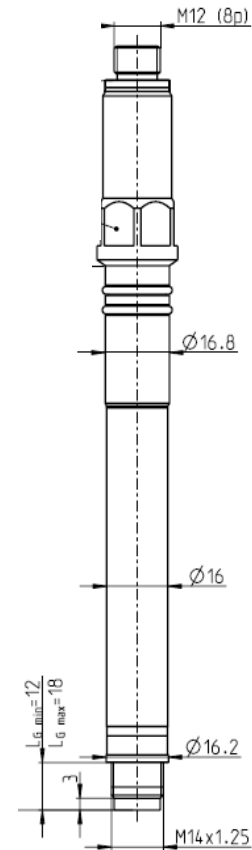


Cylinder Pressure Sensor GO41Dx

Custom-made sensor with optimized service life for continuous cylinder pressure monitoring in Diesel and gas engines. Due to its outstanding precision and the long term stability of its quality, this sensor is suitable for demanding monitoring and control tasks.

The sensor contains numerous innovative details like the Double-Shell® housing, the inboard preload element as well as the Piezocryst Leak Proof Design™. These patented innovations make this sensor not only to the most precise but also the safest sensor available.

Despite its robust design, optimized for service times as long as 20000 h, deposits may influence the sensor's quality as well as corrosive exhaust gas may reduce the service life.



CUSTOMER BENEFITS

- highest precision
- high service life and long term stable quality
- integrated charge amplifier with current or voltage output
- high quality charge amplifier with state of the art drift compensation circuit
- **outer dimensions in accordance with customer specific mounting bores**

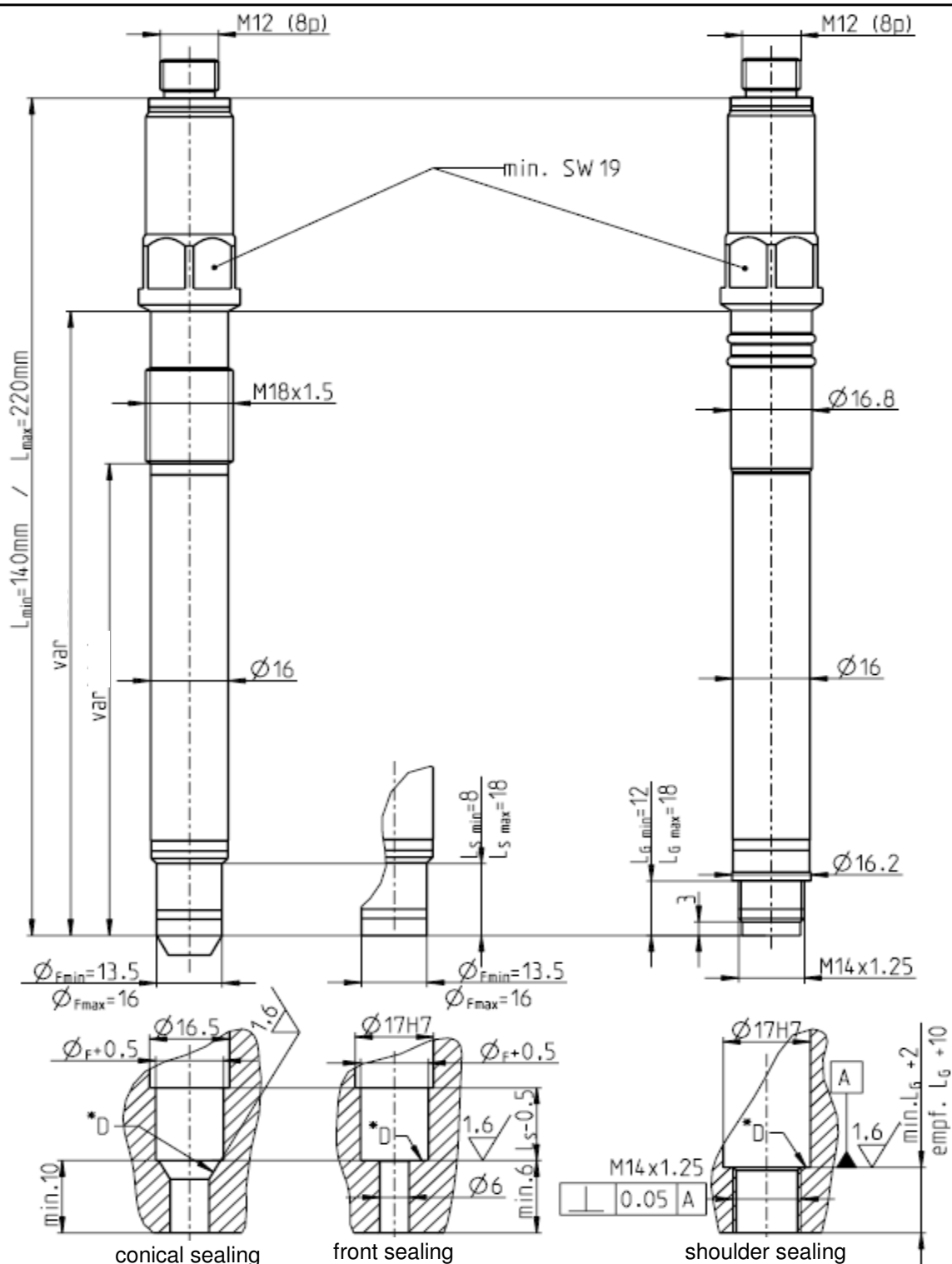
SPECIFICATION	GO41Dix	GO41DAx
Measuring range		250 bar
Overload range		300 bar
Sensitivity / Output	20 pC/bar	13/25/50 mV/mV/µA /bar
Linearity		0.5 % FSO
Thermal sensitivity shift		< 1 % (150 ... 350 °C)
Cyclic srift		0.8 bar (7 bar IMEP, 1300 rpm, Diesel)
Temperature range		-50 ... 350 °C
Temperature range electronics		-50 ... 120 °C
Supply voltage		Current output 80 °C 10 ... 32 V DC
Acceleration sensitivity		0.001 bar/g
Shock resistance		2000 g (sensor)
Mounting sorque		25 Nm / 50 Nm
Weight		160 g / 300 g
Connector	Fischer SE103	M12

