

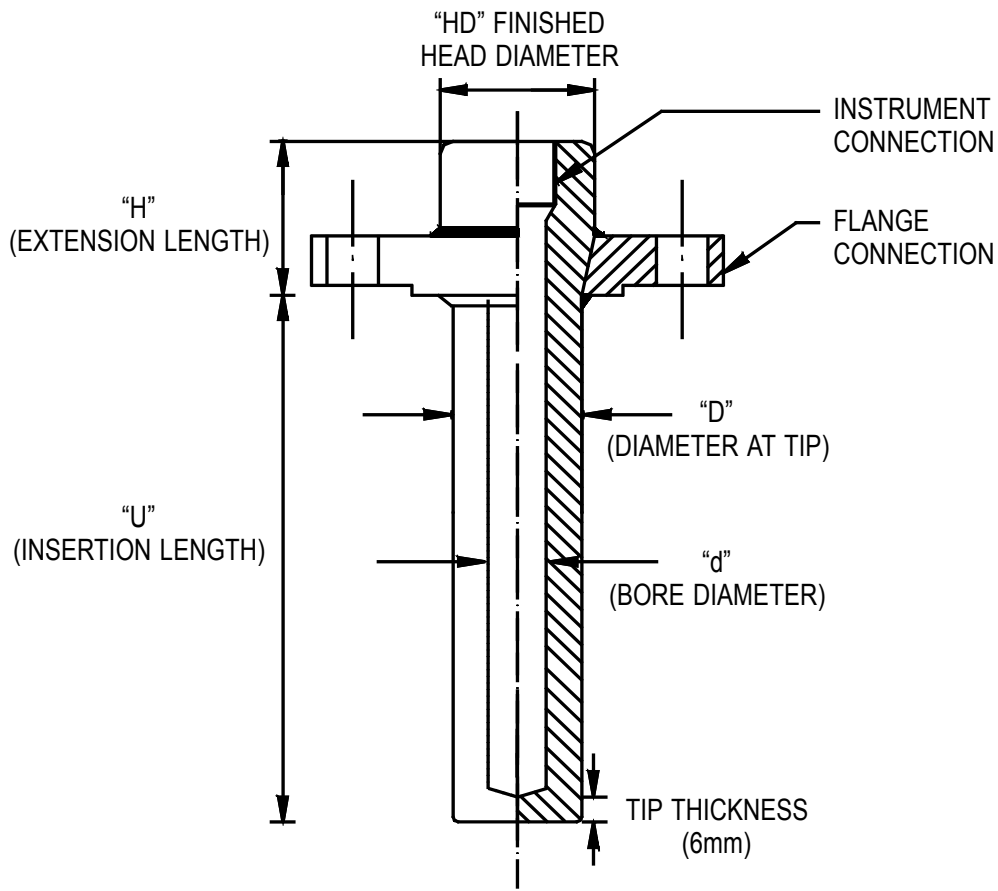
# THERMOWELLS

## FLANGED STRAIGHT TYPE



### SPECIAL FEATURES

FABRICATED FROM BAR STOCK  
STANDARD FOR MANUFACTURING  
FOLLOWED- PTC 19.3  
THERMOWELL AVAILABLE IN EXOTIC MATERIALS  
SUCH AS HASTALLOY-C, TANTALUM, MONEL,  
TITANIUM, INCONEL 600 ETC  
THERMOWELLS ARE USED AS AN ACCESSORY  
WITH TEMPERATURE INSTRUMENTS, SENSORS, TO  
PROTECT ITS BASIC SENSING ELEMENT FROM  
CORROSIVE AND MECHANICAL DAMAGES DUE TO  
PROCESS PARAMETERS



# THERMOWELLS

## FLANGED STRAIGHT TYPE

### FLANGE CONNECTION CODES

#### AS PER DIN 2527



DN	PN	CODE	DN	PN	CODE	DN	PN	CODE
10	6	A01	32	6	A36	65	6	A61
	10	A02		10	A37		10	A62
	16	A03		16	A38		16	A63
	25	A04		25	A39		25	A64
	40	A05		40	A40		40	A65
	64	A06	40	6	A41		64	A66
	100	A07		10	A42		100	A67
	160	A08		16	A43		160	A68
	250	A09		25	A44		250	A69
	400	A10		40	A45		400	A70
15	6	A11		64	A46	80	6	A71
	10	A12		100	A47		10	A72
	16	A13		160	A48		16	A73
	25	A14		250	A49		25	A74
	40	A15		400	A50		40	A75
	64	A16	50	6	A51		64	A76
	100	A17		10	A52		100	A77
	160	A18		16	A53		160	A78
	250	A19		25	A54		250	A79
	400	A20		40	A55		400	A80
20	6	A21		64	A56			
	10	A22		100	A57			
	16	A23		160	A58			
	25	A24		250	A59			
	40	A25		400	A60			
25	6	A26						
	10	A27						
	16	A28						
	25	A29						
	40	A30						
	64	A31						
	100	A32						
	160	A33						
	250	A34						
400	A35							

