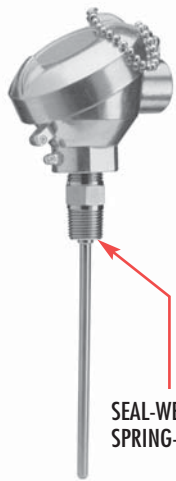


Connection Head Type



- ▶ Thermocouple or RTD
- ▶ Cast Aluminum Polypropylene or Stainless Steel Head
- ▶ Weather-Proof
- ▶ Welded or Spring Loaded Stem

SEAL-WELDED or SPRING-LOADED

The Watson McDaniel **Connection Head** is available with both Type J and Type K Thermocouples, as well as RTD sensors. The weatherproof head provides a conduit connection and is available in cast aluminum (screw cover), polypropylene (flip cover) and stainless steel (screw cover). The stem is either welded directly to the 1/2" NPT threaded connection, or is spring-loaded to provide maximum sensitivity. The spring-loaded stem must always be installed in a thermowell.

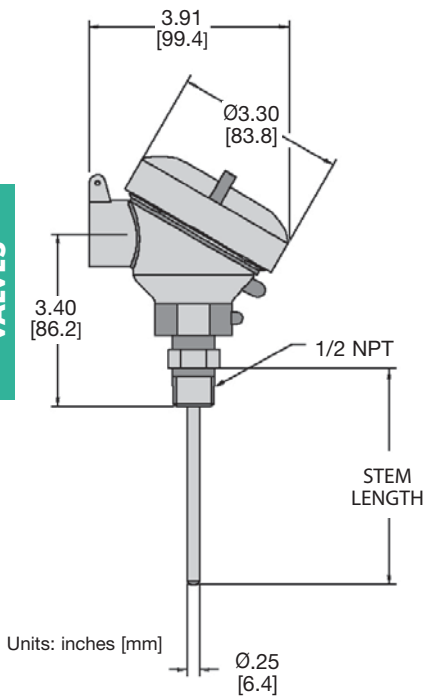
Extension wire and transmitter accessories are also available. Please consult factory.

For applications where the process media may be corrosive or contained under pressure, the use of a thermowell is required to prevent damage to the sensor and facilitate its removal from the process. To prevent leakage of the process media, spring loaded sensors must always be installed in a thermowell.

Specifications

Sensors	Description
TJD	Type J (Thermocouple)
TKD	Type K (Thermocouple)
TDD	100 Ω RTD
TMD	1000 Ω RTD
Hot Junction	
T/C: Ungrounded RTD: Platinum, 3-Wire	
Stem	316 stainless steel 1/4" diameter
Insulation	Ceramic
Head	Cast aluminum, polypropylene or stainless steel
Process Connection	
1/2" NPT welded or spring-loaded	
Conduit Connection	
3/4" NPT Female	
Approximate Shipping Weight	
1.1 lbs [0.50 kg]	

CONTROL VALVES



Specifications

Thermocouple

Type	Color Code	Positive Lead	Negative Lead	Temperature Range
J	Black	Iron* (Fe) [white]	Constantan (Cu-Ni) [red]	32° to 1382°F (0° to 750°C)
K	Yellow	Nickel-Chromium (Ni-Cr) [yellow]	Nickel-Aluminum* (Ni-Al) [red]	32° to 2282°F (0° to 1250°C)

*magnetic lead

RTD

Type	Material	Resistance @ 0°C	Temperature Coefficient	Temperature Range
D	Platinum (Pt)	100 Ω	α = 0.00385 Ω/Ω/°C	-50° to 700°F (-45° to 400°C)
M	Platinum (Pt)	1000 Ω	α = 0.00385 Ω/Ω/°C	-50° to 700°F (-45° to 400°C)

How to Order Temperature Sensors

Example Model Code: **TJD Z 04 U W A**

Sensor Type	Stem Style	Stem Length	Hot Junction	Connection	Head Material
TJD Type J (T/C)	Z 316SS, 1/4" O.D.	02 2 1/2" Stem	U Ungrounded (T/C)	S Spring Loaded, 1/2" NPT	A Aluminum
TKD Type K (T/C)		04 4" Stem	D 3-Wire (RTD)	W Welded, 1/2" NPT	P Polypropylene
TDD 100 Ω RTD		06 6" Stem			S Stainless Steel
TMD 1000 Ω RTD		09 9" Stem			
		12 12" Stem			

Other sensor styles available.
T/C = Thermocouple

Other Lengths: Specify in inches (24" maximum)