12K-M1 (F01242)	3	1166	I	SF842BR-12K-B9-M1 (F01456)
					2 1.5	777 583	II III	SF842BR-12K-B7-M1 (F01455)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
145 (CONT)	12	2010	5.22	S852BR-12K-M1 (F01287)	5 3	1924 1155	I II	SF852BR-12K-B9-M1 (F01520)
					2	770	III	SF852BR-12K-B7-M1 (F01519)
		3646	8.77	S862BR-12K-M1 (F01333)	7.5	3117	I	SF862BR-12K-B11-M1 (F01587)
					5 3	2078 1246	II III	SF862BR-12K-B9-M1 (F01588)
125	14	790	1.79	S832BR-14K-M1 (F01199)	1.5	662	I	SF832BR-14K-B7-M1 (F01410)
					1 .75	441 330	II III	SF832BR-14K-B5-M1 (F01409)
		1288	2.99	S842BR-14K-M1 (F01244)	3	1288	I	SF842BR-14K-B9-M1 (F01459)
					2 1.5	861 646	II III	SF842BR-14K-B7-M1 (F01458)
		2060	4.85	S852BR-14K-M1 (F01289)	3	1274	II	SF852BR-14K-B9-M1 (F01523)
					2	849	III	SF852BR-14K-B7-M1 (F01522)
		3827	8.20	S862BR-14K-M1 (F01335)	7.5	3498	I	SF862BR-14K-B11-M1 (F01591)
					5 3	2332 1399	II III	SF862BR-14K-B9-M1 (F01592)
109	16	730	1.70	S832BR-16K-M1 (F01201)	1.5	644	I	SF832BR-16K-B7-M1 (F01413)
					1 .75	430 322	II III	SF832BR-16K-B5-M1 (F01412)
		1218	2.72	S842BR-16K-M1 (F01246)	2 1.5	895 671	I II	SF842BR-16K-B7-M1 (F01462)
					1	448	III	SF842BR-16K-B5-M1 (F01461)
		2710	5.92	S852BR-16K-M1 (F01291)	5 3	2287 1372	I III	SF852BR-16K-B9-M1 (F01525)
		4199	9.03	S862BR-16K-M1 (F01337)	7.5	3054	I	SF862BR-16K-B11-M1 (F01595)
					5 3	2323 1393	II III	SF862BR-16K-B9-M1 (F01596)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
97	18	864	1.50	S832BR-18K-M1 (F01202)	1.5	864	I	SF832BR-18K-B7-M1 (F01415)
					1 .75	576 432	II III	SF832BR-18K-B5-M1 (F01414)
		1388	2.50	S842BR-18K-M1 (F01247)	2 1.5	1110 832	I II	SF842BR-18K-B7-M1 (F01464)
					1	555	III	SF842BR-18K-B5-M1 (F01463)
		2162	4.21	S852BR-18K-M1 (F01292)	3	1540	I	SF852BR-18K-B9-M1 (F01527)
					2	1026	III	SF852BR-18K-B7-M1 (F01526)
87	20	860	1.43	S832BR-20K-M1 (F01203)	1 .75	600 451	I III	SF832BR-20K-B5-M1 (F01416)
					2 1.5	1173 880	I II	SF842BR-20K-B7-M1 (F01466)
		1391	2.37	S842BR-20K-M1 (F01248)	1	586	III	SF842BR-20K-B5-M1 (F01465)
					3	1803	I	SF852BR-20K-B9-M1 (F01529)
		2345	3.90	S852BR-20K-M1 (F01294)	2 1.5	1202 902	II III	SF852BR-20K-B7-M1 (F01528)
					5 3	3343 2006	I III	SF862BR-20K-B9-M1 (F01598)
79	22	804	1.39	S832BR-22K-M1 (F01205)	1 .75 .50	578 434 289	I II III	SF832BR-22K-B5-M1 (F01418)
					2 1.5	1184 888	I II	SF842BR-22K-B7-M1 (F01470)
		1321	2.23	S842BR-22K-M1 (F01250)	1	592	III	SF842BR-22K-B5-M1 (F01468)
					5 3	3086 1889	I II	SF852BR-22K-B9-M1 (F01532)
		3086	4.90	S852BR-22K-M1 (F01296)	2	1259	III	SF852BR-22K-B7-M1 (F01531)
					5 3	3226 1935	II III	SF862BR-22K-B9-M1 (F01601)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

H

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
70	25	843	1.28	S832BR-25K-M1 (F01207)	1 .75 .50	658 494 329	I II III	SF832BR-25K-B5-M1 (F01420)
		1389	2.04	S842BR-25K-M1 (F01252)	2 1.5	1360 1020	I I	SF842BR-25K-B7-M1 (F01473)
					1	680	III	SF842BR-25K-B5-M1 (F01472)
		3177	4.62	S852BR-25K-M1 (F01298)	3	2062	II	SF852BR-25K-B9-M1 (F01535)
					2	1374	III	SF852BR-25K-B7-M1 (F01534)
		5026	6.94	S862BR-25K-M1 (F01343)	5 3	3620 2172	I III	SF862BR-25K-B9-M1 (F01603)
62	28	862	1.17	S832BR-28K-M1 (F01208)	1 .75 .50	736 552 368	I II III	SF832BR-28K-B5-M1 (F01421)
		1363	1.88	S842BR-28K-M1 (F01253)	1.5	1087	I	SF842BR-28K-B7-M1 (F01475)
					1 .75	725 543	II III	SF842BR-28K-B5-M1 (F01474)
		3200	4.24	S852BR-28K-M1 (F01299)	3	2263	I	SF852BR-28K-B9-M1 (F01537)
					2	1508	III	SF852BR-28K-B7-M1 (F01536)
		5290	6.49	S862BR-28K-M1 (F01344)	5 3	4073 2444	I III	SF862BR-28K-B9-M1 (F01604)
54	32	971	1.00	S832BR-32K-M1 (F01209)	1 .75 .50	971 728 485	I II III	SF832BR-32K-B5-M1 (F01422)
		1560	1.66	S842BR-32K-M1 (F01254)	1.5	1409	I	SF842BR-32K-B7-M1 (F01477)
					1 .75	940 705	II III	SF842BR-32K-B5-M1 (F01476)
		2813	2.98	S852BR-32K-M1 (F01300)	3	2813	I	SF852BR-32K-B9-M1 (F01539)
					2 1.5	1887 1415	II III	SF852BR-32K-B7-M1 (F01538)
		5184	4.93	S862BR-32K-M1 (F01345)	3	3153	II	SF862BR-32K-B9-M1 (F01606)
					2	2102	III	SF862BR-32K-B7-M1 (F01605)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
48	36	936	0.99	S832BR-36K-M1 (F01210)	1 .75 .50	936 709 472	I I III	SF832BR-36K-B5-M1 (F01423)
		1525	1.59	S842BR-36K-M1 (F01255)	1.5	1438	I	SF842BR-36K-B7-M1 (F01479)
					1 .75	959 719	II III	SF842BR-36K-B5-M1 (F01478)
		3262	3.59	S852BR-36K-M1 (F01301)	3	2722	I	SF852BR-36K-B9-M1 (F01541)
					2	1816	II	SF852BR-36K-B7-M1 (F01540)
		5768	5.65	S862BR-36K-M1 (F01346)	5 3	5102 3061	I II	SF862BR-36K-B9-M1 (F01608)
					2	2040	III	SF862BR-36K-B7-M1 (F01607)
43	40	933	0.94	S832BR-40K-M1 (F01211)	.75 .50 .33	744 746 330	I II III	SF832BR-40K-B5-M1 (F01424)
		1527	1.51	S842BR-40K-M1 (F01256)	1.5	1516	I	SF842BR-40K-B7-M1 (F01481)
					1 .75	1010 758	II III	SF842BR-40K-B5-M1 (F01480)
		3453	3.28	S852BR-40K-M1 (F01302)	3	3156	I	SF852BR-40K-B9-M1 (F01543)
					2 1.5	2104 1578	II III	SF852BR-40K-B7-M1 (F01542)
		6045	5.25	S862BR-40K-M1 (F01347)	5 3	5754 3453	I II	SF862BR-40K-B9-M1 (F01610)
					2	2302	III	SF862BR-40K-B7-M1 (F01609)
38 (CONT.)	45	1032	0.8	S832BR-45K-M1 (F01212)	.75 .50 .33	967 644 430	I II III	SF832BR-45K-B5-M1 (F01425)
		1669	1.34	S842BR-45K-M1 (F01257)	1 .75 .50	1244 933 622	I II III	SF842BR-45K-B5-M1 (F01482)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.
** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)
Actual Output RPM = Input Speed ÷ Actual Ratio.
For Overhung Load Ratings refer to Page 204.
† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

H

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
38 (CONT.)	45	3165	2.37	S852BR-45K-M1 (F01303)	2 1.5	2669 1978	I II	SF852BR-45K-B7-M1 (F01545)
					1	1335	III	SF852BR-45K-B5-M1 (F01544)
		5810	3.95	S862BR-45K-M1 (F01348)	3	4410	I	SF862BR-45K-B9-M1 (F01612)
					2	3407	II	SF862BR-45K-B7-M1 (F01611)
35	50	1000	0.71	S832BR-50K-M1 (F01213)	.50 .33	703 469	I III	SF832BR-50K-B5-M1 (F01426)
		1616	1.19	S842BR-50K-M1 (F01258)	1 .75 .50	1354 1015 677	I II III	SF842BR-50K-B5-M1 (F01483)
		3248	2.24	S852BR-50K-M1 (F01304)	2 1.5	2899 2174	I II	SF852BR-50K-B7-M1 (F01547)
					1	1449	III	SF852BR-50K-B5-M1 (F01546)
		5930	3.79	S862BR-50K-M1 (F01349)	3	4692	I	SF862BR-50K-B9-M1 (F01614)
					2 1.5	3128 2346	II III	SF862BR-50K-B7-M1 (F01613)
		1033	0.74	S832BR-56K-M1 (F01214)	.75 .50 .33	1033 698 465	I II III	SF832BR-56K-B5-M1 (F01427)
		1670	1.18	S842BR-56K-M1 (F01259)	1 .75 .50	1416 1062 708	I II III	SF842BR-56K-B5-M1 (F01484)
31	56	3813	2.63	S852BR-56K-M1 (F01305)	2 1.5	2900 2174	I II	SF852BR-56K-B7-M1 (F01549)
					1	1449	III	SF852BR-56K-B5-M1 (F01548)
		6500	4.2	S862BR-56K-M1 (F01350)	3	4633	I	SF862BR-56K-B9-M1 (F01616)
					2	3088	III	SF862BR-56K-B7-M1 (F01615)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.
** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)
Actual Output RPM = Input Speed ÷ Actual Ratio.
For Overhung Load Ratings refer to Page 204.
† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
27	63	1040	0.67	S832BR-63K-M1 (F01215)	.50 .33	775 517	I III	SF832BR-63K-B5-M1 (F01428)
		1710	1.07	S842BR-63K-M1 (F01260)	1 .75 .50	1597 1197 800	I II III	SF842BR-63K-B5-M1 (F01485)
		3899	2.39	S852BR-63K-M1 (F01306)	2 1.5	3261 2446	I II	SF852BR-63K-B7-M1 (F01552)
					1	1630	III	SF852BR-63K-B5-M1 (F01550)
		6720	3.76	S862BR-63K-M1 (F01351)	3	5360	I	SF862BR-63K-B9-M1 (F01618)
					2 1.5	3574 2680	II III	SF862BR-63K-B7-M1 (F01617)
24	71	1192	0.59	S832BR-71K-M1 (F01216)	.50 .33 .25	1009 673 505	I II III	SF832BR-71K-B5-M1 (F01429)
		1739	0.88	S842BR-71K-M1 (F01261)	.75 .50 .33	1482 950 658	I II III	SF842BR-71K-B5-M1 (F01487)
		3225	1.71	S852BR-71K-M1 (F01307)	1.5	2828	I	SF852BR-71K-B7-M1 (F01555)
					1 .75	1885 1414	II III	SF852BR-71K-B5-M1 (F01554)
		6645	2.94	S862BR-71K-M1 (F01352)	2 1.5	4520 3389	II III	SF862BR-71K-B7-M1 (F01619)
21	80	1250	0.54	S832BR-80K-M1 (F01217)	.50 .33 .25	1158 772 579	I II III	SF832BR-80K-B5-M1 (F01430)
		1619	0.74	S842BR-80K-M1 (F01262)	.75 .50 .33	1640 1093 729	I II III	SF842BR-80K-B5-M1 (F01488)
		3453	1.5	S852BR-80K-M1 (F01308)	1.5	3453	I	SF852BR-80K-B7-M1 (F01557)
					1 .75	2368 1776	II III	SF852BR-80K-B5-M1 (F01556)
		6783	2.77	S862BR-80K-M1 (F01353)	2 1.5	4895 3671	I II	SF862BR-80K-B7-M1 (F01621)
					1	2444	III	SF862BR-80K-B5-M1 (F01620)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.
** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)
Actual Output RPM = Input Speed ÷ Actual Ratio.
For Overhung Load Ratings refer to Page 204.
† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

