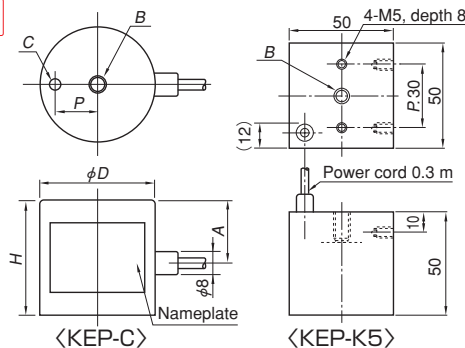


Model **KEP** PERMANENT ELECTROMAGNETIC HOLDER



Electromagnetic release

Rectifier required additionally



**Precautions for use**  
Rust and scratches on the attractive face affect the holding power adversely. Repair it periodically.

[Features]

- No fear of accidents by fallen workpieces due to power failure and no heat generated by continuous power on. These features make these holders suitable for long-hour holding. Workpieces are held by a permanent magnet, but its ON/OFF is controlled electrically.
- The electromagnetic release type that keeps the magnetic force off when power is being supplied. Normally, the magnetic force is kept ON.
- An uninterruptible power supply is not required.
- The square type (KEP-K) is suitable for picking up small parts from corners of containers, etc. and picking up doughnut-shaped workpieces.

How to use

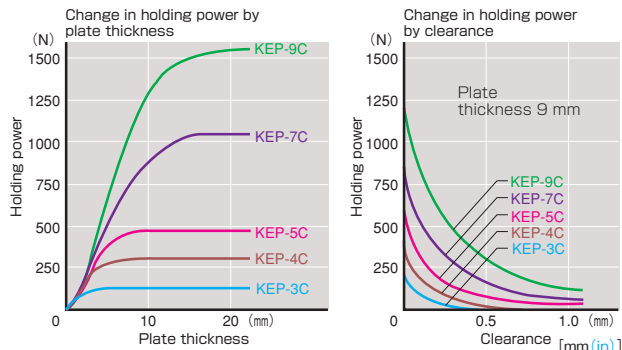
The power source is 24 VDC. When using 4 holders of the same size and same type at the same time, connect their wires in series that are used at a distribution of the voltage 96 VDC (96 V ÷ 4 = 24 V). In this case, a voltage variable rectifier (RH-M) enables adjustment of the demagnetizing voltage (power on amount at OFF) to facilitate operation.

Released only at power on

The power-on time must be 5 seconds or less. The power-off time must be 10 times or longer. (30 seconds or less for KEP-K.)

Residual holding power

As an inevitable nature of permanent electromagnetic holders, 3% to 4% of the holding power will remain as residual holding power after the workpiece has been released. If the weight of the lifted workpiece is smaller than this holding power, it may not be released. In such a case, the workpiece can be released easily by attaching a thin nonmagnetic film on the attractive face. Note, however, that the holding power will drop as the square of clearance.



Model	Dimensions						Max. Holding Power	Voltage	Current	Working Rate	Applicable Rectifier	Mass
	φD	H	P	A	B	C						
KEP-3C	30 (1.18)	40 (1.57)	10 (0.39)	22 (0.86)	M6 (0.23) Depth 10 (0.39)	φ4 (0.15) Depth 3 (0.11)	150N (15kgf)	24 VDC	0.45A	10% ED	RH-M303A-6/24 RH-M303A-6/24-C1 RH-M303A-6/24-C2 KR-T101A-6/24	0.17kg/ 0.37 lb
KEP-4C	40 (1.57)	40 (1.57)	15 (0.59)	25 (0.98)	M8 (0.31) Depth 13 (0.51)	φ5 (0.19) Depth 4 (0.15)	250N (25kgf)		0.54A			0.31kg/ 0.68 lb
KEP-5C	50 (1.96)	50 (1.96)	18 (0.70)	25 (0.98)	M8 (0.31) Depth 13 (0.51)	φ5 (0.19) Depth 4 (0.15)	340N (35kgf)		0.58A			0.6 kg/ 1.32 lb
KEP-7C	70 (2.75)	60 (2.36)	20 (0.78)	35 (1.37)	M10 (0.39) Depth 16 (0.62)	φ6 (0.23) Depth 6 (0.23)	880N (90kgf)		0.50A			1.5 kg/ 3.30 lb
KEP-9C	90 (3.54)	60 (2.36)	20 (0.78)	35 (1.37)	M10 (0.39) Depth 16 (0.62)	φ6 (0.23) Depth 6 (0.23)	1470N (150kgf)		0.45A			2.4 kg/ 5.29 lb
KEP-K5	50 (1.96)	50 (1.96)	50 (1.96)	50 (1.96)	M8 (0.31) Depth 13 (0.51)	—	250N (25kgf)		0.43A			50% ED

