

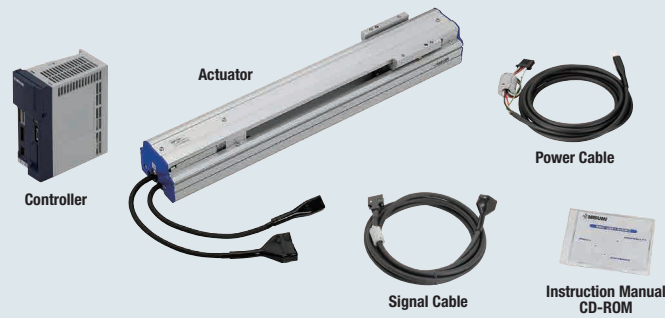
RSH3

Slider Type Actuator (30–80 kg Max.)



CE Compliant

See notes on CE Marking P.513



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

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

Robot Material / Surface Treatment				
Components	Base Frame	Guide Rail	Slider	Side Cover
Material	Aluminum	Steel	Aluminum	Aluminum
Surface Treatment	Anodize	—	Anodize	Anodize

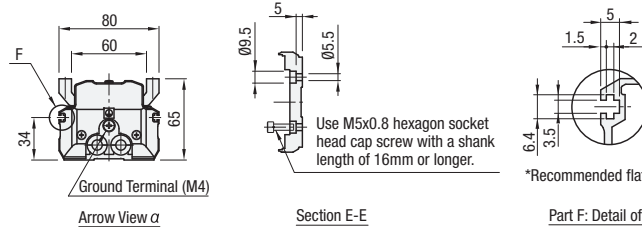
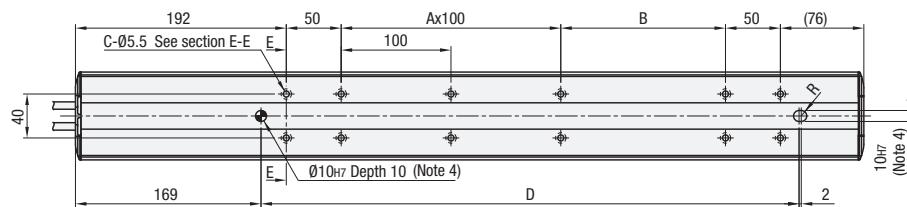
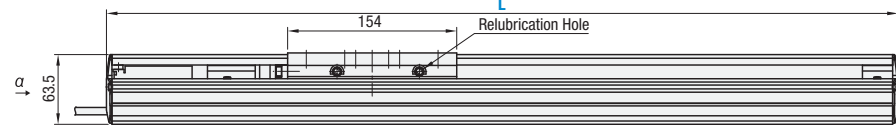
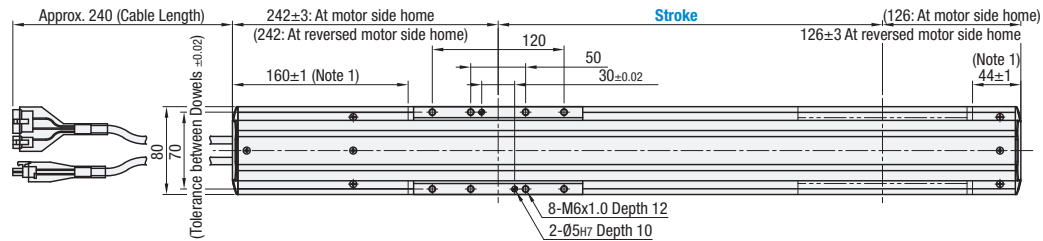
General Specifications			
Ball Screw	Motor	Position Detector	Operating Ambient Temperature / Humidity
Ø15 (C7 Rolled)	AC Servo Motors 100W	Resolver	0–40°C, 35–85% RH (No Condensation)

Controller Specification P.510 Cycle Time Graph P.517 Clean Spec. P.508

Standard Specifications Terminology P.513

Type	Lead (mm)	Positioning Repeatability (mm)	Maximum Load Capacity (kg) Horizontal	Rated Force (N)	Maximum Velocity (Note) (mm/sec)	Stroke (mm)	Rated Running Life	Input Power Supply	Maximum Positioning Points
RSH3	05	±0.01	80	339	300–105	150–1050 (50 Pitch)	10,000 km or More	AC100–115V AC200–230V ±10%	255 Points
	10		60	169	600–210				
	20		30	84	1200–420				

Note: Maximum velocity varies depending on the strokes. Please see Maximum Velocity Table on the next page.