H

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
19	90	1187	0.57	S832BR-90K-M1 (F01219)	0.5 0.33 0.25	1040 693 520	I II III	SF832BR-90K-B5-M1 (F01433)
		1934	0.91	S842BR-90K-M1 (F01264)	0.75 0.5 0.33	1593 1062 708	I II III	SF842BR-90K-B5-M1 (F01492)
		4178	1.82	S852BR-90K-M1 (F01310)	1.5	3442	I	SF852BR-90K-B7-M1 (F01560)
					1 0.75	2295 1720	II III	SF852BR-90K-B5-M1 (F01559)
		7514	3.05	S862BR-90K-M1 (F01355)	3	7388	I	SF862BR-90K-B9-M1 (F01625)
					2 1.5	4925 3694	II III	SF862BR-90K-B7-M1 (F01624)
17	100	1120	0.51	S832BR-100K-M1 (F01193)	0.5 0.33 0.25	1098 732 549	I II III	SF832BR-100K-B5-M1 (F01401)
		1302	0.47	S833BR-100K-M1 (F01220)	0.33 0.25 0.16	923 692 461	I II III	SF833BR-100K-B5-M1 (F01434)
		1835	0.81	S842BR-100K-M1 (F01238)	0.75 0.5 0.33	1697 1132 755	I II III	SF842BR-100K-B5-M1 (F01450)
		1700	0.63	S843BR-100K-M1 (F01265)	0.5 0.33 0.25	1349 900 674	I II III	SF843BR-100K-B5-M1 (F01495)
		4225	1.71	S852BR-100K-M1 (F01283)	1.5	3704	I	SF852BR-100K-B7-M1 (F01514)
					1 0.75	2469 1852	II III	SF852BR-100K-B5-M1 (F01513)
		3477	1.22	S853BR-100K-M1 (F01311)	1 0.75 0.5	2849 2136 1424	I II III	SF853BR-100K-B5-M1 (F01563)
		7539	2.87	S862BR-100K-M1 (F01329)	2 1.5	5252 3939	I III	SF862BR-100K-B7-M1 (F01581)
		7173	2.34	S863BR-100K-M1 (F01356)	2 1.5	6128 4596	I II	SF863BR-100K-B7-M1 (F01627)
					1	3064	III	SF863BR-100K-B5-M1 (F01626)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.
 ** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Overhung Load Ratings refer to Page 204.
 † For Base / Projecting Shaft / Output Flange see How to Order Page 201.
 □ Indicates Triple Reduction

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
15	112	1360	0.44	S832BR-112K-M1 (F01194)	.33 .25 .16	1029 772 514	I II III	SF832BR-112K-B5-M1 (F01402)
		1412	0.48	S842BR-112K-M1 (F01239)	.33 .25 .16	980 735 490	I II III	SF842BR-112K-B5-M1 (F01451)
		3088	1.00	S852BR-112K-M1 (F01284)	1 .75 .50	3088 2317 1544	I II III	SF852BR-112K-B5-M1 (F01515)
		6574	1.97	S862BR-112K-M1 (F01330)	1.5	5003	I	SF862BR-112K-B7-M1 (F01583)
					1 .75	3366 2502	II III	SF862BR-112K-B5-M1 (F01582)
14	118	1321	0.42	S833BR-118K-M1 (F01221)	.33 .25 .16	1048 786 524	I II III	SF833BR-118K-B5-M1 (F01435)
		1698	0.55	S843BR-118K-M1 (F01266)	.50 .33 .25	1543 1029 772	I II III	SF843BR-118K-B5-M1 (F01496)
		3436	1.07	S853BR-118K-M1 (F01312)	1 .75 .50	3210 2407 1605	I II III	SF853BR-118K-B5-M1 (F01564)
		7434	2.14	S863BR-118K-M1 (F01357)	2 1.5	6945 5209	I II	SF863BR-118K-B7-M1 (F01629)
					1	3472	III	SF863BR-118K-B5-M1 (F01628)
14	125	1311	0.36	S832BR-125K-M1 (F01196)	.33 .25 .16	1213 910 606	I II III	SF832BR-125K-B5-M1 (F01405)
		1248	0.36	S842BR-125K-M1 (F01241)	.33 .25 .16	1155 866 578	I II III	SF842BR-125K-B5-M1 (F01454)
		2630	0.75	S852BR-125K-M1 (F01286)	.75 .50 .33	2630 1753 1167	I II III	SF852BR-125K-B5-M1 (F01518)
		4832	1.28	S862BR-125K-M1 (F01332)	1 .75 .50	3773 2830 1886	I II III	SF862BR-125K-B5-M1 (F01586)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

□ Indicates Triple Reduction

H

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
13	132	1270	0.42	S833BR-132K-M1 (F01222)	.33 .25 .16	966 724 483	I II III	SF833BR-132K-B5-M1 (F01436)
		1953	0.66	S843BR-132K-M1 (F01267)	.50 .33	1478 986	I III	SF843BR-132K-B5-M1 (F01497)
		4596	1.42	S853BR-132K-M1 (F01313)	1 .75 .50	3235 2426 1617	I II III	SF853BR-132K-B5-M1 (F01565)
		7410	2.21	S863BR-132K-M1 (F01358)	2 1.5	6739 5054	I II	SF863BR-132K-B7-M1 (F01631)
					1	3370	III	SF863BR-132K-B5-M1 (F01630)
12	140	1310	0.4	S832BR-140K-M1 (F01198)	.33 .25 .16	1090 818 545	I II III	SF832BR-140K-B5-M1 (F01408)
		2117	0.64	S842BR-140K-M1 (F01243)	.50 .33 .25	1653 1102 826	I II III	SF842BR-140K-B5-M1 (F01457)
		4143	1.3	S852BR-140K-M1 (F01288)	1 .75 .50	3186 2389 1592	I II III	SF852BR-140K-B5-M1 (F01521)
		7520	2.02	S862BR-140K-M1 (F01334)	2 1.5	7448 5586	I I	SF862BR-140K-B7-M1 (F01590)
					1	3724	III	SF862BR-140K-B5-M1 (F01589)
11	150	1237	0.4	S833BR-150K-M1 (F01223)	.33 .25 .16	1030 773 515	I II III	SF833BR-150K-B5-M1 (F01437)
		1980	0.63	S843BR-150K-M1 (F01268)	.50 .33 .25	1570 1047 785	I II III	SF843BR-150K-B5-M1 (F01498)
		4604	1.35	S853BR-150K-M1 (F01314)	1 .75 .50	3409 2557 1705	I II III	SF853BR-150K-B5-M1 (F01566)
		7143	2.00	S863BR-150K-M1 (F01359)	2 1.5	7143 5382	I I	SF863BR-150K-B7-M1 (F01633)
					1	3571	III	SF863BR-150K-B5-M1 (F01632)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

□ Indicates Triple Reduction

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
10	160	1364	0.37	S832BR-160K-M1 (F01200)	.33 .25 .16	1228 921 614	I II III	SF832BR-160K-B5-M1 (F01411)
		2216	0.59	S842BR-160K-M1 (F01245)	.50 .33 .25	1877 1251 939	I II III	SF842BR-160K-B5-M1 (F01460)
		4738	1.19	S852BR-160K-M1 (F01290)	1 .75 .50	3978 2984 1989	I II III	SF852BR-160K-B5-M1 (F01524)
		7504	1.86	S862BR-160K-M1 (F01336)	1.5	6049	I	SF862BR-160K-B7-M1 (F01594)
					1 .75	4033 3024	II III	SF862BR-160K-B5-M1 (F01593)
10	160	1320	0.33	S833BR-160K-M1 (F01224)	.33 .25 .16	1320 1030 687	I I II	SF833BR-160K-B5-M1 (F01438)
		1693	0.41	S843BR-160K-M1 (F01269)	.33 .25 .16	1376 1032 688	I II III	SF843BR-160K-B5-M1 (F01499)
		3406	0.79	S853BR-160K-M1 (F01315)	.75 .50 .33	3233 2792 1437	I II III	SF853BR-160K-B5-M1 (F01567)
		7431	1.51	S863BR-160K-M1 (F01360)	1.5	7378	I	SF863BR-160K-B7-M1 (F01635)
					1 .75	4919 3689	II III	SF863BR-160K-B5-M1 (F01634)
9.1	180	1247	0.27	S833BR-180K-M1 (F01225)	.25 .16	1153 769	I II	SF833BR-180K-B5-M1 (F01439)
		1545	0.35	S843BR-180K-M1 (F01270)	.33 .25 .16	1471 1103 735	I I III	SF843BR-180K-B5-M1 (F01500)
		3161	0.68	S853BR-180K-M1 (F01316)	.50 .33	2323 1549	I III	SF853BR-180K-B5-M1 (F01568)
		7427	1.39	S863BR-180K-M1 (F01361)	1 .75 .50	5341 4006 2670	I II III	SF863BR-180K-B5-M1 (F01636)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

□ Indicates Triple Reduction

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
8.8	200	1346	0.33	S833BR-200K-M1 (F01226)	.33 .25 .16	1346 1085 723	I I II	SF833BR-200K-B5-M1 (F01440)
		2267	0.5	S843BR-200K-M1 (F01271)	.50 .33 .25	2264 1510 1133	I I III	SF843BR-200K-B5-M1 (F01501)
		5139	1.08	S853BR-200K-M1 (F01317)	1 .75 .50	4756 3567 2378	I II III	SF853BR-200K-B5-M1 (F01569)
		7443	1.49	S863BR-200K-M1 (F01362)	1 .75	4789 3745	II III	SF863BR-200K-B5-M1 (F01637)
8.2	212	1333	0.28	S832BR-212K-M1 (F01204)	.25 .16	1190 793	I II	SF832BR-212K-B5-M1 (F01417)
		2352	0.47	S842BR-212K-M1 (F01249)	.33 .25 .16	1667 1250 833	I II III	SF842BR-212K-B5-M1 (F01467)
		5021	0.97	S852BR-212K-M1 (F01295)	.75 .50	3880 2587	I II	SF852BR-212K-B5-M1 (F01530)
		7607	1.39	S862BR-212K-M1 (F01340)	1 .75 .50	5470 4103 2735	I II III	SF862BR-212K-B5-M1 (F01599)
7.8	225	1311	0.27	S833BR-225K-M1 (F01227)	.25 .16	1213 809	I II	SF833BR-225K-B5-M1 (F01441)
		2346	0.46	S843BR-225K-M1 (F01272)	.33 .25 .16	1700 1274 850	I II III	SF843BR-225K-B5-M1 (F01502)
		5260	0.97	S853BR-225K-M1 (F01318)	.75 .50 .33	4095 2803 1869	I II III	SF853BR-225K-B5-M1 (F01570)
		7405	1.32	S863BR-225K-M1 (F01363)	1 .75 .50	5608 4206 2804	I II III	SF863BR-225K-B5-M1 (F01638)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service Class III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

