

WEG Standard Product Catalog

Medium Voltage Motors | Alternators | DC Motors | Speed Reducers



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W22 Severe Duty Motors – TEFC

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TEFC SEVERE DUTY MV MOTORS

Standard Features:

- Voltage: 2300/4160V
- Frequency: 60Hz
- 1.15SF at D.O.L. starting and safe area
- Insulation Class F
- VPI Impregnation
- Class B Temperature Rise @ 1.00SF
- Class F Temperature Rise @ 1.15SF
- Aluminum Rotor (except where otherwise indicated)
- S1 Continuous Duty
- TEFC
- IP55 Protection Degree
- F1 Mounting
 - Field conversion from F1 to F2 mounting available for all motors 250HP and above
- D.O.L. Starting
- Direct coupling
- Direction of Rotation:
 - CW for 2P motors (250HP and above)
 - Dual for 2P (200HP), 4P and 6P motors
- Altitude: 3300 f.a.s.l.
- Ambient temperature: 40°C
- NEMA Premium® Efficiency (250HP and above)
- Grease lubricated antifriction (ball) bearings
- 100,000hs L10 bearings lifetime
- Final Color: Blue (RAL 5009)
- NEMA Type I main terminal box (loose leads)
- Automatic grease relief
- Grounding lugs on both sides of the frame
- 4140 Steel Shaft
- 36 Months warranty from manufacturing date

Standard Accessories:

- RTD Pt100 Temperature Detectors (02 per phase and 01 per bearing)
- Space Heater, 120V
- Provision (flat surface) for vibration sensors
- Provision for dowel pins

Severe Duty Features:

- Most relevant features of IEEE 841
- Vibration level as per IEEE 841
- Stainless Steel extended grease tubes
- INPRO/SEAL on DE and NDE sides
- 0.005" feet flatness
- Automatic threaded T-drains (stainless steel)
- Tropicalization
- IEEE 841 Test reports

V.F.D. Operation Features:

- 1.00SF at V.F.D. Operation
- Class B Temperature Rise @ 1.00SF
- Suitable for V.F.D. Operation
 - 10:1 VT with Class B temperature rise
 - 2:1 CT with Class F temperature rise
- Electrically Insulated N.D.E. bearing housing
- Helwig Shaft Grounding brush (Add-on Modification)

Note: A method of reducing common mode voltages from motor terminals must be utilized.

Hazardous Area Features:

- 1.00SF at Hazardous Area
- Class B Temperature Rise @ 1.00SF
- CSA Certification: Class I, Div. 2, Gr. A, B, C and D, T3 (Except 600HP 6P – Safe Area only)
- Non-sparking external fan

Add-on Modifications from Stock

Note: For Add-on modifications, see page A253.

Note: Special attention to Reciprocating Compressors applications where the motor design must be evaluated and confirmed in a case by case basis.

Medium Voltage Motors

HP	kW	RPM	NEMA Frame	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL. Eff (%)		“C” Dimension (in)	Voltage (V)	Notes
									2300V	4160V			
150	110	3600	L447/9TS	20036ET3XL449-W22MVR	\$38,054	MAQ2	2758	1.15	93.20	93.00	53.431	2300/4160	
		1800	L447/9T	20018ET3XL449-W22MVR	\$37,790	MAQ2	2608	1.15	93.30	93.30	57.181	2300/4160	
		1200	L447/9T	20012ET3XL449-W22MVR	\$43,039	MAQ2	2720	1.15	93.60	93.60	57.181	2300/4160	
200	150	3600	L447/9TS	20036ET3XL449-W22MV	\$38,054	MAQ2	2758	1.15	94.10	94.00	53.431	2300/4160	
		1800	L447/9T	20018ET3XL449-W22MV	\$37,790	MAQ2	2608	1.15	93.80	93.80	57.181	2300/4160	
		1200	L447/9T	20012ET3XL449-W22MV	\$43,039	MAQ2	2720	1.15	93.60	93.60	57.181	2300/4160	
250	185	3600	5009/10	25036ET3X5009-W50MV	\$42,512	MAQ2	4272	1.15	95.00	95.00	64.159	2300/4160	
		1800	5009/10	25018ET3X5009-W50MV	\$42,249	MAQ2	4457	1.15	95.00	95.00	70.035	2300/4160	
		1200	5009/10	25012ET3X5009-W50MV	\$48,810	MAQ2	4567	1.15	95.00	95.00	70.035	2300/4160	
300	220	3600	5009/10	30036ET3X5009-W50MV	\$51,698	MAQ2	4345	1.15	95.00	95.00	64.159	2300/4160	
		1800	5009/10	30018ET3X5009-W50MV	\$47,239	MAQ2	4283	1.15	95.00	95.00	70.035	2300/4160	
		1200	5009/10	30012ET3X5009-W50MV	\$55,371	MAQ2	4821	1.15	95.00	95.00	70.035	2300/4160	
350	260	3600	5009/10	40036ET3X5009-W50MVR	\$61,669	MAQ2	4707	1.15	95.00	95.00	64.159	2300/4160	47
		1800	5009/10	40018ET3X5009-W50MVR	\$60,848	MAQ2	4814	1.15	95.00	95.00	70.035	2300/4160	
		1200	5009/10	35012ET3X5009-W50MV	\$61,532	MAQ2	4825	1.15	95.00	95.00	70.035	2300/4160	
400	300	3600	5009/10	40036ET3X5009-W50MV	\$61,669	MAQ2	4707	1.15	95.00	95.00	64.159	2300/4160	47
		1800	5009/10	40018ET3X5009-W50MV	\$60,848	MAQ2	4814	1.15	95.00	95.00	70.035	2300/4160	
		1200	5809/10	40012ET3X5809-W50MV	\$68,812	MAQ2	6503	1.15	95.00	95.00	77.964	2300/4160	
450	330	3600	5809/10	50036ET3X5809-W50MVR	\$79,517	MAQ2	5915	1.15	95.20	95.20	71.089	2300/4160	
		1800	5009/10	50018ET3X5009-W50MVR	\$76,398	MAQ2	5008	1.15	95.00	95.00	70.035	2300/4160	47
		1200	5809/10	50012ET3X5809-W50MVR	\$89,970	MAQ2	6479	1.15	95.00	95.00	77.964	2300/4160	
500	370	3600	5809/10	50036ET3X5809-W50MV	\$79,517	MAQ2	5915	1.15	95.40	95.40	71.089	2300/4160	
		1800	5009/10	50018ET3X5009-W50MV	\$76,398	MAQ2	5008	1.15	95.00	95.00	70.035	2300/4160	47
		1200	5809/10	50012ET3X5809-W50MV	\$89,970	MAQ2	6479	1.15	95.00	95.00	77.964	2300/4160	
550	400	3600	5809/10	60036ET3X5809-W50MVR	\$86,864	MAQ2	6359	1.15	95.40	95.40	71.089	2300/4160	47
		1800	5809/10	60018ET3X5809-W50MVR	\$91,633	MAQ2	6351	1.15	95.40	95.40	77.964	2300/4160	
		1200	5809/10	60012ET3X5809-W50MVR	\$105,217	MAQ2	6803	1.15	95.00	95.00	77.964	2300/4160	47;48
600	440	3600	5809/10	60036ET3X5809-W50MV	\$86,864	MAQ2	6359	1.15	95.40	95.40	71.089	2300/4160	47
		1800	5809/10	60018ET3X5809-W50MV	\$91,633	MAQ2	6351	1.15	95.40	95.40	77.964	2300/4160	
		1200	5809/10	60012ET3X5809-W50MV	\$105,217	MAQ2	6803	1.15	95.00	95.00	77.964	2300/4160	47;48
650	480	1800	6806/07	70018ET3X6806-W50MVR	\$105,814	MAQ2	7686	1.15	95.40	95.40	78.224	2300/4160	47
		1200	6808/09	70012ET3X6808-W50MVR	\$117,307	MAQ2	9123	1.15	95.40	95.40	84.129	2300/4160	47
700	515	1800	6806/07	70018ET3X6806-W50MV	\$105,814	MAQ2	7686	1.15	95.40	95.40	78.224	2300/4160	47
		1200	6808/09	70012ET3X6808-W50MV	\$117,307	MAQ2	9123	1.15	95.40	95.40	84.129	2300/4160	47
750	560	1800	6808/09	80018ET3X6808-W50MVR	\$114,209	MAQ2	8704	1.15	95.40	95.40	84.129	2300/4160	
800	590	1800	6808/09	80018ET3X6808-W50MV	\$114,209	MAQ2	8704	1.15	95.40	95.40	84.129	2300/4160	

Please contact WEG for 50Hz MV motors from stock.



Add-On Modifications

NEMA FRAME			L447/9T	L447/9T	5000	5000	5800	5800	6800
			2P - MV	4/6P - MV	2P - MV	4/6P - MV	2P - MV	4/6P - MV	4/6P - MV
REPLATE	ADD CUSTOMER PART NUMBER AND / OR OTHER CHANGES SUCH AS VOLTAGE, HZ, ETC.								
MOD. NUMBER	NAMEPLATE								
N-30	Main Nameplate Change - Stainless Steel	NET	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00
N-40	Additional Nameplate - Stainless Steel	NET	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00
ELECTRICAL ADD-ON'S	INSTALLATION OF ENCODER								
E-100	Installation of Encoder - Dynapar HSD38 1024PPR & 5/8" stub shaft	LIST	\$1,145.00	\$1,145.00	\$1,876.00	\$1,876.00	\$2,176.00	\$2,176.00	\$2,426.00
E-120	Installation of Encoder - Additional Kit Required for Motors with Forced Ventilation (Motors designed with Ball Bearing at DE side)	LIST	\$680.00	\$680.00	\$1,064.00	\$1,064.00	\$1,157.00	\$1,157.00	\$1,203.00
E-130	Installation of Encoder - Additional Kit Required for Motors with Forced Ventilation (Motors designed with Roller Bearing at DE side)	LIST	N/A	\$876.00	N/A	\$1,089.00	N/A	\$1,218.00	\$1,263.00
C-FLANGE KIT	INSTALLATION OF C-FLANGE KITS								
C-90	Installation of C-FLANGE	LIST	\$1,793.00	\$1,793.00	\$3,071.00	\$3,071.00	\$3,517.00	\$3,517.00	\$4,190.00
D-FLANGE KIT	INSTALLATION OF D-FLANGE KITS								
D-130	Installation of D-FLANGE	LIST	\$1,711.00	\$1,711.00	\$2,613.00	\$2,613.00	\$3,041.00	\$3,041.00	\$3,421.00
COOLING	INSTALLATION OF BLOWER KIT (FORCED VENTILATION) AND CHANGE DIRECTION OF ROTATION								
F-210	Forced Ventilation (230/460V 60Hz): Blower Cooling (w/o Encoder) (Safe Area)	LIST	\$2,449.00	\$2,449.00	\$4,300.00	\$4,300.00	\$4,697.00	\$4,697.00	\$5,030.00
F-220	Forced Ventilation (240/480V 60Hz): Blower Cooling (w/o Encoder) (Hazardous Area)	LIST	N/A	N/A	\$4,576.00	\$4,576.00	\$5,118.00	\$5,118.00	\$5,625.00
F-230	Change Direction of Rotation - CCW External Fan for 2P motors	LIST	N/A	N/A	\$1,064.00	N/A	\$1,170.00	N/A	N/A
BEARINGS	BEARING CHANGE OUTS & SHAFT GROUNDING MODIFICATION								
B-200	Ball to Roller Bearing Conversion	LIST	N/A	\$1,813.00	N/A	\$2,544.00	N/A	\$2,714.00	\$2,934.00
B-250	Installation of Helwig Grounding Brush (Includes Brush and Brush Holder - DE only)	LIST	\$1,385.00	\$1,385.00	\$1,385.00	\$1,385.00	\$1,385.00	\$1,385.00	\$1,385.00
MOUNTING	TERMINAL BOX								
M-280	F1 to F2 Mounting Conversion	LIST	\$524.00	\$524.00	\$839.00	\$839.00	\$839.00	\$839.00	\$839.00
M-330	Oversized NEMA Type II Main Terminal Box	LIST	N/A	N/A	\$3,504.00	\$3,504.00	\$3,504.00	\$3,504.00	\$3,504.00
M-320	Install terminal block in terminal box	LIST	N/A	N/A	\$2,790.00	\$2,790.00	\$2,790.00	\$2,790.00	\$2,790.00

Electrical Data 2300V

Rated Output		Full Load Speed (RPM)	NEMA Frame	Locked Rotor Current (2300V)		Full Load Amps	2300V		
HP	kW			kVA Code	II/In		Full Load Torque - Tn (lb.ft)	Locked Rotor Torque (TI/Tn)	Breakdown torque (Tb/Tn)
150	110	3586	L447/9TS	M	11.4	36.1	220	2.40	3.70
		1789	L447/9T	K	8.0	37.9	440	1.80	2.80
		1189	L447/9T	K	7.7	40.4	662	2.00	2.80
200	150	3580	L447/9TS	K	8.7	47.1	293	1.80	2.80
		1786	L447/9T	G	6.0	48.4	588	1.40	2.10
		1185	L447/9T	G	6.0	51.6	886	1.50	2.10
250	185	3574	5009/10	G	6.4	55.5	367	1.00	2.10
		1783	5009/10	G	6.2	58.2	736	1.40	2.20
		1188	5009/10	G	5.7	61.9	1105	1.40	2.10
300	220	3575	5009/10	G	6.5	65.3	441	1.00	2.10
		1782	5009/10	G	6.2	68.4	884	1.40	2.10
		1183	5009/10	G	5.8	73.6	1332	1.60	2.20
350	260	3575	5009/10	H	7.4	78.1	514	1.10	2.40
		1787	5009/10	H	6.7	83.8	1029	1.70	2.40
		1184	5009/10	G	5.7	87.0	1552	1.70	2.30
400	300	3571	5009/10	G	6.5	89.1	588	1.00	2.10
		1785	5009/10	G	6.0	94.4	1177	1.50	2.10
		1189	5809/10	G	5.8	100	1767	1.50	2.10
450	330	3575	5809/10	H	7.2	98.9	661	1.30	2.65
		1789	5009/10	H	6.9	105	1321	0.90	2.65
		1192	5809/10	H	6.5	113	1982	1.65	2.30
500	370	3571	5809/10	G	6.5	109	735	1.20	2.40
		1787	5009/10	G	6.3	116	1469	0.80	2.40
		1191	5809/10	G	6.0	124	2205	1.50	2.10
550	400	3578	5809/10	H	7.4	121	807	1.20	2.50
		1788	5809/10	H	7.0	125	1615	1.85	2.40
		1193	5809/10	H	6.8	137	2421	1.00	2.70
600	440	3576	5809/10	G	6.7	132	881	1.10	2.30
		1786	5809/10	G	6.5	136	1764	1.70	2.20
		1192	5809/10	G	6.3	147	2643	0.90	2.50
650	480	1789	6806/07	H	6.9	152	1908	1.50	2.45
		1193	6808/09	H	7.0	149	2861	0.90	2.45
700	515	1789	6806/07	G	6.5	161	2055	1.40	2.30
		1193	6808/09	G	6.5	158	3081	0.85	2.30
750	560	1789	6808/09	H	6.8	180	2201	1.60	2.35
800	590	1789	6808/09	G	6.5	187	2348	1.50	2.20

Please contact WEG for 50Hz MV motors from stock.

