A line-up of products selectable according to machining methods and workpieces.

- Considerable power saving and reduction in size of the Chuck Master by the renewed design.
- The detachable connector type is employed to respond to pallet changing.
- Electricity is used only when mounting and demounting workpieces. Workpieces can be held firmly in the event of power failure.
- Usable in wet machining operations.

### EP-Q Series

**Model EP-Q** PERMANENT ELECTROMAGNETIC CHUCK FOR CUTTING

[A Line-up of products selectable according to machining methods and workpieces.

- Considerable power saving and reduction in size of the Chuck Master by the renewed design.
- The detachable connector type is employed to respond to pallet changing.
- Electricity is used only when mounting and demounting workpieces. Workpieces can be held firmly in the event of power failure.
- Usable in wet machining operations.

#### EP-QN Series

<table>
<thead>
<tr>
<th>Standard Size Model</th>
<th>Work Face</th>
<th>Pole Dimensions</th>
<th>Mounting Face</th>
<th>Tapped Hole on Attractive Face</th>
<th>Mass</th>
<th>Applicable Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-QN</td>
<td>300A</td>
<td>300 (11/1) 610 (24/0)</td>
<td>252 (9/0) 570 (22/4)</td>
<td>16 (0.633)</td>
<td>630 (24/4)</td>
<td>32 (1.26)</td>
</tr>
<tr>
<td>EP-QN</td>
<td>400A</td>
<td>420 (16/0) 800 (31/5)</td>
<td>372 (14.6) 760 (29.9)</td>
<td>28 (1.05)</td>
<td>820 (32.2)</td>
<td>60 (2.38)</td>
</tr>
<tr>
<td>EP-QN</td>
<td>500A</td>
<td>500 (19/8) 960 (37/8)</td>
<td>432 (17.0) 917 (36.1)</td>
<td>40 (1.57)</td>
<td>980 (38.5)</td>
<td>84 (3.31)</td>
</tr>
<tr>
<td>EP-QN</td>
<td>600A</td>
<td>600 (23/0) 1100 (39/4)</td>
<td>552 (21.7) 108 (2.38)</td>
<td>72 (2.83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-QN</td>
<td>400A</td>
<td>390 (15/3) 800 (31/5)</td>
<td>332 (13.0) 760 (29.9)</td>
<td>24 (0.94)</td>
<td>820 (32.2)</td>
<td>60 (2.38)</td>
</tr>
<tr>
<td>EP-QN</td>
<td>500A</td>
<td>500 (19/8) 960 (37/8)</td>
<td>452 (17.3) 960 (37.8)</td>
<td>40 (1.57)</td>
<td>1020 (40.1)</td>
<td>84 (3.31)</td>
</tr>
<tr>
<td>EP-QN</td>
<td>600A</td>
<td>620 (24/4) 1100 (39/4)</td>
<td>572 (22.2) 108 (2.38)</td>
<td>70 (2.78)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### EP-QS Series

<table>
<thead>
<tr>
<th>Standard Size Model</th>
<th>Work Face</th>
<th>Pole Dimensions</th>
<th>Mounting Face</th>
<th>Tapped Hole on Attractive Face</th>
<th>Mass</th>
<th>Applicable Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-QS</td>
<td>300A</td>
<td>300 (11/1) 610 (24/0)</td>
<td>252 (9/0) 570 (22/4)</td>
<td>16 (0.633)</td>
<td>630 (24/4)</td>
<td>32 (1.26)</td>
</tr>
<tr>
<td>EP-QS</td>
<td>400A</td>
<td>420 (16/0) 800 (31/5)</td>
<td>372 (14.6) 760 (29.9)</td>
<td>28 (1.05)</td>
<td>820 (32.2)</td>
<td>60 (2.38)</td>
</tr>
<tr>
<td>EP-QS</td>
<td>500A</td>
<td>500 (19/8) 960 (37/8)</td>
<td>432 (17.0) 917 (36.1)</td>
<td>40 (1.57)</td>
<td>980 (38.5)</td>
<td>84 (3.31)</td>
</tr>
<tr>
<td>EP-QS</td>
<td>600A</td>
<td>600 (23/0) 1100 (39/4)</td>
<td>552 (21.7) 108 (2.38)</td>
<td>72 (2.83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-QS</td>
<td>400A</td>
<td>390 (15/3) 800 (31/5)</td>
<td>332 (13.0) 760 (29.9)</td>
<td>24 (0.94)</td>
<td>820 (32.2)</td>
<td>60 (2.38)</td>
</tr>
<tr>
<td>EP-QS</td>
<td>500A</td>
<td>500 (19/8) 960 (37/8)</td>
<td>452 (17.3) 960 (37.8)</td>
<td>40 (1.57)</td>
<td>1020 (40.1)</td>
<td>84 (3.31)</td>
</tr>
<tr>
<td>EP-QS</td>
<td>600A</td>
<td>620 (24/4) 1100 (39/4)</td>
<td>572 (22.2) 108 (2.38)</td>
<td>70 (2.78)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Turning the permanent electromagnetic chucks on and off must be limited to once per several minutes. If on/off operations are repeated frequently, the chucks may be damaged by overheat.
**Model designation**

CHUCK : EP-QN5-3060A

- Normal (Ribs arranged between poles) Pole size
- Strong (Poles arranged densely) (5...50 7...70)

**Ordering information**

- Sizes other than the standard sizes listed on page 31 are also available.
- The recommended maximum one-piece size is W1200 × L1500 mm. For other larger sizes, please contact us.
- Round chucks are also available.
- When workpieces are hardened steel or special steel, they may be difficult to demount due to strong residual magnetism. In these cases, Model EP-D (P. 34) is recommended.

