

THERMOWELLS



ELITE INSTRUMENTS

ISO 9001 COMPANY

PRESSURE GAUGE | THERMOMETER | DIAPHRAGM SEAL | ACCESSORIES

www.elite-instrument.com
www.elite-instruments.com



the pressure equipment safety authority

NS : 40 / 50 / 63 / 80 /
100 / 125 / 160 /
200 / 250mm

Ranges
available up
to 60,000 psi

**WETTED PARTS -AVAILABLE
SS 316L , HASTELLOY-C276 ,
INCONEL 625 , MONEL 400**

- Bourdon Tube - AS PER NACE MR 0175
- Socket - AS PER NACE MR 0175
- Bourdon Tube - Seamless Tube
- Tig Welding - Approved by TUV
- Leak Testing - Helium Leak Tested
- Movement - Silicone Jelly Movement
- Dial - White Aluminum
- Window - Safety Glass
- Gasket - NBR
- Blow out Disc - Temperature Compensated
- IP Protection - IP 68

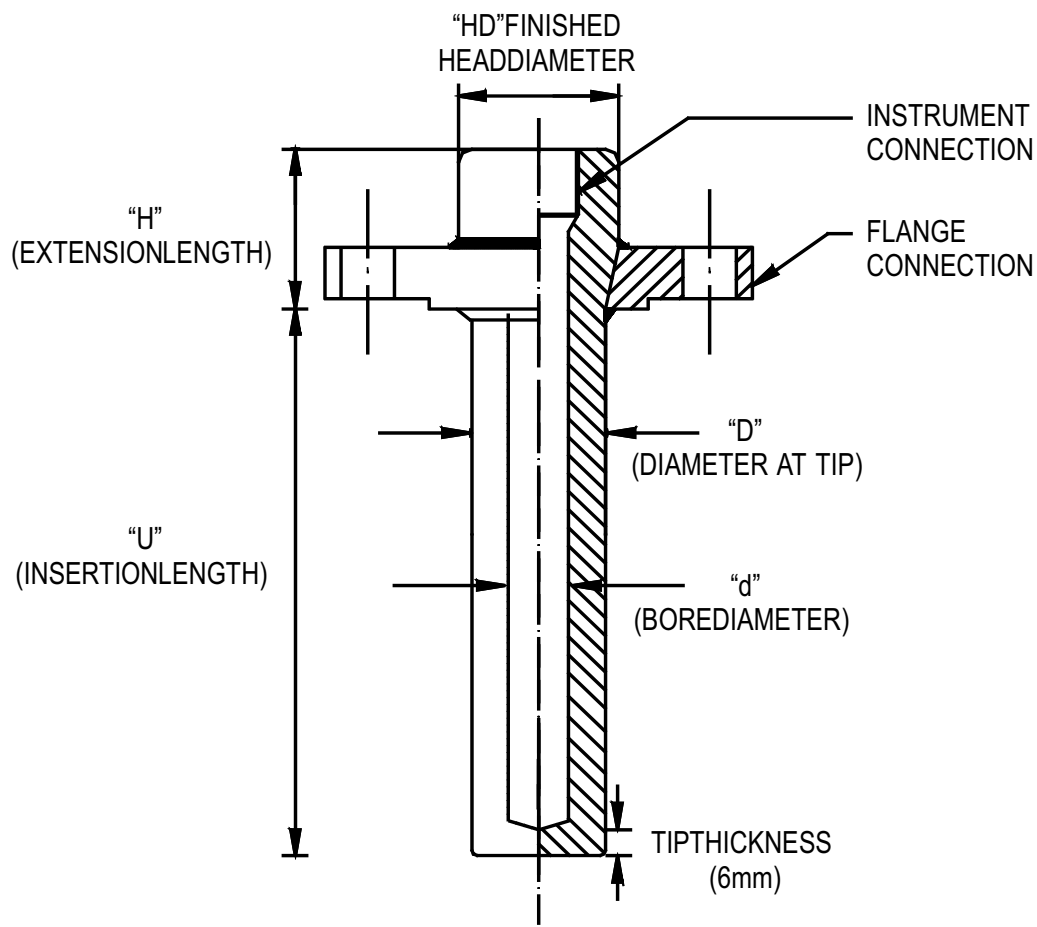
*PLEASE REFER PRESSURE GAUGE CATALOGUE FOR DETAILS

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SPECIAL FEATURES

Fabricated From Bar Stock
 Stand For Manufacturing
 Followed-PTC 19.3
 Thermowell Available In Exotic Materials
 Such As Hastelloy-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 Damage due to
 process parameters.



