

Feature of Free Guide Arms / Overview Guide for Measuring & Examination Instruments Mounting Hardware

MISUMI offers many parts suitable for mounting measuring instruments, lenses and lights for experiments and examinations on factory floors. For example, Free Guide Arms which make easy adjustment and fixture of the mounted instruments' position, Magnetic Bases which perform as the base of Free Guide Arms Shaft and adhere to magnetic objects, and Holders for mounting Dial Gauges.

Feature of Free Guide Arms

Shape	Free Guide Arms			Flexible Arms	Free Angle Arms
	Fixed Arms	Flex-Arm	Mechanical Locking Flex-Arm		
					
Feature	<p>There are three movable sections. Each can be adjusted freely.</p> <p>By fixing only one dial, three movable sections can be locked simultaneously.</p> <p>The Fixed Arm bears large allowable load at locked state, therefore, it is suitable for mounting measuring instruments, sensors and lightings.</p>	<p>The arm can be adjusted into shapes freely.</p> <p>Not having a lock function, it is not appropriate for mounting heavy loads. However, for its easy adjustment feature, it is suitable for mounting light loads such as lenses or lights and move them frequently.</p>	<p>The arm can be adjusted into shapes freely. The arm can be retained in desired shapes by tightening the nuts for holding the lock lever up.</p> <p>As it is more flexible than the Fixed Arm and can support larger loads, it is suitable for adjusting and locking at the same time.</p>	<p>Although the arm can be adjusted into shapes freely, it is not suitable for mounting heavy loads as no lock function is provided.</p> <p>It can be mounted on various devices as the item is sold separately. Also, the length and screw diameter are selectable.</p>	<p>Each joint angle can be adjusted in shape as desired.</p> <p>The unit quantities are also selectable, so use it with the necessary length.</p>
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Overview Guide for Measuring & Examination Instruments Mounting Hardware

Product Name	Base	Mounting Clamps for Installation			Holder
		Shaft	Measurement Instruments		
Appearance	Magnetic Bases	Shaft Mounts	Dial Mounts	Indicator Mounts	Dial Holders
					
Feature	<p>Compact but generates strong attraction force by using Neodymium Iron Boron Magnets.</p> <p>Smaller sizes such as 30SQ are available.</p>	<p>Mounts for adjusting angles and fixing two shafts.</p> <p>Highly efficient Spring Built-in Types are also offered.</p>	<p>Mounts for mounting Dial Gauges.</p> <p>Adjust the gauge angle and turn the knurled screw to fix it.</p>	<p>Mounts for mounting Indicators.</p> <p>The angle adjustment for the tip can be done by turning the knurled screw.</p>	<p>As the dial holder is fixed by tightening the spindle of the dial gauge, mounting does not damage the spindle.</p>
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Free Guide Arms

Fixed Arms / Flex-Arms / Mechanical Locking Flex-Arms

Free Guide Arms Set

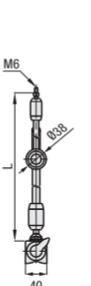
Fixed Arms



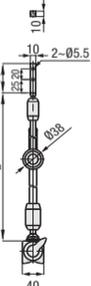
RoHS 10

Fixed Arms

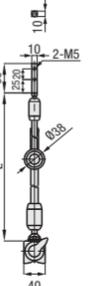
FGPMA
Tip Tapped



FGPMB
Tip Holder Through Hole



FGPMC
Tip Holder Tapped Hole



Magnetic Bases Details P.2150

Material:

(1) Main Body: 1213 Carbon Steel
(2) Magnetic Base 1018 Carbon Steel or Equivalent / Neodymium Iron Boron Magnet / ABS

Surface Treatment:

(1) Main Body: Electroless Nickel Plating
(2) Magnetic Bases Painted

Free Guide Arms Set

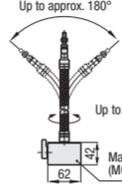
Flex-Arms



RoHS 10

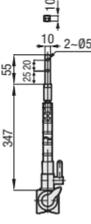
Flex-arm

FGLMA
(Tip Tapped)

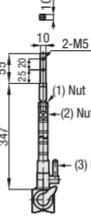


Mechanical Locking Flex-arm

FGFMB
(Tip Holder Through Hole)



FGFMC
(Electroless Nickel Plating)
Tip Holder Tapped Hole



FGFKC
(Black Oxide)
Tip Holder Tapped Hole



Magnetic Bases Details P.2150

Mechanical Locking Flex-Arm Locking Method

Locking

- Turn the nut (1) counterclockwise.
- Turn the nut (2) clockwise.
- Lift up the lock lever (3) from Left to Up and lock. (* mark shows in locked position)

Unlocking

- Push down the lock lever (3) from Up to Left.
- Turn the nut (2) counterclockwise.
- Turn the nut (1) clockwise and unlock.

Materials:

(1) Main Body: 1213 Carbon Steel
(2) Magnetic Base 1018 Carbon Steel or Equivalent / Neodymium Iron Boron Magnet / ABS

Surface Treatment:

(1) Main Body: Electroless Nickel Plating Black Oxide
(2) Magnetic Bases Painted

Fixed Arms

Part Number	Type	No.	L	L ₁	L ₂	h ₁	h ₂	Weight (kg)	Allowable Ref. Load (N)	Attraction Force (N)
Tip Holder Through Hole	FGPMB	200	432	228	142	17	68	1.9	17.6	
Tip Holder Tapped Hole	FGPMC									

Flex-Arm

Part Number	Type	Weight (kg)	Allowable Ref. Load (N)	Attraction Force (N)
Tip Tapped (M6)	FGLMA	200	0.8	3.9
	300	0.9	2.0	800

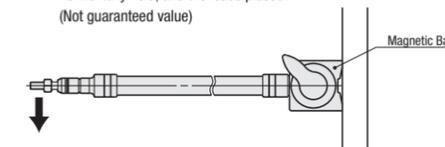
Mechanical Locking Flex-Arm

Part Number	Type	Weight (kg)	Allowable Ref. Load (N)	Attraction Force (N)
Tip Holder Through Hole	FGFMB	1.1	4.9	800
Tip Holder Tapped Hole	FGFMC FGFKC			

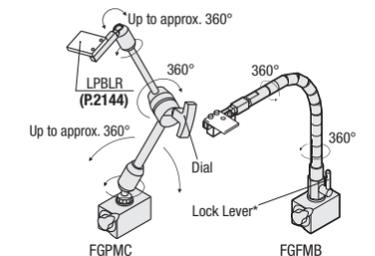
Part Number Example	Part Number
	FGPMA100
	FGLMA300
	FGFMB

Supportable Loads

Supportable Loads are obtained by the arms horizontally held, and the loads placed. (Not guaranteed value)



Application Example



Feature of Fixed Arms

By turning each of three movable sections freely and then fixing the dial, all movable sections can be fixed simultaneously.

Features of Mechanical Locking Flex-Arm

While the lock lever is released, the arm can be adjusted into shapes freely. Engaging the lock lever maintains the desired shape.