□ Indicates Triple Reduction

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
7.0	250	1382	0.25	S832BR-250K-M1 (F01206)	.25 .16	1382 920	I II	SF832BR-250K-B5-M1 (F01419)
		2050	0.36	S842BR-250K-M1 (F01251)	.33 .25 .16	1898 1423 949	I II III	SF842BR-250K-B5-M1 (F01471)
		4566	0.75	S852BR-250K-M1 (F01297)	.75 .50 .33	4566 3043 2197	I II III	SF852BR-250K-B5-M1 (F01533)
		7676	1.25	S862BR-250K-M1 (F01342)	1 .75 .50	6139 4604 3069	I II III	SF862BR-250K-B5-M1 (F01602)
6.6	265	1297	0.20	S833BR-265K-M1 (F01228)	.16	1150	I	SF833BR-265K-B5-M1 (F01442)
		1588	0.25	S843BR-265K-M1 (F01273)	.25 .16	1588 1058	I II	SF843BR-265K-B5-M1 (F01503)
		3351	0.49	S853BR-265K-M1 (F01319)	.33 .25 .16	2279 1709 1139	I II III	SF853BR-265K-B5-M1 (F01571)
		6895	0.98	S863BR-265K-M1 (F01364)	.75 .50 .33	5274 3516 2344	I II III	SF863BR-265K-B5-M1 (F01639)
6.2	280	1357	0.18	S833BR-280K-M1 (F01229)	.16	1256	I	SF833BR-280K-B5-M1 (F01443)
		1590	0.23	S843BR-280K-M1 (F01274)	.16	1151	I	SF843BR-280K-B5-M1 (F01504)
		3356	0.44	S853BR-280K-M1 (F01320)	.33 .25 .16	2541 1906 1270	I II III	SF853BR-280K-B5-M1 (F01572)
		7671	0.88	S863BR-280K-M1 (F01365)	.75 .50 .33	6535 4357 2904	I II III	SF863BR-280K-B5-M1 (F01640)
5.6 (CONT.)	315	1311	0.20	S833BR-315K-M1 (F01230)	.16	1092	I	SF833BR-315K-B5-M1 (F01444)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

□ Indicates Triple Reduction

H

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
5.6 (CONT.)	315	2620	0.39	S843BR-315K-M1 (F01275)	.33 .25 .16	2238 1679 1119	I II III	SF843BR-315K-B5-M1 (F01505)
		5252	0.75	S853BR-315K-M1 (F01321)	.75 .50 .33	5252 3595 2397	I II III	SF853BR-315K-B5-M1 (F01573)
		7490	0.94	S863BR-315K-M1 (F01366)	.75 .50 .33	5973 3982 2655	I I II	SF863BR-315K-B5-M1 (F01641)
4.9	360	1177	0.18	S833BR-360K-M1 (F01231)	.16	1089	I	SF833BR-360K-B5-M1 (F01445)
		2496	0.35	S843BR-360K-M1 (F01276)	.33 .25 .16	2376 1782 1188	I I III	SF843BR-360K-B5-M1 (F01506)
		4862	0.63	S853BR-360K-M1 (F01322)	.50 .33 .25	3857 2571 1928	I II III	SF853BR-360K-B5-M1 (F01574)
		7382	0.87	S863BR-360K-M1 (F01367)	.75 .50 .33	6361 4240 2827	I II III	SF863BR-360K-B5-M1 (F01642)
4.4	400	1296	0.13	S833BR-400K-M1 (F01232)	.16	1296	I	SF833BR-400K-B5-M1 (F01446)
		1647	0.16	S843BR-400K-M1 (F01277)	.16	1647	I	SF843BR-400K-B5-M1 (F01507)
		3368	0.32	S853BR-400K-M1 (F01323)	.25 .16	2630 1753	I II	SF853BR-400K-B5-M1 (F01575)
		7686	0.67	S863BR-400K-M1 (F01368)	.50 .33	5733 3822	I III	SF863BR-400K-B5-M1 (F01643)
3.9	450	1279	0.11	S833BR-450K-M1 (F01233)	.16	1279	I	SF833BR-450K-B5-M1 (F01447)
		1572	0.14	S843BR-450K-M1 (F01278)	.16	1572	I	SF843BR-450K-B5-M1 (F01508)
		3305	0.28	S853BR-450K-M1 (F01324)	.25 .16	2950 1966	I II	SF853BR-450K-B5-M1 (F01576)
		7692	0.59	S863BR-450K-M1 (F01369)	.50 .33 .25	6516 4344 3258	I II III	SF863BR-450K-B5-M1 (F01644)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

□ Indicates Triple Reduction

800 Series Right Angle Helical Worm Selection Tables

@ 1750 RPM Input

FOR RATINGS AT OTHER INPUT SPEEDS, SEE TABLES ON PAGES 222-231.
ORDER BY CATALOG NUMBER OR ITEM CODE
FOR STANDARD MOUNTING POSITIONS†

Approx. Output RPM	Ratio*	Non-Flanged			Flanged (Gearmotors)			
		Gear Capacity		Catalog No. (Item Code)	Ratings			Catalog No. (Item Code)
		Output Torque (LB-IN.)	Input HP		Motor HP	Output Torque (LB-IN.)	Service Class**	
3.5	500	1354	0.13	S833BR-500K-M1 (F01234)	.16	1354	I	SF833BR-500K-B5-M1 (F01448)
		2647	0.25	S843BR-500K-M1 (F01279)	.25	2641	I	SF843BR-500K-B5-M1 (F01509)
		5146	0.46	S853BR-500K-M1 (F01325)	.33 .25 .16	3728 2796 1864	I I II	SF853BR-500K-B5-M1 (F01577)
		6913	0.62	S863BR-500K-M1 (F01370)	.50 .33 .25	5573 3715 2786	I II III	SF863BR-500K-B5-M1 (F01645)
3.1	560	1384	0.12	S833BR-560K-M1 (F01235)	.16	1384	I	SF833BR-560K-B5-M1 (F01449)
		2745	0.23	S843BR-560K-M1 (F01280)	.16	1988	I	SF843BR-560K-B5-M1 (F01510)
		5296	0.42	S853BR-560K-M1 (F01326)	.33 .25 .16	4201 3151 2100	I II III	SF853BR-560K-B5-M1 (F01578)
		7200	0.55	S863BR-560K-M1 (F01371)	.50 .33 .25	6543 4362 3272	I II III	SF863BR-560K-B5-M1 (F01646)
2.2	800	1274	0.08	S833BR-800K-M1 (F01236)	--	--	--	--
		2591	0.16	S843BR-800K-M1 (F01281)	.16	2591	I	SF843BR-800K-B5-M1 (F01511)
		5308	0.31	S853BR-800K-M1 (F01327)	.25 .16	4279 2852	I II	SF853BR-800K-B5-M1 (F01579)
		7734	0.43	S863BR-800K-M1 (F01372)	.33 .25 .16	5993 4495 2997	I II III	SF863BR-800K-B5-M1 (F01647)
1.9	900	1247	0.07	S833BR-900K-M1 (F01237)	--	--	--	--
		2494	0.14	S843BR-900K-M1 (F01282)	.16	2494	I	SF843BR-900K-B5-M1 (F01512)
		5099	0.27	S853BR-900K-M1 (F01328)	.25 .16	4719 3146	I II	SF853BR-900K-B5-M1 (F01580)
		7659	0.38	S863BR-900K-M1 (F01373)	.33 .25 .16	6715 5036 3358	I II III	SF863BR-900K-B5-M1 (F01648)

* Gear Ratio is Approximate. For Actual Gear Ratio Reference Pages 222-231.

** Service Class I (S.F. = 1.00) Service Class II (S.F. = 1.50) Service III (S.F. = 2.00)

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Overhung Load Ratings refer to Page 204.

† For Base / Projecting Shaft / Output Flange see How to Order Page 201.

□ Indicates Triple Reduction

H

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM

Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832BR-8K	218	689	2.65	181	717	2.30	145	751	1.95
842BR-8K	218	1100	4.39	181	1152	3.81	145	1209	3.23
852BR-8K	218	1678	6.66	181	1829	6.00	145	1991	5.28
862BR-8K	218	2910	11.40	181	3292	10.20	145	3607	8.98
832BR-11K	159	742	2.14	131	777	1.86	105	820	1.58
842BR-11K	159	1194	3.57	131	1258	3.10	105	1316	2.63
852BR-11K	159	1929	5.52	131	2090	4.95	105	2279	4.33
862BR-11K	159	3479	9.38	131	3781	8.39	105	4112	7.34
832BR-12K	145	787	1.95	120	816	1.70	96	865	1.44
842BR-12K	145	1264	3.25	120	1324	2.83	96	1382	2.39
852BR-12K	145	2010	5.22	120	2165	4.67	96	2351	4.09
862BR-12K	145	3646	8.77	120	3952	7.84	96	4292	6.85
832BR-14K	125	790	1.79	103	831	1.56	82	870	1.32
842BR-14K	125	1288	2.99	103	1344	2.60	82	1400	2.19
852BR-14K	125	2060	4.85	103	2212	4.33	82	2398	3.79
862BR-14K	125	3827	8.20	103	4118	7.32	82	4472	6.38
832BR-16K	109	737	1.70	90	768	1.49	72	808	1.27
842BR-16K	109	1218	2.72	90	1273	2.38	72	1343	2.03
852BR-16K	109	2710	5.92	90	2922	5.33	72	3162	4.68
862BR-16K	109	4191	9.03	90	4583	8.09	72	4990	7.10
832BR-18K	97	864	1.50	80	898	1.30	64	944	1.10
842BR-18K	97	1388	2.50	80	1445	2.17	64	1512	1.83
852BR-18K	97	2162	4.21	80	2319	3.75	64	2497	3.27
862BR-18K	97	4208	7.10	80	4502	6.33	64	4882	5.51
832BR-20K	87	860	1.43	72	895	1.24	58	941	1.05
842BR-20K	87	1391	2.37	72	1450	2.06	58	1514	1.74
852BR-20K	87	2345	3.90	72	2492	3.47	58	2688	3.02
862BR-20K	87	4400	6.58	72	4698	5.86	58	5077	5.10
832BR-22K	79	804	1.39	65	826	1.22	52	887	1.04
842BR-22K	79	1321	2.23	65	1383	1.95	52	1453	1.66
852BR-22K	79	3086	4.90	65	3265	4.34	52	3443	3.72
862BR-22K	79	4784	7.41	65	5142	6.64	52	5585	5.82
832BR-25K	70	843	1.28	58	883	1.12	46	929	0.95
842BR-25K	70	1389	2.04	58	1464	1.79	46	1328	1.52
852BR-25K	70	3177	4.62	58	3339	4.06	46	3516	3.47
862BR-25K	70	5022	6.94	58	5435	6.21	46	5873	5.45
832BR-28K	62	862	1.17	51	891	1.03	41	943	0.87
842BR-28K	62	1363	1.88	51	1430	1.65	41	1491	1.39
852BR-28K	62	3200	4.24	51	3339	3.72	41	3496	3.17
862BR-28K	62	5290	6.49	51	5359	5.81	41	6043	5.06

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 348 & 349.
Actual Output RPM = Input Speed ÷ Actual Ratio.

For Base / Projecting Shaft / Output Flange see How to Order Page 201.

For Overhung Load Ratings refer to Page 204.

