LFP

RADAR LEVEL METER GUIDED WAWE

LEVEL

Radar level meter with guided wawe

At a glance
- Level monitoring in hygienic applications
- Manually cutable monoprobe up to 2,000 mm long with Ra 0.8 µm
- Process temperature up to 150 °C, process pressure up to 16 bar
- CIP/SIP resistant
- IP 67 and IP 69K enclosure rating
- Interchangeable hygienic process connections
- 3-in-1: combined display, analog output and binary output
- Analog output 4 mA ... 20 mA / 0 V … 10 V, switchable, plus two binary outputs

Your benefits
- Robust design increases service life
- High flexibility due to cutable probe and interchangeable connection concept
- Cost savings due to multiple output signals: one system for both level detection and continuous level monitoring
- Time and cost savings due to low maintenance and quick commissioning
- No calibration or recalibration required for commissioning, thus saving time and costs

IO-Link

Features

Medium	Fluids
Measurement	switch, continuous
Probe length	300 mm
Process pressure	-1 bar ... 16 bar
Process temperature	-20 °C ... 150 °C
EHEDG approval	√
GOST approval	√
RoHS certificate	√

Performance

Dielectricity constant	≥ 5
Repeatability	≤ 2 mm
Resolution	< 2 mm
Accuracy of sensor element	± 5 mm
Conductivity	no limitation
Inactive area at process connector	25 mm [1]
Inactive area at probe end	10 mm [2]

[1] With parameterized tank with water under reference conditions, otherwise 40 mm
[2] With water under reference conditions

Mechanical data

Housing material	303
Process connection	G 3/4 A
Wetted parts	316L (Ra ≤ 0,8 µm), PEEK
Max.probe load	6 Nm

Ambient data

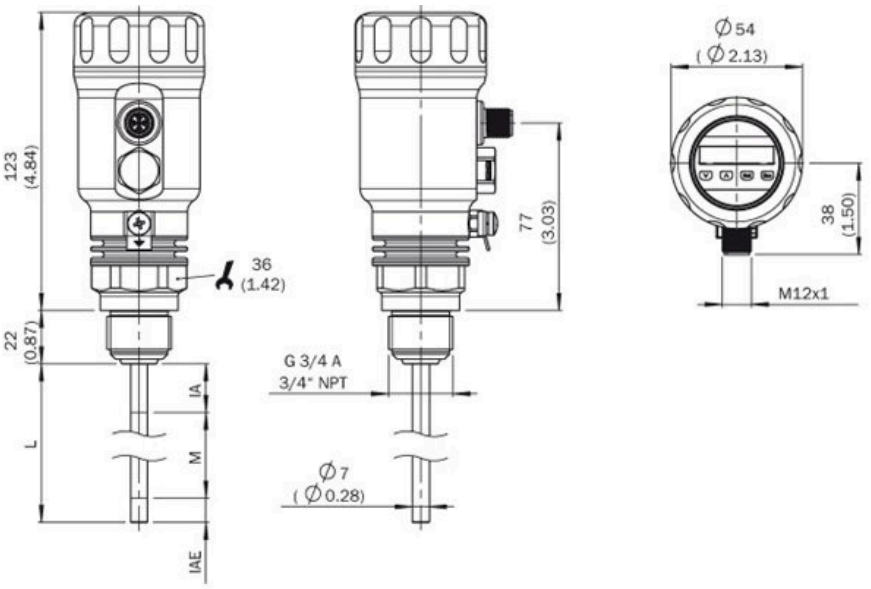
Ambient temperature, operation	-20 °C ... 60 °C
Ambient temperature, storage	-40 °C ... 80 °C

Electrical data

Supply voltage	12 V DC ... 30 V DC [1]
Power consumption	≤ 75 mA at 24 V without output load
Initialization time	≤ 2 s
Connection type	M12x1, 5-pin
Response time	< 400 ms
Signal voltage HIGH	Vs - 2 V
Signal voltage LOW	≤ 2 V
Output current	< 100 mA
Output load	0 V ... 10 V > 750 Ohm at Uv ≥ 14 V, 4 mA ... 20 mA < 400 Ohm at Uv > 12 V, 4 mA ... 20 mA < 500 Ohm at Uv > 13,5 V
Upper signal level	20 mA ... 20.5 mA
Lower signal level	3.8 mA ... 4 mA
Capacitive load	100 nF
Inductive load	< 1 H
Enclosure rating	IP 67: EN 60529, IP 69K: EN 40050
Temperature drift	< 0.1 mm/K
Protection class	III
EMC	EN 61326-1:2006, 2004/108/EG
Interference resistance	EN 61000-6-2:2005
Interference emission	EN 61000-6-4:2007
Single shock	EN 60068-2-27
Continuous shock	EN 60068-2-29

[1] All connections are polarity protected. All outputs are overload and short-circuit protected.

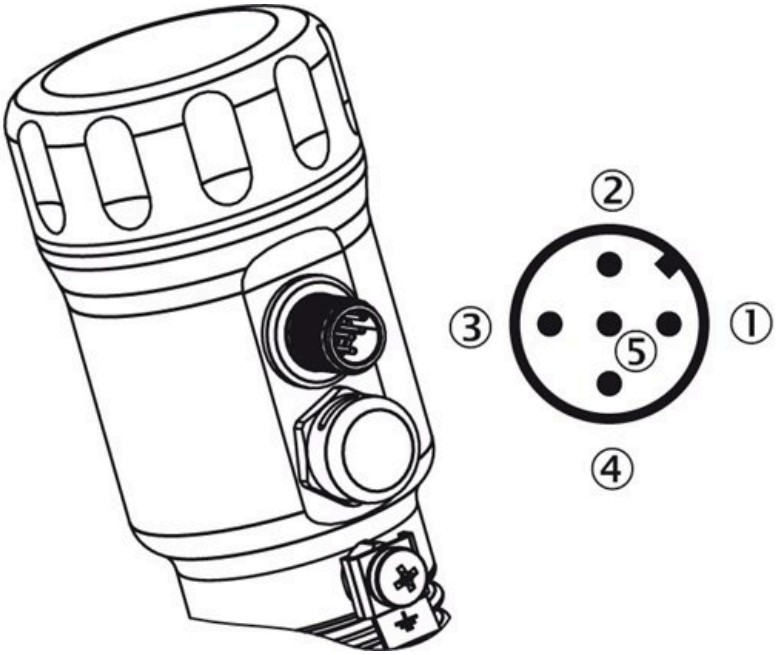
Dimensional drawing



M: Measuring range
L: Probe length
IA: Inactive area at process connection 25 mm (0.79") / 40 mm (1.58")
IAE: Inactive area at probe end 10 mm (0,39")

All dimensions in mm (inch)

Connection type



|1| L+: Supply voltage, brown
|2| QA: Analog current-/voltage output, white
|3| M: Ground, OUT - for current-/voltage output, blue
|4| C/Q1: Switching output 1, PNP/IO-Link-communication,
|5| Q2: Switching output 2, PNP/NPN, grey