



### Model **KPB** DOUBLE-FACE/SINGLE-FACE HOLDING PERMANENT MAGNETIC BLOCK



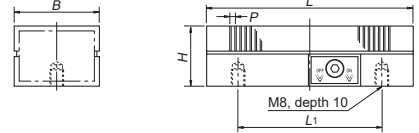
#### Application

These blocks can hold workpieces during electric discharge machining and grinding. They can also be used as holding tools for assembly and light duty machining.

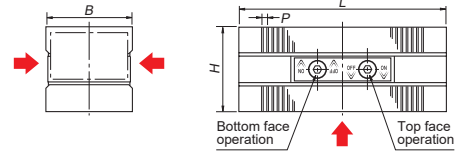
#### Features

- The both sides can hold workpieces and can be turned on and off individually. (2F type)
- They are secured to the work table by turning on and off the magnet. (2F type)
- The side faces (ON/OFF switchover face) can also hold workpieces. (2F type)
- They are secured to the work table using tapped holes provided on the mounting face. They can also be secured by having them held by a magnetic chuck. (1F type)
- The operation part is provided on both side faces to facilitate on/off operation.
- Light weight for easy positional adjustment.
- The operating handle is detachable and does not hinder the work.
- One set of two blocks has been machined and finished together.
- They are of drip-proof and oil-resistant construction to allow them to be used in fluid.

#### <KPB-1F dimensions>



#### <KPB-2F dimensions>



↑ indicates the attractive face.

#### Single face type

Model	Nominal Size	Holding Power	Dimensions					Pole Pitch	Mass
			B	L	H	L <sub>1</sub>	P		
KPB-1F13	50 (1.96) × 125 (4.92)	250N (25kgf)	52 (2.04)	125 (4.92)	35 (1.37)	85 (3.34)	1.5 (0.5+1.0)	0.05 (0.02+0.03)	1.5kg/ 3.3 lb ×2
KPB-1F18	50 (1.96) × 180 (7.08)	350N (35kgf)	52 (2.04)	180 (7.08)	35 (1.37)	110 (4.33)	1.5 (0.5+1.0)	0.05 (0.02+0.03)	2.2kg/ 4.8 lb ×2
KPB-1F25	50 (1.96) × 250 (9.84)	500N (50kgf)	52 (2.04)	250 (9.84)	35 (1.37)	150 (5.90)	1.5 (0.5+1.0)	0.05 (0.02+0.03)	3.1kg/ 6.8 lb ×2

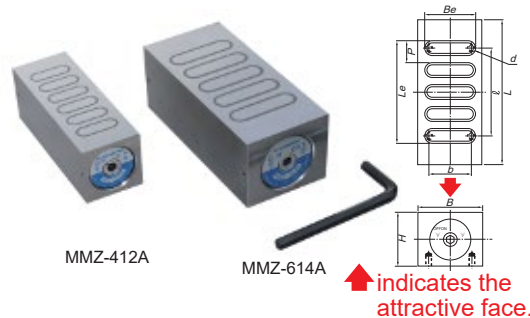
※The holding power is based on a test piece of SS400, 20 mm thick (ground surface) held on the whole face.

#### Double face type

Model	Nominal Size	Holding Power	Dimensions					Pole Pitch	Mass
			B	L	H	L <sub>1</sub>	P		
KPB-2F13	50 (1.96) × 125 (4.92)	250N (25kgf)	52 (2.04)	125 (4.92)	50 (1.96)	50 (1.96)	1.5 (0.5+1.0)	0.05 (0.02+0.03)	2.5kg/ 5.5 lb ×2
KPB-2F18	50 (1.96) × 180 (7.08)	350N (35kgf)	52 (2.04)	180 (7.08)	50 (1.96)	50 (1.96)	1.5 (0.5+1.0)	0.05 (0.02+0.03)	3.6kg/ 8.0 lb ×2
KPB-2F25	50 (1.96) × 250 (9.84)	500N (50kgf)	52 (2.04)	250 (9.84)	50 (1.96)	50 (1.96)	1.5 (0.5+1.0)	0.05 (0.02+0.03)	5.0kg/ 11.1 lb ×2

※The holding power is based on a test piece of SS400, 20 mm thick (ground surface) held on the whole face.

### Model **MMZ** ONE-FACE HOLDING RECTANGULAR PERMANENT MAGNETIC MINI CHUCK



#### Application

These chucks are used in combination with a magnetic chuck as an auxiliary holding tool for irregularly shaped workpieces in grinding and light duty cutting. These chucks are of drip-proof construction enabling them to hold workpieces in electric discharge machining fluid.

