

P252R

— VENTED PRESSURE
TRANSDUCERS

PIEZOMETERS





VENTED PRESSURE TRANSDUCERS

The P252R vented pressure transducer is designed for automatic monitoring of water table levels in standpipes and Casagrande piezometers.

It comprises a vented pressure sensor with a vent tube integrated in the signal cable to provide relative (barometrically-referenced) pressure readings.

The P252R is available with piezoresistive technology and is compatible with portable readouts, wireless nodes, and remote dataloggers for automated data collection and alerting.

APPLICATIONS

- Monitoring water levels in reservoirs
- Monitoring ground water tables
- Monitoring dewatering operations
- Monitoring landslide remediation

FEATURES

- Barometrically-referenced (vented) pressure measurement
- High accuracy and reliability
- Robust 4–20 mA output (mV/V output available on request)
- Vented support head available to preserve vent tube routing and allow safe removal



Meet the essential requirements of the EMC Directive 2014/30/EU

TECHNICAL SPECIFICATIONS

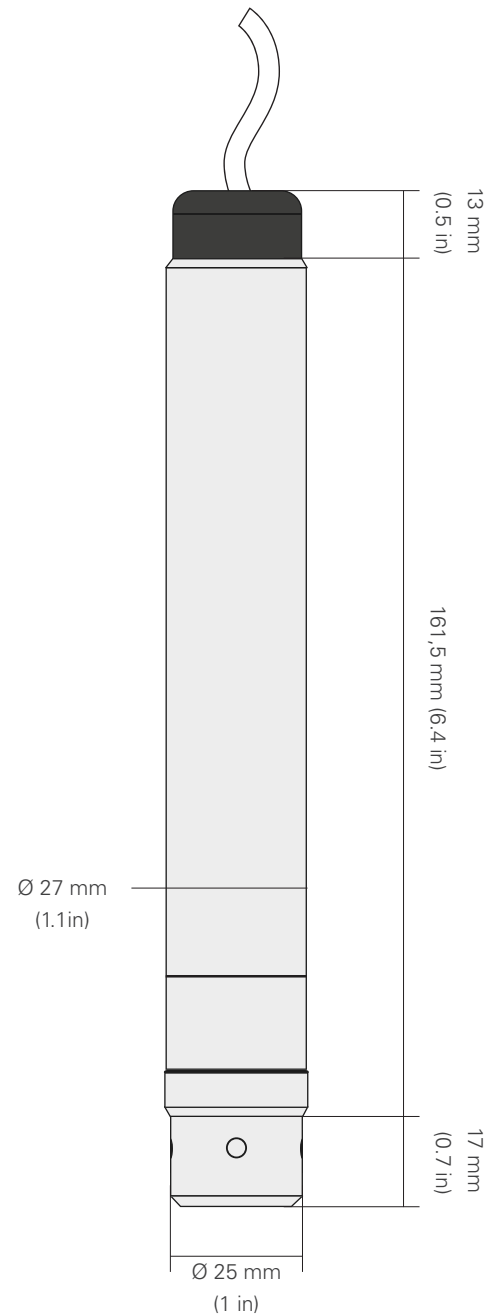
WATER LEVEL TRANSDUCER

MODEL	P252R
Application	Monitoring water tables, and water levels in Casagrande piezometers, basins, lakes, and reservoirs.
Technology	piezo-resistive pressure transducer
Available ranges (FS)	100 kPa, 200 kPa, 500 kPa, 1.0 MPa 14.5 psi, 29 psi, 72,5 psi, 145 psi
Overpressure	1.3 X Full Scale
Sensitivity	See individual calibration report
Resolution	0.01 % FS
Accuracy (MPE) ⁽¹⁾	≤ ±0.15% FS (≤ ±0.1% FS on request)
Signal output	Standard: 4–20 mA (two-wire loop) Optional: mV/V output (4-wire)
Power supply	4–20 mA: 12–24 V DC (loop powered). mV/V option: supply depends on readout
Thermal zero shift	0.00025 % FS / °C
Electric insulation	4 kV
Temp. operating range	-20°C to +80°C
FILTER UNIT	
Material	sintered steel
Pore size	40 µm
CABLE	
Signal cable	0WE203KEOZH (For 4-20mA output) 0WE205KEOPV (For mV/V output)
Max cable length to logger ⁽²⁾	1000 m with 4-20mA output 40 m with mV/V output

(1) MPE = Maximum Permissible Error over the full-scale range (FS). See Calibration Report for Lin. MPE and Pol. MPE.
(2) refer to FAQ section of Sisgeo website: www.sisgeo.com/assistance/faq.html

