Assembly Instructions

Precautionary Measures
- Do not open the sensor housing.
- Do not pull or loop the measuring wire around unprotected parts of the body.
- Do not pull the measuring wire over range.
- Danger of injury
- Do not damage the measuring wire.
- Do not oil or grease the measuring wire.
- Do not bend the measuring wire.
- Do not pull the measuring wire at an angle.
- Do not allow to loop the measuring wire around objects.
- Do not let the measuring wire rewind without control (snap back).
- Fix the measuring wire to the target when wound up only.

Sensor Assembly
- Series Z60: 2x M4 screws DIN 931
- Series P96: 4x M6 screws DIN 931 and 2 groove stones
- Series P115: 4x M6 screws DIN 931 and 2 groove stones
- Series P200: 4x M8 screws DIN 912 and 4 groove stones

The sensor does not have to be oriented in a special way. Choose the installation position so that damage and soiling of the measuring wire is avoided.

Proper Environment
- Protection class of sensor: IP 65
- Operating temperature: -20 to +80 °C (-4 to +176 °F)
- Storage temperature: -40 to +80 °C (-40 to +176 °F)
- Humidity: 5 - 95 % (non-condensing)
- Ambient pressure: atmospheric pressure
- Vibration: according to IEC 68-2-6
- Mechanical shock: according to IEC 68-2-27

Installing the Encoder
Make sure that the measuring wire is always tensioned by the spring motor in order to prevent it from jumping off the pulley.

Mounting of adapter flange and encoder, Series WDS-Z60
- Mount the encoder/adapter flange assembly on the draw-wire mechanism.
- Fasten the coupling and the encoder shaft with the supplied hexagon socket screw. Press the supplied cap into the opening in the adapter flange housing.
- Make sure that the encoder shaft is not rotated during installation! Follow the installation instructions issued by the manufacturer of the encoder.

Mounting of adapter flange and encoder, Series WDS-Pxxx
- *X9771136-A04*

For more information, refer to the manufacturer’s installation manual.
Wire Guide and Fastening
If the measuring wire has to be extracted from the sensor to guide the wire resp. to fix it to the target:
- the sensor may not be held by another person.
- the measuring wire may not be further extracted but only to the specified measuring range.
- the surroundings of the sensor have to be protected against snagging of the measuring wire.

Fix the measuring wire to the target using a M4 threaded bolt or eyelet.

Weld the measuring wire perpendicularly from the sensor housing.

Misalignment is only permissible up to 3 degrees.

Dragging of the measuring wire on the inlet hole or other objects leads to damage and/or snapping of the measuring wire.

Wire outlet:
- horizontally to the sensor.
-

Operation and Maintenance
Do not grease or oil the measuring wire, the wire drum, the spring motor.

Keep the measuring wire in an area, where it cannot be snagged or otherwise violated.

For further information, please refer to the online documentation. You will find the latest version at: www.micro-epsilon.com/link/wire > "Draw-wire sensor mechanics for mounting encoders".

Declaration of incorporation
Declaration of incorporation according to the EC Machinery Directive 2006/42/EC, Annex II B.

Manufacturer and authorized representative for the compilation of the relevant technical documents:

MICRO-EPSILON MESSTECHNIK GmbH & Co. KG
Königbacher Straße 15, 94496 Ortstein / Germany

by hereby declare that the machine designated below, as a result of its manner of design, construction as well as version that has been placed on the market - to the extent possible in the scope of delivery - corresponds to the relevant, fundamental health and safety requirements of the EC Machinery Directive, including the valid changes at the time of this declaration.

Misalignment Type designation: WDS-xxx, WPS-xxx

The following fundamental health and safety requirements in accordance with Annex I of the above-named directive are applied and maintained:

- No. 1.3.2. Principles of safety integration
- No. 1.7.3. Marking of machinery
- No. 1.7.4. Instructions

Furthermore, the compliance with the following standards is explained, including the valid changes at the time of this declaration:

- DIN EN 13857 Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs
- DIN EN 61320-1: 2013
- DIN EN 61326-2-3: 2013

Moreover, we declare that the partly completed machinery has been created in accordance with part B of Annex VII, and that we shall be obligated to deliver these upon the request of the market surveillance authorities.

The described partly completed machinery is intended for installation in a production line.

The commissioning of this partly completed machinery shall be prohibited until the partly completed machinery has been installed in a machine that complies with the provision of the EC Machinery Directive and for which an EC Declaration of Conformity in accordance with Annex II A is available.

Ortenburg, October 8th 2015

Dr. Thomas Wisspeintner
Managing Director