



# Geonor M-600 series High Performance Piezometers



## Push-in Vibrating Wire Sensors

### FEATURES:

- Installation in soft soils or loose soils by "push-in" penetration
- Short installation time compared to drilling and sealing boreholes
- Proven long-term stability in harsh underground environments
- Complete digital sensor, no analog low voltage signals
- May be galvanically isolated from drill rods using non-metallic adapter
- Self-sealing (same 32-mm diameter as E-rods) eliminates need to seal borehole with bentonite pellets or chips
- Built-in temperature sensor available in the M-600A version
- Ferro-manganese bronze housing (other alloys available)





## THE GEONOR M-600 SERIES VIBRATING WIRE PIEZOMETER

**T**he Geonor M-600 series piezometers are vibrating wire sensors which are installed by pushing into soft and loose soils without having to drill a borehole.

As with all other Geonor vibrating wire piezometers, the M-600 series offer the maximum reliability available for continuous pore water pressure or ground water level measurements. Geonor's unique design combined with continued technical improvements has made the vibrating wire sensor the most reliable equipment available, whenever accuracy and long term stability are of vital importance.

Accuracies better than 0.5% of full scale have in effect been fully documented by performance surveys carried out by the Norwegian

Geotechnical Institute for more than 25 years.

Comprehensive experience combined with continuous innovation are the key to the high performance of Geonor's piezometer.

An example of this is the unique Geonor twin-magnet system which gives both faster and more consistent readings than "pluck and read" vibrating wire piezometers.

The M-603 piezometer is the vented version of the M-600 series. It facilitates checking the zero point drift in-situ. Since it is vented variations in atmospheric pressure will be compensated through the cable. This eliminates the need of pressure corrections especially for low pressure sensors.

Sensor	M-600	M-603	M-600A
Pressure range (3)	2 to 30 bar	2 to 4 bar	2 to 30 bar
Part number	401000	403000	402000
Accuracy (%FS)	Better than $\pm 0.5\%$ FS		
Temperature range (2)	-20°C to + 60°C		
Resolution (%FS)	Better than 0.025% FS		
Max.temp.coeff. (1)	0.2 % FS/°C	0.1 % FS/°C	0.2 % FS/°C
Safe over-pressure	2 x rated pressure		
Standard filter	Sintered bronze		
Optional filter	Carborundum		
Housing material	Ferro-manganese bronze		
Membrane material	Stainless steel		
Size, mm (L x Dia)	305 x 32	305 x 32	325 x 32
Overvolt. protection	Yes		
Cable type	P-540 twin jacket	P-540 twin jacket	P-430 armoured
High air-entry resistance value filter, 1-5 bar	Yes Optional	No	Yes Optional

- (1) The actual values will be better as each sensor is individually calibrated  
The sensor can be calibrated at working temperature specified by customer
- (2) Other temperature ranges on request
- (3) 1 bar  $\approx$  10.2 m (33.5 ft) of water column  $\approx$  14.5 psi