

A detailed 3D cutaway rendering of a mechanical drive assembly, showing internal gears, shafts, and housing components. The assembly is rendered in a dark blue-grey color with yellow highlights on the teeth of the gears and the shafts.

ACCUDRIVE
SERIES RG

Precision. Motion Control. Technology.



Cone Drive is a world leader in precision motion control technology. We work with our customers every step of the way – from design specs to the final solution – to create highly precise, highly specific products that keep our customers' technology at the forefront of their industry. Cone Drive offers engineering support, unique solutions, and innovative technology across a breadth of markets and products to drive your company forward.

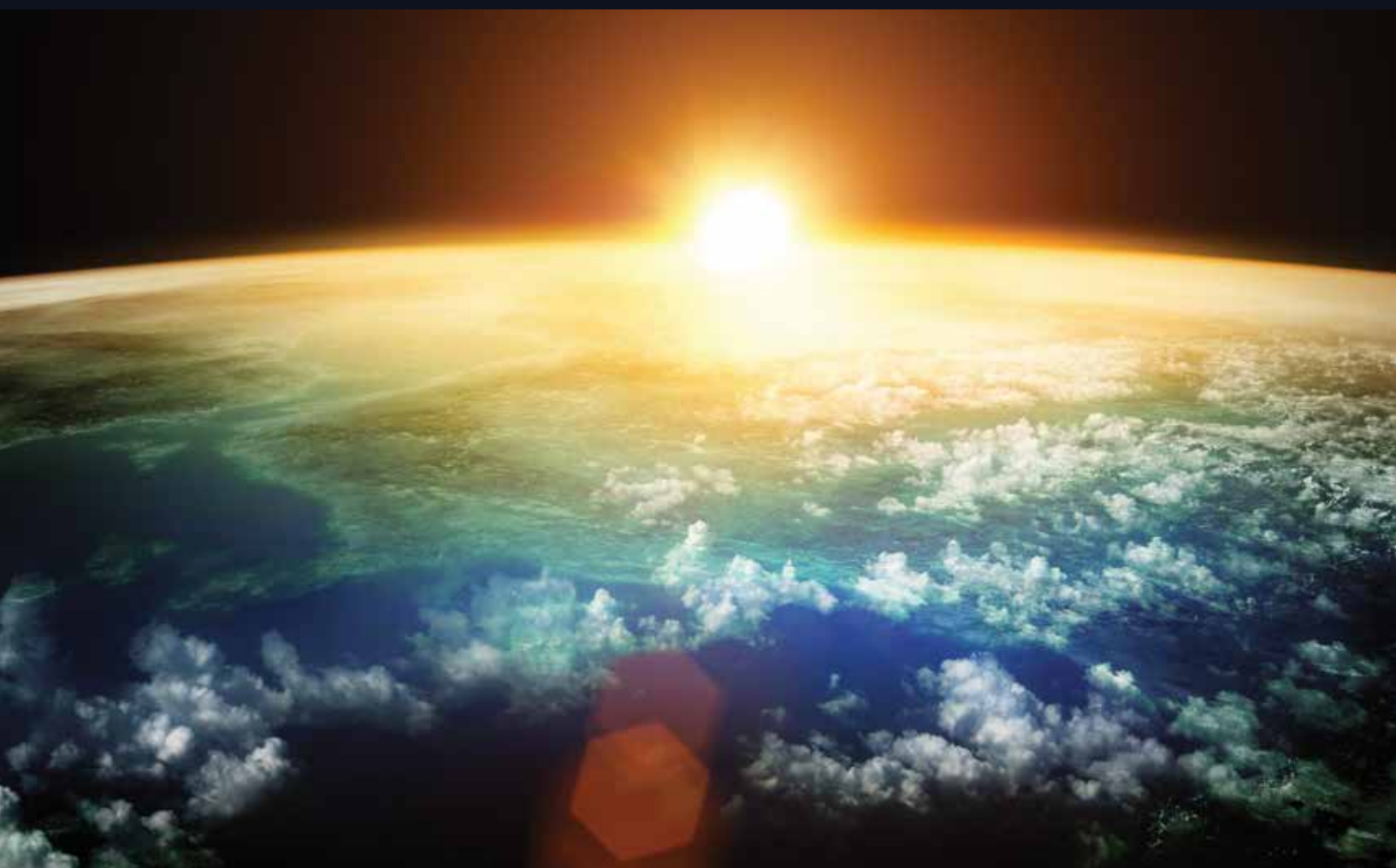


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Serving an entire spectrum of mechanical drive applications from food, energy, mining and metal; to automotive, aerospace and marine propulsion, we are your source for drive solutions.

INDUSTRIAL SOLUTIONS

SERIES HP

Worm gearbox with double-enveloping worm gearing. Available in single, double and triple reductions



SERIES HP-A

Universal metric housing featuring double-enveloping gearing & drywell feature



SERIES B

Industrial duty worm gearbox featuring Conex gearing



DUO DRIVE

Dual gears on parallel output shafts



SLEWING SOLUTIONS

Versatile slew bearings and slew drives featuring external, internal and without teeth options in a low profile, ready-to-install package



STAINLESS

Right angle, IP-69K rated for the food processing market



DOUBLE-ENVELOPING WORM GEAR SET

Available in standard sizes, ratios and backlash options along with custom worm gear sets



PRECISION MOTION SOLUTIONS

SERIES W

Precision right angle servo gearbox



SERIES RG

Moderate precision right angle servo gearbox



SERIES S

Value engineered right angle servo gearbox



SERIES LE / P

In-line helical geared motors & reducers and precision planetary servo gearbox



HARMONIC

Cone Drive Harmonic Solutions® offer the ultimate in precision motion control technology



STAINLESS SERVO

Smooth, contoured stainless steel housing (316), IP69K rated right angle gearbox



HP SERVO

This double-enveloping worm gearing, high torque gearbox meets the most demanding needs as servo motor capacities increase



We can create custom engineered transmission solutions of any size and configuration.

Design flexibility and lasting performance with our complete family of AccuDrive Precision Products.

SERIES W RIGHT ANGLE GEARHEAD



- Output torque capacity up to 10,000 lb.in. (1,130 Nm)
- Solid shaft and Servo motor interfaces standard (NEMA and IEC available upon request)
- Center distance 38 to 89 mm
- IP65 rated
- Input speeds up to 6,000rpm
- Sizes available 38, 51, 64, 76, and 89
- Universal mounting
- Gear ratios from 5:1 to 60:1

SERIES S SERVO GEARHEAD



- Economical servo solution
- Output torque up to 7,540 lb.in. (852 Nm)
- Motor adapters to fit servo motors
- Center distance from 1.33 inch up to 3.54 inch
- Speed range up to 4,000 RPM
- Flexible mounting (hollow output standard with plug in solid shaft)
- Ratios from 5:1 to 60:1

SERIES P IN-LINE PLANETARY SERVO GEARHEAD



- Output torque capacity up to 21,240 lb.in. (2,400 Nm)
- Speed range up to 6,000 RPM input
- Sizes available 42, 60, 90, 120, 140, 180, 220 (S-Type)
- Sizes available 60, 75, 100, 140, 180, 210, 240 (P-Type)
- Gear ratios from 3:1 to 100:1 available from stock (S-Type & P-Type)
- Universal Mounting with shaft mount and flange mount standard
- 3 arc-minutes backlash or better

SERIES LE IN-LINE PLANETARY SERVO GEARHEAD



- Output torque capacity up to 7,080 lb.in. (800 Nm)
- Speed range up to 6,000 RPM input
- Sizes 40, 60, 90, 115, 512 and 160 (Series E)
- Gear ratios from 3:1 to 64:1 (Series E)
- Sizes 50, 70, 90, 120, 155, 205, 235 (Series LE)
- Gear ratios from 3:1 to 100:1 (Series LE)
- Universal Mounting with shaft mount and flange mount standard
- Backlash as low as 8 arc-minutes (Series E) and 5 arc-minutes (Series LE)

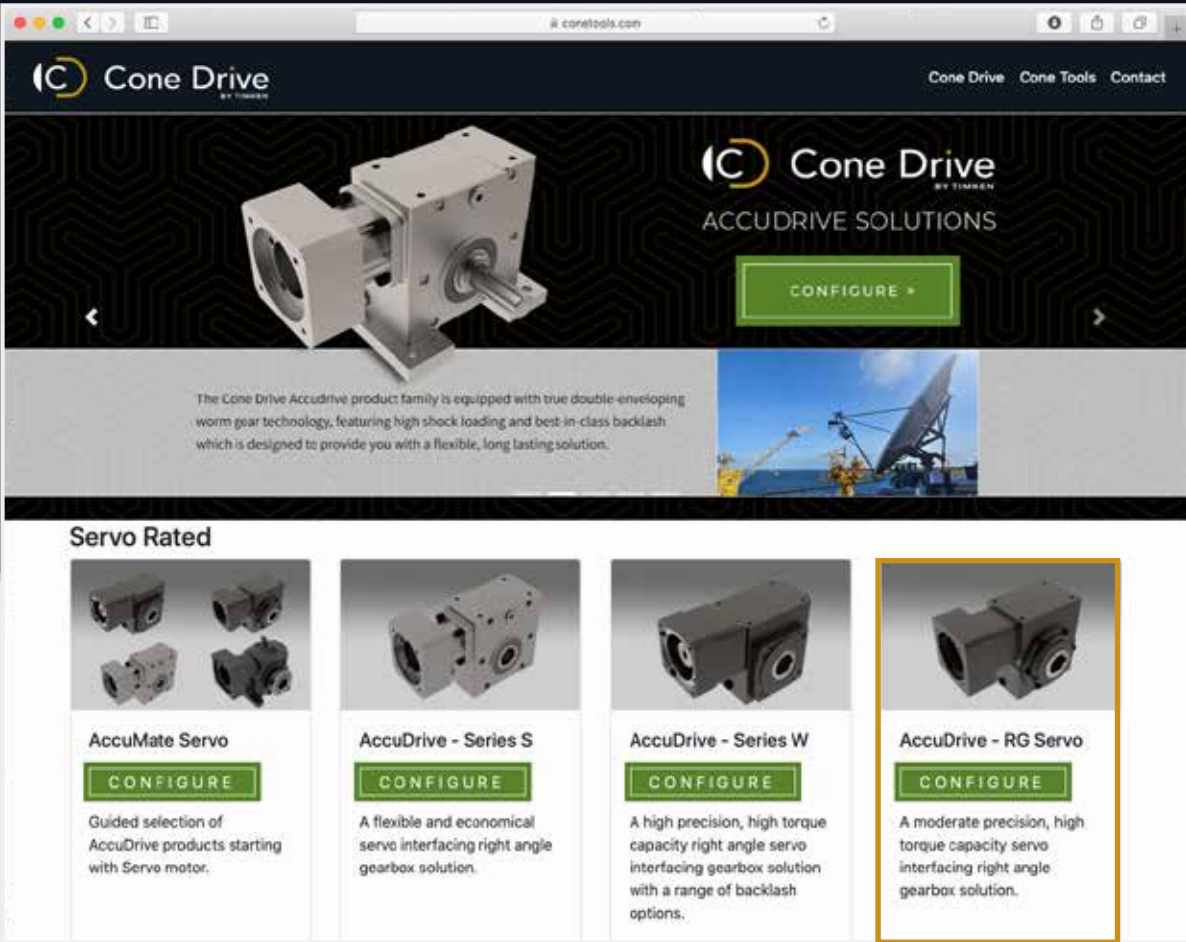
ABSOLUTE ZERO BACKLASH ACCUDRIVE GEARING



- Unique design captures both sides of the gear tooth to completely eliminate backlash. Automatically compensates for wear-guaranteed zero backlash for the life of the gear. Available for single, double and triple reduction types, gear sets, special designs and the Series W.

Configure Your AccuDrive Online

www.ConeTools.com



The screenshot shows the Cone Drive website interface. At the top, there's a navigation bar with 'Cone Drive', 'Cone Tools', and 'Contact'. The main banner features a large image of a gearhead and the text 'Cone Drive ACCU DRIVE SOLUTIONS' with a 'CONFIGURE' button. Below the banner, a paragraph describes the product family's features. The 'Servo Rated' section contains four product cards, each with an image, a title, a 'CONFIGURE' button, and a brief description. The 'AccuDrive - RG Servo' card is highlighted with a yellow border.

Servo Rated

- AccuMate Servo**
CONFIGURE
Guided selection of AccuDrive products starting with Servo motor.
- AccuDrive - Series S**
CONFIGURE
A flexible and economical servo interfacing right angle gearbox solution.
- AccuDrive - Series W**
CONFIGURE
A high precision, high torque capacity right angle servo interfacing gearbox solution with a range of backlash options.
- AccuDrive - RG Servo**
CONFIGURE
A moderate precision, high torque capacity servo interfacing right angle gearbox solution.



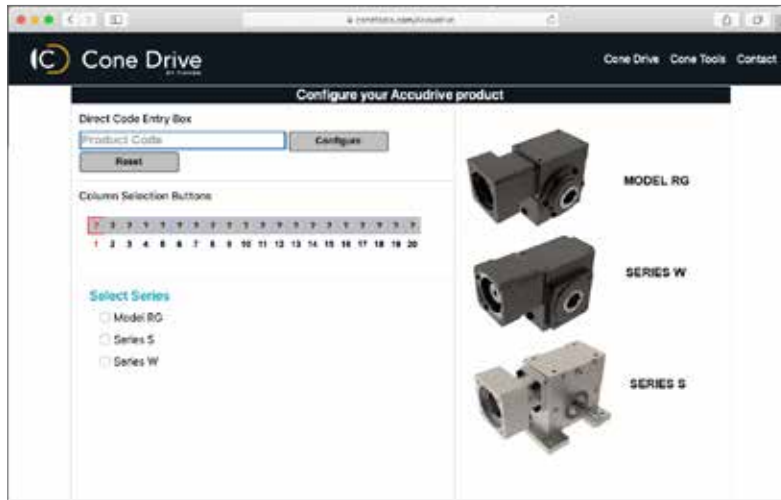
1

Visit ConeTools.com
and Click
"AccuDrive - RG Servo"

AccuMate[®]

SERVO GEARHEAD SELECTION PROGRAM

Our AccuMate[®] program helps you select the right servo gearhead for your application.



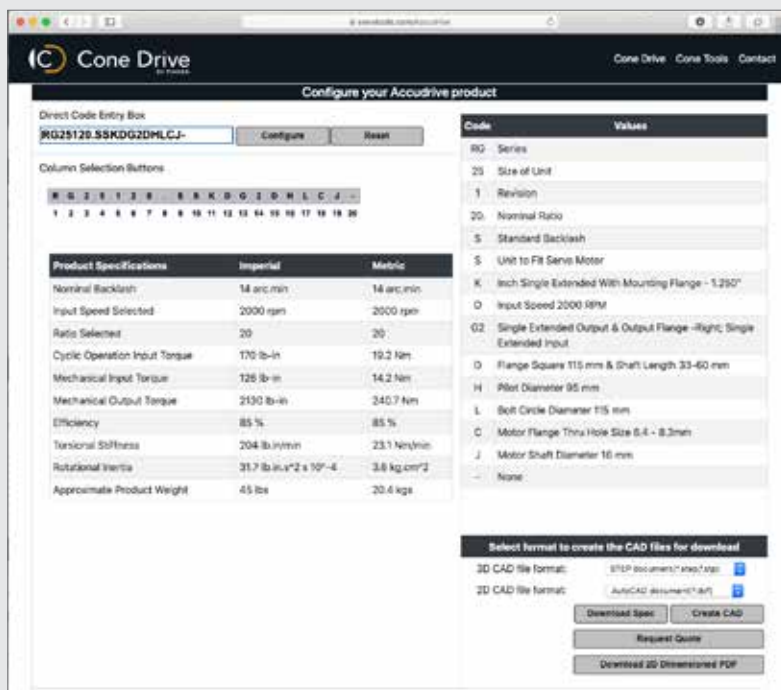
2

Start configuring your AccuDrive product by selecting Series RG or entering in the direct code in the entry box



3

Build your unit by selecting criteria specific to your needs



4

On the final screen review the product specifications and click to create a CAD file, download the specs or request a quote

SERIES RG RIGHT ANGLE GEARBOX

Two Levels of Precision

- Low Backlash - as low as 4 arcminutes
- Standard Backlash - long lasting ruggedness for less demanding applications

Easy Motor Mounting

- Integrated zero backlash below coupling provides fast, error-free alignment
- Integrated motor flange mounts directly to your servo or NEMA motor

Cast Iron Universal Housing

- Compact cube design saves space
- Machined pilots on output shaft caps
- Universal housing mounts in any orientation
- Rugged cast iron housing

Application Assistance

To ensure optimum performance, our Application Engineers can help you design the ideal servo mechanical drive system for your particular application.

We are available to further discuss the Series RG design characteristics and help with specifying backlash, gear ratios, and speeds.

Hollow Shaft Standard

- Compact mounting saves space
- No coupling required saves cost
- Solid shaft and shrink disc options available for maximum flexibility

Contact us about your application.
TEL: 1-888-994-2663
EMAIL: orders@conedrive.com

Cone Drive Gearing

- High torque capacity
- High efficiency
- Quiet and smooth running
- Exact ratios 5:1 through 60:1 in a single stage and up to 600:1 with a double reduction design
- High torsional rigidity



HIGH PRECISION RIGHT ANGLE DRIVE

The Series RG right angle drive offers an affordable solution for your motion control applications. Packaged in a compact cast iron housing, the Series RG has high torsional rigidity, is quiet, smooth running, and is capable of operating at input speeds of up to 4,000 RPM.

Rugged performer.

The Accudrive Series RG is a compact right angle precision drive that provides an economical solution for your general automation applications. Built around the Cone Drive double-enveloping worm technology, the Accudrive Series RG is available in standard and low backlash options.