**A guide for selection**

- General milling: Good holding conditions such as plate machining.
- Planomiller, horizontal M/C, use of straightening blocks, etc.: Poor holding conditions such as heavy duty cutting.

**Selection of pole size □50 or □70**

- The □70 size is superior in the absolute holding power and gap characteristic.
- The □50 size is recommended for relatively small and thin workpieces. (The plate thickness of magnetic saturation is 20 to 25 mm for □50 and 30 to 35 mm for □70.)

**Relation between chuck models and holding power**

Comparison of holding power of chucks of same size

**Holding power**

- □50 generates the max. holding power of 2.94 kN (300 kgf) or over per pole and □70 generates 5.88 kN (600 kgf) or over per pole.

(An example of calculation)

Max. holding power on whole attractive face of EP-QS5-4080A

\[2.94 \text{kN} \times 60 \text{ (number of poles)} = 176.4 \text{kN} \times 1800 \text{kgf}\]

**EPS-P EP Chuck Master**

Compact design for limited installation space.

**Options**

1. Straightening block; for □50 and □70 (KT-Q)

**EPS-P CHUCK MASTER**

Model: EP-P2100B-2

- Dimensions (W × H × D): 190 (7.48) × 165 (6.5) × 255 (10.0)
- Power source: Single-phase, 200VAC 50/60 Hz
- Output capacity: 10 VDC - 90 VDC pulse 100 A
- Output switcher: No switcher, 2
- Magnetizing time (approx.) - demagnetizing time (approx.): 1 sec. - 3 sec.
- Breaker capacity (ref.): 30A
- Mass: 7.5kg (16.5) - 7.6kg (16.7)

- The power cable must be larger than 3.5 mm² and less than 10 m.

Separately installed feeder box

Recommended for applications that require frequent connector connection/ disconnection.

**Model of special specification**

Model with T-slots available

EP-QX50-S

For more information, please contact us.

**EP-Q type holding power characteristic**

1. Relation between workpiece thickness and holding power

Test piece held by 4 poles

- 70 type
- 50 type

2. Relation between gap and holding power

Holding on whole face.

- EP-QS7-4080A
- EP-QS5-4080A
- EP-QN7-4080A
- EP-QN5-4080A

✿ The dimension H is the standard height.
PERMANENT ELECTROMAGNETIC CHUCKS

Model EP-QD

DEDEMAGNETIZING FUNCTION-EQUIPPED PERMANENT ELECTROMAGNETIC CHUCK FOR CUTTING

Weakness of checker board pattern type permanent electromagnetic chucks overcome!

[Application]
Used for securing workpieces during cutting by milling machines, machining centers, etc.

[Features]
- An optimum combination of KANETEC’s original magnetic pole construction and a construction dedicated to demagnetization has reduced residual holding power significantly.
- Hardened steel and special steel workpieces having large residual magnetism can be released easily. (Compared with conventional EP-Q)
- The optional straightening block (KT-Q70/Q70M) can be used. By mounting various blocks using tapped holes on the attractive face, various securing methods can be utilized according to machining operations.
- Can be used in wet operations.
- Special types having four poles minimum are available.

![EP-QD7-3469 Diagram]
(Mounting size equivalent to 400 × 800)

<table>
<thead>
<tr>
<th>Model</th>
<th>Mounting Size</th>
<th>Work Face</th>
<th>Pole Dimensions</th>
<th>Mounting Face</th>
<th>Tapped Hole on Attractive Face</th>
<th>Height</th>
<th>Mass</th>
<th>Electro Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-QD7-2669</td>
<td>300 (11.8) × 800 (31.5)</td>
<td>300, 260, 730, 690</td>
<td>250, 660</td>
<td>24</td>
<td>70</td>
<td>24</td>
<td>0.94</td>
<td>125/275 lb</td>
</tr>
<tr>
<td>EP-QD7-3453</td>
<td>400 (15.7) × 600 (23.6)</td>
<td>380, 340, 570, 530</td>
<td>330, 520</td>
<td>20.4</td>
<td>250</td>
<td>590</td>
<td>3.34</td>
<td>160/352 lb</td>
</tr>
<tr>
<td>EP-QD7-3469</td>
<td>400 (15.7) × 800 (31.5)</td>
<td>360, 340, 730, 690</td>
<td>490, 680</td>
<td>32</td>
<td>330</td>
<td>750</td>
<td>12.9</td>
<td>230/507 lb</td>
</tr>
<tr>
<td>EP-QD7-5069</td>
<td>550 (21.6) × 800 (31.5)</td>
<td>540, 500, 730, 690</td>
<td>990, 192</td>
<td>48</td>
<td>330</td>
<td>750</td>
<td>29.5</td>
<td>160/352 lb</td>
</tr>
</tbody>
</table>

The chuck controller and clamp parts are not included.

The KANETEC chucks work best when a KANETEC chuck controller is used.

