

# Rotation Stages

KSP-256/406  
KSP-606/656/786



Low profile rotation stages 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 ( $\pm 5^\circ$ ) for fine adjustment.

- The main body of these stages is made of brass for high stiffness and incorporate plain bearings for high performance and small size.
- The through hole at the center of the stage can be used as a transmission hole.
- A scale around the circumference provides an indication of the angle.



## Guide

- ▶ Most stages can be directly mounted to corresponding sized linear stages for multiple axis adjustments.
- ▶ Using the top plate for KSP-406 (SP-123) to convert mounting holes, various stages can be mounted. [Reference](#) D044 [Catalog Code](#) W6068
- ▶ Using the top plate for KSP/KSPA (SP-103) to convert mounting holes, various stages can be mounted. [Reference](#) D042 [Catalog Code](#) W6059
- ▶ Using the bottom plate for KSP-786M (SP-104) to convert mounting holes, mounting on magnet bases or 60 × 60mm stages (M4 50×50) is possible. [Reference](#) D042 [Catalog Code](#) W6060

Specifications						
Part Number	METRIC	KSP-256	KSP-406M	KSP-606M	KSP-656M-M6	KSP-786M
	INCH	—	KSP-406MUU	—	KSP-656MUU	—
(Opposite Model)	METRIC	—	KSP-406MR	KSP-606MR	—	—
Stage Size [mm]		φ25	φ40	φ60	φ65	φ60
Rotation Range [°]		Coarse: 360 Fine: $\pm 5$	Coarse: 360 Fine: $\pm 5$	Coarse: 360 Fine: $\pm 5$	Coarse: 360 Fine: $\pm 5$	Coarse: 360 Fine: $\pm 5$
Scale Readable Resolution		2°	2°	1°	1°	5'
Micrometer Readable Resolution		—	about 1'24.2"	about 55.8"	about 52.2"	about 51.6"
Guide Method		Lapping method				
Primary Material		Brass				Aluminum
Finish		Super black chrome				Black anodized
Load Capacity [N]		29.4 (3.0kgf)	49.0 (5.0kgf)	68.6 (7.0kgf)	68.6 (7.0kgf)	49 (5.0kgf)
Max. Moment Capacity [N·m]		0.15	0.3	0.75	0.75	1.3
Moment Stiffness ["/N·cm]		6.1	1.5	0.4	0.4	1.5
Parallelism [μm]		20	20	20	20	50
Eccentricity [μm]		20	20	20	20	20
Wobble [μm]		15	20	20	20	20
Options		—	FP*	FP	FP	FP
Weight [kg]		0.09	0.3	0.6	0.7	0.4

Option				
Option Code	Compatible product		Micrometer Readable Resolution [mm]	<a href="#">Reference</a>
	Products Name	Part Number		
FP	Fine-pitch Screw Adjusters	*FPSA-42525 FPSA-62540	—	E008

\* Please add an option code as the part number suffix to specify various optional specifications.

\* The FP type requires a hex wrench or the optional hex wrench with knob (KCL) for driving operation. [Reference](#) F010 [Catalog Code](#) W8008

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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

