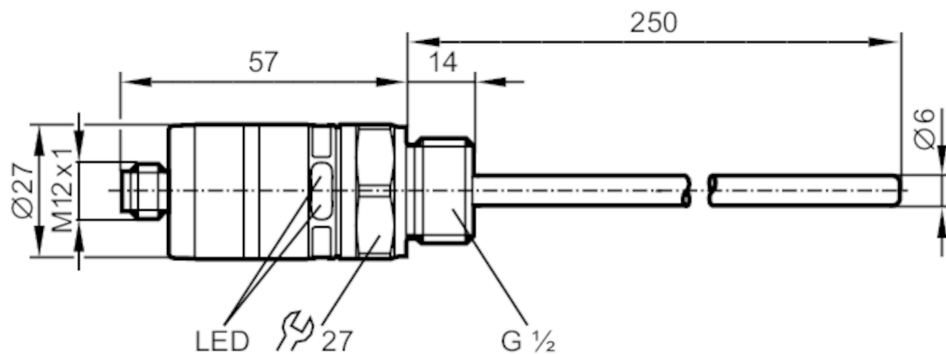


Temperature switch with intuitive switch point setting

TK-250CLFR12-QKPKG / US



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2	
Measuring range	-25...140 °C	-13...284 °F
Process connection	threaded connection G 1/2 external thread	
Installation length EL [mm]	250	

Application

Special feature	Gold-plated contacts	
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)	
Media	liquids and gases	
Medium temperature [°C]	-40...145	
Pressure rating [bar]	300	
Pressure rating [MPa]	30	

Electrical data

Operating voltage [V]	9.6...32 DC; ("supply class 2" to cULus)	
Current consumption [mA]	< 30	
Protection class	III	
Reverse polarity protection	yes	
Power-on delay time [s]	0.5	

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 2
------------------------------	------------------------------

Outputs

Total number of outputs	2
Output signal	switching signal
Electrical design	PNP
Number of digital outputs	2
Output function	normally open / normally closed
Max. voltage drop switching output DC [V]	2
Permanent current rating of switching output DC [mA]	500



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Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Probe length L	[mm]	236	
Measuring range		-25...140 °C	-13...284 °F
Set point SP		-20...140 °C	-4...284 °F
Accuracy / deviations			
Temperature drift per 10 K	[K]	0.1 **)	
Repeatability	[K]	± 0,1	
Setting accuracy	[K]	± 3	
Response times			
Dynamic response T05 / T09	[s]	1 / 3; (to DIN EN 60751)	
Software / programming			
Adjustment of the switch point		setting rings	
Operating conditions			
Ambient temperature	[°C]	-40...80	
Note on ambient temperature		at medium temperature: < 80 °C	
		-40...50 °C	
		at medium temperature: < 145 °C	
Storage temperature	[°C]	-40...100	
Protection		IP 67	
Tests / approvals			
EMC		DIN EN 61000-4-2 ESD	4 kV CD / 8 kV AD
		EN 61000-4-3 HF radiated	10 V/m
		DIN 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)
MTTF	[years]	643.1	
UL approval		UL Approval no.	K018
Mechanical data			
Weight	[g]	142	
Housing		cylindrical	
Dimensions	[mm]	Ø 27 / L = 307	
Materials		stainless steel (316L/1.4404); PC; PBT; FKM	
Materials (wetted parts)		stainless steel (316L/1.4404); FKM	
Tightening torque	[Nm]	45	
Process connection		threaded connection G 1/2 external thread	
Probe diameter	[mm]	6	
Installation length EL	[mm]	250	
Displays / operating elements			
Display		switching status	2 x LED, yellow



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Remarks

Remarks

**) in case of deviation from the reference condition 25 °C

The values for accuracy apply to flowing water.

Pack quantity

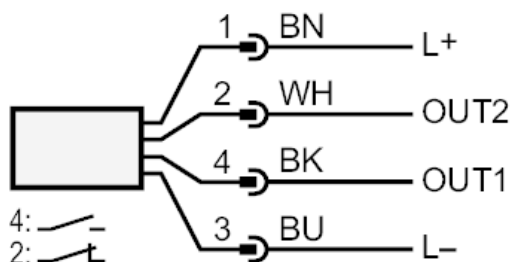
1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



colours to DIN EN 60947-5-2

Core colours :

BK = black
 BN = brown
 BU = blue
 WH = white