HOW TO ORDER

BASIC MODEL

MATERIAL

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

INSTRUMENT CONNECTION

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

FLANGE CONNECTION

SEE FLANGE TABLE-REFER PAGENO. 09 & 10

BORE DIAMETER "d"

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

OUTER DIAMETER "D"

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

THERMOWELL INSERTION LENGTH "U"

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

LAGGING/ EXTENSION LENGTH "H"

H INDICATE INSERTION LENGTH IN mm AS-UXXX
e.g: FOR 50 mm-H 50

FINISHED HEAD DIAMETER "HD"

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

NOTE TIP THICKNESS (6mm)

OPTIONS

GG PLUG AND CHAIN OF SS **GH** MATERIAL TEST CERTIFICATES*

COATING/ LINING ON THERMOWELL

GI TEFLON COATING **GK** RUBBER LINING **GM** HASTEALLOY C OVERLAY
GJ TUNGSTEN CARBIDE COATING **GL** GLASS LINING **GN** TITANIUM OVERLAY

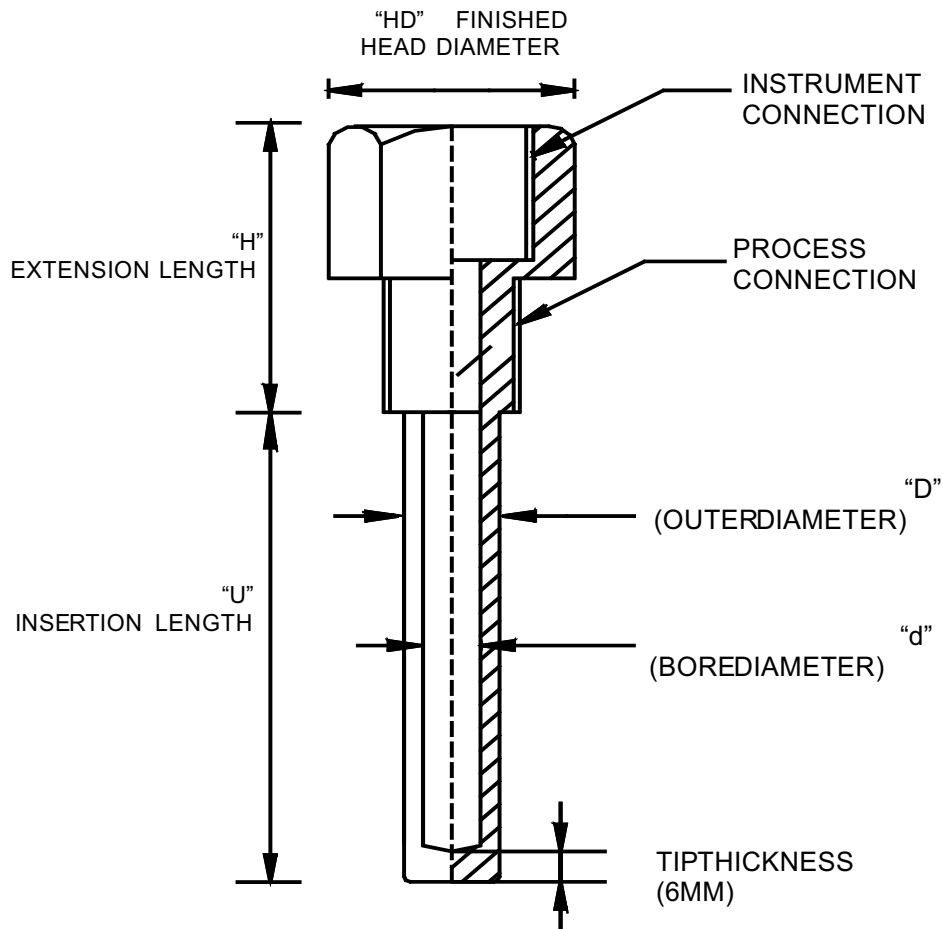
TESTS & CERTIFICATES

SY BORE CONCENTRICITY TEST **TA** DRY PENETRATION TEST FOR WELD JOINTS **PV** IBR CERTIFICATION
GO HYDRO TEST AT 100 kg/cm2 (FROM INSIDE AND OUTSIDE) **TG** CRACK DETECTION ULTRA SONIC TEST **TE** RADIOGRAPHY TEST FOR THERMOWELLS
GP WAKE FREQUENCY CALCULATION AS PER PTC 19.3

Ordering Example: EI-1-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX

SPECIAL FEATURES

