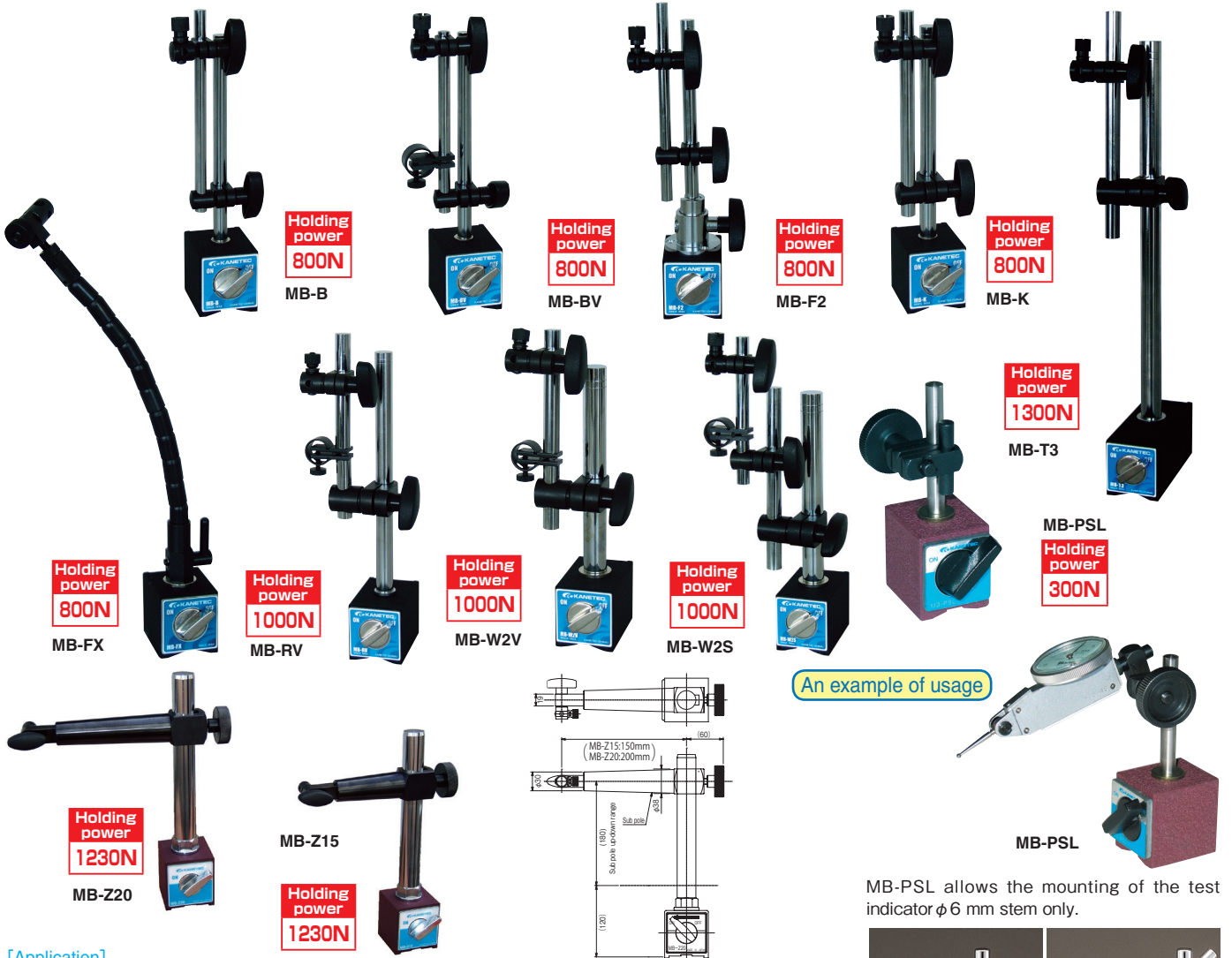
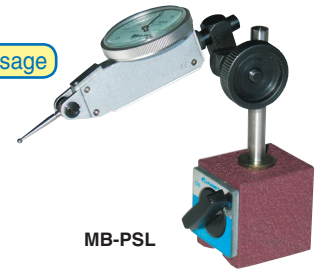


# MEASURING TOOL HOLDERS

## Model MB MAGNETIC BASE



An example of usage



MB-PSL allows the mounting of the test indicator  $\phi 6$  mm stem only.



