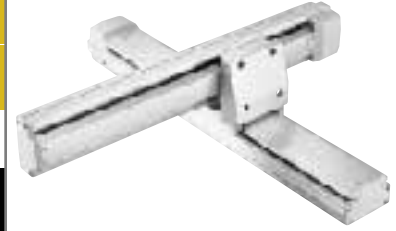


ICSA2-SA□H Cartesian Robot: X-Y 2-Axes Configuration, XYS (Y-Axis Slider Mount) Type

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

Type: XYS type Stroke: X-axis: 100-600mm Y-axis: 100-400mm Load capacity: 6.2kg ~ 4.1kg

Model specification items: ICSA2 - SA1H - A - 60AQLNM - 40AQL - 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)	Load capacity (Note 1)	Positioning repeatability (mm) (Note 2)
ICSA2 [ICSPA2] -SA□H-A-***-***-T1-△-SC	X-axis	ISA [ISPA] -SXM-A-60-16-***-T1	Absolute	60	16	100 ~ 600	1 ~ 800	6.2 ~ 4.1	±0.02
	Y-axis	ISA [ISPA] -SYM-A-60-16-***-T1				100 ~ 400			
ICSA2 [ICSPA2] -SA□H-I-***-***-T1-△-SC	X-axis	ISA [ISPA] -SXM-I-60-16-***-T1	Incremental			100 ~ 600			
	Y-axis	ISA [ISPA] -SYM-I-60-16-***-T1				100 ~ 400			

* 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)

Y-axis stroke (mm)	100	200	300	400
Acceleration (G)				
0.3	6.2	5.5	4.8	4.1
0.4	3.2	2.5	1.8	1.1
0.5	1.2	0.5		
0.6	0.2			
0.7				
0.8				
0.9				
1.0				

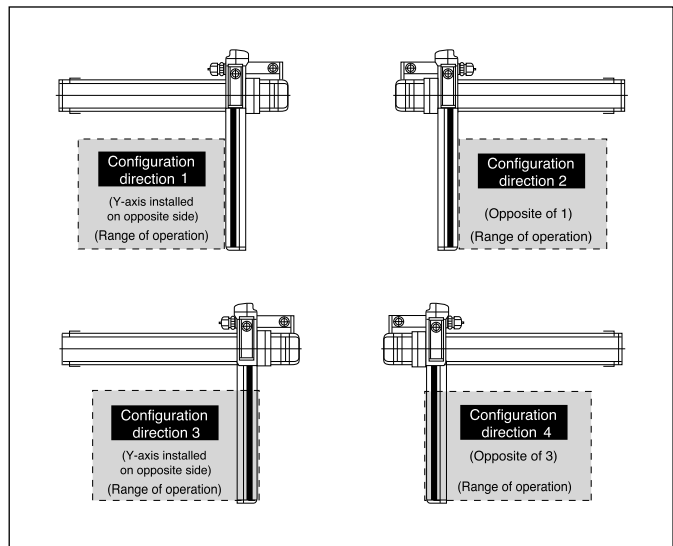
Maximum Speed by Stroke (mm/sec)

Stroke (mm)	100 ~ 400	500 ~ 600
Axis		
X-axis	800	
Y-axis	800	-

Applicable Controller Specifications

Applicable controller	Controller type	Model	Page
X-SEL	General-purpose type	XSEL-K-2-60□-60□-□-□□□-□-□	→ P241
	Compact type	XSEL-J-2-60□-60□-□-□□□-□-□	→ P241

