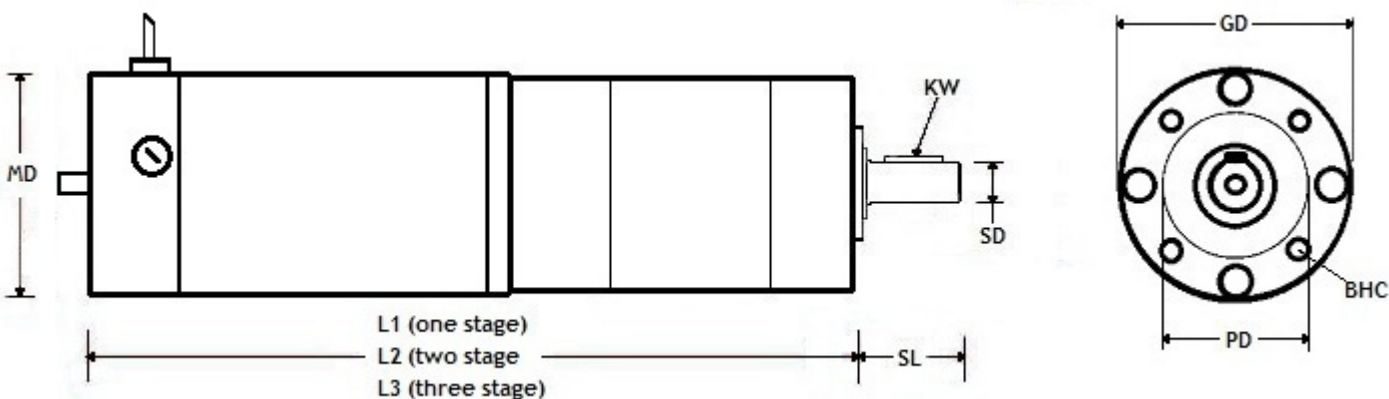




Date: 31 Oct, 2011 Prepared for: Production  
Model Number: MMP D22-290E-12V GP52-308



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

**DIMENSIONS:**

MD = 2.25" (57mm)

L = 6.85" (161mm)

KW = 2H x 4W x 16 mm long

SD = 12mm; +0, -21µm

(Note: Center of output shaft contains an M-4 threaded hole)

SL = 25mm (21mm usable)

GD = 2.047" (52mm)

PD = 32mm, pilot length = 3mm

BHC (dia) = M5 x 10mm deep (4 ea) on a 40mmØ BC

**DC MOTOR PERFORMANCE PARAMETERS:**

	VALUE	UNITS	TOLERANCE
Rated DC Voltage	12.0	DC VOLTS	-----
Rated Current	8.1	AMPERES	-----
No-Load Speed	3000	RPM	MAX
Rated Speed	2640	RPM	+/- 15%
Rated Power out	39	WATTS	+/- 15%
Rated Torque	20	OZ-IN	-----
Peak Torque (motor only)	110	OZ-IN	-----
No-Load Current	0.37	AMPERES	MAX
Back EMF Constant (Ke)	4.0	V/KRPM	+/- 10%
Torque Constant (Kt)	5.4	OZ-IN/AMP	+/- 10%
DC Armature Resistance (@1.5 amps)	1.29	OHMS	+/- 15%
Armature temperature	155	DEG. C	MAX

**PLANETARY GEARMOTOR OUTPUT PARAMETERS:**

	VALUE	UNITS	TOLERANCE
Gearhead Ratio (exact)	307.54 : 1		
Gearmotor Rated Torque	270	IN-LBS	MAX
Gearmotor Rated Peak Torque	443++	IN-LBS	MAX
Gearhead Shaft Output Speed	8.6	RPM	-----
Gearhead Standard Backlash	45	ARC MINUTES	MAX
Gearhead Efficiency	70%	-----	-----
Gearmotor Total Weight	35.6	OZ	MAX

**++ All Peak Torque Values are dependent upon duty. Kindly consult our Sales Offices for details.**

THIS ROBUST, TENV DESIGN WITH 'TRUE PLANETARY GEARING IS OFFERED BY:

