

Right-Angle PMDC Brush Gear Motors

RAC 28 Series

1/10 HP, Single-Reduction Worm Drive

Allied Motion's RAC series PMDC brush right-angle gear motors are designed for a variety of mobile battery-powered tasks such as lifts, swivels, winders, industrial welding wire feeders and linear actuators as found in medical mobility applications. The robust RAC 28 motor is available wound for 12 or 115 VDC, and can output up to 1/10 HP continuous power. The RAC 28 is a higher power version of the RAA 30.

In addition to medical mobility applications, the RAC series is an ideal choice for applications such as floor scrubber brush drives, RV and residential awning actuators, cable pullers, and door and gate actuators.

Options

- High temperature Class H (180 °C) winding insulation
- Weather-proof (IP65) design
- High back-drive torque design
- Custom leads and/or connectors
- Plastic or bronze gearing
- Internal brushes for maintenance free operation
- Encoder mounting provisions
- Electromechanical holding brake



Features & Benefits

- Specifically designed for battery-fed mobile actuator applications
- Choice of 12 or 115 VDC motor winding
- 1/10 HP continuous shaft power
- Alloy steel output gear for high strength and durability
- Precision ground steel worm for quiet operation and long life
- Die cast aluminum gearbox for strength and minimum weight
- Class A (105 °C) winding insulation
- Cartridge style brushes for easy maintenance
- Synthetic grease lubrication for long life
- Needle bearing gearbox and ball bearing motor construction
- Compact design to fit restrictive spaces
- 2-pole PMDC brush motor
- 1/2-inch diameter output shaft sized for drive sprocket pinion


QuickShip Products

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

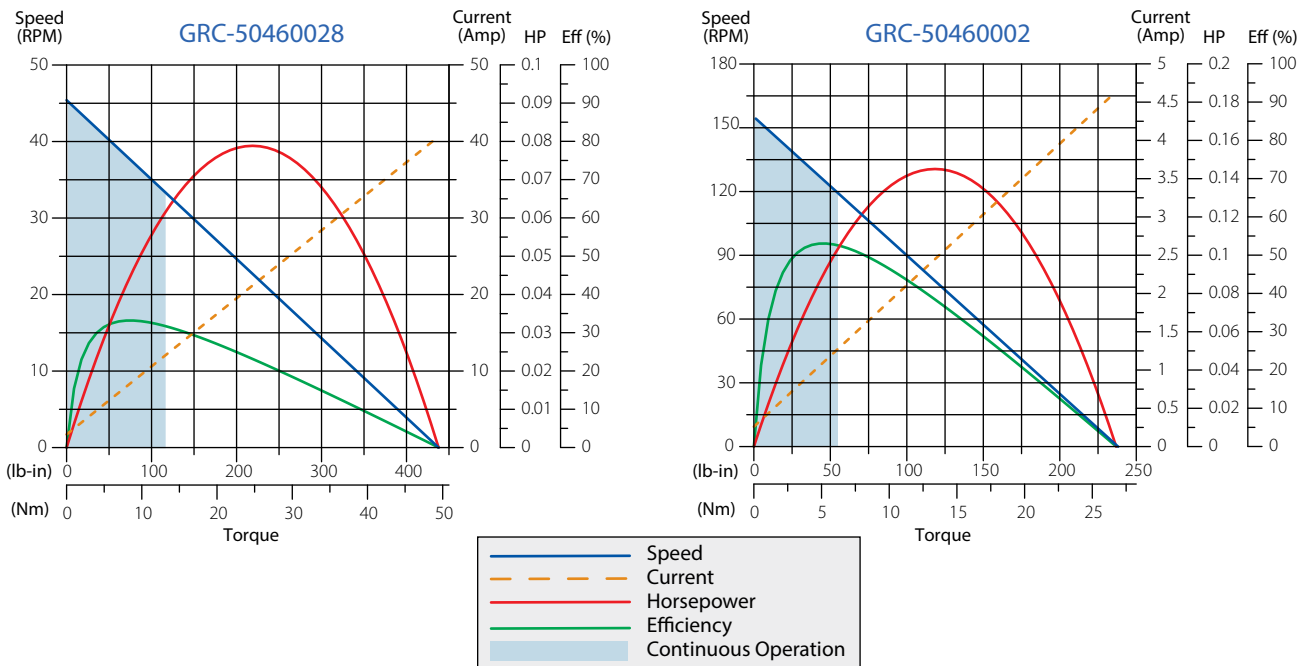
Look for the QuickShip symbol next to available part numbers. Then, click on the part number to go directly to our online store.



