




Features

- Temperature transducer for mounting in the piping
- Temperature measuring with integrated Pt 100 measuring resistor
- Output signal: Pt 100, 2(3)-wire technology

Options

- Classification per SIL 2
- Transmitter can be integrated

Application area

- Food industry
- Pharmaceuticals

Application

Inline temperature transducers allow a dead-zone free measuring of the pipe wall temperature. Measuring is performed without cross-sectional alterations and without contact of the medium with the measuring resistor. The transducer is integrated in the piping by intermediate screwing. A variety of screwings are available for different applications.

Technical Data

Mechanical design

pipe body and necktube with integrated measuring resistor

Material

stainless steel mat.-no. 1.4435 (316L)
other materials upon request

Connection head

selective

- model B, cap with 2 slotted screws, mat. aluminium, IP 54
 - model BUZH, high spring cover with slotted screw, mat. aluminium, IP 65
 - field housing Ø 60 mm, screw cap, stainless steel mat.-no. 1.4305 (303), IP 67
- further connection heads upon request

Process connection

screwing as part of the piping, connections and DN's see order details; other values upon request

Pressure stage

see table under dimensions

Measuring resistor

Pt 100, class A per DIN EN 60751

Functional safety

per EN 61508, classification per SIL 2; without transmitter, only

Process temperature

-20...200 °C

Response time

dependent on medium and the ambient conditions, e.g. with water medium:
pipe: DN 25

Rise of 20...90 % of the final temperature

Q= 0.5 m ³ /h	t= 162 s
Q= 1 m ³ /h	t= 54 s
Q= 1.5 m ³ /h	t= 39 s

Weights

see table

Integrated transmitter

suitable Pt 100 transmitters can be integrated into the connection head.

Options:

- instead of terminal block
- mounting in the spring cover of the connection head BUZH

see product group T4 for analog or digital transmitters

LED-on-site indication

programmable LED-on-site indication for stainless steel field housing (Ø 60 mm), see data sheet M6-031.

Information on other models upon request or see order details

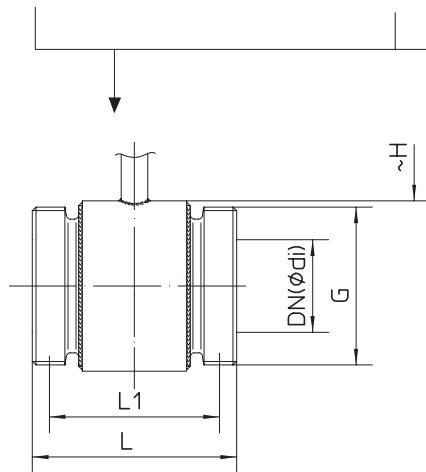
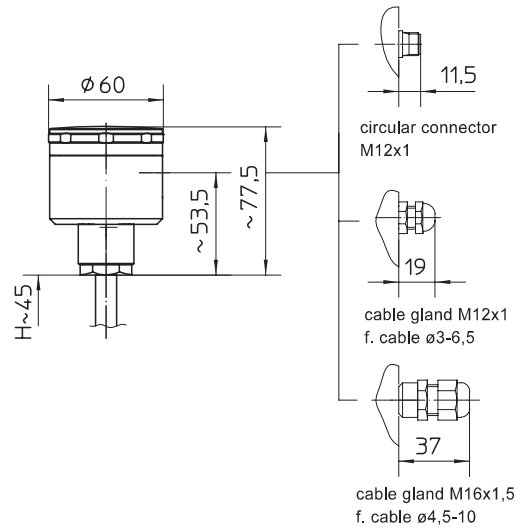
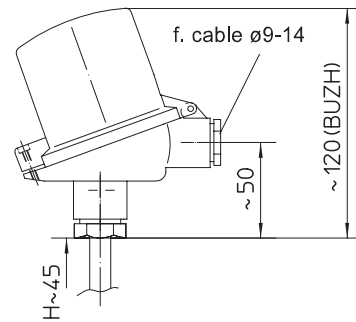
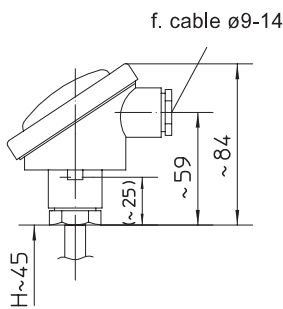
Dimensions

Connection heads

connection head model B,
cap with 2 slotted screws
mat. aluminium, IP 54

connection head model BUZH,
high spring cover with slotted screw,
mat. aluminium, IP 65

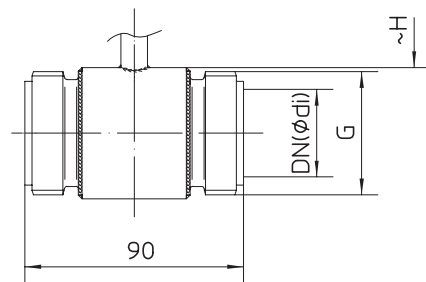
connection head field housing,
screw cap,
mat. stainless steel , IP 67



threaded pipe connection
per DIN 11851 or DIN 11864-1

dimensions/sanitary connection						
DN	di	PN ¹	G	L	L1	weight appr. kg
10	10	40	Rd. 28 x 1/8	80	72	0.4
15	16	40	Rd. 34 x 1/8	80	72	0.5
20	20	40	Rd. 44 x 1/6	84	72	0.6
25	26	40	Rd. 52 x 1/6	84	70	0.7
32	32	40	Rd. 58 x 1/6	84	70	0.8
40	38	40	Rd. 65 x 1/6	84	70	0.9
50	50	25	Rd. 78 x 1/6	84	70	1.1
65	66	25	Rd. 95 x 1/6	88	72	1.4
80	81	25	Rd. 110 x 1/4	102	86	1.9
100	100	25	Rd. 130 x 1/4	102	82	2.4
125	125	16	Rd. 160 x 1/4	110	86	2.9

