

[Standard] Goniometer Stages - Dovetail Slide, 1-Axis

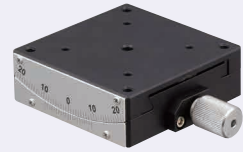
[High Precision] Goniometer Stages - Dovetail Slide, 1-Axis / 2-Axis

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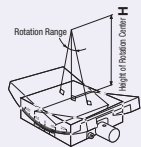
Points on Similar Product Comparison | Height Tolerance of Rotation Center: ±1.0

Features: Circular arc motion stages with arc centers located on central perpendicular line above the stage tops are offered with higher accuracy and at lower price than existing products.

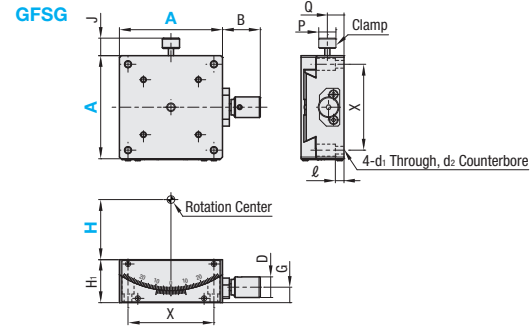
1-Axis



The height of Rotation Center is as shown below.

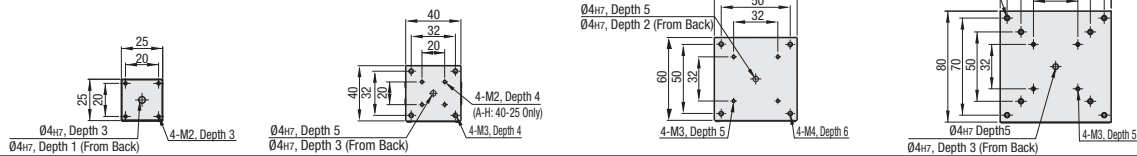


RoHS 10



M Material (Main Body): Aluminum Alloy, Material (Shaft): Low Cadmium Brass
S Surface Treatment (Main Body): Black Anodize

Table Mounting Hole Dimensions



1-Axis

Part Number	Top View			Front View			Side View					
	A-H	B	J	H ₁	D	G	P	Q	X	ℓ	d ₁	d ₂
GFSG	25-20	16	5.3	15	9	5.5	6	6.1	20	3	2.1	4.2
	25-35	16	5.3	15	9	5.95	6	6.6	20	3	2.1	4.2
	40-25	16	6.5	15	9	4.8	8	5.3	32	2	3.5	6
	40-40	20	6.5	20	12	8.55	8	9.1	32	5	3.5	6
	40-60	20	6.5	20	12	8.55	8	9.1	32	5	3.5	6
	60-35	22	10.2	25	12	9	10	9.7	50	3	4.5	8
	60-60	22	10.2	20	12	7	10	7.7	50	3	4.5	8
	60-80	22	10.2	20	12	7	10	7.7	50	3	4.5	8
	80-100	26	10.2	30	15	11	10	12.2	70	7	4.5	8
	80-130	26	10.2	30	15	11	10	12.2	70	7	4.5	8

Performance

Part Number	Stage Surface	Height of Rotation Center	Travel Distance	Travel per Rotation	Load Capacity	Weight	Unit Price
Type	A-H	H (mm)	Distance	Travel Distance	(N)	(kg)	
GFSG	25-20	20±1.0	±15°	≈2.0°	19.6	0.04	
	25-35	35±1.0	±10°	≈1.3°			
	40-25	25±1.0	±20°	≈2.8°	29.4	0.08	
	40-40	40±1.0	±15°	≈1.9°			
	40-60	60±1.0	±10°	≈1.3°			
	60-35	35±1.0	±25°	≈1.9°			
	60-60	60±1.0	±20°	≈1.3°	58.8	0.22	
	60-80	80±1.0	±15°	≈1.0°			
	80-100	100±1.0	±18°	≈1.3°			
	80-130	130±1.0	±15°	≈1.0°			
					49	0.56	
						0.54	

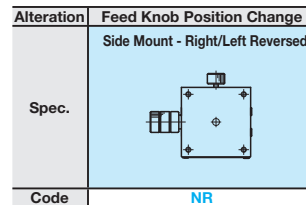
Resolution (Vernier Scale Indication): 0.1°/division
Please note that, when the stage is moved in a travel distance higher than the predetermined value, the top plate may come off.

