

Hinge Bolt

Threaded-Standard / R Type / Oil-Free Type



Grippers / Air Cylinders, Cylinder Components / Connecting Components

Hinge Bases – Threaded-Standard / R Type / Oil-Free Type

RoHS10

Threaded			Material	Surface Treatment
Standard Type		Type R		
Right-Hand Thread	Left Hand Thread	Right-Hand Thread	1045 Carbon Steel or Equivalent	Black Oxide
HGBB	HGBBL	HGBBR		Electroless Nickel Plating
HGBM	—	HGBMR		—
HGBS	—	HGBSR		—

Threaded Standard Type

Threaded R Type

25/ (√6.3/1.6/)

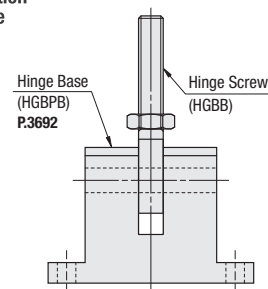
⊕ The end face of the screw may have a centering hole. ⊕ Mx2+E+Amin≤L ⊕ Left-Hand Thread Type has an identification groove on D circumference.

Part Number	D	L	W	M	ℓ	L ₁	L ₂	E	A _{min}	r
Type	d ₁₇	1 mm Increment	1 mm Increment	(Coarse)	max					
Standard Type Right-Hand Thread	3	8	13-34	3-6	3	L+4		4	3	0.8
	4	8	16-44	4-5	4	L+5		5	4	
	5	10	17-45	4-7	5	L+6		6		
		12	20-56	5-9						
Left-Hand Thread	6	12	24-68	6-9	6	L+8	L+7.5	8	5	
	8	15	28-88	8-11	8	L+10	L+10	10		
		20	30-90	8-17						
Type R Right-Hand Thread	10	20	37-112	10-16	10	L+12	L+15	14	7	1.6
	12	25	42-132	12-21	12	L+14	L+17	16	9	
14		30	49-154	14-19	14	L+18	L+20	20	20	
		36	65-216	20-25						
	40	73-240	22-23							
	40	73-240	22-26							

⊗ Inner diameter 3, 4, and 5 not available for Type R.

Part Number Example	Part Number	D	L	W
HGBB12	20	55	13	
HGBMR12	25	80	15	

Application Example



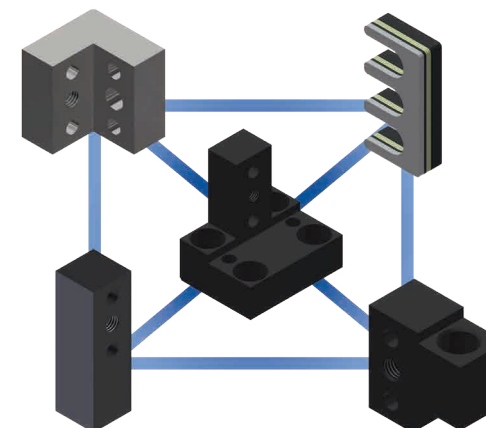
The MISUMI Approach to Standard & Configurable NAAMS

After extensive market research, MISUMI USA discovered that standard NAAMS components frequently required additional machining, or even a make detail for customization. MISUMI USA worked closely with several large customers to develop configurable NAAMS components that required no additional machining, not connected to each other, and at a lower cost than customized NAAMS components.

NAAMS Bolting Pattern

The NAAMS bolting pattern is a unique benefit of the NAAMS standards. The bolting pattern is standardized with a 15mm pitch, so components are easily interchangeable and assembly is quick and easy.

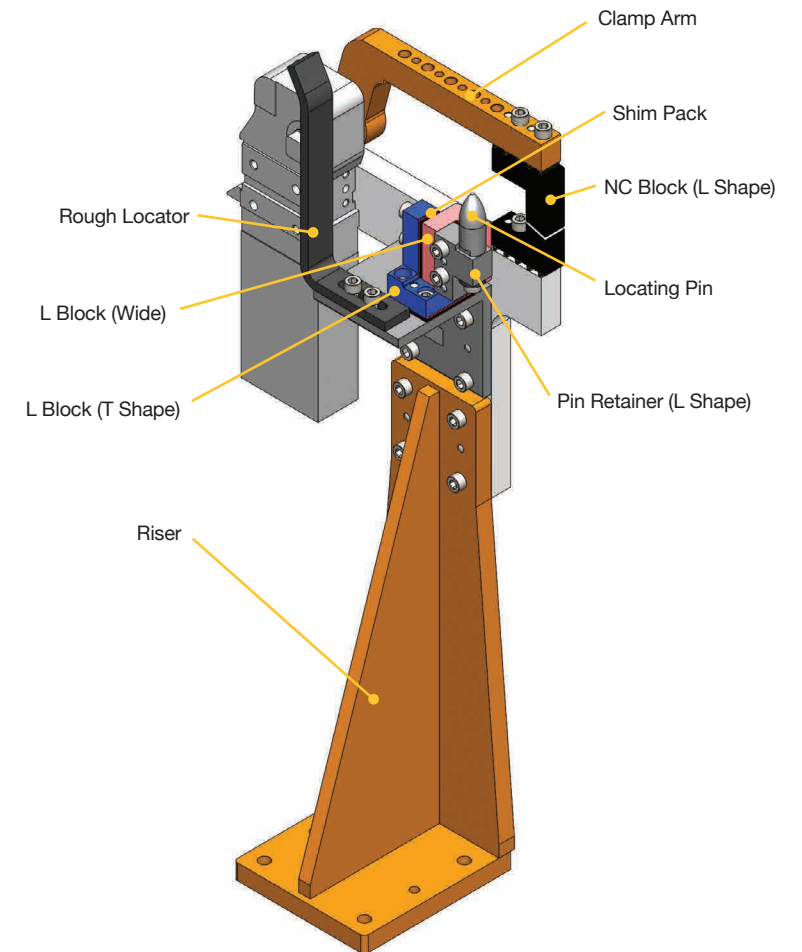
Mix and match components



All 15mm pitch = Interchangeable Bolting Pattern & Easy Assembly

Typical NAAMS Assembly

A typical NAAMS assembly includes risers, pin stacks, and clamp arms and uses multiple locating pins and pin retainers, in addition to several styles of L Blocks and NC Blocks. Shim packs are used to adjust the assembly as needed.



WHAT'S NEW

MISUMI has further expanded our NAAMS offering by adding the following new products:

- American-made NAAMS Welded Risers
- Douglas Stamping Company® NAAMS Shims & Spacers
- Suburban Bolt Supply Company NAAMS Fasteners

We have also added options on existing products by adding more Configurable L Blocks and Pin Retainers. For Locating Pins, we have expanded the diameter range on configurable pins and added a Rainbow Diamond-Like Coating to select items.