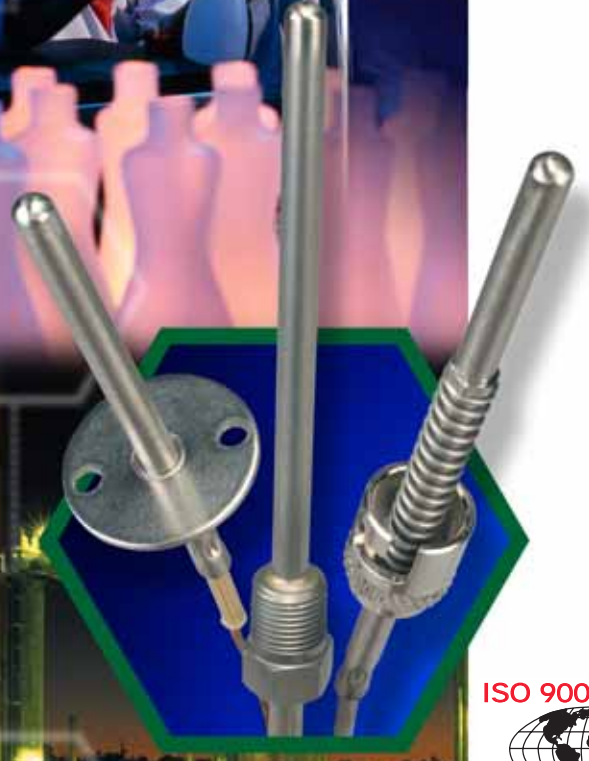


RAPID SHIP SENSORS, STOCK WIRE AND CONNECTORS

SERVICE

RELIABILITY

PERFORMANCE



ISO 9001 : 2000



Registered Company
Richmond, Illinois USA



2005

New Rapid Ship Program Responds to Your Immediate Sensing Needs

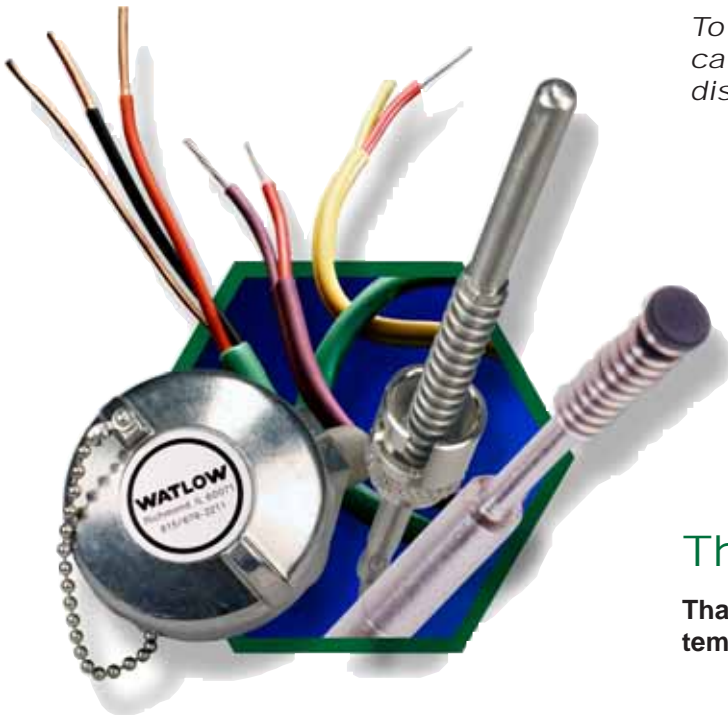
Capabilities

Watlow offers the most complete line of temperature sensors and accessories in the industry, and has been doing so since 1914. Our full product offering includes:

- General application thermocouples
- Mineral insulated thermocouples
- RTDs and thermistors
- Connectors, transmitters and other accessories
- Thermocouple and extension wire
- Infrared sensors

Watlow is a fully integrated sensor manufacturer. This gives us full design control including the selection of alloy and sheath materials. Our design engineers have solved the most difficult and most basic temperature measurement challenges across scores of industries. Our sensors can be configured in millions of different ways to meet unique and specific needs and applications. Our distributors and sales engineers are fully equipped to help you select the right sensor to meet your performance, availability and pricing requirements.

