



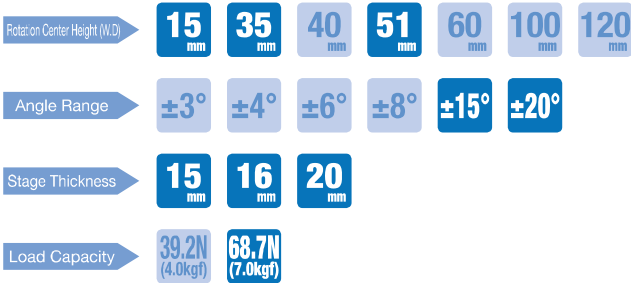
α axis Goniometers
 α axis Stainless Steel Goniometers

MGT11-40 Stage size ☐40mm
MGT21-40 Stage size ☐40mm



Goniometers fitted with dovetail slide and worm gear, suitable for orientation adjustment (angle adjustment or correction).

- The MGT2 series uses high vacuum grease, ideal for use in clean rooms or vacuum applications.



Guide

► The MGT2 series offers stages suitable for use in clean rooms or vacuum applications. **Reference** Vacuum measurement data G009
► Also ideal for use in airtight spaces that have to avoid outgassing.

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☐15mm

☐25mm

☒40mm

☐50mm

☐60mm

☐70mm

☐80mm

☐100mm

☐120mm

Others

SPEC UP

Specifications						
Part Number	MGT11-40-15		MGT11-40-35	MGT11-40-51	MGT21-40-15	MGT21-40-35
Opposite Model	MGT11-40-15R		MGT11-40-35R	MGT11-40-51R	—	—
Table Size [mm]	40×40		40×40	40×40	40×40	40×40
Rotation Center Height [mm]	15±0.1		35±0.1	51±0.1	15±0.1	35±0.1
Angle Range [°]	±20		±20	±15	±20	±20
Vernier Readable Resolution	12′		12′	12′	12′	12′
Travel per Knob Rotation [°]	about 2.83		about 1.74	about 1.27	about 2.83	about 1.74
Rotation Center Displacement [mm]	φ0.1 or less		φ0.1 or less	φ0.1 or less	φ0.2 or less	φ0.2 or less
Positioning Slide	Dovetail slide method		Dovetail slide method	Dovetail slide method	Dovetail slide method	Dovetail slide method
Primary Material	Brass		Brass	Brass	Stainless steel	Stainless steel
Finish	Super black chrome		Super black chrome	Super black chrome	None	None
Load Capacity [N]	68.7 (7.0kgf)		68.7 (7.0kgf)	68.7 (7.0kgf)	68.7 (7.0kgf)	68.7 (7.0kgf)
Max. Moment Capacity	Pitch [N·m]	0.9	0.9	0.9	0.9	0.9
	Roll [N·m]	1.2	1.2	1.2	1.2	1.2
Moment Stiffness	Roll [″/N·cm]	0.51	0.51	0.51	0.51	0.51
Parallelism [μm]	50		50	50	50	50
Weight [kg]	0.25		0.2	0.18	0.25	0.2

