



Crack meter OG400

Technical Features

OG400 model A crack-meters can be used in tough environments which may even require brief immersions. This model is specifically studied to be mounted on rocks. The instrument allows a precise monitoring of relative movements of cracks and rocks. Installation is made easier by M6 joint, with a 6mm hole, placed at the ends of the device. The sliding bar can be extended for complex installations. Readings in mm can be obtained through a manual readout unit (OG180) or a data-logger and a 4-20mA converter for potentiometers. The joints of the device make the fixing easier and allow the transducer to monitor uneven and non linear movements. The high degree of protection makes the instrument reliable even in tough installations. M6-type male screw thread can be requested at both the sensor sides, for extensions and adaptors.

The relatively low resistance allows the instrument to be insensitive to interferences and external electrical noise, even at medium distances. The transducer can be equipped with a 4-20mA.

OG400 model B crack-meters are suitable for internal application (cracks on houses, civil buildings) and when the surface of the fracture is planar.

OG400VW is vibrating wire technology crack-meter with a built in NTC3K thermistor.

Applications

Monitoring of fractures and control of structures, buildings of historical importance. They have been produced different types of crack-meters.

The crack-meters are used in the following applications:

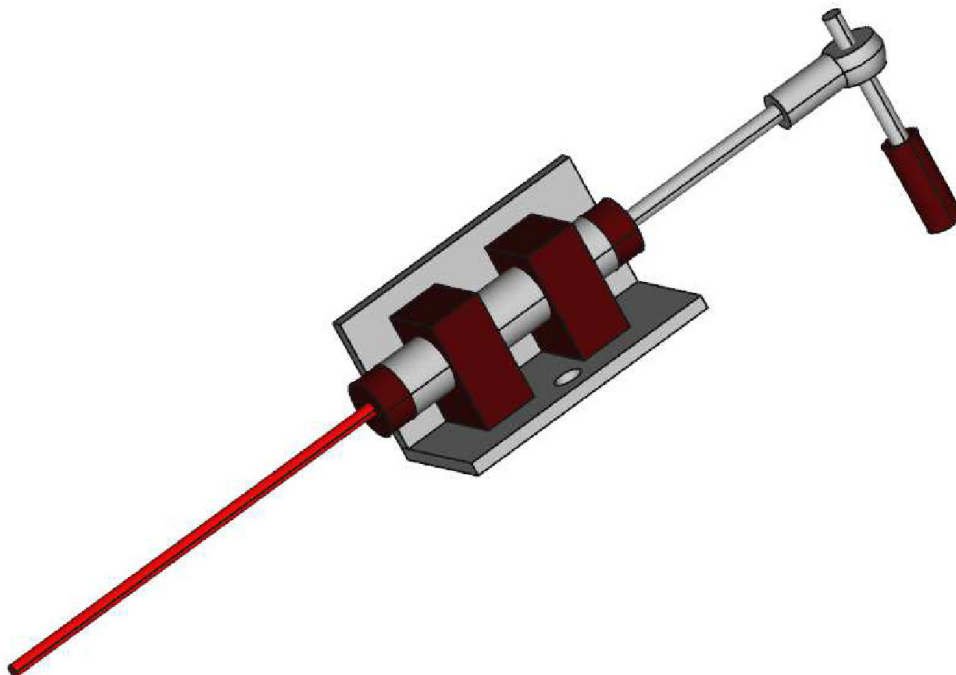
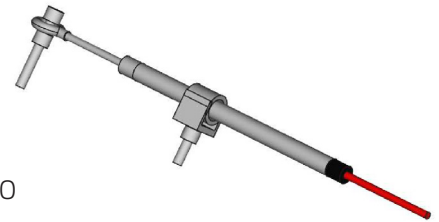
- Walls and rock masses
- Fracture surface of civil buildings and historical monuments
- Bridges, viaducts and structures
- Structural joints in concrete dams

Installation

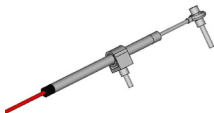
- Crackmeter may be easily employed in buildings' inside and outside cracks and fractures. M6 sferical joints with 5mm hole makes the installation simpler than before. The Joint is axially positioned to the drive shaft's sides. A placable collar on the instrument body complete the fixing. There are other Crackmeters type available that should be applied on the cracks and fractures using dowels or glues.

Related Instrumentation

- Cable 2x2x0.25 PUR
- Thermistors NTC, PT100
- 4-20 mA Converter
- Mechanical crack-meters
- Manual readout units OG180, Geotester 3.0
- Data-logger D200-D800-D1600-D3200, PRO
- OtrMonitoring web site



Technical Specifications

		
Model	OG400-A	OG400-VW
Description	Electric crack-meter outdoor installation	vibrating wire crack-meter with NTC3K sensor integrated
Range	25, 50, 100, 150 mm	25, 50, 100, 150 mm
No linearity	+/- 0.3% F.S.	+/- 0.2% F.S.
Accuracy	< 0.3% F.S.	< 0.4% F.S.
Temperature working	-20°C / +60°C	-20°C / +60°C
Output signal	mV/V – 4-20 mA (cwith converter)	Hz
Material	Stainless steel	Stainless steel
Diameter	15 mm	16 mm
Protection	IP 67	IP 67
	Supplied complete with ball joint for non linear movements	Supplied complete with ball joint for non linear movements

Codes & Part Numbers

P/N 2013030	Crack meter OG400 FS 25 mm IP67 potentiometer
P/N 2013031	Crack meter OG400 FS 50 mm IP67 potentiometer
P/N 2013032	Crack meter OG400 FS 100 mm IP67 potentiometer
P/N 2013033	Crack meter OG400 FS 150 mm IP67 potentiometer
P/N 2013038	OG400-E model FS 50 mm
P/N 2013039	OG400-E model FS 100 mm
P/N 2013040	Spring Trasnsducer FS 50 mm
P/N 2013060	Vertical Bracket
P/N 2013061	Horizontal Bracket
P/N 2013062	4-20 mA Converter in aluminum IP66 box