DATASHEET



APPLICATIONS

- For direct installation into the process
- Bearing
- Machine building
- Motors
- · Pipelines and vessels

SPECIFICATIONS

Material **Type**

PT-1 Process connection: Stainless steel

Head: Aluminium

Accuracy class Standard class A*

Process connection Scale ranges

-100 °C / +1200°C 1/2" BSP, other connections on request

DESCRIPTION

Resistance thermometers without thermowell are particularly suitable for those applications in which the metal sensor tip is mounted directly into bored holes (e.g. in machine components) or directly into the process for any application with no chemically aggressive media or abrasion.

For mounting into a thermowell, a spring-loaded compression fitting should be provided, since only this can press the measuring tip into the bottom of the thermowell. Otherwise a potentially critical force could be exerted on the measuring tip. Mounting is usually made directly into the process. Fastening elements such as threaded fittings, union nuts, etc. can also be used.

The flexible part of the probe is a mineral-insulated cable (sheathed cable). It consists of a stainless steel outer sheath in which the internal lead is pressed and isolated within a high-density ceramic mass. The measuring resistor is connected directly to the internal leads of the sheathed cable and is, therefore, also suitable for use at higher temperatures.

Due to their flexibility and the small possible diameters, sheathed resistance thermometers can also be used in locations that are not easily accessible, since, with the exception of the sensor tip and the transition sleeve of the connection cable, the sheath can be bent to a radius of three times the diameter of the cable.



- Sensor ranges from -100...1200°C (-148...2192°F)
- · For insertion, screw-in with optional process connection
- Connection head form BS

OPTIONS

- Accuracy class B or AA available on request*
- Transmitter available on request
- Calibration certificate (national and international standards)





CONNECTION METHOD	
Single elements	1 x 2-wire 1 x 3-wire 1 x 4-wire
Dual elements	2 x 2-wire 2 x 3-wire 2 x 4-wire

MEASURING ELEMENT

Pt-100

METAL PROBE

Material: Stainless steel

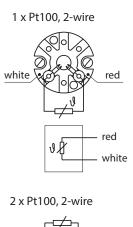
Diameter: 6*, 8, 10, 12 or 15 mm

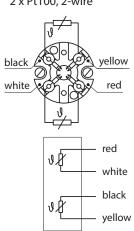
Length Selectable

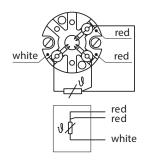
*Only possible for thermometers without thermowell

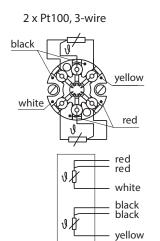
Electrical connection (colour code per IEC/EN 60751)

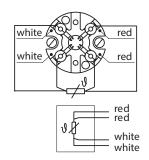
Connection head form B

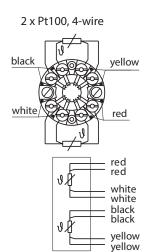










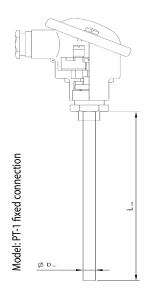


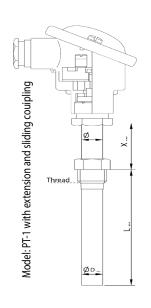


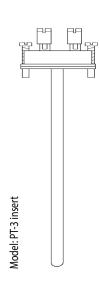
CONNECTION HEAD

MODEL	MATERIAL	CABLE ENTRY THREAD SIZE	INGRESS PROTECTION	CAP	SURFACE	CONNECTION TO NECK TUBE
BS	Aluminium	M20 x 1.5" or 1/2 NPT	IP65, IP68	Flat, 2 screws	Orange, Lacquered	M24 x 1.5 1/2 NPT

CABLE ENTRY	COLOUR	INGRESS PROTECTION (MAX.)	MIN. / MAX. AMBIENT TEMPERATURE	CABLE ENTRY THREAD SIZE
Standard cable entry	Blank	IP65	-4080 °C	M20 x 1.5 or 1/2 NPT







Without Thermowell

This version is designed mainly for mounting in one of the available compression fittings.

Material: Stainless Steel

Stainless steel ferrules can be adjusted once; they have been unscrewed, sliding along the sheat is no longer possible.

- Max. temperature at process connection 550°C for PT-100
 Max. temperature at process connection 1200°C for thermocouple type K (NiCr-Ni)

With Thermowell

This version is designed mainly for mounting in one of the available compression fittings.

Since the compression fitting is movable on the probe, the L and X dimensions define the as-deliverd condition. The length of the compression fitting determines the smallest possible neck length X of approx. 40 mm.

Material: Stainless Steel

Stainless steel ferrules can be adjusted once; they have been unscrewed, sliding along the sheat is no longer possible.

- Max. temperature at process connection 550°C for PT-100
 Max. temperature at process connection 1200°C for thermocouple type K (NiCr-Ni)





Item	Code	Notes	ххх	X	х	XX	хх	XXX	х	Х	XXX
Product											
Standard B-head	PT1										
Measuring insert	PT3	(No connection)]							
Configuration											
Head form B with ceramic socket	S	(5) (6) (1)									
Head form B with transmitter	Т	(Specify setting range)									
Measuring Element											
3-wire	3										
4-wire 2 x 3-wire	4 6										
2 x 4-wire	8	(Min. 8 mm insert)									
Thermocouple type K NiCr-Ni	9K	(Willia o Hillia Hiscre)									
PT-1000, 3-wire	5HT										
Maximum temperature											
200°C	LT										
550°C	HT										
600°C	KL										
1200°C	KH										
Insert diameter											
6 mm	06	(Only fixed insert)									
8 mm	80										
10 mm	10										
12 mm 15 mm	12 15										
	15							J			
Insert length - L Specify length in mm (3 digits)	XXX										
Sliding coupling connection											
No connection, plain stem	Χ										
G 1/2"	Α										
1/2"NPT	В										
M20 x 1,5	C										
M27 x 2 G3/4"	D E										
Other connection	Z	(Please specify!)									
Fixed thread connection		(
G 1/2"	1										
G 1/4"	2	(Max. 8 mm insert)									
1/2" NPT	3	· · · · · · · · · · · · · · · · · · ·									
G 3/4"	4										
Other connection	0	(Please specify!)									
Fixed insert											
No	L										
Yes	V										
Extension length - X Specify length in mm (3 digits)	xxx										
Extra options											
Other cable gland											
Test certificate											

