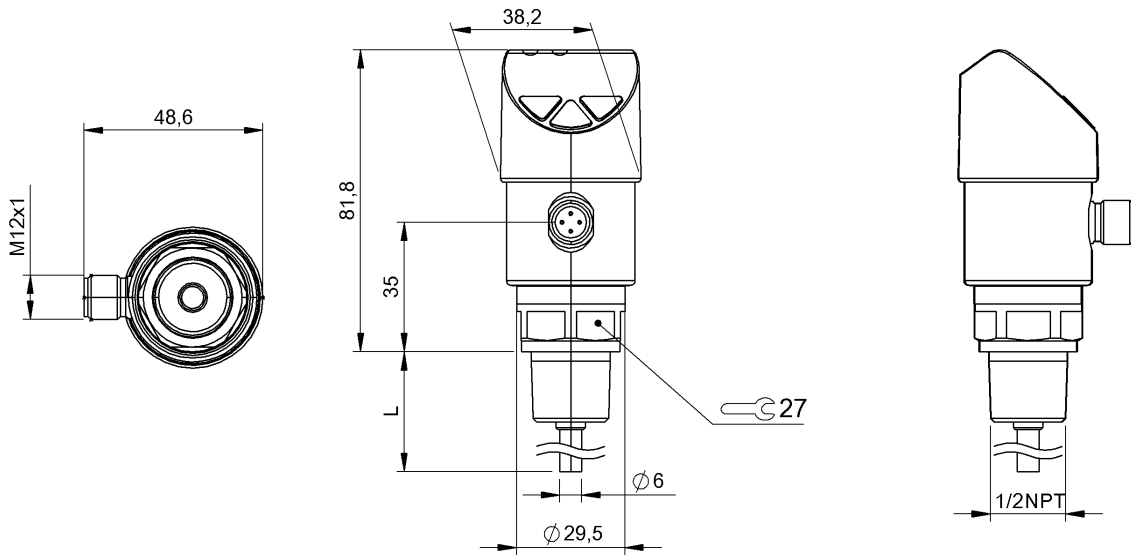


Temperature Sensors  
**BFT 6100-JC003-A02A0C-S4**  
**Order Code: BFT001A**

**BALLUFF**



**Basic features**

Approval/Conformity	CE cULus WEEE
Operating panel	3 buttons 4-digit, 14-segment display, red
Principle of operation	Temperature sensor

**Display/Operation**

Switching function display	LED
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**Electrical connection**

Connection	Connector, M12x1-Male, 4-pin
Polarity reversal protected	yes
Short-circuit protection	yes

**Electrical data**

Current draw max.	600 mA, incl. switching current
Operating voltage Ub	15...35 VDC
Switching current	100 mA
Switching cycles min.	100 mil.

**Environmental conditions**

Ambient temperature	-20...80 °C
EN 60068-2-27, Shock	50 g
EN 60068-2-6, Vibration	6 g at resonance
IP rating	IP65, IP67
Noise emission	EN 61326-2-3: 2013
Storage temperature	-20...80 °C

**Functional safety**

MTTF (40 °C)	283 a
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**Interface**

Analog output	Analog, current 4...20 mA
Switching output	PNP

**Material**

Housing material	PC/ABS TPE-E, PC, 1.4301 stainless steel
Process connection material	1.4571 stainless steel

**Mechanical data**

Installation length from contact surface	100 mm
Pressure rating max.	150 bar
Probe diameter	6 mm
Process connection	NPT 1/2" outer
Tightening torque max.	70 Nm
Weight	372 g

Temperature Sensors  
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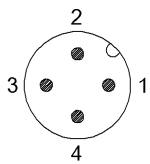


**Range/Distance**

<b>Accuracy analog signal</b>	$\leq \pm 0.5\%$ of span + temperature sensor error
<b>Accuracy display</b>	$\leq \pm (0.8\%$ of span + temperature sensor error) $\pm 1$ digit
<b>Accuracy switching output</b>	$\leq \pm 0.8\%$ of span + temperature sensor error

<b>Measuring element</b>	Pt1000
<b>Measuring range</b>	-20...80 °C
<b>Response time per IEC 60751</b>	T05 < 5 s T09 < 10 s
<b>Tolerance of the measuring resistor per IEC 60751</b>	Class A $\pm (0.15 \text{ °C} + 0.002 \text{ t})$

**Connector Drawings**



**Wiring Diagrams**

