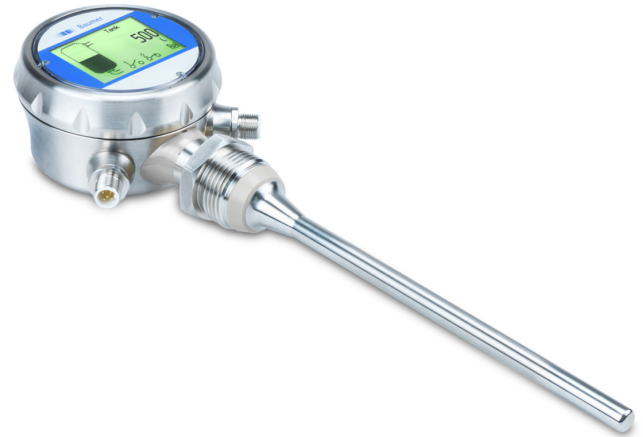


Overview

- Potentiometric Level Transmitter
- IO-Link Dual Channel
- Compact, food compatible, hygienic design
- Wetted parts in acid-proof, stainless steel and PEEK
- 3-A approved / FDA and EHEDG compliant
- Defined empty registration
- Unaffected by strong adhesive media
- Configurable measuring range



Technical data

Performance characteristics

Measuring principle	Potentiometric level measurement
Max. measuring error	± 1 % FSR ,for media conductivity ≥ 50 µS/cm ± 3 % FSR ,for media conductivity < 50 µS/cm
Measuring range	200 ... 3000 mm
Media characteristics	≥ 5 µS/cm
Step response time, T90	≤ 100 ms
Damping	≤ 60 s
Repeatability	0.2 % FSR , for rod length ≥ 500mm 1 mm , for rod length < 500mm

Process conditions

Process temperature	-10 °C ... 115 °C , permanent < 140 °C , max. t < 30 min
Process pressure	≤ 16 bar

Process connection

Connection variants	G 1 A hygienic
Mounting position	Any, top, bottom, side
Wetted parts material	AISI 316L (1.4404) PEEK Natura
Surface roughness wetted parts	Ra ≤ 0.8 µm Ra ≤ 0.4 µm, for rod length till 100 cm

Ambient conditions

Operating temperature range	-20 ... 65 °C
Storage temperature range	-40 ... 85 °C
Degree of protection (EN 60529)	IP69K , with connector M12-A. 5-pin IP67 , with cable gland
Humidity	0 ... 95 % RH
Vibration (sinusoidal) (EN 60068-2-6)	1.6 mm p-p (2 ... 25 Hz), 4 g (25 ... 100 Hz), 1 octave / min.

Switching output

Output type	PNP NPN Digital (push-pull) Off
Switching logic	High-Active Low-Active
Relays	2 relays included in the display
Current rating	100 mA , max.
Off leak current	< 100 µA
Short circuit protection	Yes

Analogue output

Output signal	4 ... 20 mA
Accuracy	≤ 40 µA
Load resistance	500 Ω max.
Temperature drift	< 0.01 % FSR/K (± 1.6 µA/K)
Resolution	3 µA
Status signal empty	3.5 mA , programmable

IO-Link interface

IO-Link version	1.1
Device profile	Smart Sensor Profile
IO-Link port type	Class A
Baud rate	38,4 kbaud (COM2)
SIO-mode	Yes
Process data (cyclic)	Process Value Device Status
Adjustable data (acyclic)	Sensor Adjustment Switch parameters Analog Output Signal Adjustment Analog Output Signallimits (Minimum, Maximum, Alarm)

PLP70H

Potentiometric level measurement

PLP70H-50####0##.D11#A040.3#3#

Technical data

Housing

Style	Compact version FlexHousing, Ø80 mm
Overall size	Refer to section "Dimensional drawings"
Material	AISI 304 (1.4301)

Electrical connection

Connector (available for left side)	M12-A, 5-pin, stainless steel M16x1.5, stainless steel M20x1.5, stainless steel
Connector (available for right side)	M12-A, 4-pin, stainless steel M16x1.5, stainless steel M20x1.5, stainless steel

Power supply

Voltage supply range	18 ... 35 V DC
Current consumption (no load)	100 mA , max.
Power-up time	≤ 3 s
Reverse polarity protection	Yes

Factory settings

QTeach	Activated
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Compliance and approvals

EMC Emission	EN 61326
EMC Immunity	EN 61326
Hygiene	3-A (74-07) EHEDG (pending)

Display

General information

Panel type	FSTN Graphical LCD
Display range	-9999 ... 99999
Max. digit height	22 mm
Material	Polycarbonate

Input signal

Input signal from transmitter	Digital, 2-way for communication between transmitter and display
Update time	≤ 1 s , max. 0.3 s , typ.

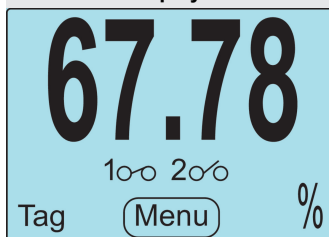
User configurable data

Error- / Warning-indication	Individually configurable display and backlight indication in white, green or red colour, steady or flashing light. Configurable limits over the range
Measuring unit	% mm cm m Inch Feet
User defined measuring unit	8 × 20 pixel matrix

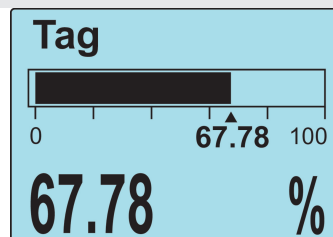
Relays

Contacts	2 x solid state relays
Max. load current	75 mA
Max. switching voltage	60 V

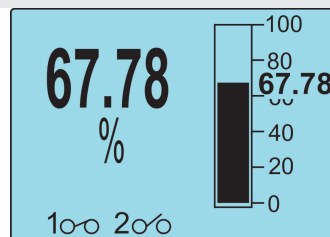
Selectable display views



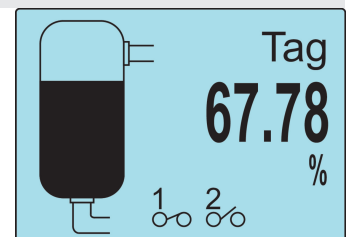
Filling level and additional values



Filling level and horizontal bar graph



Filling level and vertical bar graph



Filling level and tank illustration