

XY-axis Linear Ball Guide: PMG430/PMG530/PMG650/PMG750

Motorized Stage

PMG650-L



PMG650-R



RoHS

※A dedicated hex wrench for fixing bottom axis of XY is attached.

Model Selection code Option code
PMG 430-L05AL-C5

1 2 3 4 5 6 7 8

● Cable P.1-207~
 ● Electrical specification P.1-037~

1 Table size

4	40×60mm
5	50×70mm
6	60×100mm
7	70×110mm

* Cannot choose 450, 550, 630, 730 in combination with **1** and **2**.

2 Travel length

30	30mm
50	50mm

4 Sensor voltage

05	5V
24	24V

* 05 [5V] for standard

5 Sensor logic

A	N.C.
B	N.O.
C	Limit sensor is N.C., ORG1 and ORG2 are N.O.

* The sensor voltage/logic is different, but the external form dimension is the same.
 * If you choose 24V, not available our controller DS102/112.

8 Cable option

※See page ● P.1-039~ for ORG2 compatible cable.

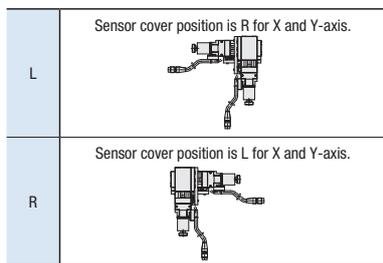
Code	Specification	Cable type
Blank	2m	D214-2-2E
1	2m One end loose	D214-2-2EK
2	4m	D214-2-4E
3	4m One end loose	D214-2-4EK
4	Only connector (Cable is not included)	—
5	Cable is not included (Standard)	—
6	Robot cable 2m	D214-2-2R
7	Robot cable 4m	D214-2-4R
8	Robot cable 4m one end loose	D214-2-4RK
9	Robot cable 2m one end loose	D214-2-2RK
M	Cable for electromagnetic brake	—
P	Cable for α step	
U	Cable for servo motor	

* 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 "blank, 2, 6 and 7" when connect with stepping motor controller(DS102/112).

[Note]
 Please check available cable from compatibility list.

Motor/ cable products list	Motor code	Cable code
	C, D, E	Blank, 1~9
MA	M	
PA	P	
U	U	

3 6 Identification mark



* **3** and **6** are linked. Cannot choose L and R at the same time.

7 Motor option

Code	Specification
C	Standard
D	High-torque
E	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.1-037~ for details of motor option.

SPEC

Model	PMG430-L05AL-C5	PMG530-L05AL-C5	PMG650-L05AL-C5	PMG750-L05AL-C5
(Opposite hand)	PMG430-R05AR-C5	PMG530-R05AR-C5	PMG650-R05AR-C5	PMG750-R05AR-C5
Travel length	30mm		50mm	
Table size	40×60mm	50×70mm	60×100mm	70×110mm
Feed screw (Ball screw)	φ6 lead 1			
Guide	Linear ball guide			
Main materials-Finishing	Stainless—Opposite side of the end face finishing			
Weight	1.40kg	1.70kg	2.46kg	2.72kg
Resolution (Pulse)	2μm (Full)/1μm (Half)			
MAX speed	10mm/sec			
Load capacity	9.24kgf [90.5N]	9.04kgf [88.5N]	8.62kgf [84.4N]	8.44kgf [82.7N]
Perpendicularity	Within 10μm/Full stroke			
Limit sensor	Installed			
Origin sensor (ORG1)	Installed			
Slit origin sensor (ORG2)	Installed Refer page ● P.1-039~			
Provided screw (Hexagon-headed bolt)	4 of M3—8		4 of M4—8	
Uni-directional positioning accuracy	Within 12μm			
Repeatability positioning accuracy	Within ±0.5μm			
Lost motion	Within 1μm			
Backlash	Within 0.5μm			
Straightness	Within 2μm			
Pitching/Yawing	Within 20"/Within 15"			

Note:PMG430,530,650,750 includes spacer for XY mounting.
 ※ Might be changed specification due to motors ● P.1-213~.

- 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