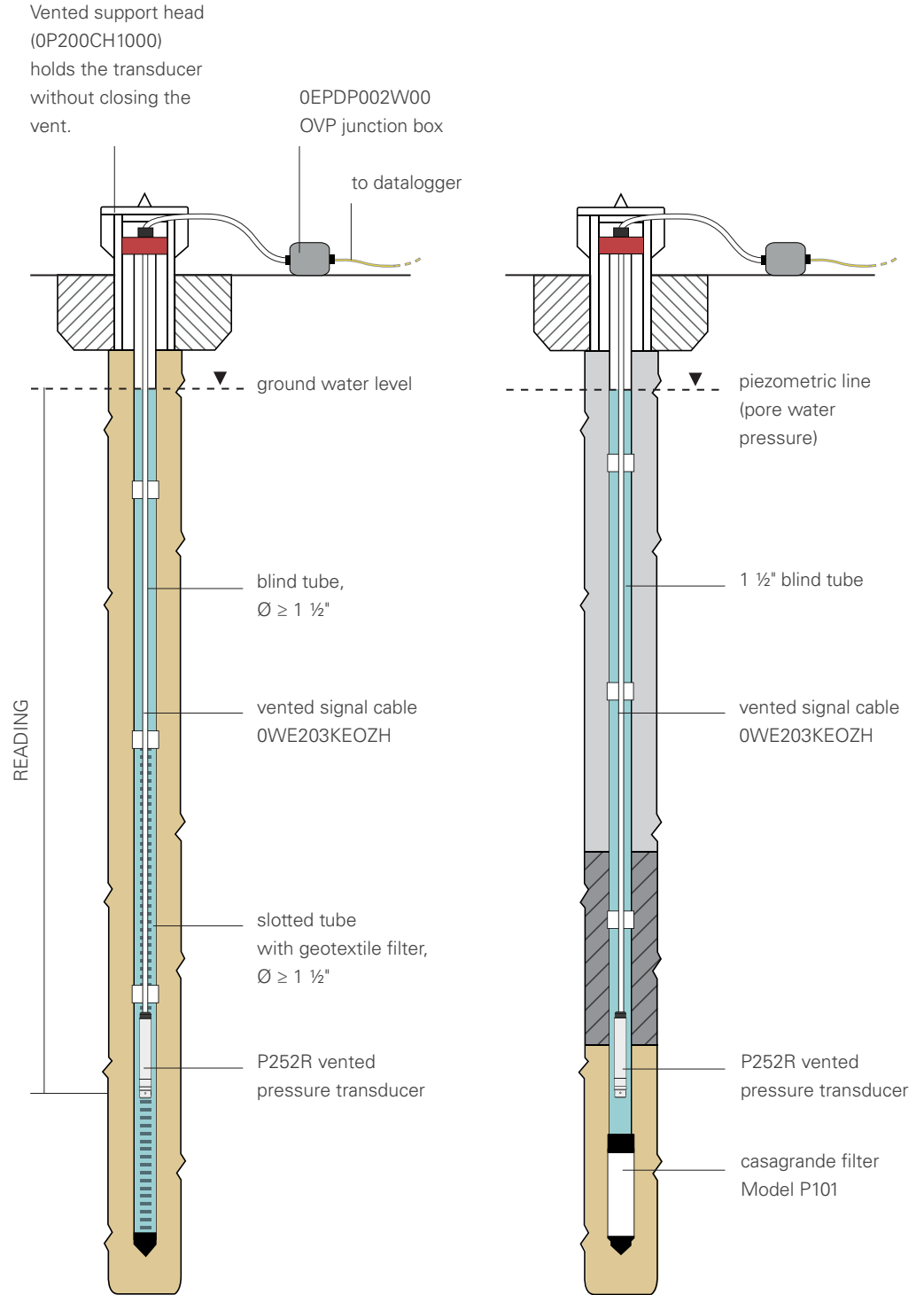
PHYSICAL FEATURES

Body diameter	Ø 27 mm (1.1 in)
Filter diameter	Ø 25 mm (1 in)
Total length	191.5 mm (7.5 in)
Weight	0.60 kg (1.32 lb) cable not included
Material	stainless steel

