

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

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 $\phi 6$ mm, 1mm lead	Ball screw diameter $\phi 6$ mm, 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) [μ m/pulse]	2
		(Half) [μ m/pulse]	1
	MAX Speed [mm/sec]	5	5
	Load Capacity [N]	29.4 (3.0kgf)*1	29.4 (3.0kgf)*1
	Backlash [μ m]	3	3
	Orthogonality of Motion [μ m]	5	5
	Straightness of Motion [μ m]	25	30
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)

*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 $\pm$ 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

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Options

40 × 40 mm

60 × 60 mm

80 × 80 mm

85 × 85 mm

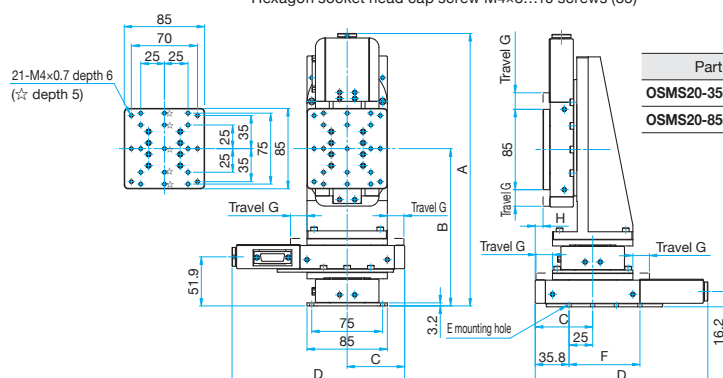
100 × 100 mm

120 × 120 mm

Others

**OSMS20-*(XYZ)**

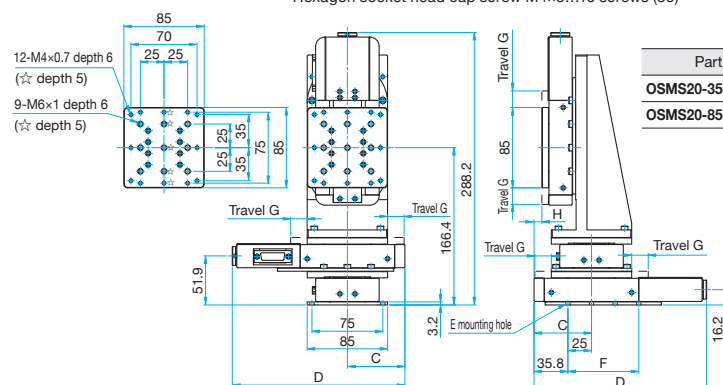
Hexagon socket head cap screw M4x8...8 screws (35)
Hexagon socket head cap screw M4x8...10 screws (85)



Part Number	A	B	C	D	E	F	G	H
OSMS20-35(XYZ)	288.2	166.4	60.8	182.6	8-φ4.5	75 (25×3)	17.5	8.3
OSMS20-85(XYZ)	338.2	191.4	85.8	232.6	10-φ4.5	100 (25×4)	42.5	33.3

OSMS20-*(XYZ)-M6

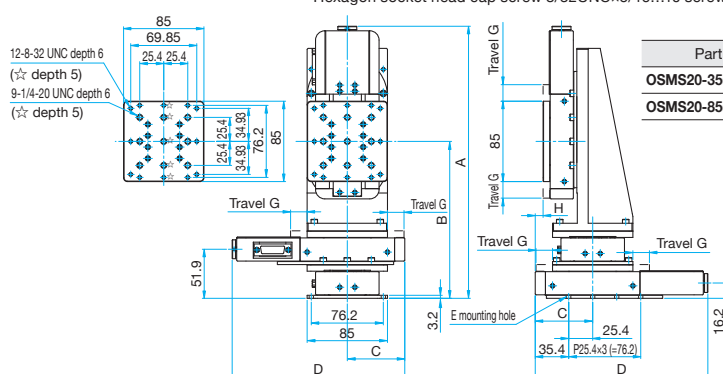
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Hexagon socket head cap screw M4x8...10 screws (85)



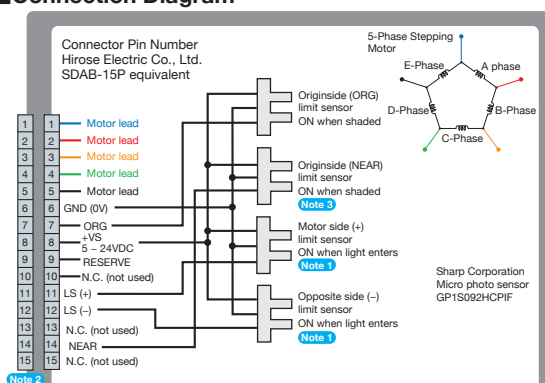
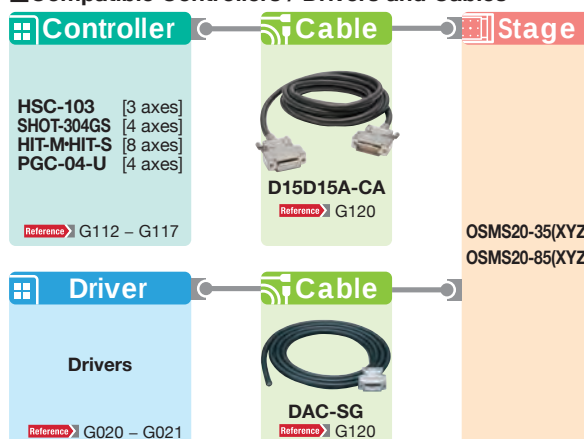
Part Number	A	B	C	D	E	F	G	H
OSMS20-35(XYZ)-M6	288.2	166.4	60.8	182.6	8-φ4.5	75 (25×3)	17.5	8.3
OSMS20-85(XYZ)-M6	338.2	191.4	85.8	232.6	10-φ4.5	100 (25×4)	42.5	33.3

OSMS20-*(XYZ)-INCH

Hexagon socket head cap screw 8/32UNCx5/16...8 screws (35)
Hexagon socket head cap screw 8/32UNCx5/16...10 screws (85)



Part Number	A	B	C	D	E	F	G	H
OSMS20-35(XYZ)-INCH	287.8	166	60.8	182.6	8-φ4.5	76.2 (25.4×3)	17.5	8.3
OSMS20-85(XYZ)-INCH	338.2	191.4	85.8	232.6	10-φ4.5	101.6 (25.4×4)	42.5	33.3

Connection Diagram**Compatible Controllers / Drivers and Cables**

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