

330# Series

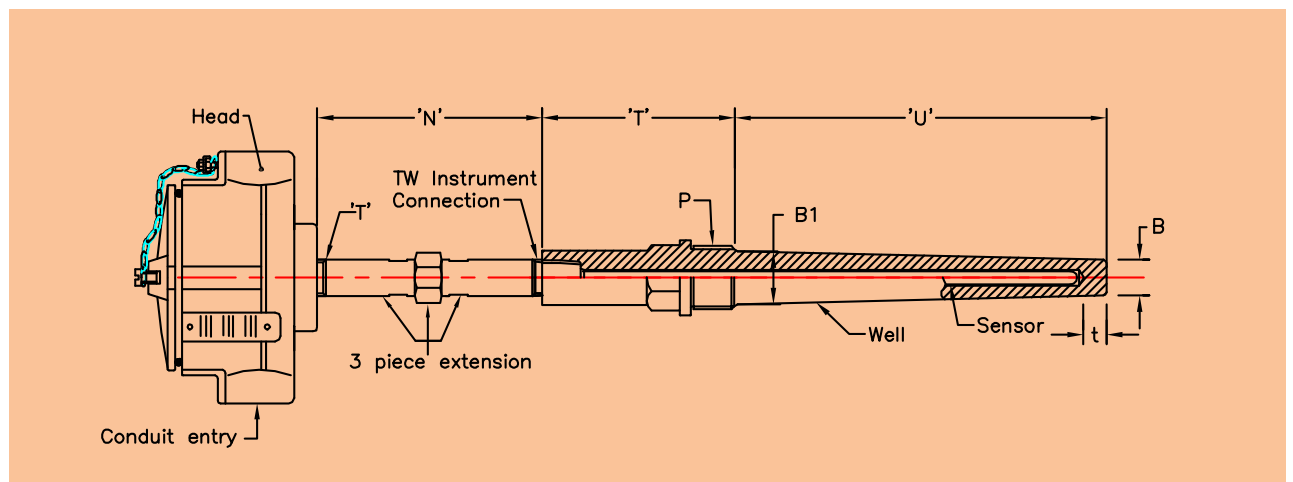
- A Threaded tapered well
- Weatherproof execution in Aluminium
- Safe design as per ASME PTC 19.3
- Available with "in head" 2-wire Temperature Transmitter



MI Thermocouple or Resistance Thermometer sensor fitted into a terminal head, and provided with head extension and drilled bar stock thermowell would form a typical complete assembly ready for use in the application, designed for.

The design of the complete assembly depends on various process parameters, such as, temperature, dynamic pressure, flow velocity, abrasive nature of process fluid, intricate nature of installation and insertion lengths required. ASME performance test code PTC 19.3 gives a basis for arriving at a design of thermowell for use on pipings carrying process fluids. We recommend that insertion lengths are checked for safe design as per ASME PTC 19.3. The assembly shown in this leaflet is typical for use in Power plants for use on steam and water services.

Thermowells are available in standard AISI 300 series stainless steel such as 316 SS, 304 SS and 321 SS. The standard execution as shown in this leaflet is with plated CS extension and Aluminium head with conduit entry of 1/2"NPT(F) and well entry of M 20x1.5. Assemblies with longer extension length to locate cold end termination away from the installation can be supplied. Specify code 10 and requirement of extension length. The Thermocouple junctions are ungrounded unless specified otherwise.



Ordering Example - RTD

330#-2-PT100B-3W-6-SS316-IEC751-CJT1001-400-D_IP67-1-HA108-SS316-250-0-50-150-1/2"NPT(M)-28-26-16-0-0-7-6-Op 1A,3A,5A,4B,31A,14A

Model	Suffix Codes	Description
330#RTD		330#RTD Insert / Probes
No of Elements	1..... 2..... 3.....	Simplex Duplex Triplex
Element Type	PT100A..... PT100B..... Pt200A..... Pt200B..... PT500A..... PT500B.....	PT100 class A tolerance PT100 class B tolerance Pt200 RTD Class A tolerance Pt200 RTD Class B tolerance PT500 class A tolerance PT500 class B tolerance
No of Wires	2W..... 3W..... 4W.....	2 Wire RTD 3 Wire RTD 4 Wire RTD
Sheath Dia	6..... 8..... 10.....	6 mm 8 mm 10 mm (For more options refer table F)
Sheath Material	316..... 316L..... 321..... INC 600	SS316 SS316L SS321 Inconel 600
Calibration Standard	DIN43760..... IEC751.....	RTD calibration DIN 43760 RTD calibration IEC 60751
CJT Details	CJT 201..... CJT 1001..... CJT 1005	Crimp On Pot And Lead Wire Spring Loaded Terminal Block OD=41 PCD=33(Weatherproof) Spring Loaded Terminal Block Od=41 PCD=33(Flameproof) (For more options Refer table G)
Length Below Base Plate* (To be specified by Pyro)	X.....	Length Below Base Plate 'X' mm
Head Type	D_IP67..... C.....	Weatherproof With IP67 Certified as per IS/IEC 60529 Flameproof Exd IIC T6,IP67 as per IS/IEC 60079 (for more options refer table H)
No Of Conduit Entries	01-10..... XX	Select 2 or 1 for Terminal Head & 1-10 for Junction Box Not Applicable
Head Assembly Type	HA108..... HA112..... HA113.....	Head-3 Piece Extension & T(M) (Made in Barstock) Head-3 Piece Extension With Spring Loading & T(M) Head-3 Piece Extension With Sealing Arrangement & T(M) (For more options refer table E)
Well Material	321..... 321L..... 316.....	SS 321 SS 321L SS 316 (Other options available)
Well Insertion Length Below Threads*	U.....	Well Insertion Length Below Threads Umm
Safe Length Below Collar*	U1.....	Well Insertion U1MM (Write 0 if Velocity Collar Not Applicable)
Well extension length including threads*	C.....	Well extension length including threads C mm
Head extension length*	N.....	Head extension length N mm
Process Connection	P-1/2NPTM..... P-1/2BSPM..... XX.....	1/2" NPT(M) 1/2" BSP(M) Not Applicable (For more options refer table B)
Rod Diameter*	A.....	Rod Diameter 'A' mm
Top End Diameter*	B1.....	Top End Diameter 'B1' mm
Hot End Diameter*	B.....	Hot End Diameter 'B' mm
Velocity Collar*	OD.....	Velocity Collar OD (Write 0 if Velocity Collar Not Applicable)
Velocity Collar Thickness*	Thk.....	Velocity Collar Thickness (Write 0 if Velocity Collar Not Applicable)
Bore ID*	d.....	Bore ID 'd' mm
Tip Thickness*	t.....	Tip Thickness 't' mm
Options.....		(For options refer table A)

