Assembly Instructions

Warnings
- Do not open the sensor housing.
- Do not pull or loop the measuring wire around unprotected body parts.
- Do not pull out the measuring wire beyond the measuring range listed.
- Do not let the measuring wire snap.

Risk of injury
- Do not damage the measuring wire.
- Do not oil or grease the measuring wire.
- Do not kink the measuring wire.
- Do not pull the measuring wire diagonally.
- Do not let the measuring wire drag around objects.
- Attach the measuring wire to the measured object while the wire is retracted.

Damage to or destruction of the sensor
- Do not let the measuring wire snap! There is no liability for material defects in case of damage due to snapping.

Notes on Product Marking
The product meets the requirements of CE and UKCA. All specifications described in the operating instructions must be observed.

Proper Environment
- Protection class: IP65
- Operating temperature: -20 °C to +80 °C (-4 °C to -176 °F)
- Storage temperature: -20 °C to +80 °C (-4 °C to -176 °F)
- Humidity: 5% to 95% (non-condensing)
- Ambient pressure: Atmospheric pressure

1) With plug version only when connected.

Unpacking/Included in Delivery
1 Sensor
2 Slot nuts
1 Assembly instructions

Dimensions in mm (inches)

Sensor Mounting
Mount the sensor with the slot nuts using M6 screws.

The slot nuts can be mounted on each sensor side and positioned as desired in the mounting groove.

Make sure that the thread length of the screws, which you use for the slot nuts, protrude from the sensor edge between 5 mm and 7 mm into the mounting groove.

Damage of the sensor housing due to the screw being too long
The sensor does not have to be oriented in a special way.

Select the installation position in such a way that damage to or contamination of the measuring wire is avoided.

If possible, prefer an installation position in which the measuring wire exits downward. This prevents liquids from entering the measuring wire outlet.

Dimensions in mm (inches)
No. 1.1.2. Principles of safety integration

- The area around the sensor must be secured.
- Directive 2011/65/EU (RoHS)
  - Maximum cable diameter 8 mm / 0.3 inch
  - SR - connector radial

No. 1.7.4. Operating instructions

- The sensor must not be held by a non-approved tool.
- Recommended conductor cross-section 0.14 mm²
- I-output: 4 ... 20 mA
- EN IEC 63000:2018 Technical documentation for the assessment of electrical equipment of machinery

Pin assignment WDS — PSR — LR 1
1) Pins 4 — 8 on the connector are not connected.

Voltage / Current Output

<table>
<thead>
<tr>
<th>Output</th>
<th>Current connection</th>
<th>Ground</th>
<th>Ground</th>
<th>Signal</th>
<th>Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+ Supply</td>
<td>- Ground</td>
<td>- Ground</td>
<td>Signal</td>
<td>Shield</td>
</tr>
<tr>
<td>2</td>
<td>Ground</td>
<td>- Ground</td>
<td>- Ground</td>
<td>Signal</td>
<td>Shield</td>
</tr>
<tr>
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<td>Ground</td>
<td>- Ground</td>
<td>- Ground</td>
<td>Signal</td>
<td>Shield</td>
</tr>
<tr>
<td>4</td>
<td>Ground</td>
<td>- Ground</td>
<td>- Ground</td>
<td>Signal</td>
<td>Shield</td>
</tr>
</tbody>
</table>

Guiding and Attaching the Wire

- If the measuring wire must be pulled out of the enclosure, a guide pulley must be used.
- If the measuring wire must be pulled out of the enclosure, a guide pulley must be used.
- Type designation: WDS-xxx, WPS-xxx

- For draw wire sensors with encoder output, it is essential to use a guide pulley to prevent the measuring wire from being damaged or caught.

- The sensor contains an additional supplement for encoder output (E,A) there are no adjustment and setting elements.

- Operation

- Draw wire sensors with output 0/4...20 mA (current output) are equipped with integrated electronics with setting potentiometers (trimmers) for zero and gain.

- Voltage output (±18 % with current output).

- Measuring range
  - 0 %
  - 100 %

- Measuring range listed,
  - ±3 ° tolerancy

- Guide the measuring wire vertically (±3 ° tolerancy) to the target (access hole, etc.)

- The sensor must be protected against the user from being caught or otherwise be damaged.

- They are online at: