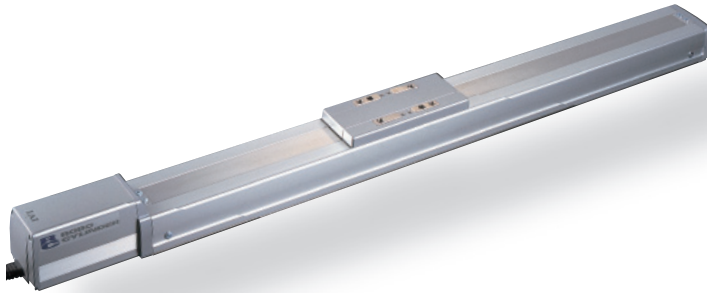


RCP2-HS8C

ROBO Cylinder High-speed, Slider Type, Actuator Dimensions 80mm, Pulse Motor, Straight Type, Steel Base Type

Model Description	RCP2 - HS8C - I - 86P - [] - [] - P2 - [] - []							
Series	Type	Encoder type	Motor type	Lead	Stroke	Compatible Controllers	Cable length	Option
		I: Incremental specification	86P: Pulse motor 86□Size	30: 30mm	50:50mm ~ 1000:1000mm (Set pitch every 50mm)	P2: PCON-CF RCP2-CF	N: None P: 1m S: 3m M: 5m X□□: Length designation R□□: Robot cable	B: Brake NM: Reverse-home specification SR: Slider roller specification

See preceding section for model descriptions.

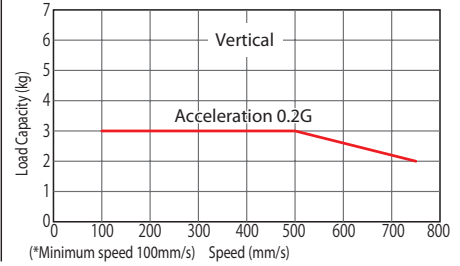
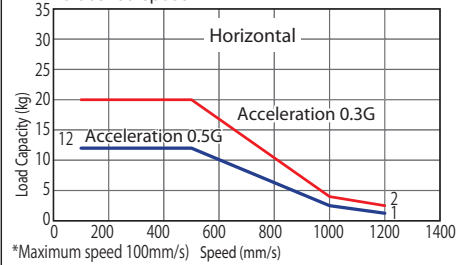


Technical Reference P.451

- POINT**
Notes on selection
- Due to the large lead in high-speed actuators, there are cases where operating at low speeds will cause vibration and noise. Therefore, use at speeds over 100mm/s.
 - As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
 - Since the RCP3 Series uses a pulse motor, the payload decreases at high speeds. Confirm the payload at the desired speed in the Speed vs. Payload graph at right.
 - The payload is the value when operated at 0.3G acceleration (0.2G acceleration in vertical operation). Acceleration limits are 0.5G horizontal, 0.2G vertical.

Speed vs. Payload Graph

Since the RCP2 Series uses a pulse motor, the payload decreases at high speeds. Use the table below to confirm that there is sufficient payload at the desired speed.



Actuator Specification Table

Model	Lead (mm)	Maximum payload		Stroke (mm)	Stroke and Maximum Speed			
		Horizontal (kg)	Vertical (kg)		Stroke / Lead	50 to 800 (every 50mm)	Up to 900 (mm)	Up to 1000 (mm)
RCP2-HS8C-I-86P-30-①-P2-②-③	30	Up to 20	Up to 3	50 to 1000 (every 50mm)	30	1200 <750>	1000 <750>	800 <750>

Legend ① Stroke ② Cable Length ③ Option

* < > indicate vertical service. (Unit = mm/s)

① Price List by Stroke

① Stroke (mm)	Type code	
	HS8C	
	Encoder type	
	Incremental	
50/100	-	
150/200	-	
250/300	-	
350/400	-	
450/500	-	
550/600	-	
650/700	-	
750/800	-	
850/900	-	
950/1000	-	

② Cable Length Price List

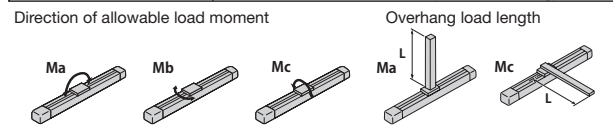
Type	Cable symbol	Standard price
Standard type	P (1m)	-
	S (3m)	-
	M (5m)	-
Special length	X06 (6m) - X10 (10m)	-
	X11 (11m) - X15 (15m)	-
	X16 (16m) - X20 (20m)	-
	R01 (1m) - R03 (3m)	-
Robot cable	R04 (4m) - R05 (5m)	-
	R06 (6m) - R10 (10m)	-
	R11 (11m) - R15 (15m)	-
	R16 (16m) - R20 (20m)	-

