

Sensors

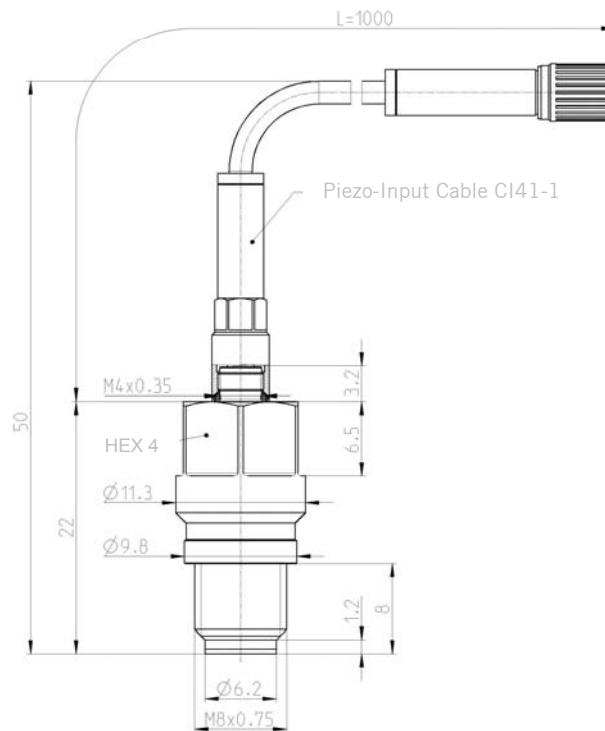


GU23D M8 Pressure Transducer Uncooled

Art. Nr. TIGG0935A.01

The GU23D is an uncooled piezoelectric pressure sensor of size M8x0,75 equipped with the Avl exclusive GaPO₄ piezoelement. Because of the high sensitivity and the outstanding thermodynamic behaviour the sensor is suitable for high-precision thermodynamic measurements.

The mounting of the uncooled GU23D could be done directly or with an adapter in existing mounting bores.



Dimensions

Standard Specification

Measurement range	0...250 bar (3625 psi), 25 MPa
Overload	300 bar (4350 psi), 30 MPa
Sensitivity (nominal)	35 pC/bar (2.41 pC/psi), 350 pC/MPa
Linearity	< ±0.3 % FSO
Natural Frequency	85 kHz
Acceleration Sensitivity	< 0.002 bar/g
Shock Resistance	> 2000 g
Operating Temperature Range	bis zu 400°C (750°F)
Thermal Sensitivity Shift at 20...400°C (68° F...750° F)	<±2%
Insulation Resistance at 20°C (68°F)	> 10 ¹³ Ω
Mass (without cable)	11 Gramm
Mounting Torque	6 Nm

Thermodynamic Specification

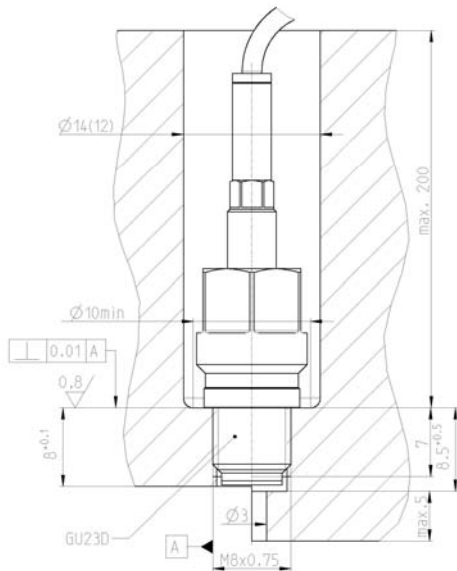
Cyclic Temperature Drift (1300 rpm/7 bar)	< ±0.4 bar
Load Change Drift	
Max. Zero-Line Deviation dp/dt	< 2 mbar/ms
Permanent Zero-Line Deviation	±12 bar

Scope of Supply

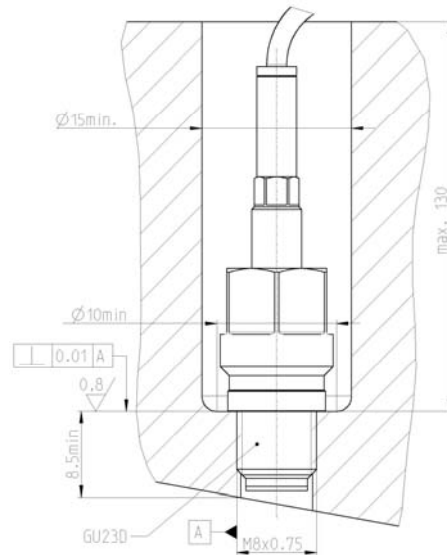
- 1 Transducer GU23D
- 1 Piezo-Input cable CI41-1, plus Coupling CC41 fitted
- 2 spare O-rings for cable
- 1 gasket SG21
- 1 Protection cap
- 1 Calibration sheet
- 1 Specification sheet
- 1 Brief description

Accessories

Cable and couples	CI41-1, CI42-1 (metal mesh), CC41
Cable-Mounting Tool	TC01
Gasket	SG21
Dismounting Tool for Gasket	TT20
Box Spanner	
for bores > D=14 mm	TA16
Measurement Cable	E124-10, l = 10 m
Mounting Spray	SF01



Mounting in existing bores



AVL recommended dimensions for a new mounting bore

Hint about Mounting Tools

Sleeves or mounting tools are not offered for the uncooled transducer GU23D.