Turning the permanent electromagnetic chuck on and off must be limited to once per several minutes. If on/off operations are repeated frequently, the chucks may be damaged by overheating.

Model EP-QL

SUPER POWERFUL PERMANENT ELECTROMAGNETIC CHUCK FOR LONG WORKPIECE

A permanent electromagnetic chuck specialized in securing long workpieces! Powerfully holds workpieces without jigs!

[Application]
Used to secure workpieces quickly and firmly during milling and machining of long workpieces such as railroad rails.

[Features]
- The employment of magnetic pole arrangement providing a wide attractive area enables it to attract and hold workpieces on the whole attractive face.
- A magnet for side-face attraction may be mounted to support securing of workpieces from sides.
- In place of a side-face attraction magnet, clamp parts may be used.

![EP-QL24111A Diagram]

<table>
<thead>
<tr>
<th>Model</th>
<th>Work Face</th>
<th>Mounting Face</th>
<th>Height</th>
<th>Mass</th>
<th>Electro Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-QL24111A</td>
<td>240 (9.4)</td>
<td>135 (5.3)</td>
<td>85 (3.3)</td>
<td>1115 (43.8)</td>
<td>1074 (42.2)</td>
</tr>
</tbody>
</table>

The chuck controller and clamp parts are not included.

The KANETEC chucks work best when a KANETEC chuck controller is used.

Turning the permanent electromagnetic chuck on and off must be limited to once per several minutes. If on/off operations are repeated frequently, the chucks may be damaged by overheating.
Model **EP-QZ**

**SUPER POWERFUL PERMANENT ELECTROMAGNETIC CHUCK FOR LONG WORKPIECE**

![Chuck controller required additionally]

EP-QZ8-1550A

An example of special fabrication

**[Features]**

- The gap characteristic is superior to that of the current Model EP-QN/QS. These chucks are suitable for workpieces that have poor flatness and require large holding power.
- These chucks replace conventional hydraulic and mechanical clamping to reduce the setup time and improve productivity.
- The magnetic poles are arranged according to shapes and length of workpieces such as rails. Securing blocks specially designed according to workpiece shapes are also available.
- A type with a separator made of brass is also available.

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Holding per Pole</th>
<th>Pole Size</th>
<th>No. of Poles</th>
<th>Features</th>
<th>Electro Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-QZ8-1550A</td>
<td>75 (1.25) 750kg</td>
<td>75 (1.25)</td>
<td>5</td>
<td>Single type</td>
<td>EPS-P2100B</td>
</tr>
<tr>
<td>EP-QZW-30100A</td>
<td>50 (1.66) 300kg</td>
<td>75 (1.25) 10 (75)</td>
<td>14</td>
<td>Double type</td>
<td>EPS-P2100B-2</td>
</tr>
</tbody>
</table>

* The chuck controller and clamp parts are not included. *
* The KANETEC chucks work best when a KANETEC chuck controller is used. *
* Turning the permanent electromagnetic chucks on and off must be limited to once per several minutes. If on/off operations are repeated frequently, the chucks may be damaged by overheat.

Model **EP-D**

**DEDEMAGNETIZING FUNCTION-EQUIPPED PERMANENT ELECTROMAGNETIC CHUCK FOR CUTTING**

**Strong holding power and good release performance realized!**

![Chuck controller required additionally]

**[Application]**

Used for securing workpieces during cutting by milling machines, machining centers, etc.

**[Features]**

- A coil dedicated to demagnetization has significantly improved the workpiece release performance when the chuck is turned off.
- The magnetic pole arrangement to concentrate magnetism on the workpiece provides strong holding power.
- Hardened steel and special steel workpieces having large residual magnetism can be released quicker than the conventional chucks.
- Electricity is used only when mounting and demounting workpieces, thus minimal heat is generated and electricity is saved.
- Can be used in wet operations.

<table>
<thead>
<tr>
<th>Model</th>
<th>Work Face</th>
<th>Dimensions</th>
<th>Mounting Face</th>
<th>Mass</th>
<th>Electro Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-D 3060</td>
<td>W</td>
<td>L</td>
<td>We</td>
<td>Le</td>
<td>W1</td>
</tr>
<tr>
<td>EP-D 4060</td>
<td>404 (15.9)</td>
<td>364 (14.3)</td>
<td>240 (9.44)</td>
<td>323 (11.13)</td>
<td>638 (25.1)</td>
</tr>
<tr>
<td>EP-D 50100</td>
<td>504 (19.8)</td>
<td>440 (17.3)</td>
<td>240 (9.44)</td>
<td>323 (11.13)</td>
<td>1058 (41.6)</td>
</tr>
</tbody>
</table>

* Turning the permanent electromagnetic chucks on and off must be limited to once per several minutes. If on/off operations are repeated frequently, the chucks may be damaged by overheat.

