

RS3C

Slider Type Actuator (6–12 kg Max.) / Clean Room Version



Features: Standard equipped with Vacuum Air Joint and Low Particulate Grease



Components: Actuator, Controller, Cable

Accessories

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

Actuator Material / Surface Treatment

Components	Guide Rail	Slider	Side Covers
Material	Steel	Aluminum	Aluminum
Surface Treatment	—	—	Anodize

General Specifications

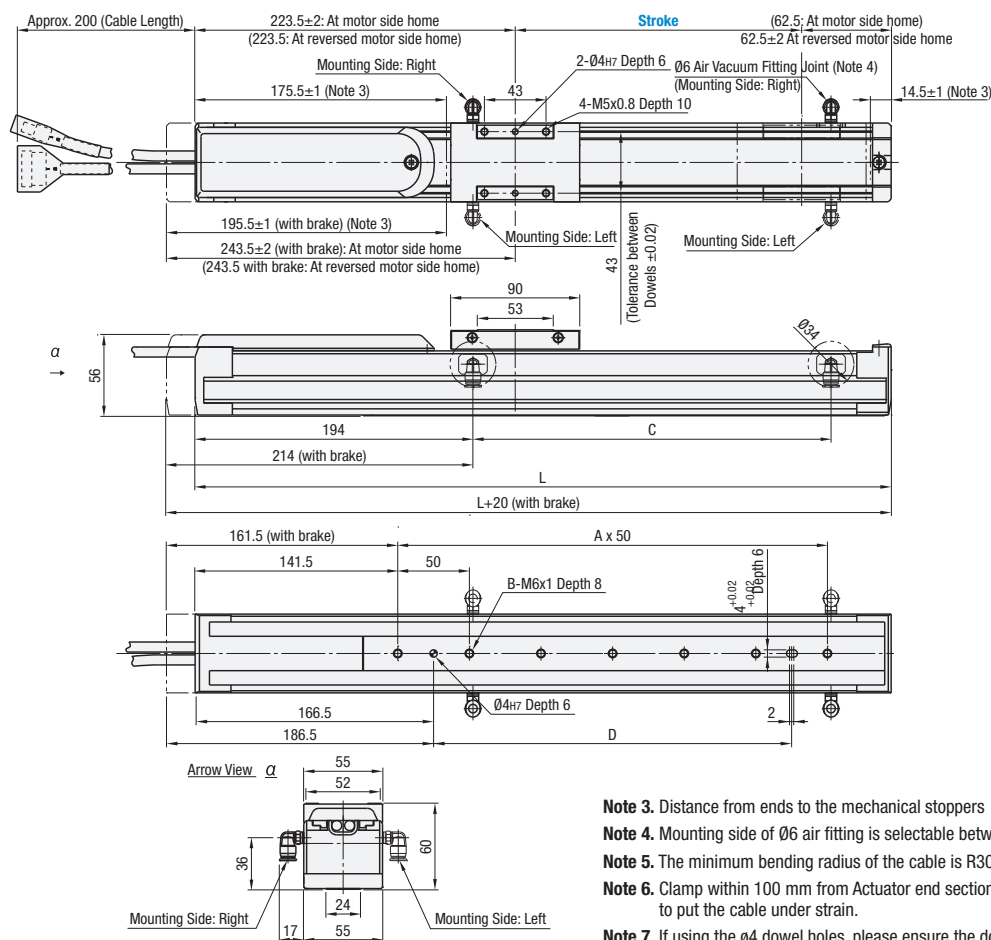
Ball Screws	Motor	Position Detector	Service Ambient Temperature / Humidity
Ø12 (C10 Rolled)	Stepping	Resolver (Incremental)	0–40°C, 35–85% RH (No condensation)

RoHS10 Controller Specification P.510 Cycle Time Graph P.515

Standard Specifications Terminology P.513

Type	Lead (mm)	Positioning Repeatability (mm)	Maximum Load Capacity (kg)		Maximum Push Force (N)	Stroke (mm)	Maximum Velocity (Note 1) (mm/sec)	Rated Running Life	Controller Input Power Supply	Maximum Positioning Points	Cleanroom Class (Note 2)	Vacuum (l/min)	
RS3C	06	±0.02	Horizontal	Vertical	120	50–800 (50 Pitch)	300–190 600–380 1000–633	10,000 km or More	DC24V ±10%	255 Points	CLASS10 Based on 0.1 µm per 1cf	90	
	12		8	2									60
	20		6	—									36

Note 1: Maximum speed varies depending on stroke. Please see Maximum Speed Table on the right page. Note 2: In the case of 90 l/min vacuum.



