

Connection Heads and Enclosures

TempoTech's Thermocouple connection heads are enclosures designed to house the thermocouple junction and provide a safe, protected environment for the connections to the temperature measurement system. These heads are typically used in industrial or scientific settings where temperature measurement needs to be done reliably and securely.

Here are the most common types of thermocouple connection heads TEMPOTECH' Offers:

Key Functions:

- ♦ **Protection:** They protect the thermocouple from physical damage, environmental factors like moisture, dust, or chemicals, and prevent corrosion.
- ♦ **Wiring:** They provide a space for wiring the thermocouple to the measuring equipment, often including terminals for easy connection and disconnection.
- ♦ **Ease of Maintenance:** They allow for easier replacement or servicing of the thermocouple sensor without needing to disturb the rest of the setup.
- ♦ **Environmental Sealing:** Many connection heads are sealed to prevent moisture or contaminants from affecting the thermocouple or wiring.

Types of Thermocouple Connection Heads:

- ♦ **Single or Multi-Input Connection Heads:**
KNE , CI & SS models comes with Single-input used for a single thermocouple, these can be used for dual thermocouples and RTDS as well with ceramic terminal blocks. Whereas our DANAW multi-input can accommodate more than one thermocouple and RTD with Transmitter, which is useful in systems where two transmitters are required with 4-20 mA output.
- ♦ **Materials:**
 - Plastic Connection Heads:** Commonly used for standard applications, lightweight, and resistant to corrosion.
 - Stainless Connection Heads:** More durable and can withstand higher temperatures and harsh environments, making them suitable for high-temperature or heavy-duty industrial applications.
 - Die Cast Aluminum Heads:** Die cast aluminum is most commonly use connection head for process instrumentation. Aluminum has a natural resistance to corrosion, making it suitable for a range of industrial environments. Aluminum is a lightweight yet strong material, providing a good balance between strength and weight.

Protection and Certification



IP68 Rated

Explosion-Proof or Flameproof Heads:

Designed for hazardous or explosive environments, these heads are sealed to prevent any ignition of gases or vapors in the surroundings. These are available in both Stainless Steel and DiesCast aluminum materials. Our Ex-A, Ex-SS models comes with certification for **CSA, ATEX,FM**

Weatherproof Connection Heads:

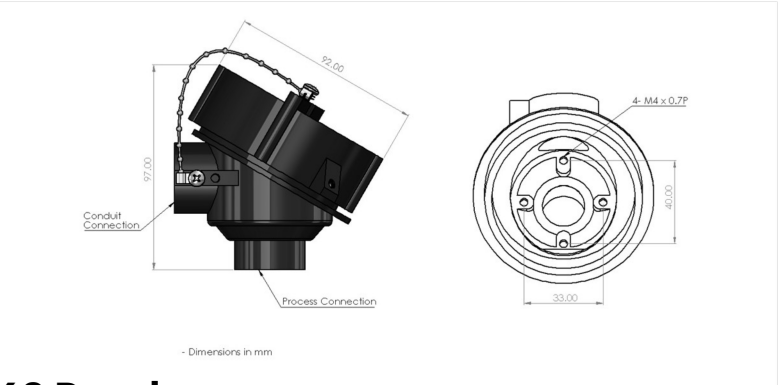
All of our connection heads are certified to IP68 and NEMA 4x rating .These are designed to withstand outdoor conditions, protecting the thermocouple from moisture, extreme temperatures, or other weather elements.

Explosion Proof Connection Head for Thermocouple and RTD

Explosion-proof design: The thermocouple head is made from durable, heavy-duty materials stainless steel and aluminum. The "explosion-proof" designation refers to the housing's ability to contain the explosion, preventing it from reaching the surrounding environments.

