**Warnings**

- Do not open the sensor housing.
- Do not pull or lift 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.
- 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 retracting.

**Risk of injury**

- 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
- **Temperature range:**
  - **Operation:** -20 ... +80 °C (-4 ... +176 °F)
  - **Storage temperature:** -20 ... +80 °C (-4 ... +176 °F)
- **Humidity:** 5 ... 95 % (non-condensing)
- **Ambient pressure:** Atmospheric pressure

**Unpacking/Included in Delivery**

- 1 Sensor
- 1 Montageanleitung (Installation instructions)

**Assembly Instructions**

**WDS Series WDS-XXXX-P60**

---

**Sensor Mounting**

Mount the sensor with nuts M4 DIN 934, screws M4 DIN 961 or with mounting clamps MT60-WDS on the mounting nuts, see Operating Instructions, Optional Accessories.

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.

Do not let the measuring wire snap! There is no liability for material defects in case of damage due to snapping.
Guiding and Attaching the Wire

If the measuring wire must be pulled out of the sensor to guide the wire to the measured object:
- The sensor must not be held by a second person during that process.
- The measuring wire must not be pulled out beyond the measuring range listed.
- The area around the sensor must be protected against snapping of the measuring wire.

To the measuring wire to the target using a wire clip.

Guiding the measuring wire vertically out of the sensor using a guide pulley.

Pins 3 to 8 on the connector are not connected.

Voltage / Current Output

Current output: Pins 3 to 8 on the connector are not connected.

Pin assignment WDS-...-Pxx-SR-U/I

1) Voltage output: Pin assignment WDS-...-Pxx-SR-U/I

- CR - Green
- Ground
- BR
- Supply +
- Ground

Example

Current, voltage output (±15 % with current output). For draw wire sensors with encoders, the signal span (sensitivity) is adjusted by ±20 % with zero trimmer.

With the gain trimmer the signal span (sensitivity) is adjusted by ±20 % with voltage output (±18 % with current output).

Use a screened cable.

Shield
- Ground

Shield
- Ground

Model with voltage output

Model with current output

A pre-assembled connecting cable P96-P115-P200 is available as an optional accessory.

Please note the following for user-side assembly of a cable:
- Use a screened cable.
- Use shield on electronic side.
- Recommended conductor crosssection: 0.14 mm² (up to 9 m/30 ft cable length)
- Cable diameter cable: 6 mm – 0.25 inch

Pin assignment for draw-wire displacement sensors with encoder output (E,A) there are no adjustment and setting elements.

With the zero trimmer the zero point can be shifted by ±20 % of the range with voltage output (±18 % with current output).

With the gain trimmer the signal span (sensitivity) is adjusted by ±20 % with voltage output (±18 % with current output).

With the zero trimmer the zero point can be shifted by ±20 % of the range with voltage output (±18 % with current output).