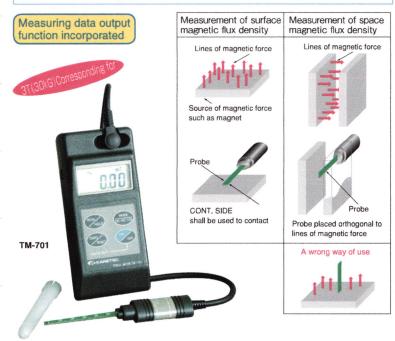
## Model TM TESLA METER

# **Industry Staudard for handheld devices**

## Meter in Compliance with New Measurement Law



Auto power off cancelation HOLD indicat Battery replacement AC magnetic flux Unit of measurement Polarity Measured

The TESLA meter is a practical, handy type Gaussmeter having digital display that has been developed based on KANETEC's long experience and achievements in the manufacture of magnetism-applied products.

From the user's point of view, this meter is designed for easy use by anyone by incorporating frequently used functions only.

The external output terminal is also provided to enable digital or analog outputs. Further, the probe has been made smaller for measurement in smaller space.

### [Application]

- •Measurement of residual magnetism in machined workpieces.
- •Measurement of magnetic flux in magnetismapplied
- Measurement of magnetic flux of motors.
- Measurement of properties of magnetic materials.

- ■A wide range of measuring range from 0 to 3000 mT (0 30,000 G). (DC)
- The battery life has been increased by about 30%.
- The rigidity of the probe has been increased.
- ●The meter can be operated with a chargeable battery also.
- ●By connecting an optional cable (TM-601DTC) to the external output terminal, digital (analog possible) data can be transferred to a PC.
- ●The alternate magnetic flux density, in addition to direct magnetic flux density, can be measu-red. (50/60 Hz)
- The high resolution measuring mode ensures more accurate measurement, (Resolution 0.01 mT = 0.1 G)
- The unit of display can be changed over between "mT" and "G".
- High dustproof by use of sheet keys.
- The auto power off function prevents useless waste of the battery.
- ●When the probe has been worn out, it can be replaced with a new one without troublesome calibration. (Optional)

(1mT=10G)

Model	Model TM-701					Zero reset Polarity indication		
Model	1 IW-701				Function	Max. detect value hold	Auto power off (can be canceled	
Detecting Contents	DC magne Polarities		magnetic flux /60Hz)	density	Display	LCD		
					Mode	Detection value	Numeric value (digital)	
Measuring	mT/G sele	ction	IT=10000	OG	Iviode	Polarity	Alphabets (N/S)	
Indication Range	0-3000.0	OmT	L		Operating Temperature	0—+40°C (104° F)		
Measuring Mode	Measuring mode	Measuring range   Resolution   Indication accuracy		Power Source	Battery SUM-3(1.5 V) × 4 pieces			
		0— 200.0 mT	0.1 mT	± (5% of rdg.+ 3digit)	Dimensions	Height 140mm (5.51) × width 64 (2.51) mm× thickness 30 (1.18		
Measuring Range	DC× 1*	200.1-3000.0 mT	1 mT	± (5% of rdg.+10digit)	Mass	Approx. 250 g/0.55 lb (inclu	uding batteries and probe)	
Deschales	DC×10	0 300.00mT	0.01mT	± (5% of rdg.+ 5digit)				
Resolution	AC× 1*	0— 200.0 mT	0.1 mT		Accessories	Probe, batteries and carrying	case	
Indication Assument	AUX 1	200.1—1500.0 mT	1 mT	$\pm$ (5% of rdg.+20digit)	Option	Digital output cable (TM-601	DTC)	
Indication Accuracy	AC×10 0— 150.00mT 0.01mT				Option	Axial probe (TM-701AXL)		

<sup>\*</sup> The measuring ranges are automatically selected.

Note: This product is not designed for measurement of electromagnetic waves.

### Model TM DIGITAL SIGNAL OUTPUT CABLE FOR TESLA METER



Optional cable connects the TM-701 Tesla Meter to a PC for recording of data.

