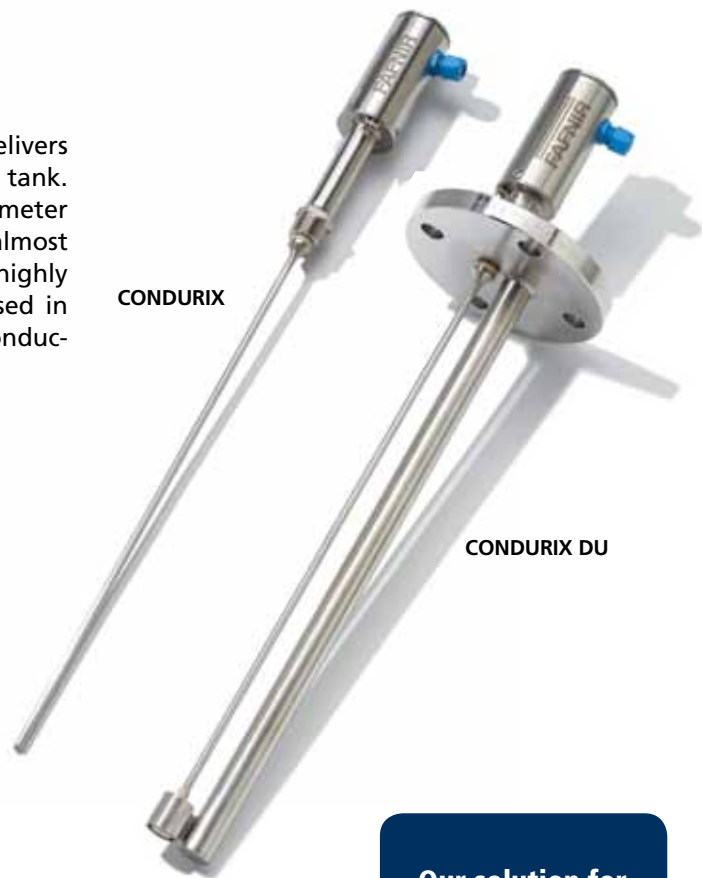


Our best solution for sticky liquids.

## CONDURIX

Potentiometric level sensor

Even in sticky or dirty liquids, this sensor delivers reliable information about the level in the tank. Due to the small sensor head and the diameter of only 6 mm, you can use the CONDURIX almost anywhere. The sensor even functions in highly viscous liquids. The CONDURIX can be used in all electrically conductive liquids with a conductance  $\geq 1 \mu\text{S/cm}$ .



**Our solution for sticky liquids**

### Just get started

» The sensor is very easy to install and to use with no adjustments to the tank or the liquid required.

### A solution for interface level measurement

» The CONDURIX level sensor is not only designed for filling level measurement, but also for interface level measurement.

### A solution even for difficult installation conditions

» Due to the small sensor head and a tube diameter starting at 6 mm, the CONDURIX can be installed almost anywhere.

### Ideal for adhesive and sticky liquids

» The CONDURIX functions even in highly-viscous fluids such as hot ceramic silt or hand cream. Even heavily contaminated liquids, such as waste water have no influence on the measurement.

### CONDURIX in brief

- 2-wire terminal (4 to 20 mA)
- Measuring result independent from pressure, temperature and density
- Filling level or separation layer detection
- Response time of 0.2 seconds
- Use in all electrically conductive liquids  $\geq 1 \mu\text{S/cm}$
- Robust design for long life time
- Measuring range freely configurable along the entire probe length
- ATEX approval for zone 0

## Attractive examples?

### CONDURIX

Below are examples of where the CONDURIX is being used successfully:

#### Sticky and viscous media



##### Acrylic glass manufacturing

The level measurement capability of CONDURIX is not affected by buildup on the sensor so it can be used to measure the sticky and strongly adherent precursors in the manufacture of acrylic glass.

##### Production of cream

Similar to the acrylic glass manufacturing creams, gels and other strong adhesive media present a major challenge for level measurement. Once again, the CONDURIX is ideally suited to the applications because attachment of the media does not affect the measurements on the sensor.

#### Aqueous solutions



##### Bioreactors

CONDURIX is easily cleaned and is available with a hygienic process connection making it ideal for measuring the level in aqueous solutions used in bioreactors. Another strength of the sensor is that it is already available from a length of 150 mm and at the lower end, has a dead zone of only 3 mm. The CONDURIX is therefore well suited for use in test and pilot plants.



##### Wastewater treatment

For level monitoring in wastewater treatment systems CONDURIX is ideal, because the measurement is neither compromised by dirt or by crystallisation.

#### Other applications



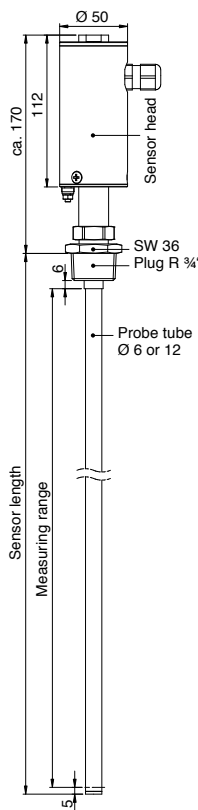
##### Water detection

For the monitoring of fluids, such as the detection of water in the filter system for aviation fuel, the CONDURIX can be successfully used since it will selectively measure only the conductive liquid (water).

