

Description :

Inside of these sensors the thermocouples are embedded in condensed magnesium oxide. Because of this execution sheated thermocouples 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 :

NiCr-Ni Type K : -100 ... 1300 °C

FeCu-Ni Type L : -100 ... 900 °C

FeCu-Ni Type J : -100 ... 700 °C

Execution :

- with thermocouple - connector
- with "Lemosa" thermocouple - connector
- with fixed compensation cable
- with loose wires

Accuracy :

Class 1, 2 or 3 according to DIN EN 60584 / IEC 584 or DIN 43710 (only for type L)

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

Maximum bending radius :

Ø 1,5 mm	Ø 3 mm	Ø 6 mm
> 4,5 mm	> 9 mm	> 18 mm

Sheat material :

1.4541 rust- and acid consistent steel

2.4816 Inconel 600

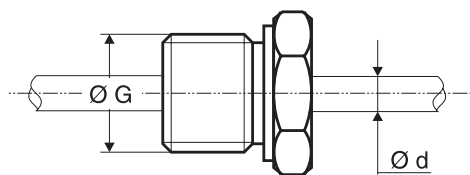


Response time

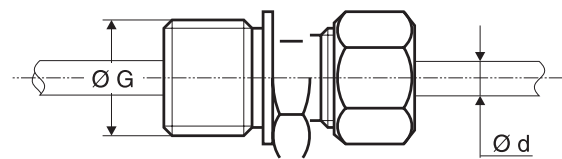
	Measuring point isolated			Measuring point welded		
	Ø 1,5mm	Ø 3mm	Ø 6mm	Ø 1,5mm	Ø 3mm	Ø 6mm
T 50 % in water	0,21s	1,2s	4s	0,13s	0,22s	0,55s
T 90 % in water	0,6s	2,9s	9,6s	0,4s	0,75s	2,6s
T 50 % in air	8s	23s	60s	8s	23s	55s
T 90 % in air	25s	80s	200s	25s	80s	185s

Suggestions for installation of sheated thermocouples

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



Thread nipple



adjustable compression fitting

Execution	
Ordering code	D
Type MHT - FD	4
Type MHT - TS	5
Type MHT - LS	6
Type MHT - FL	7

Measuring point	
Ordering code	E
Isolated	0
Welded to the sheet	1

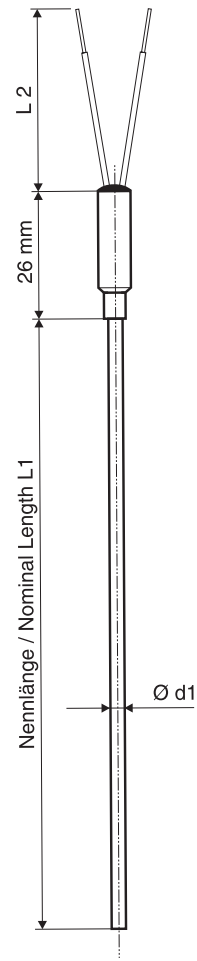
Sheat material	
Ordering code	HI
Stainless steel 1.4541	03
Inconel	10

Sheat diameter	
Ordering code	JK
1,5mm	11
3mm	01
6mm	03
Special diameter	99

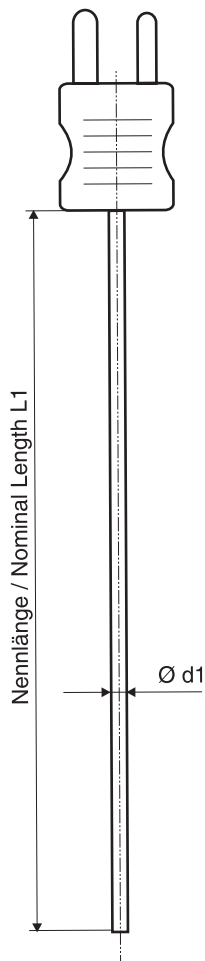
Thermocouple	
Ordering code	LM
1 x Fe / CuNi Typ J	11
2 x Fe / CuNi Typ J	12
1 x Ni / CrNi Typ K	15
2 x Ni / CrNi Typ K	16
Special type	99

Executions:

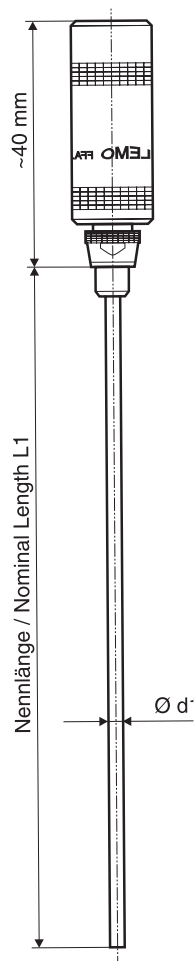
Type MHT - FD



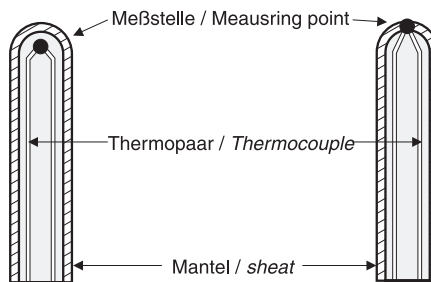
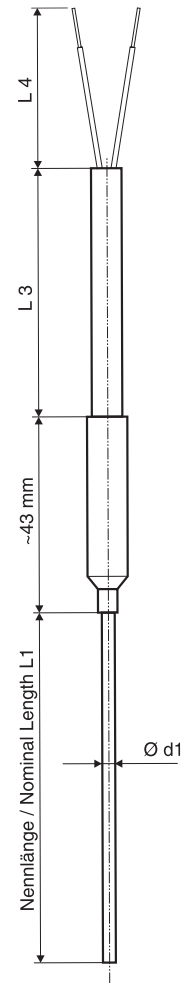
Type MHT - TS



Type MHT - LS



Type MHT - FL



Meßstelle isoliert
Measuring point isolated

Meßstelle mit Mantel verschweißt
Measuring point welded with the sheat

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.