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HOW TO ORDER

BASIC MODEL

MATERIAL

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

INSTRUMENT CONNECTION

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

PROCESS CONNECTION

WT 3/8" BSP (M)	WU 1/2" BSP (M)	WW 1" BSP (M)	4MM M20 X 1.5 (M)
WZ 3/8" NPT (M)	XA 1/2" NPT (M)	XC 1" NPT (M)	4JM 1/2" PF (M)
WV 3/4" BSP (M)	XB 3/4" NPT (M)	4QM 1/2" PT (M)	

BORE DIAMETER "d"

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

OUTER DIAMETER "D"

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

THERMOWELL INSERTION LENGTH "U"

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

LAGGING/ EXTENSION LENGTH "H"

H INDICATE INSERTION LENGTH IN mm AS-UXXX
e.g: FOR 50 mm-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

NOTE TIP THICKNESS (6mm)

OPTIONS

GG PLUG AND CHAIN OF SS **GH** MATERIAL TEST CERTIFICATES*

COATING/ LINING ON THERMOWELL

GI TEFLON COATING	GK RUBBER LINING	GM HASTEALLOY C OVERLAY
GJ TUNGSTEN CARBIDE COATING	GL GLASS LINING	GN TITANIUM OVERLAY

TESTS & CERTIFICATES

SY BORE CONCENTRICITY TEST	TA DRY PENETRATION TEST FOR WELD JOINTS	PV IBR CERTIFICATION
GO HYDRO TEST AT 100 kg/cm ² (FROM INSIDE AND OUTSIDE)	TG CRACK DETECTION ULTRA SONIC TEST	TE RADIOGRAPHY TEST FOR THERMOWELLS
GP WAKE FREQUENCY CALCULATION AS PER PTC 19.3		