#### AS PER DIN 2642

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

#### AS PER DIN 2633

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

#### AS PER DIN 2635

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

# THERMOWELLS

## FLANGED STRAIGHT TYPE

**EI1**

### AS PER ANSI B 16.5

NOMINAL SIZE	RATING /CLASS	CODE	NOMINAL SIZE	RATING /CLASS	CODE	NOMINAL SIZE	RATING /CLASS	CODE	NOMINAL SIZE	RATING /CLASS	CODE
1/2"	150	B09	1"	150	B21	1/2"	150	B33	2 1/2"	150	B45
	300	B10		300	B22		300	B34		300	B46
	600	B11		600	B23		600	B35		600	B47
	900	B12		900	B24		900	B36		900	B48
	1500	B13		1500	B25		1500	B37		1500	B49
	2500	B14		2500	B26		2500	B38		2500	B50
3/4"	150	B15	1 1/4"	150	B27	2	150	B39	3"	150	B51
	300	B16		300	B28		300	B40		300	B52
	600	B17		600	B29		600	B41		600	B53
	900	B18		900	B30		900	B42		900	B54
	1500	B19		1500	B31		1500	B43		1500	B55
	2500	B20		2500	B32		2500	B44		2500	B56

### AS PER JIS - B 2210

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

### AS PER BS - 10

NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE
1/2"	D	B84	1"	D	B96	1 1/2"	D	C09	2 1/2"	D	C21
	E	B85		E	B97		E	C10		E	C22
	F	B86		F	B98		F	C11		F	C23
	H	B87		H	B99		H	C12		H	C24
	J	B88		J	C01		J	C13		J	C25
	K	B89		K	C02		K	C14		K	C26
3/4"	D	B90	1 1/4"	D	C03	2"	D	C15	3"	D	C27
	E	B91		E	C04		E	C16		E	C28
	F	B92		F	C05		F	C17		F	C29
	H	B93		H	C06		H	C18		H	C30
	J	B94		J	C07		J	C19		J	C31
	K	B95		K	C08		K	C20		K	C32

RAISED FACE : A2, FLAT FACE : A3, RING TYPE JOINT : A4

### HOW TO ORDER

e.g. FOR FLANGE SIZE OF 1 1/2" AS PER BS-10 TABLE E WITH RAISED FACE : C10.A2

NOTE : PLEASE MENTION SEPARATELY FINISH OF THE FLANGE

# THERMOWELLS

## FLANGED STRAIGHT TYPE

**EI1**

### HOW TO ORDER

#### BASIC MODEL

#### MATERIAL

TN	CARBON STEEL	GQ	INCONEL 600
TK	AISI 304SS	TT	HASTEALLOY 'C'
TM	AISI 316SS	UH	TITANIUM
TZ	INCOLY 800HT	UD	TANTALUM
GR	AISI 446SS	TY	ALLOY 20
TX	MONEL 400		

FOR OTHER MATERIALS PLEASE REFER MATERIAL GUIDE

#### INSTRUMENT CONNECTION

VP	3/8" BSP (F)	GD	3/4" NPT (F)	4JF	1/2" PF (F)
VQ	3/8" NPT (F)	GE	1" BSP (F)	VO	1/4" NPT (F)
GC	3/4" BSP (F)	GF	1" NPT (F)	VN	1/4" BSP (F)
VL	1/2" BSP (F)	4QF	1/2" PT (F)	IV	1/4" PT (F)
VM	1/2" NPT (F)	4MF	M20 x 1.5 (F)	IW	1/4" PF (F)

FOR OTHER CONNECTIONS CONTACT FACTORY

#### FLANGE CONNECTION

SEE FLANGE TABLE

#### BORE DIAMETER "d"

d INDICATE BORE DIAMETER IN mm  
e.g : FOR 6.5 mm - d 6.5

**d 6.5**

#### OUTER DIAMETER "D"

D INDICATE TIP DIAMETER IN mm  
e.g : FOR 22 mm - D22

**D 15**

#### THERMOWELL INSERTION LENGTH "U"

U INDICATE INSERTION LENGTH IN mm AS - UXXX  
e.g : FOR 300 mm - U 300

**U 600**

#### LAGGING/EXTENSION LENGTH "H"

H INDICATE LAGGING LENGTH IN mm AS - HXX  
e.g : FOR 50 mm - H 50

**H 50**

#### FINISHED HEAD DIAMETER "HD"

HD INDICATE HEX DIAMETER IN mm  
e.g : FOR 28 mm - HD 28

HR INDICATE ROUND DIAMETER IN mm  
e.g : FOR 28 mm - HR 28

**HR 35**

NOTE TIP THICKNESS (6 mm)

### OPTIONS

GG PLUG AND CHAIN OF SS

GH TEST CERTIFICATE FOR MATERIAL OF CONSTRUCTION

#### COATING/LINING ON THERMOWELL

GI TEFLON COATING

GK RUBBER LINING

GM HASTEALLOY C OVERLAY

GJ TUNGSTEN CARBIDE COATING

GL GLASS LINING

GN TITANIUM OVERLAY

\* FOR OTHER EXOTIC MATERIALS CONTACT FACTORY

#### TESTS & CERTIFICATES

SY BORE CONCENTRICITY TEST

PV IBR CERTIFICATION

GO HYDRO TEST AT 100 KG/CM<sup>2</sup> (FROM INSIDE AND OUTSIDE)

TE RADIOGRAPHY TEST FOR THERMOWELLS

TA DYE PENETRATION TEST FOR WELD JOINTS

GP WAKE FREQUENCY CALCULATION AS PER PTC 19.3

TG CRACK DETECTION ULTRA SONIC TEST

Note : Due to continuous changes the specification may vary from time to time