

## Precision Motorized Stages - 5 Phase Stepping Motor

PMS-X

RoHS

CE

Application Systems

Machine Vision

Manual Positions

Motion Control Products

Optical & Mirror Holder

FA Parts

Measurement & Control

FA Electrical Parts

Tool & Measure

Cleanroom & AntiStatic

Index

Piezo Stage

Precision Linear MS

High Speed MS

Motorized Goniometer

Motorized Rotation

Multiaxis Motorized

Industrial Robot

Controller & Driver & Cable

Custom-Built MS

### High precision X axis stages fitted with precision ball screws and precision crossed roller.



- Steel body offers excellent stiffness and high load capacity.

#### Guide

- ▶ Contact our International Sales Division if you desire to change motors, etc. Or, use the motorized stage system question sheet. [Reference](#) I085

#### Attention

- ▶ We will assemble your X axis stage with a newly purchased X axis stage at a separate cost.

Specifications		PMS-50X	PMS-100X	PMS-200X	
Part Number					
Mechanical Specifications	Travel [mm]	50	100	200	
	Table Size [mm]	165×165	165×200	165×360	
	Feed Screw [mm]	Ball screw diameter φ8mm, 1mm lead	Ball screw diameter φ8mm, 1mm lead	Ball screw diameter φ14mm, 2mm lead	
	Positioning Slide	Crossed roller	Crossed roller	Crossed roller	
	Stage Material	Steel (S50C)	Steel (S50C)	Steel (S50C)	
	Weight [kg]	8.6	10.2	20.0	
Accuracy Specifications	Resolution	(Full) [μm/pulse]	2	2	4
		(Half) [μm/pulse]	1	1	2
	MAX Speed [mm/sec]	10	10	20	
	Positioning Accuracy [μm]	5	7	8	
	Positional Repeatability [μm]	2	2	2	
	Load Capacity [N]	392 (40.0kgf)	392 (40.0kgf)	392 (40.0kgf)	
	Moment Stiffness	Pitch [°/N·cm]	0.01	0.01	0.01
		Yaw [°/N·cm]	0.01	0.01	0.01
		Roll [°/N·cm]	0.005	0.005	0.005
	Lost Motion [μm]	1	1	1	
	Backlash [μm]	1	1	1	
	Parallelism [μm]	50	70	100	
	Running Parallelism [μm]	10	10	20	
Pitch [°] / Yaw [°]	15/15	20/20	20/20		
Sensor	Sensor Part Number	Micro photo sensor: PM-L24 (SUNX Co., Ltd.): Limit sensor, origin sensor			
	Limit Sensor	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	
	Origin Sensor	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	
	Proximity Origin Sensor	None	None	None	

Motor / Sensor Specifications		
Motor	Type	5-phase stepping motor 1.4A/phase (Oriental Motor Co., Ltd.)
	Motor Part Number	PK564-NBW (□60mm)      PK566-NBW (□60mm)      PK569-NBW (□60mm)
	Step Angle	0.72°
Sensor	Power Voltage	DC5 - 24V ±10%
	Current Consumption	45mA or lower (15mA or lower per sensor)
	Control Output	NPN open collector output DC30V or lower, 50mA
	Output Logic	When shaded: Output transistor OFF (no conduction)

Compatible Driver / Controller		
Control System	Compatible Driver	SD-5M, SD-55M, SD-514MSC, SD-5151, SD-525M
	Compatible Controller	ASC-302GS, ASC-304GS

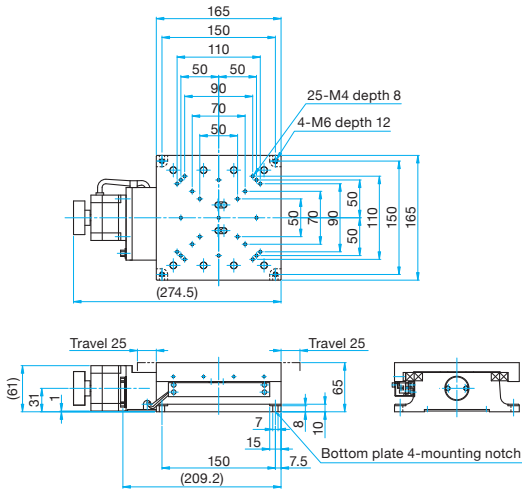
# Precision Motorized Stages - 5 Phase Stepping Motor