## [Features]

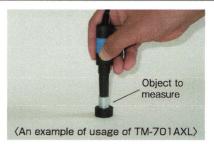
- •Monitor and record measured data to PC.
- •Data can be shown in excel spreadsheet
- Free Sample programs can be downloaded from our Kanetec home page

To PC

## Model TM MEASUREMENT PROBE FOR TESLA METER







●A probe dedicated to TM-701. Please keep this probe as a spare; it can be replaced without troublesome calibration. In addition to the standard PRB (transverse type), an axial type (AXL) capable of measurement in the vertical direction and having higher durability is optionally available.

Model	Applicable Model	Tip Dimensions	Cord Length	Mass
TM-701PRB	Only for TM-701	(T) 1.0(0.03) × (W) 3.5(0.13) × (L) 65(2.55)	1000(00.0)	50g/0.11 lb
TM-701AXL	Only for TM-701	φ13(0.51)×55(2.16)	1000 (39.3)	(Including probe cap)

## Model TM REFERENCE MAGNETIC FIELD FOR TESLA METER

# For calibration or dailycheck of the Tesla meter

- Daily check of the Tesla meter.
- Calibration of the Tesla meter.

## [Features]

- The closed circuit construction employing a permanent magnet that causes less magnetic force leak.
- Small and light weight.
- ■Usable with Kanetec TM-201 and above.

mm		

Magnetic	Dimen	sions	Mass		
Flux Density *	Frame Dia	Height	IVIASS		
0.003T( 30G)		50 (1.96)	Approx. 0.2kg/0.44 lb		
0.05 T( 500G)	φ43(1.69)	40(1.57)	Approx. U.2kg/U.44 Ib		
0.3 T(3000G)		30(1.18)	Approx. 0.1kg/0.22 lb		
1 T(10000G)	φ73(2.87)	74(2.91)	Approx. 2.0kg/4.4 lb		
	Flux Density * 0.003T ( 30G) 0.05 T ( 500G) 0.3 T (3000G)	Flux Density * Frame Dia 0.003T ( 30G) 0.05 T ( 500G)	Flux Density * Frame Dia Height 0.003T ( 30G) 0.05 T ( 500G) 0.3 T (3000G)  + 43(1.69) 40(1.57) 30(1.18)		

\*In case reference magnetic field coresponding to Axial type probe TM-701AXL is required, please consult with us.

# Model PC MAGNETIC POLARITY CHECKER

# Easy check of residual magnetic flux density, and N or S magnet polarity!



In addition to selecting magnetic material, or to confirm the magnetic pole when magnet is installed, it can be used as an easy checker for residual magnetic flux density level on processed products. [Features]

- Card size thickness, 6mm only. Convenient to have with you.
- Audio tone and LED lights
- N Pole (red LED) tone sounds in a short continuous note. S Pole (blue LED) tone sounds in a longer continuous note
- It detects magnetic flux density of more than 1mT (10G) so it can be used for simple confirmation of demagnetized results.
- \*for precise measurement of magnetic flux density, please use TM-701 Tesla Meter

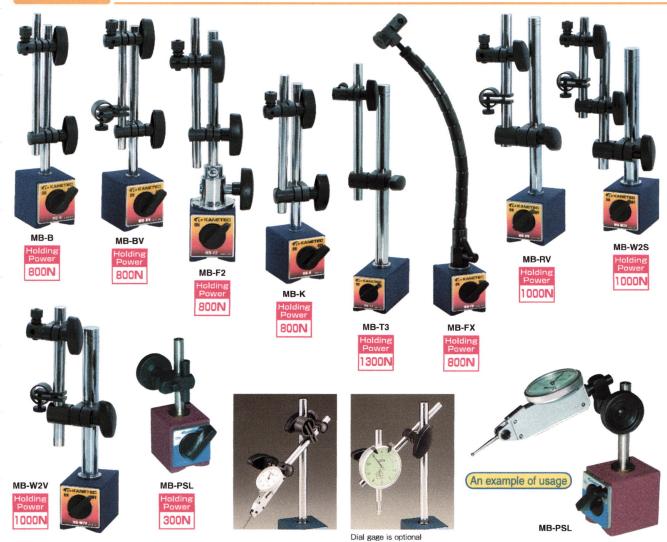




[mm	(in	וו
Dinii		/ 3

Model	Dimentions	Distinction Accuracy	Indication Lamp	Battery	Mass	Accessories
PC-10	55 (2.16) ×85 (3.34) ×t6 (0.23)	N/S Approx. 1mT (10G) or more	N pole (Red LED) S pole (Blue LED)	CR2025 Button battery (included)	25g/0.055 lb	soft case

