

[High Precision] Motorized XY-Axis - Cross Roller
Low Profile



■Features: Low Profile type XY-Axis Stages.

■XY-Axis Clear Anodize

■XY-Axis Black Anodize

XYMPTG725-L

XYMPTG725-R

Material: Aluminum Alloy
Surface Treatment: Clear Anodize (XYMPTG725)
Black Anodize (XYMPTG830)
Accessory: XYMPTG 725, 830:SCB4-8
XYMPTG 1040,1250:SCB6-16

RoHS

Part Number		Sensor	Cable	Mechanical Standards			Accuracy Standards *1		
Type	No.			Stage Surface (mm)	Travel Distance (mm)	Weight (kg)	Unidirectional Positioning Accuracy	Pitching	Yawing
XYMPTG	725	L (Standard) R (Reversed)	N (Cable not included (separately sold))	70×70	25	2.0	5µm or less / Full Stroke	20"	15"
	830			80×80	30	2.4			
	1040			100×100	40	3.2			
	1250			120×120	50	4.4			

*1. The above accuracy standards of Unidirectional Positioning Accuracy are for a single axis.

Ordering Example

Part Number	-	Sensor	-	Cable
XYMPTG725	-	L	-	N
XYMPTG1040	-	R	-	N

Days to Ship

[Configure Online](#)

■Common Specifications

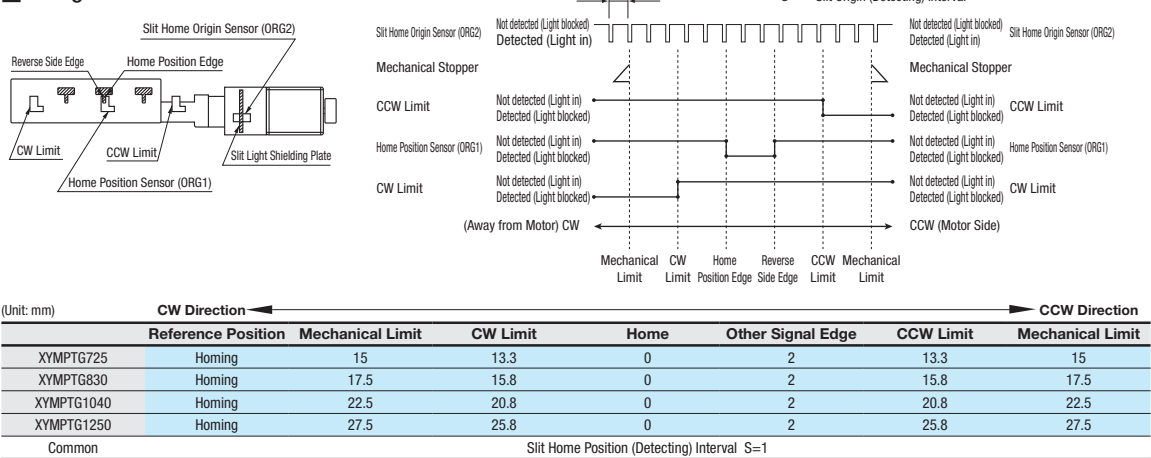
No.	725	830	1040	1250
Feed Screw	Ball Screw Ø6, Lead 1			
Guide	Cross Roller Guide			
Resolution	1µm			
	0.5µm			
	0.05µm			
Max. Speed	10mm/sec			
Positioning repeatability	Within ±0.3			
Load Capacity	98N	147N	196N	245N
Lost Motion	1µm or less			
Backlash	0.5µm or less			
Straightness	1µm or less			
Parallelism	30µm or less			
Motion Parallelism	10µm or less		15µm or less	

■Electrical Specifications

No.	725	830	1040	1250
Motor	5-Phase Stepping Motor 0.75A/Phase (Oriental Motor Co., Ltd.)			
	Step Angle 0.36°			
Connector	Applicable Receptacle Connector HR10A-10P-12S (73) (Hirose Electric Co., LTD.)			
Sensor	Limit Sensor	Provided		
	Slit Home Origin Sensor	Provided		
	Home Sensor	Provided		
	Part Number	Photomicrosensor: PM-L25 (Panasonic Industrial Devices SUNX Co., Ltd.)		
	Power Supply Voltage	DC5~24V ±10%		
	Current Consumption	60mA or less (15mA per Sensor)		
	Control Output	NPN Open Collector Output DC30V or less, 50mA or less Residual Voltage 2V or less (when load current is 50mA) Residual Voltage 1V or less (when load current is 16mA)		
	Output Logic	Detecting (Dark): Output Transistor OFF (Non-Conducting)		

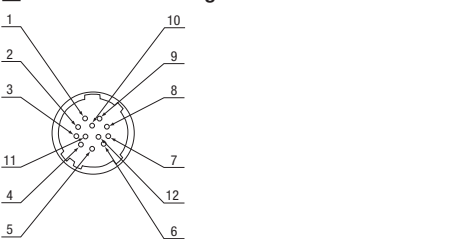
- ④ On the XMPTG Series, conversion for output logic is available for the Home Sensor.
④ Sensors with Part Number PM-□24 are to be discontinued and replaced by next-generation products with Part Number PM-□25 from April 2017.

■Timing Chart

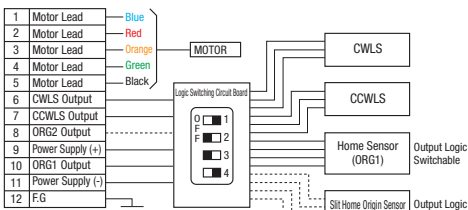


- ④ Homing Routine Above: When the standard cable and the MSCTL102 Series Controller are used and when the Homing Routine Type 4 is executed.
④ The coordinates shown are design values. There may be approx. ±0.5mm misalignment on the physical dimensions.
④ For details about Homing, see P.1735-67

■Connector Pin Configuration



■Connecting Diagram



④ The dotted line connections are not functional when a standard cable is used.

XYMPTG830-L

XYMPTG830-R

XYMPTG1040-L

XYMPTG1040-R

XYMPTG1250-L

XYMPTG1250-R