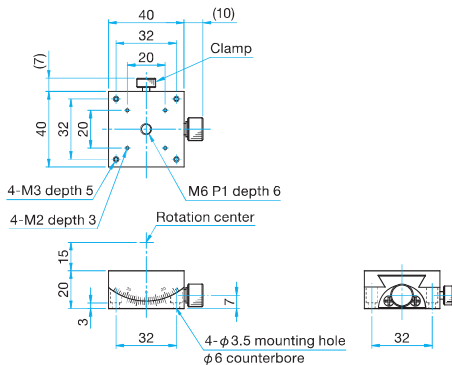
Catalog Code W7098

Catalog Code W7099

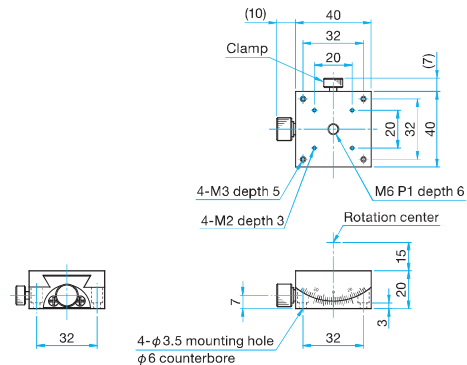


Outline Drawing

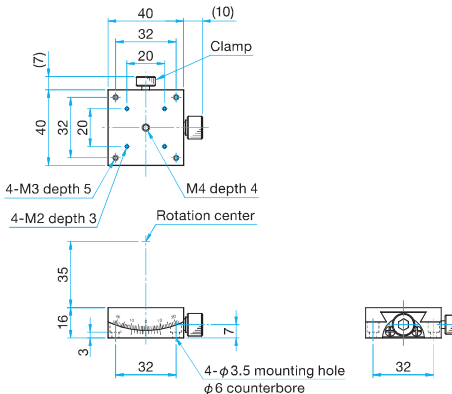
MGT11-40-15 Pan head screw M3x6...4 screws 2.5mm



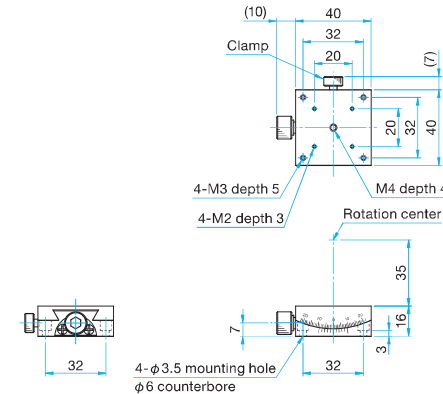
MGT11-40-15R Pan head screw M3x6...4 screws 2.5mm



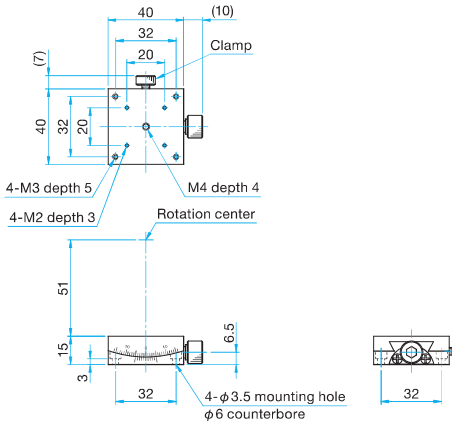
MGT11-40-35 Pan head screw M3x6...4 screws 2.5mm



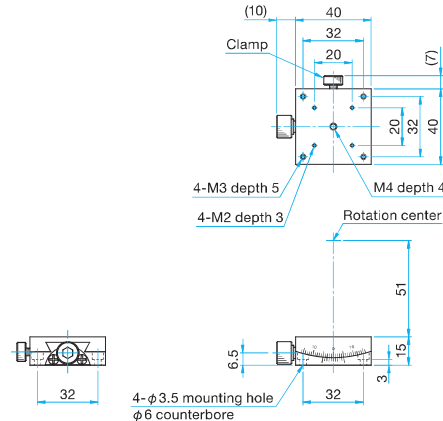
MGT11-40-35R Pan head screw M3x6...4 screws 2.5mm



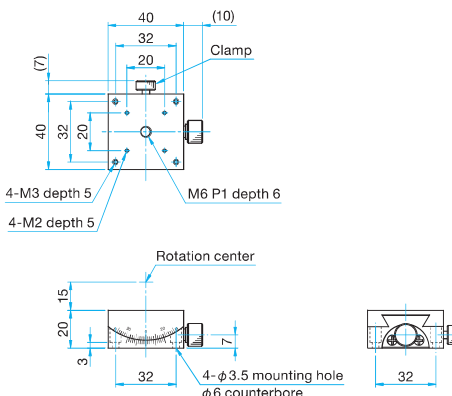
MGT11-40-51 Pan head screw M3x6...4 screws 2.5mm