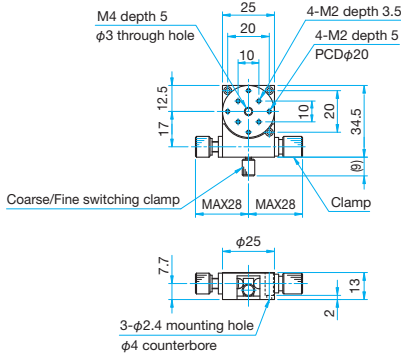
120 × 120 mm

Others



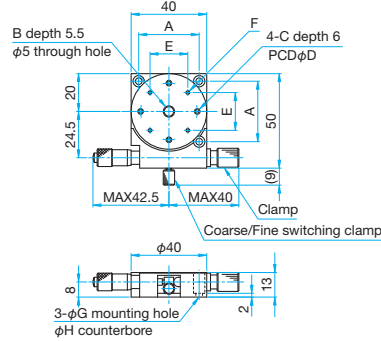
Outline Drawing

**KSP-256** Pan head screw M2x5...3 screws



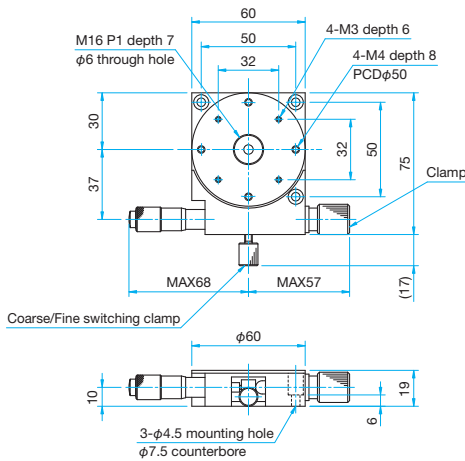
**KSP-406M/406MUU**

Pan head screw M3x6...3 screws  
Hexagonal socket head cap screw 6-32UNCx1/4...3 screws (UU)

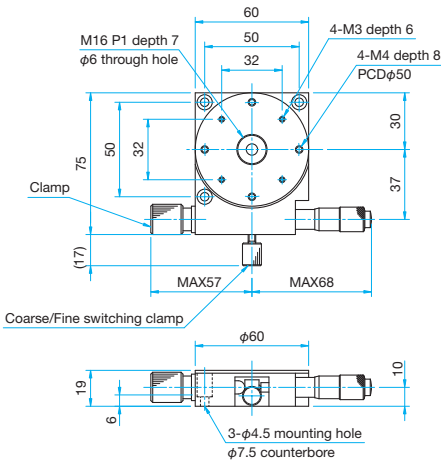


Part Number	A (mm)	B	C	D (mm)	E (mm)	F	G (mm)	H (mm)
KSP-406M	32	M6 P1	M3	30	20	4-M2 depth 2	3.5	6
KSP-406MUU	31.75	1/4-20UNC	6-32UNC	31.75			4	6.5

**KSP-606M** Hexagonal socket head cap screw M4x10...3 screws

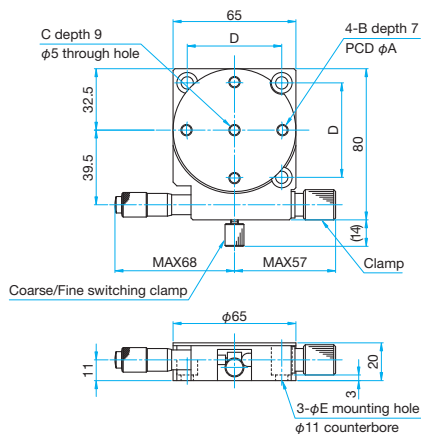


**KSP-606MR** Hexagonal socket head cap screw M4x10...3 screws

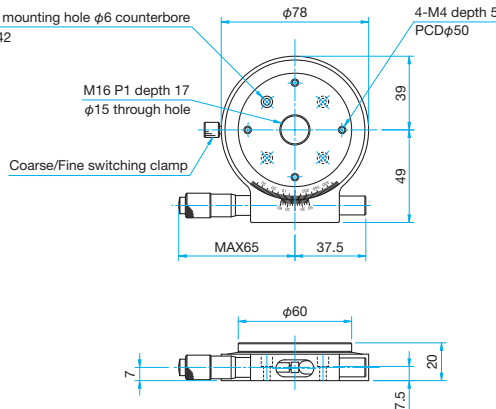


**KSP-656M-M6/656MUU**

Hexagonal socket head cap screw M6x8...3 screws (M6)  
Hexagonal socket head cap screw (stainless steel construction) 1/4-20UNCx5/16...3 screws (UU)



**KSP-786M** Pan head screw M3x12...4 screws



Part Number	A (mm)	B	C	D (mm)	E (mm)
KSP-656M-M6	50	M6 P1	M6 P1	50	phi 6.5
KSP-656MUU	50.8	1/4-20UNC	1/4-20UNC	50.8	phi 7

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