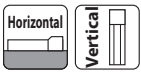


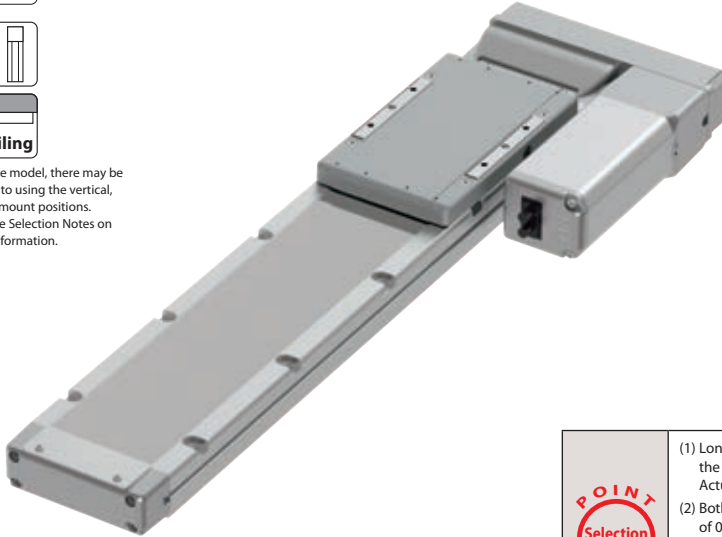
## RCS4-WSA10R



Model Specification Items	RCS4	—	WSA10R	—	WA	—	60	—		—		—	T2	—		—		* Body width does not include the width of the side-mounted motor.
	Series	—	Type	—	Encoder Type	—	Motor Type	—	Lead	—	Stroke	—	Applicable Controllers	—	Cable Length	—	Options	
					WA: Battery-less Absolute		60: Servo motor 60W		16: 16mm 10: 10mm 5: 5mm 2.5: 2.5mm		50: 50mm 500: 500mm (50mm increments)		T2: SCON MSCON SSEL XSEL-P/Q XSEL-RA/SA		N: None P: 1m S: 3m M: 5m X□□: Specified Length R□□: Robot Cable		Refer to Options table below.	



\* Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please refer to the Selection Notes on P.138 for more information.



- (1) Longer strokes may cause the maximum speed to decrease due to resonance of the ball screw. Be sure to check the maximum speed of the desired stroke in the Actuator Specifications table, which can be found below.
- (2) Both the horizontal and vertical payloads assume operation at an acceleration of 0.3G.
- (3) When the acceleration is increased, the payload will be reduced. Please refer to "Table of Payload by Acceleration" on P.139 for more details.
- (4) Estimated allowable duty varies depending on operating conditions (payload, acceleration/deceleration, etc.). Please refer to P. 149 for more information.

## Actuator Specifications

## Lead and Payload

Model Number	Motor wattage (W)	Lead (mm)	Max. payload		Rated thrust (N)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)		
RCS4-WSA10R-WA-60-16-①-T2-②-③	60	16	7	—	53	50~500 (50mm increments)
RCS4-WSA10R-WA-60-10-①-T2-②-③		10	16	3	85	
RCS4-WSA10R-WA-60-5-①-T2-②-③		5	27	5	170	
RCS4-WSA10R-WA-60-2.5-①-T2-②-③		2.5	40	10	340	

Legend: ① Stroke ② Cable Length ③ Option

## Stroke and Max Speed

(Unit: mm/s)

Lead	Stroke (50mm increments)	Max. Speed			
		400 (mm)	450 (mm)	500 (mm)	
16	960	930	775	660	
10	600	590	490	415	
5	300	290	245	205	
2.5	150	145	120	100	

## Cable Length

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

## Options

Name	Option Code	Reference Page
Brake	B	See P.131
Cable exit direction (Top)	CJT	See P.131
Cable exit direction (Bottom)	CB	See P.131
Cable exit direction (Outside)	CJO	See P.131
Motor side-mounted to left (standard)	ML	See P.135
Motor side-mounted to right	MR	See P.135
Non-motor end specification	NM	See P.136
Slider roller specification	SR	See P.137
Slider spacer	SS	See P.137

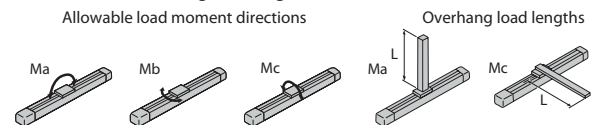
(\*1) EU option will be available soon.

## Actuator Specifications

Item	Description
Drive system	Ball screw ø8mm, rolled C10
Positioning repeatability	±0.01mm
Lost motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Allowable static moment	Ma direction 271N·m, Mb direction 271N·m, Mc direction 553N·m
Allowable dynamic moment (*1)	Ma direction 65.4N·m, Mb direction 65.4N·m, Mc direction 134N·m
Ambient operating temp. & humidity	0~40°C, 85% RH or less (Non-condensing)

(\*1) Assumes a standard rated life of 5000km. The service life will vary depending on operation and installation conditions. Please contact IAI for details of the running life.

- Reference for overhang load length: Ma: 500mm or less, Mb, Mc: 500mm or less



If the load moments in Ma/Mb/Mc direction are within the allowable ranges, there is no overhang load length limit.

