

θ axis Rotation Stages with Aperture

MRT2

RoHS

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X Axis

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Rotation

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Linear Guide

□15mm

□25mm

□40mm

□50mm

□60mm

□70mm

□80mm

□100mm

□120mm

Others

θ axis (rotation) coarse/fine adjustment stages with plane bearings offer coarse rotation adjustment of 360° and fine adjustment (with either a micrometer head or fine-pitch screw). Directly rotate the stage upper plate for coarse adjustment, then clamp the clutch screw and use micrometer head or fine-pitch screw (±3 – 5°) for fine adjustment.

- Light-weight and high precision aluminum rotation stages.
- The model with a through hole at the center of the stage can be used when a transmission hole is required.

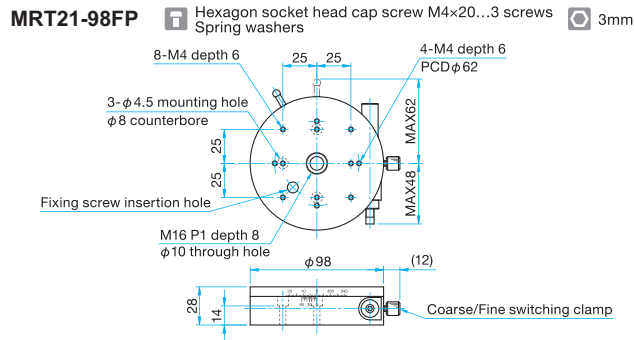
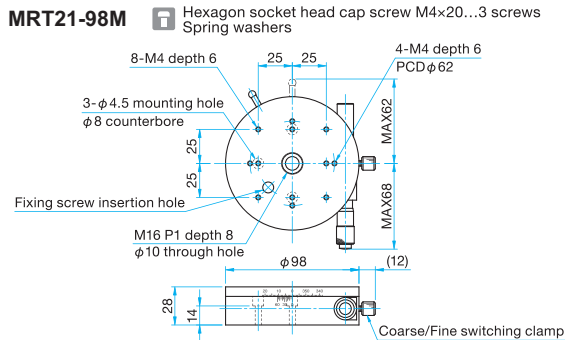
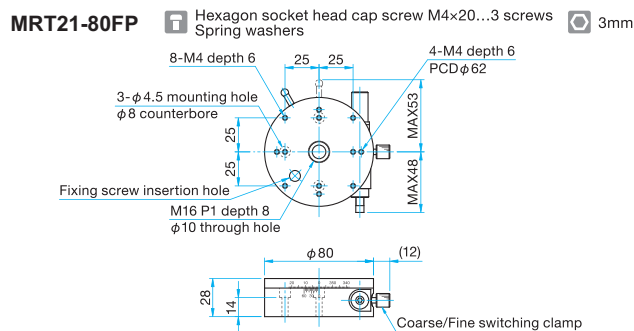
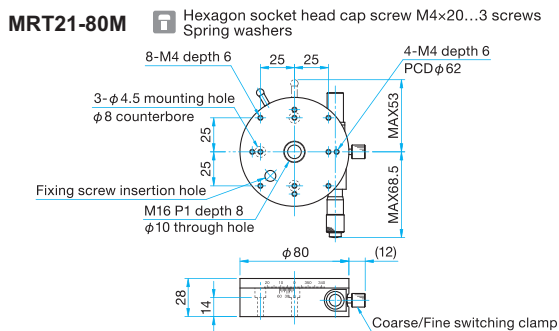


Guide

- ▶ The part number suffix FP indicates products with fine-pitch screws instead of standard micrometers.
- ▶ Fine Pitch screws have a screw pitch of 0.25mm and require a hex wrench or the optional hex wrench with knob (NSC) for adjustment.
- ▶ **Reference** H010
- ▶ Using the top plate for KSP/KSPA (SP-103) to convert mounting holes, various stages can be mounted. **Reference** F049
- ▶ Mounting holes can be converted using the bottom plate for MRT21-80M/100M(SP-117). **Reference** F050



