

Conical Sensor, Pt100

- Hygienic, without gasket
- Compact mounting
- Fast response time
- High accuracy
- Wide temperature range
- Acid-proof, stainless steel



Description

The wetted parts of the conical sensor are in acid-proof stainless steel. The sensor is available as a cable sensor with high-flexible, 4-wire silicone cable.

The conical sensor is ideal for measuring temperature in pipe systems and tanks. The sensor mounting is hygienic and without gasket in a male nipple part welded into the pipe or the tank wall. The welding nipple is available in both flat and curved versions.

Technical Data

Sensor

Sensor tube	Acid-proof stainless steel AISI 316L (W 1.4404)
Time constant $\tau_{0,5}$	< 1.0 sec., measured in liquids 0.4 m/sec.
Media pressure	≤ 25 bar (water flow 3 m/sec.)
Element type	Pt100, Class A or B
Accuracy	DIN/EN/IEC 60751 1/1 DIN B: $\pm(0.3 + 0.005 \times t)$ °C 1/3 DIN B: $\pm 1/3 \times (0.3 + 0.005 \times t)$ °C 1/6 DIN B: $\pm 1/6 \times (0.3 + 0.005 \times t)$ °C 1/1 DIN A: $\pm(0.15 + 0.002 \times t)$ °C
Sensor length	20 mm/25 mm

Cable

Type	High-flexible silicone, grey
Wires	4 (2 x Red, 2 x white)

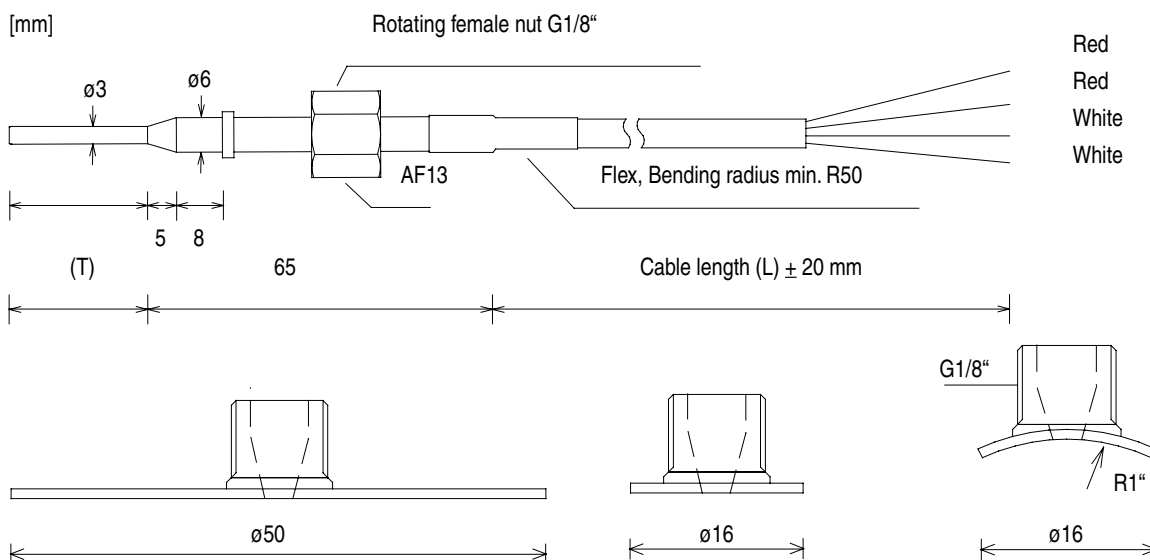
Environmental conditions

Media temperature	-50...205°C
Ambient temperature	-50...205°C
Marking label	-30...105°C
Humidity	< 95% RH, condensing
Protection class	IP 65
Vibrations	GL, test 2
Mechanical tolerances	ISO 2768-m

Disposal of product and packing

According to national laws or by returning to Baumer

Dimensional Drawings



Ordering Details - Conical Pt100 Cable Sensor

	8155	xx	xxxx
Tip length (T)	5' digit		
20 mm		2	
25 mm		3	
As customer specification (Max. 25 mm)		S	
Pt100 element (DIN/EN/IEC 60751)	6' digit		
1/1 DIN B		2	
1/1 DIN A		3	
1/3 DIN B		4	
1/6 DIN B		5	
Cable length (L)	7...10' digit		xxxx
Length in cm			

Accessories

Welding nipple, male	G 1/8, R=1"	Type no.	81 55-291
Welding nipple, male	G 1/8, flat, ϕ 16 mm	Type no.	81 55-292
Welding nipple, male	G 1/8, flat, ϕ 50 mm	Type no.	81 55-294
Blind plug		Type no.	81 55-293

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