

## FEATURES

- Solid bar-stock drilled design
- 3 different shank styles
- Flanged process connection

## APPLICATION

- Air & flue gas
- Tanks & vessels
- Oil & Gas applications
- Corrosive environments
- Power & Steel industries
- HVAC, Air filters & utilities
- On-shore/Off-shore application

### Bar-stock Type

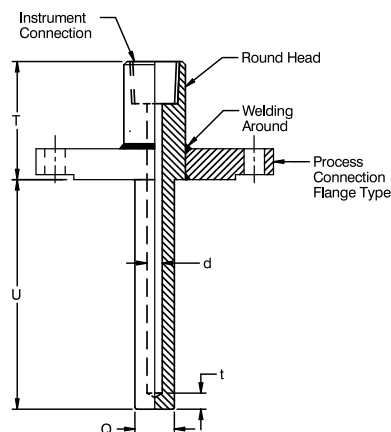


### STANDARD SPECIFICATIONS

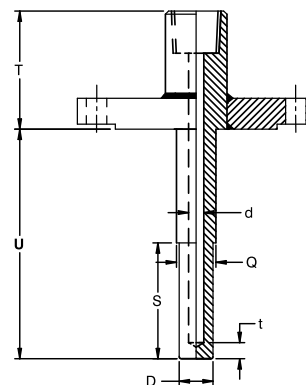
Shank form	:	Straight
Flange material	:	AISI 316 SS
Well material	:	AISI 316 SS
Instrument connection	:	1/2" NPT (F)
Bore diameter	:	6.6 mm
Lag extension	:	50 mm
Root diameter	:	21.0 mm
Tip diameter	:	16.0 mm
Immersion length	:	300 mm
Step / Taper Length	:	0 mm
Tip thickness	:	5 mm
Process connection	:	1" 150# as per ANSI B16.5
Flange facing type	:	Raised face
Head type	:	Round
Head size	:	27 mm

### DIMENSIONAL DRAWING

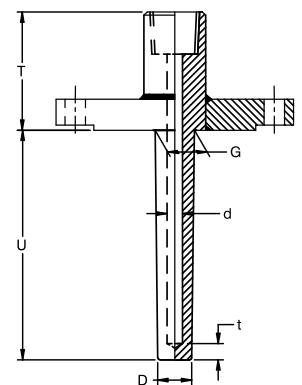
Straight Thermowell



Step Thermowell



Taper Thermowell



## REFERENCE

ASME PTC 19.3TW:2010

ORDERING CODES

1. SHANK FORM

- S Straight
- E Stepped
- T Tapered

S

2. FLANGE MATERIAL

- |                                    |                        |
|------------------------------------|------------------------|
| <b>MB</b> Carbon Steel / ASTM A105 | <b>ME</b> AISI 310 SS  |
| <b>MC</b> AISI 304SS               | <b>MG</b> AISI 316L SS |
| <b>MF</b> AISI 316 SS              | <b>MN</b> Monel K-500  |
| <b>MM</b> Monel 400                | <b>MQ</b> Inconel 600  |
| <b>MO</b> Hastelloy C-276          | <b>MS</b> Inconel 800  |
| <b>MR</b> Inconel 625              | <b>MV</b> Titanium     |
| <b>MT</b> Inconel 825              | <b>M6</b> AISI 446 SS  |
| <b>MY</b> Alloy 20                 |                        |
| <b>MI</b> AISI 321 SS              |                        |

MB

3. WELL MATERIAL

- |                                    |                        |
|------------------------------------|------------------------|
| <b>MB</b> Carbon Steel / ASTM A105 | <b>ME</b> AISI 310 SS  |
| <b>MC</b> AISI 304SS               | <b>MG</b> AISI 316L SS |
| <b>MF</b> AISI 316 SS              | <b>MN</b> Monel K-500  |
| <b>MM</b> Monel 400                | <b>MQ</b> Inconel 600  |
| <b>MO</b> Hastelloy C-276          | <b>MS</b> Inconel 800  |
| <b>MR</b> Inconel 625              | <b>MV</b> Titanium     |
| <b>MT</b> Inconel 825              | <b>M6</b> AISI 446 SS  |
| <b>MY</b> Alloy 20                 |                        |
| <b>MI</b> AISI 321 SS              |                        |

MB

4. INSTRUMENT CONNECTION

- |                             |                         |
|-----------------------------|-------------------------|
| <b>02N</b> 1/4" NPT (F)     | <b>04N</b> 1/2" NPT (F) |
| <b>05N</b> 3/4" NPT (F)     | <b>02B</b> 1/4" BSP (F) |
| <b>04B</b> 1/2" BSP (F)     | <b>05B</b> 3/4" BSP (F) |
| <b>04M</b> M20 x 1.5 mm (F) |                         |

02N

5. PROCESS CONNECTION

- XXX Refer Flange Table for the codes

XXX

6. FLANGE FACING

- F Flat Face
- J Ring-Type Joint
- R Raised Face

F

7. HEAD TYPE

- R Round

R

8. HEAD SIZE

- XX Mention in 'mm'

XX

9. LAG EXTENSION ("T")

- XXX 35 mm up to 250 mm

XXX

10. ROOT DIAMETER ("Q")

- XX.X Mention in 'mm'

XX.X

11. TIP DIAMETER ("D")

- XX.X Mention in 'mm'

XX.X

12. BORE DIAMETER ("d")

- |                         |                 |
|-------------------------|-----------------|
| <b>N</b> 6.35 mm (1/4") | <b>A</b> 6.6 mm |
| <b>B</b> 7.0 mm         | <b>C</b> 9.0 mm |
| <b>D</b> 9.6 mm         | <b>O</b> 10 mm  |
| <b>F</b> 11 mm          | <b>G</b> 13 mm  |

A

13. IMMERSION LENGTH ("U")

- XXXX 50 mm up to 1000 mm

XXXX

14. STEP STYLE

- S Straight
- T Taper

S

15. STEP / TAPER LENGTH ("S")

- XXX Mention in 'mm'

XXX

16. TIP THICKNESS ("t")

- M 5 mm
- N 6.35 mm (1/4")
- O 10 mm

M

17. OTHER OPTIONS

- XI Plug & chain in SS
- XK Electro polishing
- XL Marking by laser
- XM Marking by engraving
- TC Material test certificate 3.1
- TD Dye penetration test
- TG IGC test
- TH Hydro test certificate
- TI IBR certification
- TM Material test certificate 2.2
- TN Tested to NACE standards
- TO Certification for Oxygen service
- TP Performance test certificate
- TQ Certification for Hydrogen service
- TW WFC as per PTC 19.3TW:2010
- TR Radiography for welding
- TS Radiography for bore concentricity
- TU Ultrasonic test

XM

Ordering Example : W104-S-MB-MB-02N-XXX-F-R-XX-XXX-XX.X-XX.X-A-XXXX-S-XXX-M-XM

NOTES:

1. Other diameters, connections are available, please contact factory for details.