**Comparison of holding power**

- EP-QD
- EP-QZ

**Comparison of residual holding power**

- EP-QD
- EP-QZ
PERMANENT ELECTROMAGNETIC CHUCKS

Model **EP-DV** POWERFUL PERMANENT ELECTROMAGNETIC CHUCK WITH VACUUM FUNCTION

**Hybrid chuck to handle diversified materials!**

Chuck controller and vacuum system required additionally

![An example of milling by utilizing the permanent electromagnetic feature](image1)

![An example of grinding of brass by utilizing the permanent electromagnetic feature](image2)

**Model **EP-DV** Nominal Size**

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal Size</th>
<th>Work Face</th>
<th>Pole Pitch</th>
<th>Mounting Face</th>
<th>Height</th>
<th>Grid Pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-DV 3060</td>
<td>300 (11.8 / 300-25.6) x 600 (23.6)</td>
<td>310 (12.2 / 25.6) x 635 (25.1) x 558 (21.8)</td>
<td>3.62</td>
<td>92</td>
<td>304 (11.9 / 25.1)</td>
<td>638 (25.1)</td>
</tr>
<tr>
<td>EP-DV 4080</td>
<td>400 (15.7 / 400-31.5) x 800 (31.5)</td>
<td>400 (15.7 / 400-31.5) x 800 (31.5) x 726 (28.3)</td>
<td>1.37</td>
<td>79</td>
<td>304 (11.9 / 25.1)</td>
<td>806 (25.1)</td>
</tr>
<tr>
<td>EP-DV50100</td>
<td>500 (19.6 / 500-39.4) x 1000 (39.4)</td>
<td>500 (19.6 / 500-39.4) x 1000 (39.4) x 978 (38.3)</td>
<td>3.42</td>
<td>87</td>
<td>504 (19.6 / 38.3)</td>
<td>1058 (38.3)</td>
</tr>
</tbody>
</table>

**[Application]**

Permanent electromagnetic chucks for cutting equipped with a grid-seal type vacuum chuck function added to hold workpieces during cutting and grinding of magnetic and nonmagnetic workpieces.

**[Features]**

- The strong holding power makes these chucks suitable for cutting of magnetic materials.
- Electricity is used only when mounting and demounting workpieces, thus minimal heat is generated and electricity is saved.
- Since these chucks have a construction dedicated to demagnetization, they have good workpiece release performance when they are turned off.
- The vacuum chuck can be set to a desired area by use of seal rubber according to workpieces.
- When machining nonmagnetic workpieces, the permanent electromagnetic feature can be utilized to hold magnetic substances around them to secure them firmly.

Model **EP-DWM** POWERFUL PERMANENT ELECTROMAGNETIC CHUCK FOR HEAVY DUTY CUTTING

**Strong magnetic force & good release performance & high water-tightness!**

*Chuck controller required additionally*

**Model **EP-DWM** Nominal Size**

<table>
<thead>
<tr>
<th>Model</th>
<th>Work Face</th>
<th>Mounting Face</th>
<th>Height</th>
<th>Mass</th>
<th>Electro Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-DW-M3050</td>
<td>200 (7.9) / 490 (19.2)</td>
<td>432 (17.0)</td>
<td>490 (19.2)</td>
<td>70kg/154 lb</td>
<td>EPS-D2100A</td>
</tr>
<tr>
<td>EP-DW-M3060</td>
<td>300 (11.8) / 600 (23.6)</td>
<td>544 (21.4)</td>
<td>600 (23.6)</td>
<td>120kg/265 lb</td>
<td>EPS-D2100A</td>
</tr>
<tr>
<td>EP-DW-M4080</td>
<td>400 (15.7) / 820 (32.2)</td>
<td>768 (30.2)</td>
<td>820 (32.2)</td>
<td>230kg/507 lb</td>
<td>EPS-D2100A</td>
</tr>
</tbody>
</table>

**[Application]**

Suitable for precision machining of relatively large load as heavy duty grinding and cutting and for securing workpieces having steps such as linear motion guides.

**[Features]**

- Suitable for holding relatively small workpieces, workpieces having a small attractive area and concave workpieces.
- The addition of a construction dedicated to demagnetization has improved the workpiece release performance when the chuck is turned off.
- The chuck can be used in wet operations and has improved water-tightness.
- A resin-bonded structural face plate having little environmental burden is employed.

Model **EPS-D** CHUCK MASTER® DEDICATED TO DEMAGNETIZING FUNCTION-EQUIPPED PERMANENT ELECTROMAGNETIC CHUCK

**[Application]**

A chuck controller dedicated to permanent electromagnetic chucks equipped with a demagnetizing function.

**Model **EPS-D** Nominal Size**

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (W x H x D)</th>
<th>Power Source</th>
<th>Output capacity</th>
<th>Output switcher</th>
<th>Magnetizing time (approx.)</th>
<th>Breaker capacity (ref.)</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS-P2100A</td>
<td>190 / 7.48 x 165 (6.5) x 255 (10.0)</td>
<td>Single-phase, 200 VAC 50/60 Hz</td>
<td>50 VDC - 90 VDC pulse 100 A</td>
<td>No switcher</td>
<td>1 sec / 4 sec</td>
<td>30A</td>
<td>7.9 kg (17.5)</td>
</tr>
<tr>
<td>EPS-P2100A-2</td>
<td>190 / 7.48 x 200 (7.8) x 255 (10.0)</td>
<td>Single-phase, 200 VAC 50/60 Hz</td>
<td>50 VDC - 90 VDC pulse 100 A</td>
<td>No switcher</td>
<td>1 sec / 4 sec</td>
<td>30A</td>
<td>8.1 kg (17.8)</td>
</tr>
</tbody>
</table>
### Model EPT/EPT-LW

**PERMANENT ELECTROMAGNETIC CHUCK (STANDARD/LOW MAGNETIC FORCE CONTROL)**

- **Application**: Suitable for high precision grinding and silencing.
- **Features**:
  - Since electricity is supplied momentarily only to control the magnetomotive force when mounting/demounting a workpiece, little heat is generated internally to enable highly precise machining.
  - Since electricity needs not be supplied continuously even while holding a workpiece, the running cost is very low.
  - Since the holding power is maintained by the permanent magnet, safety is secured in the event of power failure and cable breakage.
  - A resin-bonded structural face plate having little environmental burden is employed.