In an ever-demanding industry where every minute counts, you can rely on Watlow to get you the products you need when you need them.



Rapid Ship

Watlow is pleased to announce a significant improvement to our Rapid Ship sensor program. Over 400 pre-designed sensors, connectors and wire products can now be shipped in one day at no extra charge. The products in this program were selected to meet the majority of your day-to-day temperature measurement requirements.

Same day and one day expedite programs are also in place for our full range of sensor products to meet your unexpected or emergency requirements.

Watlow is fully certified to ISO9001 : 2000 and takes pride in the quality and performance of the products we manufacture.



To receive a copy of our full catalog please call your local distributor or 1-800-WATLOW2.

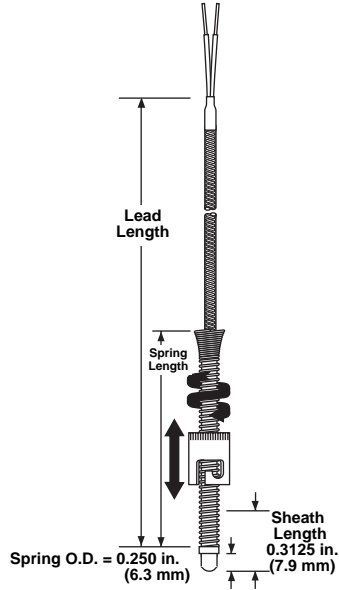
Thank You!

Thank you for choosing Watlow for your temperature sensing needs.

Thermocouples

General Applications

We are ready to meet your sensing needs with our extensive offering of thermocouples. However, if the variations listed in this brochure are unable to satisfy your requirements, Watlow can custom manufacture sensors to your exact specifications. Contact your Watlow representative or view our full-line catalog for details.



Adjustable Spring (Style 10)

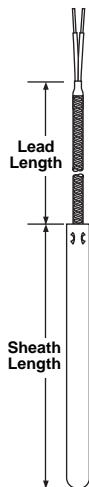
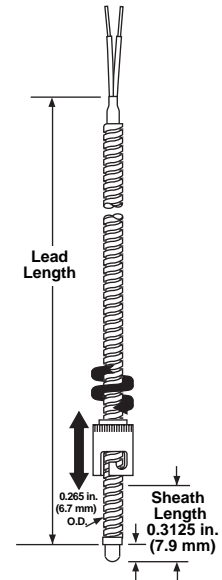
Rapid Ship adjustable spring thermocouples come with 24 gauge stranded fiberglass lead with stainless steel overbraid and grounded junction.

Calibration	Spring Length in. (mm)	Lead Length in. (mm)	Termination	
			Split Leads	Standard Connector
J	6 (152)	24 (610)	10DJSGB024A	10DJSGB024D
		48 (1219)	10DJSGB048A	10DJSGB048D
		72 (1829)	10DJSGB072A	10DJSGB072D
		96 (2438)	10DJSGB096A	10DJSGB096D
	12 (305)	24 (610)	11DJSGB024A	11DJSGB024D
		48 (1219)	11DJSGB048A	11DJSGB048D
		72 (1829)	11DJSGB072A	11DJSGB072D
		96 (2438)	11DJSGB096A	11DJSGB096D

Adjustable Armor (Style 12)

Rapid Ship adjustable armor thermocouples come with 24 gauge stranded fiberglass lead with stainless steel armor and grounded junction.

