



# REVERSIBLE BRUSHLESS DC PLANETARY GEARMOTOR

Model Number:

**MMP BL44-297I-90V GP42-100**



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) | 36        | RPM         | MAX       |
| Gearmotor Rated Continuous Torque          | 87        | In-Lbs      | MAX       |
| Gearmotor Rated Peak Torque                | 266++     | In-Lbs      | ----      |
| Gearhead Standard Backlash                 | 60        | Arc Minutes | MAX       |
| Gearhead Efficiency                        | 70%       | ----        | ----      |
| Output Shaft Radial Load Capacity          | 68        | Lbs         | MAX       |
| Output Shaft Axial Load Capacity           | 25        | Lbs         | MAX       |
| Gearmotor Total Weight                     | 2.2       | 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         | 0.74  | AMPERES   | ----      |
| No-Load Speed                    | 4185  | RPM       | +/- 15%   |
| Rated Speed                      | 3566  | RPM       | +/- 15%   |
| Rated Continuous Power Out       | 53    | WATTS     | +/- 15%   |
| Rated Continuous Torque          | 20    | OZ-IN     | ----      |
| Peak Torque (motor only)         | 91    | OZ-IN     | ----      |
| No-Load Current                  | 0.05  | AMPERES   | 10%       |
| Back EMF Constant (Ke)           | 21.3  | V/KRPM    | +/- 10%   |
| Torque Constant (Kt)             | 28.8  | OZ-IN/AMP | +/- 10%   |
| DC Armature Resistance           | 19.00 | OHMS      | +/- 15%   |
| Armature Inductance              | 16.17 | 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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