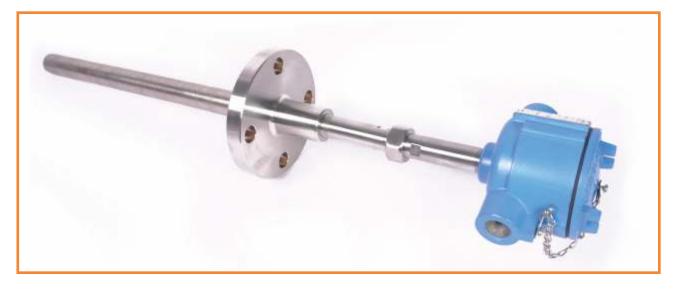
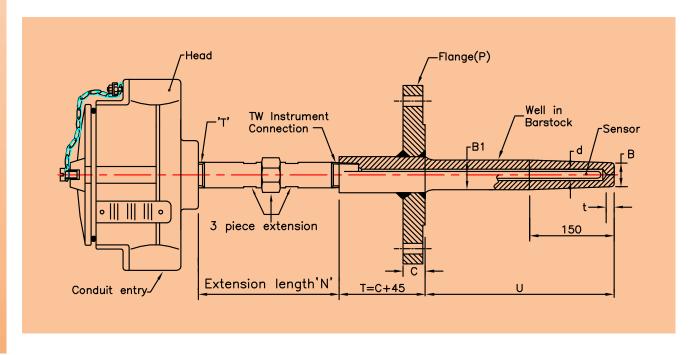
- A Flanged Straight & tapered shank Thermowell.
- Flameproof or weatherproof execution in 316SS or Aluminium.
- Safe design as per ASME PTC 19.3
- Available with "in head" 2-wire Temperature Transmitter.



The Thermocouple or RTD assembly illustrated in this leaflet is a typical design specified by M/s Engineers India Itd. A drilled bar stock Thermowell is welded to a suitably drilled blind flange by employing a groove and fillet TIG weld joint. For pressure rating 900# and above a full penetration weld is carried out. High velocity collar can be provided to reduce the suspended length of Thermowell and to meet ASME PTC 19.3 requirement.

Thermowells are available in standard AISI 300 series stainless steels as well as, in exotic materials such as Incoloy 800, Inconel 600, Monel 400, Hastelloy alloys C and B, and Flanges in ASTM grades A105, A182 and A350 and in standard size of (1.5"Nb(40mm), and ratings from 150# to 2500#.

The standard execution as shown in this leaflet is with Cd plated CS extension and Aluminium hea with conduit entry of 1/2"NPT and Thermocouples with ungrounded junction unless specified otherwise.



## **Ordering Example - RTD**

Model No: 430#-2-Pt100B-3W-6-SS316-IEC751-CJT1001-400-D\_IP67-1-HA108-SS316-F316-250-0-90-150-1/2"-150#-RF-30-26-16-150-0-0-7-6-Op 1A,3A,5A,4B,31A,14A