Calibration	Lead Length in. (mm)	Termination	
		Split Leads	Standard Connector
J	48 (1219)	12DJHGB048A	12DJHGB048D
	60 (1524)	12DJHGB060A	12DJHGB060D
	72 (1829)	12DJHGB072A	12DJHGB072D
	96 (2438)	12DJHGB096A	12DJHGB096D
	120 (3048)	12DJHGB120A	12DJHGB120D



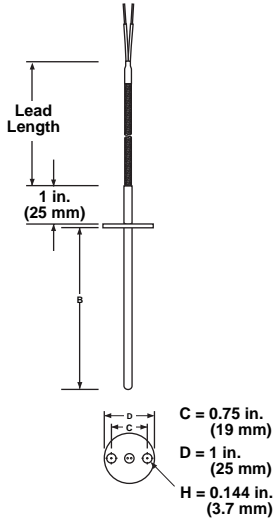
Rigid Sheath (Style 20)

Rapid Ship rigid sheath thermocouples come with 3/16 inch diameter sheath, 24 gauge stranded fiberglass lead with stainless steel overbraid, grounded junction and split lead termination.

Calibration	Sheath Length in. (mm)	Lead Length in. (mm)	Part Number
			J
		96 (2438)	20DJSGB096A
	2 (51)	48 (1219)	20DJSGD048A
		96 (2438)	20DJSGD096A
	4 (102)	48 (1219)	20DJS GH048A
		96 (2438)	20DJS GH096A

Thermocouples

General Applications



Flange (Style 25)

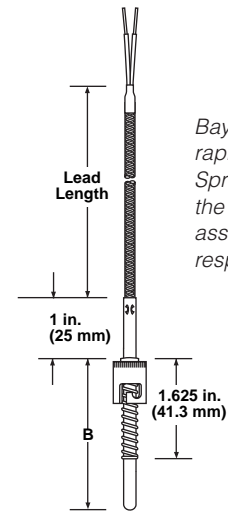
Rapid Ship flange thermocouples come with 3/16 inch diameter sheath, 24 gauge stranded fiberglass lead with stainless steel overbraid, grounded junction and a split lead termination.

Calibration	"B" Dimension		Lead Length		Part Number
	in.	(mm)	in.	(mm)	
J	2	(51)	48	(1219)	25DJSGD048A
			96	(2438)	25DJSGD096A
	4	(102)	48	(1219)	25DJSGH048A
			96	(2438)	25DJSGH096A

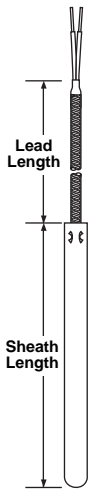
Rigid Sheath Fixed Bayonet (Style 30)

Rapid Ship rigid sheath fixed bayonet thermocouples come with 3/16 inch diameter sheath, 24 gauge stranded fiberglass lead with stainless steel overbraid, grounded junction and a split lead termination.

Calibration	"B" Dimension		Lead Length		Part Number
	in.	(mm)	in.	(mm)	
J	2	(51)	48	(1219)	30DJSGD048A
			96	(2438)	30DJSGD096A
	3	(76)	48	(1219)	30DJSGF048A
			96	(2438)	30DJSGF096A
	4	(102)	48	(1219)	30DJSGH048A
			96	(2438)	30DJSGH096A



Bayonet fittings allow rapid attachment. Spring pressure on the junction tip assures fast response time.



Rigid sheath provides protection and accurate placement through bulkheads or platens. Use with a compression fitting for water tight immersion application.

Large Diameter Rigid Sheath (Style 40)

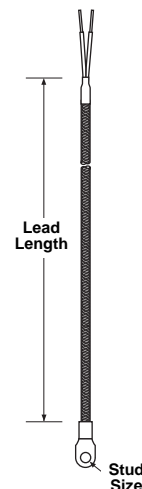
Rapid Ship large diameter rigid sheath thermocouples come with 1/4 inch diameter sheath, 20 gauge stranded fiberglass lead with stainless steel overbraid, grounded junction and a split lead termination.

Calibration	Sheath Length		Lead Length		Part Number
	in.	(mm)	in.	(mm)	
J	4	(102)	48	(1219)	40EJBGD048A
			96	(2438)	40EJBGD096A
	6	(152)	48	(1219)	40EJBGF048A
			96	(2438)	40EJBGF096A

Ring Terminal (Style 70)

Rapid Ship ring terminal thermocouples come with 24 gauge stranded fiberglass lead with stainless steel overbraid, grounded junction and a split lead termination.

