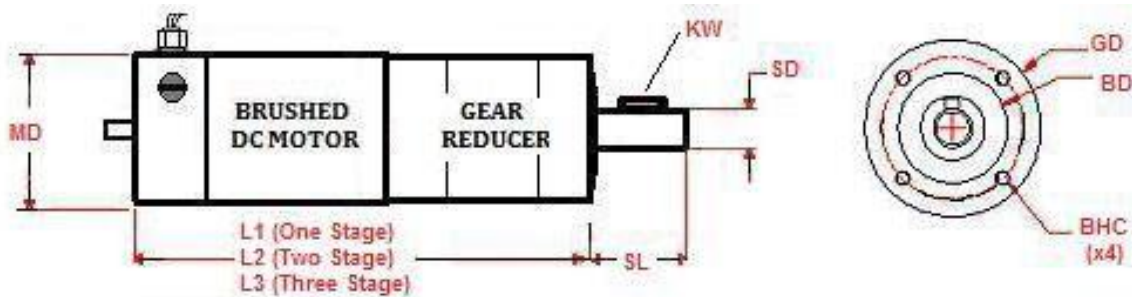




STANDARD PRODUCT

Date: 07/07/2009 **Prepared for:** Production
Planetary Gearmotor **Model Number:** MMP D22-376D-24V GPK52-046-LS



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

Dimensions: Note: The Center of the Output Shaft contains an M-4 Threaded Hole, 20mm deep (52mm units)
MD = 2.28" (58mm) **SL = 1.5" (38mm)**
L (2) = 7.25" (183mm) **GD = 2.047" (52mm)**
KW = 1/8" x 1/8" x .081" Long **BD = 32mm, Pilot Length = 3mm**
SD = 0.500" (12.7mm, + 0, -18µm) **BHC (dia.) = M5 x 10mm deep (4ea) on a 40mm Ø BC**
NOTE: OPTIONAL GHD. OUTPUT SHAFT AVAILABLE; 12mm" DIA, 25mm LONG, WITH 4 x 4" x 16mm LONG KEY (SPECIFY "12mm" OPTION)

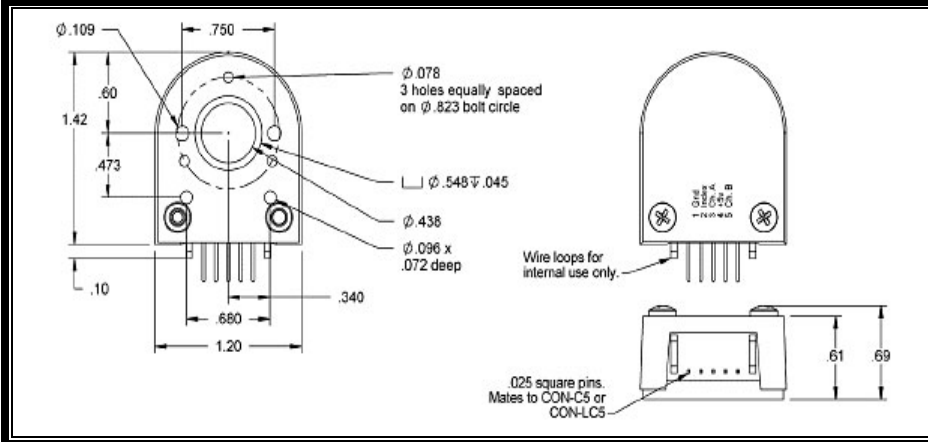
| DC MOTOR PERFORMANCE PARAMETERS: | Value | Units | Tolerance |
|---|--------------|--------------|------------------|
| RATED VOLTAGE D.C. | 24.0 | VOLTS | ---- |
| RATED CONTINUOUS CURRENT | 4.3 | AMPERE | ---- |
| RATED CONTINUOUS (Stall) TORQUE | 25.0 | OZ - IN | ---- |
| RATED SPEED | 5000 | RPM | +/- 15% |
| RATED CONTINUOUS POWER OUT | 92 | WATTS | +/- 15% |
| NO LOAD SPEED | 5500 | RPM | MAX |
| NO LOAD CURRENT | 0.18 | AMPS | MAX |
| BACK EMF CONSTANT (Ke) | 4.3 | V/KRPM | +/- 10% |
| TORQUE CONSTANT (Kt) | 5.8 | OZ -IN / A | +/- 10% |
| DC ARMATURE RESISTANCE AT 1.5 AMPS | 6.5 | OHMS | +/- 15% |
| ARMATURE TEMP | 155 | DEGR. C | MAX |
| PEAK TORQUE (motor-only) | 150 | OZ - IN | ---- |
| PLANETARY GEARMOTOR OUTPUT PARAMETERS: | Value | Units | Tolerance |
| PLANETARY GEARHEAD RATIO (EXACT RATIO) | 45.56 : 1 | | |
| GEARMOTOR RATED CONTINUOUS TORQUE | 50 | LB-IN. | MAX |
| GEARMOTOR RATED PEAK TORQUE | 89++ | LB-IN. | MAX |
| GEARHEAD SHAFT OUTPUT SPEED (@ F.L.) | 110 | RPM | ---- |
| GEARHEAD STANDARD BACKLASH | 45 | Arc Min. | MAX |
| GEARHEAD EFFICIENCY | 70% | | |
| GEARMOTOR TOTAL WEIGHT | 54 | OUNCES | 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 eFax: 480-247-4096
 www.midwestmotion.com email: randy@midwestmotion.com

