



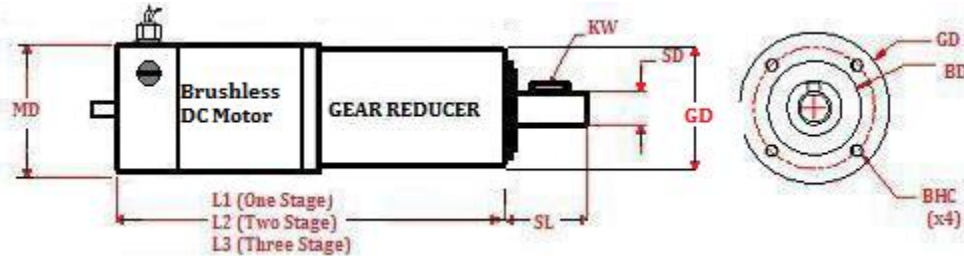
STANDARD PRODUCT

Date: 12/15/2008

Prepared for: Production

4-Pole Brushless Planetary Gearmotor

Model Number: MMP B23-075N-24V GPK52-014



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

M= 2.17" (55mm)

SL= 1.5"

L (2) =7.2" (183mm)

GD= 2.047" (52mm)

KW= 1/8" x 1/8" x 0.810" long

PD= 32mm, Pilot Length = 3mm

SD= 0.500", +0, -0.0005

BHC (dia.) =M5x10mm dp (4ea) on a 40mm BCD

DC MOTOR PERFORMANCE PARAMETERS:	Value	Units	Tolerance
RATED VOLTAGE D.C.	24.0	VOLTS	----
RATED CONTINUOUS CURRENT	2.0	AMPERE	----
RATED CONTINUOUS TORQUE	42	OZ - IN	----
RATED SPEED	1400	RPM	+/- 15%
RATED CONTINUOUS POWER OUT	43	WATTS	+/- 15%
NO LOAD SPEED	1550	RPM	MAX
NO LOAD CURRENT	0.17	AMPS	MAX
BACK EMF CONSTANT (Ke)	15.3	V/KRPM	+/- 10%
TORQUE CONSTANT (Kt)	20.7	OZ -IN / A	+/- 10%
DC ARMATURE RESISTANCE AT 1.5 AMPS	6.0	OHMS	+/- 15%
ARMATURE TEMP	155	DEGR. C	MAX
PEAK TORQUE (motor-only)	140	OZ - IN	----
PLANETARY GERMOTOR OUTPUT PARAMETERS:	Value	Units	Tolerance
PLANETARY GEARHEAD RATIO	14 : 1		
GERMOTOR RATED CONTINUOUS TORQUE	26	LB-IN.	MAX
GERMOTOR RATED PEAK TORQUE	89++	LB-IN.	MAX
GEARHEAD SHAFT OUTPUT SPEED (@ F.L.)	100	RPM	----
GEARHEAD STANDARD BACKLASH	45	Arc Min.	MAX
GEARHEAD EFFICIENCY	70%		
GERMOTOR TOTAL WEIGHT	45	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

Four Pole Brushless DC Gearmotor Wiring Configuration:

Motor Leads (18 Gage)

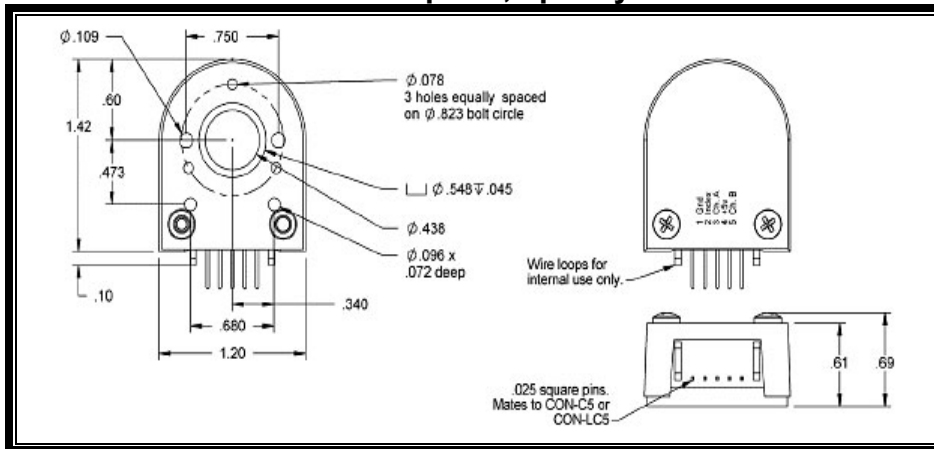
M1	Brown
M2	Black
M3	White

120° Hall Sensor Leads (24 Gage)

H1	Blue
H2	Gray
H3	Violet
Vcc	Red (+5 - 24Vdc)
Common	Black

OPTIONAL "KIT" ENCODER (Not for Commutation) ~ Consult our Sales Office for Pricing

For this "Kit" Encoder Option, specify Model # MMP B23-150G-24V EU-xxx ETC.



Interconnects / Functions

<u>Pin Number</u>	<u>Function</u>	<u>Color</u>
Pin 1	Ground	Brown
Pin 2	Index	Violet
Pin 3	Channel A	Blue
Pin 4	+ 5 Volts	Orange
Pin 5	Channel B	Yellow

**** Optical Encoder Resolutions available: 32 PPR, 100 PPR, 250 PPR, 500 PPR, 1024 PPR (Use Model # Suffix "EU-xxx" 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.

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INTEGRAL BRAKE OPTION

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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 Brake.

Please specify “BR-005” for the 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 note if the brake operating voltage is to be a Voltage OTHER THAN the Motor’s specified Operating Voltage. If not otherwise noted, the Brake’s Coil Voltage will match the motor’s operating voltage.

Dynamic Brakes also available – Contact our Sales Office for Details.

For a “Power ON” brake, or a brake that is engaged with POWER APPLIED, please specify the Part Number Suffix “-005n” This is added to the end of the Model Number, as follows in this example:

Model # MMP B23-150G-24V GP52-236 BR-005n

Both of the aforementioned 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 contact our Sales Office.

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