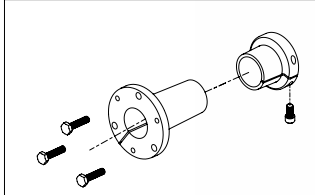
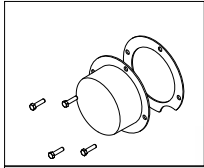


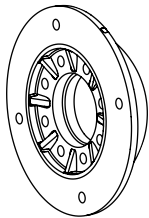
SS2000R Series Helical Bevel Gear Drives A2

Optional gasketed shaft cover available to eliminate food traps

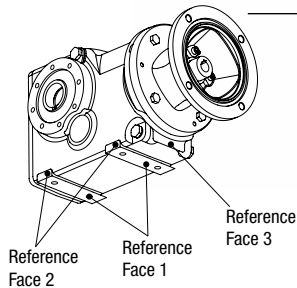


Optional keyless **Tapered Bushing** (shown) provides longer shaft life and faster installation

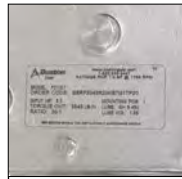
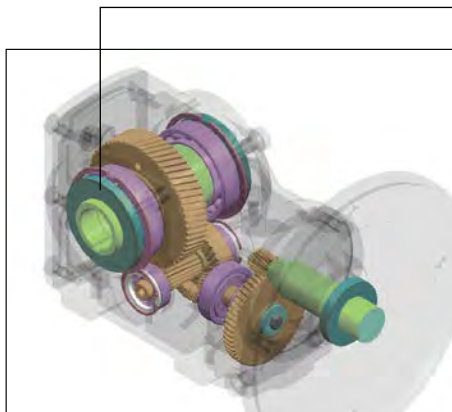
303 Stainless steel shafts



Optional piloted output flange available



Unique **Mounting Registers** allow for quick precision alignment



Laser marked nameplate provide worry-free part identification while maintaining a smooth, unetched surface

Rare Earth Magnets near gear mesh provide automatic entrapment of wear debris ensuring longer life

The **Original Domed Crown™** unique rounded housing prevents foreign matter adherence and fluid accumulation

Stainless Steel Exterior
316 Castings
303/304 Machined Components



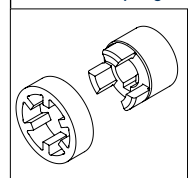
Integrated O-rings

NEMA or IEC C-Face motor input

Larger diameter oil fill/drain holes for faster oil changes

Polished matte finish maintains clean appearance throughout operation

3-Jaw Coupling



Optional high pressure washdown seal available*

Energy Efficient Design

With efficiency of 98% per gear mesh, Series 2000 helical bevel reducers are ideal for use in applications with:

- continuous or high duty cycle operations
- high-ratio reduction
- limited access applications where long life is a necessity

Ordering Information

Example: SSRF2043RF-40KC-B7-GS5-P22-Z-HUTFSS-9

SS	RF	2043R	F - 40	K	C	- B7 -	GS	5	- P22	Z -	HUTFSS - 9
Exterior SS Stainless Steel	Style RF - C-Face Coupling Mount	Size 2033R 2043R 2063R 2073R	Base Blank - None F - Output Flange T - Torque Arm B - Base Mounting Feet	Lubrication K - Klubersynth UH1-6-460 H1 Food Grade	Seal Option Blank - Standard C - High Pressure Washdown Output Seals IP69K	Motor Input Mounting Nema Mounting B5 56C B7 140TC/180C B9 180TC/210C B11 210TC/250UC IEC (B5) Mounting M14F IEC71 M19F IEC80 M24F IEC90S/90L M28F IEC100/112 M38F IEC132S/132M	Mounting Positions See page 18 1 2 3 4 5 6	Output Shaft Code Hollow Shaft See Chart 1 P24 Inch - spec'd in 1/16" increments PM40 Metric - spec'd in mm increments Solid Shaft See Chart 1 D24 OD - spec'd in 1/16" increments DM40 OD - spec'd in mm increments Tapered Bushing Hollow Output Shaft See Chart 1 TP22 Inch - Bore - spec'd in 1/16" increments TM35 Metric - Bore - spec'd in mm increments	C-Face Motor See Chart 2 Blank - No Motor	Motor Conduit Box Location See Chart 3 Blank - No Motor 0 - 12 o'clock 3 - 3 o'clock 6 - 6 o'clock 9 - 9 o'clock	
Reductions Blank - 3-Reductions WP - 4-Reduction Includes Planetary 5:1 Reduction		Ratios See page 19 for list of ratios. X.X - For ratios lower than 10:1 XXX - For ratios higher than 10.1					Output Mounting GS - Customer Mount on Left (Stainless) HS - Customer Mount Either Side (Stainless) JS - Customer Mount on Right Side (Stainless)			Shaft Cover Blank - No Cover Z - Shallow Cover (Fits Solid & Hollow Shafts) Y - Tapered Bushing Cover X - Deep Cover	

Chart 1: Available Output Shaft Codes

Size	Hollow Shaft Bore Codes		Solid Shaft OD Codes		Tapered Bushing Bore Codes	
	Inch	Metric	Inch	Metric	Inch	Metric
2033R	P16	PM25	D16	DM25	TP16	TM25
	P20	PM30	D20	DM30		
2043R	P20	PM30	D20	DM30	TP19	TM30
	P22	PM35	D22	DM35	TP20	
2063R	P23	PM40	D26	DM40	TP22	TM35
	P24		D32	DM50	TP23	
2073R	P31	PM50	D32	DM45	TP28	TM40
	P32		D34	DM50		

Additional Shaft and Bore sizes available upon request.

Chart 2: Stainless Steel AC Motors

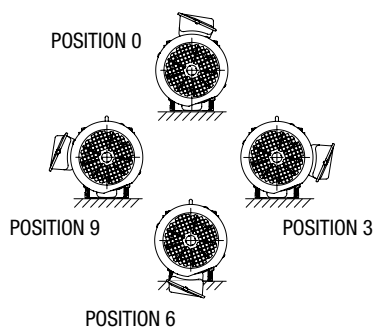
Part #	HP	Type	Frame Size
EUT-SS	0.33	TENV	56C
FUT-SS	0.5	TENV	56C
NEW FYTF-SS	0.5	TEFC	56C
NEW FYTF-SS	0.5	TEFC	56C
GUT-SS	0.75	TENV	56C
HUT5/8-SS	1.0	TENV	56C
HUTF5/8-SS	1.0	TEFC	56C
NEW HYTF5/8-SS	1.0	TEFC	56C
HUT-SS	1.0	TENV	140TC
HUTF-SS	1.0	TEFC	140TC
JUTF-SS	1.5	TEFC	140TC
KUTF-SS	2.0	TEFC	140TC
LUTF-SS	3.0	TEFC	180TC
MUTF-SS	5.0	TEFC	180TC
NUTF-SS	7.5	TEFC	210TC
PUTF-SS	10.0	TEFC	210TC

All above motors are 230/460V except FYTF-SS and HYTF5/8-SS which are 575V

TENV = Totally enclosed, non-ventilated

TEFC = Totally enclosed, fan-cooled

Chart 3: Conduit Box Positions

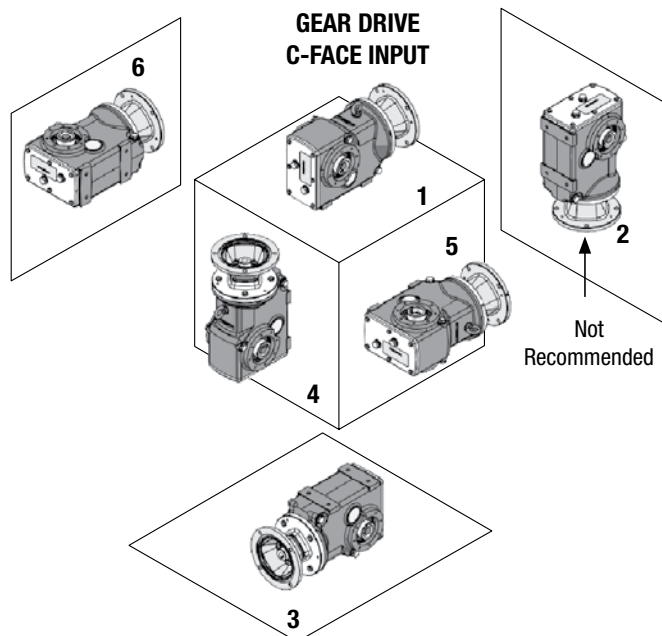
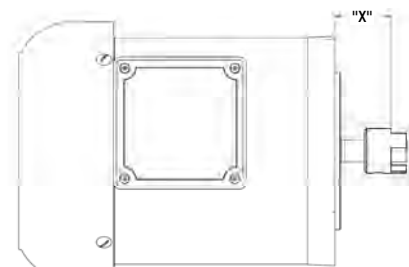


When looking into motor fan cover with gear drive in mounting position 1.

