



Single Axis Robots Clean Spec. RS1C - Straight



CE Compliant

See notes on CE Marking. P.49

CAD Data Folder Name: 07_Actuator

When placing order, select part numbers and values by proceeding through Selection Steps 1~7.

Ordering Example: Part Number (Type, 1 Lead, 2 With or w/o Brake) - 3 Fitting Mounting Direction - 4 Controller - 5 I/O Module - 6 Cable Length - 7 Stroke

RS1C02B - R - C1 - N - 3 - 400

Features: The fitting for air suction is included with as the standard equipment, and the low dust generation grease is adopted.

Components: Actuator, Controller, Cable

Accessory

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

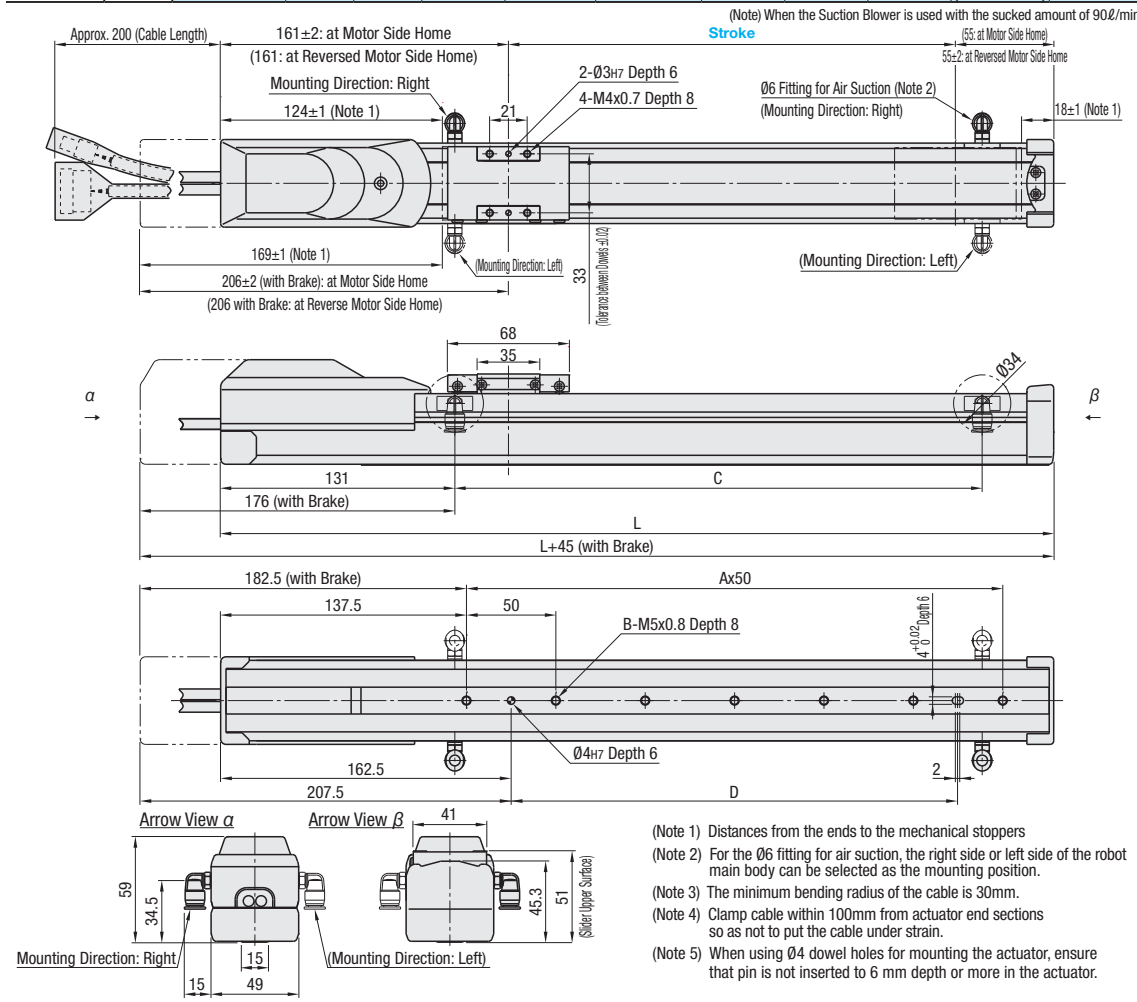
Ball Screw	Motor	Position Detector	Operating Ambient Temperature, Humidity
Ø8 (C10 Rolled)	Stepping	Resolver (Incremental)	0~40°C, 35~85%RH (No Condensation)

Black plastic specification is applied to the main body. (Please specify as alterations)

Controller Specifications P.103~P.112

Standard Specifications FAQ P.110

Type	Lead (mm)	Repeatability (mm)	Max. Load Capacity (kg)	Max. Push Force (N)	Stroke (mm)	Max. Velocity (mm/sec)	Rated Running Life	Controller Input Power Supply	Maximum Positioning Point	Cleanliness (Note)	Sucked Amount (L/min)
RS1C	02	±0.02	6	4	150	100	10,000 km or More	DC24V ±10%	255 points	CLASS10 (Based on 0.1µm particle per 1cf)	90
	06		4	2	90	300					
	12		2	1	45	600					



