



α axis Goniometers
 α axis Goniometers

MGT11-15 Stage size ☐15mm
MGT11-25 Stage size ☐25mm

RoHS
RoHS

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

- The goniometer with stage size ☐15mm (MGT11-15-10) is unique to Sigma-Koki.

■ Stage ☐15mm

Rotation Center Height (W.D) **10 mm**
Angle Range **±20°**
Stage Thickness **10 mm**
Load Capacity **9.8N (1.0kgf)**

■ Stage ☐25mm

Rotation Center Height (W.D) **18 mm** **30 mm** **40 mm**
Angle Range **±10°** **±15°** **±20°**
Stage Thickness **10 mm** **12 mm**
Load Capacity **19.6N (2.0kgf)**



Guide

- ▶ To operate the MGT11-15-10, fit a hex wrench to a hexagonal socket.

Attention

- ▶ The MGT11-15-10 is not fitted with scale or clamping mechanism.

X Axis

XY Axis

Z Axis

XZ Axis

XYZ Axis

Rotation

Goniometers /Tilt

Multiaxis

Linear Guide

☐15mm

☐25mm

☐40mm

☐50mm

☐60mm

☐70mm

☐80mm

☐100mm

☐120mm

Others

SPEC UP

Specifications				
Part Number		MGT11-15-10	MGT11-25-18	MGT11-25-30
Opposite Model		—	MGT11-25-18R	MGT11-25-30R
Table Size [mm]		15×15	25×25	25×25
Rotation Center Height [mm]		10±0.1	18±0.1	30±0.1
Angle Range [°]		±20	±20	±15
Vernier Readable Resolution		—	12′	12′
Travel per Knob Rotation [°]		about 5	about 3.1	about 2.17
Rotation Center Displacement [mm]		φ0.1 or less	φ0.1 or less	φ0.1 or less
Positioning Slide		Dovetail slide method	Dovetail slide method	Dovetail slide method
Primary Material		Brass	Brass	Brass
Finish		Super black chrome	Super black chrome	Super black chrome
Load Capacity [N]		9.8 (1.0kgf)	19.6 (2.0kgf)	19.6 (2.0kgf)
Max. Moment Capacity	Pitch [N·m]	0.03	0.35	0.35
	Roll [N·m]	0.05	0.4	0.4
Moment Stiffness	Roll [″/N·cm]	—	1.0	1.0
Parallelism [μm]		50	50	50
Weight [kg]		0.02	0.07	0.06

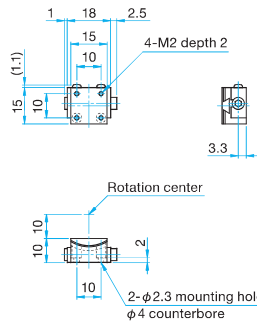
Catalog Code W7096

Catalog Code W7097

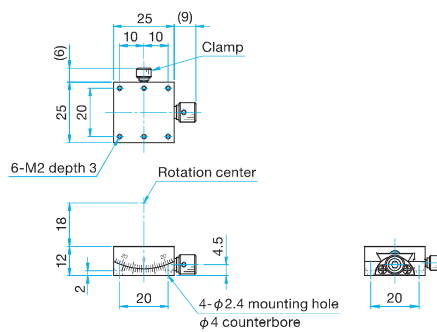


Outline Drawing

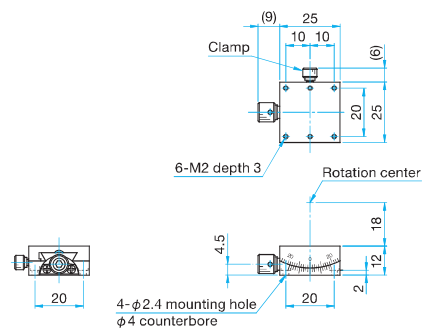
MGT11-15-10 Pan head screw M2x5...2 screws 2.5mm



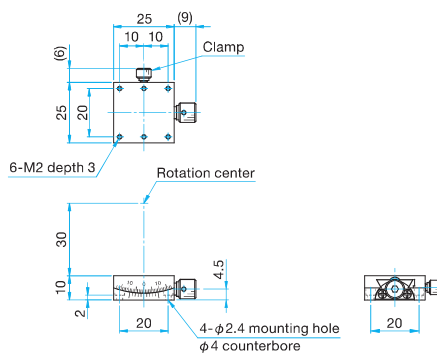
MGT11-25-18 Pan head screw M2x4...4 screws 2.5mm



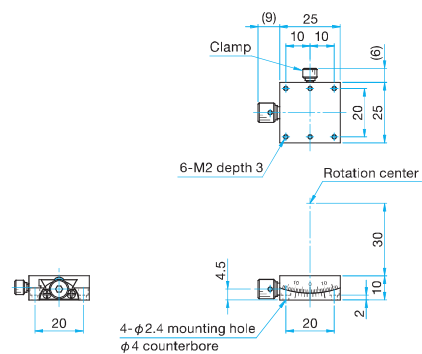
MGT11-25-18R Pan head screw M2x4...4 screws 2.5mm



