**Potentiometer** max. 4 W with individual leads

**Description**
These up to 4 W potentiometers show that Ex potentiometers can be small and compact.

The external dimensions are approximately the same as those of standard industrial potentiometer enclosures. Central fixing in a single hole and the standard size of shaft have been included.

From the variety of resistors on the market we have chosen cemented wire-wound resistors and carbon film resistors and developed a standard-program range. The metal Ex d enclosures are tailored to the dimensions of the resistors and feature a standard 30 mm diameter. The potentiometers have been designed so that the stated nominal capacities can be fully exploited at temperature class T6 or T5 and be deployed in zones 1 and 2.

The potentiometer is fitted into an enclosure that meets the requirements of an approved type of protection in conformance to IEC/EN 60079-0.

**Features**
- High IP-protection class
- Small design
- Simple installation

**Explosion protection**

**Ex protection type**
- IIC Ex db IIC Gb
- I M2 Ex db I Mb

**Certification**
PTB 03 ATEX 1025 U

**Temperature class**
T6 to T4

**Ambient temperature**
-55 °C to +40 °C/+60 °C/+80 °C

**Technical data**

**Protection class**
min. IP 54/IEC 60529

**Enclosure**
nickel-plated brass (CuZn)

**Tightening torque** (for nuts)
200 Ncm

**Resistance characteristic**
linear

**Electrical connection**
cores
4GAF - 0.75

**Cemented wire-wound resistors:**
- Resistance values/power ratings
  see selection chart
- Resistance tolerance
  ± 5 %
- Linearity tolerance
  max. 3 % of final value
- Insulation resistance
  ≥ 100 MΩ
- Rotation
electr./mech. 250°/270°

**End stop strength**
30 Ncm

**Weight with cores** (0.5 m)
180 g

**Carbon-film resistors on ceramic:**
- Resistance values/power ratings
  see selection chart
- Insulation resistance
  ≥ 100 MΩ
- Rotation
electr./mech. 270°

**End stop strength**
100 Ncm

**Weight with cores** (0.5 m)
200 g

**Precision wire-wound resistors:**
- Resistance values/power ratings
  see selection chart
- Insulation resistance
  ≥ 1000 MΩ
- Resistance tolerance
  ± 5 %
- Linearity tolerance
  to 500 Ω ± 1 %
  > 500 Ω ± 0.5 %
- Rotation
electr./mech. 320°

**End stop strength**
100 Ncm

**Weight with cores** (0.5 m)
170 g
### Selection chart

<table>
<thead>
<tr>
<th>Resistor type/ standard resistance values</th>
<th>Temperature class/ power rating</th>
<th>Complete order no. (indicate resistance values in plain text)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cemented wire-wound resistors</strong></td>
<td></td>
<td></td>
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<tr>
<td>higher power ratings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Ω 68 Ω 470 Ω 3.3 k Ω</td>
<td>T6/2.5 W resp.</td>
<td>07-6612-111</td>
</tr>
<tr>
<td>12 Ω 82 Ω 560 Ω 3.9 k Ω</td>
<td>T6/1.2 W resp.</td>
<td>07-6612-112</td>
</tr>
<tr>
<td>15 Ω 100 Ω 680 Ω 4.7 k Ω</td>
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<tr>
<td>18 Ω 120 Ω 820 Ω 5.6 k Ω</td>
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<tr>
<td>22 Ω 150 Ω 1 k Ω 6.8 k Ω</td>
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<td></td>
</tr>
<tr>
<td>27 Ω 180 Ω 1.2 k Ω 8.2 k Ω</td>
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<td></td>
</tr>
<tr>
<td>33 Ω 220 Ω 1.5 k Ω 10 k Ω</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39 Ω 270 Ω 1.8 k Ω</td>
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<tr>
<td>47 Ω 330 Ω 2.2 k Ω</td>
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<td></td>
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<tr>
<td>56 Ω 390 Ω 2.7 k Ω</td>
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<tr>
<td><strong>Carbon film resistors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 Ω 1 k Ω 10 k Ω 100 k Ω</td>
<td>T6/2 W</td>
<td>07-6612-113</td>
</tr>
<tr>
<td>220 Ω 2.2 k Ω 22 k Ω 220 k Ω</td>
<td></td>
<td></td>
</tr>
<tr>
<td>470 Ω 4.7 Ω 47 k Ω 470 k Ω</td>
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<td><strong>Precision wire-wound resistors</strong></td>
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<tr>
<td>20 Ω 200 Ω 2 k Ω 20 k Ω</td>
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<td></td>
</tr>
<tr>
<td>50 Ω 500 Ω 5 k Ω</td>
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<tr>
<td><strong>Special versions - please indicate particulars in plain text</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Anti-rotation pin on front of enclosure
- Side entry of leads
- Threaded holes on front of enclosure
- Other resistance values

### Accessories/Order no.

- **Potentiometer max. 4 W with individual leads**

- **Dimensions in mm**

- **Cemented wire-wound resistors for high power ratings**

- **Carbon-film resistors**

- **Precision wire-wound resistors**

- **Accessories/Order no.**
  - **Rotary knob shaft Ø 6 mm**
    - Order no. 03-5401-0001
  - **Pointer knob shaft Ø 6 mm**
    - Order no. 03-5401-0002
  - **Scale 0 to 100**
    - Order no. 05-0144-0112 (270°)
    - Order no. 05-0144-0127 (320°)
  - **Ship clutch adjustable to 50 Ncm, shaft Ø 6 mm**
    - Order no. 03-5600-0001