## Model MB MAGNETIC BASE

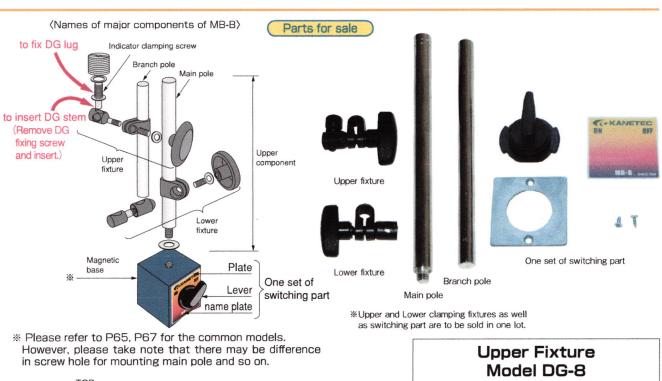


## [Application]

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

- 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.

	Holding	M	agnetic B	ase	Main	Pole	Sub	Pole		Screw Threads		Clamp	Indicator		
Model	Power	Width	Length	Height	Dia ø	Length	Dia φ	Length	Mag. Base	Step	Main Pole	Hole Dia	Clamping Screw	Mass	Features
мв-в						176		165 (6.49)	M 8(0.31)×		M8(0.31) ×			1.5kg/ 3.3 lb	General, standard type.
MB-BV	800N		58		12 (0.47)	(6.92)	10 (0.39)	150 (5.90)	1.25 (0.04)		1.25 (0.04)	4.5(0.17)/		1.6kg/ 3.5 lb	General type with fine adjustment.
MB-F2	( 80kgf)		(2.28)			194 (7.63)			3-M4 (0.15)	_	-	6.5 (0.25)		1.7kg/ 3.7 lb	Main pole 360° turning,can be locked at 75° maximum.
мв-к					14 (0.55)	178 (7.00)	12 (0.47)	165		_			М6	1.8kg/ 4.0 lb	Main pole large diameter, suitable for precision measurement.
MB-RV	1000N	50 (1.96)	73	55 (2.16)	16 (0.62)	225 (8.85)		(6.49)	M 8(0.31) × 1.25(0.04)		M8(0.31) × 1.25(0.04)			2.0kg/ 4.4 lb	Larger size with fine movement adjustment.
MB-W2V	(100kgf)		(2.87)		20	178 (7.00)	14 (0.55)					6.5 (0.25) / 8.1 (0.31)		2.7kg/ 6.0 lb	High-precision type with fine adjustment.
мв-тз	1300N (130kgf)		117 (4.60)		(0.78)	355 (13.9)		200 (7.87)	M20 (0.78) × 1.5 (0.05)	M20(0.78)/ M10(0.39)	M10 (0.39) × 1.25 (0.04)			4.1kg/ 9.1 lb	Main pole longest,base largest and holding power greatest.
MB-FX	800N ( 80kgf)		58 (2.28)		16 (0.62)	315 (12.4)	-	-	M8(0.31) ×		M8(0.31) ×	6.0 (0.23) / 8.1 (0.31)	-		Flexible type settable bent freely.
MB-W2S	1000N (100kgf)		73 (2.87)		20 (0.78)	178 (7.00)	14 (0.55) 12 (0.47)	165 (6.49) 130 (5.11)	1.25 (0.04)	-	1.25(0.04)	4.5 (0.17) / 6.5 (0.25)	М6	3.0kg/ 6.6 lb	Two-step pole with fine adjustment.
MB-PSL	300N ( 30kgf)	30 (1.18)	34 (1.33)	35 (1.37)	7 (0.27)	54 (2.12)	-	-	M5 (0.19) × 0.8 (0.03)		M5(0.19) × 0.8(0.03)	6.0 (0.23)	_	0.27kg/ 0.6 lb	Compatc and simple, suitable for narrow space.