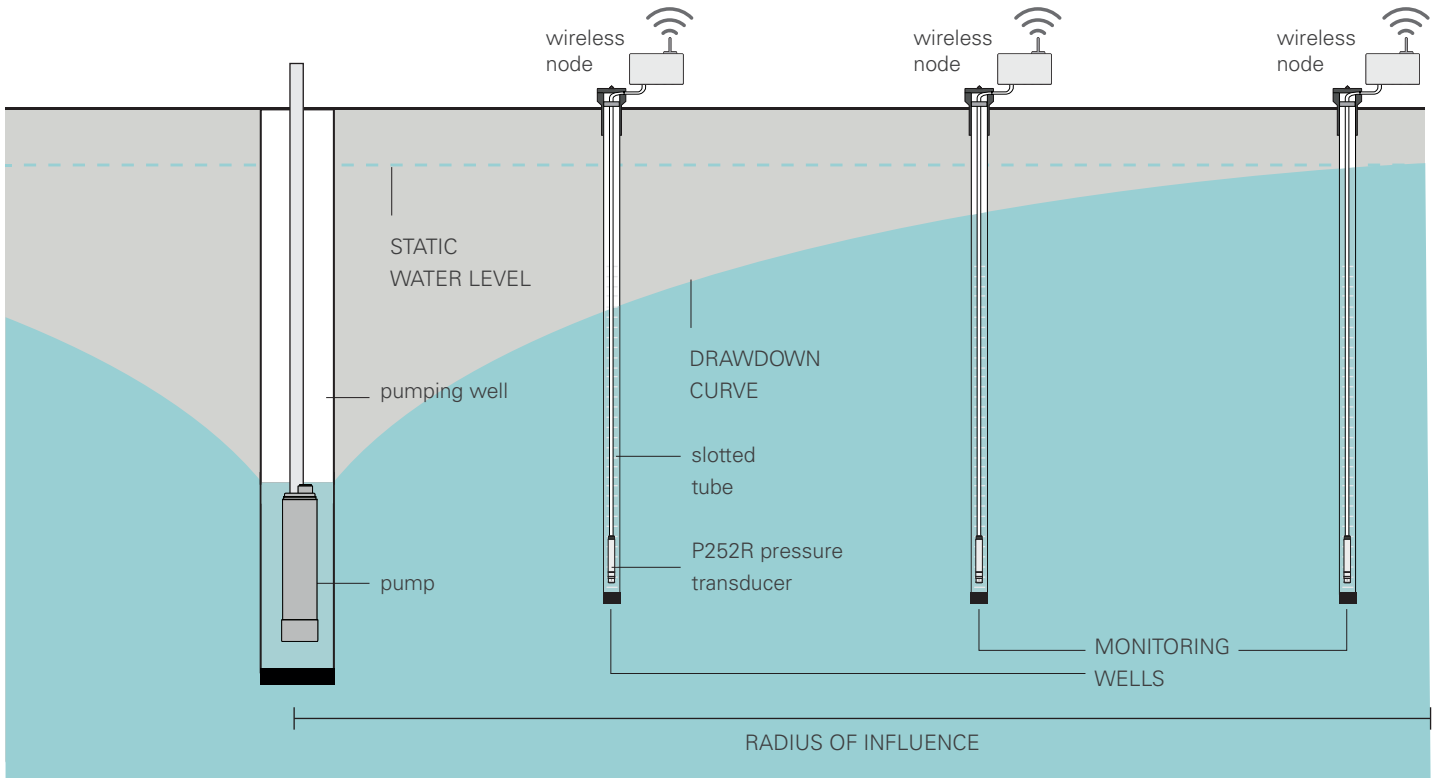


STANDPIPE AND CASAGRANDE PIEZOMETERS

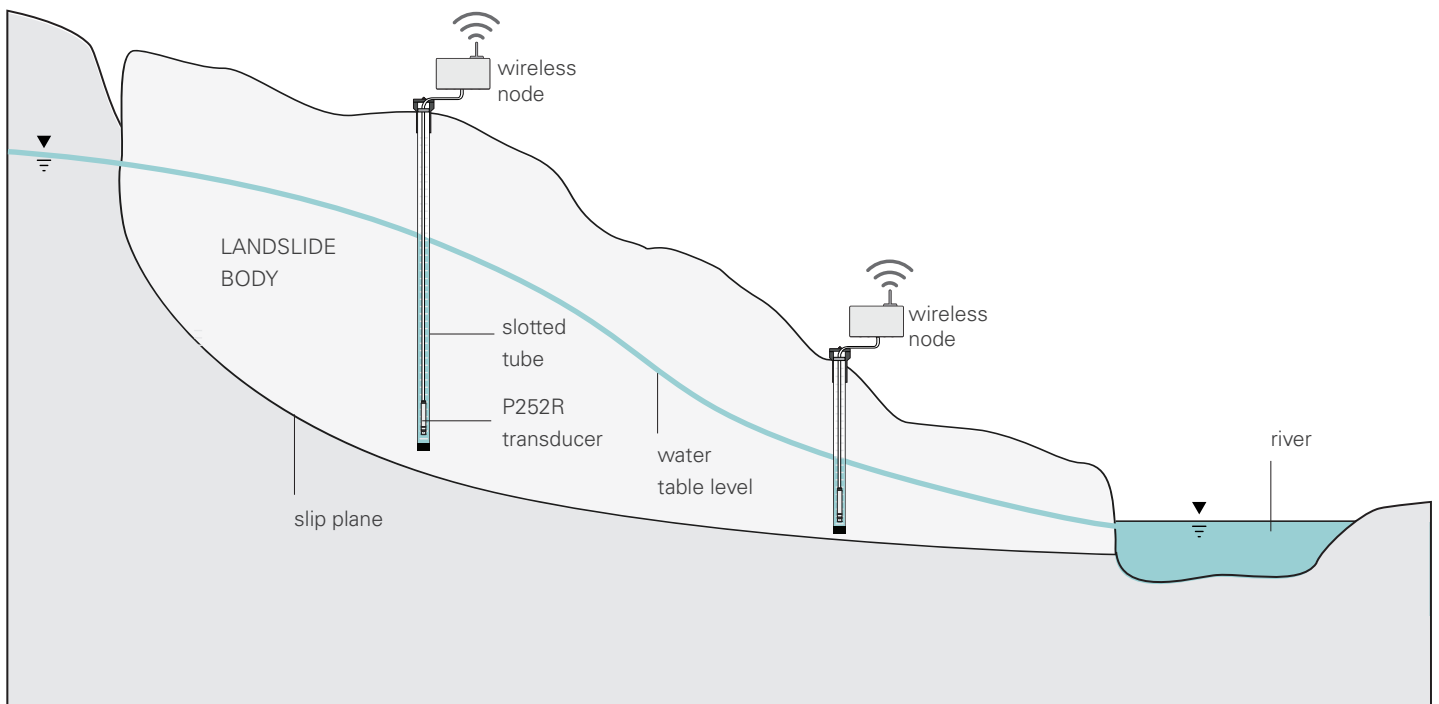
P252R vented pressure transducers are for automatic water-table monitoring in standpipes and Casagrande piezometers. The sensor is vented (relative pressure) — readings are referenced to atmosphere via the vent tube in the signal cable. The measuring point is the filter intake zone.



APPLICATION
IN PUMPING TEST



WATER TABLE LEVEL
MONITORING IN LANDSLIDE



ACCESSORIES AND SPARE PARTS

P252R VENTED SUPPORT HEAD OP200CH1000

Lockable protective support head for standpipe piezometers; includes data plate and survey pin. Designed to secure the sensor while keeping the vent path open.



JUNCTION BOX WITH OVP OEPDP002W00

Vented junction box with 3 levels of overvoltage protection, suitable for 2-wire signal cables

SPARE LAE FILTER FOR P252R OP252AF4000

Spare Low Air Entry (LAE) filter element for P252R.
Pore size: 40 µm.

EXTENSION SIGNAL CABLES OWE102KE0ZH

2-wire, 20 AWG signal cable with flame retardant polyolefin inner jacket and LSZH M1 technopolymer external jacket. For extension after junction box with OVP.

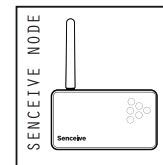
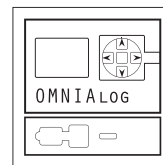
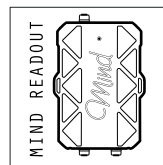
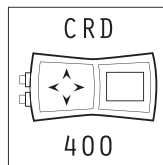
LSZH VENTED SIGNAL CABLE OWE203KE0ZH

Vented 2-wire, 20 AWG signal cable for barometric compensation and 4–20 mA loop. Flame-retardant polyolefin inner jacket; LSZH external jacket. Rated: -30 °C to +80 °C.

PVC VENTED CABLE OWE205KE0PV

Vented 4-wire, 24 AWG signal cable for mV/V output. Flame-retardant polyolefin inner jacket; PVC external jacket. Rated: -30 °C to +80 °C.

READABLE BY



For further information, refer to the readout datasheets.

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