



**APPLIED MEASUREMENTS LTD.**

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## Pi9941 Depth Sensor



### Features

- Diameter 19 mm
- Measuring range 2 mWs...250 mWs
- Piezoresistive measuring element
- Versions with PE or PUR cable

### Typical Applications

Fluid and level measurement in:

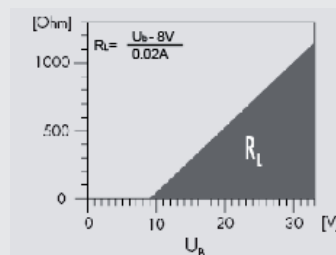
- Fountains
- Boreholes
- Pots
- Waters

## Specifications

Pressure range	[bar]	0.1 ... 0.5	> 0.5 ... 2	> 2 ... 25
Overpressure	[bar]	3 bar	3 x FS	3 x FS
Burst pressure	[bar]	≥ 200	≥ 200	≥ 200
Accuracy	[± % FS]	≤ 0.5 ≤ 0.25	≤ 0.5 optional ≤ 0.25 optional ≤ 0.1	≤ 0.5 optional ≤ 0.25 optional ≤ 0.1
Temperature error	[± % FS/°C]			
Zero	-5...50°C	≤ 0.06	≤ 0.03	≤ 0.015
Span	-5...50°C	≤ 0.015	≤ 0.015	≤ 0.015
Temperature in use			-5...50°C	
Storage temperature			-25...85°C	
Response time		< 1ms / 10...90% Nominal pressure		
Long-term stability (1 year) (typ./max.)		< 0.5 %FS / < 4 mbar	< 0.2 %FS / < 4 mbar	< 0.1 %FS / 0.2 %FS
Electrical connection		4...20 mA	0...5 V / 0...10 V	
Type		two wire current transmitter	three wire voltage transmitter	

Supply voltage	8...33 V	15...30 V DC
Supply voltage influence	< 0.1 %FS	0.1 %FS

### Load resistance



RL > 10kOhm

Load resistance influence	< 0.1 %FS	< 0.1 %FS
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## Materials

Pressure connector, membrane, Case Cable	Stainless steel 1.4435 (316L) PE, PUR
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## Electromagnety compatibility

	Norm	Level	Typical interferences
<b>Emission:</b>			
EN 61000-6-3 EN 55022	Generic emission standard Emission, class B		
<b>Immunity:</b>			
EN 61000-6-2	Generic immunity		
EN 61000-4-2	Electrostatic discharge	Level 4 (8kV contact, 15kV air)	
EN 61000-4-3	Radiated electro-magnetic field	10V/m, 80-1000 MHz, 80% AM 1kHz	Cellular phones, radio sets
EN 61000-4-3	Radiated electro-magnetic field (GSM)	10V/m, 950 MHz, 200 Hz on/off	Digital portable phones
EN 61000-4-4	Fast transients (burst)	2kV	Motors, valves
EN 61000-4-5	Surge	10 V, 0.15-80 MHz, 80% AM 1 kHz	Lightning strikes
EN 61000-4-6	Line conducted electromagnetic interference	500 V	radio sets, cellular phones



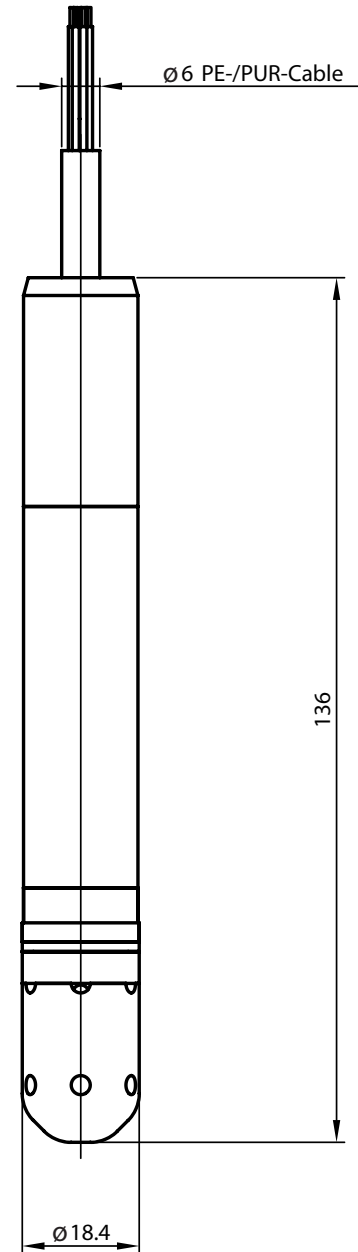
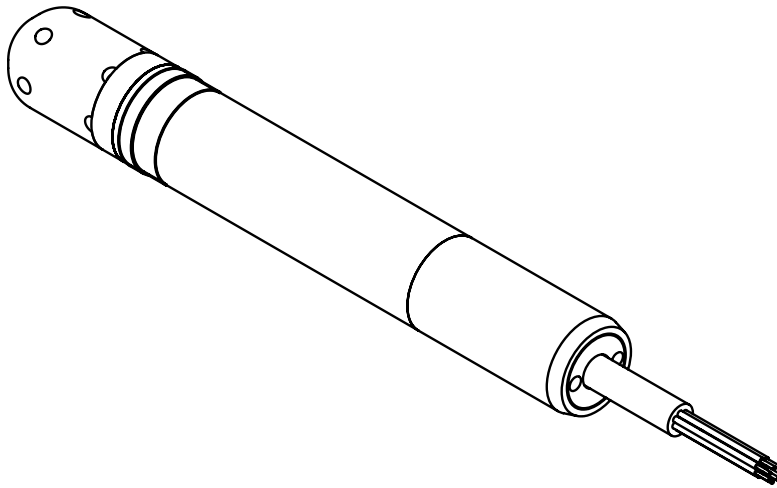
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## Dimensions



Colour	3-wire	2-wire
white	+Vin	+Vin
brown	Pout	Pout
yellow	GND	GND

Specifications may change without notice.

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