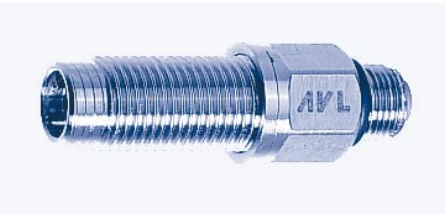


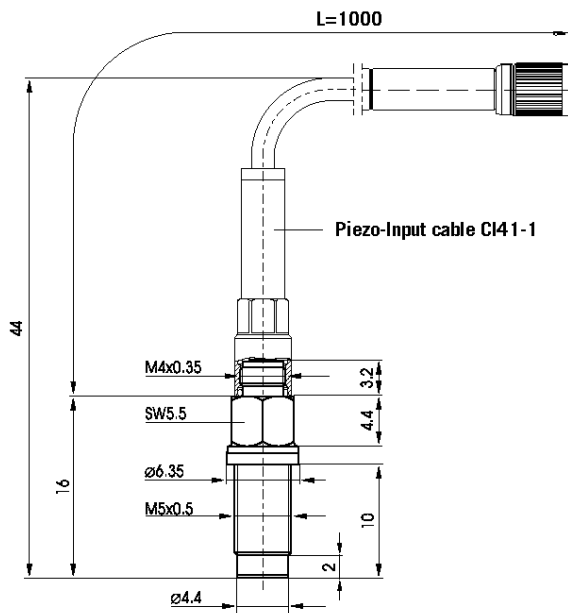
Sensors



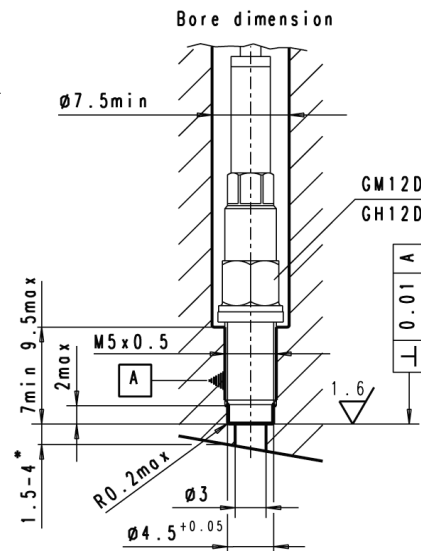
GH12D Miniature Pressure Transducer Art. No. GG0644

Due to its compact dimensions (M5x0.5) the GH12D is especially suited for measurements in IC-engines with small displacement volume. Its compact design and outstanding thermodynamic specifications make the GH12D your prime choice as universally applicable transducer especially when there is only very limited space available.

The GH12D is suited for high performance applications (e.g. racing engines, supercharged diesel engines), where highest temperature and pressure load appears



Dimensions



* 1.5mm for steel

4mm for cast iron and aluminium alloys

Example for direct installations front seal

GH12D Miniature 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)	15 pC/bar (1.03 pC/psi) 150 pC/MPa
Linearity	< ±0.3 (0.2)* % FSO
Natural Frequency	115 kHz
Acceleration Sensitivity	< 0.001 bar/g
Shock Resistance	> 2000 g
Operating Temperature Range	up to 400°C (750°F)
Thermal Sensitivity Shift	20...400°C < ±2%, 200...300°C < ±0.5%
Insulation Resistance at 20°C (68°F)	> 10 ¹³ Ω
Capacitance	7 pF
Mass (without cable)	2.3 grammes
Mounting Torque	1.5 Nm (for adaptors refer to drawings)

Thermodynamic Specifications

Cyclic Temperature Drift	< ±0.5 (0.3)* bar
Load Change Drift	
Max. Zero-line Gradient dp/dt	1 mbar/ms
Permanent Zero-line Deviation	7 bar
IMEP-Stability	< 3 %

*) Selected transducers GH12D (Art. No. GG0721) with specifications in () can be supplied upon request.