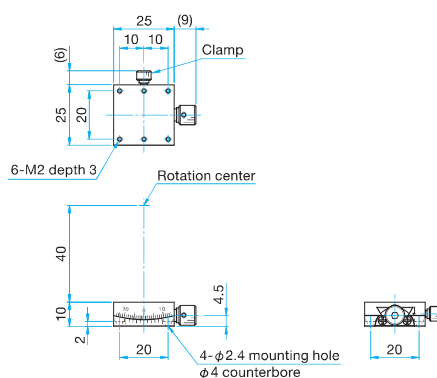
MGT11-25-30 Pan head screw M2x4...4 screws 2.5mm



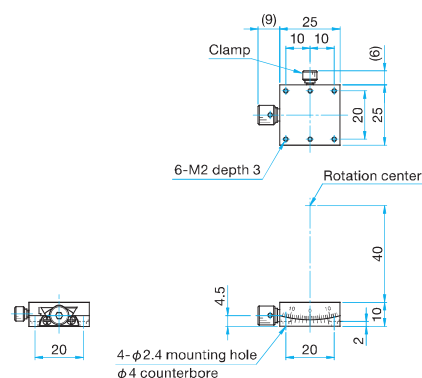
MGT11-25-30R Pan head screw M2x4...4 screws 2.5mm



MGT11-25-40 Pan head screw M2x4...4 screws 2.5mm



MGT11-25-40R Pan head screw M2x4...4 screws 2.5mm



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□15mm

□25mm

□40mm

□50mm

□60mm

□70mm

□80mm

□100mm

□120mm

Others

αβ axis Goniometers / *αβ* axis Goniometers
αβ axis Stainless Steel Goniometers

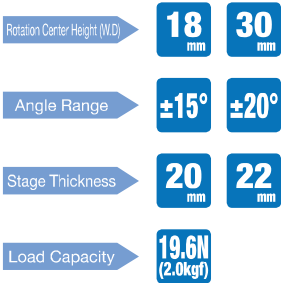
MGT12-25/40 Stage size □25/□40mm
MGT22-40 Stage size □40mm



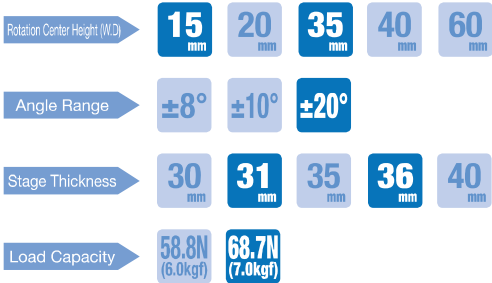
Goniometers fitted with dovetail slide and worm gear, suitable for orientation adjustment (angle adjustment or correction).

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

■ Stage □25mm



■ Stage □40mm



- 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.

SPEC UP

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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□70mm