Ordering Example: EI-2-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX

Example

EI 2

XX

XX

XX

XX

XX

XX

XX

XX

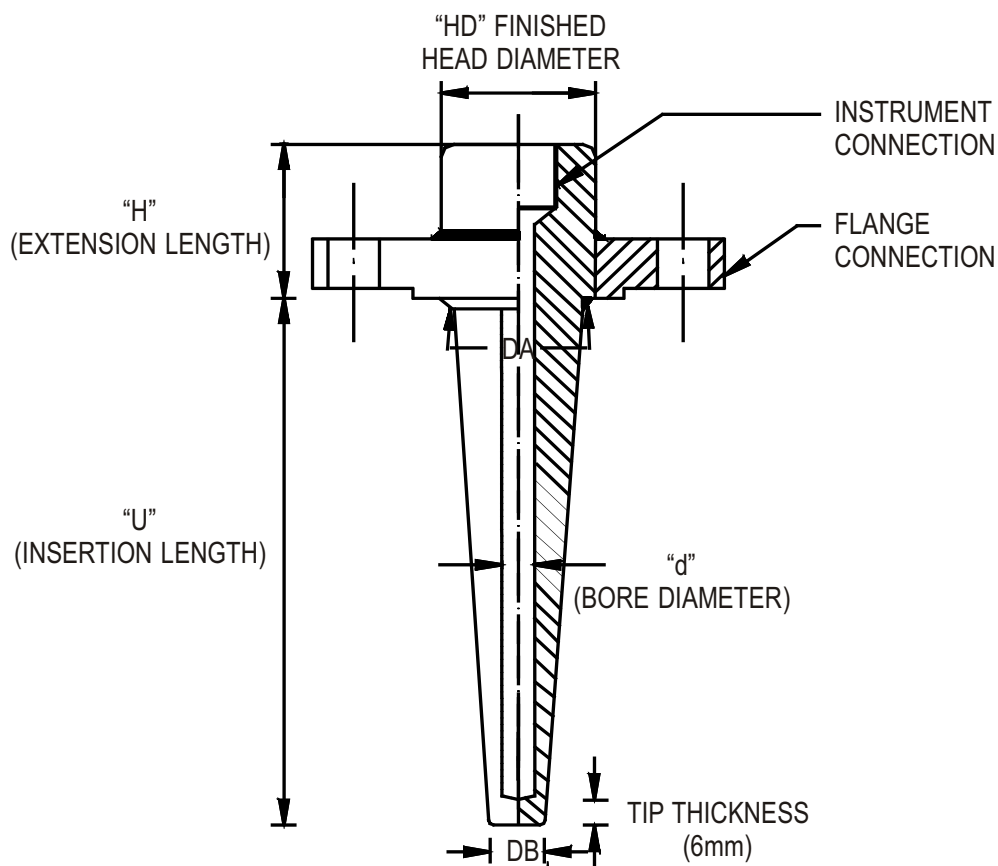
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XX

XX

SPECIAL FEATURES

Fabricated From Bar Stock
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HOW TO ORDER

BASIC MODEL

EI 3

MATERIAL

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

XX

INSTRUMENT CONNECTION

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

XX

FLANGE CONNECTION

SEE FLANGE TABLE-REFER PAGENO. 09 & 10

XX

BORE DIAMETER "d"

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

XX

TAPER STARTING AT

0 JUST BELOW FLANGE
- DISTANCE BELOW FLANGE [PLEASE MENTION IN mm]

XX

OUTSIDE MAJOR DIAMETER "DA"

DA e.g FOR MAJOR DIAMETER OF 20mm ,PLEASE MENTION DA20

XX

OUTSIDE MINOR DIAMETER "DB"

DA e.g FOR MINOR DIAMETER OF 15mm ,PLEASE MENTION DA20

XX

THERMOWELL INSERTION LENGTH "U"

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

XX

LAGGING/ EXTENSION LENGTH "H"

H INDICATE INSERTION LENGTH IN mm AS-UXXX
e.g: FOR 50 mm-H 50

XX

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

XX

NOTE TIP THICKNESS (6mm)

OPTIONS

GG PLUG AND CHAIN OF SS **GH** MATERIAL TEST CERTIFICATES* **IX** SPANNER FLAT FOR ROUND HEAD

XX

COATING/ LINING ON THERMOWELL

GI TEFLON COATING	GK RUBBER LINING	GM HASTEALLOY C OVERLAY
GJ TUNGSTEN CARBIDE COATING FOR OTHER EXOTIC MATERIALS CONTACT FACTORY	GL GLASS LINING	GN TITANIUM OVERLAY