The dial gage is not included.

[mm (in)]

**[Application]**  
These magnetic bases are widely used as measuring tool holders when measuring dimensions of machined workpieces (detecting errors and deviation) using a dial indicator on machine tools or iron surface plate for measurement by comparison.

**[Features]**

- A wide variety of models, small to large, and with diversified additional functions, are available to suit conditions of measuring places.
- A powerful magnet and strong clamping force ensure consistent, highly accurate measurement.
- Model MB-Z magnetic bases are equipped with upper components having the highest rigidity in our Magnetic Base Series, which minimizes errors in repeated measurement and precision measurement.

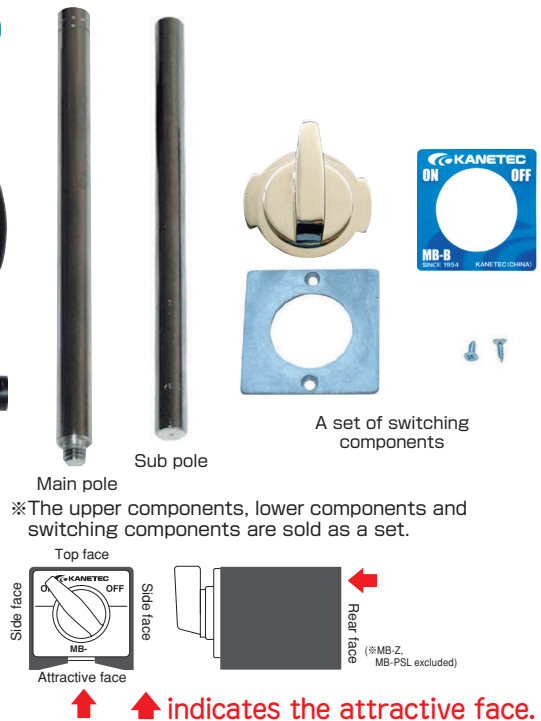
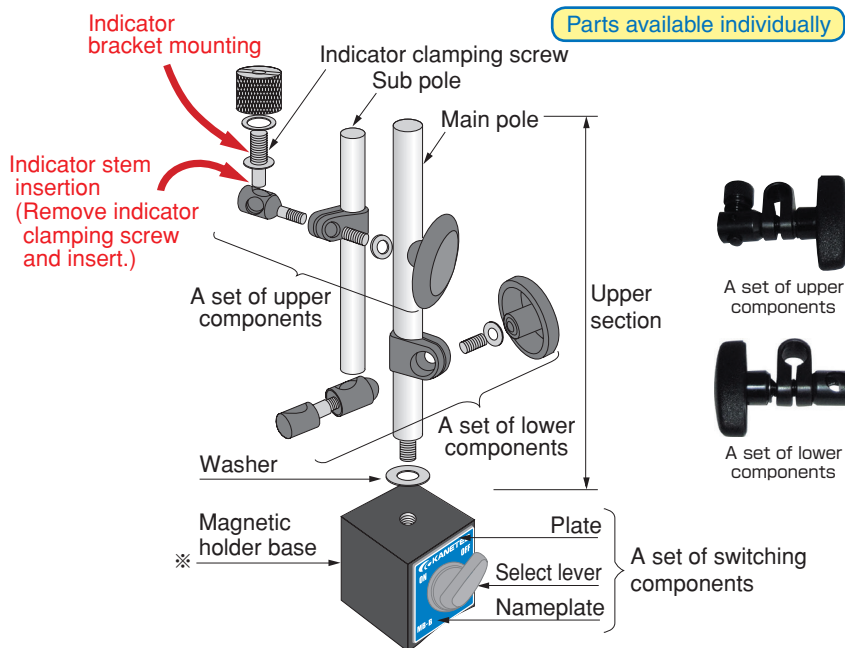
Displacement at a force of 0.5 kg ... MB-Z15: 3  $\mu$ m or less (1/8 or less of conventional base)

MB-Z20: 8  $\mu$ m or less (1/3 or less of conventional base)