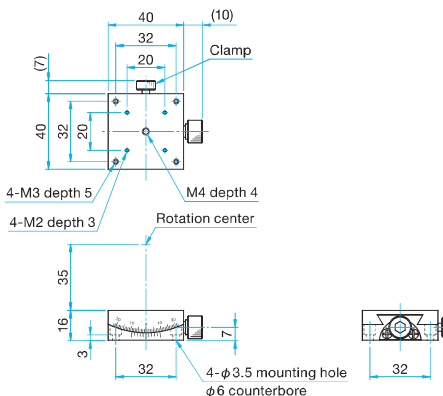
MGT11-40-51R Pan head screw M3x6...4 screws 2.5mm



MGT21-40-15 Hexagon socket head cap screw (stainless steel construction) M3x6...4 screws 2.5mm



MGT21-40-35 Hexagon socket head cap screw (stainless steel construction) M3x6...4 screws 2.5mm



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□15mm

□25mm

□40mm

□50mm

□60mm

□70mm

□80mm

□100mm

□120mm

Others

Goniometers fitted with dovetail slide and worm gear, suitable for orientation adjustment (angle adjustment or correction).

- The MGT2 series uses high vacuum grease, ideal for use in clean rooms or vacuum applications.

Stage ☐ 25mm

Rotation Center Height (W.D)	18 mm	30 mm
Angle Range	±15°	±20°
Stage Thickness	20 mm	22 mm
Load Capacity	19.6N (2.0kgf)	

■ Stage □ 40mm

Rotation Center Height (W.D)	15 mm	20 mm	35 mm	40 mm	60 mm
Angle Range	±8°	±10°	±20°		
Stage Thickness	30 mm	31 mm	35 mm	36 mm	40 mm
Load Capacity	58.8N (6.0kgf)	68.7N (7.0kgf)			



Guide

- ▶ The MGT2 series offers stages suitable for use in clean rooms or vacuum applications. [Reference](#) ▶ Vacuum measurement data G009
- ▶ Also ideal for use in airtight spaces that have to avoid outgassing.

Specifications

Part Number		MGT12-25-18	MGT12-25-30	MGT12-40-15	MGT12-40-35	MGT22-40-15
Opposite Model		MGT12-25-18R	MGT12-25-30R	MGT12-40-15R	MGT12-40-35R	—
Table Size [mm]		25×25	25×25	40×40	40×40	40×40
Rotation Center Height [mm]		18±0.1	30±0.1	15±0.1	35±0.1	15±0.1
Angle Range [°]	(Upper) β axis	±20	±15	±20	±20	±20
	(Lower) α axis	±15	±10	±20	±15	±20
Vernier Readable Resolution		12′	12′	12′	12′	12′
Travel per Knob Rotation [°]	(Upper) β axis	about 3.1	about 2.17	about 2.83	about 1.74	about 2.83
	(Lower) α axis	about 2.17	about 1.67	about 1.74	about 1.27	about 1.74
Rotation Center Displacement [mm]		φ0.1 or less	φ0.1 or less	φ0.1 or less	φ0.1 or less	φ0.2 or less
Positioning Slide		Dovetail slide method	Dovetail slide method	Dovetail slide method	Dovetail slide method	Dovetail slide method
Primary Material		Brass	Brass	Brass	Brass	Stainless steel
Finish		Super black chrome	Super black chrome	Super black chrome	Super black chrome	None
Load Capacity [N]		19.6 (2.0kgf)	19.6 (2.0kgf)	68.7 (7.0kgf)	68.7 (7.0kgf)	68.7 (7.0kgf)
Max. Moment Capacity	Pitch [N·m]	0.35	0.35	0.9	0.9	0.9
	Roll [N·m]	0.35	0.35	0.9	0.9	0.9
Parallelism [μm]		100	100	100	100	100
Weight [kg]		0.13	0.12	0.45	0.38	0.45

