T-WELL



THERMOWELLS
for thermometers and thermocouples

Thermowells (barstock) for thermometers and thermocouples are widely used for temperature measurements in food, chemical and heavy industry.

Thermowells can be weld-in, screwed or fixed using flange to the tag point. Depending on special requirements thermowells can be made of stainless steel 1.4571, 1.4841, Hastelloy C22 Alloy etc.

On customer request, we can provide Strength Calculation per ASME PTC 19.3 TW-2010. The process data required to perform such a calculation is as follows:

- flow rate,
- density of medium,
- temperature
- pressure dynamic viscosity.

Accessible materials	
on stock	on request
1.4401	1.4762
1.4404	Alloy 20 / 2.4660
1.4571	Incoloy 800 / 1.4876
1.4301	Hastelloy C22 / 2.4602
1.4307	Inconel 625 / 2.4856
1.4841	Inconel 600 / 2.4816
1.4541	Monel 400 / 2.4360
1.4462	Titanium Gr. 2
1.4410	Hastelloy C276 / 2.4819
1.0460	
1.7335	and other…
1.7380	
1.5415	

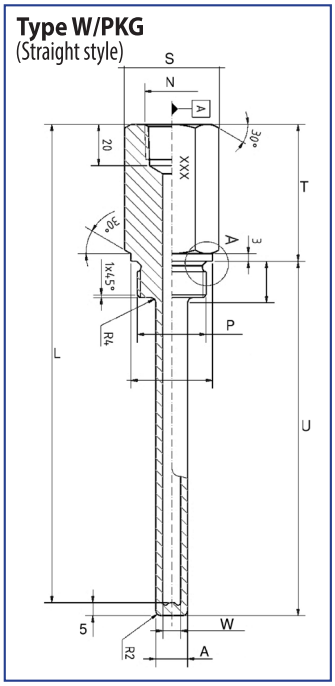
Extra options		
certificates	tests	treatment
3.1 acc. PN-EN 10204	Hydraulic pressure test	Heat treatment
3.2 acc. PN-EN 10204	Positive Material Identification	Quench hardering
	Dye penetration testing	Black oxidation
	X-ray test	Carbonizing
	Ultrasonographic examination	Zinc plating
	Ferrite content measurement	Electrpolishing
	Hardness test	Halar (ECTFE) coating
	Impact strength test	Teflon (PFA) coating
		Tantal sleeve

Drilling possibilities
bore diameter [mm] (max. depth [mm])
Ø3,4 (400) ; Ø3,5 (400) ; Ø4 (500) ; Ø4,5 (250) ; Ø5 (600) ; Ø6 (700) ; Ø6,07 (700) ; Ø6,2 (1160) ; Ø6,25 (1160) ; Ø6,3 (1160) ; Ø6,5 (1160) ; Ø6,6 (1160) ; Ø6,9 (1160) ; Ø7 (1160) ; Ø7,5 (1160) ; Ø8 (1160) ; Ø8,3 (320) ; Ø8,5 (1160) ; Ø8,73 (1160) ; Ø9 (1160) ; Ø9,5 (1160) ; Ø10 (1160) ; Ø10,5 (1160) ; Ø11 (1160) ; Ø11,1 (500) ; Ø11,6(1160) ; Ø12 (1160) ; Ø12,55 (1160) ; Ø14,02 (1160) ; Ø14,05 (1160) ; Ø15 (1160) ; Ø16 (1160) ; Ø17 (300) and other (up to 200)

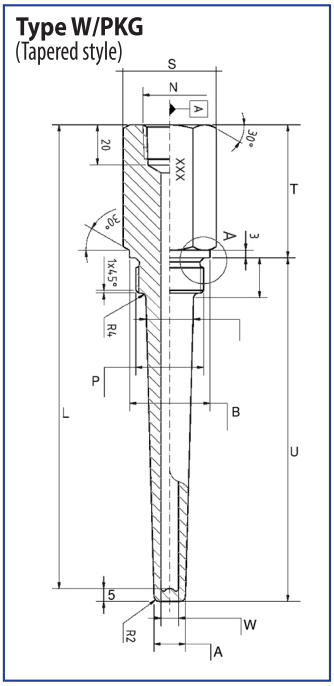
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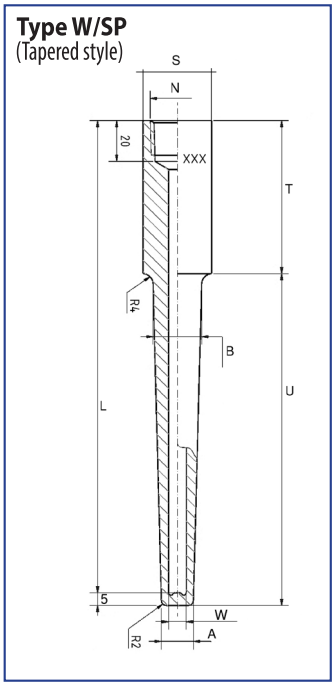
Types of drilled barstock Thermowells



