

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

Specifications

Part Number		OSMS20-35(X)	OSMS20-85(X)	
Part Number (-M6)		OSMS20-35(X)-M6	OSMS20-85(X)-M6	
Part Number (-INCH)		OSMS20-35(X)-INCH	OSMS20-85(X)-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]		1.1	1.3
Accuracy Specifications	Resolution	(Full) [μm/pulse]	2	2
		(Half) [μm/pulse]	1	1
	MAX Speed [mm/sec]		25	25
	Positioning Accuracy [μm]		5	10
	Positional Repeatability [μm]		3	3
	Load Capacity [N]		78.4 (8.0kgf)	78.4 (8.0kgf)
	Moment Stiffness	Pitch [°/N·cm]	0.4	0.4
		Yaw [°/N·cm]	0.25	0.25
		Roll [°/N·cm]	0.35	0.35
	Lost Motion [μm]		3	3
	Backlash [μm]		3	3
	Parallelism [μm]		30	30
	Running Parallelism [μm]		10	10
Pitch [°] / Yaw [°]		30/20	30/20	
Sensor	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)

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	60mA or lower (20mA or lower per sensor)	80mA or lower (20mA or lower per 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	SG-5M, SG-5MA, MC-S0514ZU, SG-514MSC, MC-7514PCL
	Compatible Controller	GSC-01, GSC-02, SHOT-702, GIP-101, HSC-103, SHOT-302GS, SHOT-304GS, HIT-M-HIT-S, PGC-04-U

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Options

40 × 40 mm

60 × 60 mm

80 × 80 mm

85 × 85 mm

100 × 100 mm

120 × 120 mm

Others