



Pressure Sensor

QBE9002-P...

for liquids, gases and refrigerants

- Piezo-resistive measuring system
- Seal-free welding, no elastomer seals
- Output signal DC 0...10 V
- M12x1 connector
- Inside thread 7/16-20 UNF (Schrader nipple)
- Connecting cable available as accessory

Use

The pressure sensors are suitable for the measurement of relative pressure in HVAC systems using liquids, gases and refrigerant, ammonia included.

Type overview

Type	Item number	Pressure range	Output signal
QBE9002-P10U	S55720-S274	-1...9 bar	0...10 V
QBE9002-P25U	S55720-S275	-1...24 bar	0...10 V
QBE9002-P60U	S55720-S276	-1...59 bar	0...10 V

Ordering and delivery

When ordering, please give name and type reference,
e.g. Pressure sensor / QBE9002-P10U / S55720-S274.

A connecting cable is not supplied with the pressure sensor. The pressure sensors are supplied in sets of 25.

Accessories

Connecting cable

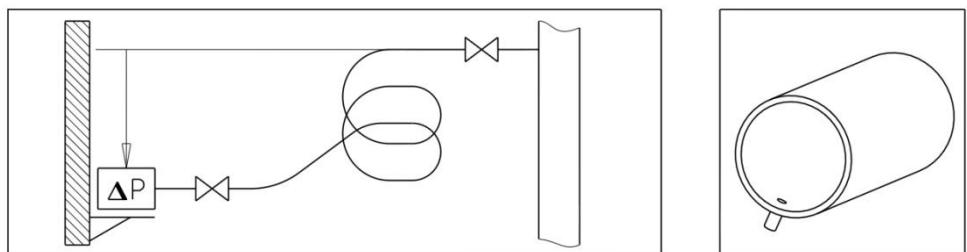
Ordering text: Cable Connector / AQB9000 / S55720-S288

The connecting cables are supplied in sets of 25.

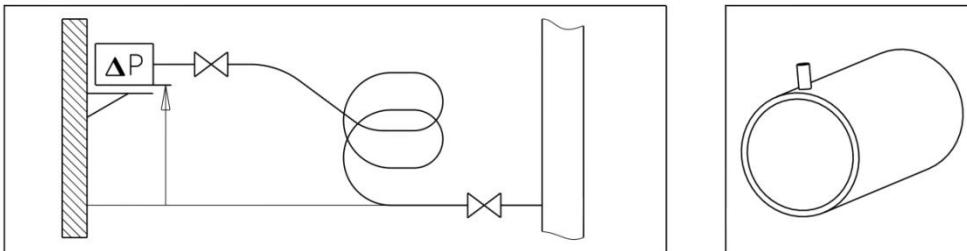
Installation instructions

The sensors can be installed in any position. The position has no impact on the measurement precision of the sensor.

Installation for measuring pressure in liquids:



Installation for measuring pressure in gases:



⚠ Caution

The supply has to be SELV voltage.

The power consumption has to be restricted to maximal 4 A by an adequate circuit breaker.

Disposal



The devices are considered electronics devices for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic waste.

- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Technical data

Functional data	Supply voltage	SELV DC 11.5...33 V
	Current consumption	< 7 mA
	Output signal	DC 0 ...10 V (load up to ± 1 mA)
	Pressure range	See "Type overview"
	Typical measurement accuracy: max (including linearity, hysteresis and reproducibility zero point, Full Scale)	< $\pm 0.5\%$ FS (FS = Full Scale)
	Response time	< 2 ms
	Nominal pressure	Relative pressure as in "Type overview"
	Tolerable overload	3 x scale end value of measuring range (FS)
	Rupture pressure	6 x scale end value of measuring range (FS)
	Media	Liquids, gases and refrigerants, ammonia incl.
Directives and standards	Medium temperature	-40...+ 135 °C
	Environment	-30...+ 85 °C
	Storage	-50...+ 100 °C
	Maintenance	Maintenance-free
	Installation position	Any
	Product standard	EN 61326-x Electrical equipment for measurement, control and laboratory use. EMC requirements. General requirements
	EU Conformity (CE)	CE1T1909xx *)
	RCM Conformity	CE1T1909en_C1 *)
	Protection degree of housing	IP67 according to EN 60529
	Protection class	III according EN 60730-1
Connections	Electrical connection	M12x1 connector*
	Connection cable available as accessory	Straight cable box M12x1 with cable three-pole, 2 m, PVC black, stripped
* Accuracy in pressure ranges \leq 16 bar only possible if deaeration through cable is ensured		
Weight	Pressure connection	Inside thread 7/16-20 UNF
	Single pressure sensor	85 g
	25 pressure sensors including packaging	2.2 kg
	Connection cable AQB9000	50 g
	25 connection cables including packaging	1.3 kg

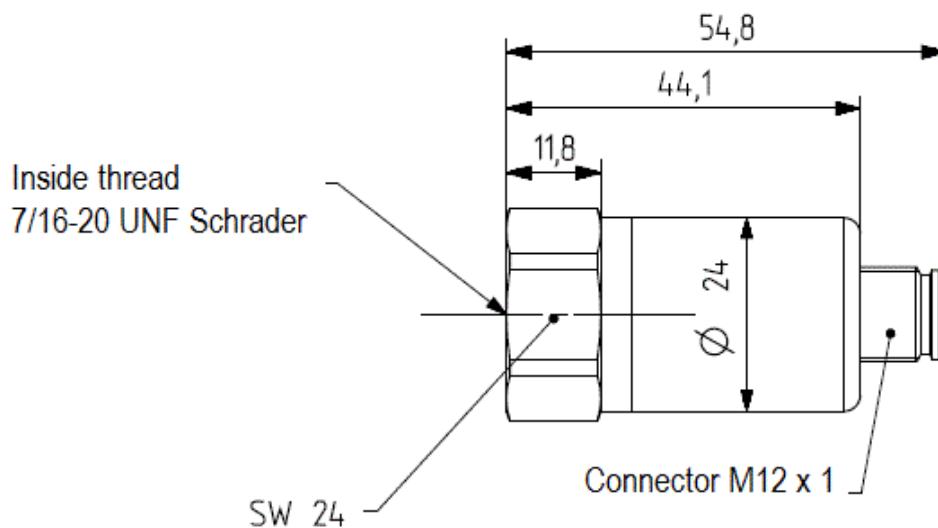
Device circuit diagram

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Connector configuration		Accessories cable M12x1
Pin	Assignment	Wire color
1	DC 11.5...33 V (IN)	brown
3	0...10 V (OUT)	blue
4	GND	black

Dimension drawings

QBE9002-P...



Dimensions in mm