

The 2500 series is a precision permanent magnet DC, brush commutated motor that can be mounted to a variety of Merkle-Korff gear reducer options. The 2500 series motor can be fitted with available encoders.

SPECIFICATIONS

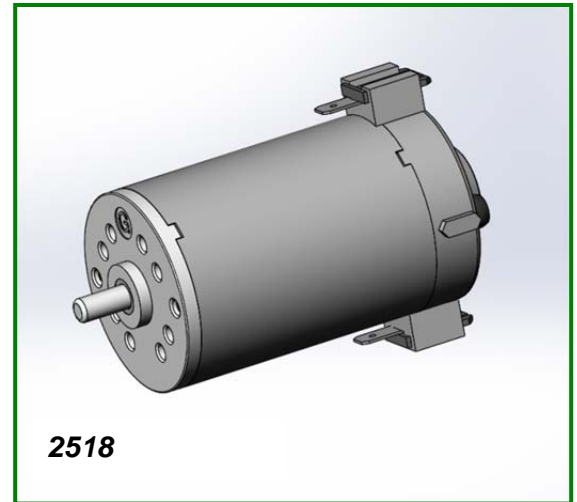
Input Voltage: 6 to 48 Vdc
Output Power: 8 to 30 Watts
Rotation: Bi-Directional
Maximum Speed: 8000 RPM
Temperature Range: -30 °C to +80 °C

Construction Features

Poles: 2
Bearings: Sintered Bronze
Brushes: Long life copper or silver graphite
Insulation Class: B
Shaft Diameters: 0.187"
Termination: Two 0.187" Spade Terminals
Regulatory Approvals: RoHs

TYPICAL APPLICATIONS

- Analytical Laboratory Equipment
- Food Service Equipment
- Actuators
- Pumps
- Conveyors
- Material Handling
- Packaging equipment
- Drive-Thru Window Operators

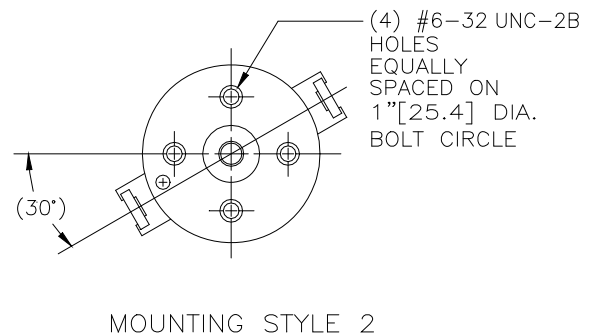
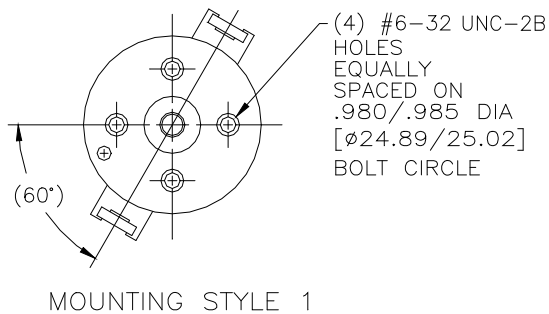


