



For CAD data, see the MISUMI website.

Features: Low Profile type Z-Axis Stages.

Z-Axis Clear Anodize



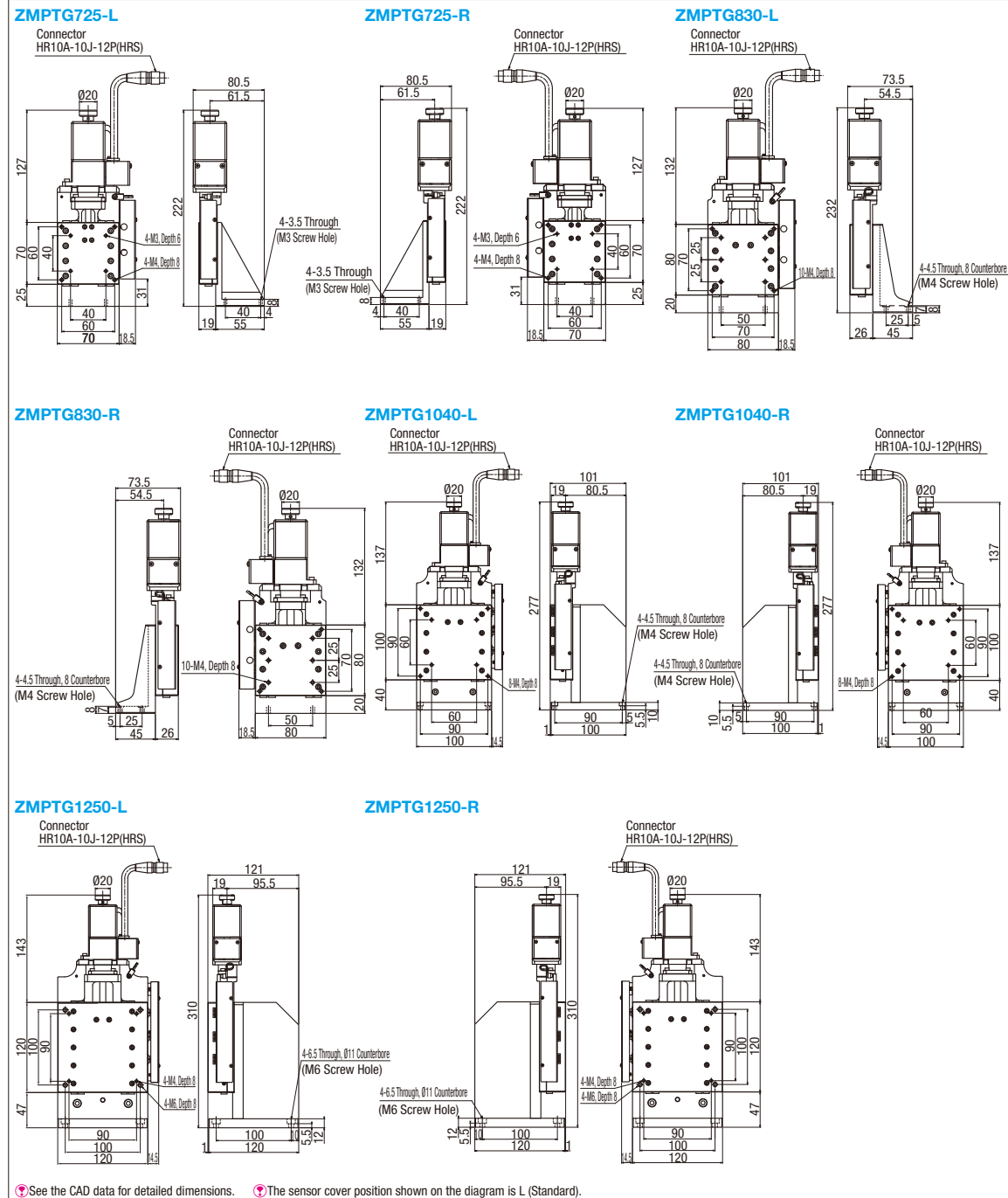
Z-Axis Black Anodize



- M** Material Aluminum Alloy
- S** Surface Treatment Clear Anodize (ZMPTG725)
Black Anodize (ZMPTG830/1040/1250)
- A** Accessory ZMPTG725/830 -SCB4-6
ZMPTG1040 -SCB4-10
ZMPTG1250 -SCB6-12

For Controllers, Handset Terminals, see P. 1-1735-93 - P. 1-1735-94

The sensor cover position shown on the photo is L (Standard). **RoHS10**



See the CAD data for detailed dimensions. The sensor cover position shown on the diagram is L (Standard).

