

Nipple-union-nipple Extension (NUN)

**MIEPL** make MTT02 Thermocouples are the most common, convenient, and versatile devices used to measure temperature. They convert units of heat into useable engineering units that serve as input signals for process controllers and recorders. A thermocouple consists of a welded 'hot' junction between two dissimilar metals, usually wires and a reference junction at opposite ends of the parent materials. This type of Thermocouple have Nipple Union Extension. Mainly used in Power, Chemical, Steel and Oil Industries.



**FEATURES**

- Nipple-union-nipple extension
- Mineral insulated
- Transmitter mountable
- Exchangeable insert
- Spring loaded design

**APPLICATION**

- Chemical & petrochemical
- Oil & gas application
- Water, waste-water treatment
- Power & Utilities

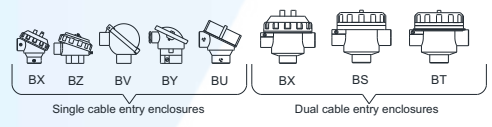
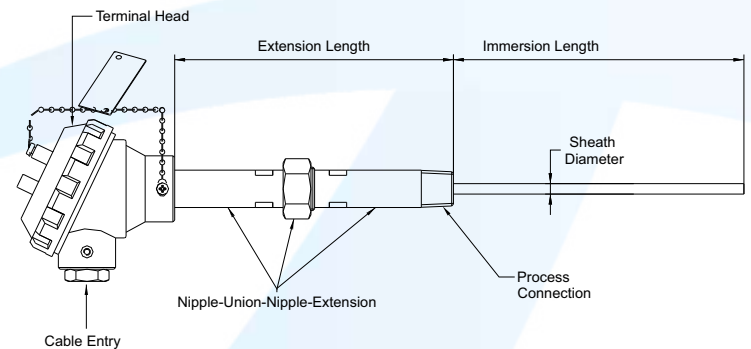
**REFERENCE**

- IEC-584.2 / ANSI MC-96.1

**STANDARD SPECIFICATIONS**

Element	: Type K (NiCr-Ni)
Accuracy	: Standard to ISA & ANSI MC96.1
No. of sensors	: Simplex
Hot junction	: Ungrounded
Sheath material	: AISI 316 SS
Sheath diameter	: 6.0 mm
Terminal head type	: Threaded, weatherproof, IP-65
Terminal head material	: Die-cast aluminum
Cable entry	: 3/4" ET (F), 1 No.
Head extension	: Nun assembly in ASTM A105 (Cadmium plated)
Head extension length	: 150 mm
Immersion length	: 150 mm
Process connection	: 1/2" NPT (M) / 1/2" BSP (M)

**DRAWING**



## ORDERING CODE

MTT02 - **k** - **P** - **V** - **U** - **MF** - **M60** - **BZ**

1. ELEMENT	Type K (NiCr-Ni)	<b>K</b>					
	Type J (Fe-CuNi)	J					
	Type N (NiCrSi-NiSi)	N					
	Type E (NiCr-CuNi)	E					
	Type T (Cu-CuNi)	T					
	Type R (Pt-13%Rh/Pt)	R					
	Type S (Pt-10%Rh/Pt)	S					
	Type B (Pt/30%Rh-Pt/6%Rh)	B					
2. ACCURACY	Standard	<b>P</b>					
	Special	Q					
3. NO. OF SENSORS	Simplex		<b>V</b>				
	Triplex			X			
	Duplex			W			
	Ungrounded				<b>U</b>		
	Grounded					G	
4. HOT JUNCTION	AISI 316 SS					<b>MF</b>	
	AISI 310 SS					ME	
	AISI 316L SS					MG	
	Inconel 600					MQ	
5. SHEATH MATERIAL	3.0 mm						M30
	5.0 mm						M50
	6.0 mm						<b>M60</b>
	8.0 mm						M80
6. SHEATH DIAMETER	WP, IP 65, threaded cover						<b>BZ</b>
	WP, IP 67, threaded cover						BX
	Flame proof, IP 67, Gr IIA, IIB						BS
	Explosion proof, IP 67, Gr IIC						BT
	WP, IP 65, Hinged type						BV
	WP, IP 65, cover fitted with 2 screws						BY
	Ex-Proof to CSA,FM,ATEX [EEx-d]						BU

## ORDERING CODE

			ML	CO	N5	4NM
8. ENCLOSURE MATERIAL	Die-cast aluminum		ML			
	AISI 304 SS		MC			
	AISI 316 SS		MF			
9. CABLE ENTRY	¾" ET (F), 1 No.			CO		
	½" NPT (F), 1 No.			C1		
	M20 x 1.5mm (F), 1 No.			C2		
	¾" NPT (F), 1 No.			C3		
	¾" ET (F), 2 Nos.			C5		
	½" NPT (F), 2 Nos.			C6		
	M20 x 1.5mm (F), 2 Nos.			C8		
	¾" NPT (F), 2 Nos.			C9		
10. HEAD EXTENSION	NUN assembly in ASTM A 105				N5	
	NUN assembly in AISI 304 SS				N6	
	NUN assembly in AISI 316 SS				N7	
11. HEAD EXTENSION LENGTH (XL)	50 mm up to 250 mm			XXX		
12. IMMERSION LENGTH (IL)	50 mm up to 10,000 mm			XXXXX		
13. PROCESS CONNECTION	½" NPT (M)					4NM
	¾" NPT (M)					5NM
	M20 X 1.5 mm (M)					4MM
	½" BSP (M)					4BM
	¾" BSP (M)					5BM
14. OTHER OPTIONS	Calibration Certificate	SB	SC, cable gland, AISI 316 SS WP			JH
	Tag plate, AISI 304 SS	WF	DC, cable gland, AISI 316 SS WP			JI
	SC, cable gland, Ni-brass WP	JD	SC, cable gland, AISI 316 SS FP			JN
	DC, cable gland, Ni-brass WP	JE	DC, cable gland, AISI 316 SS FP			JO
	SC, cable gland, Ni-brass FP	JJ	Plug fitting for CE, AISI 304 SS			JB
	DC, cable gland, Ni-brass FP	JK	Plug fitting for CE, AISI 316 SS			JC
	SC, cable gland, AISI 304 SS WP	JF	Plug fitting for CE, Aluminum			JU
	DC, cable gland, AISI 304 SS WP	JG	SS base plate for transmitter			JS
	SC, cable gland, AISI 304 SS FP	JL	Head mount transmitter			JT
	DC, cable gland, AISI 304 SS FP	JM				

### Ordering Example

MTT02 - K - P - V - U - MF - M60 - BZ - ML - CO - N5 - 4NM

- Other sheath diameters, connections are available, please contact factory for details..
- WP = Weatherproof, FP = Flame proof, SC = Single Compression, DC = Double Compression, CE = Cable Entry
- Transmitter output shall be 4...20 mA as standard, any other output required, please contact factory for details.
- NUN assembly in ASTM A105 is provided with Cd plating.