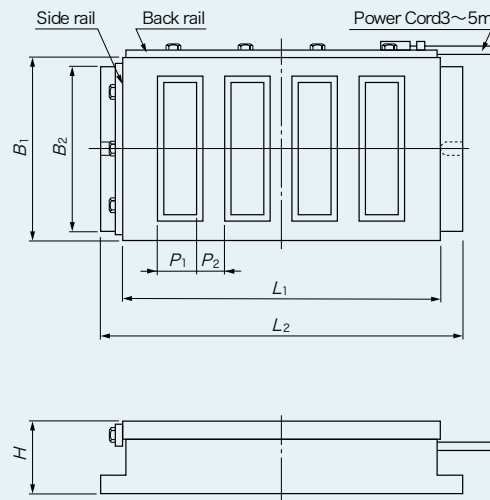


## Model KETZ



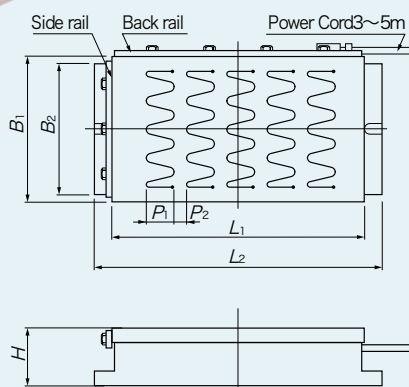
KETZ-3060A



## Model KETN



KETN-3060A



〈An example of Model KETN mounted on machine〉



## Super Powerful Type Model KETZ

Most efficient for heavy cutting with milling machine, shaper, planer and planomiller. It provides holding for the thick work pieces and the high speed cutting operation.

### [Features]

- Super powerful electromagnetic chuck specially designed for heavy cutting operation.
- Designed for very easy mounting, easy wiring hook-up, and elimination of residual magnetism.
- More effective holding power for work pieces sized bigger than 140×140 mm thicker than 15 mm.

[mm (in)]

Model	Nominal Dimension	Top Plate		Pole Pitch		No. of Poles	Bottom Plate		Height H	Voltage	Current	Mass	Electro Chuck Master				
		B <sub>1</sub>	L <sub>1</sub>	P <sub>1</sub>	P <sub>2</sub>		B <sub>2</sub>	L <sub>2</sub>									
KETZ- 1530A	150(5.90) × 300(11.8)	150(5.90)	300(11.8)	228(8.97)	—	1	144(5.66)	344(13.5)	100(3.93)	DC90V	0.44A	31kg/ 68 lb	*ES-M103A ES-M305A EH-V105A EH-V205A EH-VE105A EH-VE205A				
KETZ- 1545A	150(5.90) × 450(17.7)		450(17.7)	378(14.8)	—			494(19.4)			0.64A	46kg/ 102 lb					
KETZ- 2050A	200(7.87) × 500(19.6)	200(7.87)	500(19.6)	62(2.44)	54(2.12)	4	194(7.63)	500(19.6)	110(4.33)	DC90V	0.90A	75kg/ 166 lb		Above models except for the one marked by *.			
KETZ- 2060A	200(7.87) × 600(23.6)		600(23.6)	60(2.36)	52(2.04)			600(23.6)			0.95A	82kg/ 182 lb					
KETZ- 2080A	200(7.87) × 800(31.4)		800(31.4)	58(2.28)	50(1.96)			800(31.4)			1.39A	120kg/ 266 lb					
KETZ- 2550A	250(9.84) × 500(19.6)	250(9.84)	500(19.6)	62(2.44)	54(2.12)	4	240(9.44)	500(19.6)	120(4.72)	DC90V	1.16A	102kg/ 226 lb			EH-VE210A ES-V310A		
KETZ- 2560A	250(9.84) × 600(23.6)		600(23.6)	60(2.36)	52(2.04)			600(23.6)			1.18A	122kg/ 271 lb					
KETZ- 3060A	300(11.8) × 600(23.6)	300(11.8)	600(23.6)	67(2.63)	56(2.20)	5	290(11.4)	900(35.4)	120(4.72)	DC90V	1.59A	147kg/ 326 lb				Above models except for the one marked by *.	
KETZ- 3090A	300(11.8) × 900(35.4)		900(35.4)	67(2.63)	56(2.20)			900(35.4)			2.87A	220kg/ 488 lb					
KETZ- 4080A	400(15.7) × 800(31.4)	400(15.7)	800(31.4)	58(2.28)	50(1.96)	7	390(15.3)	800(31.4)	120(4.72)	DC90V	3.23A	260kg/ 577 lb					Above models except for the one marked by *.
KETZ-40100A	400(15.7) × 1000(39.3)		1000(39.3)	65(2.55)	55(2.16)			1000(39.3)			3.69A	326kg/ 724 lb					
KETZ-50100A	500(19.6) × 1000(39.3)	500(19.6)	1000(39.3)	65(2.55)	55(2.16)	8	490(19.2)	1000(39.3)	120(4.72)	DC90V	3.96A	408kg/ 906 lb	EH-VE210A ES-V310A				
◎KETZ-50150B	500(19.6) × 1500(59.0)		750(29.5) × 2	64(2.51)	53(2.08)			750(29.5) × 2			3.20A × 2	300kg(666 lb) × 2					
KETZ-60100A	600(23.6) × 1000(39.3)	600(23.6)	1000(39.3)	65(2.55)	55(2.16)	8	590(23.2)	1000(39.3)	120(4.72)	DC90V	5.30A	450kg/1000 lb		EH-VE210A ES-V310A			
◎KETZ-60150B	600(23.6) × 1500(59.0)		750(29.5) × 2	64(2.51)	53(2.08)			750(29.5) × 2			3.51A × 2	360kg(800 lb) × 2					

