

# Reliable pH Measurement In Pure Water Applications



## Reliable Low Conductivity Measurement

Designed to excel in challenging conditions, pHure sensors deliver highly accurate pH measurement in pure waters. Stability of the reference diaphragm/junction potential provides monitoring consistency in low conductivity applications.



## Faster Response, Simplified Maintenance

With a special glass membrane and an integrated temperature sensor, the pHure sensor ensures fast, reliable response. Prioritize convenience by extending lifetime and minimizing maintenance with the internally pressurized gel electrolyte.



## Increase Process Uptime

Leveraging ISM technology, seamlessly upload calibration data from lab to process for fast, error-free start-up. Achieve uptime and maintenance goals with predictive diagnostics on sensor calibration or replacement needs adapted to your process conditions.



## High Measurement Stability

The pHure sensor's controlled sample flow path with minimum volume reduces the accumulation of corrosion particles around the electrode membrane. A sealed stainless steel housing prevents contamination from air and provides electrical shielding.



## pHure Sensor® for Pure Water Simplify Your Measurements

Accurate, continuous pure water monitoring can reduce expensive unplanned maintenance, downtime and capital equipment expenditure. The pHure Sensor with Intelligent Sensor Management (ISM®) combines high performance and convenience to simplify pH monitoring in low conductivity samples.

The easy installation and calibration plus low service requirement of the pHure Sensor increases lifetime and reduces safety risks. As a robust pressurized gel-filled electrode, the pHure Sensor delivers measurements field-proven to simplify processes. The pHure Sensor provides accuracy, stability and low maintenance for pH monitoring in pure waters.

Discover the pHure Sensor:

► [www.mt.com/pHure](http://www.mt.com/pHure)

# pHure pH/ORP Sensor Technical Data and Ordering Information

## pHure Sensor Specifications

Wetted materials	pH Glass
Process connections	1/4" NPT(F) in/out
Flow housing volume	5 mL with electrode in place
Maximum pressure	Atmospheric pressure for optimum stability; operational 0–2.5 bar(g) (0–35 psig); can safely withstand 7 bar(g) (100 psig)
Sample temperature	0–80 °C (32–176 °F); short term to 100 °C (212 °F)
Sample pH	1–11 pH
Sample flowrate	50–150 mL/min
Sample conductivity	> 1.5 µs/cm for highest accuracy
Connection	AK9 or VP cable from sensor to instrument
Reference electrode	3M KCl

## pHure Sensor Ordering Information

### Order Number

pHure Sensor ISM combination electrode with temperature compensator	52003821
pHure Sensor combination electrode with RTD	52002447

## Spare Parts/Required Accessories

### Order Number

### Housings

pHure Sensor flow housing	58084010
---------------------------	----------

### AK9 Cables

### Order Number

Sensor cable, 1 m (3.3 ft)	59902167
Sensor cable, 3 m (9.9 ft)	59902193
Sensor cable, 5 m (16.4 ft)	59902213
Sensor cable, 10 m (32.8 ft)	59902230
Sensor cable, 20 m (65.6 ft)	52300204
Sensor cable, 30 m (98.4 ft)	52300393
Sensor cable, 50 m (164.0 ft)	52300394
Sensor cable, 80 m (262.4 ft)	52300395

### VP Cables

### Order Number

Sensor cable, 1 m (3.3 ft)	52300107
Sensor cable, 3 m (9.9 ft)	52300108
Sensor cable, 5 m (16.4 ft)	52300109
Sensor cable, 10 m (32.8 ft)	52300110

\* For pH/ORP buffers, housing and cable options for other pH sensors, refer to the Process Analytics Catalog (P/N 52900315) or consult with METTLER TOLEDO directly.

ISM and pHure Sensor are registered trademarks of the METTLER TOLEDO Group.

[www.mt.com/thornton](http://www.mt.com/thornton)

For more information

### METTLER TOLEDO Group

Process Analytics Division

Local contact: [www.mt.com/pro-MOs](http://www.mt.com/pro-MOs)

Subject to technical changes

©12/2020 METTLER TOLEDO. All rights reserved

PA2052EN Rev A 12/20



### Quality certificate.

Development, production and testing to ISO 9001.



CE Compliant



UL listed  
Meets Canadian Standards