# Model MB MAGNETIC BASE



# **MAGNETIC HOLDER**



# M8×1 depth 6 8-M4×0.7 depth 6 65 (18.5) Nameplate 25 20

# [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. [Features]

- Easy ON-OFF operation using the lever.
- Thin and powerful magnetic force.

							[mm (in)]	
	Model	Holding		Dimensions		Mounting Hole	Mass	
	Model	Power	Width	Length	Height	Mounting Hole	Mass	
	MB-L-45	CENI/C Flort	45 (1.77)	45 (1.77)		4-M4 (0.15) Depth 6 (0.23)	0.01/0.011-	
	WD-L-43	65N (6.5kgf)	45 (1.77)	45 (1.77)	00 (0.70)	(Span 25 (0.98))	0.3kg/0.6 lb	
ĺ	MB-L-65	200N ( 20kgf)	65 (2.55)	65 (2.55)	20 (0.78)	8-M4 (0.15) Depth 6 (0.23)	0.6kg/1.3 lb	
ĺ	MB-L-90	250N ( 25kgf)	90 (3.54)	90 (3.54)		(Span 25 (0.98))	1.0kg/2.2 lb	

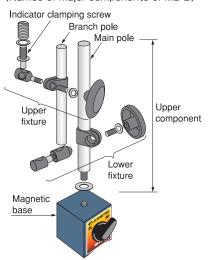
<sup>\*</sup> The holding power applies to SS400, thickness 25 mm and ground surface.

## [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

## (Names of major components of MB-B)



# **Upper Fixture** Model DG-8 (Fixture for Mounting Dial Gage)

Oupper fixture clamp with mounting hole size of φ 6.5/8.1mm, supplied optionally for MB-B, BV, F2, K (if  $\phi$ 8mm mounting hole is required).



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

Model DG-8-K (MB-K)





Dial gage is optional



[mm (in)]

Holding Magnetic Base Main Pole Sub Pole Screw Threads Clamp Model Mass Features Main Pole Hole Dia Width Length Height Dia φ Mag. Base Power Lenath Dia φ Lenath Step 165 1.5kg/ General, standard type. мв-в 176 6.49 3.3 lb 1.6kg/ 12 10 150 General type with fine MB-BV 800N 58 (0.47)(0.39) 4.5 (0.17)/ adjustment. 80kaf 194 6.5 (0.25) 1.7kg Main pole 360° turning,can MB-F2 M 8 (0.31) × be locked at 75° maximum. M8 (0.31) X 1.25 (0.04) 178 1.25 (0.04) 1.8kg/ Main pole large diameter, suitable 14 12 мв-к 0.47 165 4.0 lb for precision measurement. Larger size with fine 50 55 16 225 (6.49)2.0kg MB-RV 1000N movement adjustment. (1.96)73 (2.16) 4.4 lb (100kgf) (2.87)178 14 6.5 (0.25)/ 2.7kg/ High-precision type with MB-W2V 20 7.00 (0.55) 8.1 (0.31) 6.0 lb fine adjustment. 1300N 117 355 200 M20 (0.78) X M20 (0.78)/ M10 (0.39) X 4.1kg/ Main pole longest,base largest MB-T3 (130kgf) M10 (0.3 1.25 (0.04 and holding power greatest. Flexible type settable 800N 58 16 1.5kg 6.0 (0.23)/ MB-FX M8 (0.31) X 80kgf) M8 (0.31) X bent freelv 8.1 (0.31 73 178 165 (6.49) 1.25 (0.04) 3.0kg/ Two-step pole with fine 1000N 20 14 (0.55 1.25 (0.04) 4.5 (0.17)/ MB-W2S М6 6.6 lb adjustment. (100kgf) 130 (5.11 12 (0.47 6.5 (0.25 M5 (0,19) X 300N 34 54 M5 (0.19) X 0.27kg Compate and simple. 30kaf) 0.8 (0.03 suitable for narrow space.

#Upper fixture, Model DC-8 (attaching hole of  $\phi$ 6.5/8.1), for attaching dial guage is optionally supplied.