*Please consult our marketing team for any non standard dimensions. Note: For field which are not applicable, select 'XX' or enter '0' whichever is mentioned .

INDIA

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Ordering Example - TC

330#-MI-2-K-6-20AWG-SS316-IEC584-CJT1001-400-D_IP67-1-HA108-SS316-250-0-50-150-1/2"NPT(M)-28-26-16-0-0-7-6-Op 1A,3A,5A,4B,31A,15B,16B

Model	Suffix Codes	Description
330#TC		330#TC Insert / probes
Thermocouple Type	MI..... BE.....	Mineral Insulated Ceramic Beaded
Number of Elements	1..... 2..... 3.....	Simplex Duplex Triplex
Element Type	J..... K..... T..... E..... N..... R..... S..... B..... C.....	Iron Constantan Chromel Alumel Copper Constantan Chromel Constantan Nicrosil Nisil PTRH13%_PT PTRH10%_PT PTRH30%_PTRH6% TU 5% Rhenium -TU 26% Rhenium
Sheath Diameter of TC	6..... 8..... 9.5.....	6 mm 8 mm 9.5 mm (Refer table F)
Size of Conductor of TC	16AWG..... 18AWG..... 24AWG..... XX.....	1.29032 mm 1.02362 mm 0.51054 mm Not Applicable (For more options refer table C)
Sheath Material for TC	316..... 316L..... 321..... INC 600	SS316 SS316L SS321 Inconel 600 (For more options refer table D)
Calibration Standard	ANSIMC96.1..... DIN43710..... IEC60584.....	TC calibration as per ANSIMC 96.1 TC calibration as per DIN 43710 TC calibration as per IEC 60584
Details of CJT	CJT 201..... CJT 1001..... CJT 1005.....	Crimp On Pot And Lead Wire Spring Loaded Terminal Block OD=41 PCD=33(Weatherproof) Spring Loaded Terminal Block Od=41 PCD=33(Flameproof) (For more options refer table G)
Length Below Base Plate* (To be specified by Pyro)	X.....	Length Below Base Plate X mm
Head Type	D_IP67..... C.....	Weatherproof With IP67 Certified as per IS/IEC 60529 Flameproof Exd IIC T6,IP67 as per IS/IEC 60079 (For more options refer table H)
No of Conduit Entries	01-10.....	Select 2 or 1 for Terminal Head & 1-10 for Junction Box
Head Assembly Type	HA108..... HA112..... HA113.....	Head-3 Piece Extension & T(M) (Made in Barstock) Head-3 Piece Extension With Spring Loading & T(M) Head-3 Piece Extension With Sealing Arrangement & T(M) (For more options refer table E)
Well Material	321..... 321L..... 316.....	SS 321 SS 321L SS 316 Other Options Available
Well Insertion Length Below Threads*	U.....	Well Insertion Length Below Threads U mm
Safe Length Below Collar*	U1.....	Well Insertion U1 MM (Write 0 if Velocity Collar Not Applicable)
Well extension length including threads*	C.....	Well extension length including threads C mm
Head extension length*	N.....	Head extension length N mm
Process Connection	P-1/2NPTM..... P-1/2BSPM..... XX.....	1/2" NPT(M) 1/2" BSP(M) Not Applicable (For more options refer table B)
Rod Diameter*	A.....	Rod Diameter 'A' mm
Top End Diameter*	B1.....	Top End Diameter 'B1' mm
Hot End Diameter*	B.....	Hot End Diameter 'B' mm
Velocity Collar*	OD.....	Velocity Collar OD (Write 0 if Velocity Collar Not Applicable)
Velocity Collar Thickness*	Thk.....	Velocity Collar Thickness (Write 0 if Velocity Collar Not Applicable)
Bore ID*	d.....	Bore ID 'd' mm
Tip Thickness*	t.....	Tip Thickness 't' mm
Options		(For options refer table A)

*Please consult our marketing team for any non standard dimensions. Note: For field which are not applicable, select 'XX' or enter '0' whichever is mentioned .

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