

Please refer to page 5 for detailed selection



WTD-500

Intelligent Temperature Switch

Product Description

Industrial instrument level intelligent temperature control switch, specially developed for industrial working conditions, equipped with high-precision industrial grade temperature sensors and intelligent computing chips, accurate temperature measurement, rapid response, and real-time accurate monitoring of equipment, pipelines, and internal temperature of enclosures. Support custom upper and lower temperature limits, hysteresis temperature control parameters, achieve fully automatic closed-loop control of over temperature shutdown and low temperature start-up, stable temperature control without deviation, suitable for continuous and uninterrupted industrial operations.

Equipped with an industrial high-definition digital display interface, the data is intuitive and clear, and it is not afraid of strong light and dim environments in the workshop; Easy button debugging, parameter locking to prevent misoperation. The whole machine adopts a thickened shell, which is dustproof, moisture-proof, anti-interference, and resistant to high and low temperatures, suitable for complex and harsh production environments. Built in multiple power-off protections for overcurrent, overload, overheating, and short circuit, eliminating equipment burnout and safety hazards.

Suitable for conventional industrial voltage, standardized wiring, stable installation, wall mounted and rail mounted, suitable for various industrial heating equipment, drying ovens, pipeline tracing, machine tool equipment, reactor auxiliary temperature control, storage temperature control, machine room equipment temperature control and other scenarios. Intelligent start stop on-demand heating, effectively reducing energy consumption and extending equipment service life, is a professional supporting instrument accessory for precise and automated temperature control in industrial production.

Scope of application

This product is compact in size, integrating temperature measurement, display, output, and control. It is flexible to use, easy to operate, safe and reliable, and widely used in various industries such as automation machinery and equipment, environmental protection petrochemicals, and water treatment.

