

Extended Contact Ball Slide Goniometers

$\alpha\beta$ Axis Extended Contact Ball Slide Goniometers

GOHT-65A

Stage Size 65 x 65 mm

GOHT-65B

RoHS

RoHS

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

- Centering accuracy 10x better than typical dovetail goniometers.
- Designed for use in a variety of orientations. Not limited to horizontal mounting.
- Integral-guide structure offers high performance of rotation center displacement $\phi 0.007\text{mm}$.
- Disc clamp improves the stability of clamping.
- Designed for use with precision alignment pins for ease of assembly.



Guide

- ▶ Attachment pins (GOHT-AP) can be purchased separately.
[Reference](#) E010 [Catalog Code](#) W7112
- ▶ Contact our Sales Division for information about custom center heights.

Attention

- ▶ Locking mechanism is operated using thumbscrew on side of stage.

Specifications

Part Number	METRIC	GOHT-65A50B-M6	GOHT-65A75B-M6	GOHT-65A100B-M6	GOHT-65B50B-M6	GOHT-65B75B-M6
	INCH	GOHT-65A50BUU	GOHT-65A75BUU	GOHT-65A100BUU	GOHT-65B50BUU	GOHT-65B75BUU
(Opposite Model)	METRIC	GOHT-65A50BR-M6	GOHT-65A75BR-M6	GOHT-65A100BR-M6	GOHT-65B50BR-M6	GOHT-65B75BR-M6
	INCH	GOHT-65A50BRUU	GOHT-65A75BRUU	GOHT-65A100BRUU	GOHT-65B50BRUU	GOHT-65B75BRUU
Stage Size [mm]		65×65	65×65	65×65	65×65	65×65
Axes of Travel		α axis			$\alpha\beta$ axis	
Rotation Center Height [mm]		50±0.1	75±0.1	100±0.1	50±0.2	75±0.2
Angle Range [°]	(Upper) β axis	—	—	—	±20	±15
	(Lower) α axis	±20	±15	±10	±15	±10
Vernier Readable Resolution		0.1°	0.1°	0.1°	0.1°	0.1°
Travel per Knob Rotation [°]	(Upper) β axis	—	—	—	about 1.70	about 1.22
	(Lower) α axis	about 1.70	about 1.22	about 0.95	about 1.22	about 0.95
Rotation Center Displacement [mm]		$\phi 0.007$ or less	$\phi 0.007$ or less	$\phi 0.007$ or less	$\phi 0.007$ or less	$\phi 0.007$ or less
Guide Method		Extended contact ball bearing guide				
Primary Material		SUS440C quench hardened				
Finish		Super black chrome				
Load Capacity [N]		98 (10kgf)	98 (10kgf)	98 (10kgf)	98 (10kgf)	98 (10kgf)
Max. Moment Capacity	Pitch [N·m]	3.5	3.5	3.5	3.5	3.5
	Roll [N·m]	6.5	6.5	6.5	3.5	3.5
	Yaw [N·m]	3.5	3.5	3.5	3.5	3.5
Moment Stiffness	Roll [°/N·cm]	0.3	0.3	0.3	—	—
	Yaw [°/N·cm]	0.3	0.3	0.3	—	—
Parallelism [μm]		30	30	30	30.0	30.0
Weight [kg]		0.75	0.75	0.75	1.5	1.5

