

Design of thermowells in special lengths

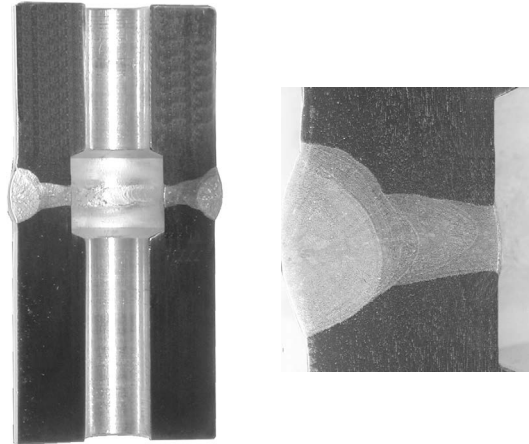
WIKA data sheet IN 00.16

Applications

- Temperature measurements **without** dynamic loading from process media flows (e.g. tank farms)

Special features

- Thermowells in special lengths made from solid-drilled components, welded together
- Fast response time and easy mounting of temperature sensors by special bore design
- Welding certification to ASME Sec. IX



Micrograph of the weld seam (butt seam) of a special-length thermowell

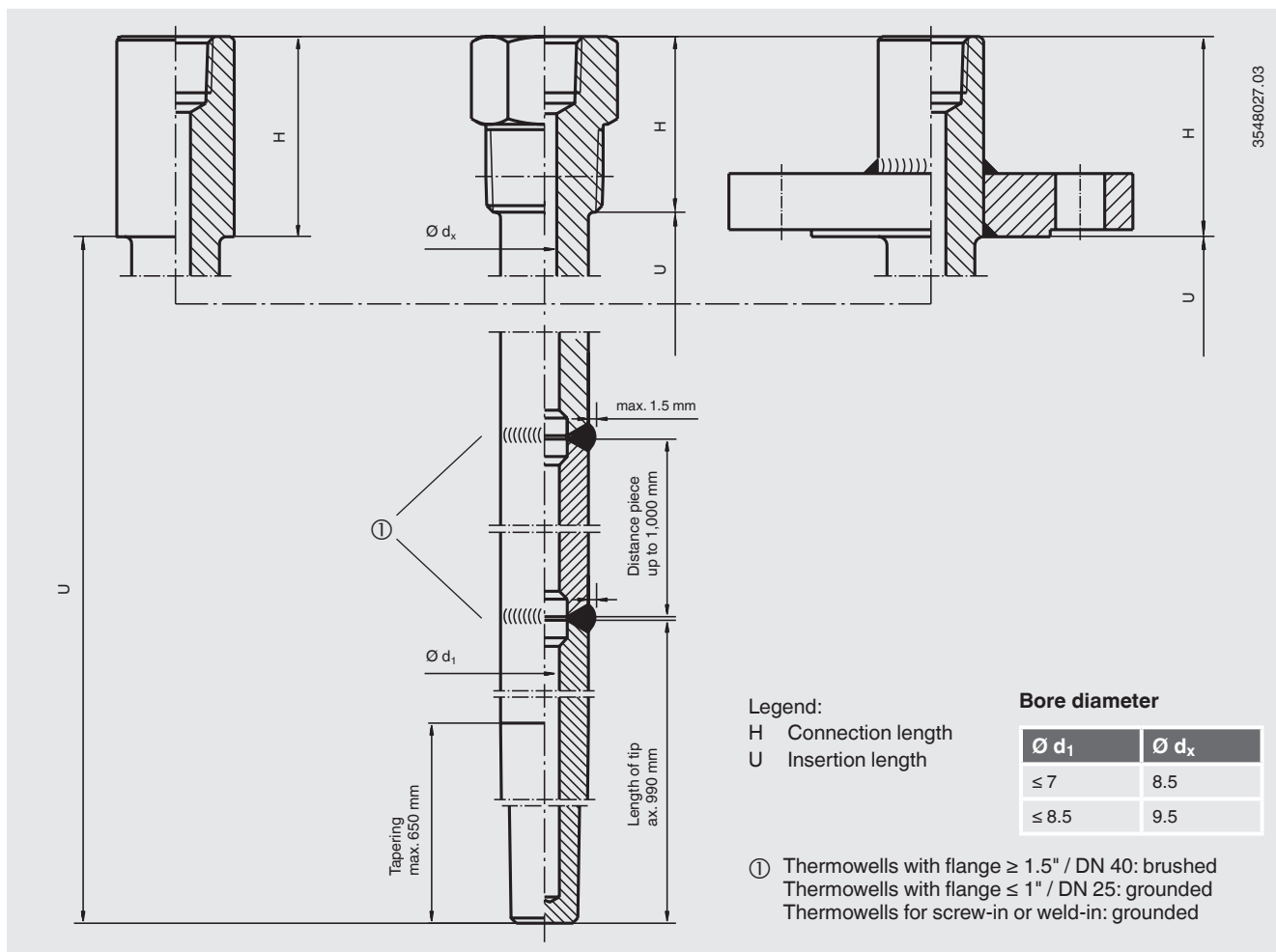
Description

Thermowells in special lengths are made by welding several solid-drilled individual components. The thermowell has a straight profile with a tapered tip and stepped bore design in order to reduce the response times. The welded joint between the individual thermowell components is certified to ASME Sec. IX.

Tests/certificates

- Liquid penetrant test of the weld seams
- Hydrostatic pressure test up to 600 bar external pressure (max. 1.5-fold pressure rating of the flange)
- Hydrostatic pressure test up to 500 bar internal pressure for screw-in/weld-in type thermowells
- PMI (Positive Material Identification) of the individual components
- X-ray test of the weld seam
- 3.1 certificate

Schematic description



Applicable thermowell models

Model	Data sheet
TW10	TW 95.10 TW 95.11 TW 95.12
TW15	TW 95.15
TW20	TW 95.20
TW25	TW 95.25
TW30	TW 95.30

Tolerances of lengths	
L U < 5,000 mm	DIN ISO 27 68-C
L U > 5,000 mm	DIN ISO 27 68-V

as well as all solid-drilled thermowells per DIN 43772.

In rare cases a reworking of the weld seam is necessary for mounting.

You can find the data sheets for the thermowells on the internet at www.wika.com.

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