

GLÖTZL Baumeßtechnik

PRECISION DISPLACEMENT TRANSDUCER FISSUREMETER

available in 4 meas. lengths, 2 meas. ranges and 4 models

Type: GFD . . .
Art. No.: 66.01

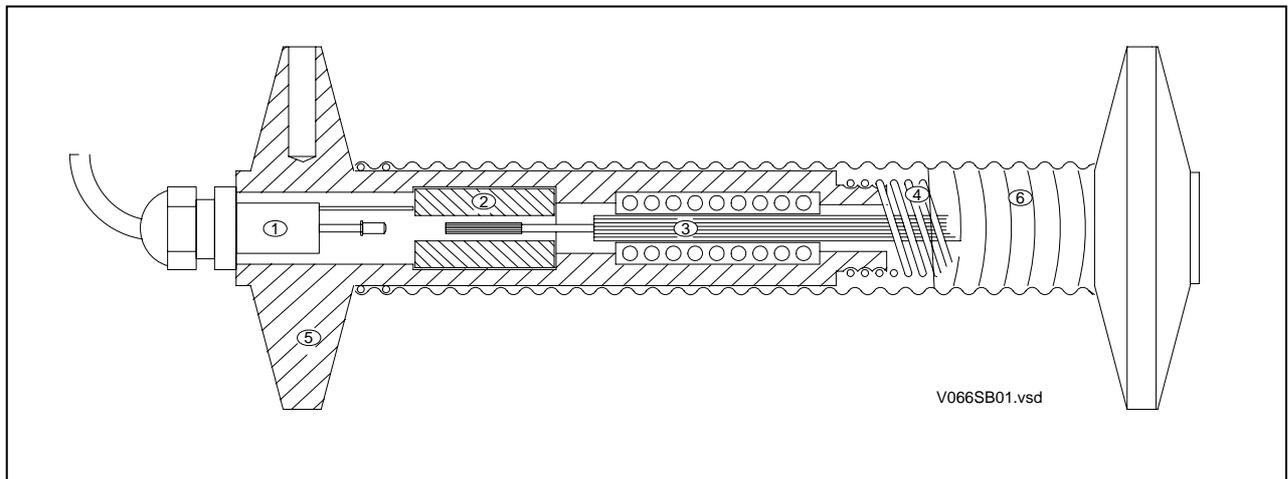
The precision transducer GFD ... is used for measurement of smallest displacements with highest precision.

Different models are available and therefore the fissuremeter can be used as a multi-purpose instrument.

For recording of dilatations and upsetting deformations at or in buildings, the transducer is

annexed or embedded in the building material. Changes in length are recorded by high-resolution inductive displacement transducers.

Furthermore, a temperature measurement can be carried out for recording the course of temperature and – if necessary – to make a corresponding compensation.



The zero position which can be adjusted over the full measuring range, is fixed by a compression-tension spring and the movement of the anchor points is precisely transferred by a linear ball bearing to the displacement transducer.

By this constructive solution, a displacement change can be recorded without considerable inherent resistances by system.

All transducers are encapsulated against spray and light pressure water and manufactured of stainless steel.

Fundamental component parts:

- 1 Connection cable with temperature transducer
- 2 Displacement transducer with shiftable core
- 3 Jacked rod and linear ball bearing
- 4 Zero position – adjusting spring
- 5 Casing with anchor points
- 6 Corrugated pipe of steel or plastic dependent on model for mechanical protection and sealing

Measurement can be done with manual, semi-automatic or automatic measuring devices.

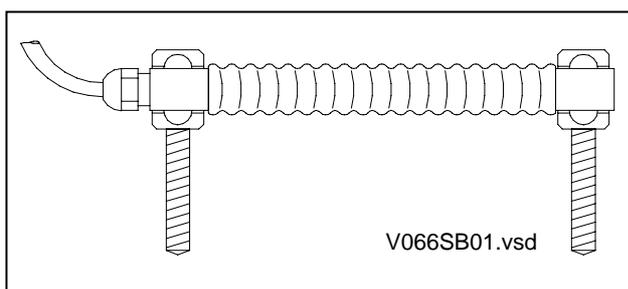
Model A

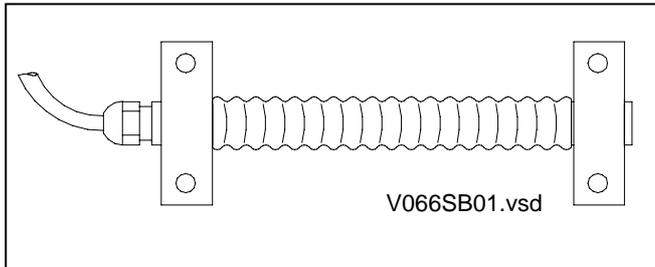
Fissuremeter for precise measurement of fissure movements. The instrument is fixed above the fissure by means of two anchor rods.

