

Right-Angle PMDC Brush Gear Motors

RAA 30 Series

1/30 HP, Single-Reduction Worm Drive

Allied Motion's RAA 30 Series PMDC brush gear motors are specifically designed for the requirements of battery powered medical mobility lifting and moving applications, such as wheelchair and scooter lifts and wheelchair seat actuators. These economical 3-inch diameter gear motors are wound for 12 VDC with a continuous shaft output power rating of 1/30 HP (22 W).

In addition to medical mobility applications, the RAA 30 series is an ideal choice in a variety of other motion applications, including floor maintenance brush drives, welding wire feeders, residential or recreational awning operators, and gate and door actuators.

Custom versions are available to suit specific application requirements, including custom lead length and connector arrangements, and custom output shaft configurations.

Options

- Custom lead length and connector arrangements
- Custom output shaft configurations



Features & Benefits

- Single-reduction worm drive design delivers up to 20 lb-in (2.3 Nm) of continuous output torque
- Brass output gear for long life and high load capacity
- High hardness, precision ground steel worm ensures quiet operation and long life
- Die cast aluminum gearbox for strength and minimum weight
- Class A (105° C) winding insulation
- IP54 protection rating
- Long-life internal brushes for maintenance-free operation
- Permanently lubricated gearbox
- Ball bearing and oil-impregnated bronze bearing construction for extended service life
- Compact design to fit tight spaces
- PMDC 2-pole motor
- 300 lb-in (34 Nm) minimum back-drive withstand torque


QuickShip Products

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

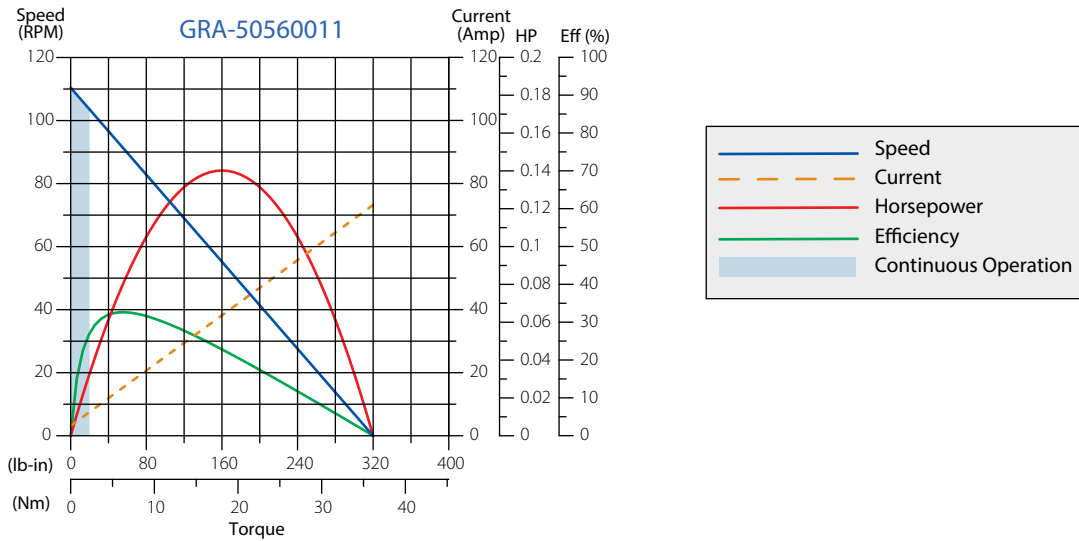
Look for the QuickShip symbol next to available part numbers. Then, click on the part number to go directly to our online store.



