Baumer
Passion for Sensors

Pressure sensor

PP20S-1.BB33R.A144.034100.004

Article number: 11263786

Overview

- Suitable for all kind of industrial application
- High accuracy over a wide temperature range (-40 … 125 °C) due to active compensated temperature compensation
- Robust and Compact stainless housing for harsh environment conditions
- Abrasive resistant due to ceramic measurement cell
- Relative pressure and vacuum measurement
- Programmable by the FlexProgrammer 9701



Picture similar

Technical data

Performance characteristics	
Pressure type	Relative (gauged)
Compensated temperature range	-10 … 60 °C
Long term stability	≤ 0.2 % FSR/a
Max. measuring error	± 0.3 % FSR Including zero-point and span error, non-linearity (by terminal base line), hysteresis and non-repeatability (EN 61298-2)
Max. turndown ratio	5 : 1
Measuring range	0 … 160 bar
Step response time	< 3 ms
Standard error of measurement (BFSL)	± 0.12 % FSR Including non-linearity, hysteresis and non-repeatability according BFSL
Power-up time	< 50 ms
Temperature coefficient	≤ 0.05 % FSR/10 K , measuring span ≤ 0.05 % FSR/10 K , zero point
Process conditions	
Process temperature	Refer to section "Operating conditions"
Process pressure	350 bar , proof pressure 500 bar , burst pressure
Process connection	
Connection variants	G 1/2 B EN 837-1
Wetted parts material	AISI 304 (1.4301) Ceramic, 96% AL2O3 NBR
Ambient conditions	
Operating temperature range	-40 … 90 °C

Ambient conditions	
Storage temperature range	-40 … 125 °C
Degree of protection (EN 60529)	IP65
Shock and vibration tests (EN 61373:1999, 2010)	Category 2 The respective most demanding severity levels of the issues 1999 and 2010 are applied in each Category 2
Output signal	
Output signal	4 … 20 mA , 2-wire
Load resistance	R ≤ (V DC - 11 V)/0.023 A, with current output
Short circuit protection	Yes
Housing	
Style	Compact transmitter
Overall size	Refer to section "Dimensional drawings"
Material	AISI 304 (1.4301)
Electrical connection	
Connector	DIN EN 175301-803 A (DIN 43650 A), 4-pin
Power supply	
Voltage supply range	11 … 35 V DC
Current consumption (no load)	23 mA , max.
Compliance and approvals	
EMC	EN 61326-1 EN 61000-6-2 EN 61000-6-3

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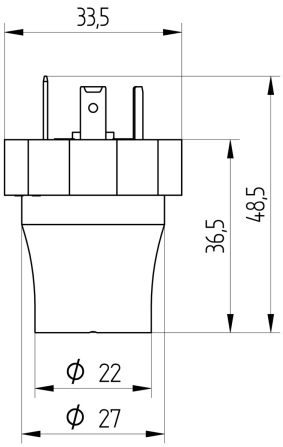
Operating conditions

Material	Process temperature	
	Air	Liquids (water or more viscuous)
	Full scale range FSR refers to upper limit of pressure measuring range of the sensor	
FKM	-5 … 125 °C @ *FSR* ≤ 400 bar	-10 … 125 °C @ *FSR* ≤ 400 bar
FVMQ	-40 … 125 °C @ *FSR* ≤ 160 bar	-40 … 125 °C @ *FSR* ≤ 160 bar
EPDM	-40 … 125 °C @ *FSR* ≤ 100 bar -30 … 100 °C @ 100 bar < *FSR* ≤ 400 bar	-40 … 125 °C @ *FSR* ≤ 100 bar -30 … 100 °C @ 100 bar < *FSR* ≤ 400 bar
NBR standard	-20 … 100 °C @ *FSR* ≤ 100 bar -10 … 100 °C @ 100 bar < *FSR* ≤ 400 bar	-20 … 100 °C @ FSR ≤ 400 bar
NBR low temperature	-30 … 100 °C @ FSR ≤ 160 bar	-30 … 100 °C @ FSR ≤ 160 bar

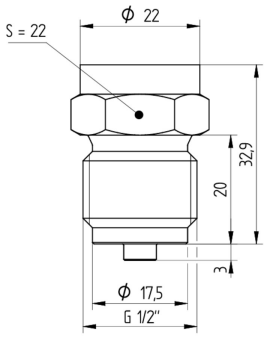
Dimensional drawings (mm)

Housing



DIN EN 175301-803 A (DIN 43650 A), 4-pin

Process connection



G 1/2 B EN 837-1 (G31)

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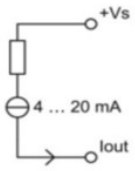
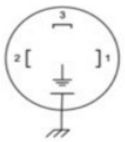
Electrical connection

Output type	Equivalent circuit	Electrical connection	Function	Pin assignment
4 … 20 mA (2-wire)			+Vs	1
			Iout	2
			Frame Ground	Grounding lug
			n.c.	3

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