## (Fixture for Mounting Dial Gage)

 Upper fixture clamp with mounting hole size of φ 6.5/8.1mm, supplied optionally for MB-B, BV, F2, K (if φ8mm mounting hole is required).



Model **DG-8-B** (MB-B, BV, F2)

Model **DG-8-K** (MB-K)

# Model MB OPTIONAL UPPER CLAMP

SIDE

# A range of variation for measuring can be wider



mounting mounting \$\phi 6\$ stem \$\phi 8\$ stem

SIDE

HOLD FACE



mounting back dial gauge

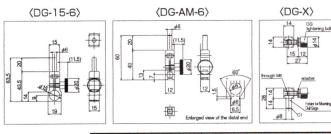
## [Application]

Rear Face (\*MB-PSL excluded)

For use with magnetic base, High Lock Base for mounting dial gauge, linear gauge. [Features]

- With  $\phi$ 6 mm shaft corresponding to the bracket mounting holes on the MB series.
- ●It can mount larger size dial gauges such as liner gauge ( dia. 15 ). (DG-15-6)
- •It has  $\phi 8$  mm and  $\phi 6$ mm holes and can mount dial gauges in the dovetail groove. ( DG-AM-6).
- ●It has an

  ##\text{\pmathbb{0}} 8 mm mounting stem, corresponding to the MB-MX and MB-OX, for lug back dial gauge mounting.



Model	Applicable models	specifications
DG-15-6	MB-series,MX,OX	for $\phi$ 15 dial gauge (such as liner gauge)
DG-AM-6	MB-series	for dial gauge with dovetail
DG-X	MB-MX,OX	for dial gauge with lug

Model MB-MX HIGH LOCK BASE

Mechanical lock & fine movement adjuster

# Tightening torque + clamp force + fine adjustment function, all improved!



Free style by dial adjustment



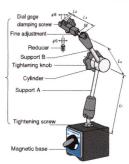
# Consistent and highly accurate measurement

### [Application]

While these bases are used as measuring tool holders, like magnetic bases, they can also be used to hold sensors in place. [Features]

- Any position can be set by tightening a knob to lock every part.
- The clamp system is adjustable steplessly. Light turn achieves it.
- ■A wide variety of models, small to large, are available to suit your applications.
- The dial gage mounting part can be adjusted finely.
- The arm can be adjusted freely in angle and direction and provides stable, shake free positioning.





 $\label{eq:component} $$ \langle {\rm Dial \ gage \ mounting} \rangle $$ $$ \langle {\rm Component \ names/Dimensions} \rangle $$_{[mm(in)]} $$$ 

Model	Lock	Holding	Ma	agnetic Ba	ase			Arm			Tapped	Indicator C	lamp		
Model	Mechanism	Power	Width	Length	Height	Lı	L2	L3	L4	М	Hole	Stem Hole	Dovetail	Mass	Features
MB-MX13F		600N( 60kgf)	40	40	40	57	46.5	61.5		M6(0.23) ×	M6 (0.23) ×			0.8kg/1.7 lb	Smallest type
			(1.57)	(1.57)	(1.57)	(2.24)	(1.83)	(2.42)		7(0.28)	1 (0.03)			0,0,0	oanoot type
MB-MX20F		800N ( 80kgf)		58		95	71					φ8(0.31)		1,4kg/3,1 lb	Small type
MID-MIXEO	Mechanical	BOOM ( BONG!)		(2.28)		(3.74)	(2.79)		6.5	M6(0.23) ×			6.5	1.466/0.110	Small type
ND HYDDE	Type		50		55	137	109.5	63.5	(0.25)	10(0.39)	M8(0.31) ×	φ6(0.23)	(0.25)	0.41-74.63	01-1-11
MB-MX28F		1000N (100kgf)	(1.96)	73	(2.16)	(5.39)	(4.31)	(2.50)			1.25 (0.04)	(When reducer is used)		2.1kg/4.6 lb	Standard type
ND NVAOE		TOUCH (TOURGE)		(2.87)		197	170	1		M6(0.23) ×				0.01 - / / 0.11	
MB-MX40F						(7.75)	(6.69)			12(0.47)				2.2kg/4.8 lb	Long arm type

<sup>%</sup> The holding power applies to SS400, thickness 10 mm and ground surface.

