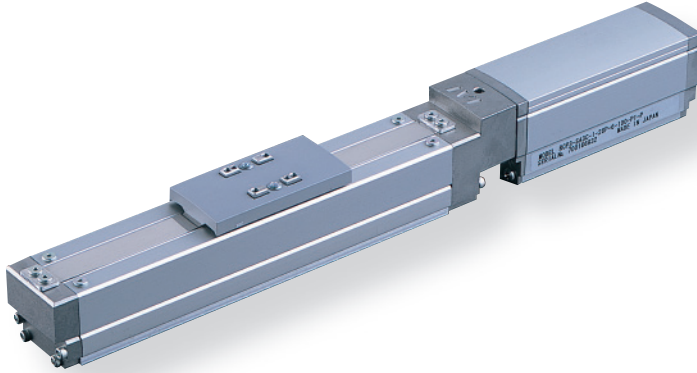


RCP3-SA3C

ROBO Cylinder, Slider Type, Actuator Dimensions 32mm, Pulse Motor, Coupling Specification

Model Description	RCP3 — SA3C — I — 28P — — — P1 — —
Series	Type — Encoder type — Motor type — Lead — Stroke — Compatible Controllers — Cable length — Option
	I: Incremental specification 28P: Pulse motor 28□Size 6: 6mm 4: 4mm 2: 2mm 50:50mm ~ 300:300mm (Set pitch every 50mm) P1: PCON PSEL N : None P : 1m S : 3m M : 5m X□□ : Length designation B: Brake-equipped NCO: No cover specification NM: Reverse-home specification

See preceding section for model descriptions.



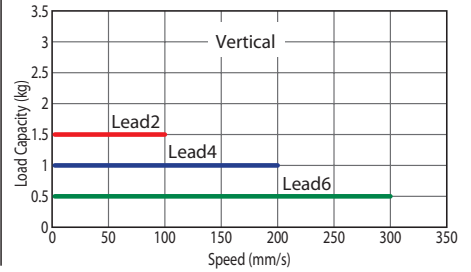
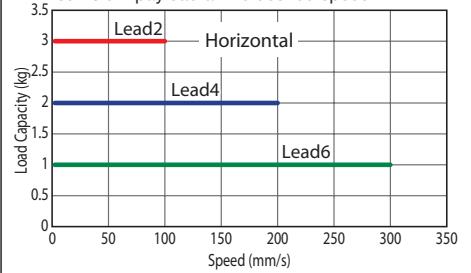
Technical Reference P.451



- 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 with lead 2). The above values are maximum acceleration.

Speed vs. Payload Graph

Since the RCP3 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

Leads and Payloads

Model	Lead (mm)	Maximum payload		Maximum pushing force (N)	Stroke (mm)
		Horizontal (kg)	Vertical (kg)		
RCP3-SA3C-I-28P-6-①-P1-②-③	6	1	0.5	15	50 to 300 (every 50mm)
RCP3-SA3C-I-28P-4-①-P1-②-③	4	2	1	22	
RCP3-SA3C-I-28P-2-①-P1-②-③	2	3	1.5	44	

Legend ① Stroke ② Cable Length ③ Option

Stroke and Maximum Speed

Stroke / Lead	50 to 300 (every 50mm)
	6
4	200
2	100

(Unit = mm/s)

① Price List by Stroke (Standard Price)

① Stroke (mm)	Type code	
	SA3C	
	Encoder type	
	Incremental	
	Actuator Cover	
	With cover (Standard)	No cover (Option)
50	—	—
100	—	—
150	—	—
200	—	—
250	—	—
300	—	—

③ Option Price List (Standard Price)

Title	Option code	See page	Standard price
Brake-equipped	B	P437	—
No cover	NCO	P22	See above
Reversed-home specification	NM	P442	No charge

② Cable Length Price List (Standard Price)

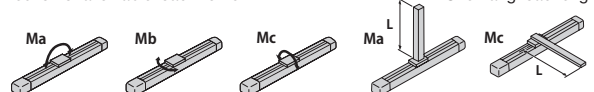
Type	Cable symbol	Standard price
Standard type (Robot cable)	P (1m)	—
	S (3m)	—
	M (5m)	—
Special length	X06 (6m) — X10 (10m)	—
	X11 (11m) — X15 (15m)	—
	X16 (16m) — X20 (20m)	—
		—

The standard cable for this actuator is a robot cable that has both the motor and encoder cable integrated. See P374 about maintenance cables.

