



SGSP Series Translation Motorized Stages - 5 Phase Stepping Motor

SGSP26-(X) Stage size □80mm



Stepping motor driven stages, ideal for positioning of measuring instruments or inspection tools from which high stiffness and high precision are required.



- U-shaped rail offers light weight, and minimized deflection to achieve high stiffness.

Guide

► Contact our International Sales Division if you desire to change motors, etc. [Reference](#) I019, I085 (Question Sheet)

► Dust-proof cover reel and grease change are optionally available. [Reference](#) I017, I018

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

Attention

► Two X axis stages cannot be assembled into an XY axis stage. A special mounting plate is required. [Reference](#) I014

Specifications						
Part Number		SGSP26-50(X)	SGSP26-100(X)	SGSP26-150(X)	SGSP26-200(X)	
Mechanical Specifications	Travel [mm]	50	100	150	200	
	Table Size [mm]	80×80	80×80	80×80	80×80	
	Feed Screw [mm]	Ball screw diameter φ8mm, 2mm lead	Ball screw diameter φ8mm, 2mm lead	Ball screw diameter φ8mm, 2mm lead	Ball screw diameter φ8mm, 2mm lead	
	Positioning Slide	Outer rail structure	Outer rail structure	Outer rail structure	Outer rail structure	
	Stage Top Material	Aluminum	Aluminum	Aluminum	Aluminum	
	Finish	Black anodized	Black anodized	Black anodized	Black anodized	
	Weight [kg]	1.4	1.7	2.0	2.5	
Accuracy Specifications	Resolution	(Full) [μm/pulse]	4	4	4	4
		(Half) [μm/pulse]	2	2	2	2
	MAX Speed [mm/sec]		30	30	30	30
	Positioning Accuracy [μm]		5	10	15	15
	Positional Repeatability [μm]		3	3	6	6
	Load Capacity [N]		117 (12.0kgf)	117 (12.0kgf)	117 (12.0kgf)	117 (12.0kgf)
	Moment Stiffness	Pitch [°/N·cm]	0.23	0.23	0.23	0.23
		Yaw [°/N·cm]	0.12	0.12	0.12	0.12
		Roll [°/N·cm]	0.2	0.2	0.2	0.2
	Lost Motion [μm]		3	3	5	5
	Backlash [μm]		3	3	3	3
	Parallelism [μm]		50	50	50	50
	Running Parallelism [μm]		10	10	10	10
	Pitch [°] / Yaw [°]		25/20	25/20	25/20	30/25
Sensor	Sensor Part Number		Micro photo sensor: PM-L24 (SUNX Co., Ltd.)			
	Limit Sensor		Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)
	Origin Sensor		None	None	None	None
	Proximity Origin Sensor		None	None	None	None

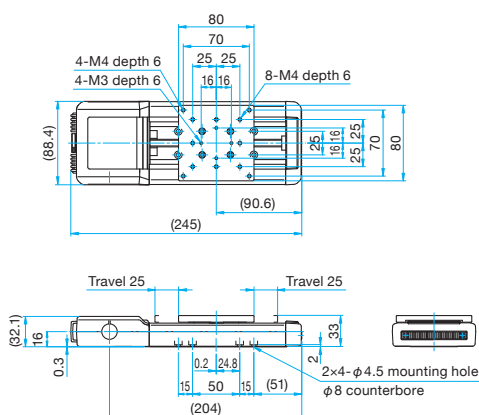
Motor / Sensor Specifications		
Motor	Type	5-phase stepping motor 0.75A/phase (Oriental Motor Co., Ltd.)
	Motor Part Number	C9863-90215P (□28mm)
	Step Angle	0.72°
Sensor	Power Voltage	DC5 – 24V ±10%
	Current Consumption	30mA or lower (15mA or lower per sensor)
	Control Output	NPN open collector output DC30V or lower, 50mA or lower
	Output Logic	When shaded: Output transistor OFF (no conduction)

Compatible Driver / Controller		
Control System	Compatible Driver	SG-5M, SG-5MA, SG-55M, SG-55MA, SG-514MSC, SG-5151, KR-525M
	Compatible Controller	PAT-001, GSC-01, SHOT-102, GSC-02, SHOT-702, GIP-101, SHOT-302GS, SHOT-304GS, HIT-M/HIT-S