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
832BR-8K	86	799	1.25	12	1056	.25	24	8.591
842BR-8K	86	1296	2.06	12	1403	.34	32	8.182
852BR-8K	86	2232	3.52	12	2683	.63	39	8.043
862BR-8K	86	4013	6.01	12	5265	1.18	70	8.232
832BR-11K	63	879	1.02	9.1	1200	.21	24	11.605
842BR-11K	63	1388	1.67	9.1	1541	.28	32	11.053
852BR-11K	63	2496	2.86	9.1	3511	.61	39	11.282
862BR-11K	63	4563	4.90	9.1	6820	1.10	70	11.573
832BR-12K	57	928	0.93	8.3	1310	.20	24	13.500
842BR-12K	57	1470	1.53	8.3	1580	.25	32	12.857
852BR-12K	57	2598	2.72	8.3	3491	.55	39	12.432
862BR-12K	57	4739	4.55	8.3	7019	1.01	70	12.972
832BR-14K	49	942	0.85	7.1	1306	.18	24	14.954
842BR-14K	49	1426	1.39	7.1	1610	.23	32	14.242
852BR-14K	49	2627	2.50	7.1	3388	.49	39	13.714
862BR-14K	49	4916	4.22	7.1	7254	.93	70	14.560
832BR-16K	43	865	0.82	6.2	1225	.18	24	16.364
842BR-16K	43	1437	1.31	6.2	1866	.27	32	16.364
852BR-16K	43	3408	3.04	6.2	4329	.61	39	16.087
862BR-16K	43	5625	4.82	6.2	7183	.98	70	15.932
832BR-18K	38	997	0.70	5.5	1419	.15	24	19.500
842BR-18K	38	1606	1.17	5.5	1622	.18	32	18.571
852BR-18K	38	2740	2.16	5.5	3174	.38	39	16.774
862BR-18K	38	5375	3.65	5.5	7537	.77	70	18.490
832BR-20K	34	996	0.67	5.0	1382	.14	24	20.610
842BR-20K	34	1619	1.12	5.0	1715	.18	32	19.630
852BR-20K	34	2927	1.98	5.0	3325	.34	39	19.643
862BR-20K	34	5542	3.35	5.0	7546	.68	70	20.962
832BR-22K	31	933	0.66	4.5	1268	.14	24	22.105
842BR-22K	31	1539	1.06	4.5	2115	.23	32	22.105
852BR-22K	31	3685	2.40	4.5	4642	.48	39	22.564
862BR-22K	31	6101	3.83	4.5	7423	.74	70	22.105
832BR-25K	28	989	0.61	4.0	1348	.13	24	25.714
842BR-25K	28	1634	0.98	4.0	2212	.21	32	25.714
852BR-25K	28	3702	2.25	4.0	4689	.44	39	24.865
862BR-25K	28	6332	3.54	4.0	7527	.67	70	25.106
832BR-28K	25	1023	0.57	3.6	1379	.12	24	28.485
842BR-28K	25	1630	0.90	3.6	2135	.19	32	27.428
852BR-28K	25	3611	2.03	3.6	4633	.40	39	27.428
862BR-28K	25	6402	3.23	3.6	7566	.60	70	28.182

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 348 & 349.
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Base / Projecting Shaft / Output Flange see How to Order Page 201.
 For Overhung Load Ratings refer to Page 204.

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM

Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832BR-32K	54	971	1.00	45	995	0.86	36	1056	0.73
842BR-32K	54	1560	1.66	45	1618	1.44	36	1702	1.22
852BR-32K	54	2813	2.98	45	2986	2.64	36	3214	2.29
862BR-32K	54	5184	4.93	45	5526	4.37	36	5913	3.78
832BR-36K	48	936	0.99	40	969	0.87	32	1030	0.74
842BR-36K	48	1525	1.59	40	1600	1.38	32	1653	1.17
852BR-36K	48	3262	3.59	40	3397	3.14	32	3553	2.67
862BR-36K	48	5768	5.65	40	6174	5.03	32	6491	4.24
832BR-40K	43	933	0.94	36	972	0.82	29	1015	0.70
842BR-40K	43	1527	1.51	36	1587	1.31	29	1672	1.12
852BR-40K	43	3453	3.28	36	3587	2.87	29	3734	2.43
862BR-40K	43	6045	5.25	36	6292	4.58	29	6569	3.87
832BR-45K	38	1032	0.80	32	1088	0.70	25	1157	0.60
842BR-45K	38	1669	1.34	32	1752	1.16	25	1767	0.95
852BR-45K	38	3165	2.37	32	3308	2.06	25	3297	1.65
862BR-45K	38	5810	3.95	32	6151	3.49	25	6555	3.00
832BR-50K	35	1000	0.71	29	1032	0.62	23	1118	0.54
842BR-50K	35	1612	1.19	29	1639	1.01	23	1618	0.81
852BR-50K	35	3248	2.24	29	3427	1.98	23	3492	1.63
862BR-50K	35	5930	3.79	29	6278	3.34	23	6696	2.87
832BR-56K	31	1033	0.74	25	1050	0.64	20	1125	0.55
842BR-56K	31	1670	1.18	25	1733	1.03	20	1806	0.87
852BR-56K	31	3820	2.63	25	3951	2.28	20	4129	1.93
862BR-56K	31	6500	4.20	25	6718	3.65	20	6992	3.08
832BR-63K	27	1040	0.67	23	1088	0.59	18	1151	0.50
842BR-63K	27	1716	1.07	23	1787	0.94	18	1898	0.80
852BR-63K	27	3899	2.39	23	4050	2.08	18	4193	1.75
862BR-63K	27	6720	3.76	23	6954	3.27	18	7217	2.77
832BR-71K	24	1192	0.59	20	1246	0.51	16	1353	0.44
842BR-71K	24	1739	0.88	20	1704	0.73	16	1799	0.58
852BR-71K	24	3225	1.71	20	3216	1.42	16	3275	1.13
862BR-71K	24	6645	2.94	20	6972	2.58	16	7420	2.20
832BR-80K	21	1250	0.54	18	1296	0.47	14	1368	0.40
842BR-80K	21	1619	0.74	18	1611	0.61	14	1596	0.49
852BR-80K	21	3453	1.50	18	3436	1.24	14	3494	0.99
862BR-80K	21	6783	2.77	18	7143	2.42	14	7483	2.05
832BR-90K	19	1187	0.57	16	1243	0.50	12	1285	0.42
842BR-90K	19	1934	0.91	16	1997	0.79	12	2113	0.68
852BR-90K	19	4178	1.82	16	4294	1.57	12	4455	1.33
862BR-90K	19	7514	3.05	16	7520	2.56	12	7555	2.08

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 348 & 349.
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Base / Projecting Shaft / Output Flange see How to Order Page 201.
 For Overhung Load Ratings refer to Page 204.

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
832BR-32K	21	1129	.47	3.1	1360	.09	24	33.710
842BR-32K	21	1761	.76	3.1	1692	.11	32	32.105
852BR-32K	21	3496	1.50	3.1	3407	.22	39	31.500
862BR-32K	21	6446	2.48	3.1	7440	.43	70	33.480
832BR-36K	19	1107	.48	2.8	1327	.09	24	37.143
842BR-36K	19	1756	.75	2.8	2547	.17	32	37.143
852BR-36K	19	3751	1.70	2.8	4745	.34	39	33.548
862BR-36K	19	6469	2.57	2.8	7105	.45	70	35.790
832BR-40K	17	1081	.45	2.5	1381	.09	24	39.259
842BR-40K	17	1781	.72	2.5	2534	.16	32	39.259
852BR-40K	17	3949	1.55	2.5	4902	.30	39	39.286
862BR-40K	17	6928	2.46	2.5	7518	.42	70	40.571
832BR-45K	15	1312	.41	2.2	1360	.06	24	45.500
842BR-45K	15	1821	.59	2.2	1639	.08	32	43.333
852BR-45K	15	3346	1.01	2.2	3080	.14	39	45.333
862BR-45K	15	7018	2.03	2.2	7488	.31	70	47.316
832BR-50K	14	1271	.37	2.0	1366	.06	24	49.500
842BR-50K	14	1691	.51	2.0	1539	.07	32	47.143
852BR-50K	14	3556	1.00	2.0	3349	.14	39	49.286
862BR-50K	14	7481	1.93	2.0	7489	.29	70	50.518
832BR-56K	12	1287	.38	1.8	1296	.06	24	56.190
842BR-56K	12	2063	.60	1.8	2677	.12	32	56.190
852BR-56K	12	4645	1.31	1.8	5225	.23	39	55.454
862BR-56K	12	7514	2.14	1.8	7402	.31	70	55.714
832BR-63K	11	1296	.34	1.6	1481	.06	24	64.210
842BR-63K	11	2161	.55	1.6	2760	.11	32	64.210
852BR-63K	11	4765	1.20	1.6	5336	.21	39	63.000
862BR-63K	11	7526	1.87	1.6	7498	.27	70	64.800
832BR-71K	10	1378	.27	1.4	1353	.04	24	73.500
842BR-71K	10	1749	.36	1.4	1632	.05	32	70.000
852BR-71K	10	3264	.70	1.4	3135	.10	39	65.454
862BR-71K	10	7420	1.39	1.4	7454	.20	70	73.923
832BR-80K	9.0	1419	.25	1.2	1504	.04	24	82.833
842BR-80K	9.0	1621	.30	1.2	1815	.04	32	78.889
852BR-80K	9.0	3573	.61	1.2	3498	.09	39	82.222
862BR-80K	9.0	7511	1.27	1.2	7346	.18	70	80.944
832BR-90K	8.0	1360	.29	1.1	1360	.04	24	86.667
842BR-90K	8.0	2230	.46	1.1	2720	.08	32	86.667
852BR-90K	8.0	4730	.91	1.1	5110	.14	39	90.667
862BR-90K	8.0	7520	1.36	1.1	7520	.20	70	91.579

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 348 & 349.
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Base / Projecting Shaft / Output Flange see How to Order Page 201.
 For Overhung Load Ratings refer to Page 204.

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM

Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
832BR-100K	17	1120	0.51	14	1188	0.44	11	1256	0.38
842BR-100K	17	1835	0.81	14	1926	0.71	11	1998	0.60
852BR-100K	17	4225	1.71	14	4365	1.47	11	4552	1.25
862BR-100K	17	7539	2.87	14	7518	2.41	11	7500	1.96
833BR-100K	17	1302	0.47	14	1346	0.40	11	1326	0.32
843BR-100K	17	1700	0.63	14	1667	0.52	11	1656	0.42
853BR-100K	17	3477	1.22	14	3452	1.01	11	3443	0.81
863BR-100K	17	7173	2.34	14	7455	2.02	11	7455	1.63
832BR-112K	15	1360	0.44	12	1342	0.36	10	1351	0.29
842BR-112K	15	1412	0.48	12	1427	0.40	10	1464	0.33
852BR-112K	15	3088	0.99	12	3076	0.83	10	3138	0.68
862BR-112K	15	6594	1.97	12	6533	1.63	10	6533	1.30
833BR-118K	14	1321	0.42	12	1334	0.35	9	1346	0.28
843BR-118K	14	1698	0.55	12	1666	0.46	9	1649	0.37
853BR-118K	14	3436	1.07	12	3446	0.88	9	3369	0.71
863BR-118K	14	7434	2.14	12	7450	1.79	9	7410	1.44
832BR-125K	14	1311	0.36	11	1299	0.31	9	1324	0.25
842BR-125K	14	1248	0.36	11	1237	0.31	9	1261	0.25
852BR-125K	14	2630	0.75	11	2636	0.63	9	2692	0.52
862BR-125K	14	4832	1.28	11	4829	1.06	9	4794	0.85
833BR-132K	13	1217	0.42	10	1300	0.37	8	1340	0.31
843BR-132K	13	1953	0.66	10	2088	0.58	8	2259	0.51
853BR-132K	13	4596	1.42	10	4856	1.26	8	5196	1.09
863BR-132K	13	7410	2.21	10	7520	1.87	8	7520	1.52
832BR-140K	12	1310	0.40	10	1338	0.35	8	1342	0.28
842BR-140K	12	2117	0.64	10	2191	0.56	8	2337	0.48
852BR-140K	12	4143	1.30	10	4321	1.13	8	4460	0.95
862BR-140K	12	7520	2.02	10	7525	1.69	8	7561	1.37
833BR-150K	11	1237	0.40	9	1313	0.35	7	1342	0.29
843BR-150K	11	1580	0.63	9	2151	0.56	7	2516	0.49
853BR-150K	11	4604	1.35	9	4888	1.20	7	5192	1.04
863BR-150K	11	7143	1.99	9	7161	1.66	7	7187	1.35
832BR-160K	10	1364	0.37	9	1372	0.32	7	1382	0.26
842BR-160K	10	2216	0.59	9	2264	0.52	7	2430	0.45
852BR-160K	10	4736	1.19	9	4925	1.03	7	5130	0.87
862BR-160K	10	7504	1.86	9	7489	1.56	7	7508	1.26
833BR-160K	10	1320	0.32	9	1316	0.26	7	1326	0.21
843BR-160K	10	1693	0.41	9	1647	0.34	7	1648	0.27
853BR-160K	10	3406	0.79	9	3368	0.66	7	3394	0.53
863BR-160K	10	7431	1.51	9	7290	1.26	7	7461	1.01

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 348 & 349. Actual Output RPM = Input Speed ÷ Actual Ratio.

