

NEW Motorized Extended Guide Goniometer

ASG-50A

Stage size □50mm

RoHS

Application Systems

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Piezo Stage

Precision Linear MS

High Speed MS

Motorized Goniometer

Motorized Rotation

Multiaxis Motorized

Industrial Robot

Controller & Driver & Cable

Custom-Built MS

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

Their smooth movement is ideal for frequent angle adjustment.



- Cost-effective motorized stages achieved by integrated structure in which guides are directly processed on the main body to reduce the number of parts and assembly time.
- Attachment pins (accessories) are ideal for positioning when assembling into $\alpha\beta$ axis or mounting on various instruments or devices.

Guide

- ▶ Contact our International Sales Division if you desire to assemble into an $\alpha\beta$ axis stage.
- ▶ Manual type (ASG-50) is also available. [Reference](#) G150



ASG-50

Specifications

Part Number		NEW ASG-50A50	NEW ASG-50A68	NEW ASG-50A86	
(Opposite model)		NEW ASG-50A50R	NEW ASG-50A68R	NEW ASG-50A86R	
Mechanical Specifications	Travel [°]	±10	±8	±6	
	Table Size [mm]	50×50	50×50	50×50	
	Travel Mechanism (reduction ratio)	Worm gear (1:232)	Worm gear (1:300)	Worm gear (1:375)	
	Positioning Slide	Extended Contact Ball Guide	Extended Contact Ball Guide	Extended Contact Ball Guide	
	Stage Material	SUS440C quench hardened	SUS440C quench hardened	SUS440C quench hardened	
	Finish	Electroless nickel	Electroless nickel	Electroless nickel	
	Weight [kg]	0.9	0.9	0.9	
Size Tolerance	Stage Height [mm]	18	18	18	
	Rotation Center Height [mm]	50±0.1	68±0.1	86±0.1	
	Rotation Center Deflection Accuracy [mm]	Within φ0.01	Within φ0.01	Within φ0.01	
Accuracy Specifications	Resolution	(Full) [°/pulse]	about 0.00310	about 0.0024	about 0.00192
		(Half) [°/pulse]	about 0.00155	about 0.0012	about 0.00096
	MAX Speed [°/sec]	9.3	7.2	5.8	
	Positional Repeatability [°]	±0.004	±0.004	±0.004	
	Load Capacity [N]	29.4 (3.0kgf)	29.4 (3.0kgf)	29.4 (3.0kgf)	
	Moment Stiffness [°/N·cm]	Roll 0.4, Yaw 0.4	Roll 0.4, Yaw 0.4	Roll 0.4, Yaw 0.4	
	Lost Motion [°]	0.02	0.02	0.02	
Sensor	Sensor Part Number	Micro photo sensor: GP1S097HCZ0F (Sharp Corporation): Limit sensor, origin sensor			
	Limit Sensor	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	
	Origin Sensor	Equipped (NORMAL OPEN)	Equipped (NORMAL OPEN)	Equipped (NORMAL OPEN)	

Motor / Sensor Specifications

Motor	Type	5-phase stepping motor 0.75A/phase (Tamagawa Seiki Co., Ltd.)
	Motor Part Number	TS3667N43E7 (□42mm)
	Step Angle	0.72°
Sensor	Power Voltage	DC+5V - +24V
	Current Consumption	60mA or lower (20mA per sensor)
	Control Output	NPN open collector output 50mA
	Output Logic	When shaded: Output transistor OFF (no conduction): Limit sensor When shaded: Output transistor OFF (conduction): Origin sensor

Compatible Driver / Controller

Control System	Compatible Driver	SD-5M, SD-5MA, SD-55M, SD-55MA, SD-514MSC, SD-5151, SD-525M
	Compatible Controller	ASC-702, ASCG-101, ASC-302GS, ASC-304GS, ESC-M/ESC-S