Actuator Specification

Item	Description
Drive System	Ball screw φ6mm rolled C10
Positioning Repeatability	±0.05mm
Backlash	0.1mm or less
Base	Material: Aluminum Special alumite treatment
Allowable load moment	Ma: 1.96N·m Mb: 2.84N·m Mc: 3.14N·m
Overhang load length	100mm or less
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)
Service life	5000km

Direction of allowable load moment

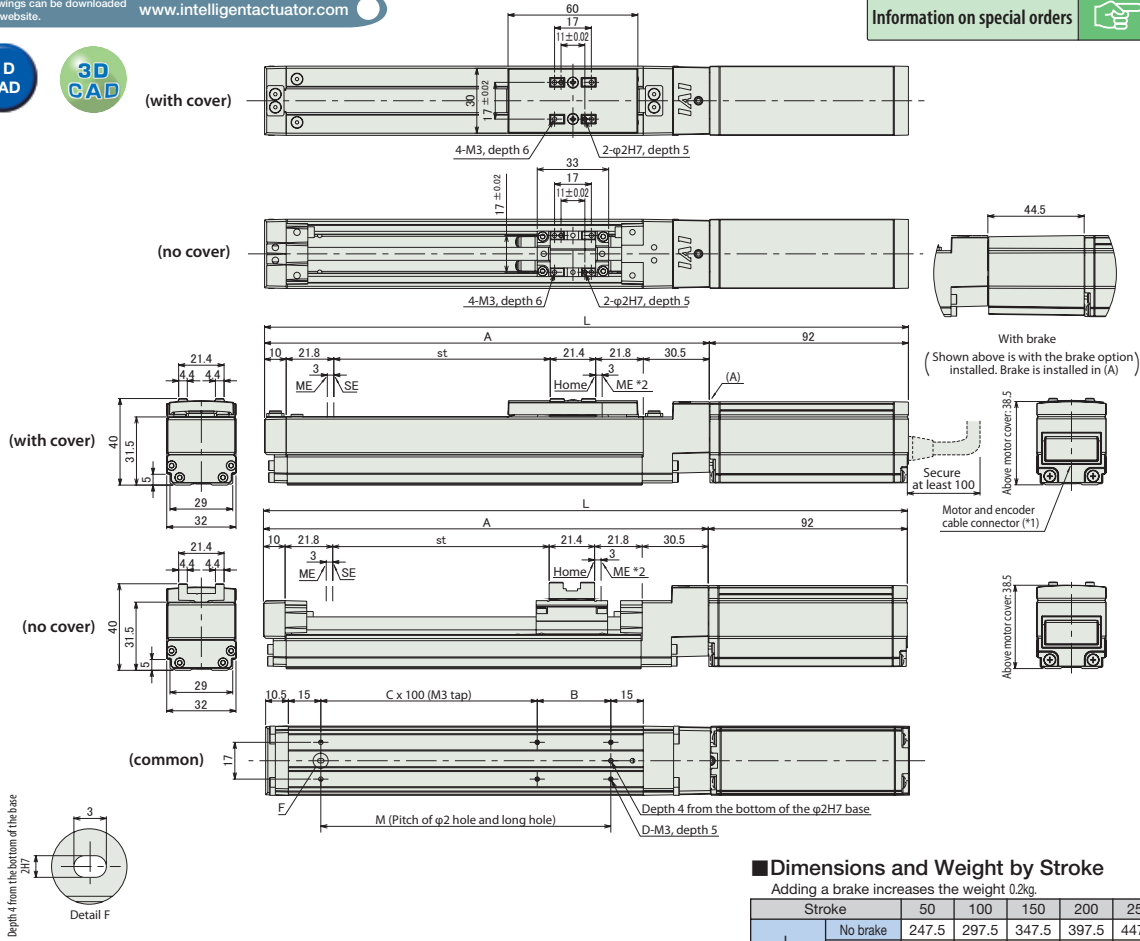


Dimensional Drawings

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



Information on special orders P.454



■ Dimensions and Weight by Stroke

Adding a brake increases the weight 0.2kg.

Stroke	Adding a brake increases the weight 0.2kg.						
	No brake	50	100	150	200	250	300
L	No brake	247.5	297.5	347.5	397.5	447.5	497.5
	Brake-equipped	292	342	392	442	492	542
A	155.5	205.5	255.5	305.5	355.5	405.5	
B	84	34	84	34	84	34	
C	0	1	1	2	2	3	
D	4	6	6	8	8	10	
M	84	134	184	234	284	334	
Weight (kg)	With cover	0.7	0.7	0.8	0.9	0.9	1
	No cover	0.6	0.7	0.7	0.8	0.8	0.9

(*) Connect the motor-encoder cable (integrated). (See P374 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

Compatible Controllers

The RCP3 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner Type		PCON-C-28PI-NP-2-0	Up to 512-point positioning possible	512 points	DC24V	Maximum 2A	-	P365
Safety category compatible Positioner type		PCON-CG-28PI-NP-2-0						
Solenoid valve type		PCON-CY-28PI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			-	P365
Pulse series input type (Differential line driver specification)		PCON-PL-28PI-NP-2-0	Differential line driver compatible Pulse series input type	(-)			-	P365
Pulse series input type (Open collector specification)		PCON-PO-28PI-NP-2-0	Open collector compatible Pulse series input type	(-)			-	P365
Serial communication type		PCON-SE-28PI-N-0-0	Serial communications Special Type	64 points			-	P365
Field network type		RPCON-28P	Field network Dedicated type	768 points			-	P343
Program control type		PSEL-C-1-28PI-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			-	P395

*PSEL is for single axis specification.