For Base / Projecting Shaft / Output Flange see How to Order Page 201.

For Overhung Load Ratings refer to Page 204.

□ Indicates Triple Reduction

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
832BR-100K	6.9	1356	.25	1.0	1360	.04	24	94.286
842BR-100K	6.9	2260	.41	1.0	2496	.07	32	94.286
852BR-100K	6.9	5128	.85	1.0	5260	.13	39	98.571
862BR-100K	6.9	7588	1.28	1.0	7520	.18	70	97.778
833BR-100K	6.9	1377	.20	1.0	1386	.03	32	103.250
843BR-100K	6.9	1700	.26	1.0	1710	.04	40	98.333
853BR-100K	6.9	3597	.51	1.0	3283	.07	47	100.551
863BR-100K	6.9	7596	1.00	1.0	7157	.14	83	102.668
832BR-112K	6.2	1391	.18	.89	1360	.03	24	114.333
842BR-112K	6.2	1766	.23	.89	1710	.03	32	108.889
852BR-112K	6.2	3170	.42	.89	3370	.07	39	108.889
862BR-112K	6.2	6592	.80	.89	6160	.11	70	111.370
833BR-118K	5.8	1356	.17	.85	1360	.03	32	117.987
843BR-118K	5.8	1656	.22	.85	1530	.03	40	112.368
853BR-118K	5.8	3385	.43	.85	3370	.06	47	114.903
863BR-118K	5.8	7505	.89	.85	7390	.13	83	116.637
832BR-125K	5.5	1405	.16	.80	1360	.02	24	129.937
842BR-125K	5.5	1338	.16	.80	1410	.02	32	123.750
852BR-125K	5.5	2835	.33	.80	2990	.05	39	123.750
862BR-125K	5.5	4870	.52	.80	4470	.07	70	126.583
833BR-132K	5.2	1430	.20	.78	1360	.03	32	130.000
843BR-132K	5.2	2638	.36	.78	2670	.06	40	130.000
853BR-132K	5.2	5260	.72	.78	5260	.10	47	132.932
863BR-132K	5.2	7520	.99	.78	7520	.14	83	130.000
832BR-140K	4.9	1360	.18	.71	1360	.03	24	140.000
842BR-140K	4.9	2739	.34	.71	2603	.05	32	140.000
852BR-140K	4.9	4897	.63	.71	4604	.09	39	130.909
862BR-140K	4.9	7520	.89	.71	7520	.13	70	143.077
833BR-150K	4.6	1378	.18	.67	1380	.03	32	137.407
843BR-150K	4.6	2659	.34	.67	2660	.05	40	137.407
853BR-150K	4.6	5192	.59	.67	5260	.09	47	140.507
863BR-150K	4.6	7674	.87	.67	7550	.14	83	140.774
832BR-160K	4.3	1407	.16	.62	1360	.02	24	157.778
842BR-160K	4.3	2770	.31	.62	2470	.04	32	157.778
852BR-160K	4.3	5200	.58	.62	5690	.09	39	164.444
862BR-160K	4.3	7515	.82	.62	7520	.12	70	156.667
833BR-160K	4.3	1362	.13	.62	1360	.02	32	159.250
843BR-160K	4.3	1719	.17	.62	1720	.02	40	151.667
853BR-160K	4.3	3400	.32	.62	3470	.05	47	155.089
863BR-160K	4.3	7500	.62	.62	7500	.09	83	167.859

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 348 & 349.
Actual Output RPM = Input Speed ÷ Actual Ratio.

For Base / Projecting Shaft / Output Flange see How to Order Page 201.

For Overhung Load Ratings refer to Page 204.

□ Indicates Triple Reduction

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM

Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
833BR-180K	9.7	1247	0.27	8.1	1205	0.23	6.4	1205	0.18
843BR-180K	9.7	1554	0.35	8.1	1539	0.29	6.4	1599	0.23
853BR-180K	9.7	3161	0.68	8.1	3154	0.56	6.4	3200	0.45
863BR-180K	9.7	7427	1.39	8.1	7453	1.16	6.4	7455	0.93
833BR-200K	8.7	1346	0.31	7.2	1367	0.26	5.8	1367	0.21
843BR-200K	8.7	2267	0.50	7.2	2393	0.45	5.8	2584	0.39
853BR-200K	8.7	5139	1.08	7.2	5243	0.92	5.8	5248	0.75
863BR-200K	8.7	7443	1.49	7.2	7428	1.25	5.8	7428	1.01
832BR-212K	8.2	1333	0.28	6.8	1324	0.23	5.5	1371	0.19
842BR-212K	8.2	2352	0.47	6.8	2365	0.40	5.5	2421	0.33
852BR-212K	8.2	5021	0.97	6.8	5107	0.83	5.5	5230	0.68
862BR-212K	8.2	7607	1.39	6.8	7586	1.17	5.5	7666	0.95
833BR-225K	7.8	1311	0.27	6.4	1366	0.23	5.1	1319	0.18
843BR-225K	7.8	2346	0.46	6.4	2539	0.41	5.1	2725	0.36
853BR-225K	7.8	5298	0.97	6.4	5291	0.82	5.1	5295	0.66
863BR-225K	7.8	7405	1.32	6.4	7461	1.11	5.1	7506	0.90
832BR-250K	7.0	1382	0.25	5.8	1398	0.21	4.6	1398	0.17
842BR-250K	7.0	2050	0.36	5.8	2041	0.31	4.6	2080	0.25
852BR-250K	7.0	4566	0.75	5.8	4768	0.63	4.6	4800	0.52
862BR-250K	7.0	7676	1.25	5.8	7671	1.05	4.6	7625	0.85
833BR-265K	6.6	1297	0.20	5.5	1342	0.16	4.4	1308	0.13
843BR-265K	6.6	1588	0.25	5.5	1597	0.21	4.4	1629	0.17
853BR-265K	6.6	3351	0.49	5.5	3267	0.40	4.4	3267	0.32
863BR-265K	6.6	6895	0.98	5.5	6850	0.82	4.4	6866	0.66
833BR-280K	6.2	1357	0.18	5.2	1386	0.15	4.1	1360	0.12
843BR-280K	6.2	1590	0.23	5.2	1681	0.19	4.1	1680	0.15
853BR-280K	6.2	3356	0.44	5.2	3313	0.36	4.1	3392	0.29
863BR-280K	6.2	7671	0.88	5.2	7671	0.73	4.1	7710	0.59
833BR-315K	5.6	1311	0.20	4.6	1318	0.17	3.7	1360	0.14
843BR-315K	5.6	2620	0.39	4.6	2770	0.34	3.7	2770	0.27
853BR-315K	5.6	5252	0.73	4.6	5255	0.61	3.7	5309	0.50
863BR-315K	5.6	7490	0.94	4.6	7475	0.79	3.7	7474	0.64
833BR-360K	4.9	1177	0.18	4.0	1269	0.15	3.2	1269	0.12
843BR-360K	4.9	2496	0.35	4.0	2537	0.29	3.2	2537	0.23
853BR-360K	4.9	4862	0.63	4.0	4897	0.53	3.2	4900	0.43
863BR-360K	4.9	7382	0.87	4.0	7509	0.73	3.2	7512	0.59
833BR-400K	4.4	1296	0.13	3.6	1391	0.11	2.9	1391	0.09
843BR-400K	4.4	1647	0.16	3.6	1656	0.14	2.9	1653	0.11
853BR-400K	4.4	3368	0.32	3.6	3215	0.26	2.9	3290	0.21
863BR-400K	4.4	7686	0.67	3.6	7704	0.56	2.9	7718	0.44

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 354 & 355.
 Actual Output RPM = Input Speed ÷ Actual Ratio.
 For Base / Projecting Shaft / Output Flange see How to Order Page 201.
 For Overhung Load Ratings refer to Page 204.
 □ Indicates Triple Reduction

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
833BR-180K	3.8	1205	.11	.55	1260	.70	32	173.250
843BR-180K	3.8	1600	.14	.55	1700	.71	40	165.000
853BR-180K	3.8	3400	.27	.55	3440	.73	47	168.723
863BR-180K	3.8	7500	.57	.55	7500	.78	83	182.494
833BR-200K	3.4	1360	.13	.50	1360	.57	32	196.667
843BR-200K	3.4	2620	.26	.50	2620	.58	40	196.667
853BR-200K	3.4	5555	.48	.50	5260	.60	47	201.103
863BR-200K	3.4	7520	.65	.50	7520	.63	83	198.712
832BR-212K	3.2	1432	.12	.47	1360	.57	24	217.778
842BR-212K	3.2	2548	.21	.47	2610	.58	32	217.778
852BR-212K	3.2	5602	.44	.47	5260	.60	39	217.778
862BR-212K	3.2	7700	.61	.47	7700	.63	70	215.555
833BR-225K	3.1	1355	.11	.44	1360	.57	32	224.737
843BR-225K	3.1	2880	.23	.44	2610	.58	40	224.737
853BR-225K	3.1	5554	.42	.44	5260	.60	47	229.806
863BR-225K	3.1	7520	.57	.44	7520	.63	83	225.750
832BR-250K	2.8	1360	.11	.40	1360	.57	24	247.500
842BR-250K	2.8	2206	.16	.40	2150	.58	32	247.500
852BR-250K	2.8	4800	.33	.40	4680	.60	39	247.500
862BR-250K	2.8	7770	.54	.40	7427	.62	70	245.000
833BR-265K	2.6	1335	.08	.38	1360	.70	32	257.250
843BR-265K	2.6	1589	.10	.38	1680	.70	40	245.000
853BR-265K	2.6	3387	.20	.38	3310	.72	47	250.526
863BR-265K	2.6	7080	.41	.38	7260	.76	83	242.367
833BR-280K	2.5	1360	.07	.36	1360	.01	32	289.917
843BR-280K	2.5	1712	.09	.36	1670	.01	40	276.111
853BR-280K	2.5	3382	.18	.36	3310	.02	47	282.339
863BR-280K	2.5	7710	.36	.36	7250	.05	83	304.445
833BR-315K	2.2	1446	.09	.32	1360	.01	32	303.333
843BR-315K	2.2	2782	.17	.32	2580	.02	40	303.333
853BR-315K	2.2	5445	.31	.32	5220	.05	47	310.175
863BR-315K	2.2	7520	.41	.32	7520	.06	83	324.889
833BR-360K	1.9	1270	.07	.28	1360	.01	32	330.000
843BR-360K	1.9	2537	.14	.28	2570	.02	40	330.000
853BR-360K	1.9	5079	.27	.28	5190	.04	47	337.444
863BR-360K	1.9	7520	.38	.28	7520	.05	83	353.214
833BR-400K	1.7	1391	.05	.25	1360	.01	32	400.167
843BR-400K	1.7	1730	.07	.25	1660	.01	40	381.111
853BR-400K	1.7	3378	.13	.25	3290	.02	47	389.708
863BR-400K	1.7	7798	.27	.25	7718	.04	83	403.190

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 354 & 355.

