

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

SPECIFICATIONS

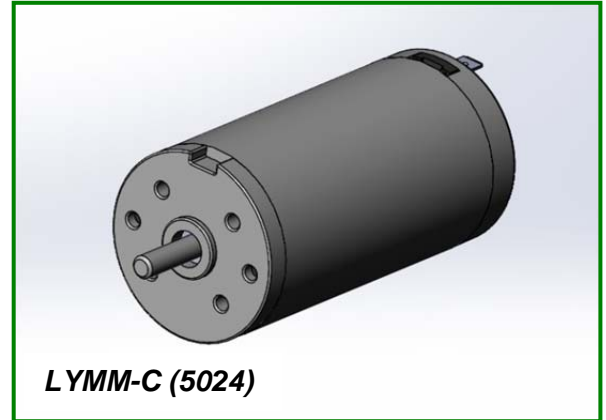
Input Voltage: 6 to 48 Vdc
Output Power: 8 to 30 Watts
Rotation: Bi-Directional
Maximum Speed: 8000 RPM
Temperature Range: -30 °C to +80 °C

Construction Features

Poles: 2
Bearings: Sintered Bronze or Ball
Brushes: Long life copper or silver graphite
Insulation Class: F
Armature: Dynamically balanced for low vibration
Shaft Diameters: 0.187", 5mm
Termination: #22 AWG Lead Wires or two 0.187" Spade Terminals
Regulatory Approvals: RoHs

TYPICAL APPLICATIONS

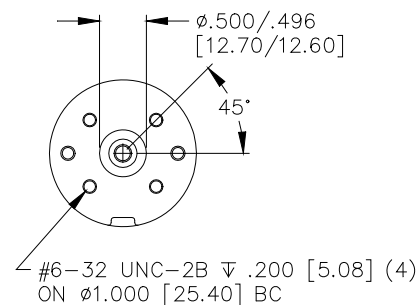
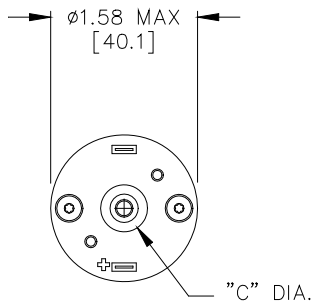
- Analytical Laboratory Equipment
- Food Service Equipment
- Actuators
- Pumps
- Conveyors
- Material Handling
- Currency Counters
- RV Room Slide-out



OPTIONAL FEATURES

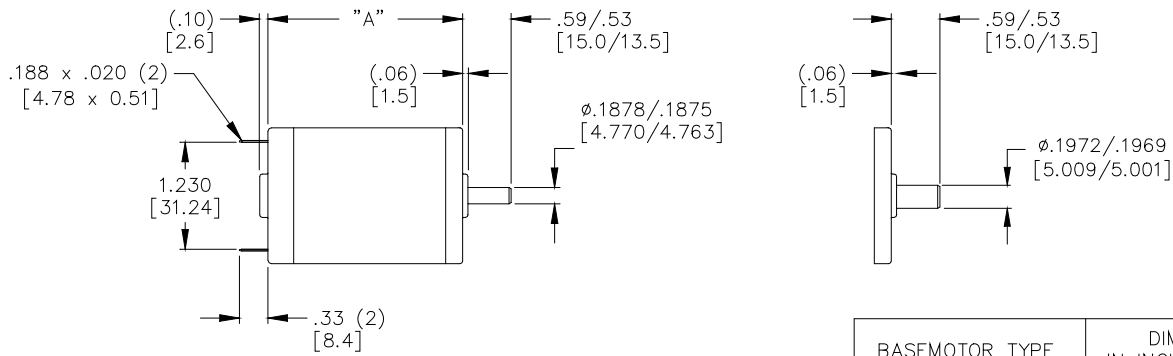
- Customized output shafts including dual output
- Various lead lengths, terminals and connectors
- Brakes: Electromagnetic
- EMI Filtering: Internal Suppression
- Magnetic Encoder: 2 to 12 PPR Resolution
- Optical or Capacitive: Up to 2048 PPR Resolution

MOUNTING



| SHAFT DIA. | DIM "C" DIA. |
|--------------------------------------|------------------------------------|
| $\phi .1878 / .1875 [4.770 / 4.763]$ | $\phi .500 / .496 [12.70 / 12.60]$ |
| $\phi .1972 / .1969 [5.009 / 5.001]$ | $\phi .625 / .623 [15.88 / 15.82]$ |

LYMM



| BASEMOTOR TYPE | DIM "A" (MAX) IN INCHES [MILLIMETERS] |
|----------------|--|
| LYMM-4X SERIES | 2.11 [53.6] |
| LYMM-6X SERIES | 2.36 [59.9] |
| LYMM-8X SERIES | 2.61 [66.3] |
| LYMM-CX SERIES | 3.11 [79.0] |

LYMM (5000) SERIES MOTOR PERFORMANCE

| Parameter | Symbol | Units | LYMM-4 | LYMM-4 | LYMM-6 | LYMM-6 | LYMM-8 | LYMM-8 | LYMM-C | LYMM-C |
|------------------------------------|------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| Voltage | E | Volts | 12 | 24 | 12 | 24 | 12 | 24 | 12 | 24 |
| Continuous Torque | T _c | N.m | 0.011 | 0.011 | 0.033 | 0.033 | 0.043 | 0.043 | 0.067 | 0.067 |
| Continuous Current | I | Amps | 1.3 | 0.64 | 2.2 | 1.1 | 2.8 | 1.4 | 3.4 | 1.7 |
| Continuous Speed | n _c | RPM | 6550 | 6700 | 4800 | 5000 | 5100 | 5300 | 4125 | 4250 |
| Stall Torque | T _s | N.m | 0.13 | 0.16 | 0.24 | 0.26 | 0.30 | 0.34 | 0.40 | 0.44 |
| No Load Speed | N ₀ | RPM | 7150 | 7150 | 5750 | 5750 | 6000 | 6000 | 4985 | 4985 |
| Output Power | P | Watts | 8 | 8 | 17 | 17 | 23 | 23 | 30 | 30 |
| No Load Current | I ₀ | Amps | 0.55 | 0.27 | 0.44 | 0.22 | 0.50 | 0.25 | 0.44 | 0.22 |
| Maximum Winding Temperature | Θ _{max} | °C | 155 | 155 | 155 | 155 | 155 | 155 | 155 | 155 |
| Torque Constant | K _t | N.m/Amp | 0.015 | 0.030 | 0.019 | 0.038 | 0.019 | 0.038 | 0.023 | 0.046 |
| Back-EMF Constant | K _e | V.s/rad | 0.015 | 0.030 | 0.019 | 0.038 | 0.019 | 0.038 | 0.023 | 0.046 |
| Length | L | mm | 53.6 | 53.6 | 59.9 | 59.9 | 66.3 | 66.3 | 79.0 | 79.0 |