

# Piezometer

Types PP3 SS – PP3 RS – PP4 RS






The sensors PP3 SS, PP3 RS and PP4 RS designate pore water pressure sensors with forehead or ring filters made of sintered metal. They are used to measure the groundwater level, the rock or pore water pressure in all disciplines of the construction industry. For demanding measurement tasks, piezometers with a ring filter are particularly suitable because of their large filter surface which ensures optimal contact with the water-saturated soil.

## TECHNICAL DATA

	PP3 SS	PP3 RS	PP4 RS
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	680 g (PW 4 RV)	920 g
Filter type	Sintered metal	Sintered metal	Sintered metal
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	 <b>AU Pressure Sensor</b> piezoresistive, <b>4-wire system</b>	 <b>AI Pressure Sensor</b> piezoresistive, <b>2-wire system</b>	 <b>VW Pressure Sensor</b> 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