

MODEL X7.01



PRODUCT DESCRIPTION

Thermowells are used to to protect the measuring instrument from corrosion, high pressure or high fluid velocity and to allow the measuring instrument removal for recalibration or replacement without affecting the process system. Thermowells are typically constructed of solid drilled-out bar stock and are designed to protect a temperature sensor from flow, high pressure and harsh environments. It is suitable for heavy work conditions. These thermowells have a conic immersion length.



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KEY FEATURES

- Solid bar stock drilled design with Threaded process connection
- These thermowell are installed directly into the process with the help of threaded process connection
- · Ideal for use in longer length tank & vessel where bar stock is a limitation
- Different shank style- Straight, Straight Reduced Tip, Partial Taper, Full taper

APPLICATION

- Air & flue gas
- Tank, Boilers & vessels
- Oil & Gas applications
- Corrosive environments
- Power & Steel industries
- On-shore/Off-shore application

SPECIFICATIONS

Design	:	ASME PTC 19.3
Instrument Connection	:	1⁄2" NPT (F)
Process Connection	:	1⁄2" NPT (M)
Bore diameter	:	Ø7 mm
Tip thickness	:	6.35 mm
Lagging extension	:	50 mm
Head Diameter	:	Ø28 mm
Shank Style	:	Straight, Taper, Reduced Tip, Partial Taper

• Pharma, Chemical, Petrochemical

MATERIAL OF CONSTRUCTION

Well material : SS 316

DIMENSIONAL DRAWINGS





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BAR STOCK THREADED THERMOWELL



DIMENSIONAL DRAWINGS

Straight





A -	Minor Diameter	В -	Major Diameter	D -	Bore Diameter	н -	Head Size
- 1	Instrument Connection	Τ-	Extension Length	Ρ-	Process Connection	t -	Tip Thickness
ΓL -	Taper Length	RL -	Reduced Tip Length	U/IL -	Insertion Length		

Important Notes: • Above drawings are not to scale • All Dimension are in mm



Taper



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BAR STOCK THREADED THERMOWELL



DIMENSIONAL DRAWINGS

Partial Taper





Reduced Tip

A -	Minor Diameter	В	-	Major Diameter	D	-	Bore Diameter	н -	Head Size
۱ -	Instrument Connection	Т	-	Extension Length	Ρ	-	Process Connection	t -	Tip Thickness
TL -	Taper Length	RL	-	Reduced Tip Length	U/IL	-	Insertion Length		

Important Notes: • Above drawings are not to scale • All Dimension are in mm

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MODEL CODING & ORDERING INFORMATION

DESCRIPTION	CODE	X7.01	ST	CS	12NF	12NM	H28	нн	T50	D07	t5	XXX
Model Bar Stock Threaded Thermowell Version Straight Straight Reduced Tip Partial Taper Full taper	X7.01 ST SR PT FT	X7.01	ST									
Well Material Carbon Steel SS 304 SS 310 SS 316 SS 316L Duplex SS 2205 Monel 400 Inconel 600 Hast C-276 SS 316 / 316L	CS S4 S1 S6 SL DU M4 I6 HC DC			CS								
Instrument Connection ½" NPT (F) ½" BSP (F) ¾" NPT (F) ¾" BSP (F) ¾" BSP (F) ¾" DSP (F)	12NF 12BF 34NF 34BF M20F				12NF							
Process Connection 1/2" NPT (M) 1/2" BSP (M) M20M x 1.5 (M) 3/4" NPT (M) 3/4" SSP (M) M33 × 2 (M) 1" NPT 1" BSP	12NM 12BM M20M 34NM 34BM M33M 01NM 01BM					12NM						
Head Diameter 'H' 28 mm Customer Specific	H28 XXX						H28					
Headed Round Head with Spanner Slot	HH RH							НН				
50 mm Customer Specific	T50 XXX								T50			
Bore Diameter 'D' 7 mm 9 mm 11 mm Customer Specific	D07 D09 D11 XXX									D07		
Tip Thickness 't' 6.35 mm Customer Specific	t5 XXX										t5	
Insertion Length 'U/IL' Please specify in 'mm' e.g. for 200 mm mention IL200mm	XXX											XXX





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TABLE - 1

STRAIGHT

Major Diameter 'B' Please Specify in 'mm' e.g. for 22 mm, mention B22

STRAIGHT REDUCED TIP

Major Diameter of Step 'B' Please Specify in 'mm' e.g. for 22 mm, mention B22

Minor Diameter of Step 'A' Please Specify in 'mm' e.g. for 18 mm, mention A18

Length of Step 'RL' Please Specify in 'mm' e.g. for 100 mm, Step Length from tip, Specify RL100

PARTIAL

Major Diameter of Taper 'B' Please Specify in 'mm' e.g. for 22 mm, mention B22

Minor Diameter of Taper 'A' Please Specify in 'mm' e.g. for 18 mm, mention A18

Length of Taper 'T ' Please Specify in 'mm' e.g. For Taper length from Tip, from tip of 150mm, Specify LT150

FULL TAPER

Major Diameter of Taper 'B' Please Specify in 'mm' e.g. for 22 mm, mention B22

Minor Diameter of Taper 'A' Please Specify in 'mm' e.g. for 18 mm, mention A18

MODEL CODING & ORDERING INFORMATION

DESCRIPTION	CODE	X17
Other Options Material Test Certificate IBR Certification Tested to NACE Standards Certification for Oxygen Service Hydro Test Certificate Plug & chain in SS IGC Test Certification for Hydrogen Service WFC as per PTC 19.3TW:2010 Ultrasonic Test Chemical Composition	X17 X18 X20 X21 X53 X77 X79 X81 X82 X85 X86	X17
PMI Test	X89	

SAMPLE ORDERING CODE:

X7.01-ST.CS.12NF.12NM.H28.HH.T50.D07.t5.XXX.X17

Note: Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and material specified may be replaced by others without prior notice.

