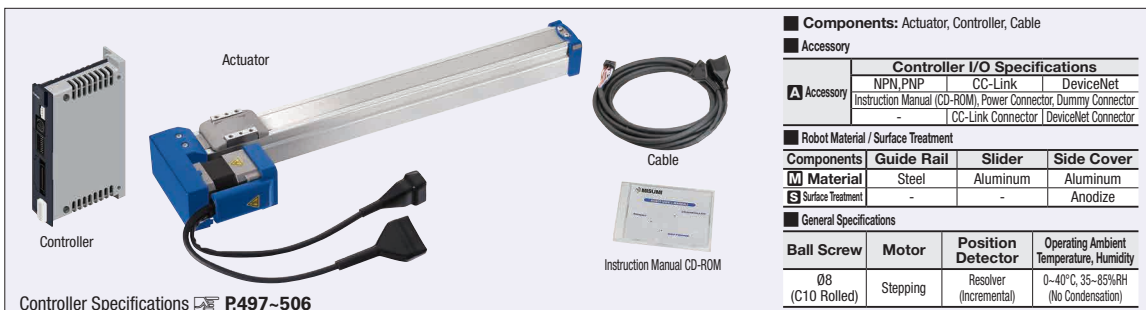


# Single Axis Robots RS1 - Motor Folded -



Dedicated Website: [http://download.misumi.jp/mol/fa\\_soft.html](http://download.misumi.jp/mol/fa_soft.html)  
Useful Selection Software and Instruction Manuals can be downloaded.

See notes on CE Marking. P.456



**Components:** Actuator, Controller, Cable

**Accessory**

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

**Robot Material / Surface Treatment**

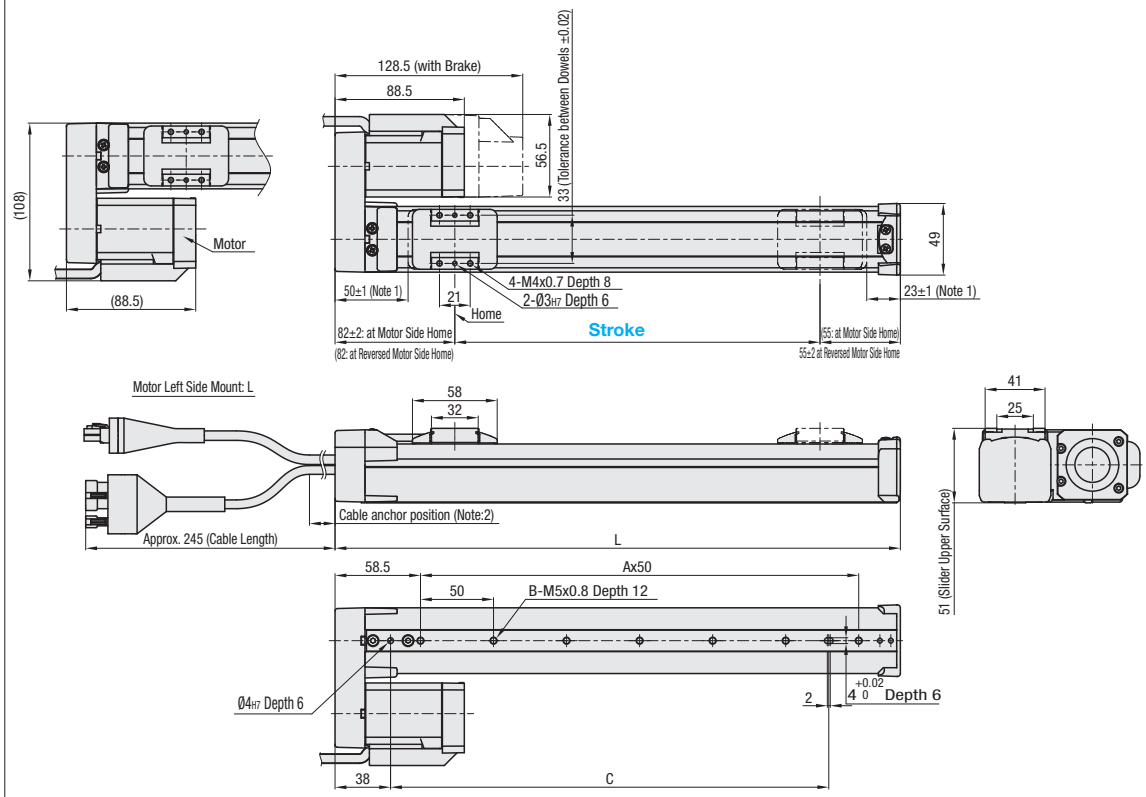
Components	Guide Rail	Slider	Side Cover
M Material	Steel	Aluminum	Aluminum
S Surface Treatment	-	-	Anodize

**General Specifications**

Ball Screw	Motor	Position Detector	Operating Ambient Temperature, Humidity
Ø8 (C10 Rolled)	Stepping	Resolver (Incremental)	0~40°C, 35~85%RH (No Condensation)

