

Solid Machined, with Flange

Wetted Parts made of Special Material

Model TW10-P

WIKA Data Sheet TW 95.12

Applications

- Chemical engineering, process engineering, apparatus engineering
- For high chemical loads
- For high process loads

Special Features

- Good price-performance ratio
- Wetted parts made of special material
- Non wetted flange made of stainless steel 316/316L
- Flanged connection thermowell with partial penetration welding $a = 3 \text{ mm}$
- All parts of the thermowell welded to one unit ²⁾
- Available thermowell style: tapered, straight and stepped

Description

Material of wetted parts

Hastelloy C4 (2.4610), Hastelloy C276 (2.4819),
Monel 400 (2.4360), Titan Grade 2 (3.7035) ²⁾

Flange

acc. to ASME / EN 1092-1 / DIN 2527

Instrument connection

½ NPT, G ½ female

Bore size

Ø 6.6 mm, Ø 8.5 mm

Insertion length U

To customer specification

Connection length H

To customer specification (standard 57 mm, 83 mm)

Maximum process temperature ¹⁾

Dependent upon thermowell material



Flanged Thermowell Model TW10-P

Maximum process pressure

Dependent upon pressure rating of flange

Optional extras

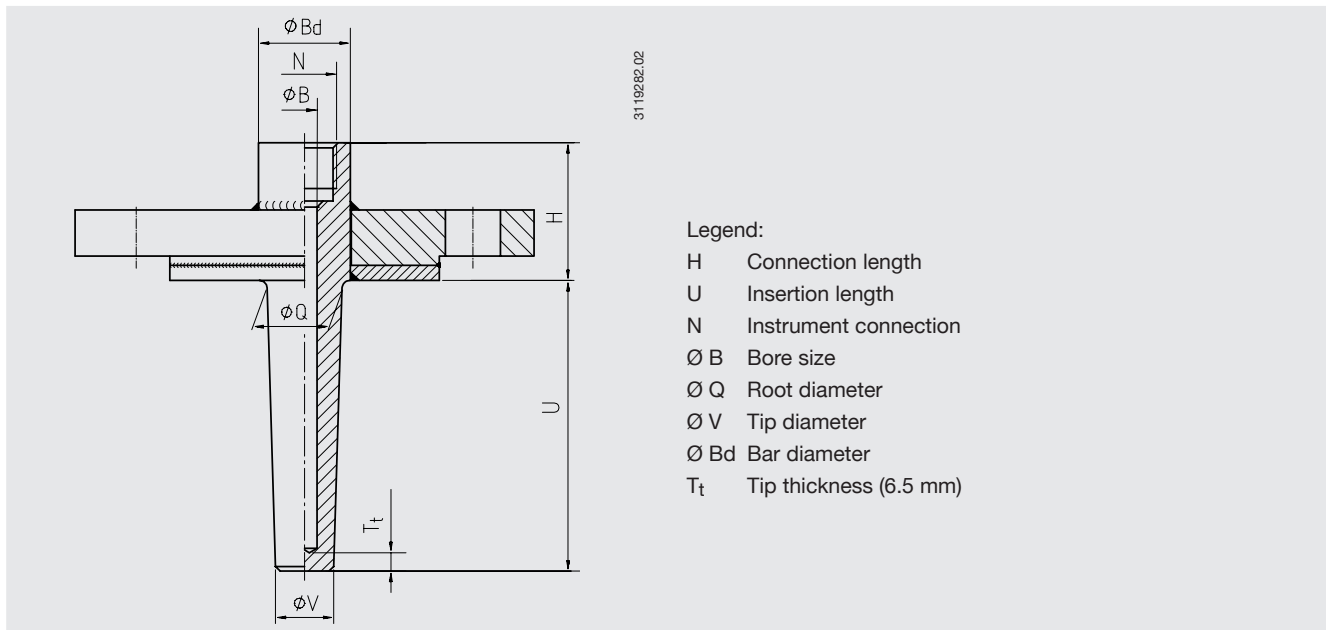
- Other flanges, dimensions and materials
- Quality certificates
- Wake frequency calculations in accordance with ASME PTC 19.3 are recommended in critical applications. WIKA offer this as an engineering service. Please find further information in our separate technical information sheet, IN 00.15 "Strength calculation for thermowells"

1) Rating depends on the parameters below:

- Process medium
- Process pressure and temperature
- Flow rate
- Design of thermowell (dimensions, material)

2) For Titan Grade 2 (3.7035) material, the flange is designed to be a loose pressure flange.

Dimensions in mm



Dimensions for ASME flanges, Model TW10-P-A

DN	PN in lbs	Dimensions in mm				Weight in kg			
		H	Ø Q	Ø V	Ø B	Ø Bd	U = 4"	U = 13"	U = 22"
1"	150	2 1/4" (ca. 57 mm)	22	16	6.6 or 8.5	30	1.6	2.1	2.5
	300						2.3	2.8	3.2
	600						2.5	3	3.4
	1500						4.7	5.2	5.6
1 1/2"	150	2 1/4" (ca. 57 mm)	25	19	6.6 or 8.5	30	2	2.6	3.2
	300						3.5	4.1	4.7
	600						4.2	4.9	5.5
	1500						6.9	7.6	8.2
2"	150	2 1/4" (ca. 57 mm)	25	19	6.6 or 8.5	30	2.8	3.4	4
	300						4	4.6	5.2
	600						4.5	5.2	5.8
	1500						11.7	12.3	13

Dimensions for EN/DIN flanges, Model TW10-P-A

DN	PN in bar	Dimensions in mm				Weight in kg		
		H	Ø Q	Ø V	Ø B	Ø Bd	U = 160 mm	U = 500 mm
25	40	45	22	16	6.2 - 10.2	30	1.94	2.62
	63/64						3.24	3.92
	100						3.24	3.92
40	40	45	25	19	6.2 - 10.2	30	3.06	4.0
	63/64						4.76	5.7
	100						4.76	5.7
50	40	60	25	19	6.2 - 10.2	30	3.86	4.8
	63/64						5.16	6.1
	100						6.56	7.5
80	40	60	25	19	6.2 - 10.2	30	6.56	7.5
	63/64						7.56	8.5
	100						10.16	11.1
100	40	60	25	19	6.2 - 10.2	30	8.26	9.2
	63/64						10.86	11.8
	100						14.96	15.9

Suitable stem lengths for mechanical thermometers

Connection design	Stem length l_1
S / 4 / 5	$l_1 = U + H - 10 \text{ mm}$
2	$l_1 = U + H - 30 \text{ mm}$

Sealing surface roughness

Flange standard	AARH in μinch	Ra in μm	Rz in μm
ASME Stock finish	125-250	3.2 - 6.3	-
B 16.5 Smooth finish	< 125	< 3.2	-
EN 1092 Form B1	-	3.2 - 12.5	12.5 - 50
Form B2	-	0.8 - 3.2	3.2 - 12.5
DIN 2527 Form C	-	-	40 - 160
Form E	-	-	< 16

Modifications may take place and materials specified may be replaced by others without prior notice.
Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.



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