Outline Drawing



SPEC UP

Specifications

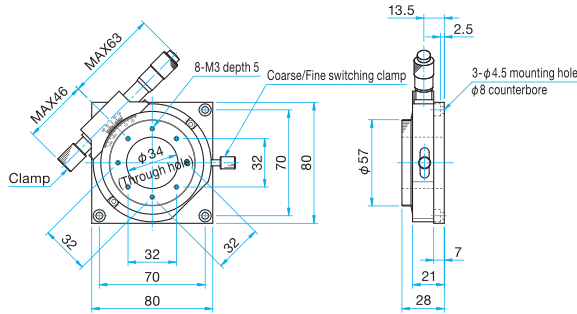
Part Number	MRT21-80M	MRT21-80FP	MRT21-98M	MRT21-98FP
Table Size [mm]	φ80.0	φ80.0	φ98.0	φ98.0
Rotation Range [°]	Coarse: 360, Fine: ±5	Coarse: 360, Fine: ±5	Coarse: 360, Fine: ±5	Coarse: 360, Fine: ±5
Scale Readable Resolution	5'	5'	5'	5'
Micrometer Readable Resolution	about 1'08.8"	—	about 52.9"	—
Positioning Slide	Lapping method	Lapping method	Lapping method	Lapping method
Primary Material	Aluminum	Aluminum	Aluminum	Aluminum
Finish	Black anodized	Black anodized	Black anodized	Black anodized
Load Capacity [N]	58.8 (6.0kgf)	58.8 (6.0kgf)	68.6 (7.0kgf)	68.6 (7.0kgf)
Max. Moment Capacity [N·m]	1.0	1.0	1.0	1.0
Moment Stiffness ["/N·cm]	0.8	0.8	0.8	0.8
Parallelism [μm]	50	50	50	50
Eccentricity [μm]	20	20	20	20
Wobble [μm]	20	20	20	20
Weight [kg]	0.5	0.5	0.7	0.7

Catalog Code **W7090**

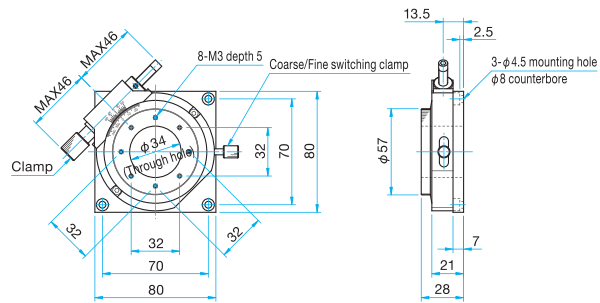


Outline Drawing

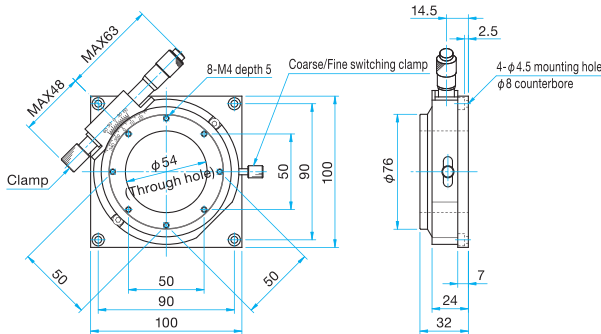
MRT21-80MH Hexagonal socket head cap screw M4x8...4 screws
Spring washers



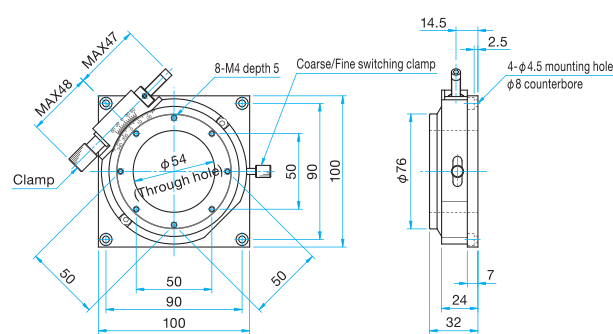
MRT21-80FPH Hexagonal socket head cap screw M4x8...4 screws
Spring washers 3mm



MRT21-100MH Hexagonal socket head cap screw M4x8...4 screws
Spring washers



MRT21-100FPH Hexagonal socket head cap screw M4x8...4 screws
Spring washers 3mm



SPEC UP

Specifications				
Part Number	MRT21-80MH	MRT21-80FPH	MRT21-100MH	MRT21-100FPH
Table Size [mm]	φ57.0	φ57.0	φ76.0	φ76.0
Rotation Range [°]	Coarse: 360, Fine: ±5	Coarse: 360, Fine: ±5	Coarse: 360, Fine: ±5	Coarse: 360, Fine: ±5
Scale Readable Resolution	5'	5'	5'	5'
Micrometer Readable Resolution	about 51.6"	—	about 42.1"	—
Positioning Slide	Lapping method	Lapping method	Lapping method	Lapping method
Primary Material	Aluminum	Aluminum	Aluminum	Aluminum
Finish	Black anodized	Black anodized	Black anodized	Black anodized
Load Capacity [N]	49.0 (5.0kgf)	49.0 (5.0kgf)	68.6 (7.0kgf)	68.6 (7.0kgf)
Max. Moment Capacity [N·m]	0.88	0.88	0.98	0.98
Moment Stiffness ["/N·cm]	0.61	0.61	0.2	0.2
Parallelism [μm]	30	30	40	40
Eccentricity [μm]	20	20	20	20
Wobble [μm]	20	20	20	20
Weight [kg]	0.45	0.45	0.6	0.6

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