**Standard Specifications** FAQ P.504

Type	Lead (mm)	Positioning Repeatability (mm)	Max Load Capacity (kg)		Max. Push Force (N)	Stroke (mm)	Max. Velocity (mm/sec)	Rated Running Life	Input Power Supply	Maximum Positioning Point
			Horizontal	Vertical						
RS1	02	±0.02	6	4	150	50~400 (50 Pitch)	100	10,000 km or More	DC24V ±10%	255 points
	06		4	2	90		300			
	12		2	1	45		600			



(Note 1) Distances from the ends to the mechanical stoppers  
(Note 2) The cables should be tied down within 80mm from the ends of the unit avoiding any stress to the cables.  
(Note 3) The minimum bending radius of the cable is 30mm.  
(Note 4) These masses are for units without brakes. With brakes, they are 0.2 kg heavier.  
(Note 5) Belt cover is not right-left symmetrical. If the motor mounting orientation is changed, the belt cover can not be reinstalled.

**Dimensions / Mass**

Type	Dimensions / Mass	Stroke (mm)							
		50	100	150	200	250	300	350	400
RS1	L (mm)	187	237	287	337	387	437	487	537
	A (mm)	2	3	4	5	6	7	8	9
	B (mm)	3	4	5	6	7	8	9	10
	C (mm)	100	150	200	250	300	350	400	450
	Mass (kg)	1.2	1.4	1.5	1.6	1.7	1.8	1.9	2.1

Type	Part Number		Motor Mounting Direction	Controller (P2)	I/O Module	Cable Length (m)	Stroke (mm)
	Lead (mm)	With or w/o Brake (P1)					
RS1	02	None : Leave blank Included: B	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)	50~400 (50mm Increment)
	06						
	12						

(P1) Choose the "Brake" option for use in vertical applications. (P2) 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
RS102B	L	C1	N	3	400
RS102B	L	P1	-	3	400

(Controller: P1)

**Robot Body Price**

Part Number	Unit Price 1 ~ 2 pc(s).							
	Stroke (mm)							
	50	100	150	200	250	300	350	400
RS1□□								
RS1□□B								

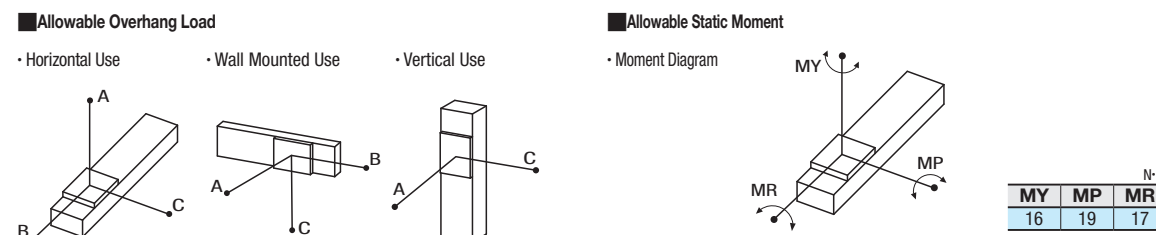
**Controller Price**

Type	I/O Module	Unit Price
C1	N	
	P	
	C	
	D	
P1	-	

**Cable Price**

Cable Length (m)	Unit Price
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



**Max. Velocity (mm/sec)** Please confirm the details of the Max. Speeds based on various strokes with MISUMI Web Simulator.

Type	Lead (mm)	Stroke (mm)							
		50	100	150	200	250	300	350	400
RS1	02	100							
	06	300							
	12	400~600							

**Alterations**

Part Number - Motor Mounting Direction - Controller Type - I/O Type - Cable Length - Stroke - (G, E...etc.)

Example: RS102B - L - C1 - N - 3 - 400 - G-E

(Grease Type Alteration) + (Change of Home Position) = Total Price

Alterations	Grease Type Alteration	Change of Home Position	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 MJ5: Body KJ3: Controller (C1) KJ4: Controller (P1)	Main Body Plastic Color Alterations
Code	G	E	H	D	S	R	T/TP	C	MJ5/KJ3/KJ4	BC
Spec.	Grease is changed to low particle generation grease. (NSK LG2)	The home position is relocated to the opposite side of the motor.	Handset Terminal is included. Specifications P.503, 507	Handset Terminal w/ Deadman's Switch is included. Specifications P.503, 507	Support Software w/ USB Communication Cable is included. Specifications P.503, 507	Support Software w/ D-Sub Communication Cable is included. Specifications P.507	I/O Cable is included. Required for NPN/PNP configurations. Specifications P.507	A cable to connect multiple controllers. It can connect maximum 16 controllers. Specifications P.507	Operation Manual is included. For Actuator MJ5: For Controller KJ3: For Controller KJ4: KJ4:	Change the actuator plastic parts color to black.

(P) For optional items, see P.507 (P) It is more economical to order the optional items as alterations than purchasing them individually.  
(P) Entering point data requires the handy terminal or the support software. (P) An I/O Cable is required for Parallel Communication I/O Control.  
(P) For details on daisy-chain, see P.507 (P) Please select the correct I/O cable type for the appropriate controller type.