

RS3

Slider Type Actuator (6–12 kg Max.)



Controller Specification P510 Cycle Time Graph P515 Clean Spec. P502

Components: Actuator, Controller, Cable

Accessories

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

Robot Material / Surface Treatment

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

General Specifications

Ball Screws	Motor	Position Detector	Operating Ambient Temperature, Humidity
Ø12 (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)

CE Compliant

See notes on CE Marking P513

RS3

Slider Type Actuator (6–12 kg Max.), continued



Type	Part Number		Selections			
	Lead (mm)	Stroke (mm)	Controller (C2)	I/O Module	Cable Length (m)	Stroke (mm)
RS3	06	50–800 50 mm Increment	None: Blank Included: B	Point Control: C1 Pulse Control: P1 DC24V ±10%	NPN: N PNP: P CC-Link: C DeviceNet: D	1 3 5 10 Flexible Cable
	12					
	20					

(C1) Choose with brake type for use in vertical alignment. With brake type is not available for Lead 20.

Part Number Example

Part Number	Controller	I/O Module	Cable Length	Stroke
RS306B	C1	N	3	400
RS306B	P1		3	400

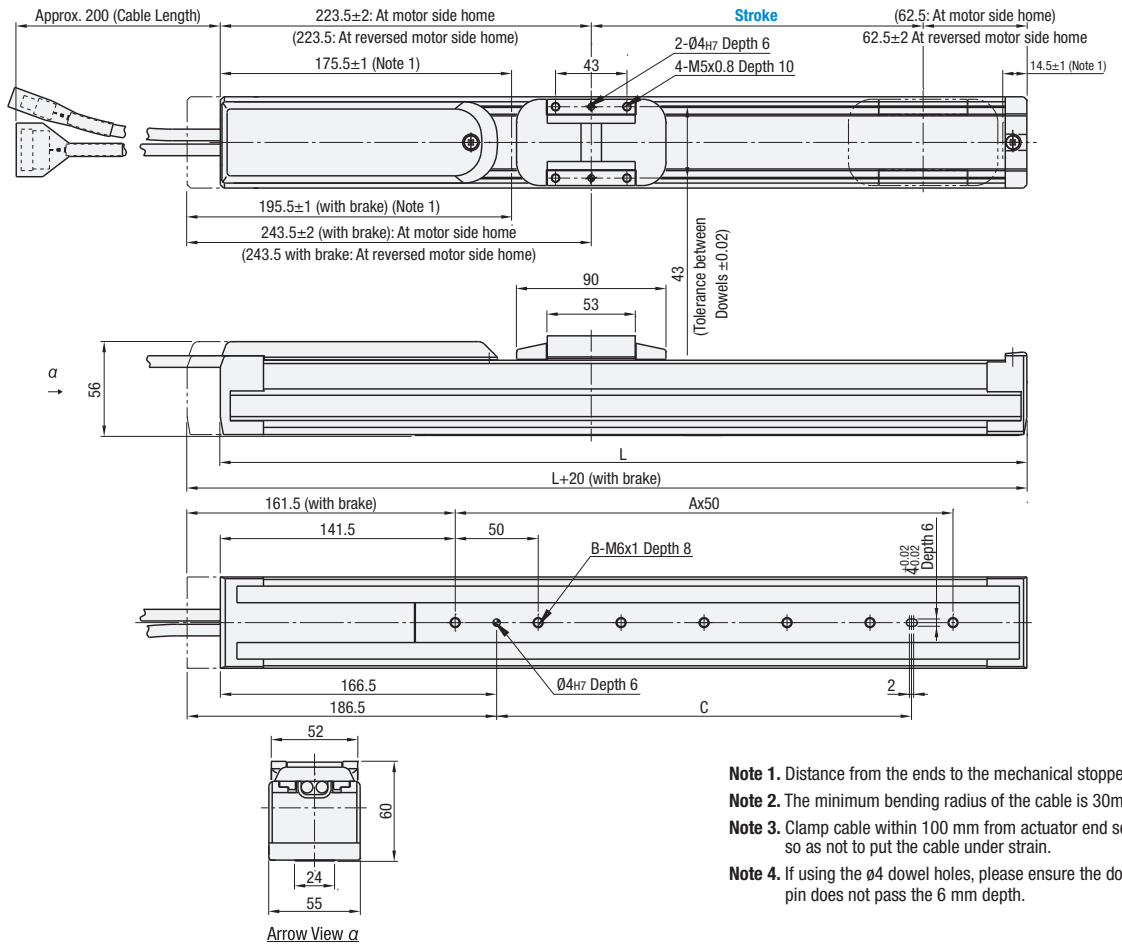
Note

A power interruption circuit is not installed in this controller in order to provide maximum flexibility for customer specification safety scheme. Please be sure to build an external power interruption circuit and form an emergency stop circuit. For Circuit Examples, see P511.

Standard Specifications Terminology P513

Type	Lead (mm)	Positioning Repeatability (mm)	Maximum Load Capacity (kg)		Maximum Push Force (N)	Stroke (mm)	Maximum Velocity (Note) (mm/sec)	Rated Running Life	Input Power Supply	Maximum Positioning Points
			Horizontal	Vertical						
RS3	06	±0.02	12	4	120	50–800 (50 Pitch)	300–190	10,000 km or More	DC24V ±10%	255 Points
	12		8	2	60	600–380				
	20		6	—	36	1000–633				

Note: Maximum velocities allowed may vary depending on the stroke length selected. Please refer to the "Recommended Maximum Velocities" table.



Dimensions / Mass

Type	Dimensions / Mass	Stroke (mm)															
		50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
