RCS3-SS8R

ROBO Cylinder, Slider Type, Actuator Width 80mm, 200V Servo Motor, Side-mounted Motor, Steel Base

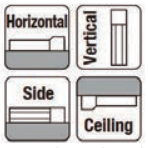
■**Model Specification Items**

RCS3	SS8R	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options
Series	Type	WA : Battery-less absolute	100 : Servo motor 100W 150 : Servo motor 150W	30 : 30mm 20 : 20mm 10 : 10mm 5 : 5mm	50 : 50mm ~ 1000 : 1,000mm (Can be set in 50mm increments)	T2 : SCON-CB	N : No cable P : 1m S : 3m M : 5m X□□ : Specified length R□□ : Robot cable	Please refer to the options table below. * Please specify a code indicating your desired cable exit direction.

*Controller is not included.

CE RoHS

* CE marking is an option.



* Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please contact for more information regarding mounting positions.

POINT Note on selection

(1) When the stroke is increased, the maximum speed will drop to prevent reaching a critical rotational speed of the ball screw. Please confirm the maximum speed for the desired stroke in the actuator specifications table below.
(2) The payload assumes operation at an acceleration of 0.3G (0.2G for lead 5) for horizontal, and 0.2G for vertical use.
(3) The payload drops when the acceleration is increased.
(4) Please refer to our website for more information about push-motion operation.

Actuator Specifications

■Lead and Payload

Model number	Motor (W)	Lead (mm)	Maximum payload Horizontal (kg)	Maximum payload Vertical (kg)	Rated thrust (N)	Stroke (mm)
RCS3-SS8R-①-100-30-②-③-④-⑤	100	30	8	2	56.6	50~1,000 (Every 50mm)
RCS3-SS8R-①-100-20-②-③-④-⑤		20	20	4	84.9	
RCS3-SS8R-①-100-10-②-③-④-⑤		10	40	8	169.8	
RCS3-SS8R-①-100-5-②-③-④-⑤		5	80	16	339.7	
RCS3-SS8R-①-150-30-②-③-④-⑤	150	30	12	3	85.1	
RCS3-SS8R-①-150-20-②-③-④-⑤		20	30	6	127.6	
RCS3-SS8R-①-150-10-②-③-④-⑤		10	60	12	255.3	

Legend: ① Encoder type ② Stroke ③ Applicable controller ④ Cable length ⑤ Options

■Stroke and Maximum Speed (Unit: mm/s)

Lead \ Stroke	50~600 (Every 50mm)	650	700	750	800	850	900	950	1,000
30	1,800	1,660	1,460	1,295	1,155	1,035	935	850	775
20	1,200	1,105	970	860	770	690	625	565	515
10	600	550	485	430	385	345	310	280	255
5	300	275	240	215	190	170	150	140	125

①Encoder Type / ② Stroke

Stroke (mm)	Standard price Encoder type Battery-less absolute Motor wattage 100W	150W
50/100	-	-
150/200	-	-
250/300	-	-
350/400	-	-
450/500	-	-
550/600	-	-
650/700	-	-
750/800	-	-
850/900	-	-
950/1,000	-	-

④ Cable Length

Type	Cable code	Standard price
Standard type	**P** (1m)	-
	S (3m)	-
	M (5m)	-
Special length	**X06** (6m) ~**X10** (10m)	-
	X11 (11m) ~**X15** (15m)	-
	X16 (16m) ~**X20** (20m)	-
Robot cable	**R01** (1m) ~**R03** (3m)	-
	R04 (4m) ~**R05** (5m)	-
	R06 (6m) ~**R10** (10m)	-
	R11 (11m) ~**R15** (15m)	-
	R16 (16m) ~**R20** (20m)	-

*Please refer to P. 84 for maintenance cables.

⑤ Options

Name	Option code	Reference page	Standard price
Brake	**B**	Please refer to our website for the details of the options.	-
CE marking	**CE**		-
Motor mounted on left, cable exit from back	**MLE**		-
Motor mounted on left, cable exit from side	**MLS**		-
Motor mounted on right, cable exit from back	**MRE**		-
Motor mounted on right, cable exit from side	**MRS**		-
Non-motor end specification	**NM**		-
Slider roller specification	**SR**		-

Actuator Specifications

Item	Description
Drive system	Ball screw Ø16mm, rolled C10
Positioning repeatability	±0.02mm
Lost motion	0.1mm or less
Base	Material: Dedicated alloy steel
Static allowable moment	Ma: 198.9N•m, Mb: 198.9N•m, Mc: 416.7N•m
Dynamic allowable moment (*)	Ma: 43.4N•m, Mb: 43.4N•m, Mc: 90.9N•m
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

