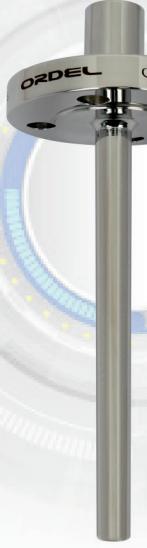


OTW20 SERIES FLANGED THERMOWELLS



OTW21 Flanged Flat Type Thermowells



OTW22 Flanged Conical Type Thermowells



OTW23 Flanged Stepped Type Thermowells

DEFINITION

Thermowells are protective sheaths used to protect temperature sensors (T / C - R / T) and other temperature sensors (Bimetallic). They are processed from pipes and filled materials. All thermowells are an important component of the temperature measuring point. They prevent damage to the sensor from environmental conditions such as high pressure, excessive material speeds and viscosities, chemical and mechanical abrasions. In addition, they provide easy replacement of temperature sensors without interrupting the process in case of failure. They are an excellent solution to protect the process and extend the lifespan of the sensor.

Important criteria in the selection of thermowell:

- 1 - Maximum operating temperature
- 2 - Maximum working pressure
- 3 - Flow rate of the working environment
- 4 - The density of the working environment
- 5 - Viscosity of the working environment
- 6- Predetermined Ordel or other brand thermowell code or details

Ordel Thermowells are classified according to the design of the body. Flat type thermowell is the same length along the whole body length. Conical thermowells have a diameter that gradually decreases along the body length. With this structure, they have a fast response time. Conical thermowells are also preferred in applications with very high output speed.

Stepped thermowells have two different diameter structures with their body structure. With its low diameter structure close to the measurement point, it has a speed of transition and a fast temperature sensing structure.

Thermowells are usually drilled from solid bars and processed as a whole piece (Barstock). In addition, there are thermowell types produced by welding pipes of various structures to process fittings such as raccord and flange.

ORDEL FLANGED THERMOVEL FEATURES and SELECTION CRITERIA

PICTURE NO : OTW21, OTW22, OTW23

OTW21 -	Flanged Flat Type Thermowell
OTW22 -	Flanged Conical Type Thermowell
OTW23 -	Flanged Stepped Type Thermowell

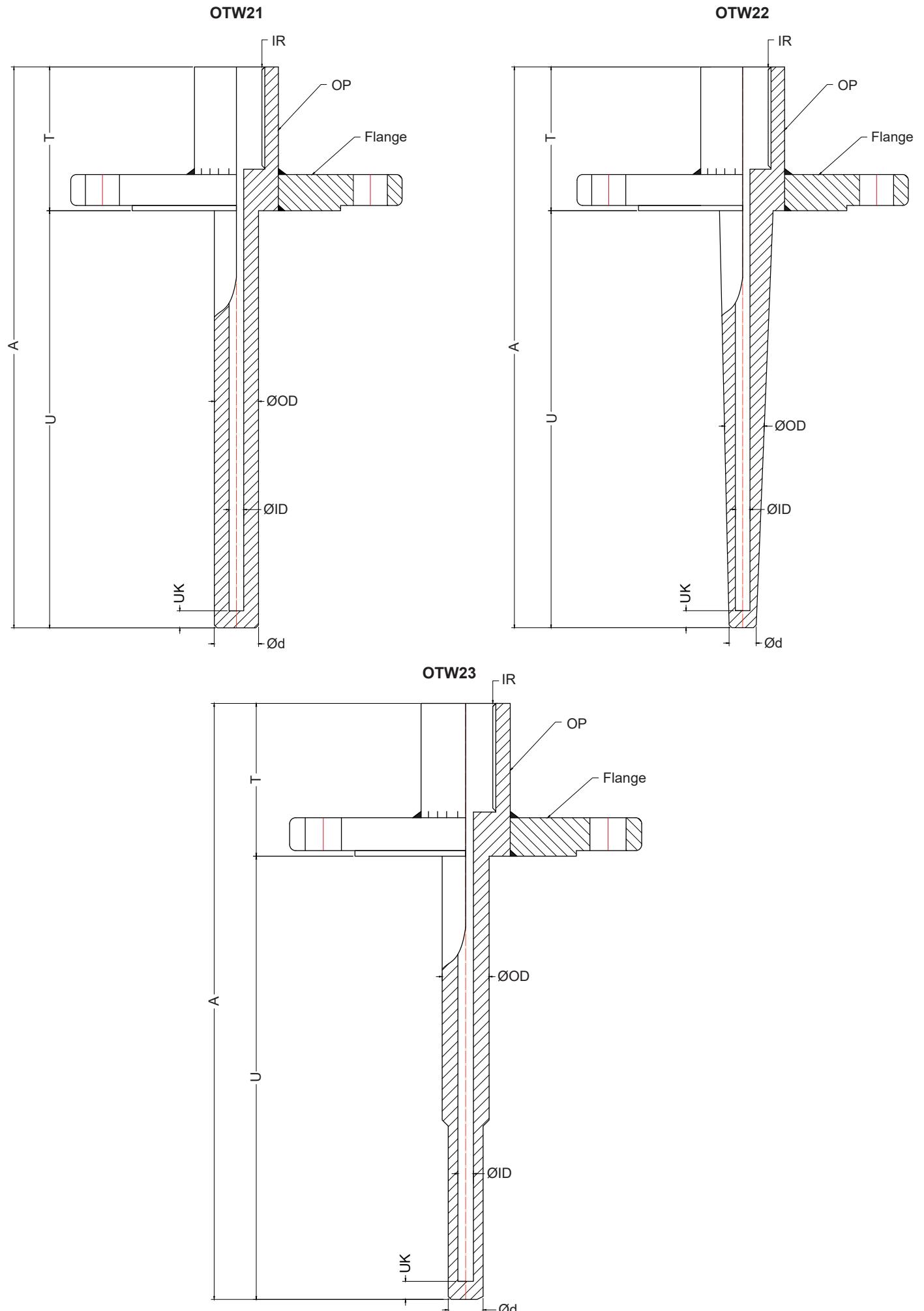
STANDARD THERMOVEL FILLED AND PIPE MATERIALS