Motor Installation Mounting Positions & Lubrication

Coupling Location for Motor Installation

Motor Frame	"X"
B5	56TC
B7	140TC
B9	180TC
B11	210TC
B13	250TC



Lubrication

Klubersynth UH1 6-460 is recommended for the SS2000R Series gear drives for optimum performance. Normal full-load operating temperatures range between 130°F - 150°F. During initial break-in of the gear drive, higher than normal operating temperatures may result. All gear drives are supplied with UH1 6-460 synthetic oil (unless specified otherwise) with quantity listed below for standard mounting position 1 or to mounting specified at time of order. These gear drives are designed with internal features to

reduce the impact of metallic wear debris, which should increase maintenance intervals. Relubrication is recommended for 10,000 hours or more frequently when operating in highly contaminated environments. Satisfactory performance may be obtained in some applications with non-synthetic oils, but will require more frequent oil changes. Recommendations are based on input speeds of 1800 RPM nominal. For higher input speeds, consult factory.

RECOMMENDED LUBRICANT	Reducer Designation	ISO Viscosity Grade No.	Viscosity Range SUS @ 100F	Part Number (Quart)	Comments
Klubersynth UH1 6-460 Synthetic	K	460	1950/2500	65159	H1 Food-Grade

Ambient temperature range of -20°F to +125°F is suitable for standard configured products and ratings. Contact technical support for operating conditions beyond this range. Notes: Upper temperature limit is dictated by reducer components and not the oil.

	Mounting Position					
	1	2	3	4	5	6
Plug A	Oil-Fill	Opt. Vent	—	Oil Drain	Oil-Fill	—
Plug B	—	Opt. Vent	Oil-Fill	Oil Drain	—	Oil-Fill
Plug C	Opt. Vent	Oil-Fill	Oil Drain	—	Oil Drain	Opt. Vent
Plug D	Oil Drain	Oil Drain	Opt. Vent	Oil-Fill	Oil Drain	Opt. Vent
Plug E	Oil Drain	Oil Drain	Opt. Vent	Oil-Fill	Opt. Vent	Oil Drain
Plug F	Opt. Vent	Oil-Fill	Oil Drain	—	Opt. Vent	Oil Drain

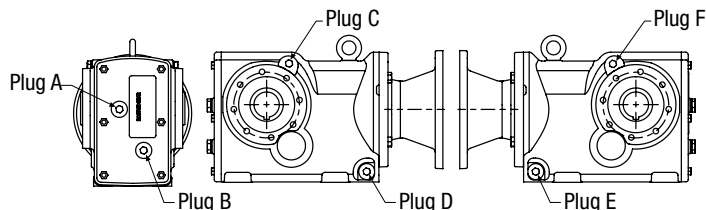
Notes:

- Oil-Fill** Plugged from factory. Port used during regular maintenance intervals for Oil-Fill. Defines approximate oil-level during operation.
 - Opt. Vent** Plugged from factory. A 5psi pressure vent plug is supplied uninstalled with each product. Defines optional location for installation of that pressure vent.
 - Oil Drain** Plugged from factory. Port used during regular maintenance intervals for draining used oil. Re-plug prior to oil-fill.
 - Position 2*** Not preferred and not recommended as a Mounting Position
 - Position 4*** Venting not required.
- All products supplied from factory lubed for Position 1 unless specified otherwise

Lube Capacity in Quarts

	Mounting Position					
	1	2	3	4	5	6
2033R	0.43	0.95	1.40	1.58	1.25	1.38
2043R	0.70	1.77	2.23	2.47	2.00	2.00
2063R	1.25	2.32	3.30	4.08	2.82	3.02
2073R	1.60	3.58	5.46	6.27	4.86	5.16

Oil Plug and Vent Plug Location Details



Ratios and Performance

3 Reductions

■ Available Options ○ Optional

Model No.	Output Speed (1750 rpm Input)	Actual Ratio	Ratio used in Part No.	Input Power (HP)	Output Torque Rating (lbf-in)	NEMA C-Face Input				IEC C-Face Input				
						B5	B7	B9	B11	M14F	M19F	M24F	M28F	M38F
SSRF2033R	326	5.36	5.4	7.29	1,320	○	○	■		○	○	○	■	
	273	6.42	6.4	6.47	1,400	■	■	○		■	■	■	○	
	259	6.76	6.8	6.22	1,420	■	■	○		■	■	■	○	
	220	7.96	8.0	5.42	1,460	■	■	○		■	■	■	○	
	196	8.91	8.9	5.01	1,510	■	■	○		■	■	■	○	
	164	10.67	11	4.21	1,520	■	■	○		■	■	■	○	
	144	12.14	12	3.60	1,480	■	■	○		■	■	■	○	
	134	13.02	13	3.47	1,530	■	■	○		■	■	■	○	
	114	15.32	15	3.23	1,670	■	■	○		■	■	■	○	
	102	17.15	17	2.93	1,700	■	■			■	■	■		
	85	20.54	21	2.63	1,830	■	■			■	■	■		
	75	23.36	23	2.32	1,830	■	■			■	■	■		
	70	24.99	25	2.17	1,840	■	■			■	■	■		
	61	28.83	29	1.89	1,850	■	■			■	■	■		
	58	29.96	30	1.82	1,850	■	■			■	■	■		
	49	35.85	36	1.53	1,860	■	■			■	■	■		
	46	37.79	38	1.46	1,870	■	■			■	■	■		
	39	44.46	44	1.24	1,880	■	■			■	■	■		
	35	49.79	50	1.11	1,880	■	■			■	■	■		
	29	59.61	60	0.93	1,890	■				■	■			
SSRF2043R	26	67.80	68	0.82	1,900	■				■	■			
	24	72.54	73	0.77	1,900	■				■	■			
	21	83.69	84	0.67	1,910	■				■				
	18	97.81	98	0.58	1,920	■				■				
	16	106.38	106	0.53	1,920	■				■				
	311	5.62	5.6	12.1	2,310		○	■	■			○	■	■
	266	6.58	6.6	11.2	2,490		○	■	■			○	■	■
	238	7.36	7.4	10.4	2,590		○	■	■			○	■	■
	203	8.63	8.6*	8.10	2,370		○	■	■			○	■	■
	193	9.06	9.1*	7.91	2,430		○	■	■			○	■	■
	166	10.56	11*	7.09	2,530		○	■				○	■	
	149	11.77	11.8*	6.60	2,620		○	■				○	■	
	144	12.19	12	8.40	3,460		○	■				○	■	
	128	13.65	14	7.50	3,480		○	■				○	■	
	109	15.99	16*	6.46	3,500	■	■	■		○	○	■	■	
	104	16.80	17*	6.16	3,510	■	■	■		○	○	■	■	
	89	19.58	20	5.32	3,530	■	■	■		○	○	■	■	
	80	21.81	22	4.80	3,550	■	■	■		○	○	■	■	
	72	24.42	24	4.30	3,560	■	■	■		○	○	■	■	
	68	25.91	26	4.06	3,570	■	■	■		○	○	■	■	
	60	29.30	29	3.61	3,590	■	■	■		○	○	■	■	
	58	30.23	30	3.50	3,590	■	■	■		○	○	■	■	
	49	35.39	35	3.01	3,610	■	■	■		○	○	■	■	
	44	39.61	40	2.70	3,630	■	■			■	■	■		
	38	46.41	46	2.31	3,650	■	■			■	■	■		
	36	48.75	49	2.20	3,650	■	■			■	■	■		
	31	56.83	57	1.90	3,670	■	■			■	■	■		
	28	63.30	63	1.71	3,680	■	■			■	■	■		
	25	70.89	71	1.53	3,690	■	■			■	■	■		
	23	75.20	75	1.50	3,700	■	■			■	■	■		
	21	85.12	85	1.28	3,710	■	■			■	■	■		
	19	90.86	91	1.20	3,720	■	■			■	■	■		
	17	104.37	104	1.05	3,740	■	■			■	■	■		
	14	121.48	121	0.91	3,750	■				■	■			
	13	131.87	132	0.84	3,760	■				■	■			

Ratings shown reflect maximum gear capacity based on AGMA Standards (Service Factor = 1.0) with Klybersynth UH1 6-460.

For input speeds above 1750 RPM, do not exceed maximum listed input horsepower.

* Depending on the input option chosen, reducer ratios denoted with * may have an overall capacity lower than the values shown (values represent gear capacity). Contact factory for details.

