

Model KE-D•E ELECTRO MAGNETIC HOLDER

Controller required additionally

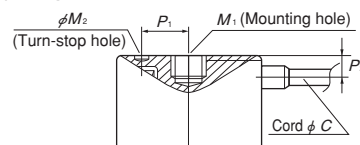
[Application]

Thin type electromagnetic holders suitable for a robotic hand as they provide vertical motion in a certain range in limited space.

[Features]

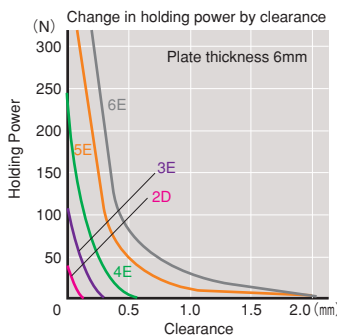
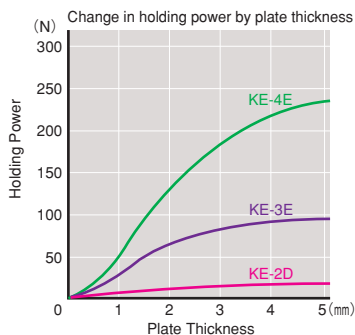
- Special cables that have specially high durability against bending and vibration are used. (Employed in all models except for KE-2D.)
- Usable for continuous operation.
- Finished by plating.

<KE-3—6E>



Precaution for use

Rust and scratches on the attractive face affect the holding power adversely. Repair it periodically.



Model	Dimensions	Max. Holding Power	Hole Dimensions			Power Cord		Voltage	Current	Working Rate	Applicable Rectifier	Mass
			M ₁	M ₂	P ₁	C	P ₂					
KE-2D	φ20 (0.78) × 25 (0.98)	18N (1.8kgf)	M4 (0.15) × 0.7 (0.02) Depth 8 (0.31)	φ2.1 (0.08) Depth 2.5 (0.09)	7.5 (0.29)	—	—	24 VDC	0.04 A	100% ED	KR-T101-6/24 RH-M303A-6/24, -C1, -C2 RH-M105A-24	30g/0.06 lb
KE-3E	φ30 (1.18) × 25 (0.98)	80N (8kgf)	M6 (0.23) × 1.0 (0.03) Depth 12 (0.47)	φ4 (0.15) Depth 2 (0.07)	10 (0.39)	7.5 (0.29)	8 (0.31)	24 VDC	0.085A	100% ED	KR-T101-6/24 RH-M303A-6/24, -C1, -C2 RH-M105A-24	100g/0.22 lb
KE-4E	φ40 (1.57) × 25 (0.98)	220N (22kgf)	M8 (0.31) × 1.25 (0.04) Depth 15 (0.59)	φ5 (0.19) Depth 3 (0.11)	18 (0.70)	9.5 (0.37)	11 (0.43)	24 VDC	0.12 A	100% ED	KR-T101-6/24 RH-M303A-6/24, -C1, -C2 RH-M105A-24	190g/0.42 lb
KE-5E	φ50 (1.96) × 30 (1.18)	490N (50kgf)	M8 (0.31) × 1.25 (0.04) Depth 15 (0.59)	φ5 (0.19) Depth 3 (0.11)	18 (0.70)	9.5 (0.37)	11 (0.43)	90 VDC	0.044A	100% ED	KR-N101A RH-M105B RH-M205B RH-M102C RH-M210B	380g/0.83 lb
KE-6E	φ60 (2.36) × 30 (1.18)	880N (90kgf)	M8 (0.31) × 1.25 (0.04) Depth 15 (0.59)	φ5 (0.19) Depth 4 (0.15)	20 (0.78)	11 (0.43)	11 (0.43)	90 VDC	0.065A	100% ED	KR-N101A RH-M105B RH-M205B RH-M102C RH-M210B	500g/1.10 lb

※E type: Cord length 0.3 m (0.2-m lead for KE-2D only) ※The maximum holding power applies to SS400, 10-mm thick, ground-finished test piece held on the whole area.

1N≒0.1kgf

Model KE-R ELECTRO MAGNETIC HOLDER

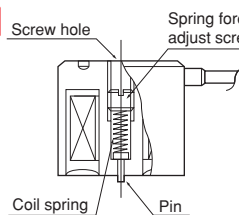
Chuck controller required additionally



KE-2R



KE-3RA



[Application]

Small and light, for meeting uses in carrying press material which is not easily released by its own weight ; also for holding hands of industrial robots.