\*The holding power applies to SS400, thickness 10 mm and ground surface

# **MAGNETIC HOLDER**



MB-L-C50

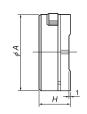


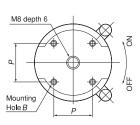
MB-L-C75

						[mm (in)]
Model	Holding	Dime	nsions		Mounting Hole	Mass
Model	Power	Α	Н	P	В	iviass
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.

59**N** 





## [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.

- Easy ON-OFF operation using the lever.
- Thin and powerful magnetic force.

ELECTROMAGNETIC CHUCKS

PERMANENT PERMANENT CHUCK
ELECTROMAGNETIC CHUCKS | CONTROLLERS

BLOCKS FOR MC

PROMELTA SYSTEM

SINE BAR CHUCKS

INJECTION MOLDING MACHINE MOLD FIXTURE WORKING TOOLS

MAGNETIC BLOCKS

MEASURING TOOLS

# 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





# 800N MB-MX13F

1000N

1000N

MB-MX20F

MB-MX28F

Dial gage clamping screw Fine

Reducer Support B

Cylinder

Support A

Tightening knob

Tightening screv

MB-MX40F

23

(20F-21)

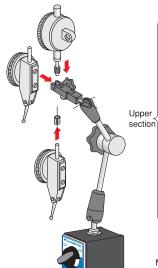
# **Consistent and highly** accurate measurement

Dial gage is optional

# [Application]

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

- Any position can be set by tightening a knob to lock every part.
- ●The clamp system is adjustable steplessly. Light turn achieves it. Quick lock mechanism
- 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.





(Dial gage mounting)

(Component names/Dimensions)

																[mm (in)]
Ī	Model	Lock	Holding Power	Magnetic Base			Arm				Tapped	Indicator CI	amp	Mass	Features	
	Model	Mechanism	Holding Power	Width	Length	Height	L <sub>1</sub>	L2	Lз	L4	М	Hole	Stem Hole	Dovetail	IVIASS	reatures
Π	MB-MX13F		600N ( 60kgf)	40	40	40	57	46.5	61.5			M6 (0.23) X			0.8kg/1.7 lb	Smallest type
MP-MX 13F		600IN ( 60KgI)	(1.57)	(1.57)	(1.57)	(2.24)	(1.83)	(2.42)			1 (0.03)			0.6Kg/1./ ID	Smallest type	
MB-MX20F		00001/001()		58		95	71			M6 (0.23) ×		φ8 (0.31)		4.41/0.4.11-	Constitutions	
	WD-WAZUF	Mechanical 800N (80kgf)		(2.28)		(3.74)	(2.79)		6.5	10 (0.39)		- ()	6.5	1.4kg/3.1 lb	Small type	
Ī	MD MYOOF	Туре		50		55	137	109.5	63.5	(0.25)		M8 (0.31) X	φ6 (0.23) / When reducer\	(0.25)	0.41/4.0.11-	Ottored and the con-
MB-MX28F		100001(1001-1)	(1.96)	73	(2.16)	(5.39)	(4.31)	(2.50)			1.25 (0.04)	(is used		2.1kg/4.6 lb	Standard type	
MD MY40E		1000N (100kgf)		(2.87)		197	170			M6 (0.23) ×				0.01 . (4.0 !!		
	MB-MX40F						(7.75)	(6.69)			12 (0.47)				2.2kg/4.8 lb	Long arm type

# Mechanical lock type



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

## [Application]

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

#### [Features]

- 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.

[mm (in)]

Model	Lock Mechanism	Holding	Magnetic Base				Arm		Tapped Hole	Indicator	Clamp	Mass	Features	
Model	Lock Wednamsm	Power	Width	Length	Height	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	rapped riole	Stem Hole	Dovetail	iviass	reatures	
мв-сх	Mechanical Type	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-PS	iviectianicai Type	300N (30kgf)	30 (1.18)	34 (1.33)	35 (1.37)	(1.81)	(1.81)	(1.53)	IVIS (0.19) X0.8 (0.03)	X2	(0.25)	0.8 lb	Small, magnet switchover	

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

# Model MB-OX

# **HIGH LOCK BASE**

# Hydraulic & fine adjuster



#### [Application]

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

#### [Features]

- 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.
- Fine adjustment.



