FAFNIR™

Process Automation

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

Accurate

Flexible

Reliable

Sensors and Systems: www.fafnir.com

FAFNIR Sensors and Systems

Reliable, Universal Solutions for Your Level, Pressure and Temperature Measurement Requirements

FAFNIR prides itself on providing the highest-quality measurement solutions to all its customers, regardless of application complexity and size. After trading for approximately 45 years, driving industry innovation, and listening to our customers and their requirements, we are pleased to present FAFNIR's German-made, high-precision level, pressure and temperature measurement devices for the petroleum, pharmaceutical, chemical and food industries to you, our customers.

Why Buy FAFNIR Sensors and Systems?

Reliability, Accuracy and Ease of Installation as Standard

+ All our sensors are calibrated and stringently tested before they reach you, ensuring you receive only the best
+ With FAFNIR's "plug-and-play" sensors, installation is quick and easy
+ With pre-calibration, once installed, no adaptation to the liquid is required
+ Our sensor lifespan and failure rate is second to none. FAFNIR's field-proven sensors are installed globally

With 45 Years' Engineering and Manufacturing Experience, Customer Service is Key

+ Regardless of order complexity or size, we will find a solution for your business
+ We have listened to the market and we know you need the full solution from one supplier
+ We have extended our product portfolio to include pressure and temperature measurement so FAFNIR is at the forefront of your measurement needs
+ The FAFNIR team are experts. We design, manufacture and calibrate all of our products to the highest quality

Difficult Installation Conditions Are No Challenge for FAFNIR.

+ Designed to meet every requirement, our sensors fit the smallest to the largest openings
+ Our extensive range of sensors means we will have a solution for you, even when other suppliers don't

Extreme Process Conditions?

+ Our sensors are proven in temperatures of up to 450 °C or with up to 200 bar of pressure
+ With a response time of less than 0.2 s and information regarding the filling levels with an accuracy of ±0.3 mm, you have constant visibility of your liquid stock
+ Reliability assured in corrosive, toxic and viscous substances

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. Due to the small sensor head, with a diameter of only 6mm, CONDURIX can be used in a wide range of applications, in all electrically conductive liquids with a conductance ≥1µS/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 6mm
+ The CONDURIX level sensor is designed not only for filling-level measurement, but also for interface-level measurement

Installed and Tested in Multiple Industries

+ Chemical, petrochemical, liquid gas, pharmaceutical, off-shore, ship building, power plants, energy systems, process & drinking water treatment, laboratory

Ideal for Adhesive and the Most Viscous Liquids

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

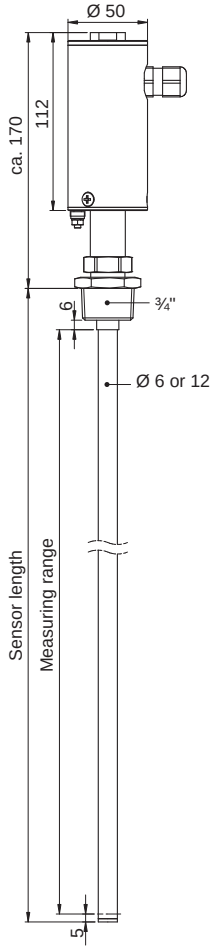
Main Features and Benefits

+ 2-wire terminal (4 to 20 mA/HART®)
+ Level measurement result independent of pressure, temperature and density
+ Filling level or interface layer measurement
+ Response time of 0.2 seconds
+ Use in all electrically conductive liquids ≥1 µS/cm
+ Robust long-life design
+ Versions available from 150 mm to 6,000 mm
+ ATEX approval for zone 0