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Electrical Data 2300V (continued)

Rated Output		Efficiency (2300V)			Power Factor (2300V)			Moment of Inertia WK2 (lb.ft2)	Approx. Weight (lb)	Approx. Sound Level dB(A)
		% of Full load								
HP	kW	50	75	100	50	75	100			
150	110	90.00	92.20	93.20	0.63	0.75	0.82	37.7	2536	88
		91.00	92.60	93.30	0.60	0.72	0.78	94.9	2386	79
		91.50	93.20	93.60	0.52	0.65	0.73	114.0	2498	71
200	150	92.40	93.60	94.10	0.72	0.82	0.85	37.7	2536	88
		92.60	93.80	93.80	0.70	0.79	0.83	94.9	2386	79
		92.80	93.60	93.60	0.63	0.73	0.78	114.0	2498	71
250	185	93.60	94.10	95.00	0.83	0.87	0.88	83.1	3803	79
		93.00	94.10	95.00	0.70	0.81	0.84	94.9	3971	79
		93.60	94.50	95.00	0.66	0.76	0.79	138.0	4081	77
300	220	93.60	94.10	95.00	0.83	0.88	0.89	88.5	3876	79
		93.60	94.10	95.00	0.74	0.82	0.85	114.0	3797	79
		93.60	94.50	95.00	0.66	0.74	0.79	159.0	4335	77
350	260	93.60	94.50	95.00	0.81	0.86	0.88	99.7	4238	79
		93.60	94.10	95.00	0.67	0.77	0.82	157.0	4328	79
		93.60	94.50	95.00	0.64	0.75	0.79	168.0	4339	77
400	300	94.10	94.50	95.00	0.83	0.87	0.89	99.7	4238	79
		94.10	94.50	95.00	0.72	0.80	0.84	157.0	4328	79
		94.10	94.50	95.00	0.67	0.76	0.79	382.0	5980	77
450	330	94.20	94.90	95.20	0.83	0.87	0.88	142.0	5415	82
		94.10	95.00	95.00	0.70	0.79	0.83	166.0	4522	79
		93.60	94.50	95.00	0.60	0.71	0.77	384.0	5956	77
500	370	94.50	95.00	95.40	0.85	0.89	0.89	142.0	5415	82
		94.50	95.00	95.00	0.73	0.81	0.84	166.0	4522	79
		94.10	94.50	95.00	0.63	0.73	0.79	384.0	5956	77
550	400	94.30	95.10	95.40	0.78	0.85	0.87	159.0	5859	82
		94.50	95.20	95.40	0.72	0.80	0.84	275.0	5828	82
		93.10	94.30	95.00	0.59	0.70	0.77	418.0	6280	77
600	440	94.70	95.40	95.40	0.80	0.86	0.88	159.0	5859	82
		95.00	95.40	95.40	0.75	0.81	0.85	275.0	5828	82
		93.30	94.50	95.00	0.62	0.73	0.79	418.0	6280	77
650	480	94.30	94.80	95.40	0.71	0.80	0.83	427.0	7074	82
		94.80	95.40	95.40	0.74	0.82	0.85	724.0	8500	81
700	515	94.50	95.00	95.40	0.73	0.81	0.84	427.0	7074	82
		95.00	95.40	95.40	0.75	0.83	0.86	724.0	8500	81
750	560	94.90	95.40	95.40	0.71	0.79	0.82	534.0	8081	82
800	590	95.00	95.40	95.40	0.72	0.80	0.83	534.0	8081	82

Please contact WEG for 50Hz MV motors from stock.

Electrical Data - 4160V

Rated Output		Full Load Speed (RPM)	NEMA Frame	Locked Rotor Current (4160V)		Full Load Amps	4160V		
HP	kW			kVA Code	II/In		Full Load Torque - Tn (lb.ft)	Locked Rotor Torque (TI/Tn)	Breakdown torque (Tb/Tn)
150	110	3587	L447/9TS	N	11.4	20.5	220	2.60	4.00
		1790	L447/9T	K	8.3	21.3	440	2.00	3.00
		1190	L447/9T	L	8.1	23.3	662	2.10	3.00
200	150	3582	L447/9TS	N	8.7	26.4	293	2.00	3.00
		1787	L447/9T	H	6.5	27.4	588	1.50	2.30
		1186	L447/9T	H	6.5	29.3	886	1.60	2.30
250	185	3576	5009/10	H	7.5	30.7	367	1.10	2.20
		1785	5009/10	H	6.8	32.2	735	1.50	2.30
		1189	5009/10	H	6.4	34.6	1104	1.60	2.20
300	220	3576	5009/10	H	7.3	36.1	441	1.10	2.30
		1784	5009/10	G	6.5	38.3	883	1.50	2.20
		1185	5009/10	H	6.4	41.2	1329	1.70	2.30
350	260	3577	5009/10	J	8.2	43.2	514	1.25	2.50
		1788	5009/10	J	7.5	47.5	1028	1.90	2.50
		1185	5009/10	H	6.3	48.7	1551	1.80	2.50
400	300	3573	5009/10	H	7.2	49.2	588	1.10	2.20
		1786	5009/10	H	6.7	52.8	1176	1.70	2.20
		1190	5809/10	H	6.3	56.2	1765	1.70	2.20
450	330	3577	5809/10	J	8.2	54.7	661	1.40	2.85
		1789	5009/10	J	7.6	58.8	1321	1.00	2.85
		1192	5809/10	J	7.0	64.3	1982	1.75	2.45
500	370	3574	5809/10	H	7.4	60.5	735	1.30	2.60
		1787	5009/10	H	6.8	65.1	1469	0.90	2.60
		1191	5809/10	H	6.5	70.2	2205	1.60	2.20
550	400	3580	5809/10	J	8.0	68.5	807	1.30	2.70
		1789	5809/10	J	7.8	70.1	1614	1.95	2.50
		1193	5809/10	J	7.1	77.9	2421	1.10	2.90
600	440	3578	5809/10	H	7.2	74.4	881	1.20	2.50
		1787	5809/10	H	7.0	76.2	1763	1.80	2.30
		1192	5809/10	H	6.5	83.5	2643	1.00	2.70
650	480	1790	6806/07	J	7.6	85.2	1907	1.60	2.55
		1193	6808/09	J	7.8	83.1	2861	1.00	2.55
700	515	1790	6806/07	H	6.8	90.3	2054	1.50	2.40
		1193	6808/09	H	7.0	88.1	3081	0.95	2.40
750	560	1790	6808/09	J	7.5	101	2200	1.80	2.45
800	590	1790	6808/09	H	7.0	105	2347	1.70	2.30

Please contact WEG for 50Hz MV motors from stock.

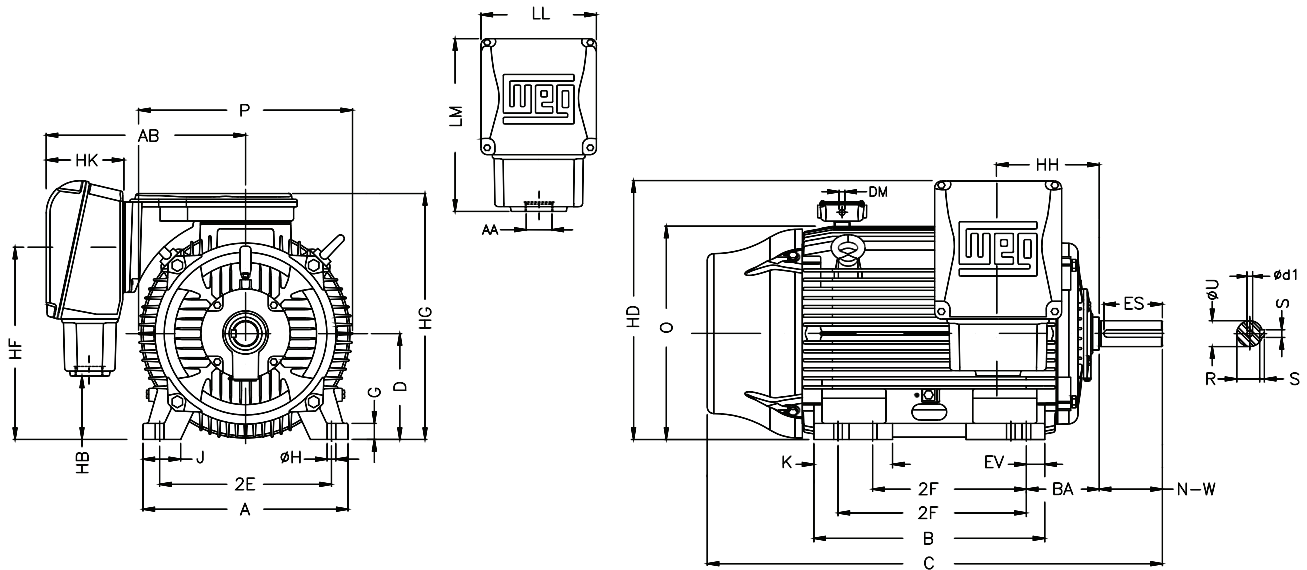
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Electrical Data 4160V (continued)

Rated Output		Efficiency (4160V)			Power Factor (4160V)			Moment of Inertia WK2 (lb.ft2)	Approx. Weight (lb)	Approx. Sound Level dB(A)
		% of Full load								
HP	kW	50	75	100	50	75	100			
150	110	89.60	91.90	93.00	0.60	0.72	0.80	37.7	2536	88
		91.00	92.60	93.30	0.57	0.69	0.77	94.9	2386	79
		91.50	93.20	93.60	0.48	0.61	0.70	114.0	2498	71
200	150	92.10	93.40	94.00	0.70	0.80	0.84	37.7	2536	88
		92.60	93.80	93.80	0.67	0.77	0.81	94.9	2386	79
		92.80	93.60	93.60	0.59	0.70	0.76	114.0	2498	71
250	185	93.60	94.10	95.00	0.83	0.87	0.88	83.1	3803	79
		93.00	94.10	95.00	0.70	0.81	0.84	94.9	3971	79
		93.60	94.50	95.00	0.63	0.74	0.78	138.0	4081	77
300	220	93.60	94.10	95.00	0.83	0.87	0.89	88.5	3876	79
		93.60	94.10	95.00	0.72	0.81	0.84	114.0	3797	79
		93.60	94.50	95.00	0.63	0.73	0.78	159.0	4335	77
350	260	93.60	94.50	95.00	0.80	0.86	0.88	99.7	4238	79
		93.60	94.10	95.00	0.65	0.76	0.80	157.0	4328	79
		93.60	94.50	95.00	0.61	0.71	0.78	168.0	4339	77
400	300	94.10	94.50	95.00	0.82	0.87	0.89	99.7	4238	79
		94.10	94.50	95.00	0.70	0.79	0.83	157.0	4328	79
		94.10	94.50	95.00	0.64	0.74	0.78	382.0	5980	77
450	330	94.20	94.90	95.20	0.82	0.87	0.88	142.0	5415	82
		94.10	95.00	95.00	0.67	0.77	0.82	166.0	4522	79
		93.60	94.50	95.00	0.58	0.68	0.75	384.0	5956	77
500	370	94.50	95.00	95.40	0.84	0.89	0.89	142.0	5415	82
		94.50	95.00	95.00	0.71	0.80	0.83	166.0	4522	79
		94.10	94.50	95.00	0.60	0.71	0.77	384.0	5956	77
550	400	94.30	95.10	95.40	0.75	0.82	0.85	159.0	5859	82
		94.50	95.20	95.40	0.71	0.79	0.83	275.0	5828	82
		93.10	94.30	95.00	0.56	0.68	0.75	418.0	6280	77
600	440	94.70	95.40	95.40	0.77	0.83	0.86	159.0	5859	82
		95.00	95.40	95.40	0.73	0.80	0.84	275.0	5828	82
		93.30	94.50	95.00	0.58	0.71	0.77	418.0	6280	77
650	480	94.30	94.80	95.40	0.69	0.79	0.82	427.0	7074	82
		94.80	95.40	95.40	0.72	0.81	0.84	724.0	8500	81
700	515	94.50	95.00	95.40	0.71	0.80	0.83	427.0	7074	82
		95.00	95.40	95.40	0.74	0.82	0.85	724.0	8500	81
750	560	94.90	95.40	95.40	0.68	0.77	0.81	534.0	8081	82
800	590	95.00	95.40	95.40	0.70	0.79	0.82	534.0	8081	82

Please contact WEG for 50Hz MV motors from stock.

Mechanical Data

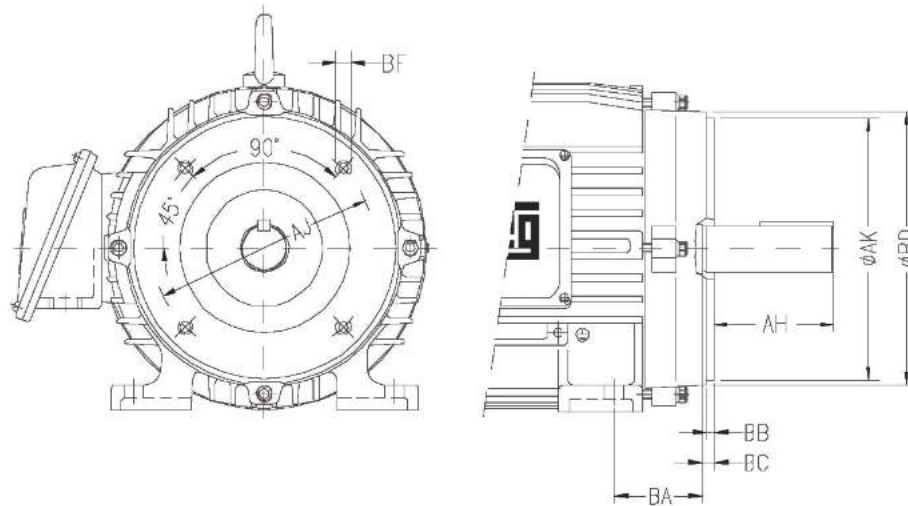


NEMA	Mounting														
	FRAME	2E	2F	EV	H	BA	A	B	C	D	G	J	K	O	P
	L447/9T	18	20	2.638	0.81	7.5	21.929	31.535	57.181	11	1.63	3.937	8.78	23.874	25.866
	L447/9TS		25						53.431						

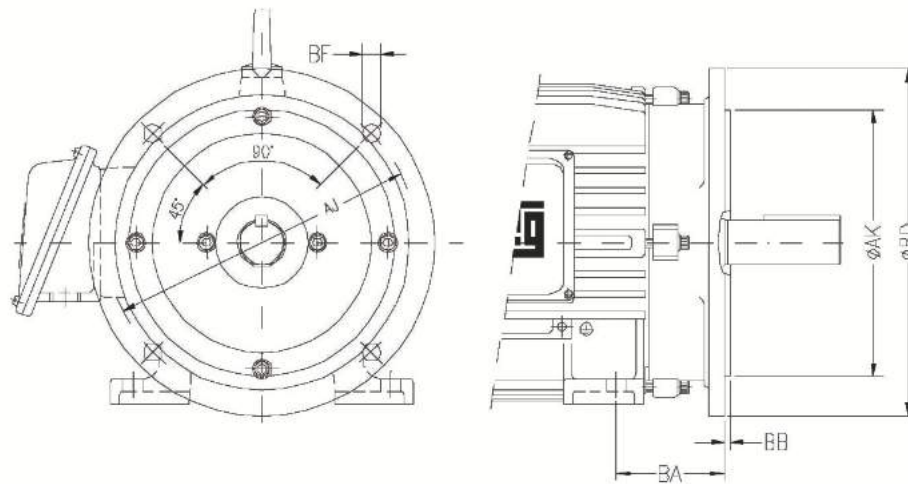
NEMA	KEYWAY				SHAFT EXTENSION	
	FRAME	S	R	ES	N-W	U
	L447/9T	0.875	2.88	7.087	8.5	3.375
	L447/9TS	0.625	2.021	3	4.75	2.375

NEMA	TERMINAL BOX													BEARINGS	
	FRAME	AB	HB	HD	HF	HG	HH	HK	LL	LM	AA	DM	d1	D.E.	N.D.E.
	L447/9T	28.543	2.125	30.906	21.024	28.236	11.5	14.291	18.11	28.74	1 x NPT 3"	2 x NPT 3/4"	DUNC 3/4"-10	6322-C3	6319-C3
	L447/9TS													6314-C3	6314-C3

