

### 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 $U_b$	15...35 VDC
Switching current	250 mA
Switching cycles min.	100 million

### Environmental conditions

Ambient temperature	-20...80 °C
EN 60068-2-27, Shock	50 g
EN 60068-2-6, Vibration	6 g bei Resonanz
Noise emission	EN 61326-2-3:2013
Protection degree	IP65, IP67
Storage temperature	-20...80 °C

### Functional safety

MTTF (40 °C)	325 a
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### Material

Housing material	PC/ABS TPE-E, PC, Stainless steel (1.4301)
Process connection material	Stainless steel (1.4571)

### Mechanical data

Installation length from contact surface	50 mm
Pressure rating max.	150 bar
Probe diameter	6 mm
Process connection	NPT 1/2" outer
Tightening torque max.	70 Nm
Weight	340 g

### Output/Interface

Switching output	2x PNP
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Temperature Sensors  
**BFT 6050-JC003-D00A0C-S4**  
**Order Code: BFT001M**

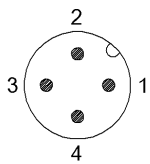
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**Range/Distance**

<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 $\pm (0.15 \text{ }^\circ\text{C} + 0.002 \text{ t})$

**Connector Drawings**



**Wiring Diagrams**