Model	Holding Power	Magnetic Holder Base			Main Pole		Sub Pole		Main Pole Mounting Thread			Clamp Hole Dia.	Mountable Stem Dia.	Indicator Clamp Screw	Mass	Features
		Width	Length	Height	Dia $\phi$	Length	Dia $\phi$	Length	Mag. Base	Step	Main Pole					
MB-B	800N (80kgf)	58.5 (2.30)	73 (2.87)	55 (2.16)	12 (0.47)	176 (6.92)	10 (0.39)	165 (6.49)	M 8(0.31) x 1.25(0.04)	-	M8(0.31) x 1.25(0.04)	6.6(0.26) / 8.1(0.31)	M6 (0.23)	1.5kg / 3.3 lb	General, standard type.	
MB-BV					14 (0.55)	178 (7.00)	12 (0.47)	150 (5.90)	M 8(0.31) x 1.25(0.04)		M8(0.31) x 1.25(0.04)			1.8kg / 3.9 lb	General type with fine move adjustment.	
MB-F2					14 (0.55)	178 (7.00)	12 (0.47)	165 (6.49)	3-M4(0.15)		-			M8(0.31) x 1.25(0.04)	1.5kg / 3.3 lb	Main pole 360° turning, can be locked at 75° max.
MB-K					14 (0.55)	178 (7.00)	12 (0.47)	165 (6.49)	M 8(0.31) x 1.25(0.04)		M8(0.31) x 1.25(0.04)			1.5kg / 3.3 lb	Main pole large diameter, suitable for precision measurement.	
MB-RV	1000N (100kgf)	50 (1.96)	73 (2.87)	55 (2.16)	16 (0.62)	225 (8.85)	14 (0.55)	178 (7.00)	M 8(0.31) x 1.25(0.04)	M8(0.31) x 1.25(0.04)	6.6(0.26) / 8.1(0.31)	$\phi 6$ (0.23) $\phi 8$ (0.31)	2.4kg / 5.2 lb	Larger size with fine move adjustment.		
MB-W2V	1000N (100kgf)	50 (1.96)	73 (2.87)	55 (2.16)	16 (0.62)	225 (8.85)	14 (0.55)	178 (7.00)	M 8(0.31) x 1.25(0.04)	M8(0.31) x 1.25(0.04)	6.6(0.26) / 8.1(0.31)	$\phi 6$ (0.23) $\phi 8$ (0.31)	2.5kg / 5.5 lb	High precision type with fine move adjustment.		
MB-T3	1300N (130kgf)	50 (1.96)	117 (4.60)	55 (2.16)	20 (0.78)	355 (13.9)	14 (0.55)	178 (7.00)	M20(0.78) x 1.5(0.05)	M20(0.78) / M10(0.39)	M10(0.39) x 1.25(0.04)	6.6(0.26) / 8.1(0.31)	M6 (0.23)	3.6kg / 7.9 lb	Main pole longest, base largest and holding power greatest.	
MB-FX	800N (80kgf)	58.5 (2.30)	73 (2.87)	55 (2.16)	16 (0.62)	315 (12.4)	-	-	M8(0.31) x 1.25(0.04)	-	M8(0.31) x 1.25(0.04)	6.0(0.23) / 8.1(0.31)	-	1.8kg / 3.9 lb	Flexible type, settable freely.	
MB-W2S	1000N (100kgf)	73 (2.87)	73 (2.87)	55 (2.16)	20 (0.78)	178 (7.00)	14(0.55) 12(0.47)	165(6.49) 130(5.11)	M 8(0.31) x 1.25(0.04)	-	M8(0.31) x 1.25(0.04)	6.6(0.26) / 8.1(0.31)	M6 (0.23)	2.7kg / 5.9 lb	Two-step sub pole with fine move adjustment.	
MB-PSL	300N (30kgf)	30 (1.18)	34 (1.33)	35 (1.37)	7 (0.27)	54 (2.12)	-	-	M5(0.19) x 0.8(0.03)	-	M5(0.19) x 0.8(0.03)	6.0(0.23)	-	0.25kg / 0.5 lb	Compact and simple, suitable for limited space.	
MB-Z15	1230N (125kgf)	70 (2.76)	70 (2.76)	76 (2.99)	30 (1.18)	250 (9.84)	-	-	M20(0.78) x 1.5(0.05)	M20(0.78) / M12(0.47)	M12(0.47) x 1.75(0.06)	6.6(0.26) / 8.1(0.31)	M6 (0.23)	5.2kg / 11.5 lb	Strongest upper components in Series.	
MB-Z20	1230N (125kgf)	70 (2.76)	70 (2.76)	76 (2.99)	30 (1.18)	250 (9.84)	-	-	M20(0.78) x 1.5(0.05)	M20(0.78) / M12(0.47)	M12(0.47) x 1.75(0.06)	6.6(0.26) / 8.1(0.31)	M6 (0.23)	5.5kg / 12.1 lb	Suitable for repeated measurement and precision measurement.	