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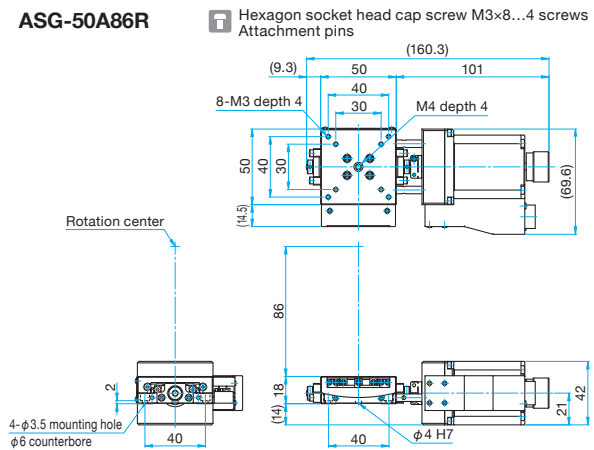
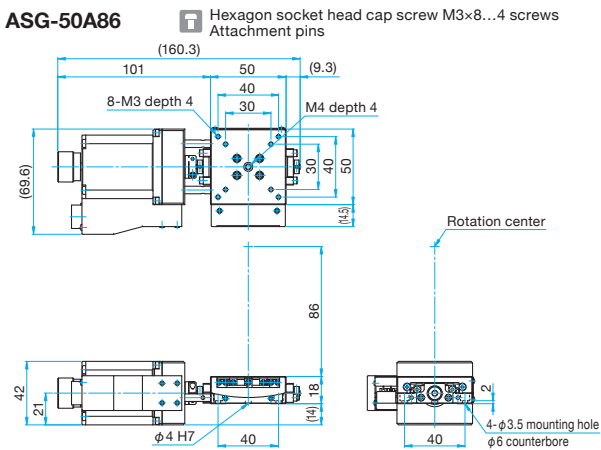
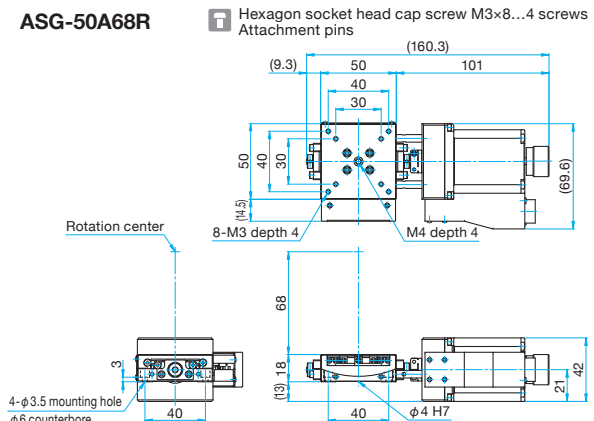
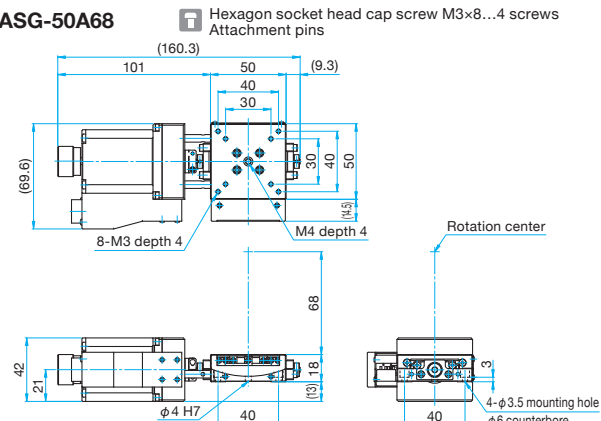
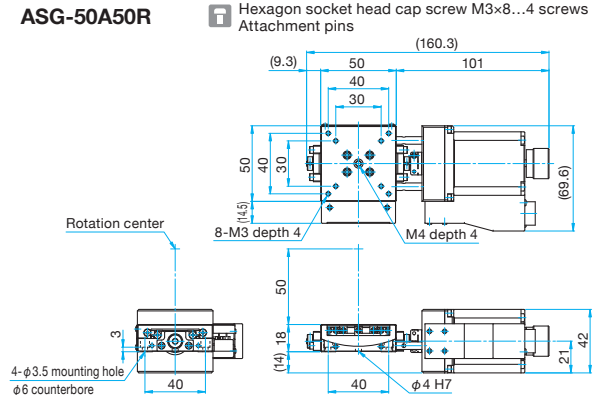
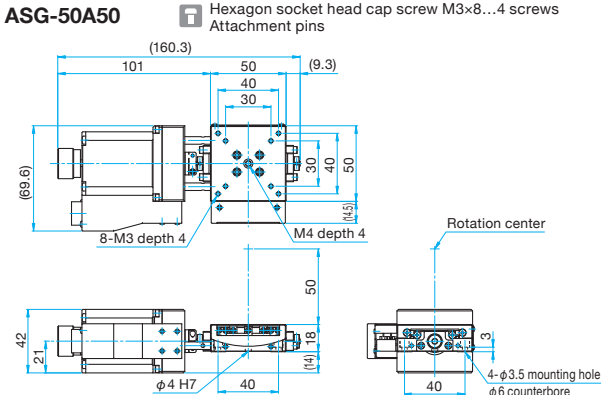
ASG-50A

Stage size □50mm

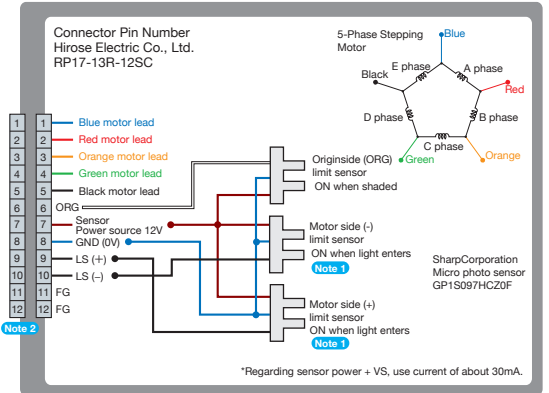
RoHS



Outline Drawing

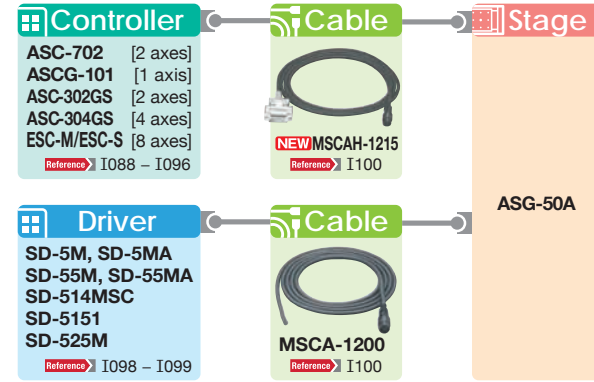


Connection Diagram



Note 1 The motor side limit sensor is the + direction limit sensor. Motorized stages are not fitted with proximity origin sensors.
Note 2 Compatible cable connector: Hirose Electric Co., Ltd. RP17-13PA-12PC/RP17-PC-122

Compatible Controllers / Drivers and Cables



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