S P E C I F I C A T I O N S

PRODUCT FEATURES

Sizes (Center Distance-in): 1.5, 2.0, 2.5, 3.0, 3.5

Standard Reduction Stages: Single, Double

Interface: Inch or metric

Output Torque: Up to 7,800 lb.in. (880 Nm)

Gear Ratios: 5:1 to 60:1; custom ratios available

Ingress Protection: IP65 (Servo Version)

Input Options: Solid shaft, NEMA + Servo motor interfaces

Output Shaft Options: Solid, Hollow, Shrink Disc

Backlash Options: Standard, Low

Mounting Options: Universal mount, Output flange



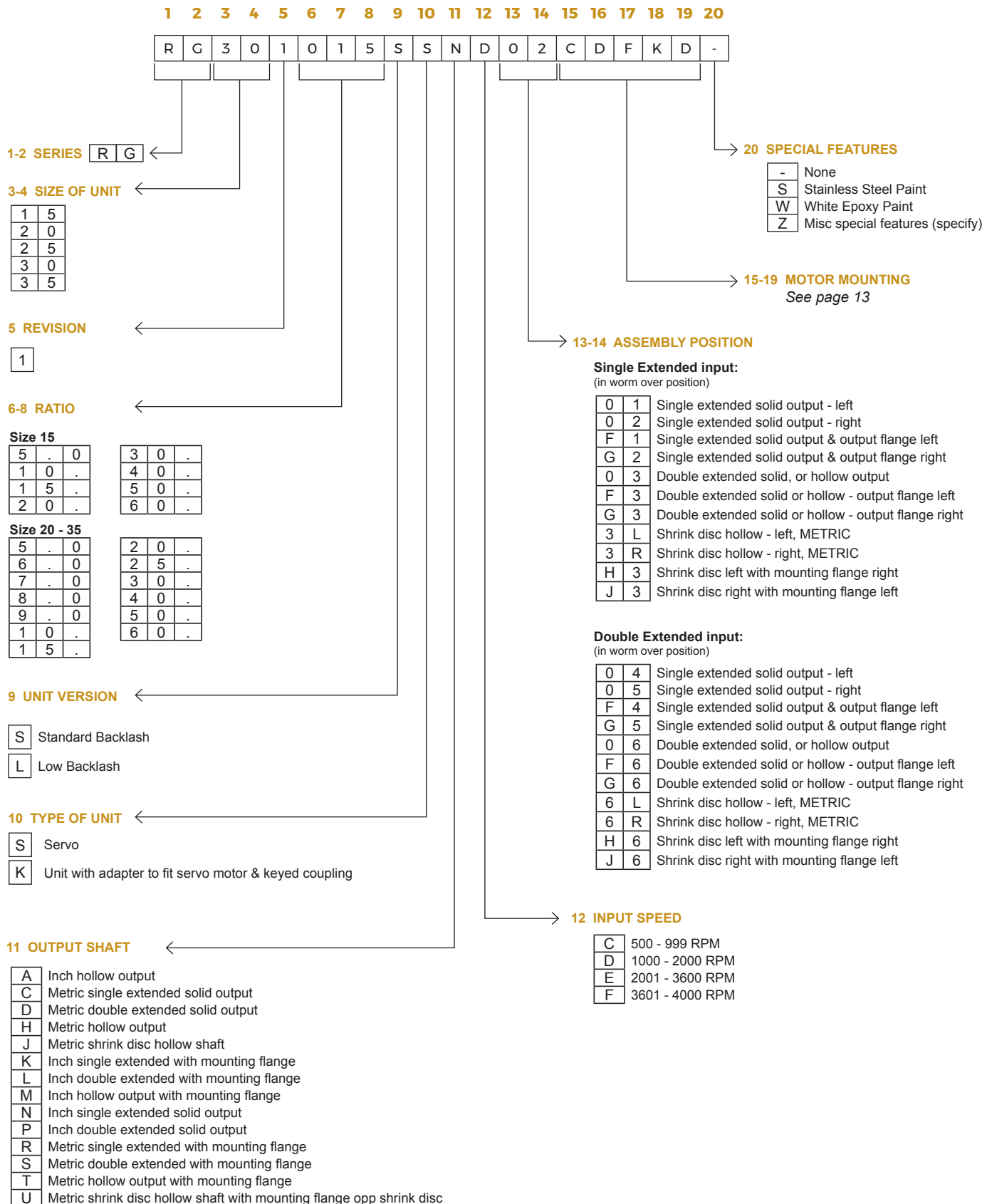
PACKAGING | FOOD & BEVERAGE | SATELLITE COMMUNICATION | PHARMACEUTICAL | AUTOMATION





S E R I E S R G

Servo Specific Information



We reserve the right to improve or change product design and specifications without notice.

Servo Motor Flange Selection

1. Go to the appropriate table for the unit size you have selected.
2. Select the appropriate codes for columns 15 - 19 to match the dimensions on your servo motor flange.
3. Make sure your motor length fits the range accommodated by flange square for the size unit you're specifying.
4. If you can't locate the appropriate code for your motor or need assistance, please contact us.

RG15 & RG20

MOTOR FLANGE SQUARE

Column 15	Flange Square (mm)		90		115		130		140	
	Acceptable Motor Shaft Length		22-45	46-65	22-39	40-65	40-47	48-73	48-73	
	Unit Size	RG15 & RG20	B	M	C	D	E	F	G	

MOTOR PILOT DIAMETER

Column 16	Motor Pilot Diameter (mm)											
	38.15	40	50	55.55	60	70	73.07	80	95	110	114.3	130
A	B	C	N	D	E	F	G	H	J	K	L	

BOLT CIRCLE DIAMETER

Column 17	Bolt Circle Diameter (mm)															
	63	65	66.68	70	75	80	85	90	95	98.43	100	115	125.73	130	145	149
A	B	C	D	E	F	U	G	H	J	K	L	T	M	N	P	Q

MOTOR MOUNTING BOLT SIZE

Column 18	Motor Flange Thru Hole Size	4.5 - 5.2		5.3 - 6.3		6.4 - 8.3		8.4 - 10.3		10.4 - 12.4		12.5 - 15.0	
		A		B		C		D		E		F	
		M4	M5	M6	M8	M10	M12	1/4 - 20	3/8 - 16	1/2 - 13			
Motor Flange Tapped Holes		G	H	J	K	L	M	N	P	Q			

MOTOR SHAFT DIAMETER

Column 19	Motor Shaft Diameter (mm)													
	9.525	11	12	12.7	14	15.875	16	19	19.05	22	22.225	24	25.4	28
B	D	E	F	G	H	J	K	L	M	N	P	Q	R	

RG25, RG30 & RG35

MOTOR FLANGE SQUARE

Column 15	Flange Square (mm)		115		140		190			
	Acceptable Motor Shaft Length		20-32	33-60	38-56	57-80	38-53	54-65	68-85	
	Unit Size	RG25, RG20 & RG35	C	D	G	H	K	S	T	

MOTOR PILOT DIAMETER

Column 16	Motor Pilot Diameter (mm)					
	80	95	110	114.3	130	180
G	H	J	K	L	M	

BOLT CIRCLE DIAMETER

Column 17	Bolt Circle Diameter (mm)							
	100	115	130	145	149.23	165	200	215
K	L	M	N	P	Q	R	S	

MOTOR MOUNTING BOLT SIZE

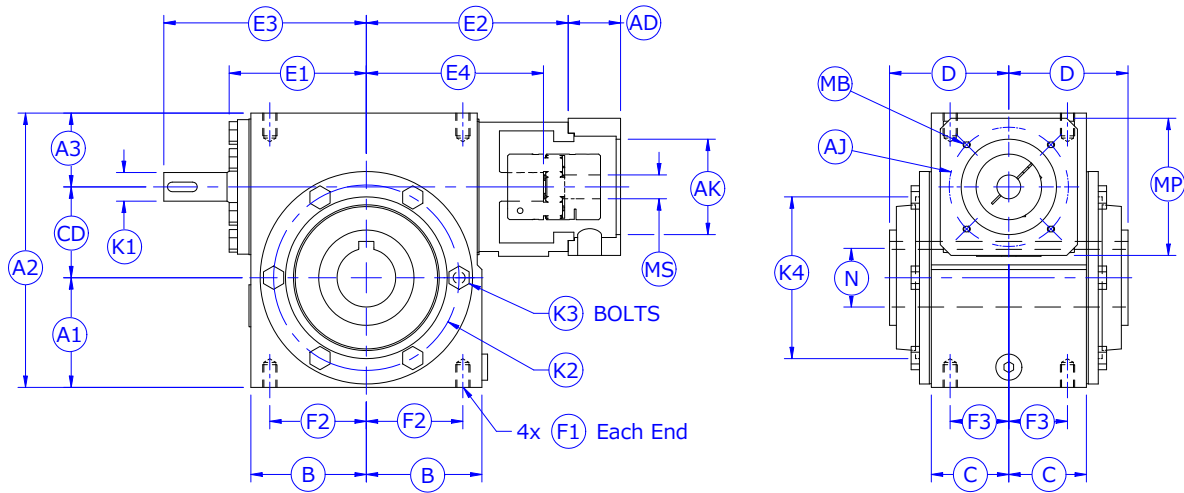
Column 18	Motor Flange Thru Hole Size	6.4 - 8.3		8.4 - 10.3		10.4 - 12.4		12.5 - 15.0		
		C		D		E		F		
		M6	M8	M10	M12	1/4 - 20	3/8 - 16	1/2 - 13		
Motor Flange Tapped Holes		J	K	L	M	N	P	Q		

MOTOR SHAFT DIAMETER

Column 19	Motor Shaft Diameter (mm)															
	14	15.875	16	19	19.05	22	22.225	24	25.4	28	28.575	31.75	32	34.925	35	38*
G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y

*RG35 ONLY

Series RG Servo Standard Hollow Shaft Dimensions



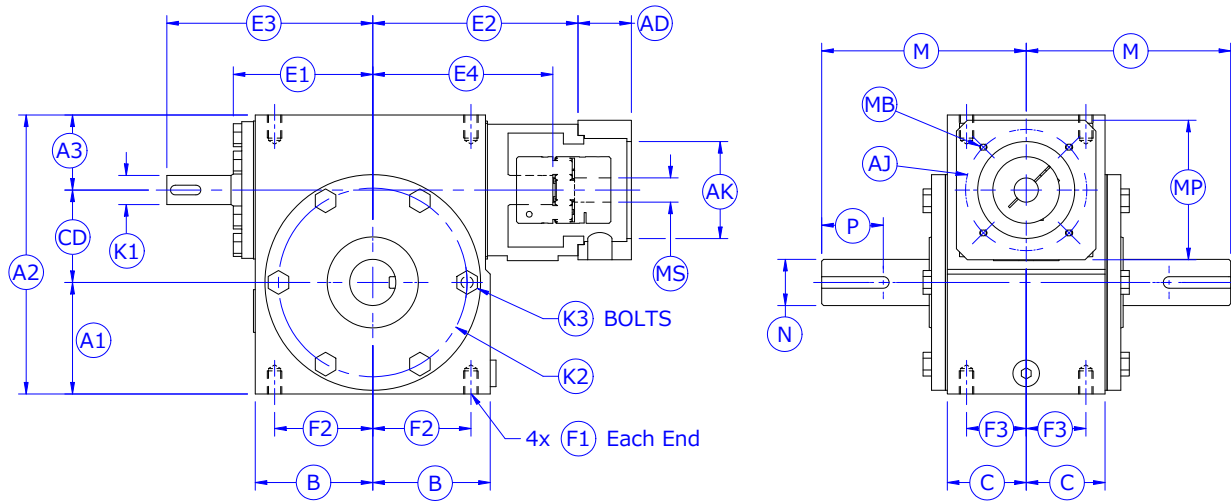
Hollow Shaft Dimensions

SIZE	CD		A1		A2		A3		B		C		D	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
15	1.500	38.1	1.625	41.3	4.75	121	1.625	41.3	1.78	45	1.66	42	2.31	59
20	2.000	50.8	2.500	63.5	6.25	159	1.750	44.5	2.41	61	1.56	40	2.63	67
25	2.500	63.5	3.000	76.2	7.50	191	2.000	50.8	3.09	79	1.94	49	2.91	74
30	3.000	76.2	3.625	92.1	9.06	230	2.438	61.9	3.86	98	2.56	65	3.94	100
35	3.500	88.9	4.250	108	10.31	262	2.563	65.1	4.44	113	3.44	87	4.61	117

SIZE	E1		E2		E3		E4		F1	F2		F3	
	in	mm	in	mm	in	mm	in	mm	tap	in	mm	in	mm
15	2.17	55	4.46	113	3.31	84	3.62	91.9	M8	1.44	36.5	1.31	33.4
20	2.88	73	5.13	130	4.59	117	4.30	109.2	M10	2.00	50.8	1.13	28.6
25	3.65	93	6.25	159	5.25	133	5.44	138.2	M10	2.56	65.1	1.50	38.1
30	4.53	115	6.66	169	6.69	170	5.85	148.6	M12	3.19	81	1.94	49.2
35	5.16	131	7.44	189	7.75	197	6.63	168.4	M12	3.81	96.9	2.81	71.5

SIZE	K1			K2		K3 bolts	K4 pilot dia		N			N		
	in	mm	keyway	in	mm	mm	in	mm	in	tol	keyway	mm	tol	keyway
15	0.551	14 k6	5 x 2.3 x 16	3.125	79.4	M6	2.498	63.4	0.876	± 0.001	3/16 x 3/32	25	H7	8 x 3.3
20	0.551	14 k6	5 x 2.3 x 25	4.125	104.8	M8	3.336	84.7	1.251	± 0.001	1/4 x 1/8	30	H7	8 x 3.3
25	0.748	19 k6	6 x 2.8 x 25	4.938	125.4	M8	4.217	107.1	1.688	± 0.001	3/8 x 3/16	35	H7	10 x 3.3
30	0.945	24 k6	8 x 3 x 25	6.125	155.6	M10	5.342	135.7	1.938	± 0.001	1/2 x 1/4	45	H7	14 x 3.8
35	1.103	28 k6	8 x 4 x 32	7.250	184.2	M10	6.467	164.3	2.438	± 0.001	5/8 x 5/16	60	H7	18 x 4.4

SIZE	AD Max		AK	AJ	MP	MB	MS	Weight
	in	mm						lbs
15	2.055	52.2	Motor Plate Dimensions are made to fit your servo motor. Refer to page 13 for available dimensions.					15
20	2.055	52.2						27
25	2.717	69.0						44
30	2.717	69.0						78
35	2.717	69.0						116



Solid Shaft Dimensions

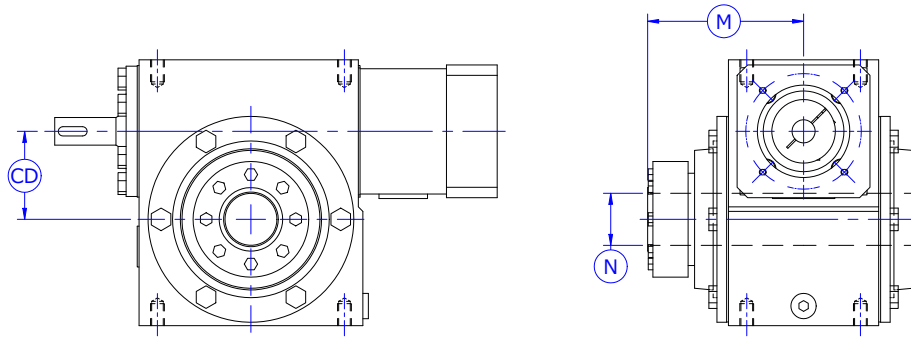
SIZE	CD		A1		A2		A3		B		C		M	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
15	1.500	38.1	1.625	41.3	4.75	121	1.625	41.3	1.78	45	1.66	42	3.50	89
20	2.000	50.8	2.500	63.5	6.25	159	1.750	44.5	2.41	61	1.57	40	4.63	118
25	2.500	63.5	3.000	76.2	7.50	191	2.000	50.8	3.09	79	1.94	49	4.78	121
30	3.000	76.2	3.625	92.1	9.06	230	2.438	61.9	3.86	98	2.56	65	6.64	169
35	3.500	88.9	4.250	108	10.31	262	2.563	65.1	4.44	113	3.44	87	8.25	210

SIZE	E1		E2		E3		E4		F1	F2		F3	
	in	mm	in	mm	in	mm	in	mm	tap	in	mm	in	mm
15	2.17	55	4.46	113	3.31	84	3.62	91.9	M8	1.44	36.5	1.31	33.4
20	2.88	73	5.13	130	4.59	117	4.30	109.2	M10	2.00	50.8	1.13	28.6
25	3.65	93	6.25	159	5.25	133	5.44	138.2	M10	2.56	65.1	1.50	38.1
30	4.53	115	6.66	169	6.69	170	5.85	148.6	M12	3.19	81	1.94	49.2
35	5.16	131	7.44	189	7.75	197	6.63	168.4	M12	3.81	96.9	2.81	71.5

SIZE	K1			K2		K3 bolts	Inch Shaft Option			Metric Shaft Option					
	in	mm	keyway	in	mm	mm	N		P	N		P ¹			
							dia	tol		length	keyway	dia	tol	length	keyway
15	0.551	14 k6	5 x 2.3 x 16	3.125	79.4	M6	0.7497	± 0.003	0.89	3/16 x 3/32	20	k6	22	6 x 3.5	4
20	0.551	14 k6	5 x 2.3 x 25	4.125	104.8	M8	1.1245	± 0.005	1.50	1/4 x 1/8	25	k6	36	8 x 4	4
25	0.748	19 k6	6 x 2.8 x 25	4.938	125.4	M8	1.2495	± 0.005	1.38	1/4 x 1/8	30	k6	40	8 x 4	3
30	0.945	24 k6	8 x 3 x 25	6.125	125.4	M10	1.4995	± 0.005	2.00	3/8 x 3/16	38	k6	50	10 x 5	3
35	1.103	28 k6	8 x 4 x 32	7.250	184.2	M10	1.8745	± 0.005	2.62	1/2 x 1/4	45	k6	63	14 x 5.5	5

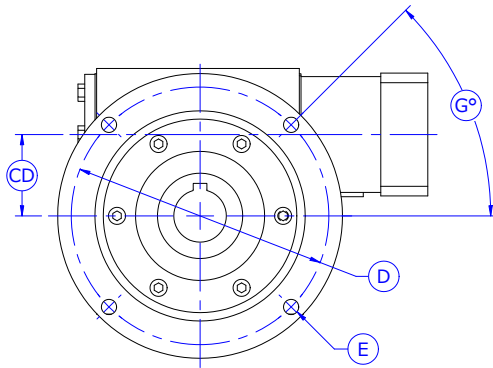
¹ P (mm) is length of pocket-style keyway and offset from shaft end