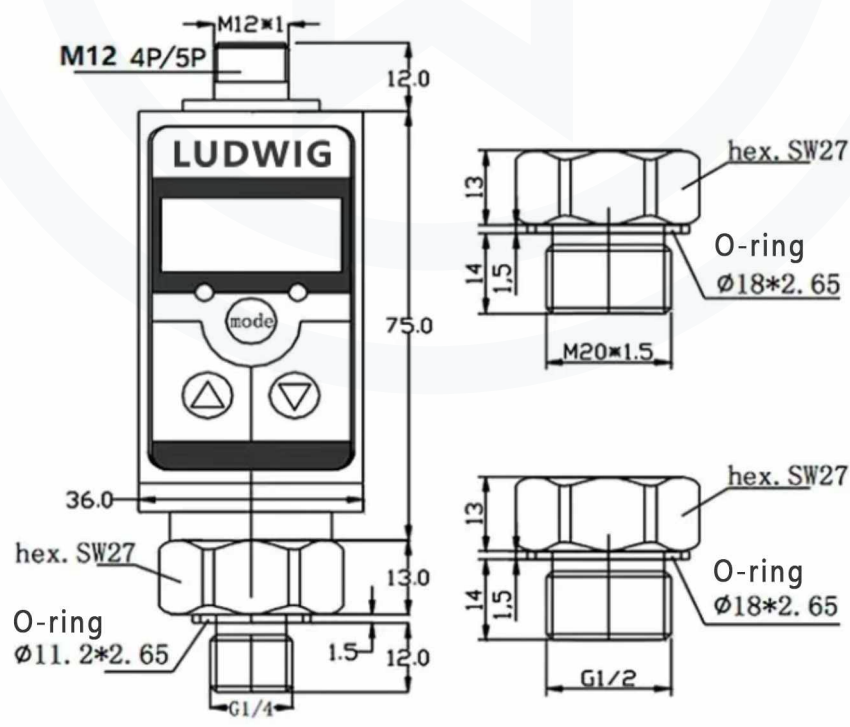
Features

Industrial instrument intelligent temperature control switch, with high-precision industrial grade temperature control capability, equipped with professional temperature sensors and intelligent computing chips, accurate temperature measurement, rapid response, customizable temperature upper and lower limits and hysteresis parameters, achieving closed-loop control of automatic shutdown for over temperature and automatic start for low temperature. Equipped with an industrial grade high-definition digital display interface, data is clear and visible in strong and dim environments. The buttons are easy to debug and support parameter locking to prevent workshop misoperation. The whole machine adopts a flame-retardant and explosion-proof shell, which is dustproof, moisture-proof, anti-interference, and suitable for complex industrial working conditions. It is equipped with multiple safety protections such as overcurrent, overload, and overheating, and is suitable for industrial voltage. It can be installed on rails or wall mounted, with intelligent start stop temperature control as needed, energy-saving, and can extend the service life of equipment, meeting the precise temperature control needs of industrial continuous operation.

Technical Parameters

Product Name	Intelligent temperature switch
Product Model	WTD-500
measurement range	-50~0~450 ° C (optional within the range)
output signal	NPN/PNP control output, can increase 4-20mA
install thread	M20 * 1.5 (default) G1/2、 Customization
power supply	12-24V (default)
compensation temperature	-20~70°C
measurement accuracy	0.5% FS (default), 0.2% FS, 0.1% FS
Operating Temperature	-40~85°C
Enclosure protection	IP65
Media compatibility	Various fluid media compatible with 316 stainless steel
measuring medium	Gas, liquid, water, oil
Overload pressure	150%FS
long-term stability	+0.2% FS/year

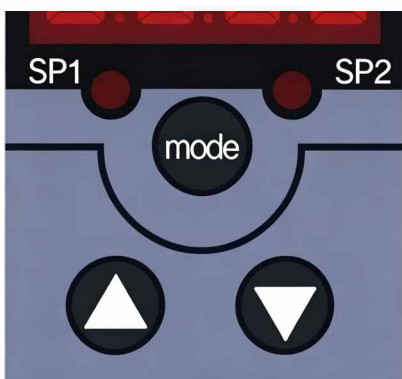
Product dimensions



LUDWIG

304 Stainless Steel Material

Custom Threads Available



LUDWIG

4-Digit Display

Buttons support on-site setup and various parameters, easy to operate

One Solution for One Solution for Multiple Conditions

Water, Gas, Oil, Liquid – Multi-Industry Use



Smelting Plant



Petrochemical Plant



Power Equipment



Mauufacturing Industry



Fearless of any harsh environment

IP65 waterproof and dustproof design

Carefully selected materials, beautiful and durable

Selected stainless steel material with high temperature resistance and corrosion resistance

Five core aviation plug connection

M12 connection operation is simple and easy to debug

Product wiring

The schematic diagram of the four wire system wiring is shown in Figures 5-2 and 5-3.

The schematic diagram of the five wire system wiring is shown in Figure 5-4.

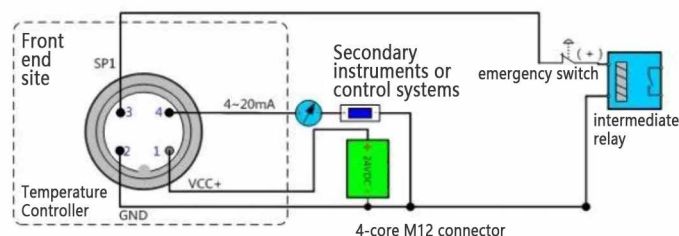


Figure 5-2 1-channel switch value+4~20mA analog signal

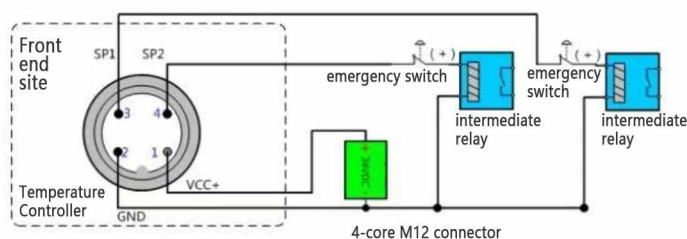


Figure 5-3 2 Switching output, no analog signal (4-wire system)