Mechanical Data

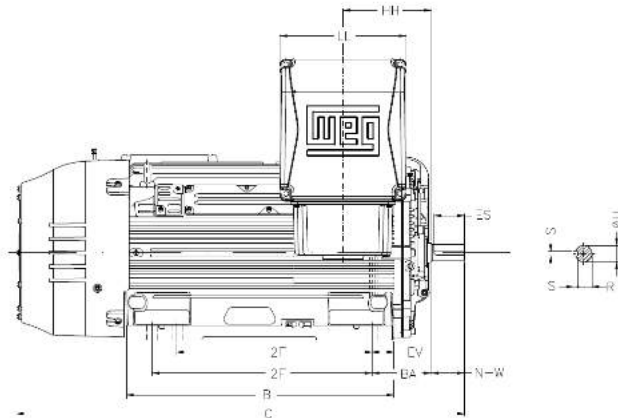
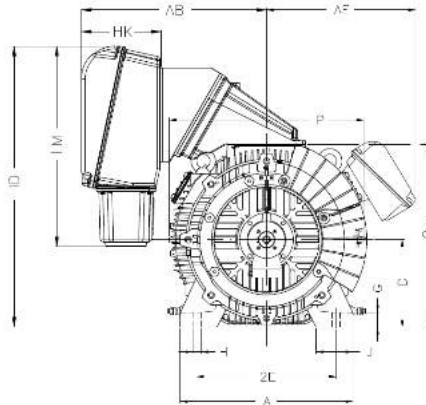


NEMA	“C” FLANGE DIMENSIONS								
	FRAME	BA	AJ	AK	BD	BF	BB	BC	AH
	L447/9T L447/9TS	7.5	14	16	17.91	UNC 5/8” x 11	0.25	0.25	8.25



NEMA	“D” FLANGE DIMENSIONS						
	FRAME	BA	AJ	AK	BD	BF	BB
	L447/9T L447/9TS	7.5	20	18	21.65	0.828	0.203

Mechanical Data



MOUNTING

	FRAME	Speed	2E	2F	EV	H	BA	A	B	C	D	G	J	K	O	P
NEMA	5009/10	2P	20	28.000 / 32.000	3.151	1.181	8.503	24.724	38.585	64.159	12.5	2.073	5.279	11.12	26.083	27.795
		4P & 6P														
	5809/10	2P	23	32.000 / 36.000	3.491	1.181	10	29.506	42.415	71.089	14.5	2.498	5.793	11.596	30.051	31.086
		4P & 6P														
	6806/07	4P	27	28.000 / 32.000	4.575	1.417	11.5	33.071	42.226	78.224	17	1.967	7.064	11.74	34.52	34.646
	6808/09	4P & 6P		36.000 / 40.000					48.126	84.129				11.737		

KEYWAY

SHAFT EXTENSION

	FRAME	Speed	S	R	ES	N-W	U
NEMA	5009/10	2P	0.625	2.02	4.331	4.75	2.375
		4P & 6P	0.875	3.134	9.055	10.625	3.625
	5809/10	2P	0.625	2.021	4.331	4.75	2.375
		4P & 6P	1	3.309	9.843	11.625	3.875
	6806/07	4P	1	3.817	9.843	11.625	4.375
	6808/09	4P & 6P					

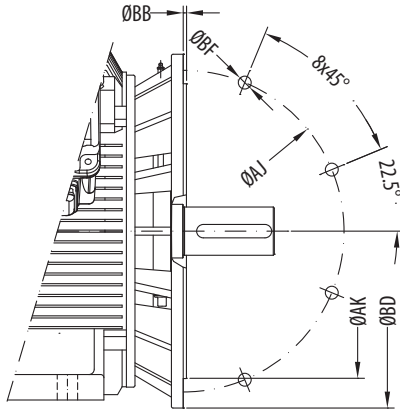
TERMINAL BOX

	FRAME	Speed	AB	AE	HD	HH	HK	LL	LM	AA	DM	d1
NEMA	5009/10	2P	26.536	21.343	40.196	12.638	11.41	18.11	28.712	1 x NPT 3"	3 x NPT 3/4"	DUNC 3/4"-10
		4P & 6P										DUNC 7/8"-9
	5809/10	2P	26.69	22.397	44.168	13.74	11.41	18.11	28.74	1 x NPT 3"	3 x NPT 3/4"	DUNC 3/4"-10
		4P & 6P										DUNC 7/8"-9
	6806/07	4P & 6P	29.901	23.697	48.588	13.862	11.41	18.11	28.72	1 x NPT 3"	3 x NPT 3/4"	DUNC 1"-8
	6808/09											

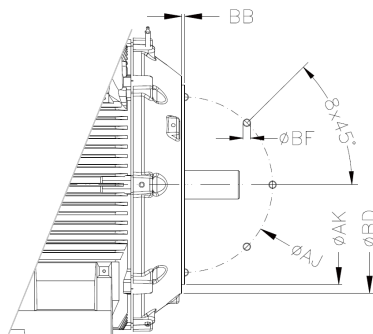
BEARINGS

	FRAME	Speed	D.E.	N.D.E.
NEMA	5009/10	2P	6314-C3	6314-C3
		4P & 6P	6320-C3	6316-C3
	5809/10	2P	6314-C3	6314-C3
		4P & 6P	6322-C3	6319-C3
	6806/07	4P & 6P	6324-C3	6319-C3
	6808/09			

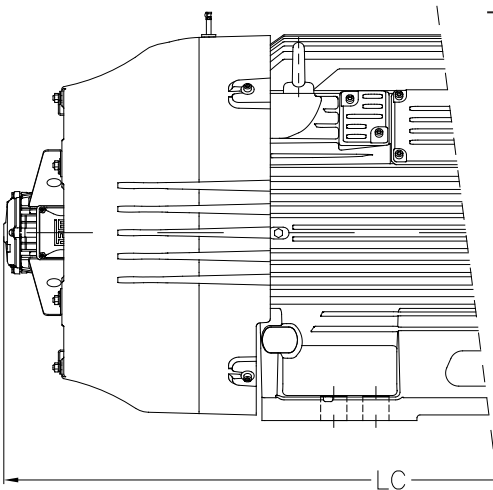
Mechanical Data



NEMA	"D" FLANGE DIMENSIONS						
	FRAME	FLANGE	BB	AJ	AK	BD	BF
	5009/10	D-558	0.250	22.000	18.000	24.000	0.827
	5809/10	D-762	0.250	30.000	28.000	32.000	0.827
	6806/07	FF-940	0.250	35.252	33.250	37.250	1.000
	6808/09	FF-1080	0.250	35.252	33.250	37.250	1.000



NEMA	"C" FLANGE DIMENSIONS						
	FRAME	FLANGE	BB	AJ	AK	BD	BF
	5009/10	FC 368	0.25	14.5	16.5	17.9	UNC 5/8"-11 x 8
	5809/10		0.25	14.5	16.5	17.9	UNC 1"-8 x 8
	6806/7	FC 533	0.25	21	23	24.9	UNC 1"-8 x 8
	6808/9	FC 533	0.25	21	23	24.9	UNC 1"-8 x 8



NEMA	MOTOR TOTAL LENGTH WITH INSTALLED BLOWER		
	FRAME	SPEED	C
	5009/10	2P	70.577
		4P & 6P	76.432
	5809/10	2P	77.486
		4P & 6P	84.361
	6806/07	4P	84.621
	6808/09	4P & 6P	90.527

Medium Voltage Worksheet

LET US KNOW ABOUT YOUR APPLICATION

Please fill in and provide the below information (as much as possible) to ensure WEG's motor design matches your particular application.

Date: / /

Submitted by: E-mail:

Customer/ Project: Specification:

Customer ref.:

MAIN FEATURES:

Quantity: Voltage:

Number of Poles: Frequency: 60 Hz

Output: (kW/ HP)

ADDITIONAL FEATURES:

Cooling System: TEFC Rotation (facing DE):

Service Factor: Duty Cycle:

Degree of Protection: IP55 Starting Method:

Starting Method: Speed Range (V.F.D.):

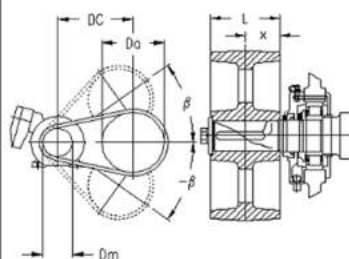
Temperature Rise: Coupling:

Ambient Temperature: Altitude:

Hazardous Area: Zone/ Division: Group/ Class: Temp. Class:

Pulley and Belt Coupling:

Coupling Type:



*DM = [in]
 *Da = [in]
 *DC = [in]
 *L = [in]
 *x = [in]
 *β = [degrees]
 *Weight = [lb]
 *Number of Belts =
 *Type of Belt =

* Just for Pulley & Belt Coupling

LOAD DATA:

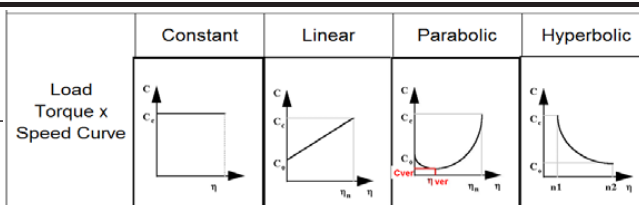
Driven Machine:

Rotation (rpm):

Inertia (J = sq.ft.lb):

Torque x Speed Curve type:

Absorbed Power:



ADD-ON MODIFICATIONS (Check as necessary):

☐ Main nameplate change

☐ Additional Nameplate

☐ Encoder Dynapar HSD38 1024ppr

☐ Flange

☐ D-Flange

☐ Forced Ventilation (Blower Cooling)

☐ Change Direction of Rotation (2P motors only)

☐ Ball to Roller Bearing conversion

☐ Helwig Shaft grounding brush

☐ F1 to F2 mounting conversion

☐ Oversized NEMA Type II Main terminal box

☐ Terminal Block inside Main terminal box

SSW7000

WEG's SSW7000 medium voltage solid-state soft starter is an industrial general-purpose starter package for starting & protecting MV AC motors.

Designed to be rugged, reliable and safe, the SSW7000 is a simple and cost effective solution for demanding applications.

Key Features & Advantages:

- 4160V & 2300V models in stock (NEMA 12 & NEMA 3R) up to 3000HP (higher voltages & powers available)
- Suitable for service entrance
- Motor protections active in both DOL & RUN modes eliminating the need for expensive motor protection relays for backup protection
- Pump control utilizes a specific algorithm for centrifugal pumps designed to minimize water hammer and pressure overshoots
- Soft PLC function with license-free software
- Flexible Torque Control (FTC) allows adjusting starting torque limit curve with 3 points (ideal for quadratic loads)
- Motor thermal protection via PT100 monitoring available (up to 8 channels)

Accessories:

- PT100 monitoring (8x channels)
- Network communication modules
- FLASH memory module



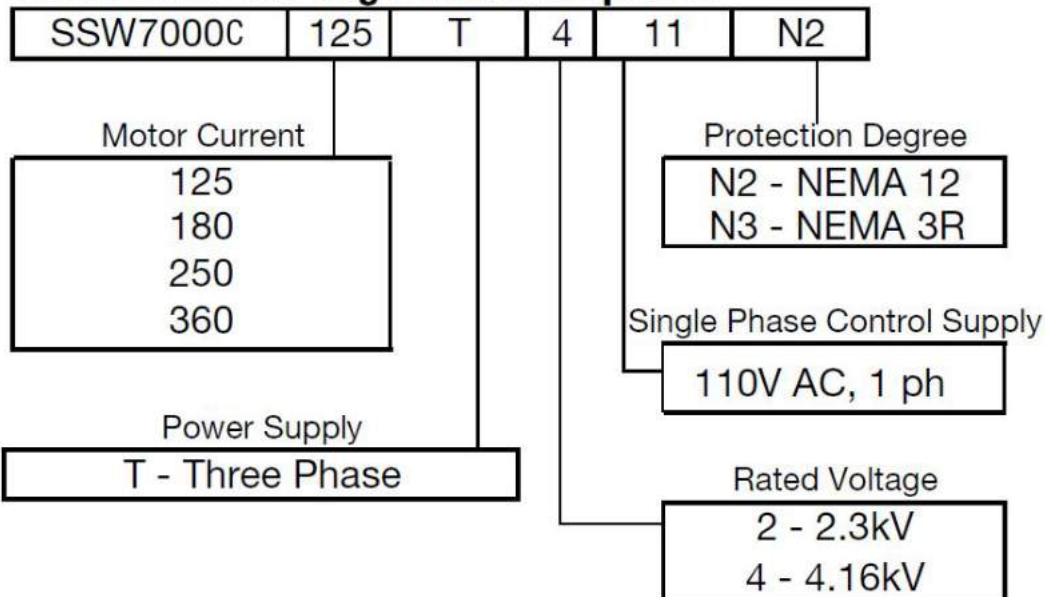
Features that make a difference:

- Assembled and stocked in the US
- NEMA 12 & NEMA 3R enclosures available
- Emergency DOL start capability (ATL bypass)
- Oriented startup for easy commissioning
- UL 347 listed
- Ground fault monitoring standard



Product Code

SSW7000C Catalog Number Sequence



Rating

Power Supply	Model	Rated Current	Motor Power		List Price	Multiplier
			HP*	kW		
NEMA 12						
2300V, 3PH, 60HZ	SSW7000C125T211N2	125A	550	410	\$55,750	E3
	SSW7000C180T211N2	180A	750	560	\$58,665	
	SSW7000C250T211N2	250A	1100	800	\$65,195	
	SSW7000C360T211N2	360A	1500	1100	\$67,430	
4160V, 3PH, 60HZ	SSW7000C125T411N2	125A	1000	750	\$63,950	
	SSW7000C180T411N2	180A	1500	1100	\$67,195	
	SSW7000C250T411N2	250A	2000	1500	\$75,235	
	SSW7000C360T411N2	360A	3000	2250	\$77,980	
NEMA 3R						
2300V, 3PH, 60HZ	SSW7000C125T211N3	125A	550	410	\$60,820	E3
	SSW7000C180T211N3	180A	750	560	\$63,725	
	SSW7000C250T211N3	250A	1100	800	\$70,255	
	SSW7000C360T211N3	360A	1600	1190	\$73,020	
4160V, 3PH, 60HZ	SSW7000C125T411N3	125A	1000	750	\$69,015	
	SSW7000C180T411N3	180A	1500	1100	\$72,250	
	SSW7000C250T411N3	250A	2000	1500	\$80,295	
	SSW7000C360T411N3	360A	3000	2250	\$83,550	

Note: (*) The motor power ratings given above are based on WEG 4-pole motors, 4.16kV, 60-Hz, PF=0.87, Eff=0.97, SF=1.

For applications with high overloads or special starting conditions, contact WEG's sales force.

Current Rating of SSW7000C must be calculated based on the information on load type, load speed/torque curve and required number of starts per hour.

All models are available in 220V, 1Ph control voltage.

Synchronous Alternators

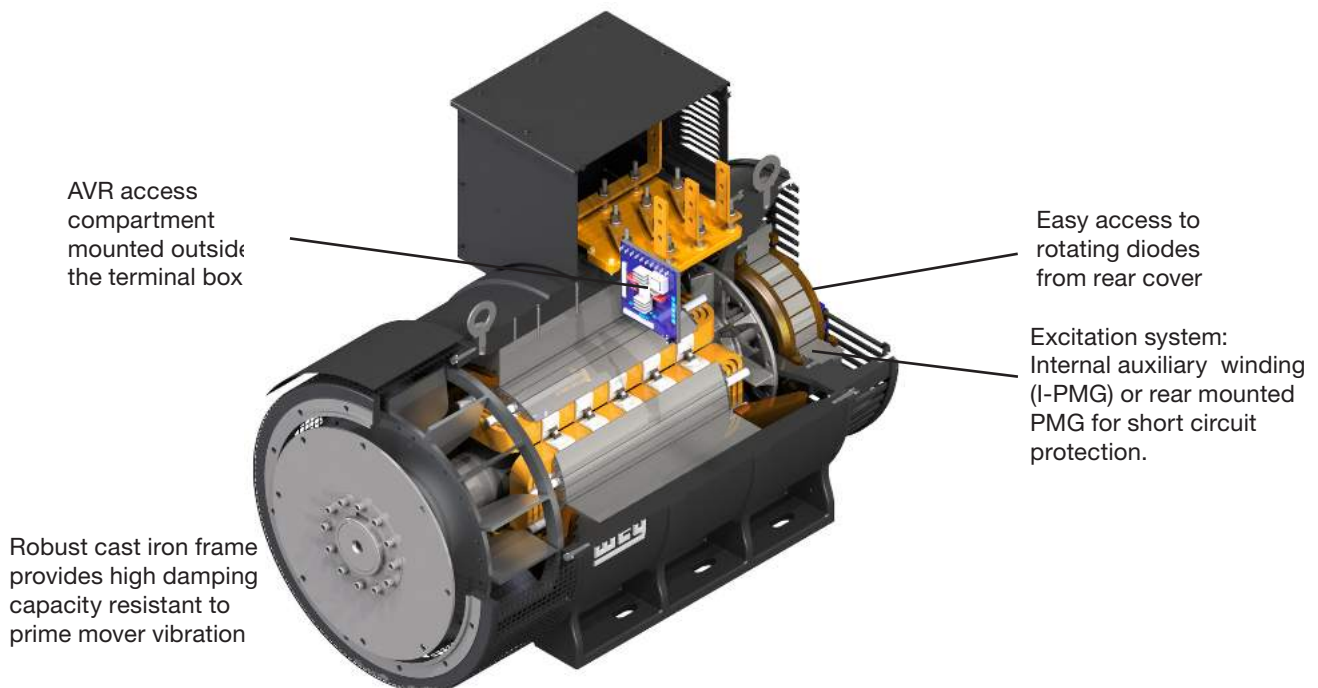
WEG's extensive experience in the manufacturing of alternators in addition to modern design, production capacity and testing facilities, has resulted in a range of brushless synchronous alternators.

