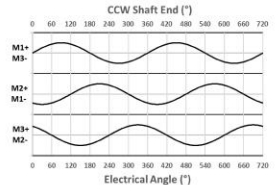
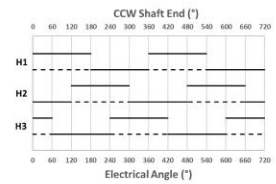
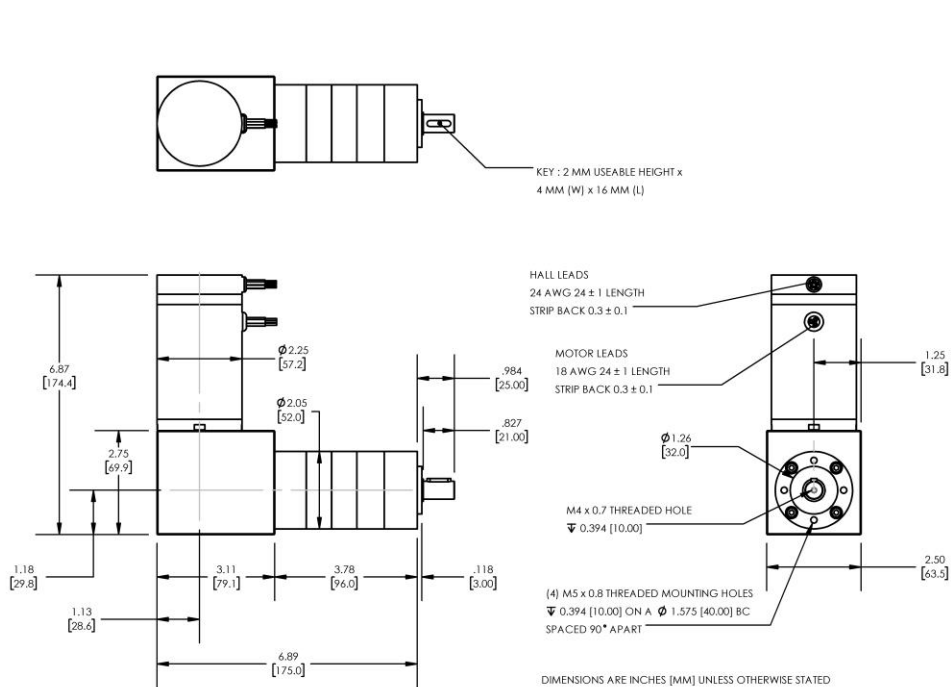




# REVERSIBLE BRUSHLESS DC RIGHT-ANGLED GEARMOTOR

Model Number:

**MMP BL58-412H-90V GRA52-408**



| HALL LEADS |        | MOTOR LEADS |       |
|------------|--------|-------------|-------|
| LEAD       | COLOR  | LEAD        | COLOR |
| H1         | BLUE   | M1          | RED   |
| H2         | GREY   | M2          | BLACK |
| H3         | VIOLET | M3          | WHITE |
| VCC        | RED    |             |       |
| GND        | BLACK  |             |       |

| ENCODER CABLE FUNCTIONS |              |        |
|-------------------------|--------------|--------|
| PIN                     | FUNCTION     | COLOR  |
| 1                       | GROUND       | BROWN  |
| 2                       | INDEX        | VIOLET |
| 3                       | A CHANNEL    | BLUE   |
| 4                       | +5 VDC POWER | ORANGE |
| 5                       | B CHANNEL    | YELLOW |

| PLANETARY GEARMOTOR OUTPUT PARAMETERS:     | VALUE      | UNITS       | TOLERANCE |
|--------------------------------------------|------------|-------------|-----------|
| Gearhead Ratio (exact)                     | 407.89 : 1 |             |           |
| Gearhead Shaft Output Speed (at full-load) | 16         | RPM         | MAX       |
| Gearmotor Rated Continuous Torque          | 443        | In-Lbs      | MAX       |
| Gearmotor Rated Peak Torque                | 443++      | In-Lbs      | ----      |
| Gearhead Standard Backlash                 | 51         | Arc Minutes | MAX       |
| Gearhead Efficiency                        | 65%        | ----        | ----      |
| Output Shaft Radial Load Capacity          | 113        | Lbs         | MAX       |
| Output Shaft Axial Load Capacity           | 45         | Lbs         | MAX       |
| Gearmotor Total Weight                     | 6.1        | 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         | 1.9   | AMPERES   | ----      |
| No-Load Speed                    | 7143  | RPM       | MAX       |
| Rated Speed                      | 6674  | RPM       | +/- 15%   |
| Rated Continuous Power Out       | 132   | WATTS     | +/- 15%   |
| Rated Continuous Torque          | 27    | OZ-IN     | ----      |
| Peak Torque (motor only)         | 323   | OZ-IN     | ----      |
| No-Load Current                  | 0.28  | AMPERES   | MAX       |
| Back EMF Constant (Ke)           | 12.6  | V/KRPM    | +/- 10%   |
| Torque Constant (Kt)             | 17.0  | OZ-IN/AMP | +/- 10%   |
| DC Armature Resistance           | 3.17  | OHMS      | +/- 15%   |
| Armature Inductance              | 2.40  | 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)