EXPLOSION PROOF "AX" SERIES ALUMINUM

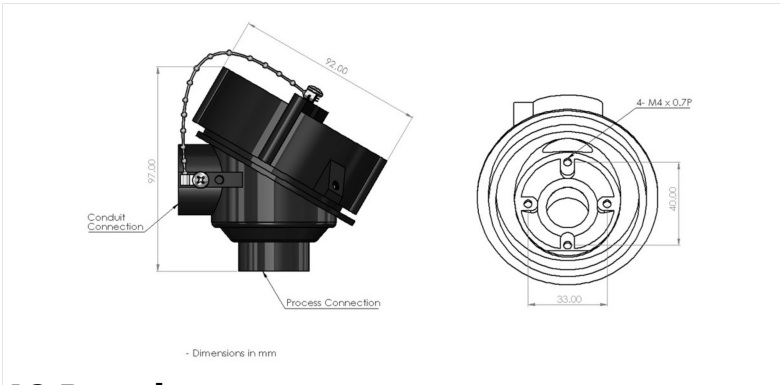
PART NO.	TUBE NPT	CONDUIT NPT
EXP-AX-12-34	1/2" NPT	3/4" NPT
EXP-AX-12-12	1/2" NPT	1/2" NPT
EXP-AX-34-34	3/4" NPT	3/4" NPT



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EXPLOSION PROOF "SX" SERIES STIANLESS STEEL

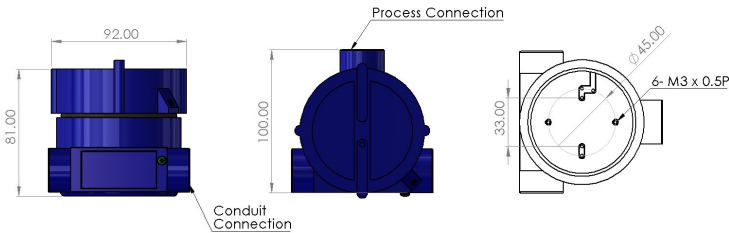
PART NO.	TUBE NPT	CONDUIT NPT
EXP-SX-12-34	1/2" NPT	3/4" NPT
EXP-SX-12-12	1/2" NPT	1/2" NPT
EXP-SX-34-34	3/4" NPT	3/4" NPT



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EXPLOSION PROOF "WM" WALL MOUNT STYLE ENCLOSURE

PART NO.	ID	OD
EXP-WMA-12-34	1/2" NPT	3/4" NPT
EXP-WMA-12-12	1/2" NPT	1/2" NPT
EXP-WMA-34-34	3/4" NPT	3/4" NPT

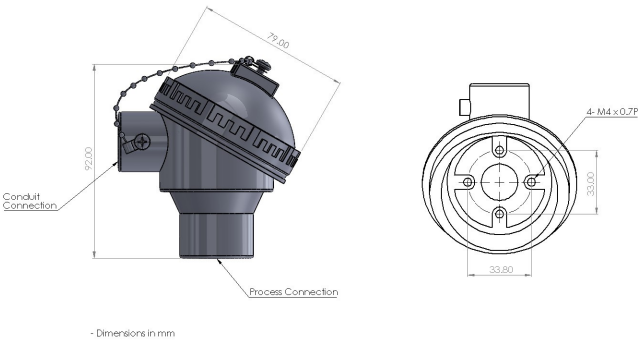


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DIE CAST ALUMINUM HEAD

KNE STYLE

PART NO.	TUBE NPT	CONDUIT NPT
KNE-12-34-AL	1/2" NPT	3/4" NPT
KNE-12-12-AL	1/2" NPT	1/2" NPT

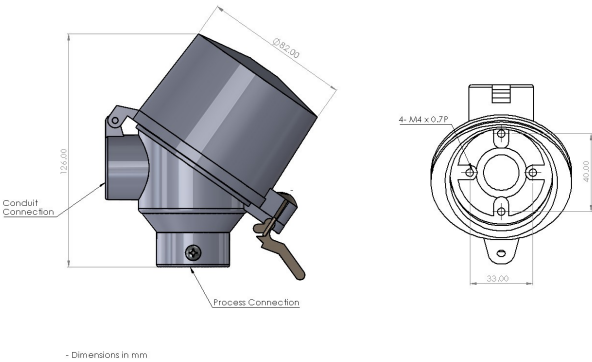


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DANAW STYLE

PART NO.	TUBE NPT	CONDUIT NPT
DANAW-12-34-AL	1/2"	3/4"
DANAW-12-12-AL	1/2"	1/2"

