

Stepping motor driven stages, ideal for positioning of measuring instruments or inspection tools for which high stiffness and high precision are required.



- U-shaped rail offers light weight, and minimized deflection to achieve high stiffness.

Guide

- ▶ Contact our Sales Division if you desire to change motors, etc.
[Reference](#) G017, G123 (Motorized Stage System Question Sheet)
[WEB Reference](#) [Catalog Code](#) W9500
- ▶ Grease change is optionally available.
[Reference](#) G122 [WEB Reference](#) [Catalog Code](#) W9006

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motorized Stages

Light Sources & Laser Safety

Index

Guide

Controllers/Drivers

Softwares

Stepping Motor

AC Servo Motor

Cables

Piezo

X Translation

Theta Rotation

Goniometer

Vacuum

Options

40 x 40 mm

60 x 60 mm

80 x 80 mm

85 x 85 mm

100 x 100 mm

120 x 120 mm

Others

Specifications

Part Number		OSMS20-35(XYZ)	OSMS20-85(XYZ)
Part Number (-M6)		OSMS20-35(XYZ)-M6	OSMS20-85(XYZ)-M6
Part Number (-INCH)		OSMS20-35(XYZ)-INCH	OSMS20-85(XYZ)-INCH
Mechanical Specifications	Travel [mm]	35	85
	Stage Size [mm]	85×85	85×85
	Feed Screw	Ball screw diameter φ6mm, 1mm lead	Ball screw diameter φ6mm, 1mm lead
	Positioning Slide	Outer rail structure	Outer rail structure
	Stage Material	Aluminum	Aluminum
	Finish	Black anodized	Black anodized
	Weight [kg]	4.5	5.1
Accuracy Specifications	Resolution	(Full) [μm/pulse]	2
		(Half) [μm/pulse]	1
	MAX Speed [mm/sec]	5	5
	Load Capacity [N]	29.4 (3.0kgf)*1	29.4 (3.0kgf)*1
	Backlash [μm]	3	3
	Orthogonality of Motion [μm]	5	5
Sensor	Straightness of Motion [μm]	25	30
	Sensor Part Number	Micro photo sensor : GP1S097HCZ0F (Sharp Corporation)	Micro photo sensor: GP1S092HCPIF (Sharp Corporation)
	Limit Sensor	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)
	Origin Sensor	Equipped (NORMAL OPEN)	Equipped (NORMAL OPEN)
	Proximity Origin Sensor	None	Equipped (NORMAL OPEN)

*1 If you use the Driver of ②.

Motor / Sensor Specifications

Motor	Type	5-phase stepping motor 0.75A/phase (Tamagawa Seiki Co., Ltd.)	
	Motor Part Number	TS3664N4E10(□24mm)	
	Step Angle	0.72°	
Sensor	Power Voltage	DC5 - 24V±10%	
	Current Consumption	180mA or lower (60mA or lower a per axis20mA or lower per a sensor)	240mA or lower (80mA or lower a per axis20mA or lower per a sensor)
	Control Output	NPN open collector output DC30V or lower, 50mA or lower	
	Output Logic	When shaded: Output transistor OFF (no conduction) : Limit Sensor When shaded: Output transistor ON (conduction): Origin sensor, Proximity Origin Sensor	

Compatible Driver / Controller

Control System	Compatible Driver	①: SG-5M, SG-5MA ②: SG-514MSC, MC-7514PCL, MC-S0514ZU
	Compatible Controller	HSC-103, SHOT-304GS, HIT-M, HIT-S, PGC-04-U

