Industrial-Grade Potentiometers
Series IPS6000

Special features
• excellent linearity standard ± 0.1 %
• long life 100 x 10⁶ movements typ.
• mechanical continuous rotation
• extremely robust industrial-grade construction
• protection class IP 67

Using this potentiometer a maximum angular rotation of 355° can be converted into a voltage proportional to the angle of rotation, through the medium of a conductive plastic potentiometer.

This special „heavy-duty“ version of our industrial potentiometers can be used successfully in the most demanding applications or environmental conditions. Simply yet robustly built, these units are suitable for use in all manner of industrial applications and machinery manufacturing. The cast housing is watertight; sealing is achieved through the use of a stepped bush whilst electrical connections are made via a plug and socket mounted on the side of the unit.

Special versions with different electrical travels and shaft dimensions are available.

<table>
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<tr>
<th>Description</th>
<th>Case</th>
<th>Shaft</th>
<th>Bearings</th>
<th>Resistance element</th>
<th>Wiper assembly</th>
<th>Mounting</th>
<th>Electrical connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>aluminium varnished, entry sealed using special stepped bush</td>
<td>stainless steel</td>
<td>stainless steel ball bearings</td>
<td>conductive plastic</td>
<td>precious metal multi-finger wiper</td>
<td>any optional position</td>
<td>7pin all-metal plug and socket, freely rotatable, 90° right-angled, protection class IP67, bayonet catch</td>
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</table>
Important
All the values given in this data sheet for linearity, lifetime and temperature coefficient in the voltage dividing mode are quoted for the device operating with the wiper voltage driving on operational amplifier working as a voltage follower, where virtually no load is applied to the wiper (I_{w} \leq 1 \mu A).

Included in delivery
4 mounting clamps Z4-1, 1 corner plug Cannon No. CA 08 COM-E-16S-1S-B, 1 anti-kink sleeve

Recommended accessories
Spring loaded coupling, Z110 G10 (backlash-free), Process-controlled indicators MAP... with display, Signal conditioner MUP.../MUK... for standardized output signals

Order designations

<table>
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<tr>
<th>Type</th>
<th>Art.no.</th>
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<tr>
<td>IPS6501 A032</td>
<td>010031</td>
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Additional models available

| IPS6501 G252 | 010036 | \( \varepsilon \) 90° ± 2° indep. lin. ± 0.3%, R= 2.5 k\( \Omega \) ± 20% |