



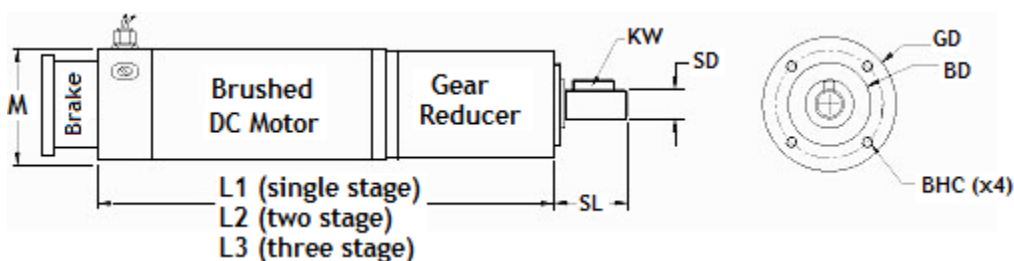
# STANDARD PRODUCT

Date: 12/01/2009

Prepared for: Production

Planetary Gearmotor + Brake

Model Number: MMP S22-346G-24V GP52-04.3 BR-005



**INTEGRAL BRAKES AND OPTICAL ENCODER OPTIONS AVAILABLE – SEE PAGES 2 AND 3 FOR DETAILS**

**Dimensions:** Note: The Center of the Gearhead output shaft contains an M4 Threaded Hole, 20mm deep  
**MD= 2.25" (57mm)** **SL= 0.984" (25mm)**  
**L (1) = 6.34" (161mm)** **GD= 2.05" (52mm)**  
**KW= 4x4x16 mm** **BD= 1.26" (32mm) - Pilot length = 3mm**  
**SD= 0.472" (12mm, + 0, -18µm)** **BHC = M5 x 10mm deep (4ea) on a 40mm Ø BC**

| DC MOTOR PERFORMANCE PARAMETERS      | Value    | Units       | Tolerance |
|--------------------------------------|----------|-------------|-----------|
| RATED VOLTAGE D.C.                   | 24.0     | VOLTS       | ----      |
| RATED CONTINUOUS CURRENT             | 6.1      | AMPERE      | ----      |
| RATED CONTINUOUS TORQUE              | 50.0     | OZ - IN     | ----      |
| RATED SPEED                          | 3520     | RPM         | +/- 15%   |
| RATED CONTINUOUS POWER OUT           | 130      | WATTS       | +/- 15%   |
| NO LOAD SPEED                        | 4000     | RPM         | MAX       |
| NO LOAD CURRENT                      | 0.74     | AMPS        | MAX       |
| BACK EMF CONSTANT (Ke)               | 6.0      | V/KRPM      | +/- 10%   |
| TORQUE CONSTANT (Kt)                 | 8.1      | OZ -IN / A  | +/- 10%   |
| DC ARMATURE RESISTANCE AT 1.5 AMPS   | 0.96     | OHMS        | +/- 15%   |
| ARMATURE TEMP                        | 155      | DEGR. C     | MAX       |
| PEAK TORQUE (motor-only)             | 500      | OZ - IN     | ----      |
| GEARMOTOR OUTPUT PARAMETERS:         | Value    | Units       | Tolerance |
| PLANETARY GEARHEAD RATIO - EXACT     | 4.28 : 1 |             |           |
| GEAR MOTOR RATED CONTINUOUS TORQUE   | 11       | LB-IN.      | MAX       |
| GEAR MOTOR RATED PEAK TORQUE         | 72++     | LB-IN.      | MAX       |
| GEARHEAD SHAFT OUTPUT SPEED (@ F.L.) | 822      | RPM         | ----      |
| GEARHEAD STANDARD BACKLASH           | 42       | Arc Minutes | MAX       |
| GEARHEAD EFFICIENCY                  | 80%      |             |           |
| GEARMOTOR TOTAL WEIGHT               | 3.7      | Lbs.        | MAX       |

**NOTE: TENV DESIGN; MEETS IP-54 STANDARD ~ TRUE PLANETARY GEARING ~ BALL BEARINGS**  
**++ All Peak Torque Values are dependent upon duty. Kindly consult our Sales Offices for further details**

**MIDWEST MOTION PRODUCTS**

**Design, Manufacturing & Distribution – Motion Control Equipment**

10761 Ahern Avenue S. E. Watertown, MN. 55388

Phone: 952-955-2626 Fax: 480-297-4096

www.midwestmotion.com

email: sales@midwestmotion.com





**OPTION 3: INTEGRAL BRAKE OPTION**

**Consult our Sales Office for Pricing**

MMP's "Smaller Frame" Gearmotors and Motors, including the MMP D22 Series, MMP S22 Series and MMP B58 (Brushless) Series, most are sufficiently served by a 5 In-Lb Brake. The Standard Brake / Cover Dimensions are as follows:

**Typical dimensions 2.1" Diameter by 1.3" Long, with 24" Leadwires**  
**Typical Brake Current = 400 mA**

Use Suffix "BR-005" after model # to designate the Brake and its' Torque

**IMPORTANT NOTE: IF THE BRAKE IS TO BE ENERGIZED BY A VOLTAGE LEVEL OTHER THAN THE SPECIFIED OPERATING VOLTAGE OF THE MOTOR, PLEASE SPECIFY THE BRAKE OPERATING VOLTAGE SEPARATELY. IF NOT OTHERWISE NOTED, IT IS ASSUMED THAT THE BRAKE'S COIL VOLTAGE WILL MATCH THAT OF THE MOTOR.**

Please specify "**BR-005**" for Standard "Holding" Brake (not to be used for Dynamic Braking)... This Part Number Suffix also identifies a "Failsafe" type brake – the brake engages in the ABSENCE of input power to the coil.

For a "Power ON" brake, or a brake that is engaged with POWER APPLIED, please specify the Part Number Suffix "**BR-005n**".

Both of the above mentioned brakes are integrally mounted to the back of the motor, and are equipped with mounting holes and a shaft extension for an encoder.

The rear surface of the Standard Brake doubles as an Encoder Mounting Surface. Most MMP Brake Motors and Gearmotors are designed to include Encoder Compatibility.

**For additional details and assistance with configuring the model number for Brake and Encoder Options, please feel free to contact our Sales Offices.**