

Sensors

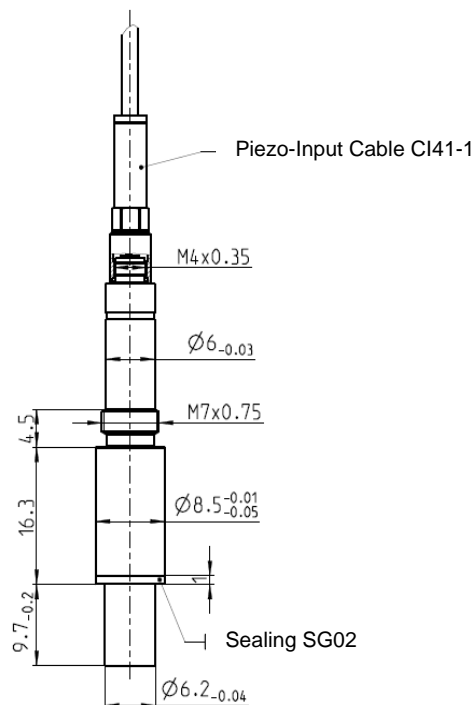


GU22C

Ø 6,2mm Pressure Sensor Uncooled
Art. Nr. TIGG1073A.01

GU22C is an uncooled piezoelectric pressure sensor with a diameter of 6.2mm. Due to the excellent thermal characteristics of the crystal GaPO_4 in use this pressure sensor is the best choice for precise thermodynamic evaluations.

The mounting of the uncooled pressure sensor GU22C can be done directly by using the mounting nipple AM04 (AM05) or by the mounting sleeve AH26 (AH27) (optional).



Dimensions GU22C

Sensors

Standard Specifications

Measuring Range	0...250 bar (3625 psi), 25 MPa
Overload	300 bar (4350 psi), 30 MPa
Sensitivity (nominal)	36 pC/bar (2.48 pC/psi), 360 pC/MPa
Linearity	< ± 0.3 % FSO
Resonance Frequency	100 kHz
Acceleration Sensitivity	< 0.001 bar/g
Shock Resistance	> 2000 g
Operating Temperature Range	up to 400°C (750°F)
Thermal Sensitivity Shift	
at 20...400°C (68°F...750°F)	< ± 1 %
200...300°C (392°F...572°F)	< ± 0.5 %
Insulation Resistance at 20°C (68°F)	> 10^{13} Ω
Mass (without cable)	12.5 grammes
Torque	10 Nm

Thermodynamic Specifications

Cyclic Temperature Drift (1300 rpm/7 bar)	< ± 0.4 bar
Load Change Drift	
Max. Zero-Line Gradient dp/dt	< 1.5 mbar/ms
Permanent Zero-Line Deviation	± 4 bar
IMEP-Stability	< 2%

