

An integrated worm gear drive makes these rotation stages are capable of precise adjustment over a full 360° rotation.



- The through hole at the center of the stage can be used as a transmission hole.
- In order to switch coarse / fine adjustment, please use a set screw inside of the side surface of the rotation stage. (The location of the set screw is indicated by ▽ mark.)

**Attention**

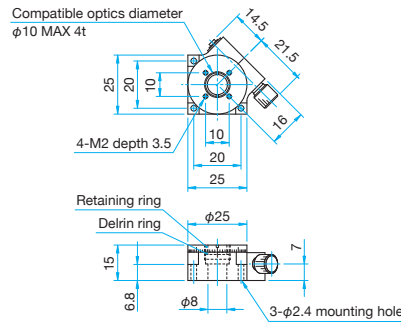
- ▶ KSW-256 and KSW-1006 do not have a clamping mechanism.
- ▶ KSW-256 and KSW-406 do not have a vernier scale.



**Outline Drawing**

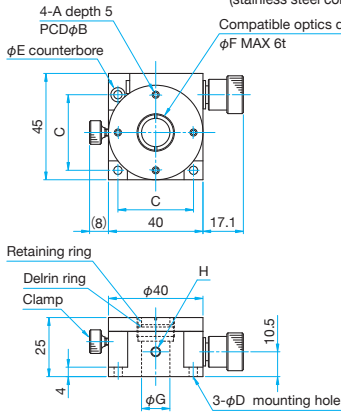
**KSW-256**

ⓘ Pan head screw M2x10...3 screws



**KSW-406/406UU**

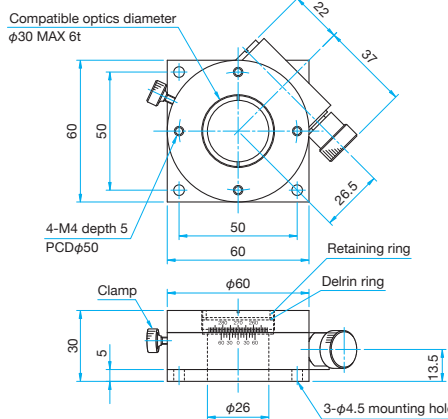
ⓘ Pan head screw M3x8...3 screws, Hexagonal socket head cap screw (stainless steel construction) 6-32UNCx5/16...3 screws (UU)



Part Number	KSW-406	KSW-406UU
A	M3	6-32UNC
B (mm)	φ32	φ31.75
C (mm)	32	31.75
D (mm)	φ3.5	φ4
E (mm)	φ6	φ6.5
F (mm)	φ15	φ12.7
G (mm)	φ12	φ10
H		8-32UNC depth5

**KSW-606**

ⓘ Hexagonal socket head cap screw M4x10...3 screws, One 1.5mm hex wrench (Coarse/Fine switching)



**Specifications**

Part Number	METRIC	KSW-256	KSW-406	KSW-606
	INCH	—	KSW-406UU	—
Stage Size [mm]		φ25	φ40	φ60
Rotation Range [°]		Coarse: — Fine: 360°	Coarse: — Fine: 360°	Coarse: 360° Fine: 360°
Scale Readable Resolution		5°	2°	10'
Knob Rotation Angle [°/1 rotation]		about 8	about 7.5	about 4
Guide Method		Lapping method		
Primary Material		Brass		
Finish		Super black chrome		
Load Capacity [N]		29.4 (3.0kgf)	49.0 (5.0kgf)	98.0 (10.0kgf)
Max. Moment Capacity	Pitch [N·m]	0.14	0.29	0.49
Moment Stiffness	Pitch [°/N·cm]	6.1	1.5	0.9
Parallelism [μm]		30	30	50
Eccentricity [μm]		20	20	20
Wobble [μm]		15	20	20
Weight [kg]		0.07	0.3	0.55

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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

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#### Attention

- ▶ KSW-1006 does not have a clamping mechanism.

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### Specifications

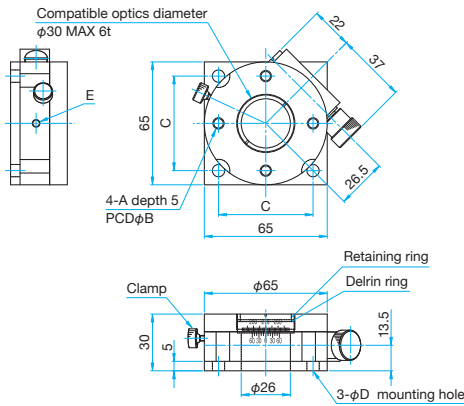
Part Number	METRIC	KSW-656-M6	KSW-1006	KSW-1206	KSW-1206-M6
	INCH	KSW-656UU	—	—	KSW-1206UU
Stage Size [mm]		φ65mm	φ84mm	φ120mm	φ120mm
Rotation Range [°]		Coarse: 360° Fine: 360°	— Fine: 360°	Coarse: 360° Fine: 360°	Coarse: 360° Fine: 360°
Scale Readable Resolution		10'	5'	5'	5'
Knob Rotation Angle [°/1 rotation]		4	2.05	1.62	1.62
Guide Method		Lapping method	Lapping method	Crossed roller	Crossed roller
Primary Material		Brass	Aluminum	Brass	
Finish		Super black chrome	Black anodized	Super black chrome	
Load Capacity [N]		98.0 (10.0kgf)	78.4 (8.0kgf)	196.0 (20.0kgf)	196.0 (20.0kgf)
Max. Moment Capacity	Pitch [N·m]	0.49	1.0	9.8	9.8
Moment Stiffness	Pitch ["/N·cm]	0.9	0.5	0.15	0.15
Parallelism [μm]		50	70	60	60
Eccentricity [μm]		20	20	30	30
Wobble [μm]		20	20	30	30
Weight [kg]		0.6	0.62	2.2	2.2



