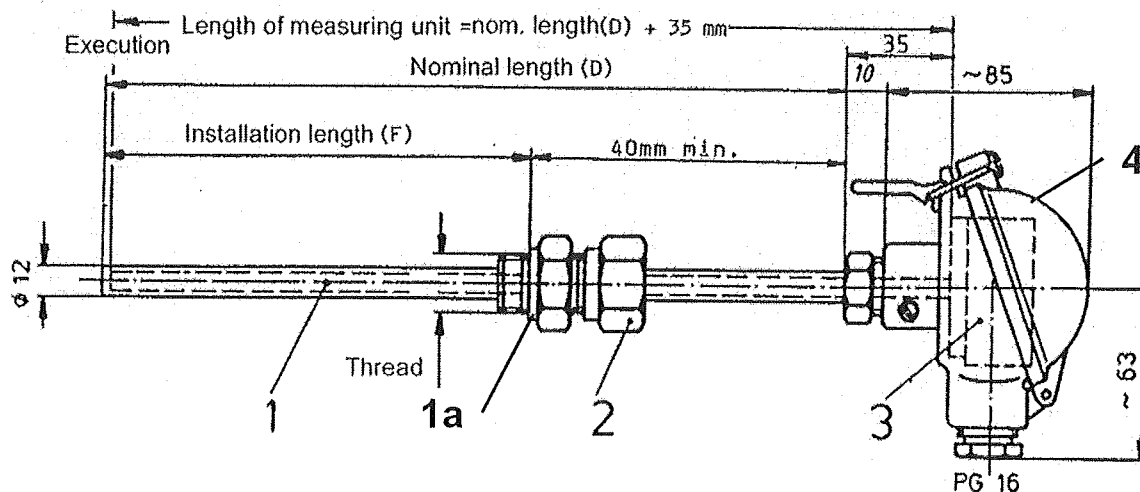


Resistance thermometer with replaceable measuring units

• Structure



- 0 Protective tube
- 1 Measuring unit
- 1a Screw connection for welded nozzle on pipe
- 2 Clamp/screw connection of protective tube, adjustment of immersion depth
- 3 Connecting terminal for measuring unit
- 4 Protective cover with fastening device

The resistance thermometers are designed to measure temperatures of gaseous and liquid fluids. To be able to replace any defective measuring units during operation, the resistance thermometers have been provided with protective tubes mounted in the welded nozzle on the tube with clamp/screw connection and directly subjected to the pressure prevailing in the plant. The immersion depth of the measuring unit within the protective tube is adjusted in the works.

• Accessories

Dimensions

Measuring unit Nominal length (D)	Protective tube installation length (F)	
	from	to
150	≥ 60	≤ 90
180	> 90	≤ 120
210	> 120	≤ 150
250	> 150	≤ 190
290	> 190	≤ 230
330	> 230	≤ 270
380	> 270	≤ 320
430	> 320	≤ 370
480	> 370	≤ 420
550	> 420	≤ 490
620	> 490	≤ 560

Measuring units

Nominal length (D)	Material No.			
	Resistance thermometers		Thermocouples	
	1 x PT 100 Ω DIN	2 x PT 100 Ω DIN	1 x NiCr-Ni	2 x NiCr-Ni
150	6915 291 087	6915 291 088		6915 291 098
180		6915 291 090		6915 291 103
210		6915 291 091		6915 291 104
250		6915 291 092		6915 291 106
290		6915 291 093		6915 291 108
330		6915 291 094		6915 291 109
380		6915 291 095		6915 291 110
430		6915 291 096		6915 291 111
480		6915 291 097		6915 291 112

Protective tube with connecting head

Nominal length	Material No.
150	6915 291 074
180	6915 291 075
210	6915 291 077
250	6915 291 078
290	6915 291 079
330	6915 291 080
380	6915 291 082
430	6915 291 084
480	6915 291 085
550	6915 294 212
620	6915 294 213