A power cord of 3 m is attached to KETZ-1530A and -1545A and a 5-m cord to other models.

Full-function chuck masters are available with both rectification and demagnetization functions.

Sizes other than the above are available upon request.

Clamping parts are not included.

The models marked by ◎ are used combined section chucks. Please provide information such as center connecting hole position. Also the branch box TB-2PD is required for connection to the chuck master.

For models with a combination of a rectifier and demagnetizer, refer to the page of CHUCK CONTROLLERS.

\*Optional controls are available in the U.S.

## Powerful Waveform Type Model KETN

For cutting work pieces with milling machine, shaper, planer and planomiller.

The magnetic force is evenly distributed over the entire attractive surface.

This chuck is specially designed for more powerful holding for cutting operations, in a wide range of applications.

### [Features]

- This electromagnetic chuck is ideal for cutting operations with its powerful attraction.
- Specially designed to minimize the adverse magnetic effect on cutter blades.
- This super powerful electromagnetic chuck is designed for heavy cutting operation, but also can hold work pieces with plate thickness thinner than 15mm as well.

[mm (in)]

Model	Nominal Dimension	Top Plate		Pole Pitch		Bottom Plate		Height H	Voltage	Current	Mass	Electro Chuck Master			
		B <sub>1</sub>	L <sub>1</sub>	P <sub>1</sub>	P <sub>2</sub>	B <sub>2</sub>	L <sub>2</sub>								
KETN- 1530A	150(5.90) × 300(11.8)	150(5.90)	300(11.8)	25(0.98)	19(0.74)	144(5.66)	344(13.5)	100(3.93)	DC90V	0.49A	27kg/ 60 lb	*ES-M103A ES-M305A EH-V105A EH-V205A EH-VE105A EH-VE205A			
KETN- 1545A	150(5.90) × 450(17.7)		450(17.7)	23(0.90)			494(19.4)				0.83A		41kg/ 91 lb		
KETN- 2050A	200(7.87) × 500(19.6)	200(7.87)	500(19.6)	19(0.74)	19(0.74)	194(7.63)	544(21.4)	120(4.72)	DC90V	1.26A	72kg/160 lb		Above models except for the one marked by *.		
KETN- 2060A	200(7.87) × 600(23.6)		600(23.6)	21(0.82)			600(23.6)				1.17A			87kg/193 lb	
KETN- 2550A	250(9.84) × 500(19.6)		250(9.84)	500(19.6)			19(0.74)				240(9.44)			544(21.4)	1.42A
KETN- 3060A	300(11.8) × 600(23.6)	300(11.8)	600(23.6)	19.5(0.76)	19.5(0.76)	290(11.4)	600(23.6)	120(4.72)	DC90V	1.60A	120kg/266 lb			Above models except for the one marked by *.	
KETN- 4080A	400(15.7) × 800(31.4)		800(31.4)	22(0.86)			800(31.4)				3.00A				230kg/511 lb
KETN-40100A	400(15.7) × 1000(39.3)	400(15.7)	1000(39.3)	23.5(0.92)	19(0.74)	390(15.3)	1000(39.3)	120(4.72)	DC90V	4.20A	290kg/644 lb				Above models except for the one marked by *.
KETN-40100A	400(15.7) × 1000(39.3)		1000(39.3)	23.5(0.92)			1000(39.3)				4.20A				

A power cord of 3 m is attached to KETZ-1530A and -1545A and a 5-m cord to other models.

Full-function chuck masters are available with both rectification and demagnetization functions.

Clamping parts are not included.

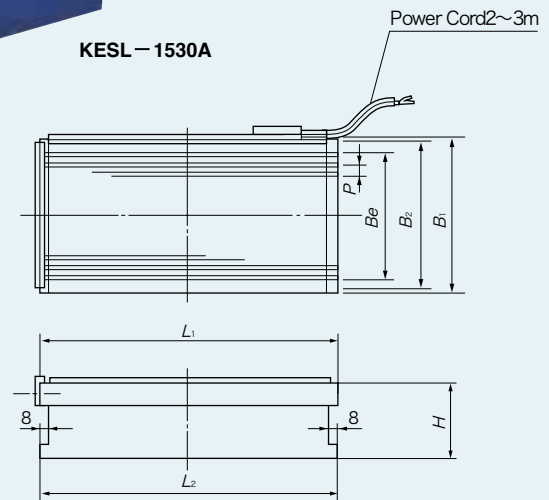
For models with a combination of a rectifier and demagnetizer, refer to the page of CHUCK CONTROLLERS.

\*Optional controls are available in the U.S.

