

Motorized Extended Guide Goniometer

Stage Size 40 × 40 mm

OSMS-40A

RoHS

CE

High precision motorized goniometers with integrated bearing ways for superior stiffness, accuracy and durability.

Their smooth motion makes them ideal for frequent angle adjustment.



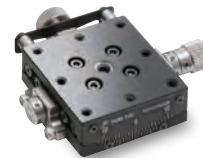
- Extended Contact bearing ways are machined directly into the main body reduce the number of parts and assembly time, making these very durable and cost effective.
- Attachment pins (accessories) are ideal for positioning when assembling into $\alpha\beta$ axis or mounting on various instruments or devices.

Guide

- ▶ Contact our Sales Division if you desire to assemble into an $\alpha\beta$ axis stage.
- ▶ Contact our Sales Division if you desire a rotation center height not listed in the catalog.
- ▶ Manual type (GOHT-40) is also available.

[Reference](#) E174

[WEB Reference](#) [Catalog Code](#) W7092



GOHT-40A***

Specifications

Part Number		OSMS-40A60	OSMS-40A75	
(Opposite Model)		OSMS-40A60R	OSMS-40A75R	
Mechanical Specifications	Travel [°]	±5	±4	
	Stage Size [mm]	40×40	40×40	
	Travel Mechanism (reduction ratio)	Worm gear (1: 332)	Worm gear (1: 406)	
	Positioning Slide	Extended Contact Ball Guide	Extended Contact Ball Guide	
	Stage Material	SUS440C quench hardened	SUS440C quench hardened	
	Finish	Super black chrome	Super black chrome	
	Weight [kg]	0.4	0.4	
Size Tolerance	Stage Height [mm]	15	15	
	Rotation Center Height [mm]	60±0.1	75±0.1	
	Rotation Center Deflection Accuracy [mm]	Within φ0.01	Within φ0.01	
Accuracy Specifications	Resolution	(Full) [°/pulse]	about 0.00217	about 0.00177
		(Half) [°/pulse]	about 0.00108	about 0.00089
	MAX Speed [°/sec]		10	8.9
	Positional Repeatability [°]		±0.004	±0.004
	Load Capacity [N]		19.6(2.0kgf)	19.6(2.0kgf)
	Moment Stiffness [°/N·cm]		Roll 0.6 Yaw 0.6	Roll 0.6 Yaw 0.6
	Lost Motion [°]		0.02	0.02
Sensor	Sensor Part Number			Micro photo sensor: GP1S092HCPIF(Sharp Corporation): Limit Sensor
	Limit Sensor		Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)
	Origin Sensor		None	None

Motor / Sensor Specifications

Motor	Type	5-phase stepping motor 0.75A/phase (Oriental Motor Co., Ltd.)	
	Motor Part Number	PK523HPB-C12 (□28mm)	
	Step Angle	0.72°	
Sensor	Power Voltage	DC5 ~ 24V±10%	
	Current Consumption	40mA or lower (20mA 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	

Compatible Driver / Controller

Control System	Compatible Driver	SG-5M, SG-5MA, SG-55M, SG-55MA, SG-514MSC, MC-7514PCL	
	Compatible Controller	GSC-01, GSC-02, SHOT-702, GIP-101, SHOT-302GS, SHOT-304GS, HIT-M-HIT-S, PGC-04-U	