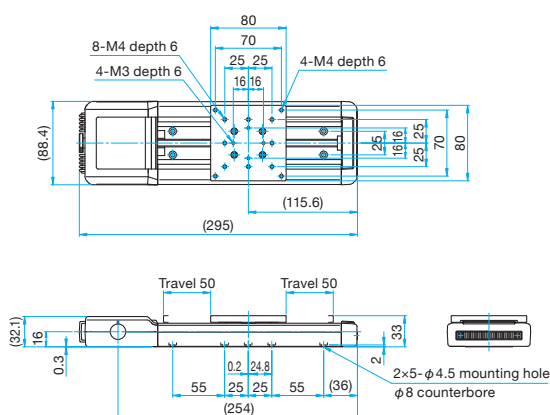


Outline Drawing

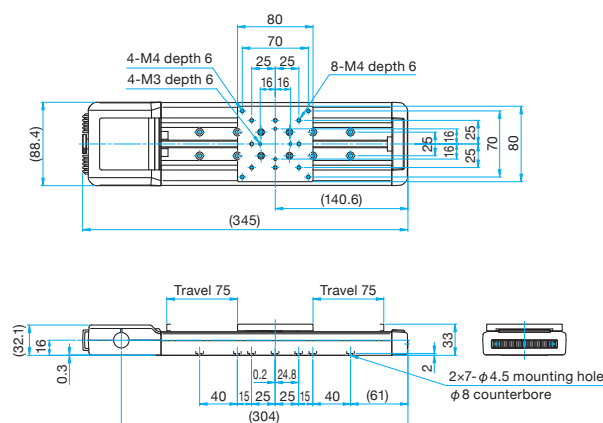
SGSP26-50(X) Hexagonal socket head cap screw M4×8...6 screws



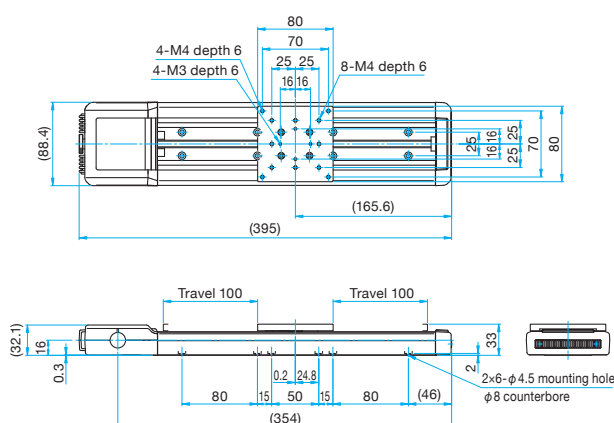
SGSP26-100(X) Hexagonal socket head cap screw M4×8...6 screws



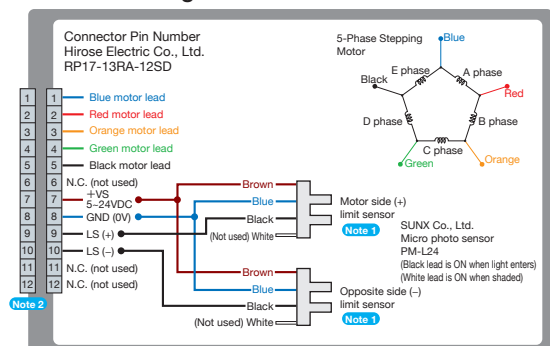
SGSP26-150(X) Hexagonal socket head cap screw M4×8...6 screws



SGSP26-200(X) Hexagonal socket head cap screw M4×8...8 screws



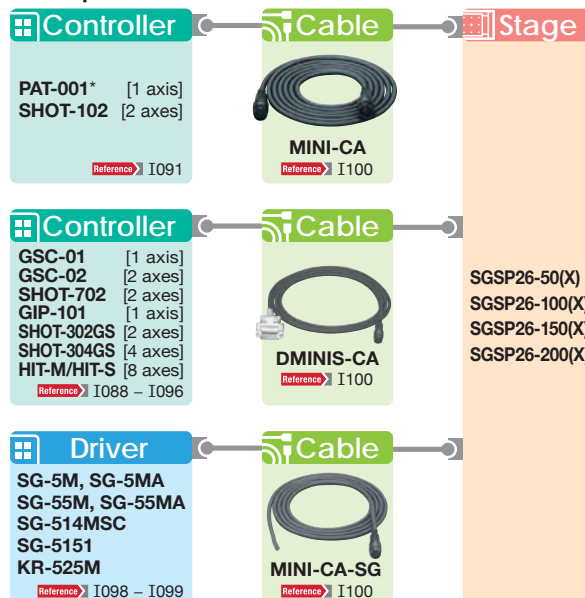
Connection Diagram



Note 1 The motor side limit sensor is the + direction limit sensor. Motorized stages are not fitted with origin and proximity origin sensors. Limit sensors are used as origin detection sensors.

Note 2 Compatible cable connector: Hirose Electric Co., Ltd. RP17-13PA-12PC/RP17-PC-122

Compatible Controllers / Drivers and Cables



* PAT-001 will be discontinued in September 2012, and will be replaced by GSC-01.

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With Scale

40mm

50mm

60mm

70mm

80mm

Others