XX

TESTS & CERTIFICATES

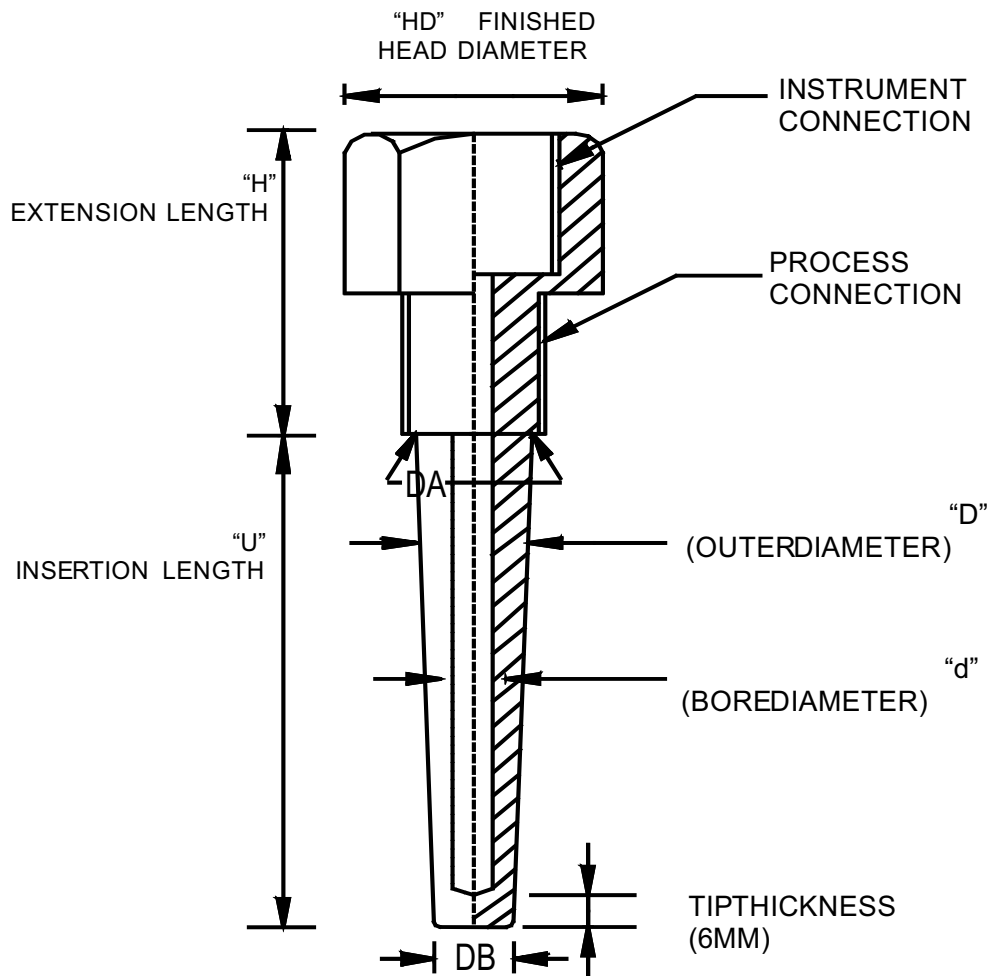
SY BORE CONCENTRICITY TEST	TA DRY PENETRATION TEST FOR WELD JOINTS	PV IBR CERTIFICATION
GO HYDRO TEST AT 100 kg/cm2 (FROM INSIDE AND OUTSIDE)	TG CRACK DETECTION ULTRA SONIC TEST	TE RADIOGRAPHY TEST FOR THERMOWELLS
GP WAKE FREQUENCY CALCULATION AS PER PTC 19.3		TF NACE

XX

Ordering Example: EI-3-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX

SPECIAL FEATURES

Fabricated From Bar Stock
 Stand For Manufacturing
 Followed-PTC 19.3
 Thermowell Available In Exotic Materials
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 Corrosive and Mechanical Damage due to
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HOW TO ORDER

BASIC MODEL

MATERIAL

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

INSTRUMENT CONNECTION

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

PROCESS CONNECTION

WT 3/8" BSP (M)	WU 1/2" BSP (M)	WW 1" BSP (M)	4MM M20 X 1.5 (M)
WZ 3/8" NPT (M)	XA 1/2" NPT (M)	XC 1" NPT (M)	4JM 1/2" PF (M)
WV 3/4" BSP (M)	XB 3/4" NPT (M)	4QM 1/2" PT (M)	

BORE DIAMETER "d"

