

Free Guide Arms / Measurements and Inspection Instrument Mounting Components - Overview

MISUMI offers many parts suitable for mounting measurement instruments, lenses and lights for experiments and examinations on factory floors such as Free Guide Arms which make adjusting of instrument positions, Magnetic Bases as the bases for Free Guide Arms or Free Guide Arms Shafts, and holders for mounting dial indicators.

Types and Features of Free Guide Arms

Shape	Free Guide Arms			Flexible Arms	Free Angle Arms
	Fixed Arm	Flex-Arm	Mechanical Locking Flex-Arm		
Features	There are 3 movable sections. Each can be adjusted freely. By fixing only one dial, 3 movable sections can be locked simultaneously. The Fixed Arm bears large allowable load at locked state, therefore, it is suitable for mounting measurement instruments, sensors and lightings.	The arm can be adjusted into shapes freely. Not suitable for mounting heavy loads due to the lack of locking mechanism, but well suited for mounting light objects such as lens and lights, and frequently moving them with good adjustability.	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. As it is more flexible than the Fixed Arm and can support larger loads than the Flexible Arm, it is suitable for adjusting and locking at the same time.	Although the arm can be adjusted into shapes freely, it is not suitable for mounting heavy loads as no lock function is provided. It can be mounted on various devices as the item is sold separately. Also, the length and screw diameter are selectable.	Each joint angle can be adjusted in shape as desired. The unit quantities are also selectable, so use it with the necessary length.
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Measurements/Inspection Instrument Mounting Components - Overview

Product Name	Bases	Mounting Clamps			Holder
	Magnetic Bases	Shaft Mounts	Dial Mounts	Indicator Mounts	Dial Holders
Appearance					
Features	Compact but generates strong attraction force by using Neodymium Iron Boron Magnets. Smaller sizes such as 30SQ are available.	Mounts for adjusting angles and fixing 2 shafts. Highly efficient Spring Built-in Types are also offered.	Mounts for mounting Dial Gauges. Adjust the gauge angle and turn the knurled screw to fix it.	Mounts for mounting Indicators. The angle adjustment for the tip can be done by turning the knurled screw.	As the dial holder is fixed by tightening the spindle of the dial gauge, mounting does not damage the spindle.
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Free Guide Arm Sets

Fixed Arm / Flex-Arm / Mechanical Locking Flex-Arm

■Features: A set of a Free Guide Arm and a Magnetic Base. Suitable for holding measurement instruments, sensors and lights with easy adjustment. For Arm only, P2035

■Fixed Arm

RoHS 10

■Fixed Arm

FGPMA
Tip Tapped

FGPMB
Tip Holder Through Hole

FGPMC
Tip Holder Tapped Hole

Material:
Body SUM22
Magnet Base SS400, Neodymium Magnet, ABS

Surface Treatment:
Main Body Electroless Nickel Plating
Magnetic Base Paint Finish

Magnetic Base (MGNBS100)

■Flex-Arm

■Mechanical Locking Flex-Arm

RoHS 10

■Flex-Arm

FGLMA
Tip Tapped

Up to Approx. 180°
Up to Approx. 360°

Magnetic Base (MGNBS80)

■Mechanical Locking Flex-Arm

FGFMB
Tip Holder Through Hole

FGFMC, FGFKC
Electroless Nickel Plating Black Oxide
Tip Holder Tapped Hole

Max. Approx. 180°
Up to Approx. 360°

Magnetic Base (MGNBS80)

Material:
Main Body SUM22
Magnetic Bases SS400, Neodymium Magnet, ABS

Surface Treatment:
Main Body Electroless Nickel Plating
Black Oxide
Magnetic Base Paint Finish

■Mechanical Locking Flex-Arm: Locking Method

- To lock,
 - Turn the nut ① counterclockwise.
 - Turn the nut ② counterclockwise.
 - Lift up the lock lever ③ from Left to Up and lock.
- To unlock,
 - Push down the lock lever ③ from Up to Left.
 - Turn the nut ② counterclockwise.
 - Turn the nut ① clockwise and unlock.

Fixed Arm

Part Number	Type	No.	(L)	(L1)	(L2)	h1	h2	Weight (kg)	Allowable Load (N) (Ref.)	Attraction Force (N)	FGPMA		FGPMB		FGPMC	
											Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
Tip Tapped (M6)	FGPMA	100	272	145	62	15	56	1.7	24.5	1000	1 ~ 4 pc(s)	5 ~ 10	1 ~ 4 pc(s)	5 ~ 10	1 ~ 4 pc(s)	5 ~ 10
Tip Holder Through Hole	FGPMB	200	432	228	142	17	68	1.9	17.6							
Tip Holder Tapped Hole	FGPMC															

Flex-Arm

For orders larger than indicated quantity, please check with WOS.

Part Number	Type	L	Weight (kg)	Allowable Load (N) (Ref.)	Attraction Force (N)	FGLMA	
						Unit Price	Volume Discount Rate
Tip Tapped (M6)	FGLMA	200	0.8	3.9	800	1 ~ 4 pc(s)	5 ~ 10
		300	0.9	2.0			

Mechanical Locking Flex-Arm

For orders larger than indicated quantity, please check with WOS.

Part Number	Type	Weight (kg)	Allowable Load (N) (Ref.)	Attraction Force (N)	FGFMB		FGFMC		FGFKC	
					Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
Tip Holder Through Hole	FGFMB	1.1	4.9	800	1 ~ 4 pc(s)	5 ~ 10	1 ~ 4 pc(s)	5 ~ 10	1 ~ 4 pc(s)	5 ~ 10
Tip Holder Tapped Hole	FGFMC FGFKC									

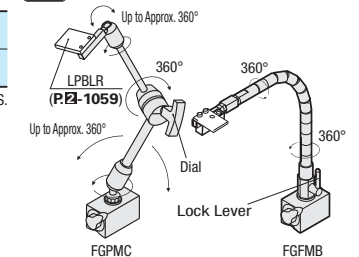
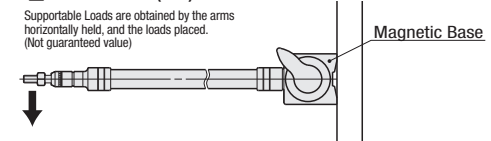
Ordering Example

Part Number

FGPMA100
FGLMA300
FGFMB

Allowable Load (Ref.)

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



Features of Fixed Arms

By turning each of 3 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.