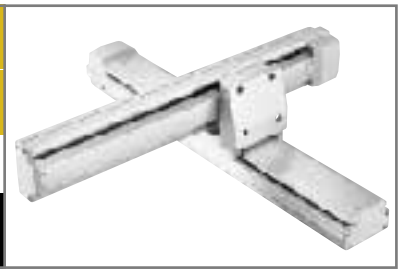
ICSA2-S1C□H
Cartesian Robot: X-Y 2-Axes Configuration, XYS (Y-Axis Slider Mount) Type

ICSPA2-S1C□H
Cartesian Robot: X-Y 2-Axes Configuration, XYS (Y-Axis Slider Mount) Type High-Precision Specification



Type: XYS type | Stroke: X-axis: 200~800mm Y-axis: 100~500mm | Load capacity: 9.7kg ~ 5.6kg

■ Model specification items

Series	Type	Encoder type	X-axis stroke + options	Y-axis stroke + options	Applicable controller	Cable length	Cable management
ICSA2	S1C1H	A	80AQLNM	50AQL	T1	5L	SC

* Refer to page 61 for the details of model specification items.

Models/Specifications

Model	Axis configuration		Encoder type	Motor output (W)	Lead (mm)	Stroke (mm) In increments of 100mm	Speed (mm/s) (Note 1)	Load capacity (Note 2)	Positioning repeatability (mm) (Note 3)
ICSA2 [ICSPA2] -S1C□H-A-∗∗∗-∗∗∗-T1-△-SC	X-axis	ISA [ISPA] -MXM-A-100-20-∗∗∗-T1	Absolute	100	20	200 ~ 800	1 ~ 1000	9.7 ~ 5.6	±0.02 [±0.01]
	Y-axis	ISA [ISPA] -MYM-A-100-20-∗∗∗-T1				100 ~ 500			
ICSA2 [ICSPA2] -S1C□H-I-∗∗∗-∗∗∗-T1-△-SC	X-axis	ISA [ISPA] -MXM-I-100-20-∗∗∗-T1	Incremental			200 ~ 800			
	Y-axis	ISA [ISPA] -MYM-I-100-20-∗∗∗-T1				100 ~ 500			

* In the above model names, □ indicates the configuration direction, ∗∗∗ the stroke/applicable options (stroke is specified in centimeters), △ the cable length.

Options

Name	Code	Page	Remarks
AQ seal	AQ	→ P13	
Brake	B	→ P13	
Creep sensor	C	→ P13	
Home limit switch	L	→ P14	
Reverse homing specification	NM	→ P14	
Guide with ball-retaining mechanism	RT	→ P14	

Common Specifications

Drive system (Note 4)	Ball screw, rolled C10 [equivalent to rolled C5]
Backlash (Note 5)	0.05mm or less [0.02mm or less]
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
Cable length (Note 6)	3L: 3m, 5L: 5m, □L : Length specification
Cable management	SC: Self-standing cable

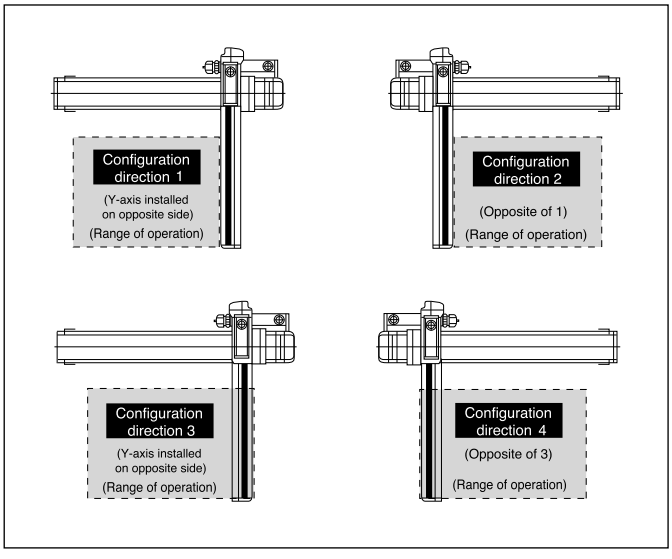
Load Capacity by Acceleration (kg)

Acceleration (G) \ Y-axis stroke (mm)	100	200	300	400	500
0.3	9.7	8.7	7.7	6.7	5.6
0.4	4.7	3.7	2.7	1.7	0.6
0.5	1.7	0.7			
0.6					
0.7					
0.8					
0.9					
1.0					

Maximum Speed by Stroke (mm/sec)

Axis \ Stroke (mm)	100	200 ~ 500	600 ~ 700	800
X-axis	–	1000		795
Y-axis	1000		–	–

Configuration direction



Applicable Controller Specifications

Applicable controller	Controller type	Model	Page
X-SEL	General-purpose type	XSEL-K-2-100□-100□-□-□□□-□-□	→ P241
	Compact type	XSEL-J-2-100□-100□-□-□□□-□-□	→ P241

Caution

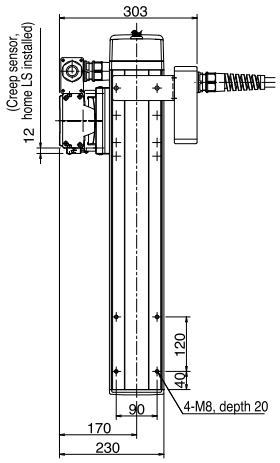
(Note 1) The maximum speed will vary depending on the stroke. (Refer to the table of maximum speed by stroke.)
(Note 2) The load capacity assumes operation at the rated acceleration (0.3 G). The actuator can be operated at accelerations beyond the rated acceleration, but the load capacity will decrease (refer to the table of load capacity by acceleration).
(Notes 3, 4, 5) The figures in brackets apply to the ICSPA2.
(Note 6) The cable length measures from the X-axis connector box to the controller. The standard lengths are 3 m and 5 m, but other lengths can also be specified in meters up to 20 m (e.g., 10L = 10 m).

