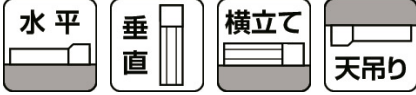


EC-S8X□AHCR

Product Features



Mounting position



[Dimensional drawing](#)

[Selection Notes](#)

[Adaptive controller](#)

Main specifications

Specification 1		Specification 2			
item		Content			
	Lead	Ball screw lead (mm)	20	10	5
horizontal	Payload	Maximum payload (kg)	40	70	90
		Speed/acceleration/deceleration	Maximum speed (mm/s)	900	450
	Minimum speed (mm/s)		twenty five	13	7
	Rated acceleration/deceleration (G)		0.3	0.3	0.3
	Maximum acceleration/deceleration (G)	1	0.5	0.3	
vertical	Payload	Maximum payload (kg)	4	twenty five	55
		Speed/acceleration/deceleration	Maximum speed (mm/s)	650	400
	Minimum speed (mm/s)		twenty five	13	7
	Rated acceleration/deceleration (G)		0.3	0.3	0.3
	Maximum acceleration/deceleration (G)	0.5	0.5	0.3	
Press	Maximum thrust when pressed (N)	147	294	588	
	Maximum pressing speed (mm/s)	20	20	20	
Cleanroom specifications		Suction amount (NL/min) (Note 5)	121	75	61
brake	Brake specifications		Non-excitation operated electromagnetic brake		
	Brake holding force (kgf)		4	twenty five	55
stroke	Minimum stroke (mm)		700	700	700
	Maximum stroke (mm)		2000	2000	2000
	Stroke pitch (mm)		50	50	50

(Note 5) This is an estimate of the suction volume at maximum speed.

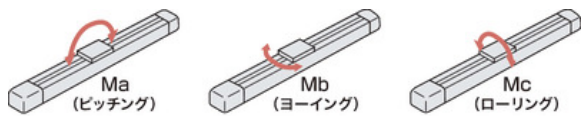
Specification 1

Specification 2

item	Content
Drive system	Ball screw, ϕ 16mm, rolled C10
Repeatable positioning accuracy	Lead 5/10: $\pm 0.02\text{mm}$, Lead 20: $\pm 0.03\text{mm}$
Lost Motion	0.1mm
base	Specially designed aluminum extruded material (equivalent to A6063SS-T6), black anodized finish.
Linear guide	Linear infinite loop type
Static allowable moment	Ma: 327 N·m
	Mb: 389 N·m
	Mc: 629 N·m
Dynamic allowable moment (Note 6)	Ma: 120 N·m
	Mb: 143 N·m
	Mc: 226 N·m
Cleanliness	ISO Class 2.5 (ISO 14644-1 standard)
Operating ambient temperature and humidity	0 to 40° C, 85% RH or less (non-condensing)
Protection class	IP20
Vibration-resistant and shock-resistant	4.9 m/ s ²
International Standards	CE mark, RoHS directive, UL standard
Motor types	Pulse motor (\square 56SP) (Power supply capacity: Maximum 6A)
Encoder types	Incremental/Battery-less Absolute
Encoder pulse count	800 pulses/rev
deadline	Listed on the website under [Delivery Date Inquiry].

(Note 6) This is based on a standard rated lifespan of 5,000 km. Actual lifespan varies depending on driving conditions and installation. Please refer to pages [1-280 for details on actual lifespan.](#)

Slider type Moment direction



▶ Payload table by speed/acceleration

The unit of payload capacity is kg. A blank space indicates that the device is not operational.

Lead 20	Lead 10		Lead 5				
posture	horizontal					vertical	
speed (mm/s)	Acceleration (G)						
	0.3	0.5	0.7	1	0.3	0.5	
0	40	30	twenty five	twenty five	4	4	
200	40	30	twenty five	twenty five	4	4	
300	40	30	twenty five	twenty three	4	4	
350	35	30	twenty three	20	1	1	
650	15	10	5	3	1	1	
800	5	1					
900	1						

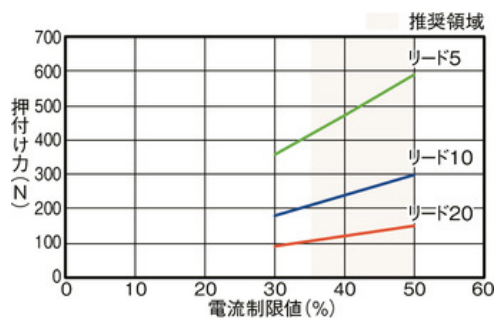
▶ Stroke and maximum speed

(Units are mm/s)

Lead (mm)	700-1150 (in 50mm increments)	1200 (mm)	1250 (mm)	1300 (mm)	1350 (mm)	1400 (mm)	1450 (mm)	1500 (mm)	1550 (mm)	1600 (mm)	1650 (mm)	1700 (mm)	1750 (mm)	1800 (mm)
20	900 <650>	900 <650>	850 <650>	790 <650>	740 <650>	690 <650>	650	610	570	540	510	480	460	440
10	450 <400>	440 <400>	410 <400>	380	360	340	320	300	280	260	250	240	220	210
5	225	210	200	190	180	170	160	150	140	130	125	120	110	100

(Note) The values in < > refer to vertical use.

Correlation diagram between pressing force and current limit value



Adaptive controller

(Note) The EC series has a built-in controller. For details on the built-in controller, please refer to page [2-845](#).

International standards



Selection Notes



- (1) As the stroke length increases, the maximum speed decreases due to the critical rotational speed of the ball screw. Please check the maximum speed.
- (2) The payload capacity listed in "Main Specifications" is the maximum value. For details, please refer to the "Payload Capacity Table by Speed and Stroke Length".
- (3) When performing a pressing operation, please refer to the "Correlation Diagram between Pressing Force and Current Limit Value". The pressing force is limited for important points.
- (4) Duty cycle limits may be required depending on the ambient operating temperature. For details, please refer to page [1-332](#).
- (5) Caution is required depending on the mounting position. For details, please check page [1-313](#).
- (6) The guideline for the overhang load length is 400 mm or less in the Ma, Mb, and Mc directions. For details on overhang load length, please refer to page [1-313](#).
- (7) The center of gravity of the mounted object should be less than or equal to half the overhang distance. Even if the overhang distance and load are within the limits, the center of gravity must be within the limits.
- (8) When connecting the RCON-EC connection specification (ACR) to the EC connection unit (RCON-EC-4), there is a limit to the number of connections.

[Return to top of page](#)

Dimensional drawing

CAD図面がホームページよりダウンロード出来ます。

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ST: Stroke

ME: Mechanical End

SE: Stroke End

(Note) When returning to the origin, the slider will move to ME, so please be careful of interference with surrounding objects.

(Note) Please pay attention to the length of the mounting bolts. If you use the mounting screws on the back of the base, if the bolts are too long, they may interfere with internal parts, potentially causing sliding abnormalities or damage to the parts.

(Note) When fixing the actuator using the through-holes in the base, the side cover and stainless steel sheet must be removed.