Dial gage is optional

[mm (in)]

Mo	Model	Lock Holding Power		Ма	gnetic Ba	ase		Arm		Tapped Hole	Indicator	Clamp	Mass	Features
	Model	Mechanism	Holding Power	Width	Length	Height	L <sub>1</sub>	L <sub>2</sub>	L 3	гарреа нове	Stem Hole	Dovetail	IVIASS	reatures
	MD OV	Hydraulic	1000N (1001	50	73	55	140	110	81	M0 (0.04) X4.05 (0.04)	φ8 (0.31)	6.5	2.0kg/	Chandend has
MB-OX	Туре	1000N (100kgf)	(1.96)	(2.87)	(2.16)	(5.51)	(4.33)	(3.18)	M8 (0.31) ×1.25 (0.04)	φ6 (0.23)	(0.25)	4.4 lb	Standard type	

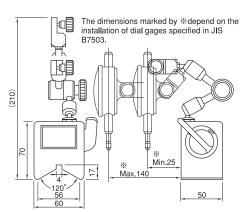
<sup>\*</sup> The holding power applies to SS400, thickness 10 mm and ground surface.

#### Model MB-S **BORER BASE\***

MB-OX

Holding





#### [Application]

Useful for measuring the projected amount of a cutter mounted on the arbor of a boring machine with a dial gage to locate the cutter precisely.

- ●The measuring tool holding arm can be freely locked by single operation, which makes this base suitable for any length between its mounting position and the tip of the
- Since a magnetic force is used for holding, the dial gage is held firmly even if it is mounted inclined. Further, the magnetic force can be turned on and off for easy installation and removal.
- ●The dial gage is mounted by tightening a lug with an M6

[mm (in)]

Model Holding Power		Arbor Diameter	Holding Area	Mass		
Model	Holding Fower	Arbor Diameter	Width	Angle	IVIASS	
MB-S12B	250N (25kgf) at $\phi$ 70 (2.75)	φ15 (0.59) —120 (4.72)	56 (2.20)	120°	1.3kg/2.8 lb	

WORKING TOOLS

# Model ME MAGNETIC LAMP STAND









# [Application]

The magnetic lamp stands allow the magnet to be turned on and off quickly, and thus can easily be installed in any place, removed and relocated. These stands are most suitable for illumination of work areas on workbenches or machine tools.

\*A bulb is not included except for ME-5RA. Use a bulb of base E26.

Thanks to a strong holding power by a small and light weight, yet strong magnet, these stands can easily be mounted not only on a horizontal face, but inclined face and vertical face. The flexible tube enables it to obtain an optimum illuminating angle. [Features]

- •While the installation position is fixed by the attractive face, an illuminating direction can be changed freely.
- The protective guard protects the bulb from breakage when the lamp falls.
- ●The employment of an oil resistant power cord enables these stands to be used in various workplaces.

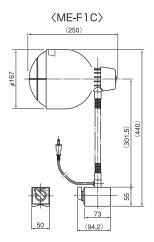
Model	Туре	Holding Power	Height	Cord Length		IIIumination Rating	Mass
ME-2CA	Standard type	800N	440 (17.3)		100 VAC	Upper limit 100W, optimum 60W	1.3kg/2.8 lb
ME-2CA-R	Reflective plate type	( 80kgf)	440 (17.3)	1.6m (62.9)	100 VAC	Upper limit 100W, optimum 40W	1.5kg/3.3 lb
ME-L2C	Tall type	1000N	704 (27.7)	1.6111(62.9)	100 VAC	Upper limit 100W, optimum 60W	1.7kg/3.7 lb
ME-F1C	Fluorescent lamp type	(100kgf)	440 (17.3)		100 VAC	Opper limit 10000, optimum 6000	2.0kg/4.4 lb
ME-5RA	Outdoor type	(Tookgi)	240 (9.44)	5.0m (196.8)		100 VAC 200W	1.3kg/2.8 lb

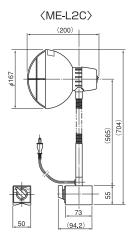
- \*A 100VAC/200W bulb is included with ME-5RA only.
- \*When using a stand with 100W incandescent lamp for long hours, no rating problem arises, but caution against overheating when handling it.

