Electro-Permanent Magnetic Chuck

SAV 243.70

With continuous transverse pole arrangement \( P = 13, 18 \) and \( 25 \) mm

This range of magnetic chucks belongs to the new generation of electro-permanent magnetic chucks and is notable for its very robust, homogeneous design and its precision. The magnetic force is produced by permanent magnets that are magnetized and demagnetized by short electric current pulses. This chuck is particularly notable for its high power and long-life. The pole pitch gives real \( N \) and \( S \)-poles.

Use:
For universal clamping of precision workpieces.
- for workpiece positioning cross to pole pitch
- for workpiece with min. thickness \( = x \)
  - 4.5 mm at \( P = 13 \) mm
  - 6.0 mm at \( P = 18 \) mm
  - 8.5 mm at \( P = 25 \) mm
- for flat workpieces with min. dimensions \( = a \):
  - 25 mm x 25 mm at \( P = 13 \) mm
  - 32 mm x 32 mm at \( P = 18 \) mm
  - 45 mm x 45 mm at \( P = 25 \) mm

 Nominal holding force:
- 90 N/cm², at pole pitch \( P = 13 \) mm
- 110 N/cm², at pole pitch \( P = 18 \) mm
- 115 N/cm², at pole pitch \( P = 25 \) mm
adjustable with control unit with encoded switch

 Nominal operating voltage:
- 210 V DC up to size \( A \times B = 600 \times 400 \)
- 360 V DC above size \( A \times B = 450 \times 175 \)

Features:
- solid constructed pole plate with either 13 mm, 18 mm or 25 mm transverse pole pitch
- real magnetic \((N/S)\) poles
- switching off through demagnetizing cycle
- heat treated tension free body
- electro-permanent system, guaranteeing safe operation during power failure
- air pressure release system on request for \( P = 18 \) or \( 25 \) mm
- gap free construction of pole plate
- fine grid pole plate to body connection
- extra enhanced systems available on request
- pole plate wearing limit 8 mm
- pole plate exchangeable
- mounting slots in both short faces
- through holes for mounting in sizes over 1000 mm length on specification
- robust and waterproof
- sealed to IP 65
- for use with control unit type SAV 876.03 / SAV 876.10 (see chapter 04)

Auxiliary equipment:
- side stop rail on short and long face
- connecting cable, 3 m, on the right-hand, short face
- lifting bolts on larger models
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**Ordering example:**

**Ordering key:** Name — SAV - No. - A x B - P - Operating voltage

**Dimensions in mm**

<table>
<thead>
<tr>
<th>$A$</th>
<th>$B$</th>
<th>$C$</th>
<th>$D$</th>
<th>Weight in kg</th>
<th>Chuck voltage in V</th>
<th>Control unit max. current in A</th>
<th>Suitable control unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>100</td>
<td>80</td>
<td>120</td>
<td>18</td>
<td>11.0</td>
<td>210</td>
<td>30 / 16</td>
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<tr>
<td>300</td>
<td>100</td>
<td>80</td>
<td>224</td>
<td>18</td>
<td>17.0</td>
<td>210</td>
<td>30 / 16</td>
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<tr>
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<td>150</td>
<td>80</td>
<td>224</td>
<td>18</td>
<td>25.0</td>
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<tr>
<td>400</td>
<td>150</td>
<td>80</td>
<td>328</td>
<td>18</td>
<td>34.0</td>
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<tr>
<td>450</td>
<td>175</td>
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<td>381</td>
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<td>309</td>
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<tr>
<td>500</td>
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<td>417</td>
<td>18</td>
<td>56.0</td>
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<td>525</td>
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<td>67.0</td>
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<td>741</td>
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<td>921</td>
<td>18</td>
<td>210.0</td>
<td>210 / 360</td>
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</table>

**Other sizes and operating voltages available on request. Larger clamping surfaces can be made by flush mounting several units. Please refer to SAV 876.10 to SAV 876.03, for details regarding suitable control units, based on max. current or control voltage (see Chapter 04).**

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**Ordering example:** Electro-Permanent Magnetic Chuck SAV 243.70 - 2000 x 800 - 25 - 360 V

**Ordering key:** Name — SAV - No. - A x B - P - Operating voltage