Part Number		Selection					
Type	1 Lead (mm)	2 With or w/o Brake (☑)	3 Fitting Mounting Direction	4 Controller	5 I/O Module	6 Cable Length (m)	7 Stroke (mm)
RS1C	02	W/o Brake: Leave blank With Brake: B	Right: R Left: 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						

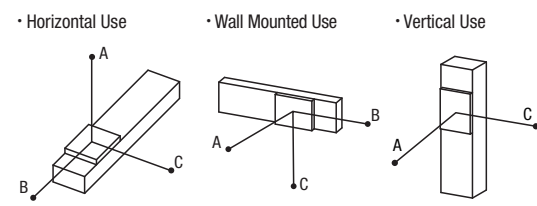
☑1) Choose the "With Brake" option for use in vertical applications.

Dimensions / Mass

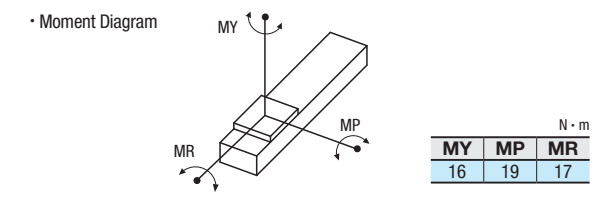
Type	Stroke (mm)	50	100	150	200	250	300	350	400
RS1C	L (mm)	266	316	366	416	466	516	566	616
	A	2	3	4	5	6	7	8	9
	B	3	4	5	6	7	8	9	10
	C (mm)	95	145	195	245	295	345	395	445
	D (mm)	50	100	150	200	250	300	350	400
	Mass (kg)	1.5	1.7	1.8	1.9	2.0	2.1	2.3	2.4

☑The brake adds 0.2 kg to the total mass.

Allowable Overhang Load



Allowable Static Moment



Lead	Mass	mm			Lead	Mass	mm			Lead	Mass	mm		
		A	B	C			A	B	C			A	B	C
02	6kg	863	40	60	02	6kg	39	26	789	02	4kg	53	53	
	4kg	869	61	92		4kg	72	48	829		2kg	118	118	
	4kg	567	56	84		4kg	63	43	507		2kg	107	107	
06	3kg	556	76	112	06	3kg	92	62	516	06	1kg	223	223	
	2kg	687	116	169		2kg	149	102	656		1kg	204	204	
	2kg	667	107	152		2kg	133	93	611		0.5kg	407	408	
12	1kg	807	218	292	12	1kg	274	204	776					

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.109.

FAQ

- Q1. The actuator does not move.
A1. When activating an actuator using Support Software or Handset Terminal, invalidate Option Parameter (No. 80). (Option Valid = I/O Terminal Valid, Option Invalid = I/O Terminal Invalid). Then turn the servo status "ON" and operate the homing procedure. After the completion of homing, start the operation by turning on "Operation".
- Q2. LED light is on. Is there a controller defect?
A2. Blue: PWR (OFF: Control Power Shutoff, Blink: Servo OFF, ON: Servo ON), Red: ERR (OFF: Control Power Shutoff / No Error Alarm, Blink: Error Alarm On (External Factor), ON: Error Alarm On (Internal Factor))
- Q3. Teaching cannot be conducted by via I/O.
A3. To conduct teaching via I/O, the status needs to be ON for MANUAL Input and OFF for Interlock Input. Note that it does not function in the state of "Homing Incomplete".
- Q4. Is low-speed operation possible?
A4. Possible, however, 10 to 20% of max. velocity is the limit depending on the lead.

Days to Ship: 7 Days

Alterations: Part Number - Fitting Mounting Direction - Controller Type - I/O Type - Cable Length - Stroke - (E, H--etc.)

RS1C02B - R - C1 - N - 3 - 400 - E-H

Alterations	Grease Type Alteration	Change of Home Position	Handset Terminal Standard Specification	Handset Terminal w/ Deadman's Switch	Support Software w/ USB Communication Cable is included.	Support Software w/ D-Sub Communication Cable is included.	I/O Cable	Cable for daisy-chain connection	Instruction Manual	Main Body Plastic Color Alterations
Code	G	E	H	D	S	R	T/TP	C	ME5/KE3/KE4	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.109, 113	Handset Terminal w/ Deadman's Switch is included. Specifications P.109, 113	Support Software w/ USB Communication Cable is included. Specifications P.109, 113	Support Software w/ D-Sub Communication Cable is included. Specifications P.109, 113	I/O Cable is included. Required for NPN/PNP configurations. Specifications P.109, 113	A cable to connect multiple controllers. Up to 16 controllers can be connected. Specifications P.111, 113	Operation Manual is included.	Change the actuator plastic parts color to black.

☑ For optional items, see P.113. ☑ 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. ☑ Please select the correct I/O cable type for the appropriate controller type.