Part Number		Sensor	Cable	Mechanical Standards			Accuracy Standards		
Type	No.			Stage Surface (mm)	Travel Distance (mm)	Weight (kg)	Unidirectional Positioning Accuracy	Pitching	Yawing
ZMPTG	725	L (Standard) R (Reversed)	N (Not Provided) The cable is separately sold.	70×70	25	1.3	15µm or less	20" or less	15" or less
	830			80×80	30	1.49			
	1040			100×100	40	2.7			
	1250			120×120	50	4.0			



Ordering Example: Part Number - Sensor - Cable
ZMPTG725 - L - N



Configure Online

Common Specifications

No.	725	830	1040	1250
Feed Screw	Ball Screw Ø6, Lead 1		Ball Screw Ø8, Lead 1	
Guide	Cross Roller Guide			
	Full	1µm		
	Half	0.5µm		
Resolution	0.05µm (upon 1/20 partitioned)			
Max. Speed	10mm/sec			
Positioning repeatability	Within ±0.3µm			
Load Capacity *1	49N	73.5N		
Lost Motion	1µm or less			
Backlash	0.5µm or less			
Straightness	1µm			
Parallelism	10µm or less		15µm or less	

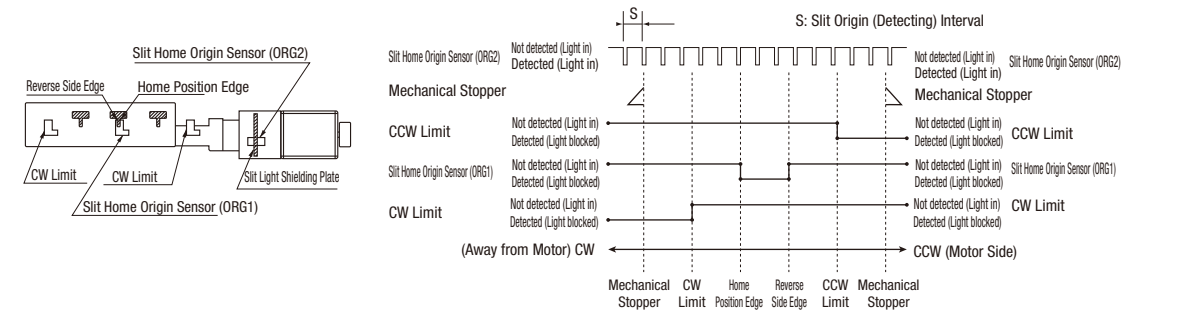
The above specifications are for single-axis horizontal mounting orientation.
*1. Only for load capacity, the above specifications are for Z-Axis.

Electrical Specifications

No.	725	830	1040	1250
Motor	5-Phase Stepping Motor 0.75A/Phase (Oriental Motor Co., Ltd.)			
Part Number	C7214-9015-1 (□38mm)			
Step Angle	0.36°			
Connector	Applicable Receptacle Connector HR10A-10P-12S (73) (Hirose Electric Co., LTD.)			
Sensor	Limit Sensor	Provided		
	Slit Home Origin Sensor (ORG2)	Provided		
	Home Position Sensor (ORG1)	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	Limit, ORG1: While Detecting (Dark), Output Transistor OFF (Non-Conducting) ORG2: While Detecting (Light in), Output Transistor OFF (Non-Conducting)			

On the XMPTG Series, conversion for output logic is available for the Home Sensor.
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



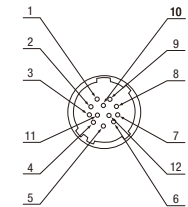
(Unit: mm)	Reference Position	Mechanical Limit	CW Limit	Home	Other Signal Edge	CCW Limit	Mechanical Limit	
	ZMPTG725	Homing	15	12.3	0	2	13.3	15
	ZMPTG830	Homing	17.5	15.8	0	2	15.8	17.5
	ZMPTG1040	Homing	22.5	20.8	0	2	20.8	22.5
	ZMPTG1250	Homing	27.5	25.8	0	2	25.8	27.5
Common	Slit Home Position (Detecting) Interval S=1							

Homing Routine Above: When the standard cable and the DS102/DS112 Series Controller are used and when the Homing Routine Type 4 is executed.

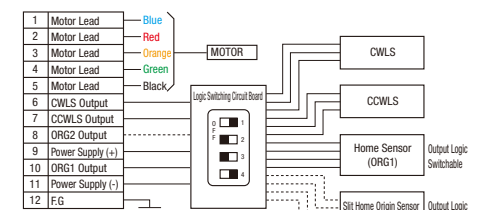
The coordinates shown are design values. There may be approx. ±0.5mm misalignment on the physical dimensions.

For details about Homing, see P. 1-1735-97

Connector Pin Configuration



Wiring Diagram



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