

Precision motorized stages with built-in compact optical scales make highly accurate and reliable full closed loop system using Sigma-Koki controllers (SHOT-302GS/304GS, HIT-M-HIT-S).



- U-shaped guide rail offers light weight, and minimized deflection to achieve high stiffness.
- Includes a compact scale built in while keeping the installation space the same as that of the equivalent open loop OSMS series.

Guide

- ▶ Contact our Sales Division for replacement of motors or for stabilizing (drop-preventing) mechanism.

[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

- ▶ Contact our Sales Division to use the stage as an XY axis or a Z axis stage.

Specifications

Part Number		OSMS(CS)26-100(X)	OSMS(CS)26-200(X)
Part Number (-M6)		OSMS(CS)26-100(X)-M6	OSMS(CS)26-200(X)-M6
Part Number (-INCH)		OSMS(CS)26-100(X)-INCH	OSMS(CS)26-200(X)-INCH
Mechanical Specifications	Travel [mm]	100	200
	Stage Size [mm] (M6, INCH)	100×100 (120×120)	100×100 (120×120)
	Feed Screw	Ball screw diameter $\phi 8$ mm, 2mm lead	Ball screw diameter $\phi 8$ mm, 2mm lead
	Positioning Slide	Outer rail structure	Outer rail structure
	Stage Material	Aluminum	Aluminum
	Finish	Black anodized	Black anodized
	Weight [kg]	3.2	4.3
Accuracy Specifications	Resolution	(Full) [μ m/pulse]	4
		(Half) [μ m/pulse]	2
	MAX Speed [mm/sec]		40
	Positioning Accuracy [μ m]		15
	Positional Repeatability [μ m]		3
	Load Capacity [N]		117 (12.0kgf)
	Moment Stiffness	Pitch [$^{\circ}$ /N·cm]	0.23
		Yaw [$^{\circ}$ /N·cm]	0.12
		Roll [$^{\circ}$ /N·cm]	0.2
	Lost Motion [μ m]		5
	Backlash [μ m]		3
	Parallelism [μ m]		50
	Running Parallelism [μ m]		10
	Pitch [$^{\circ}$] / Yaw [$^{\circ}$]		30/25
Sensor	Sensor Part Number		Micro photo sensor: GP1S092HCP1F (Sharp Corporation)
	Limit Sensor		Equipped (NORMAL CLOSE)
	Origin Sensor		Equipped (NORMAL OPEN)
	Proximity Origin Sensor		Equipped (NORMAL OPEN)
Scale head	Resolution [μ m]		0.5

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±10%
	Current Consumption	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
Scale head	Power Voltage / Current Consumption	DC5V±5% / 50mA

Compatible Cable

Cable	Driver Cable	D15D15A-CA
	Scale Cable	GSEF-CA-3

Compatible Driver / Controller

Control System	Compatible Driver	—
	Compatible Controller	SHOT-302GS, SHOT-304GS, HIT-M-HIT-S

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40 × 40 mm

60 × 60 mm

80 × 80 mm

85 × 85 mm

100 × 100 mm

120 × 120 mm

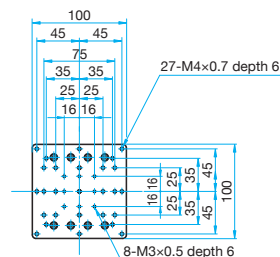
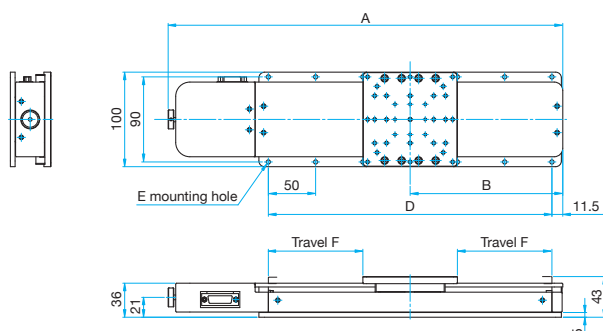
Others



Outline Drawing

OSMS(CS)26-*(X)

