



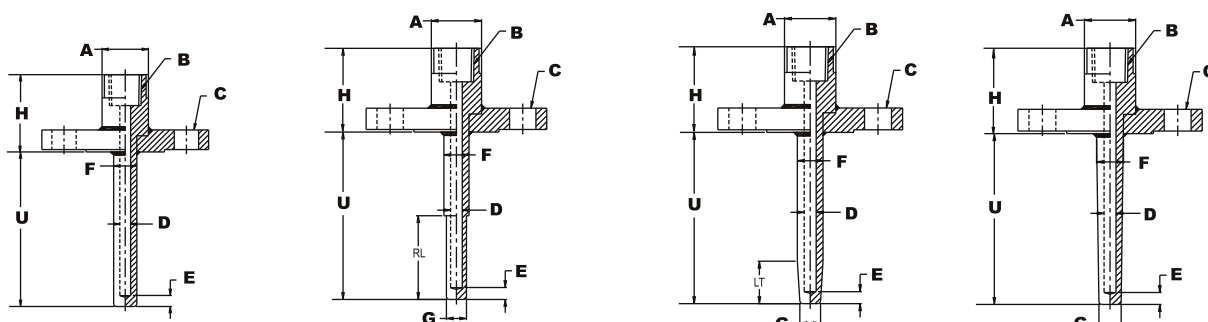
Special Features

- Design as per PTC 19.3
- These Thermowells are manufactured from solid bar stock and installed into the process by using a flanged connection
- This design is suitable for all type of RTD s, Thermocouples, Mechanical as well as digital thermometers
- Full penetration welded
- Available in various shapes like Straight, Straight with reduced tip, partial taper & full taper
- All type of flanges and flange facings are available as per ANSI / DIN / JIS & BS

Applications

- Chemical plants
- Petrochemical plants
- Engineering plants
- On shore
- Off shore
- Other similar process industries

Thermowell Drawings



S - Straight

R - Straight Reduced Tip

P - Partial Taper

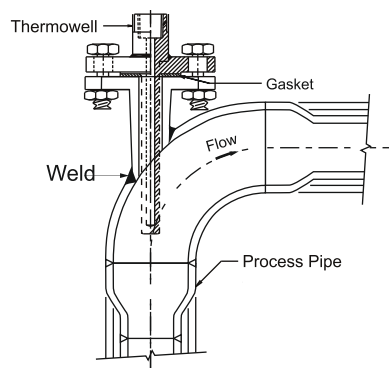
F - Full Taper

A - Finished Head Size
B - Instrument Connection
C - Flange
D - Bore Diameter

E - Tip Thickness
F - Major Diameter
G - Minor Diameter
H - Extension Length

U - Insertion Length
RL - Reduced Tip Length
LT - Taper Length

Thermowell Installation





a unique innovation, with trust and quality...

Bar Stock Flanged

How To Order					Example
Basic Model					TW2
Type					
S - Straight	R - Straight Reduced Tip	P - Partial Taper	F - Full Taper		X
Well Material					
(It is recommended that the well material and flange material (wetted area) should be same.)					
S64 AISI 304 SS	S10 AISI 310 SS	I60 Inconel 600	CST Carbon Steel		XXX
S66 AISI 316 SS	HST Hastelloy C	A20 Alloy 20			
S6L AISI 316L SS	S21 AISI 321 SS	NIK Nickel			
Note : Other Materials are available on request.					
Flange Material					
S64 AISI 304 SS	S10 AISI 310 SS	I60 Inconel 600	CST Carbon Steel		XXX
S66 AISI 316 SS	HST Hastelloy C	A20 Alloy 20			
S6L AISI 316L SS	S21 AISI 321 SS	NIK Nickel			
Note : Other Materials are available on request.					
Instrument Connection					
4BF ½ BSP (F)	5TF 3/4 BSPT (F)	6NF 1 NPT (F)	M18 M18 x 1.5 (F)	M24 M24 x 1.5 (F)	XXX
4NF ½ NPT (F)	5NF 3/4 NPT (F)	6BF 1 BSP (F)	M20 M20 x 1.5 (F)	M27 M27 x 2 (F)	
4TF ½ BSPT (F)	5BF 3/4 BSP (F)	6TF 1 BSPT (F)	M22 M22 x 1.5 (F)	M33 M33 x 2 (F)	
Note : Other Connections are available on request.					
Flange Type					
1 Blind Flange	2 SORF Flange				X
Flange C (size & Rating)					
Refer Flange table for code selection.					XXX
Flange Facing Type					
RF Raised Face	FF Flat Face	RJ Ring type joint			XX
Flange Finish					
1 - 125 AARH (Standard)	2 - 63 AARH				X
Note : Other Flange finish are available on request.					
Extension / Lagging Length H (In case of welding neck flange & threaded flange, consult factory.)					
Please specify in mm For e.g. : for length 65 mm, mention H65					XXX
Finished Head Size A (Refer Table 1.1 for selection of Head Size for Thermowell.)					
Please Specify in mm e.g. : For 28 mm Finished head Size, Specify A28					XXX
Type Of Head					
H Hex Headed*	R Round Headed	S Round Headed With Spanner Slots.			X
* Maximum U Length below Flange will be 500 mm.					
Bore Diameter D					
A 6.6 mm	B 7 mm	C 8.5 mm	D 9 mm		X
E 10.5 mm	F 11 mm	G 13 mm	H 13.5 mm		
Note : Refer Table 1.3 of Thermowell Design Procedure for dimensions as per PTC 19.3					