# CONDURIX

## Technical data

Name	CONDURIX Mono	CONDURIX DU
Technical drawing		
Process connection*	All common flanges and threads from R 3/4	All common flanges and threads from R 1 1/2
Probe head		
Protection class	IP68	
Material	Standard: Stainless steel 303	
Cable terminal	M16 x 1.5 cable gland for cable diameter 5 to 10 mm; optional: 1/2" NPT threads for conduit cabling; M12 plug	
Ambient temperature	- 40 °C to +85 °C	
Probe tube		
Material	Standard: Stainless steel 316 Ti; optional: Stainless steel 316 L; Hastelloy®	
Diameter	Probe length to 1,400 mm: 6 mm Probe length from 1,401 mm: 12 mm	
Length	150 mm to 6,000 mm	250 mm to 6,000 mm
Isolation		
Normal temperature (NT)	PTFE	
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®	
HART® functions	Filling level in mm, cm, m, inch or feet; Configuration: Sensor status information	
Process conditions		
Temperature	Normal temperature (NT): - 40 °C to + 125 °C	
Pressure	NT: 0 bar to 120 bar (room temperature); 0 bar to 25 bar (125 °C)	
Options		
	ATEX approval	
	Material and calibration certificate	

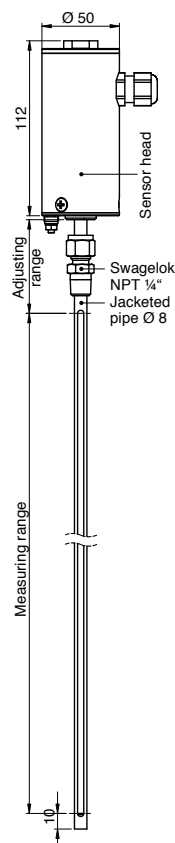


\* See order information for process connection page 14.

# CONDURIX

## Technical data

Name	CONDURIX MA	with external housing
Technical drawing		
Process connection*	All screw-in units from R 3/4	
Probe head		
Protection class	IP68	
Material	Standard: Stainless steel 303	
Cable terminal	M16 x 1.5 cable gland for cable diameter 5 to 10 mm; optional: 1/2" NPT threads for conduit cabling; M12 plug	
Ambient temperature	- 40 °C to +85 °C	
Probe tube		
Material	Standard: Stainless steel 316 Ti; optional: Stainless steel 316 L; Hastelloy®	
Diameter	Probe tube: 4 mm; Jacketed pipe: 8 mm	
Length	150 mm to 750 mm	
Isolation		
Normal temperature (NT)	PTFE	
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®	
HART® functions	Filling level in mm, cm, m, inch or feet; Configuration: Sensor status information	
Process conditions		
Temperature	Normal temperature (NT): - 40 °C to + 125 °C	
Pressure	NT: 0 bar to 120 bar (room temperature); 0 bar to 25 bar (125 °C)	
Options	ATEX approval	
	Material and calibration certificate	



\* See order information for process connection page 14.

# CONDURIX

## Order code

Version	
<b>CONDURIX</b> (order code)	- - - - -
<b>Material</b> (probe tube)	
Stainless Steel 316 Ti	SS
Stainless Steel 316 L	SC
Hastelloy® C4	C4
Hastelloy® C2	C2
<b>Surface treatment</b>	None N Electropolished E
<b>Version</b>	Single-tube version Mono MO Two-tube version DU DU Jacketed pipe with 8 mm external diameter MA
<b>Housing</b>	Standard S Offset housing A Offset housing, plug-in P
<b>Length</b> / Extra charge for probe or fitting length more than 1,000 mm / per 100 mm	Single-tube version Mono Two-tube version DU
<b>Temperature range</b>	Normal temperature (-40 °C to +125 °C) NT
<b>Approvals</b>	None NN Ex (ATEX) Ex
<b>Electrical output</b>	4 to 20 mA/HART® HA
<b>Cable terminal</b>	Cable gland CC M12 connector M2 ½ NPT female thread NM ½ NPT male thread NF

## Standard gland

Description	Order code
R ¾" (mono only)	909285
R 1½"	909129
2" NPT	909284
3" ANSI	909282
DN 25, PN 6, DIN 2527, Form B	909283

## Certificates

Description	Order code
Inspection certificate 3.1 in accordance with EN 10204:2004	904495
Inspection certificate 3.1 with supplier report in accordance with EN 10204:2004	904496

## Special designs for process connection

When ordering please specify (nominal diameter DN, nominal pressure PN, standard, shape).

Variants	
▪ All common flanges	▪ Tri-Clamp
▪ Dairy fitting	▪ Other fittings on request