ASTM A304 (1.4301)	DIN 1.4749(AISI 446)	INCOLOY-825 (DIN 2.4858)
ASTM A316 Ti (1.4571)	DIN 1.4828(AISI 309)	HASTELLOY-C4 (DIN 2.4610)
ASTM A316 L (1.4404)	DIN 1.4841(AISI 314)	BRASS MATERIAL
ASTM A310 (1.4845)	DIN 1.7335 (Molibden)	TEFLON
ASTM A321 (1.4541)	INCONEL-600 (DIN 2.4816)	
ASTM A105 (Carbon Steel)	INCONEL-800 (DIN 1.4876)	

STANDARD HOLE DIAMETERS

3.0 mm
4.0 mm
5.0 mm
6.0 mm
7.0 mm
8.0 mm
9.0 mm
10.0 mm

Note: Ordel thermowells can be produced in desired diameters according to the application other than standard hole diameters. Filled material length is produced up to a maximum of 1100 mm.



ORDEL OTW20 THERMOWELL CODING

Type - Well Material	Body Structure	Hole Diameter	End Diameter	End Thickness	Well Head Length - (T)	Well Head Diameter	Immersion Length (U)	Total Length (A)	Sensor Connection	Flange Material	Flange Pipe Size	Flange Pressure Class	Flange Type	Option
Order Code OTW21 OTW22 OTW23														
Write the length T as U Example: 145 Note: Dimensions are in "mm". Note: For unspecified well-head length, contact Order.														
Order Code ASTM A304 (1.4301) E ASTM A316TI (1.4571) H ASTM A316L (1.4404) B ASTM A310 (1.4845) L ASTM A321 (1.4541) J ASTM A105 (Carbon Steel) G 1.4749 (AISI446) M 1.4828 (AISI309) V 1.4841 (AISI314) L 1.7335 (Molibden) K INCONEL-600 N INCOLOY-800 NX INCOLOY-825 NY HASTELLOY-C4 O BRASS MATL. U TEFILON T FULL D PIPE B														
Write the length U as U Example: U105 Note: Dimensions are in "mm". Note: Write "U" and "A" length as when requested, except for the specified lengths. Example: When 470mm is requested, write as U470 or A470.														
for OTW21 3 mm 03 4 mm 04 5 mm 05 7 mm 07 9 mm 09 10 mm 10														
for OTW22 15 mm 15 18 mm 18 20 mm 20 26 mm 26														
for OTW23 9 mm 09 12 mm 12 14 mm 14 16 mm 16														
Write the length A as A Example: A150														
DN FLANGES DN10 DN15 DN20 DN25 DN40 DN50 ... DN100 S1/2" NPT S3/4" NPT S1" NPT														
Note: Write the other flange dimensions as DN.....														
ANSI FLANGES 150 lb Slip.on 300 lb Slip.on 600 lb Slip.on 900 lb Slip.on														
Note: Write the other sensor connection dimensions as S ... Example: S2" NPT														
Write the length A as A Example: A5 mm														
5 mm 5 6.35 mm 1/4"														
Note: You can specify other tip thickness sizes.														