The G Plus and AG10 lines are suitable for a wide range of continuous, prime power and standby power applications including:

- Industrial
- Commercial
- Marine
- Telecommunication
- Mining
- Mission Critical
- Irrigation
- Hospitals
- Agriculture
- Aviation and others

Technical Features:

- Output power: up to 2,500 kVA (others upon request)
- In stock: up to 1000kW / 1250kVA, 480V
- Low voltage: 110 to 690 V
- High voltage: 2,300 to 13,800 V (upon request)
- Frequency: 50 to 60 Hz
- Degree of protection: IP23 (standard), IP44 to IP55W (upon request)
- Insulation class: 180 °C (H) low voltage and 155 °C (F) high voltage
- THD: $\leq 3\%$
- Number of poles: 4 poles (standard), 6 and 8 poles (upon request)
- Leads: 12 or 6 leads
- Vacuum Pressure Impregnation (VPI) with harsh environment epoxy winding protection as standard



G Plus Line

Leads		Catalog Number Model	WEG Part Number	DT	SAE	480V - Y					List Price	Multi. Symbol
						240V - YY						
						80°C	105°C	125°C	150°C	163°C		
G Plus	12	GTA161AIHS	13960615	kVA	4/7.5	14.6	16.8	18.3	19.6	20.3	\$3,501	ALT
			kW	11.7		13.4	14.6	15.7	16.2			
	12	GTA161AIHS	14084460	kVA	B3T	14.6	16.8	18.3	19.6	20.3	\$3,501	ALT
			kW	11.7		13.4	14.6	15.7	16.2			
	12	GTA161AIHI	13943203	kVA	4/7.5	20.8	23.8	26.0	28.5	29.7	\$3,787	ALT
			kW	16.6		19.0	20.8	22.8	23.8			
	12	GTA161AIHI	14084500	kVA	B3T	20.8	23.8	26.0	28.5	29.7	\$3,787	ALT
			kW	16.6		19.0	20.8	22.8	23.8			
	12	GTA162AIVD	13943207	kVA	4/7.5	25.9	29.7	42.0	44.0	46.0	\$4,453	ALT
			kW	20.7		23.8	33.6	35.2	36.8			
	12	GTA162AIVD	14076066	kVA	4/10	25.9	29.7	42.0	44.0	46.0	\$4,453	ALT
			kW	20.7		23.8	33.6	35.2	36.8			
	12	GTA162AIVD	14417107	kVA	B3T	25.9	29.7	42.0	44.0	46.0	\$4,453	ALT
			kW	20.7		23.8	33.6	35.2	36.8			
	12	GTA201AIHS	14417163	kVA	B3T	43.4	49.7	54.3	59.5	62.0	\$5,382	ALT
			kW	34.7		39.8	43.4	47.6	49.6			
	12	GTA201AIHV	13943281	kVA	3/11.5	56.4	64.6	70.5	77.2	81.0	\$5,674	ALT
			kW	45.1		51.7	56.4	61.8	64.8			
	12	GTA201AIHV	14417168	kVA	4/10	56.4	64.6	70.5	77.2	81.0	\$5,674	ALT
			kW	45.1		51.7	56.4	61.8	64.8			
	12	GTA201AIHB	14417194	kVA	B3T	68.5	78.5	85.6	92.2	92.2	\$6,357	ALT
			kW	54.8		62.8	68.5	73.8	73.8			
	12	GTA201AIHB	14417179	kVA	4/10	68.5	78.5	85.6	92.2	92.2	\$6,357	ALT
			kW	54.8		62.8	68.5	73.8	73.8			
	12	GTA201AIHB	14417007	kVA	4/7.5	68.5	78.5	85.6	92.2	92.2	\$6,357	ALT
			kW	54.8		62.8	68.5	73.8	73.8			
	12	GTA201AIHE	13943282	kVA	3/11.5	66.1	75.7	88.0	95.0	97.0	\$6,507	ALT
			kW	52.9		60.6	70.4	76.0	77.6			
	12	GTA202AIVS	13943283	kVA	3/11.5	88.0	101.0	110.0	116.0	120.0	\$7,037	ALT
			kW	70.4		80.8	88.0	92.8	96.0			
12	GTA202AIVS	14417226	kVA	B3T	88.0	101.0	110.0	116.0	120.0	\$7,037	ALT	
		kW	70.4		80.8	88.0	92.8	96.0				
12	GTA202AIVJ	13943284	kVA	3/11.5	107	123	141	144	150	\$8,058	ALT	
		kW	85.8		98.2	112.8	115.2	120.0				
12	GTA202AIVJ	14417242	kVA	B3T	107	123	141	144	150	\$8,058	ALT	
		kW	85.8		98.2	112.8	115.2	120.0				
12	GTA251AIHD	13943285	kVA	3/11 .5	140	161	175	188	189	\$9,165	ALT	
		kW	112		129	140	150	151				
12	GTA251AIHD	14417252	kVA	B3T	140	161	175	188	189	\$9,165	ALT	
		kW	112		129	140	150	151				
12	GTA251AIHE	13943286	kVA	3/11 .5	180	206	225	243	252	\$10,725	ALT	
		kW	144		165	180	194	202				

AG10 Line

Leads		Catalog Number Model	WEG Part Number	DT	SAE	480V - Y					List Price	Multi. Symbol
						240V - YY						
						80°C	105°C	125°C	150°C	163°C		
AG10	12	AG10250SI50AI	13943287	kVA	1/14	208	238	260	290	295	\$11,723	ALT
			kW		166	190	208	232	236			
	12	AG10250SI50AI	14415907	kVA	2/11.5	208	238	260	290	295	\$11,723	ALT
			kW		166	190	208	232	236			
	12	AG10250MI60AI	13943309	kVA	1/14	250	288	312	345	360	\$12,665	ALT
			kW		200	230	250	276	288			
	12	AG10250MI70AI	13943310	kVA	1/14	292	335	365	400	417	\$14,625	ALT
			kW		234	268	292	320	334			
	12	AG10250MI80AI	13943311	kVA	1/14	324	371	405	460	470	\$15,561	ALT
			kW		259	297	324	368	376			
	12	AG10280MI50AI	14092871	kVA	1/14	378	440	472	517	550	\$16,948	ALT
			kW		302	352	378	414	440			
	12	AG10280MI60AI	13943312	kVA	1/14	412	472	515	550	580	\$18,802	ALT
			kW		330	378	412	440	464			
	12	AG10315MI50AI	13943315	kVA	1/14	520	596	650	700	750	\$21,388	ALT
			kW		416	477	520	560	600			
	12	AG10315MI60AI	13943314	kVA	1/14	570	650	710	780	825	\$23,985	ALT
			kW		456	520	568	624	660			
	12	AG10315MI70AI	14092872	kVA	1/14	642	736	803	875	906	\$26,638	ALT
			kW		514	589	642	700	725			
	12	AG10315LI90AI	14092873	kVA	1/14	832	953	1040	1100	1160	\$35,691	ALT
			kW		666	762	832	880	928			
	12	AG10355MI65AI	14416985	kVA	0/18	1000	1146	1250	1310	1380	\$42,822	ALT
			kW		800	917	1000	1048	1104			
	12	AG10355MI70AI	13943317	kVA	0/18	1120	1283	1400	1450	1520	\$48,750	ALT
			kW		896	1026	1120	1160	1216			

Modifications

Modifications		Description	List Price USD	Multi. Symbol
E-35	Space heater 120 / 240V	160 - 200 models	\$350	ALT
E-35	Space heater 120 / 240V	250 - 280 models	\$425	ALT
E-35	Space heater 120 / 240V	315 - 400 models	\$450	ALT
PM-10	External PMG	250 models	\$1,950	ALT
PM-20	External PMG	280 models	\$2,025	
PM-20	External PMG	315 - 400 models	\$2,450	

Alternators



NEMA 56 PMDC Motors	A-304
NEMA 145TC PMDC Motors	A-305
Brushes for RAE "MT" Motors	A-305
M1600 Permanent Magnet Motor - 2.375" diameter	A-306
M4000 Permanent Magnet Motor - 3.12" diameter	A-307
Dimensions	A-307

Parallel Shaft Gearmotors

GIL 100 Series Gearbox	A-308
GIL 200 Series Gearbox	A-309

DC Motors and Gearmotors

WEG DC motors and gearmotors are designed for industrial-strength, continuous duty applications. Our broad range of PMDC motors, gearmotors and wound field motors can be modified to meet your specific application requirements. We offer off-the-shelf products and custom OEM designs. All the standard WEG DC motors and gearmotors are interchangeable with most major brands and are UL/ CSA approved to meet the needs of most general industries.

WEG DC products have been used in many industries for several decades, including:

- Packaging Equipment
- Material Handling
- Office Machinery
- Pumps
- Door/ Gate Openers
- Food Processing
- Lawn/ Garden
- Medical/ Lab Equipment



DC Motors and Gearmotors

WEG can provide a complete custom industrial-duty DC-powered solution for all your application needs by developing a custom designed control for the motor. Our team has been developing DC controls for many industries for decades. Let us help you differentiate your product by working to your specifications. For more information on our DC control capabilities, please contact your local sales person or contact us at 815-385-3500.



DC MOTORS and GEARMOTORS



PERMANENT MAGNET DC MOTORS

NEMA Frame MT Motors

- SCR Rated
- 20:1 Constant torque speed range
- 1.0 Service Factor - Continuous Duty (S1)
- Rolled Steel Frame Construction
- C-Face with Removable bolt-on base
- Class F Insulation
- Ambient temperature up to 40°C
- Permanently lubricated ball bearings
- High Starting Torque and Increased Efficiency
- UL Recognized / CSA Approved and CE Marked
- Replaceable brushes



NEMA Frame PMDC Motors (90& 180VDC)

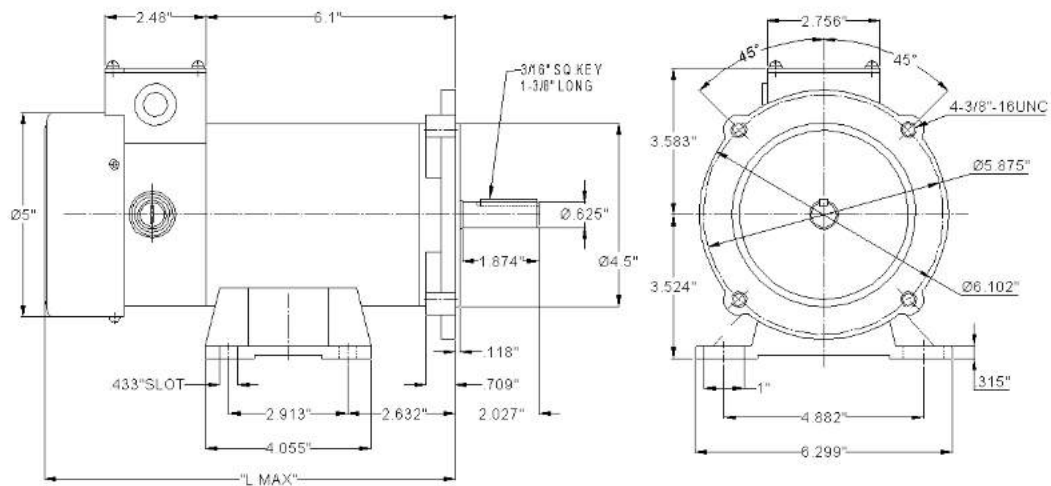
HP	Catalog Number	Full Load RPM	NEMA Frame	Voltage (DC)	Enclosure	Full Load Amps (A)	App. Weight	"L" Dimension Max	List Price	Multiplier
1/4	MT-031	1750	56C	90	TEFC	2.90	19	9.63	\$516	DC1
	MT-041	1750	56C	180	TEFC	1.30	19	9.63	\$516	DC1
1/3	MT-033	1750	56C	90	TEFC	3.70	20	9.63	\$563	DC1
	MT-042	1750	56C	180	TEFC	1.85	20	9.63	\$563	DC1
1/2	MT-032	1750	56C	90	TEFC	5.20	22	10.24	\$644	DC1
	MT-043	1750	56C	180	TEFC	2.60	22	10.24	\$644	DC1
3/4	MT-035	1750	56C	90	TEFC	7.80	28	11.67	\$791	DC1
	MT-044	1750	56C	180	TEFC	3.90	28	11.67	\$791	DC1
1	MT-034	1750	56C	90	TEFC	10.4	32	13.05	\$930	DC1
	MT-037	1750	56C	180	TEFC	5.2	32	13.05	\$930	DC1
1-1/2	MT-038	1750	145TC	180	TEFC	8.0	47	15.60	\$1,590	DC1
2	MT-039	1750	145TC	180	TEFC	9.5	65	16.50	\$2,093	DC1
3	MT-040	1750	145TC	180	TEFC	14.0	72	18.70	\$2,930	DC1

Note: 1/4-1/2HP models have 4.45" frame diameter.
3/4 & 1HP models have 4.85" frame diameter.

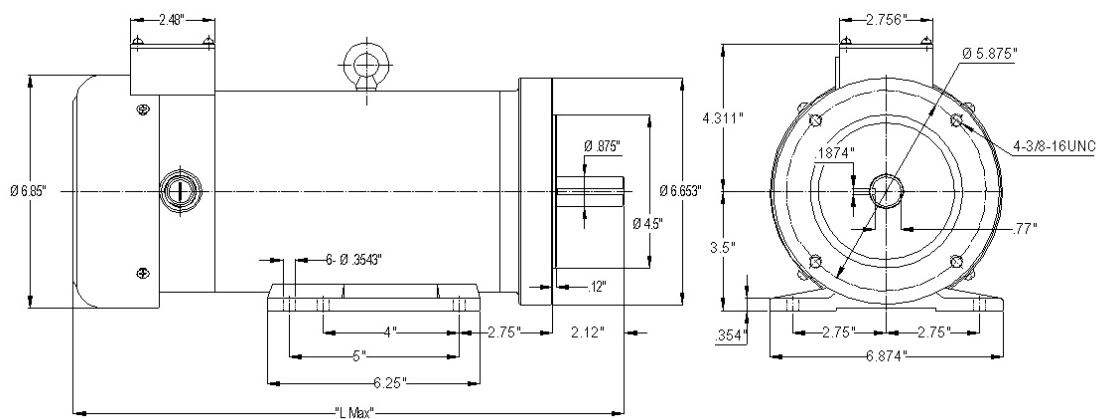
NEMA Frame Low Voltage PMDC Motors (12 & 24VDC)

HP	Catalog Number	Full Load RPM	NEMA Frame	Voltage (DC)	Enclosure	Full Load Amps (A)	App. Weight	"L" Dimension Max	List Price	Multiplier
1/4	MT-065	1750	56C	12	TENV	21.00	18	9.63	\$613	DC1
	MT-066	1750	56C	24	TENV	10.50	18	9.63	\$613	DC1
1/3	MT-067	1750	56C	12	TENV	28.00	19	9.63	\$674	DC1
	MT-068	1750	56C	24	TENV	14.00	19	9.63	\$645	DC1
1/2	MT-069	1750	56C	12	TENV	40.80	22	10.24	\$702	DC1
	MT-070	1750	56C	24	TENV	20.50	22	10.24	\$669	DC1
3/4	MT-071	1750	56C	12	TENV	61.20	28	11.67	\$773	DC1
	MT-072	1750	56C	24	TENV	28.30	28	11.67	\$701	DC1
1	MT-073	1750	56C	12	TENV	83.0	33	13.05	\$921	DC1
	MT-074	1750	56C	24	TENV	41.5	33	13.05	\$849	DC1

NEMA 56 Dimensions



NEMA 145TC Dimensions



DC Motors and Gearmotors

Direct Interchange to Many Popular Brands in the Industry

BRUSHES FOR RAE "MT" MOTORS

- List price for one brush. It is best to replace both brushes at the same time. Two brush kits required per motor.

