

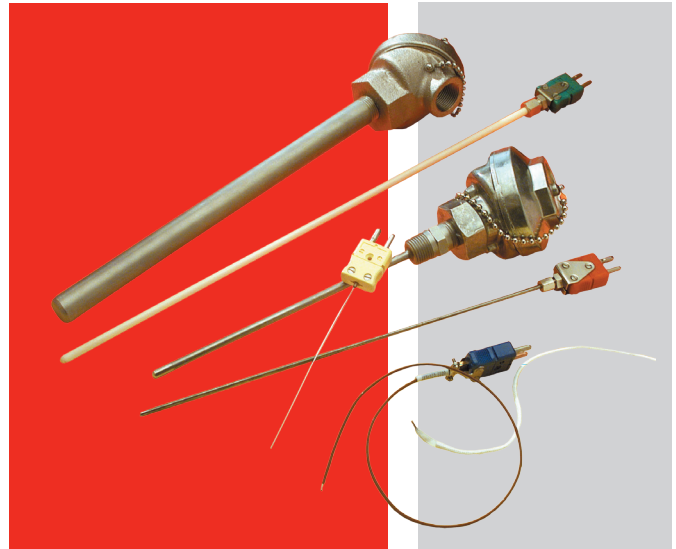
High Reliability Sensors For Demanding Heat Treat Market

High temperature heat treating processes require temperature accuracy and consistency. Watlow® provides the most precise temperature measurement devices in the industry. With over 75 years' experience in manufacturing specialized heat treating sensors, Watlow is vertically integrated and manufactures its own mineral insulated thermocouples. The company also insulates its own wire and controls uniformity to insure a highly accurate and reliable sensor. Watlow complies with the calibration requirements of AMS 2750 specifications.

Watlow has full service lab services that include tensile, vibration, micro-hardness, high temperature, cycle and drift and radiographic inspection, along with a staff of qualified engineers to develop temperature sensing solutions to meet even the most challenging, unique requirements.

Typical Applications

- Cryogenic
- Quenching
- Carbonizing
- High temperature
- Vacuum/vacuum brazing
- Salt baths
- Stress relieving
- Nitriding
- Annealing
- Hardening



Features and Benefits

End-to-end calibration

- Offers reliable batch processing

Material lot control

- Reduces scrap and saves on costs

Vertical integration

- Ensures consistency of products

NIST traceable

- Ensures accurate temperature measurements

Coil identification

- Offers cost savings with calibration off-sets

Testing and certification services

- Complies with AMS 2750 calibration requirements
- Meets ISO-9001 compliance for quality

Full laboratory testing in house

- Allows quick material analysis

Low drift insulations

- Meets long-term measurement objectives

Ordering Information

Load Sensors



Part Number — SERIES 61, up to 1300°F (704°C)

① ②	③	④	⑤	⑥	⑦	⑧ ⑨ ⑩	⑪
	Diameter	Calibration	Lead Protection	Junction		Lead Length (in.)	Term.
61	X			E	X		

③	Diameter
X =	Not applicable

④	Calibration
J =	Type J
K =	Type K
T =	Type T

⑤	Lead Protection
P =	Fiberglass (20 gauge solid) 900°F (482°C)
B =	Fiberglass with SS overbraid (20 gauge solid) 900°F (482°C)
J =	Extruded FEP (20 gauge solid) 400°F (205°C)
F =	Fiberglass (24 gauge solid) 900°F (482°C)
S =	Fiberglass with SS overbraid (24 gauge solid) 900°F (482°C)
7 =	High temperature Fiberglass 1300°F (704°C)

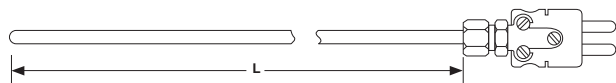
⑥	Junction
E =	Exposed

⑧ ⑨ ⑩	Lead Length (in.)
	Whole inches: 006 to 999

⑪	Terminations
A =	Standard 2 1/2 inch split leads
D =	Standard male plug, quick disconnect
E =	Standard female jack, quick disconnect
F =	Miniature male plug, quick disconnect

Note: Contact the factory for AMS-2750 calibration.

Ordering Information



Part Number — High Temperature, up to 2700°F (1482°C)

① ②	③	④	⑤	⑥	⑦	⑧ ⑨	⑩	⑪	⑫	⑬ ⑭	⑮
	Sheath O.D. (in.)	Connector Type		Insulation	Sheath Material	Sheath Length "L" (in.)	Sheath Length "L" (fract. in.)	Junction	Calibration		Special Reqmts
HC	J		0	B				U		00	000

③	Sheath O.D. (in.)
J =	0.250

④	Connector Type
A =	Standard plug 400°F (205°C)
L =	High temperature plug 1000°F (538°C)

⑥	Insulation
B =	Al ₂ O ₃ – Loose pack

⑦	Sheath Material
B =	Alumina
3 =	Molybdenum

⑧ ⑨	Sheath Length L (in.)
	Whole inches: 01 to 99

⑩	Sheath Length "L" (fractional in.)
0 =	0
1 =	1/8
2 =	1/4
3 =	3/8
4 =	1/2
5 =	5/8
6 =	3/4
7 =	7/8

⑪	Junction (Ungrounded)
U =	Single

⑫	Calibration (S)
S =	Standard limits
7 =	Special limits

⑮	Special Requirements
	If none, enter "0". If required, contact factory

Note: Contact the factory for AMS-2750 calibration.

To be automatically connected to the nearest North American Technical Sales Office:

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