Features

- High precision
- Fast response
- Smooth operation
- Compact design
- Reliable performance

RS PRO Servo Motors

RS Stock No.:

885330

885331

885332



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

Servo motors are advanced motion control solutions designed for applications that require high precision, fast response, and reliable performance. They are widely used in industrial automation systems where accurate control of position, speed, and torque is essential.

Built to deliver smooth operation and excellent dynamic behavior, servo motors provide high efficiency, low torque ripple, and strong acceleration and deceleration capability. Their compact design and high power density make them suitable for a broad range of machinery, including systems with limited installation space.

Thanks to their precise feedback control structure, servo motors ensure accurate positioning, repeatability, and stable performance even under changing load conditions. They are ideal for demanding applications such as CNC machines, robotics, packaging equipment, conveyor systems, textile machinery, and other automated production lines.

Servo motors can be configured with different feedback technologies such as incremental or absolute encoders, and many models are available with optional brake systems for enhanced control and safety. Their combination of precision, flexibility, and durability makes them a preferred choice for modern motion control applications.

Key Features

- High precision position, speed, and torque control
- Fast dynamic response
- Smooth rotation with low torque ripple
- High efficiency and power density
- Compact and robust construction
- Stable performance under variable load conditions
- High repeatability and positioning accuracy
- Optional brake configurations
- Incremental and absolute encoder options
- Suitable for continuous industrial operation

Typical Applications

- CNC machines
- Robotics
- Packaging machines
- Conveyor and transfer systems
- Textile machinery
- Pick-and-place systems
- Printing machines
- Special-purpose industrial machines

General Specifications

AC Motor Type	Servo Motor
Output Speed	3000rpm
Maximum Output Torque	3,8Nm
Typical Housing Material	Aluminium housing with steel shaft and aluminium flange
Applications	CNC machinery, Industrial automation systems, Robotics, Pick & Place systems, Packaging machines, Material handling and conveyor systems

Electrical Specifications

Supply Voltage	310V
Power Rating	400W
Current Rating	2,7A
No Load Speed	3000rpm
Stall Torque	1,3Nm
Stall Current	8,1A
Maximum Efficiency	90.5 %
Terminal Resistance	3 ohm
Terminal Inductance	8.5mH
Torque Constant	0.48 Nm/A
Rotor Inertia	0.26 kg·cm^2

Mechanical Specifications

Shaft Diameter	14mm
Core Construction	Permanent Magnet, Brushless AC Servo Motor
Number of Pole Pairs	10
Dimensions	191,4mmx156,4mm
Length	191mm
Width	60mm
Depth	75mm
Weight	1.54kg

Operation Environment Specifications

Ambient Temperature	0°C to 40°C

Accessories

RS Stock#	Product Name	Description	For Use With
885354	Encoder Cable (15 Pin D-Sub – 9 Pin Circular)	Encoder cable for SMB servo motors. Compatible with incremental and BISS/SSI encoders.	Servo Motors
885352	Power Cable (Without Brake)	Power cable for SMB servo motors with RD24 type circular connector. Includes U, V, W and PE connections.	Servo Motors (Without Brake)
885353	Power Cable (With Brake)	Power cable for SMB servo motors with integrated brake connections, including U, V, W, brake signals and PE, equipped with RD24 type circular connector.	Servo Motors (With Brake)

Similar Products

Parameters	Stock#	Stock#	Stock#
Brand	**(750W)**	**(1KW)**	**(1,5KW)**
Motor Type	AC Servo	AC Servo	AC Servo
Output Speed	3000rpm	3000rpm	3000rpm
Maximum Output Torque	6,26Nm	11,8Nm	18,6Nm
Supply Voltage	310V	310 V	310 V
Power Rating	750W	1000W	1500W
Current Rating	5A	5A	8A
No Load Speed	5000 rpm	5000 rpm	5000 rpm
Stall Torque	2,40Nm	4,8Nm	7,2Nm
Stall Current	15A	16,5A	24A
Maximum Efficiency	92.5 %	92%	93,5%
Back-EMF Constant	42 V/k rpm	77,55 V/k rpm	81 V/k rpm
Shaft Diameter	19mm	22mm	22mm
Core Construction	Permanent Magnet, Brushless AC Servo Motor	Permanent Magnet, Brushless AC Servo Motor	Permanent Magnet, Brushless AC Servo Motor
Dimensions	176,4 x 141,4 mm	201.4 x 146.4 mm	211,4 x 156,4 mm
Length	176.4mm	201,4mm	211,4mm
Width	80mm	130mm	130mm
Depth	95mm	179,35mm	179mm
Weight	3.5kg	5,7kg	8,5kg
Ambient Temperature	0°C to 40°C	0°C to 40°C	0°C to 40°C