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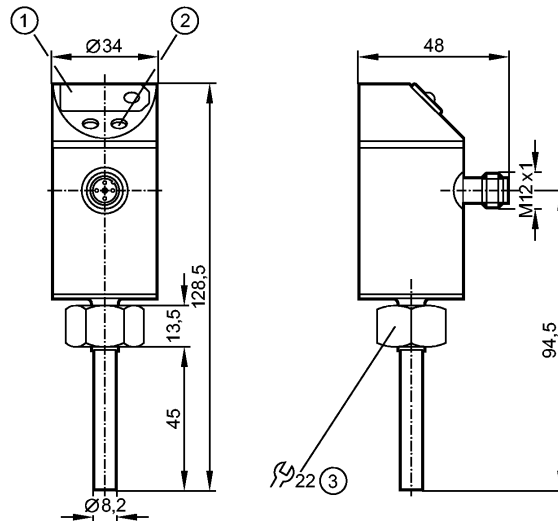
efector600

TN7530



TN-013KBBD10-QFPKG/US/ IV

Temperature sensors



- 1: 7-segment LED display
- 2: Programming button
- 3: internal thread M18 x 1.5



Product characteristics

Electronic temperature sensor

for adapter

Process connection: internal thread M18 x 1.5 for adapter

gold-plated contacts

2 switching outputs

7-segment LED display


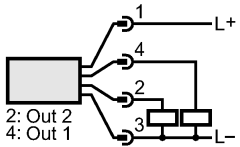
Measuring range: -40...125 °C / -40...257 °F

Measuring element: 1 x Pt 1000, to DIN EN 60751, class B

Application

Application	liquids and gases	
Pressure rating [bar]	300	
Minimum installation depth [mm]	15	
Electrical data		
Electrical design	DC PNP	
Operating voltage [V]	18...30 DC	
Current consumption [mA]	< 50	
Insulation resistance [MΩ]	> 100 (500 V DC)	
Protection class	III	
Reverse polarity protection	yes	
Outputs		
Output	2 switching outputs	
Output function	2 x normally open / closed programmable	
Current rating [mA]	250	
Voltage drop [V]	< 2	
Short-circuit protection	yes (non-latching)	
Overload protection	yes	
Measuring / setting range		
Measuring range	-40...125 °C	-40...257 °F
Setting range		

TN7530 - Electronic temperature sensor - eclass: 27200208 / 27-20-02-08

Set point, SP	-39.5...125 °C	-39...257 °F
Reset point, rP	-40...124.5 °C	-40...256 °F
in steps of	0.5 °C	1 °F
Resolution		
Switching output [K]		0.5
Display [K]		0.5
Accuracy / deviations		
Switch point accuracy [K]		± (Pt 1000 + 0.2 K)
Display [K]		± (Pt 1000 + 0.2 K + ½ Digit)
Temperature drift (/ 10 K) [K]		0.1
Reaction times		
Power-on delay time [s]		1.5
Dynamic response T05 / T09 [s]		1 / 3 *)
Integrated watchdog		yes
Software / programming		
Adjustment of the switch point		Programming button
Programming options	hysteresis / window; normally closed/open; min./max. memory reset; °C/°F selectable; adjustment up to ± 10 K	
Environment		
Ambient temperature [°C]		-25...70
Storage temperature [°C]		-40...100
Protection		IP 67
Tests / approvals		
EMC	EN 61000-4-2 ESD:	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated:	10 V/m
	EN 61000-4-4 Burst:	2 kV
	EN 61000-4-6 HF conducted:	10 V
Shock resistance	DIN IEC 68-2-27:	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
Mechanical data		
Process connection		internal thread M18 x 1.5 for adapter
Materials (wetted parts)		stainless steel 316L / 1.4404
Probe length L [mm]		45
Housing materials	stainless steel (304S15); EPDM/X (Santoprene); PC Copolymer; PBT (Pocan); FPM (Viton); PA	
Weight [kg]		0.245
Displays / operating elements		
Display	Switching status	2 x LED red
	Function display	7-segment LED display
	Measured values	7-segment LED display
Electrical connection		
Connection	M12 connector; gold-plated contacts	
Wiring		
Programming of the output function: Hno = hysteresis / N.O. Hnc = hysteresis / N.C. Fno = window function / N.O. Fnc = window function / N.C.		
Remarks		
Remarks	*) according to DIN EN 60751 The values for accuracy apply to flowing water.	
Pack quantity [piece]		1