

Temperature sensor connected with adequate devices enables temperature measurement, control and recording of liquid alloys of non-ferrous metals. It has special ceramic sheath resistant to corrosive action of metals and their alloys.

Specification

Temperature range / sensing element

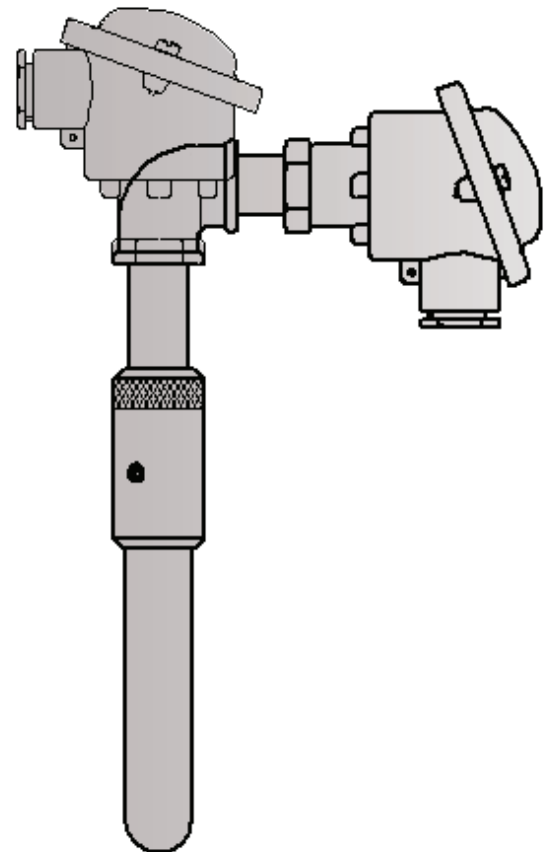
0÷700°C	J	class 2
0÷1200°C	K	class 2

Sheath

- ceramics: HEXOLOY, REFRAZ 20E or SYALON
- resistant to thermal shock
- mounting assembly and extension pipe: steel 1.4541
- length L_2 [mm]: 300÷1000
- ceramic sheath dimensions acc. to the table

Connection head

- BA, IP54, -40÷100°C



Other parameters acc. to requirements

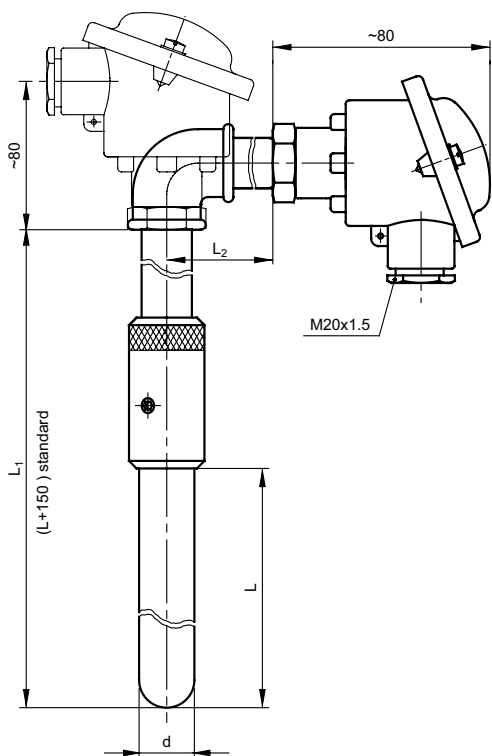
Options

Temperature transmitter application

Temperature transmitter with standard 4÷20mA, 0÷10V output signals and with the HART or PROFIBUS communication protocols can be mounted in the high cover connection head.

Non-standard design

Immersion length, shape and material of the sheath, and connection head type can be customized per client request.



