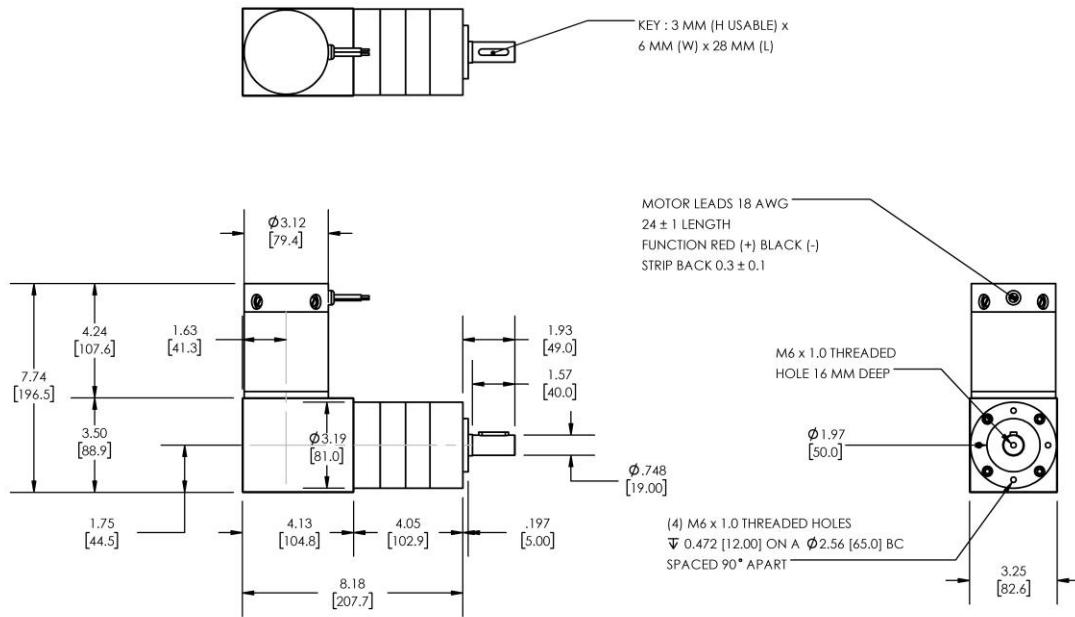




# REVERSIBLE BRUSHED DC RIGHT-ANGLED GEARMOTOR

**Model Number:**

**MMP D33-455I-90V GRA81-100**



DIMENSIONS ARE INCHES [MM] UNLESS OTHERWISE STATED

| PLANETARY GEARMOTOR OUTPUT PARAMETERS:     | VALUE     | UNITS       | TOLERANCE |
|--------------------------------------------|-----------|-------------|-----------|
| Gearhead Ratio (exact)                     | 99.50 : 1 |             |           |
| Gearhead Shaft Output Speed (at full-load) | 44        | RPM         | MAX       |
| Gearmotor Rated Continuous Torque          | 353       | In-Lbs      | MAX       |
| Gearmotor Rated Peak Torque                | 2124++    | In-Lbs      | ----      |
| Gearhead Standard Backlash                 | 36        | Arc Minutes | MAX       |
| Gearhead Efficiency                        | 70%       | ----        | ----      |
| Output Shaft Radial Load Capacity          | 225       | Lbs         | MAX       |
| Output Shaft Axial Load Capacity           | 45        | Lbs         | MAX       |
| Gearmotor Total Weight                     | 16        | 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                 | 90    | DC VOLTS  | ----      |
| Rated Continuous Current         | 3.7   | AMPERES   | ----      |
| No-Load Speed                    | 5000  | RPM       | MAX       |
| Rated Speed                      | 4398  | RPM       | +/- 15%   |
| Rated Continuous Power Out       | 264   | WATTS     | +/- 15%   |
| Rated Continuous Torque          | 81    | OZ-IN     | ----      |
| Peak Torque (motor only)         | 498   | OZ-IN     | ----      |
| No-Load Current                  | 0.37  | AMPERES   | MAX       |
| Back EMF Constant (Ke)           | 18.0  | V/KRPM    | +/- 10%   |
| Torque Constant (Kt)             | 24.3  | OZ-IN/AMP | +/- 10%   |
| DC Armature Resistance           | 2.93  | OHMS      | +/- 15%   |
| Armature Inductance              | 2.20  | 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

[www.midwestmotion.com](http://www.midwestmotion.com)

email: [sales@midwestmotion.com](mailto:sales@midwestmotion.com)