[Features]

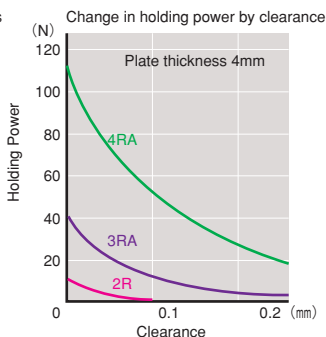
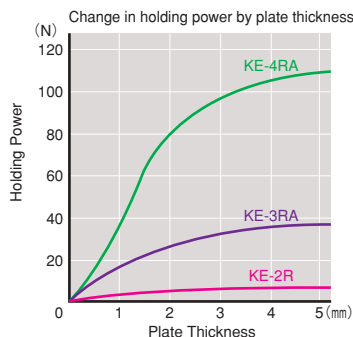
- Special cables that have specially high durability against bending and vibration are used. (Employed in all models except for KE-2R.)
- The workpiece is released quickly by the spring pressure of the projection at the center of the attractive face. The spring pressure can be adjusted according to workpiece situations.
- Electrical control such as a reverse exciting circuit is not necessary.
- Quick attach and detach enables speedy automation.
- Usable for continuous operation.
- Finished by plating.

※Use these holders for workpieces whose surface where the holder comes in contact is not rough. They are not suitable for thin plates that may be deformed by the pressing force.



Precaution for use

Rust and scratches on the attractive face affect the holding power adversely. Repair it periodically.



Model	Dimensions	Max. Holding Power	Tapped Hole	Voltage	Current	Working Rate	Applicable Rectifier	Mass
KE-2R	φ20 (0.78) × 25 (0.98)	5N (0.5kgf)	M5 (0.19) × 0.8 (0.03) Depth 5 (0.19)	24 VDC	0.04 A	100% ED	KR-T101A-6/24 RH-M303A-6/24, -C1, -C2 RH-M105B-24	50g/0.11 lb
KE-3RA	φ30 (1.18) × 25 (0.98)	30N (3kgf)	M6 (0.23) × 1.0 (0.03) Depth 6 (0.23)	24 VDC	0.085A	100% ED	KR-T101A-6/24 RH-M303A-6/24, -C1, -C2 RH-M105B-24	100g/0.22 lb
KE-4RA	φ40 (1.57) × 25 (0.98)	100N (10kgf)	M6 (0.23) × 1.0 (0.03) Depth 7.5 (0.29)	24 VDC	0.12 A	100% ED	KR-T101A-6/24 RH-M303A-6/24, -C1, -C2 RH-M105B-24	200g/0.44 lb

※Projection is provided at the center of attractive face with φ2 × max length 1mm for KE-2R & φ2.5 × max length 1mm for KE-3RA and 4RA.

※If the pressing force cannot release the workpiece smoothly, use a rectifier enclosed in parentheses. ※RA type: Cord length 0.3 m (0.2-m lead for KE-2R only)

※The maximum holding power applies to SS400, 10-mm thick, ground-finished test piece held on the whole area.

※Allowable temperature: The electromagnetic holders KE, permanent electromagnetic holders KEP and hybrid holders KE-H must be used under the conditions of ambient temperature 40℃ or below and temperature of workpieces to hold 50℃ or below. For higher temperature, please contact us.

※The holding power of KE-B, KE-E (D) and KE-RA (R) on various thickness of steel plates and the holding power relative to various gaps are as shown in the graphs.

※The maximum holding power is the power that can be obtained under the most favorable conditions including materials, shapes and finishes of workpieces to hold. Thus, for practical use, choose a suitable model in consideration of a large drop in the holding power depending on situations. Generally, the lifting capacity drops to a half or below of the holding power obtained from the graphs. If you plan to use holders in particular situations such as for workpieces having holes and grooves on the attractive face to

disable the utilization of the whole area or where big acceleration (G) will be applied to workpieces to be held and transported, please contact us.

※The electromagnetic holders when powered off still have residual magnetism. If the mass of the workpiece is greater than the residual holding power, the workpiece will come off, but if not, it is usually necessary to use a rectifier equipped with a reduction-of-magnetization function by reverse excitation, except for the holders equipped with the automatic release function.

※The electromagnetic holders are not of waterproof construction. If waterproof holders are required, please contact us.

※If you want to use an uninterruptible power supply for a rectifier for electromagnetic holders, please consult with us in advance.

ELECTROMAGNETIC CHUCKS

CHUCK CONTROLLERS

PERMANENT ELECTROMAGNETIC CHUCKS

PERMANENT ELECTROMAGNETIC CHUCKS

BLOCKS FOR MC

VACUUM CHUCKS

PROMELTA SYSTEM

SINE BAR CHUCKS

MAGNETIC BLOCKS

WORKING TOOLS

MEASURING TOOL HOLDERS

MAGNETIC HOLDERS

MAGNETIC TOOLS