□80mm

□100mm

□120mm

Others

Catalog Code W7106

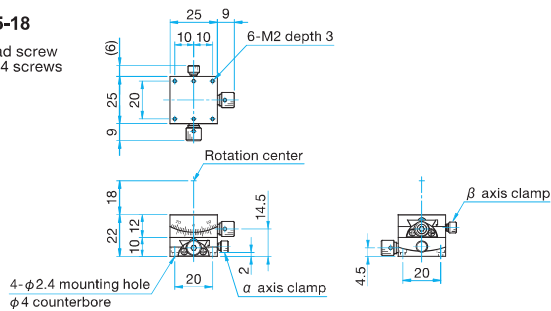
Catalog Code W7107



Outline Drawing

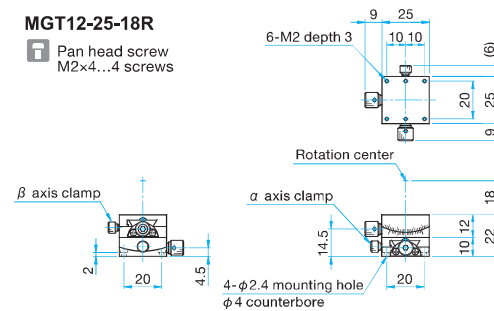
MGT12-25-18

■ Pan head screw
M2×4...4 screws



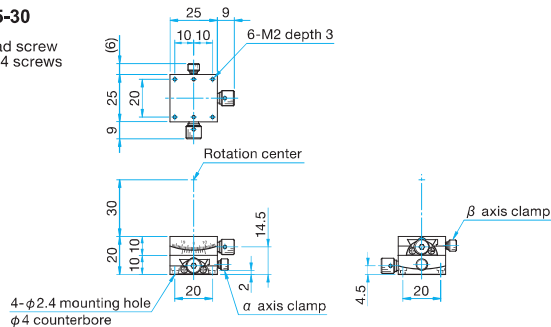
MGT12-25-18R

■ Pan head screw
M2×4...4 screws



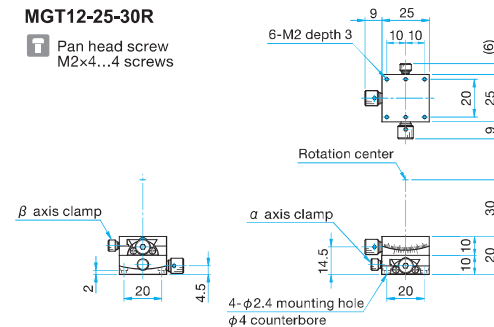
MGT12-25-30

■ Pan head screw
M2×4...4 screws



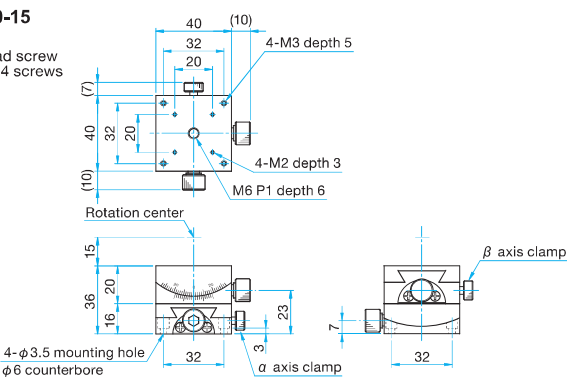
MGT12-25-30R

■ Pan head screw
M2×4...4 screws



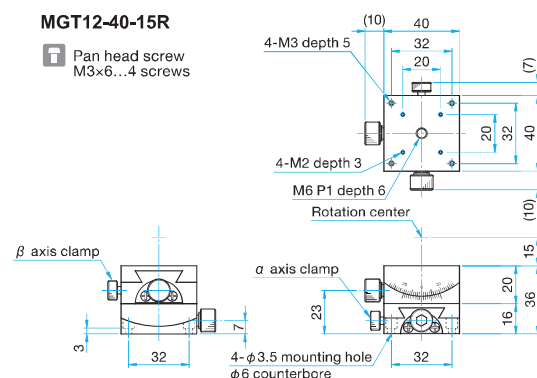
MGT12-40-15

■ Pan head screw
M3×6...4 screws



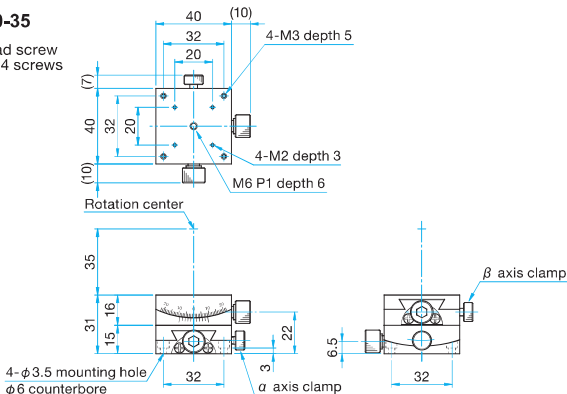
MGT12-40-15R

■ Pan head screw
M3×6...4 screws



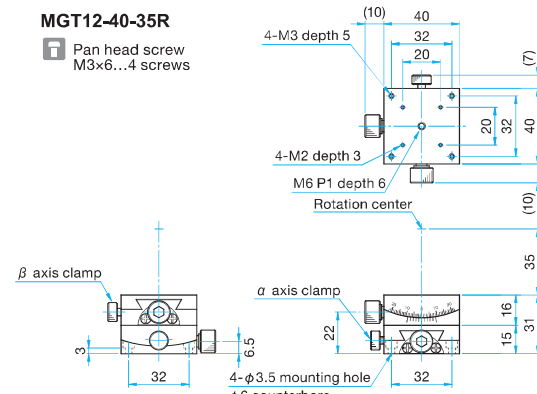
MGT12-40-35

■ Pan head screw
M3×6...4 screws



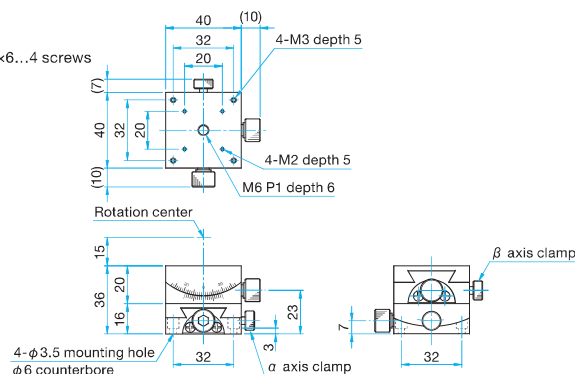
MGT12-40-35R

■ 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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