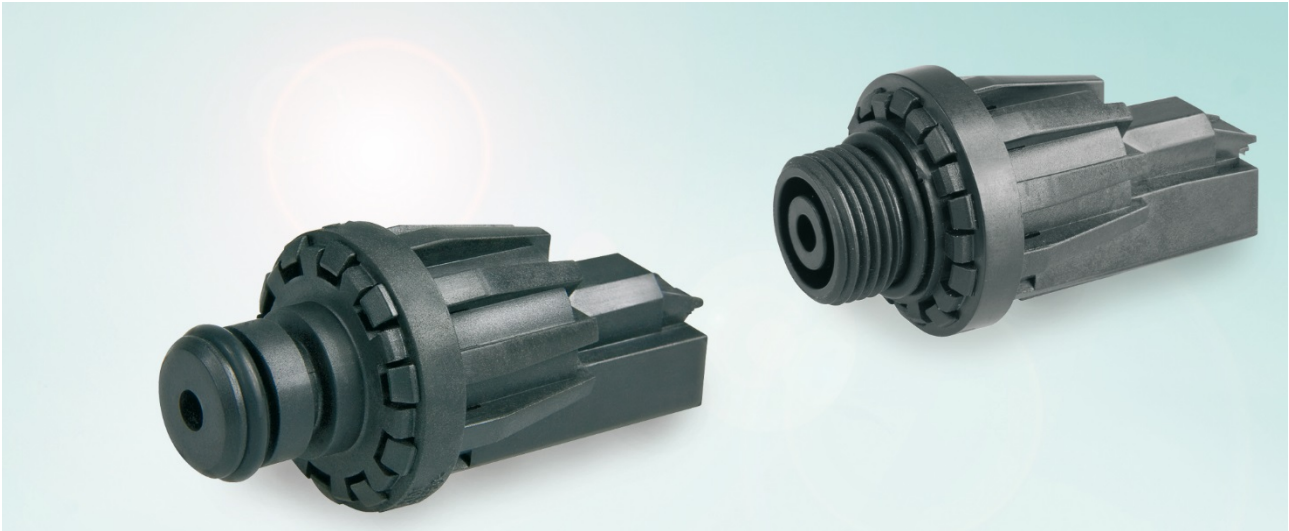




SERIES 2066.21XX – ANALOG PRESSUR SENSOR

MEASURING LIQUID AND GAS PRESSURE



ADVANTAGE

- High endurance
- Suitable for high temperatures
- Linear output signal
- High quality
- Numerous versions

PRODUCT FEATURES

- More than 150,000 pressure cycles, useful life of more than 15 years
- Robust design, special materials, strict qualification
- Analogue voltage output signal (1,125 V - 3,6 V / 0 - 4,5 bar (2066.2102))
- Fully automatic 100% final test and calibration
- Different versions available regarding measuring range, output signal, supply voltage, mechanical and electrical connection

EXAMPLES OF APPLICATION

- HVAC technology
- Heat pumps
- Solar thermal systems
- Controlled pumps and valves
- Large household appliances
- Level measuring



Medium	Heating water, water, air
Measuring range	0 ... 450 kPa / 4,5 bar / 65 psi
Burst pressure	> 0,9 MPa / 9 bar / 130 psi
Characteristic / Tolerance* at Vcc = 5,00 V DC	$U_{out} [V] = 0,58 [V/bar] \times \text{applied pressure [bar]} + 1,23 [V]$ $U_{out} [V] = 0,55 [V/bar] \times \text{applied pressure [bar]} + 1,125 [V]$ $U_{out} [V] = 0,52 [V/bar] \times \text{applied pressure [bar]} + 1,02 [V]$
→ Upper tolerance limit	
→ Ideal characteristic	
→ Lower tolerance limit	
The tolerance value includes a temperature influence of 0.01 % FS/K for the medium temperature	
→ Material housing	Grivory (glass fibre reinforced) EPDM + fabric reinforcement Certified for drinking-water / KTW, W270, FDA on request
→ Material membrane	
Medium temperatur (water)	+2 °C ... +90 °C (max. 120 °C for 10 minutes above lifetime)
Ambient temperature	-10 °C ... +70 °C
Storage temperature	-40 °C ... +70 °C
Supply voltage	5 V DC ± 0.25 V (ratiometric)
Maximum power consumption	< 14 mA (12 mA typ)
Output signal (2066.2102)	Proportional analog voltage
→ at 0 bar / → at 4,5 bar	→ 1,125 V / → 3,6 V
Terminal	Rast 2.5; 3-pole, 4-pole