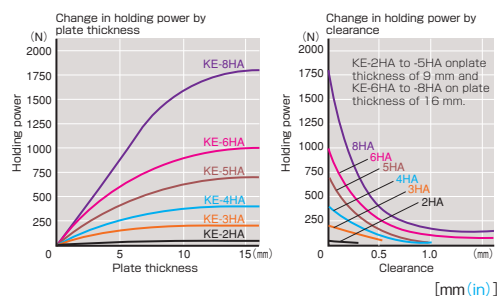
※The max. holding power is based on a test piece of SS400, 20 mm thick, ground surface held on the whole area. Therefore, the lifting capacity is normally a third or less of the max. holding power. ※Cord length 0.3 m.

Model **KE-H** HYBRID HOLDER

Controller required additionally



**Precautions for use**  
Rust and scratches on the attractive face affect the holding power adversely. Repair it periodically.



[Application]

Suitable for robot hands and such systems that require high-speed operations such as repeated transfer in automated lines.

[Features]

- Very little residual holding power allows workpieces to be released quickly. This enables high-speed operation; for example, light weight workpieces can be attached/detached 5 to 6 times per second.
- Because these holders are of permanent electromagnetic type, the holders consume little power and generate little heat, making these holders suitable for continuous, long-hour operation.
- The holding power is switchable at two stages; High and Low by turning on and off the power supply. The reverse supply of power releases workpieces. This enables a wide variety of usage. (When at "Low," the holding power is about 1/3 of that at "High.")
- The powerful rare earth magnet offers high holding power in spite of its small size.

A type of cord on the top face spec. (KE-HA-U) is also available.

Model	Size	Max. Holding Power	Center Tapped Hole on Back	Voltage	Current	Working Rate	Applicable Rectifier	Mass
KE-2HA	φ20 (0.78) × 25 (0.98)	50N (5kgf)	M4 (0.15) × 0.7 (0.02) Depth 6 (0.23)	24 VDC	0.07A	100% ED	RH-H303A RH-H303A-C2	60g/ 0.13 lb
KE-3HA	φ30 (1.18) × 40 (1.57)	200N (20kgf)	M6 (0.23) × 1.0 (0.03) Depth 6 (0.23)		0.11A			140g/ 0.31 lb
KE-4HA	φ40 (1.57) × 40 (1.57)	400N (40kgf)	M6 (0.23) × 1.0 (0.03) Depth 6 (0.23)		0.15A			280g/ 0.61 lb
KE-5HA	φ50 (1.96) × 50 (1.96)	700N (70kgf)	M8 (0.31) × 1.25 (0.04) Depth 10 (0.39)		0.2 A			530g/ 1.17 lb
KE-6HA	φ60 (2.36) × 60 (2.36)	1000N (100kgf)	M8 (0.31) × 1.25 (0.04) Depth 10 (0.39)		0.22A			960g/ 2.11 lb
KE-8HA	φ80 (3.15) × 60 (2.36)	1800N (180kgf)	M10 (0.39) × 1.5 (0.05) Depth 12 (0.47)		0.28A			1.6kg/ 3.52 lb

※Cord length 0.3 m. (KE-2HA: 0.2 m)

※The max. holding power is based on a test piece of SS400, ground surface held on the whole area. Therefore, the lifting capacity is normally a third or less of the max. holding power. Test piece thickness: KE-2HA to 4HA ... 10 mm, KE-5HA to 8HA ... 20 mm

ELECTROMAGNETIC CHUCKS  
CHUCK CONTROLLERS  
PERMANENT ELECTROMAGNETIC CHUCKS  
PERMANENT ELECTROMAGNETIC CHUCKS  
BLOCKS FOR MC  
VACUUM CHUCKS  
PROMELTA\* SYSTEM  
SINE BAR CHUCKS  
BLOCKS, HOLDERS, MINI CHUCKS  
HOLDING TOOLS  
MEASURING TOOL HOLDERS  
MAGNETIC HOLDERS  
MAGNETIC TOOLS