RS3	L (mm)	336	386	436	486	536	586	636	686	736	786	836	886	936	986	1036	1086
	A (mm)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	B (mm)	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	C (mm)	100	150	200	250	300	350	400	450	500	500	500	500	500	500	500	500
	Mass (kg)	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.5	4.7	4.9	5.1	5.3

The brake adds 0.2 kg to the total mass.

Allowable Overhang Load

Horizontal Use

Wall Mount Use

Vertical Use

Lead	Mass	mm		
		A	B	C
06	12 kg	465	39	64
	10 kg	442	47	78
	8 kg	480	61	100
	6 kg	573	83	136
	8 kg	403	56	88
	4 kg	399	76	118
12	4 kg	500	118	179
	6 kg	352	71	104
	4 kg	366	109	148
	2 kg	599	225	291
	4 kg	500	118	179
	6 kg	352	71	104
20	4 kg	500	118	179
	6 kg	352	71	104
	4 kg	366	109	148
	2 kg	599	225	291
	4 kg	500	118	179
	6 kg	352	71	104

Allowable Static Moment

Moment Diagram

N · m		
MY	MP	MR
32	38	34

Max. Velocity (mm/s)

Type	Lead (mm)	Stroke (mm)				
		50–600	650	700	750	800
RS3	06	300 (250)	280 (250)	250	220	190
	12	400–600 (500)	560 (500)	500	440	380
	20	350–1000	933	833	733	633

Please confirm the max speeds based on stroke with MISUMI Web Simulator.
 Value in () are for vertical application.
 For stroke ranges 650 mm 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.

Part Number Alterations

Part Number	Controller Types	I/O Types	Cable Length	Stroke	(G, E, etc.)
RS306B	C1	N	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	Cable for daisy-chain connection	Instruction Manual	Main Body Plastic Color Alterations
Code	G	E	H	D	S	R	T / TP	C	MJ5 / KJ3 / KJ4	BC
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 P512	Handy Terminal with Deadman's Switch is included. Specifications P512	Support Software with USB Communication Cable is included. Specifications P512	Support Software with D-Sub communication cable is included. Specifications P512	I/O cable is included. Required for NPN / PNP configurations. Specifications P512	A cable to connect multiple controllers. Up to 16 controllers can be connected.	Operation Manual is included.	Change the actuator plastic parts color to black.

For optional items, see P512. 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.