Transverse movements are uncoupled by ball-bearing.

Application examples:

Measurement and observation of rock fissures, movement of construction elements, observation of fissures at buildings



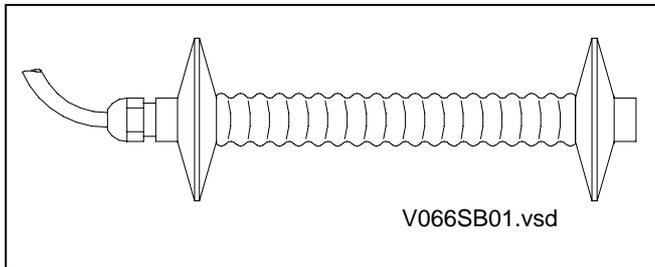
**Model B**

Precision displacement transducer for measurement of dilatation and upsetting deformations at building components

Application examples:

Fabric foils, steel parts for buildings, brickwork and concrete elements

The instrument is attached to building parts by screwing or welding.

**Model C**

Special transducer for displacement measurement in cast or filled-up building components

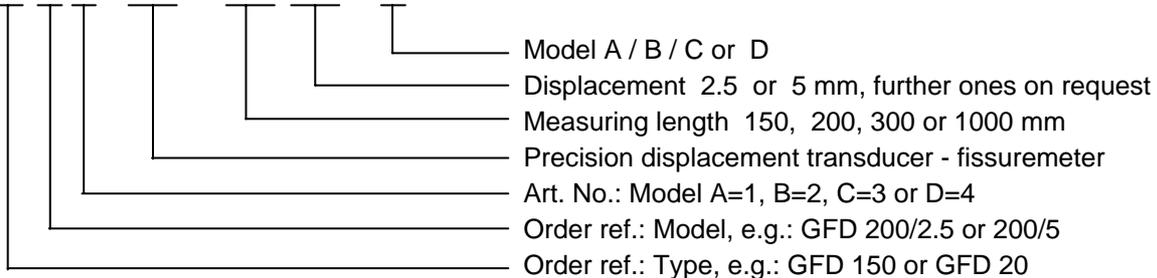
Application examples:

In plastics, grounds, brickwork, concrete and shotcrete. The special models of anchor points are ensuring a good adhesion in the embedded medium.

Art. No.	Model	Meas. length [mm]	Displacem. [mm]	Model	Total length [mm]	Distance max. [mm]
66.01.01.01	GFD 150/2,5	150	2.5	A/B/C/D	180	3.5
66.01.01.02	GFD 150/5	150	5	A/B/C/D	180	7.5
66.01.02.01	GFD 200/2,5	200	2.5	A/B/C/D	230	3.5
66.01.02.02	GFD 200/5	200	5	A/B/C/D	230	7.5
66.01.03.01	GFD 300/2,5	300	2.5	A/B/C/D	330	3.5
66.01.03.02	GFD 300/5	300	5	A/B/C/D	330	7.5
66.01.10.01	GFD 1000/2,5	1000	2.5	A/B/C/D	1100	3.5
66.01.10.02	GFD 1000/5	1000	5	A/B/C/D	1100	7.5

Code for ordering:

66.01.XX.YY.Z GFD 150 / 2.5 A

**Technical data:**

Inductive displacement transducer
 Meas. ranges nominal 2.5 / 5 mm
 Non-linearity $\pm 0.3\%$ f.s.
 Carrier frequency 2.4 kHz
 Nominal output signal 130 / 263 mV/V
 Sensitivity 98 / 102 mV/mm/V
 Temperature range -45 °C up to +120 °C
 Resolution of meas. value infinite
 Resolution of meas. values with manual standard recording devices 10^{-5}
 Further recording possibilities with automatic meas. device MFA 6 E or field measuring device
 Special models an request

Temperature sensor

Transducer AD 590
 Supply 6 - 30 V DC, 1mA
 Current output 1 μ A / K
 Absolute accuracy $\pm 1^\circ$ C at 25 °C
 Shielded meas. cable standard PVC 100 CY
 6x0.5 mm², -30 °C up to +80 °C
 Special cable P120 6x0.5 mm² -10 °C up to +120 °C

Accessories

Change-over manifolds in groups of 5 / 10 / 20 and 30 measuring points

Subject to technical alterations.