RAE PART NUMBER	MOTOR FRAME SIZE	MOTOR HP RANGE	List Price	Multipiler
MT-56BS	56C	¼ - ½ HP	\$34	DC1
MT-75BS	56C	¾ - 1 HP	\$34	DC1
MT-145BS	145C	1.5 – 3 HP	\$41	DC1

PERMANENT MAGNET DC MOTORS

M1600

The M1600 Series Permanent Magnet Motor features a compact 2.375" diameter design that provides continuous duty torque ratings.

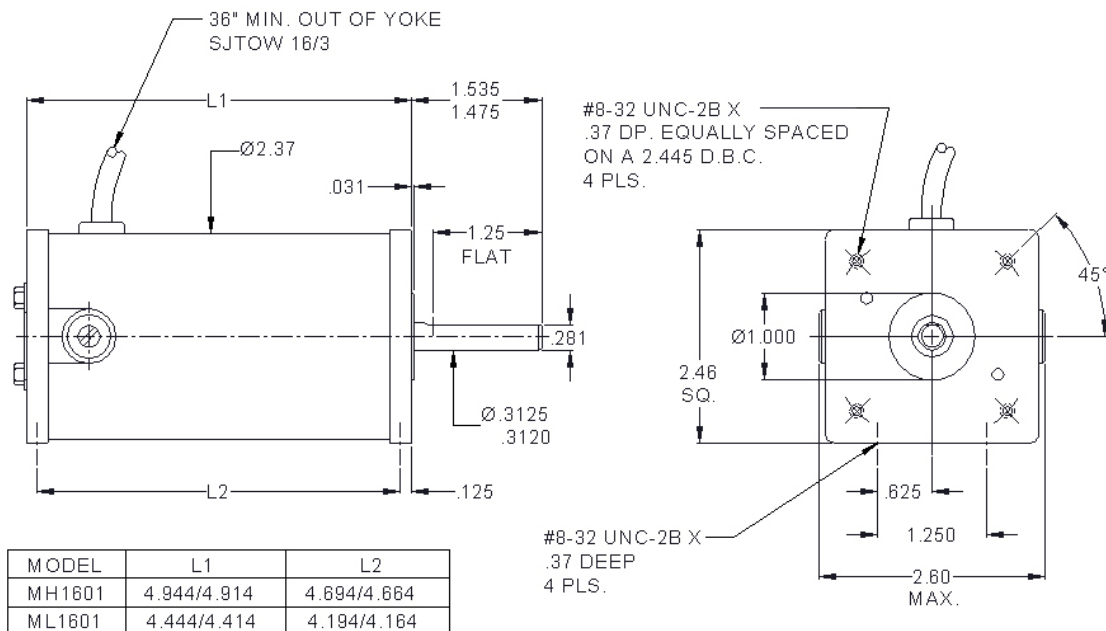
Features

- High Energy Ceramic Magnets
- Double Shielded Ball Bearings
- Dynamically Balanced Armature
- Reversible Design
- 36" Cord
- TENV Design
- Square End Bells
- Externally Replaceable Brushes
- Optional Sleeve Bearings
- Value added options and modifications available
- 1/30 hp - 1/8 hp
- Speeds up to 5000 rpm
- 12 - 115 VDC
- 0.312" Maximum Shaft Diameter
- 1.00" Standard Pilot Diameter
- Class "F" Insulation



Catalog Number	Hp	Voltage	RPM	FLA	List Price	Multiplier
MH1601	1/20	90	1800	0.61	\$258	DC1
ML1601	1/20	12	1800	4.50	\$228	DC1

M1600 Dimensions



Quick Interchange Guide

WEG Catalog Number	Dayton	Leeson
MH1601	3XE22, 4Z142	M1110003.00
ML1601	3XE19, 4Z145	M1110006.00

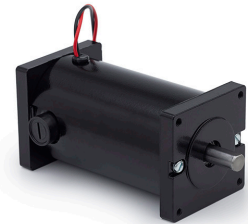
Many other models available for Quick Interchange

M4000

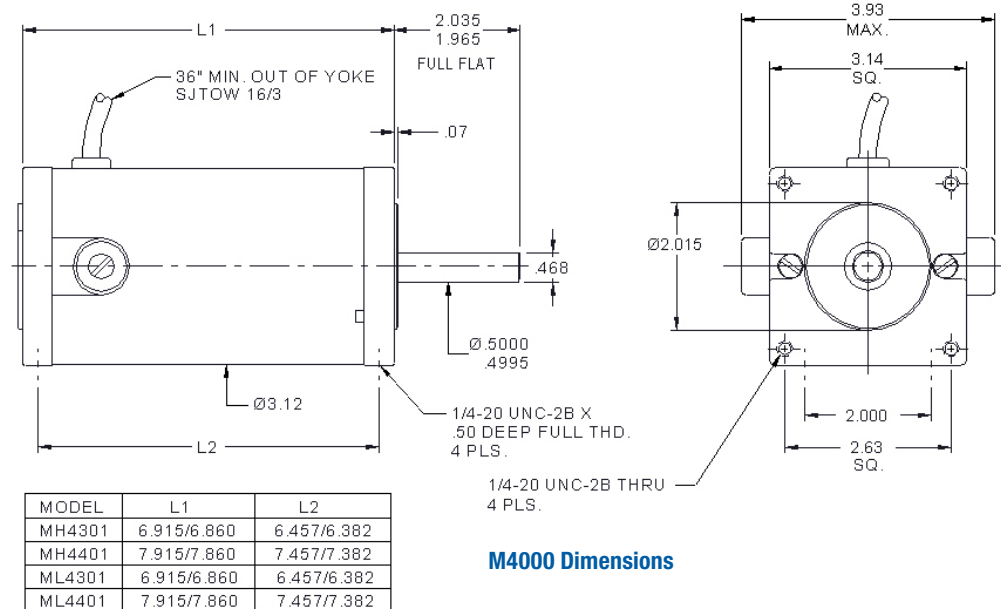
The M4000 Series Permanent Magnet Motor offers the design engineer a great deal of flexibility in a 3.12" diameter motor design that provides continuous duty torque ratings.

Features

- High Energy Ceramic Magnets
- Double Shielded Ball Bearings
- Dynamically Balanced Armature
- Reversible Design
- 36" Cord
- TENV Design
- Square End Bells
- Externally Replaceable Brushes
- Value added options and modifications available (1/30 hp - 1/4 hp)
- Speeds up to 3500 rpm
- 12 - 180 VDC
- 0.500" Maximum Shaft Diameter
- 2.015" Standard Pilot Diameter
- Class "F" Insulation



Catalog Number	Hp	Voltage	RPM	FLA	List Price	Multiplier
MH4301	1/8	90	1800	1.30	\$337	DC1
MH4401	1/6	90	1800	1.80	\$344	DC1
ML4301	1/8	12	1800	10.20	\$351	DC1
ML4401	1/6	12	1800	15.20	\$372	DC1



M4000 Dimensions

Quick Interchange Guide

WEG Catalog Number	Dayton	Leeson
MH4301	4Z140	M1120027.00
MH4401	4Z528	M1120042.00
ML4301	4Z143	M1120044.00
ML4401	4Z529	M1120046.00

Many other models available for Quick Interchange

PARALLEL SHAFT GEARMOTORS

GIL100 Series

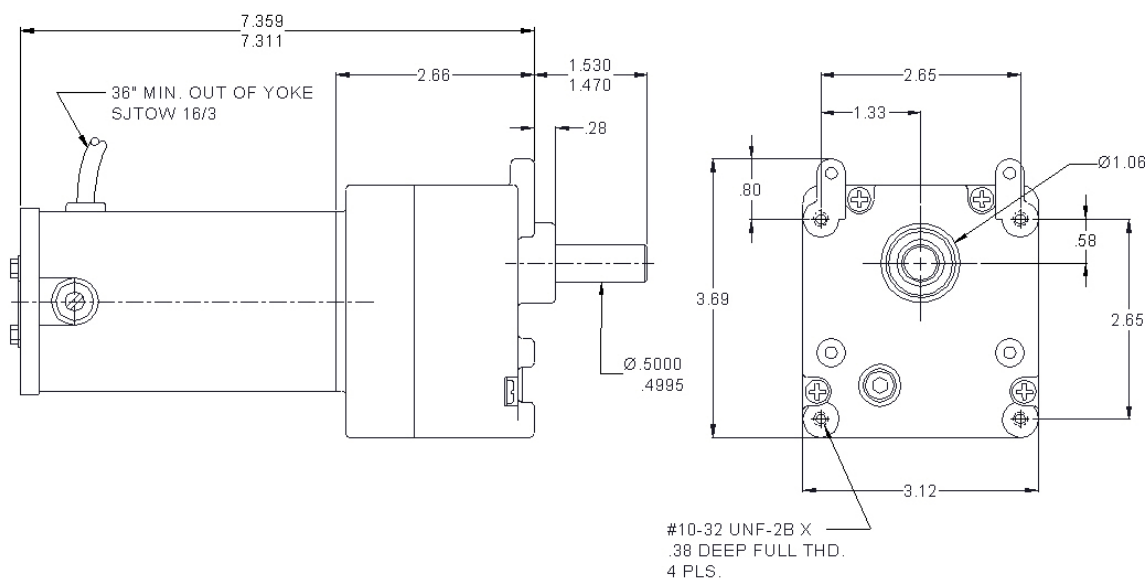
The GL100 Series Gearmotor is a versatile parallel shaft, medium torque design offering low noise levels and longer life for reliable service in any industrial application.

Features

- Gearbox Designed to AGMA Standards
- Oil Filled
- Needle Bearings (Gearbox)
- High Energy Ceramic Magnets
- Double Shielded Ball Bearings (Motor)
- Dynamically Balanced Armature
- Reversible Design
- 36" "Cord
- TENV Design
- Externally Replaceable Brushes
- Value Added Options and Modifications Available
- Rating up to 100 in-lbs
- Speeds up to 250 rpm
- 12 up to 115 VDC
- 16:1 up to 488:1 Ratios
- 0.500" Maximum Shaft Diameter
- Class "F" Insulation
- Interchangeable with most popular brands



Catalog Number	Gearmotor	Hp	Voltage	RPM	FLA	Ratios	FLT in-lbs	List Price	Multiplier
GH1001	Parallel	1/20	90	4	0.20	488	100	\$470	DC1
GH1002	Parallel	1/20	90	6	0.24	340	100	\$470	DC1
GH1003	Parallel	1/17	90	10	0.30	172	100	\$470	DC1
GH1004	Parallel	1/17	90	40	0.44	52	50	\$460	DC1
GH1005	Parallel	1/17	90	65	0.46	31	30	\$460	DC1
GH1006	Parallel	1/17	90	90	0.46	16	20	\$460	DC1



GIL200

The GIL200 Series Gearmotor is a versatile parallel shaft design offering high torque, low noise levels and long life for reliable service in any industrial application.

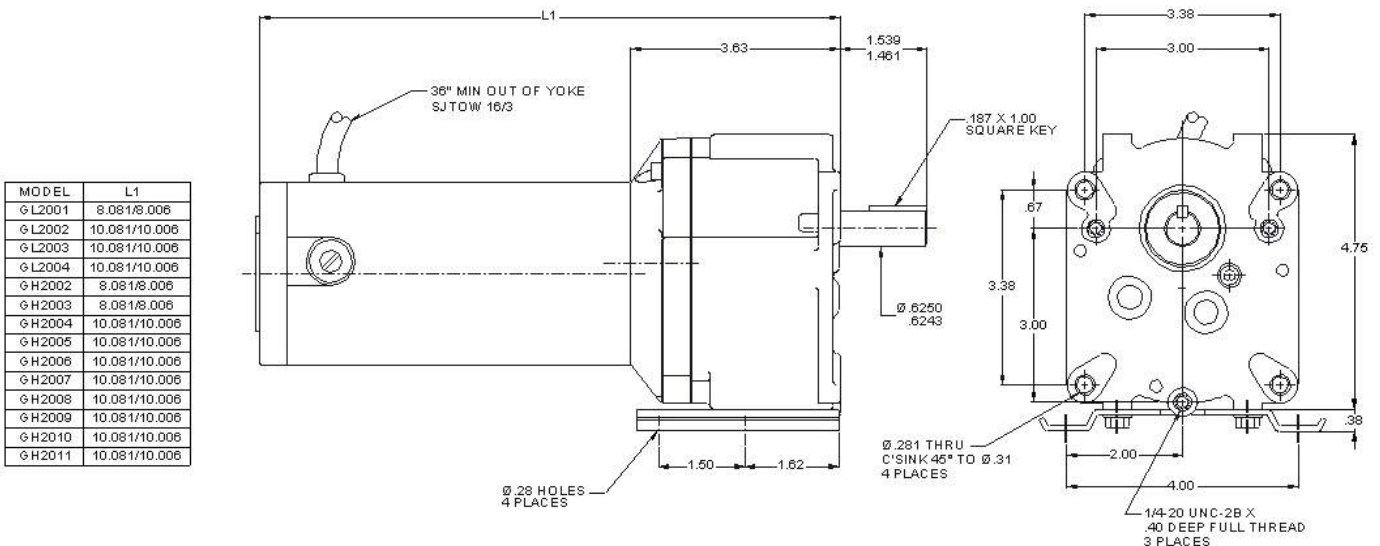
Features

- TENV Design
- Gearbox Designed to AGMA Standards
- Oil Lubrication
- Needle Bearings (Gearbox)
- Double Shielded Ball Bearings (Motor)
- Dynamically Balanced Armature
- Reversible Design
- Externally Replaceable Brushes
- Value Added Options and Modifications Available
- Rating up to 300 in-lbs
- 12 up to 180 VDC
- 5:1 up to 343:1 Ratios
- 0.625" Standard Shaft Diameter
- Class "F" Insulation
- Interchangeable with most popular brands