How to Order			Example
S Major Diameter F Please specify in mm e.g. : for 22 mm, mention F22 R Major Diameter Of Step F Please specify in mm e.g. : for 22 mm, mention F22 Minor Diameter Of Step G Please specify in mm e.g. : for 18 mm, mention G18 Length Of Step RL Please specify in mm e.g. : for 100 mm step length from tip, specify RL100 P Major Diameter Of Taper F Please specify in mm e.g. : for 22 mm, mention F22 Minor Diameter Of Taper G Please specify in mm e.g. : for 18 mm, mention G18 Length Of Taper L T Please specify in mm e.g. : For taper length from tip of 150 mm, specify LT150 F Major Diameter Of Taper F Please specify in mm e.g. : for 22 mm, mention F22 Minor Diameter Of Taper G Please specify in mm e.g. : for 18 mm, mention G18			XXX OR XXX OR XXXXX
Note : Refer Table 1.3 of Thermowell Design Procedure for dimensions as per PTC 19.3			
Tip Thickness E Standard Tip Thickness is 5 mm. e.g. : Specify E5 for 5 mm Tip Thickness For others, please specify in mm.			XX
INSERTION LENGTH U Please specify in mm e.g. : for 250 mm, mention U250 Note : Refer Table 1.4 of Thermowell Design Procedure for dimensions as per PTC 19.3			XXXX
Options PAC Plug and chain in SS EPL Electro polishing ENM Marking by Engraving CFL Counter flange with studs, nuts & gasket LAM Marking by Laser STG SS Tag Plate			XXX
Lining & Coatings (User to specify thickness during enquiry) PL PTFE Lining* PC PTFE Coating RL Rubber Lining*			XXX
* Lining will be on wetted area of straight type wells only.			
Tests & Certification RBCRadiography for Bore Concentricity IBR IBR Certification METMechanical Test ULT Ultrasonic Test PMI PMI Test WFC Wake Frequency Calculations as per PTC 19.3* CCT Chemical Composition Test 31B 3.1B Material Conformity Certificate CNS Conformity as per NACE Standard			XXX
#Please Specify Fluid, Max. Pressure, Temperature & Flow velocity for wake frequency calculations as per PTC 19.3			
Ordering Example:			
Tw2 . X . XXX . XXX . XXX . X . XXX . XX . X . XXX . XXX . X . X . XXX OR XXX OR XXXXX . XX . XXXX . XXX . XXX			

Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing.
Modifications may take place and materials specified may be replaced by others without prior notice.
For Any Custom / Non Standard / Special Requirement Consult Factory..

