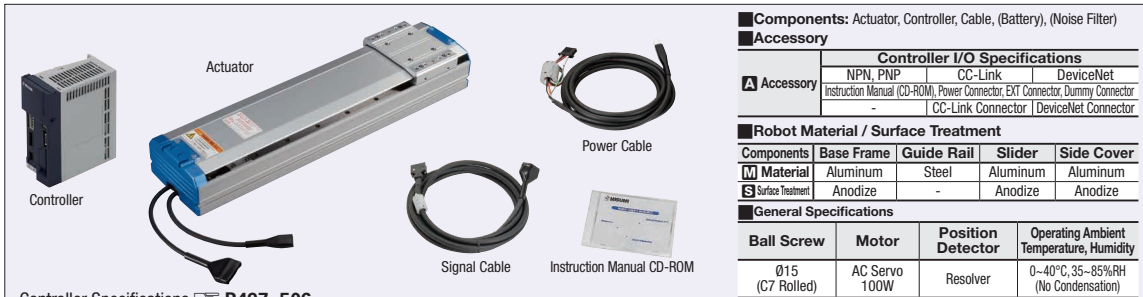


Single Axis Robots RSH5 - Straight -



See notes on CE Marking. P456



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

Accessory

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

Robot Material / Surface Treatment

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

General Specifications

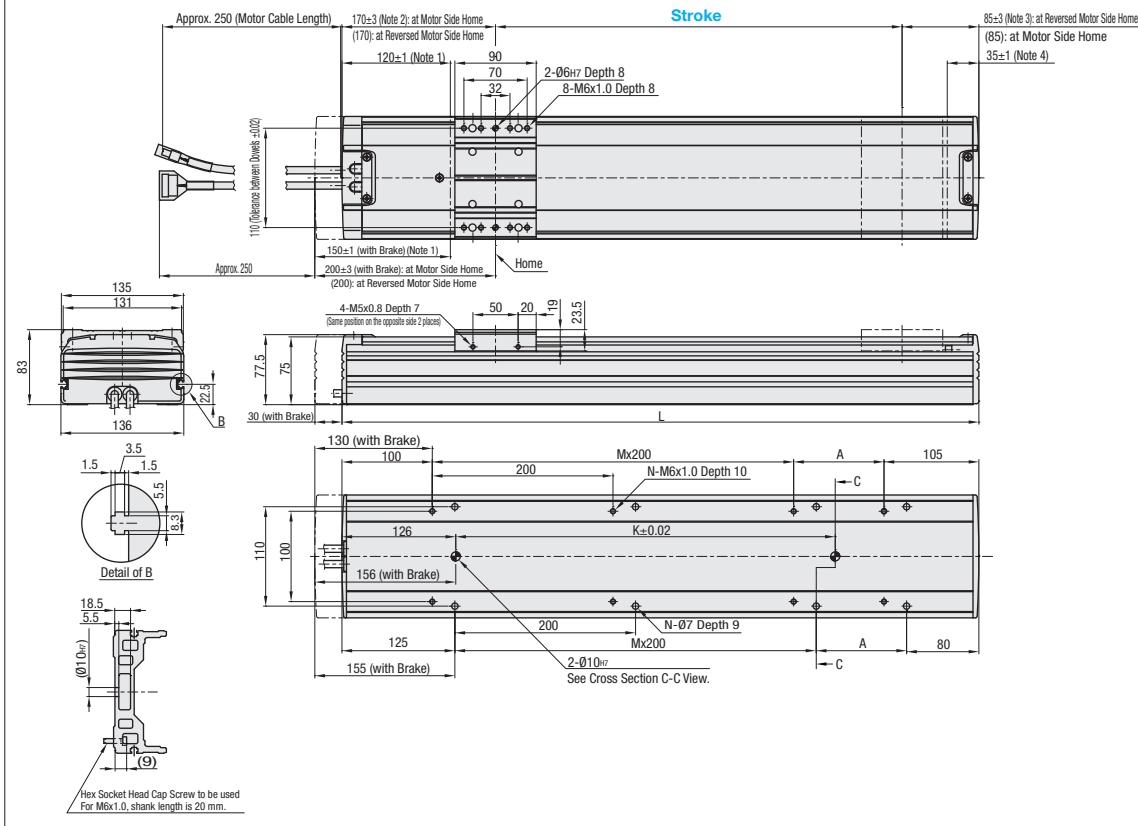
Ball Screw	Motor	Position Detector	Operating Ambient Temperature, Humidity
Ø15 (C7 Rolled)	AC Servo 100W	Resolver	0~40°C, 35~85%RH (No Condensation)

Controller Specifications P497-506

Standard Specifications FAQ P504

Type	Lead (mm)	Positioning Repeatability (mm)	Max Load Capacity (kg)		Rated Force (N)	Max. Velocity (Note) (mm/sec)	Stroke (mm)	Rated Running Life	Input Power Supply	Maximum Positioning Point
			Horizontal	Vertical						
RSH5	05	±0.01	80	20	339	~300	150~1050 (50 Pitch)	10,000km or More	Single-phase AC 100~115V 200~230V ±10%	255 points
	10		55	10	169	~600				
	20		30	4	84	~1200				
	30		15	-	56	~1800				

(Note) The maximum velocities may vary depending on the load capacity. Please refer to the "Recommended Maximum Velocities" table.