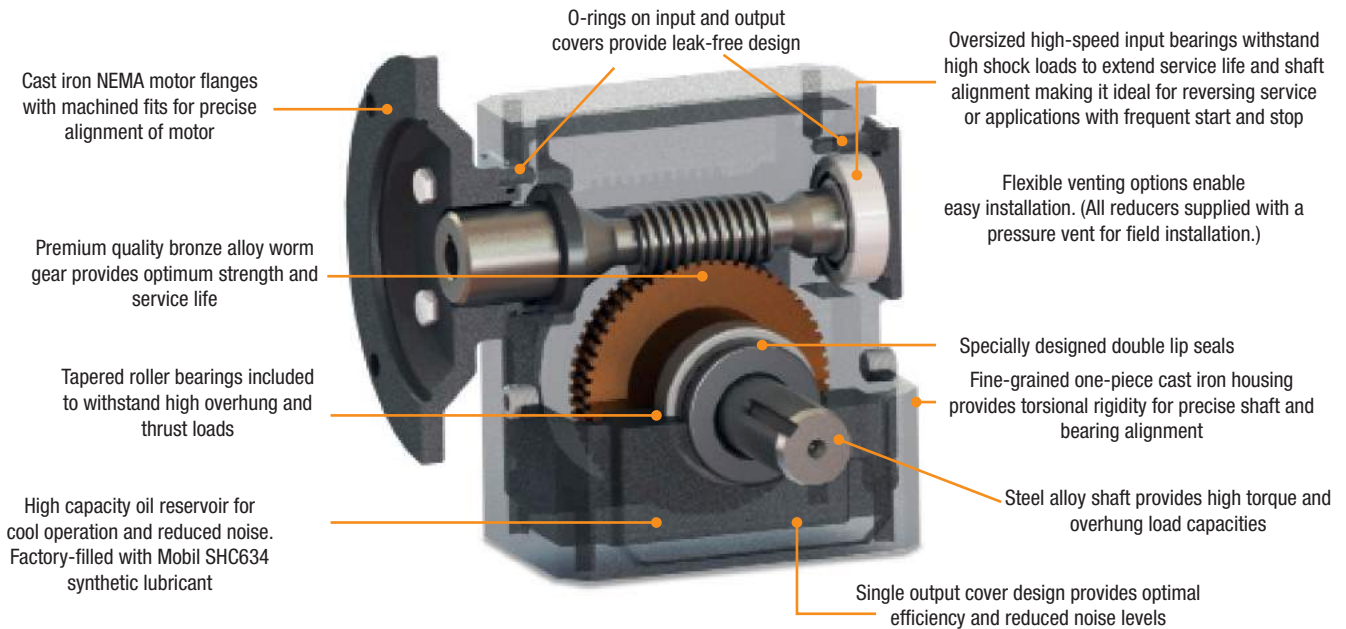
Catalog Number	Gearmotor	Hp	Voltage	RPM	FLA	Ratios	FLT in-lbs	List Price	Multiplier
GH2001	Parallel	1/20	90	6	0.59	343	290	\$651	DC1
GH2002	Parallel	1/20	90	9	0.75	202	268	\$651	DC1
GH2003	Parallel	1/20	90	18	0.80	103	150	\$651	DC1
GL2001	Parallel	1/20	12	6	3.89	343	290	\$656	DC1
GH2004	Parallel	1/8	90	21	1.30	88	280	\$656	DC1
GH2005	Parallel	1/8	90	26	1.58	69	280	\$663	DC1
GH2006	Parallel	1/8	90	32	1.50	58	220	\$663	DC1
GH2007	Parallel	1/8	90	54	1.51	34	138	\$663	DC1
GH2008	Parallel	1/8	90	61	1.42	30	113	\$653	DC1
GH2009	Parallel	1/8	90	91	1.58	20	86	\$653	DC1
GH2010	Parallel	1/8	90	165	1.57	11	47	\$653	DC1
GH2011	Parallel	1/8	90	364	1.55	5	21	\$667	DC1
GL2002	Parallel	1/8	12	31	12.00	58	220	\$667	DC1
GL2003	Parallel	1/8	12	61	11.40	30	113	\$658	DC1
GL2004	Parallel	1/8	12	163	12.60	11	47	\$658	DC1

DC Motors and Gearmotors



TG-90™ Model Information	A-311
TG-90™ Quill Type Speed Reducers	A-312
TG-90™ Solid Shaft Speed Reducers	A-316
Dimensions	A-320

WEG's Line of right angle gear reducers has been a leading source to the industry for over 60 years. Designed for reliability and long life, the TG-90 series comes in a variety of sizes and styles. Our robust design is precision engineered and manufactured to fit a variety of applications. Ideal for use on conveyors, material handling and packaging machinery, lift gates, hoists, and many other applications, the TG-90 series proves to be a versatile choice for all your gearing needs.



Features:

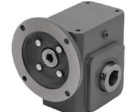
- Cast iron housing construction
- Forged manganese bronze worm gear for added strength
- Oversized high-speed input bearings to withstand high shock loads
- Oversized output tapered roller bearings to withstand high overhung and thrust loads
- Specially designed double lip seals maximize life and minimize potential for leaks
- High capacity oil reservoir filled with synthetic oil for cool operation, long life and maximize torque capacity
- Available in 56C, 143TC and 180TC quill or solid shaft input mounting
- Eight gear ratios available from 5:1 to 60:1
- Coming soon - accessory mounting kits to increase modularity for interchange to competitor's product
- WEG TG gear reducers are interchangeable to many brands, including Grove Gear, Boston Gear, Hub City, Worldwide and many more.

MODEL NUMBER INFORMATION

STYLE	SIZE	RATIO	OUTPUT SHAFT	MOTOR MOUNT	OUTPUT BORE CODE
TQ - Quill Input	13 - 1.33" CD	5	L - Left Hand	56 -56C	(Hollow output shaft only) Refer to table below for available bores
TS- Shaft Input	15 - 1.54" CD	10	R - Right Hand	140 - 143/5TC	
	18 - 1.75" CD	15	D - Double	180 - 182/4TC	
	21 - 2.06" CD	20	H - Hollow	"Blank" - shaft input	
	24 -2.37" CD	30			
	26 - 2.63" CD	40			
		50			
		60			
TQ	21	60	L	56	



C-Face Input/Solid Shaft Output



C-Face or Shaft Input/
Hollow Bore Output



Shaft Input/Solid Shaft Output



Shaft Input/Hollow Shaft Output

TG-90 Available Output Bores

Fraction Size	Decimal Size	Output Bore Code	Reducer Size					
			13	15	18	21	24	26
5/8	0.625	10						
11/16	0.688	11						
3/4	0.750	12						
7/8	0.875	14						
1	1.000	16						
1-1/8	1.125	18						
1-3/16	1.188	19						
1-1/4	1.250	20						
1-7/16	1.438	23						
1-1/2	1.500	24						

TG90 OVERHUNG LOAD RATINGS

Model	Single Output Shaft Max. Over-hung Load (lb)	Dual Output Shaft Max. Over-hung Load (lb)	Hollow Output Shaft Max. Over-hung Load (lb)
T13	425	213	425
T15	655	328	655
T18	925	463	925
T21	1200	600	1200
T24	1670	835	1670
T26	1665	833	1665

TG-90™ Quill Type Speed Reducers

	Service Class I Torque Ratings (1.0 Service Factor)
	Service Class II Torque Ratings (≥ 1.4 Service Factor)
	Service Class III Torque Ratings (≥ 2.0 Service Factor)



Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor									Max Input HP	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Catalog Number	List Price	Multi. Symbol
		0.25	0.33	0.5	0.75	1	1.5	2	3	5						
350	5:1			83	124	166					1.32	218	56C	TQ135L56SP	\$509	TG
				83	124	166					1.32	218	56C	TQ135R56SP	\$509	
				83	124	166					1.32	218	56C	TQ135D56SP	\$515	
				83	124	166					1.32	218	56C	TQ135H56SP	\$538	
					124	166	250				1.89	313	140TC	TQ155L140SP	\$558	
					124	166	250				1.89	313	140TC	TQ155R140SP	\$558	
					124	166	250				1.89	313	140TC	TQ155D140SP	\$569	
					124	166	250				1.89	313	140TC	TQ155H140SP	\$593	
						167	251	335			2.50	418	140TC	TQ185L140SP	\$575	
						167	251	335			2.50	418	140TC	TQ185R140SP	\$575	
						167	251	335			2.50	418	140TC	TQ185D140SP	\$586	
						167	251	335			2.50	418	140TC	TQ185H140SP	\$643	
							251	335	502		3.65	611	140TC	TQ215L140SP	\$590	
							251	335	502		3.65	611	140TC	TQ215R140SP	\$590	
							251	335	502		3.65	611	140TC	TQ215D140SP	\$600	
							251	335	502		3.65	611	140TC	TQ215H140SP	\$669	
								335	502	837	4.89	819	140TC	TQ245L140SP	\$712	
								335	502	837	4.89	819	140TC	TQ245R140SP	\$712	
								335	502	837	4.89	819	140TC	TQ245D140SP	\$723	
								335	502	837	4.89	819	140TC	TQ245H140SP	\$805	
								335	502	837	5.36	1037	140TC	TQ265L140SP	\$876	
								335	502	837	5.36	1037	140TC	TQ265R140SP	\$876	
								335	502	837	5.36	1037	140TC	TQ265D140SP	\$904	
								335	502	837	5.36	1037	140TC	TQ265H140SP	\$990	
175	10:1		105	158	238						0.85	269	56C	TQ1310L56SP	\$509	TG
			105	158	238						0.85	269	56C	TQ1310R56SP	\$509	
			105	158	238						0.85	269	56C	TQ1310D56SP	\$515	
			105	158	238						0.85	269	56C	TQ1310H56SP	\$538	
				160	240	321					1.19	382	140TC	TQ1510L140SP	\$558	
				160	240	321					1.19	382	140TC	TQ1510R140SP	\$558	
				160	240	321					1.19	382	140TC	TQ1510D140SP	\$569	
				160	240	321					1.19	382	140TC	TQ1510H140SP	\$593	
					243	324	486				1.59	514	140TC	TQ1810L140SP	\$575	
					243	324	486				1.59	514	140TC	TQ1810R140SP	\$575	
					243	324	486				1.59	514	140TC	TQ1810D140SP	\$586	
					243	324	486				1.59	514	140TC	TQ1810H140SP	\$643	
						324	486	648			2.33	755	140TC	TQ2110L140SP	\$590	
						324	486	648			2.33	755	140TC	TQ2110R140SP	\$590	
						324	486	648			2.33	755	140TC	TQ2110D140SP	\$600	
						324	486	648			2.33	755	140TC	TQ2110H140SP	\$669	
							492	655	983		3.18	1041	140TC	TQ2410L140SP	\$712	
							492	655	983		3.18	1041	140TC	TQ2410R140SP	\$712	
							492	655	983		3.18	1041	140TC	TQ2410D140SP	\$723	
							492	655	983		3.18	1041	140TC	TQ2410H140SP	\$805	
							492	655	983		4.00	1311	140TC	TQ2610L140SP	\$876	
							492	655	983		4.00	1311	140TC	TQ2610R140SP	\$876	
							492	655	983		4.00	1311	140TC	TQ2610D140SP	\$904	
							492	655	983		4.00	1311	140TC	TQ2610H140SP	\$990	



	Service Class I Torque Ratings (1.0 Service Factor)
	Service Class II Torque Ratings (≥ 1.4 Service Factor)
	Service Class III Torque Ratings (≥ 2.0 Service Factor)

TG-90™ Quill Type Speed Reducers

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor								Max Input HP	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Catalog Number	List Price	Multi. Symbol	
		0.25	0.33	0.5	0.75	1	1.5	2	3							5
117	15:1	113	149	226							0.64	288	56C	TQ1315L56SP	\$509	TG
		113	149	226							0.64	288	56C	TQ1315R56SP	\$509	
		113	149	226							0.64	288	56C	TQ1315D56SP	\$515	
		113	149	226							0.64	288	56C	TQ1315H56SP	\$538	
			151	229	343						0.90	410	56C	TQ1515L56SP	\$558	
			151	229	343						0.90	410	56C	TQ1515R56SP	\$558	
			151	229	343						0.90	410	56C	TQ1515D56SP	\$569	
			151	229	343						0.90	410	56C	TQ1515H56SP	\$593	
				234	351	469					1.17	548	56C	TQ1815L56SP	\$575	
				234	351	469					1.17	548	56C	TQ1815R56SP	\$575	
				234	351	469					1.17	548	56C	TQ1815D56SP	\$586	
				234	351	469					1.17	548	56C	TQ1815H56SP	\$643	
					351	469	703				1.73	813	56C	TQ2115L56SP	\$590	
					351	469	703				1.73	813	56C	TQ2115R56SP	\$590	
					351	469	703				1.73	813	56C	TQ2115D56SP	\$600	
					351	469	703				1.73	813	56C	TQ2115H56SP	\$669	
						474	711	948			2.37	1123	56C	TQ2415L56SP	\$712	
						474	711	948			2.37	1123	56C	TQ2415R56SP	\$712	
						474	711	948			2.37	1123	56C	TQ2415D56SP	\$723	
						474	711	948			2.37	1123	56C	TQ2415H56SP	\$805	
							711	948	1422		2.99	1419	56C	TQ2615L56SP	\$876	
							711	948	1422		2.99	1419	56C	TQ2615R56SP	\$876	
							711	948	1422		2.99	1419	56C	TQ2615D56SP	\$904	
							711	948	1422		2.99	1419	56C	TQ2615H56SP	\$990	
88	20:1	145	191	290							0.51	295	56C	TQ1320L56SP	\$509	TG
		145	191	290							0.51	295	56C	TQ1320R56SP	\$509	
		145	191	290							0.51	295	56C	TQ1320D56SP	\$515	
		145	191	290							0.51	295	56C	TQ1320H56SP	\$538	
		145	191	290							0.72	420	56C	TQ1520L56SP	\$558	
		145	191	290							0.72	420	56C	TQ1520R56SP	\$558	
		145	191	290							0.72	420	56C	TQ1520D56SP	\$569	
		145	191	290							0.72	420	56C	TQ1520H56SP	\$593	
			199	301	451						0.94	566	56C	TQ1820L56SP	\$575	
			199	301	451						0.94	566	56C	TQ1820R56SP	\$575	
			199	301	451						0.94	566	56C	TQ1820D56SP	\$586	
			199	301	451						0.94	566	56C	TQ1820H56SP	\$643	
				301	451	602					1.39	835	56C	TQ2120L56SP	\$590	
				301	451	602					1.39	835	56C	TQ2120R56SP	\$590	
				301	451	602					1.39	835	56C	TQ2120D56SP	\$600	
				301	451	602					1.39	835	56C	TQ2120H56SP	\$669	
					457	609	913				1.89	1152	56C	TQ2420L56SP	\$712	
					457	609	913				1.89	1152	56C	TQ2420R56SP	\$712	
					457	609	913				1.89	1152	56C	TQ2420D56SP	\$723	
					457	609	913				1.89	1152	56C	TQ2420H56SP	\$805	
						609	913	1218			2.40	1461	56C	TQ2620L56SP	\$876	
						609	913	1218			2.40	1461	56C	TQ2620R56SP	\$876	
						609	913	1218			2.40	1461	56C	TQ2620D56SP	\$904	
						609	913	1218			2.40	1461	56C	TQ2620H56SP	\$990	

TG-90™ Quill Type Speed Reducers

	Service Class I Torque Ratings (1.0 Service Factor)
	Service Class II Torque Ratings (≥ 1.4 Service Factor)
	Service Class III Torque Ratings (≥ 2.0 Service Factor)



Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor									Max Input HP	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Catalog Number	List Price	Multi. Symbol
		0.25	0.33	0.5	0.75	1	1.5	2	3	5						
58	30:1	201	265								0.37	297	56C	TQ1330L56SP	\$509	TG
		201	265								0.37	297	56C	TQ1330R56SP	\$509	
		201	265								0.37	297	56C	TQ1330D56SP	\$515	
		201	265								0.37	297	56C	TQ1330H56SP	\$538	
		201	265	402							0.53	423	56C	TQ1530L56SP	\$558	
		201	265	402							0.53	423	56C	TQ1530R56SP	\$558	
		201	265	402							0.53	423	56C	TQ1530D56SP	\$569	
		201	265	402							0.53	423	56C	TQ1530H56SP	\$593	
		212	280	424							0.67	571	56C	TQ1830L56SP	\$575	
		212	280	424							0.67	571	56C	TQ1830R56SP	\$575	
		212	280	424							0.67	571	56C	TQ1830D56SP	\$586	
		212	280	424							0.67	571	56C	TQ1830H56SP	\$643	
				424	636	848					0.99	842	56C	TQ2130L56SP	\$590	
				424	636	848					0.99	842	56C	TQ2130R56SP	\$590	
				424	636	848					0.99	842	56C	TQ2130D56SP	\$600	
				424	636	848					0.99	842	56C	TQ2130H56SP	\$669	
				429	644	858					1.36	1165	56C	TQ2430L56SP	\$712	
				429	644	858					1.36	1165	56C	TQ2430R56SP	\$712	
				429	644	858					1.36	1165	56C	TQ2430D56SP	\$723	
				429	644	858					1.36	1165	56C	TQ2430H56SP	\$805	
					644	858	1288				1.72	1474	56C	TQ2630L56SP	\$876	
					644	858	1288				1.72	1474	56C	TQ2630R56SP	\$876	
					644	858	1288				1.72	1474	56C	TQ2630D56SP	\$904	
					644	858	1288				1.72	1474	56C	TQ2630H56SP	\$990	
44	40:1	247									0.30	292	56C	TQ1340L56SP	\$509	TG
		247									0.30	292	56C	TQ1340R56SP	\$509	
		247									0.30	292	56C	TQ1340D56SP	\$515	
		247									0.30	292	56C	TQ1340H56SP	\$538	
		247	326								0.42	419	56C	TQ1540L56SP	\$558	
		247	326								0.42	419	56C	TQ1540R56SP	\$558	
		247	326								0.42	419	56C	TQ1540D56SP	\$569	
		247	326								0.42	419	56C	TQ1540H56SP	\$593	
		261	345	523							0.54	565	56C	TQ1840L56SP	\$575	
		261	345	523							0.54	565	56C	TQ1840R56SP	\$575	
		261	345	523							0.54	565	56C	TQ1840D56SP	\$586	
		261	345	523							0.54	565	56C	TQ1840H56SP	\$643	
			345	523	784						0.80	833	56C	TQ2140L56SP	\$590	
			345	523	784						0.80	833	56C	TQ2140R56SP	\$590	
			345	523	784						0.80	833	56C	TQ2140D56SP	\$600	
			345	523	784						0.80	833	56C	TQ2140H56SP	\$669	
				530	795	1060					1.09	1154	56C	TQ2440L56SP	\$712	
				530	795	1060					1.09	1154	56C	TQ2440R56SP	\$712	
				530	795	1060					1.09	1154	56C	TQ2440D56SP	\$723	
				530	795	1060					1.09	1154	56C	TQ2440H56SP	\$805	
					795	1060	1590				1.38	1460	56C	TQ2640L56SP	\$876	
					795	1060	1590				1.38	1460	56C	TQ2640R56SP	\$876	
					795	1060	1590				1.38	1460	56C	TQ2640D56SP	\$904	
					795	1060	1590				1.38	1460	56C	TQ2640H56SP	\$990	