OPTION 1: OPTICAL "KIT" ENCODER

Consult our Sales Office for Pricing



Interconnects / Functions

| Pin Number | Function | Color |
|------------|-----------|--------|
| Pin 1 | Ground | Brown |
| Pin 2 | Index | Violet |
| Pin 3 | Channel A | Blue |
| Pin 4 | + 5 Volts | Orange |
| Pin 5 | Channel B | Yellow |

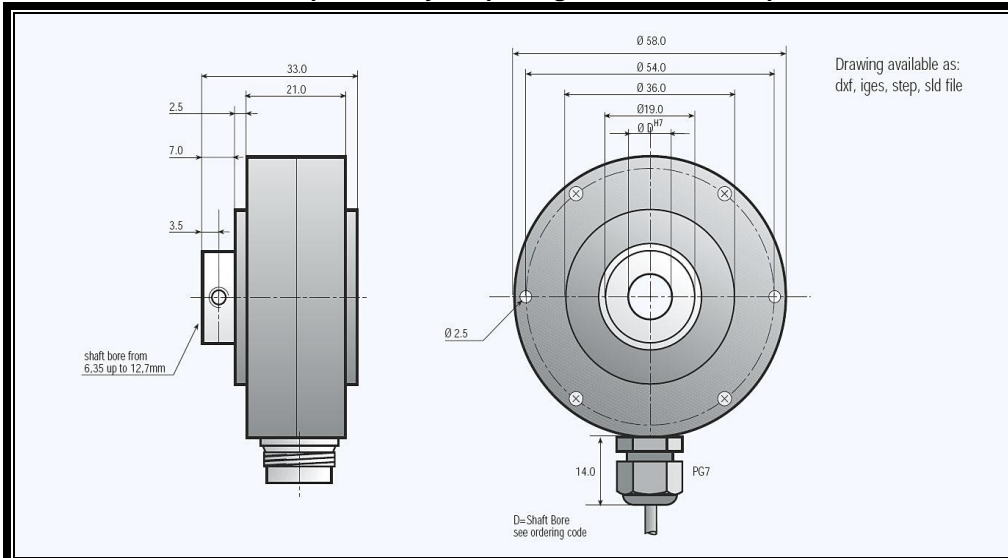
****Encoder Resolutions available: 32 PPR, 100 PPR, 250 PPR, 500 PPR, 1024 PPR
(Use Suffix "EU-xxx" after model # to designate the Encoder and its resolution)**

The Standard "Kit" Encoder Option, mounted integrally to the back of the Motor, includes an Index Pulse, and 12" Long Flying Leads with Connector – Mounted and tested before shipping.

Option 2: "IP-65" Optical Encoder, 1000 PPR STD

Consult our Sales Office for Pricing

Features Index Pulse, Complementary Output Signals, IP-65 Rated protection for harsh environments, 6 FT Long Cable.



**Ei-1000
Interconnects/Functions:**

| Function: | Wire Color |
|-----------|------------|
| 0 Volts | White |
| + Volts | Brown |
| A | Green |
| B | Yellow |
| 0 | Grey |
| A- | Pink |
| B- | Blue |
| 0- | Red |

****Encoder Resolution 1000 PPR available from stock, but many other resolutions available.
Consult our sales office for details.**

(Use Suffix "Ei-xxx" after model # to designate the Encoder and its resolution)

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OPTION 3: INTEGRAL BRAKE OPTION

Consult our Sales Office for Pricing

-For “Mid Sized” Gearmotors and Motors, including the MMP C21 Series, MMP S23 Series and MMP B23 (Brushless) Series, most are sufficiently served by a 5 In-Lb to 10 In-Lb Brake.

-For “Large Sized” Gearmotors and Motors, including the MMP S28 Series, MMP C40 Series, MMP MT36 Series, MMP PT28 Series and the MMP MT33 Series, most are sufficiently served by a 15 In-Lb to 40 In-Lb Brake.

(Use Suffix “BR-xxx” after model # to designate the Brake and its’ Torque)

Please specify “**BR-xxx**” 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.

Please also notify if the brake operating voltage is to be DIFFERENT THAN the Motor’s specified Operating Voltage. If not otherwise noted, the Brake’s Coil Voltage will match the motors’ operating voltage.

For a “Power ON” brake, or a brake that is engaged with POWER APPLIED, please specify the Part Number Suffix “**BR-xxxN**”.

Both of the above mentioned brakes are integrally mounted to the back of the motor, and are enclosed in an aluminum cover.

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

The Standard Brake / Cover Dimensions are as follows:

2.15” Diameter by 1.55” Long, with 24” Leadwires
Typical Brake Current = 250 mA

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

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