## **Unbreakable pH Sensors**

# For Hygienic Applications



### Resists Clean-in-Place Processes

The InPro X1 HLS is the first food-safe, in-line pH sensor that withstands cleaning without sacrificing accuracy or sensor lifetime.



## Eliminates Risk of Glass Contamination

The unbreakable X-Chip pH-sensing technology enables in-line pH measurement without the risk of contamination by glass fragments.



## Improve Product Yield and Quality

Real process control through precise inline pH measurement leads to improved product quality, yield and shorter batch times.



#### Meets All Major Food Regulations

The InPro X1 HLS has a hygienic design, with all materials selected for food or beverage contact applications. Available certificates include 3A, EHEDG, EC1935/2004, ATEX and FM.



#### InPro X1 HLS

Digital, Food-Safe, In-line pH Sensor

With its unbreakable\* X-Chip<sup>TM</sup> technology, the InPro X1<sup>TM</sup> HLS offers extremely safe and highly reliable pH measurement for food or beverage production processes. The sensor's low drift and long lifetime reduce maintenance, calibration and replacements costs. Its rapid response to pH changes improves process control, leading to lower consumption of additives and shorter batch times.

Intelligent Sensor Management (ISM<sup>TM</sup>) digital technology provides predictive diagnostics, such as the Dynamic Lifetime Indicator (DLI), interference-free signal transmission, fast Plug and Measure installation and easy calibration with ISM Core software.

\* The InPro X1 has passed the US military's MIL-STD-810H drop test.



#### InPro X1 HLS

### Technical Data & Ordering Information

Technical Data	
Measurement Parameter	pH
ISM (Digital) or Analog	ISM (Digital)
pH Sensing Technology	Composite X-Chip
pH Range	0-14
Reference System	Pre-pressurized liquid electrolyte, ceramic diaphragm, Argenthal cartridge with silver-ion trap
Operating Temperature (for Cleaning)	0-80°C (100°C)/32-176°F (212°F)
Operating Pressure	0-4 barg/0-58 psig
Process Connection	Pg 13.5 thread
Temperature Sensor	Digital
Shaft Material	Food-grade PEEK
Solution Ground	12 mm
Sensor Length	120 mm, 225 mm
Hazardous Area Approvals	Yes (see Certificates and Approvals below)
Hygienic/Biocompatibility Approvals	Yes (see Certificates and Approvals below)
Sterilizable/Autoclavable	No
Primary Media/Application	Food/Beverage Production
Certificates & Approvals	CE, EHEDG, 3A, EC1935/2004, ATEX/IECEX: Ex ia IIC T6/T5/T4/T3 Ga/Gb, FM: IS CI. I, II, III, Div 1, GR ABCDEFG/T6, PED, METTLER TOLEDO Quality Certificate

		59.7 mm	2,35 in	K8S Connector
	-	,		Pg 13.5 Thread Washer PTFE O-ring (silicone); 10.77 × 2.62 mm (0.42 × 0.10 in)
	_	119.5 mm	4.705 in	Electrode Shaft PEEK Ø 12 mm
17.6 mm 0.6929 in 15 mm 0.5906 in	Dimer	nsions	of the li	Diaphragm Solution Ground X-Chip nPro X1 HLS

Ordering Information		
pH Sensor	Shaft Length	Order Nr.
InPro X1 HLS-N200-K120	120 mm	30 389 700
InPro X1 HLS-N200-K225	225 mm	30 389 701











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For more information