SIZE	AD Max		AK	AJ	MP	MB	MS	Weight
	in	mm						lbs
15	2.055	52.2	Motor Plate Dimensions are made to fit your servo motor. Refer to page 13 for available dimensions.					16
20	2.055	52.2						28
25	2.717	69.0						45
30	2.717	69.0						73
35	2.717	69.0						112

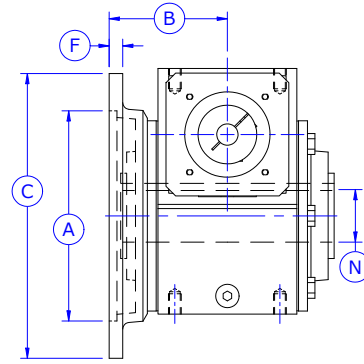


Optional Shrink Disc Hollow Shaft

SIZE	CD		M		N (mm)		Customer Mating Shaft Diameter		
	in	mm	in	mm	mm	+/-	mm	+	-
15	1.50	38	3.26	83	25.005	0.005	25	0	0.010
20	2.00	51	3.65	93	30.005	0.005	30	0	0.010
25	2.50	64	4.29	109	35.008	0.008	35	0	0.016
30	3.00	76	5.31	135	45.008	0.008	45	0	0.016
35	3.50	89	6.06	154	60.010	0.010	60	0	0.020



Bolt pattern arrangement shown applies to sizes 15 / 30 / 35



Assembly position "f3"
Flange to left shown here

Optional Output Flange (Available with hollow or solid output shaft)

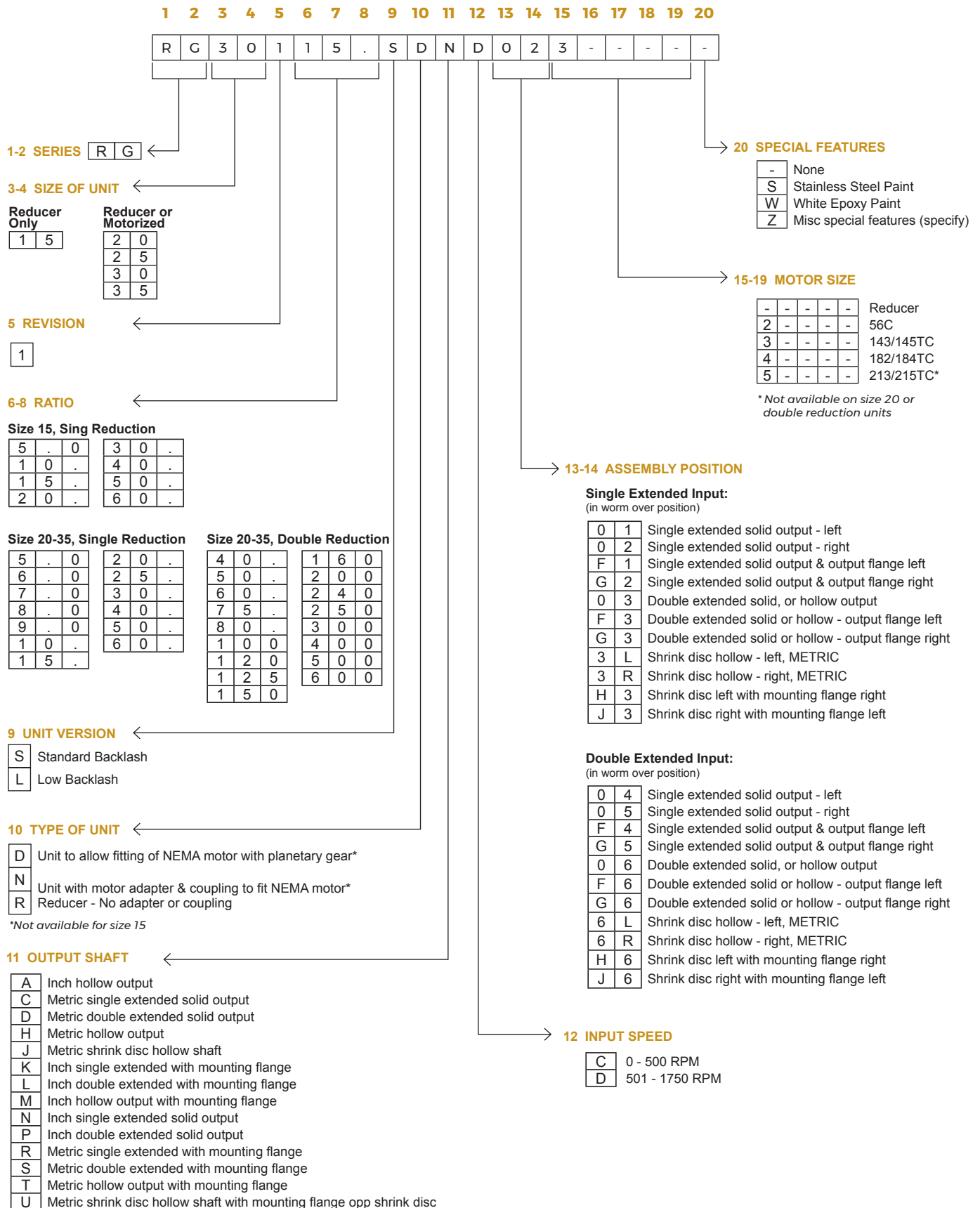
SIZE	CD		A		B		C		D		E		F		G	N (if hollow shaft)	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	mm	tol	tol
15	1.50	38	4.500	114.3	3.40	86	6.63	168	5.88	149	0.41	10	0.38	10	25	H7	H7
20	2.00	51	5.376	136.6	3.41	87	8.00	203	7.00	178	0.41	10	0.50	13	30	H7	H7
25	2.50	64	6.626	168.3	3.52	89	9.25	235	8.25	210	0.47	12	0.50	13	35	H7	H7
30	3.00	76	7.751	196.9	4.35	111	10.50	267	9.50	241	0.56	14	0.50	13	45	H7	H7
35	3.50	89	8.751	222.3	5.08	129	11.75	298	10.50	267	0.56	14	0.50	13	60	H7	H7



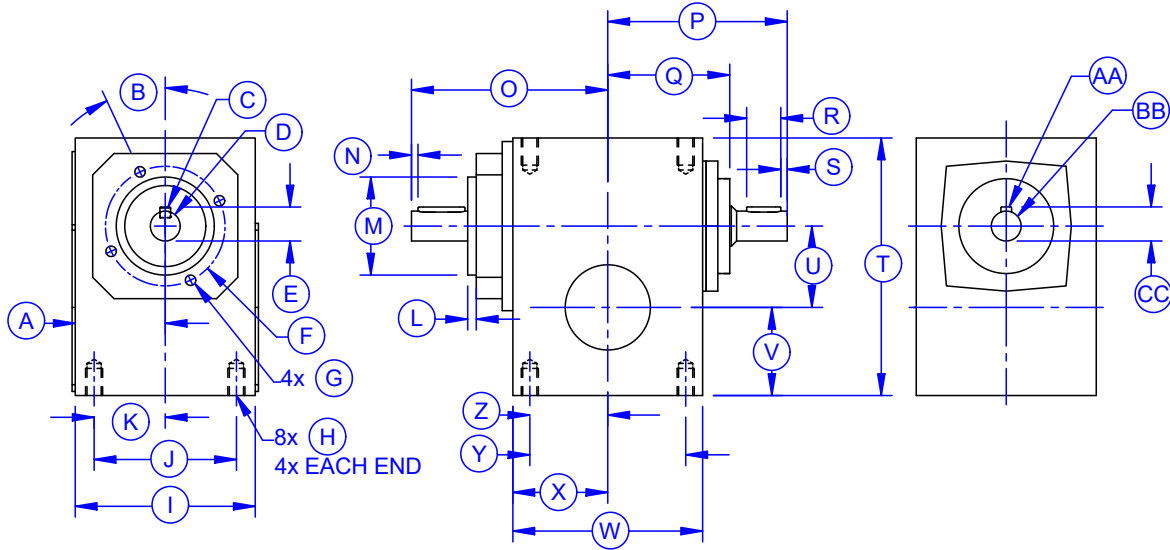
S E R I E S R G

NEMA Specific Information

Series RG NEMA Unit Designation



Series RG Reducer Hollow Shaft Dimensions



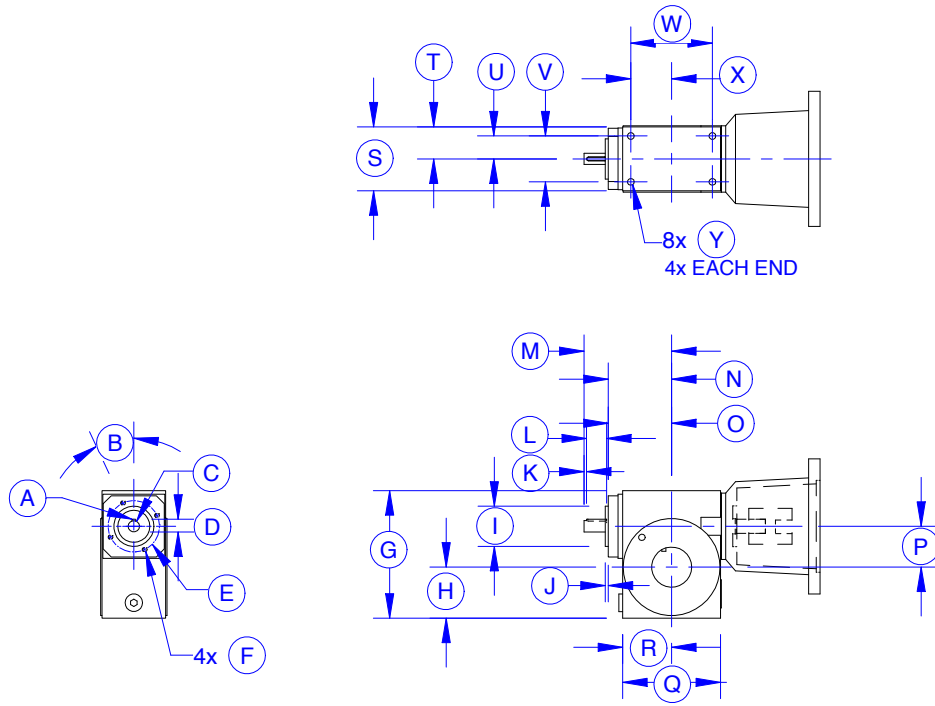
SIZE	A		B	C		D			E		F		G		
				Key									Thread	Depth	
	in	mm	deg	in	mm	in	mm	tol	in	mm	in	mm		in	mm
15	1.66	42.2	0	0.2	5	0.6	14	k6	0.63	15.94	2.20	56	M6	0.47	12.0
20	1.56	39.6	0	0.2	5	0.6	14	k6	0.63	15.94	2.52	64	M6	0.47	12.0
25	1.94	49.3	25	0.2	6	0.7	19	k6	0.84	21.45	3.07	78	M8	0.57	14.5
30	2.56	65.0	25	0.3	8	0.9	24	k6	1.06	26.89	3.62	92	M10	0.79	20.0
35	3.44	87.4	25	0.3	8	1.1	28	k6	1.22	30.90	3.62	92	M10	0.79	20.0

SIZE	Thread	H		I		J		K		L		M		N	
		Depth													
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
15	M8	0.50	12.7	3.32	84.3	2.62	66.5	1.31	33.3	0.16	4.1	1.810	46.0	0.12	3.0
20	M10	0.56	14.2	3.13	79.5	2.25	57.2	1.12	28.4	0.16	4.1	1.967	49.9	0.12	3.0
25	M10	0.63	16.0	3.88	98.6	3.00	76.2	1.50	38.1	0.16	4.1	2.361	60.0	0.12	3.0
30	M12	0.75	19.1	5.12	130.0	3.88	98.6	1.94	49.3	0.12	3.0	2.754	69.9	0.12	3.0
35	M12	0.75	19.1	6.88	174.8	5.62	142.7	2.81	71.4	0.12	3.0	2.754	70.0	0.10	2.5

SIZE	O		P		Q		R		S		T		U		V	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
15	3.62	91.9	3.31	84.1	2.2	55.9	0.63	16.0	0.12	3.0	4.75	120.7	1.50	38.1	1.62	41.1
20	4.30	109.2	4.59	116.6	3.0	76.2	0.98	24.9	0.12	3.0	6.25	158.8	2.00	50.8	2.50	63.5
25	5.44	138.2	5.25	133.4	3.7	94.0	0.98	24.9	0.12	3.0	7.50	190.5	2.50	63.5	3.00	76.2
30	5.85	148.6	6.69	169.9	4.5	115.1	0.98	24.9	0.12	3.0	9.06	230.1	3.00	76.2	3.62	91.9
35	6.62	168.1	7.75	196.9	4.9	124.2	1.26	32.0	0.10	2.5	10.31	261.9	3.50	88.9	4.25	108.0

SIZE	W		X		Y		Z		AA		BB			CC	
									Key						
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	tol	in	mm
15	3.50	88.9	1.75	44.5	2.88	73.2	1.44	36.6	0.2	5	0.6	14	k6	0.6	15.94
20	4.81	122.2	2.40	61.0	4.00	101.6	2.00	50.8	0.2	5	0.6	14	k6	0.6	15.94
25	6.12	155.4	3.06	77.7	5.12	130.0	2.56	65.0	0.2	6	0.7	19	k6	0.8	21.45
30	7.63	193.8	3.82	97.0	6.38	162.1	3.19	81.0	0.3	8	0.9	24	k6	1.1	26.89
35	8.80	223.5	4.40	111.8	7.62	193.5	3.81	96.8	0.3	8	1.1	28	k6	1.2	30.90

Series RG NEMA Hollow Shaft Dimensions

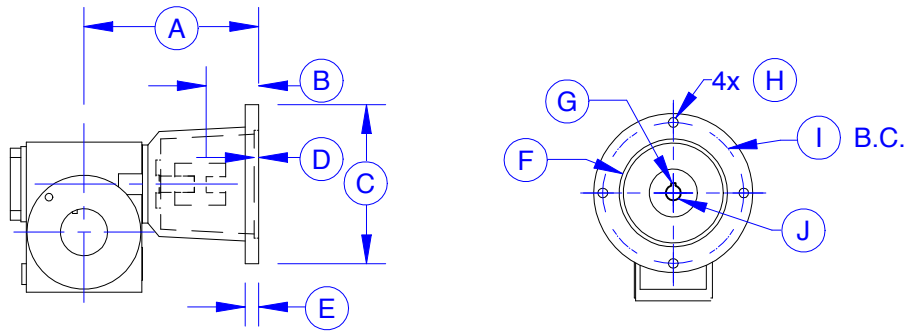


SIZE	A		B	C			D		E		F			
	Key			deg	in	mm	tol	in	mm	in	mm	Thread	Depth	
	in	mm											in	mm
20	0.2	5	0	0.6	14	k6	0.63	15.94	2.52	64	M6	0.47	12.0	
25	0.2	6	25	0.7	19	k6	0.84	21.45	3.07	78	M8	0.57	14.5	
30	0.3	8	25	0.9	24	k6	1.06	26.89	3.62	92	M10	0.79	20.0	
35	0.3	8	25	1.1	28	k6	1.22	30.90	3.62	92	M10	0.79	20.0	

SIZE	G		H		I		J		K		L	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
	20	6.25	158.8	2.50	63.5	1.967	49.9	0.16	4.1	0.12	3.0	0.98
25	7.50	190.5	3.00	76.2	2.361	60.0	0.16	4.1	0.12	3.0	0.98	24.9
30	9.06	230.1	3.62	91.9	2.754	69.9	0.12	3.0	0.12	3.0	0.98	24.9
35	10.31	261.9	4.25	108.0	2.754	70.0	0.12	3.0	0.10	2.5	1.26	32.0

SIZE	M		N		O		P		Q		R		S	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
	20	4.30	109.2	3.1	78.7	3.1	78.7	2.00	50.8	4.81	122.2	2.40	61.0	3.13
25	5.44	138.2	4.0	101.6	4.0	101.6	2.50	63.5	6.12	155.4	3.06	77.7	3.88	98.6
30	5.85	148.6	4.5	114.3	4.5	114.3	3.00	76.2	7.63	193.8	3.82	97.0	5.12	130.0
35	6.62	168.1	5.3	134.4	5.3	134.6	3.50	88.9	8.80	223.5	4.40	111.8	6.88	174.8

SIZE	T		U		V		W		X		Y		
	in	mm	in	mm	in	mm	in	mm	in	mm	Thread	Depth	
	in	mm	in	mm	in	mm	in	mm	in	mm		in	mm
20	1.56	39.6	1.12	28.4	2.25	57.2	4.00	101.6	2.00	50.8	M10	0.56	14.2
25	1.94	49.3	1.50	38.1	3.00	76.2	5.12	130.0	2.56	65.0	M10	0.63	16.0
30	2.56	65.0	1.94	49.3	3.88	98.6	6.38	162.1	3.19	81.0	M12	0.75	19.1
35	3.44	87.4	2.81	71.4	5.62	142.7	7.62	193.5	3.81	96.8	M12	0.75	19.1

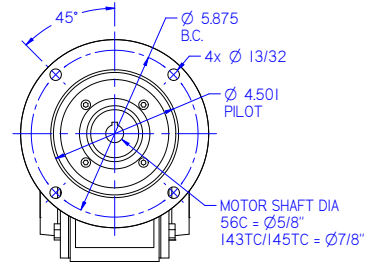
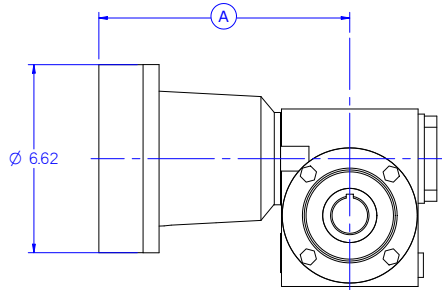


