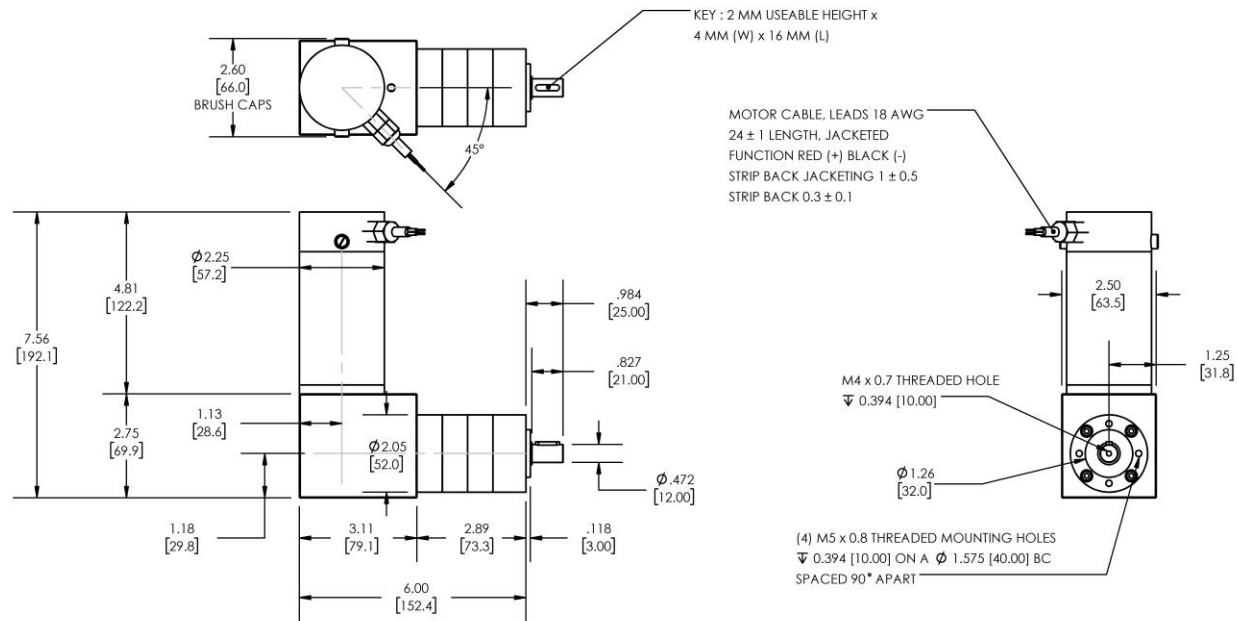




# REVERSIBLE BRUSHED DC RIGHT-ANGLED GEARMOTOR

**Model Number:**

**MMP D22-490F-36V GRA52-169**



DIMENSIONS ARE INCHES [MM] UNLESS OTHERWISE STATED

| PLANETARY GEARMOTOR OUTPUT PARAMETERS:     | VALUE      | UNITS       | TOLERANCE |
|--------------------------------------------|------------|-------------|-----------|
| Gearhead Ratio (exact)                     | 168.84 : 1 |             |           |
| Gearhead Shaft Output Speed (at full-load) | 16         | RPM         | MAX       |
| Gearmotor Rated Continuous Torque          | 369        | In-Lbs      | MAX       |
| Gearmotor Rated Peak Torque                | 443++      | In-Lbs      | ----      |
| Gearhead Standard Backlash                 | 48         | Arc Minutes | MAX       |
| Gearhead Efficiency                        | 70%        | ----        | ----      |
| Output Shaft Radial Load Capacity          | 102        | Lbs         | MAX       |
| Output Shaft Axial Load Capacity           | 34         | Lbs         | MAX       |
| Gearmotor Total Weight                     | 6.9        | Lbs         | MAX       |

++ All Peak Torque values are dependent upon duty. Contact our sales office for details.

| DC MOTOR PERFORMANCE PARAMETERS: | VALUE | UNITS     | TOLERANCE |
|----------------------------------|-------|-----------|-----------|
| Rated DC Voltage                 | 36    | DC VOLTS  | ----      |
| Rated Continuous Current         | 4.1   | AMPERES   | ----      |
| No-Load Speed                    | 3600  | RPM       | MAX       |
| Rated Speed                      | 2664  | RPM       | +/- 15%   |
| Rated Continuous Power Out       | 99    | WATTS     | +/- 15%   |
| Rated Continuous Torque          | 50    | OZ-IN     | ----      |
| Peak Torque (motor only)         | 140   | OZ-IN     | ----      |
| No-Load Current                  | 0.33  | AMPERES   | MAX       |
| Back EMF Constant (Ke)           | 10.0  | V/KRPM    | +/- 10%   |
| Torque Constant (Kt)             | 13.5  | OZ-IN/AMP | +/- 10%   |
| DC Armature Resistance           | 2.31  | OHMS      | +/- 15%   |
| Armature Inductance              | 2.89  | mH        | +/- 15%   |
| Armature temperature             | 155   | DEG. C    | MAX       |

**NOTES:**

- ENCODER & BRAKE OPTIONS AVAILABLE – [FOLLOW THIS LINK FOR DETAILS](#)
- NEMA MOUNTING FLANGE OPTION AVAILABLE – [FOLLOW THIS LINK FOR DETAILS](#)

**MIDWEST MOTION PRODUCTS, INC**

**DESIGN, MANUFACTURING & DISTRIBUTION - MOTION CONTROL EQUIPMENT**

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