Ratios and Performance

3 Reductions

■ Available Options ○ Optional

Model No.	Output Speed (1750 rpm Input)	Actual Ratio	Ratio used in Part No.	Input Power (HP)	Output Torque Rating (lbf-in)	NEMA C-Face Input				IEC C-Face Input				
						B5	B7	B9	B11	M14F	M19F	M24F	M28F	M38F
SSRF2063R	240	7.28	7.3	17.6	4,330		○	■	■			○	■	■
	209	8.37	8.4	15.5	4,400		○	■	■			○	■	■
	181	9.66	9.7	13.5	4,440		○	■	■			○	■	■
	165	10.63	11*	12.4	4,460		○	■	■			○	■	■
	141	12.41	12*	10.7	4,490		○	■	■			○	■	■
	132	13.22	13	15.5	6,930		○	■	■			○	■	■
	115	15.19	15	14.0	7,230		○	■	■			○	■	■
	100	17.53	18	12.9	7,680		○	■	■			○	■	■
	91	19.29	19*	12.0	7,830		○	■	■			○	■	■
	78	22.53	23*	10.5	8,050		○	■	■			○	■	■
	74	23.60	24*	10.2	8,170		○	■	■			○	■	■
	64	27.27	27*	9.10	8,410		■	■	■			■	■	■
	58	30.21	30*	7.72	7,910		■	■	■			■	■	■
	49	35.61	36	5.30	6,340	○	■	■		○	○	■	■	
	46	38.39	38	5.79	7,550	○	■	■		○	○	■	■	
	39	44.32	44	5.04	7,580	○	■	■		○	○	■	■	
	36	48.77	49	4.59	7,600	■	■	■		■	■	■	■	
	31	56.97	57	3.95	7,630	■	■	■		■	■	■	■	
	29	59.67	60	3.78	7,650	■	■	■		■	■	■	■	
	25	68.95	69	3.28	7,670	■	■	■		■	■	■	■	
	23	76.37	76	2.97	7,700	■	■			■	■	■		
	19	90.04	90	2.53	7,720	■	■			■	■	■		
	17	101.43	101	2.25	7,750	■	■			■	■	■		
	16	108.03	108	2.11	7,750	■	■			■	■	■		
	14	123.54	124	1.85	7,770	■	■			■	■	■		
	12	143.20	143	1.60	7,800	■	■			■	■	■		
SSRF2073R	242	7.24	7.2	31	7500			○	■				○	■
	206	8.48	8.5*	29	8300			○	■				○	■
	183	9.56	9.6*	27	8730			○	■				○	■
	161	10.84	11	25	9010			○	■				○	■
	142	12.35	12	22	9010			○	■				○	■
	129	13.52	14	27	12300			○	■				○	■
	110	15.84	16	25	13500			○	■				○	■
	98	17.86	18	22	13600			○	■				○	■
	86	20.24	20	19.9	13700			○	■				○	■
	76	23.08	23	17.6	13700			○	■				○	■
	69	25.2	25*	16.2	13800		○	■	■			○	■	■
	60	29.12	29*	13.5	13300		○	■	■			○	■	■
	58	30.4	30*	13	13400		○	■	■			○	■	■
	50	34.84	35*	11.4	13500		○	■	■			○	■	■
	46	38.39	38*	10.8	14000		○	■	■			○	■	■
	44	40.04	40	10.4	14000		○	■	■			○	■	■
	39	45.16	45	9.2	14100		○	■	■			○	■	■
	34	51.18	51	8.2	14200		○	■	■			○	■	■
	30	58.34	58	7.2	14200		○	■				○	■	
	27	63.71	64*	6.6	14300	■	■	■		■	■	■	■	
	24	73.62	74	5.7	14300	■	■	■		■	■	■	■	
	23	76.87	77	5.5	14400	■	■	■		■	■	■	■	
	20	88.08	88	4.8	14400	■	■	■		■	■	■	■	
	18	97.05	97	4.4	14500	■	■	■		■	■	■	■	
	15	113.56	114	3.8	14500	■	■	■		■	■	■	■	
	14	127.32	127	3.4	14600	■	■	■		■	■	■	■	
	13	135.28	135	3.2	14600	■	■	■		■	■	■	■	
	11	154.02	154	2.8	14400	■	■			■	■	■		
	10	177.76	178	2.4	14600	■	■			■	■	■		
	9	192.18	192	2.3	14700	■	■			■	■	■		

Ratings shown reflect maximum gear capacity based on AGMA Standards (Service Factor = 1.0) with Klybersynth UH1 6-460.

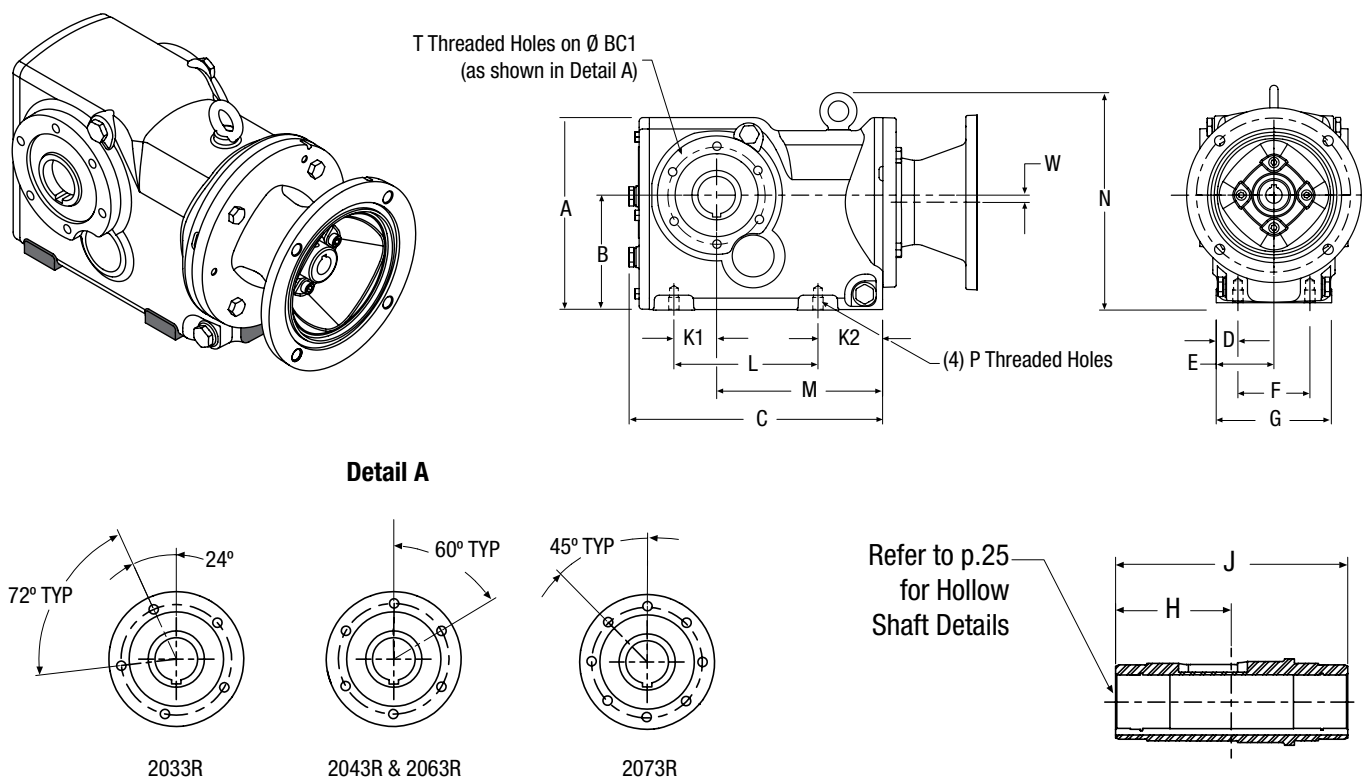
For input speeds above 1750 RPM, do not exceed maximum listed input horsepower.

* Depending on the input option chosen, reducer ratios denoted with * may have an overall capacity lower than the values shown (values represent gear capacity). Contact factory for details.

