GLÖTZL Baumeßtechnik

ELECTRIC TEMPERATURE TRANSDUCER

The temperature sensors GPT have a temperature-dependent platinum resistor PT 100 with a nominal resistance of 100 Ohm at 0 °C. For compensation of line restistances, they are constructed in three- or four-conductor technics. The sensors are very robust and suitable for application under rough site conditions. According to temperature range and required accuracy, the sensor GPT is used, for higher requirements the sensor GPT-E is more suitable.

Type: GPT . . Art. No.: 67.02

For application in an extended temperature range, a special cable is required.



Figure: Readout unit FMG 01-2





Figure: Temperature transducer in standard housing and in press-in housing

Figure: Readout unit VMG 14.1

Besides the standard version, the sensors are also available in special models which are suitable for pressing into the underground. Furthermore, the standard version can also be delivered with additional cable screwing and strain relief.

For manual reading of single measuring points, the FMG 01-2, or the multimeter VMG 14.1 can be used. The necessary supply for the temperature sensors is placed in the measuring instruments.

The used measuring instruments contain a line compensation in four-conductor technics and also a linearization of measured values according to DIN 43 760.

Technical data:

Absolute accuracy: acc. to DIN 43760 class A, B, 1/3A

Standard temperature range:

Extended temperature range:

Special temperature range:

- 25 °C up to +75 °C

- 55 °C up to +180 °C

- 100 °C up to +260 °C

Higher accuracy ranges can be quoted on request.

Type codes:

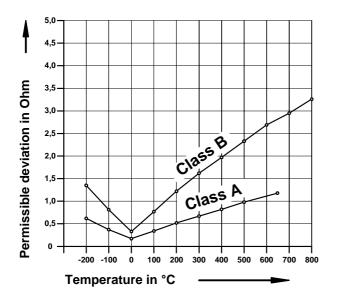
GPT Standard sensor

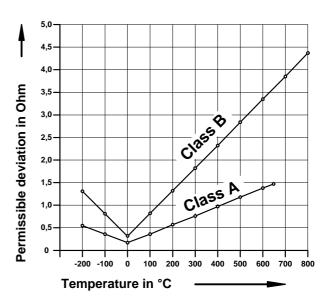
GPT-E Standard sensor with extended temperature range GPT-P Temperature sensor to press in, connection thread R 1/4"

GPT-P Temperature sensor to press in, connection thread R 1/4
GPT-EP Temperature sensor to press in, extended temperature range,

connection thread R 1/4"

Permissible deviation from basic values acc. to DIN





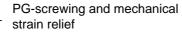
Sensor: Construction

Standard transducer GPT

with extended temperature range GPT-E

Lapptherm 120, 5x0.5 mm² screened
Special insulation on PVC base
Temperature range
-10 °C up to +105 °C short-time +120 °C
Nominal voltage 500 V

Siflex 4x0.5 mm² screened Refined wired cord of galvanized E-Cu wires, insulating cover and outer casing silicone base Temperature range -10 °C up to 105 °C short-term +120 °C Nominal voltage 500 V



Sealing material 0-ring Perbunan temp. up to +100 °C Sealing material 0-ring Viton temp. up to +200 °C

Intern. casing

Sealing compound epoxy resin
Application temperature

Application temperature -20 °C up to +100 °C

Cable connection Meas. cable transducer soldered

Sensor PT 100 acc. to IEC 751 resp. DIN class B

Casing stainless steel 1.4305

Sealing compound silicone Application temperature -40 °C up to +180 °C

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