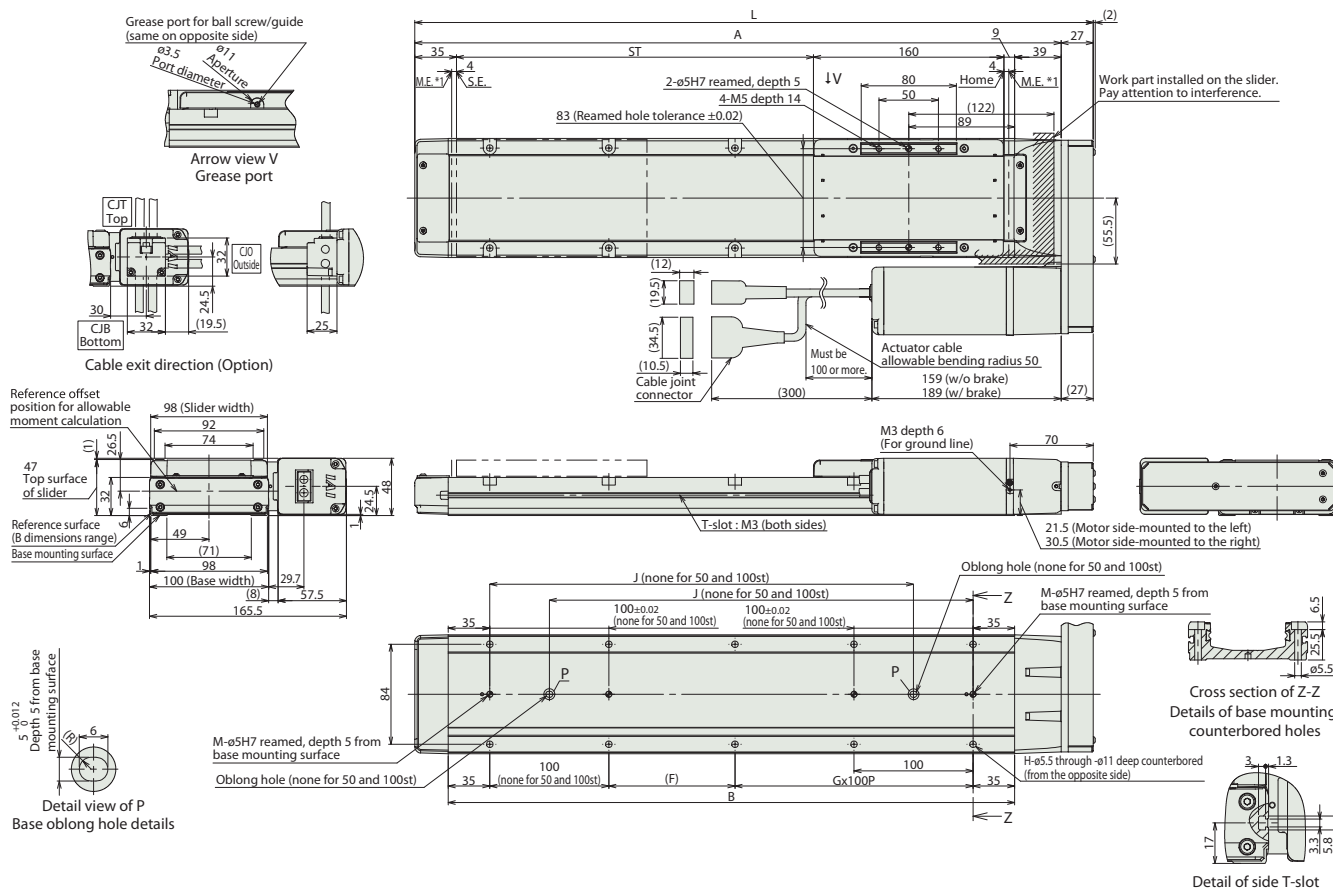
Round cable joint connector with screw locking (*1)	EU	See P.131
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## Dimensions

CAD drawings can be downloaded from our website.  
www.robocylinder.de



\*1 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 M.E.  
M.E: Mechanical end S.E: Stroke end









## ■ Dimensions and Mass by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500
L	320	370	420	470	520	570	620	670	720	770
A	293	343	393	443	493	543	593	643	693	743
B	226	276	326	376	426	476	526	576	626	676
F	156	206	256	306	356	406	456	506	556	606
G	0	0	1	1	2	2	3	3	4	4
H	4	4	8	8	10	10	12	12	14	14
J	—	—	206	256	306	356	406	456	506	556
M	1	1	2	2	2	2	2	2	2	2
Mass (kg)										
W/o brake	3.2	3.5	3.7	4.0	4.2	4.5	4.7	4.9	5.2	5.4
W/ brake	3.5	3.8	4.0	4.3	4.5	4.8	5.0	5.2	5.5	5.7

## Applicable Controllers

The RCS4 series actuators can be operated by the controllers indicated below. Please select the type depending on your intended use.

Name	External view	Max. number of connectable axes	Input power	Control method				Maximum number of positioning points	Reference page	
				Positioner	Pulse train	Program	Network * Option			
SCON-CB/CGB		1	Single phase 115V/230VAC	●	●	—	<div>DeviceNet</div> <div>CC-Link</div> <div>PROFINET</div> <div>CompoNet</div> <div>EtherCAT</div> <div>EtherNet/IP</div> <div>20000</div> <div>20000</div> <div>Note: The type of compatible networks will vary depending on the controller. Please refer to the reference page for more information.</div>	512 (768 for network spec.)	Please see the dedicated controller catalog or manual.	
SCON-LC/LCG (*)		1		—	—	●		512 (768 for network spec.)		
SCON-CAL/CGAL		1		●	—	—		512 (768 for network spec.)		
MSCON-C		6		This model is network-compatible only.				256		
SSEL-CS		2		●	—	●		20000		
XSEL-P/Q or XSEL-RA/SA (*)		6 or 8 (Depending on the type)	Single phase 230VAC Three-phase 230VAC	—	—	●	20000 or 55000 (Depending on the type)			

(\*) Coming soon