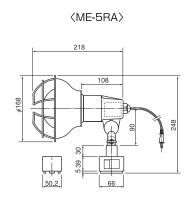
  \*Depending on the dimensions of bulb type fluorescent lamp, they may be used on ME-2CA.

  \*The holding power applies to SS400, plate thickness 10 mm and ground surface.

(ME-2CA) (200) 22 58.5







[mm (in)]

MEASURING TOOLS

**Reflective** plate type

Most suitable for cost reduction + energy saving + inspection work! Magnetic lamp stand with reflective plate

[Application]

Thanks to the effect of a high performance special reflective plate, illuminance of more than 100W can be obtained using a 60W bulb, saving power consumption significantly. Also "heat", a weak point of incandescent lamps, can be reduced.

#### [Features]

- ●Illuminance tripled and heat generation reduced 50%. Great energy saving
- Problems associated with incandescent lamps having good color rendering \* have been resolved.
- ●Long-hour work does not cause eye fatigue and thus this model is most suitable for visual inspections and reading fine scales on measuring instruments.
- Color rendering…A level of easiness of reading vernier scales and fine articles.



Comparison of illuminance with and without special reflective plate

•		(LOX)
Bulb	With reflective pate	Without reflective plate
40W	850	300
60W	1300	420
100W	2100	640

No bulb is included. Use a bulb of base E26.



Energy saving lamp type

# **Energy saving lamp type: Energy saving & long life!** Magnetic lamp stand with energy saving lamp

# Latest energy saving lamp employed.

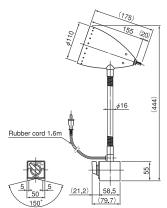
- A spiral type fluorescent lamp having high luminous intensity distribution efficiency is used.
  - A lamp equivalent to 16W (100V) is as bright as a 60W incandescent lamp.
- Heat generated during operation has been reduced significantly. When compared with temperature rise of a 60W incandescent lamp, temperature is lower by about 40%.
- ■A long life; a service life is 5 times longer than incandescent

Average life as long as 10,000 hours.

# Small and light weight shade employed.

# Safe

●The lamp is housed inside the shade, which protects the lamp from being broken when it falls.









## Precautions for use

●A lamp must be of the correct rating. The use of a lamp exceeding the rating will cause injury or accident due to heat.

For replacement lamps, please use Kanetec recommended lamps for safe operation.

Please contact your nearest dealer or Kanetec sales office.

_								[mm (in)]
	Model	Type	Holding Power	Cord Length	IIIumination Rating	Attached Lamp	Socket	Mass
	ME-ELC	Energy saving lamp type	800N (80kgf)	1.6m (62.9)	100 VAC Upper limit 60W Optimum 40W	16W (100 VAC)	E26	1.6kg/3.5 lb

# Model MR MAGNETIC LENS STAND MAGLENS\*

#### [Application]

Very useful for accurate readings of the smallest graduations on measuring instruments.

#### [Features]

- The large diameter lens protects your eyes from fatigue and is easy
- ■Angle of Maglens is freely adjustable with its flexible neck; and the lens is alse turnable.

[mm (in)]

Model	Holding Power	Flexible tube Length	Lens Dia	Focus Distance	Magnification	Mass	
MR-2C	800N (80kgf)	257 (10.1)	φ 100 (3.93)	250 (9.84)	×2	1.5kg/3.3 lb	

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

# MR-2C 800N

# **MAGNETIC HOLDER BASE**



MB-PB 800N



MB-PR 1000N





MB-PL Holding 1300N



MB-PH 1250N



MB-PG Holding 1500N

# [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 changeover switch face is also attractive. (MB-PH, MB-PM and MB-PS excluded)
- Although screw holes are provided, some working is possible as shown.



600N



Holdine 300N



# Workable area on magnetic holder base

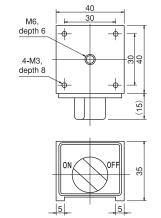
Some working such as drilling is allowed in the \_\_\_\_ area.

