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Cylinder Pressure Transmitter

Type 7621CQ...

for Continuous Cylinder Pressure Monitoring

Robust transmitter for continuous cylinder pressure monitoring of large engines, especially suitable for heavy fuel operation.

- suitable for heavy fuel operation
- good long-term stability
- robust design

Description

The piezoelectric measuring element integrated in a robust body measures the material strain proportional to the cylinder pressure. Thanks to the simple design without diaphragm a very good lifetime and stability are ensured. The measuring signal is fed through an integrated cable to the charge amplifier and converted in to a voltage signal.

Application

The transmitter is especially suitable for large Diesel engines operated with heavy fuel and offering sufficient space for mounting of the transmitter underneath the indicator valve.

Technical Data

Measuring range	bar	0 ... 250
Sensitivity (± 0,5%)	mV/bar	10
Overload	bar	300
Linearity	% FSO	≤±1,5 %
Sensitivity to acceleration	bar/g	0,001
Operating temperature range		
Sensor	°C	-50 ... 350
Plug with charge amplifier	°C	-10 ... 110
Change in sensitivity		
200 ±150 °C	%	≤±3
200 ±50 °C	%	≤±2
Frequency range (-3 dB)	Hz	0,032 ... 20'000
Output voltage (with 1 mA load)		
max.	V	4,4 ... 5
min.	V	>0
Signal range	V	2,5
Zero point	V	2 ... 2,2
Supply voltage	VDC	7 ... 32
Output impedance	Ω	100
Plug DIN	M12 x 1	IP67
Weight	g	140
Tightening torque	Nm	200

Mounting

By means of a hollow bolt the C-Sensor is installed between the cylinder cover and the indicator valve. In order to ensure a stable operating temperature of < 350°C, it is necessary to install the transmitter directly on the cylinder cover.

For the mounting, a flat and machined sealing surface with a diameter of >31 mm is needed.

Maintenance and Calibration

No maintenance work is necessary when the sensor is used on gas engines and engines operated with Diesel oil. With heavy fuel operation, the indicator bore should be cleaned at regular intervals, by opening the indicator valve.

000-413e-09.02 (DB03.7621CQe)

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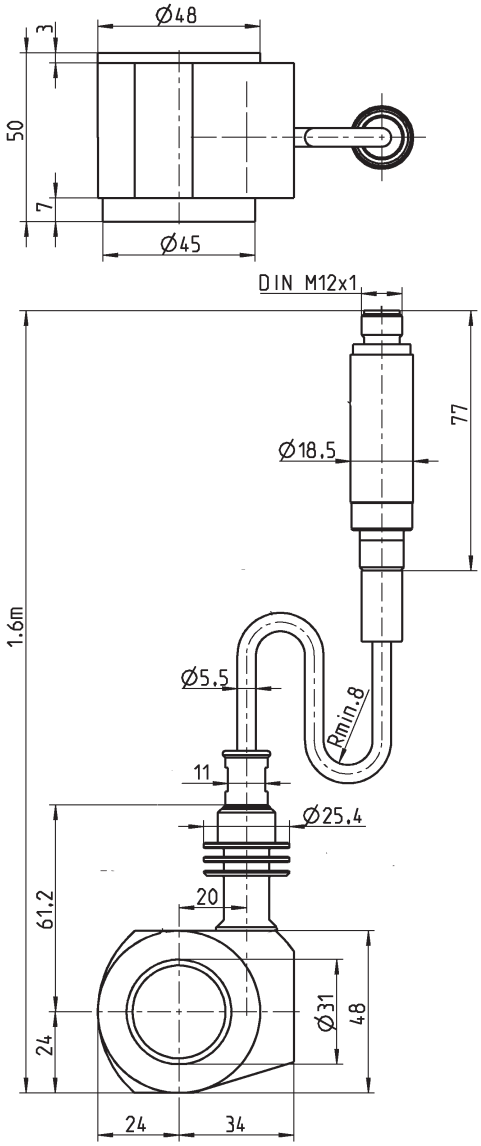
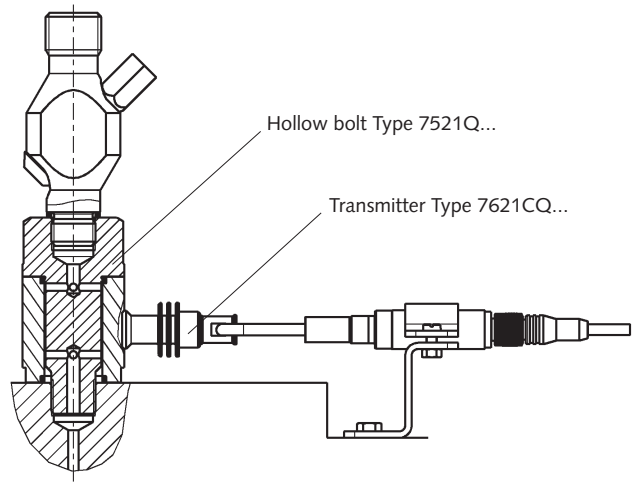
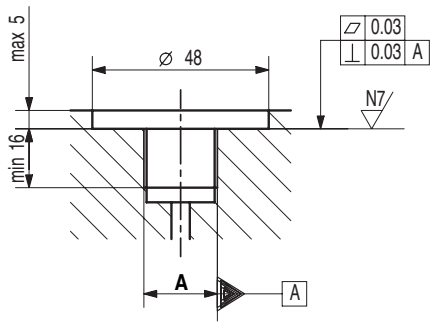
Dimensions Transmitter Type 7621CQ...





Transmitter installed with hollow bolt Type 7521Q...



Recommended mounting surface

Included Accessories

- 2x Steel sealing ring Ø31mm

Optional Accessories

• Hollow bolt	7521Q...
• Signal conditioner	5145B...
• Connecting cable 4-pin, one free cable end length = 10 meter	1700A69
• Connecting cable 3-pin, one free cable end length = 10 meter	1700A71
• Mounting plate	7.050.059

Order information:

The transmitter needs to be adapted to the engine. Please contact the responsible Kistler distributor for the necessary technical clarification.

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