Calibration	Stud Size	Lead Length		Part Number
		in.	(mm)	
J	No. 10	48	(1219)	70XJSGC048A
		96	(2438)	70XJSGC096A
	1/4 in.	48	(1219)	70XJSGD048A
		96	(2438)	70XJSGD096A



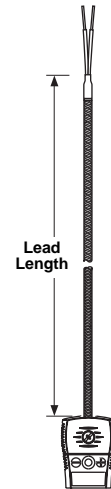
Thermocouples

General Applications

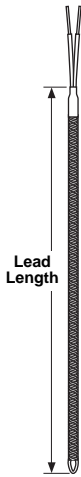
Flexible Extensions (Style 60)

Rapid Ship flexible extensions come with standard female connector and a split lead termination.

Calibration	Lead Protection	Lead Length		Part Number
		in.	(mm)	
J	Fiberglass with SS overbraid	48	(1219)	60XJBXE048A
		96	(2438)	60XJBXE096A
	Fiberglass with SS hose	48	(1219)	60XJCXE048A
		96	(2438)	60XJCXE096A
K	Fiberglass with SS overbraid	48	(1219)	60XKBXE048A
		96	(2438)	60XKBXE096A
	Fiberglass with SS hose	48	(1219)	60XKCXE048A
		96	(2438)	60XKCXE096A



Flexible extensions allow the disconnecting of thermocouples from a system without disturbing the remaining wiring.



Insulated Wire Thermocouple (Style 61)

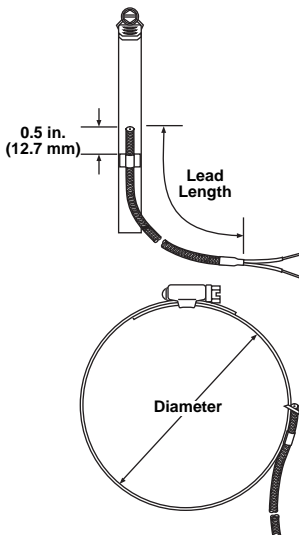
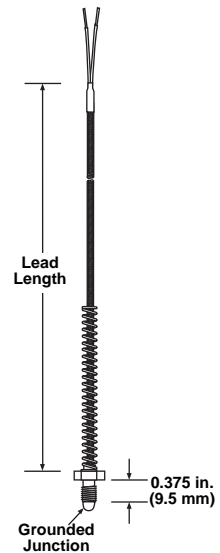
Rapid Ship insulated wire thermocouples come with 24 gauge solid FEP insulated lead and a split lead termination.

Calibration	Lead Protection	Lead Length		Part Number
		in.	(mm)	
K	Extruded FEP	48	(1219)	61XKTEX048A
		96	(2438)	61XKTEX096A
T	Extruded FEP	48	(1219)	61XTTEX048A
		96	(2438)	61XTTEX096A

Nozzle (Style 71)

Rapid Ship nozzle thermocouples come with 24 gauge stranded fiberglass lead with stainless steel overbraid, grounded junction and a split lead termination.

Calibration	Bolt Size	Lead Length		Part Number
		in.	(mm)	
J	¼ in. x 28 UNF	48	(1219)	71XJSGA048A
		96	(2438)	71XJSGA096A
	M6 x 1	48	(1219)	71XJSGM048A
		96	(2438)	71XJSGM096A



Pipe Clamp (Style 72)

Rapid Ship pipe clamp thermocouples come with 24 gauge stranded fiberglass lead with stainless steel overbraid, grounded junction and a split lead termination.