A2 SS2000R Series Helical Bevel Gear Drives

Mounting Details

(Shown with Hollow Output Shaft Option)



Solid output shaft details shown on p. 23
Tapered bushing output shaft details shown on p. 24

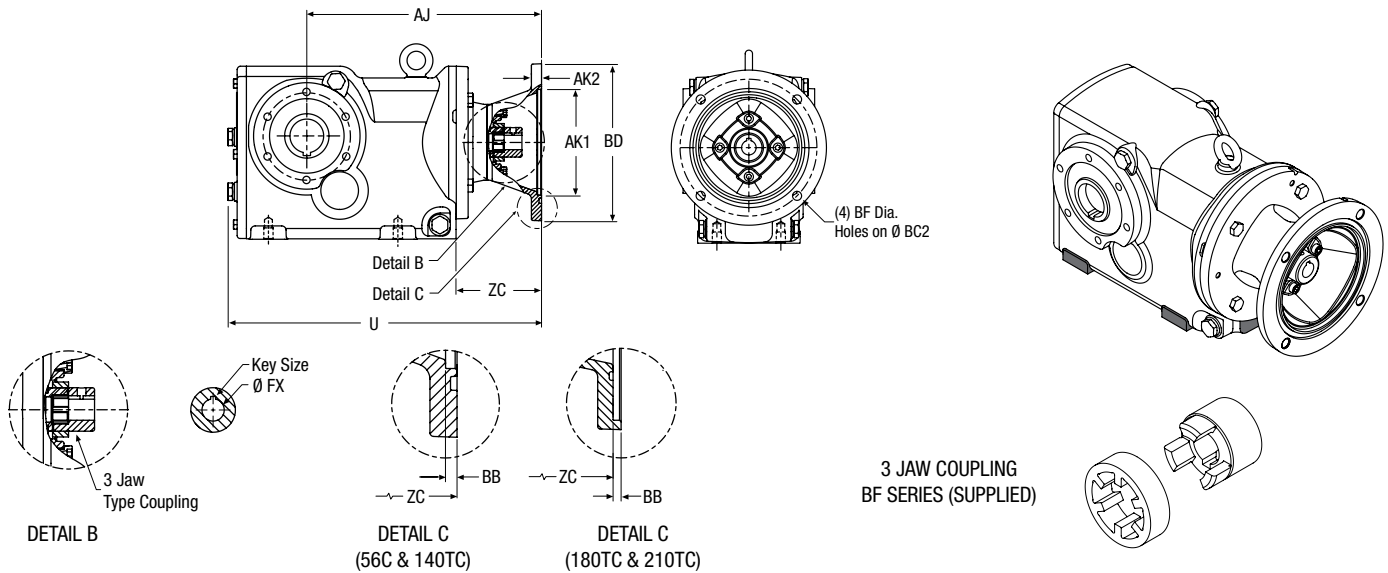
Dimensions in inches (mm)

CATALOG NO.	A	B +/- 0.005 (+/- 0.13)	C	D	E +/- 0.010 (+/- 0.25)	F	L	G	H	J
SSRF2033R	6.4 (163)	3.923 (99.64)	8.7 (221)	0.83 (21.1)	2.010 (51.05)	2.360 (59.94)	4.610 (117.09)	4.01 (101.9)	2.55 (64.8)	5.09 (129.3)
SSRF2043R	7.4 (188)	4.400 (111.76)	9.7 (246)	0.83 (21.1)	2.210 (56.13)	2.756 (70.00)	5.512 (140.00)	4.42 (112.3)	3.03 (77.0)	6.06 (153.9)
SSRF2063R	8.9 (226)	5.510 (139.95)	11.4 (290)	0.90 (22.9)	2.630 (66.80)	3.460 (87.88)	5.984 (151.99)	5.25 (133.3)	3.50 (88.9)	7.00 (177.8)
SSRF2073R	11.3 (287)	7.081 (179.86)	12.9 (328)	1.06 (26.9)	3.070 (77.98)	4.020 (102.11)	6.69 (169.93)	6.14 (156.0)	4.13 (104.9)	8.27 (210.1)

CATALOG NO.	K1	K2	M +/- 0.005 (+/- 0.13)	N	P		T		BC1	W	Approx. Weight (LBS)
					Dia. (mm)	Depth	Dia. (mm)	Depth			
SSRF2033R	1.38 (35.1)	2.34 (59.5)	5.574 (141.58)	7.1 (180)	M10x1.5	0.65 (16.5)	M8x1.25	0.58 (14.8)	3.70 (94.0)	0.33 (8.4)	32
SSRF2043R	1.57 (39.9)	2.41 (61.3)	6.354 (161.39)	8.3 (211)	M10x1.5	0.65 (16.5)	M10x1.5	0.52 (13.3)	3.85 (97.8)	0.28 (7.1)	58
SSRF2063R	1.65 (41.9)	3.01 (76.6)	7.348 (186.64)	8.9 (226)	M12x1.75	0.78 (19.8)	M12x1.75	0.78 (19.8)	4.60 (116.8)	0.80 (20.3)	80
SSRF2073R	1.89 (48.0)	3.63 (92.1)	8.425 (214.00)	11.4 (290)	M16x2.0	1.00 (26.0)	M12x1.75	0.78 (19.8)	5.59 (142.0)	1.23 (31.2)	138

Motor Flange and Coupling Details

(Shown with Hollow Output Shaft Option)



NEMA Sizes - Dimensions in inches (mm)

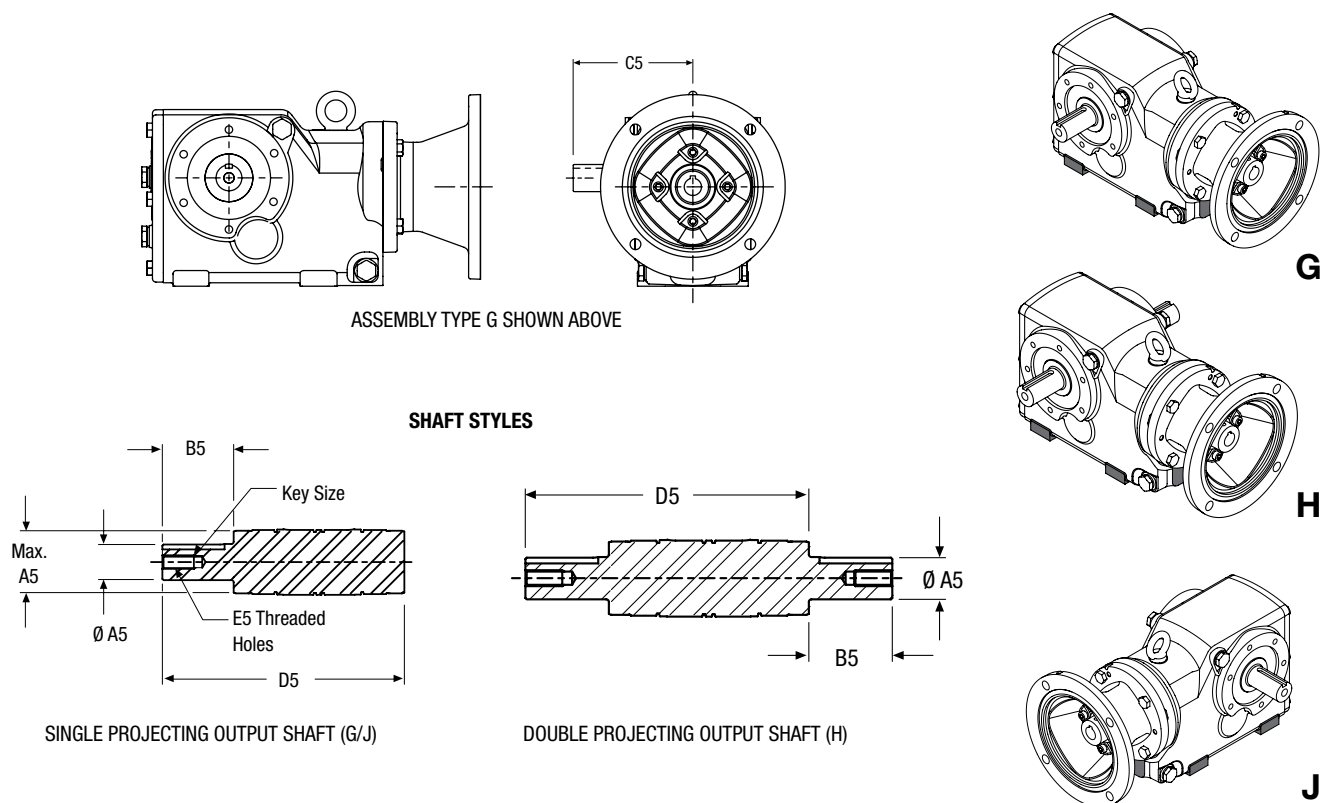
CATALOG NO.	INPUT SIZE	U	AJ	AK1	AK2	BB	BD	BF	BC2	ZC	FX	KEY SIZE	
												SQ.	LENGTH
SSRF2033R	B5 (56C)	12.3 (312)	9.1 (231)	4.500 (114.3)	0.43 (10.9)	0.18 (4.60)	6.69 (169.9)	0.39 (9.9)	5.88 (149.4)	3.53 (89.7)	0.625 (15.88)	3/16	1-3/8
	B7 (140TC)	13.2 (335)	10 (254)	4.500 (114.3)	0.47 (11.9)	0.18 (4.60)	6.69 (169.9)	0.39 (9.9)	5.88 (149.4)	4.460 (113.3)	0.875 (22.22)	3/16	1-3/8
	B9 (180TC)	15.7 (399)	12.4 (315)	8.500 (215.9)	0.59 (15.0)	0.20 (5.10)	8.98 (228.1)	0.53 (13.5)	7.25 (184.1)	6.000 (152.4)	1.125 (28.57)	1/4	1-3/4
SSRF2043R	B5 (56C)	13.3 (338)	10.0 (254)	4.500 (114.3)	0.43 (10.9)	0.18 (4.60)	6.69 (169.9)	0.39 (9.9)	5.88 (149.4)	3.62 (91.9)	0.625 (15.88)	3/16	1-3/8
	B7 (140TC)	14.3 (363)	10.9 (277)	4.500 (114.3)	0.47 (11.9)	0.18 (4.60)	6.69 (169.9)	0.39 (9.9)	5.88 (149.4)	4.540 (115.3)	0.875 (22.22)	3/16	1-3/8
	B9 (180TC)	15.7 (399)	12.4 (315)	8.500 (215.9)	0.59 (15.0)	0.20 (5.10)	8.98 (228.1)	0.53 (13.5)	7.25 (184.1)	6.000 (152.4)	1.125 (28.57)	1/4	1-3/4
SSRF2063R	B5 (56C)	14.5 (368)	10.5 (267)	4.500 (114.3)	0.43 (10.9)	0.18 (4.60)	6.69 (169.9)	0.39 (9.9)	5.88 (149.4)	3.14 (79.8)	0.625 (15.88)	3/16	1-3/8
	B7 (140TC)	15.5 (394)	11.4 (290)	4.500 (114.3)	0.47 (11.9)	0.18 (4.60)	6.69 (169.9)	0.39 (9.9)	5.88 (149.4)	4.060 (103.1)	0.625 (15.88)	3/16	1-3/8
	B9 (180TC)	17.0 (432)	12.9 (328)	8.500 (215.9)	0.59 (15.0)	0.20 (5.10)	8.98 (228.1)	0.53 (13.5)	7.25 (184.1)	5.520 (140.2)	1.125 (28.57)	1/4	1-3/4
SSRF2073R	B5 (56C)	15.8 (401)	11.3 (287)	4.500 (114.3)	0.43 (10.9)	0.18 (4.60)	6.69 (169.9)	0.39 (9.9)	5.88 (149.4)	2.84 (72.1)	0.625 (15.88)	3/16	1-3/8
	B7 (140TC)	16.7 (424)	12.2 (310)	4.500 (114.3)	0.47 (11.9)	0.18 (4.60)	6.69 (169.9)	0.39 (9.9)	5.88 (149.4)	3.76 (95.5)	0.625 (15.88)	3/16	1-3/8
	B9 (180TC)	18.1 (460)	13.6 (345)	8.500 (215.9)	0.59 (15)	0.2 (5.10)	8.98 (228.1)	0.53 (13.5)	7.25 (184.1)	5.220 (132.6)	1.125 (28.57)	1/4	1-3/4
SSRF2073R	B11 (210TC)	20.2 (513)	15.7 (399)	8.500 (215.9)	0.59 (15)	0.2 (5.10)	8.98 (228.1)	0.53 (13.5)	7.25 (184.1)	7.300 (185.4)	1.375 (34.92)	5/16	2-3/8