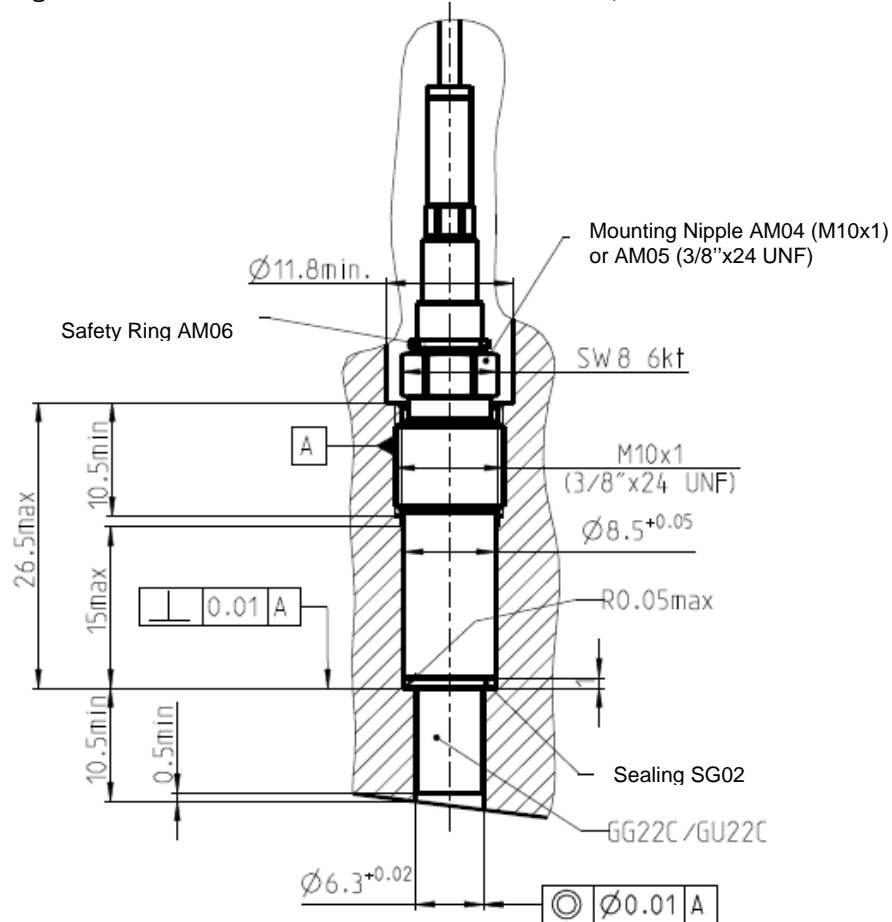
Scope of Supply

- 1 Pressure Sensor GU22C (GG1074)
- 1 Piezo-Input Cable CI41-1, with Coupling CC41 mounted (BV2443, EU2077)
- 2 Spare O-Rings for the Cable (DA0293)
- 1 Sealing SG02 (YF0572)
- 1 Protection Cap PT01 (YF0520)
- 1 Calibration Protocol
- 1 Specification Sheet
- 1 Brief Description

Sensors

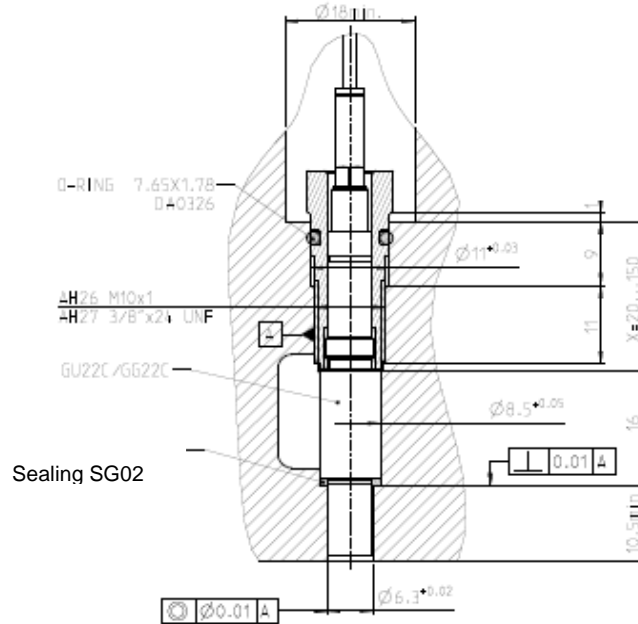
Accessories

Cable and Coupling	CI41-1/2 (BV2443, BV2445), CI42-1/2 (BV2444, BV2446) (Metal Mesh), CC41 (EU2077)
Cable-Mounting Tool	TC01 (WG0131)
Sealing	SG02 (YF0572)
Mounting Tool	TS02, consisting of TT09 and TT02 (WG0128), TA13 (WG0136)
Mounting Nipple M10x1	AM04 (YG1476)
Mounting Nipple 3/8 Zoll x 24 UNF	AM05 (YG1477)
Safety Ring for Mounting Nipple	AM06 (YG1406)
Mounting Sleeve M10x1	AH26 (YG1520, with O-Ring WG0250) (variable Length of 28mm to 160mm)
Mounting Sleeve 3/8 Zoll x 24 UNF	AH27 (YG1521, with O-Ring WG0251) (variable Length of 28mm to 160mm)
Thermal Protection	PH04 (YF0760)
Measuring Cable	E124-10 (BV0056), l = 10 m

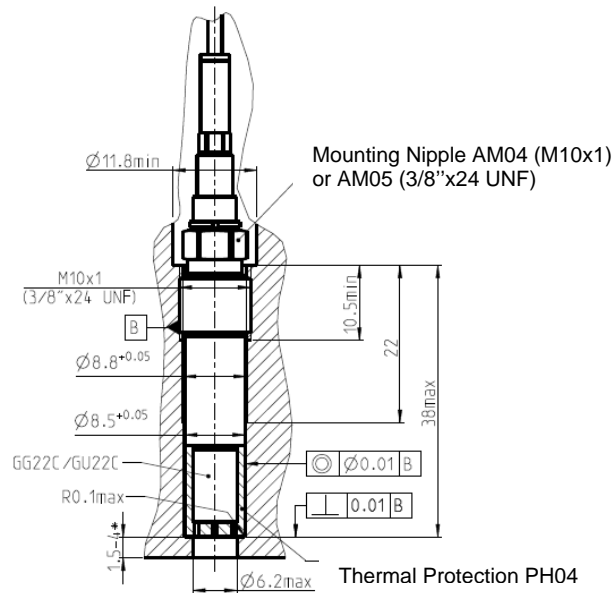


Installation with the Mounting Nipple AM04 or AM05

Sensors



Installation with the Mounting Sleeve AH26 or AH27



*1.5mm for steel
4mm for cast iron and aluminium alloys

Installation with Thermal Protection PH04

Note about the use of the thermal protection PH04:

Before the mounting of the thermal protection PH04 the sealing gasket SG02 has to be removed