



# ProTrode 200 sensor ProTrode 300 sensor

Suitable electrodes for inline pH measurements for the pharmaceutical and biotechnology industry

## HIGHLIGHTS

- Reliable: accurate results over the entire lifetime of the sensor
- Flexible: ideal for measurements in vessels, reactors, or pipes
- Robust: designed for a wide range of process conditions
- Maintenance-free: the ProTrode sensors are always ready to use

# Optimize your process by monitoring pH in «real-time»

The ProTrode 200 and 300 are combined pH sensors with integrated temperature sensor (Pt1000) designed to perform inline pH measurements in biotechnology and pharmaceutical processes. They have been designed with a silver scavenger to avoid silver ions entering the process sample.

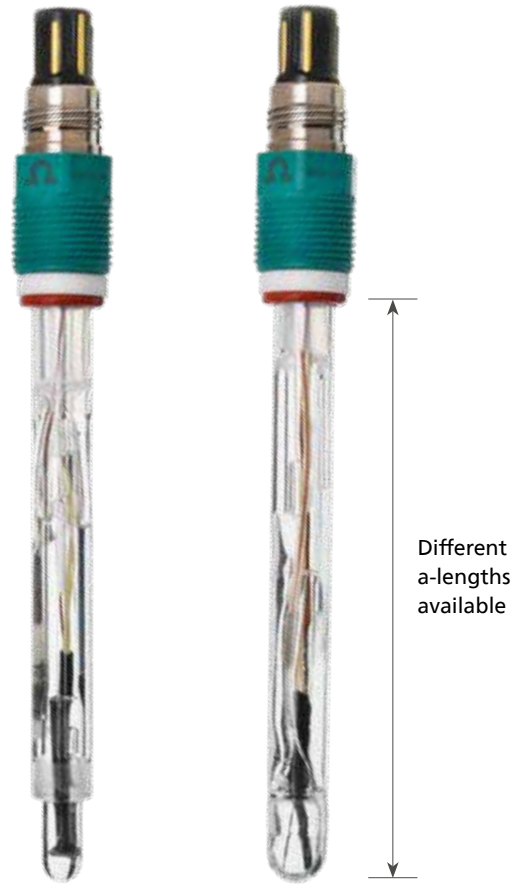
The ProTrode 200 is a non-pressurized sensor with a pH range of 0–12. Its unique sleeve diaphragm design enables the ProTrode 200 to perform very accurate pH measurement, with short response time's independent of the process flow.

On the other hand, the ProTrode 300 is a pressurized electrode with a pH range of 0–12 utilizing a ceramic pin diaphragm design, which results in accurate pH measurements with fast response times.



## TECHNICAL SPECIFICATIONS

Specifications	Protrode 200	Protrode 300
Measuring range	0–12 pH	0–12 pH
Max. Pressure	1 bar (non-pressurized)	4 bar (pressurized)
Temperature range	0–80 °C	0–120 °C
Diaphragm	Sleeve	Ceramic pin
pH membrane	HT glass	HT glass
Sensor connector	VarioPin, PG 13.5	VarioPin, PG 13.5



Protrode 200 (left) and ProTrode 300 (right) sensors for pharmaceutical and biotechnology process environments

## ORDERING INFORMATION

Type	a-lengths	Part number
ProTrode 200	120 mm	6.09331.110
ProTrode 200	225 mm	6.09331.120
ProTrode 200	325 mm	6.09331.130
ProTrode 200	360 mm	6.09331.140
ProTrode 200	425 mm	6.09331.150
ProTrode 300	120 mm	6.09331.210
ProTrode 300	225 mm	6.09331.220
ProTrode 300	325 mm	6.09331.230
ProTrode 300	360 mm	6.09331.240
ProTrode 300	425 mm	6.09331.250