SIZE	MOTOR FRAME	A		B		C		D		E	
		in	mm	in	mm	in	mm	in	mm	in	mm
20	56C/143TC/145TC	7.28	184.9	2.18	55.4	6.63	168.4	0.19	4.8	0.56	14.2
	182TC/185TC	8.06	204.7	2.71	68.8	9.00	228.6	0.17	4.3	0.58	14.7
25	56C/143TC/145TC	7.95	201.9	2.20	55.9	6.62	168.1	0.19	4.8	0.56	14.2
	182TC/185TC	8.70	221.0	2.75	69.9	9.00	228.6	0.17	4.3	0.58	14.7
	213TC/215TC	8.70	221.0	3.12	79.2	9.00	228.6	0.17	4.3	0.58	14.7
30	56C/143TC/145TC	9.56	242.8	2.12	53.8	6.62	168.1	0.31	7.9	0.56	14.2
	182TC/185TC	10.19	258.8	2.92	74.2	9.00	228.6	0.17	4.3	0.58	14.7
	213TC/215TC	10.19	258.8	2.93	74.4	9.00	228.6	0.17	4.3	0.58	14.7
35	56C/143TC/145TC	10.56	268.2	2.06	52.3	6.62	168.1	0.25	6.4	0.56	14.2
	182TC/185TC	11.25	285.8	2.91	73.9	9.00	228.6	0.16	4.1	0.59	15.0
	213TC/215TC	11.25	285.8	3.24	82.3	9.00	228.6	0.16	4.1	0.59	15.0

SIZE	MOTOR FRAME	A		B	C		D		E	
		in	mm	keyway: in	in	mm	in	mm	in	mm
ALL	56C	4.501	114.3	3/16 X 3/32	13/32	10	5.875	149.2	0.625	15.9
	143TC/145TC	4.501	114.3	3/16 X 3/32	13/32	10	5.875	149.2	0.875	22.2
	182TC/185TC	8.501	215.9	1/4 X 1/8	17/32	13	7.250	184.2	1.125	28.6
	213TC/215TC	8.501	215.9	5/16 X 5/32	17/32	13	7.250	184.2	1.375	34.9

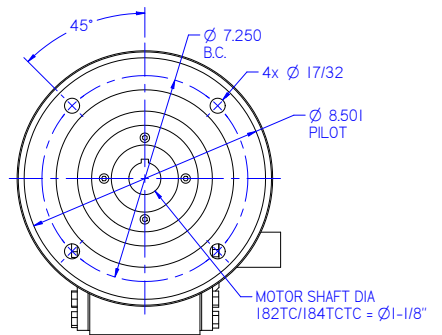
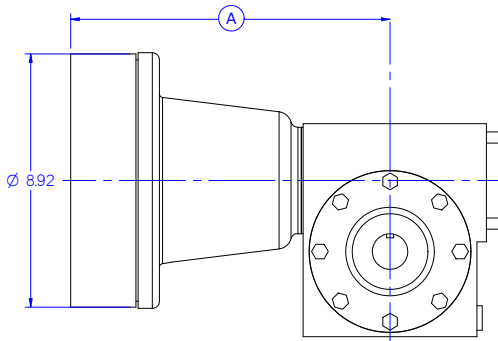
Double Reduction NEMA
NEMA 56T /143TC /145TC ADAPTER

SIZE	A	
	in	mm
20	0.348	8.84
25	0.376	9.54
30	0.397	10.09
35	0.434	11.03



Double Reduction NEMA
NEMA 182TC /184TC ADAPTER

SIZE	A	
	in	mm
20	0.408	10.37
25	0.434	11.02
30	0.459	11.66
35	0.495	12.57





S E R I E S R G

General Specs and Ratings

			SIZE				
			RG15	RG20	RG25	RG30	RG35
Emergency Stop			T_{2MAX} (see expanded rating tables)				
Maximum Axial Load	lb		400	410	420	950	900
	N		1780	1820	1860	4220	4000
Average Lifetime	Hours		25,000				
Operating Temperature	°F		-13 to +200°F				
	°C		-25 to +100°C				
Degree of Protection			IP 65				
Lubrication			Synthetic Gear Oil – Factory Filled				
Mounting Position			Any				
Nominal Backlash	Low	arcmin	11	8	7	5	4
	Standard	arcmin	27	17	14	11	11
Torsional Rigidity	lb-in/min		91	157	204	367	699
	Nm/min		10.3	17.8	23.1	41.6	79.2

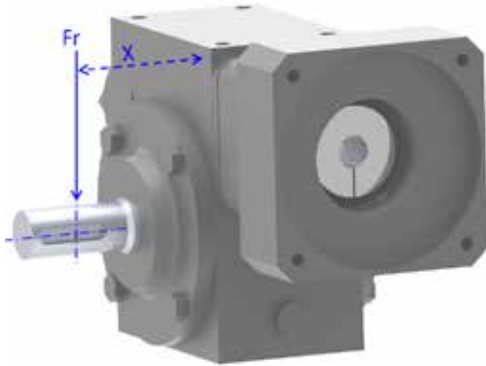
See page 25 for radial/overhung load calculation

Ratios 30:1 and above can be self-locking. It is important to review the input torque applied during stopping and reversing. This is of particular importance when unrestrained high inertia loads are involved.

MAXIMUM PERMISSIBLE RADIAL/OVERHUNG LOADS (Standard Output Shaft)

When a sprocket, gear, etc., is mounted on the shaft, you must calculate the application's radial/overhung load (Fr) to verify the maximum permissible load rating is not exceeded.

The gearbox radial/overhung load ratings apply to both solid and hollow shafts.



$$Fr = \frac{P \times 126,000 \times K}{n \times PD} \quad \text{OR} \quad Fr = T \frac{2}{PD} \times K$$

- Fr Radial/Overhung load (lb)
- X Housing face to center of solid shaft keyway (in)
- P Power transmitted by shaft (hp)
- n Shaft speed (rpm)
- PD Pitch Diameter of sprocket, pinion or pulley (in)
- K Overhung load factor (Table 1 below)
- T Torque transmitted by shaft (lb-in)

Table 1. Overhung Load Factor by Load Type

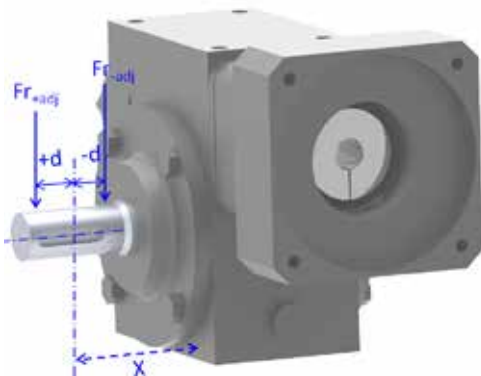
K	OVERHUNG LOAD TYPE
1.00	Chain Sprocket
1.25	Spur or helical pinion
1.50	Timing belt pulley
1.50	V-belt sheave
2.50	Flat belt pulley

Table 2. Overhung Load Rating by Gearbox Size

RADIAL/OHL SPECIFICATIONS		SIZE				
		RG15	RG20	RG25	RG30	RG35
Fr	lb	700	950	1250	1500	3000
	N	3100	4200	5600	6700	13300
X	in	1.3	2.3	2.0	3.0	3.4
	mm	33	57	52	77	87

Overhung loads can be reduced by increasing the diameter of the sprockets, gear, etc., or by moving the part closer to the gearbox. If the maximum permissible overhung load is exceeded, the sprocket, gear, etc., should be extended to run in an outboard bearing.

To adjust for load locations that differ from the reference location, X , use the method given below:



$$Fr_{adj} = Fr \times \frac{X}{(X \pm d)}$$

- Fr_{adj} Adjusted radial/overhung load (lb)*
- d Distance of load from center (in)

* Fr_{adj} must not exceed Fr value listed in Table 2

	RATIO		SIZE				
			RG15	RG20	RG25	RG30	RG35
Moment of Inertia ¹	5	lb.in. s ² 10 ⁻⁴	13.2	22.8	53.0	115.1	244.4
		kg cm ²	1.5	2.6	6.0	13.0	27.6
	6	lb.in. s ² 10 ⁻⁴	-	20.7	46.2	95.6	205.1
		kg cm ²	-	2.3	5.2	10.8	23.2
	7	lb.in. s ² 10 ⁻⁴	-	19.5	42.1	83.9	181.4
		kg cm ²	-	2.2	4.8	9.5	20.5
	8	lb.in. s ² 10 ⁻⁴	-	18.6	39.5	76.3	166.0
		kg cm ²	-	2.1	4.5	8.6	18.8
	9	lb.in. s ² 10 ⁻⁴	-	18.1	37.7	71.0	155.5
		kg cm ²	-	2.0	4.3	8.0	17.6
	10	lb.in. s ² 10 ⁻⁴	11.7	17.7	36.4	67.3	147.9
		kg cm ²	1.3	2.0	4.1	7.6	16.7
	15	lb.in. s ² 10 ⁻⁴	11.5	16.7	33.3	58.4	130.1
		kg cm ²	1.3	1.9	3.8	6.6	14.7
	20	lb.in. s ² 10 ⁻⁴	11.4	16.4	32.2	55.3	123.8
		kg cm ²	1.3	1.9	3.6	6.3	14.0
	25	lb.in. s ² 10 ⁻⁴	-	16.2	31.7	53.9	120.9
		kg cm ²	-	1.8	3.6	6.1	13.7
	30 ²	lb.in. s ² 10 ⁻⁴	11.3	16.2	31.4	53.1	119.4
		kg cm ²	1.3	1.8	3.6	6.0	13.5
	40 ²	lb.in. s ² 10 ⁻⁴	11.3	16.1	31.2	52.4	117.8
		kg cm ²	1.3	1.8	3.5	5.9	13.3
	50 ²	lb.in. s ² 10 ⁻⁴	11.3	16.0	31.0	52.0	117.1
		kg cm ²	1.3	1.8	3.5	5.9	13.2
	60 ²	lb.in. s ² 10 ⁻⁴	11.3	16.0	31.0	51.8	116.7
		kg cm ²	1.3	1.8	3.5	5.9	13.2

1 The moment of inertia values reflected at the input shaft and includes coupling

2 Maximum input speed allowed for short acceleration cycles

RG15 Single Reduction

i : 1	Ratings	Units	$N_{1\text{NOM}}$ (rpm)								$N_{1\text{PK}}$ rpm	$T_{2\text{MAX}}$	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
5	$P_{1\text{ME}}$	hp	0.99	1.74	1.92	2.24	2.49	2.67	3.33	3.85	4000	1,610	181
		kW	0.74	1.30	1.44	1.67	1.86	2.00	2.49	2.87			
	$P_{1\text{TH}}$	hp	0.99	1.74	1.82	1.82	1.82	1.79	1.61	1.54			
		kW	0.74	1.30	1.36	1.36	1.36	1.34	1.20	1.15			
	$T_{2\text{ME}}$	lb-in	548	488	469	434	399	374	306	264			
		Nm	62	55	53	49	45	42	35	30			
	$T_{2\text{ACC}}$	lb-in	593	548	538	517	504	488	427	374			
		Nm	67	62	61	58	57	55	48	42			
η	%	88	89	89	89	89	89	88	87				
10	$P_{1\text{ME}}$	hp	0.68	1.22	1.36	1.60	1.80	1.94	2.42	2.79	4000	1,890	214
		kW	0.51	0.91	1.01	1.19	1.34	1.44	1.80	2.08			
	$P_{1\text{TH}}$	hp	0.68	1.22	1.36	1.54	1.54	1.52	1.39	1.33			
		kW	0.51	0.91	1.01	1.15	1.15	1.14	1.03	1.00			
	$T_{2\text{ME}}$	lb-in	720	670	647	603	563	530	434	374			
		Nm	81	76	73	68	64	60	49	42			
	$T_{2\text{ACC}}$	lb-in	774	720	710	703	679	670	597	530			
		Nm	88	81	80	80	77	76	68	60			
η	%	84	87	87	87	87	87	86	85				
15	$P_{1\text{ME}}$	hp	0.55	0.99	1.10	1.30	1.47	1.59	1.98	2.30	4000	1,890	213
		kW	0.41	0.74	0.82	0.97	1.10	1.18	1.47	1.72			
	$P_{1\text{TH}}$	hp	0.55	0.99	1.10	1.30	1.33	1.32	1.22	1.18			
		kW	0.41	0.74	0.82	0.97	1.00	0.99	0.91	0.88			
	$T_{2\text{ME}}$	lb-in	848	798	772	722	676	636	520	451			
		Nm	96	90	87	82	76	72	59	51			
	$T_{2\text{ACC}}$	lb-in	896	848	843	826	809	798	715	636			
		Nm	101	96	95	93	91	90	81	72			
η	%	81	85	85	85	85	85	84	83				
20	$P_{1\text{ME}}$	hp	0.42	0.76	0.85	1.00	1.13	1.22	1.52	1.77	4000	1,820	206
		kW	0.32	0.57	0.63	0.75	0.84	0.91	1.13	1.32			
	$P_{1\text{TH}}$	hp	0.42	0.76	0.85	1.00	1.11	1.10	1.03	1.00			
		kW	0.32	0.57	0.63	0.75	0.83	0.82	0.77	0.75			
	$T_{2\text{ME}}$	lb-in	835	776	751	713	667	629	514	445			
		Nm	94	88	85	81	75	71	58	50			
	$T_{2\text{ACC}}$	lb-in	869	835	837	814	787	776	704	629			
		Nm	98	94	95	92	89	88	80	71			
η	%	78	81	81	82	82	82	81	80				
30	$P_{1\text{ME}}$	hp	0.29	0.51	0.57	0.67	0.76	0.82	1.02	1.19	4000	1,670	189
		kW	0.21	0.38	0.43	0.50	0.57	0.61	0.76	0.89			
	$P_{1\text{TH}}$	hp	0.29	0.51	0.57	0.67	0.76	0.82	0.82	0.80			
		kW	0.21	0.38	0.43	0.50	0.57	0.61	0.61	0.60			
	$T_{2\text{ME}}$	lb-in	768	739	724	678	634	598	488	423			
		Nm	87	84	82	77	72	68	55	48			
	$T_{2\text{ACC}}$	lb-in	807	768	763	771	755	739	669	598			
		Nm	91	87	86	87	85	84	76	68			
η	%	71	76	77	77	77	77	76	75				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG NEMA 15 Single Reduction

i : 1	Ratings	Units	$N_{1\text{NOM}}$ (rpm)								$N_{1\text{PK}}$ rpm	$T_{2\text{MAX}}$	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
40	$P_{1\text{ME}}$	hp	0.21	0.39	0.43	0.51	0.57	0.62	0.77	0.90	4000	1,500	169
		kW	0.16	0.29	0.32	0.38	0.43	0.46	0.58	0.67			
	$P_{1\text{TH}}$	hp	0.21	0.39	0.43	0.51	0.57	0.62	0.70	0.69			
		kW	0.16	0.29	0.32	0.38	0.43	0.46	0.53	0.51			
	$T_{2\text{ME}}$	lb-in	730	704	690	647	604	570	465	403			
		Nm	83	80	78	73	68	64	53	46			
	$T_{2\text{ACC}}$	lb-in	732	730	734	743	720	704	639	570			
		Nm	83	83	83	84	81	80	72	64			
η	%	67	72	73	73	73	73	72	71				
50	$P_{1\text{ME}}$	hp	0.17	0.31	0.35	0.41	0.46	0.50	0.62	0.72	4000	1,320	149
		kW	0.13	0.23	0.26	0.31	0.34	0.37	0.46	0.54			
	$P_{1\text{TH}}$	hp	0.17	0.31	0.35	0.41	0.46	0.50	0.62	0.62			
		kW	0.13	0.23	0.26	0.31	0.34	0.37	0.46	0.47			
	$T_{2\text{ME}}$	lb-in	710	676	663	622	581	549	446	387			
		Nm	80	76	75	70	66	62	50	44			
	$T_{2\text{ACC}}$	lb-in	710	710	715	714	692	676	614	549			
		Nm	80	80	81	81	78	76	69	62			
η	%	65	69	70	70	70	70	69	68				
60	$P_{1\text{ME}}$	hp	0.14	0.26	0.29	0.34	0.39	0.42	0.52	0.60	4000	1,300	146
		kW	0.11	0.19	0.22	0.25	0.29	0.31	0.39	0.45			
	$P_{1\text{TH}}$	hp	0.14	0.26	0.29	0.34	0.39	0.42	0.52	0.53			
		kW	0.11	0.19	0.22	0.25	0.29	0.31	0.39	0.39			
	$T_{2\text{ME}}$	lb-in	668	648	636	596	558	526	428	354			
		Nm	76	73	72	67	63	59	48	40			
	$T_{2\text{ACC}}$	lb-in	672	668	673	674	663	648	589	526			
		Nm	76	76	76	76	75	73	67	59			
η	%	61	66	67	67	67	67	66	62				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG20 Single Reduction

