

Flanged Thermowells according ASME B16.5 or EN 1092-1

FEATURES

- One piece bar stock construction
- Stamped with mill traceable material and heat number
- Full penetration welds on flanged thermowell
- Standard or customized shank dimensions
- Testing and certifications including wake frequency calculations per ASME PTC 19.3 TW-2016

DESCRIPTION

- Power Generation
- Reactors
- Storage Tanks
- Cooling Towers
- Industrial equipment Manufacture
- Industrial Ovens
- HVAC/R
- Chemical and petrochemical industry



SPECIFICATIONS

Form:	Straight, Tapered or Stepped
Bore Diameter:	6.6 mm, 8.5 mm, 9.8 mm, 10.5 mm, 0.26" or 0.385"
Lagging Length:	75 mm (3") others on request
Immersion Length:	40 to 999 mm others on request
Pressure Rating:	Max. flange rating see ordering code for further details
Connection Size:	EN and ASME see ordering code for further details
Instrument Connection:	All common sizes see ordering code for further details
Flange Facing:	EN 1092-1: A, B1, B2, C or D ASME B16.5: Raised face, flat face or ring joint
Material:	All common materials see ordering code for further details

KEY BENEFITS

- Protects instrument against corrosive effects
- Permits instrument interchange or calibration check
- Tracing of material origin for quality assurance and control

OPTIONS

CODE

Stamp tag number on thermowell	NF
SS tag wired to thermowell	NH
Hydrostatic test-external	W4
Clean for oxygen service	6B
Wake frequency calculation	W5
Liquid dye penetrant	W2
Material origin restriction	UM

CERTIFICATES

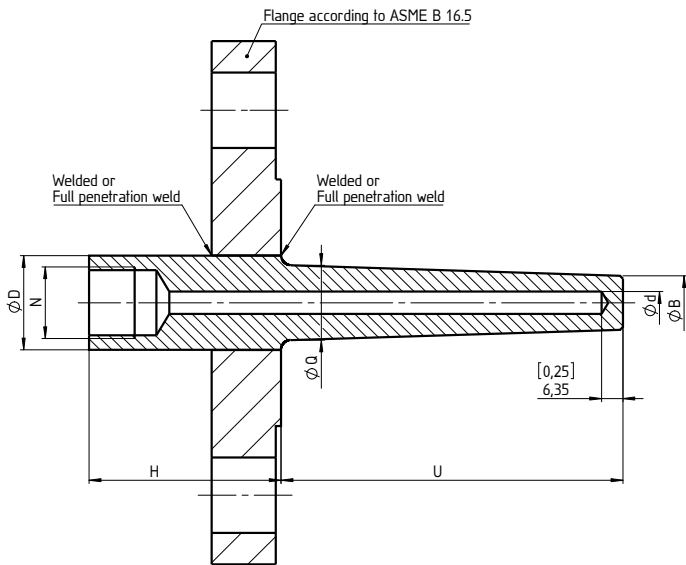
Certificate of Conformance (per order)	CD-1A
Physical and Chemical Material Test Report (MTR's)	W6
Positive Material Identification (PMI)	MQ
NACE Certificate of Compliance	CD-5

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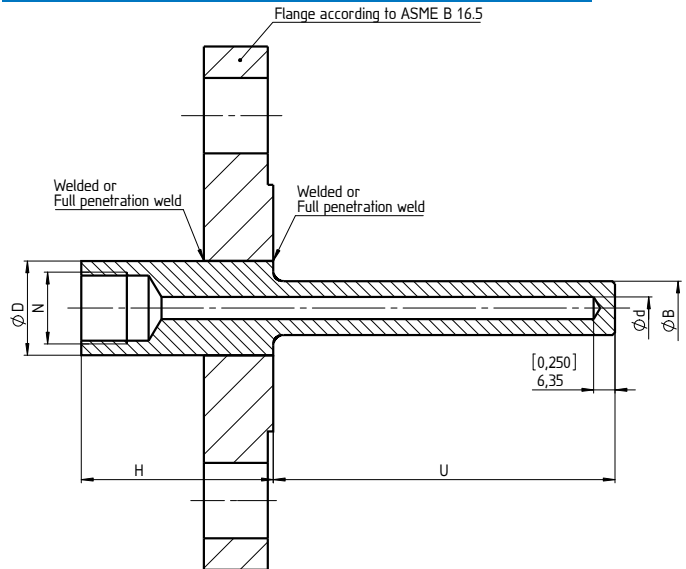
DIMENSIONS IN MM