	Service Class I Torque Ratings (1.0 Service Factor)
	Service Class II Torque Ratings (≥ 1.4 Service Factor)
	Service Class III Torque Ratings (≥ 2.0 Service Factor)

TG-90™ Quill Type Speed Reducers

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on 1750 RPM Motor									Max Input HP	Max Output Torque Rating In-Lbs	NEMA Motor Mount	Catalog Number	List Price	Multi-Symbol
		0.25	0.33	0.5	0.75	1	1.5	2	3	5						
35	50:1	288									0.24	281	56C	TQ1350L56SP	\$509	TG
		288									0.24	281	56C	TQ1350R56SP	\$509	
		288									0.24	281	56C	TQ1350D56SP	\$515	
		288									0.24	281	56C	TQ1350H56SP	\$538	
		288	380								0.35	403	56C	TQ1550L56SP	\$558	
		288	380								0.35	403	56C	TQ1550R56SP	\$558	
		288	380								0.35	403	56C	TQ1550D56SP	\$569	
		288	380								0.35	403	56C	TQ1550H56SP	\$593	
		306	404								0.44	544	56C	TQ1850L56SP	\$575	
		306	404								0.44	544	56C	TQ1850R56SP	\$575	
		306	404								0.44	544	56C	TQ1850D56SP	\$586	
		306	404								0.44	544	56C	TQ1850H56SP	\$643	
			410	621	932						0.65	803	56C	TQ2150L56SP	\$590	
			410	621	932						0.65	803	56C	TQ2150R56SP	\$590	
			410	621	932						0.65	803	56C	TQ2150D56SP	\$600	
			410	621	932						0.65	803	56C	TQ2150H56SP	\$669	
			416	630	945						0.88	1114	56C	TQ2450L56SP	\$712	
			416	630	945						0.88	1114	56C	TQ2450R56SP	\$712	
			416	630	945						0.88	1114	56C	TQ2450D56SP	\$723	
			416	630	945						0.88	1114	56C	TQ2450H56SP	\$805	
				630	945	1261					1.12	1410	56C	TQ2650L56SP	\$876	
				630	945	1261					1.12	1410	56C	TQ2650R56SP	\$876	
				630	945	1261					1.12	1410	56C	TQ2650D56SP	\$904	
				630	945	1261					1.12	1410	56C	TQ2650H56SP	\$990	
29	60:1										0.20	267	56C	TQ1360L56SP	\$457	TG
											0.20	267	56C	TQ1360R56SP	\$457	
											0.20	267	56C	TQ1360D56SP	\$470	
											0.20	267	56C	TQ1360H56SP	\$507	
		326									0.29	383	56C	TQ1560L56SP	\$533	
		326									0.29	383	56C	TQ1560R56SP	\$533	
		326									0.29	383	56C	TQ1560D56SP	\$559	
		326									0.29	383	56C	TQ1560H56SP	\$573	
		348	459								0.37	517	56C	TQ1860L56SP	\$551	
		348	459								0.37	517	56C	TQ1860R56SP	\$551	
		348	459								0.37	517	56C	TQ1860D56SP	\$580	
		348	459								0.37	517	56C	TQ1860H56SP	\$619	
		353	466	706							0.54	762	56C	TQ2160L56SP	\$585	
		353	466	706							0.54	762	56C	TQ2160R56SP	\$585	
		353	466	706							0.54	762	56C	TQ2160D56SP	\$632	
		353	466	706							0.54	762	56C	TQ2160H56SP	\$672	
			473	717	1076						0.74	1057	56C	TQ2460L56SP	\$701	
			473	717	1076						0.74	1057	56C	TQ2460R56SP	\$701	
			473	717	1076						0.74	1057	56C	TQ2460D56SP	\$748	
			473	717	1076						0.74	1057	56C	TQ2460H56SP	\$816	
				717	1076	1434					0.93	1338	56C	TQ2660L56SP	\$868	
				717	1076	1434					0.93	1338	56C	TQ2660R56SP	\$868	
				717	1076	1434					0.93	1338	56C	TQ2660D56SP	\$918	
				717	1076	1434					0.93	1338	56C	TQ2660H56SP	\$983	

Speed Reducers

TG-90™ Solid Shaft Speed Reducers

Service Class I Torque Ratings (1.0 Service Factor)
 Service Class II Torque Ratings (≥ 1.4 Service Factor)
 Service Class III Torque Ratings (≥ 2.0 Service Factor)



Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on Motor HP at 1750 RPM									Max Input HP	Max Output Torque Rating In-Lbs	Catalog Number	List Price	Multi. Symbol	
		0.25	0.33	0.5	0.75	1	1.5	2	3	5						
350	5:1			83	124	166						1.32	218	TS135LSP	\$457	TG
				83	124	166						1.32	218	TS135RSP	\$457	
				83	124	166						1.32	218	TS135DSP	\$470	
				83	124	166						1.32	218	TS135HSP	\$507	
					124	166	250					1.89	313	TS155LSP	\$533	
					124	166	250					1.89	313	TS155RSP	\$533	
					124	166	250					1.89	313	TS155DSP	\$559	
					124	166	250					1.89	313	TS155HSP	\$573	
						167	251	335				2.50	418	TS185LSP	\$551	
						167	251	335				2.50	418	TS185RSP	\$551	
						167	251	335				2.50	418	TS185DSP	\$580	
						167	251	335				2.50	418	TS185HSP	\$619	
							251	335	502			3.65	611	TS215LSP	\$585	
							251	335	502			3.65	611	TS215RSP	\$585	
							251	335	502			3.65	611	TS215DSP	\$632	
							251	335	502			3.65	611	TS215HSP	\$672	
								335	502	837		4.89	819	TS245LSP	\$701	
								335	502	837		4.89	819	TS245RSP	\$701	
								335	502	837		4.89	819	TS245DSP	\$748	
								335	502	837		4.89	819	TS245HSP	\$816	
								335	502	837		5.36	1037	TS265LSP	\$868	
								335	502	837		5.36	1037	TS265RSP	\$868	
								335	502	837		5.36	1037	TS265DSP	\$918	
								335	502	837		5.36	1037	TS265HSP	\$983	
175	10:1		105	158	238							0.85	269	TS1310LSP	\$457	TG
			105	158	238							0.85	269	TS1310RSP	\$457	
			105	158	238							0.85	269	TS1310DSP	\$470	
			105	158	238							0.85	269	TS1310HSP	\$507	
				160	240	321						1.19	382	TS1510LSP	\$533	
				160	240	321						1.19	382	TS1510RSP	\$533	
				160	240	321						1.19	382	TS1510DSP	\$559	
				160	240	321						1.19	382	TS1510HSP	\$573	
					243	324	486					1.59	514	TS1810LSP	\$551	
					243	324	486					1.59	514	TS1810RSP	\$551	
					243	324	486					1.59	514	TS1810DSP	\$580	
					243	324	486					1.59	514	TS1810HSP	\$619	
						324	486	648				2.33	755	TS2110LSP	\$585	
						324	486	648				2.33	755	TS2110RSP	\$585	
						324	486	648				2.33	755	TS2110DSP	\$632	
						324	486	648				2.33	755	TS2110HSP	\$672	
							492	655	983			3.18	1041	TS2410LSP	\$701	
							492	655	983			3.18	1041	TS2410RSP	\$701	
							492	655	983			3.18	1041	TS2410DSP	\$748	
							492	655	983			3.18	1041	TS2410HSP	\$816	
							492	655	983			4.00	1311	TS2610LSP	\$868	
							492	655	983			4.00	1311	TS2610RSP	\$868	
							492	655	983			4.00	1311	TS2610DSP	\$918	
							492	655	983			4.00	1311	TS2610HSP	\$983	

Speed Reducers



	Service Class I Torque Ratings (1.0 Service Factor)
	Service Class II Torque Ratings (≥ 1.4 Service Factor)
	Service Class III Torque Ratings (≥ 2.0 Service Factor)

TG-90™ Solid Shaft Speed Reducers

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on Motor HP at 1750 RPM									Max Input HP	Max Output Torque Rating In-Lbs	Catalog Number	List Price	Multi. Symbol
		0.25	0.33	0.5	0.75	1	1.5	2	3	5					
117	15:1	113	149	226							0.64	288	TS1315LSP	\$457	TG
		113	149	226							0.64	288	TS1315RSP	\$457	
		113	149	226							0.64	288	TS1315DSP	\$470	
		113	149	226							0.64	288	TS1315HSP	\$507	
			151	229	343						0.90	410	TS1515LSP	\$533	
			151	229	343						0.90	410	TS1515RSP	\$533	
			151	229	343						0.90	410	TS1515DSP	\$559	
			151	229	343						0.90	410	TS1515HSP	\$573	
				234	351	469					1.17	548	TS1815LSP	\$551	
				234	351	469					1.17	548	TS1815RSP	\$551	
				234	351	469					1.17	548	TS1815DSP	\$580	
				234	351	469					1.17	548	TS1815HSP	\$619	
					351	469	703				1.73	813	TS2115LSP	\$585	
					351	469	703				1.73	813	TS2115RSP	\$585	
					351	469	703				1.73	813	TS2115DSP	\$632	
					351	469	703				1.73	813	TS2115HSP	\$672	
						474	711	948			2.37	1123	TS2415LSP	\$701	
						474	711	948			2.37	1123	TS2415RSP	\$701	
						474	711	948			2.37	1123	TS2415DSP	\$748	
						474	711	948			2.37	1123	TS2415HSP	\$816	
							711	948	1422		2.99	1419	TS2615LSP	\$868	
							711	948	1422		2.99	1419	TS2615RSP	\$868	
							711	948	1422		2.99	1419	TS2615DSP	\$918	
							711	948	1422		2.99	1419	TS2615HSP	\$983	
88	20:1	145	191	290							0.51	295	TS1320LSP	\$457	TG
		145	191	290							0.51	295	TS1320RSP	\$457	
		145	191	290							0.51	295	TS1320DSP	\$470	
		145	191	290							0.51	295	TS1320HSP	\$507	
		145	191	290							0.72	420	TS1520LSP	\$533	
		145	191	290							0.72	420	TS1520RSP	\$533	
		145	191	290							0.72	420	TS1520DSP	\$559	
		145	191	290							0.72	420	TS1520HSP	\$573	
			199	301	451						0.94	566	TS1820LSP	\$551	
			199	301	451						0.94	566	TS1820RSP	\$551	
			199	301	451						0.94	566	TS1820DSP	\$580	
			199	301	451						0.94	566	TS1820HSP	\$619	
				301	451	602					1.39	835	TS2120LSP	\$585	
				301	451	602					1.39	835	TS2120RSP	\$585	
				301	451	602					1.39	835	TS2120DSP	\$632	
				301	451	602					1.39	835	TS2120HSP	\$672	
					457	609	913				1.89	1152	TS2420LSP	\$701	
					457	609	913				1.89	1152	TS2420RSP	\$701	
					457	609	913				1.89	1152	TS2420DSP	\$748	
					457	609	913				1.89	1152	TS2420HSP	\$816	
						609	913	1218			2.40	1461	TS2620LSP	\$868	
						609	913	1218			2.40	1461	TS2620RSP	\$868	
						609	913	1218			2.40	1461	TS2620DSP	\$918	
						609	913	1218			2.40	1461	TS2620HSP	\$983	

TG-90™ Solid Shaft Speed Reducers

	Service Class I Torque Ratings (1.0 Service Factor)
	Service Class II Torque Ratings (≥ 1.4 Service Factor)
	Service Class III Torque Ratings (≥ 2.0 Service Factor)



Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on Motor HP at 1750 RPM									Max Input HP	Max Output Torque Rating In-Lbs	Catalog Number	List Price	Multi. Symbol
		0.25	0.33	0.5	0.75	1	1.5	2	3	5					
58	30:1	201	265								0.37	297	TS1330LSP	\$457	TG
		201	265								0.37	297	TS1330RSP	\$457	
		201	265								0.37	297	TS1330DSP	\$470	
		201	265								0.37	297	TS1330HSP	\$507	
		201	265	402							0.53	423	TS1530LSP	\$533	
		201	265	402							0.53	423	TS1530RSP	\$533	
		201	265	402							0.53	423	TS1530DSP	\$559	
		201	265	402							0.53	423	TS1530HSP	\$573	
		212	280	424							0.67	571	TS1830LSP	\$551	
		212	280	424							0.67	571	TS1830RSP	\$551	
		212	280	424							0.67	571	TS1830DSP	\$580	
		212	280	424							0.67	571	TS1830HSP	\$619	
				424	636	848					0.99	842	TS2130LSP	\$585	
				424	636	848					0.99	842	TS2130RSP	\$585	
				424	636	848					0.99	842	TS2130DSP	\$632	
				424	636	848					0.99	842	TS2130HSP	\$672	
				429	644	858					1.36	1165	TS2430LSP	\$701	
				429	644	858					1.36	1165	TS2430RSP	\$701	
				429	644	858					1.36	1165	TS2430DSP	\$748	
				429	644	858					1.36	1165	TS2430HSP	\$816	
					644	858	1288				1.72	1474	TS2630LSP	\$868	
					644	858	1288				1.72	1474	TS2630RSP	\$868	
					644	858	1288				1.72	1474	TS2630DSP	\$918	
					644	858	1288				1.72	1474	TS2630HSP	\$983	
44	40:1	247									0.30	292	TS1340LSP	\$457	TG
		247									0.30	292	TS1340RSP	\$457	
		247									0.30	292	TS1340DSP	\$470	
		247									0.30	292	TS1340HSP	\$507	
		247	326								0.42	419	TS1540LSP	\$533	
		247	326								0.42	419	TS1540RSP	\$533	
		247	326								0.42	419	TS1540DSP	\$559	
		247	326								0.42	419	TS1540HSP	\$573	
		261	345	523							0.54	565	TS1840LSP	\$551	
		261	345	523							0.54	565	TS1840RSP	\$551	
		261	345	523							0.54	565	TS1840DSP	\$580	
		261	345	523							0.54	565	TS1840HSP	\$619	
			345	523	784						0.80	833	TS2140LSP	\$585	
			345	523	784						0.80	833	TS2140RSP	\$585	
			345	523	784						0.80	833	TS2140DSP	\$632	
			345	523	784						0.80	833	TS2140HSP	\$672	
				530	795	1060					1.09	1154	TS2440LSP	\$701	
				530	795	1060					1.09	1154	TS2440RSP	\$701	
				530	795	1060					1.09	1154	TS2440DSP	\$748	
				530	795	1060					1.09	1154	TS2440HSP	\$816	
					795	1060	1590				1.38	1460	TS2640LSP	\$868	
					795	1060	1590				1.38	1460	TS2640RSP	\$868	
					795	1060	1590				1.38	1460	TS2640DSP	\$918	
					795	1060	1590				1.38	1460	TS2640HSP	\$983	

