



Process Automation



# Process Automation

Level Sensors | Level Switches | Overfill Prevention  
Pressure Sensors | Temperature Sensors



Accurate



Flexible



Reliable

**Sensors and Systems:** [www.fafnir.com](http://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 conductance  $\geq 1 \mu\text{S}/\text{cm}$ .

## Why Choose CONDURIX?

### Quick and Precise

- + As with all FAFNIR solutions: The sensor is easy to install, saving you valuable time with no adjustments to the tank or liquid required

### A Solution for the Most Complex Installation

- + CONDURIX can be installed almost anywhere with its small sensor head and tube with a diameter of just 6 mm
- + The CONDURIX level sensor is designed not only for filling-level measurement, but also for interface-level measurement

### Ideal for Adhesive and the Most Viscous Liquids

- + Contaminated liquids such as waste water have no impact on the reliability of the measurement

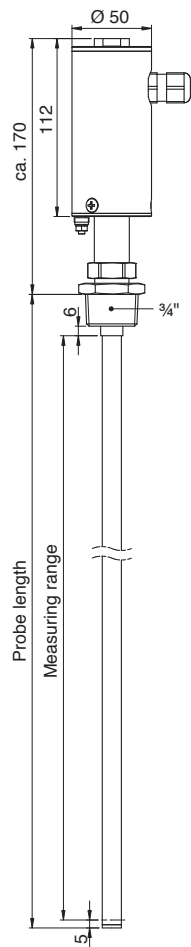
### Main Features and Benefits

- + 2-wire terminal (4 to 20 mA/HART®)
- + Level measurement result independent of pressure, temperature and density
- + Filling level and/or Interface layer 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 6,000 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 to +85 °C

### Probe tube

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

### Accuracy

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

### Electrical connection

Connection	2-wire
Voltage	8 to 30 V <sub>DC</sub> ; Ex-version 10 to 30 V <sub>DC</sub>
Signal	Power output: 4 to 20 mA/HART®; Failure mode in accordance with NAMUR NE43
HART® functions	Level in mm, cm, m, inch or feet; remote configuration

### Process conditions

Temperature	Up to 200 °C
Pressure	Up to 100 bar

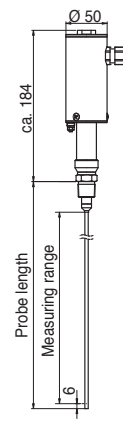
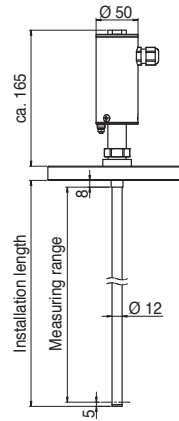
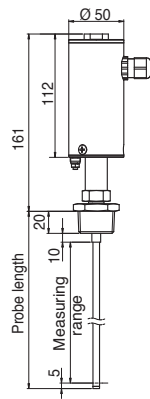
### Options

ATEX approval

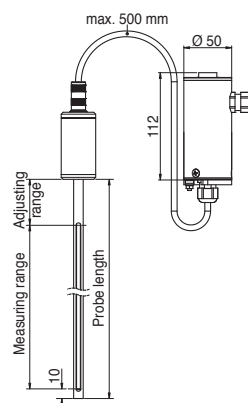
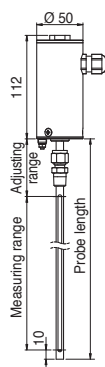
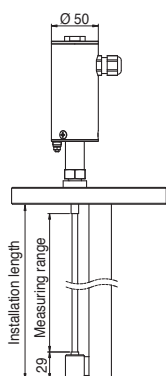


For order code and  
technical documentation visit:  
[www.fafnir.com/CONDURIX](http://www.fafnir.com/CONDURIX)





Name	CONDURIX MONO HART NT	CONDURIX MONO HART NT	CONDURIX MONO HART HT
Description	Our standard CONDURIX, ideal for any conductive tank. Available with two different tube diameters.	Our standard CONDURIX, ideal for any conductive tank. Available with two different tube diameters.	Our high-temperature, high-pressure version. Ideal for small conductive tanks, i.e. pilot plants.
<b>Probe tube</b>			
Diameter	6 mm	12 mm	4 mm
Length	150 mm to 1,500 mm	500 mm to 4,000 mm	100 mm to 600 mm
Sealing material	PEEK	PEEK	FFKM and Ceramic (Al <sub>2</sub> O <sub>3</sub> 99.7 %)
<b>Process conditions</b>			
Temperature	Normal temperature (NT): -40 °C to +125 °C	Normal temperature (NT): -40 °C to +125 °C	High temperature (HT), 0 °C to +200 °C
Pressure (probe tube)	-1 bar to 100 bar (room temperature) -1 bar to 25 bar (125 °C)	-1 bar to 100 bar (room temperature) -1 bar to 25 bar (125 °C)	-1 bar to 100 bar (100 °C) -1 bar to 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 when strong lateral forces are in the tank due to strong turbulence.

**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 head can be separated: Where space is limited or in applications where the sensor tubing needs to be cleaned regularly, this can be done without risking damage to the electronics.

Probe tube: 6 mm  
Counter electrode: 24 mm

200 mm to 6,000 mm

PEEK

Outer tube: 8 mm  
(counter electrode)  
Inner tube: 4 mm  
(Measuring tube)

100 mm to 600 mm

PEEK/PTFE

Outer tube: 8 mm  
(counter electrode)  
Inner tube: 4 mm  
(Measuring tube)

100 mm to 600 mm

PEEK/PTFE

Normal temperature (NT):  
-40 °C to +125 °C

-1 bar to 100 bar  
(room temperature)  
-1 bar to 25 bar (125 °C)

R 1 3/4"  
DN 50

Normal temperature (NT):  
-40 °C to +125 °C

-1 bar to 100 bar  
(room temperature)

G 1/4"

Normal temperature (NT):  
-40 °C to +125 °C

-1 bar to 10 bar  
(room temperature)

G 1/4"



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