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Base / Projecting Shaft / Output Flange see How to Order Page 201.

For Overhung Load Ratings refer to Page 204.

□ Indicates Triple Reduction

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 1750, 1450 and 1160 RPM

Service Factor 1.0*

Catalog Number	Input Speed								
	1750 RPM			1450 RPM			1160 RPM		
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN) (Max.)	Input HP (Max.)
833BR-450K	3.9	1279	0.11	3.2	1263	0.09	2.6	1403	0.08
843BR-450K	3.9	1572	0.14	3.2	1627	0.12	2.6	1671	0.10
853BR-450K	3.9	3303	0.28	3.2	3276	0.23	2.6	3380	0.19
863BR-450K	3.9	7692	0.59	3.2	7612	0.49	2.6	7612	0.39
833BR-500K	3.5	1354	0.13	2.9	1359	0.11	2.3	1390	0.09
843BR-500K	3.5	2647	0.25	2.9	2684	0.21	2.3	2690	0.17
853BR-500K	3.5	5146	0.46	2.9	5266	0.39	2.3	5266	0.31
863BR-500K	3.5	6913	0.62	2.9	6892	0.52	2.3	6892	0.42
833BR-560K	3.1	1384	0.12	2.6	1392	0.10	2.0	1392	0.08
843BR-560K	3.1	2745	0.23	2.6	2691	0.19	2.0	2691	0.15
853BR-560K	3.1	5296	0.42	2.6	5240	0.35	2.0	5240	0.28
863BR-560K	3.1	7200	0.55	2.6	7156	0.46	2.0	7200	0.37
833BR-800K	2.2	1274	0.08	1.8	1322	0.07	1.4	1416	0.06
843BR-800K	2.2	2591	0.16	1.8	2737	0.14	1.4	2740	0.11
853BR-800K	2.2	5308	0.31	1.8	5373	0.26	1.4	5376	0.21
863BR-800K	2.2	7734	0.43	1.8	7734	0.36	1.4	7774	0.29
833BR-900K	1.9	1247	0.07	1.6	1490	0.06	1.3	1490	0.05
843BR-900K	1.9	2494	0.14	1.6	2621	0.12	1.3	2630	0.10
853BR-900K	1.9	5099	0.27	1.6	5402	0.23	1.3	5420	0.18
863BR-900K	1.9	7659	0.38	1.6	7771	0.32	1.3	7775	0.26

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 348 & 349.

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Base / Projecting Shaft / Output Flange see How to Order Page 201.

For Overhung Load Ratings refer to Page 204.

□ Indicates Triple Reduction

800 Series Right Angle Helical Worm Ratings

Non-Flanged; Input Speeds 690 and 100 RPM

Service Factor 1.0*

Catalog Number	Input Speed						Approx. Wt. (LB)	Actual Gear Ratio
	690 RPM			100 RPM				
	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)	Approx. Output RPM	Output Torque (LB-IN)(Max.)	Input HP (Max.)		
833BR-450K	1.5	1454	.05	.22	1454	.01	32	454.781
843BR-450K	1.5	1662	.06	.22	1660	.01	40	433.125
853BR-450K	1.5	3360	.11	.22	3280	.02	47	442.895
863BR-450K	1.5	7612	.24	.22	7190	.03	83	458.217
833BR-500K	1.4	1390	.05	.20	1360	.01	32	490.000
843BR-500K	1.4	2650	.10	.20	2540	.01	40	490.000
853BR-500K	1.4	5270	.20	.20	5410	.03	47	501.053
863BR-500K	1.4	7288	.27	.20	7520	.04	83	469.091
833BR-560K	1.2	1412	.05	.18	1360	.01	32	552.222
843BR-560K	1.2	2700	.09	.18	2530	.01	40	552.222
853BR-560K	1.2	5260	.18	.18	5130	.02	47	564.678
863BR-560K	1.2	7520	.24	.18	7520	.03	83	589.250
833BR-800K	.86	1453	.03	.12	1360	.01	32	762.222
843BR-800K	.86	2778	.07	.12	2510	.01	40	762.222
853BR-800K	.86	5460	.13	.12	5080	.02	47	779.415
863BR-800K	.86	7734	.18	.12	7520	.03	83	780.370
833BR-900K	.78	1490	.03	.11	1360	.00	32	866.250
843BR-900K	.78	2630	.06	.11	2500	.01	40	866.250
853BR-900K	.78	5450	.11	.11	5060	.02	47	885.789
863BR-900K	.78	7775	.16	.11	7520	.02	83	886.875

* For applications requiring a service factor greater than 1.0, multiply the design torque or horsepower by the application factor, found on pages 348 & 349.

Actual Output RPM = Input Speed ÷ Actual Ratio.

For Base / Projecting Shaft / Output Flange see How to Order Page 201.

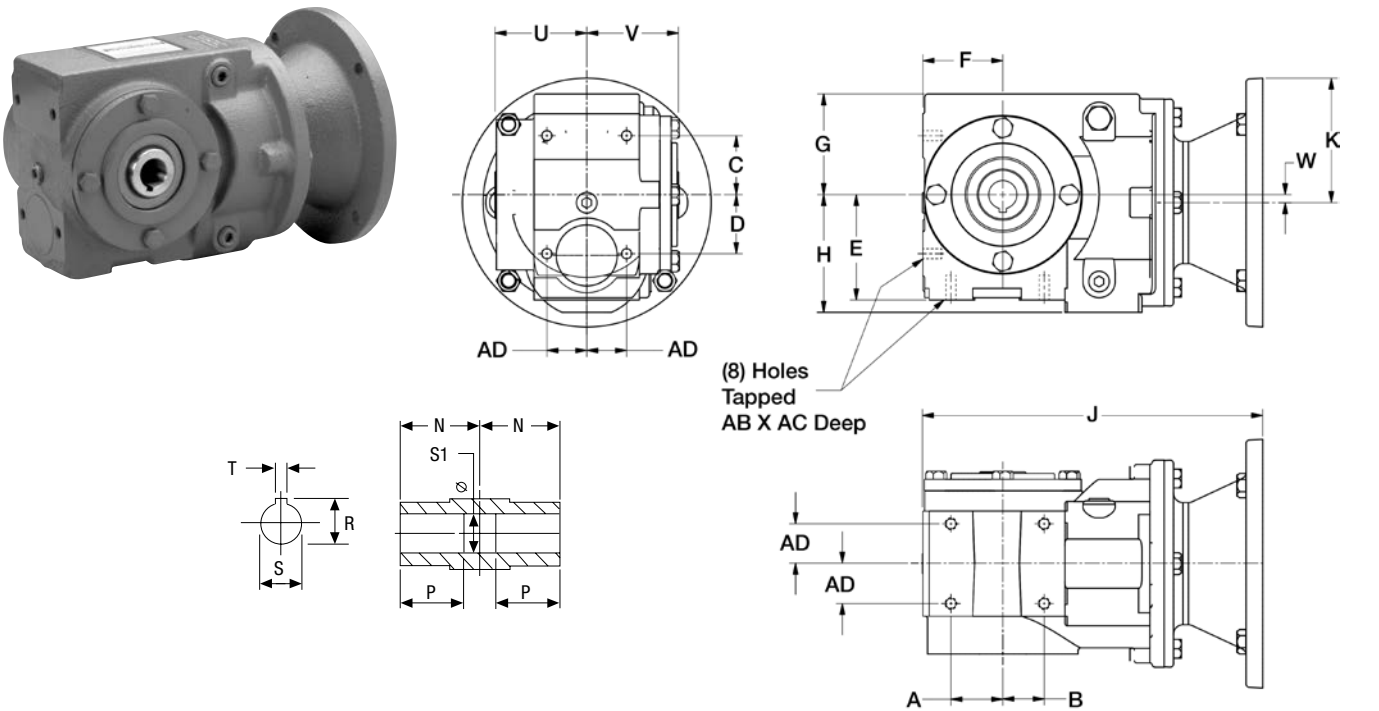
For Overhung Load Ratings refer to Page 204.

□ Indicates Triple Reduction

H

800 Series Right Angle Helical Worm Gear Drives

SF800BR Series; NEMA C-Face Input; Double Reduction Basic Model



Size	A	B	C	D	E	F	G	H	J				K			
									NEMA Mounting				NEMA Mounting			
									56C	140TC	180TC	210TC	56C	140TC	180TC	210TC
									B5	B7	B9	B11	B5	B7	B9	B11
SF832BR	1.38	1.10	1.57	1.57	2.80	2.13	2.68	3.13	9.04	9.04	—	—	3.31	3.31	—	—
SF842BR	1.38	1.77	2.09	2.56	3.39	2.52	2.95	3.66	9.79	9.79	10.61	—	3.31	3.31	4.63	—
SF852BR	1.77	2.17	2.56	3.03	3.78	2.68	3.46	4.36	10.57	10.57	11.40	—	3.31	3.31	4.63	—
SF862BR	2.20	2.60	2.99	3.78	4.72	3.54	3.94	5.49	12.29	12.29	14.65	14.65	3.31	3.31	4.63	4.63

Size	N	P	R	S +.001 -.000	S1	T	U	V	W	AB	AC	AD
SF832BR	2.44	1.25	.84	.7500	.76	.19	2.76	2.24	.21	5/16-18	.50	1.06
SF842BR	2.56	1.25	1.37	1.250	1.26	.25	2.93	2.56	.59	3/8-16	.56	1.10
SF852BR	2.76	1.38	1.53	1.375*	1.39	.31	2.76	2.76	.53	3/8-16	.75	1.34
SF862BR	3.54	3.00	1.67	1.500*	1.51	.38	3.54	3.17	.67	7/16-14	.75	1.57

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

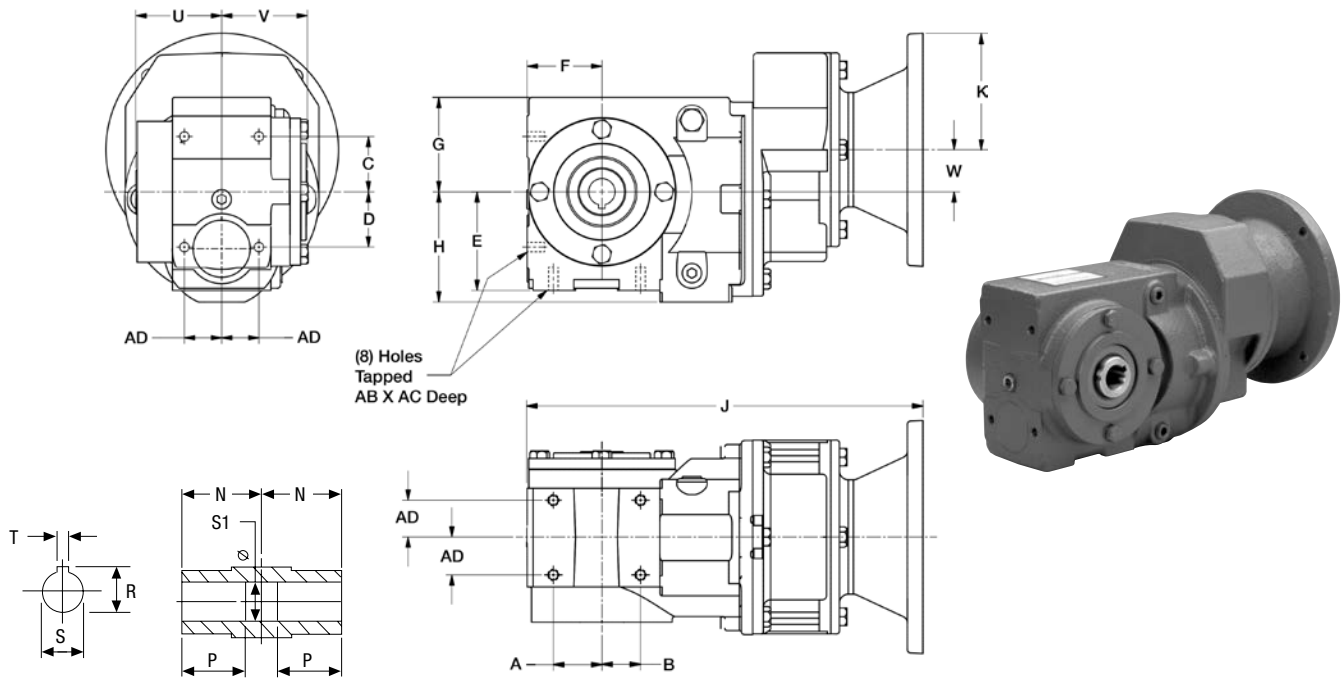
Option kit dimensions on pages 236 & 237.

