

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
- ▶ Please contact our Sales Division if you desire to assemble OSMS26-200* or 300** into XYZ axis.

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 × 40 mm

60 × 60 mm

80 × 80 mm

85 × 85 mm

100 × 100 mm

120 × 120 mm

Others

Specifications

Part Number		OSMS26-50(XYZ)	OSMS26-100(XYZ)
Part Number (-M6)		OSMS26-50(XYZ)-M6	OSMS26-100(XYZ)-M6
Part Number (-INCH)		OSMS26-50(XYZ)-INCH	OSMS26-100(XYZ)-INCH
Mechanical Specifications	Travel [mm]	50	100
	Stage Size [mm]	100×100 (120×120)	100×100 (120×120)
	Feed Screw	Ball screw diameter ϕ 8mm, 2mm lead	Ball screw diameter ϕ 8mm, 2mm lead
	Positioning Slide	Outer rail structure	Outer rail structure
	Stage Material	Aluminum	Aluminum
	Finish	Black anodized	Black anodized
	Weight [kg] (M6, INCH)	10.1 11.3	11.3 12.5
Accuracy Specifications	Resolution	(Full) [μ m/pulse]	4
		(Half) [μ m/pulse]	2
	MAX Speed [mm/sec]	10	10
	Load Capacity [N]	39.2 (4.0kgf)	39.2 (4.0kgf)
	Backlash [μ m]	3	3
	Orthogonality of Motion [μ m]	5	5
Straightness of Motion [μ m]	30	40	
Sensor	Sensor Part Number	Micro photo sensor : GP1S092HCPIF (Sharp Corporation)	
	Limit Sensor	Equipped (NORMAL CLOSE)	
	Origin Sensor	Equipped (NORMAL OPEN)	
	Proximity Origin Sensor	Equipped (NORMAL OPEN)	

Motor / Sensor Specifications

Motor	Type	5-phase stepping motor 0.75A/phase (Oriental Motor Co., Ltd.)
	Motor Part Number	PK525HPB-C4 (□28mm)
	Step Angle	0.72°
Sensor	Power Voltage	DC5 - 24V \pm 10%
	Current Consumption	240mA or lower (80mA or lower a per axis 20mA 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

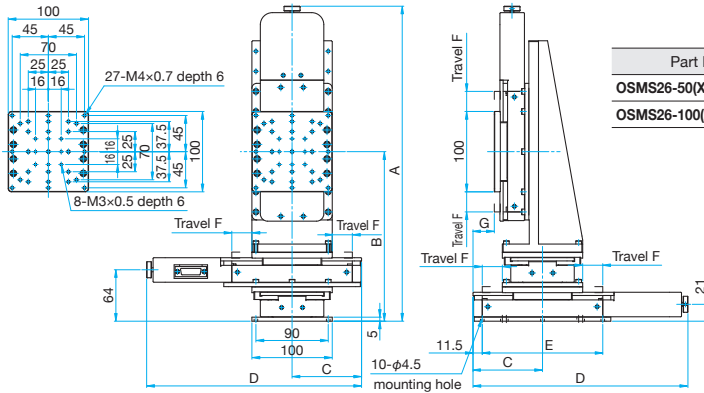
Compatible Driver / Controller

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



OSMS26-*(XYZ)

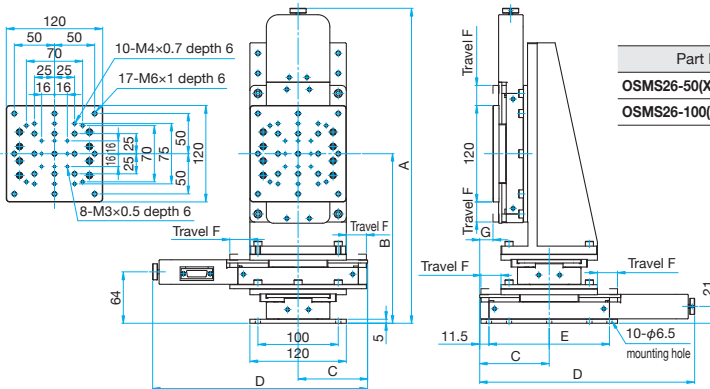
Hexagon socket head cap screw M4×10...10 screws (50, 100)
Hexagon socket head cap screw M4×10...14 screws (200)
Hexagon socket head cap screw M4×10...18 screws (300)