2-Axis: Combination Table

Stage Surface (mm)	Height of Rotation Center H (mm)	Combination of Part Numbers
25x25	20±1.0	GFSG25-20 GFSG25-35
40x40	25±1.0	GFSG40-25 GFSG40-40
	40±1.0	GFSG40-40 GFSG40-60
60x60	35±1.0	GFSG60-35 GFSG60-60
	60±1.0	GFSG60-60 GFSG60-80
80x80	100±1.0	GFSG80-100 GFSG80-130

Ordering Example: Part Number GFSG40-25

Alterations: Part Number - (NR) GFSG40-25 - NR



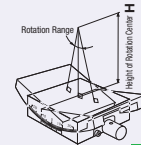
See the CAD data for details.

Features: Circular arc motion stages with arc centers located on central perpendicular line above the stage tops. Suitable for large angle positioning applications.

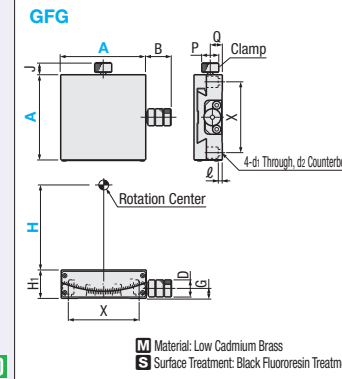
1-Axis



The height of Rotation Center is as shown below.



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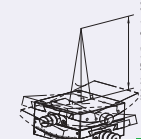


M Material: Low Cadmium Brass
S Surface Treatment: Black Fluorescent Treatment

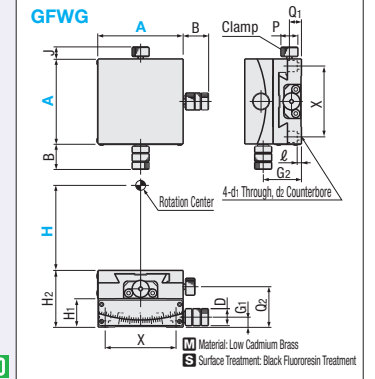
2-Axis



The height of Rotation Center is as shown below.

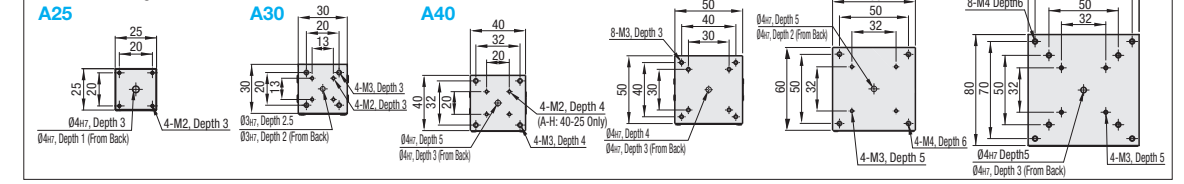


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M Material: Low Cadmium Brass
S Surface Treatment: Black Fluorescent Treatment

Table Mounting Hole Dimensions



1-Axis

Part Number	Top View			Front View			Side View					Accessory (4 pcs.)	
	A-H	B	J	H ₁	D	G	P	Q	X	ℓ	d ₁		d ₂
GFG	25-20	19	9	15	10	5.5	10	6.2	20	3	2.5	4.2	SCB2-6
	25-35	19	9	15	10	6	10	7.7	20	3	2.5	4.2	
	30-30	19.5	9	14	10	6.5	6	6.3	13	5	2.3	3.8	SCB2-8
	30-44	19.5	9	13	10	6.5	6	6.3	13	5	2.3	3.8	
	40-25	17.5	8	15	9	4.8	10	5.8	32	2	3.5	6	SCB3-6
	40-40	18	8	20	12	8.5	10	9.7	32	5	3.5	6	
	40-60	18	8	20	12	8.5	10	9.7	32	5	3.5	6	SCB3-8
	50-50	18	7.7	18	12	7	10	7	40	3	3.5	6	
	50-68	18	7.7	18	12	8	10	8	40	3	3.5	6	SCB3-6
	50-86	18	7.7	18	12	8	10	8	40	3	3.5	6	
60-35	18	8.6	25	12	9	12	10.5	50	3	4.5	8	SCB4-8	
60-60	18	8.6	20	12	7	12	8.5	50	3	4.5	8		
60-80	18	8.6	20	12	7	12	8.5	50	3	4.5	8	SCB4-8	
80-100	25	14	30	15	11	15	14	70	7	4.5	8		
80-130	25	14	30	15	11	15	13	70	7	4.5	8	SCB4-12	