### **HIGH LOCK MINI BASE** Model MB-X

# Mechanical lock type

Dial gage is optional





# Small and simple, suitable for use in limited space.

While these bases are used as measuring tool holders like magnetic bases, they can also be used to hold sensors in place.

- A mechanical lock system that tightens joints in three places by one operation.
- The arm can be adjusted freely, which facilitates locating the mounted measuring instrument.

	I I M b i	Holding	Magnetic Base			Arm			Tapped Hole	Indicator Clamp		Mass	Features
Model Lock Mechanism	Power	Width	Length	Height	L <sub>1</sub>	L2	La	Tapped Title	Stem Hole	Dovetail	IVIDSS	reatures	
мв-сх	M. b. i.e.	160N (16kgf)	28 (1.10)	28(1.10)	29(1.14)	46	46	39	M5(0.19) × 0.8(0.03)	φ6(0.23)	6.5	0.38kg/	Small, V attractive face
MB-PSX	Mechanical Type	300N (30kgf)	30 (1.18)	34 (1.33)	35 (1.37)	(1.81)	(1.81)	(1.53)	M5(0.19) × 0.8(0.03)	×2	(0.25)	0.8 lb	Small, magnet switchover

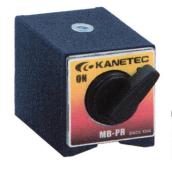
ELECTROMAGNETIC CHUCK PERMANENT CHUCKS CONTROLLERS MAGNETIC CHUCKS ELECTROMAGNETIC CHUCKS

PROMELTA SYSTEM

## Model MB-P MAGNETIC HOLDER BASE



MB-PB 800N



MB-PR 1000N





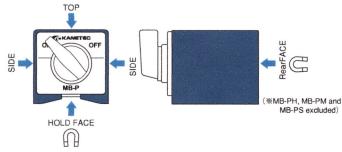






MB-PS 300N

If a plate is to be installed on the top face (tapped holes provided), be sure to use a nonmagnetic material (e.g. aluminum, SUS304, brass plate). If a magnetic material such as iron is mounted/installed to the top face, the holding power will drop significantly.



### [Application]

Available in a wide range of sizes from minimum and medium to large. These on-off switchable magnetic holder bases meet various application. Usable as a tacking base for equipment, and/or a measuring base for laser use (by installing jigs in the screw holes or, if necessary, with slight additional machining).

## [Features]

- Compact in size, yet it delivers a strong magnetic force.
- ●Either a V-slot and/or flat attractive face is provided. The face opposite to the chang eover switch face is also attractive. (MB-PH, MB-PM and MB-PS excluded)
- •Although screw holes are provided, some working is possible as shown.



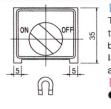




Model	Helding Dawer		Dimensions		Toward Male	Held Face Face	D Att	
Model	Holding Power	Width	Length	Height	Tapped Hole	Hold Face Form	Rear Face Attraction	Mass
MB-PB	800N ( 80kgf)		58.5(2.30)			1.0kg/2.2 lb		
MB-PR	1000N (100kgf)	50(1.96)	73(2.87)	55 (2.16)	M 8 (0.31) × 1.25 (0.04) Depth 7 (0.27)			1.3kg/2.8 lb
MB-PRW	600N ( 60kgf)	50(1.96)	73(2.87) 55(2	55 (2.16)				1.2kg/2.6 lb
MB-PL	1300N (130kgf)		117 (4.60)	1	M10(0.39) ×1.25(0.04) Depth 7(0.27)			2.0kg/4.4 lb
мв-рн	1250N (125kgf)	70 (2.75)	70 (2.75)	80 (3.15)	M12(0.47) ×1.75(0.06) Depth 11 (0.43)			2.5kg/5.5 lb
МВ-РМ	600N ( 60kgf)	40(1.57)	40 (1.57)	40 (1.57)	M6 (0.23) × Depth 6 (0.23)		×	0.5kg/1.1 lb
MB-PS	300N ( 30kgf)	30 (1.18)	34 (1.33)	35 (1.37)	M5 (0.19) × Depth 4 (0.15)	1		0.2kg/0.4 lb
MB-PG	1500N (150kgf)	50(1.96)	120(4.72)	52 (2.04)	M 8(0.31) × 1.25(0.04) Depth 7(0.27)	LJ	0	1.9kg/4.1 lb

## Model MB MAGNETIC HOLDER BASE





This base can be used widely as a magnetic force ON/OFF type magnetic base. It is designed small and is useful as a base for temporarily mounted legs of equipment, sensors and lasers by mounting a jig using tapped holes or by some additional machining.

