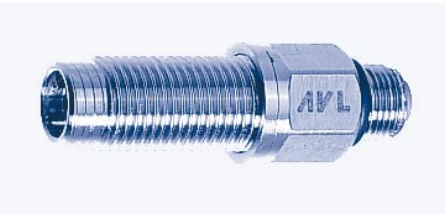
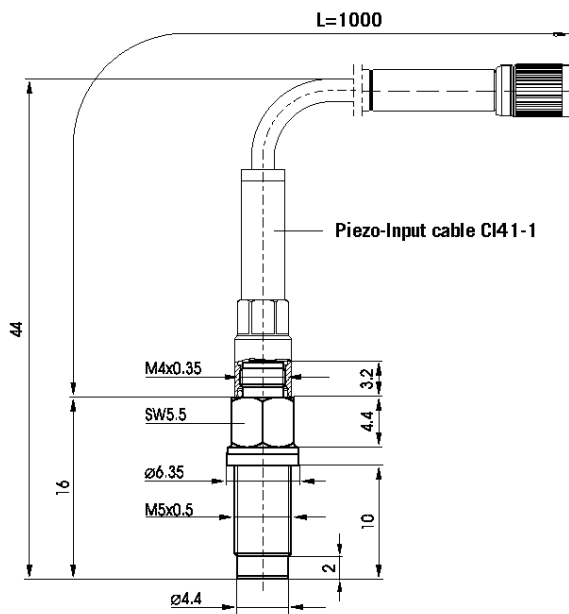


## Sensors

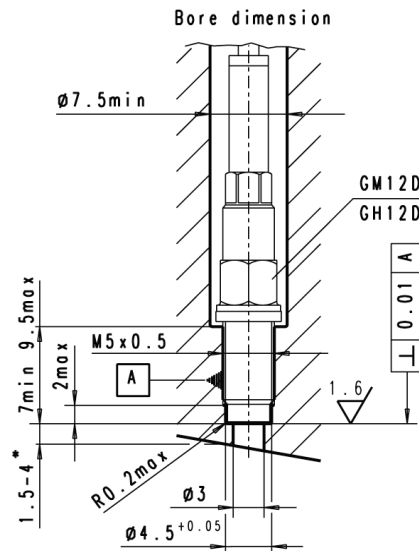


### GM12D Miniature Pressure Transducer Art. No. GG0470

Due to its compact dimensions (M5x0.5) the GM12D is especially suited for measurements in IC-engines with small displacement volume. Its compact design and outstanding thermodynamic specifications make the GM12D your prime choice as universally applicable transducer especially when there is only very limited space available.



**Dimensions**



\* 1.5mm for steel

4mm for cast iron and aluminium alloys

**Example for direct installations front seal**

## GM12D Miniature Pressure Transducer

**Standard Specifications**

Measuring Range	0...200 bar (2900 psi) 20 MPa
Lifetime	> 10 <sup>8</sup> load changes
Overload	250 bar (3625 psi) 25 MPa
Sensitivity (nominal)	15 pC/bar (1.03 pC/psi) 150 pC/MPa
Linearity	< ±0.3 % FSO
Natural Frequency	130 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 <sup>13</sup> 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	< ±0.6 bar
<b>Load Change Drift</b>	
Max. Zero-line Gradient dp/dt	1.5 mbar/ms
Permanent Zero-line Deviation	2 bar
IMEP-Stability	< 3 %

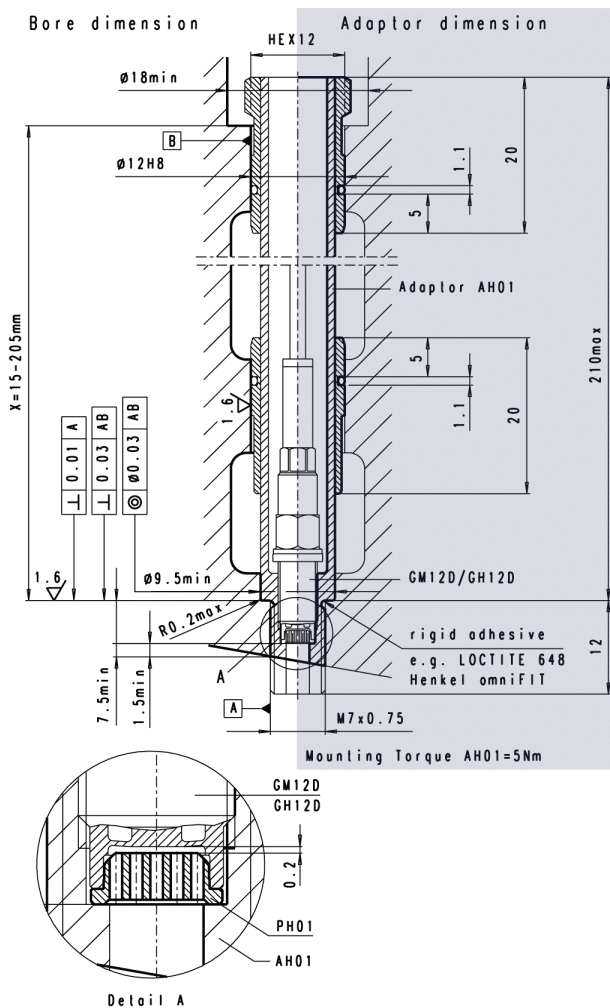
**Scope of Supply**

1 Transducer GM12D	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

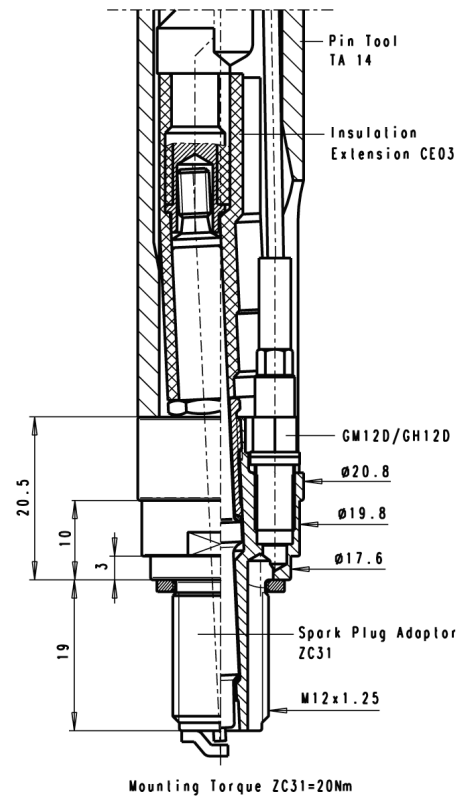
GM12D Miniature Pressure Transducer

**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**