i : 1	Ratings	Units	N_{1NOM} (rpm)								N_{1PK} rpm	T_{2MAX}	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
5	P_{1ME}	hp	1.95	3.31	3.62	4.13	4.55	4.91	6.07	6.92	4000	3,320	375
		kW	1.45	2.47	2.70	3.08	3.40	3.67	4.53	5.16			
	P_{1TH}	hp	1.95	3.00	3.00	3.00	3.00	2.95	2.55	2.40			
		kW	1.45	2.24	2.24	2.24	2.24	2.20	1.90	1.79			
	T_{2ME}	lb-in	1,120	960	913	825	754	711	577	490			
		Nm	126	108	103	93	85	80	65	55			
T_{2ACC}	lb-in	1,210	1,120	1,090	1,040	1,000	960	812	711				
	Nm	137	126	123	118	113	108	92	80				
η	%	91	92	92	92	92	92	91	90				
6	P_{1ME}	hp	1.83	3.13	3.43	3.92	4.33	4.66	5.75	6.63	4000	3,600	407
		kW	1.36	2.34	2.56	2.93	3.23	3.48	4.29	4.95			
	P_{1TH}	hp	1.83	2.86	2.86	2.86	2.86	2.81	2.44	2.31			
		kW	1.36	2.13	2.13	2.13	2.13	2.10	1.82	1.72			
	T_{2ME}	lb-in	1,250	1,090	1,030	937	857	805	654	561			
		Nm	141	123	117	106	97	91	74	63			
T_{2ACC}	lb-in	1,350	1,250	1,220	1,170	1,130	1,090	923	805				
	Nm	153	141	138	132	127	123	104	91				
η	%	90	92	92	92	92	91	90	90				
7	P_{1ME}	hp	1.67	2.88	3.15	3.62	4.00	4.30	5.31	6.11	4000	3,720	421
		kW	1.25	2.15	2.35	2.70	2.99	3.21	3.96	4.56			
	P_{1TH}	hp	1.67	2.73	2.73	2.73	2.73	2.68	2.35	2.22			
		kW	1.25	2.04	2.04	2.04	2.04	2.00	1.75	1.66			
	T_{2ME}	lb-in	1,320	1,160	1,100	1,000	920	864	701	601			
		Nm	149	131	125	113	104	98	79	68			
T_{2ACC}	lb-in	1,430	1,320	1,290	1,240	1,200	1,160	989	864				
	Nm	161	149	146	141	135	131	112	98				
η	%	89	91	91	91	91	91	90	89				
8	P_{1ME}	hp	1.57	2.72	2.98	3.43	3.79	4.07	5.07	5.80	4000	3,870	438
		kW	1.17	2.03	2.23	2.56	2.83	3.04	3.78	4.33			
	P_{1TH}	hp	1.57	2.61	2.61	2.61	2.61	2.57	2.26	2.14			
		kW	1.17	1.95	1.95	1.95	1.95	1.92	1.69	1.60			
	T_{2ME}	lb-in	1,400	1,240	1,190	1,080	993	930	761	649			
		Nm	159	140	134	122	112	105	86	73			
T_{2ACC}	lb-in	1,510	1,400	1,370	1,330	1,280	1,240	1,070	930				
	Nm	171	159	155	151	145	140	121	105				
η	%	89	91	91	91	91	91	89	89				
9	P_{1ME}	hp	1.45	2.50	2.75	3.16	3.50	3.75	4.67	5.35	4000	3,900	440
		kW	1.08	1.87	2.05	2.36	2.61	2.80	3.49	4.00			
	P_{1TH}	hp	1.45	2.50	2.50	2.50	2.50	2.46	2.18	2.07			
		kW	1.08	1.87	1.87	1.87	1.87	1.84	1.62	1.54			
	T_{2ME}	lb-in	1,440	1,280	1,220	1,120	1,030	960	786	671			
		Nm	163	145	138	126	116	108	89	76			
T_{2ACC}	lb-in	1,550	1,440	1,410	1,370	1,320	1,280	1,100	960				
	Nm	175	163	159	155	149	145	125	108				
η	%	88	90	90	90	90	90	89	88				
10	P_{1ME}	hp	1.35	2.34	2.57	2.96	3.28	3.51	4.38	5.01	4000	3,910	442
		kW	1.01	1.74	1.92	2.21	2.45	2.62	3.27	3.74			
	P_{1TH}	hp	1.35	2.34	2.40	2.40	2.40	2.37	2.10	2.00			
		kW	1.01	1.74	1.79	1.79	1.79	1.77	1.57	1.49			
	T_{2ME}	lb-in	1,480	1,330	1,270	1,160	1,060	994	815	694			
		Nm	167	150	143	131	120	112	92	79			
T_{2ACC}	lb-in	1,580	1,480	1,450	1,420	1,360	1,330	1,140	994				
	Nm	179	167	164	160	153	150	129	112				
η	%	87	90	90	90	90	90	89	88				
15	P_{1ME}	hp	1.09	1.90	2.10	2.43	2.69	2.89	3.59	4.13	4000	3,930	444
		kW	0.82	1.42	1.57	1.81	2.01	2.15	2.68	3.08			
	P_{1TH}	hp	1.09	1.90	2.00	2.00	2.00	1.98	1.79	1.71			
		kW	0.82	1.42	1.49	1.49	1.49	1.47	1.33	1.28			
	T_{2ME}	lb-in	1,740	1,580	1,520	1,390	1,280	1,200	981	839			
		Nm	197	179	172	157	144	135	111	95			
T_{2ACC}	lb-in	1,840	1,740	1,720	1,670	1,620	1,580	1,370	1,200				
	Nm	208	197	195	189	183	179	155	135				
η	%	84	88	88	88	88	88	87	86				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG20 Single Reduction

i : 1	Ratings	Units	N_{1NOM} (rpm)								N_{1PK} rpm	T_{2MAX}	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
20	P_{1ME}	hp	0.84	1.46	1.61	1.86	2.07	2.22	2.76	3.18	4000	3,800	429
		kW	0.62	1.09	1.20	1.39	1.54	1.66	2.06	2.37			
	P_{1TH}	hp	0.84	1.46	1.50	1.60	1.60	1.58	1.46	1.41			
		kW	0.62	1.09	1.12	1.19	1.19	1.18	1.09	1.05			
	T_{2ME}	lb-in	1,720	1,550	1,480	1,380	1,260	1,190	971	832			
		Nm	194	175	167	156	143	134	110	94			
T_{2ACC}	lb-in	1,780	1,720	1,720	1,650	1,580	1,550	1,360	1,190				
	Nm	201	194	194	186	179	175	153	134				
η	%	81	84	84	85	85	85	84	83				
25	P_{1ME}	hp	0.68	1.18	1.30	1.50	1.67	1.79	2.23	2.57	4000	3,620	409
		kW	0.50	0.88	0.97	1.12	1.24	1.34	1.66	1.91			
	P_{1TH}	hp	0.68	1.18	1.30	1.50	1.50	1.49	1.38	1.33			
		kW	0.50	0.88	0.97	1.12	1.12	1.11	1.03	1.00			
	T_{2ME}	lb-in	1,720	1,550	1,490	1,370	1,260	1,180	967	829			
		Nm	195	175	169	155	142	134	109	94			
T_{2ACC}	lb-in	1,750	1,720	1,690	1,620	1,590	1,550	1,350	1,180				
	Nm	198	195	191	183	180	175	153	134				
η	%	81	83	84	84	84	84	83	82				
30	P_{1ME}	hp	0.56	0.99	1.09	1.26	1.39	1.50	1.87	2.15	4000	3,480	393
		kW	0.42	0.74	0.81	0.94	1.04	1.12	1.39	1.60			
	P_{1TH}	hp	0.56	0.99	1.09	1.20	1.20	1.19	1.12	1.09			
		kW	0.42	0.74	0.81	0.90	0.90	0.89	0.84	0.81			
	T_{2ME}	lb-in	1,580	1,480	1,430	1,310	1,210	1,130	925	792			
		Nm	179	167	161	148	136	128	105	90			
T_{2ACC}	lb-in	1,660	1,580	1,570	1,560	1,520	1,480	1,290	1,130				
	Nm	188	179	177	177	172	167	146	128				
η	%	74	79	80	80	80	80	79	78				
40	P_{1ME}	hp	0.43	0.74	0.82	0.95	1.05	1.13	1.41	1.62	4000	3,140	354
		kW	0.32	0.56	0.61	0.71	0.79	0.84	1.05	1.21			
	P_{1TH}	hp	0.43	0.74	0.82	0.95	1.00	0.99	0.94	0.92			
		kW	0.32	0.56	0.61	0.71	0.75	0.74	0.70	0.69			
	T_{2ME}	lb-in	1,510	1,410	1,370	1,260	1,150	1,080	883	756			
		Nm	171	160	154	142	130	122	100	85			
T_{2ACC}	lb-in	1,510	1,510	1,510	1,510	1,450	1,410	1,240	1,080				
	Nm	171	171	171	171	164	160	140	122				
η	%	70	75	76	76	76	76	75	74				
50	P_{1ME}	hp	0.34	0.60	0.66	0.76	0.84	0.91	1.13	1.30	4000	2,780	315
		kW	0.25	0.45	0.49	0.57	0.63	0.68	0.84	0.97			
	P_{1TH}	hp	0.34	0.60	0.66	0.76	0.84	0.88	0.84	0.83			
		kW	0.25	0.45	0.49	0.57	0.63	0.66	0.63	0.62			
	T_{2ME}	lb-in	1,470	1,360	1,320	1,210	1,110	1,040	850	728			
		Nm	166	154	149	137	125	118	96	82			
T_{2ACC}	lb-in	1,470	1,470	1,470	1,460	1,400	1,360	1,190	1,040				
	Nm	166	166	167	165	158	154	135	118				
η	%	68	72	73	73	73	73	72	71				
60	P_{1ME}	hp	0.28	0.50	0.55	0.64	0.71	0.76	0.94	1.09	4000	2,740	309
		kW	0.21	0.37	0.41	0.48	0.53	0.57	0.70	0.81			
	P_{1TH}	hp	0.28	0.50	0.55	0.64	0.71	0.76	0.76	0.69			
		kW	0.21	0.37	0.41	0.48	0.53	0.57	0.57	0.51			
	T_{2ME}	lb-in	1,390	1,300	1,270	1,160	1,070	1,000	816	668			
		Nm	157	147	143	131	121	113	92	76			
T_{2ACC}	lb-in	1,390	1,390	1,390	1,380	1,340	1,300	1,150	1,000				
	Nm	157	157	157	156	152	147	129	113				
η	%	64	69	70	70	70	70	69	65				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG25 Single Reduction

i : 1	Ratings	Units	N_{1NOM} (rpm)								N_{1PK} rpm	T_{2MAX}	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
5	P_{1ME}	hp	3.76	6.10	6.58	7.43	8.24	8.87	10.80	11.80	4000	6,570	742
		kW	2.81	4.55	4.91	5.55	6.15	6.62	8.05	8.84			
	P_{1TH}	hp	3.56	4.00	4.00	4.00	4.00	3.93	3.39	3.20			
		kW	2.65	2.99	2.99	2.99	2.99	2.93	2.53	2.39			
	T_{2ME}	lb-in	2,160	1,770	1,660	1,490	1,370	1,280	1,030	840			
		Nm	244	200	187	168	154	145	116	95			
T_{2ACC}	lb-in	2,370	2,160	2,100	1,970	1,870	1,770	1,470	1,280				
	Nm	268	244	237	222	211	200	166	145				
η	%	91	92	92	92	92	92	91	90				
6	P_{1ME}	hp	3.53	5.77	6.25	7.04	7.81	8.41	10.20	11.40	4000	7,140	807
		kW	2.63	4.31	4.66	5.26	5.83	6.27	7.62	8.48			
	P_{1TH}	hp	3.27	3.81	3.81	3.81	3.81	3.75	3.26	3.08			
		kW	2.44	2.84	2.84	2.84	2.84	2.80	2.43	2.30			
	T_{2ME}	lb-in	2,410	2,000	1,880	1,680	1,550	1,450	1,160	963			
		Nm	272	226	213	190	175	164	131	109			
T_{2ACC}	lb-in	2,640	2,410	2,340	2,220	2,100	2,000	1,660	1,450				
	Nm	298	272	264	250	237	226	188	164				
η	%	90	92	92	92	92	91	90	90				
7	P_{1ME}	hp	3.24	5.32	5.75	6.52	7.24	7.75	9.45	10.50	4000	7,400	836
		kW	2.42	3.97	4.29	4.86	5.40	5.78	7.05	7.87			
	P_{1TH}	hp	3.02	3.64	3.64	3.64	3.64	3.58	3.13	2.96			
		kW	2.25	2.71	2.71	2.71	2.71	2.67	2.33	2.21			
	T_{2ME}	lb-in	2,560	2,140	2,010	1,810	1,660	1,560	1,250	1,040			
		Nm	289	242	227	204	188	176	141	117			
T_{2ACC}	lb-in	2,790	2,560	2,480	2,360	2,240	2,140	1,770	1,560				
	Nm	315	289	281	267	253	242	201	176				
η	%	89	91	91	91	91	91	90	89				
8	P_{1ME}	hp	3.04	5.03	5.46	6.17	6.86	7.32	9.00	10.10	4000	7,690	869
		kW	2.27	3.76	4.07	4.60	5.12	5.47	6.71	7.52			
	P_{1TH}	hp	2.81	3.48	3.48	3.48	3.48	3.42	3.01	2.86			
		kW	2.09	2.60	2.60	2.60	2.60	2.56	2.25	2.13			
	T_{2ME}	lb-in	2,720	2,300	2,170	1,950	1,790	1,670	1,350	1,130			
		Nm	307	260	245	220	203	189	153	127			
T_{2ACC}	lb-in	2,950	2,720	2,640	2,540	2,400	2,300	1,920	1,670				
	Nm	334	307	299	287	271	260	217	189				
η	%	89	91	91	91	91	91	89	89				
9	P_{1ME}	hp	2.80	4.64	5.03	5.70	6.32	6.77	8.29	9.30	4000	7,710	872
		kW	2.09	3.46	3.75	4.25	4.71	5.05	6.19	6.94			
	P_{1TH}	hp	2.62	3.33	3.33	3.33	3.33	3.28	2.90	2.76			
		kW	1.96	2.49	2.49	2.49	2.49	2.45	2.17	2.06			
	T_{2ME}	lb-in	2,790	2,380	2,240	2,010	1,850	1,730	1,400	1,170			
		Nm	315	269	253	228	209	196	158	132			
T_{2ACC}	lb-in	3,020	2,790	2,710	2,620	2,470	2,380	1,980	1,730				
	Nm	342	315	306	296	279	269	224	196				
η	%	88	90	90	90	90	90	89	88				
10	P_{1ME}	hp	2.61	4.33	4.70	5.33	5.90	6.33	7.77	8.75	4000	7,770	878
		kW	1.95	3.23	3.51	3.98	4.40	4.72	5.80	6.53			
	P_{1TH}	hp	2.46	3.20	3.20	3.20	3.20	3.15	2.80	2.67			
		kW	1.84	2.39	2.39	2.39	2.39	2.35	2.09	1.99			
	T_{2ME}	lb-in	2,860	2,460	2,320	2,080	1,910	1,790	1,450	1,210			
		Nm	323	278	262	236	216	202	163	137			
T_{2ACC}	lb-in	3,090	2,860	2,790	2,700	2,550	2,460	2,050	1,790				
	Nm	349	323	315	305	288	278	232	202				
η	%	87	90	90	90	90	90	89	88				
15	P_{1ME}	hp	2.12	3.55	3.86	4.37	4.82	5.19	6.38	7.20	4000	7,790	880
		kW	1.58	2.65	2.88	3.26	3.60	3.87	4.76	5.38			
	P_{1TH}	hp	2.02	2.67	2.67	2.67	2.67	2.64	2.38	2.29			
		kW	1.51	1.99	1.99	1.99	1.99	1.97	1.78	1.71			
	T_{2ME}	lb-in	3,380	2,950	2,790	2,510	2,290	2,150	1,740	1,460			
		Nm	382	334	315	283	259	243	197	165			
T_{2ACC}	lb-in	3,580	3,380	3,320	3,190	3,050	2,950	2,470	2,150				
	Nm	405	382	375	360	345	334	279	243				
η	%	84	88	88	88	88	88	87	86				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG25 Single Reduction

i : 1	Ratings	Units	N_{1NOM} (rpm)								N_{1PK} rpm	T_{2MAX}	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
20	P_{1ME}	hp	1.62	2.72	2.96	3.36	3.71	3.99	4.91	5.56	4000	7,540	851
		kW	1.21	2.03	2.21	2.50	2.77	2.97	3.66	4.15			
	P_{1TH}	hp	1.62	2.00	2.00	2.13	2.13	2.11	1.95	1.88			
		kW	1.21	1.49	1.49	1.59	1.59	1.58	1.45	1.40			
	T_{2ME}	lb-in	3,330	2,880	2,720	2,480	2,270	2,130	1,720	1,450			
		Nm	376	325	308	280	257	241	195	164			
T_{2ACC}	lb-in	3,480	3,330	3,300	3,150	2,980	2,880	2,440	2,130				
	Nm	393	376	373	355	337	325	276	241				
η	%	81	84	84	85	85	85	84	83				
25	P_{1ME}	hp	1.31	2.19	2.39	2.71	3.00	3.21	3.96	4.48	4000	7,180	812
		kW	0.98	1.64	1.78	2.02	2.24	2.40	2.96	3.35			
	P_{1TH}	hp	1.31	1.91	2.00	2.00	2.00	1.98	1.84	1.78			
		kW	0.98	1.43	1.49	1.49	1.49	1.48	1.37	1.33			
	T_{2ME}	lb-in	3,340	2,880	2,750	2,470	2,270	2,120	1,720	1,450			
		Nm	377	325	310	279	256	240	194	164			
T_{2ACC}	lb-in	3,410	3,340	3,250	3,090	3,000	2,880	2,430	2,120				
	Nm	385	377	367	350	339	325	275	240				
η	%	81	83	84	84	84	84	83	82				
30	P_{1ME}	hp	1.10	1.83	2.00	2.27	2.51	2.70	3.32	3.76	4000	6,900	780
		kW	0.82	1.37	1.49	1.69	1.87	2.01	2.48	2.80			
	P_{1TH}	hp	1.10	1.54	1.60	1.60	1.60	1.59	1.49	1.45			
		kW	0.82	1.15	1.19	1.19	1.19	1.19	1.11	1.09			
	T_{2ME}	lb-in	3,070	2,750	2,630	2,370	2,170	2,040	1,640	1,390			
		Nm	347	311	297	267	245	230	186	157			
T_{2ACC}	lb-in	3,240	3,070	3,020	2,990	2,870	2,750	2,330	2,040				
	Nm	366	347	341	338	324	311	263	230				
η	%	74	79	80	80	80	80	79	78				
40	P_{1ME}	hp	0.83	1.39	1.51	1.71	1.90	2.03	2.50	2.83	4000	6,220	703
		kW	0.62	1.03	1.13	1.28	1.41	1.52	1.87	2.12			
	P_{1TH}	hp	0.83	1.29	1.33	1.33	1.33	1.33	1.26	1.23			
		kW	0.62	0.97	1.00	1.00	1.00	0.99	0.94	0.92			
	T_{2ME}	lb-in	2,930	2,630	2,510	2,260	2,070	1,950	1,570	1,320			
		Nm	331	297	284	255	234	220	177	149			
T_{2ACC}	lb-in	2,950	2,930	2,910	2,890	2,740	2,630	2,230	1,950				
	Nm	334	331	329	327	309	297	252	220				
η	%	70	75	76	76	76	76	75	74				
50	P_{1ME}	hp	0.66	1.11	1.21	1.37	1.52	1.63	2.01	2.28	4000	5,520	624
		kW	0.49	0.83	0.90	1.03	1.13	1.22	1.50	1.70			
	P_{1TH}	hp	0.66	1.11	1.19	1.19	1.19	1.18	1.13	1.10			
		kW	0.49	0.83	0.88	0.88	0.88	0.88	0.84	0.82			
	T_{2ME}	lb-in	2,850	2,530	2,420	2,180	2,000	1,870	1,510	1,270			
		Nm	322	286	274	246	226	212	170	144			
T_{2ACC}	lb-in	2,860	2,850	2,840	2,780	2,640	2,530	2,150	1,870				
	Nm	323	322	321	314	298	286	243	212				
η	%	68	72	73	73	73	73	72	71				
60	P_{1ME}	hp	0.55	0.93	1.01	1.15	1.27	1.36	1.68	1.90	4000	5,430	613
		kW	0.41	0.69	0.75	0.86	0.95	1.02	1.25	1.42			
	P_{1TH}	hp	0.55	0.93	1.01	1.07	1.07	1.06	1.02	0.91			
		kW	0.41	0.69	0.75	0.80	0.80	0.79	0.76	0.68			
	T_{2ME}	lb-in	2,690	2,430	2,330	2,090	1,920	1,800	1,450	1,170			
		Nm	304	274	263	237	217	203	164	132			
T_{2ACC}	lb-in	2,720	2,690	2,690	2,630	2,530	2,430	2,060	1,800				
	Nm	308	304	303	297	286	274	233	203				
η	%	64	69	70	70	70	70	69	65				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG30 Single Reduction