- Note 3. Distance from ends to the mechanical stoppers
- Note 4. Mounting side of Ø6 air fitting is selectable between right and left.
- Note 5. The minimum bending radius of the cable is R30.
- Note 6. Clamp within 100 mm from Actuator end sections so as not to put the cable under strain.
- Note 7. If using the ø4 dowel holes, please ensure the dowel pin does not pass the 6 mm depth.

Dimensions / Mass

Type	Stroke (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
RS3C	L	336	386	436	486	536	586	636	686	736	786	836	886	936	986	1036	1086
	A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	B	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	C	90	140	190	240	290	340	390	440	490	540	590	640	690	740	790	840
	D	100	150	200	250	300	350	400	450	500	500	500	500	500	500	500	500
	Mass (kg)	2.5	2.7	2.9	3.1	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4

⊙ The mass of "with brake" type is 0.2 kg heavier.

RS3C

Slider Type Actuator (6–12 kg Max.) / Clean Room Version, continued



CE Compliant

⊙ See notes on CE Marking P.513

Type	Part Number		Selections				
	Lead (mm)	Brake (⊙1)	Coupler Install Side	Controller	I/O Module	Cable Length (m)	Stroke (mm)
RS3C	06	Without: Blank With: B	Right: R Left: L	C1 DC24V±10%	NPN: N PNP: P CC-Link: C DeviceNet: D	1 3 5 10 Flexible Cable	50–800 50 mm Increment
	12						
	20						

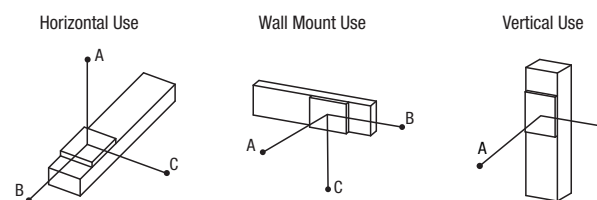
⊙1) Choose with brake type for use in vertical alignment. With brake type is not available for Lead 20.

Part Number Example: **RS3C06B** - **R** - **C1** - **N** - **3** - **400**

Note

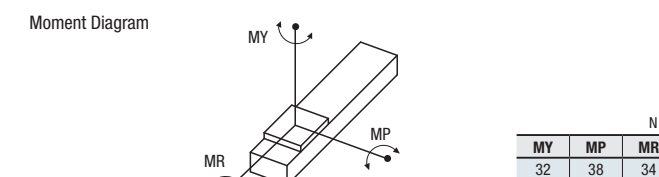
A power interruption circuit is not installed in this controller. Please be sure to build an external power interruption circuit and form an emergency stop circuit. Circuit Examples P.511.

Allowable Overhang Load



Lead	mm				Lead	mm				Lead	mm								
	Mass	A	B	C		Mass	A	B	C		Mass	A	B	C					
06	12 kg	465	39	64	06	4 kg	113	113	06	4 kg	113	113	12	2 kg	224	224			
	10 kg	442	47	78		8 kg	64	39		413	8 kg	101		62	519	8 kg	55	34	305
	8 kg	480	61	100		6 kg	573	83		136	6 kg	399		76	118	6 kg	85	55	334
12	6 kg	573	83	136	12	6 kg	399	76	118	12	4 kg	500	118	179	20	6 kg	352	71	104
	8 kg	403	56	88		4 kg	500	118	179		4 kg	146	96	449		4 kg	366	109	148
	6 kg	399	76	118		6 kg	352	71	104		2 kg	599	225	291		2 kg	262	203	554

Allowable Static Moment



Max. Velocity (mm/s)

Type	Lead (mm)	Stroke (mm)				
		50–600	650	700	750	800
RS3C	06	300 (250)	280 (250)	250	220	190
	12	600 (500)	560 (500)	500	440	380
	20	1000	933	833	733	633

⊙ Values in () are for vertical applications.

Part Number Alterations: **RS3C06B** - **R** - **C1** - **N** - **3** - **400** - **E-H**

Alterations	Change of Home Position	Handy Terminal	Handy Terminal with Deadman's Switch	Support Software with USB Communication Cable	Support Software with RS232C Communication Cable	I/O Cable	Actuator Instruction Manual	Controller Instruction Manual	Main Body Plastic Color Alterations
Code	E	H	D	S	R	T	MJ / ME	KJ / KE	BC
Spec.	The home position is relocated to the opposite side of the motor.	Handy Terminal is included. Specifications P.512	Handy Terminal with Deadman's Switch is included. Specifications P.512	Support Software USB with communication cable is included. Specifications P.512	Support Software with RS232C communication cable is included. Specifications P.512	I/O cable is included. Required for NPN / PNP configurations. Specifications P.512	For Actuator main structures. Instruction Manual is included. MJ: Japanese Language ME: English Language	For Controllers Instruction Manual is included. KJ: Japanese Language KE: English Language	Change the Actuator plastic parts color to black.

⊙ See P.512 for Optional Items.