



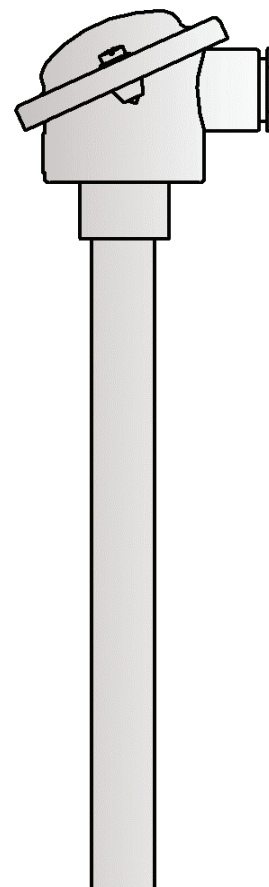
AP 108

This sensor is suitable for temperature measurements of media with slow temperature changes. 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÷700°C	J	class 2
-40÷1150°C	K	class 2
Measuring insert		
– thermocouple WD, ceramic insulation dimensions 12x8mm		
Thermowell		
– material: steel 1.4841 max. temp. 1150°C		
– material: steel 15Cr25T max. temp. 1000°C		
– length: min. [mm]: 300		
max. [mm]: 3000		
Connection head		
– BA, IP54, -40÷100 °C		

Other parameters acc. to requirements



Options

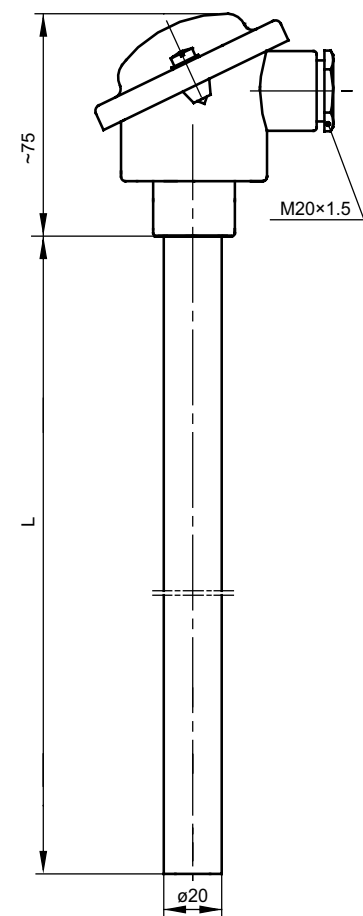
Temperature transmitter application

Temperature transmitter with standard 4÷20mA, 0÷10V output signals and with the HART or PROFIBUS communication protocols can be mounted in the connection head. Transmitter installation is carried out directly on the measuring insert (in place of a terminal block) or in the high cover connection head (solution used to enable installation of two transmitters).

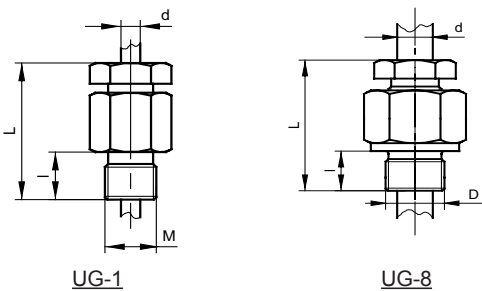
Non-standard design

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

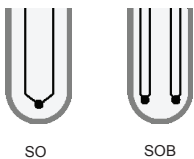
Calibrations performed by Limatherm Sensor Sp. z o.o. are confirmed with the Calibration Certificate of the Accredited Laboratory for Temperature Measurements.