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XZ Axis Stages

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Rotation Stages

Goniometer

Tilt Stages

Vacuum

Ball Bearing Guide

Crossed Roller

Dovetail

Lapping

V Groove Screw

Others

15 × 15 mm

25 × 25 mm

40 × 40 mm

60 × 60 mm

65 × 65 mm

80 × 80 mm

100 × 100 mm

120 × 120 mm

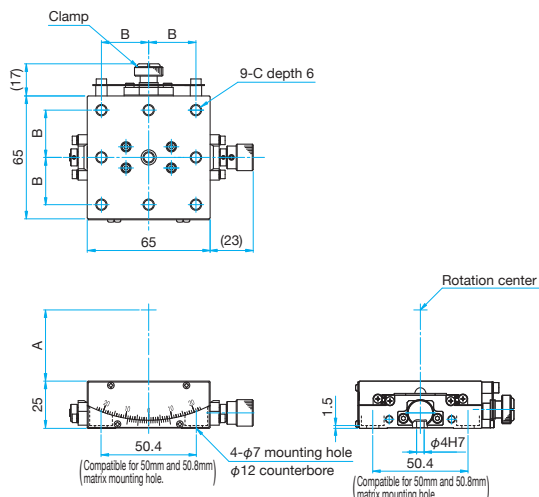
Others



Outline Drawing

GOHT-65A**B-M6/65A**BUU

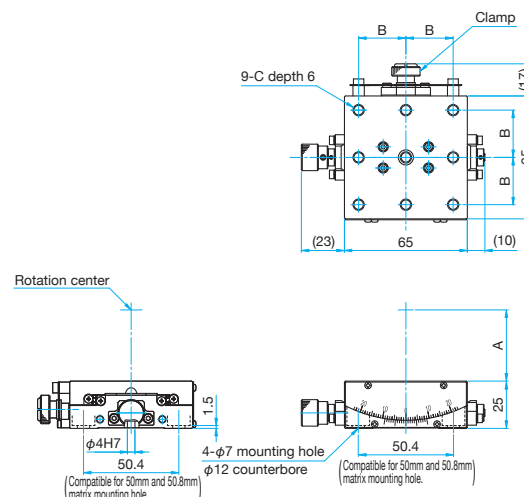
- Low head hexagon socket head cap screw (stainless steel construction)
M6×6...4 screws, Attachment pins for M6...1 pin (M6)
Low head hexagon socket head cap screw (stainless steel construction)
1/4-20UNC×1/4...4 screws, Attachment pins for 1/4-20UNC...1 pin (UU)



Part Number	A (mm)	B (mm)	C
GOHT-65A50B-M6	50	25	M6 P1
GOHT-65A50BUU	50	25.4	1/4-20UNC
GOHT-65A75B-M6	75	25	M6 P1
GOHT-65A75BUU	75	25.4	1/4-20UNC
GOHT-65A100B-M6	100	25	M6 P1
GOHT-65A100BUU	100	25.4	1/4-20UNC

GOHT-65A**BR-M6/65A**BRUU

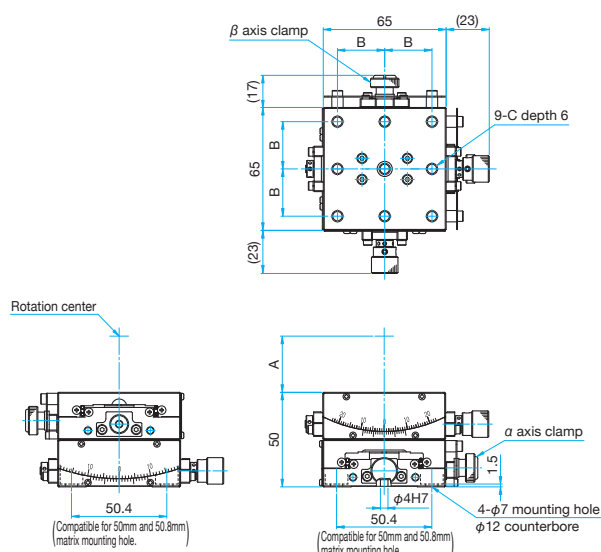
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GOHT-65A50BR-M6	50	25	M6 P1
GOHT-65A50BRUU	50	25.4	1/4-20UNC
GOHT-65A75BR-M6	75	25	M6 P1
GOHT-65A75BRUU	75	25.4	1/4-20UNC
GOHT-65A100BR-M6	100	25	M6 P1
GOHT-65A100BRUU	100	25.4	1/4-20UNC

GOHT-65B**B-M6/65B**BUU

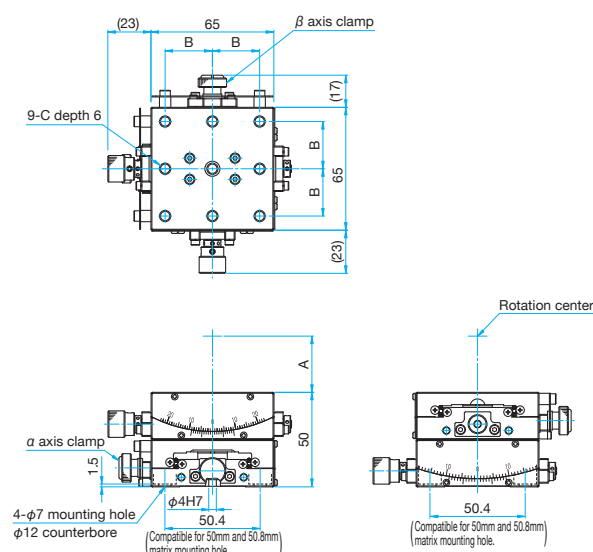
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GOHT-65B50BUU	50	25.4	1/4-20UNC
GOHT-65B75B-M6	75	25	M6 P1
GOHT-65B75BUU	75	25.4	1/4-20UNC

GOHT-65B**BR-M6/65B**BRUU

- Low head hexagon socket head cap screw (stainless steel construction)
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