IEC Sizes - Dimensions in mm

CATALOG NO.	PART NO. IDENTIFIER	FRAME SIZE	U	AJ	AK1	AK2	BB	BD	BF	BC2	ZC	FX	KEY SIZE	
													SQ.	LENGTH
SSRF2033R	M14F	71	299.00	219.00	110	10.92	4.64	160	11.00	130	77.09	14	5x5	20
	M19F	80	328.00	248.00	130	11.94	4.64	200	13.50	165	106.63	19	6x6	25
SSRF2043R	M14F	71	326.00	241.00	110	10.92	4.64	160	11.00	130	79.22	14	5x5	20
	M19F	80	355.00	270.00	130	11.94	4.64	200	13.50	165	108.66	19	6x6	25
	M24F	90S/90L	387.00	302.00	130	15.00	5.15	200	13.50	165	140.23	24	8x7	32
	M28F	100L/112M	432.00	347.00	180	16.51	5.15	250	15.50	215	185.67	28	8x7	40
SSRF2063R	M14F	71	356.00	254.00	110	10.92	4.64	160	11.00	130	67.13	14	5x5	20
	M19F	80	386.00	283.00	130	11.94	4.64	200	13.50	165	96.67	19	6x6	25
	M24F	90S/90L	417.00	315.00	130	15.00	5.15	200	13.50	165	128.14	24	8x7	32
	M28F	100L/112M	463.00	360.00	180	16.51	5.15	250	15.50	215	173.58	28	8x7	40
SSRF2073R	M14F	71	387.32	273.40	110	10.92	4.64	160	11.00	130	59.41	14	5x5	20
	M19F	80	416.86	302.94	130	11.94	4.64	200	13.50	165	88.95	19	6x6	25
	M24F	90S/90L	448.34	334.41	130	15.00	5.15	200	13.50	165	120.42	24	8x7	32
	M28F	100L/112M	493.78	379.85	180	16.51	5.15	250	15.50	215	165.86	28	8x7	40

A2 SS2000R Series Helical Bevel Gear Drives

Output Options – Projecting Solid Output Shaft Details



Dimensions in inches

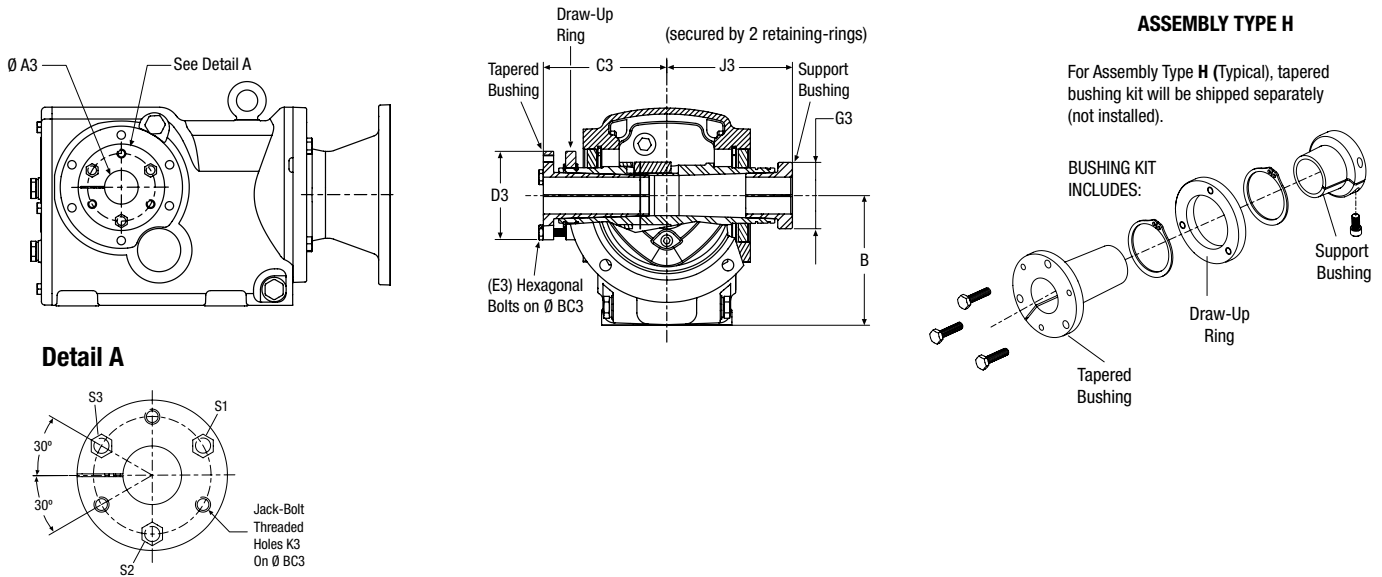
SIZE	PART NO. IDENTIFIER	A5	A5 Tolerance	Max. A5	B5	C5	D5	E5		KEY SIZE	
								Thread	Depth	SQ.	Length
2033R	D16	1.000	+0.0000 -0.0005	1.732	1.97	4.33	6.69	3/8-16	0.87	1/4	1-5/16
	D20	1.250		1.732	2.36	4.72	7.08	1/2-13	0.87	1/4	1-11/16
2043R	D20	1.250		1.890	2.36	5.33	8.26	1/2-13	1.12	1/4	1-11/16
	D22	1.375		1.890	2.76	5.73	8.66	1/2-13	1.12	5/16	1-13/16
2063R	D22	1.375	+0.0000 -0.0010	2.126	2.76	6.34	9.76	1/2-13	1.12	5/16	1-13/16
	D26	1.625		2.126	3.15	6.73	10.15	5/8-11	1.38	3/8	2-1/4
	D32	2.000		2.126	3.94	7.52	10.94	3/4-10	1.61	1/2	2-5/8
2073R	D28	1.750	+0.0000 -0.0010	2.717	3.54	7.72	11.81	5/8-11	0.94	3/8	2-1/4
	D32	2.000		2.717	3.94	8.12	12.21	3/4-10	1.61	1/2	2-5/8
	D34	2.125		2.717	3.94	8.12	12.21	3/4-10	1.61	1/2	2-5/8

