

This sensor is suitable for temperature measurements of media with slow temperature changes. Sensor sheath made of heat-resistant and creep-resistant steel enables temperature measurement of e.g. burned gases and exhaust gases in furnaces.

Specification

Temperature range / sensing element

-40÷1200°C **K** class 2
-40÷700°C **J** class 2

Measuring insert

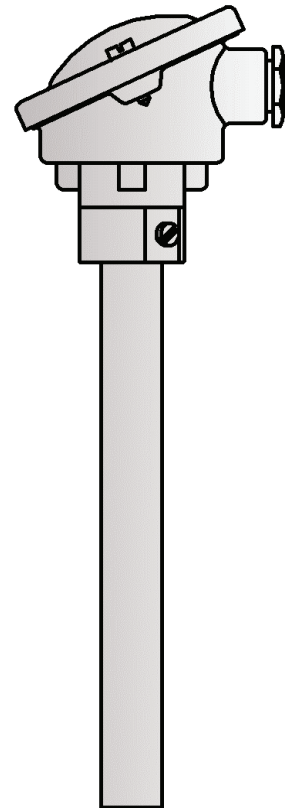
– thermocouple WD, ceramic insulation dimensions 12x8mm

Thermowell

– material: steel 1.4841 max. temp. 1150°C
– material: steel 1.4762 max. temp. 1200°C
– material: steel 15Cr25T max. temp. 1000°C
– length min. [mm]: 300
 max. [mm]: 3000

Connection head

– AA, IP53, -40÷100 °C



Other parameters acc. to requirements

Options

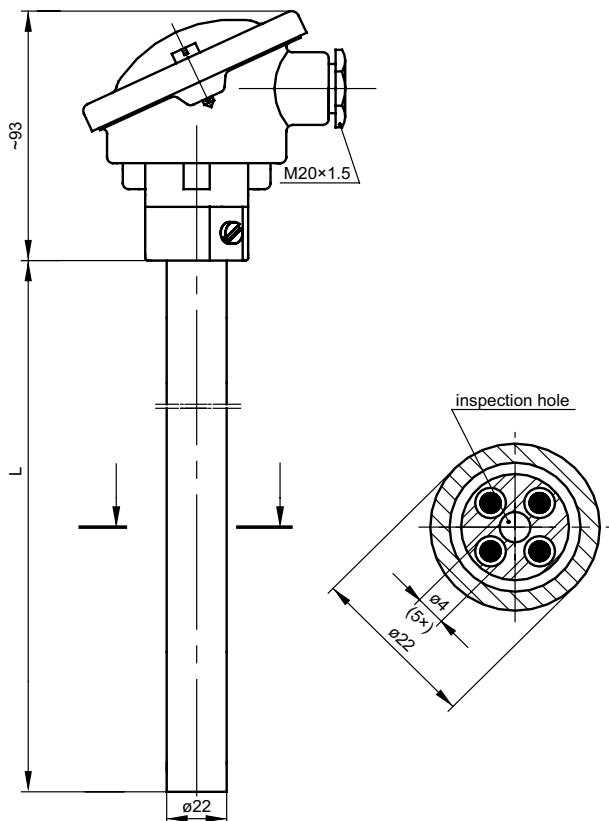
Temperature transmitter application

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

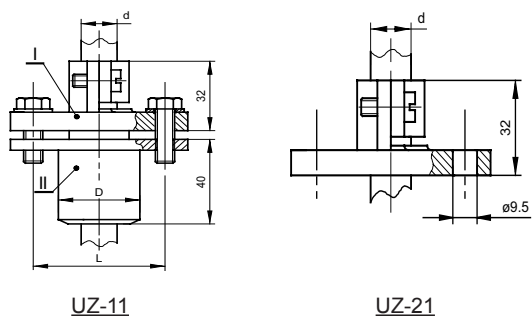
Non-standard design

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

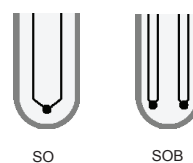
Calibrations performed by Limatherm Sensor Sp. z o.o. are confirmed with the Calibration Certificate of the Accredited Laboratory for Temperature Measurements.