![EPT-3060F](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal Size</th>
<th>Work Face</th>
<th>Pole Pitch</th>
<th>Mounting Face Height</th>
<th>Voltage</th>
<th>Current</th>
<th>Power Cord</th>
<th>Mass</th>
<th>Electro Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPT-1530F</td>
<td>50/590 x 309/118</td>
<td>B L L e</td>
<td>300</td>
<td>240</td>
<td>300</td>
<td>1.91A</td>
<td>0.80A</td>
<td>24kg</td>
<td>EPT-LW20SB</td>
</tr>
<tr>
<td>EPT-1535F</td>
<td>50/590 x 309/137</td>
<td>B L L e</td>
<td>350</td>
<td>296</td>
<td>350</td>
<td>2.43A</td>
<td>0.93A</td>
<td>29kg</td>
<td>EPT-LW20SB</td>
</tr>
<tr>
<td>EPT-1545F</td>
<td>50/590 x 450/177</td>
<td>B L L e</td>
<td>450</td>
<td>380</td>
<td>450</td>
<td>2.64A</td>
<td>1.17A</td>
<td>30kg</td>
<td>EPT-LW20SB</td>
</tr>
<tr>
<td>EPT-2050F</td>
<td>50/590 x 309/198</td>
<td>B L L e</td>
<td>500</td>
<td>406</td>
<td>500</td>
<td>5.88A</td>
<td>3.31A</td>
<td>50kg</td>
<td>EPT-LW20SB</td>
</tr>
<tr>
<td>EPT-2060F</td>
<td>50/590 x 600/236</td>
<td>B L L e</td>
<td>600</td>
<td>548</td>
<td>600</td>
<td>7.87A</td>
<td>3.82A</td>
<td>65kg</td>
<td>EPT-LW20SB</td>
</tr>
<tr>
<td>EPT-3060F</td>
<td>50/590 x 620/236</td>
<td>B L L e</td>
<td>620</td>
<td>579</td>
<td>620</td>
<td>6.14A</td>
<td>2.55A</td>
<td>44kg</td>
<td>EPT-LW20B</td>
</tr>
<tr>
<td>EPT-4060F</td>
<td>50/590 x 800/313</td>
<td>B L L e</td>
<td>800</td>
<td>724</td>
<td>800</td>
<td>11.0A</td>
<td>6.59A</td>
<td>65kg</td>
<td>EPT-LW20B</td>
</tr>
<tr>
<td>EPT-5060F</td>
<td>50/590 x 800/315</td>
<td>B L L e</td>
<td>800</td>
<td>724</td>
<td>800</td>
<td>12.5A</td>
<td>6.45A</td>
<td>64kg</td>
<td>EPT-LW20B</td>
</tr>
<tr>
<td>EPT-50100F</td>
<td>50/590 x 1000/394</td>
<td>B L L e</td>
<td>1000</td>
<td>919</td>
<td>1000</td>
<td>9.01A</td>
<td>5.41A</td>
<td>66kg</td>
<td>EPT-LW20B</td>
</tr>
<tr>
<td>EPT-60100F</td>
<td>50/590 x 1000/394</td>
<td>B L L e</td>
<td>1000</td>
<td>919</td>
<td>1000</td>
<td>11.7A</td>
<td>6.05A</td>
<td>130kg</td>
<td>EPT-LW20B</td>
</tr>
</tbody>
</table>

*The chuck controller and clamp parts are not included. The KANETEC chucks work best when a KANETEC chuck controller is used.

### Model EPT-H

**POWERFUL PERMANENT ELECTROMAGNETIC CHUCK**

- **Application**: Suitable for high precision grinding and silencing.
- **Features**:
  - Compared with the standard type (EPT), these chucks generate a larger magnetic force and therefore are capable of securing workpieces firmly during grinding of large machining load.
  - A resin-bonded structural face plate having little environmental burden is employed.

![EPT-H3060F](image)

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal Size</th>
<th>Work Face</th>
<th>Pole Pitch</th>
<th>Mounting Face Height</th>
<th>Voltage</th>
<th>Current</th>
<th>Power Cord</th>
<th>Mass</th>
<th>Electro Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPT-H3050F</td>
<td>150/590 x 309/118</td>
<td>B L L e</td>
<td>150</td>
<td>240</td>
<td>150</td>
<td>30</td>
<td>14 (2.72 + 17)</td>
<td>20 (0.78)</td>
<td>100 (3.93)</td>
</tr>
<tr>
<td>EPT-H3055F</td>
<td>200/590 x 600/236</td>
<td>B L L e</td>
<td>260</td>
<td>406</td>
<td>260</td>
<td>15.9 (2.5 + 17)</td>
<td>20 (0.78)</td>
<td>100 (3.93)</td>
<td>180 VDC</td>
</tr>
<tr>
<td>EPT-H3060F</td>
<td>400/590 x 800/313</td>
<td>B L L e</td>
<td>800</td>
<td>724</td>
<td>800</td>
<td>15.9 (2.5 + 17)</td>
<td>20 (0.78)</td>
<td>100 (3.93)</td>
<td>180 VDC</td>
</tr>
</tbody>
</table>

*The chuck controller and clamp parts are not included. The KANETEC chucks work best when a KANETEC chuck controller is used.

