

Parallel-Shaft PMDC Brush Gear Motors

PLB 28 Series

1/8 HP, Multi-Stage Reduction, Spur/Helical, Parallel-Shaft

Allied Motion's PLB 28 series PMDC brush parallel-shaft gear motors are specially designed for battery-fed welding wire-feed, and similar industrial tool applications. The PLB 28 is available as standard wound for 24 VDC. Optional winding voltage from 12 up to 240 VDC are available.

Rated shaft power of the PLB 28 is 1/8 HP (82 W) continuous. Rated output speed at 24 V is 255 RPM and 16.8:1 gear ratio or 130 RPM and 29:1 ratio.

The compact and versatile PLB 28 series is also well suited for lifting and moving tasks such as RV slide-outs, bed lifts, and powered jacks.

Options

- Alternate gear ratio
- Class H (180 °C) high temperature winding insulation
- Electromechanical holding brake
- Custom lead lengths and connector arrangements
- Shaft extension and mounting provisions for an encoder
- Plastic/powdered metal gears
- Custom output shaft configuration
- Internal brush motor



Features & Benefits

- Parallel-shaft gear motor designed for mobile, battery-powered applications
- 24 VDC motor winding and 82 W continuous output power
- 130 or 255 RPM rated speed with up to 52 lb-in rated torque
- Multi-stage gearbox configuration in two standard gear ratios
- Alloy steel gears for good wear characteristics under heavy loads
- Die cast aluminum gearbox adds strength and minimizes weight
- Class A (105 °C) winding insulation
- Cartridge-style brushes for easy maintenance
- Long-life synthetic gear lubricant
- Ball and needle bearing construction for long life
- Compact design fits into tight spaces
- Rugged 2-pole PMDC brush motor with maintainable brushes
- Standard 1/2-inch (12.7 mm) diameter output shaft


QuickShip Products

Some of the part number configurations for this product are in stock and available for ***immediate delivery!***

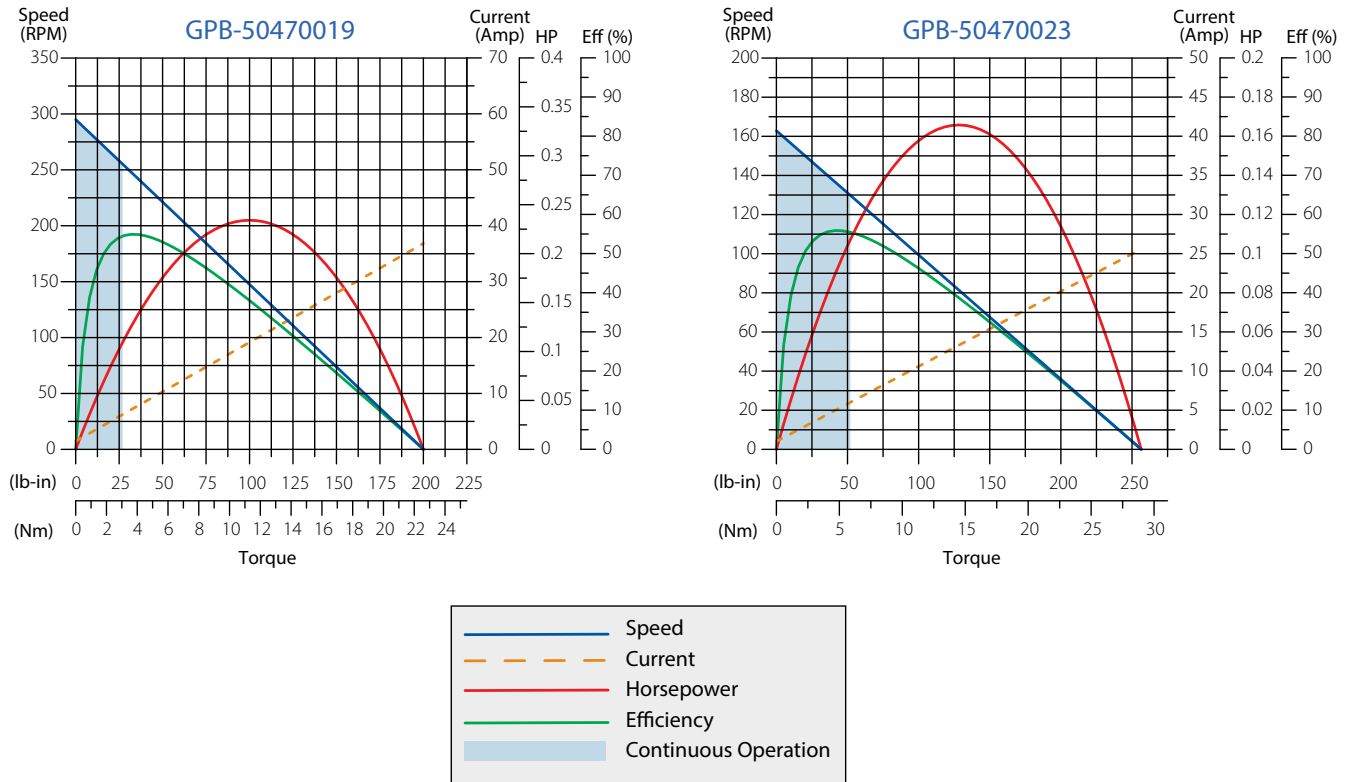
Look for the QuickShip symbol next to available part numbers. Then, click on the part number to go directly to our online store.



