

FEATURES

- High definition LCD display, multi-parameter on-site settings;
- Multiple output signals to meet different applications;
- Protection of reverse connection, lightning strike, current limit, over-voltage, industrial grade anti-interference performance;
- Wide voltage power supply, high precision, small temperature drift, good stability.



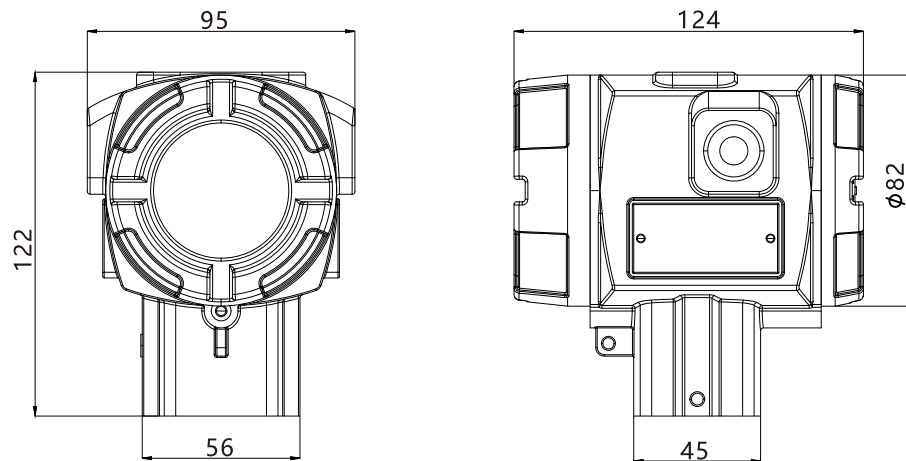
DESCRIPTION

LFW70 Explosion-proof Temperature Transmitter adopts imported A-class platinum resistor, imported high-precision ADC and reference. These components have been carefully calibrated and debugged to provide a standard temperature analog signal and digital signal output. It uses stainless steel temperature probe rods and aluminum alloy shell, which has good stability and mechanical strength. There are multiple output options of voltage, current, HART and RS485, can be widely used in temperature measurement for petroleum, chemical, power station, hydrology and other industrial field.

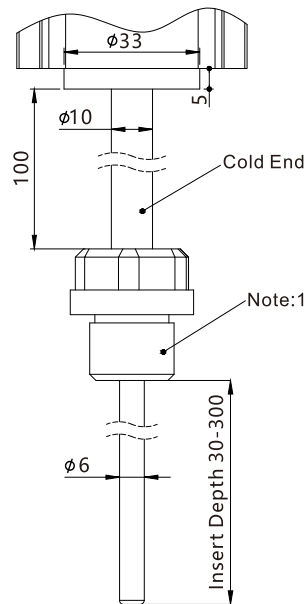
SPECIFICATION

Measuring medium	Liquid or gas, etc. (compatible with the contact material)
Measuring range	-50~300°C (see Order Ref No.)
Output signal	4~20mA/HART/0-10V/RS485
Supply voltage	Voltage/RS485: 15-35VDC Current type: 9.5-35VDC (RL=0Ω)/19.5-35VDC (RL=500Ω)
Output load	≤500Ω (current type), ≥10KΩ (voltage type)
Accuracy	±0.25%FS/±0.5%FS
Working environment	-40~85°C, 0~95%RH (non-condensing)
Shell material	Die-casting aluminum shell, 304 stainless steel probe and casing
Explosion-proof grade	Flameproof type: Ex db IIC T6 Gb Flameproof dust type: Ex tb IIIC T80°C Db
Protection level	Ip66 Note: The above protection class refers to the electrical connection is complete to achieve
Display mode	LCD digital display (-10-60°C)
Net weight	1340g(No probe rod included)

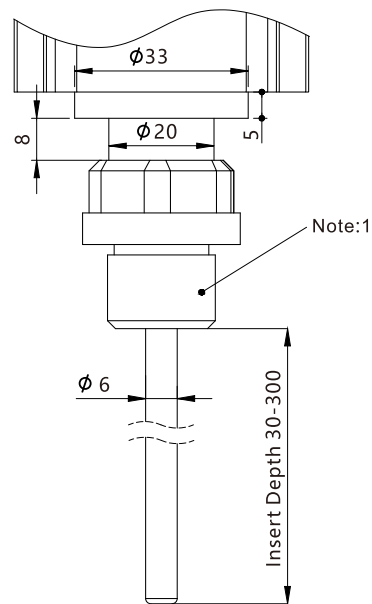
DIMENSION (mm)



