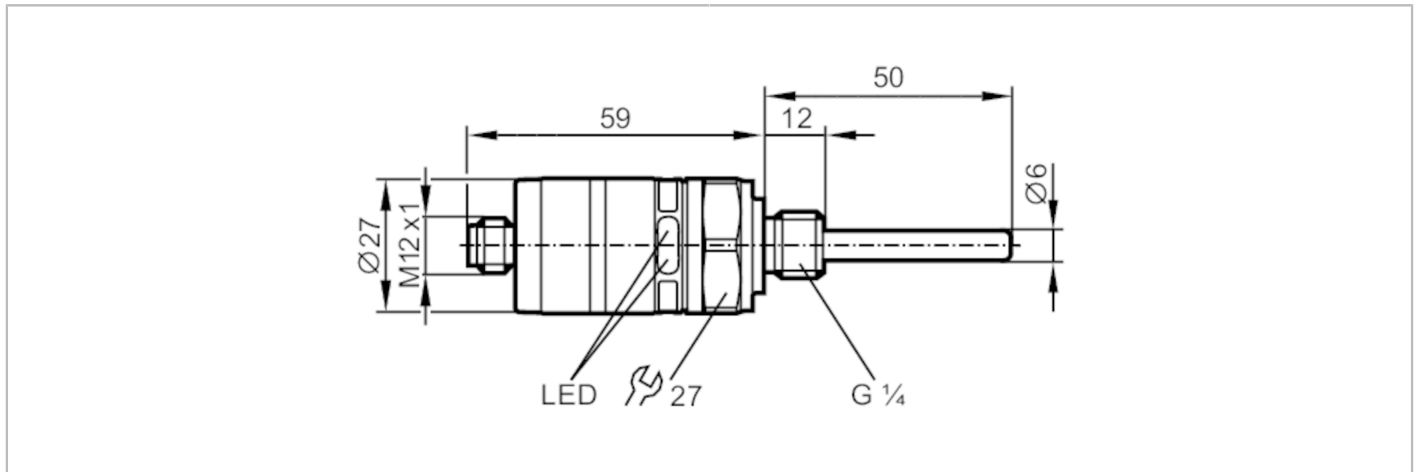


TK7110



Temperature switch with intuitive switch point setting

TK-050CLFR14-QSPKG / 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 1/4 external thread	
Installation length EL [mm]	50	

Application

System	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	400 bar	40 MPa

Electrical data

Operating voltage [V]	9.6...32 DC; (cULus - Class 2 source required)	
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	
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Outputs

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

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Type of short-circuit protection	yes (non-latching)	
Overload protection	yes	
Measuring/setting range		
Probe length L [mm]	38	
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	
Reaction times		
Dynamic response T05 / T09 [s]	1 / 3; (according 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	
Storage temperature [°C]	at medium temperature: < 145 °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 number	K018
Mechanical data		
Weight [g]	103.5	
Housing	tubular	
Dimensions [mm]	Ø 27 / L = 109	
Material	stainless steel (1.4404 / 316L); PC; PBT; FKM	
Materials (wetted parts)	stainless steel (1.4404 / 316L); FKM	
Tightening torque [Nm]	35	
Process connection	threaded connection G 1/4 external thread	
Probe diameter [mm]	6	
Installation length EL [mm]	50	
Displays / operating elements		
Display	Switching status	2 x LED, yellow

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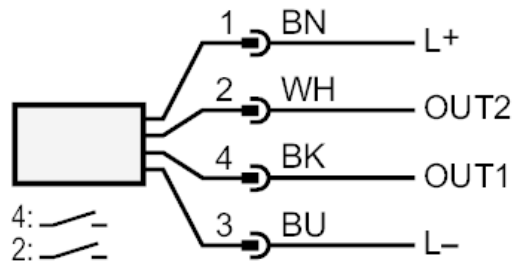
Remarks	
Remarks	**) In case of deviation from the reference condition 25 °C The values for accuracy apply to flowing water.
Pack quantity	1 pcs.

Electrical connection

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



Connection



Colors to DIN EN 60947-5-2
Core colors :
BK = black
BN = brown
BU = blue
WH = white