LITRONIC-WMS-SHAFT SENSORS IN COMPACT DESIGN
with integrated measured value transmitter

EX-PROTECTION AVAILABLE

TECHNICAL DATA

- Physical principle: Capacity calculation with high-frequency-leakage field (frequency 0.02 GHz)
- Sensor location: Pipeline, tank
- Measuring range: 0 – 100 % water moisture (measuring window in range 0 – 100 % adjustable as desired)
- Resolution: 0.01 % (depends on emulsion)
- Number of leakage field condensers: 1 alternatively 3
- Capacity resolution: 10 \(^{-15}\) F
- Actualisation cycle: 32.64 \(\times 10^{-3}\) s
- Scanning rate average value counter: 16 \(\times 10^6 – 25 \times 10^6\)
- Possible measuring precision: ± 0.1 %, with regular calibration
- Micro-processor: SAB 80C32
- Power supply: 24 V, 150 mA DC
- Measuring range temperature measuring: -10° C – 90° C
- Measuring precision temperature measuring: ± 0.5° C
- Analogous output: 4 – 20 mA, actively supplied from sensor power unit
  max. load 500 \(\Omega\), resolution 12 bit
- Error report: via analogous output 3.6 mA or 22 mA, Control optional via HART-MODEM
- Connecting cable: 2 TWP AWG 20, shielded max. 1500 m (24 V DC and 4 – 20 mA output)
- Remote parameterisation: HART-protocol
- On-site parameterisation: optional via measured value display and parameterisation module
- Pressure resistance: 110 bar
- Medium temperature: 5° C – 80° C
- Ambient temperature: - 20° C – 70° C (-35° C – 80° C optional)
- Working temperature electronics: - 5° C – 80° C (-35° C – 80° C optional)
- Storage temperature: - 35° C – 80° C
- Material housing/wear protection: V4A / ALU / PEEK
- Measuring gauge diameter: 42 mm
- Process connection: 2” ANSI 600
- Enclosure rating: IP 65
**Water content measurement system**

*Typ „Litronic WMS“*

### Measuring

<table>
<thead>
<tr>
<th>D</th>
<th>L1 (mm)</th>
<th>L2 (mm)</th>
<th>L3 (mm)</th>
<th>L4 (mm)</th>
<th>L5 (mm)</th>
<th>Gewicht (kg)</th>
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<th>Sensor</th>
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<td>19,80</td>
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Wight sensor: 26 kg
Wight inter changeble fitting 19 kg
ACCESSORIES

1 BYPASS-MEASURING DEVICE. (Sensoradaption)
Suitable for recording of a 10" sensor

consisting of:
- measuring pipe, each with 2 inlets and 2 outlets, with connection
  socket and thread
- connection- and dummy flanges
- flange for sensor connection ANSI 600 lb 2" (DN 50)

QUICK CHANGE FITTING

is a device for exchanging measuring systems from pipe lines
under process conditions

consisting of:

Protective pipe which is shifted via the sensor shaft using the hand crank
and sealed on the opposite facing side of the pipe to the supply medium.
It is thus possible to change the measuring system under
process conditions.
The flange situated opposite the quick change fitting seals 3 times
as efficiently as the protective pipe and centralises the protective pipe.
It is possible to ventilate the protective pipe via a needle valve.
The protective pipe has been laid three times in the quick change fitting
and is sealed against the supply medium.
The position of the protective pipe in the pipe line is visible from the outside.
The quick change fitting can be ventilated via a needle valve.
In the operating condition the sensor shaft rests in the quick change fitting.
The quick change fitting is made entirely of stainless steel or with the thread
made of bronze.
All seals and guide elements are crude oil resistant.

RETRACTABLE FITTING for the sensor

consisting of:
- Guide pipe with sealing set, flange and sleeve
- Retention screw with sealing package and clamp fitting
- Safety chain.

Configured for an adjustment range of approx. 500 mm and an
operating pressure up to 6 bar.
Designed for direct flange mounting with 2" ANSI 150 flange.
ACCESSORIES

MEASURING CASE

Capacity approx. 1,5 litre
Round carrying out, Ø approx. 120 mm;
height approx. 200 mm
Stainless steel

incl.

integrated sensor field and sep. measured value display

LITRONIC-WMS-MEASURED VALUE DISPLAY EX-VERSION

a) for connection to shaft sensor, installed in sensor connection head with transparent screen.

b) for connection to SHAFT sensor, installed in a separate housing.

TECHNICAL DATA

- Display: LCD display, bar graph 20 segments and digital value, 4 characters
- Operating and ambient temperature: 0° C to 50° C (with installed parameterisation module)
- Storage and transport temperature: -40° C to 85° C.
- Housing made from PBT, B/H/T: 85 x 118 x 82 mm
- Enclosure rating: IP 67
- Cable length to sensor: max. 20 m.

PARAMETERISATION MODULE, pluggable

Insertion module for parameterisation of the compact sensors with own LCD display for clear text and 6 keys.