Turning the permanent electromagnetic chucks on and off must be limited to once per several minutes. If on-off operations are repeated frequently, the chucks may be damaged by overheating.
**PERMANENT ELECTROMAGNETIC CHUCKS**

**Model EPTW**

**PERMANENT ELECTROMAGNETIC MICROPITCH CHUCK**

- **Suitable for grinding on precision grinders and for holding thin and thick workpieces having a large area.**

- **[Features]**
  - Thanks to finer pole pitches on the chuck work face, these chucks hold thin and wide workpieces firmly.
  - Since electricity is supplied momentarily only to control the magnetomotive force when mounting/demounting a workpiece, little heat is generated internally to maintain accuracy.
  - Since electricity need not be supplied continuously even while holding a workpiece, the running cost is very low.
  - Since the holding power is maintained in the event of power failure and cable breakage, safety is secured.

**Model EPTW-N**

**PERMANENT ELECTROMAGNETIC MICROPITCH CHUCK**

- **Suitable for grinding of thin and small workpieces.**

- **[Features]**
  - Generates strong holding power on workpieces of 25 mm and larger.
  - Instead of the conventional magnetic pole longitudinal patterns, the transverse magnetic pole patterns are used.
  - A resin-bound structural face plate having little environmental burden is employed.

**Model EPZ-U**

**TILT TYPE PERMANENT ELECTROMAGNETIC CHUCK**

- **Suitable for angle grinding on grinders. Easy to install.**

- **[Features]**
  - The rotary shaft with scale facilitates angle setting. (An angle can be set as desired in a range of 90° forward and 90° backward.)
  - Since electricity is supplied momentarily only to control the magnetomotive force when mounting/demounting a workpiece, little heat is generated internally to enable highly precise machining.
  - Since electricity need not be supplied continuously even while holding a workpiece, the running cost is very low.
  - Since the holding power is maintained in the event of power failure and cable breakage, safety is secured.

---

**Model EPTW-1530**

**Model EPTW-N2040**

**Model EPZ-1030UF**

---

**Table**

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal Size</th>
<th>Work Face</th>
<th>Pole Pitch</th>
<th>Mounting Face</th>
<th>Height</th>
<th>Voltage</th>
<th>Power Cord</th>
<th>Mass</th>
<th>Electric Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPTW-1530</td>
<td>150 (5.90) x 300 (11.8)</td>
<td>150 (5.90)</td>
<td>300 (11.8)</td>
<td>125 (4.90)</td>
<td>148 (5.82)</td>
<td>150 (5.90)</td>
<td>300 (11.8)</td>
<td>18</td>
<td>95</td>
</tr>
<tr>
<td>EPTW-N2040</td>
<td>200 (7.87) x 400 (15.7)</td>
<td>200 (7.87)</td>
<td>400 (15.7)</td>
<td>25</td>
<td>173 (6.81)</td>
<td>198 (7.79)</td>
<td>500 (19.6)</td>
<td>120</td>
<td>3m</td>
</tr>
<tr>
<td>EPZ-1030UF</td>
<td>150 (5.90) x 300 (11.8)</td>
<td>150 (5.90)</td>
<td>300 (11.8)</td>
<td>125 (4.90)</td>
<td>148 (5.82)</td>
<td>150 (5.90)</td>
<td>300 (11.8)</td>
<td>18</td>
<td>95</td>
</tr>
<tr>
<td>EPTW-N2040</td>
<td>200 (7.87) x 400 (15.7)</td>
<td>200 (7.87)</td>
<td>400 (15.7)</td>
<td>18</td>
<td>217 (8.54)</td>
<td>248 (9.76)</td>
<td>600 (23.6)</td>
<td>90</td>
<td>180 VDC</td>
</tr>
<tr>
<td>EPZ-1030UF</td>
<td>150 (5.90) x 300 (11.8)</td>
<td>150 (5.90)</td>
<td>300 (11.8)</td>
<td>125 (4.90)</td>
<td>148 (5.82)</td>
<td>150 (5.90)</td>
<td>300 (11.8)</td>
<td>18</td>
<td>95</td>
</tr>
<tr>
<td>EPTW-N2040</td>
<td>200 (7.87) x 400 (15.7)</td>
<td>200 (7.87)</td>
<td>400 (15.7)</td>
<td>25</td>
<td>173 (6.81)</td>
<td>198 (7.79)</td>
<td>500 (19.6)</td>
<td>120</td>
<td>3m</td>
</tr>
<tr>
<td>EPZ-1030UF</td>
<td>150 (5.90) x 300 (11.8)</td>
<td>150 (5.90)</td>
<td>300 (11.8)</td>
<td>125 (4.90)</td>
<td>148 (5.82)</td>
<td>150 (5.90)</td>
<td>300 (11.8)</td>
<td>18</td>
<td>95</td>
</tr>
</tbody>
</table>
**Model EPS**

EP CHUCK MASTER*

**Control unit for permanent electromagnetic chucks**

- Rectifies an input from an AC power source to DC and momentarily outputs exciting current to permanent electromagnetic chucks. The automatic demagnetization circuit is activated to reduce residual remagnetism of permanent electromagnetic chucks.