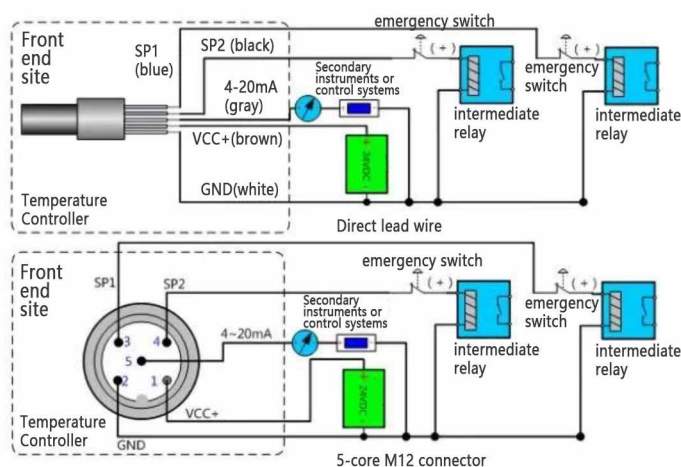


Figure 5-4 2-channel switch+4~20mA analog signal output (5-wire)



WTD-500 Intelligent Temperature Control Switch

Example of Selection **WTD-500**

1	2	3	4	5	6	7	8	9	10	11
A	I	D	N	X	Z	D	P	D	S	0-400

1. Instrument type	A	Digital temperature transmitter
	T()	Other types
2. Electrical interface	G	1/2NPT
	H	3/4NPT
	I	M20*1.5
	J	M16*1.5
	K	M12*1.5
	T()	Other electrical interfaces
3. Output signal	D	2-channel NPN
	F	2-channel PNP
	G	2-channel NPN+4-20MA
	H	2-channel PNP+4-20mA
4. Input signal	N	Pt100, B
	O	Pt100, A
	P	Pt1000, B
	Q	Pt1000, A
	R	K(NiCr-Ni)
	S	E(NiCr-CuNi)
	W	N(NiCrSi-NiSi)
	U	J(Fe-CuNi)
	V	J(T-CuNi)
	T()	Other measuring components
5. Switch output	X	Normally Open
	Y	Normally closed
6. Wire system	Z	2-wire system
	W	3-wire system
	S	4-wire system
	T()	Other wire systems
7. Thread connection specifications	A	1/2NPT
	B	3/4NPT
	C	1/4NPT
	D	G1/2
	E	G3/4
	F	G1/4
	G	G1/8
	H	G3/8
	I	G1
	J	M8×1.0
	K	M10×1.0



WTD-500 Intelligent Temperature Control Switch

Example of Selection **WTD-500**

1	A	2	I	3	D	4	N	5	X	6	Z	7	D	8	P	9	D	10	S	11	0-400
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----	---	----	-------

7. Thread connection specifications	L	M12×1.5																			
	M	M14×1.5																			
	N	M18×1.5																			
	O	M20×1.5																			
	T()	Other Specifications																			
8. Probe length (mm)	R	50																			
	S	100																			
	P	150																			
	U	200																			
	V	250																			
	W	300																			
	X	350																			
	Y	400																			
	Z	450																			
	I	500																			
	T()	Other lengths																			
9. Probe diameter mm	A	3																			
	B	4																			
	C	5																			
	D	6																			
	E	8																			
	F	10																			
	T()	Other lengths																			
10. Material of probe rod	S	304SS																			
	L	316L																			
	T()	Other materials																			
11. Temperature range	C()	Set temperature range (unit: °C)																			
	F()	Set temperature range (unit: °F)																			
12. Special requirements	A	Additional information																			
	N	None																			

Instructions:

WTD-500 intelligent temperature control switch, electrical interface M20 * 1.5, output 2-channel NPN, input signal Pt100, B-class, switch output normally open, thread specification G1/2, probe length 150mm, probe diameter 6mm, probe material 304 stainless steel, temperature range 0-400 °C. The 12th item in the table is optional.

Product Certification

Compliance and approval; Rod Weige flowmeter meets key standards and certifications for process measurement technology; Thus ensuring the highest reliability in such settings;