

## Description :

Resistance thermometer for industrial applications  
Type B according to DIN 43765

## Installation :

For the direct installation into the process.  
Connection via fixed external thread.  
The connection head can be turned after the installation

## Measuring Insert:

Execution according DIN 43762  
The insert can be replaced seperately. For single measuring inserts  
see datasheet 801

## Measuring Element :

Pt100 according to DIN EN 60751 / IEC 751  
*other Measuring elements e.g. Pt1000 or Ni100 upon request*

## Accuracy :

Class A or B according to DIN EN 60751 / IEC 751  
Also available with reduced tolerances e.g. 1/5 DIN Cl. B

## Material of wetted parts

Stainless steel AISI316Ti (1.4571)  
*other upon request*

## Electrical connection:

Ceramic terminal block for 1 x Pt100 2-, 3- or 4- wire connection  
or 1 x Pt100 2- or 3- wire connection.  
Also available with mounted head transmitter.

## Maximum Temperature Range :

-50...+550 °C



*Picture shows execution  
with connection head  
type B*

## Suggestions for installation of resistance thermometer with fixed external thread

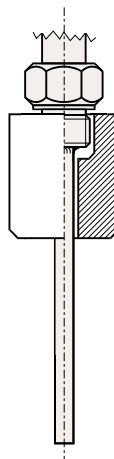
*For further installation possibilities see chapter **protection tubes***

### Thread joint,

weld - in type

*according to datasheed*

18.11



# Resistance thermometer

With protection tube and thread

# Datasheet 813.1

Types without necktube

Material for tube and thread	
Ordering code	F G
Stainless steel AISI316Ti (1.4571)	03
Special material	99

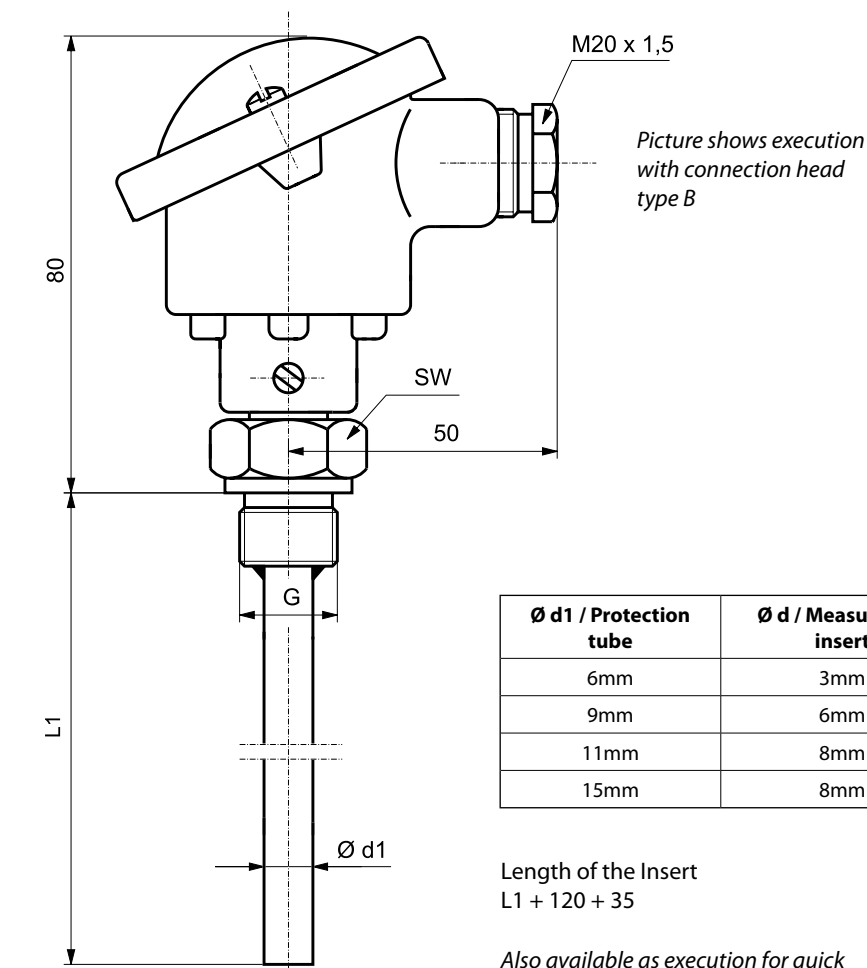
Stem diameter (d1)	
Ordering code	H I
6mm	13
9mm (Standard)	56
11mm	68
15mm	78
Special diameter	99

Threads (G)		
Ordering code		JK
G 1/2"	SW 27	01
G 3/4"	SW 32	02
G 1"	SW 41	03
NPT 1/2"	SW 27	
NPT 3/4"	SW 32	
M 18 x 1,5	SW 24	06
M 20 x 1,5	SW 27	07
Sondergewinde		99

Terminal heads *1	
Ordering code	LM
Type B	01
Type BUZ	02
Type BUZ - H	03
Type NS	04
Type GG	05
Type BEG	06
Special type	09

Transmitter *2	
Ordering code	N
Without	0
According datasheet 844.00 *3	1
According datasheet 846.00 *4	3
According datasheet 847.00 *5	5
According datasheet 848.00 *6	6
Special type	9

Connection *7	
Ordering code	O
2 - Wire configuration	2
3 - Wire configuration	3
4 - Wire configuration *8	4



Ø d1 / Protection tube	Ø d / Measuring insert
6mm	3mm
9mm	6mm
11mm	8mm
15mm	8mm

Length of the Insert  
L1 + 120 + 35

Also available as execution for quick response time (only for protection tubes Ø d1 = 9mm):  
The last 40mm at the end of the protection tube have a reduced diameter of 6mm

RTD	
Ordering code	P
1 x Pt100 CL. B	1
1 x Pt100 CL. A	2
2 x Pt100 CL. B *8	3
2 x Pt100 CL. A *8	4
Special RTD	9

- \*1 Terminal heads see Infosheet 81.02
- \*2 Declare measurement range in plain text
- \*3 Analog, Low- Cost
- \*4 Digital, Low- Cost, without separation
- \*5 Digital, with separation
- \*6 Digital, with separation, HART® compatible
- \*7 Wiring schemes see datasheet 801.0
- \*8 No 4- wire circuit with two Pt100

## 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>):  
..... mm

with transmitter / Measuring range:  
..... °C to ..... °C