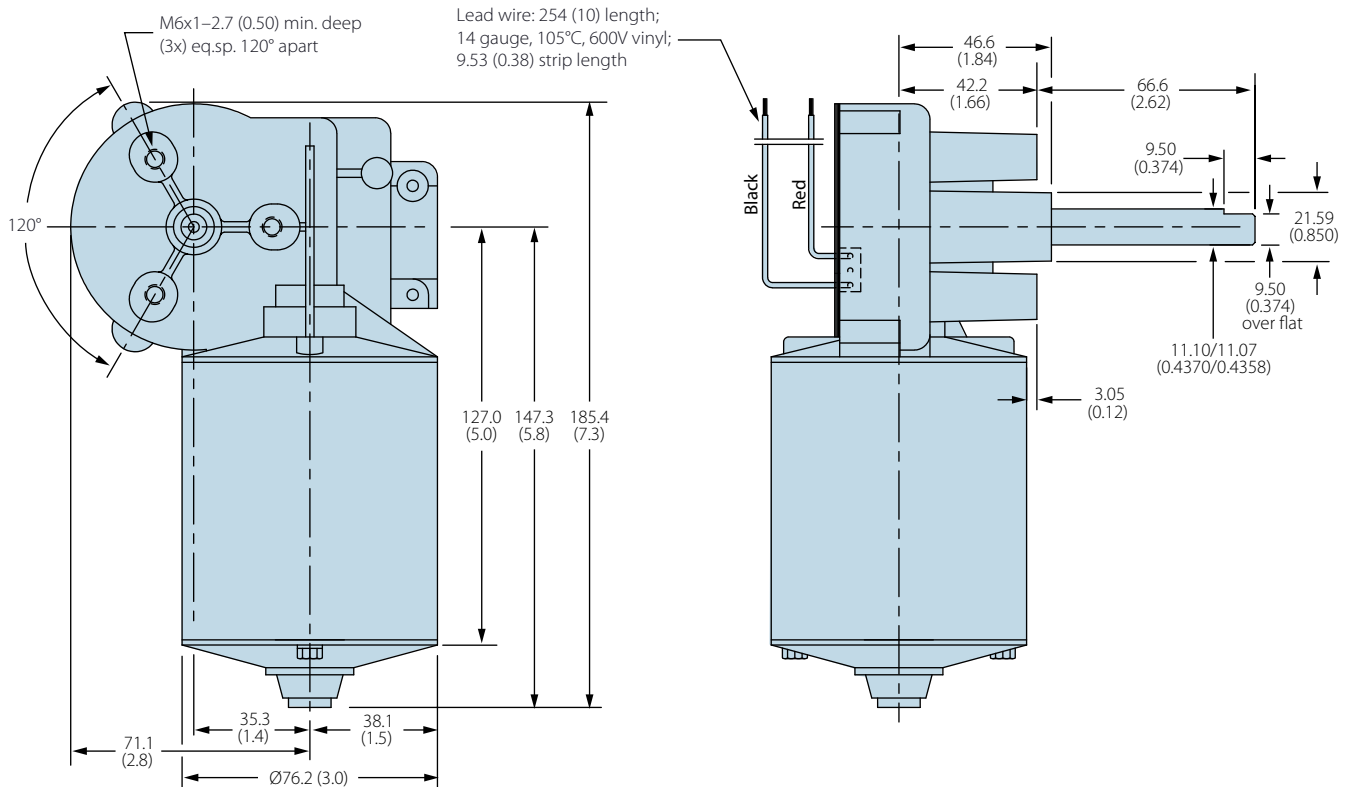
RAA 30 Series Gear Motors – Specifications

Model	 GRA-50560011	
Type	Right-angle shaft	
Motor Type	PMDC brush, 2-pole	
Frame Size	76.2 mm (3.0 in)	
Winding Voltage	12 VDC	
Torque	Rated	2.3 Nm (20.4 lb.in)
	Peak	20.6 Nm (182.3 lb.in)
Rated Speed	100 rpm	
No-load Speed	100 - 120 rpm	
Rated Power	22 W	
Current — ADC	Rated	6
	Peak	43
	No-load	3
Gear Ratio	35:1	
Peak Efficiency	36%	
Rotation (shaft view)	CCW (positive voltage to positive motor terminal)	
Bearing Type	Radial ball bearing & bronze bushing	
Backlash (no load)	5.5 - 16.6 arcmin	
Weight	2.3 kg (5 lb)	
Ambient Operating Temperature at Rated Duty	22 °C max	
Ambient Storage Temperature	-30 to 80 °C	
IP Rating	IP 54	

RAA 30 Series Gear Motors – Performance



RAA 30 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.

Allied Motion Solution Centers

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.

Each Solution Center's experienced application engineering and customer service team provide:

- 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.

Allied Motion also has a global network of factory trained selling partners to serve you. Visit our website for contact information for the Allied Motion Sales Partner nearest you.



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