③ Option Price List

Title	Option code	See page	Standard price
Brake	B	P437	-
Reverse-home specification	NM	P442	No charge
Slider roller specification	SR	P445	-

Actuator Specification

Item	Description
Drive System	Ball screw ϕ 16mm rolled C10
Positioning Repeatability	± 0.02 mm
Backlash	0.1mm or less
Base	Material: Special alloy steel
Allowable load moment	Ma: 36.3N·m Mb: 36.3N·m Mc: 77.4N·m
Overhang load length	Ma 450mm Mb-Mc 450mm
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)



Dimensional Drawings

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

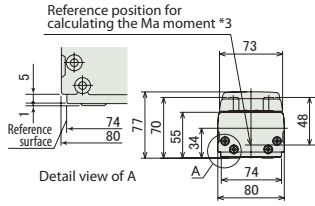
Information on special orders P.454

2D CAD

3D CAD

*With the reversed-home specification, the dimension on the motor side (distance to the home) and that on the counter-motor side are reversed.

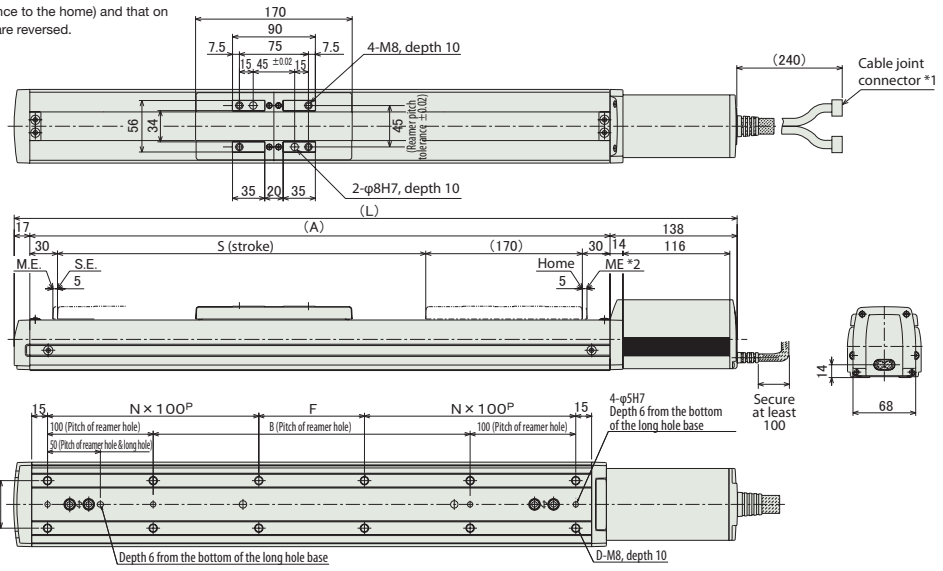
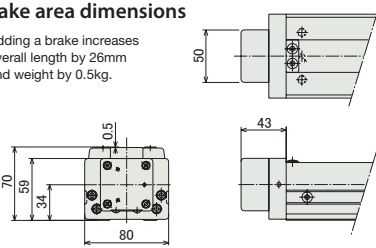
*3. Ma This is the reference position for calculating the moment offset.



- *1 Connect the motor-encoder cable. See p. 374 for cable details.
- *2 Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end Dimensions within () are for reference.

Brake area dimensions

* Adding a brake increases overall length by 26mm and weight by 0.5kg.



Details of long hole area

* Brake wiring is passed through the actuator body and connected to the motor cable.

■ Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L	435	485	535	585	635	685	735	785	835	885	935	985	1035	1085	1135	1185	1235	1285	1335	1385
A	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230
B	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
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	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6
Weight(kg)	6.6	7.1	7.6	8.1	8.6	9.2	9.7	10.2	10.7	11.3	11.7	12.3	12.8	13.4	13.9	14.5	15.0	15.5	16.1	16.6

Compatible Controllers

The RCP2-HS8C type actuator uses the special controller listed below.

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner Type		PCON-CF-86PI-NP-2-0	Up to 512-point positioning possible	512 points	DC24V	Maximum 6A	—	P365

Caution Please note that a different CF type dedicated encoder cable is used than with the PCON-C/CG/CY/PL/PO/SE controllers.