

[High Precision] Goniometer Stages - Cross Roller, 1-Axis / 2-Axis

Features: High Accuracy Stages with Cross Roller Guides. Excellent operability makes them suitable for frequent positioning applications. Also suitable for fine feeding.

1-Axis

GPG

Clamp (M4x7)
*M2x6 for A=40 only

Rotation Center

4-d1 Through
d2 Counterbore

M Material: Aluminum Alloy
S Surface Treatment GPG40, 60: Black Anodize
GPG50, 70: Clear Anodize

RoHS 10

2-Axis

GPWG

Clamp (M4x7)
*M2x6 for A=40 only

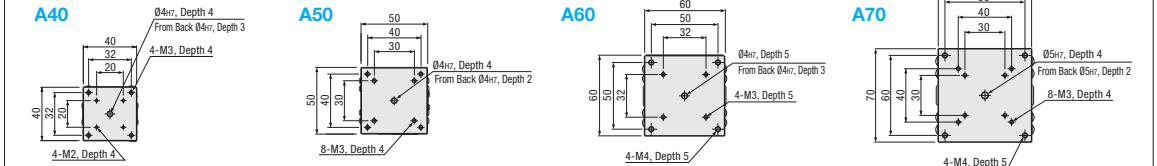
Rotation Center

4-d1 Through
d2 Counterbore

M Material: Aluminum Alloy
S Surface Treatment GPWG40, 60: Black Anodize
GPWG50, 70: Clear Anodize

RoHS 10

Table Mounting Hole Dimensions



Part Number	Top View				Front View				Side View						
	Type	A-H	B	J	E	F	H ₁	D	G	P	Q	X	ℓ	d ₁	d ₂
GPG	40-40	38	5.5	7.5	14	20	13	11	3.8	14	32	3	3.5	6	
	40-60									15	9				
	40-80									18	9				
	50-50	31	13	11.5	18	18	13	9.3	15	10	40	3	3.5	6	
	50-68									13	15.5				
	50-86									15.9	16.4				
	60-50	31	13.5	7.5	14	25	13	12.9	15	12.8	60	5	4.5	8	
	60-75									16.3	16				
	60-100									16	16				
	60-125									17.5	17.5				
	70-70	52	13.3	12.5	21.5	26	18	14	15		60	4	4.5	8	
	70-96														
70-122															

Part Number	Top View				Front View				Side View								
	Type	A-H	B	J	F	H ₁	H ₂	D	G ₁	Q ₂	P	Q ₁	G ₂	X	ℓ	d ₁	d ₂
GPWG	40-40	38	5.5	14	20	40	13	11	34	3.8	14	15	31	32	3	3.5	6
	40-60								34	15							
	40-80								27	15	10	27.3	40	3	3.5	6	
	50-50	31	13	18	18	36	13	9.3	28	15	10	27.3	40	3	3.5	6	
	50-68								28								
	60-50	31	13.5	14	25	50	13	12.9	40.5	15	15.9	38	50	5	4.5	8	
	60-75								40.9	15	16.4	37.9					
	60-100								12.8	41.4	16.3	37.9					
	70-70	52	13.3	21.5	26	52	18	14	42	15	17.5	40	60	4	4.5	8	
	70-96								43.5								

Performance

Part Number	Type	Stage Surface (mm)	Height of Rotation Center H(mm)	Rotation Center Runout	Travel Distance	Resolution ("/division) (Micrometer)	Load Capacity (N)	Moment Load Capacity (N · m)			Moment Rigidity ("/N · cm)			Weight (kg)	Accessory (4 pcs.) TypeM-L	Unit Price
								Pitch	Yaw	Roll	Pitch	Yaw	Roll			
GPG	40-40	40x40	40±0.2	0.01mm or Less	±7°	≈42	29.4	1.0	0.8	0.9	1.30	1.15	0.27	0.13	SCB3-6	
	40-60		60±0.2			≈30										
	40-80		80±0.2			≈23										
	50-50		50±0.2			≈53										
	50-68	50x50	68±0.2			≈40										
	50-86		86±0.2			≈33										
	60-50		50±0.2			≈33										
	60-75		75±0.2			≈24										
	60-100	60x60	100±0.2			≈18										
	60-125		125±0.2			≈15										
	70-70		70±0.2			≈25										
	70-96		96±0.2			≈19										
70-122	122±0.2	≈15	49.0	3.6	2.8	5.7	0.17	0.06	0.06	0.53	SCB4-8					

Part Number	Type	Stage Surface (mm)	Height of Rotation Center H(mm)	Travel Distance	Resolution ("/division) (Micrometer)	Load Capacity (N)	Moment Load Capacity (N · m)			Moment Rigidity ("/N · cm)			Weight (kg)	Accessory (4 pcs.) TypeM-L	Unit Price
							Pitch	Yaw	Roll	Pitch	Yaw	Roll			
GPWG	40-40	40x40	40±0.4	(Top)±7°/(Bottom)±4°	(Top)≈42/(Bottom)≈30	27.4	1.0	0.8	0.9	1.57	2.30	1.57	0.26	SCB3-6	
	40-60		60±0.4	(Top)±4°/(Bottom)±4°	(Top)≈30/(Bottom)≈23										
	50-50	50x50	50±0.4	(Top)±3°/(Bottom)±3°	(Top)≈53/(Bottom)≈40	27.4	1.5	1.2	1.5	0.97	0.52	0.97	0.46	SCB3-6	
	50-68		68±0.4	(Top)±4°/(Bottom)±4°	(Top)≈40/(Bottom)≈33										
	60-50	60x60	50±0.4	(Top)±4°/(Bottom)±4°	(Top)≈33/(Bottom)≈24	46.0	1.5	2.0	1.5	0.37	0.18	0.37	0.62	SCB4-10	
	60-75		75±0.4	(Top)±4°/(Bottom)±3°	(Top)≈24/(Bottom)≈18										
	60-100		100±0.4	(Top)±3°/(Bottom)±2.5°	(Top)≈18/(Bottom)≈15										
	70-70		70±0.4	(Top)±3°/(Bottom)±3°	(Top)≈25/(Bottom)≈19										
	70-96	96±0.4	(Top)±3°/(Bottom)±3°	(Top)≈19/(Bottom)≈15	44.1	3.6	2.8	3.6	0.23	0.12	0.23	1.06	SCB4-8		

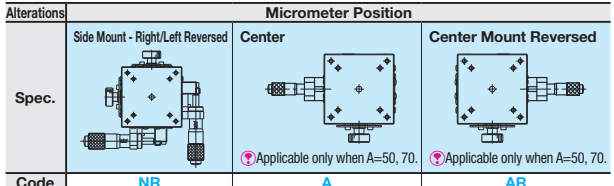
Knob Cover HDCVR13 (Sold Separately): Ø13 micrometer knob diameter can be increased by installing the cover. **P2004**
 Extension Cover HDEXT13 (Sold Separately): Ø13 micrometer head knob can be extended. **P2004**

Ordering Example

Part Number
GPG40-40
GPWG70-96

Alterations

Part Number (NR, A, AR)
 GPG40-40 - NR
 GPWG50-50 - A



Mounting dimensions of micrometer head, feed screw and clamp are different from those of standard products. See the CAD data for details.