Configuration

Part Number	MGT12-25-18	MGT12-25-30	MGT12-40-15	MGT12-40-35	MGT22-40-15
(Upper) β axis	MGT11-25-18	MGT11-25-30	MGT11-40-15	MGT11-40-35	MGT21-40-15
(Lower) α axis	MGT11-25-30	MGT11-25-40	MGT11-40-35	MGT11-40-51	MGT21-40-35

Opposite Model	MGT12-25-18R	MGT12-25-30R	MGT12-40-15R	MGT12-40-35R
(Upper) β axis	MGT11-25-18R	MGT11-25-30R	MGT11-40-15R	MGT11-40-35R
(Lower) α axis	MGT11-25-30R	MGT11-25-40R	MGT11-40-35R	MGT11-40-51R

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□15mm

□25mm

☐ 50mm

□60mm

☐ 70mm

100mm

☐ 120mm

Others

SPEC UP

Catalog Code W7106

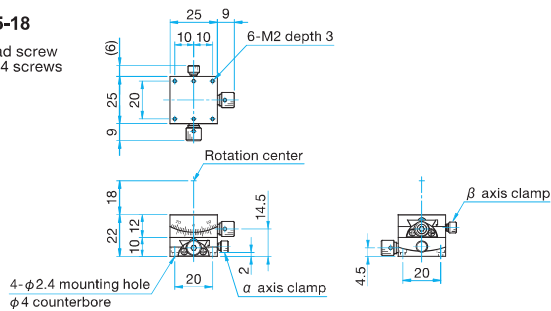
Catalog Code W7107



Outline Drawing

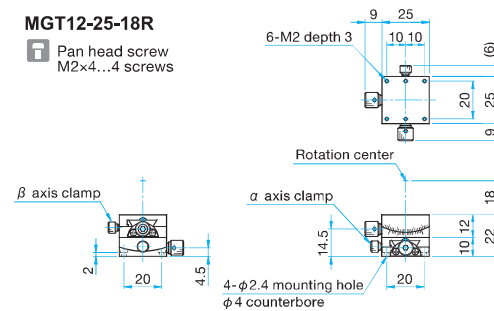
MGT12-25-18

■ Pan head screw
M2×4...4 screws