* Refer to page 59 for other points to note.

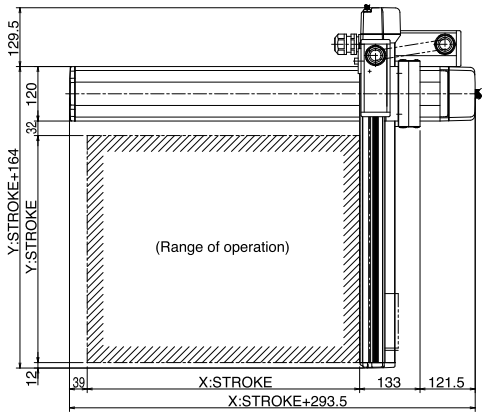
Self-standing Cable Specification (Cable Management Code: SC)

Dimensions

* Note that changing the home direction will require the actuator to be returned to IAI for adjustment.

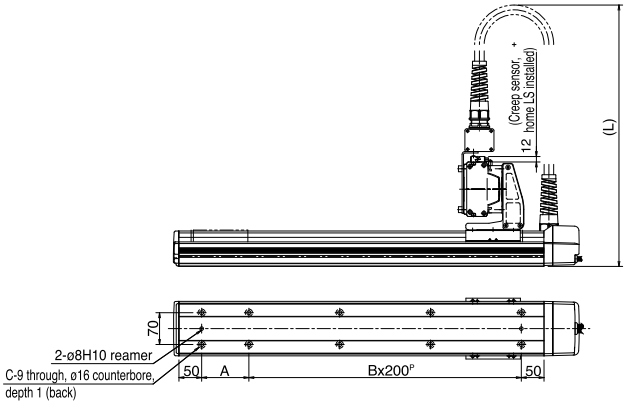


(Configuration direction 1)



Dimension L							
Yst \ Xst	200	300	400	500	600	700	800
100	550	600	650	700	750	800	850
200	600	650	700	750	800	850	900
300	650	700	750	800	850	900	950
400	700	750	800	850	900	950	1000
500	750	800	850	900	950	1000	1050

X stroke	200	300	400	500	600	700	800
A	104	204	104	204	104	204	104
B	1	1	2	2	3	3	4
C	6	6	8	8	10	10	12



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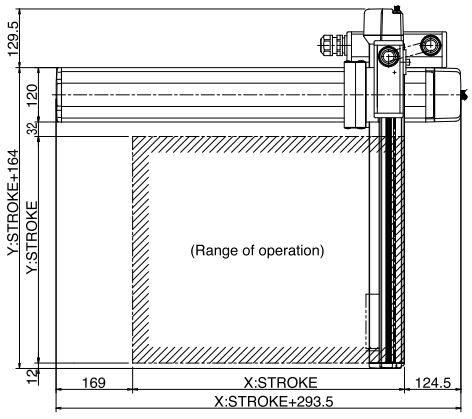
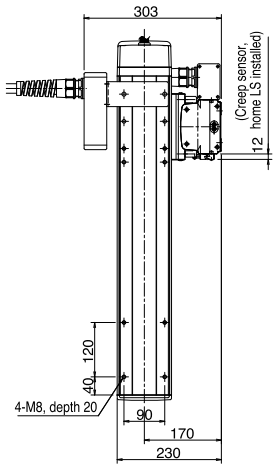
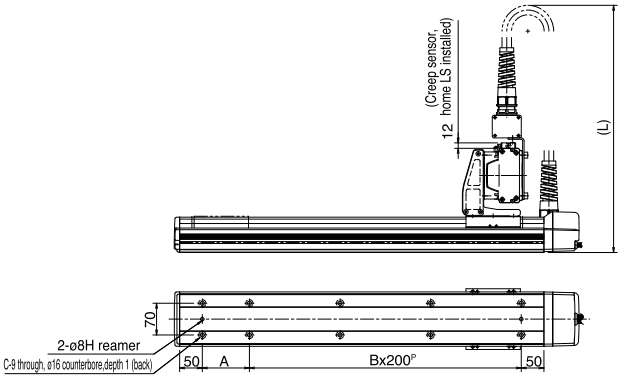
* Note that changing the home direction will require the actuator to be returned to IAI for adjustment.

(Configuration direction 3)







Dimension L							
Yst \ Xst	200	300	400	500	600	700	800
100	550	600	650	700	750	800	850
200	600	650	700	750	800	850	900
300	650	700	750	800	850	900	950
400	700	750	800	850	900	950	1000
500	750	800	850	900	950	1000	1050

X stroke	200	300	400	500	600	700	800
A	104	204	104	204	104	204	104
B	1	1	2	2	3	3	4
C	6	6	8	8	10	10	12