Standard length

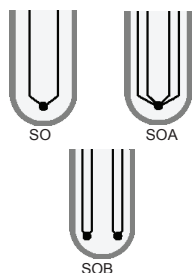
Immersion length L [mm]
500
700
900
1100

Ceramics type and designation

Ceramics type and designation	d	L	Remarks*	Resistance in metals
HEXOLOY H..	19 or 25,4	300	1650°C	Al, Zn, Cu
REFRAX R	22	500	1450°C	Al, Zn, Cu, Mg
		700		
		900	1300°C	Al, Zn
SYALON SN	22	1100		

* max. temperature of

Thermocouple hot junction types



Measurement circuit

1 x Pt100			2 x Pt100			1 x TC	2 x TC
2-wire	3-wire	4-wire	2-wire	3-wire	4-wire	2-wire	2-wire
x	x	x	x	x	x	✓	x

Tolerance for thermocouple classes acc. to PN-EN 60584

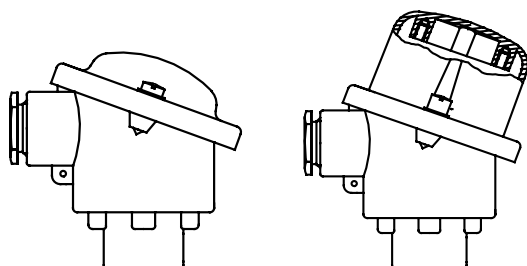
Thermocouple type	Class 1		Class 2	
	Range of application [°C]	Tolerance [°C]	Range of application [°C]	Tolerance [°C]
J Fe-CuNi	from -40 to +375 from +375 to +750	±1,5 ±0,004 t	from -40 to +333 from +333 to +750	±2,5 ±0,0075 t
K NiCr-NiAl	from -40 to +375 from +375 to +1000	±1,5 ±0,004 t	from -40 to +333 from +333 to +1200	±2,5 ±0,0075 t

|t|- absolute value of temperature

Connection head types

Connection head type BA in standard.

Possibility to mount the connection head of different type.



BA

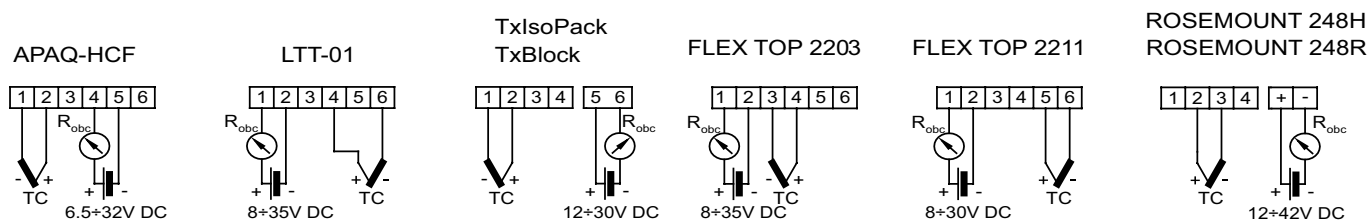
BAW

Connection schemes

TC (thermocouple)



Transmitters



Product code

		Sensor version	
1	<input type="checkbox"/>	IC6	straight
		ID6	angular
		Termoelement	
2	<input type="checkbox"/>	K	NiCr-NiAl
		J	Fe-CuNi
		Thermocouple class	
3	<input type="checkbox"/>	1 or 2	for thermocouple
		Thermocouple hot junction type	
4	<input type="checkbox"/>	SO	insulated hot junction
		Immersion length L	
5	<input type="checkbox"/>	500	500mm
		700	700mm
		900	900mm
		1100	1100mm
			other parameters acc. to requirements
		Extension pipe length L₂ (for catalogue sensor)	
6	<input type="checkbox"/>	500	500mm
			other parameters acc. to requirements
		Thermowell material	
7	<input type="checkbox"/>	R	REFRAX
		SN	SYALON
		H19 or H25	HEXOLOY
		Transmitter type (optionally)	
8	<input type="checkbox"/>	HLP	head mounted MiniPAQ-HLP transmitter
			other parameters acc. to requirements
		Temperature range of transmitter	
9	<input type="checkbox"/>	(0÷100°C)	transmitter configured for temperature range 0÷100°C
			other parameters acc. to requirements

IT - 1 - 2 / 3 / 4 - 5 - 6 - 7 - 8 - 9

Ordering example: IT-ID6-K/2/SO-500/650-200-R-HLP-(0÷1000)°C sensor with thermocouple NiCr-NiAl /K/, class 2, angular type (K), sheath material REFRAK (R), immersion length L=500 mm, standard extension and horizontal pipe 200 mm (500/650-200)