Configuration direction



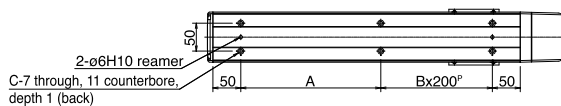
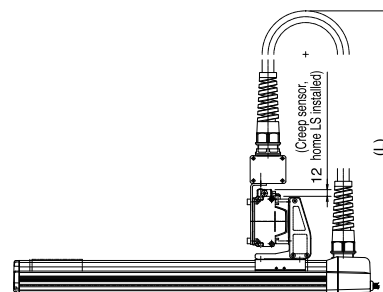
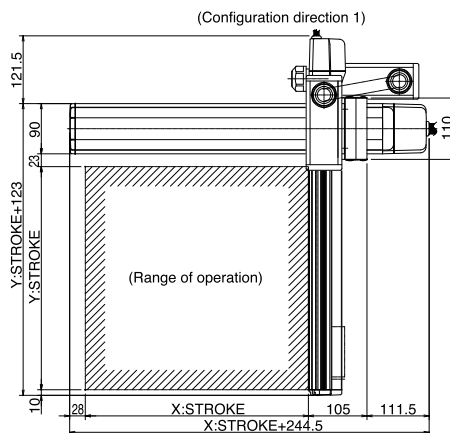
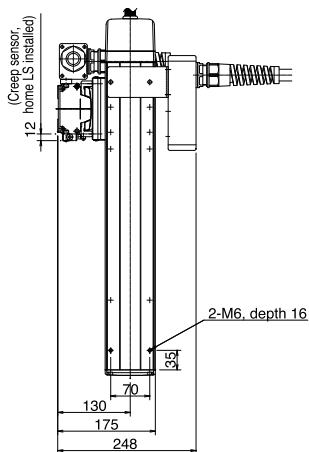
(Note 1) The load capacity assumes operation at the rated acceleration (0.3 G). The actuator can be operated at accelerations beyond the rated acceleration, but the load capacity will decrease (refer to the table of load capacity by acceleration).
 (Notes 2, 3, 4) The figures in brackets apply to the ICSPA2.
 (Note 5) 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

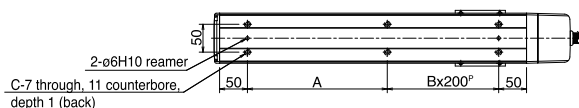
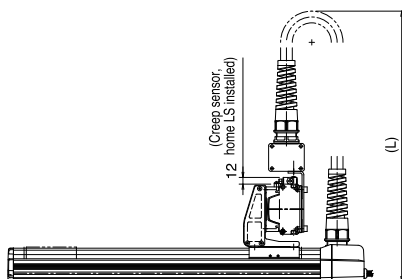
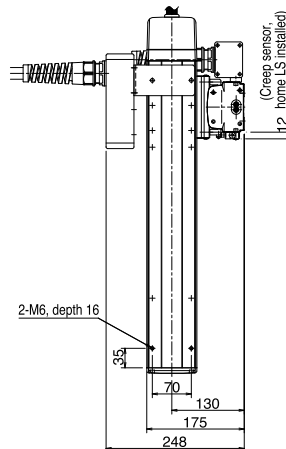
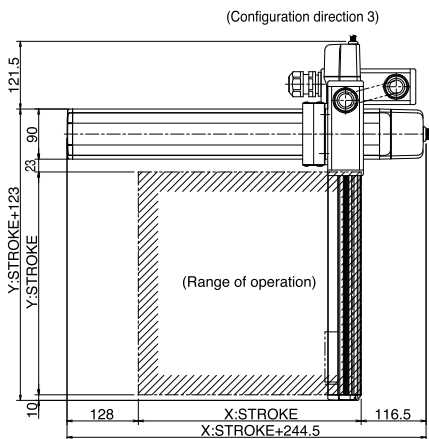
* Note that changing the home direction will require the actuator to be returned to IAI for adjustment.



		Dimension L					
Yst	Xst	100	200	300	400	500	600
100		480	530	580	630	680	730
200		530	580	630	680	730	780
300		580	630	680	730	780	830
400		630	680	730	780	830	880

X stroke	100	200	300	400	500	600
A	151	251	151	251	151	251
B	0	0	1	1	2	2
C	4	4	6	6	8	8

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



		Dimension L					
Yst	Xst	100	200	300	400	500	600
100		480	530	580	630	680	730
200		530	580	630	680	730	780
300		580	630	680	730	780	830
400		630	680	730	780	830	880

X stroke	100	200	300	400	500	600
A	151	251	151	251	151	251
B	0	0	1	1	2	2
C	4	4	6	6	8	8