### [Features]

- The base can be mounted and demounted easily using the select lever.
- Compact but powerful magnetic force.
- Waterproof and oilproof construction.

[mm (in)]

ELECTROMAGNETIC CHUCKS

CHUCK

MAGNETIC CHUCKS PERMANENT

PERMANENT ELECTROMAGNETIC CHUCKS

BLOCKS FOR MC

Model	Holding Power		Dimensions		Mounting Hole	Mone	
WIOGE	Floiding Fower	Width	Height	Length	Mounting Hole	Mass	
MB-0404	200N (20kgf) or over	40(1.57)	35(1.37)	40 (1.57)	4-M3(0.11) Depth 6(Span30(1.18))	0.4kg/0.8 lb	

\* The holding power applies to SS400, thickness 25 mm and ground surface

## MAGNETIC HOLDER





Center

Tapped Hole

M8(0.31)×P1.25

(0.04) depth8 (0.31)

M16(0.23) XP1.0

0.03) depth8 (0.31)

### [Application]

Suitable as a base for laser and other optical measurement. Because the ON-OFF holding power is adjustable, these are recommended where fine adjustment and accuracy are required.

15

(0.59)

(0.74)

(0.94)

36

Operating lever part

Φ8

(0.31)

9 (0.35

10

(0.39)

4 (0.15)

8(0.31

25

(0.98)

50

Easy ON-OFF operation using the lever.

6 (0.23)

- Thin and powerful magnetic force.
- Dry specification. Peripheral tapped hole

M4 (0.15) ×

P0.7(0.02)

M6(0.23) x

[mm (in)] Mass

0.3kg/ 0.6kg 1.32 lb 1.2kg/ 3.3kg/

PROMELTA SYSTEM

SINE BAR CHUCKS

MAGNETIC BLOCKS

WORKING TOOLS

MAGNETIC HOLDERS

MAGNETIC TOOLS

\* The holding power applies to SS400, thickness 25 mm and ground surface. **MAGNETIC HOLDER** Model MB-L-C





MB-L-C50



Holding

65N

25kgf)

(80kgf

Power



Dimensions

H

30

W

65 20

90

Model	Holding Power	Dimensions			Mass	
		A	Н	P	В	Mass
MB-L-C50	59N ( 6kgf)	50(1.96)	20 (0.78)	25 (0.98)	M4 (0.15) Depth 6 (0.23)	0.30kg/0.6 lb
MB-L-C75	196N (20kgf)	75 (2.95)	20 (0.78)	35 (1.37)	M4 (0.15) Depth 6 (0.23)	0.68kg/1.5 lb

\* The holding power applies to SS400, thickness 25 mm and ground surface.

## [Features] ●Easy ON-OFF operation using the lever.

- Thin and powerful magnetic force.
- Dry specification.

[Application]

# **RULER HOLDER**

Because the ON-OFF holding power is adjustable, these are recommended where fine adjustment and accuracy are required.



Parts for sale!

## [Application]

Useful for a wide variety of operations; holding down a large ruler on a floor or wall during machining of iron plates, etc. and moving workpieces after cutting or holding and removing chips. %If used at high temperature, the holding power may drop. \*For transporting heavy workpieces, Model HL-15 (P91) having a reinforced grip to withstand the weight is available.

- Attachable and detachable easily by changeover lever.
- ■Attractive face is made in V-slot for KM-B1 and in inverted concave for KM-B2.

[mm (in)]

	Holding Power		Mounting Hole		Tapped Hole	Mass
Model		Width	Length	Height		
KM-B1	800N ( 80kgf)	50 (1.96)	58.5 (2.30)	55 (2.16)	M 8 (0.31) × 1.25 (0.04) Depth 7 (0.27)	1.1kg/2.4 lb
KM-B2	1500N (150kgf)	50(1.96)	120(4.72)	52 (2.04)		2.5kg/5.5 lb