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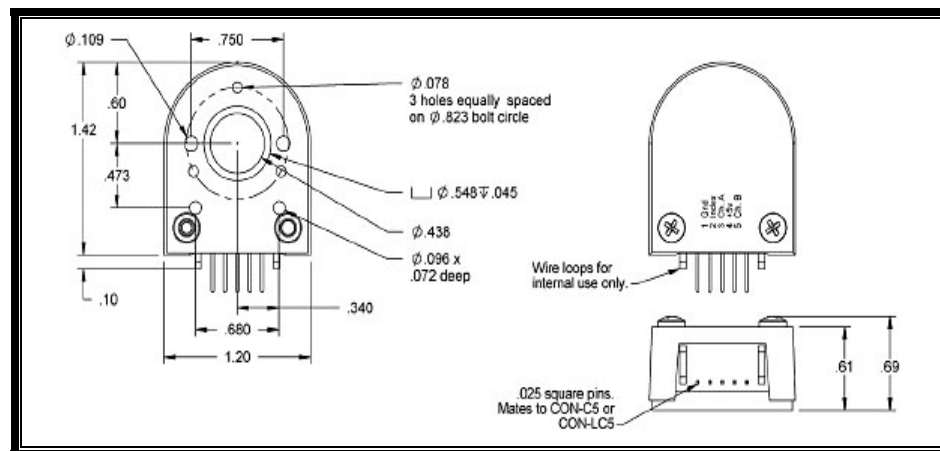
Phone: 952-955-2626 Fax: 480-247-4096

www.midwestmotion.com email: sales@midwestmotion.com



## Option 1: Optical 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

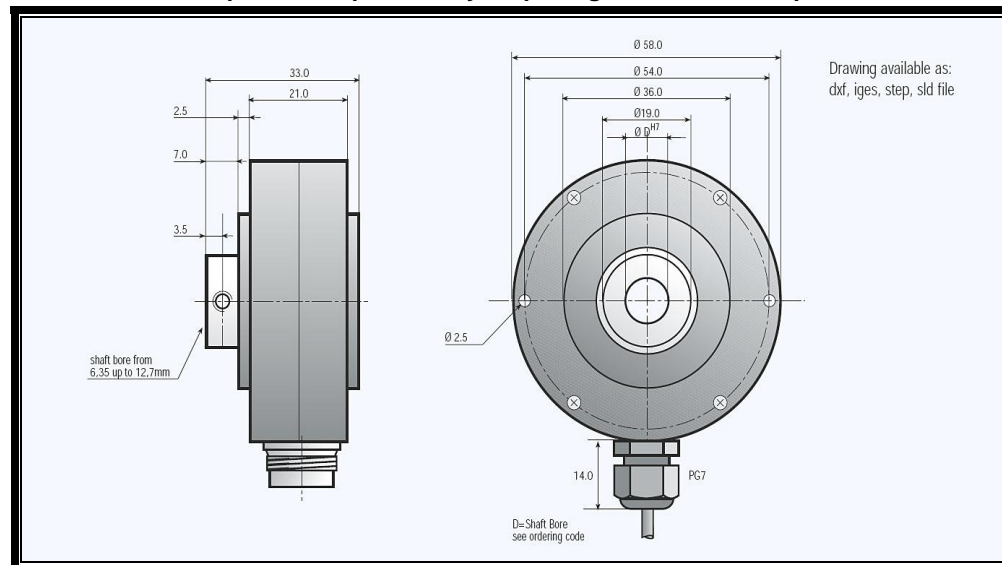
(Use suffix "EU-xxx" after model # to designate the encoder and its resolution)

The standard modular 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, 512 or 1000 PPR

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

\*\*Encoder Resolution 512 or 1000 PPR available from stock, but many other resolutions available.

Consult our sales office for details. (Use Suffix "Ei-xxx" after model # to designate encoder and resolution)



### OPTION 3: INTEGRAL BRAKE OPTION

Consult our Sales Office for Pricing

The MMP small frame gearmotors and motors, including the MMP D22 Series, MMP S22 Series and MMP B23 (brushless) series are sufficiently served by a 5 in-lb brake, when used correctly.

The standard brake/cover dimensions are as follows:

Typical dimensions 1.8" Diameter by 1.3" Long, with 24" leadwires

Typical (24V) brake current = 375 mA (12v, 24v, 36v and 48v Brakes are all 9 Watt devices)

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 (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 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 or assistance configuring the model number for brake and encoder options, please feel free to contact our sales offices.**

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