i:1	Ratings	Units	N_{1NOM} (rpm)								N_{1PK} rpm	T_{2MAX}	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
5	P_{1ME}	hp	6.51	10.10	10.80	12.30	13.60	14.50	17.20	18.90	4000	11,600	1,310
		kW	4.86	7.51	8.07	9.18	10.10	10.80	12.80	14.10			
	P_{1TH}	hp	4.22	4.75	4.75	4.75	4.75	4.67	4.03	3.80			
		kW	3.15	3.54	3.54	3.54	3.54	3.48	3.01	2.84			
	T_{2ME}	lb-in	3,730	2,920	2,730	2,460	2,250	2,100	1,630	1,340			
		Nm	422	330	308	278	255	237	185	151			
T_{2ACC}	lb-in	4,200	3,730	3,590	3,320	3,110	2,920	2,420	2,100				
	Nm	474	422	406	376	351	330	273	237				
η	%	91	92	92	92	92	92	91	90				
6	P_{1ME}	hp	6.12	9.56	10.30	11.70	12.90	13.80	16.50	18.00	4000	12,600	1,430
		kW	4.57	7.14	7.69	8.71	9.64	10.30	12.30	13.40			
	P_{1TH}	hp	3.88	4.52	4.52	4.52	4.52	4.45	3.87	3.65			
		kW	2.89	3.38	3.38	3.38	3.38	3.32	2.89	2.73			
	T_{2ME}	lb-in	4,170	3,310	3,100	2,790	2,560	2,390	1,870	1,520			
		Nm	472	374	351	315	289	270	211	172			
T_{2ACC}	lb-in	4,660	4,170	4,030	3,750	3,510	3,310	2,750	2,390				
	Nm	527	472	455	424	397	374	310	270				
η	%	90	92	92	92	92	91	90	90				
7	P_{1ME}	hp	5.63	8.86	9.54	10.80	12.00	12.80	15.30	16.80	4000	13,100	1,480
		kW	4.20	6.61	7.12	8.09	8.94	9.52	11.50	12.50			
	P_{1TH}	hp	3.58	4.32	4.32	4.32	4.32	4.25	3.72	3.52			
		kW	2.68	3.22	3.22	3.22	3.22	3.17	2.77	2.63			
	T_{2ME}	lb-in	4,440	3,570	3,340	3,010	2,750	2,560	2,030	1,650			
		Nm	502	403	377	340	311	290	229	186			
T_{2ACC}	lb-in	4,920	4,440	4,290	4,020	3,770	3,570	2,960	2,560				
	Nm	556	502	484	455	426	403	334	290				
η	%	89	91	91	91	91	91	90	89				
8	P_{1ME}	hp	5.35	8.58	9.26	10.40	11.60	12.40	15.00	16.50	4000	13,700	1,550
		kW	3.99	6.40	6.91	7.80	8.63	9.29	11.20	12.30			
	P_{1TH}	hp	3.33	4.13	4.13	4.13	4.13	4.07	3.58	3.39			
		kW	2.49	3.08	3.08	3.08	3.08	3.03	2.67	2.53			
	T_{2ME}	lb-in	4,780	3,930	3,690	3,300	3,030	2,850	2,260	1,850			
		Nm	540	444	417	373	342	322	255	209			
T_{2ACC}	lb-in	5,240	4,780	4,630	4,400	4,130	3,930	3,260	2,850				
	Nm	592	540	524	497	467	444	369	322				
η	%	89	91	91	91	91	91	89	89				
9	P_{1ME}	hp	4.94	7.95	8.57	9.72	10.70	11.50	14.00	15.30	4000	13,800	1,560
		kW	3.69	5.94	6.40	7.25	8.02	8.62	10.40	11.40			
	P_{1TH}	hp	3.11	3.96	3.96	3.96	3.96	3.90	3.45	3.28			
		kW	2.32	2.95	2.95	2.95	2.95	2.91	2.57	2.44			
	T_{2ME}	lb-in	4,920	4,080	3,820	3,440	3,150	2,960	2,350	1,920			
		Nm	556	461	432	388	356	334	266	217			
T_{2ACC}	lb-in	5,370	4,920	4,770	4,550	4,270	4,080	3,380	2,960				
	Nm	607	556	538	514	482	461	381	334				
η	%	88	90	90	90	90	90	89	88				
10	P_{1ME}	hp	4.60	7.43	8.02	9.07	10.00	10.80	13.10	14.30	4000	13,800	1,560
		kW	3.43	5.54	5.98	6.77	7.48	8.05	9.76	10.70			
	P_{1TH}	hp	2.92	3.80	3.80	3.80	3.80	3.75	3.33	3.17			
		kW	2.18	2.84	2.84	2.84	2.84	2.80	2.48	2.36			
	T_{2ME}	lb-in	5,040	4,210	3,950	3,550	3,250	3,060	2,430	1,990			
		Nm	570	476	447	401	367	345	275	224			
T_{2ACC}	lb-in	5,500	5,040	4,890	4,700	4,400	4,210	3,490	3,060				
	Nm	622	570	553	531	498	476	394	345				
η	%	87	90	90	90	90	90	89	88				
15	P_{1ME}	hp	3.74	6.09	6.58	7.42	8.23	8.86	10.80	11.90	4000	13,900	1,570
		kW	2.79	4.54	4.91	5.54	6.14	6.61	8.04	8.89			
	P_{1TH}	hp	2.40	3.17	3.17	3.17	3.17	3.13	2.83	2.71			
		kW	1.79	2.36	2.36	2.36	2.36	2.34	2.11	2.03			
	T_{2ME}	lb-in	5,950	5,070	4,760	4,260	3,910	3,680	2,940	2,420			
		Nm	672	572	538	481	442	416	332	274			
T_{2ACC}	lb-in	6,380	5,950	5,840	5,560	5,280	5,070	4,210	3,680				
	Nm	721	672	660	628	596	572	475	416				
η	%	84	88	88	88	88	88	87	86				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG30 Single Reduction

i : 1	Ratings	Units	$N_{1\text{NOM}}$ (rpm)								$N_{1\text{PK}}$ rpm	$T_{2\text{MAX}}$	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
20	$P_{1\text{ME}}$	hp	2.87	4.68	5.06	5.70	6.33	6.81	8.28	9.18	4000	13,500	1,520
		kW	2.14	3.49	3.77	4.26	4.73	5.08	6.18	6.85			
	$P_{1\text{TH}}$	hp	2.04	2.37	2.37	2.53	2.53	2.51	2.31	2.24			
		kW	1.52	1.77	1.77	1.89	1.89	1.87	1.73	1.67			
	$T_{2\text{ME}}$	lb-in	5,880	4,950	4,660	4,210	3,880	3,640	2,910	2,400			
		Nm	664	560	526	476	438	411	328	271			
$T_{2\text{ACC}}$	lb-in	6,190	5,880	5,830	5,490	5,160	4,950	4,160	3,640				
	Nm	700	664	658	620	583	560	470	411				
η	%	81	84	84	85	85	85	84	83				
25	$P_{1\text{ME}}$	hp	2.31	3.78	4.09	4.60	5.12	5.50	6.68	7.43	4000	12,800	1,450
		kW	1.73	2.82	3.05	3.43	3.82	4.10	4.99	5.54			
	$P_{1\text{TH}}$	hp	2.00	2.27	2.37	2.37	2.37	2.35	2.18	2.11			
		kW	1.49	1.69	1.77	1.77	1.77	1.76	1.63	1.58			
	$T_{2\text{ME}}$	lb-in	5,910	4,960	4,700	4,200	3,870	3,630	2,900	2,400			
		Nm	667	560	532	474	437	410	327	271			
$T_{2\text{ACC}}$	lb-in	6,080	5,910	5,740	5,410	5,200	4,960	4,140	3,630				
	Nm	687	667	649	611	587	560	468	410				
η	%	81	83	84	84	84	84	83	82				
30	$P_{1\text{ME}}$	hp	1.94	3.16	3.42	3.85	4.28	4.60	5.59	6.22	4000	12,300	1,390
		kW	1.44	2.36	2.55	2.87	3.20	3.44	4.17	4.64			
	$P_{1\text{TH}}$	hp	1.47	1.83	1.90	1.90	1.90	1.89	1.77	1.73			
		kW	1.10	1.37	1.42	1.42	1.42	1.41	1.32	1.29			
	$T_{2\text{ME}}$	lb-in	5,430	4,740	4,500	4,020	3,700	3,480	2,770	2,290			
		Nm	613	536	509	454	418	393	313	259			
$T_{2\text{ACC}}$	lb-in	5,780	5,430	5,330	5,220	4,980	4,740	3,960	3,480				
	Nm	653	613	602	590	562	536	448	393				
η	%	74	79	80	80	80	80	79	78				
40	$P_{1\text{ME}}$	hp	1.46	2.39	2.58	2.91	3.23	3.47	4.22	4.69	4000	11,100	1,260
		kW	1.09	1.78	1.93	2.17	2.41	2.59	3.15	3.50			
	$P_{1\text{TH}}$	hp	1.28	1.54	1.58	1.58	1.58	1.57	1.49	1.46			
		kW	0.96	1.15	1.18	1.18	1.18	1.17	1.12	1.09			
	$T_{2\text{ME}}$	lb-in	5,170	4,530	4,300	3,840	3,530	3,320	2,640	2,190			
		Nm	584	511	486	434	399	375	299	247			
$T_{2\text{ACC}}$	lb-in	5,260	5,170	5,140	5,050	4,750	4,530	3,790	3,320				
	Nm	595	584	580	571	536	511	429	375				
η	%	70	75	76	76	76	76	75	74				
50	$P_{1\text{ME}}$	hp	1.17	1.92	2.07	2.34	2.59	2.79	3.39	3.77	4000	9,860	1,110
		kW	0.87	1.43	1.55	1.74	1.93	2.08	2.53	2.81			
	$P_{1\text{TH}}$	hp	1.17	1.37	1.41	1.41	1.41	1.40	1.34	1.31			
		kW	0.87	1.02	1.05	1.05	1.05	1.04	1.00	0.98			
	$T_{2\text{ME}}$	lb-in	5,040	4,360	4,140	3,710	3,410	3,200	2,550	2,110			
		Nm	569	493	468	419	385	362	288	238			
$T_{2\text{ACC}}$	lb-in	5,090	5,040	5,010	4,860	4,570	4,360	3,650	3,200				
	Nm	575	569	566	549	516	493	413	362				
η	%	68	72	73	73	73	73	72	71				
60	$P_{1\text{ME}}$	hp	0.98	1.60	1.73	1.95	2.16	2.33	2.83	3.15	4000	9,700	1,100
		kW	0.73	1.19	1.29	1.46	1.62	1.74	2.11	2.35			
	$P_{1\text{TH}}$	hp	0.98	1.24	1.27	1.27	1.27	1.26	1.21	1.09			
		kW	0.73	0.92	0.95	0.95	0.95	0.94	0.90	0.81			
	$T_{2\text{ME}}$	lb-in	4,750	4,190	3,980	3,560	3,270	3,080	2,440	1,930			
		Nm	537	473	450	402	370	347	276	219			
$T_{2\text{ACC}}$	lb-in	4,850	4,750	4,730	4,600	4,390	4,190	3,510	3,080				
	Nm	548	537	534	520	497	473	396	347				
η	%	64	69	70	70	70	70	69	65				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG35 Single Reduction

i : 1	Ratings	Units	N_{1NOM} (rpm)								N_{1PK} rpm	T_{2MAX}	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
5	P_{1ME}	hp	11.70	17.50	19.00	21.50	23.50	24.90	28.90	32.10	4000	21,400	2,420
		kW	8.73	13.10	14.20	16.00	17.60	18.60	21.60	24.00			
	P_{1TH}	hp	8.33	9.38	9.38	9.38	9.38	9.21	7.95	7.50			
		kW	6.22	7.00	7.00	7.00	7.00	6.87	5.94	5.60			
	T_{2ME}	lb-in	6,710	5,080	4,790	4,290	3,900	3,610	2,750	2,280			
		Nm	758	574	541	485	440	408	311	257			
T_{2ACC}	lb-in	7,720	6,710	6,410	5,850	5,410	5,080	4,220	3,610				
	Nm	872	758	724	661	611	574	477	408				
η	%	91	92	92	92	92	92	91	90				
6	P_{1ME}	hp	11.00	16.70	18.00	20.40	22.40	23.90	27.50	30.70	4000	23,300	2,640
		kW	8.24	12.50	13.50	15.20	16.70	17.80	20.60	22.90			
	P_{1TH}	hp	7.65	8.93	8.93	8.93	8.93	8.78	7.63	7.21			
		kW	5.71	6.66	6.66	6.66	6.66	6.55	5.69	5.38			
	T_{2ME}	lb-in	7,530	5,780	5,430	4,880	4,430	4,130	3,130	2,600			
		Nm	851	653	614	551	501	466	354	294			
T_{2ACC}	lb-in	8,570	7,530	7,200	6,630	6,140	5,780	4,800	4,130				
	Nm	969	851	814	749	693	653	542	466				
η	%	90	92	92	92	92	91	90	90				
7	P_{1ME}	hp	10.20	15.50	16.70	18.90	20.80	22.10	25.80	28.60	4000	24,200	2,730
		kW	7.59	11.50	12.40	14.10	15.50	16.50	19.30	21.30			
	P_{1TH}	hp	7.08	8.52	8.52	8.52	8.52	8.39	7.33	6.94			
		kW	5.28	6.36	6.36	6.36	6.36	6.26	5.47	5.18			
	T_{2ME}	lb-in	8,020	6,220	5,830	5,240	4,780	4,450	3,410	2,810			
		Nm	906	703	659	593	540	503	386	318			
T_{2ACC}	lb-in	9,080	8,020	7,680	7,130	6,580	6,220	5,170	4,450				
	Nm	1,030	906	868	806	744	703	584	503				
η	%	89	91	91	91	91	91	90	89				
8	P_{1ME}	hp	9.68	14.90	16.00	18.20	20.00	21.50	25.40	27.90	4000	25,300	2,860
		kW	7.23	11.10	12.00	13.60	15.00	16.00	18.90	20.80			
	P_{1TH}	hp	6.58	8.15	8.15	8.15	8.15	8.03	7.06	6.70			
		kW	4.91	6.08	6.08	6.08	6.08	5.99	5.27	5.00			
	T_{2ME}	lb-in	8,650	6,840	6,380	5,740	5,240	4,910	3,810	3,120			
		Nm	978	772	721	649	593	554	431	353			
T_{2ACC}	lb-in	9,640	8,650	8,310	7,790	7,220	6,840	5,660	4,910				
	Nm	1,090	978	939	880	816	772	639	554				
η	%	89	91	91	91	91	91	89	89				
9	P_{1ME}	hp	8.91	13.80	14.80	16.90	18.60	19.80	23.50	25.90	4000	25,400	2,870
		kW	6.65	10.30	11.10	12.60	13.90	14.80	17.60	19.30			
	P_{1TH}	hp	6.15	7.81	7.81	7.81	7.81	7.70	6.80	6.47			
		kW	4.59	5.83	5.83	5.83	5.83	5.74	5.08	4.83			
	T_{2ME}	lb-in	8,880	7,080	6,610	5,960	5,460	5,080	3,960	3,250			
		Nm	1,000	800	746	674	616	574	448	367			
T_{2ACC}	lb-in	9,890	8,880	8,550	8,050	7,470	7,080	5,860	5,080				
	Nm	1,120	1,000	966	910	844	800	662	574				
η	%	88	90	90	90	90	90	89	88				
10	P_{1ME}	hp	8.31	12.90	13.90	15.70	17.40	18.50	22.00	24.10	4000	25,500	2,880
		kW	6.20	9.62	10.30	11.70	13.00	13.80	16.40	18.00			
	P_{1TH}	hp	5.77	7.50	7.50	7.50	7.50	7.39	6.56	6.25			
		kW	4.31	5.60	5.60	5.60	5.60	5.52	4.90	4.66			
	T_{2ME}	lb-in	9,110	7,320	6,840	6,160	5,640	5,250	4,100	3,340			
		Nm	1,030	827	773	696	637	593	463	378			
T_{2ACC}	lb-in	10,100	9,110	8,780	8,310	7,690	7,320	6,030	5,250				
	Nm	1,140	1,030	992	939	869	827	681	593				
η	%	87	90	90	90	90	90	89	88				
15	P_{1ME}	hp	6.77	10.60	11.40	12.90	14.30	15.30	18.20	19.90	4000	25,600	2,890
		kW	5.05	7.90	8.50	9.64	10.70	11.40	13.60	14.90			
	P_{1TH}	hp	4.74	6.25	6.25	6.25	6.25	6.18	5.59	5.36			
		kW	3.54	4.66	4.66	4.66	4.66	4.61	4.17	4.00			
	T_{2ME}	lb-in	10,800	8,800	8,240	7,410	6,790	6,340	4,970	4,050			
		Nm	1,220	995	931	837	767	716	561	457			
T_{2ACC}	lb-in	11,700	10,800	10,500	9,860	9,250	8,800	7,290	6,340				
	Nm	1,320	1,220	1,190	1,110	1,050	995	824	716				
η	%	84	88	88	88	88	88	87	86				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG35 Single Reduction