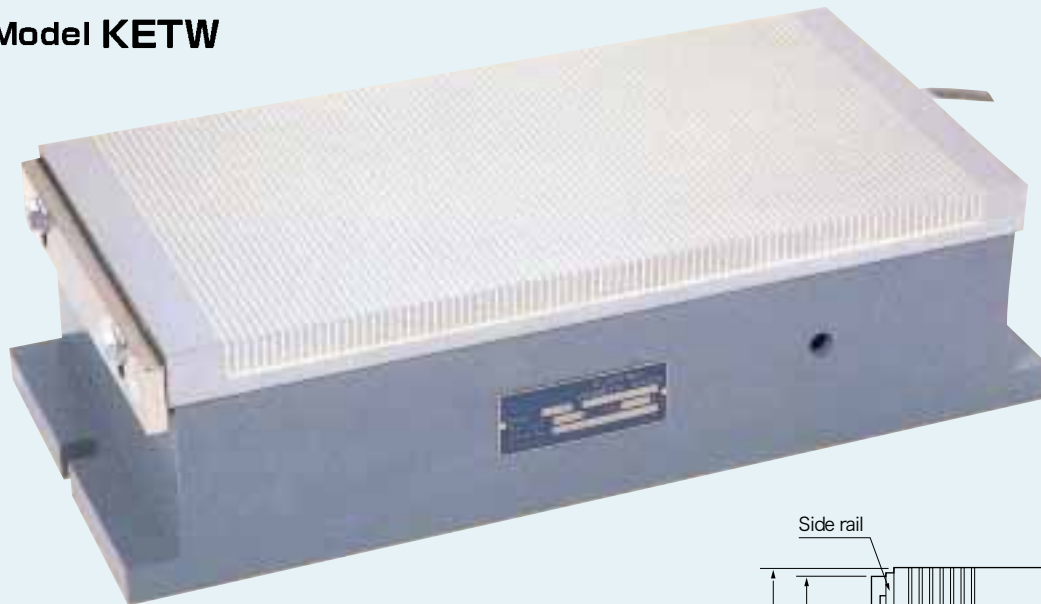
## Model KESL



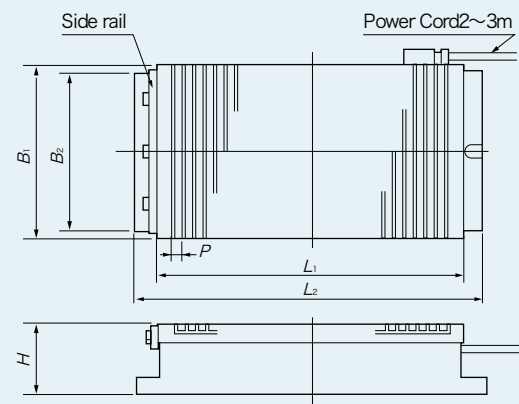
KESL-1530A



## Model KETW



KETW-2040



## Horizontalpitch Type Model KESL

### [Application]

These are versatile electromagnetic chucks, with longitudinal direction poles; capable of holding work-pieces, thin and thick, used in grinding and light duty cutting. In particular, these chucks are suited for long work pieces, and used in additional applications such as buff and belt grinding of large quantities of work-pieces, which are difficult to hold on standard type electromagnetic chucks.

### [Features]

- Close pole pattern, in longitudinal direction.
- The N-S magnetic force lines are spaced relatively wide for good holding via a belt. (Note, however, that because the distribution of the holding power is not uniform, they may not be suitable for grinding small work pieces arranged over the whole surface.)
- Powerful holding, with low profile height.

[mm(in.)]

Model	Nominal Dimension	Top Plate		Pole Pitch <i>P</i>	Bottom Plate		Height <i>H</i>	Voltage	Current	Power Cord	Mass	Electro Chuck Master
		<i>B</i> <sub>1</sub>	<i>L</i> <sub>1</sub>		<i>B</i> <sub>2</sub>	<i>L</i> <sub>2</sub>						