Detailed dimensions are found on page 63.



							[111111 (1117 ]
Model	Holding Power		Dimensions		Tapped Hole	Hold Face	Mass
Wodel	Tiolaing Fower	Width Length Height		тарреатные	Form	IVIGSS	
MB-PB	800N ( 80kgf)		58 (2.28)				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)	/3 (2.87)	35 (2.16)			1.2kg/2.6 lb
MB-PL	1300N (130kgf)		117 (4.60)		M10 (0.39) ×1.25 (0.04) Depth 7 (0.27)		2.0kg/4.4 lb
MB-PH	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
MB-PM	600N ( 60kgf)	40 (1.57)	40 (1.57)	40 (1.57)	M6 (0.23) XDepth 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)		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)		1.8kg/3.9 lb





## [Application]

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.
- dripproof and oilproof construction.

[mm (in)]

PERMANENT CHUCK ELECTROMAGNETIC HUCKS CONTROLLERS CHUCKS

ELECTROMAGNETIC CHUCKS CONTROLLERS CHUCKS

BLOCKS FOR MC

VACUUM

PROMELTA SYSTEM

SINE BAR CHUCKS

	Holding Power	Dimensions				.,
Model		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.

#### **RULER HOLDER** Model KM-B





#### [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 (P76) having a reinforced grip to withstand the weight is available.

# [Features]

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

	Model	Holding Power	Base Dimensions			Tapped Hole	Mass
			Width	Length	Height	таррей поле	Iviass
Ī	KM-B1	800N ( 80kgf)	50 (1.96)	58 (2.28)	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)		1.9kg/4.2 lb

\* The holding power applies to SS400, thickness 10 mm and ground surface.

# Information for additional working on magnetic holder bases

# **\*Precautions**

- 1) The (shaded) areas shown in the following figures can be worked.
- 2) If areas (magnet, separator, main unit construction) other than (shaded) areas have been worked, the ON-OFF operation may be disabled or the main unit may be damaged, or, disabled in the worst case.
- 3) Additional working may result in a drop in the holding power and strength. Prior to using the base after additional working, always check its capacity.
- 4) 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.

M3 thread

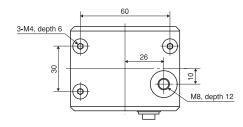
# MB-PB MB-PR MB-PL MB-B/MB-BV/MB-K/MB-FX MB-RV/MB-W2V/MB-W2S/MB-MX28F/ MB-T3 (Top face tapped hole M20) MB-MX20F/KM-B1 MB-MX40F/MB-OX $M8 \times 1.25$ , depth 7 Section A-A (29.25) 12 19 MB-PH MB-PRW MB-PG Common base type КМ-В2 # # 14.5 19 MB-PM MB-PS MB-0404 Common base type MB-PSL/MB-PSX Section A M6 thread, depth 6 4-M3 thread, depth 6

# Model MBE MOBITY\* (ONE-TOUCH BASE)

# **Excellent for use in clean rooms!**



**MBE-35** 



# An example of usage of laser displacement gage



An example of usage of micro checker



## [Application]

52

Most suitable as a temporary mounting base for laser and other optical measurement.

(5.5)

The magnetic force can be changed over with a finger tip quickly. "One-touch" and "soft-touch" ON/OFF changeover is possible.

#### [Features]

- The magnetic force can be turned on and off with a single hand to enable fine positioning quickly.
- Since this is not of mechanical changeover construction, there are no parts that are worn by ON/OFF operations, thus making this model suitable for use in clean rooms.
- Light weight and compact, yet strong holding
- Various measuring instruments can be mounted with M8 and M4 tapped holes on the top face to expand applications further.

Lmm	(in)	J

Model	Holding Power	Dimensions			Maustine Hale	Mana
		Width	Length	Height	Mounting Hole	Mass
MBE-35	400N (40kgf)	73 (2.87)	55 (2.16)	52 (2.04)	1 (0.03) -M8 (0.31) Depth12 (0.47) /3 (0.11) -M4 (0.15) Depth 6 (0.23)	0.7kg/1.5 lb

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