

Motorized Stage

CAVE-X POSITIONER

XYZ-axis Linear Ball Guide: KWL06030/KWL06050

Motorized Stage



RoHS

Model Selection code Option code

KWL06030-N1-C

1 2 3 4 5 6

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

1 Travel length

030	30mm
050	50mm

2 Cover type

N	Uncovered	
C	Covered	

3 Ball screw lead selection

1	Lead 1mm
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4 Motor option

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

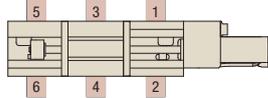
* Code MA · PA · U is the set of driver and cable.

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 (Cable is not included)	—
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	Cable is not included (Standard)	—

* 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
	C,F,G	Blank, A~H,J
	MA	M
	PA	P
U	U	

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

SPEC

Model	Uncovered		Covered	
	KWL06030-N1-C	KWL06050-N1-C	KWL06030-C1-C	KWL06050-C1-C
Travel length	30mm	50mm	30mm	50mm
Table size	60×60mm			
Feed screw (Ball screw)	φ8 lead 1			
Guide	Linear ball guide			
Main materials-Finishing	Stainless—Opposite side of the end face finishing			
Weight	4.56kg	4.92kg	4.74kg	5.04kg
Accuracy specification	Resolution (Pulse)	Full/Half Microstep 2μm/1μm		
	MAX speed	0.1μm (1/20 on resolution) 20mm/sec		
	Load capacity	7kgf [68.6N]		
Sensor	Perpendicularity	Within 15μm/ Full stroke	Within 25μm/ Full stroke	Within 15μm/ Full stroke Within 25μm/ Full stroke
	Limit sensor	Installed		
	Origin sensor	— ※ Attachable in origin sensor option		
	Slit origin sensor	—		
Provided screw (Hexagon-headed bolt)	8 of M4—14			
Single-axis accuracy specification	Uni-directional positioning accuracy	Within 5μm		
	Repeatability positioning accuracy	Within ±0.5μm		
	Lost motion	Within 1μm		
	Backlash	Within 1μm		
	Straightness	Within 3μm		
	Pitching/Yawing	Within 20" / Within 15"		

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