#### **BTC-BAY Copper Tip Bearing Thermocouple Adjustable Depth**



**BTC-BAY** A bearing thermocouple with a bayonet lock is designed to monitor bearing temperatures in rotating machinery. It ensures reliable and secure contact with the bearing housing, making it ideal for preventing overheating and potential failures in industrial equipment.

#### Key Feature:

- Adjustable bayonet Lock Mechanism provides a secure, spring-loaded connection for better contact with the bearing surface and allows for quick installation and removal without special tools.
- Available in Thermocouples Type-K, J and T. Type-K is most widely used for industrial applications.
- Spring-Loaded Tip ensures constant pressure against the bearing housing, improving heat transfer leading to faster response time and accurate temperature readings.
- Available in 0.188 " diameter and lengths depending on application requirements.

#### Thermocouple Junction options for BTC-BAY



**Ungrounded Junction:** Junction is similar to grounded junction except wire are fuse welded, which is then insulated with Mgo powder and formed cap by welding without incorporating thermocouple wires. Thus, the junction is called the ungrounded junction.

#### Key Benefits:

- · Wires are protected from any mechanical damage
- · Offers rugged construction, the same as the grounded junction.
- · Strain due to differential expansion between wire and sheath is minimized with insulated wires.



**Grounded Junction:** In grounded junction thermocouple wires and sheath of the mineral insulated cable is welded together to form a junction. Thermocouple wires and sheath becomes an integral part of the junction. Thus, the wire is grounded to the sheath.

#### Kev Benefits:

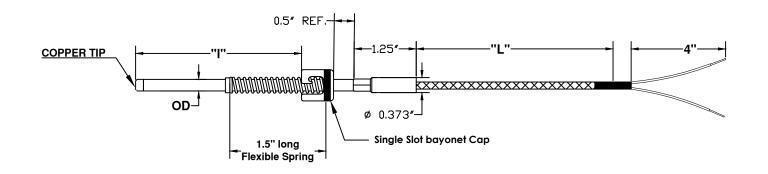
- Slower response than Exposed junction, but offers rugged construction.
- Can hold higher pressure than exposed junction and Ungrounded junction.

#### **Maximum Temperature Rating:**

For Teflon Wire : 260°C For Fiberglass Wire: 510°C



### TEMPERATURE SENSOR



	1	2	3	4	5	6	7	8
BTC BAY								

For Example- BTC BAY-J-UG-3-8i-24i-1-Z-0-0

1. THERMOCOUPLE TYPE			
CODE			
J	Iron(+) vs Constantan(-)		
K	Chromel(+) vs Alumel(-)		
T	Copper(+) vs Constantan(-)		

2. MEASURING JUNCTION			
CODE			
ШС	Simpley / Un Grounded Junction		

	3. SHEATH O	D
CODE	IMPERIAL SIZE	METRIC SIZE
3	3/4"	4.76 mm

# 4. IMMERSION LENGTH (I) Immersion length - use "I" for inches and "M" for millimetre

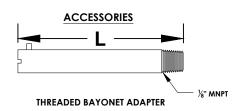
## 5. LEAD LEMGTH (L) Lead length - use "I" for inches and "M" for millimetre

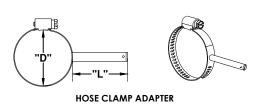
6. WIRE TYPE			
CODE			
1	PFA (260° C)		
NOTE:- Add "X" for SS braiding & "Z" for			
Armour			

6. CODES FOR TERMINATION			
CODE			
Z	Bare ends		
STP	Standard Plug		
MP	Miniature Plug		

7. CODES FOR TERMINATION (JACK)			
CODE			
0	Not required		
STJ	Standard Jack		
MJ	Miniature Jack		

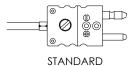
8. OPTIONAL ACCESSORY			
CODE			
0	Not required		
WC	Wire clamp		
Only choose when ordering with			
connector			



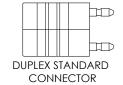


NOTE : SEE ACCESSORIES PAGE TO ORDER

#### **Termination Options**











DUPLEX MINI CONNECTOR



MINI CONNECTOR WITH BRACKET