Part Number	A	B	C	D	E	F	G
OSMS26-50(XYZ)	392	211	86.5	267.5	150 (25, 50×25, 25)	25	26.5
OSMS26-100(XYZ)	442	236	111.5	317.5	200 (50×4)	50	51.5

OSMS26-*(XYZ)-M6

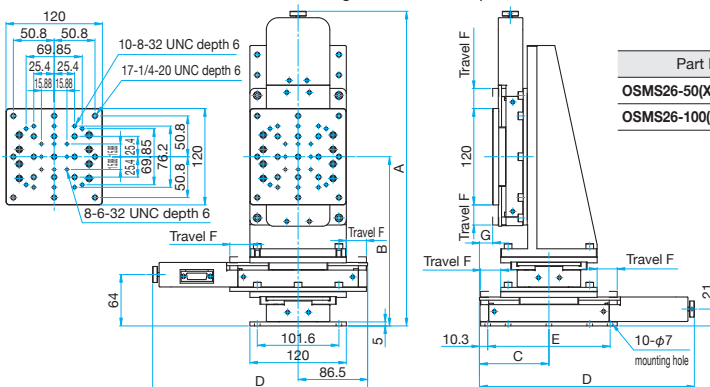
Hexagon socket head cap screw M6×10...10 screws (50, 100)
Hexagon socket head cap screw M6×10...14 screws (200)
Hexagon socket head cap screw M6×10...18 screws (300)



Part Number	A	B	C	D	E	F	G
OSMS26-50(XYZ)-M6	392	211	86.5	267.5	150 (25, 50×25, 25)	25	16.5
OSMS26-100(XYZ)-M6	442	236	111.5	317.5	200 (50×4)	50	41.5

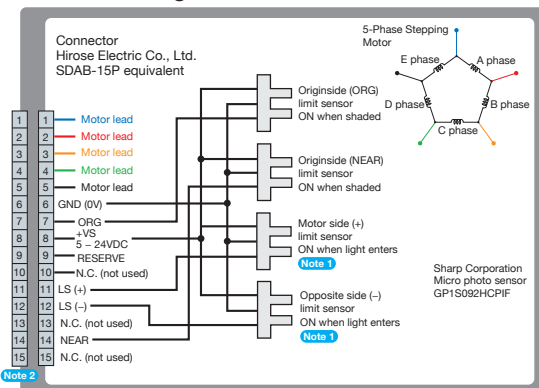
OSMS26-*(XYZ)-INCH

Hexagon socket head cap screw 1/4-20UNC×3/8...10 screws (50, 100)
Hexagon socket head cap screw 1/4-20UNC×3/8...14 screws (200)
Hexagon socket head cap screw 1/4-20UNC×3/8...18 screws (300)



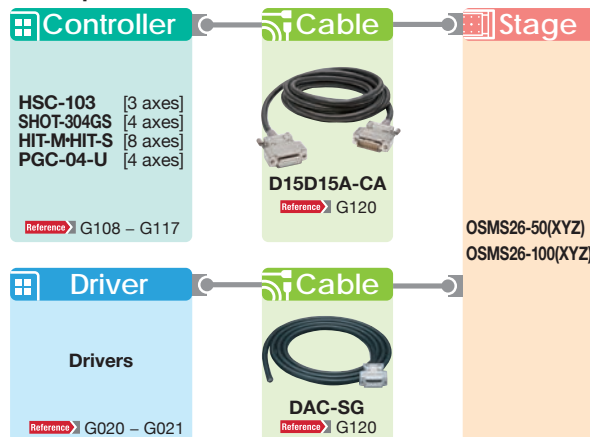
Part Number	A	B	C	D	E	F	G
OSMS26-50(XYZ)-INCH	391.6	210.6	86.5	267.5	152.4 (25.4, 50.8×2, 25.4)	25	16.5
OSMS26-100(XYZ)-INCH	442	236	111.5	317.5	203.2 (50.8×4)	50	41.5

Connection Diagram



Note 1 The motor side limit sensor is the + direction limit sensor.
Note 2 Compatible cable connector: DDK Ltd. 17JE-13150

Compatible Controllers / Drivers and Cables



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 × 40 mm

60 × 60 mm

80 × 80 mm

85 × 85 mm

100 × 100 mm

120 × 120 mm

Others