Flange Table With Connection Code

AS PER DIN 2527

DN	PN	CODE
10	6	A01
	10	A02
	16	A03
	25	A04
	40	A05
	64	A06
	100	A07
	160	A08
	250	A09
	400	A10
15	6	A11
	10	A12
	16	A13
	25	A14
	40	A15
	64	A16
	100	A17
	160	A18
	250	A19
	400	A20
20	6	A21
	10	A22
	16	A23
	25	A24
	40	A25
25	6	A26
	10	A27
	16	A28
	25	A29
	40	A30
	64	A31
	100	A32
	160	A33
	250	A34
	400	A35
DN	PN	CODE
32	6	A36
	10	A37
	16	A38
	25	A39
	40	A40
40	6	A41
	10	A42
	16	A43
	25	A44
	40	A45
	64	A46
	100	A47
	160	A48
	250	A49
	400	A50
50	6	A51
	10	A52
	16	A53
	25	A54
	40	A55
	64	A56
	100	A57
	160	A58
	250	A59
	400	A60

DN	PN	CODE
65	6	A61
	10	A62
	16	A63
	25	A64
	40	A65
	64	A66
	100	A67
	160	A68
	250	A69
	400	A70
80	6	A71
	10	A72
	16	A73
	25	A74
	40	A75
	64	A76
	100	A77
	160	A78
	250	A79
	400	A80

AS PER JIS - B 2210

NOMINAL SIZE	RATING /CLASS	CODE
10A	5K	B57
	10K	B58
	40K	B59
15A	5K	B60
	10K	B61
	40K	B62
20A	5K	B63
	10K	B64
	40K	B65
NOMINAL SIZE	RATING /CLASS	CODE
25A	5K	B66
	10K	B67
	40K	B68
	5K	B69
32A	10K	B70
	40K	B71
	5K	B72
40A	10K	B73
	40K	B74
NOMINAL SIZE	RATING /CLASS	CODE
50A	5K	B75
	10K	B76
	40K	B77
65A	5K	B78
	10K	B79
	40K	B80
80A	5K	B81
	10K	B82
	40K	B83

AS PER DIN 2642

DN	PN	CODE
10	10	A90
15		A91
20		A92
25		A93
32		A94
40		A95
50		A96
65		A97
80		A98

AS PER DIN 2633

DN	PN	CODE
10	16	A81
15		A82
20		A83
25		A84
32		A85
40		A86
50		A87
65		A88
80		A89

AS PER DIN 2635

DN	PN	CODE
10	40	A99
15		B01
20		B02
25		B03
32		B04
40		B05
50		B06
65		B07
80		B08

AS PER ANSI B 16.5

NOMINAL SIZE	RATING /CLASS	CODE
½	150	B09
	300	B10
	600	B11
	900	B12
	1500	B13
	2500	B14
¾	150	B15
	300	B16
	600	B17
	900	B18
	1500	B19
	2500	B20

NOMINAL SIZE	RATING /CLASS	CODE
1	150	B21
	300	B22
	600	B23
	900	B24
	1500	B25
	2500	B26
1 1/4	150	B27
	300	B28
	600	B29
	900	B30
	1500	B31
	2500	B32

NOMINAL SIZE	RATING /CLASS	CODE
1 ½	150	B33
	300	B34
	600	B35
	900	B36
	1500	B37
	2500	B38
2	150	B39
	300	B40
	600	B41
	900	B42
	1500	B43
	2500	B44

NOMINAL SIZE	RATING /CLASS	CODE
2 ½	150	B45
	300	B46
	600	B47
	900	B48
	1500	B49
	2500	B50
3	150	B51
	300	B52
	600	B53
	900	B54
	1500	B55
	2500	B56

AS PER BS - 10

NOMINAL SIZE	TABLE	CODE
½	D	B84
	E	B85
	F	B86
	H	B87
	J	B88
	K	B89
¾	D	B90
	E	B91
	F	B92
	H	B93
	J	B94
	K	B95

NOMINAL SIZE	TABLE	CODE
1	D	B96
	E	B97
	F	B98
	H	B99
	J	C01
	K	C02
1 ¼	D	C03
	E	C04
	F	C05
	H	C06
	J	C07
	K	C08

NOMINAL SIZE	TABLE	CODE
1 ½	D	C09
	E	C10
	F	C11
	H	C12
	J	C13
	K	C14
2	D	C15
	E	C16
	F	C17
	H	C18
	J	C19
	K	C20

NOMINAL SIZE	TABLE	CODE
2 ½	D	C21
	E	C22
	F	C23
	H	C24
	J	C25
	K	C26
3	D	C27
	E	C28
	F	C29
	H	C30
	J	C31
	K	C32

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