	Model Suffix Codes		Description
Sort   Limited   1			
2			
Pricods			
PP100A   PP100B   P	3		Triplex
P2000 H D Class A Malerance   P2000 H D Class A Malerance   P2000 H D Class S Malerance   P200			Pt100 RTD Class A tolerence
PPDOR   PPDO			Pt100 RTD Class B tolerence
PRODUCE   PRO			
PISOR ID Class Bioletence   PISOR RTD Class Bioletence   2 Wire RTD   3 Wire RTD   3 Wire RTD   4 Wire RTD   4 Wire RTD   4 Wire RTD   5 wire RTD			
2   2   2   2   2   2   3   3   3   3			
3W   3W (FRTD   4W (FRTD   4W (FRTD   4W (FRTD   5W (			
A Wire RTD   A Wire RTD   B   B   B   B   B   B   B   B   B			
A mm			
Barrier   Barr			
10			
Since   Simple   Since   Simple   Since   Simple   Since   S			
			· ' ' '
SS21			
MC 600			
All Parallon   Sandard   DIN43760   EC751   RTD calibration DIN 43760   EC751			
EC75			
CJT 201.   Cirm on Pet and Lead Wire   CJT 1001.   Spring Loaded Terminal Block OD-41 PCID-33(Weatherproof)   Spring Loaded Terminal Block OD-41 PCID-33(Weatherproof)   Spring Loaded Terminal Block OD-41 PCID-33(Flameproof)   Spring Loaded Terminal Block OD-41 PCID-34(Flameproof)   Spring Loaded Terminal Block OD-42 PCID-34(Flamepro			
CJT 1001			
Cut   Tubes			
Circ more options refer table C)			
Length Below Base Plate   X m   Length Below Base Plate   X m	GT 1003		
To be specified by Pyro    Lead Type   D_JP67	Longth Polow Paco Diato* V		
Bead Type			Lengin below base Plate X IIIII
C			Weatherproof With ID67 Cartified as per IS/IEC 60520
10 Of Conduit Entries	· · · · · · · · · · · · · · · · · · ·		
Not Applicable   Harlos   Harlos   Head 3 Piece Extension & T(M) (Made in Barstock)   Harlos   Harlos   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 3 Piece Extension with Spring Loading & T(M)   Head 5 Piece Extension Loading Flange T   SS 321   SS 316   Inconel 600 (Other options available)   SS 3 16   Inconel 600 (Other options available)   SS 3 16   Inconel 600 (Other options available)   ST 3 16   Inconel 600 (Other options available)   Incone St 3 16   Inconel 600 (Other options available)   Incone St 3 16   Incon	No Of Conduit Entries 01-10		
Hard Assembly Type			
HA112			
HA113	3 31		
Veil Material   321			
Mell Material   321   SS 321   SS 316   INC 600   Inconel 600 (Other options available)   Incone 600 (Other options a		·	
316	Well Material 32	1	,
Income   I			
F321			
F316   SS316   SS 316   Colter options available			SS 321
F316L   SS 316L(Other options available	<i>y</i>	F316	
Well Insertion Length Below Flange   U			
U1	Well Insertion Length Below Flange*		
Will Extension Length Including Flange"   T	Safe Length Below Collar *		
Well Extension Length Including Flange "T mm	5		(Write 0 if Velocity Collar ( Not applicable)
Head extension Length"   Head extension length "N" mm	Well Extension Length Including Flange*	Т	
1	Head Extension Length*		
1.5	Flanged Process Connection Size		0
150#		1.5	1.5" ANSI
150#		2	2" ANSI (Other options available)
300#	Flanged Process Connection Rating	150#	
600#	Š	300#	
1500#			600# as per B16.5
2500# 2500# as per B16.5  Flanged Process Connection Facing  BLRF Blind raised face BLRTJ Blind ring type joint SORF Slip on raised face (Other options available)  Rod Diameter* A. Rod Diameter 'A' mm  Top End Diameter 'B' mm  Flapered Length for Thermowell O-500(Define Dia between 0 to 150) Tapered Length for Thermowell  Velocity Collar* OD Write 0 if Velocity Collar Not Applicable)  Velocity Collar Thickness* (Write 0 if Velocity Collar Not Applicable)  Bore ID* d. Bore ID 'd' mm  Tip Thickness* Tip Thickness 't' mm  Options.		900#	900# as per B16.5
BLRF BIND raised face BLRTJ Blind raised face BLRTJ SORF Slip on raised face (Other options available)  Rod Diameter* A. Rod Diameter 'A' mm  Top End Diameter 'B' mm  Ide End Diameter 'B B. Hot End Diameter 'B' mm  Ide Engered Length for Thermowell  Ideocity Collar*  Ideocity Collar Thickness*  Ink. Velocity Collar Not Applicable)  Velocity Collar Not Applicable)  Bore ID*  In Tip Thickness 'I mm  If princkness 'I mm  If prin			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
BLRTJ			
SORF	Flanged Process Connection Facing		
Rod Diameter* A			
Top End Diameter* B1			
Hot End Diameter* B			
Fapered Length for Thermowell     0-500(Define Dia between 0 to 150)     Tapered Length for Thermowell       Velocity Collar*     Velocity Collar OD (Write 0 if Velocity Collar Not Applicable)       Velocity Collar Thickness*     Velocity Collar Thickness (Write 0 if Velocity Collar Not Applicable)       Bore ID*     d			
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*  Tip Thickness 't' mm  Options.  (For options refer table A)			
(Write 0 if Velocity Collar Not Applicable)  //elocity Collar Thickness*  Thk  Velocity Collar Thickness (Write 0 if Velocity Collar Not Applicable)  Bore ID*  d  Bore ID 'd' mm  Tip Thickness*  Tip Thickness 't' mm  Options.  (For options refer table A)		,	
Velocity Collar Thickness*  Thk	Velocity Collar*	OD	
(Write 0 if Velocity Collar Not Applicable)  Bore ID*  d			
Bore ID*   d	Velocity Collar Thickness*	Thk	
Tip Thickness* t			11 /
Options. (For options refer table A)		d	
		t	

