

# Sheathed Resistance thermometer

Resistance thermometers according to DIN EN 60751 / IEC 751

# Datasheet 811

Resistance - thermometer

## Description :

Inside sheathed resistance thermometers the RTD and its feeding wires are embedded together in condensed magnesium oxide. Because of this execution sheathed resistance thermometers are very consistent against vibration. Because the metal tubes are flexible and not limited in length they can be installed in hot environment where the use of cables is not possible. Also they have very short response times.

## Temperature Limits :

-50 ... + 400 °C or -50 ... + 600 °C

## Accuracy :

Class A or B according to DIN EN 60751 / IEC 751

Tolerance Pt100 Cl. A @ 100 °C : 0,35 °C

Tolerance Pt100 Cl. B @ 100 °C : 0,80 °C

The tolerances for Pt 100 RTD's you can see in the chart "Values and Tolerances of Pt100 resistance thermometers" in the appendix.

## Response times :

	Ø 2mm	Ø 3mm	Ø 6mm
T 50% in water	1s	1,5s	6s
T 90% in water	3s	6s	15s
T 50% in air	10s	26s	55s
T 90% in air	35s	81s	170s

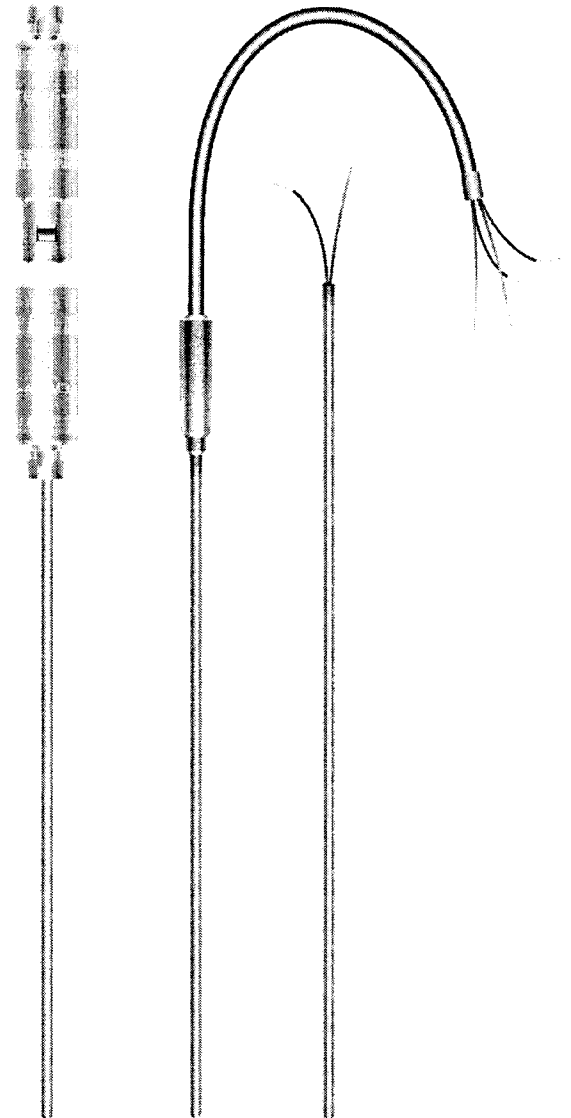
## Maximum bending radius :

Ø 2mm	Ø 3 mm	Ø 6 mm
>6 mm	>9 mm	>18 mm

## Sheat material :

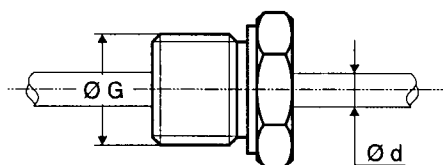
1.4541CrNi - Steel

2.4816 Inconel 600

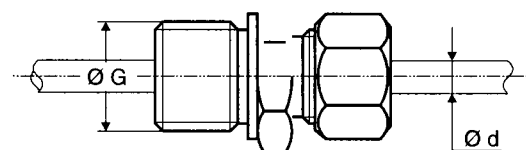


## Suggestions for installation of sheathed resistance thermometers

For further installation possibilities see chapter **protection tubes**



Thread nipple



Adjustable compression fitting

Revision 2.0 - 10/2004

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Resistance - thermometer

Execution	
<b>Ordering code</b>	<b>D</b>
Type MWT - FD	1
Type MWT - LS	2
Type MWT - FL	3

Connection	
<b>Ordering code</b>	<b>FG</b>
2 - Wire connection	01
3 - Wire connection	02
4 - Wire connection (only 1 x PT)	03

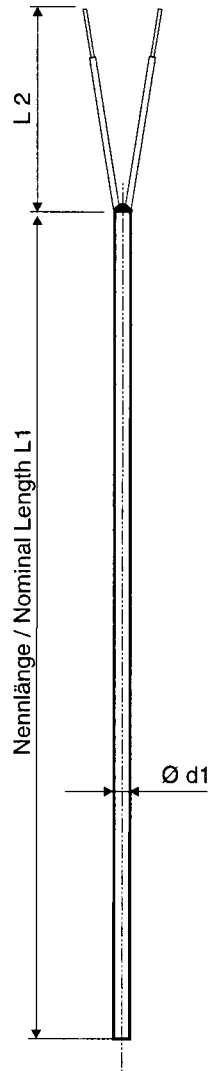
RTD	
<b>Ordering code</b>	<b>HI</b>
1 x PT100 CL. B	01
1 x PT100 CL. A	11
2 x PT100 CL. B	02
2 x PT100 CL. A	12
Special RTD	99

Sheath diameter	
<b>Ordering code</b>	<b>JK</b>
3mm	01
6mm	03
Special diameter	99

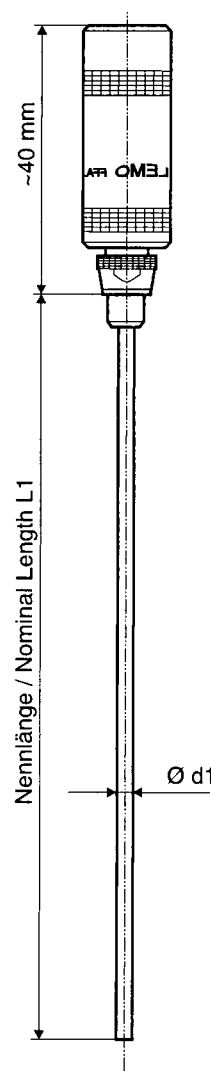
Sheath material	
<b>Ordering code</b>	<b>LM</b>
Stainless steel 1.4541	03
Inconel	10
Special diameter	99

## Executions:

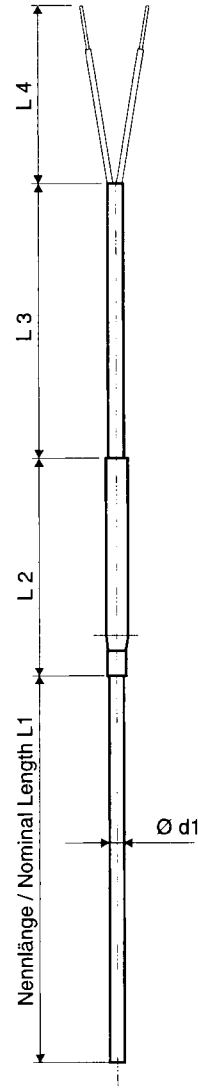
Type MWT - LD



Type MWT - LS



Type MWT - FL



With connection cable or stripped leads available

## 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.

