

# ICSA2-ZDH

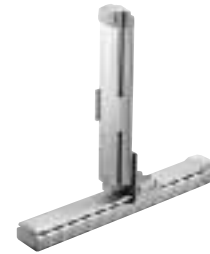
Cartesian Robot: X-Z 2-Axes Configuration, XZ (Z-Axis Base Mount) Type

# ICSPA2-ZDH

Cartesian Robot: X-Z 2-Axes Configuration, XZ (Z-Axis Base Mount) Type **High-Precision Specification**

Type XZ type Stroke X-axis: 800-2000mm Z-axis: 100-400mm Load capacity 19kg ~ 11kg

Model specification items Series Type Encoder type X-axis stroke + options Z-axis stroke + options Applicable controller Cable length Cable management  
 ICSA2-ZDH-A-200AQLNM-40AQB-L-T1-5L-CT



\* 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]-ZDH-A-***-***-B-T1-△-CT	X-axis	ISA [ISPA]-MXMX-A-200-20-***-T1	Absolute	200	20	800 ~ 2000	1 ~ 1000	19 ~ 11	±0.02 [±0.01]
	Z-axis	ISA [ISPA]-MZM-A-200-10-***-T1-B			10	100 ~ 400	1 ~ 500		
ICSA2 [ICSPA2]-ZDH-I-***-***-B-T1-△-CT	X-axis	ISA [ISPA]-MXMX-I-200-20-***-T1	Incremental		20	800 ~ 2000	1 ~ 1000		
	Z-axis	ISA [ISPA]-MZM-I-200-10-***-T1-B			10	100 ~ 400	1 ~ 500		

\* In the above model names, \*\*\* indicates the stroke/applicable options (stroke is specified in centimeters), and △ the cable length.

### Options

Name	Code	Page	Remarks
AQ seal	AQ	→ P13	
Brake	B	→ P13	Standard equipment on Z-axis
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	CT: Cable track

### Load Capacity by Acceleration (kg)

Z-axis stroke (mm)	100	200	300	400
Acceleration (G)				
0.3	19.0	16.0	13.0	11.0
0.4				
0.5				
0.6				
0.7				
0.8				
0.9				
1.0				

### Maximum Speed by Stroke (mm/sec)

Stroke (mm)	100-400	800-1300	1400	1500	1600	1700	1800	1900	2000
X-axis	-	1000	950	800	700	600	550	500	450
Z-axis	500	-	-	-	-	-	-	-	-

### Applicable Controller Specifications

Applicable controller	Controller type	Model	Page
X-SEL	General-purpose type	XSEL-K-2-200□-200B□-□-□□□-□-□	→ P241
	Compact type	XSEL-J-2-200□-200B□-□-□□□-□-□	→ P241

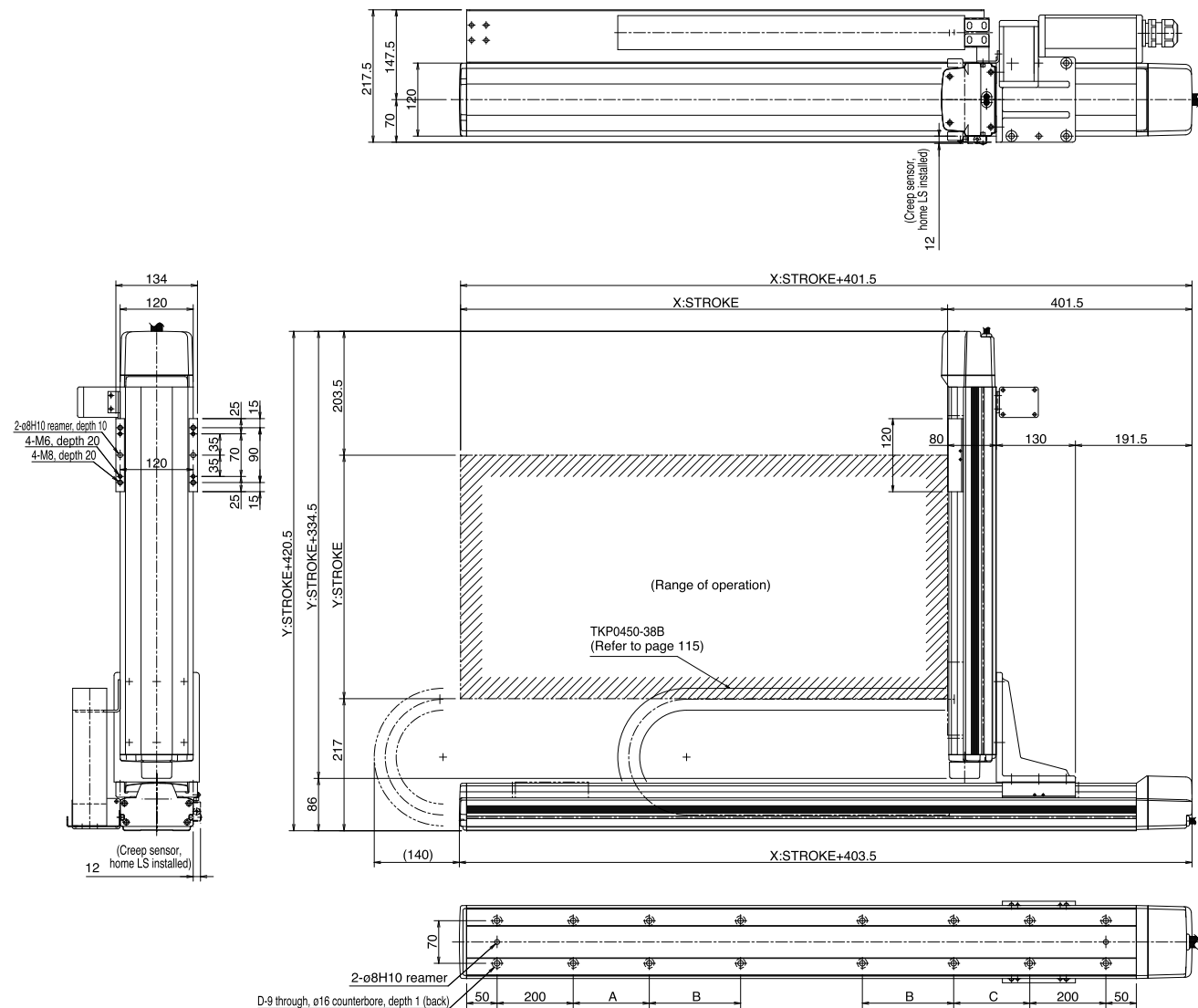
**Caution**

(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 rated acceleration is the maximum specifiable acceleration for both the ICSA2 and ICSPA2.  
 (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.

# Cable Track Specification (Cable Management Code: CT)

## Dimensions



Single-Axis Robots  
Cartesian Robots  
Controllers

X stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	0	0	200	250	300	350	400	450	500	550	200	200	200
B	0	0	0	0	0	0	0	0	0	0	400	450	500
C	200	200	200	250	300	350	400	450	500	550	200	200	200
D	10	10	12	12	12	12	12	12	12	12	16	16	16