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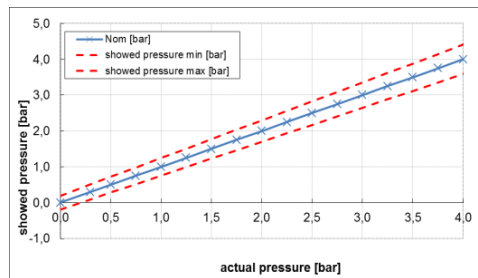
MEASURING LIQUID AND GAS PRESSURE

VARIANTS

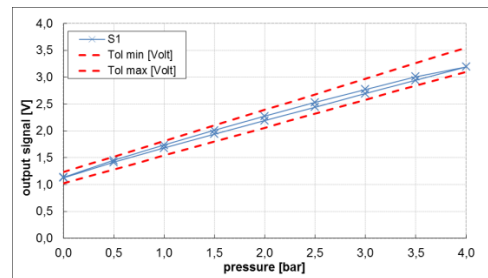
Product number	Supply voltage	Ratiometric	Voltage-controlled	Pressure range	Burst pressure	O-ring seal	3-pole (Rast 2.5)	4-pole (Rast 2.5)	Plug-on flanges	Screw flange G3/8"	Output signal Uout
2066.2102*	5 V DC $\pm 0,25$ V	●		0...4,5 bar	9 bar			●	●		0.55 V x p + 1.125 V
2066.2109*	5 V DC $\pm 0,25$ V	●		0...4,5 bar	9 bar	●		●	●		0.55 V x p + 1.125 V
2066.2112*	5 V DC $\pm 0,25$ V (protective diode)	●		0...4,5 bar	9 bar	●		●	●		0.55 V x p + 1.125 V
2066.2116*	6 - 30 V DC		●	0...4,5 bar	9 bar	●	●		●		0.75 V x p + 0.5 V
2066.2122	5 V DC $\pm 0,25$ V	●		0...4,5 bar (max. 6 bar – 2*10 min)	9 bar			●	●		0.55 V x p + 1.125 V
2066.2103*	5 V DC $\pm 0,25$ V	●		0...4,5 bar	9 bar			●		●	0.55 V x p + 1.125 V
2066.2113*	5 V DC $\pm 0,25$ V	●		0...4,5 bar	9 bar	●		●		●	0.55 V x p + 1.125 V
2066.2105	5 V DC $\pm 0,25$ V	●		0...4,5 bar	9 bar		●			●	0.5 V x p + 0.5 V
2066.2107*	6 - 30 V DC		●	0...4,5 bar	9 bar		●			●	0.75 V x p + 0.5 V
2066.2117*	6 - 30 V DC		●	0...4,5 bar	9 bar	●	●			●	0.75 V x p + 0.5 V

* Stock versions

CHARACTERISTIC CURVES



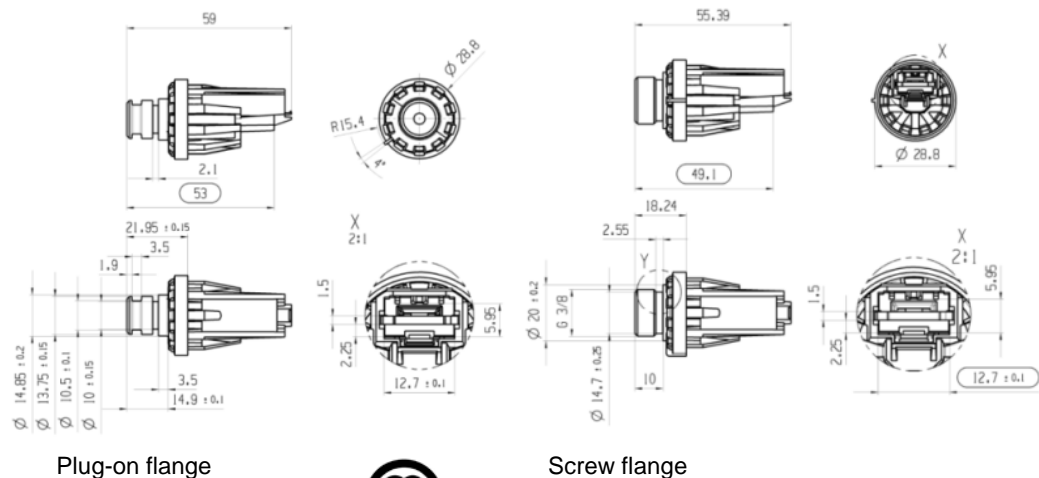
Nominal characteristic curve 2066.2102



Typical sensor characteristic curve 2066.2102

DRAWINGS

(Dimensions in mm)



Plug-on flange

Screw flange