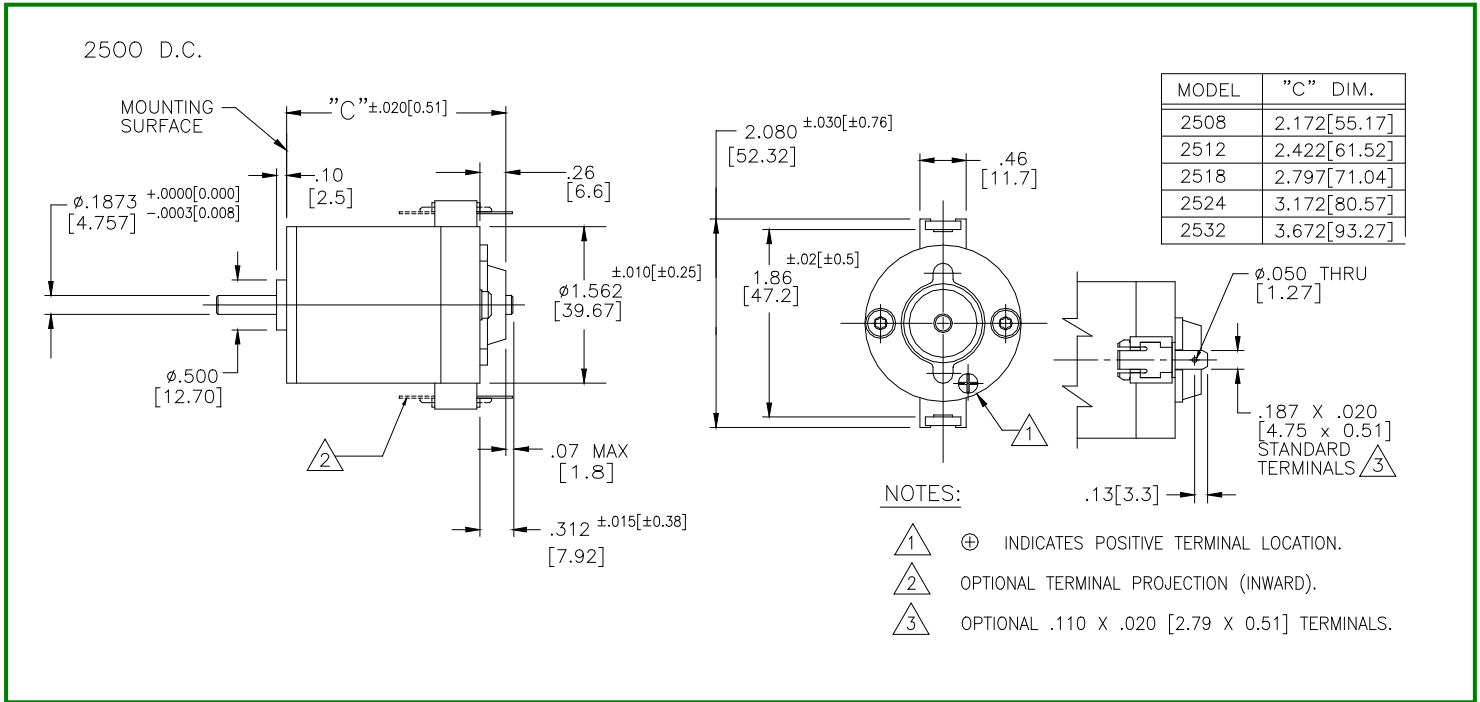
OPTIONAL FEATURES

- Customized output shafts including dual output
- Various lead lengths, terminals and connectors
- EMI Filtering: External Suppression Only
- Magnetic Encoder: 2 to 12 PPR Resolution
- Optical or Capacitive: Up to 2048 PPR Resolution

MOUNTING

2500 D.C.





2500 SERIES MOTOR PERFORMANCE

Parameter	Symbol	Units	2508	2508	2512	2512	2518	2518	2524	2524	2532	2532
Voltage	E	Volts	12	24	12	24	12	24	12	24	12	24
Continuous Torque	T _c	Oz.in	1.6	1.6	4.2	4.2	5.0	5.0	6.0	7.0	8.2	8.8
Continuous Current	I	Amps	1.15	0.55	1.95	0.95	2.5	1.25	2.75	1.48	3.23	1.72
Continuous Speed	n _c	RPM	6500	6500	5000	5000	5600	5600	5050	5000	4485	4700
Stall Torque	T _s	Oz.in	18	20	26	30	40	42	48	52	51	70
No Load Speed	N ₀	RPM	7050	7050	5800	5800	6350	6350	5970	5730	5340	5340
Output Power	P	Watts	7.8	7.8	15	15	20	20	23	25	27	30
Maximum Winding Temperature	Θ _{max}	°C	130	130	130	130	130	130	130	130	130	130
Torque Constant	K _t	Oz.in/Amp	2.18	4.37	2.63	5.41	2.48	4.97	2.63	5.53	2.96	5.91
Back-EMF Constant	K _e	V/kRPM	1.61	3.23	1.94	4.0	1.84	3.67	1.95	4.09	2.19	4.38
Terminal Resistance	R _t	Ohms	1.4	4.90	1.21	4.23	0.74	2.74	0.78	2.48	0.68	1.97
Motor Constant	K _m	Oz.in/√W	1.66	1.66	2.39	2.64	2.88	3.00	2.99	3.52	3.60	4.21
Length	L	In	2.172	2.172	2.422	2.422	2.797	2.797	3.172	3.172	3.672	3.672