Dimensions in mm

SIZE	PART NO. IDENTIFIER	A5	A5 Tolerance	Max. A5	B5	C5	D5	E5		KEY SIZE	
								Thread	Depth	Rect.	Length
2033R	DM25	25.0	-0.015 -0.002	44	50	110.0	169.9	M10	22.0	8X7	40
	DM30	30.0		44	60	120.0	179.9	M10	22.0	8X7	50
2043R	DM30	30.0	-0.018 -0.002	48	60	135.3	209.9	M10	22.0	8 X 7	50
	DM35	35.0		48	70	145.3	219.9	M12	28.0	10 X 8	56
2063R	DM35	35.0		54	70	161.0	247.8	M12	28.0	10 X 8	56
	DM40	40.0		54	80	171.0	257.8	M16	36.0	12 X 8	70
	DM50	50.0		54	100	191.0	277.8	M16	36.0	14 X 9	80
2073R	DM45	45.0	+0.018	69	90	196.1	310.0	M16	36.0	14x9	80
	DM50	50.0	+0.002	69	100	206.1	300.0	M16	36.0	14x9	80

Output shaft key is provided with gear drive. Customer's driven shaft requires standard width and depth keyway.

Output Options – Tapered Bushing Hollow Output Shaft Details



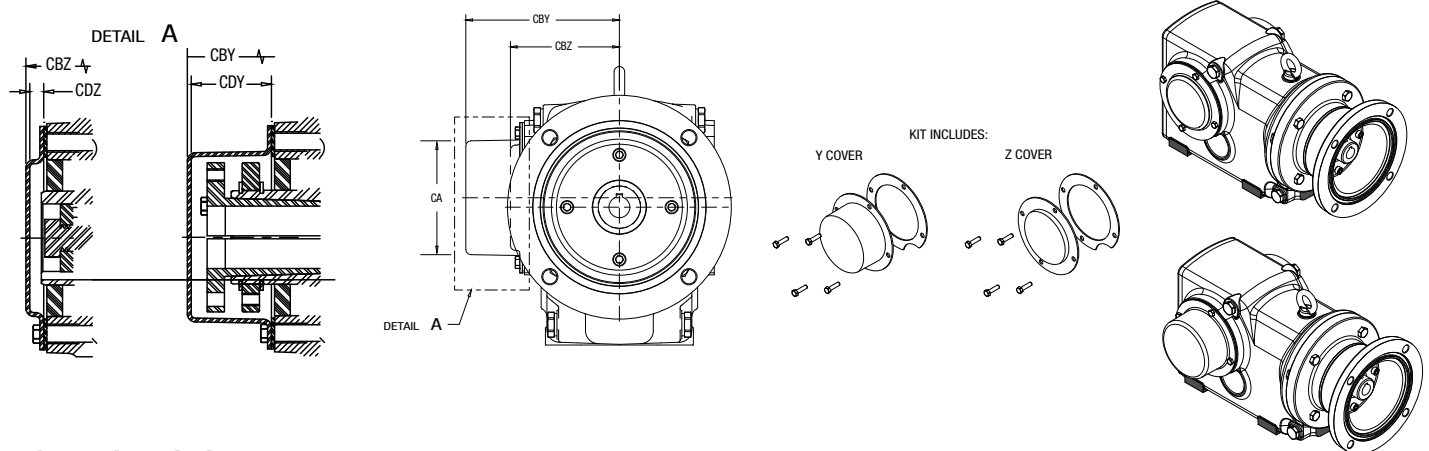
Dimensions in inches

SIZE	TYPE	DRIVEN SHAFT DIA. +/- 0.002	B	C3	D3	E3		BC3	G3	J3	K3	KIT PART #
						SPEC.	LENGTH					
2033R	TP16	1.000	3.92	3.63	2.85	#10-24	1.00	2.25	2.50	3.84	#10-24	2030R-63K-P16
2043R	TP20	1.250	4.40	4.19	3.00	1/4-20	1.13	2.50	2.50	4.29	1/4-20	2040R-63K-P20
2063R	TP23	1.438	5.51	5.01	3.94	3/8-16	1.38	3.00	3.00	5.23	3/8-16	2060R-63K-P23
2073R	TP28	1.750	7.08	5.91	4.38	3/8-16	1.63	3.50	3.50	6.06	3/8-16	2070R-63K-P28

Bolt Tightening Sequence Table

SIZE	STEP 1 Apply Initial Torque - ft.lbs.			STEP 2 Apply Secondary Torque - ft.lbs.			STEP 3 Apply Final Torque - ft.lbs.		
	S1	S2	S3	S1	S2	S3	S1	S2	S3
2033R	1.5	1.5	1.5	3.0	3.0	3.0	5.0	5.0	5.0
2043R	2.7	2.7	2.7	5.5	5.5	5.5	9.0	9.0	9.0
2063R	7.5	7.5	7.5	15.0	15.0	15.0	30.0	30.0	30.0
2073R	7.5	7.5	7.5	15.0	15.0	15.0	30.0	30.0	30.0

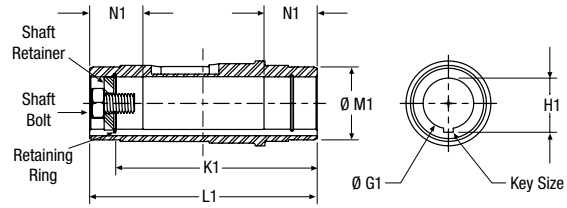
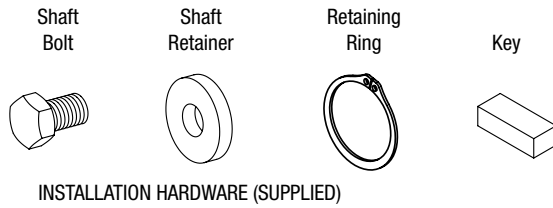
Shaft Covers



Dimensions in inches

SIZE	TYPE	CA	CBY	CDY	Y-KIT PART #	CBZ	CDZ	Z-KIT PART #
2033R	TP16	3.16	4.13	1.58	2033R-33-A-K	2.90	0.35	2033R-33-B-K
2043R	TP20	3.40	4.59	1.61	2043R-33-A-K	3.26	0.28	2043R-33-B-K
2063R	TP23	4.34	5.43	1.95	2063R-33-A-K	3.70	0.22	2063R-33-B-K
2073R	TP28	4.78	6.50	2.30	2073R-33-A-K	4.54	0.34	2073R-33-B-K

Output & Mounting Options – Hollow Output Shaft Details



Dimensions in inches

SIZE	PART NO. IDENTIFIER	G1 +0.0005/ +0.0015	Key Size		H1	Shaft Bolt		K1	L1	M1	N1
			Sq.	Length		Spec.	Length				
2033R	P20	1.2500	1/4	2.00	1.37	1/2-13	1.25	4.41	5.09	1.73	1.38
	P20	1.2500	1/4	2.00	1.37	7/16-14	1.00				
2043R	P22	1.3750	5/16	1.81	1.53	1/2-13	1.00	5.30	6.06	1.89	1.46
	P23	1.4375	3/8	2.25	1.61	1/2-13	1.00				
2063R	P23	1.4375	3/8	2.25	1.61	1/2-13	1.00	6.40	7.16	2.13	1.46
	P24	1.5000	3/8	2.25	1.68	5/8-11	1.75				
2073R	P31	1.9375	1/2	2.63	2.17	1/2-13	1.25	7.20	8.27	2.72	1.96
	P32	2.0000	1/2	2.63	2.23						