Performance

Part Number	Stage Surface	Height of Rotation Center	Travel Distance	Travel per Rotation	Load Capacity	Moment Load Capacity (N-m)	Weight	Unit Price	
Type	A-H	H (mm)	Distance	Travel Distance	(N)	Pitching Yawing Rolling	(kg)		
GFG	25-20	25x25	20	±15°	≈2.0°	19.6	0.3	0.3	0.07
	25-35	35	±10°	≈1.3°					
	30-30	30x30	30	±10°	≈2.06°	29.4	0.8	1.0	0.24
	30-44	44	±10°	≈1.5°					
	40-25	25	±20°	≈2.2°					
	40-40	40	±15°	≈1.89°					
	40-60	60	±10°	≈1.33°	0.36	1.0	1.2	1.2	
	50-50	50	±10°	≈1.55°					
	50-68	68	±8°	≈0.97°	58.8	1.5	2.0	2.0	
	50-86	86	±8°	≈0.97°					
60-35	35	±25°	≈2.0°						
60-60	60	±20°	≈1.3°						
60-80	80	±15°	≈1.0°	0.64	2.0	3.0	3.0		
80-100	100	±18°	≈1.0°						
80-130	130	±15°	≈1.0°						

Resolution (Vernier Scale Indication): 0.1°/division
Please note that, when the stage is moved in a travel distance higher than the predetermined value, the top plate may come off.

2-Axis

Part Number	Top View			Front View			Side View					Accessory (4 pcs.)				
	A-H	B	J	H ₁	H ₂	D	G ₁	Q ₂	P	Q ₁	G ₂		X	ℓ	d ₁	d ₂
GFWG	25-20	19	9	15	30	10	6	21.15	10	7.7	20.5	20	3	2.5	4.2	SCB2-6
	30-30	19.5	8.7	13	27	10	6.5	19.3	6	6.3	19.5	13	5	2.3	3.8	
	40-25	17.5/18*	8	20	35	12	8.5	25.8	10	9.7	24.8	32	5	3.5	6	SCB3-6
	40-40	18	8	20	40	12	8.5	29.7	10	9.7	28.5	32	5	3.5	6	
	50-50	18	7.7	18	36	12	8	25	10	8	25	40	3	3.5	6	SCB3-6
	50-68	18	7.7	18	36	12	8	26	10	8	26	40	3	3.5	6	
	60-35	18	8.6	20	45	12	7	30	12	8.5	29	50	3	4.5	8	SCB4-8
	60-60	18	8.6	20	40	12	7	28.5	12	8.5	27	50	3	4.5	8	
	80-100	25	14	30	60	15	11	44	15	13	41	70	7	4.5	8	SCB4-12

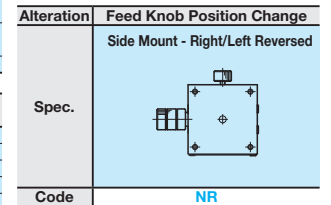
* GFWG40-25 knob length (B): Top 17.5, Bottom 18mm

Part Number	Stage Surface	Height of Rotation Center	Travel Distance	Travel per Rotation	Moment Load Capacity (N-m)	Weight	Unit Price	
Type	A-H	H (mm)	Distance	Travel Distance	Pitching Yawing Rolling	(kg)		
GFWG	25-20	25x25	20	(Top)=15°/(Bottom)=10°	(Top)=2.0°/(Bottom)=2.0°	19.6	0.14	
	25-35	35	(Top)=10°/(Bottom)=10°	(Top)=2.06°/(Bottom)=1.5°	9.8			0.5
	30-30	30x30	30	(Top)=10°/(Bottom)=10°		(Top)=2.06°/(Bottom)=1.5°	29.4	
	40-25	25	(Top)=20°/(Bottom)=15°	(Top)=2.2°/(Bottom)=1.89°	27.4	0.42		
	40-40	40	(Top)=15°/(Bottom)=10°	(Top)=1.89°/(Bottom)=1.33°				26.4
	50-50	50	(Top)=10°/(Bottom)=10°	(Top)=1.55°/(Bottom)=1.2°	24.5	0.72		
	50-68	68	(Top)=10°/(Bottom)=8°	(Top)=1.2°/(Bottom)=0.97°			51.9	1.30
	60-35	35	(Top)=25°/(Bottom)=20°	(Top)=2.0°/(Bottom)=1.3°	52.9	1.16		
	60-60	60	(Top)=20°/(Bottom)=15°	(Top)=1.3°/(Bottom)=1.0°			42.1	1.28
	80-100	80x80	100	(Top)=18°/(Bottom)=15°	(Top)=1.0°/(Bottom)=1.0°			

Resolution (Vernier Scale Indication): 0.1°/division

Ordering Example: Part Number GFG40-25 GFWG60-60

Alterations: Part Number - (NR) GFG40-25 - NR



See the CAD data for details.