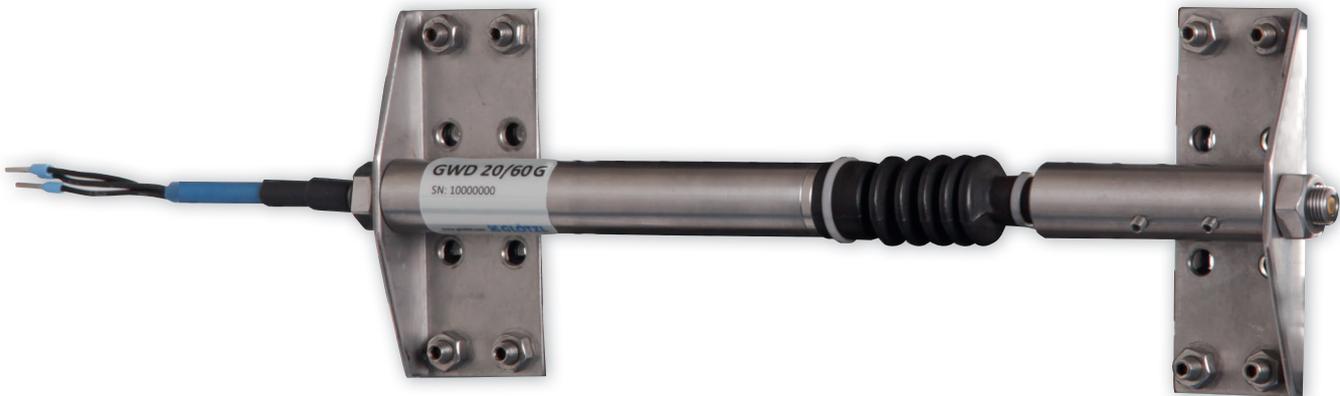


GWD 20 G

Electrical displacement transducers for strain measurement at the geotextile grid



The displacement transducer GWD 20 G consists of a flexible insulated foil with a resistive track inside plus fixation angles and one counter plate for strain measurement at the geotextile grid. The foil itself is assembled to a carrier of special steel. A slider connected to a tracer pin is charging the foil and working as voltage divider. Load value is proportional to the measuring displacement with regards to the position of the slider. Connection of the displacement transducer is made in 3-wire-technique. The displacement transducers of the series GWD 20 are foreseen for installation in boreholes or also other application ranges where access is difficult. For this reason we did installation without electronic measuring amplifiers. When using the standard version, connection is made via Teflon wires which are grouted in the displacement transducer. Optionally, plug connectors are available. Evaluation electronics for processing of measured data 0 - 10 V, 0 - 20 mA, 4 - 20 mA etc. are available in various housing types according customers' request. All housing connections are sealed by O-rings against environmental influences. At the tracer pin the housing is protected against penetration of dust and fluid by a radial shaft-sealing ring.

Technical data	
Type GWD 20/60 G:	displacement 60 mm housing length 170 mm
Type GWD 20/100 G:	displacement 100 mm housing length 210 mm
Type GWD 20/250 G:	displacement 250 mm housing length 280 mm
Housing:	Ø 20 mm
Tracer pin:	Ø 6 mm
Max. power-handling capacity:	0.5 W at 40°
Potentiometer resistance:	4.7 kOhm
Resistance tolerance:	± 10 %
Linearity:	< ± 1 %
Resolution:	0.01 mm
Reproducibility:	0.1 mm
Sliding current:	max. 1 mA
Max. operating load:	10 V
Factory-made calibration with supply 1 V:	meas. output: mV/V
Temperature range:	- 30 °C, + 70 °C
Max. operating pressure:	1.5 bar
Protection type:	IP 66