**Features**
- The EP Chuck Master* is dedicated to permanent electromagnetic chucks and can be used for EPT, EPT-H, EPTW and EPZ-U.
- The microcomputer control ensures very effective automatic demagnetization.
- The holding power is adjustable.
- Model EPS-GW (B) is of external operation type.
- EPS-GW is installed inside the machine panel and EPS-GWB is installed outside the panel and both of them are equipped with a remote operation box.
- Compared with the conventional type, the volume has been reduced to about a third.
- Workability and operability such as wiring, fuse replacement, switchover of voltage between 200 VAC and 220 VAC and output voltage/demagnetizing time adjustment have been improved.

### General type

<table>
<thead>
<tr>
<th>Model</th>
<th>Power Source</th>
<th>Rated Output (VAC)</th>
<th>Dimensions (W x D x H)</th>
<th>Mounting Dimensions (W x H x Hole)</th>
<th>Mass (kg)</th>
<th>Operation Box Width/Depth/Height/Comb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS-215B</td>
<td>Single-phase 200 VAC (50/60Hz)</td>
<td>20-90 VDC</td>
<td>15A</td>
<td>180 (5.1) x 130 (5.1) x 110</td>
<td>4.6</td>
<td>—</td>
</tr>
<tr>
<td>EPS-230B</td>
<td>Single-phase 180-220 VAC (50Hz)</td>
<td>40-180 VDC</td>
<td>15A</td>
<td>180 (5.1) x 130 (5.1) x 110</td>
<td>7.27</td>
<td>—</td>
</tr>
<tr>
<td>EPS-230B</td>
<td>Single-phase 200 VAC (50Hz)</td>
<td>20-90 VDC</td>
<td>15A</td>
<td>180 (5.1) x 130 (5.1) x 110</td>
<td>7.27</td>
<td>—</td>
</tr>
</tbody>
</table>

* The applicable models are EPT, EPT-H, EPTW and EPZ-U only. Interstate EPS-GW (B) 230A is used as a control unit for the connection of some models or specially ordered large chucks.

**Model EPH-LW**

NON-CONTACT TYPE EP CHUCK MASTER*

**Low magnetic force control function**

- The use of the low magnetic force control function enables straightening operations as with electromagnetic chucks.
- The use of the low magnetic force control function facilitates positioning of workpieces. (The low magnetic force control requires electricity to be supplied continuously. When used with the low magnetic force control function activated for long hours, accuracy change due to heat generated in the permanent electromagnetic chuck itself may slightly affect the machining accuracy.)

**Features**
- These Chuck Masters enable it to control the low magnetic force (weak holding power), which is difficult with permanent electromagnetic chucks. When a conventional permanent electromagnetic chuck is used, it is necessary to turn it off once and after lowering the magnetizing voltage, turn it on again in order to set a low magnetic force for straightening grinding operations. These Chuck Masters have a control function by which the power can be applied continuously only in the low output region, which makes it possible to finely and continuously adjust the low magnetic force region as with electromagnetic chucks. They offer a possibility of straightening grinding with permanent electromagnetic chucks. Workpieces can also be positioned smoothly with the low magnetic force control.

### Low magnetic force control function

<table>
<thead>
<tr>
<th>Model</th>
<th>Power Source</th>
<th>Rated Output (VAC)</th>
<th>Dimensions (W x D x H)</th>
<th>Mass (kg)</th>
<th>Operation Box Width/Depth/Height/Comb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPH-LW205B</td>
<td>Single-phase 200 VAC (50Hz)</td>
<td>Permanent electromagnetic: 0-180 VDC (2 sec.)</td>
<td>5A</td>
<td>140 (5.5) x 5.5 (0.19) x 175 (6.8)</td>
<td>Approx. 4.7kg/10.3 lb</td>
</tr>
<tr>
<td>EPH-LW230B</td>
<td>Single-phase 220 VAC (50Hz)</td>
<td>Low magnetic force: 3.0-60 VDC (continuous)</td>
<td>10A</td>
<td>220 (8.6) x 115 (4.5) x 250 (9.8)</td>
<td>Approx. 6.9kg/15.2 lb</td>
</tr>
</tbody>
</table>

* Non-contact type Chuck Masters (with low magnetic force control) for permanent electromagnetic chucks (180 VDC version). The low magnetic force control is possible when used in combination with the permanent electromagnetic chuck Model EPT-LW. *Three types; rated output of 180 VDC-5A, 180 VDC-5A (with operation box) and 180 VDC-10A (with operation box) are available.
**Model EPC**  
**ROUND PERMANENT ELECTROMAGNETIC CHUCK**