•Reference for overhang load length/Ma: 450mm or less, Mb, Mc: 450mm or less

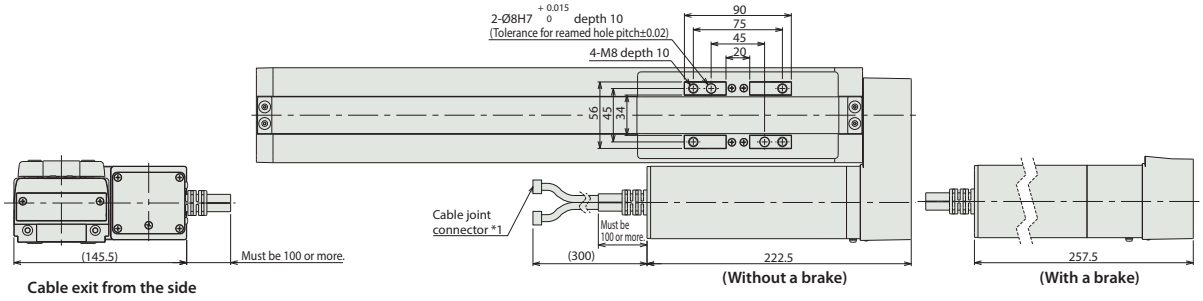
(*) Assumes a standard rated life of 10 ,000km. The operational life will vary depending on operation and installation conditions.
Please refer to our website for more information regarding the service life of the products, directions of the allowable moment, and overhang load length.

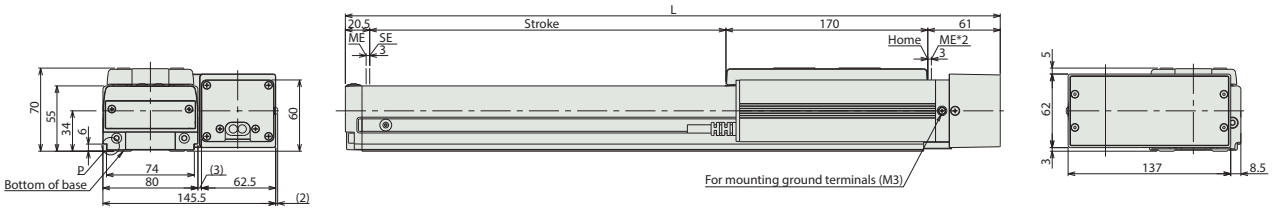
Dimensions

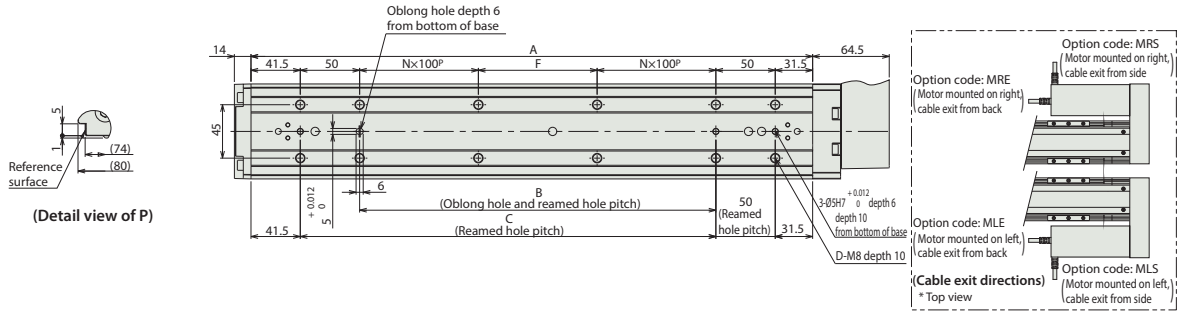
CAD drawings can be downloaded from our website. www.intelligentactuator.com

2D CAD 3D CAD

*1 Connects the motor-encoder cable. Please refer to P. 84 for the details of the cables.
*2 When the slider is returning to its home position, please be careful of interference from surrounding objects, as it will travel until it reaches the ME.
ME: Mechanical end SE: Stroke end
* Offset reference position for the allowable moment is the same as the one for SS8C type. (Please refer to P. 40)







■Dimensions and Mass by Stroke

Stroke			50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000
L			301.5	351.5	401.5	451.5	501.5	551.5	601.5	651.5	701.5	751.5	801.5	851.5	901.5	951.5	1,001.5	1,051.5	1,101.5	1,151.5	1,201.5	1,251.5
A			223	273	323	373	423	473	523	573	623	673	723	773	823	873	923	973	1,023	1,073	1,123	1,173
B			50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000
C			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050
D			8	8	8	10	12	12	12	14	16	16	16	18	20	20	20	22	24	24	24	26
F			50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
N			0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
Mass (kg)	100W	Without brake	6.0	6.5	7.1	7.6	8.2	8.7	9.3	9.8	10.4	10.9	11.5	12.0	12.6	13.1	13.7	14.2	14.8	15.3	15.9	16.4
		With brake	6.3	6.8	7.4	7.9	8.5	9.0	9.6	10.1	10.7	11.2	11.8	12.3	12.9	13.4	14.0	14.5	15.1	15.6	16.2	16.7
	150W	Without brake	6.1	6.6	7.2	7.7	8.3	8.8	9.4	9.9	10.5	11.0	11.6	12.1	12.7	13.2	13.8	14.3	14.9	15.4	16.0	16.5
		With brake	6.4	6.9	7.5	8.0	8.6	9.1	9.7	10.2	10.8	11.3	11.9	12.4	13.0	13.5	14.1	14.6	15.2	15.7	16.3	16.8