Single Axis Robots RSD3 - Rod Type -

RS
SINGLE AXIS ROBOT

See notes on CE Marking. P.456

Controller Specifications P497~506

■**Components:** Actuator, Controller, Cable

■**Accessory**

A Accessory	Controller I/O Specifications		
	NPN,PNP	CC-Link	DeviceNet
	Instruction Manual (CD-ROM), Power Connector, Dummy Connector, 6 Mounting Nuts		
	-	CC-Link Connector	DeviceNet Connector

■**Robot Material / Surface Treatment**

Components	Body	Rod	Cover
M Material	Aluminum	Steel	ABS
S Surface Treatment	Acrylic Paint	-	-

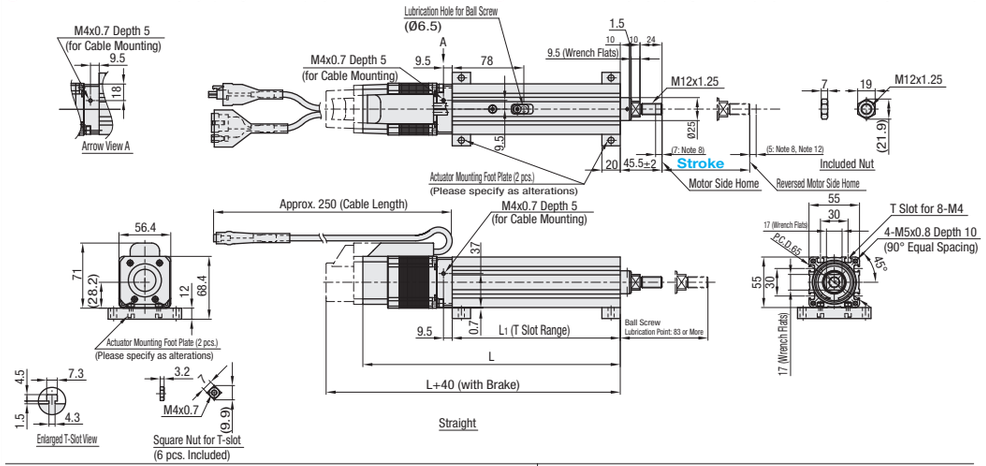
■**General Specifications**

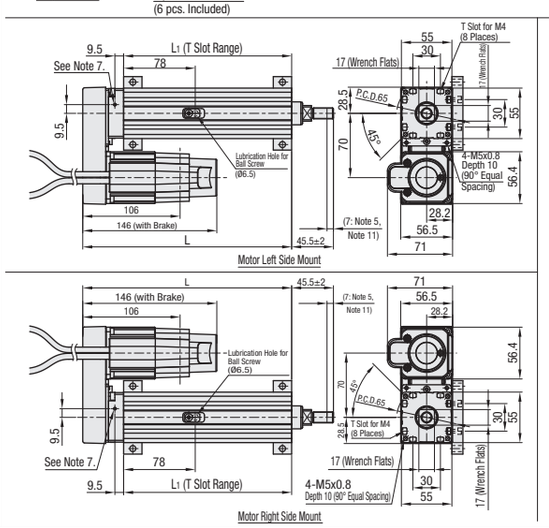
Ball Screw	Motor	Position Detector	Operating Ambient Temperature, Humidity
Ø12 (C10 Rolled)	Stepping	Resolver (Incremental)	0~40°C, 35~85%RH (No Condensation)

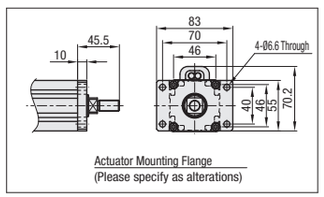
■**Standard Specifications** FAQ P503

Type	Lead (mm)	Positioning Repeatability (mm)	Max Load Capacity (kg) Horizontal	Max Load Capacity (kg) Vertical	Max. Push Force (N)	Rated Running Life 1	Lost Motion (mm)	Rod Non-Rotational Accuracy (degrees)	Stroke (mm)	Max. Velocity 2 (mm/sec)	Input Power Supply	Maximum Positioning Point
RSD3	02	±0.02	60	30	900	5,000km or More	0.1 or Less	±1.0	50~300 (50 Pitch)	~ 50	DC24V ±10%	255 points
	06		55	20	550					~150		
	12		50	10	250					~300		

1. The Service life in the vertical use may vary depending on the load capacity. Please refer to the "Service Life Table." 2. The maximum velocities may vary depending on the load capacity. Please refer to the "Velocity - Maximum Load Capacity Table."







Note 1. Load can be applied only in axial direction. Please use externally mounted guides together to avoid application of radial loads on the rods.
Note 2. Orientation of the wrench flats is not fixed in relation to the base surface.
Note 3. In order to ensure running straightness, use externally mounted linear guides.
Note 4. Reversed Motor Side Home cannot be set in case of Lead 2mm specifications.
Note 5. In case of Lead 2mm, it is 27mm.
Note 6. The cable should be fastened without excessive strains.
Note 7. The M4 hex-socket head screw can be utilized to fasten the cable (effective screw depth is 5mm).
Note 8. The minimum bending radius of the cable is 30mm.
Note 9. Note that the motor protrudes from the bottom of the actuator unit.
Note 10. The brake adds 0.2kg to the masses.
Note 11. Indicates the distance to the mechanical stopper.