※ The upper fixture, Model DG-6 (mounting hole of  $\phi 4.5/6.6$  mm), for mounting a dial gage is optionally available. ※ The holding power is based on a test piece of SS400, 10 mm thick, ground surface. ※ The magnet part of MB-Z is designed for mounting on a flat surface such as a surface plate, but not on a curved surface. ※ The parts of the magnetic holder base are available individually.

<Names of major components of MB-B>



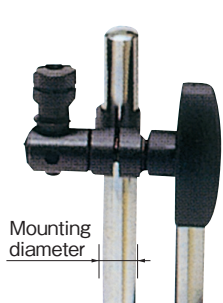
※Refer to P71 and P72 for the common models.  
Note, however, that there may be difference in the main pole mounting thread hole and so on.

↑ ↑ indicates the attractive face.

**Model DG OPTIONAL CLAMP FOR MAGNETIC BASE/HIGH LOCK BASE**

**Measurement variation expanded.**

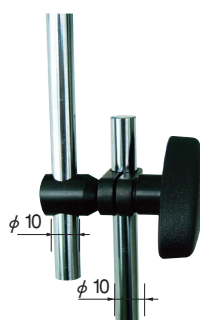
**Upper components Model DG-6**  
(Components for mounting dial gage)



[Application]  
Optionally sold when  $\phi 4.5$  mm mounting hole is required on MB-B, BV, F2 and K.  
[Features]  
●Upper components with  $\phi 4.5/6.6$  mm mounting hole.

MB-B (Common with BV/F2)  
Model **DG-6-B** (Mounting diameter  $\phi 10$ )  
MB-K (Common with W2S)  
Model **DG-6-K** (Mounting diameter  $\phi 12$ )

**Lower components Model MB-CMF**  
(Components for mounting  $\phi 10$  sub pole)

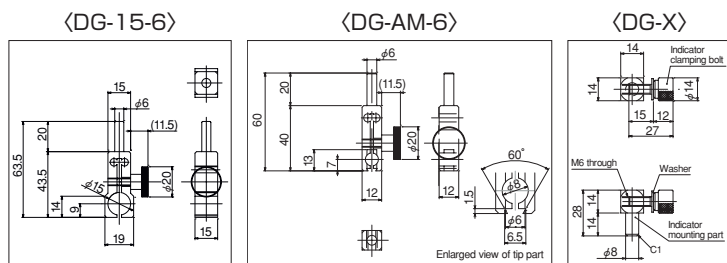


[Application]  
An optional unit for mounting one  $\phi 10$  sub pole in addition to the existing  $\phi 10$  sub pole.  
[Features]  
●An application range of magnetic bases is expanded such as holding light weight objects by, for example, extending the sub pole.  
※Depending on measurement conditions, the rigidity may drop. Pay attention to a drop in measurement accuracy.  
Applicable models: MB-B, BV, F2 (Sub pole diameter 10 mm)  
Model **MB-CMF1010**

**Designed for Magnetic Base and High Lock Base**



[Application]  
Mounted on a magnetic base or High Lock Base to secure a dial gage, linear gage, etc.  
[Features]  
● $\phi 6$  shaft to suit the mounting hole of MB Series upper components. (DG-15-6, DG-AM-6)  
●A larger diameter dial gage such as a liner gage ( $\phi 15$ ) can be clamped. (DG-15-6)  
● $\phi 8$  and  $\phi 6$  holes are provided for securing a dial gage in the dovetail groove. (DG-AM-6)  
● $\phi 8$  shaft to suit the tip mounting part of MB-MX and MB-OX to secure the bracket of a dial gage. (DG-X)



Model	Applicable Base	Specification	Mass
DG-15-6	MB-series,MX,OX	$\phi 15$ dial gage (linear gage, etc.)	68g / 0.15 lb
DG-AM-6	MB-series	Dial gage with dovetail groove	49g / 0.11 lb
DG-X	MB-MX,OX	Dial gage with bracket	40g / 0.09 lb

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MAGNETIC TOOLS