Calibration	Bolt Size in.	Lead Length		Part Number
		in.	(mm)	
J	⅞ to 1¼	48	(1219)	72XJSGA048A
		96	(2438)	72XJSGA096A
	1¼ to 2¼	48	(1219)	72XJSGB048A
		96	(2438)	72XJSGB096A

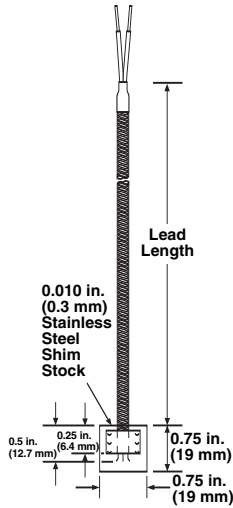
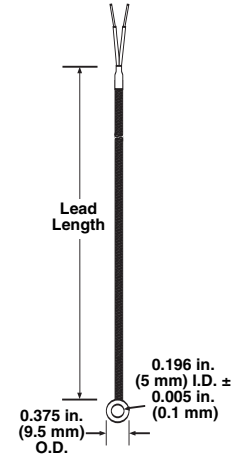
Thermocouples

General Applications

Grommet (Style 73)

Rapid Ship grommet thermocouples come with 24 gauge solid fiberglass lead with stainless steel overbraid, grounded junction and a split lead termination.

Calibration	Lead Length		Part Number
	in.	(mm)	
J	48	(1219)	73XJFGA048A
	96	(2438)	73XJFGA096A



Stainless Steel Shim (Style 75)

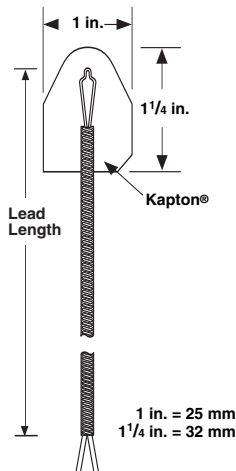
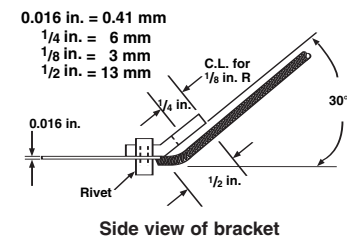
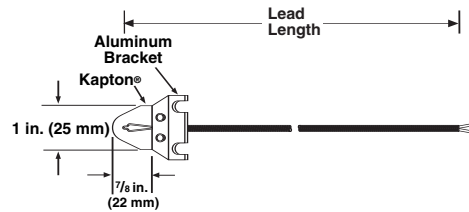
Rapid Ship stainless steel shim thermocouples come with 24 gauge solid fiberglass lead with stainless steel overbraid, grounded junction and a split lead termination.

Calibration	Lead Length		Part Number
	in.	(mm)	
J	48	(1219)	75XJSGA048A
	96	(2438)	75XJSGA096A

Kapton® Bracket

Rapid Ship Kapton® brackets with 30 gauge solid thermocouple wire, with fiberglass insulation and split lead termination.

Calibration	Lead Length	Part No.
	in. (cm)	
J	48 (122)	OKJ30B4A
K	48 (122)	OKK30B2A



Low Profile Kapton®

Rapid Ship low profile with and without brackets with 30 gauge solid thermocouple wire, with fiberglass insulation and split lead termination.

Calibration	Lead Length	Part No.
	in. (cm)	
J	48 (122)	OKJ30B2A
K	48 (122)	OKK30B1A

Peel and Stick Style

Calibration	Lead Length	Part No.
	in. (cm)	
J	48 (122)	OKJ30B11A
	96 (244)	OKJ30B11B
K	48 (122)	OKK30B10A
	96 (244)	OKK30B10B

Kapton® is a registered trademark of E.I. du Pont de Nemours & Company.

Thermocouples

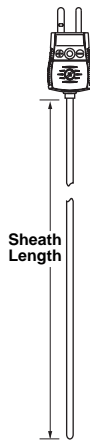
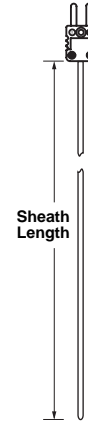
Mineral Insulated (MI)

Watlow's mineral insulated thermocouples are fast-responding, durable and capable of handling high temperatures.

