

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

Stage Size 40 × 40 mm

GOHT-40B

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.
- ▶ Motorized version (OSMS-40B***) also available.
Reference G094 Catalog Code W9098



OSMS-40B***

- ▶ For the surface finishing, the white coating of electroless nickel plating is also available. ▶WEB Reference Catalog Code W7104



Attention

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

Specifications

Part Number	METRIC	GOHT-40B20B	GOHT-40B40B	GOHT-40B60B
	INCH	GOHT-40B20BUU	GOHT-40B40BUU	GOHT-40B60BUU
(Opposite Model)	METRIC	GOHT-40B20BR	GOHT-40B40BR	GOHT-40B60BR
	INCH	GOHT-40B20BRUU	GOHT-40B40BRUU	GOHT-40B60BRUU
Stage Size [mm]		40×40	40×40	40×40
Axes of Travel		$\alpha\beta$ axis		
Rotation Center Height [mm]		20±0.2	40±0.2	60±0.2
Angle Range [°]	(Upper) β axis	±20	±10	±8
	(Lower) α axis	±10	±8	±6
Vernier Readable Resolution		0.1°	0.1°	0.1°
Travel per Knob Rotation [°]	(Upper) β axis	about 2.31	about 1.41	about 1.08
	(Lower) α axis	about 1.41	about 1.08	about 0.89
Rotation Center Displacement [mm]		$\phi 0.007$ 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]		58.8 (6.0kgf)	58.8 (6.0kgf)	58.8 (6.0kgf)
Max. Moment Capacity	Pitch [N·m]	2.0	2.0	2.0
	Roll [N·m]	2.0	2.0	2.0
	Yaw [N·m]	2.0	2.0	2.0
Parallelism [μm]		30	30	30
Weight [kg]		0.4	0.4	0.4

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motorized Stages

Light Sources & Laser Safety

Index

Guide

X Axis Stages

XY Axis Stages

Z Axis Stages

XZ Axis Stages

XYZ Axis Stages

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

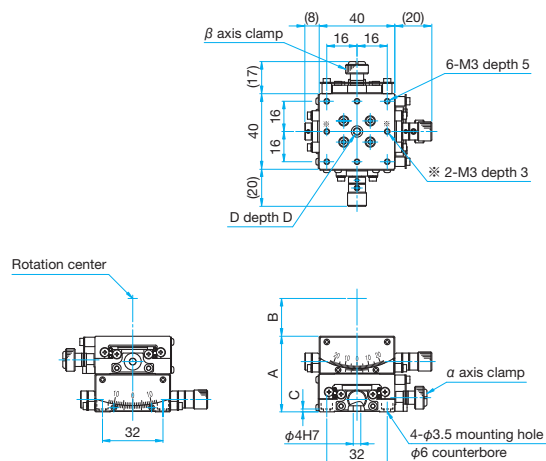
Others



Outline Drawing

GOHT-40B**B

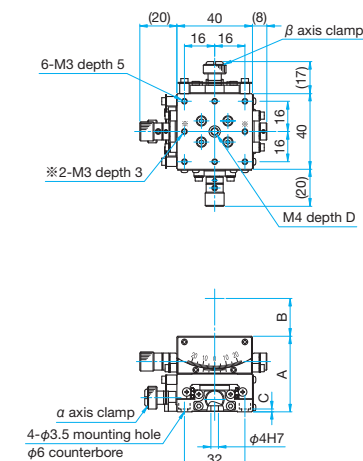
Hexagon socket head cap screw (stainless steel construction) M3×6...4 screws
Attachment pins for M4...1 pin



Part Number	A (mm)	B (mm)	C (mm)	D (mm)
GOHT-40B20B	40	20	1.5	4
GOHT-40B40B	35	40	1	4
GOHT-40B60B	30	60	1	3

GOHT-40B**BR

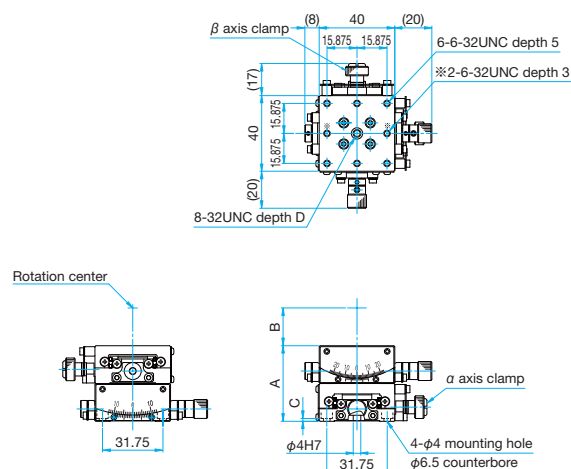
Hexagon socket head cap screw (stainless steel construction) M3×6...4 screws
Attachment pins for M4...1 pin



Part Number	A (mm)	B (mm)	C (mm)	D (mm)
GOHT-40B20BR	40	20	1.5	4
GOHT-40B40BR	35	40	1	4
GOHT-40B60BR	30	60	1	3

GOHT-40B**BUU

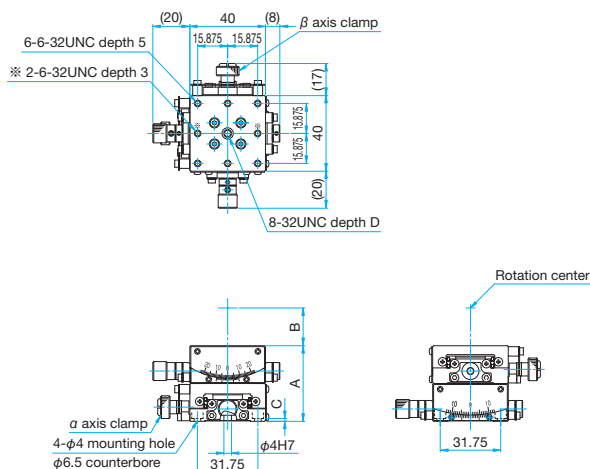
Low head hexagon socket head cap screw (stainless steel construction)
6-32UNC×1/4...4screws, Attachment pins for 8-32UNC...1 pin



Part Number	A (mm)	B (mm)	C (mm)	D (mm)
GOHT-40B20BUU	40	20	1.5	4
GOHT-40B40BUU	35	40	1	4
GOHT-40B60BUU	30	60	1	3

GOHT-40B**BRUU

Low head hexagon socket head cap screw (stainless steel construction)
6-32UNC×1/4...4screws, Attachment pins for 8-32UNC...1 pin



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