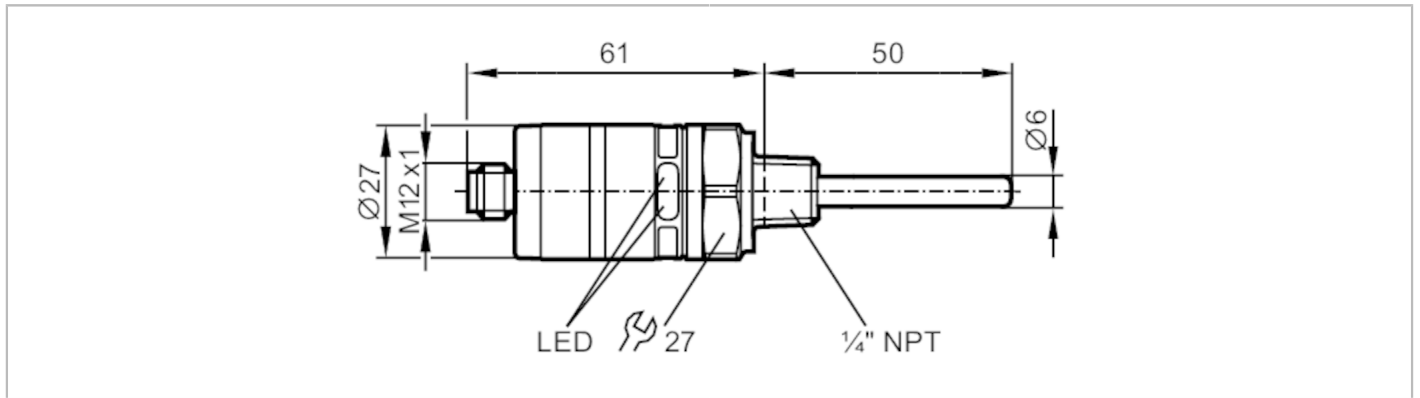


# TK7310



## Temperature switch with intuitive switch point setting

TK-050CLFN14-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 1/4" NPT	
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 [bar]	400	

### 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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# TK7310



## Temperature switch with intuitive switch point setting

TK-050CLFN14-QSPKG / US

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
Type of short-circuit protection		yes (non-latching)
Overload protection		yes
Measuring/setting range		
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
UL approval	UL approval number	K018

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## Temperature switch with intuitive switch point setting

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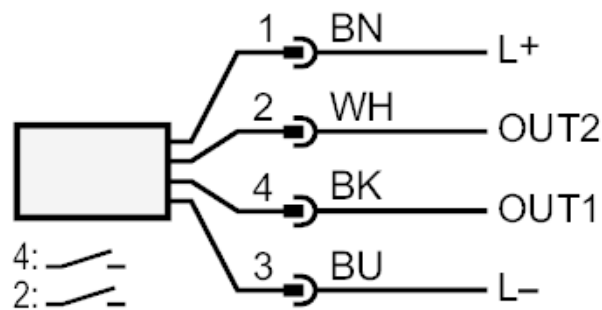
Mechanical data		
Weight	[g]	101
Material		stainless steel (1.4404 / 316L); PC; PBT; FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L); FKM
Process connection		threaded connection 1/4" NPT
Probe diameter	[mm]	6
Installation length EL	[mm]	50
Displays / operating elements		
Display	Switching status	2 x LED, yellow
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