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

**INDIA** 

PYRO ELECTRIC INSTRUMENTS GOA PVT. LTD.

G/B, Hill Crown, College Road, Mapuca - Goa 403 507 India. Tel : +91 832 2252719/2264391, Fax : +91 832 2263294, Email : marketing@pyro-electric.in



## **Ordering Example - THERMOCOUPLE**

Model No: 430#-MI-2-K-6-20AWG-SS316-IEC584-CJT1001-400-D\_IP67-1-HA108-SS316-F316-250-0-80-150-1/2"-150-RF-28-26-16-50-0-0-7-6-Op 1A,3A,5A,4B,31A,15B,16B

Model Suffix Codes		Description
100 %TO		Description 430#TC Assembly
Thermocouple Type MI		Mineral Insulated
BE		Ceramic Beaded
		Simplex
		Duplex Triplex
		Iron Constantan
		Chromel Alumel
		Copper Constantan
		Chromel Constantan Nicrosil Nisil
		PTRH13%_PT
		PTRH10%_PT
В		PTRH30% PTRH6%
Character of TO		TU 5% Rhenium –TU 26% Rhenium
		6 mm 8 mm
		9.5 mm (For more option refer table F)
		1.29032 mm
		1.02362 mm
		0.51054 mm
		Not Applicable (For more options refer table C) SS316
		SS316L
		SS321
INC 600		Inconel 600 (For more options refer table D)
Calibration Standard ANSIMC96.1		TC calibration as per ANSIMC 96.1
		TC calibration as per DIN 43710 TC calibration as per IEC 60584
		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 'X' mm
(To be specified by Pyro) Head Type D_IP67		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)
Number of Conduit Entries 01-10		Select 2 or 1 for Terminal Head & 1-10 for Junction Box
100		
Head Assembly Type HA108		Head-3 Piece Extension & T(M) (Made in Barstock)
		Head-3 Piece Extension with Spring Loading & T(M)
HA113		Head-3 Piece Extension with Sealing Arrangement & T(M)
		(For more options refer table E)
		SS 321
	600	SS 316
The state of the s	<del>-</del> 321	Inconal 600 (Other options available) SS 321
3	- 32 1 - 316	SS316
	F316L	SS 316L (Other options available)
Well Insertion Length Below Flange*	U	Well Insertion Length Below Flange 'U' mm
Safe Length Below Collar*	U1	Well Insertion 'U1' mm
		(Write 0 if Velocity Collar Not Applicable)
Well extension length including Flange*	T	Well extension length including Flange 'T' mm
Head extension length*	N	Head extension length 'N' mm
Flanged Process Connection Size	1	1" ANSI
	1.5	1.5" ANSI
	2	2" ANSI (Other options available)
Flanged Process Connection Rating	150#	150# as per B16.5
	300#	300# as per B16.5
	600#	600# as per B16.5
	900#	900# as per B16.5
	1500#	1500# as per B16.5
Flangad Dracace Connection Facing	2500#	2500# as per B16.5
Flanged Process Connection Facing	BLRF	Blind raised face
	BLRTJ	Blind ring type joint Slip on raised face (Other options available)
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
Tapered Length for Thermowell	0-500(Define Dia between 0 to 500)	Step Length
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
TIP THICKHESS		
Options		(For options refer table A)

<sup>\*</sup>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.