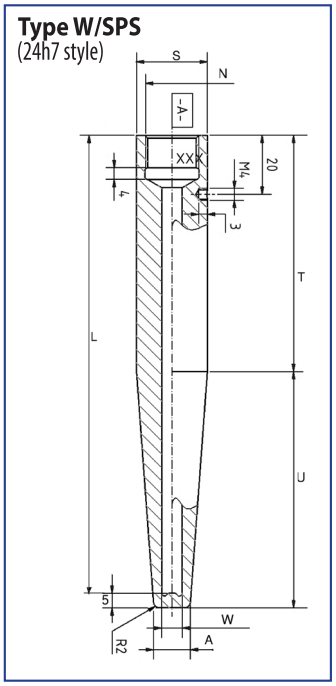
Threaded t-well, straight



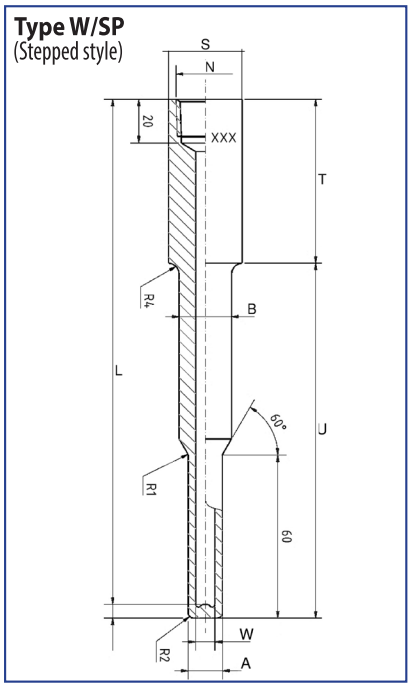
Threaded t-well, tapered



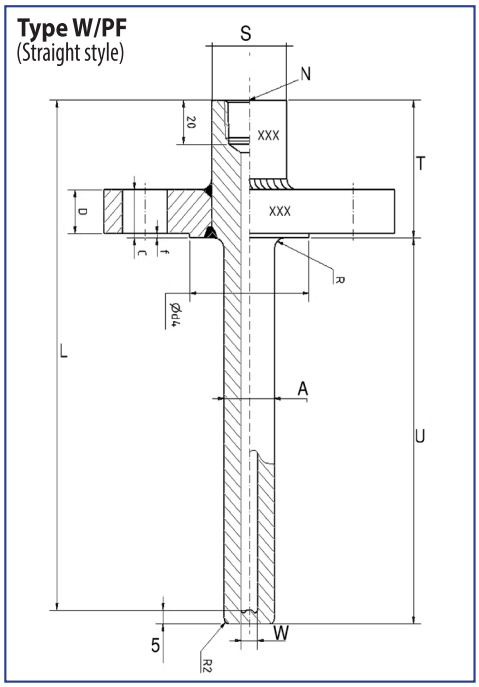
Weld-in t-well, tapered



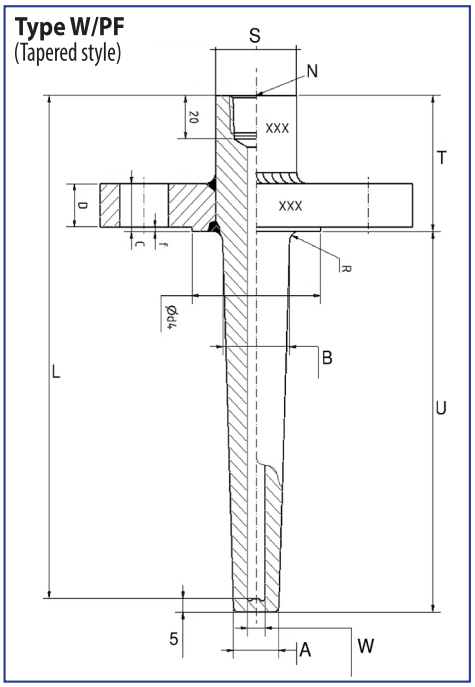
Weld-in t-well, polished (h7)



Weld-in t-well, stepped



Flanged t-well, straight



Flanged t-well, tapered

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Ordering Information

T-WELL	A	B	C	D	E	F	G	H	I	J	K	L

A	Thermowell type
W/PF	Thermowell with flange
W/PKG	Thermowell threaded
W/SP	Thermowell weld-in
W/SPS	Thermowell Form 4 (acc to DIN 43772)

B	Process connection type (flange, thread P)
	specify type

C	Thermowell style
Z	tapered
P	straight
S	stepped

D	Material
1.4571	1.4571 / 316Ti
1.4404	1.4404 / 316L
1.5415	1.5415 / 15Mo3
1.7335	1.7335 / A182 Grade F11 / 15HM
1.7380	1.7380 / 10H2M
	specify material grade

E	Thermowell diameter A (tip)
	specify in mm

F	Thermowell diameter B (root)
	specify in mm

G	Bore diameter W
	specify in mm

H	Instrument connection thread (inside) N
	specify thread type

I	Immersion length U
	specify in mm

J	Lagging length T
	specify in mm

K	Diameter or hex S of lagging
	specify in mm

L	Boring depth L
	specify in mm

Ordering Example:

T-WELL-W/PKG-G1/2-Z-1.4571-12,5-19-7-M18x1,5-250-60-SW 30-305

stands for: Thermowell threaded, process connection G1/2", tapered, material 1.4571, tip diam. A=12,5 mm, root diam. B=19 mm, bore diam. W=7 mm, instrument thread M18x1,5, immersion length U=250 mm, lagging length T=60mm, lagging SW 30, boring depth L=305 mm.

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