

PMDC Parallel Shaft Gearmotor Model

The Merkle-Korff line of PMDC Gearmotors offer customers maximum application flexibility in gearmotors designed to exacting specifications. All models offer custom windings, gear-ratios and a wide variety of accessories to meet specific performance requirements.



Features

- Customized output shafts
- Double output shaft extension
- Various lead lengths, termination and custom harnesses
- Needle bearings for high radial loads
- Various mounting options including case mounting
- Replaceable brushes on the 2500 series motor
- Class B (130°C) or Class F (155°C) armature insulation
- Ball bearings in the motor for longer life
- EMI filtering for electronic motor controls
- Encoders/tachometers



Specifications

- Type: Zinc die cast and plastic DC gearmotor
- Output speeds: 1 - 500 rpm*
- Voltage: windings up to 48V DC; 12 and 24V DC standard
- Bearings: self-aligning sintered bronze with large oil reservoir
- Terminations: spade terminals or leads
- Duty cycle: intermittent or continuous
- Motors available: 300, 600, 2500 and 5000 series
- Rotation: reversible

Applications

- Food processing and restaurant equipment
- Vending
- Medical equipment
- Security systems
- Instrumentation
- Production machinery and equipment
- Valve actuators
- Industrial controls
- Switch gear

*Note: Speed and torque combinations will vary depending on the motor/gearbox combination.

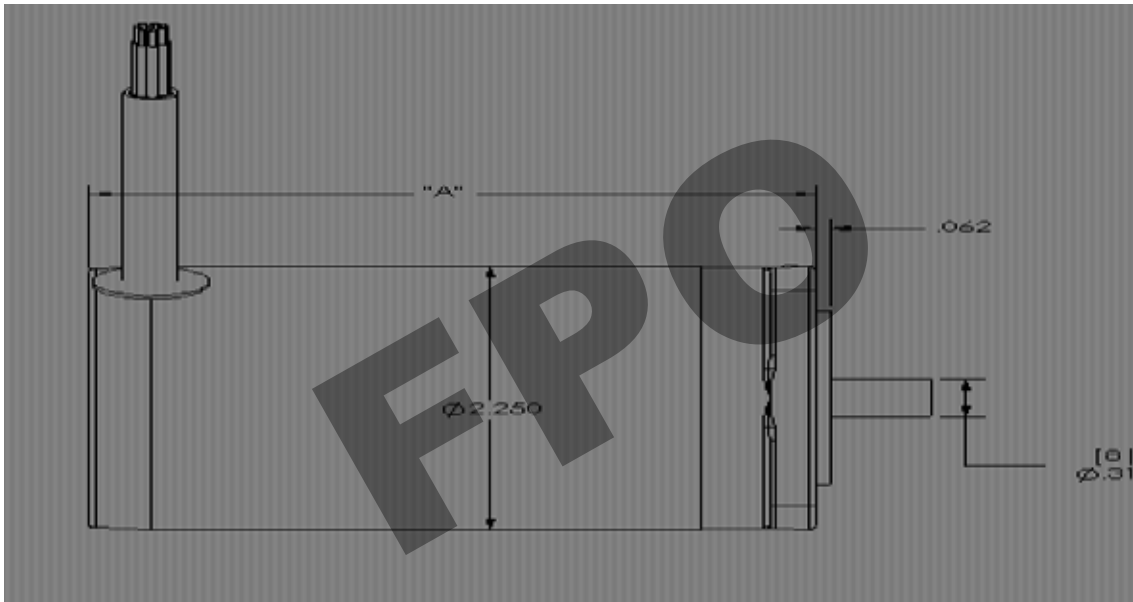


Merkle-Korff Industries®

A Kinetek Company®

Merkle-Korff Industries
25 NorthWest Point Blvd., Suite 900
Elk Grove Village, IL 60007
Phone: (847) 439-3760
Fax: (847) 439-3963
Email: sales@merkle-korff.com
Web: www.merkle-korff.com

Dimensional diagram



Timing diagram sensor — winding

	Hall-effect sensors			CCW phases			CW phases		
	HA	HB	HC	A	B	C	A	B	C
1	1	0	1	+	-	0	-	+	0
2	1	0	0	0	-	+	0	+	-
3	1	1	0	-	0	+	+	0	-
4	0	1	0	-	+	0	+	-	0
5	0	1	1	0	+	-	0	-	+
6	0	0	1	+	0	-	-	0	+

Internal controller: lead wire color code

Board position	Designation	Lead color
1	motor A	blue
2	motor B	white
3	motor C	brown
4	hall A	green
5	hall B	orange
6	hall C	yellow
7	5VDC	red
8	GND	black

External (hall only): lead wire color code

Board position	Designation	Lead color
1	digital I/O "A"	gray
2	digital I/O "B"	white/red
3	direction	white/black
4	signal ground	green
5	enable input	orange
6	5VDC (output)	yellow
7	input power (12-32VDC)	red
8	power ground	black
9	analog input 2	violet
10	analog input 1 (speed)	blue
11	tach output "B"	brown
12	tach output "A"	white