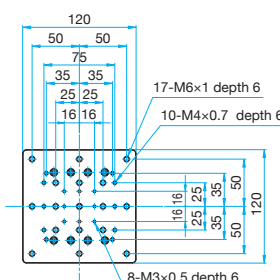
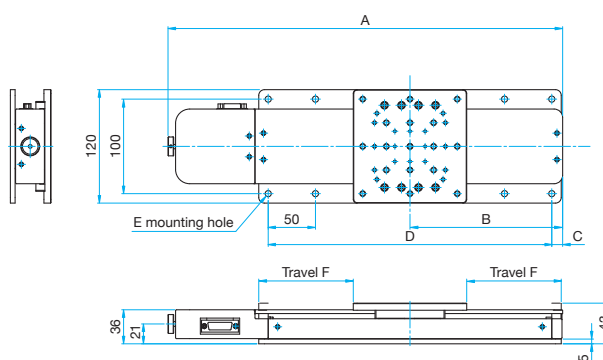
Hexagon socket head cap screw M4×10...10 screws (100)
Hexagon socket head cap screw M4×10...14 screws (200)



Part Number	A	B	C	D	E	F
OSMS(CS)26-100(X)	317.5	111.5	11.5	200 (50×4)	10-φ4.5	50
OSMS(CS)26-200(X)	417.5	161.5	11.5	300 (50×6)	14-φ4.5	100

OSMS(CS)26-*(X)-M6

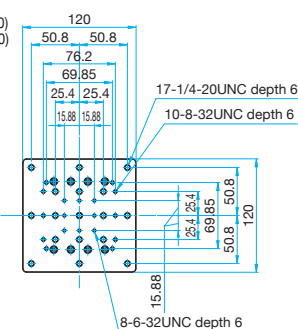
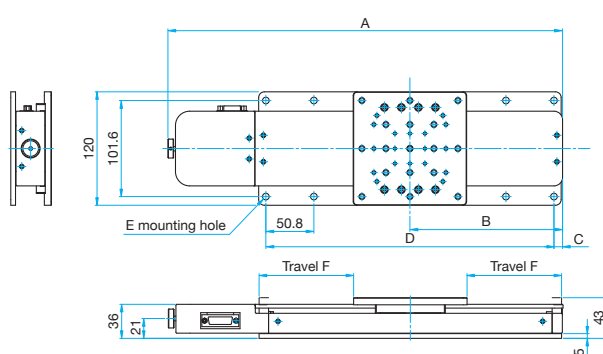
Hexagon socket head cap screw M6×10...10 screws (100)
Hexagon socket head cap screw M6×10...14 screws (200)



Part Number	A	B	C	D	E	F
OSMS(CS)26-100(X)-M6	317.5	111.5	11.5	200 (50×4)	10-φ6.5	50
OSMS(CS)26-200(X)-M6	417.5	161.5	11.5	300 (50×6)	14-φ6.5	100

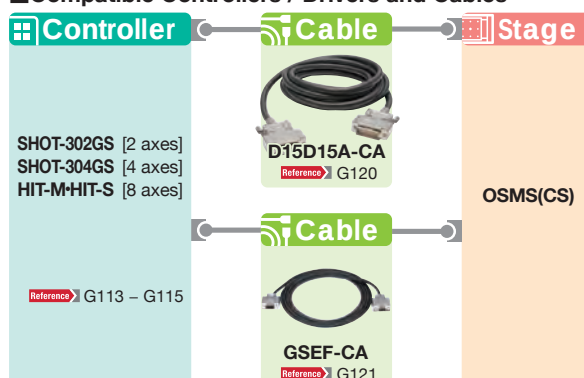
OSMS(CS)26-*(X)-INCH

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



Part Number	A	B	C	D	E	F
OSMS(CS)26-100(X)-INCH	317.5	111.5	9.9	203.2 (50.8×4)	10-φ7	50
OSMS(CS)26-200(X)-INCH	417.5	161.5	9.1	304.8 (50.8×6)	14-φ7	100

Compatible Controllers / Drivers and Cables



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