■**Dimensions / Mass**

Type	Dimensions / Mass	Motor Mounting Direction: Straight, Stroke (mm) 50	100	150	200	250	300	Motor Mounting Direction: R/L, Stroke (mm) 50	100	150	200	250	300
RSD3	L1 (mm)	183	223	283	333	383	433	183	223	283	333	383	433
	L (mm)	280.5	330.5	380.5	430.5	480.5	530.5	227.5	277.5	327.5	377.5	427.5	477.5
	Mass (kg)(Note 10)	2.2	2.6	3.0	3.3	3.7	4.1	2.4	2.8	3.2	3.5	3.9	4.3

The brake adds 0.2kg to the total mass.

Part Number: Type	Lead (mm)	With or w/o Brake (1)	Selection: Motor Mounting Direction	Controller (2)	I/O Module	Cable Length (m)	Stroke (mm)
RSD3	02	None: Leave blank Included: B	Straight: Leave blank Right Side Mount: R Left Side Mount: L	Point Control: C1 Pulse Control: P1 (DC24V ±10%)	NPN: N PNP: P CC-Link: C DeviceNet: D	1 3 5 10 (Flexible Cable)	50~300 (50mm Increment)
	06						
	12						

(1) Choose the "Brake" option for use in vertical applications. (2) When the pulse train type controller is selected, the I/O type selection is not required.

Ordering Example

Part Number	Motor Mounting Direction	Controller	I/O Module	Cable Length	Stroke	
RSD306B	L	C1	N	3	200	(Motor Mounting Direction: L)
RSD306B		C1	N	3	200	(Motor Mounting Direction: Straight)
RSD306B	L	P1		3	200	Motor Mounting Direction: L, Controller: P1)

■**Robot Body Price**

Part Number	Unit Price 1 ~ 3 pc(s). Stroke (mm) 50	100	150	200	250	300
RSD3□□						
RSD3□□B						

■**Controller Price**

Type	I/O Module	Unit Price 1 ~ 3 pc(s).
C1	N	
	P	
	C	
	D	
P1	-	

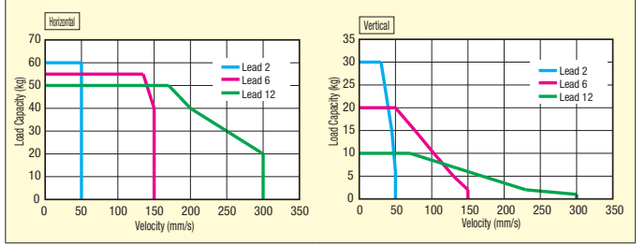
■**Cable Price**

Cable Length (m)	Unit Price 1 ~ 3 pc(s).
1	
3	
5	
10	

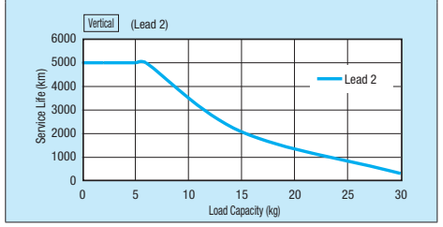
Note

Power interruption circuit is not provided in this controller in order to provide maximum flexibility for customer specific safety scheme.
Please be sure to provide an external power interruption circuit and form an emergency stop circuit. For Circuit examples, see P.503

■**Velocity - Maximum Load Capacity Table**



■**Service Life Table** Rated Running Life is 5,000km or more. For the following types, however, service life varies depending on its maximum load capacity, and how it is applied.



Alterations

Part Number	Motor Mounting Direction	Controller Type	I/O Type	Cable Length	Stroke	(G, E···etc.)
RSD3B	L	C1	N	3	200	G-E

Alterations	Handset Terminal Standard Specification	Handset Terminal w/ Deadman's Switch	Support Software w/ USB Communication Cable	Support Software W / D-Sub Communication Cable	I/O Cable	Cable for daisy-chain connection	Instruction Manual	Main Body Plastic Color Alterations	Actuator Mounting Foot Plate	Actuator Mounting Flange
					T: Controller C1 TP: Controller P1	Length: 300mm	MJ5: Body KJ3: Controller (C1) KJ4: Controller (P1)			
Code	H	D	S	R	T/TP	C	MJ5/KJ3/KJ4	BC	HP	VP
Spec.	Handset Terminal is included. Specifications P503, 507	Handset Terminal w/ Deadman's Switch is included. Specifications P503, 507	Support Software w / USB Communication Cable is included. Specifications P503, 507	Support Software w/ D-Sub Communication Cable is included. Specifications P507	I/O Cable is included. Required for NPN/PNP configurations. Specifications P507	A cable to connect multiple controllers. Up to 16 controllers can be connected. Specifications P507	Operation Manual is included. For Actuator MJ5: For Controller KJ3: KJ4:	Change the actuator plastic parts color to black.	2 plates are included for horizontal mounting. Specifications P507	1 plate is included for vertical mounting. Specifications P507

For optional items, see P507 It is more economical to order the optional items as alterations than purchasing them individually.
Entering point data requires the handy terminal or the support software. An I/O Cable is required for Parallel Communication I/O Control.
For details on daisy-chain, see P505 Please select the correct I/O cable type for the appropriate controller type.