KESL-1025A	100 (3.93) × 250 (9.84)	100 (3.93)	250 (9.84)	4 (1+3) (0.15)	98 (3.85)	250 (9.84)	70 (2.75)	DC90V	0.36A	2m (78.7)	12kg/ 26 lb	*ES-M103A ES-M305A EH-V105A EH-V205A EH-VE105A EH-VE205A
KESL-1325A	125 (4.92) × 250 (9.84)	125 (4.92)			123 (4.84)						14kg/ 31 lb	
KESL-1530A	150 (5.90) × 300 (11.8)	150 (5.90)	300 (11.8)		148 (5.82)	300 (11.8)					19kg/ 42 lb	
KESL-1535A	150 (5.90) × 350 (13.7)		350 (13.7)		350 (13.7)	23kg/ 51 lb						
KESL-1545A	150 (5.90) × 450 (17.7)	200 (7.87)	450 (17.7)		450 (17.7)	450 (17.7)					29kg/ 64 lb	
KESL-2040A	200 (7.87) × 400 (15.7)		400 (15.7)		400 (15.7)	34kg/ 75 lb						
KESL-2050A	200 (7.87) × 500 (19.6)	200 (7.87)	500 (19.6)		198 (7.79)	500 (19.6)					42kg/ 93 lb	
KESL-2060A	200 (7.87) × 600 (23.6)		600 (23.6)			600 (23.6)					51kg/137 lb	
KESL-2550A	250 (9.84) × 500 (19.6)	250 (9.84)	500 (19.6)		248 (9.76)	500 (19.6)					62kg/137 lb	
KESL-3060A	300 (11.8) × 600 (23.6)	300 (11.8)	600 (23.6)		298 (11.7)	600 (23.6)					85 (3.34)	
				98kg/217 lb								

## Micropitch Type Model KETW

### [Application]

Designed for holding thin work in grinding and cutting operations. The work should be longer than 80mm (3.15 inch) and placed in the longitudinal direction.