#### Features

- The magnetic force can be turned ON and OFF from either the front side or the rear side.
- The chucks can be used in fluid.

The cranks can be used in fluid.

[mm (in.)]

Model	Holding Power	Attractive Face				Pole Pitch		Mounting Face			Height	Handle Hole	Mass
		B	L	Be	Le	P		b	ℓ	d			
MMZ-412A	300N (30kgf)	40 (1.57)	115 (4.52)	29 (1.14)	86 (3.38)	15 (1.5+8+1.5+4)		30 (1.18)	65 (2.55)	4-M5 (0.19) depth 7 (0.27)	40 (1.57)	Nominal 6 (0.23)	1.3kg/ 2.8 lb
	800N (80kgf)	60 (2.36)	135 (5.31)	44 (1.73)	92 (3.62)	19.5 (2+10+2+5.5)		42 (1.65)	72 (2.83)	4-M6 (0.23) depth 10 (0.39)	50 (1.96)		3.1kg/ 6.8 lb

※The holding 800N (80kgf) power is based on a test piece of 50 × 125, S15C.

### Model **MMC** ONE-FACE HOLDING ROUND PERMANENT MAGNETIC MINI CHUCK



#### Application

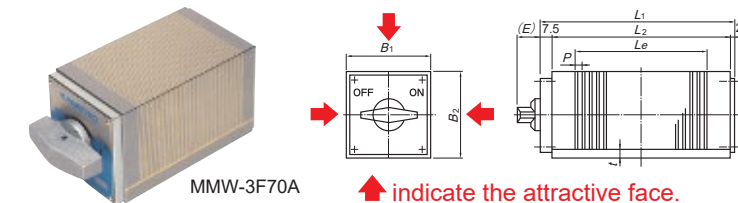
These chucks are used in combination with a magnetic chuck as an auxiliary holding tool for irregularly shaped workpieces in grinding and light duty cutting. (These chucks cannot be used in wet operations.) They can also be used for such applications as holding workpieces in advance to reduce the setup time. Thus they can be used for continuous grinding of small and thin workpieces.

#### Features

- These chucks are of powerful type having a special construction using Alnico magnet steel.
- Small, but the magnetic force can be turned on and off.

Small, but the magnetic force can be turned on and off.										[mm (in.)]	
Model	Holding Power	Attractive Face		Pole Pitch		Mounting Face			Height	Handle Hole	Mass
		D <sub>1</sub>	D <sub>e</sub>	P	D <sub>p</sub>	D <sub>2</sub>	d	H			
MMC-5	85N (8.5kgf)	50 (1.96)	29 (1.14)	9.5 (1.5+8) 0.37 (0.06+0.31)	35 (1.37)	25 (0.98)	4-M5 (0.19) depth 7 (0.27)	50 (1.96)	Nominal 8 (0.31)	0.7kg/ 1.5lb	
MMC-8	500N (50kgf)	80 (3.15)	54 (2.12)	10 (2+8) 0.39 (0.08+0.31)	60 (2.36)	50 (1.96)	4-M6 (0.23) depth 10 (0.39)	65 (2.55)		2.2kg/ 4.8lb	

### Model **MMW** THREE-FACE HOLDING PERMANENT MAGNETIC MINI CHUCK



#### Application

These chucks have three attractive faces and can be used in combination with a magnetic chuck. They are suitable for setting angles of small workpieces and angle grinding.

#### Features

- Since these chucks have three attractive faces, one face may be used for mounting the chuck and other faces for holding workpieces.
- They have magnetic poles arranged at micro pitches to hold small workpieces.
- Drip-proof construction.

Model	Nominal Size	Holding Power	Dimensions					Pole Pitch		Squareness	Parallelism	Mass
			B <sub>1</sub>	B <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	E	Le	t			
MMW-3F50A	55 (2.16) × 115 (4.52)	600N (60kgf)	55 (2.16)	55 (2.16)	125.5 (4.94)	115 (4.52)	20.5 (0.80)	90.5 (3.56)	10 (0.39)	1.5 (0.5+1.0)	0.010.02	2.8kg/ 6.2 lb
MMW-3F70A	70 (2.75) × 115 (4.52)	900N (90kgf)	70 (2.75)	70 (2.75)	125.5 (4.94)	115 (4.52)	25.5 (1.00)	90.5 (3.56)	10 (0.39)	1.5 (0.5+1.0)	0.010.02	4.0kg/ 8.8 lb