Note 1. Mechanical stopper position from the ends.
 Note 2. For Large Lead Type (Lead 30), 172.5±4.
 Note 3. For Large Lead Type (Lead 30), 85±4.
 Note 4. For Large Lead Type (Lead 30), 32.5±1.
 Note 5. The minimum bending radius of the motor cable is 50mm.

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
RSH5	L (mm)	405	455	505	555	605	655	705	755	805	855	905	955	1005	1055	1105	1155	1205	1255	1305
	A (mm)	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100
	M (mm)	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5
	N (mm)	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14
	K (mm)	240	240	240	240	420	420	420	420	600	600	600	600	780	780	780	780	960	960	960
	Mass (kg)	6.2	6.9	7.5	8.2	8.8	9.5	10.1	10.8	11.4	12.1	12.6	13.4	13.9	14.6	15.2	15.9	16.5	17.2	17.8

The brake adds 0.7kg to the mass.

Part Number	Selection										
	Type	Lead (mm)	With or w/o Brake (1)	Controller		I/O Module	W/ or w/o Noise Filter (3)	Cable Length (m)		Stroke (mm)	Regenerative unit
RSH5	05	None: Leave blank Included: B	Specifications Power Supply AC100~115V AC200~230V	Absolute Encoders (w/ Data Storage Battery)	Incremental Type Specifications	NPN: N PNP: P CC-Link: C DeviceNet: D	None: F0 Included: F1 Specifications: P508	Standard	Flexible	150~1050 (50mm Increment)	RGT
	10			3.5m: R3	3.5m: R3			Always select this option when using 700mm or more strokes in vertical applications.			
	20			5m: R5	5m: R5						
	30			10m: R10	10m: R10						

(1) Choose the "Brake" option for use in vertical applications. (W/ brake type is not available for Lead 30)
 (2) Controllers are shipped with preset parameters for each type. Data storage batteries are outside the scope of RoHS Directive.
 (3) A noise filter is required for this product. When the customer is purchasing the noise filter 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.

Ordering Example

Part Number - Controller - I/O Module - W/ or w/o Noise Filter - Cable Length - Stroke

RSH520B - C22A - N - F1 - 3 - 200

To order actuators with regenerative unit, specify -RGT after Stroke.

Robot Body Price

Part Number	Unit Price 1 ~ 5 pc(s).									
	Stroke (mm)									
	150	200/250	300/350	400/450	500/550	600/650	700/750	800/850	900/950	1000/1050
RSH5										
RSH5B										

Controller Price

I/O Type	Unit Price 1 ~ 5 pc(s).	
	Absolute Encoders (w/ Data Storage Battery)	Incremental Type
N	3	
P	5	
C	10	
D		

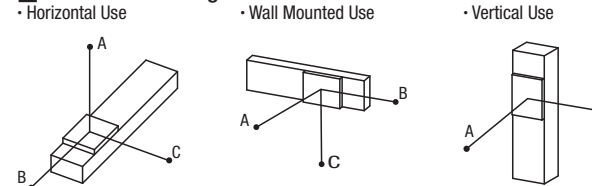
Cable Price

Cable (Standard)	Unit Price 1 ~ 5 pc(s).	
	Cable (Flexible)	Unit Price 1 ~ 5 pc(s).
3	R3	
5	R5	
10	R10	

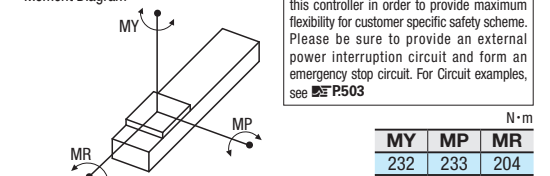
Noise Filter Price

W/ or w/o Noise Filter	Unit Price 1 ~ 5 pc(s).	
	None: F0	Included: F1

Allowable Overhang Load



Allowable Static Moment



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 P503

N·m		
MY	MP	MR
232	233	204

Max. Velocity (mm/sec)

Type	Lead (mm)	Stroke (mm)							
		150-700	750	800	850	900	950	1000	1050
RSH5	05	300	240	195	150	135			
	10	600	480	390	300	270			
	20	1000~1200	960	780	600	540			
	30	900~1800	1440	1170	900	810			

For stroke ranges 650mm or more, ball screws may resonate in certain operation areas (critical speed). In that case, reduce the operation speed by referring to the Max. Velocity shown in the table above.

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 MJS: Body KJ3: Controller (C21/C22)

Code: G, E, H, D, S, R, T, C, MJ5/KJ3

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 P503, 507, Handset Terminal w/ Deadman's Switch is included. Specifications P503, 507, Support Software w/ USB Communication Cable is included. Specifications P503, 507, Support Software w/ D-Sub Communication Cable is included. Specifications P507, I/O Cable is included. Required for NPN/PNP configurations. Specifications P507, A cable to connect multiple controllers. It can connect maximum 16 controllers. Specifications P507, Operation Manual is included. For Actuator MJS: For Controller KJ3:

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
Code	G	E	H	D	S	R	T	C	MJ5/KJ3
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 P503, 507	Handset Terminal w/ Deadman's Switch is included. Specifications P503, 507	Support Software w/ USB Communication Cable is included. Specifications P503, 507	Support Software w/ D-Sub Communication Cable is included. Specifications P507	I/O Cable is included. Required for NPN/PNP configurations. Specifications P507	A cable to connect multiple controllers. It can connect maximum 16 controllers. Specifications P507	Operation Manual is included. For Actuator MJS: For Controller KJ3:

For optional items, see P507. 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.
 For details on daisy-chain, see P505