### [Features]

- Micropitch pole spacing for holding thin, small, hard to hold work pieces. Suited for grinding and cutting operations.

[mm(in.)]

Model	Nominal Dimension	Top Plate		Pole Pitch <i>P</i>	Bottom Plate		Height <i>H</i>	Voltage	Current	Power Cord	Mass	Electro Chuck Master					
		<i>B</i> <sub>1</sub>	<i>L</i> <sub>1</sub>		<i>B</i> <sub>2</sub>	<i>L</i> <sub>2</sub>											
KETW-1530	150 (5.90) × 300 (11.8)	150 (5.90)	300 (11.8)	4 (0.8+3.2) (0.15)	146 (5.74)	344 (13.5)	100 (3.93)	DC90V	0.44A	2m (78.7)	31kg/ 68 lb	*ES-M103A ES-M305A EH-V105A EH-V205A EH-VE105A EH-VE205A					
KETW-1535	150 (5.90) × 350 (13.7)		350 (13.7)			394 (15.5)					37kg/ 82 lb						
KETW-1545	150 (5.90) × 450 (17.7)		450 (17.7)			494 (19.4)					48kg/106 lb						
KETW-2040	200 (7.87) × 400 (15.7)	200 (7.87)	400 (15.7)		196 (7.71)	444 (17.4)					120 (4.72)		0.62A	0.98A	3m (118)	65kg/144 lb	
KETW-2050	200 (7.87) × 500 (19.6)		500 (19.6)			544 (21.4)										82kg/182 lb	
KETW-2060	200 (7.87) × 600 (23.6)	250 (9.84)	600 (23.6)		246 (9.68)	612 (24.0)					1.17A		0.98A	3m (118)	1.70A	98kg/217 lb	
KETW-2560	250 (9.84) × 600 (23.6)					290 (11.4)										600 (23.6)	128kg/284 lb
KETW-3060	300 (11.8) × 600 (23.6)	300 (11.8)	600 (23.6)		290 (11.4)	600 (23.6)					85 (3.34)		2.44A	3m (118)	1.70A	3m (118)	147kg/326 lb

\*Full function chuck masters are available with both rectification and demagnetization functions.

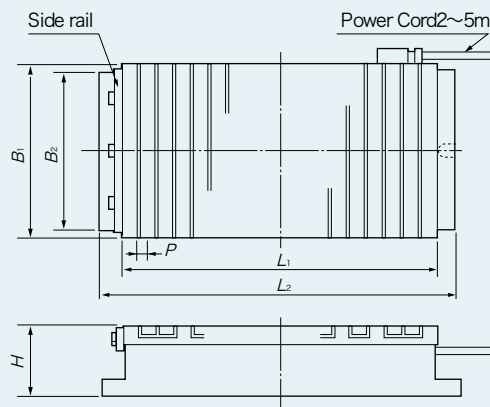
\*For models with a combination of a rectifier and demagnetizer, refer to the page of CHUCK CONTROLLERS.

\*Optional controls are available in the U.S.

## Model KET



KET-2050B



## Standard Type Model KET

## [Features]

## High Rigidity with High Precision

It is constructed by slotting the chuck top plate, and slotting the bottom case by our own processing method; this is unlike the conventional welding construction, our method increases the rigidity of the electromagnetic chuck, so to minimize quality change in time and to improve the precision.