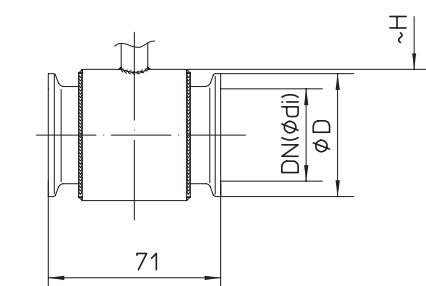
¹ up to 140 °C process temperature



IDF connection
per ISO 2853

dimensions/IDF connection					
DN		PN ²	di	G	weight appr. kg
1"	25	40	22.6	TR37x3.175	0.5
1 1/2"	38	40	35.6	TR50.5x3.175	0.6
2"	51	25	48.6	TR64x3.175	0.8

² up to 140 °C process temperature

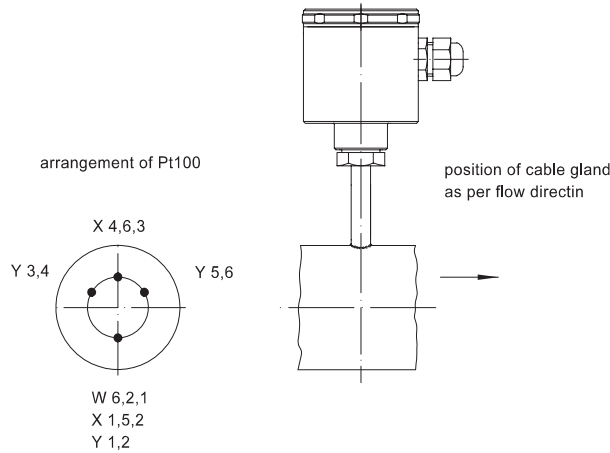
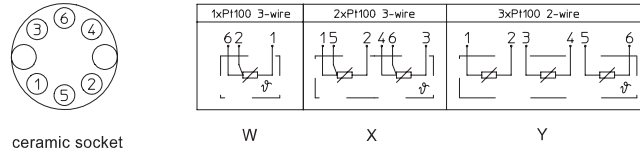


Clamp connection
per DIN 32676, ISO 2852
DIN 11864-3 or Tri-Clamp

dimensions/clamping joint					
DN		PN ³	di	D	weight appr. kg
1 1/2"	38	16	35.6	50.5	0.5
2"	51	16	48.6	64	0.6

³ up to 120 °C process temperature

Connection diagram



Order Details - please give additional specifications for models not listed -

Inline temperature transducer with Pt 100		GA2200		
surface roughness	· according to hygienic design (see data sheet D1-030)		HY	
process connection/ nominal width	sanitary connection per DIN 11851 (both sides) internal diameter per DIN 11850			
	· DN 10		A1010	
	· DN 15		A1012	
	· DN 20		A1013	
	· DN 25		A1014	
	· DN 32		A1015	
	· DN 40		A1016	
	· DN 50		A1017	
	· DN 65		A1018	
	· DN 80		A1019	
	· DN 100		A1020	
	· DN 125		A1021	
		threaded couplings per IDF ISO 2853 (both sides) internal diameter for ISO-tubes per DIN 2463		
		· 1"		B4532
	· 1 1/2"		B4533	
	· 2"		B4535	
	Clamp connection per ISO 2852 (both sides) internal diameter for ISO-tubes per DIN 2463			
	· 1 1/2"		C5133	
	· 2"		C5135	
material pipe body	· stainless steel mat.-no. 1.4435 (316L)		G3	
	· as in writing		G9	
measuring resistor	· 1 x Pt 100, 3-wire technology, standard		E12	
	· 2 x Pt 100, 3-wire technology, arrangement opposing		E22	
	· 3 x Pt 100, 2-wire technology, arrangement: 120°		E32	
connection head	· model B	electrical connection cable gland M20x1.5 nickel	T11	
	· model BUZH	plated brass cable Ø 9-14	T15	
	· field housing	cable gland	polyamide cable Ø 3-6.5	T47
			black cable Ø 4.5-10	T47.40
		st. steel cable Ø 3-6.5	T47.21	
	with circular connector M12x1		T47.51	
additional features (to be indicated in case of need, only)				
incl. transmitter (pls. specify separately)	· mounting on the measuring insert (instead of terminal block)		Z1	
	· mounting in the spring cover of the connection head BUZH		Z2	
material certificate per DIN EN 10204-3.1			W1020	
functional safety per EN 61508, classification per SIL 2			W2604	
transmitter with resistance thermometer calibrated			W4057	
process connection electropolished			W4035	
Order code (example):		GA2200	HY A1013 G3 E12 T47	