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Vacuum

Options

40 × 40 mm

60 × 60 mm

80 × 80 mm

85 × 85 mm

100 × 100 mm

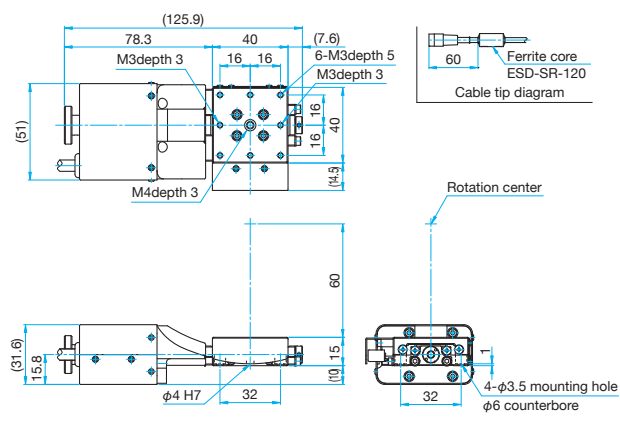
120 × 120 mm

Others

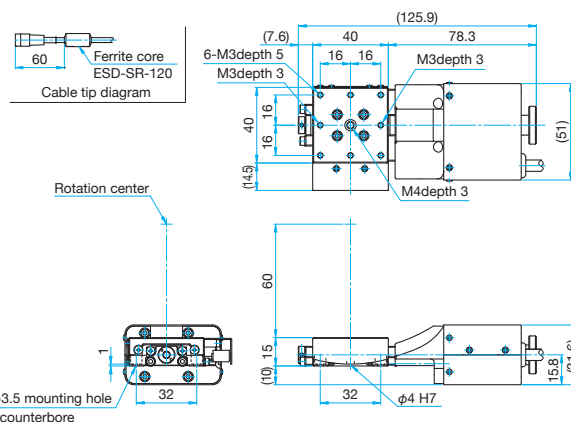


Outline Drawing

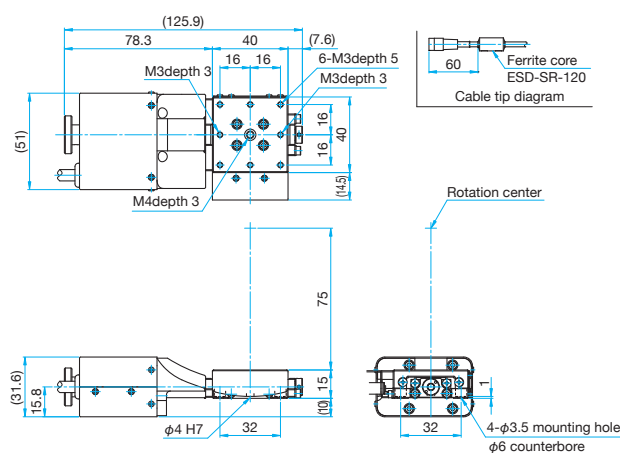
OSMS-40A60 Hexagon socket head cap screw M3×6...4 screws, Attachment pins



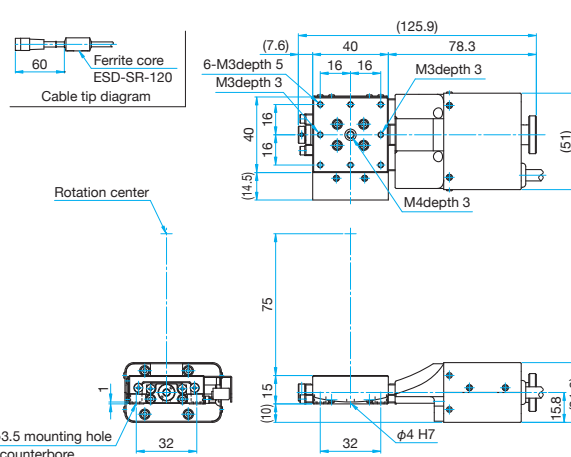
OSMS-40A60R Hexagon socket head cap screw M3×6...4 screws, Attachment pins



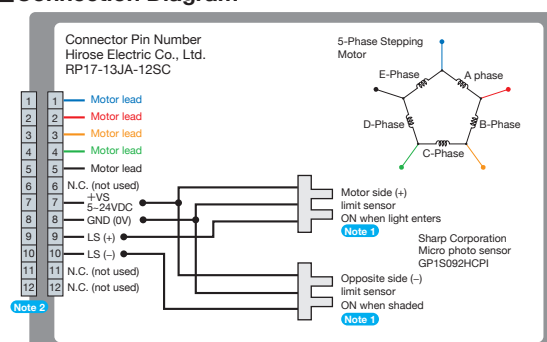
OSMS-40A75 Hexagon socket head cap screw M3×6...4 screws, Attachment pins



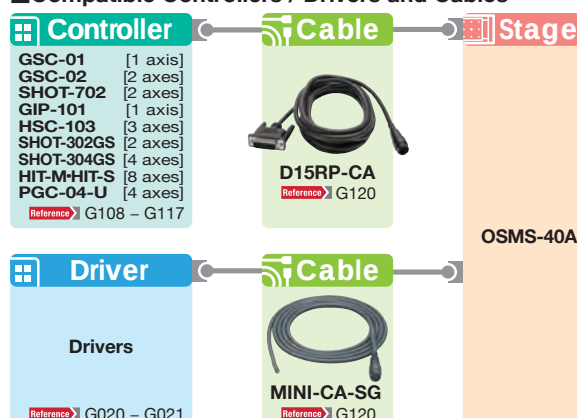
OSMS-40A75R Hexagon socket head cap screw M3×6...4 screws, Attachment pins



Connection Diagram



Compatible Controllers / Drivers and Cables



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