

RSH3C

Slider Type Actuator (30–80 kg Max.) / Clean Room Version



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

Components: Actuator, Controller, Cable, Battery, Noise Filter

Accessory

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

Actuator Material / Surface Treatment

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

General Specifications

Ball Screws	Motor	Position Detector	Service Ambient Temperature / Humidity
Ø15 (C7 Rolled)	AC Servo Motors 100W	Resolver	0–40°C, 35–85% RH (No condensation)

CE Compliant

See notes on CE Marking P.513

RSH3C

Slider Type Actuator (30–80 kg Max.) / Clean Room Version, *continued*



Part Number		Selections							
Type	Lead (mm)	Controllers (O1)			I/O Module	Noise Filter (O2)	Cable	Stroke (mm)	
RSH3C	05	Spec. Power Supply AC100–115V AC200–230V	Absolute Type (With Data Storage Battery) C21A C22A	Incremental Type C21B C22B	NPN: N PNP: P CC-Link: C DeviceNet: D	Without: F0 With: F1 Specifications P.513	Standard 3.5 m: R3 5 m: R5 10 m: R10	Flexible 3.5 m: R3 5 m: R5 10 m: R10	150–1050 50 mm Increment
	10								
	20								

(O1) Controllers are shipped with preset parameters for each type. Data storage batteries are outside the scope of RoHS Directive.

(O2) This product needs a noise filter. When purchased separately by customers, please select "none." Be sure to install a surge absorber on the primary side of a noise filter. For details, please see the Instruction Manual.