RAC 28 Series Gear Motors – Specifications

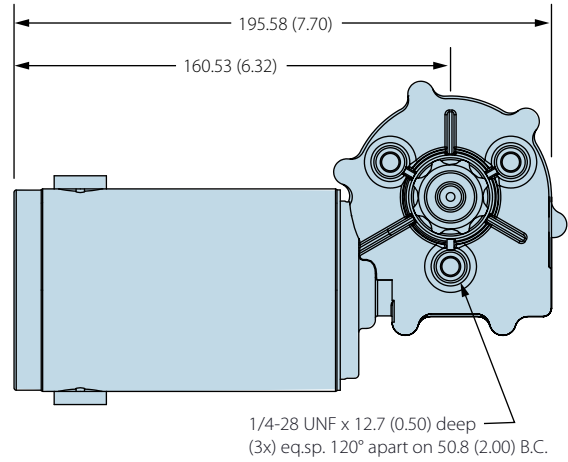
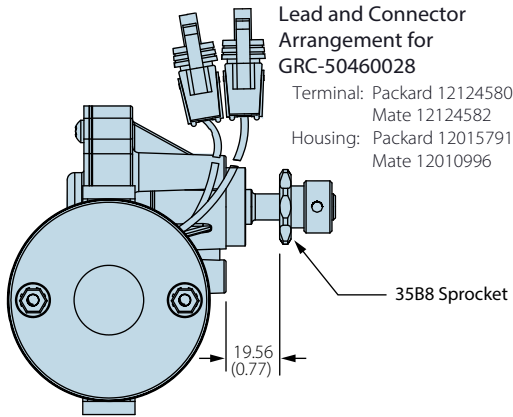
Model		 GRC-50460028	GRC-50460002
Type		Right-angle shaft	
Motor Type		PMDC brush, 2-pole	
Frame Size		71.1 mm (2.8 in)	
Winding Voltage		12 VDC	115 VDC
Torque	Rated	13 Nm (115 lb.in)	6.2 Nm (55 lb.in)
	Peak	28.8 Nm (254.9 lb.in)	117.5 Nm (1040 lb.in)
Rated Speed		33.5 rpm	119 rpm
No-load Speed		40 - 50 rpm	134 - 156 rpm
Rated Power		48 W (0.06 HP)	78 W (0.10 HP)
Current — ADC	Rated	12	1.25
	Peak	24	3.2
	No-load	3	0.32
Gear Ratio		47:1	30:1
Peak Efficiency		33%	53%
Rotation (shaft view)		CW (positive voltage to positive motor terminal)	
Bearing Type		Radial ball bearing & needle roller bearing	
Backlash (no load)		5.6 - 16.9 arcmin	5.7 - 17.2 arcmin
Weight		2.4 kg (5.2 lb)	
Ambient Operating Temperature at Rated Duty		22 °C max	
Ambient Storage Temperature		-30 to 80 °C	
IP Rating		IP 52	

RAC 28 Series Gear Motors – Performance

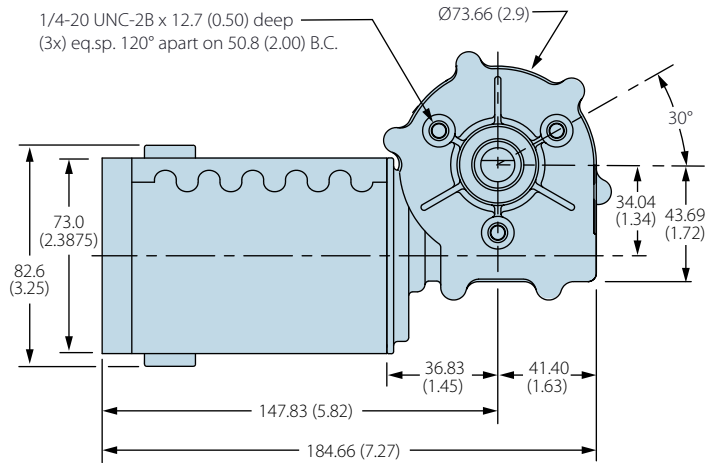
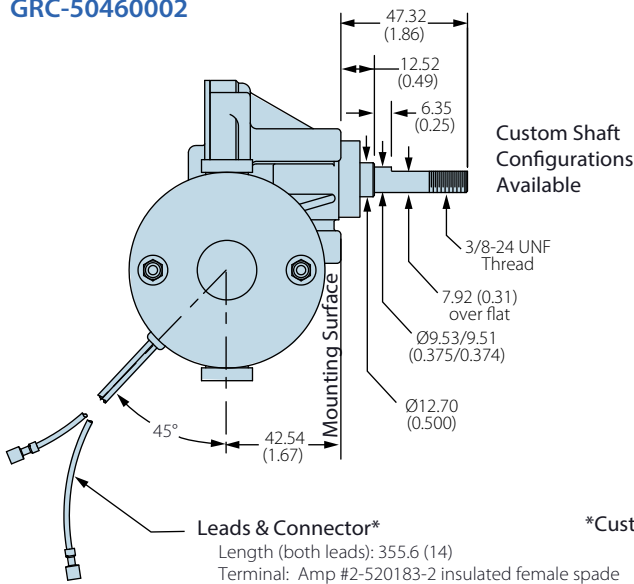


RAC 28 Series Gear Motors Dimensions — mm (in)

GRC-50460028 Note: All dimensions not listed are per GRC50460002 below



GRC-50460002



*Custom Lead Configurations Available

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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Allied Motion maintains Solution Centers in three geographically strategic locations to assist our customers with all aspects of their product selection and buying decisions. These facilities assure local support no matter your location around the globe.

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- Application analysis assistance
- 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

For assistance with your project, contact us at one of our continental Allied Motion Solution Centers listed below.

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