PCT710 Intelligent Temperature Switch

Features

- High precision
- Adjustable response time
- NPN, PNP compatible, free switching
- Button operation, shortcut button for one-key zero calibration, quick unit switching
- OLED shows the current temperature
- Node Action Indicator LED, easy to observe

Applications and industries

- Hydropower
- Chemical industry
- City water supply
- Scientific research
- Accurate measurement and control of temperature

Notes:

1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.

2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.

3 Strictly follow the wiring method for wiring; otherwise, it may cause product damage or other potential faults.

4 Misuse of the product may cause danger or personal injury.

Product overview

The electronic digital display temperature switch is an intelligent digital display pressure measurement & control product which integrates temperature measurement, display, output, and control functions. This product, with a full-electronic structure, adopts the PT100 high-precision temperature sensor at the front end. The output signal is processed by the pre-amplification electric circuit and then sent into a high-precision A/D converter. Through arithmetic processing by an advanced industrial-grade microprocessor, the output signal is displayed on-site with a 2-way switch quantity, accomplishing the measurement and control for the control system temperature.

This intelligent digital temperature switch has the advantages of flexible use, simple operation, easy commissioning, and high safety and reliability. It is widely used in hydropower, tap water, petroleum, chemical, mechanical, hydraulic, and other industries for the measurement, display, and control of the medium temperature.

Notes:

1 Do not misuse documentation.

2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.

3 Complete installation, operation, and maintenance information is provided in the instructions of the product.

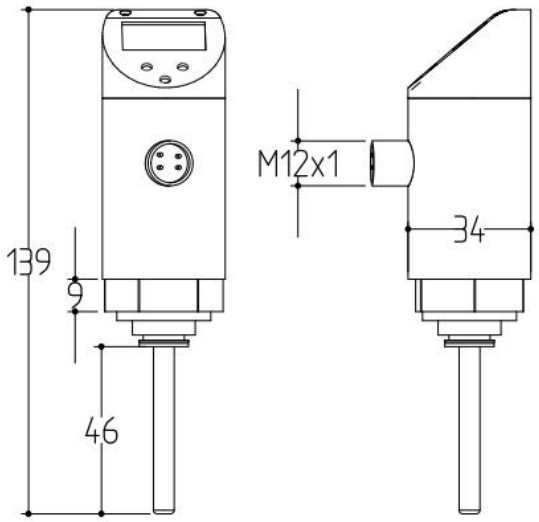
4 Misuse of the product may cause danger or personal injury.

Performance parameters	
Measurement range	-50℃~200℃ (-58℉~392℉)
Accuracy	0.5%FS
Display unit	℃/℉
Electrical connector	M12×1 round plug
Power supply	12~30V, 24V recommended
Display mode	OLED display of 4 digits
Output mode	2-way switch quantity, NPN and PNP compatible + 4~20mA
Load capacity	≤24V1.2A
Power consumption	≤15mA
Medium temp.	-50℃~200℃
Operating temp.	-25℃~80℃
Storage temp.	-40℃~100℃
Response time	≤20ms
Insulation	200MΩ/250VDC
Protection grade	IP65

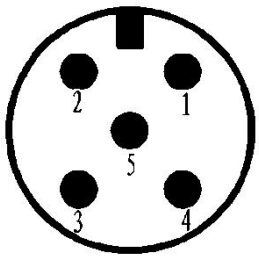
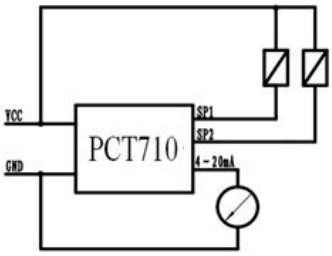
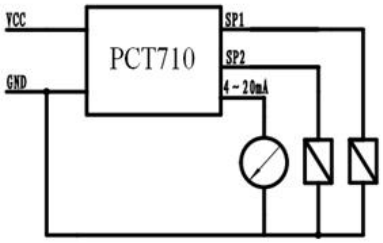
Structural performance parameters	
Housing material	304
Medium compatibility	Liquid contacting diaphragm 316L, pressure port 304
Panel material	PA66

Outline dimension

In mm

Dimension	

Wring method

M12×1	Wiring definition	Wiring diagram
	1: VCC (Supply +) 2: GND (Supply -) 3: SP1 (Switch 1) 4: SP2 (Switch 2) 5: 4~20mA	 NPN output wiring diagram  PNP output wiring diagram

How to order

PCT710 - (-50~-150) - C3 - D6 - L100

Product model
PCT710

Temperature range

Pressure connection
C1 = M20×1.5
C2 = G1/2
C3 = G1/4
C5 = NPT1/4
Others

Length
L50: The rod length is 50mm
L100: The rod length is 100mm
L150: The rod length is 150mm
L200: The rod length is 200mm
L250: The rod length is 250mm
L300: The rod length is 300mm
L350: The rod length is 350mm
L400: The rod length is 400mm
L450: The rod length is 450mm
Others

Probe diameter
D6: 6mm
Others

Example: PCT710-(-50~150)C3D6L100

Refer to PCT710 Digital Display Temperature Switch, temperature range -50℃~150℃, pressure connection G1/4, probe diameter 6mm, rod length 100mm.

Accessory	
Name	**Specification**
M12×1 female with wires	M12×1 female 5-pin with wires 2m

Ordering tips

1 Ensure the measured medium is compatible with the contacting part of the product.
2 For special requirements on the appearance and performance parameters, customization is available.

Contact us

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