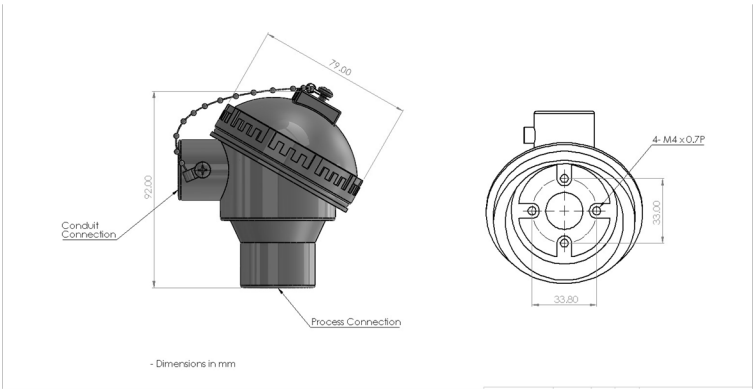
For two transmitter installation with dual sensor



PLASTIC HEAD

KNE STYLE

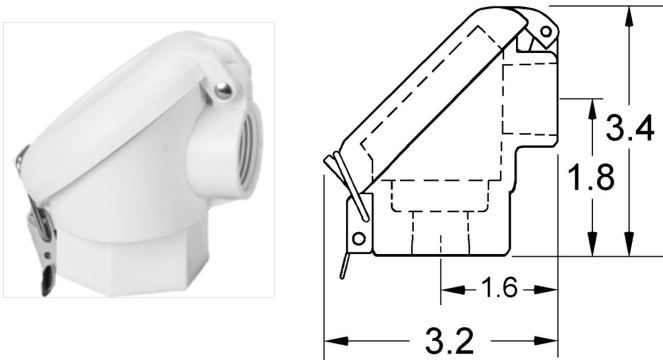
PART NO.	TUBE NPT	CONDUIT NPT
KNE-12-34-P	1/2" NPT	3/4" NPT
KNE-12-12-P	1/2" NPT	1/2" NPT



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FLIP LOCK STYLE

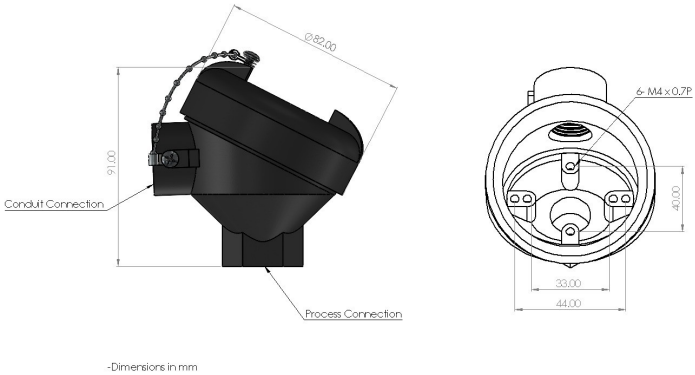
PART NO.	TUBE NPT	CONDUIT NPT
FL-12-34-P	1/2"	3/4"
FL-12-12-P	1/2"	1/2"



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CAST IRON HEAD

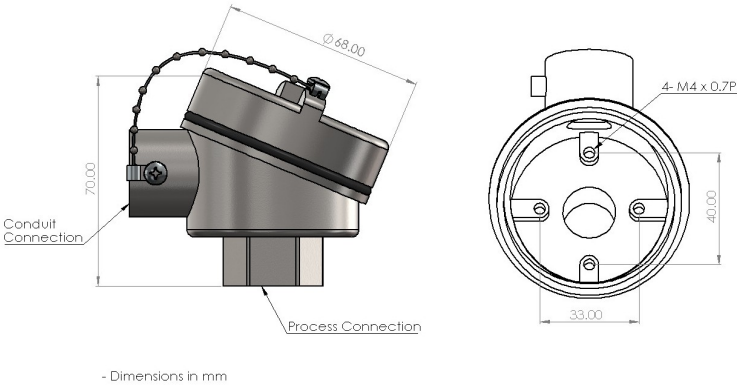
PART NO.	TUBE NPT	CONDUIT NPT
CI-12-34	1/2" NPT	3/4" NPT
CI-12-12	1/2" NPT	1/2" NPT
CI-34-34	3/4" NPT	3/4" NPT



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STAINLESS STEEL HEAD

PART NO.	ID	OD
SS-12-34	1/2" NPT	3/4" NPT
SS-12-12	1/2" NPT	1/2" NPT
SS-34-34	3/4" NPT	3/4" NPT



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