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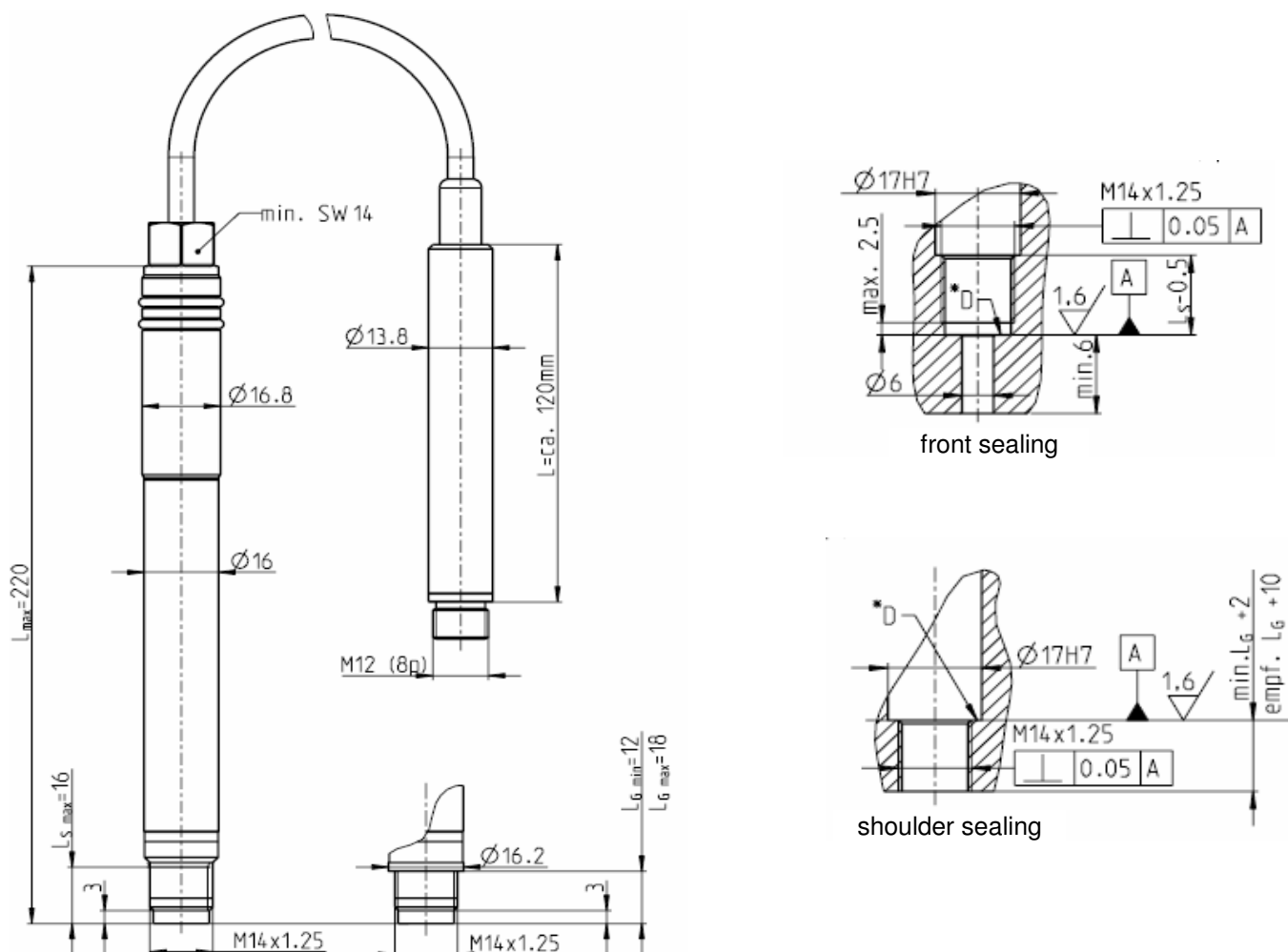
MOUNTING

