NEO WAVE®

OverView

TxTA03 temperature sensor uses high-precision platinum resistance with a 304 stainless steel probe, ensuring durability and corrosion resistance. It offers multiple installation options and suits various industries, including petroleum, chemical, HVAC, and hydrology
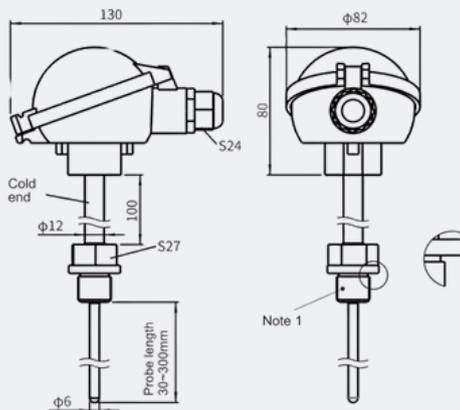
Features

- Material: 304 stainless steel, corrosion-resistant, excellent mechanics.
- Feature: Reverse protection function.
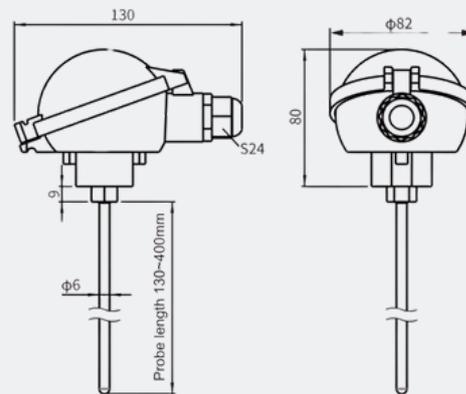- Protection: High level, up to IP65.

Applications

- Petroleum
- Chemical
- Heating
- Hydrology,
- HVAC
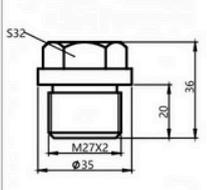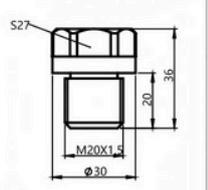- other industrial site temperature measurement.

Dimensions

· Sleeved Type ·
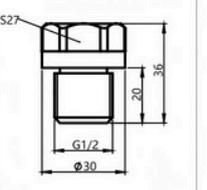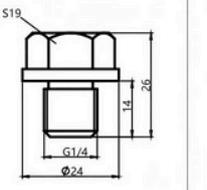

· Direct Insert Type ·

Thread Size					
Thread Spec	M27*2	M20*1.5	G1/2	G1/4	Clamp size 50.5MM

PARAMETRIC CURVE

① Pressure resistance characteristics

The pressure that protective tube withstand changes with the tube length (see the figure below)

$P(PSI)$ $P(MPa)$

A Medium temperature T=50°C
B Medium temperature T=400°C

A

B

L (mm)
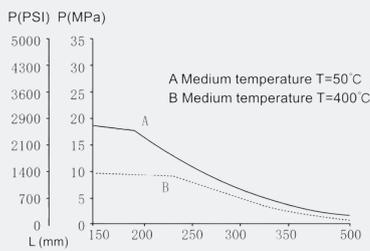
Protective tube diameter 6MM, wall thickness 1.0MM,
L: immersion depth, P: process pressure

② Medium flow

The maximum medium flow rate that the protective tube can withstand decreases with the increase of insertion depth (see the figure below)

V (tf/s) v (m/s)

Water T=50°C

L (mm)
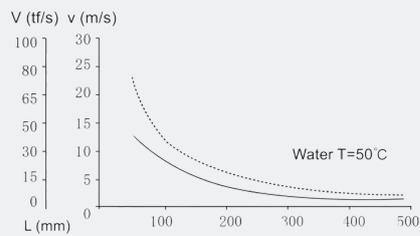
Protective tube diameter 6MM, wall thickness 1.0MM,
L: immersion depth V: flow rate

Wiring Instructions

• RS485 Output

Transmitter
(V+)
(GND)
(A)
(B)

+ U −
Power (VDC)

Collecting Device
PC
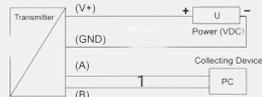
• Current Output (two wire system)

Transmitter
(V+)
(V-)

+ U −
Power (VDC)

A
Collecting Device
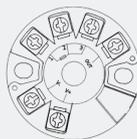
• Voltage Output (three wires ystem)

Transmitter
(V+)
(V-)
(OUT)

+ U −
Power (VDC)

Collecting Device
V
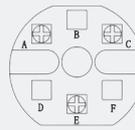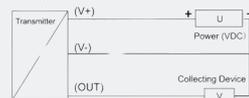
A   C   E
Red Red White

PT100/PT1000
output wiring diagram

NEO WAVE®

Specifications:

Armored Temperature Sensor

Measuring medium	Liquid or gas, etc. (compatible with contact materials)
Range	-50~300℃ (see range parameter selection table for details)
Output Signal	4~20mA / 0~10VDC / RS485 / PT100 / PT1000
Supply Voltage	15~35VDC
Accuracy	0.25%FS, 0.5%FS
Housing material	Die-cast aluminum housing, 304 stainless steel probe rod and casing
Working Environment	-40~85°C, 0~95%RH (No condensation)
Protection level	IP65 (Note: this protection level refers to the level achieved after the electrical connection is complete)

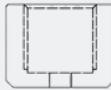## ACCESSORIES (NEED PURCHASE SEPARATELY)

ACCESSORIES PURCHASE SEPARATELY)

Welded ring	Adapter	Protective tube
Staged welded ring / Flat welded ring	Clamp adapter / Flange adapter / Ferrule adapter	Integrated sleeve / Ferrule tube
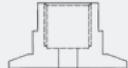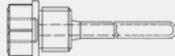
neowave.tech

NEO WAVE®

Selection Code:

Code and description				Remark
TxTA03	Armored Temperature Sensor			Model
V10	0~10VDC(3-wire)	1	Pt100, ±0.2°C@0°C	Temperature Output
A	4~20mA(2-wire)	2	Pt1000, ±0.2°C@0°C	
RS	RS485/Modbus			
25	0.25%FS			Accuracy
50	0.5%FS			
1	0~100°C	4	-50~150°C (with cold end)	Temperature Range
2	0~200°C (with cold end)	5	-50~300°C (with cold end)	
3	0~300°C (with cold end)	9	customized (-50~300°C)	
1	Wiring Box			Wiring Box
G2	G1/2 male (fixed thread installation	Sleeved Type		Installation Method
G4	G1/4 male (fixed thread installation)			
M	M16*1.5 male (fixed thread installation)			
M2	M20*1.5 male (fixed thread installation)			
M7	M27*2 male (fixed thread installation)			
C	Clamp (50.5MM)			
D	Direct Insert Type			
1	without			Protective Tube
2	with			

NEO WAVE®

1	30mm		
2	50mm		
3	100mm	**Sleeved Type**	
4	150mm		
5	200mm		
6	300mm		**Probe length (without thread)**
9	customized		
1D	130mm		
2D	200mm		
3D	250mm	**Direct Insert Type**	
4D	300mm		
5D	400mm		
9D	customized		

1	Without cold end (15mm)	
2	Cold end length 100mm)	**Code End**
9	Customized	

neowave.tech