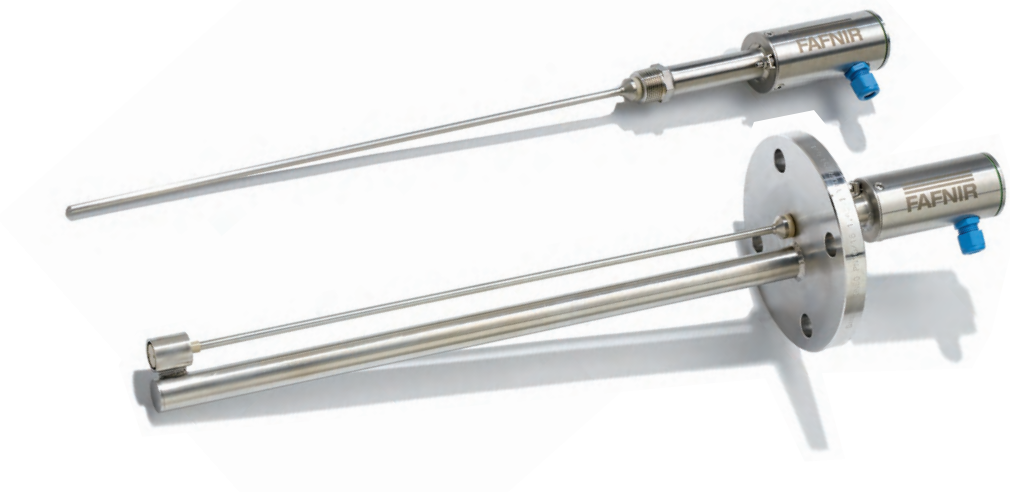
Tried and Tested

+ Sticky and viscous media
+ Aqueous solutions

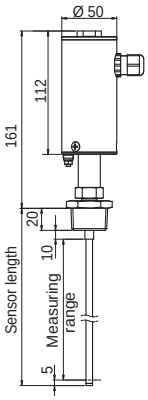
CONDURIX – Technical Data

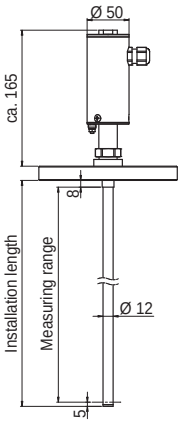


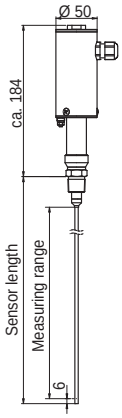
Probe head	
Protection class	IP68
Material	Stainless steel 303
Cable terminal	M16 x 1.5 cable gland for cable diameter 5 to 10 mm ½" NPT threads for conduit cabling; M12 Connector
Ambient temperature	–40 °C to +85 °C
Probe tube	
Tube	Stainless steel 316 Ti; Hastelloy® C4/C22
Sealing	PEEK, PTFE or FFKM and Ceramic (Al2O3 99.7 %)
Accuracy	
Filling level	±1 mm or ±1 %
Resolution (HART®)	0.1 mm
Electrical connection	
Connection	2-wire
Voltage	8 to 30 V_{DC}, Ex version 10 to 30 V_{DC}
Signal	Power output: 4 to 20 mA/HART®; Failure mode in accordance with NAMUR NE43
HART® functions	Level in mm, cm, m, inches or feet; Remote Configuration
Process conditions	
Temperature	Up to 200 °C
Pressure	Up to 100 bar
Options	ATEX approval



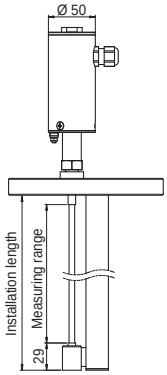
For order code and technical documentation visit:
www.fafnir.com/CONDURIX

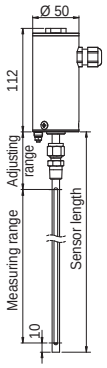


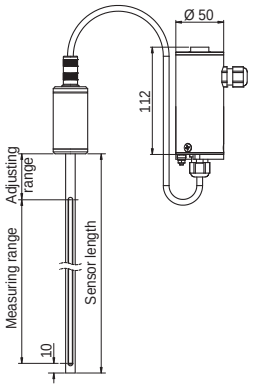




Name	CONDURIX MONO HART NT		CONDURIX MONO HART HT
Description	Our standard CONDURIX, ideal for any conductive tank. Available with two different tube diameters.		Our high-temperature, high-pressure version. Ideal for small conductive tanks, i.e. in pilot plants.
Probe tube			
Diameter	6 mm	12 mm	4 mm
Length	150 mm to 1,500 mm	1000 mm to 3,000 mm	150 mm to 500 mm
Sealing material	PEEK	PEEK	FFKM and Ceramic (Al2O3 99.7 %)
Process conditions			
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	–1 bar to 120 bar (room temperature) –1 bar to 25 bar (125 °C)	–1 bar to 120 bar (room temperature) –1 bar to 25 bar (125 °C)	–1 bar to 100 bar (100 °C) –1 bar to 50 bar (200 °C)
Minimal process connection	G ½" DN 25	G ½" DN 25	G ½" DN 25







CONDURIX DU HART NT	CONDURIX MA HART NT	CONDURIX MA HART NT Steck
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 turbulence.	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.	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.
Sensor 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 to 6000 mm	150 mm to 750 mm	150 mm to 500 mm
PEEK	PTFE	PTFE
Normal temperature (NT): –40 °C to +125 °C	Normal temperature (NT): –40 °C to +125 °C	Normal temperature (NT): –40 °C to +125 °C
–1 bar to 120 bar (room temperature) –1 bar to 25 bar (125 °C)	–1 bar to 120 bar (room temperature) –1 bar to 25 bar (125 °C)	–1 bar to 120 bar (room temperature) –1 bar to 25 bar (125 °C)
G 1 ¾" DN 50	G ¼"	G ¼"

FAFNIR GmbH
Bahrenfelder Straße 19
22765 Hamburg
Phone: +49/40/39 82 07-0
Fax: +49/40/390 63 39
E-mail: info@fafnir.com
Internet: www.fafnir.com

Sensors & Systems Worldwide: www.fafnir.com