

# Motorized Stage

CAVE-X POSITIONER

## X-axis Linear Ball Guide: KXL06100/KXL06150

Motorized Stage

KXL06100-N



KXL06150-N



KXL06100-C



KXL06150-C



Freely customize the motor

RoHS

See page P.009

Model Selection code Option code

**KXL06** **100-N2-F**

1 2 3 4 5 6

Cable P.1-207~  
Electrical specification P.1-077~

### 1 Travel length

100	100mm
150	150mm

### 2 Cover type

N	Uncovered	
C	Covered	

### 3 Ball screw lead selection

2	Lead 2mm
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### 4 Motor option

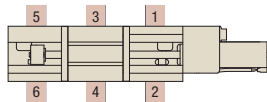
Code	Specification
F	High-torque
G	High resolution
MA	With electromagnetic brake (Driver set)
PA	α Step (Driver set)
U	Servo motor (Amplifier set)

\* Code MA · PA · U is the set of driver and cable.  
\* See page P.1-077~ for details of motor option.

### 5 Origin sensor option

Code	Specification
Blank	None
1	CCW right side
2	CCW left side
3	Center right side
4	Center left side
5	CW right side
6	CW left side

\* See page P.1-079~ for details of origin sensor option.  
■ Position of origin sensor option (Please choose one position )



### 6 Cable option

Code	Specification	Cable type
A	2m	D214-2-2E
B	2m One end loose	D214-2-2EK
C	4m	D214-2-4E
D	4m One end loose	D214-2-4EK
E	Only connector	—
F	Robot cable 2m	D214-2-2R
G	Robot cable 2m one end loose	D214-2-2RK
H	Robot cable 4m	D214-2-4R
J	Robot cable 4m one end loose	D214-2-4RK
M	Cable for electromagnetic brake	—
P	Cable for α step	—
U	Cable for servo motor	—
Blank	Without cable	—

\* One end loose position to only stage opposite side.  
\* The price includes M, P and U.  
Not available non-cable.  
\* See page P.1-207,209~ for details of cable.  
\* Please select "Code A, C, F or H" when connect with stepping motor controller(DS102/112).

[Note]  
Please check available cable from compatibility list.  
Not included cable for a main body. Please choose the code as below.

Motor / cable products list	Motor code	Cable code
	F,G	Blank, A~H,J
MA	M	
PA	P	
U	U	

## SPEC

Model	Uncovered	KXL06100-N2-F	KXL06150-N2-F
	Covered	KXL06100-C2-F	KXL06150-C2-F
Mechanical specification	Travel length	100mm	150mm
	Table size	60×60mm	
	Feed screw (Ball screw)	φ8 lead 2	
	Guide	Linear ball guide	
Main materials-Finishing	Stainless—Opposite side of the end face finishing		
	Weight	Uncovered 1.80kg Covered 1.86kg	2.10kg 2.16kg
	Resolution (Pulse)	Full/ Half	4μm/2μm
Accuracy specification	MAX speed	0.2μm (1/20 on resolution)	
	Uni-directional positioning accuracy	Within 10μm	Within 15μm
	Repeatability positioning accuracy	Within ±0.5μm	
	Load capacity	12kgf [117.6N]	
	Moment stiffness	Pitch 0.05/yaw 0.05/roll 0.05 ["/N · cm]	
	Lost motion	Within 1μm	
	Backlash	1Within μm	
	Straightness	Within 5μm	
	Parallelism	Within 15μm	
	Motion parallelism	Within 10μm	Within 15μm
Pitching/Yawing	Within 25"/Within 20"		
Sensor	Limit sensor	Installed	
	Origin sensor	— ※Attachable in origin sensor option	
	Slit origin sensor	—	
Provided screw (Hexagon-headed bolt)	8 of M4—14	14 of M4—14	

※ Might be changed specification due to motors. See page P.1-213~ for details.

X

XY

Z

Horizontal Z

XYZ

Goniometer

Rotary

Unit

Controller

Linear Ball

CAVE-X Linear ball

Cross Roller

Slide Guide

φ40

φ50

φ60

φ70

φ80

φ100

φ120

Other