**Revolutionary permanent electromagnetic chuck!**
Magnetic force adjustable!

Model | EPC / EPC-Z
---|---

**EPC-50A-S**  
<An example of special fabrication>

**Chuck controller required additionally**

<table>
<thead>
<tr>
<th>Model</th>
<th>Nominal Size</th>
<th>Work Face (Dd x Dp)</th>
<th>No. of Poles</th>
<th>Mounting Face (Dd x Dp)</th>
<th>Voltage</th>
<th>Current</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPC-50AST</td>
<td>500 x 19.6</td>
<td>650 x 18.1</td>
<td>8</td>
<td>200 x 7.87</td>
<td>110 V</td>
<td>27A</td>
<td>125 (4.90)</td>
</tr>
<tr>
<td>EPC-75AST</td>
<td>700 x 27.6</td>
<td>850 x 25.8</td>
<td>12</td>
<td>500 x 16.0</td>
<td>180 V</td>
<td>32A</td>
<td>150 (5.91)</td>
</tr>
<tr>
<td>EPC-90AST</td>
<td>900 x 35.6</td>
<td>1050 x 33.4</td>
<td>18</td>
<td>700 x 27.5</td>
<td>180 V</td>
<td>45A</td>
<td>150 (5.90)</td>
</tr>
<tr>
<td>EPC-120AST</td>
<td>1200 x 47.2</td>
<td>1500 x 45.6</td>
<td>24</td>
<td>1000 x 38.4</td>
<td>180 V</td>
<td>60A</td>
<td>150 (5.90)</td>
</tr>
</tbody>
</table>

*The slip ring (carbon brush) is optional. The brush holder support bar for the slip ring should be provided by the user.*
*Turning the permanent electromagnetic chucks on and off must be limited to once per several minutes. If on/off operations are repeated frequently, the chuck may be damaged by overheating.*

**Patented**

**A size φ 1200 and larger is also available.**

---

**Model EPC-Z**  
**POWERFUL ROUND PERMANENT ELECTROMAGNETIC CHUCK**

Construction machinery / Ship building / Nuclear power plant / Wind power generation  
Highly precise machining of ring-shaped workpiece such as bearings!

**Chuck controller required additionally**

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>No. of Poles</th>
<th>Applicable Workpiece Diameter (Min. dia. x Max. dia.)</th>
<th>Mass</th>
<th>Electro Chuck Master</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPC-Z50</td>
<td>φ 640 x 90 (3.54)</td>
<td>14</td>
<td>250 (9.84)</td>
<td>150 kg</td>
<td>EPC-Z50 / EPC-Z50A</td>
</tr>
<tr>
<td>EPC-Z90</td>
<td>φ 950 x 90 (3.54)</td>
<td>42</td>
<td>350 (13.78)</td>
<td>300 kg</td>
<td>EPC-Z90 / EPC-Z90A</td>
</tr>
<tr>
<td>EPC-Z120</td>
<td>φ 1250 x 90 (3.54)</td>
<td>60</td>
<td>500 (19.69)</td>
<td>350 kg</td>
<td>EPC-Z120 / EPC-Z120A</td>
</tr>
<tr>
<td>EPC-Z150</td>
<td>φ 1550 x 90 (3.54)</td>
<td>90</td>
<td>750 (29.53)</td>
<td>400 kg</td>
<td>EPC-Z150 / EPC-Z150A</td>
</tr>
<tr>
<td>EPC-Z180</td>
<td>φ 1850 x 90 (3.54)</td>
<td>120</td>
<td>1000 (39.37)</td>
<td>450 kg</td>
<td>EPC-Z180 / EPC-Z180A</td>
</tr>
</tbody>
</table>

*The chuck controller is not included.*
*The power is supplied through the metal connector (with cable connection confirmation signal) on the side of the chuck.*

---

**<Chuck controller>**

<table>
<thead>
<tr>
<th>Model</th>
<th>Power Source</th>
<th>Voltage</th>
<th>Output</th>
<th>Current</th>
<th>Breaker Capacity</th>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
<th>Dimensions</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPC-P2100A-2</td>
<td>200 VAC (50 / 60Hz)</td>
<td>1Φ</td>
<td>90 VDC  x 2 times switching</td>
<td>30A</td>
<td>450 (17.7)</td>
<td>450 (17.7)</td>
<td>200 (7.87)</td>
<td>15kg / 33.0 lb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPC-P2100A-4</td>
<td>200 VAC (50 / 60Hz)</td>
<td>1Φ</td>
<td>90 VDC  x 4 times switching</td>
<td>60A</td>
<td>750 (29.5)</td>
<td>250 (9.84)</td>
<td>40kg / 88.2 lb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPC-P2100A-6</td>
<td>200 VAC (50 / 60Hz)</td>
<td>1Φ</td>
<td>90 VDC  x 6 times switching</td>
<td>75A</td>
<td>850 (33.4)</td>
<td>50kg / 110 lb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPC-P2100A-8</td>
<td>200 VAC (50 / 60Hz)</td>
<td>1Φ</td>
<td>90 VDC  x 8 times switching</td>
<td>75A</td>
<td>850 (33.4)</td>
<td>50kg / 110 lb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPC-P2100A-10</td>
<td>200 VAC (50 / 60Hz)</td>
<td>1Φ</td>
<td>90 VDC  x 10 times switching</td>
<td>75A</td>
<td>850 (33.4)</td>
<td>50kg / 110 lb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**EPC** / **EPC-Z**