i : 1	Ratings	Units	N_{1NOM} (rpm)								N_{1PK} rpm	T_{2MAX}	
			500	1,000	1,150	1,450	1,750	2,000	3,000	4,000		lb-in	Nm
20	P_{1ME}	hp	5.19	8.13	8.76	9.92	11.00	11.70	14.00	15.40	4000	24,800	2,800
		kW	3.88	6.06	6.54	7.41	8.20	8.75	10.50	11.50			
	P_{1TH}	hp	4.02	4.69	4.69	5.00	5.00	4.95	4.57	4.41			
		kW	3.00	3.50	3.50	3.73	3.73	3.70	3.41	3.29			
	T_{2ME}	lb-in	10,700	8,600	8,060	7,330	6,720	6,270	4,930	4,020			
		Nm	1,200	972	911	829	760	709	556	454			
T_{2ACC}	lb-in	11,400	10,700	10,500	9,740	9,050	8,600	7,210	6,270				
	Nm	1,280	1,200	1,180	1,100	1,020	972	814	709				
η	%	81	84	84	85	85	85	84	83				
25	P_{1ME}	hp	4.19	6.56	7.06	8.02	8.87	9.48	11.40	12.40	4000	23,600	2,670
		kW	3.13	4.90	5.27	5.98	6.62	7.07	8.47	9.24			
	P_{1TH}	hp	3.95	4.48	4.69	4.69	4.69	4.65	4.30	4.17			
		kW	2.95	3.34	3.50	3.50	3.50	3.47	3.21	3.11			
	T_{2ME}	lb-in	10,700	8,610	8,130	7,320	6,710	6,260	4,920	4,000			
		Nm	1,210	973	919	827	758	708	556	452			
T_{2ACC}	lb-in	11,200	10,700	10,300	9,600	9,130	8,610	7,190	6,260				
	Nm	1,260	1,210	1,170	1,080	1,030	973	812	708				
η	%	81	83	84	84	84	84	83	82				
30	P_{1ME}	hp	3.51	5.49	5.91	6.71	7.42	7.93	9.51	10.40	4000	22,700	2,570
		kW	2.62	4.09	4.41	5.01	5.54	5.92	7.10	7.73			
	P_{1TH}	hp	2.90	3.62	3.75	3.75	3.75	3.72	3.50	3.41			
		kW	2.17	2.70	2.80	2.80	2.80	2.78	2.61	2.54			
	T_{2ME}	lb-in	9,830	8,220	7,770	7,000	6,420	5,990	4,710	3,820			
		Nm	1,110	929	878	791	725	676	532	432			
T_{2ACC}	lb-in	10,600	9,830	9,590	9,270	8,720	8,220	6,870	5,990				
	Nm	1,200	1,110	1,080	1,050	985	929	777	676				
η	%	74	79	80	80	80	80	79	78				
40	P_{1ME}	hp	2.64	4.14	4.46	5.07	5.60	5.98	7.18	7.83	4000	20,500	2,310
		kW	1.97	3.09	3.33	3.78	4.18	4.46	5.36	5.84			
	P_{1TH}	hp	2.53	3.03	3.12	3.12	3.12	3.11	2.95	2.88			
		kW	1.89	2.26	2.33	2.33	2.33	2.32	2.20	2.15			
	T_{2ME}	lb-in	9,370	7,860	7,430	6,690	6,130	5,720	4,500	3,650			
		Nm	1,060	888	840	756	693	646	508	413			
T_{2ACC}	lb-in	9,670	9,370	9,240	8,970	8,320	7,860	6,580	5,720				
	Nm	1,090	1,060	1,040	1,010	941	888	743	646				
η	%	70	75	76	76	76	76	75	74				
50	P_{1ME}	hp	2.12	3.32	3.58	4.06	4.50	4.80	5.76	6.29	4000	18,200	2,050
		kW	1.58	2.48	2.67	3.03	3.36	3.58	4.30	4.69			
	P_{1TH}	hp	2.12	2.70	2.78	2.78	2.78	2.76	2.64	2.59			
		kW	1.58	2.02	2.07	2.07	2.07	2.06	1.97	1.93			
	T_{2ME}	lb-in	9,120	7,570	7,160	6,450	5,910	5,510	4,330	3,520			
		Nm	1,030	855	809	728	668	622	489	397			
T_{2ACC}	lb-in	9,340	9,120	9,010	8,630	8,020	7,570	6,330	5,510				
	Nm	1,060	1,030	1,020	975	906	855	716	622				
η	%	68	72	73	73	73	73	72	71				
60	P_{1ME}	hp	1.77	2.78	2.99	3.39	3.75	4.01	4.81	5.25	4000	17,900	2,020
		kW	1.32	2.07	2.23	2.53	2.80	2.99	3.59	3.92			
	P_{1TH}	hp	1.77	2.44	2.50	2.50	2.50	2.49	2.39	2.14			
		kW	1.32	1.82	1.87	1.87	1.87	1.86	1.78	1.60			
	T_{2ME}	lb-in	8,610	7,280	6,890	6,190	5,680	5,290	4,160	3,230			
		Nm	972	822	778	700	642	598	470	365			
T_{2ACC}	lb-in	8,910	8,610	8,510	8,170	7,700	7,280	6,080	5,290				
	Nm	1,010	972	961	923	870	822	688	598				
η	%	64	69	70	70	70	70	69	65				

Other ratios are available. Please contact Cone Drive for ratios and ratings.
See page 43 for rating definitions.

RG 20 & 25 Double Reduction

Overall Ratio	Primary Ratio	Worm Ratio	Ratings	Units	RG20 DOUBLE REDUCTION					RG25 DOUBLE REDUCTION				
					$N_{1\text{NOM}}$		$N_{1\text{PK}}$	$T_{2\text{MAX}}$		$N_{1\text{NOM}}$		$N_{1\text{PK}}$	$T_{2\text{MAX}}$	
					1,150	1,750		rpm	lb-in	Nm	1,150		1,750	rpm
40	4	10	$P_{1\text{ME}}$	hp	0.87	1.25	3000	3,910	442	3000	7,380	834	1.69	2.44
				kW	0.65	0.93							1.26	1.82
			$P_{1\text{TH}}$	hp	0.87	1.25							1.69	2.38
				kW	0.65	0.93							1.26	1.78
			$T_{2\text{ME}}$	lb-in	1,570	1,490							3,060	2,900
				Nm	177	168							346	327
η	%	83	83	83	83									
50	5	10	$P_{1\text{ME}}$	hp	0.71	1.03	3000	3,910	442	3000	7,350	830	1.39	2.01
				kW	0.53	0.77							1.04	1.50
			$P_{1\text{TH}}$	hp	0.71	1.03							1.39	2.01
				kW	0.53	0.77							1.04	1.50
			$T_{2\text{ME}}$	lb-in	1,590	1,530							3,110	2,990
				Nm	180	173							352	338
η	%	82	83	82	83									
60	4	15	$P_{1\text{ME}}$	hp	0.70	1.01	3000	3,930	444	3000	7,790	880	1.37	1.98
				kW	0.52	0.76							1.02	1.48
			$P_{1\text{TH}}$	hp	0.70	1.01							1.37	1.98
				kW	0.52	0.76							1.02	1.48
			$T_{2\text{ME}}$	lb-in	1,820	1,770							3,550	3,450
				Nm	206	200							401	390
η	%	79	81	79	81									
75	5	15	$P_{1\text{ME}}$	hp	0.58	0.83	3000	3,930	444	3000	7,790	880	1.13	1.63
				kW	0.43	0.62							0.84	1.22
			$P_{1\text{TH}}$	hp	0.58	0.83							1.13	1.63
				kW	0.43	0.62							0.84	1.22
			$T_{2\text{ME}}$	lb-in	1,850	1,800							3,610	3,510
				Nm	209	203							408	397
η	%	78	80	78	80									
80	4	20	$P_{1\text{ME}}$	hp	0.54	0.78	3000	3,800	429	3000	7,540	851	1.05	1.52
				kW	0.40	0.58							0.78	1.13
			$P_{1\text{TH}}$	hp	0.54	0.78							1.05	1.52
				kW	0.40	0.58							0.78	1.13
			$T_{2\text{ME}}$	lb-in	1,770	1,740							3,450	3,390
				Nm	200	196							390	384
η	%	75	78	75	78									
100	4	25	$P_{1\text{ME}}$	hp	0.43	0.63	3000	3,620	409	3000	7,180	812	0.85	1.22
				kW	0.32	0.47							0.63	0.91
			$P_{1\text{TH}}$	hp	0.43	0.63							0.85	1.22
				kW	0.32	0.47							0.63	0.91
			$T_{2\text{ME}}$	lb-in	1,740	1,710							3,380	3,330
				Nm	196	193							382	377
η	%	73	76	73	76									
120	4	30	$P_{1\text{ME}}$	hp	0.36	0.52	3000	3,480	393	3000	6,900	780	0.71	1.02
				kW	0.27	0.39							0.53	0.76
			$P_{1\text{TH}}$	hp	0.36	0.52							0.71	1.02
				kW	0.27	0.39							0.53	0.76
			$T_{2\text{ME}}$	lb-in	1,650	1,610							3,220	3,130
				Nm	186	181							363	354
η	%	69	71	69	71									
125	5	25	$P_{1\text{ME}}$	hp	0.36	0.51	3000	3,620	409	3000	7,180	812	0.70	1.01
				kW	0.27	0.38							0.52	0.75
			$P_{1\text{TH}}$	hp	0.36	0.51							0.70	1.01
				kW	0.27	0.38							0.52	0.75
			$T_{2\text{ME}}$	lb-in	1,760	1,730							3,430	3,390
				Nm	199	196							388	383
η	%	72	75	72	75									
150	10	15	$P_{1\text{ME}}$	hp	0.31	0.46	3000	3,930	444	3000	7,060	798	0.59	0.89
				kW	0.23	0.34							0.44	0.67
			$P_{1\text{TH}}$	hp	0.31	0.46							0.59	0.89
				kW	0.23	0.34							0.44	0.67
			$T_{2\text{ME}}$	lb-in	1,940	1,910							3,670	3,750
				Nm	219	216							415	423
η	%	76	78	76	78									

See page 43 for rating definitions.

RG 20 & 25 Double Reduction

Overall Ratio	Primary Ratio	Worm Ratio	Ratings	Units	RG20 DOUBLE REDUCTION					RG25 DOUBLE REDUCTION				
					$N_{1\text{ NOM}}$		$N_{1\text{ PK}}$	$T_{2\text{ MAX}}$		$N_{1\text{ NOM}}$		$N_{1\text{ PK}}$	$T_{2\text{ MAX}}$	
					1,150	1,750		rpm	lb-in	Nm	1,150		1,750	rpm
160	4	40	$P_{1\text{ ME}}$	hp	0.27	0.39	3000	3,140	354	3000	6,220	703	0.53	0.77
				kW	0.20	0.29							0.40	0.57
			$P_{1\text{ TH}}$	hp	0.27	0.39							0.53	0.77
				kW	0.20	0.29							0.40	0.57
			$T_{2\text{ ME}}$	lb-in	1,520	1,520							2,970	2,980
				Nm	172	172							335	336
η	%	63	67	63	67									
200	10	20	$P_{1\text{ ME}}$	hp	0.24	0.35	3000	3,800	429	3000	7,540	851	0.47	0.68
				kW	0.18	0.26							0.35	0.51
			$P_{1\text{ TH}}$	hp	0.24	0.35							0.47	0.68
				kW	0.18	0.26							0.35	0.51
			$T_{2\text{ ME}}$	lb-in	1,880	1,850							3,710	3,640
				Nm	212	210							419	411
η	%	72	74	72	74									
240	4	60	$P_{1\text{ ME}}$	hp	0.18	0.26	3000	2,740	309	3000	5,430	613	0.36	0.51
				kW	0.14	0.20							0.27	0.38
			$P_{1\text{ TH}}$	hp	0.18	0.26							0.36	0.51
				kW	0.14	0.20							0.27	0.38
			$T_{2\text{ ME}}$	lb-in	1,390	1,400							2,710	2,730
				Nm	157	158							306	309
η	%	58	61	58	61									
250	10	25	$P_{1\text{ ME}}$	hp	0.19	0.28	3000	3,620	409	3000	7,180	812	0.38	0.55
				kW	0.14	0.21							0.28	0.41
			$P_{1\text{ TH}}$	hp	0.19	0.28							0.38	0.55
				kW	0.14	0.21							0.28	0.41
			$T_{2\text{ ME}}$	lb-in	1,790	1,780							3,540	3,500
				Nm	202	202							400	396
η	%	68	71	68	71									
300	10	30	$P_{1\text{ ME}}$	hp	0.16	0.23	3000	3,480	393	3000	6,900	780	0.32	0.46
				kW	0.12	0.18							0.24	0.34
			$P_{1\text{ TH}}$	hp	0.16	0.23							0.32	0.46
				kW	0.12	0.18							0.24	0.34
			$T_{2\text{ ME}}$	lb-in	1,720	1,710							3,400	3,340
				Nm	194	193							384	378
η	%	65	67	65	67									
400	10	40	$P_{1\text{ ME}}$	hp	0.12	0.18	3000	3,140	354	3000	6,220	703	0.24	0.35
				kW	0.09	0.13							0.18	0.26
			$P_{1\text{ TH}}$	hp	0.12	0.18							0.24	0.35
				kW	0.09	0.13							0.18	0.26
			$T_{2\text{ ME}}$	lb-in	1,550	1,540							3,060	3,020
				Nm	175	174							346	341
η	%	59	60	59	60									
500	10	50	$P_{1\text{ ME}}$	hp	0.10	0.14	3000	2,780	315	3000	5,520	624	0.19	0.28
				kW	0.07	0.11							0.14	0.21
			$P_{1\text{ TH}}$	hp	0.10	0.14							0.19	0.28
				kW	0.07	0.11							0.14	0.21
			$T_{2\text{ ME}}$	lb-in	1,390	1,440							2,750	2,820
				Nm	157	163							311	319
η	%	52	56	52	56									
600	10	60	$P_{1\text{ ME}}$	hp	0.08	0.12	3000	2,740	309	3000	5,430	613	0.16	0.23
				kW	0.06	0.09							0.12	0.17
			$P_{1\text{ TH}}$	hp	0.08	0.12							0.16	0.23
				kW	0.06	0.09							0.12	0.17
			$T_{2\text{ ME}}$	lb-in	1,360	1,420							2,700	2,780
				Nm	154	160							306	314
η	%	51	55	51	55									

See page 43 for rating definitions.

RG 20 & 25 Double Reduction

Overall Ratio	Primary Ratio	Worm Ratio	Ratings	Units	RG30 DOUBLE REDUCTION					RG35 DOUBLE REDUCTION				
					$N_{1\text{NOM}}$		$N_{1\text{PK}}$ rpm	$T_{2\text{MAX}}$		$N_{1\text{NOM}}$		$N_{1\text{PK}}$ rpm	$T_{2\text{MAX}}$	
					1,150	1,750		lb-in	Nm	1,150	1,750		lb-in	Nm
40	4	10	$P_{1\text{ME}}$	hp	2.10	3.20	3000	7,380	834	2.10	3.20	3000	7,380	834
				kW	1.57	2.39				1.57	2.39			
			$P_{1\text{TH}}$	hp	2.10	2.83				2.10	3.20			
				kW	1.57	2.11				1.57	2.39			
			$T_{2\text{ME}}$	lb-in	3,810	3,810				3,810	3,810			
				Nm	430	430				430	430			
η	%	83	83	83	83									
50	5	10	$P_{1\text{ME}}$	hp	1.68	2.56	3000	7,350	830	1.68	2.56	3000	7,350	830
				kW	1.26	1.91				1.26	1.91			
			$P_{1\text{TH}}$	hp	1.68	2.56				1.68	2.56			
				kW	1.26	1.91				1.26	1.91			
			$T_{2\text{ME}}$	lb-in	3,760	3,810				3,760	3,810			
				Nm	425	430				425	430			
η	%	82	83	82	83									
60	4	15	$P_{1\text{ME}}$	hp	2.10	3.20	3000	10,500	1,190	2.10	3.20	3000	10,500	1,190
				kW	1.57	2.39				1.57	2.39			
			$P_{1\text{TH}}$	hp	2.10	2.47				2.10	3.20			
				kW	1.57	1.85				1.57	2.39			
			$T_{2\text{ME}}$	lb-in	5,440	5,580				5,440	5,580			
				Nm	615	630				615	630			
η	%	79	81	79	81									
75	5	15	$P_{1\text{ME}}$	hp	1.68	2.56	3000	10,500	1,190	1.68	2.56	3000	10,500	1,190
				kW	1.26	1.91				1.26	1.91			
			$P_{1\text{TH}}$	hp	1.68	2.33				1.68	2.56			
				kW	1.26	1.74				1.26	1.91			
			$T_{2\text{ME}}$	lb-in	5,380	5,510				5,380	5,510			
				Nm	608	623				608	623			
η	%	78	80	78	80									
80	4	20	$P_{1\text{ME}}$	hp	1.87	2.68	3000	13,300	1,510	2.10	3.20	3000	13,300	1,510
				kW	1.39	2.00				1.57	2.39			
			$P_{1\text{TH}}$	hp	1.80	2.08				2.10	3.20			
				kW	1.34	1.55				1.57	2.39			
			$T_{2\text{ME}}$	lb-in	6,130	6,010				6,900	7,170			
				Nm	693	679				780	810			
η	%	75	78	75	78									
100	4	25	$P_{1\text{ME}}$	hp	1.51	2.16	3000	12,800	1,450	2.10	3.20	3000	15,800	1,780
				kW	1.12	1.61				1.57	2.39			
			$P_{1\text{TH}}$	hp	1.51	1.88				2.10	3.20			
				kW	1.12	1.41				1.57	2.39			
			$T_{2\text{ME}}$	lb-in	6,020	5,910				8,410	8,740			
				Nm	681	668				950	988			
η	%	73	76	73	76									
120	4	30	$P_{1\text{ME}}$	hp	1.26	1.81	3000	12,300	1,390	2.10	3.20	3000	18,200	2,050
				kW	0.94	1.35				1.57	2.39			
			$P_{1\text{TH}}$	hp	1.26	1.52				2.10	3.00			
				kW	0.94	1.14				1.57	2.24			
			$T_{2\text{ME}}$	lb-in	5,730	5,560				9,560	9,820			
				Nm	647	628				1,080	1,110			
η	%	69	71	69	71									
125	5	25	$P_{1\text{ME}}$	hp	1.24	1.79	3000	12,800	1,450	1.68	2.56	3000	15,700	1,780
				kW	0.93	1.34				1.26	1.91			
			$P_{1\text{TH}}$	hp	1.24	1.79				1.68	2.56			
				kW	0.93	1.34				1.26	1.91			
			$T_{2\text{ME}}$	lb-in	6,120	6,040				8,300	8,640			
				Nm	691	682				938	976			
η	%	72	75	72	75									
150	10	15	$P_{1\text{ME}}$	hp	0.59	0.90	3000	7,060	798	0.59	0.90	3000	7,060	798
				kW	0.44	0.67				0.44	0.67			
			$P_{1\text{TH}}$	hp	0.59	0.90				0.59	0.90			
				kW	0.44	0.67				0.44	0.67			
			$T_{2\text{ME}}$	lb-in	3,670	3,760				3,670	3,760			
				Nm	415	425				415	425			
η	%	76	78	76	78									

See page 43 for rating definitions.