Mounting fittings



Thermocouple hot junction types



Standard length

Immersion length L [mm]	Measuring insert length L _w [mm]
400	420
500	520
630	650
800	820

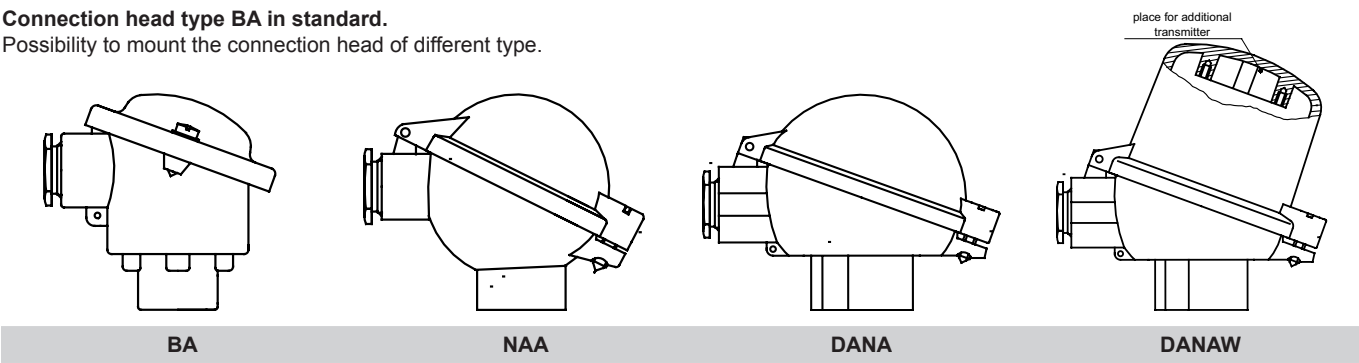
Tolerance for thermocouple classes acc. to PN-EN 60584

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

Connection head types

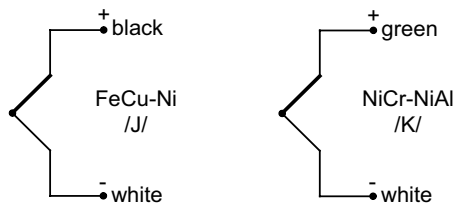
Connection head type BA in standard.

Possibility to mount the connection head of different type.



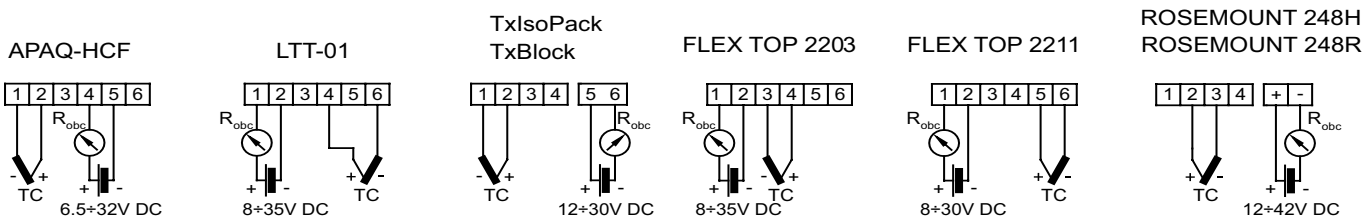
Connection schemes

TC (thermocouple)



In double sensors one of thermocouples is additionally marked out.

Transmitters



Product code

Sensor version		
1		no designation
		single
		2
2		AP
		with transmitter (only single)
		Sensing element
3		TJ
		thermocouple Fe-CuNi /J/
		TK
4		
		thermocouple NiCr-NiAl /K/
		other parameters acc. to requirements
5		Thermowell length
		400
		400mm
6		500
		500mm
		630
7		800
		800mm
		other parameters acc. to requirements
8		Accuracy
		1 or 2
		for thermocouple
9		Thermowell material
		1.4841
		creep-resistant steel
10		15Cr25T
		heat-resistant steel
		Transmitter type (optionally)
11		Tx
		head mounted transmitter TxBlock
		other parameters acc. to requirements
12		Temperature range of transmitter
		(0÷100°C)
		transmitter configured for temperature range 0÷100°C
13		
		other parameters acc. to requirements

1	2	3	4	5	6	7							
	T		U-1	-		-		-		-		-	

Ordering example: **TTJU-1-500-1-15Cr25T** single sensor with thermocouple Fe-CuNi /J/, class 1, material steel 15Cr25T, sheath diameter 20mm and length L=500mm.