- Note 1. Distance from ends to the mechanical stoppers
- Note 2. When mounting, ensure mounting bolts do not interfere with the travel of the carriage.
- Note 3. Minimum bending radius of the cable is R50.
- Note 4. If using the Ø10 dowel holes, please ensure the dowel pin does not pass the 10 mm depth.

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

Dimensions / Mass

Type	Dimensions / Mass	Stroke (mm)																		
		150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
RSH3	L (mm)	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368	1418
	A (mm)	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9
	B (mm)	150	100	150	100	150	100	150	100	150	100	150	100	150	100	150	100	150	100	150
	C (mm)	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
	D (mm)	290	340	390	440	490	540	590	640	690	740	790	840	890	940	990	1040	1090	1140	1190
	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

RSH3

Slider Type Actuator (30–80 kg Max.), continued

Part Number	Selection								
	Type	Lead (mm)	Controllers (O1)			I/O Module	Noise Filter (O2)	Cable	
RSH3	05	Spec. Power Supply AC100–115V AC200–230V	Absolute Type (With Data Storage Battery) C21A	Incremental Type C21B	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								

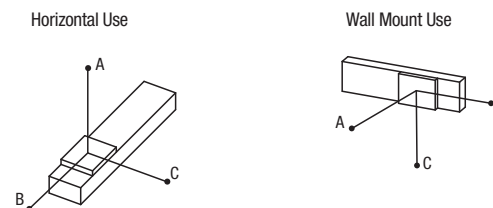
- (O1) Controllers are shipped with preset parameters for each type. Data storage batteries are outside the scope of RoHS Directive.
- (O2) This product needs a noise filter. When purchasing separately, please select "none." Be sure to install a surge absorber on the primary side of a noise filter. For details, please see the Instruction Manual.

Part Number Example: RSH305B - C22A - N - F1 - 3 - 400

Note

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

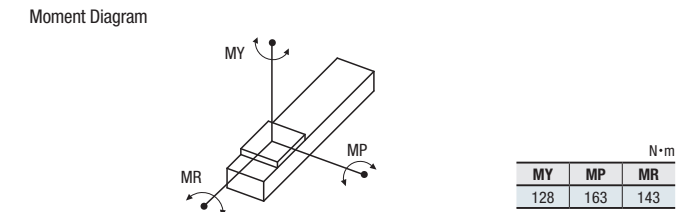
Allowable Overhang Load



Lead	Mass	mm			Lead	Mass	mm		
		A	B	C			A	B	C
05	80 kg	601	20	17	05	80 kg	0	0	0
	60 kg	714	34	29		60 kg	0	0	0
	40 kg	851	63	54		40 kg	22	26	604
10	20 kg	1094	148	127	10	20 kg	96	112	1005
	60 kg	382	30	25		60 kg	0	0	0
	40 kg	479	57	47		40 kg	15	19	270
20	20 kg	629	137	111	20	20 kg	80	99	545
	30 kg	279	70	50		30 kg	20	29	160
	20 kg	334	116	81		20 kg	53	75	255
20	10 kg	573	256	176	20	10 kg	147	215	515

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
RSH3	05	300	255	225	195	180	165	150	135	120	105
	10	600	510	450	390	360	330	300	270	240	210
	20	1200	1020	900	780	720	660	600	540	480	420

When the stroke is 650 mm or more, the resonance of ball screws may occur according to the operating area (critical speed). In that case, reduce the operation speed by referring to the maximum velocity shown in the table above.

Part Number Alterations: RSH305B - C22A - N - F1 - 3 - 400 - G-E

Alterations	Grease Type Alteration	Change of Home Position	Handy Terminal Standard Specification	Handy Terminal with Deadman's Switch	Support Software with USB Communication Cable	Support Software with D-Sub Communication Cable	I/O Cable	Robot Instruction Manual	Controller Instruction Manual
Code	G	E	H	D	S	R	T	MJ / ME	KJ / KE
Spec.	Grease is changed to low particle generation grease. (NSK LG2)	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 with USB Communication Cable is included. Specifications P.512	Support Software with D-Sub communication cable is included. Specifications P.512	I/O cable is included. Required for NPN / PNP configurations. Specifications P.512	Instruction Manual for robot main structures is included. MJ: Japanese Language ME: English Language	Instruction Manual for controllers is included. KJ: Japanese Language KE: English Language

- For optional items, see P.512. Optional items can be purchased more economically as Alterations than as single items.
- Point data requires Handy Terminal or Support Software.
- Parallel Communication I/O Control requires I/O Cable.