Complete devices

Resistance thermometers
with clamp/screw connection
GI/2 ISO 228

Nominal length	Material No.
	2 x PT 100 Ω DIN
150	6915 2911 13
180	6915 2911 14
210	6915 2911 15
250	6915 2911 16
290	6915 2911 17
330	6915 2911 18
380	6915 2911 19
430	6915 2911 20
480	6915 2911 21
550	6915 2942 18
620	6915 2942 19

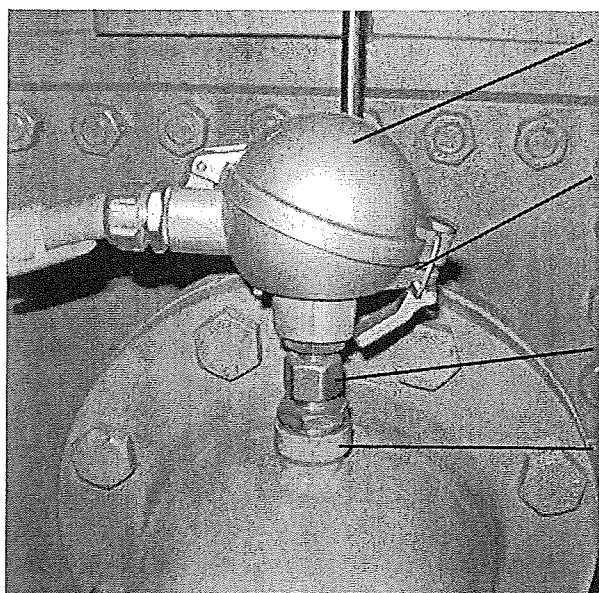
• Replacement of measuring units



WARNING

**Danger by emerging process gas
May lead to lethal injuries.**

The protective tubes of PT 100 resistance thermometers must not be replaced during turbomachine operation. Any maintenance or repair on protective tubes must only be effected on de-pressurized turbomachinery pipes. During any re-commissioning of turbomachinery, the protective tubes must be checked for tightness.



4

4a

2

1

- 1 Welded nozzle
- 2 Clamp/screw connection
- 3 Measuring unit
- 4 Protective cover
- 4a Fastening device
- 5 Fastening screws measuring unit

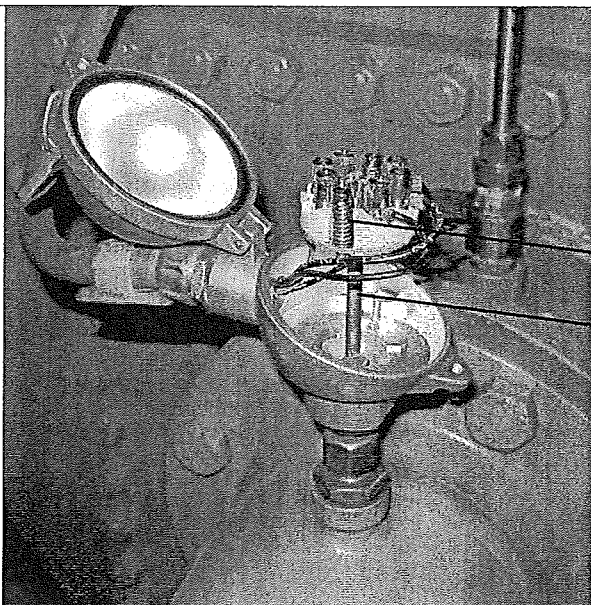


WARNING

Danger of explosion

In explosive atmospheres, measuring units may only be replaced during operation in the presence of intrinsically safe circuits.

1. Unlock fastening device (4a) and open protective cover (4).



5

3

2. Loosen the two spring-loaded fastening screws (5) and pull out measuring unit (3).

ATTENTION

Current-conducting cables (24 volts) should be de-energized. If this is impossible during operation, pay increased attention to ensure that cables will not come into contact. For connection refer to the cable connection plan or circuit diagram (in chapter „Drawings“).