## ● Succeeded in Reducing the Weight by 30%

The chuck weight was decreased, as much as possible, by about 20%

to 30% as compared with conventional chucks. This was inconsideration to the factory regarding the table driving time of grinder.

This also helps increase the durability of grinder itself.

## ● Low Height with Powerful Attraction

The chuck height is lowered to its limit, by about 20 to 30mm, as compared with the conventional types, so as to enlarge the work mounting space on the grinder.

[mm (in)]

Model	Nominal Dimension	Top Plate		Pole Pitch	Bottom Plate		Height	Voltage	Current	Mass	Electro Chuck Master	
		B <sub>1</sub>	L <sub>1</sub>	P	B <sub>2</sub>	L <sub>2</sub>	H					
KET- 614	60(2.36) × 140(5.51)	63(2.48)	140(5.51)	$\frac{8(2+6)}{0.31}$	60(2.36)	170(6.69)	67(2.63)	DC90V	0.09A	3.5kg/ 7.7 lb	※ES-M103A ES-M305A EH-V105A EH-V205A EH-VE105A EH-VE205A	
KET- 1025B	100(3.93) × 250(9.84)	100(3.93)	250(9.84)	$\frac{11(2+9)}{0.45}$	96(3.77)	294(11.5)	70(2.75)		0.16A	12kg/ 26.6 lb		
KET- 1325B	125(4.92) × 250(9.84)	125(4.92)	250(9.84)	14(2+12) (0.55)	119(4.68)	344(13.5)			0.19A	15kg/ 33.3 lb		
KET- 1530B	150(5.90) × 300(11.8)	150(5.90)	300(11.8)		144(5.66)	394(15.5)			0.20A	21kg/ 46.6 lb		
KET- 1535B	150(5.90) × 350(13.7)	150(5.90)	350(13.7)		194(7.63)	494(19.4)			0.22A	25kg/ 55.5 lb		
KET- 1545B	150(5.90) × 450(17.7)	150(5.90)	450(17.7)		240(9.44)	444(17.4)			0.29A	32kg/ 71.1 lb		
KET- 2040B	200(7.87) × 400(15.7)	200(7.87)	400(15.7)		290(11.4)	544(21.4)			0.43A	38kg/ 84.4 lb		
KET- 2050B	200(7.87) × 500(19.6)	200(7.87)	500(19.6)		390(15.3)	600(23.6)			0.34A	47kg/ 104.4 lb		
KET- 2060B	200(7.87) × 600(23.6)	200(7.87)	600(23.6)		19.5(2.5+17) (0.76)	600(23.6)			600(23.6)	0.47A		57kg/ 126.6 lb
KET- 2550B	250(9.84) × 500(19.6)	250(9.84)	500(19.6)			490(19.2)			500(19.6)	0.56A		67kg/ 148.8 lb
KET- 2560B	250(9.84) × 600(23.6)	250(9.84)	600(23.6)			590(23.2)			600(23.6)	0.72A		80kg/ 177.7 lb
KET- 3050B	300(11.8) × 500(19.6)	300(11.8)	500(19.6)			690(27.1)	500(19.6)		0.68A	80kg/ 177.7 lb		
KET- 3060B	300(11.8) × 600(23.6)	300(11.8)	600(23.6)	790(31.1)		600(23.6)	1.06A		94kg/ 208.8 lb			
KET- 3090B	300(11.8) × 900(35.4)	300(11.8)	900(35.4)	1000(39.3)		900(35.4)	1.22A		145kg/ 322.2 lb			
KET- 4050B	400(15.7) × 500(19.6)	400(15.7)	500(19.6)	1000(39.3)		500(19.6)	0.96A		114kg/ 253.3 lb			
KET- 4060B	400(15.7) × 600(23.6)	400(15.7)	600(23.6)	1000(39.3)		600(23.6)	1.09A		137kg/ 304.4 lb			
KET- 4080B	400(15.7) × 800(31.4)	400(15.7)	800(31.4)	1000(39.3)		800(31.4)	1.42A		182kg/ 404.4 lb			
KET-40100B	400(15.7) × 1000(39.3)	400(15.7)	1000(39.3)	1000(39.3)		1000(39.3)	1.74A		228kg/ 506.6 lb			
KET- 5050B	500(19.6) × 500(19.6)	500(19.6)	500(19.6)	1000(39.3)	500(19.6)	0.93A	142kg/ 315.5 lb					
KET- 5060B	500(19.6) × 600(23.6)	500(19.6)	600(23.6)	1000(39.3)	600(23.6)	1.06A	171kg/ 380.0 lb					
KET- 5065B	500(19.6) × 650(25.5)	500(19.6)	650(25.5)	1000(39.3)	650(25.5)	1.30A	185kg/ 411.1 lb					
KET-50100B	500(19.6) × 1000(39.3)	500(19.6)	1000(39.3)	1000(39.3)	1000(39.3)	1.71A	285kg/ 633.3 lb					
KET- 6060B	600(23.6) × 600(23.6)	600(23.6)	600(23.6)	1000(39.3)	600(23.6)	1.48A	205kg/ 455.5 lb					
KET-60100B	600(23.6) × 1000(39.3)	600(23.6)	1000(39.3)	1000(39.3)	1000(39.3)	3.10A	342kg/ 760.0 lb					
KET- 7075B	700(27.5) × 750(29.5)	700(27.5)	750(29.5)	1000(39.3)	690(27.1)	750(29.5)	2.87A	299kg/ 644.4 lb				
KET-80100B	800(31.4) × 1000(39.3)	800(31.4)	1000(39.3)	1000(39.3)	790(31.1)	1000(39.3)	4.23A	456kg/1013.3 lb				