Upper Dimension



Lower Dimension
With Cold End

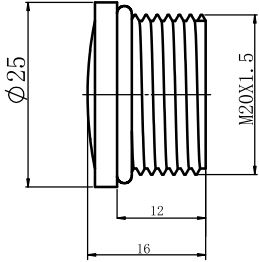
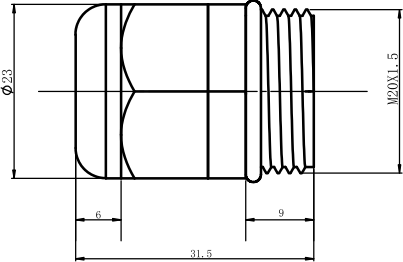
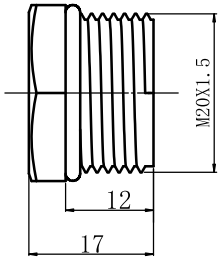
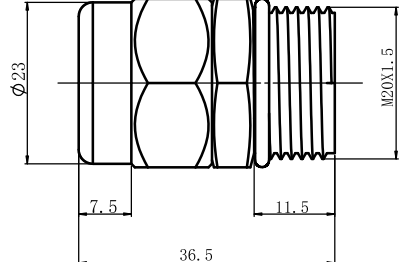


Lower Dimension
Without Cold End

Note 1

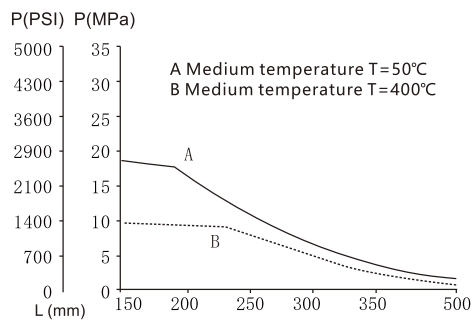
Thread Size				
Thread Spec	M20*1.5	G1/2	G1/4	Clamp 50.5MM

PLUG AND ELECTRICAL INTERFACE

Applicable common type	
Cap	Electrical interface
	
Material: Nylon	Material: Nylon
Suitable for flameproof type	
Cap	Electrical interface
	
Material: 304Stainless steel	Material: 304Stainless steel

PRESSURE RESISTANCE

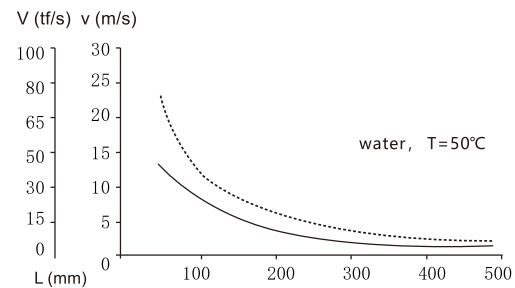
The pressure borne by the probe varies with its length (see the figure below).



One probe has a diameter of 6mm and a wall thickness of 1.0mm. L: Immersion depth. P: Process pressure.

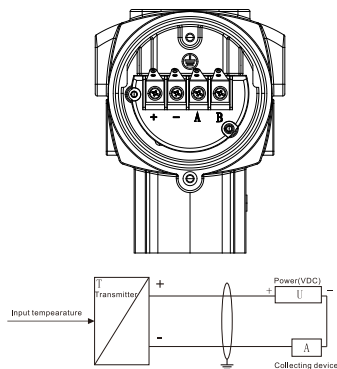
MEDIUM FLOW

The maximum medium flow velocity that the probe rod can withstand decreases with the increase of insertion depth (see the figure below).

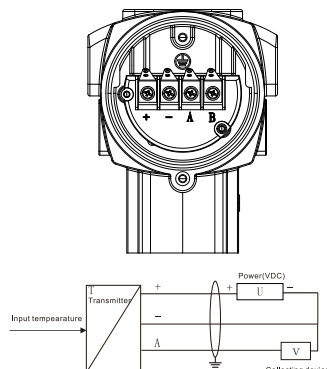


The diameter of the probe rod is 6MM and the wall thickness is 1.0MM. L: immersion depth; V: flow velocity.

