

InPro 3250

Highest Performance, Highest Accuracy



InPro 3253

InPro 3250SG

The new InPro 3250 family is a pre-pressurized, liquid-filled, low-maintenance pH sensor and temperature sensor for in-line measurements in demanding applications. Its durable design is well suited for harsh chemical process conditions or meet the stringent demands of sterile biotech applications where CIP and SIP are used. These rugged electrodes lead the industry for fast and precise measurements, even after repeated autoclaving or sterilization cycles at 140°C (284 °F). The new InPro 3250 family is available with an expanded selection of different pH-sensitive glass membranes. This guarantees the best possible measurement performance under the most diverse operating conditions, both in chemical and biotech processes. The InPro 3250SG features an integral platinum-auxiliary electrode, Solution Ground, which functions to eliminate ground loop problems, allows for use of advanced sensor diagnostics, or can be used as an ORP (redox) sensor.

Also available with “Intelligent Sensor Management” (ISM) for “Plug and Measure” and Advanced Diagnostics.

Specifications

pH range	0–14 pH InPro 3250; 0–12 pH InPro 3253; 1–11 pH InPro 3251, InPro 3252
Temperature	0 to 100 °C (32 to 212 °F) (continuous) Up to 140 °C (284 °F) (sterilization) InPro 3250, InPro 3253 –25 to 80 °C (–13 to 176 °F) InPro 3251 0 to 80 °C (32 to 176 °F) InPro 3252
Pressure	0 to 4 barg (0 to 58 psig)
Plug head	VP (IP68), Pg 13.5 thread
Reference system	Argenthal with silver-ion trap
Type of junction	Ceramic
Reference electrolyte	Pre-pressurized liquid
Lengths	120 to 425 mm (see listings)
Shaft diameter	12 mm
Temperature sensor	Pt100 or Pt1000
Sterilizable	Yes
Autoclavable	Yes
Certificates	Quality certificate, Pressure Equipment Directive guidelines (PED) 97/23/EC, ATEX: EEx II 1/2 G IIC T6/T5/T4/T3, FM: IS Cl. I, II, III, Div 1, GR ABCDEFG/T6

Intelligent Sensor Management (ISM)

pH electrodes with integrated ISM functionality allow “Plug and Measure” and Advanced Diagnostics. ISM simplifies the installation, handling and maintenance of measurement equipment. For more information see ISM introduction pages 12–13 and 32–33.

Feature Overview

- Fully autoclavable or sterilizable in-situ (InPro 3250, InPro 3253)
- Pressurized electrolyte reduces maintenance
- MaxCert™, including biocompatibility according to USP 26, Chapter 27

► www.mt.com/InPro3250

Ordering Information

Electrode	Length	Pt 100	Order Nr	Pt 1000	Order Nr
pH Electrodes with alkali resistant glass					
InPro 3250	120 mm	Pt100	52 002 547	Pt1000	52 002 548
InPro 3250	225 mm	Pt100	52 002 552	Pt1000	52 002 553
InPro 3250	325 mm	Pt100	52 002 554	Pt1000	52 002 555
InPro 3250	425 mm	Pt100	52 002 556	Pt1000	52 002 557
InPro 3250SG	120 mm	Pt100	52 002 558	Pt1000	52 002 559
InPro 3250SG	225 mm	Pt100	52 002 560	Pt1000	52 002 561
InPro 3250SG	325 mm	Pt100	52 002 562	Pt1000	52 002 563
InPro 3250SG	425 mm	Pt100	52 002 564	Pt1000	52 002 565
– for applications at low temperatures					
InPro 3251	120 mm	Pt100	52 002 585	–	–
InPro 3251	225 mm	Pt100	52 002 586	–	–
– for applications in hydrofluoric acid cont. media					
InPro 3252	120 mm	Pt100	52 002 587	–	–
InPro 3252	225 mm	Pt100	52 002 588	–	–
InPro 3252	250 mm	Pt100	52 002 589	–	–
pH Electrodes with sterilization resistant glass					
InPro 3253	120 mm	Pt100	52 002 566	Pt1000	52 002 567
InPro 3253	225 mm	Pt100	52 002 568	Pt1000	52 002 569
InPro 3253	250 mm	Pt100	52 002 570	–	–
InPro 3253	325 mm	Pt100	52 002 571	Pt1000	52 002 572
InPro 3253	425 mm	Pt100	52 002 573	Pt1000	52 002 574
InPro 3253SG	120 mm	Pt100	52 002 576	Pt1000	52 002 577
InPro 3253SG	225 mm	Pt100	52 002 578	Pt1000	52 002 579
InPro 3253SG	325 mm	Pt100	52 002 580	Pt1000	52 002 581
InPro 3253SG	425 mm	Pt100	52 002 582	Pt1000	52 002 583

For pH buffers, refer to pH and Redox Accessories section.

For cables, cable lengths and for terminating connectors, refer to "Cables" section on pages 152–155.

InPro 3250 Product Family

The InPro 3250 product family consists of four different pH glass formulations to best match the application:

InPro 3250: High alkali resistant glass

InPro 3251: Low temperature glass

InPro 3252: Hydrofluoric acid resistant glass

InPro 3253: Sterilization resistant glass

Suitable Housings	pg.
InFit 761e/762e	126/128
InFlow	132
InDip	134
InTrac 777e	138
InTrac 797e	140
InTrac 798e	142
InTrac 787/785	144