

# Water Pressure Sensor

Types PW3 SV – PW3 RV – PW4 RV






The transducers PW3 SV, PW3 RV and PW4 RV are sensors for water pressure measurement with a front or ring filter made of geotextile fleece. They are generally used to measure groundwater tables and also pore water pressure. Especially in soils with a high proportion of suspended particles or aggressive water, fleece filters are permanently permeable to water and ensure the monitoring operation.

## TECHNICAL DATA

	PW3 SV	PW3 RV	PW4 RV
Dimensions (Ø / length)	30 × 160 mm	30 × 225 mm	40 × 230 mm
Material	V4A 1.4571	V4A 1.4571	V4A 1.4571
Weight	450 g	720 g	880 g
Filter type	Geotextile fleece	Geotextile fleece	Geotextile fleece
Filter area	4,5 cm <sup>2</sup>	43 cm <sup>2</sup>	58 cm <sup>2</sup>
Protection class	IP 68	IP 68	IP 68

## SENSOR-SPECIFIC DATA

Sensor types	 AU Pressure Sensor piezoresistive, 4-wire system	 AI Pressure Sensor piezoresistive, 2-wire system	 VW Pressure Sensor vibrating wire system
Supply	1 mA	15–30 V	VW excitation (pulse, sweep)
Output signal	0–250 mV	4–20 mA	2–3.3 kHz
Standard measuring ranges	0.5 / 1 / 2 / 5 / 10 / 20 / 50 / 100 bar	0.5 / 1 / 2 / 5 / 10 / 20 / 50 / 100 bar	0.7 / 1.7 / 3.5 / 5 / 7 / 10 / 20 / 35 / 70 / 100 bar
Over range	50 % FS	50 % FS	50 % FS
Resolution	± 0.01 % FS	± 0.01 % FS	± 0.01 % FS
Accuracy (laboratory)	± 0.25 % FS	± 0.25 % FS	± 0.25 % FS
Linearity	< 0.5 % FS	< 0.5 % FS	< 0.5 % FS
Temperature range	+5 °C to +80 °C	+5 °C to +80 °C	+5 °C to +80 °C
Thermal zero shift	≤ 0.06 % FS/K	≤ 0.06 % FS/K	≤ 0.06 % FS/K
Temperature sensor	Thermistor (optional)	Thermistor (optional)	Thermistor (standard)
Maximum cable length	1000 m	2000 m	2500 m