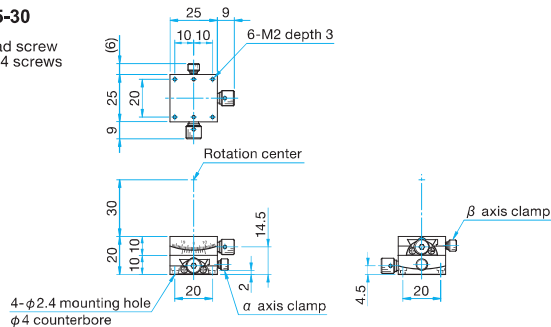
MGT12-25-18R

■ Pan head screw
M2×4...4 screws



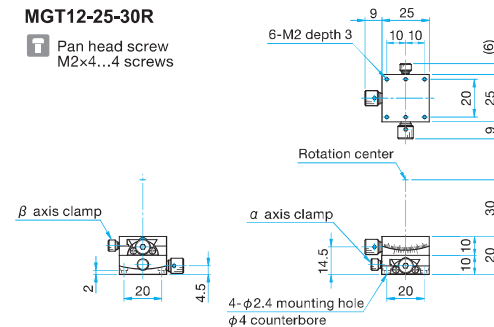
MGT12-25-30

■ Pan head screw
M2×4...4 screws



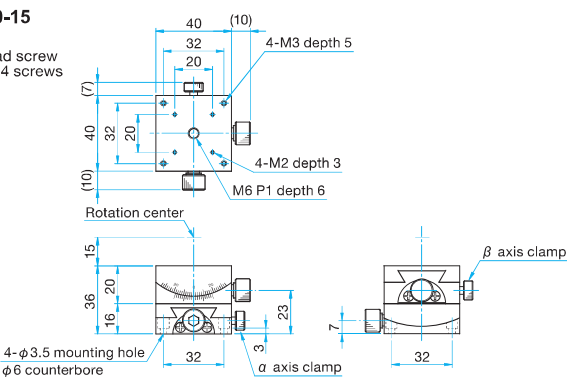
MGT12-25-30R

■ Pan head screw
M2×4...4 screws



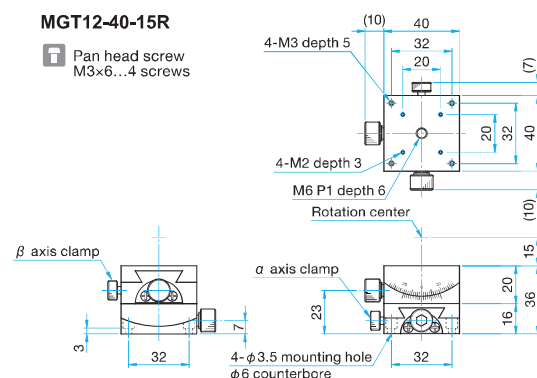
MGT12-40-15

■ Pan head screw
M3×6...4 screws



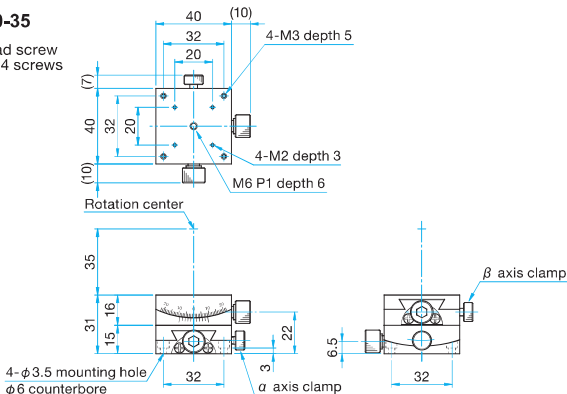
MGT12-40-15R

■ Pan head screw
M3×6...4 screws



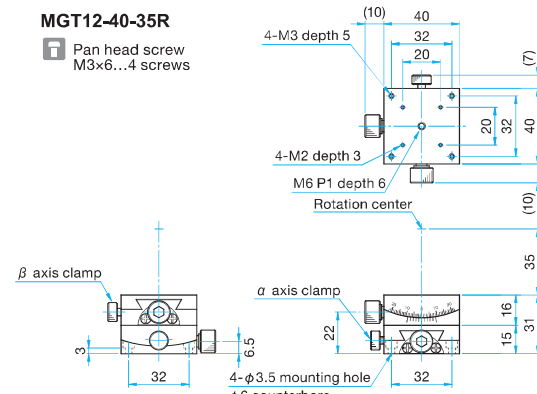
MGT12-40-35

■ Pan head screw
M3×6...4 screws



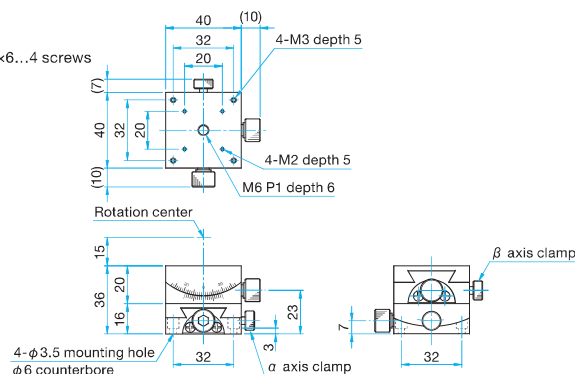
MGT12-40-35R

■ Pan head screw
M3×6...4 screws



MGT22-40-15

■ Hexagon socket head cap screw
(stainless steel construction) M3×6...4 screws
⊙ 2.5mm



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