Mounting fittings



Thermocouple hot junction types



Standard length

Immersion length L [mm]	Measuring insert length L _w [mm]
500	535
710	745
1000	1035
1400	1035
2000	2035

Tolerance for thermocouple classes acc. to PN-EN 60584

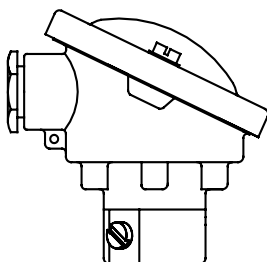
Thermocouple type	Class 1		Class 2	
	Range of application [°C]	Tolerance [°C]	Range of application [°C]	Tolerance [°C]
J Fe-CuNi	from -40 to +375 from +375 to +750	±1,5 ±0,004 t	from -40 to +333 from +333 to +750	±2,5 ±0,0075 t
K NiCr-NiAl	from -40 to +375 from +375 to +1000	±1,5 ±0,004 t	from -40 to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

|t| - absolute value of temperature

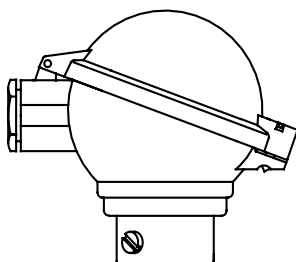
Connection head types

Connection head type AA in standard.

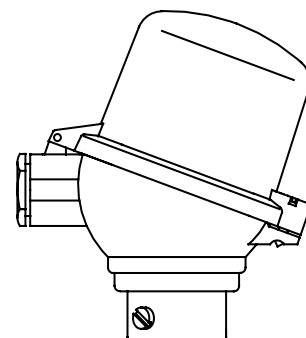
Possibility to mount the connection head of different type.



AA



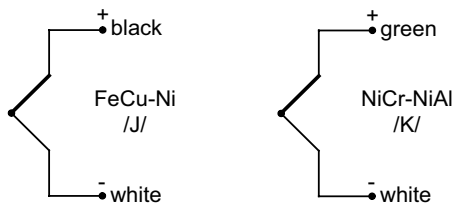
DA



DAW

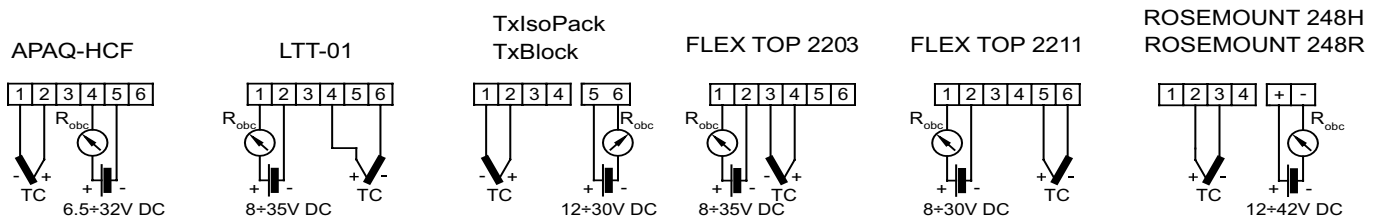
Connection schemes

TC (thermocouple)



In double sensors one of thermocouples is additionally marked out.

Transmitters



Product code

Sensor version		
1	no designation	single
	2	double
	AP	with transmitter
Sensing element		
2	TJ	thermocouple Fe-CuNi /J/
	TK	thermocouple NiCr-NiAl /K/
		other parameters acc. to requirements
Inspection hole (optionally)		
3	O	ø4mm
	Thermowell length	
4	500	500mm
	710	710mm
	1000	1000mm
	1400	1400mm
	2000	2000mm
		other parameters acc. to requirements
Accuracy		
5	1 or 2	for thermocouple
	Thermowell material	
6	1.4841	creep-resistant steel
	1.4762	heat-resistant steel
	15Cr25T	heat-resistant steel
		other parameters acc. to requirements

		Transmitter type (optionally)				
7	<input style="width: 50px; height: 20px;" type="text"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Tx</td> <td>head mounted transmitter TxBlock</td> </tr> <tr> <td></td> <td>other parameters acc. to requirements</td> </tr> </table>	Tx	head mounted transmitter TxBlock		other parameters acc. to requirements
Tx	head mounted transmitter TxBlock					
	other parameters acc. to requirements					
		Temperature range of transmitter				
8	<input style="width: 50px; height: 20px;" type="text"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">(0÷100°C)</td> <td>transmitter configured for temperature range 0÷100°C</td> </tr> <tr> <td></td> <td>other parameters acc. to requirements</td> </tr> </table>	(0÷100°C)	transmitter configured for temperature range 0÷100°C		other parameters acc. to requirements
(0÷100°C)	transmitter configured for temperature range 0÷100°C					
	other parameters acc. to requirements					

1
2
3
4
5
6
7
8

-

-

-

-

-

-

Ordering example: **TTKUO-11-500-1-1.4762** single sensor with thermocouple NiCr-NiAl /K/, class 1, material steel 1.4762, diameter 22mm, with inspection hole ø4mm, sheath length L=500mm

SARLIN

SARLIN OY AB • PL 750, 00101 Helsinki
 Käyntiosoite: Kaivokselantie 3-5, 01610 Vantaa
 Vaihde 010 550 4000 • Fax 010 550 4201
 info@sarlin.com
 www.sarlin.com