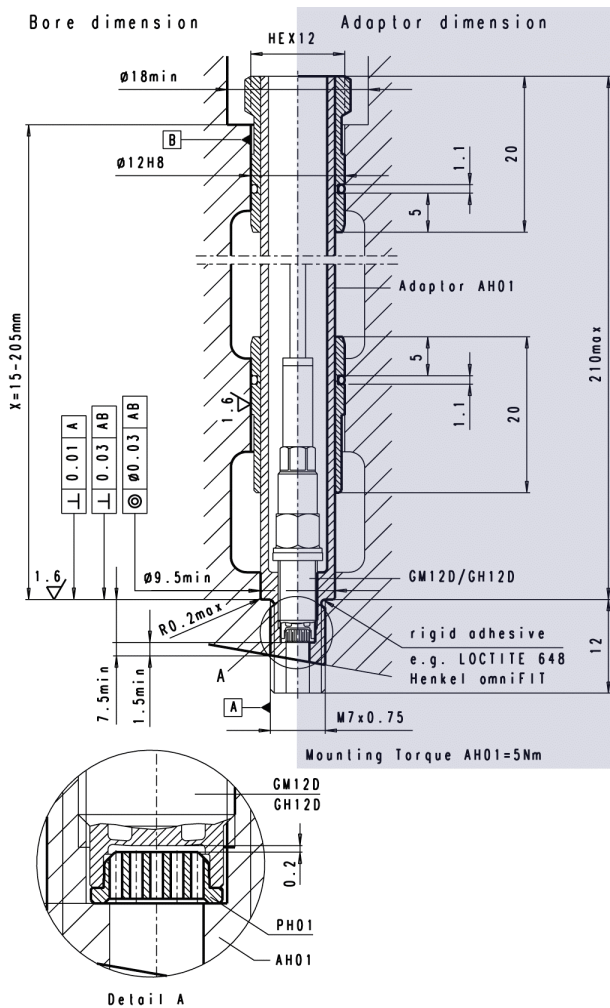
Scope of Supply

1 Transducer GH12D	1 Protection cap
1 Piezo-Input cable CI41-1 plus Coupling CC41, fitted	1 Calibration sheet
2 Spare O-rings for cable	1 Specification sheet
1 Gasket SG07 (front seal)	1 Brief description

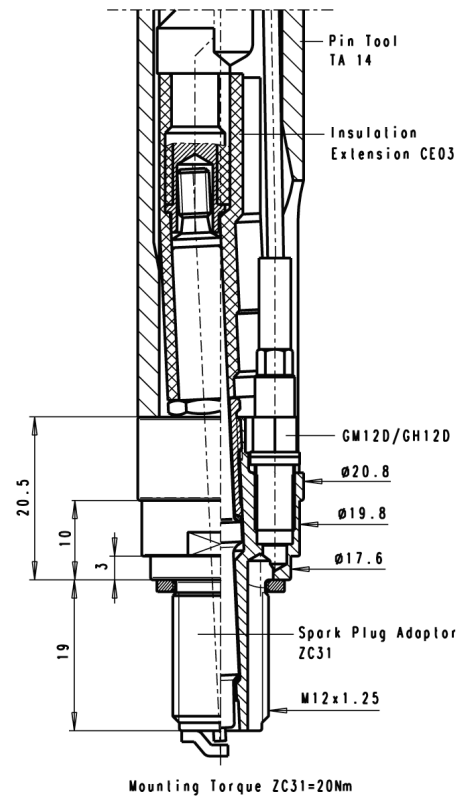
GH12D Miniature Pressure Transducer

Accessories

Cables and Couplings	CI41-1, CI42-1 (metal mesh), CC41, E124-10
Cable-Mounting Tool	TC01
Gasket	SG07 (front-seal)
Dummy	DG01
Removal Tool	TD01
Adaptor	AH01, ZC31
Machining Tools	MS11(MD11, MT11), MS22 (MD22, MT21)
Mounting Tools	TS01 (TT01, TT02), TA14
Extra Accessories	PH01, SF01



Installation by means of Adaptor AH01 with Thermo Protection PH01



Installation by means of Spark Plug Adaptor ZC31