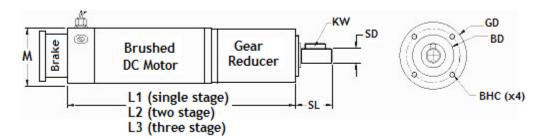


STANDARD PRODUCT

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

<u>Dimensions</u>: 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, - $18\mu m$) 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

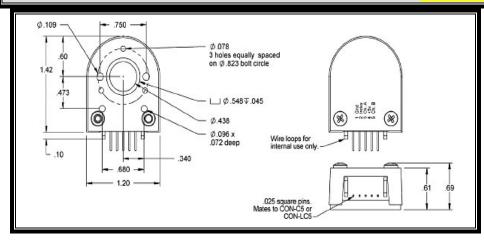
www.midwestmotion.com email: sales@midwestmotion.com



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OPTION 1: OPTICAL "KIT" ENCODER

Consult our Sales Office for Pricing



interconnects / 1 diletions			
<u>Function</u>	Color		
Ground	Brown		
Index	Violet		
Channel A	Blue		
+ 5 Volts	Orange		
Channel B	Yellow		
	Function Ground Index Channel A + 5 Volts		

Interconnects / Functions

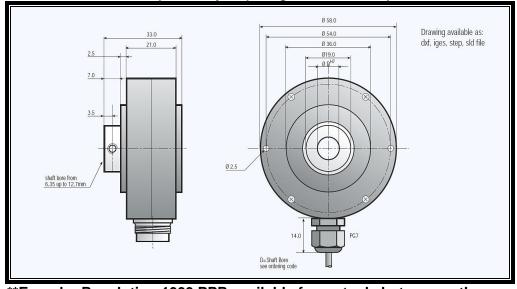
**Encoder Resolutions available: 32 PPR, 100 PPR, 250 PPR, 500 PPR, 1024 PPR (Use Suffix "EU-xxx" after model # to designate the Encoder and its resolution)

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	
O Volts + Volts A B O A- B- O-	White Brown Green Yellow Grey Pink Blue 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

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.

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