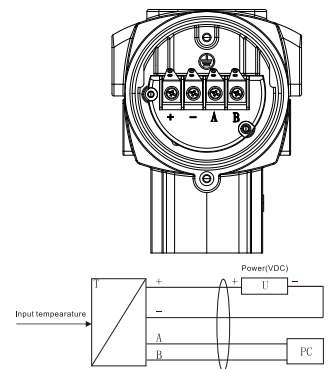
WIRING INSTRUCTIONS



Current Output
Wiring Diagram



Voltage Output
Wiring Diagram



RS485 output
Wiring Diagram

ORDER REF NO.

Code and description										Remark	
LFW70	Explosion-proof Temperature Transmitter									Model	
	A4	4~20mA(2-wire)				V10	0~10V (3-wire)			Output Signal	
	HART	4~20mA+HART (2-wire)				RS	RS485/Modbus				
		0	0~100℃							Temperature Range	
		1	0~200℃ (with cold end)								
		2	0~300℃ (with cold end)								
		3	-50~200℃ (with cold end)								
		4	-50~300℃ (with cold end)								
		X	Customized (temperature range -50~300℃)								
		A	0.25%FS							Accuracy	
		B	0.5%FS								
			G	Flameproof type							Explosion-proof type
			GF	Flameproof dust type							
			P	Normal type (no explosion-proof)							
			G2	G1/2 male (fixed thread installation)							Installation Method
			G4	G1/4 male (fixed thread installation)							
			M20	M20*1.5 male (fixed thread installation)							
			K	Clamp (50.5MM)							
			0	Without							Protective Tube
			1	With							
			L30	30mm							Probe Length (without threads)
			L50	50mm							
			L100	100mm							
L150			150mm								
L200			200mm								
L300			300mm								
X			Customized								
		0	Without cold end							Cold End	
		1	Cold end length 100m								
		X	Customized								
		0	Without							Display	
		1	With								
LFW70	A4	1	B	G	G2	0	L150	1	1	Selection Example	

Note:

1.LFW70-A4-1-B-G-G2-0-L150-1-1 represents explosion-proof temperature transmitter; output 4-20mA; temperature range 0~200℃ (with cold end); precision: 0.5%FS;Explosion-proof type is flameproof type; installation mode is G1/2 external thread (fixed thread installation); no protection sleeve; length of probe rod is 150mm; length of cold end is 100mm, with display.

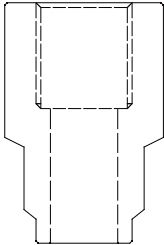
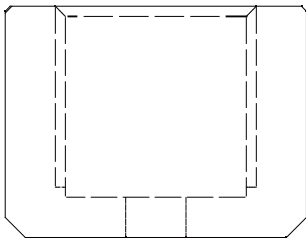
2. The use temperature without cold end should be $\leq 120^{\circ}\text{C}$; it is recommended to add the cold end when the use temperature $> 120^{\circ}\text{C}$.

3.Protective sleeve parameters: diameter 10mm, installation thread G1/2 external thread, protective sleeve length matches probe length.

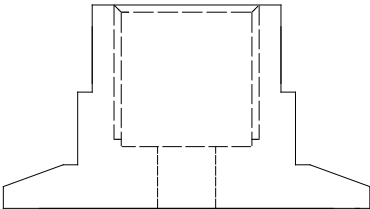
4.Flameproof and flameproof dust type standard with stainless steel electrical interface, ordinary type standard with nylon electrical interface

Accessories (need to be purchased separately)

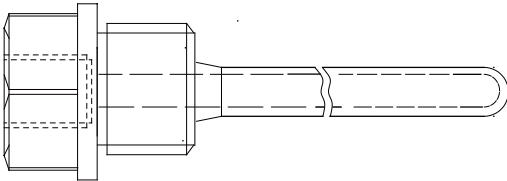
Welding Base

	
Tower-style welding base	Column-type welding base

Adapters

	
Adapter chucks	Adapter flange

Sleeve


Integral Probe Sleeve