The full-function chuck masters are equipped with both functions of rectification and demagnetization.  
For models with a combination of a rectifier and demagnetizer, refer to the page of CHUCK CONTROLLERS.

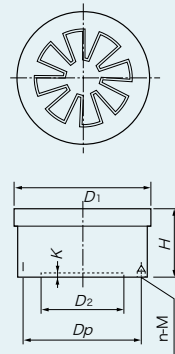
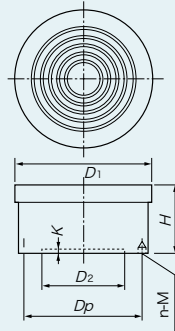
Model KEC



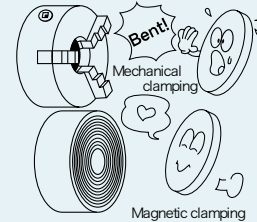
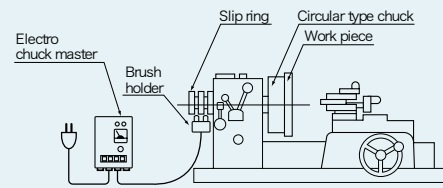
KEC-25ARA



KEC-25ASA



(Lathe Wiring Diagram)



(An example of installation on a vertical grinder)

Circular Type Model KEC

[Application]

Most suitable for grinding and cutting operations as mounted on to rotary grinder, lathe, turning machine, rotary milling machine, etc.

[Features]

- The polar pattern on the electromagnetic chuck face plate consists of the ring-pole and the star-pole types.
- The ring-pole type is used in general grinding operation; and the star-pole type is used in cutting operation.

Ring-Pole Type

[mm(in)]

