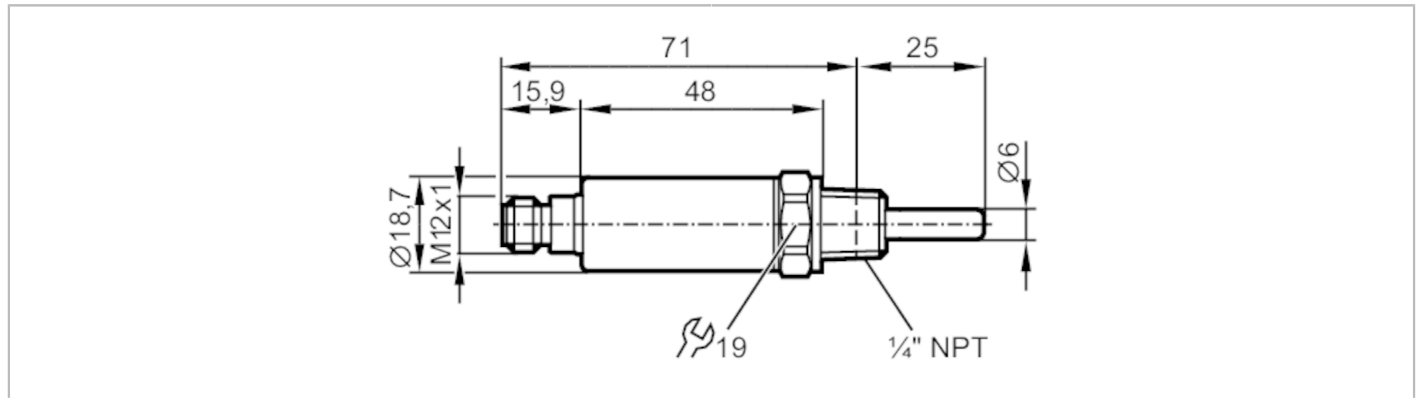


TV7603



Temperature sensor with IO-Link

TV7-025FLEN14-QFRVG/US



Product characteristics

Number of inputs and outputs	Number of digital outputs: 2
Measuring range [°F]	-58...302
Communication interface	IO-Link
Process connection	threaded connection 1/4" NPT external thread
Installation length EL [mm]	25

Application

System	gold-plated contacts
Measuring element	1 x Pt 1000; (to DIN EN 60751, class A)
Media	liquids and gases
Pressure rating	400 bar / 40 MPa
Note on pressure rating	sensor When mounted in adapters the specifications of the adapter data sheet apply.

Electrical data

Operating voltage [V]	18...32 DC; (cULus - Class 2 source required)
Current consumption [mA]	< 50
Protection class	III
Reverse polarity protection	yes
Power-on delay time [s]	1
Integrated watchdog	yes

Inputs / outputs

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

Outputs

Total number of outputs	2
Output signal	switching signal; IO-Link; (configurable)
Electrical design	PNP/NPN
Number of digital outputs	2
Output function	normally open / closed; (configurable)
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	100

TV7603



Temperature sensor with IO-Link

TV7-025FLEN14-QFRVG/US

Measuring/setting range		
Probe length L	[mm]	17.1
Measuring range	[°F]	-58...302
Set point SP	[°F]	-57.6...302
Reset point rP	[°F]	-58...301.6
In steps of	[°F]	0.1
Resolution		
Resolution of switching output	[K]	0.1
Accuracy / deviations		
Switch point accuracy	[K]	± 0,3
Temperature drift per 10 K	[K]	0.1 **)
Reaction times		
Dynamic response T05 / T09	[s]	1 / 3; (according to DIN EN 60751)
Software / programming		
Parameter setting options	hysteresis / window; normally open / closed; switching logic; switch-on/switch-off delay; Damping; Display unit	
Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Process data variable
	Function	Device diagnosis
Min. process cycle time	[ms]	3.2
Supported DeviceIDs	Type of operation default	DeviceID 778
Operating conditions		
Ambient temperature	[°C]	-40...80
Note on ambient temperature	at medium temperature: < 125 °C	
	-40...50 °C	
Storage temperature	at medium temperature: < 150 °C	
	-40...100	
Protection	IP 69K	
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-3	
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]	542.6
UL approval	UL approval number	K019
Mechanical data		
Weight	[g]	75
Housing	tubular	

TV7603



Temperature sensor with IO-Link

TV7-025FLEN14-QFRVG/US

Dimensions	[mm]	Ø 18.7 / L = 96
Material		stainless steel (1.4404 / 316L); FKM
Materials (wetted parts)		stainless steel (1.4404 / 316L)
Process connection		threaded connection 1/4" NPT external thread
Probe diameter	[mm]	6
Installation length EL	[mm]	25

Remarks

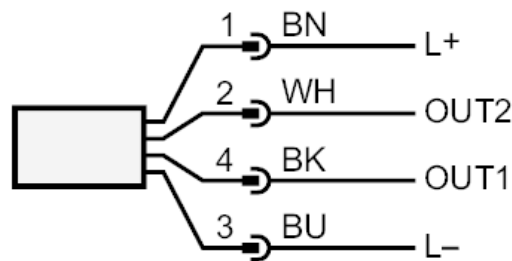
Remarks	The values for accuracy apply to flowing water.
Pack quantity	1 pcs.

Electrical connection

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



Connection



OUT1: Switching output / IO-Link
OUT2: Switching output
Colors to DIN EN 60947-5-2
Core colors :
BK = black
BN = brown
BU = blue
WH = white