

Application

Designed for use as drilled from solid bar stock thermowells for resistance thermometers and thermocouples.

Thermowell assembly by welding into process.

Features

- Instrument connection: thread G1/2", 1/2"NPT or others
- Immersion lengths: acc. to customer's specification
- Tolerances per DIN ISO 2768
- Maximal process pressure and temperature depends on thermowell dimension and material
- Thermowell materials:
1.4401 (AISI316), 1.4404 (AISI316L)
1.4541 (AISI321), 1.4571 (AISI316Ti)
- 2.4816 (Alloy 600), 2.4819 (Alloy C276)
2.4602 (Alloy C22), 3.7035 (Tytan gr. 2)

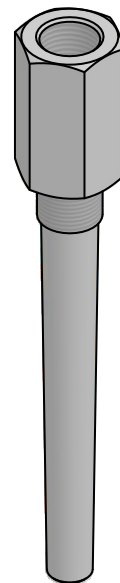
Options

- Certificate 3.1 acc. to EN 10204
- PMI test
- Designation with individual serial number
- Other materials, threads and dimensions
- Protective coatings: PFA, silicon carbide or others

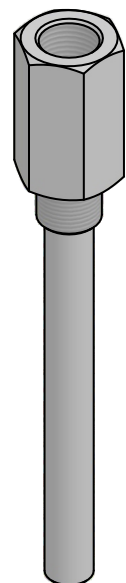
Protective coatings

Additional protective coatings are commonly used in applications where resistance to abrasion, corrosion or erosion is critical.

This solution is also an alternative to expensive materials - it allows to lower production costs compared to thermowells made entirely of desired material. Coat can be applied for example to standard stainless steel AISI316L (1.4404).



Drilled thermowells,
screw-in.
Type W-WZ (tapered)



Drilled thermowells,
screw-in.
Type W-WP (straight)

Rating depends on the parameters below:

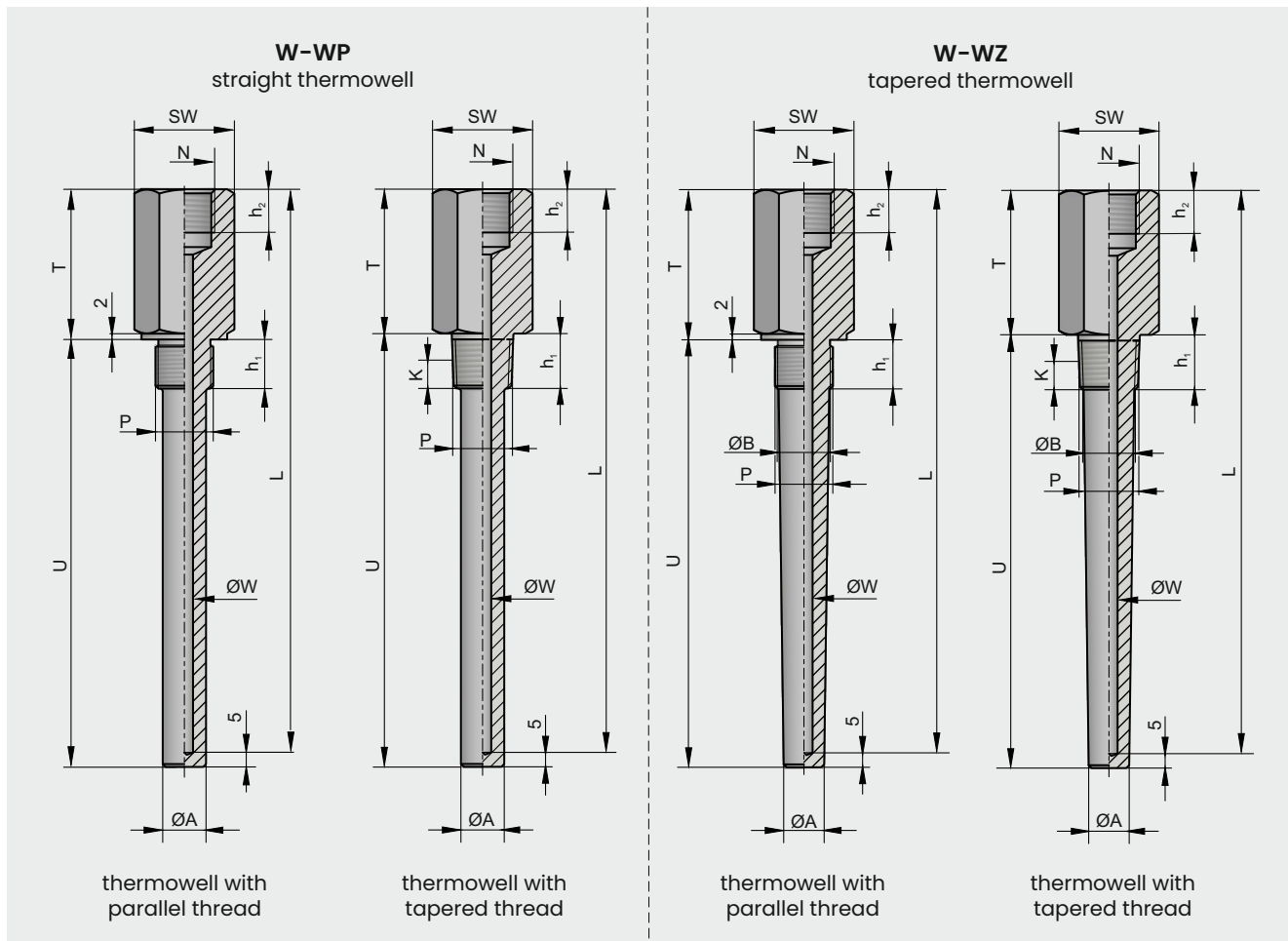
- Process medium
- Process pressure and temperature
- Flow rate
- Design of thermowell (dimensions, material)

