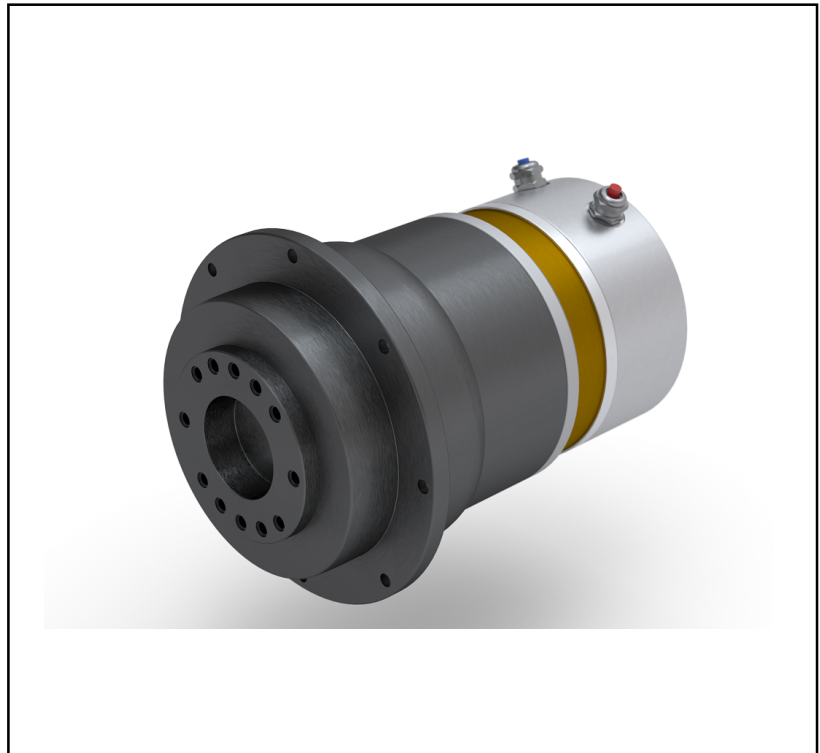


Features

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

RS PRO DC Geared Motor, 500 W – 100:1 Gear Ratio

RS Stock No.: 0192520



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 | 100:1 |

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 |

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 | |

Similar Products

| Parameters | Stock# | Stock# | Stock# | Stock# |
|--------------------------------|--------|--------|--------|--------|
| Brand | RS PRO | RS PRO | RS PRO | RS PRO |
| DC Motor Type | | | | |
| Output Speed (No Load) | | | | |
| Speed at Max. Torque | | | | |
| Gearhead Type | | | | |
| Gear Ratio | | | | |
| Power Rating | | | | |
| Supply Voltage | | | | |
| Current Rating (No Load) | | | | |
| Current at Max. Torque | | | | |
| Maximum Output Torque | | | | |
| Rated Tolerance Torque | | | | |
| Max momentary Tolerance Torque | | | | |
| Efficiency | | | | |
| EMC Filter | | | | |
| Shaft Diameter | | | | |
| Core Construction | | | | |
| Shaft Angle | | | | |
| Dimensions | | | | |
| Length | | | | |
| Width | | | | |
| Depth | | | | |
| Reduction Ratio | | | | |
| Weight | | | | |
| Life Span | | | | |
| Standards Met | | | | |

MOTOR DIMENSIONAL DIAGRAM / SAFETY WARNING