**Outline Drawing**

**KSW-656-M6/656UU**

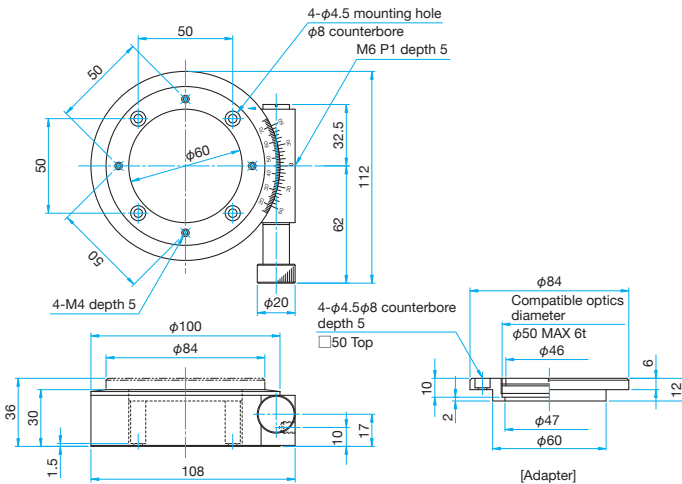
Hexagonal socket head cap screw M6×10...3 screws, One 1.5mm hex wrench (Coarse/Fine switching) (M6)  
Hexagonal socket head cap screw 1/4-20UNC×3/8...3 screws, One 1.5mm hex wrench (Coarse/Fine switching) (UU)



Part Number	A	B (mm)	C (mm)	D (mm)	E
<b>KSW-656-M6</b>	M6	φ50	50	φ6.5	
<b>KSW-656UU</b>	1/4-20UNC	φ50.8	50.8	φ7	8-32UNC depth 5

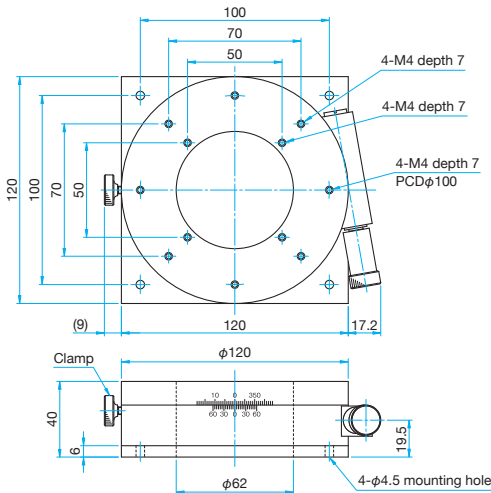
**KSW-1006**

Hexagonal socket head cap screw M4×6...4 screws



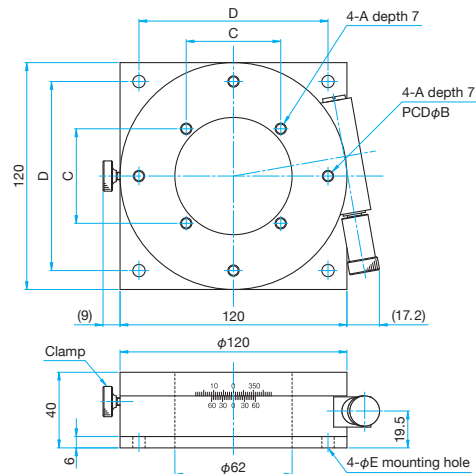
**KSW-1206**

Hexagonal socket head cap screw M4×12...4 screws, Spring washer, One 1.5mm hex wrench (Coarse/Fine switching)



**KSW-1206-M6/1206UU**

Hexagonal socket head cap screw M6×12...4 screws, Spring washer, One 1.5mm hex wrench (Coarse/Fine switching) (M6)  
Hexagonal socket head cap screw 1/4-20UNC×1/2...4 screws, One 1.5mm hex wrench (Coarse/Fine switching) (UU)



Part Number	A	B (mm)	C (mm)	D (mm)	E (mm)
<b>KSW-1206-M6</b>	M6 P1	φ100	50	100	φ6.5
<b>KSW-1206UU</b>	1/4-20UNC	φ101.6	50.8	101.6	φ7

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