Termoaparatura Wroclaw offers following protective coating materials:

- Teflon® PTFE/PFA
- Stellite®
- Hard chrome
- Silicon carbide SiC
- Aluminum oxide

Wake frequency calculations in accordance with ASME PTC 19.3 are recommended in critical applications. TERMOAPARATURA offer this as an engineering service.

Solid machined thermowells W-WZ, W-WP with threaded connection



ⓘ Screw-in length by hand (K)
 - thread 1/2"NPT approx. 8,1 mm
 - thread 3/4"NPT approx. 8,6 mm

Standard dimensions

- Standard lengths of external threads

Process connection P	Thread length h_1 [mm]
M20x1.5 G1/2"	15
M27x2 G3/4" 1/2"NPT 3/4"NPT	18
G1"	19
1"NPT	25

- Standard lengths of internal threads

Instrument connection N	Thread length h_2 [mm]
M14x1.5 M18x1.5 M20x1.5 G1/4" G1/2"	17
1/2"NPT	18

Ordering code

W - W ¹ - ² - ³ - ⁴ - ⁵ - ⁶ - ⁷ - ⁸ - ⁹ - ¹⁰

1	<input type="text"/>	Design	
		Z	thermowell screw-in, tapered
		P	thermowell screw-in, straight
2	<input type="text"/>	Process connection P	
		xxx	specify type of thread
3	<input type="text"/>	Thermowell material	
		xxx	specify material type
4	<input type="text"/>	Diameter A	
		xxx	to be specified in milimeters
5	<input type="text"/>	Diameter B (for thermowell W-WP dimension B=A)	
		xxx	to be specified in milimeters
6	<input type="text"/>	Bore diameter W	
		xxx	to be specified in milimeters
7	<input type="text"/>	Instrument connection N	
		xxx	specify type of thread
8	<input type="text"/>	Immersion length U	
		xxx	to be specified in milimeters
9	<input type="text"/>	Length T	
		xxx	to be specified in milimeters
10	<input type="text"/>	Hexagon size SW	
		xxx	to be specified in milimeters