



Drive-In Piezometers

Technical Features



Drive-in piezometer is constituted by a metal body of cylindrical shape and a conical tip 40 mm diameter, larger than the body of the piezometer to facilitate its insertion into the ground. A connection to the push rods completes the tool of the instrument. The pressure transducer is housed inside of the metal body complete with a porous filter made of sintered steel or ceramic. The electronics of the transducer is completely embedded in resin to ensure long-term reliability. The water pressure deforms the membrane integral with the sensor which converts the pressure into a signal, electrical, proportional to it. Drive-in piezometers are easily connected to a portable readout unit or to Datalogger.

Applications

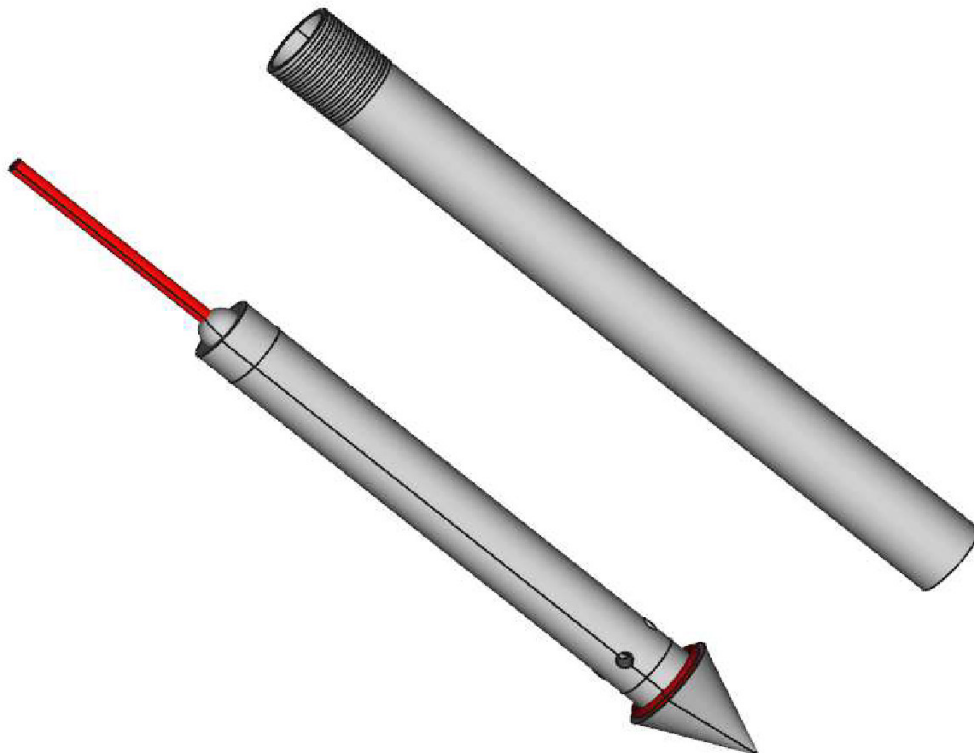
- Drive-in piezometers are used in soft soils and saturated soil for monitoring, pressures and pore pressures in the long term. They are equipped with electrical resistive transducers or vibrating wire transducer with porous filters for every kind of use.
- Measurement of pore pressures in soft soil and saturated soil
- Monitoring over-pressures induced overload, road and rail embankments and tanks.

Installation

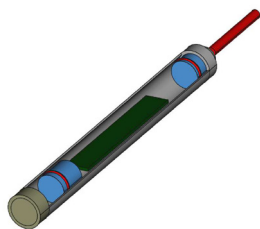
- Drive-in piezometer is installed directly in the ground (soft) through a thrust device (static penetrometer and / or drilling machine), by applying a vertical force with a battery of rods, to bring the instrument to the installation point. On the upper end of the pusher, you need an adapter with groove, to avoid damaging the cable.

Related Instrumentation

- Pushrod and conical tip in Stainless Steel
- Portable readout unit
- Watertight connector



Technical Specification



Model	OG201	OG201VW
Measure	Pore pressure	Pore pressure
Type of sensor	Absolute or SG Piezoresistive	Absolute Vibrating wire
Range	100-200-500-700-1000 2000-3000 kPa	350-500-700- 1000-1500 kPa
Sensitivity	0.01% F.S.	0.01% F.S.
Accuracy	0.3% F.S.	0.3% F.S.
Overload	150%	120%
Output signal	4-20 mA	Hz
Temperature oper. range	-10°C / +70°C	-10°C / +70°C
Long term stability	0.02% F.S. (1 year)	0.02% F.S. (1 year)
Diameter	35 mm	35 mm
Length	190 mm	190 mm
Filter pore size (*)	40 micron	40 micron
PUSHROD	Length 500 mm, Diameter 1" Material Stainless Steel, Diameter conical tip 40 mm INOX	

Codes & Part Numbers

P/N 2006005 OG201 4-20 mA drive in piezometer
 P/N 2006006 OG201 Vibrating Wire drive in piezometer
 P/N 2006030 Stainless steel Pushing Rod 1"
 P/N 2015000 Cable 3x2x0.25 PUR KEVLAR Halogen Free
 P/N 2015004 VENTED ARMORED Cable 2x2x0.25 PUR Halogen Free