PMS-X **RoHS** **CE**

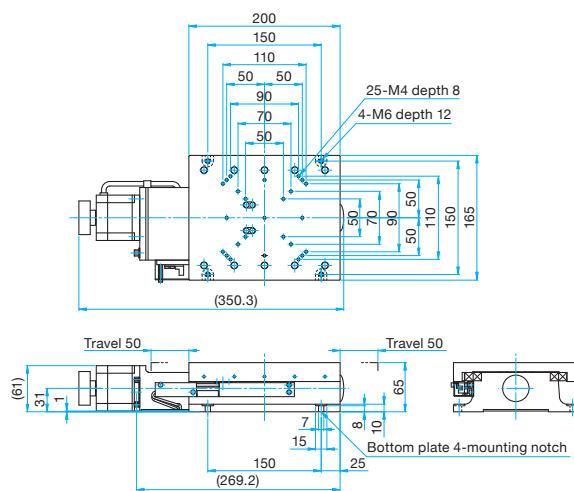


## Outline Drawing

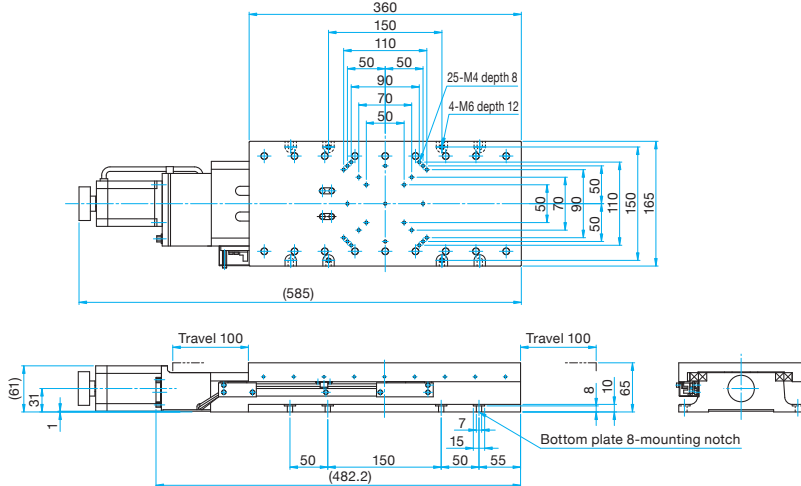
**PMS-50X** Hexagon socket head cap screw M6×15...4 screws



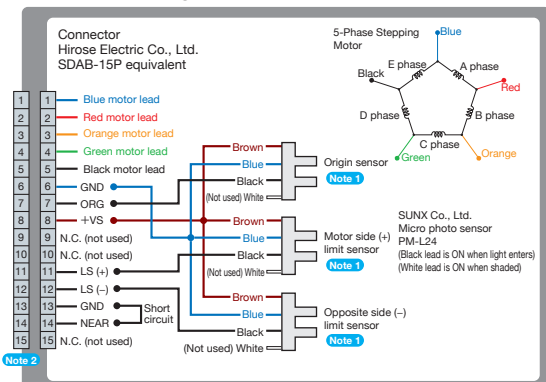
**PMS-100X** Hexagon socket head cap screw M6×15...4 screws



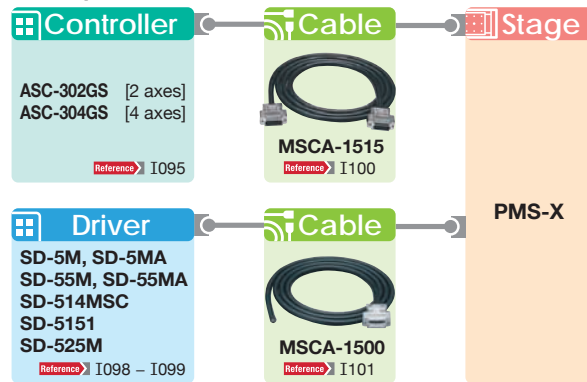
**PMS-200X** Hexagon socket head cap screw M6×15...8 screws



## Connection Diagram



## Compatible Controllers / Drivers and Cables



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