



Process Automation



Process Automation

Level Sensors | Level Detectors | Overfill Prevention



Accuracy



Flexible



Reliable

Sensors and Systems: www.fafnir.com

CONDURIX

The Ultimate Solution for Sticky Liquids: Potentiometric Level Sensor

Even in the most viscous or dirty liquids, CONDURIX delivers the most reliable tank-level information. Its small sensor head makes it especially suitable for tight spaces. This means that CONDURIX can be used for a wide range of applications in all electrically conductive liquids with conductivity at or above 1 $\mu\text{S}/\text{cm}$.

Why Choose CONDURIX?

Quick and Precise

- + Easy installation, no configuration: This saves time and prevents errors

Solution for the Most Complex installation

- + With its small sensor head, CONDURIX can be installed almost anywhere
- + The CONDURIX level sensor is suitable not only for fill level measurement, but also for interface level measurement

Ideal for Adhesive and the Most Viscous Liquids

- + Contaminants in waste water have no effect on measurement reliability

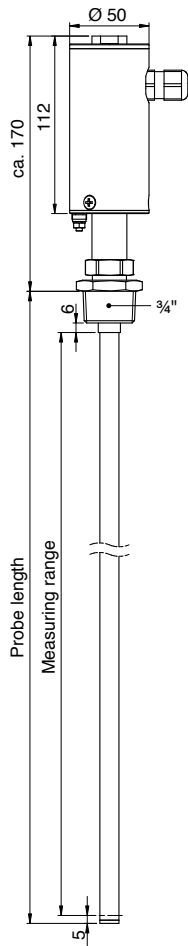
Main Features and Benefits

- + 2-wire terminal (4 ... 20 mA / HART®)
- + Level measurement result independent of pressure, temperature and density
- + Fill level and/or interface measurement
- + Response time of 0.2 seconds
- + Use in all electrically conductive liquids $\geq 1 \mu\text{S}/\text{cm}$
- + Robust long-life design
- + Versions available from 100 mm to 4,000 mm
- + ATEX approval for zone 0

Applications

- + Sticky and viscous media
 - + Aqueous solutions
-

CONDURIX – Technical Data



Probe head

Protection class	IP68
Material	Stainless steel 1.4305 (303)
Cable terminal	M16 x 1.5 cable gland for cable diameter 5 to 10 mm ½" NPT threads for conduit cabling; M12 connector
Ambient temperature	-40 °C ... +85 °C

Probe tube

Tube	Stainless steel 1.4571 (316Ti); Hastelloy® C4/C22
Sealing	PEEK, PTFE or FFKM and Ceramic (Al ₂ O ₃ 99.7 %)

Accuracy

Filling level	±1 mm or ±1 %
Resolution (HART®)	0.1 mm

Electrical connection

Connection	2-wire
Voltage	8 ... 30 V _{DC} ; Ex version 10 ... 30 V _{DC}
Signal	Output power: 4 ... 20 mA / HART® Failure mode in accordance with NAMUR NE43
HART® functions	Fill level in mm, cm, m, inch or feet; configuration

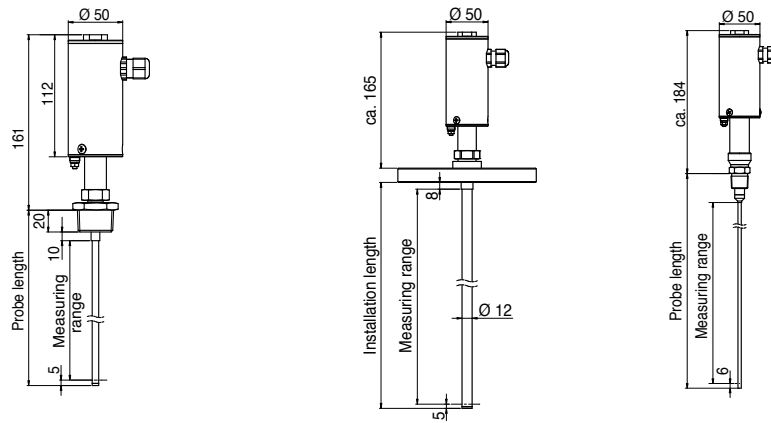
Process conditions

Temperature	Up to 200 °C
Pressure	Up to 100 bar

Options

ATEX approval



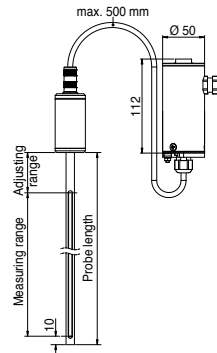
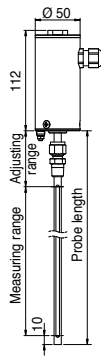
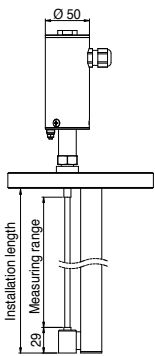

Name
CONDURIX MONO HART NT
CONDURIX MONO HART HT
Description

Our standard CONDURIX, ideal for use in conductive tanks. Available with two different probe diameters.

Our high-temperature and high-pressure version. Ideal for small conductive tanks, such as in pilot plants.

Probe tube

	6 mm	12 mm	4 mm
Diameter	6 mm	12 mm	4 mm
Length	150 mm ... 1,500 mm	500 mm ... 4,000 mm	100 mm ... 600 mm
Sealing material	PEEK	PEEK	FFKM and Ceramic (Al ₂ O ₃ 99.7 %)
Process conditions			
Temperature	Normal temperature (NT): -40 °C ... +125 °C	Normal temperature (NT): -40 °C ... +125 °C	High temperature (HT): 0 °C ... +200 °C
Pressure (probe tube)	-1 bar ... 100 bar (room temperature) -1 bar ... 25 bar (125 °C)	-1 bar ... 100 bar (room temperature) -1 bar ... 25 bar (125 °C)	-1 bar ... 100 bar (100 °C) -1 bar ... 50 bar (200 °C)
Minimum process connection	R ¾" DN 25	R 1" DN 25	R ½" DN 25



CONDURIX DU HART NT

Our CONDURIX with an integrated counter electrode, ideal for non-conductive or coated tanks. Also the best solution if strong lateral forces are in the tank due to strong turbulences.

CONDURIX MA HART NT

Our best solution for small, non-conductive containers, i.e. glass reaction containers. Since the height can be adjusted, the same sensor can be used in different container sizes.

CONDURIX MA HART NT Steck

The sensor with the detachable head: Where space is limited or in applications where the sensor tube needs to be cleaned regularly, this can be done without the risk of damaging the electronics.

Probe tube: 6 mm Counter electrode: 24 mm	Outer tube: 8 mm (counter electrode) Inner tube: 4 mm (measuring tube)	Outer tube: 8 mm (counter electrode) Inner tube: 4 mm (measuring tube)
200 mm ... 6,000 mm	100 mm ... 600 mm	100 mm ... 600 mm
PEEK	PEEK/PTFE	PEEK/PTFE
Normal temperature (NT): -40 °C ... +125 °C	Normal temperature (NT): -40 °C ... +125 °C	Normal temperature (NT): -40 °C ... +125 °C
-1 bar ... 100 bar (room temperature) -1 bar ... 25 bar (125 °C)	-1 bar ... 100 bar (room temperature)	-1 bar ... 10 bar (room temperature)
R 1 3/4" DN 50	G 1/4"	G 1/4"



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