Baumer
Passion for Sensors

Pressure sensor

PP20S-1.BB38R.A114.064300.004

Article number: 11252243

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 … 400 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	500 bar , proof pressure 650 bar , burst pressure
Process connection	
Connection variants	G 1/4 A DIN EN ISO 1179-2 (3852-E)
Wetted parts material	AISI 304 (1.4301) Ceramic, 96% AL2O3
Ambient conditions	
Operating temperature range	-40 … 115 °C , with current output @ voltage supply range 26.4 ... 35 V DC -40 … 125 °C , with current output @ voltage supply range 11 ... 26.3 V DC Class OT6 (EN 50155)

Ambient conditions	
Storage temperature range	-40 … 125 °C
Degree of protection (EN 60529)	IP67 IP69K
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	M12-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

2025-11-06 The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

PP20S-1.BB38R.A114.064300.004

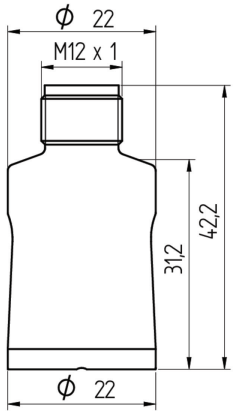
Article number: 11252243

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

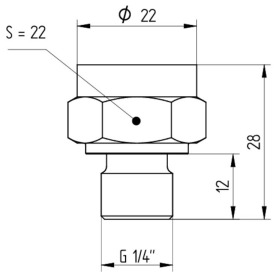
Dimensional drawings (mm)

Housing



M12-A, 4-pin

Process connection



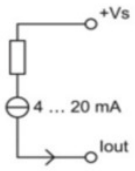
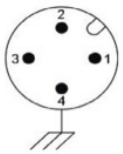
G 1/4 A DIN EN ISO 1179-2 (3852-E) (G50)

2025-11-06 The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

PP20S-1.BB38R.A114.064300.004

Article number: 11252243

Electrical connection

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

2025-11-06 The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.