RG 30 & 35 Double Reduction

Overall Ratio	Primary Ratio	Worm Ratio	Ratings	Units	RG30 DOUBLE REDUCTION					RG35 DOUBLE REDUCTION				
					$N_{1\text{ NOM}}$		$N_{1\text{ PK}}$	$T_{2\text{ MAX}}$		$N_{1\text{ NOM}}$		$N_{1\text{ PK}}$	$T_{2\text{ MAX}}$	
					1,150	1,750		rpm	lb-in	Nm	1,150		1,750	rpm
160	4	40	$P_{1\text{ ME}}$	hp	0.95	1.36	3000	11,100	1,260	3000	20,500	2,310		
				kW	0.71	1.02								
			$P_{1\text{ TH}}$	hp	0.95	1.32								
				kW	0.71	0.98								
			$T_{2\text{ ME}}$	lb-in	5,270	5,280								
				Nm	596	596								
η	%	63	67											
200	10	20	$P_{1\text{ ME}}$	hp	0.59	0.90	3000	8,800	994	3000	8,800	994		
				kW	0.44	0.67								
			$P_{1\text{ TH}}$	hp	0.59	0.90								
				kW	0.44	0.67								
			$T_{2\text{ ME}}$	lb-in	4,650	4,770								
				Nm	525	539								
η	%	72	74											
240	4	60	$P_{1\text{ ME}}$	hp	0.64	0.91	3000	9,700	1,100	3000	17,900	2,020		
				kW	0.47	0.68								
			$P_{1\text{ TH}}$	hp	0.64	0.91								
				kW	0.47	0.68								
			$T_{2\text{ ME}}$	lb-in	4,810	4,850								
				Nm	544	548								
η	%	58	61											
250	10	25	$P_{1\text{ ME}}$	hp	0.59	0.90	3000	10,400	1,170	3000	10,400	1,170		
				kW	0.44	0.67								
			$P_{1\text{ TH}}$	hp	0.59	0.90								
				kW	0.44	0.67								
			$T_{2\text{ ME}}$	lb-in	5,500	5,700								
				Nm	621	644								
η	%	68	71											
300	10	30	$P_{1\text{ ME}}$	hp	0.57	0.82	3000	11,900	1,340	3000	11,900	1,340		
				kW	0.42	0.61								
			$P_{1\text{ TH}}$	hp	0.57	0.82								
				kW	0.42	0.61								
			$T_{2\text{ ME}}$	lb-in	6,070	5,940								
				Nm	685	671								
η	%	65	67											
400	10	40	$P_{1\text{ ME}}$	hp	0.43	0.62	3000	11,100	1,260	3000	14,100	1,600		
				kW	0.32	0.46								
			$P_{1\text{ TH}}$	hp	0.43	0.62								
				kW	0.32	0.46								
			$T_{2\text{ ME}}$	lb-in	5,470	5,370								
				Nm	618	607								
η	%	59	60											
500	10	50	$P_{1\text{ ME}}$	hp	0.34	0.49	3000	9,860	1,110	3000	15,500	1,750		
				kW	0.26	0.37								
			$P_{1\text{ TH}}$	hp	0.34	0.49								
				kW	0.26	0.37								
			$T_{2\text{ ME}}$	lb-in	4,900	5,010								
				Nm	553	566								
η	%	52	56											
600	10	60	$P_{1\text{ ME}}$	hp	0.29	0.41	3000	9,700	1,100	3000	17,900	2,020		
				kW	0.21	0.31								
			$P_{1\text{ TH}}$	hp	0.29	0.41								
				kW	0.21	0.31								
			$T_{2\text{ ME}}$	lb-in	4,820	4,930								
				Nm	544	557								
η	%	51	55											

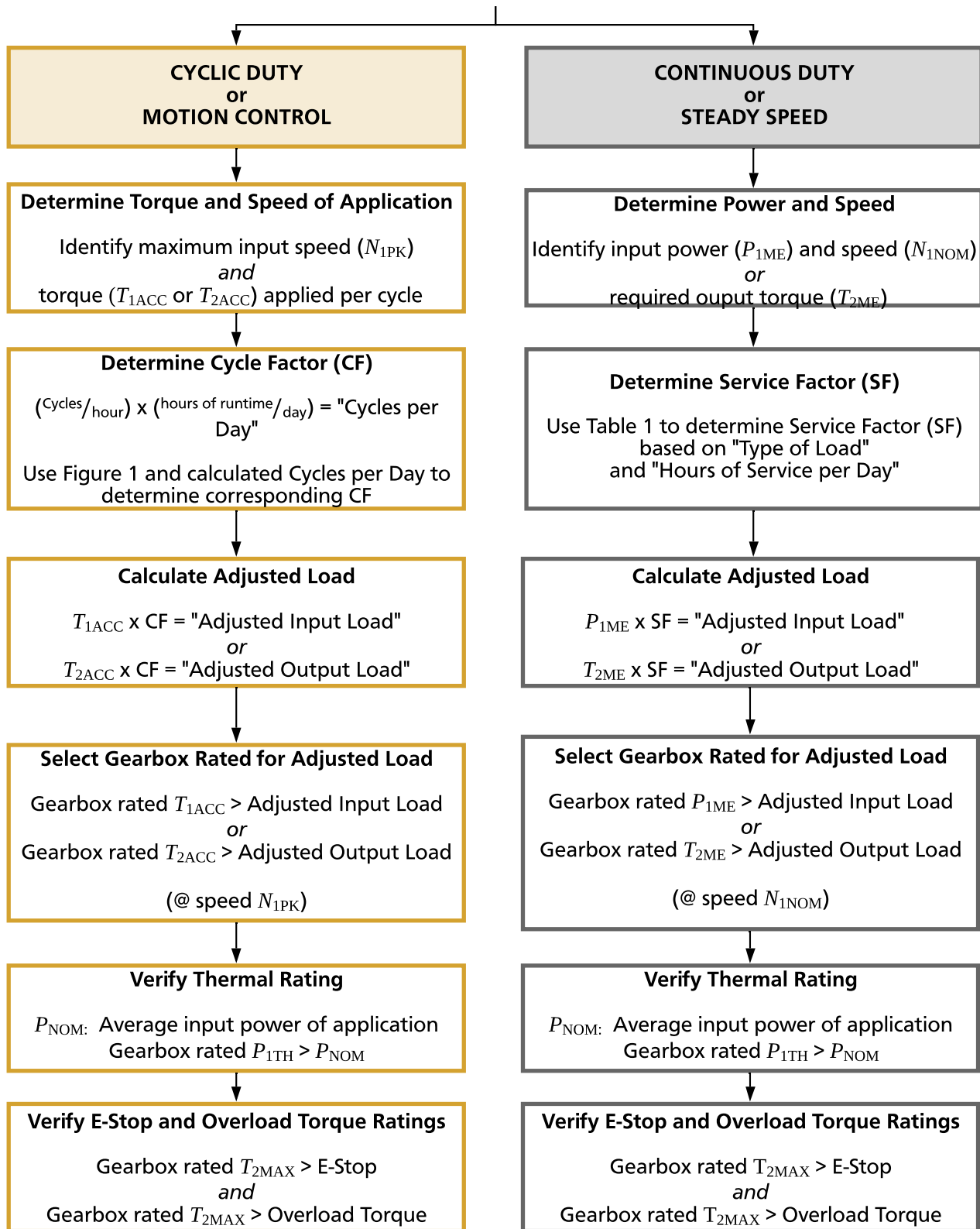
See page 43 for rating definitions.



S E R I E S R G

Product Selection Process

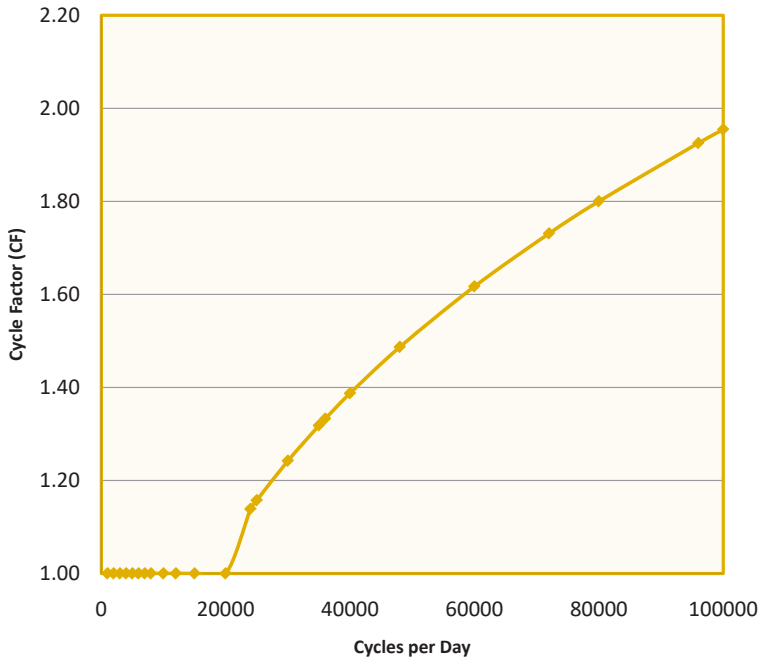
APPLICATION TYPE



See appendix on next page for referenced nomenclature and conversions

CYCLE FACTOR

FOR CYCLIC DUTY OR MOTION CONTROL APPLICATIONS



SERVICE FACTOR FOR CONTINUOUS DUTY OR STEADY SPEED APPLICATIONS

Hours of Service per Day	TYPE OF LOAD			
	Uniform	Moderate	Heavy	Extreme
0.5	0.8	0.9	1.0	1.2
2	0.9	1.0	1.2	1.3
10	1.0	1.3	1.5	1.7
24	1.3	1.5	1.7	2.0

Appendix

REFERENCED NOMENCLATURE

SYMBOL	UNITS	PRODUCT RATING DEFINITIONS
i	—	Ratio
$N_{1\text{NOM}}$	RPM	Nominal input speed
$N_{1\text{PK}}$	RPM	Maximum cyclic input speed permissible
$P_{1\text{ME}}$	HP	Mechanical input power rating (SF = 1.0)
$P_{1\text{TH}}$	HP	Continuous average thermal input power rating
$T_{1\text{ME}}$	lb-in	Mechanical input torque rating (SF = 1.0)
$T_{1\text{ACC}}$	lb-in	Cyclic operation input torque rating
$T_{2\text{ME}}$	lb-in	Mechanical output torque rating (SF = 1.0)
$T_{2\text{ACC}}$	lb-in	Cyclic operation output torque rating
$T_{2\text{MAX}}$	lb-in	Maximum E-stop output torque
η	%	Efficiency

CONVERSION EQUATIONS

$$1. \quad T_2 = T_1 \times i \times \eta$$

$$2. \quad P_1 = \frac{(T_2 \times N_1)}{(63,000 \times i \times \eta)}$$

Lubrication

Series RG gearboxes are factory filled with synthetic lubricant. They require no lubrication service throughout the life of the unit. Series RG gearboxes are built for universal mounting; ready to mount in any position.

Installation

MOTOR ON GEARBOX:

1. Clean motor shaft and mating surfaces of the motor and gearbox to ensure they are dust free.
2. Slide the motor shaft into the coupling clamp ring until the gearbox and motor flanges are seated together. Install bolts to clamp the gearbox and motor flanges together.
3. Tighten the clamp ring screw through the access slot in the gearbox flange to the following torque settings:

	UNIT SIZE				
	RG15	RG20	RG25	RG30	RG35
lb. in.	90	90	95	95	220
Nm.	10	10	10.5	10.5	25

4. Replace the urethane plug in the access slot.

HOLLOW SHAFT UNITS:

1. Place key in driven shaft.
2. Slide hollow shaft unit onto the driven shaft.
3. Secure unit to machine base using either a mounting base or torque arm.

SOLID SHAFT UNITS:

1. The gearbox must be securely mounted to a rigid flat foundation or base plate. If necessary, shim under the gearbox to provide a flat mounting surface.
2. Four mounting bolts are required to mount all gearboxes. If the gearbox will be subjected to heavy overhung load or thrust loading, heat treated mounting bolts must be used to prevent stretching and loosening of the bolts.
3. The output shaft of the gearbox should be coupled to the driven shaft with a flexible coupling and the gearbox aligned with the shaft, within ± 0.001 ". Solid or rigid couplings should be avoided. Failure to properly align shafts and the use of solid couplings can result in excessive coupling and bearing wear, shaft deflection and eventual failure of one or more of the components.

ANCILLARY COMPONENTS:

1. Couplings, sheaves and sprockets should be mounted on the reducer shafts carefully. Do not pound or hammer them onto the shafts as this will damage bearings and oil seals.
2. Sprockets and sheaves should be mounted as close to the gearbox as possible and "V" belts and chains adjusted to the proper tension to keep bearing loading and shaft deflection to a minimum. Too much tension in belts and improper location of sheaves and sprockets will lead to excessive overhung load, bearing wear and shaft deflection. For specific information on overhung load capacity, shaft stress, and bearing life, please contact Cone Drive.

Start-Up

1. After the gearbox has been properly mounted and aligned, it is ready for start-up.
2. Make sure driven machine is clear of all obstructions and all safety guards and covers are in place. If possible, turn motor shaft by hand to confirm drive system is operating freely and in correct direction of rotation.
3. Jog motor to confirm proper rotation.
4. Operate gearbox with minimum load for approximately 15 minutes (in both directions if applicable) to seal gears, bearings, and oil seals.

Operation

1. All gearboxes require a "run-in" period under load to achieve optimum efficiency. During this initial run-in the gearbox will probably run warmer than normal and draw more current than after the run-in period. Gearboxes operating at a very low load or speed will take much longer to run-in and even if operated continuously at low load or speed may never achieve the efficiency that they would if operated at or near their catalog rating.
2. IMPORTANT: Normal gearbox operating temperature measured at the oil sump area of the housing should not exceed 100°F above ambient temperature or 210°F maximum. If the gearbox operating temperature exceeds these limits, shut down the unit and contact Cone Drive. Excessive oil sump temperature is indicative of overloading, misalignment, or improper or marginal lubrication. Continuous operation of the gearbox with the oil sump temperature above will result in failure of the gearbox.

Maintenance

1. If a gearbox has to be repaired, contact Cone Drive for detailed instruction, blueprints, parts lists, etc. If necessary, field service is available.
2. If a gearbox is to be returned, contact Cone Drive for instructions and a returned material authorization (RMA) number.
3. Please have model number information from the unit name plate recorded.

SAFETY PRECAUTIONS

IMPORTANT: In any applications of Cone Drive Products where breakage, damage, disconnection, any other malfunction of any drive train component, or excessive wear could result in personal injury or property damage, a fail-safe device capable of stopping and holding the load in the event of such an occurrence must be incorporated after the drive train.

THE FOLLOWING INFORMATION IS FOR YOUR PROTECTION. DO NOT ATTEMPT TO INSTALL OR OPERATE THIS GEARBOX UNTIL ALL OF THESE INSTRUCTIONS ARE READ AND THOROUGHLY UNDERSTOOD.

SELF-LOCKING

It is a common misconception that all worm gears are self-locking or non-overhauling. Actually, worm gear ratios up to 15:1 will overhaul quite freely. Ratios from 20:1 to 40:1 can generally be considered as overhauling with difficulty (particularly from rest). Ratios above 40:1 may or may not overhaul depending on loading, lubrication, and the amount of vibration present. Cone Drive cannot guarantee any worm gear ratio to be self-locking. There have been instances where single reduction ratios as high as 100:1 have overhauled. Therefore, it is not acceptable to rely on a worm gear to prevent movement in a system. Whenever a load must be stopped or held in place, a positive mechanical device must be incorporated into the system to prevent rotation of the gear set.

BACKDRIVING OR OVERHAULING

Applications such as wheel drives that require a brake on the motor or input shaft to decelerate a high inertial load require special attention to brake selection. Whenever possible, these applications should utilize freely overhauling ratios (15:1 or less). If self-locking ratios are used with a brake, the gear set can, under certain conditions, lock-up during decelerations and impose severe shock loading on the gearbox and driven equipment. Each reduction should be limited to 15:1 or less to allow the gearbox to overhaul. Contact Cone Drive for specific information on backdriving efficiency and brake selection.

RATINGS & SERVICE FACTORS

The horsepower or output torque capacity of this gearbox and the service factor (maximum allowable operating cycle) are documented in the product catalog. These values are not to be exceeded as overloading can result in gearbox failure. Exceeding the rating and duty cycle will void the warranty. Please contact Cone Drive with any questions regarding rating and service factors.

ALTERATION

Do not alter the gearbox without approval from Cone Drive.

OPERATION & REPAIR

This gearbox has moving mechanical components and may have connected electrical devices operating under high voltage. Operation and repair should only be done by qualified personnel.

PROTECTIVE GUARDING

Cone Drive products are furnished without guard covers. It is the responsibility of the purchase or user to provide guards for all exposed shafting, couplings, sprockets, sheaves, belts, chains, clutches, and any other moving parts in accordance with current local, state, and federal requirements.

LOCK-OUT/TAG-OUT

Before servicing a gearbox, the main electrical disconnect or other input power sources must be moved to and locked in the off-position. The person performing the work should post on that disconnect a warning to others not to turn on the power. Loads on the input and output shafts should be disconnected prior to working on the gearbox.

GEARBOX SURFACE IS HOT

It is normal for the gearbox to operate at temperatures up to and exceeding 200°F. To prevent burns, proper personal protective equipment, guards, or shields should be provided by the purchaser or user to prevent personnel from touching the gearbox.



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