

Features

- Precision Planetary Geared Motor
- Integrated Low-Voltage DC Brushless Pancake Motor
- High Resolution Encoder
- Holding Brake

RS PRO DC Geared Motor, 500 W – 16:1 Gear Ratio

RS Stock No.: 0192514



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.



Product Description

Experience exceptional motion control with the RS PRO Precision Planetary Geared Motor, featuring an integrated brushless motor for smooth and reliable performance. These motors are engineered to tackle demanding tasks, offering high continuous and peak torque, making them perfect for applications that require consistent power and durability.

Operating efficiently at a low voltage of 48V DC, these motors ensure safety and compatibility with various power systems. Their powerful 500W rating provides the necessary strength for various industrial and commercial uses.

General Specifications

DC Motor Type	Brushless		
Output Speed (No Load)	30-187rpm (depending on gear ratio)		
Speed at Max. Torque	29-178rpm (depending on gear ratio)		
Gearhead Type	Planetary		
Gear Ratio	16:1		

Electrical Specifications

Power Rating	500W		
Supply Voltage	48V DC		
Current Rating (No Load)			
Current at Max. Torque			
Maximum Output Torque	29-188Nm (depending on gear ratio)		
Rated Tolerance Torque	1.0 kgf-cm Maximum		
Max momentary Tolerance Torque	3.0 kgf-cm		
Efficiency	65%		
EMC Filter	Yes/No		

Reduction Table RPM Supply Voltage	3V	6V	9V	12V
Speed	32rpm	65rpm	97rpm	129rpm

DC Geared Motors



Mechanical Specifications

Shaft Diameter	6mm		
Core Construction	Iron Core		
Shaft Angle	Straight		
Dimensions	124mm x 124mm x 232mm		
Length	124mm		
Width	124mm		
Depth	232mm		
Reduction Ratio	10,16,20,25,50and 100:1		
Weight	9.8kg		
Life Span	20,000 h		

Gearbox Housing Material	Metal
Backlash at No-Load	< 3°
Bearing at Output	Sleeve bearings
Radial Load (10mm from flange)	< 0.5kgf
Shaft Axial Load	< 0.5kgf
Shaft Press Fit Force Max.	< 1.5kgf
Radial Play of Shaft	< 0.08mm
Thrust Play of Shaft	< 0.2mm

Protection Category

IP Rating	IP65

Classification

eCl@ss Version	
UNSPSC Version	

Approvals

Compliance/Certifications	CE / CSA / UL94-V0		
Standards Met	Approved Class B Insulation System; NEMA 23		
	Mounting; NEMA TEFC Enclosure		
Declarations			

DC Geared Motors



Similar Products

Parameters	Stock#	Stock#	Stock#	Stock#
Brand	RS PRO	RS PRO	RS PRO	RS PRO
DC Motor Type				
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Speed at Max. Torque				
Gearhead Type				
Gear Ratio				
Power Rating				
Supply Voltage				
Current Rating (No Load)				
Current at Max. Torque				
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Shaft Diameter				
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Standards Met				

MOTOR DIMENSIONAL DIAGRAM / SAFETY WARNING