Speed Reducers

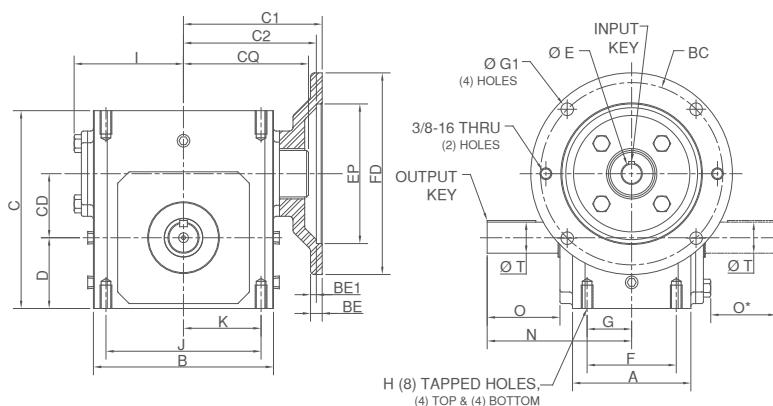


	Service Class I Torque Ratings (1.0 Service Factor)
	Service Class II Torque Ratings (≥ 1.4 Service Factor)
	Service Class III Torque Ratings (≥ 2.0 Service Factor)

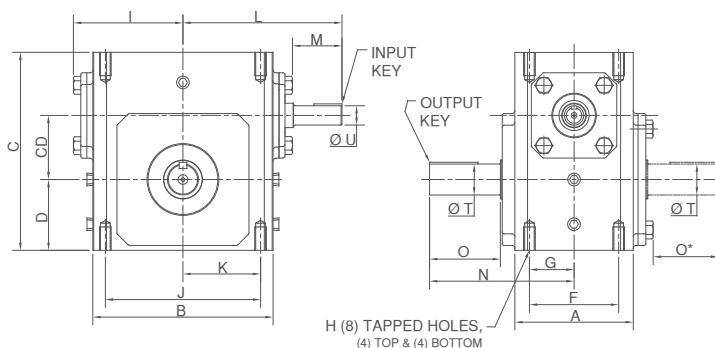
TG-90™ Solid Shaft Speed Reducers

Nominal Output RPM @ 1750 RPM In	Gear Ratio	Continuous Duty Output Torque (In-Lbs) Based on Motor HP at 1750 RPM									Max Input HP	Max Output Torque Rating In-Lbs	Catalog Number	List Price	Multi. Symbol
		0.25	0.33	0.5	0.75	1	1.5	2	3	5					
35	50:1	288									0.24	281	TS1350LSP	\$457	TG
		288									0.24	281	TS1350RSP	\$457	
		288									0.24	281	TS1350DSP	\$470	
		288									0.24	281	TS1350HSP	\$507	
		288	380								0.35	403	TS1550LSP	\$533	
		288	380								0.35	403	TS1550RSP	\$533	
		288	380								0.35	403	TS1550DSP	\$559	
		288	380								0.35	403	TS1550HSP	\$573	
		306	404								0.44	544	TS1850LSP	\$551	
		306	404								0.44	544	TS1850RSP	\$551	
		306	404								0.44	544	TS1850DSP	\$580	
		306	404								0.44	544	TS1850HSP	\$619	
			410	621	932						0.65	803	TS2150LSP	\$585	
			410	621	932						0.65	803	TS2150RSP	\$585	
			410	621	932						0.65	803	TS2150DSP	\$632	
			410	621	932						0.65	803	TS2150HSP	\$672	
			416	630	945						0.88	1114	TS2450LSP	\$701	
			416	630	945						0.88	1114	TS2450RSP	\$701	
			416	630	945						0.88	1114	TS2450DSP	\$748	
			416	630	945						0.88	1114	TS2450HSP	\$816	
				630	945	1261					1.12	1410	TS2650LSP	\$868	
				630	945	1261					1.12	1410	TS2650RSP	\$868	
				630	945	1261					1.12	1410	TS2650DSP	\$918	
				630	945	1261					1.12	1410	TS2650HSP	\$983	
29	60:1										0.20	267	TS1360LSP	\$457	TG
											0.20	267	TS1360RSP	\$457	
											0.20	267	TS1360DSP	\$470	
											0.20	267	TS1360HSP	\$507	
		326									0.29	383	TS1560LSP	\$533	
		326									0.29	383	TS1560RSP	\$533	
		326									0.29	383	TS1560DSP	\$559	
		326									0.29	383	TS1560HSP	\$573	
		348	459								0.37	517	TS1860LSP	\$551	
		348	459								0.37	517	TS1860RSP	\$551	
		348	459								0.37	517	TS1860DSP	\$580	
		348	459								0.37	517	TS1860HSP	\$619	
		353	466	706							0.54	762	TS2160LSP	\$585	
		353	466	706							0.54	762	TS2160RSP	\$585	
		353	466	706							0.54	762	TS2160DSP	\$632	
		353	466	706							0.54	762	TS2160HSP	\$672	
			473	717	1076						0.74	1057	TS2460LSP	\$701	
			473	717	1076						0.74	1057	TS2460RSP	\$701	
			473	717	1076						0.74	1057	TS2460DSP	\$748	
			473	717	1076						0.74	1057	TS2460HSP	\$816	
				717	1076	1434					0.93	1338	TS2660LSP	\$868	
				717	1076	1434					0.93	1338	TS2660RSP	\$868	
				717	1076	1434					0.93	1338	TS2660DSP	\$918	
				717	1076	1434					0.93	1338	TS2660HSP	\$983	

TG90 Style TQ - Motorized Input / Solid Output Shaft



TG90 Style TS - Shaft Input / Solid Output Shaft



STYLE TQ / TS DIMENSIONS (Inches)

SIZE	A	B	C	CD	D	F	G	H	I	J	K	L	M	N	O	O*	T DIA +0.000 -0.002	U DIA +0.000 -0.001	Input Key	Output Key
T13	2.88	3.82	4.66	1.33	1.72	2.000	1.000	5/16-18 X .44 DEEP	2.68	3.250	1.625	3.82	1.28	4.00	2.16	1.94	0.625	0.500	1/8 SQ. x .88 LG.	3/16 SQ.X 1.38 LG.
T15	3.44	4.88	5.38	1.54	1.91	2.750	1.375	5/16-18 X .62 DEEP	3.12	4.188	2.094	4.77	1.72	4.31	2.00	1.79	0.750	0.625	3/16 SQ. x .88 LG.	3/16 SQ.X 1.38 LG.
T18	3.56	5.06	5.75	1.75	2.06	2.750	1.375	5/16-18 X .62 DEEP	3.16	4.188	2.094	4.88	1.56	4.34	2.06	1.85	0.875	0.625	3/16 SQ. x .88 LG.	3/16SQ.X 1.38 LG.
T21	3.81	5.81	6.38	2.06	2.28	2.875	1.438	3/8-16 X .75 DEEP	3.53	5.000	2.500	5.12	1.56	4.66	2.28	2.07	1.000	0.625	3/16 SQ. x .88 LG.	1/4 SQ.X 1.75 LG.
T24	4.06	6.13	6.94	2.38	2.50	2.875	1.438	3/8-16 X .75 DEEP	3.69	5.000	2.500	5.88	2.19	5.12	2.53	2.31	1.125	0.750	3/16 SQ. x 1.50 LG.	1/4 SQ.X 1.75 LG.
T26	4.44	7.38	8.00	2.63	2.94	3.375	1.688	3/8-16 X .75 DEEP	4.24	6.375	3.188	6.05	1.81	5.63	2.94	2.73	1.250	0.750	3/16 SQ. x 1.50 LG.	1/4 SQ.X 1.75 LG.

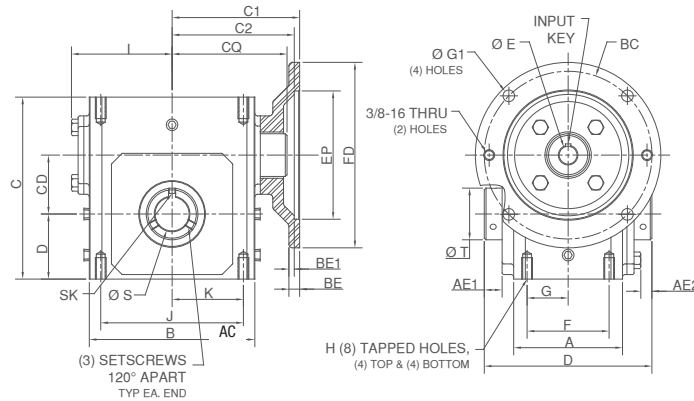
MOTOR MOUNTING DIMENSIONS (Inches)

SIZE	C1 56C/140TC	C2 180TC	CQ	
			56C/140TC	180TC
T13	3.44	N/A	3.12	N/A
T15	4.00	N/A	3.38	N/A
T18	4.09	N/A	3.59	N/A
T21	4.47	N/A	4.06	N/A
T24	4.62	5.07	4.12	4.10
T26	5.19	5.63	4.82	4.83

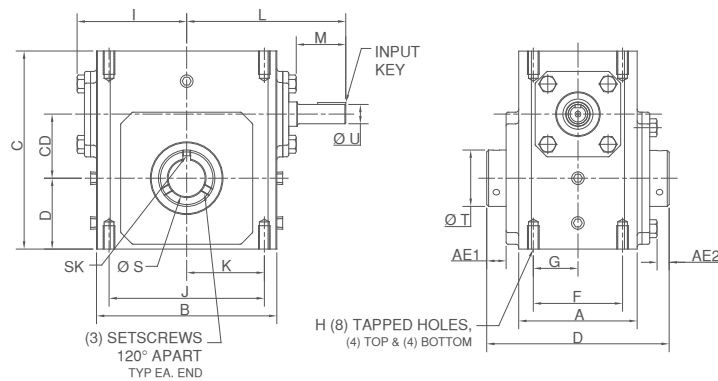
NEMA DIMENSIONS (Inches)

Motor Frame	BC	EP	FD	BE	BE1	E BORE DIA	Input Keyway	G1
56C	5.88	4.50	6.50	0.38	N/A	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	0.875	3/16 X 3/32	0.41
180TC	7.25	8.50	9.00	N/A	0.50	1.125	1/4 x 1/8	0.53

TG90 Style TZ - Motorized Input / Hollow Output Shaft



TG90 Style TS - Shaft Input / Hollow Output Shaft



STYLE TQ / TS DIMENSIONS (Inches)

SIZE	A	AC	AE1	AE2	B	C	CD	D	F	G	H	I	J	K	L	M	N	S BORE MAX -0.000 +0.002	U DIA +0.000 -0.001	Input Key	Output Key (Max Bore)
T13	2.88	6.05	0.53	0.32	3.82	4.66	1.33	1.72	2.000	1.000	5/16-18 X .44 DEEP	2.68	3.250	1.625	3.82	1.28	4.00	0.625	0.500	1/8 SQ. x .88 LG.	3/16 SQ.X 1.50 LG.
T15	3.44	6.64	0.53	0.32	4.88	5.38	1.54	1.91	2.750	1.375	5/16-18 X .62 DEEP	3.12	4.188	2.094	4.77	1.72	4.31	0.625	0.625	3/16 SQ. x .88 LG.	3/16 SQ.X 1.50 LG.
T18	3.56	6.75	0.49	0.28	5.06	5.75	1.75	2.06	2.750	1.375	5/16-18 X .62 DEEP	3.16	4.188	2.094	4.88	1.56	4.34	1.000	0.625	3/16 SQ. x .88 LG.	1/4SQ.X 3.00 LG.
T21	3.81	7.20	0.61	0.40	5.81	6.38	2.06	2.28	2.875	1.438	3/8-16 X .75 DEEP	3.53	5.000	2.500	5.12	1.56	4.66	1.250	0.625	3/16 SQ. x .88 LG.	3/8 SQ.X 3.00 LG.
T24	4.06	8.81	0.51	0.30	6.13	6.94	2.38	2.50	2.875	1.438	3/8-16 X .75 DEEP	3.69	5.000	2.500	5.88	2.19	5.12	1.500	0.750	3/16 SQ. x 1.50 LG.	3/8 SQ.X 3.00 LG.
T26	4.44	8.49	0.6	0.39	7.38	8.00	2.63	2.94	3.375	1.688	3/8-16 X .75 DEEP	4.24	6.375	3.188	6.05	1.81	5.63	1.500	0.750	3/16 SQ. x 1.50 LG.	3/8 SQ.X 3.00 LG.

MOTOR MOUNTING DIMENSIONS (Inches)

SIZE	C1 56C/140TC	C2 180TC	CQ	
			56C/140TC	180TC
T13	3.44	N/A	3.12	N/A
T15	4.00	N/A	3.38	N/A
T18	4.09	N/A	3.59	N/A
T21	4.47	N/A	4.06	N/A
T24	4.62	5.07	4.12	4.10
T26	5.19	5.63	4.82	4.83

NEMA DIMENSIONS (Inches)

Motor Frame	BC	EP	FD	BE	BE1	E BORE DIA	Input Keyway	G1
56C	5.88	4.50	6.50	0.38	N/A	0.625	3/16 x 3/32	0.41
140TC	5.88	4.50	6.50	0.38	N/A	0.875	3/16 X 3/32	0.41
180TC	7.25	8.50	9.00	N/A	0.50	1.125	1/4 x 1/8	0.53

- Models in black text are Standard Efficiency
- Models in blue text are NEMA Premium® Efficiency
- Models in green text are NEMA Super Premium Efficiency

Catalog Notes

1	1.0 Service Factor	31	Rating is suitable for 1.0SF @ 50Hz. Also suitable for next lower HP @ 1.15SF 50Hz
2	Aluminum Frame with Removable Feet	32	Suitable for 1.15SF @ 50°C ambient
3	Automatic Reset Thermal Overload Protector	33	Suitable for 380V 60Hz when wired as YY (double WYE)
4	Manual Reset Thermal Overload Protector	34	AEGIS® Inside
5	CCW Rotation Viewed from Shaft End - Non Reversible	35	AEGIS® ring installation reduces the available "N-W" length
6	Compressor Duty	36	Super Premium
7	F2 Mount	37	Design A
8	F3 Mount	38	TEAO - Totally Enclosed Air Over
9	Rolled Steel Frame - Cannot be modified with T Box on opposite side	39	Cannot be modified with T Box on opposite side
10	Not Thermally Protected	40	NDE shaft with 3/8" drive socket
11	Metal fan - Not suitable for division 2	41	Also rated 230/460V 50Hz 1.0 SF
12	Reduced Frame	42	Rated 50°C ambient
13	Resilient Base	43	With insulated non drive end housing
14	Roller Bearing	44	With air deflector. Flange MOD not available
15	Round Body - Drip Cover Included	45	Also rated 380V 50Hz
16	Split-Phase Motor	46	56J shaft end with dual opposed threads (7/16-20 UNF-2A R.H and 3/8-16 UNF-2A L.H)
17	TENV - Totally Enclosed Non Ventilated	47	Motor designed with copper bar rotor
18	Z-Frame; Bigger Shaft Diameter and Bearings	48	Motor suitable for safe area only
19	105K Tempature Rise; VFD service requires HP derate	49	Rating suitable for replat to 1.15SF on variable torque VFD power
20	Round Body - Drip Cover NOT Included	50	Rating requires replat to Class H insulation for 1.15SF on variable torque VFD power
21	Stainless Steel Body	51	Not normally stocked. Factory build lead time may apply
22	Two Speed - Double Windings		
23	Two Speed - Single Winding		
24	Modified item. Usually ships in two weeks		
25	Brake rectifier suitable for 230VAC		
26	Brake rectifier suitable for 460VAC		
27	For Export Only (not to be used in the USA) due to Certification and/or Efficiency requirements.		
28	ODP Fan Cooled		
29	Standard Efficiency		
30	High Efficiency (EPACT)		