

## Description :

Thermocouples according DIN 43733\* for industrial applications. Connection heads type A or type B according DIN 43729.

*Other connection heads upon request*

## Installation :

Direct installation into the process with compression fitting or limiting flange.

## Thermocouples :

Type L ( Fe-CuNi ) according to DIN 43710

Type J ( Fe-CuNi ) according to DIN EN 60584 / IEC 584

Type K ( NiCr-Ni ) according to DIN EN 60584 / IEC 584

*The DIN-Types T, S, E, N, R and B available upon request.*

## Temperature Limits :

FeCu-Ni Type L : 700 °C

FeCu-Ni Type J : 750 °C

NiCr-Ni Type K : 1200 °C

## Accuracy :

Class 1 according to DIN EN 60584 / IEC 584

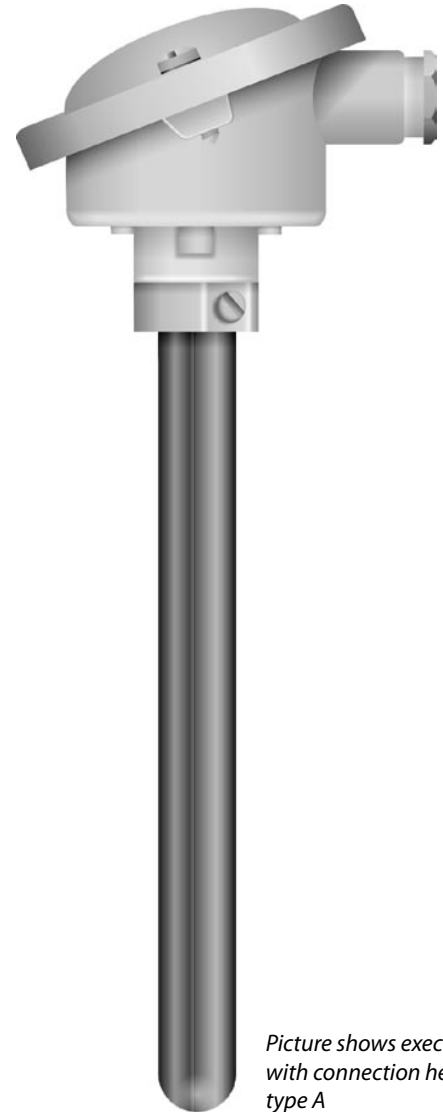
*The tolerances for thermocouples you can see in the chart "Values and Tolerances for thermocouples" in the appendix.*

## Electrical connection:

Ceramic connection terminal for 2 or 4 clamps.

Also available with mounted head transmitter

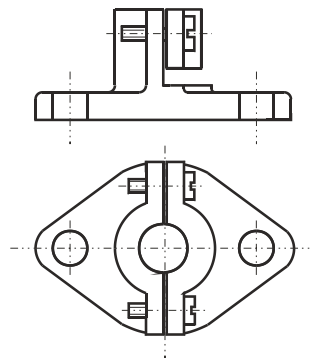
4...20 mA (Only in connection heads type BUZ-H)



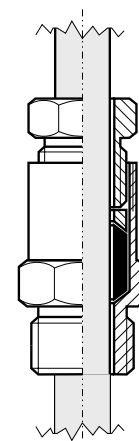
*Picture shows execution with connection head type A*

## Suggestions for installation of straight thermocouples

**Limiting flange**



**Compression fitting**



# Thermocouples

With metall tube

# Datasheet 821.1

Straight thermocouples

Protection tube	
Bestellcode	F G
Ø 15 x 2mm Mat. 1.4762 (X10CrAl24) suitable up to 1200°C	7 5
Ø 15 x 2mm with gastight internal tube Mat. C610	7 6
Ø 22 x 2mm Mat. 1.4762 (X10CrAl24) suitable up to 1200°C	8 5
Ø 22 x 2mm with gastight internal tube Mat. C610	8 6

### Connection heads

For protection tubes Ø 15 mm we use connection head type B and for Ø 22 mm connection head type A.

Transmitters are basically only available in BUZ-H connection heads.

For details about connection heads see datasheet 81.02

Number of thermocouples	
Ordering code	P
Single TC	1
Double TC	2

The wire diameter of the thermocouple is always 3 mm. Only double thermocouples with protection tubes Ø 15 mm have a diameter of 2 mm.

Thermocouples	
Ordering code	LM
Typ L (Fe - CuNi)	1 0
Typ J (Fe - CuNi)	1 1
Typ K (Ni - CrNi)	1 2
Special type	9 9

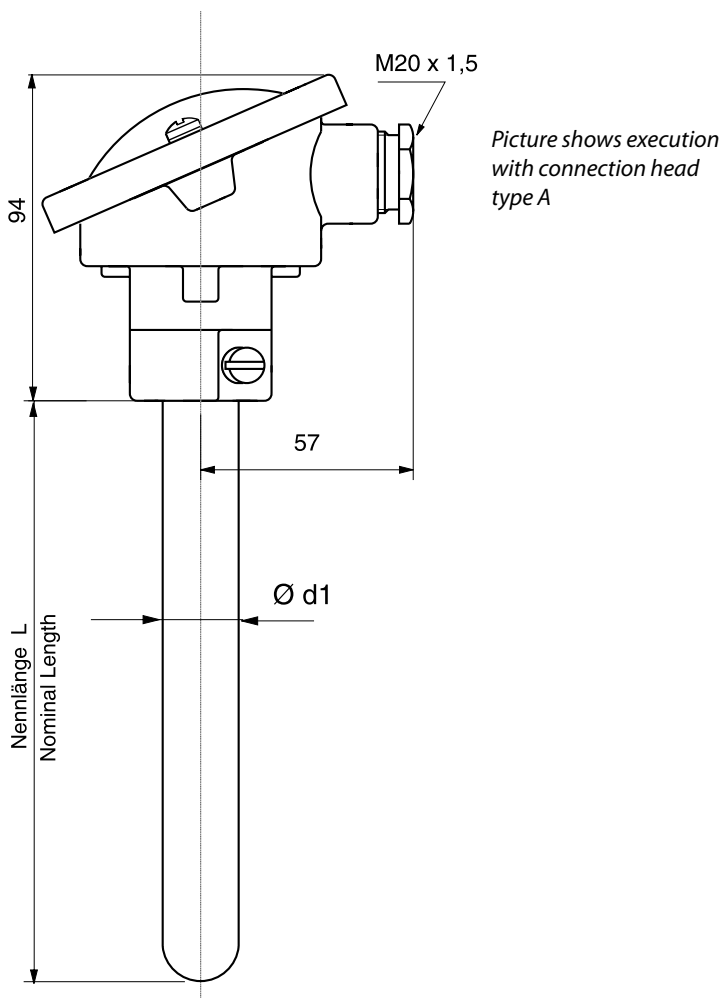
### Ordering-code :

for ordering please fill out all empty digits in the order code on the right.

The code numbers for all free digits you find in the charts above.

### For ordering please declare in plain text :

Insertion length (L<sub>i</sub>):                      With transmitter / measuring range:  
 ..... mm                                      .....°C to ..... °C



Picture shows execution with connection head type A

Transmitter 4...20mA	
Ordering code	N
Without Transmitter	0
Acc. to Datasheet 84.4	1
Acc. to Datasheet 84.5 (Ex)	2
Acc. to DB 84.6 (programmable)	3
Acc. to DB 84.7 (programmable, Ex)	4
Special type	9

Please declare range of transmitter in plain text

Additional equipment	
Ordering code	O
Without	0
Limiting flange	1
Compression fitting	2
Special equipment	9