* Maximum bore size is 1.625, contact factory for availability.

800 Series Right Angle Helical Worm Gear Drives

SF800BR Series; NEMA C-Face Input; Triple Reduction

Basic Model



Size	A	B	C	D	E	F	G	H	J		K	
									NEMA Mounting		NEMA Mounting	
									56C	140TC	56C	140TC
									B5	B7	B5	B7
SF833BR	1.38	1.10	1.57	1.57	2.80	2.13	2.68	3.13	11.24	11.24	3.31	3.31
SF843BR	1.38	1.77	2.09	2.56	3.39	2.52	2.95	3.66	12.00	12.00	3.31	3.31
SF853BR	1.77	2.17	2.56	3.03	3.78	2.68	3.46	4.41	13.17	13.17	3.31	3.31
SF863BR	2.20	2.60	2.99	3.78	4.72	3.54	3.94	5.49	16.00	16.00	3.31	3.31

Size	N	P	R	S +.001 -.000	S1	T	U	V	W	AB	AC	AD
SF833BR	2.44	1.25	.84	.7500	.76	.19	2.76	2.24	1.20	5/16-18	.50	1.06
SF843BR	2.56	1.25	1.37	1.250	1.26	.25	2.93	2.56	.81	3/8-16	.56	1.10
SF853BR	2.76	1.35	1.47	1.375*	1.39	.31	2.76	2.76	.89	3/8-16	.75	1.34
SF863BR	3.54	3.00	1.62	1.500*	1.51	.38	3.54	3.17	1.16	7/16-14	.75	1.57

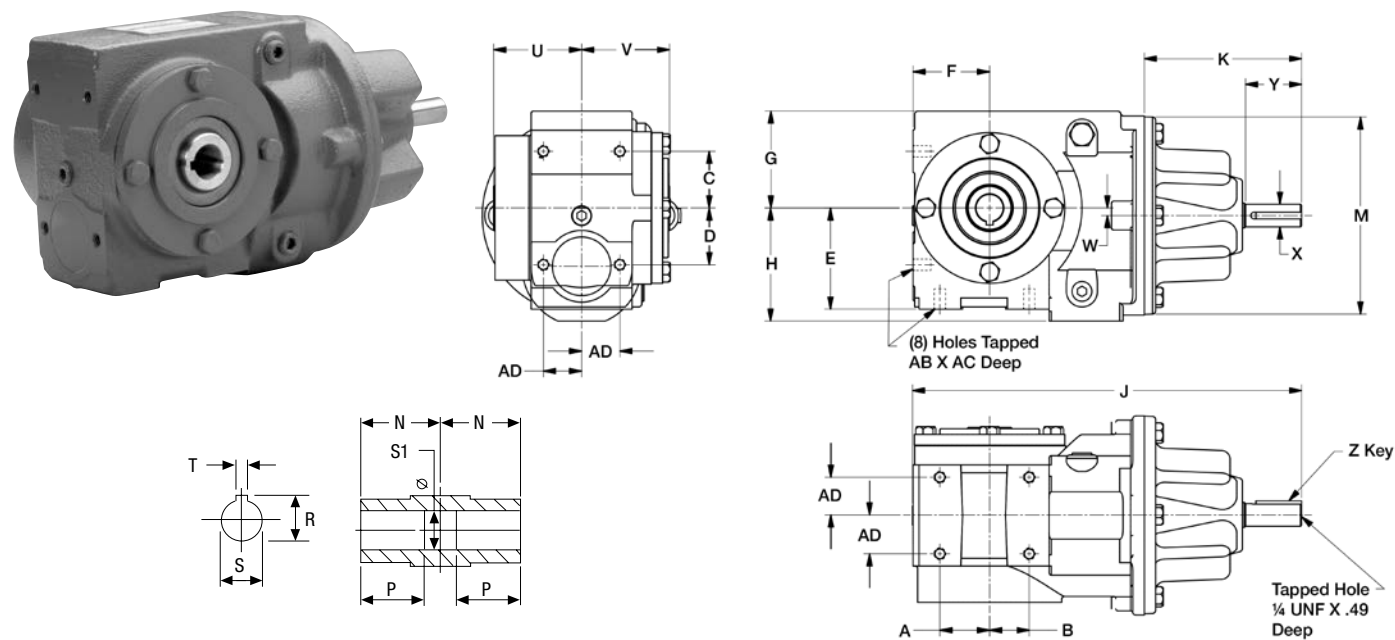
Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

Option kit dimensions on pages 236 & 237.

* Maximum bore size is 1.625, contact factory for availability.

800 Series Right Angle Helical Worm Gear Drives

S800BR Series; Non-Flanged; Double Reduction Basic Model



Size	A	B	C	D	E	F	G	H	J	K	M	N	P
S832BR	1.38	1.10	1.57	1.57	2.80	2.13	2.68	3.13	10.79	4.37	5.51	2.44	1.25
S842BR	1.38	1.77	2.09	2.56	3.39	2.52	2.95	3.66	11.54	4.37	5.51	2.56	1.25
S852BR	1.77	2.17	2.56	3.03	3.78	2.68	3.46	4.36	12.32	4.37	5.51	2.76	1.38
S862BR	2.20	2.60	2.99	3.78	4.72	3.54	3.94	5.49	14.57	4.37	7.09	3.54	3.00

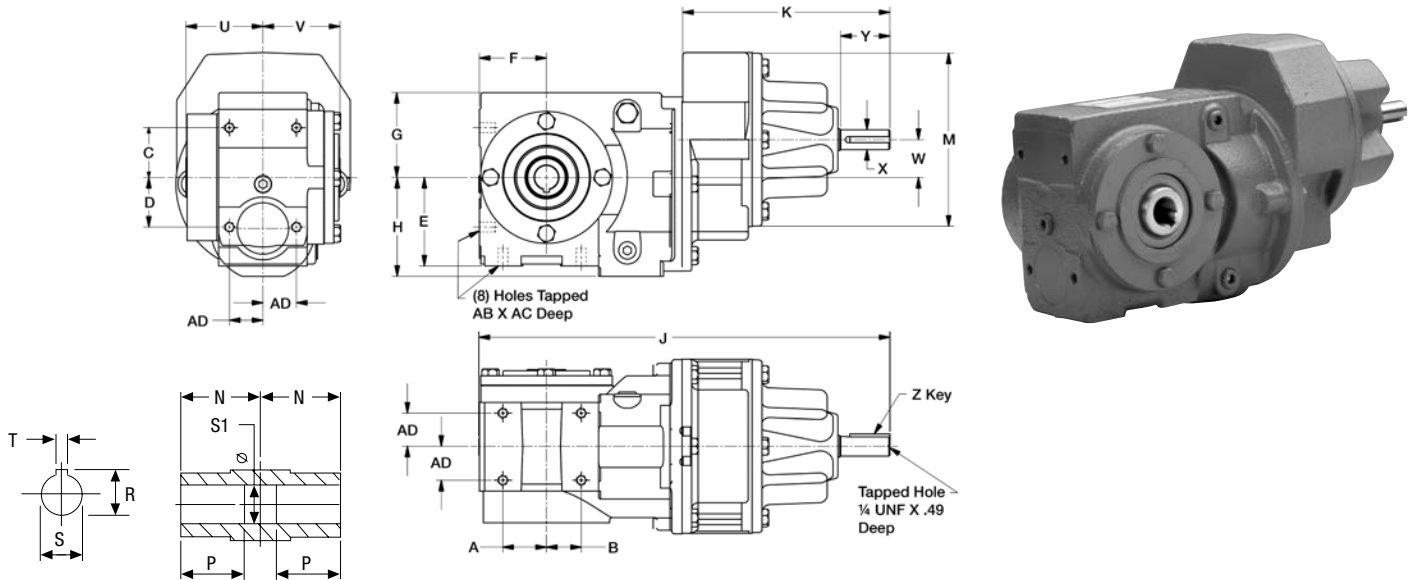
Size	R	S +.001 -.000	S1	T	U	V	W	X +.000 -.001	Y	Z - KEY		AB	AC	AD
										Sq.	Lgth.			
S832BR	.84	.7500	.76	.19	2.76	2.24	.21	.625	1.57	.19	1.28	5/16-18	.56	1.06
S842BR	1.37	1.250	1.26	.25	2.93	2.56	.59	.625	1.57	.19	1.28	3/8-16	.56	1.10
S852BR	1.53	1.375*	1.39	.31	2.76	2.76	.53	.625	1.57	.19	1.28	3/8-16	.75	1.34
S862BR	1.67	1.500*	1.51	.38	3.54	3.17	.67	.750	1.57	.19	1.28	7/16-14	.75	1.57

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.
Option kit dimensions on pages 236 & 237.
* Maximum bore size is 1.625, contact factory for availability.

800 Series Right Angle Helical Worm Gear Drives

S800BR Series; Non-Flanged; Triple Reduction

Basic Model



Size	A	B	C	D	E	F	G	H	J	K	M	N	P
S833BR	1.38	1.10	1.57	1.57	2.80	2.13	2.68	3.13	12.99	6.57	5.51	2.44	1.25
S843BR	1.38	1.77	2.09	2.56	3.39	2.52	2.95	3.66	13.74	6.57	5.51	2.56	1.25
S853BR	1.77	2.17	2.56	3.03	3.78	2.68	3.46	4.36	14.53	6.57	5.51	2.76	1.38
S863BR	2.20	2.60	2.99	3.78	4.72	3.54	3.94	5.49	17.17	6.97	5.51	3.54	2.00

Size	R	S +.001 -.000	S1	T	U	V	W	X +.000 -.001	Y	Z - KEY		AB	AC	AD
										Sq.	Lgth.			
S833BR	.84	.7500	.76	.19	2.76	2.24	1.20	.625	1.57	.19	1.28	5/16-18	.59	1.06
S843BR	1.37	1.250	1.26	.25	2.93	2.56	.89	.625	1.57	.19	1.28	3/8-16	.79	1.10
S853BR	1.53	1.375*	1.39	.31	2.76	2.76	.89	.625	1.57	.19	1.28	3/8-16	.79	1.34
S863BR	1.67	1.500*	1.51	.38	3.54	3.17	1.16	.625	1.57	.19	1.28	7/16-14	.79	1.57

Output shaft rotation, relative to input shaft rotation, is identical for double reduction and opposite for triple reduction.

Option kit dimensions on pages 236 & 237.

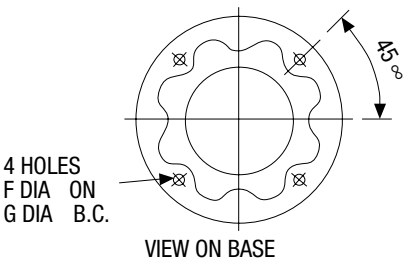
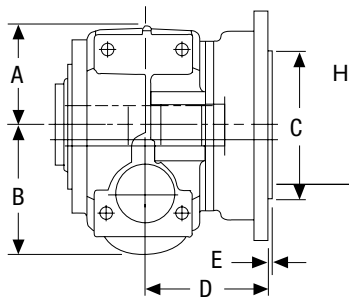
* Maximum bore size is 1.625, contact factory for availability.

