

Sensors

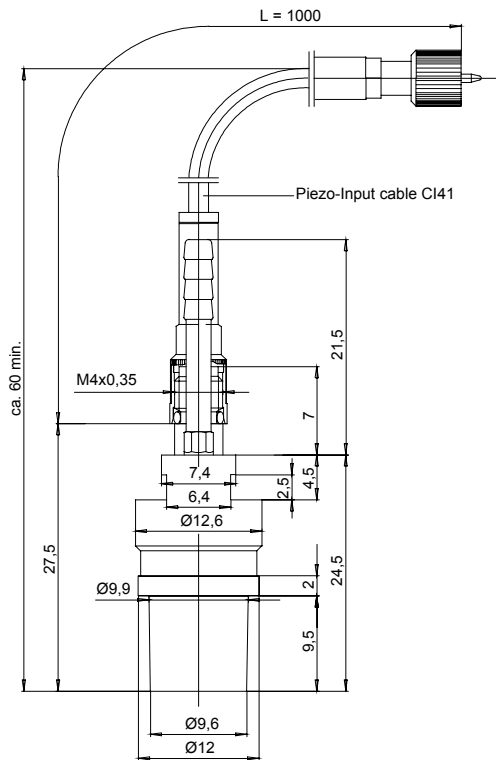


QC34C Quartz Pressure Transducer Art. No. TIGG0867A.01

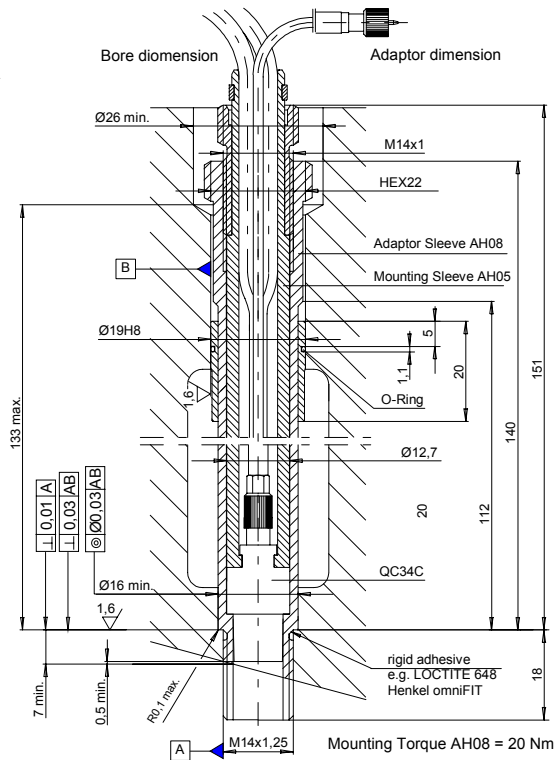
The watercooled QC34C represents an ideal solution for measurements in engines with cylinder bores of less than 100 mm and high requirements on the measurement results.

The plug-in design with a mounting adapter makes these transducer particularly suitable for water-cooled engines.

A temperature controlled cooling system becomes needless because the sensor shows a high insensibility towards a breakdown of the cooling system. Additionally the sensor is working properly up to a temperature of 350 °C.



Dimensions



Installation by means of Adaptor-Set AS02

QC34C Quartz Pressure Transducer

Standard Specifications

Measuring Range	0...250 bar (3625 psi), 25 MPa
Lifetime	> 10 ⁸ load changes
Overload	300 bar (4350 psi), 30 MPa
Sensitivity (nominal)	19 pC/bar (1.31 pC/psi), 190 pC/MPa
Linearity	< ±0.20 % FSO
Natural Frequency	69 kHz
Acceleration	< 0.013 bar/g with cooling water
Sensitivity	< 0.003 bar/g without cooling water
Temperature coefficient of sensitivity	0.003 %/°C at 20...80°C (68...176°F)
Insulation Resistance at 20°C (68°F)	> 10 ¹³ Ω
Capacitance	10 pF
Cooling water	rate of flow min. 20l/h pressure max. 2.0 bar (29 psi)
Mass (without cable)	15 grammes
Mounting Torque (in Adaptor)	15 Nm (for adaptors refer to drawings)

Thermodynamic Specifications

Cyclic Temperature Drift	< ±0.30 bar
Load Change Drift	
Max. Zero-line Gradient dp/dt	5.5 mbar/ms
Permanent Zero-line Deviation	5 bar
IMEP-Stability	< 2 %

Accessories

Cables and Couplings	CI41, CC41, E124-10
Cable-Mounting Tool	TC01
Gasket	SG20
Dismounting Tool for gasket	TT15
Dummy	DG05
Adaptor	AS02 (AH05, AH08)
Mounting Spray	SF01
Cooling System	ZP91.00/1-4 (8)
Cooling tube	ZP90.40 (2.3 x 0.75 Viton)

Scope of Supply

1 Transducer QC34C	1 Protection cap
1 Piezo-Input cable CI41 plus coupling CC41, fitted	1 Calibration sheet
2 Spare O-rings for cable	1 Specification sheet
1 Gasket SG20 (fitted)	1 Brief description
1 Spare gasket SG20	