Model	Nominal Dimension	Top Plate D <sub>1</sub>	Pole Pitch P	Bottom Plate				Height H	Voltage	Current	Mass	Electro Chuck Master				
				D <sub>2</sub>	K	n	M						D <sub>p</sub>			
KEC-10ARA	100(3.93)	100(3.93)	10(3+7)	63(2.48)	4 (0.15)	4 (0.15)	M 6(0.23)	80(3.14)	85(3.34)	DC90V	0.06A	4kg/ 8 lb	*ES-M103A ES-M305A EH-V105A EH-V205A EH-VE105A EH-VE205A			
KEC-16ARA	160(6.29)	160(6.29)	10(3+7) (0.39)	125(4.92)			M 8(0.31)	141(5.55)			0.29A	12kg/ 26 lb				
KEC-20ARA	200(7.87)	200(7.87)		160(6.29)			M 10(0.39)	178(7.00)			0.26A	19kg/ 42 lb				
KEC-25ARA	250(9.84)	250(9.84)	12(3+9) (0.47)	200(7.87)			4 (0.15)	4 (0.15)			M 10(0.39)	224(8.81)		0.52A	33kg/ 73 lb	
KEC-32ARA	315(12.4)	315(12.4)		250(9.84)							M 10(0.39)	280(11.0)		0.53A	52kg/ 115 lb	
KEC-40ARA	400(15.7)	400(15.7)		315(12.4)							M 12(0.47)	355(13.9)		1.10A	93kg/ 206 lb	
KEC-50ARA	500(19.6)	500(19.6)		400(15.7)							M 12(0.47)	450(17.7)		1.85A	130kg/ 288 lb	
KEC-63ARA	630(24.8)	630(24.8)	14(3+11) (0.55)	500(19.6)			8 (0.31)	8 (0.31)			M 16(0.62)	560(22.0)		3.10A	190kg/ 422 lb	Above models except for the one marked by *.
KEC-80ARA	800(31.4)	800(31.4)		630(24.8)							M 16(0.62)	710(27.9)		5.10A	370kg/ 822 lb	EH-VE210A
KEC-100ARA	1000(39.3)	1000(39.3)		800(31.4)							M 16(0.62)	900(35.4)		6.55A	580kg/ 1288 lb	ES-V310A

For models with a combination of a rectifier and demagnetizer, refer to the page of CHUCK CONTROLLERS.

Star-Pole Type

[mm(in)]

Model	Nominal Dimension	Top Plate D <sub>1</sub>	No. of Poles	Bottom Plate				Height H	Voltage	Current	Mass	Electro Chuck Master		
				D <sub>2</sub>	K	n	M						D <sub>p</sub>	
KEC-10ASA	100(3.93)	100(3.93)	8	63(2.48)	4 (0.15)	4 (0.15)	M 6(0.23)	80(3.14)	85(3.34)	DC90V	0.04A	4.2kg/ 9 lb	*ES-M103A ES-M305A EH-V105A EH-V205A EH-VE105A EH-VE205A	
KEC-16ASA	160(6.29)	160(6.29)		125(4.92)			M 8(0.31)	140(5.51)			0.08A	12kg/ 26 lb		
KEC-20ASA	200(7.87)	200(7.87)		160(6.29)			M 8(0.31)	178(7.12)			0.13A	19kg/ 42 lb		
KEC-25ASA	250(9.84)	250(9.84)		200(7.87)			M 10(0.39)	224(8.81)			0.40A	33kg/ 73 lb		
KEC-32ASA	315(12.4)	315(12.4)		250(9.84)				280(11.0)			0.44A	52kg/ 115 lb		
KEC-40ASA	400(15.7)	400(15.7)		315(12.4)				355(13.9)			0.68A	93kg/ 206 lb		
KEC-50ASA	500(19.6)	500(19.6)		400(15.7)				450(17.7)			1.00A	145kg/ 322 lb		
KEC-63ASA	630(24.8)	630(24.8)		500(19.6)			M 12(0.47)	560(22.0)			1.28A	190kg/ 422 lb		
KEC-80ASA	800(31.4)	800(31.4)						630(24.8)			710(27.9)	1.88A		370kg/ 822 lb
KEC-100ASA	1000(39.3)	1000(39.3)						800(31.4)			M 16(0.62)	900(35.4)		3.92A

The full-function chuck masters are equipped with both functions of rectification and demagnetization.

For models with a combination of a rectifier and demagnetizer, refer to the page of CHUCK CONTROLLERS.

\* Optional controls are available in the U.S.