

## Data Sheet

# Sanitary Thermowells

### FEATURES

- One piece bar stock construction
- Stamped with mill traceable material and heat number
- Testing and certifications including Wake Frequency Calculations ASME PTC 19.3 TW-2016
- Standard or customized dimensions

### TYPICAL USES

- Pharmaceutical / Biotech
- Food and beverages



**Sanitary Thermowells**  
1", 1½", 2" Tri-Clamp® sizes

### SPECIFICATIONS

Shank Style:	Straight, Tapered or Stepped
Process Connection:	1", 1½" or 2" Tri-Clamp®
Instrument Connection:	½ NPSM or ½ NPT Female
Bore Size:	0.260" or 0.385"
Surface Finish:	8-12 Ra or 4-12 Ra
Lagging:	2": if U-dimension is <3" 3": if U-dimension is >3"
Cap and Chain:	Brass or stainless steel

TABLE 1

OPTIONS	CODE
Stamp tag number on thermowell	NF
Stainless steel tag wired to thermowell	NH
Hydrostatic test-internal	W9
Clean for oxygen service	6B
Wake frequency calculation	W5
4-12 Ra finish	PT
Material origin restriction	UM

### Certificates

Certificate of Conformance (per order)	CD-1A
Physical and Chemical Material Test Report (MTR's)	W6
Positive Material Identification (PMI)	MQ
NACE Certificate of Compliance	CD-5

### KEY BENEFITS

- Protects instrument against corrosive effects and physical damage caused by media flow
- Permits instrument interchange or calibration check without disturbing/closing down the process
- Traceability of material origin for quality assurance and control

TABLE 2

MATERIALS	CODE
304 Stainless steel	C
316 Stainless steel	S
Hastelloy® B/C	G/H
Carpenter® 20	D
Duplex 2205 Stainless steel	J
Super Duplex S32750	SD
Inconel® 600	W
Titanium	TI

# Data Sheet

## Sanitary Thermowells

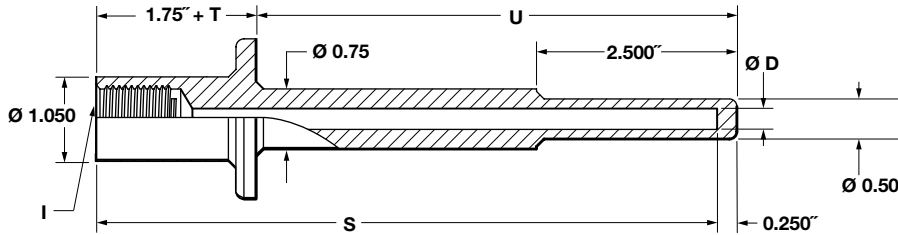
<b>ORDERING CODE</b>	Example:	15	W	0250		H	C	260	S	2	X6B	L0350
<b>P-Process Connection Size</b>												
10 - 1" Tri-Clamp®												
15 - 1½" Tri-Clamp®												
20 - 2" Tri-Clamp®												
<b>Thermowell</b>												
W - Thermowell												
<b>U-Process Insertion Length</b>												
0250 - 2½"												
0450 - 4½"												
0750 - 7½"												
1050 - 10½"												
1350 - 13½"												
1650 - 16½"												
2250 - 22½"												
<b>I-Instrument Connection</b>												
Blank - ½ NPSM												
2 - ½ NPT Female												
<b>T-Lagging</b>												
Blank - No lagging												
L - Lagging (for special lag length, see below)												
<b>Shank Type</b>												
H - Tapered												
S - Straight												
R - Stepped												
<b>Process Connection</b>												
C - Sanitary												
<b>Bore Diameter</b>												
260 - 0.260"												
385 - 0.385"												
<b>Material (Refer to Table 2)</b>												
C - 304 Stainless steel												
S - 316 Stainless steel												
<b>Cap and Chain</b>												
Blank - No cap and chain												
1 - Brass												
2 - Stainless steel												
<b>Options - (see Table 1 on page 1 for additional options (if choosing an option(s) must include an "X")</b>												
6B - Clean for oxygen service												
<b>Special Lagging Length</b>												
L - Lagging length × 100 (ex: 3.5" × 100 = L0350)												

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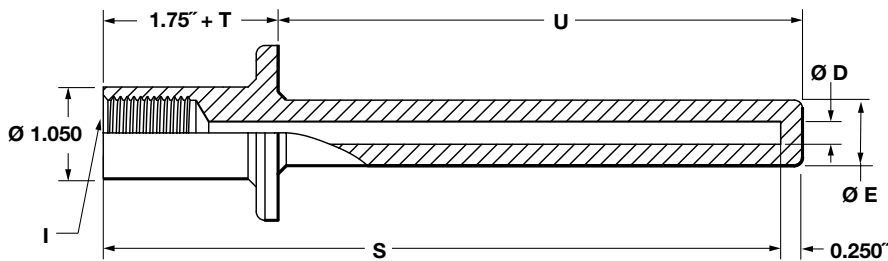
### DIMENSIONS

For reference only, consult Ashcroft for specific dimensional drawings

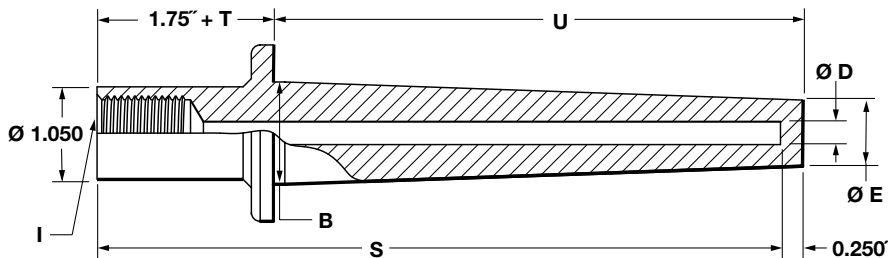
#### Sanitary Stepped Thermowell



#### Sanitary Straight Thermowell



#### Sanitary Tapered Thermowell



### Thermowell Legend

I - Instrument connection ( $\frac{1}{2}$ " NPSM is STD.)

E - Tip O.D.

D - Bore diameter

U - Insertion depth

S - Instrument stem length or bore depth

B - Root OD

T - Lag dimension when required

### Sanitary Straight

E	E
0.260" Bore	0.385" Bore
0.5"	0.766"

### Sanitary Tapered

B	E	E
	0.260" Bore	0.385" Bore
0.875"	0.625"	0.768"