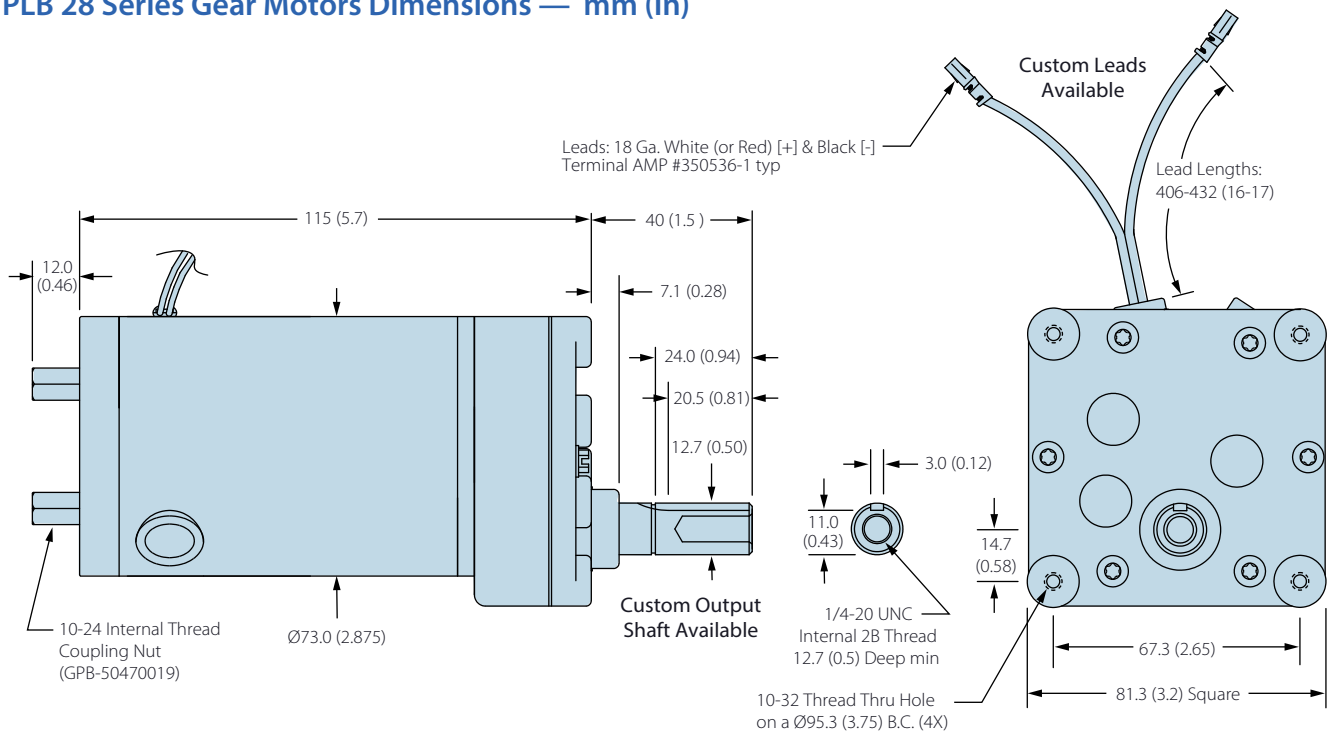
PLB 28 Series Gear Motors – Specifications

Model	GPB-50470019		 GPB-50470023	
Type	Parallel-shaft			
Motor Type	Permanent-magnet, 2-pole DC brush			
Frame Size	73.0 mm (2.9 in)			
Winding Voltage	24 VDC			
Torque	Rated	3.1 Nm (27 lb.in)	5.9 Nm (52 lb.in)	
	Peak	11.3 Nm (100 lb.in)	18.6 Nm (164.6 lb.in)	
Rated Speed	255 rpm		130 rpm	
No-load Speed	274 - 316 rpm		150 - 172 rpm	
Rated Power	82 W (0.11 HP)			
Current — ADC	Rated	6	6	
	Peak	19	18	
	No-load	1.5	2	
Gear Ratio	16.8:1		29:1	
Peak Efficiency	55%		56%	
Rotation (shaft view)	CCW (positive voltage to positive motor terminal)		CW (positive voltage to positive motor terminal)	
Bearing Type	Needle roller bearing			
Backlash (no load)	22.7 - 68.2 arcmin		21.5 - 64.6 arcmin	
Weight	1.8 kg (4 lb)			
Ambient Operating Temperature at Rated Duty	22 °C max			
Ambient Storage Temperature	-30 to 80 °C			
IP Rating	IP 52			

PLB 28 Series Gear Motors – Performance



PLB 28 Series Gear Motors Dimensions — mm (in)



Custom & Specific-Purpose Products & Sub-Assemblies

Allied Motion offers a very wide selection of standard motion control solutions to satisfy the requirements found in the commercial, industrial and aerospace and defense markets. And, we are adding new products every year to meet new demands we find in those markets.

However, a recognized strength of Allied Motion is our willingness and ability to develop custom motion control products and systems to meet the specific needs of customers. Please contact us to discuss your specialized application requirements.

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- Detailed product information and documentation
- Standard product selection
- Product customization and options guidance
- Specification development assistance for custom-design products
- Price quotations
- Ordering, order status and shipment information
- Logistics assistance

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