

WIRE LENGTH MEASUREMENT WLM 5 UW PRODUCT SHEETS

The WLM 5 UW sensor: highly accurate distance measurement in harsh dredging and subsea environments.



SELECTION & OPTION LIST

For every WLM sensor the following configuration items must be determined:

- Data output format. In its standard configuration the WLM 5 UW can be executed with either a 4 – 20 mA current output signal, or a 0-10 V voltage output signal. Other (digital) output data formats, such as CAN bus, Profibus, and SSI are available upon request.
- Measurement range. In order to maximize measurement accuracy, the WLM sensor will be set to a pre-specified measurement range which can be up to 5 meters.

The following features are options:

A Precursor wire length

Adding precursor wire length allows for increasing the distance between the sensor and the measurement starting point.

B Cable assembly

The sensor can be supplied with custom-made cabling in a variety of lengths, allowable loads, and connector types.

Connector type

The sensor is supplied standard with a Subconn® Metal Shell connector. Other connector types are available upon request.

TYPICAL APPLICATIONS

The WLM sensor range is specifically designed for stroke and distance measurement in offshore, dredging, and subsea applications, including:

- Spud pole position measurement
- Suction tube position measurement
- Hydraulic cylinder stroke measurement
- Subsea reservoir level measurement





WLM 5 UW sensor installed on subsea reservoir for level measurement

WIRE LENGTH MEASUREMENT 5 UW SPECIFICATIONS

GENERAL

Main dimensions

METRIC

See detailed drawings

 ${\sf Material\ housing\ /\ frame} \qquad \qquad {\sf Stainless\ steel\ 316L}$

Weight in air $\pm 25 \text{ kg}$ $\pm 55 \text{ lbs}$ Nom. pull force start of stroke $\geq 40 \text{ N}$ $\geq 9 \text{ lbf}$ Nom. pull force end of stroke $\leq 120 \text{ N}$ $\leq 27 \text{ lbf}$ Maximum effective measurement length 5 m 16.4 ft

Depth rating 75 m 246 ft

Operational temperature range $-10^{\circ}\text{C} - +70^{\circ}\text{C}$ $14^{\circ}\text{F} - +158^{\circ}\text{F}$ Connector BCR2004M

ELECTRICAL – ANALOG DATA OUTPUT

VOLTAGE OUTPUT

CURRENT OUTPUT

IMPERIAL

Supply voltage 8 - 32 V DC 8 - 32 V DC

Current consumption 15 mA (without load) 20 mA (without load)

Output signal 0.5 – 9.5 V 4 – 20 mA Load on output >5 k Ω at 12 V DC <500 Ω

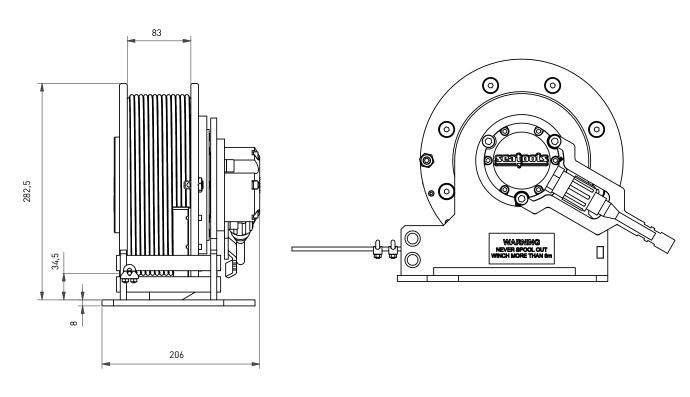
Resolution 13 Bit (over entire measurement range)

Linearity 0.15 % Settling time 80 ms

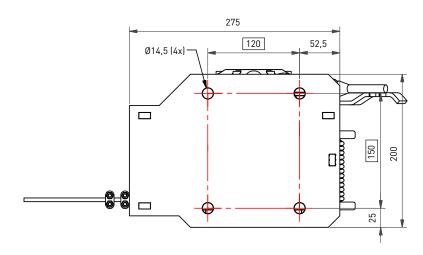
DIMENSIONS

FRONT VIEW

SIDE VIEW



BOTTOM VIEW



3D CAD files in STEP format are available on www.seatools.com

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