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

TAPER STARTING AT

0 JUST BELOW THREADS
- DISTANCE BELOW THREADS [PLEASE MENTION IN mm]

OUTSIDE MAJOR DIAMETER

DA e.g FOR MAJOR DIAMETER OF 20mm ,PLEASE MENTION DA 20

OUTSIDE MINOR DIAMETER

DA e.g FOR MINOR DIAMETER OF 15mm ,PLEASE MENTION DB 15

THERMOWELL INSERTION LENGTH "U"

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

LAGGING/ EXTENSION LENGTH "H"

H INDICATE INSERTION LENGTH IN mm AS-UXXX
e.g: FOR 50 mm-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

NOTE TIP THICKNESS (6mm)

OPTIONS

GG PLUG AND CHAIN OF SS **GH** MATERIAL TEST CERTIFICATES*

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	TA DRY PENETRATION TEST FOR WELD JOINTS	PV IBR CERTIFICATION
GO HYDRO TEST AT 100 kg/cm2 (FROM INSIDE AND OUTSIDE)	TG CRACK DETECTION ULTRA SONIC TEST	TE RADIOGRAPHY TEST FOR THERMOWELLS

GP WAKE FREQUENCY CALCULATION AS PER PTC 19.3

NOTE: Due to continuous changes the specification may vary from time to time.

Ordering Example: EI-4-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX

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 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
10	5K	B57
	10K	B58
	40K	B59
15	5K	B60
	10K	B61
	40K	B62
20	5K	B63
	10K	B64
	40K	B65

NOMINAL SIZE	RATING/ CLASS	CODE
25	5K	B66
	10K	B67
	40K	B68
32	5K	B69
	10K	B70
	40K	B71
40	5K	B72
	10K	B73
	40K	B74

NOMINAL SIZE	RATING/ CLASS	CODE
50	5K	B75
	10K	B76
	40K	B77
65	5K	B78
	10K	B79
	40K	B80
80	5K	B81
	10K	B82
	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

A2 RAISED FACE

A3 FLAT FACE

A4 RING TYPE JOINT

AS PER DIN 2527

DN	PN	CODE	DN	PN	CODE
40	6	A41	65	6	A61
	10	A42		10	A62
	16	A43		16	A63
	25	A44		25	A64
	40	A45		40	A65
	64	A46		64	A66
	100	A47		100	A67
	160	A48		160	A68
	250	A49		250	A69
	400	A50		400	A70
50	6	A51	80	6	A71
	10	A52		10	A72
	16	A53		16	A73
	25	A54		25	A74
	40	A55		40	A75
	64	A56		64	A76
	100	A57		100	A77
	160	A58		160	A78
	250	A59		250	A79
	400	A60		400	A80

AS PER JIS-B 2210

NOMINAL SIZE	RATING / CLASS	CODE
40A	5K	B72
	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
40	10	A95
50		A96
65		A97
80		A98

AS PER DIN 2635

DN	PN	CODE
40	40	B05
50		B06
65		B07
80		B08

AS PER DIN 2633

DN	PN	CODE
40	16	A86
50		A87
65		A88
80		A89



ABOUT US:

Elite Instruments is a world class manufacturer of measuring instruments and accessories, including pressure gauges, thermometers, level gauges, pressure switches, RTD's, thermocouples and thermowells. We specialize in working together with our customers to develop comprehensive solutions in measurement technology and integrating those solutions into their processes.

Established in 2010, Elite Instruments delivers over 2 million quality products to over 50 countries every year. Worldwide, over 6 million ELITE measuring instruments are currently in use.

Headquartered in China, Kunshan Elite Instruments Company Ltd. also has locations in Singapore and India to better serve our customers,

Elite serves a wide variety of industries worldwide, including:

1. Oil and Gas
2. Chemical and Petrochemical
3. Food and Pharmaceutical
4. Water and Wastewater
5. Engineering and Process

Elite also specializes in developing custom built OEM products as per customer requirements. Our proficient team of engineers will work to bring your custom design to life, or work with you to create new products designed meet your exact needs.

Our customers have testified that the Quality, workmanship, appearance and packaging of Elite products are second to none.