Dimensions in mm

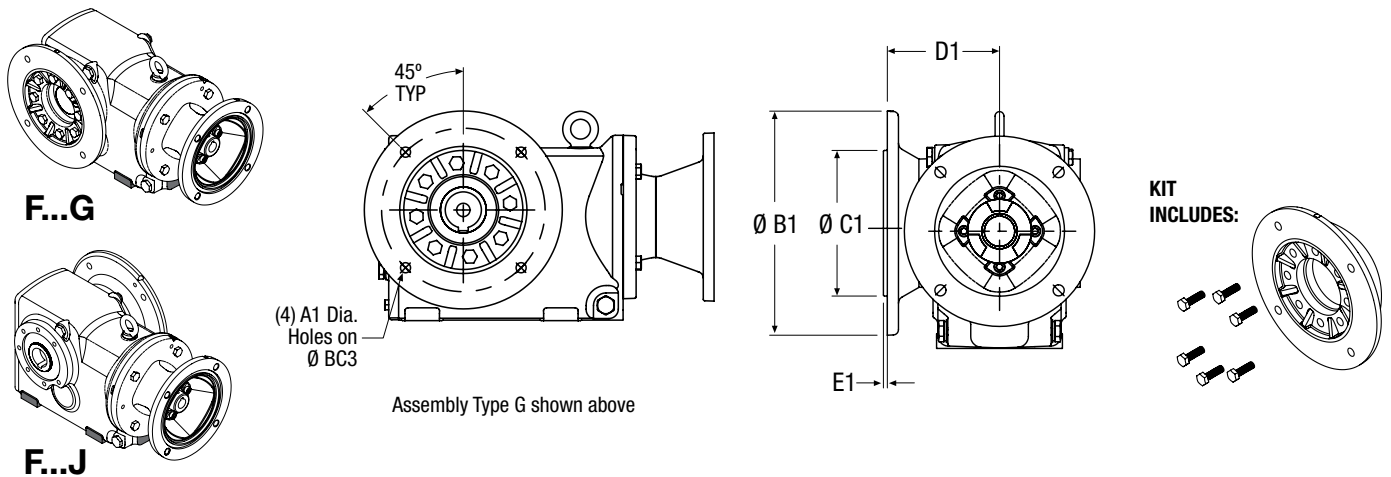
SIZE	PART NO. IDENTIFIER	G1	Key Size		H1	Shaft Bolt		K1	L1	M1	N1
			Rect.	Length		Spec.	Length				
2033R	PM30	30.00	8x7	40	33.4	M10x1.5	25	111.9	129.3	44.0	35.05
2043R	PM30	30.00	8x7	40	33.4	M10x1.5	25	134.6	153.9	48.0	37.08
	PM35	35.00	10x8	45	38.4	M12x1.75	30				
2063R	PM40	40.00	12x8	50	43.4	M16x2.0	40	162.6	181.9	54.0	37.08
2073R	PM50	50.00	14x9	80	53.9	M16x2.0	40	182.8	210.0	69.0	49.78

Output shaft key is provided with gear drive. Customer's driven shaft requires standard width and depth keyway.

Output Flange Details

ASSEMBLY TYPES

Shown with hollow output shaft option

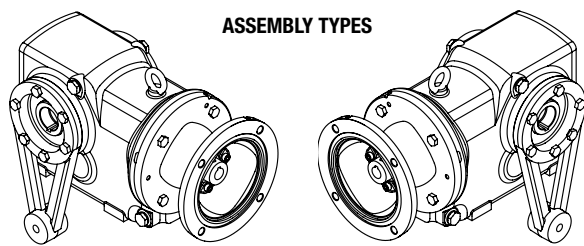


Dimensions in inches (mm)

SIZE	A1	BC3	B1	C1 +0 / -0.001 (+0 / -0.03)	D1	E1	KIT PART #
SSRF2033R-F	0.35 (8.9)	5.12 (130)	6.30 (160)	4.331 (110)	3.49 (88.6)	0.14 (3.6)	SS2030R-21K-160
SSRF2043R-F	0.43 (10.9)	6.50 (165)	7.87 (200)	5.119 (130)	3.94 (100)	0.14 (3.6)	SS2040R-21K-200
SSRF2063R-F	0.53 (13.5)	8.46 (215)	9.84 (250)	7.087 (180)	4.45 (113)	0.16 (4.1)	SS2060R-21K-250
SSRF2073R-F	0.53 (13.5)	10.43 (265)	11.81 (300)	9.056 (230)	5.59 (142)	0.16 (4.1)	SS2070R-21K-300

Note: Output flange will be shipped assembled to gear drive, unless ordered separately using the kit part number.

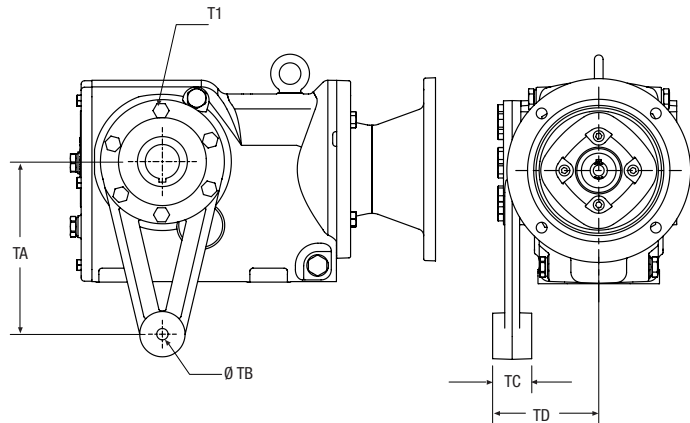
Mounting Options – Torque Arm Details



T...G

T...J

For Assembly Type **H** (Typical), torque arm kit will be shipped separately (not installed).



Dimensions in inches

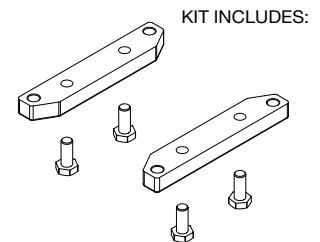
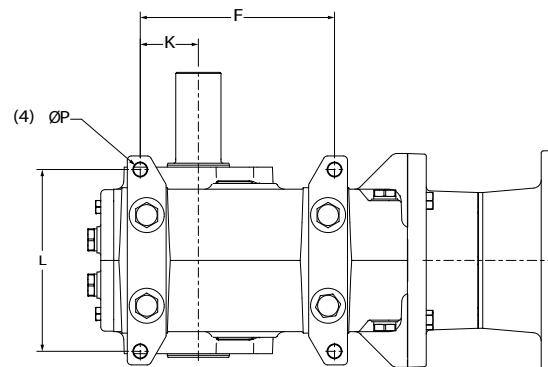
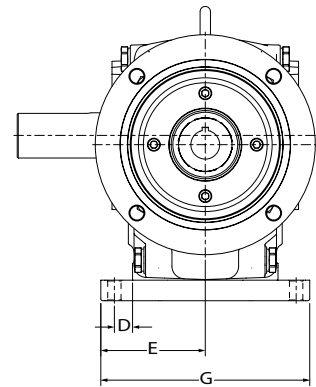
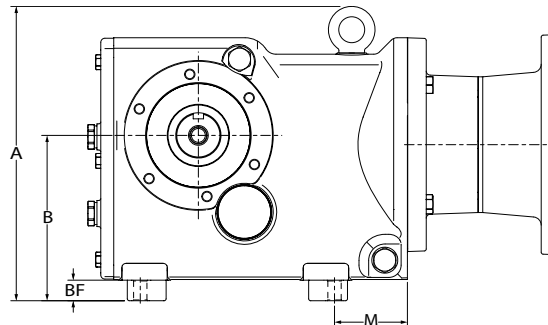
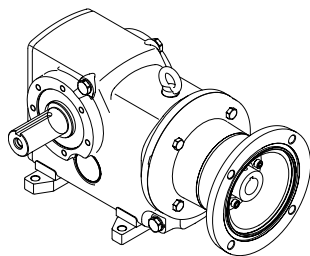
SIZE	TA	T1 (mm)		TB	TC	TD	Degrees of Rotation
		Spec.	Length				
SSRF2033R-T	5.51	M8	25	0.42	1.42	3.44	72°
SSRF2043R-T	6.30	M10	25	0.42	1.1	3.63	60°
SSRF2063R-T	7.87	M12	30	0.66	1.5	4.45	60°
SSRF2073R-T	9.84	M12	35	0.66	2.36	5.55	45°

KIT PART #
SS2030R-76K
SS2040R-76K
SS2060R-76K
SS2070R-76K

Early versions of this design were manufactured from plate with welded gussets which have a "TD" dimension of 3.54" (For SSRF2043-R-T) and 4.30" (For SSRF2063R-T). Note: To avoid damage during transit, all torque arms will be shipped disassembled from gear drive.

Base Mounting Feet Details

Shown with solid output shaft option (Assembly Type G)



KIT INCLUDES:

Dimensions in inches

SIZE	A	B	M	BF	D	E	G	F	L	K	P
SSRF2033R-B	7.68	4.55	2.20	0.63	0.55	2.98	5.95	4.89	5.12	1.52	0.41
SSRF2043R-B	8.95	5.03	2.22	0.63	0.55	3.18	6.35	5.90	5.53	1.77	0.41
SSRF2063R-B	9.87	6.15	2.38	0.64	0.63	3.71	7.42	7.25	6.51	2.28	0.49
SSRF2073R-B	12.20	7.88	3.23	0.80	0.91	4.40	8.80	7.47	7.72	2.28	0.65

KIT PART #
SS2030R-11HK
SS2040R-11HK
SS2060R-11HK
SS2070R-11HK

* Kit Part # can be used if ordering separately.