For reference only, consult Ashcroft for specific dimensional drawings

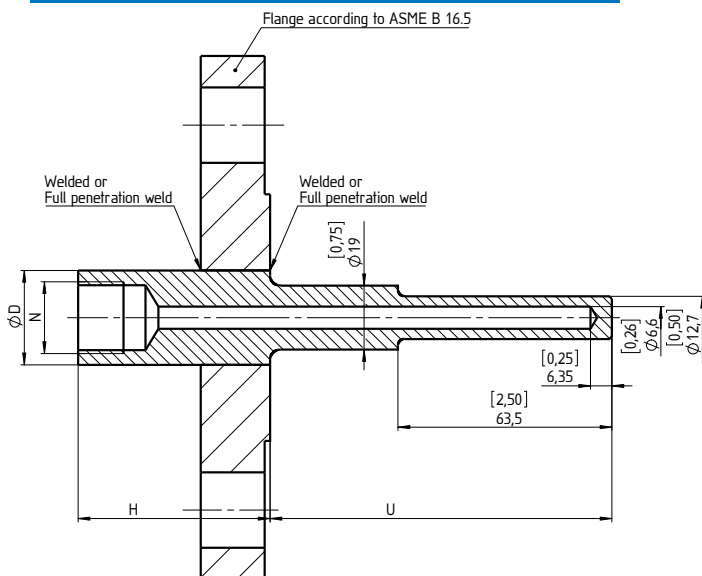
TAPERED



STRAIGHT



STEPPED



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ORDERING CODE	EXAMPLE:	TW-FLG	FP	B	15	M	7	120	2	H	256
Model											
TW-FLG	Flanged thermowell										
Welding											
FP	Full Penetration Welding										
PP	Partial Penetration Welding										
SB	Solid Body Construction										
Flange Style											
R	ASME B16.5 Raised flange										
F	ASME B16.5 Flat face										
J	ASME B16.5 Ring joint										
A	EN 1092-1 form A (flat)										
B	EN 1092-1 form B1 or B2 (raised)										
D	EN 1092-1 form C (tongued)										
N	EN 1092-1 form D (grooved)										
Connection Size (respectively to the flange standard)											
10	1" or DN25										
12	1-1/4"										
15	1-1/2" or DN40										
20	2" or DN50										
30	3" or DN80										
40	4"										
Flange Rating											
C	150 lbs										
D	300 lbs										
E	600 lbs										
F	900 lbs										
G	1500 lbs										
H	2500 lbs										
J	PN 10										
K	PN 16										
L	PN 25										
M	PN 40										
N	PN 64										
P	PN 80										
Q	PN 100										
R	PN 250										
Instrument Connection											
1	1/2 NPSM female										
2	1/2 NPT female										
4	G 1/2 female										
6	3/4-14 NPT Female										
7	M20x1.5 Female										
8	M22x1.5 Female										
9	M24x1.5 Female										
Head Length in mm (contact Ashcroft to determine minimum length)											
45...999	Head length in 1 mm steps										



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ORDERING CODE	EXAMPLE:	...	120	2	H	256	376	STD	22	16	G2	...
Bore Diameter												
2	6.6 mm (0.260")											
3	9.8 mm (0.385")											
A	7 mm											
B	7.7 mm											
C	8 mm											
D	8.5 mm											
E	8.7 mm											
F	8.8 mm											
G	10 mm											
H	10.5 mm											
J	11 mm											
K	12.5 mm											
L	13 mm											
Shank Type												
H	Tapered											
S	Straight											
R	Stepped											
Immersion Length (U-Length)												
0...999	U-length in 1 mm steps											
Total Length (T-Length)												
Head length + Immersion length												
Root Tip												
STD	Standard (6,35 mm)											
NON	Non standard											
Root Diameter												
22	22 mm or 0,875"											
25	25 mm or 1"											
0...XXX	Non standard root diameter in mm											
Tip Diameter												
16	16 mm or 0,625 "											
19	19 mm or 0,750"											
0...XXX	Non standard tip diameter in mm											
Material												
S1	Stainless steel 304 (1.4301)											
S2	Stainless steel 304L (1.4306)											
G1	Dual Grade Stainless Steel 304 /304L											
G2	Dual Grade Stainless Steel 316 /316L											
S3	Stainless steel 316 (1.4401)											
S4	Stainless steel 316H (1.4919)											
S5	Stainless steel 316L (1.4404)											
S6	Stainless steel 316Ti (1.4571)											
S7	Stainless steel 321 (1.4541)											
S8	Stainless steel 321H (1.4878)											
S9	stainless steel 347 (1.4550)											
B1	Carbon Steel											
T1	Titanium											
M1	Monel 400 (2.4360)											
M2	Monel R405											
M3	Monel K500 (2.4375)											
H1	Hastelloy B-2 (2.4617)											
H2	Hastelloy C22 (2.4602)											
H3	Hastelloy C276 (2.4919)											



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ORDERING CODE
EXAMPLE:

TW-FLG

FP

B

...

...

G2

N

NF

Material

C1	Carpenter 20, (Alloy 20, 2.4660)
N1	Nickel 200 (2.4066)
N2	Nickel 201 (2.4068)
D1	Duplex 2205 (1.4462)
D2	Super Duplex S32750 (1.4410)
US	Tantalum Sheath over stainless steel 316 (1.4401)
W1	Inconel 600 (2.4816)
W2	Inconel 601 (2.4851)
W3	Inconel 617 (2.4663)
W4	Inconel 625 (2.4856)
F1	A 182 F11 Chrome Moly (1.7335)
F2	A 182 F22 Chrome Moly (1.7380)
F3	A 182 F91 Alloy Steel (1.4903)

Cap & Chain

N	No Cap
1	Brass
2	304 Stainless Steel
3	316 Stainless Steel

Options (If choosing an option(s) must include a "X")
Surface

PT Surface finish 4-12 RA

Cleaning

6B Cleaned for gaseous Oxygen or other strong oxidizing agents

6W Cleaned for oxidizing processes other than Oxygen

Marking/Tagging

NF Tag number stamped on thermowell

NH Stainless steel tag wired

NH1 Extra large stainless steel tag wired

Testing/Certificates

A8 CRN registration for Canada

CD2 Certificate according to EN 10204 2.2

C3 Material Traceability Report acc. to EN 10204 3.1

CD5 Certificate according to NACE for Oilfields MR0175/ISO 15156-2009 and for Refineries MR0103-2010

MQ Positive material identification (PMI) test

W2 Dye penetration test

HE Hydrostatic external testing

HN Hydrostatic test (internal) acc. Ashcroft standard

W4 Hydrostatic test (internal) acc. customer standard

W5 Wake frequency calculation

YR X-ray (weld quality)

YQ X-ray (bore concentricity)