H

800 Series Right Angle Helical Worm Gear Drives

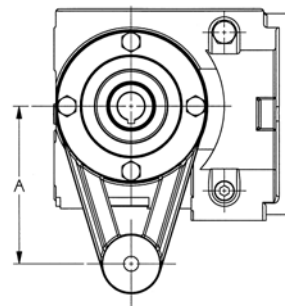
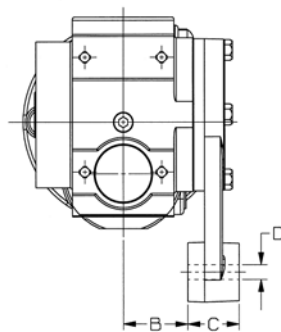
Accessories

Output Flange Kits



Size	A	B	C	D	E	F	G	H	Catalog No. (Item Code)
832BR	2.66	3.13	4.3312	2.95	.16	.35	5.12	6.30	XS830BR-11VK (59611)
833BR			4.3304						
842BR	2.95	3.36	4.3312	3.39	.16	.35	5.12	6.30	XS840BR-11VK (59523)
843BR			4.3304						
852BR	3.43	4.41	5.1187	4.21	.14	.43	6.50	7.88	XS850BR-11VK (59528)
853BR			5.1177						
862BR	4.04	5.49	5.1187	4.72	.14	.43	6.50	7.88	XS860BR-11VK (59533)
863BR			5.1177						

Torque Arm Kits

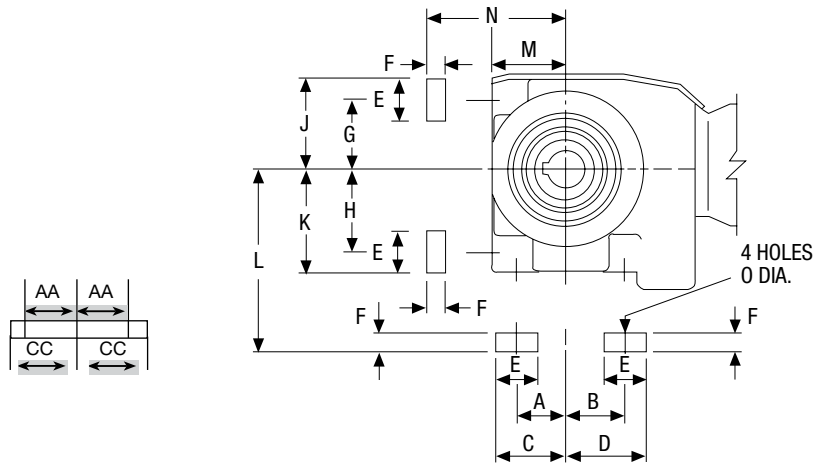


Size	A	B	C	D	Catalog No. (Item Code)
832BR	4.33	1.85	1.42	.41	XS830BR-76K (59612)
833BR					
842BR	5.12	2.05	1.42	.41	XS840BR-76K (59524)
843BR					
852BR	6.30	2.05	1.42	.41	XS850BR-76K (59529)
853BR					
862BR	7.87	2.81	1.73	.65	XS860BR-76K (59534)
863BR					

*Available on carrier side only (left side when facing flange input).

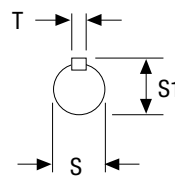
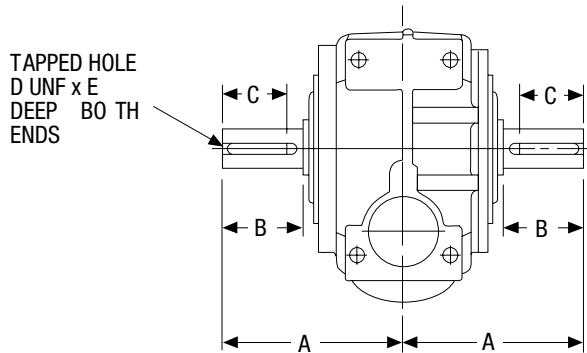
800 Series Right Angle Helical Worm Gear Drives

Accessories Base Kits



Size	A	B	C	D	E	F	G	H	J	K	L	M	N	O	AA	CC	Catalog No. (Item Code)
832BR 833BR	1.38	1.10	1.85	1.61	.98	.35	1.57	1.57	2.07	2.07	3.15	2.13	2.48	.35	1.77	2.17	XS830BR-11K (59610)
842BR 843BR	1.38	1.77	2.09	2.44	1.38	.55	2.09	2.56	2.78	3.25	3.94	2.52	3.07	.43	1.97	2.44	XS840BR-11K (59522)
852BR 853BR	1.77	2.17	2.56	2.95	1.57	.63	2.56	3.03	3.35	3.82	4.41	2.68	3.31	.43	2.17	2.68	XS850BR-11K (59527)
862BR 863BR	2.36	2.76	3.19	3.58	1.97	.79	3.15	3.94	3.98	4.76	5.51	3.54	4.33	.55	2.56	3.15	XS860BR-11K (59532)

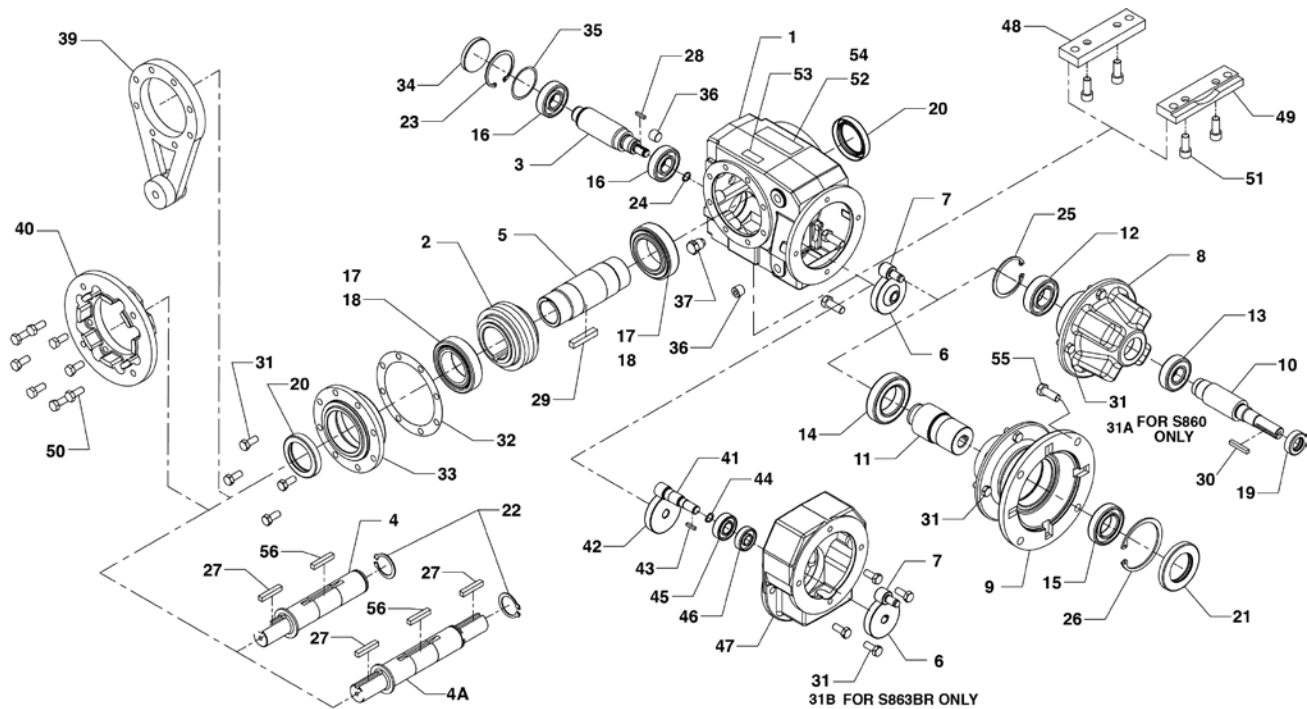
Output Shaft Kits



Size	A	B	C	D	E	S +.000 -.001	S1	T	Catalog No. (Item Code)	
									Single Projection	Double Projection
832BR 833BR	3.94	1.38	1.28	1/4	.63	.750	.83	.19	XS830BR-3PAK (59608)	XS830BR-3PBK (59609)
842BR 843BR	4.53	1.81	1.69	1/4	.63	1.000	1.10	.25	XS840BR-3PAK (59520)	XS840BR-3PBK (59521)
852BR 853BR	5.28	2.36	2.12	3/4	.87	1.250	1.36	.25	XS850BR-3PAK (59525)	XS850BR-3PBK (59526)
862BR 863BR	6.30	2.48	2.34	1/2	1.12	1.375	1.51	.31	XS860BR-3PAK (59530)	XS860BR-3PBK (59531)

Single left / right or double projection shafts.

800 Series Parts List – Right Angle Helical Worm Gear Drives



Part No.	Description of Part
1	HOUSING
2	O/P WORM GEAR
3	O/P WORM
4	OUTPUT SHAFT, PROJECTION (SINGLE)
4A	OUTPUT SHAFT, PROJECTION (DOUBLE)
5	OUTPUT SHAFT, HOLLOW
6	HELICAL GEAR, 1ST REDUCTOR
7	HELICAL PINION, 1ST REDUCTOR
8	INPUT BEARING CARRIER
9	MOTOR FLANGE (B5/B7-B9/B11)
10	INPUT REDUCTOR SHAFT
11	INPUT MOTOR SHAFT
12	BEARING, INPUT SHAFT (INBOARD)
13	BEARING, INPUT SHAFT (OUTBOARD)
14	BEARING, MOTOR SHAFT (INBOARD)
15	BEARING, MOTOR SHAFT (OUTBOARD)
16	BEARING, OUTPUT PINION
17	BEARING, OUTPUT SHAFT (CUP)
18	BEARING, OUTPUT SHAFT (CONE)
19	OIL SEAL, INPUT REDUCTOR SHAFT
20	OIL SEAL, OUTPUT SHAFT
21	OIL SEAL, INPUT MOTOR SHAFT
22	RETAINING RING, OUTPUT SHAFT
23	RETAINING RING, OUTPUT PINION (HOUSING)
24	RETAINING RING, 1ST REDUCTOR GEAR
25	RETAINING RING, INPUT CARRIER
26	RETAINING RING, B5/B7-B9/B11 FLANGE
27	KEY, OUTPUT SHAFT PROJECTION

Part No.	Description of Part
28	KEY, 1ST REDUCTION GEAR
29	KEY, OUTPUT SHAFT HOLLOW
30	KEY, INPUT REDUCTOR
31	HEX HEAD CAP SCREWS
32	OUTPUT SHIM
33	OUTPUT BEARING CARRIER
34	BORE PLUG, OUTPUT PINION
35	OUTPUT PINION SHIM
36	PLUG, PIPE
37	PLUG, OIL VENT
39	TORQUE ARM
40	OUTPUT FLANGE 11V BASE
41	HELICAL PINION, 2ND REDUCTOR (TRIPLE)
42	HELICAL GEAR, 2ND REDUCTOR (TRIPLE)
43	KEY, HELICAL PINION (TRIPLE)
44	RETAINING RING, HELICAL PINION
45	BEARING, HELICAL PINION (TRPL) OUTBOARD
46	BEARING, HELICAL GEAR (TRPL)
47	HOUSING, TRIPLE REDUCTION
48	MOUNTING FOOT
49	MOUNTING FOOT
50	SOCKET HEAD CAPSCREW
51	ALLEN HEAD CAPSCREWS
52	NAMEPLATE
53	SYNTHETIC OIL LEVEL
54	NAMEPLATE TAPE
55	MOTOR BOLTS
56	HOLLOW-TO-SOLID SHAFT KEY