

WS Position Sensors

Mounting Hints



Automation
Sensors
Measurement

1

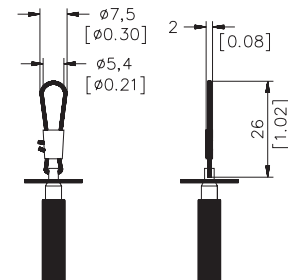
Cable Fixing

The WS17 and WS/LR19 sensors are fitted with the M4 connection at the end of the cable (see Options on p. 68). All other sensors use the cable clip: The cable fixing consists of a rotatable steel clip, a mounting aid and an elastomeric sleeve. Connection to the moving part of the machine or system is made with an M5 set screw (Allen screw) preferably using the GK1 Attachment Head. The steel cable clip can be opened for easy fixing.

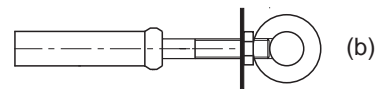
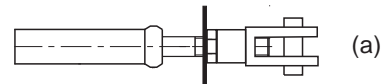
The mounting aid is included to provide a positive finger grip on the cable end during fixing and can be removed afterwards if space is limited.

CAUTION: Snap-back of measuring cable during sensor mounting must be avoided or sensor may be damaged!

The M4 cable connection is easy to use, it can be combined with the GK1 Attachment Head (a) or with a fastening eye (b) OE1 (see accessories p. 69).



Dimensions in brackets are inches.



Cable Alignment

When mounting the WS Position Sensor the cables linear travel must be at 90° to the sensor body face on which the cable outlet is situated (See diagram).

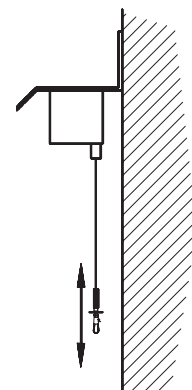
IMPORTANT: Any deviation from the 90° angle will reduce the lifecycle of both cable and cable outlet!



Mounting Position

The WS Position Sensor must be firmly mounted in a position which allows free cable movement and where damage to the sensor or cable from foreign objects is unlikely. The sensor will operate in any orientation but where cable contamination by oil, water or particulate matter is possible the sensor should be mounted in the vertical plane with the cable pointing down (as per diagram). Where necessary a sensor shield should be incorporated in the mounting assembly to protect the sensor from falling solids or liquid media.

It is also good practice to mount the sensor onto or close by a rigid part of the machine or system (see diagram).



The above information is provided as a user guide only and is not part of our specific technical product data.

WS Position Sensors Mounting Hints

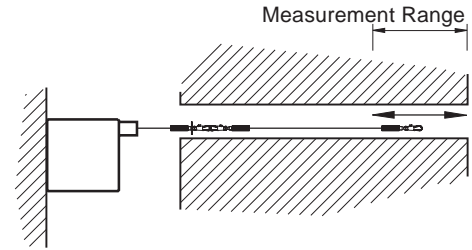


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1

Cable Extensions

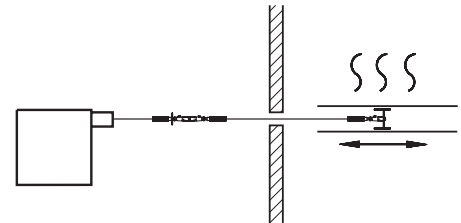
In certain restricted access situations it is impossible to mount the sensor close to the part of the machine or system where the linear motion is measured. In this case the SV1 Cable Extension (See accessories) can be used to connect the sensor cable to the moving part (See diagram). The SV1 Cable Extension is also ideal for applications where measurement under water is required. The WS Position sensor can be mounted in a dry, protected position above the surface and the SV1 Cable Extension used to connect the sensor cable to the underwater moving part.



High Temperatures

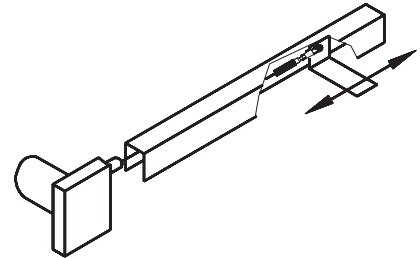
Standard WS Position Sensors and measuring cables are rated at a maximum of 85 °C ambient operating temperature. The SV1 cable extension can be used on temperatures up to 200°C. The sensor and sensor cable can be placed in a normal temperature area and the cable extension passed through a small access hole into the hot area connecting the sensor cable to the moving part (See diagram).

Please Note: Heat shielding and/or forced air cooling of the sensor is recommended where 85°C may be exceeded for even short periods.



Hostile Environments

WS Position Sensors can be used in very hostile environments if suitable shielding and protection of the sensor and cable is provided. A shielding channel of metal or rigid plastic is recommended where cable damage or contamination may occur (See diagram).

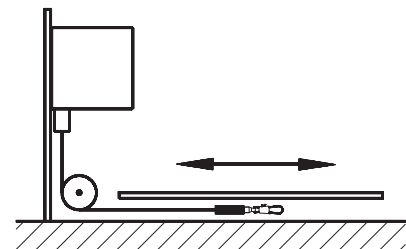


Cable Runs using pulleys

The SR1 low friction pulley wheel (See Accessories) can be used where it is necessary to have the cable linear movement in a different plane to the sensor mounting or restricted access makes direct mounting of the sensor impossible.

Angles of up to 180° are permissible.

NOTE: The use of pulley wheels will reduce the lifecycle of the cable!

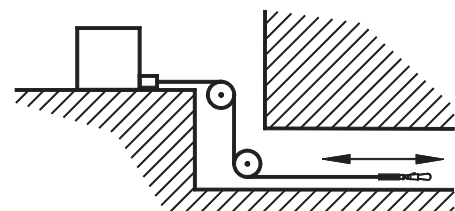


Multiple Pulleys

It is possible to use two or more SR1 pulley wheels to divert the cable into restricted access areas.

Angles of 0° to 180° are permissible.

NOTE: The use of pulley wheels will reduce the lifecycle of the cable!



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