

BTC44- A bearing thermocouple with armor is a dedicated temperature sensor used for monitoring bearing temperatures in industrial machinery. It features a thermocouple probe encased in a flexible armored sheath, providing superior mechanical protection. This sensor plays a crucial role in preventing overheating and potential failures in rotating equipment like motors, turbines, compressors, and gearboxes.

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 BTC44



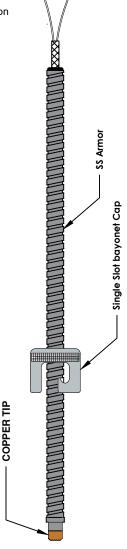
Ungrounded Junction: Junction is similar to grounded junction except wire are fuse welded, which is then insulated with Mgo powder and formed cap by welding without incorporating thermocouple wires. Thus, the junction is called the ungrounded junction.

Key Benefits :

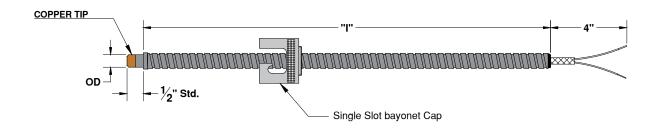
- · Wires are protected from any mechanical damage
- · Offers rugged construction, the same as the grounded junction.
- · Strain due to differential expansion between wire and sheath is minimized with insulated wires.

Maximum Temperature Rating:

For Teflon Wire: 205°C For Fiberglass Wire: 510°C



TEMPERATURE SENSOR



Notes:

Standard sheath material is SS316.

	1	2	3	4	5	6	7	8
BTC 44								

For Example- BTC44-J-UG-3-24i-1-STP-0-0

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

	2. MEASURING JUNCTION
CODE	
UG	Simplex / Un- Grounded Junction

3. SHEATH OD				
CODE	IMPERIAL SIZE	METRIC SIZE		
3	3/16"	4.76 mm		

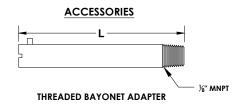
4. LEAD LENGTH (L)
Lead length - use "I" for inches and "M" for
millimetre

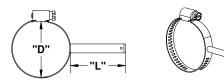
5. WIRE TYPE			
CODE			
1	TEFLON (205° C)		
3	FIBRE GLASS (510° C)		

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

HOSE CLAMP ADAPTER

Termination Options