Elite Instruments is ISO 9001 :2008 certified with many products holding ATEX approval, per 2014/34/EU Our state of the art production, testing and warehouse facilities ensure Elite exceeds customer expectations for quality and delivery.

Elite's commitment to quality is demonstrated by our investment in world class production and testing equipment.

Our commitment to quality is also demonstrated in our procedures. All Elite products undergo rigorous quality inspection before, during and post-production to ensure 100% of products meet customer demands and specifications.

Elite Instruments' customer service is fast and flexible. We always put our CUSTOMER FIRST. Let us prove that we are the best choice for your supplier of measuring instruments.

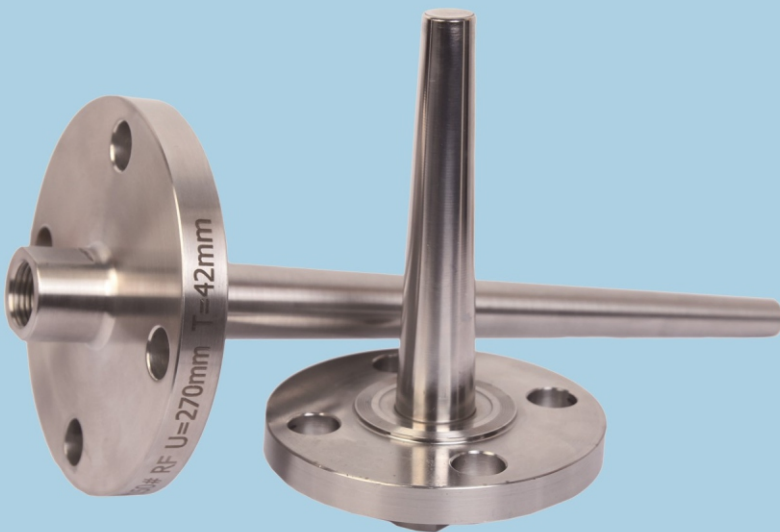
Please visit our website www.elite-instrument.com or send your enquires to sales@elite-instrument.com

Please visit youtube page :

<https://youtu.be/72MgbJNO5fw>

THERMOWELLS

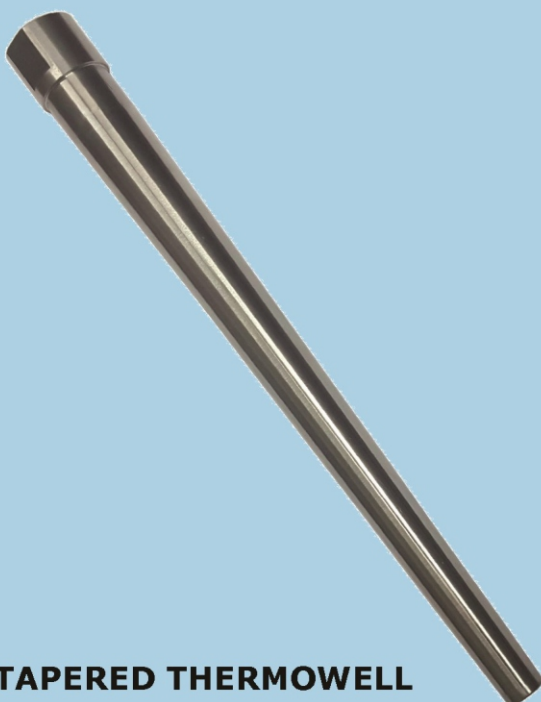
- Manufacture from BAR STOCK
- Design Standard : PTC 19.3
- Available material: SS316L ,HASTELLOY C,MONEL,TITANIUM,TANTALUM, INCONEL 600
- Protection Coating: Available with PTFE for acid applications.
- Leak Testing : Helium gas and Hydro static pressure internal and external



FLANGE THERMOWELL



STRAIGHT THERMOWELL



TAPERED THERMOWELL



STEPPED THERMOWELL



Manufacturing Units

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Tel.+65 81617572 ,Mobile: +86 13586509674

Email : sales@elite-instrument.com / snreddy@elite-instruments.com

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www.elite-instruments.com