Part Number Example

RSH3C05 - C22A - N - F1 - 3 - 400

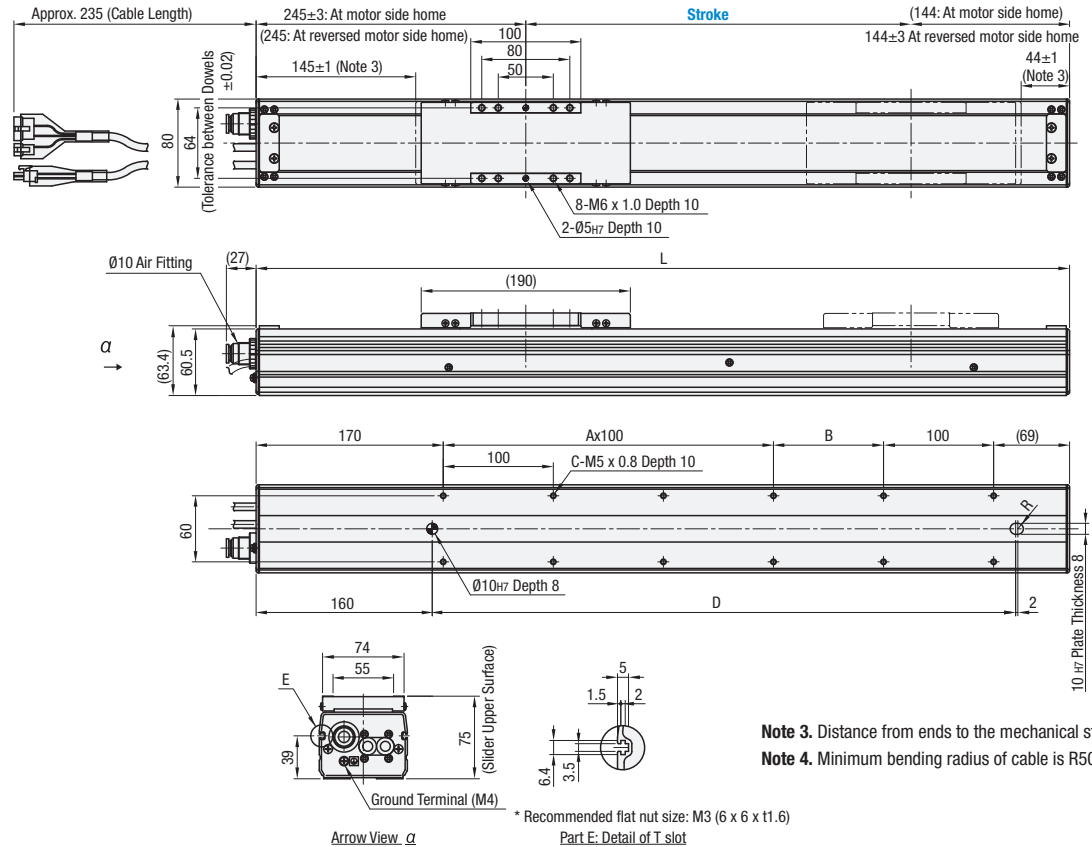
Note

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

Standard Specifications Terminology P.513

Type	Lead (mm)	Positioning Repeatability (mm)	Maximum Load Capacity (kg)		Rated Force (N)	Maximum Velocity (Note 1) (mm/sec)	Stroke (mm)	Rated Running Life	Controller Input Power Supply	Maximum Positioning Points	Cleanroom Class (Note 2)	Vacuum (l/min)
			Horizontal	Vertical								
RSH3C	05	±0.01	80	339	300–105	150–1050 (50 Pitch)	10,000 km or More	100–115V 200–230V ±10%	255 Points	CLASS10 Based on 0.1 µm per 1cf	90	
	10		60	169								
	20		30	84								

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.

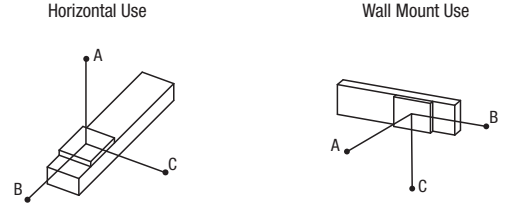
Note 4. Minimum bending radius of cable is R50.

* Recommended flat nut size: M3 (6 x 6 x t1.6)

Dimensions / Mass

Type	Stroke (mm)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
RSH3C	L	539	589	639	689	739	789	839	889	939	989	1039	1089	1139	1189	1239	1289	1339	1389	1439
	A	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10
	B	100	150	100	150	100	150	100	150	100	150	100	150	100	150	100	150	100	150	100
	C	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
	D	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230
	Mass (kg)	4.7	5.0	5.3	5.6	5.9	6.2	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.7	9.0	9.3	9.7	10.0	10.3

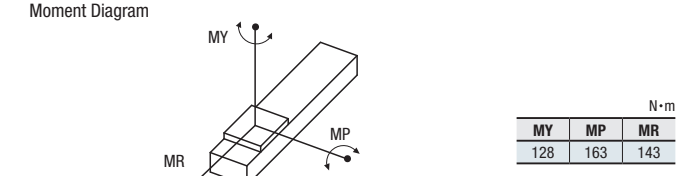
Allowable Overhang Load



Lead	Mass	mm			Lead	Mass	mm		
		A	B	C			A	B	C
05	80 kg	594	20	17	05	80 kg	0	0	0
	60 kg	707	34	29		60 kg	0	0	0
	40 kg	844	63	54		40 kg	15	18	505
	20 kg	1087	148	127		20 kg	89	104	974
	60 kg	375	30	25		60 kg	0	0	0
10	40 kg	472	57	47	10	40 kg	8	11	196
	20 kg	622	137	111		20 kg	74	90	517
	30 kg	338	76	57		30 kg	20	27	182
	20 kg	401	125	92		20 kg	56	76	302
	10 kg	687	274	200		10 kg	163	225	617

When overhang equals zero, use linear guides with selected unit to support workload.

Allowable Static Moment



Max. Velocity (mm/s)

Type	Lead (mm)	Stroke (mm)									
		150–600	650	700	750	800	850	900	950	1000	1050
RSH3C	05	300	264	225	195	180	165	150	135	120	105
	10	600	528	450	390	360	330	300	270	240	210
	20	1000	1000	900	800	700	650	600	550	500	450

Part Number Alterations

RSH3C05 - C22A - N - F1 - 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
Code	E	H	D	S	R	T	MJ / ME	KJ / KE
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

See P.512 for Optional Items.