In close cooperation with the customer Piezocryst is developing an optimized design suited for a specific engine as well as a specific measuring task. Such designed sensors guarantee highest precision as well as highest possible service life. The sensor design can feature front- or shoulder sealing, different positions of the mounting thread, integrated or external amplifier and customer specific over all lengths.

EXAMPLES OF SENSORS WITH INTEGRATED AMPLIFIER

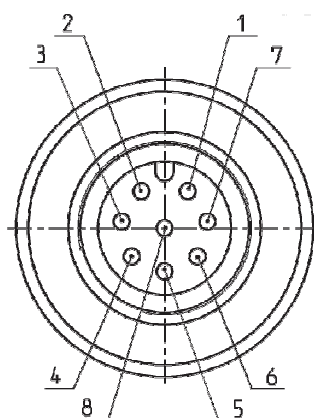


EXAMPLES OF SENSORS WITH EXTERNAL AMPLIFIER



PIN ALLOCATION FOR SENSORS WITH INTEGRATED CHARGE AMPLIFIER

Please refer to the table below for the pin allocation for the M4C – current output - and M4V – voltage output - amplifier.



Pin	M4C	M4V
1	GND	GND
2	-	-
3	Output 4 .. 18 mA	-
4	(Com. Input)*	(Com. Input)*
5	-	Output 0.5 .. 4.5 V
6	(Com. Output)*	(Com. Output)*
7	(Drift Comp. Off)*	(Drift Comp. Off)*
8	Supply 12 ..32 V	Supply 8 ..32 V

* Used at Piezocryst only