

# InPro® 4501 VP / InPro® 4501 fixed cable

The combined pH/temperature electrode with robust PVDF shaft

## Technical data

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InPro 4501 VP    InPro 4501  
fixed cable

### Short description

METTLER TOLEDO offers the improvements of the successful XEROLYT® PLUS polymer reference system also for the robust pH-electrode version with PVDF shaft. The electrode InPro4501, with VP connector or fixed cable, provides the following advantages, where direct mounting and robust design are extra appreciated:

- Covers a broad range of applications in chemical processes and wastewater utilities.
- Low maintenance due to the solid polymer reference system, and due to the open annular junction.
- No mechanical breakage of the electrode due to the PVDF body and the flat membrane with protective stand-offs.
- Dual 1" NPT threads allow the sensor to be screwed directly into immersion tubes, pipes, process vessels etc.
- Particularly suitable for heavily contaminating and sulphide-bearing media.

**New!** – Higher performance measurement, in a wider pH and temperature range (refer to specifications on next page).

**New!** – Solution ground with improved function, now also providing diagnostics.

**New!** – Improved connector design for fixed cable version, now with a metallic material to eliminate electro magnetic interference from external sources.

**New!** – Integrated temperature sensor, now positioned inside the glass membrane part offers increased performance.

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**METTLER TOLEDO**

Specifications

Measuring range	pH 1...14 (with reduced life time and performance by pH 12...14)
Temperature	0...100 °C or 32...212 °F (with reduced life time and performance by temperatures over 85 °C or 185 °F)
Pressure resistance*	0...7 bar up to 65 °C, linearity derated to 3.5 bar at 100 °C 0...100 psi up to 150 °F, linearity derated to 50 psi at 212 °F
Reference system	reference system XEROLYT PLUS polymer incl. KCl
Diaphragm	open annular junction with direct contact with medium
Shaft	material: Polymer PVDF, Ø 1.12 " or 33.5 mm
Plug head	VarioPin (VP) IP 68, resp. fixed cable

\* please refer to the diagram on page 3

Ordering information

pH electrodes

VP connector:	Order no.
InPro 4501 VP/Pt 100/SG	41 453 3101
InPro 4501 VP/Pt 1000/SG	41 453 3102

with fixed cable:	Order no.
InPro4501/Pt 100/SG/3m/S/T	10 453 3007
InPro4501/Pt 1000/SG/3m/S/T	10 453 3011
InPro4501/Pt 100/SG/3m/BNC	10 453 3008
InPro4501/Pt 100/SG/10m/S/T	10 453 3013
InPro4501/Pt 1000/SG/10m/S/T	10 453 3017

Accessories

Protective sleeve*	Order no.
1" NPT complete	52 401 808

\* protects the VP and the fixed cable connector from any mechanical damage

Cables (open ends) - only for VP connector

Standard temperature (-20...80 ° C)	Order no. VP6-ST/3 m	Order no. VP6-ST/5 m	Order no. VP6-ST/10 m
	52 300 108	52 300 109	52 300 110
High temperature (-30...140 ° C)	Order no. VP6-HT/3 m	Order no. VP6-HT/5 m	Order no. VP6-HT/10 m
	52 300 112	52 300 113	52 300 114

Buffer solutions

Solution	Order no. 1 x 250 ml	Order no. 6 x 250 ml	Order no. 1 x 1000 ml
Buffer pH=4.01 (red)	51 340 057	51 340 058	51 340 228
Buffer pH=7.00 (green)	51 340 059	51 340 060	51 340 229
Buffer pH=9.21 (blue)	51 300 193	51 300 194	51 340 230
Friscolyt™ conditioning solution	51 340 053		



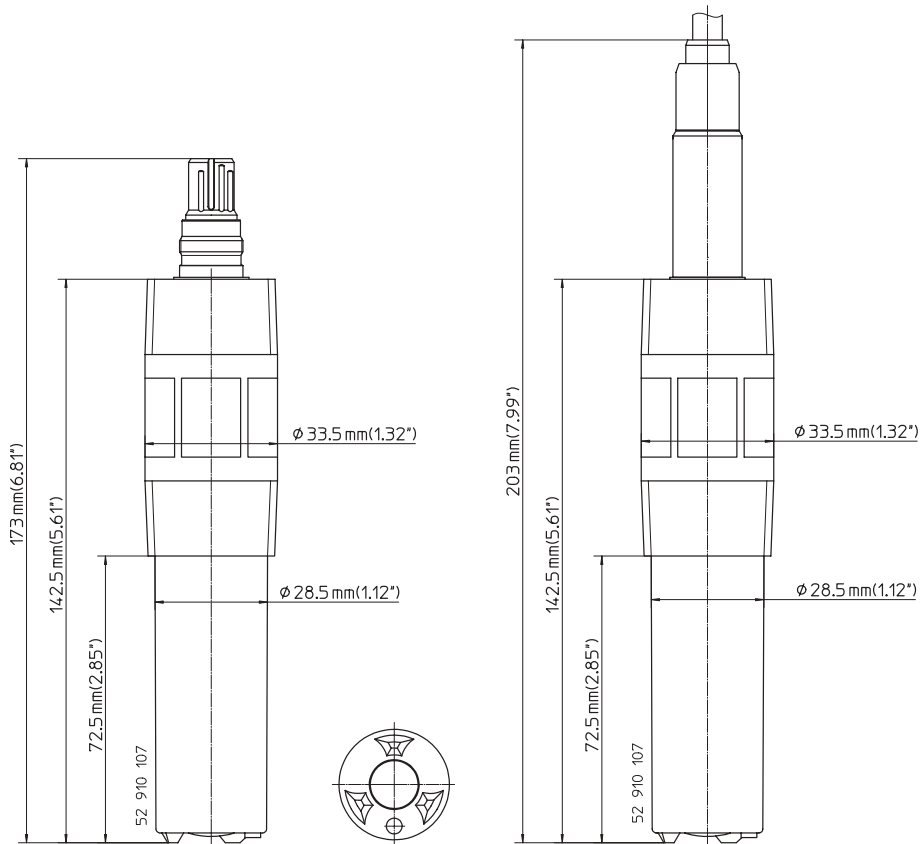
Transmitters

A wide range of transmitters can be offered to complete the METTLER TOLEDO INGOLD measurement system, including a 4 wire version for universal AC/DC power supply, or alternatively in 2-wire versions, with or without HART® or Profibus® communication, of standard or explosion-proof (EEx) design.

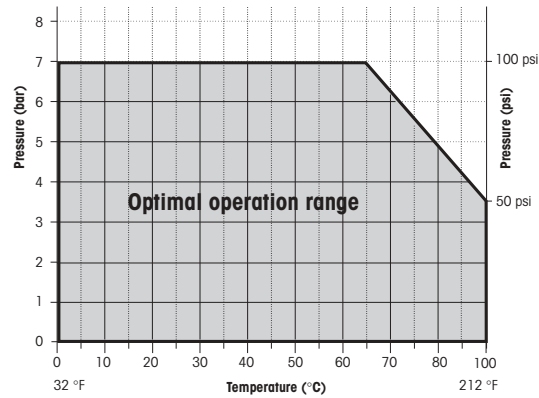
Drawing

InPro 4501VP

InPro 4501 fixed cable



Operation range



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