

Description

UTB3 general temperature transmitter uses Pt100 thermal resistor as sensing element. The thermal resistor transforms the measured temperature into electrical signal, after this signal is processed, it will be amplified to 4~20mA or other standard simulated signals on industry scene. UTB3 is made with integrated construction for the direct measurement of various of liquid, gas and solid's surface temperature in the range of -200°C~500°C. UTB3 is featured with good performance and stability. It is sealed with epoxy resin, this construction makes UTB3 have good ability on anti-shock and withstand high temperature, also have high mechanical strength, is suitable for the application in bad working condition.

UTB3 has widely been used for temperature measurement in such industries as petroleum industry, chemical industry, spinning and weaving, mine, medicine, electric power, environmental protection, municipal administration, food industry as well as scientific research and so on.



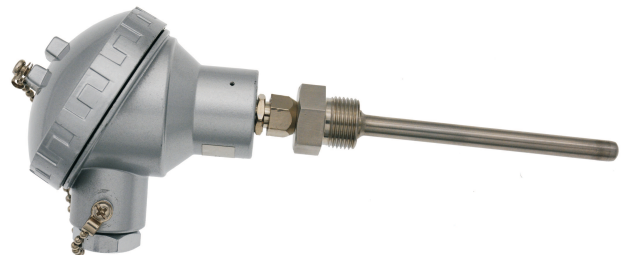
UTB3-a Hirschmann (DIN) Connector



UTB3-a with LED display



UTB3-a Water-proof Connector (PG7)



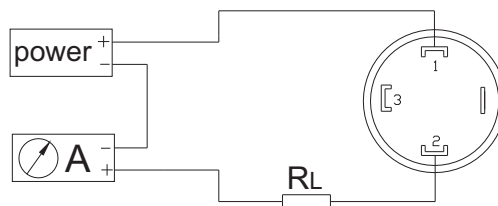
UTB3-b

Features

- Use Pt100 or other thermal resistors as sensing element.
- High accuracy, low power consumption, wide operating ambient temperature range
- Integrated construction, easy installation
- Use full metal sealed construction, coordinate high temperature radiation trough

Electrical connection

connection	cable color(pin)
power“+”	red(1)
signal“+”	yellow(2)

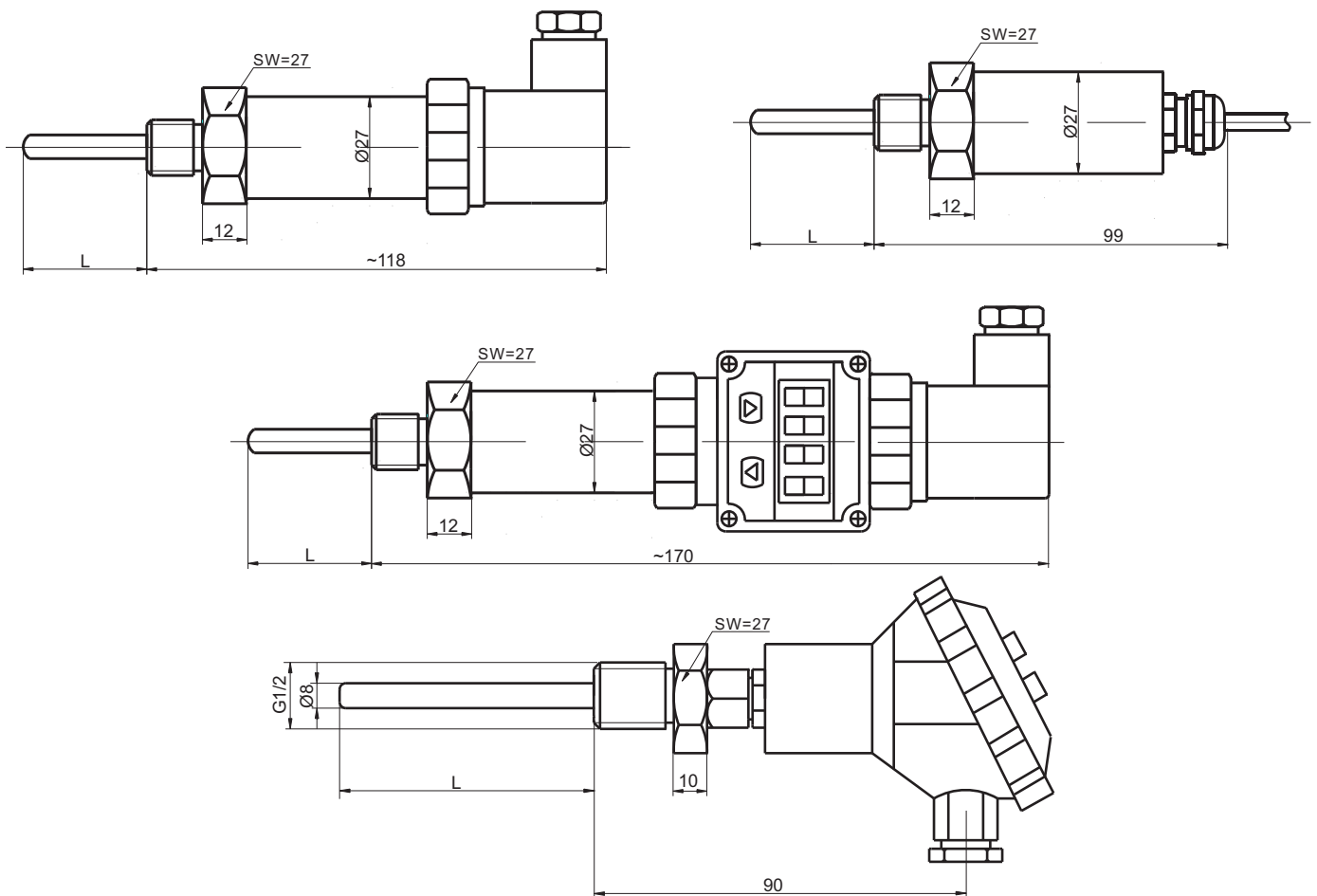


wiring drawing of two-wire 4~20mA output (hirschmann)

Specifications

temperature measurement element	Pt100 or other thermal resistors
measured medium	gas or liquid compatible to stainless steel
measured medium's temperature	-200°C ~+500°C
insert depth	20~500mm can be made upon customer's request
output signal	4~20mA(0~5V,1~5V option)
accuracy	0.5%FS(standard)
circuit working temperature range	-30°C~80°C
storage temperature range	-40°C~100°C
temperature limit	120% of measured range
power supply	10~30VDC(15~30VDC for products with indicator)
long term stability	0.15%FS/year
load resistance	>500Ω(24V supply)
circuit temperature shift	<±0.2%FS/10°C
response time	<1ms
process connection	G1/4 or others
electrical connection	hirchsmann connector
material of housing	stainless steel

Dimensions





UTB3 General Temperature Transmitter

Ordering code

UTB3-a		UTB3-b			
range	measuring range: -200°C~+500°C				
(X1~X2)°C	X1-lower limit of measured temperature, X2-higher limit of measured temperature				
code	output				
O1	4~20mA				
O2	0~5V				
O3	1~5V				
code	process connection				
P1	G1/4				
P5	1/2NPT				
P6	M12×1.5				
Pz	customer request				
code	electrical connection and display (UTB3-a)				
E1	hirschmann(DIN) connector				
E2	PG7 connector				
Ez	customer request				
D0	no display				
D1	4 digit LCD digital indicator				
D2	4 digit LED digital indicator				
length	insert length				
L	20mm~500mm				
UTB3-a	(0~100)°C	O1	P1	E1D0	50mm