Installation Aids

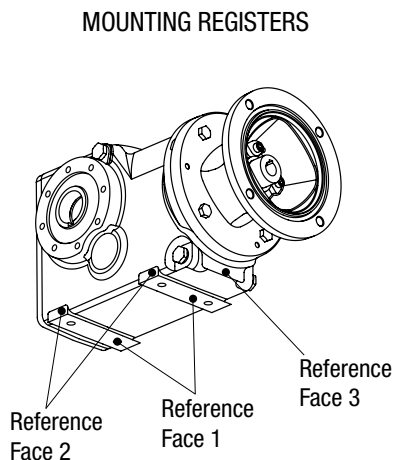
Mounting Registers (Standard Feature)

Mounting Registers on the 2000 Series products enable a simpler installation for Base Mounted units.

Use the following steps to assist in the alignment between the reducer output shaft and the shaft being driven (driven shaft).

1. Establish a reference edge that is parallel to the driven shaft using Dimension M from page 21 as the offset.
2. Bank Reference Face 3 of the reducer against your reference edge.
3. Use Reference Face 2 of the reducer for any fine angular (yaw) or lateral adjustments.

Contacting thumbscrews against Reference Face 2 is a clever method for higher precision alignment requirements.



Tapered Bushing Option

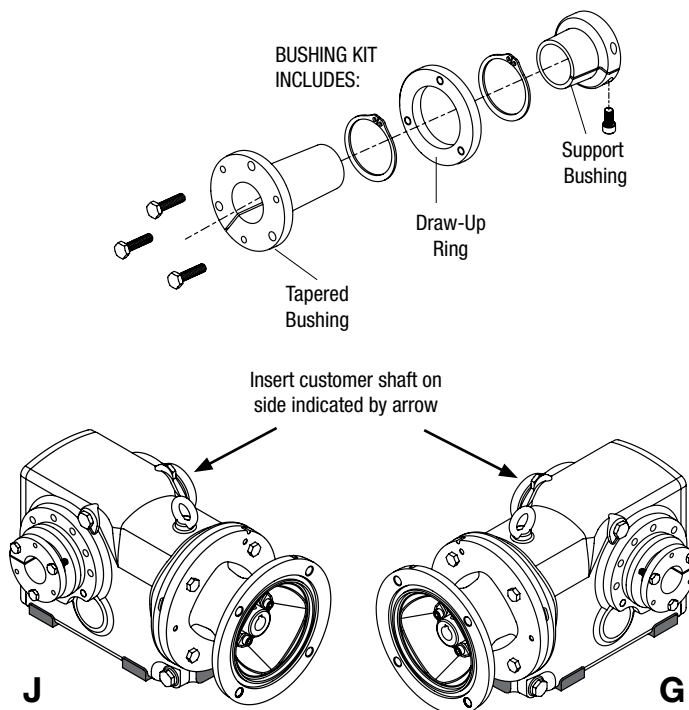
The Tapered Bushing is a valuable option that ensures a simple and secure installation for Shaft Mounted units.

Use the following steps to assist in the alignment between the reducer output shaft and the shaft being driven (driven shaft). See page 24 for additional reference.

1. Make a score mark on your Driven Shaft at a length equal to the Table 1 dimension from the mounting end.
2. Slide Support Bushing onto driven shaft, flange first, until the flange reaches the score mark & secure with clamp screw.
3. Mount Reducer onto Driven Shaft allowing it to slide through the Tapered Bushing on the opposite end.
Expect the Tapered Bushing to be pushed outward from the reducer as it expands inside the outer bore.
4. Align the holes between the Tapered Bushing and the Draw-Up Ring.
5. Using a mallet, tap the Tapered Bushing inward until the bolts are able to engage the Draw-Up Ring threads.
6. Tighten bolts evenly in sequence indicated in Bolt Tightening Sequence Table on page 24.
7. Readjust Support Bushing as needed to ensure full engagement of taper and re-secure clamp screw.

Table 1

	Used Length of Driven Shaft	
	(in)	(mm)
2033R	7.47	190
2043R	8.48	216
2063R	10.24	260
2073R	12.04	306



Ratios and Performance

4 Reductions

■ Available Options ○ Optional

Model No.	Output Speed (1750 rpm Input)	Actual Ratio	Ratio used in Part No.	Input Power (HP)	Output Torque Rating (lbf-in)	NEMA C-Face Input
						B5
SSRFPW2033R	14	125.00	125	0.43	1840	■
	12	144.15	144	0.38	1850	■
	12	149.80	150	0.36	1850	■
	9.8	179.25	179	0.30	1860	■
	9.3	188.95	189	0.29	1870	■
	7.9	222.30	222	0.25	1880	■
	7.0	248.95	249	0.22	1880	■
	5.9	298.05	298	0.18	1890	■
	5.2	339.00	339	0.16	1900	■
	4.8	362.70	363	0.15	1900	■
	4.2	418.45	418	0.13	1910	■
	3.6	489.05	489	0.11	1920	■
SSRFPW2043R	3.3	531.90	532	0.10	1920	■
	12	146.50	147	0.72	3580	■
	12	151.15	151	0.7	3590	■
	10	176.95	177	0.6	3610	■
	8.8	198.05	198	0.54	3620	■
	7.5	232.05	232	0.46	3640	■
	7.2	243.75	244	0.44	3650	■
	6.2	284.15	284	0.38	3660	■
	5.5	316.50	317	0.34	3680	■
	4.9	354.45	354	0.3	3690	■
	4.7	376.00	376	0.3	3700	■
	4.1	425.60	426	0.25	3710	■
	3.9	454.30	454	0.24	3720	■
	3.4	521.85	522	0.21	3730	■
SSRFPW2063R	2.9	607.40	607	0.18	3750	■
	2.7	659.35	659	0.16	3750	■
	12	151.05	151	0.75	8340	■
	10	178.05	178	0.75	6340	■
	9.1	191.95	192	0.75	7540	■
	7.9	221.60	222	0.75	7570	■
	7.2	243.85	244	0.75	7600	■
	6.1	284.85	285	0.75	7630	■
	5.9	298.35	298	0.75	7650	■
	5.1	344.75	345	0.65	7670	■
	4.6	381.85	382	0.59	7690	■
	3.9	450.20	450	0.5	7720	■
SSRFPW2073R	3.5	507.15	507	0.45	7740	■
	3.2	540.15	540	0.42	7750	■
	2.8	617.70	618	0.37	7770	■
	2.4	716.00	716	0.32	7790	■
	8.7	200.20	200	0.75	4800	■
	7.8	225.80	226	0.75	5400	■
	6.8	255.90	256	0.75	6100	■
	6.0	291.70	292	0.75	7000	■
	5.5	318.55	319	0.75	7600	■
	4.8	368.10	368	0.75	8800	■
	4.6	384.35	384	0.75	9200	■
	4.0	440.40	440	0.75	10600	■
	3.6	485.25	485	0.75	11600	■
	3.1	567.80	568	0.75	13600	■
SSRFPW2073R	2.7	636.60	637	0.66	14600	■
	2.6	676.40	676	0.62	14600	■
	2.3	770.10	770	0.54	14400	■
	2.0	888.80	889	0.47	14600	■
	1.8	960.90	961	0.45	14700	■

Ratings shown reflect maximum gear capacity based on AGMA Standards (Service Factor = 1.0) with Klybersynth UH1 6-460.

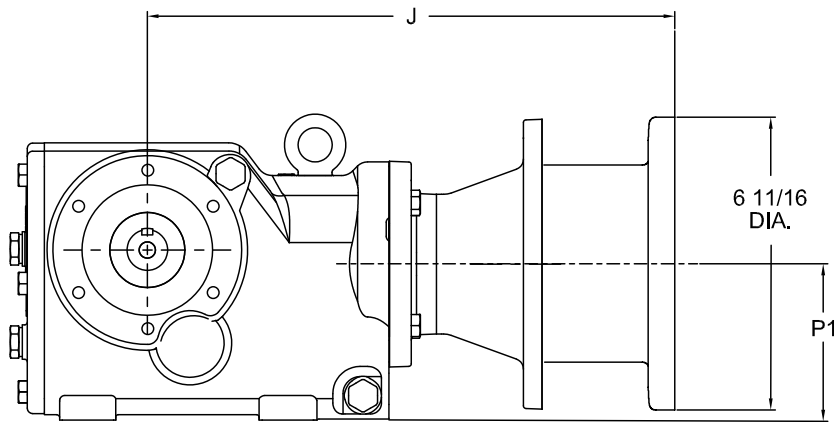
For input speeds above 1750 RPM, do not exceed maximum listed input horsepower.

Not recommended for use in applications with repetitive vibrational or impact loading.

A2 SS2000R Series Helical Bevel Gear Drives

Dimensions

4 Reductions



Size	NEMA C-Face Input	J	P1
SSRFPW2033R	B5	14.2	3.59
SSRFPW2043R	B5	15.1	4.12
SSRFPW2063R	B5	15.6	4.71
SSRFPW2073R	B5	16.4	5.85