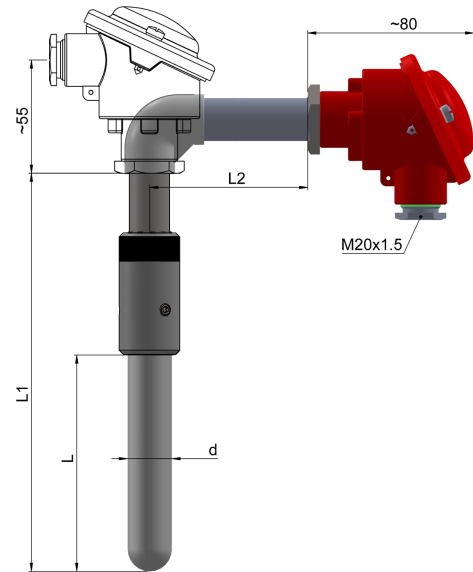


Temperature sensors for liquid metals and liquid metal alloys **PTTJC-37, PTTKC-37, PTTNC-37**

Technical description

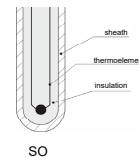
Measuring range / sensing element			
(0 ÷ 700) °C	J	class 2	
(0 ÷ 1200) °C	K, N	class 2	
Thermowell			
– ceramics: REFRA X 20E for liquid metals and liquid metal alloys			
– ceramics: SINITEC, special high resistance to mechanical damage and thermal shock			
– fitting assembly and extension pipe: steel 1.4541			
length L ₂ [mm]: 100÷1000			
– length L ₁ [mm]: min. (L+60 mm), standard (L+150 mm)			
– ceramic thermowell dimensions acc. to table:			
Ceramic types and designation	d	L _{max} [mm]	Remarks**
REFRA X R	22	300, 500, 700, 900, 1100	1450 °C
SINITEC SN	16	260, 360, 460, 560	1400 °C
SINITEC SN	22	360, 560, 760, 860	1400 °C
Connection head			
– BA, IP54, (-40 ÷ 100) °C			
Options			
– thermocouple J, K: class 1			
– straight version with thermocouples R, S, B			
Additional accessories			
– temperature transmitters – p. 225÷241			
– compensation cables – p. 197			



Tolerance for thermocouples class acc to. PN-EN 60584

Thermocouple	Class 1		Class 2	
	Range [°C]	Tolerance [°C]	Range [°C]	Tolerance [°C]
J Fe-CuNi	(-40÷375) (375÷750)	±1,5 ±0,004 t	(-40÷333) (333÷750)	±2,5 ±0,0075 t
K, Na NiCr-NiAl	(-40÷375) (375÷1000)	±1,5 ±0,004 t	from (-40÷333) (333÷1200)	±2,5 ±0,0075 t

Types of measuring hot junction



** max. air use temperature

Ordering code

Temperature sensor	...	TT	...	C-37	-
Single	no sign											
Double	2											
With transmitter	AP											
Thermocouple Fe-CuNi		J										
Thermocouple NiCr-NiAl		K										
Thermocouple NiCrSi-NiSi		N										
Construction version: straight								P				
angular								K				
Material of the sheath: REFRA X								R				
Material of the sheath: SINITEC ø16								SN16				
Material of the sheath: SINITEC ø22								SN22				
Immersion length L/L ₁ [mm]								500/650*				
Extension length L ₂ [mm]								500*				
Thermocouple class											1, 2	
Type of transmitter											LTT01*	
Setting of transmitter temperature											(0 ÷ 400) °C*	

* or others acc. to requirements

Ordering example

TTKC-37-K-R-500/650-200-2 sensor with thermocouple NiCr-NiAl, class 2, angular, sheath REFRA X, immersion length L=500 mm, Ex standard tension and horizontal pipe 200 mm

FOR LIQUID METALS AND LIQUID METAL ALLOYS