Mini Plug Termination (Style AC)

Rapid Ship style AC mini MI thermocouples come with mini male thermocouple connector directly attached to sheath, Type J or K, ungrounded junction, 0.063 or 0.125 inch sheath diameter and six or 12 inch sheath length.

Calibration	Sheath Material	Sheath Diameter in. (mm)	Sheath Length in. (mm)	
			6 (152)	12 (305)
J	316 SS	0.063 (1.6)	ACEF00F060UJ000	ACEF00F120UJ000
		0.125 (3.2)	ACGF00F060UJ000	ACGF00F120UJ000
K	Alloy 600	0.063 (1.6)	ACEF00Q060UK000	ACEF00Q120UK000
		0.125 (3.2)	ACGF00Q060UK000	ACGF00Q120UK000



Standard Plug Termination (Style AC)

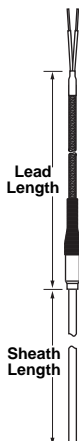
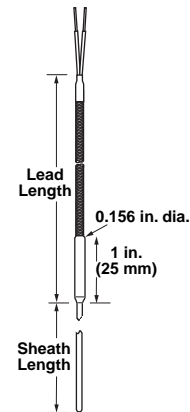
Rapid Ship style AC standard MI thermocouples come with standard male thermocouple connector directly attached to sheath, Type J or K, ungrounded junction, 0.125, 0.188 or 0.250 inch diameter and six or 12 inch sheath length.

Calibration	Sheath Material	Sheath Diameter in. (mm)	Sheath Length in. (mm)	
			6 (152)	12 (305)
J	316 SS	0.125 (3.2)	ACGA00F060UJ000	ACGA00F120UJ000
		0.188 (4.8)	ACHA00F060UJ000	ACHA00F120UJ000
		0.250 (6.4)	ACJA00F060UJ000	ACJA00F120UJ000
K	Alloy 600	0.125 (3.2)	ACGA00Q060UK000	ACGA00Q120UK000
		0.188 (4.8)	ACHA00Q060UK000	ACHA00Q120UK000
		0.250 (6.4)	ACJA00Q060UK000	ACJA00Q120UK000

Miniature Transitions (Style AQ)

Rapid Ship style AQ MI thermocouples come with three feet of FEP insulated flexible extension, split lead termination and an ungrounded junction.

Calibration	Sheath Material	Sheath Diameter in. (mm)	Sheath Length in. (mm)	
			3 (76)	6 (152)
J	316 SS	0.040 (1.0)	AQDC0TF030UJ030	AQDC0TF060UJ030
		0.063 (1.6)	AQEC0TF030UJ030	AQEC0TF060UJ030
K	Alloy 600	0.040 (1.0)	AQDC0TQ030UK030	AQDC0TQ060UK030
		0.063 (0.9)	AQEC0TQ030UK030	AQEC0TQ060UK030



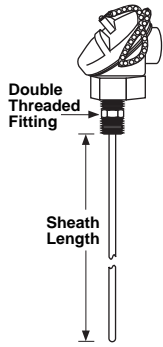
Metal Transitions with Spring Strain Relief (Style AF)

Rapid Ship style AR MI thermocouples come with three feet of stranded conductor FEP insulated flexible lead, split lead termination, ungrounded junction and 149°C (300°F) potting.

Calibration	Sheath Material	Sheath Diameter in. (mm)	Sheath Length in. (mm)	
			6 (152)	12 (305)
J	316 SS	0.063 (1.6)	AFED0TF060UJ030	AFED0TF120UJ030
		0.125 (3.2)	AFGD0TF060UJ030	AFGD0TF120UJ030
		0.188 (4.8)	AFHD0TF060UJ030	AFHD0TF120UJ030
		0.250 (6.4)	AFJD0TF060UJ030	AFJD0TF120UJ030
K	Alloy 600	0.063 (1.6)	AFED0TQ060UK030	AFED0TQ120UK030
		0.125 (3.2)	AFGD0TQ060UK030	AFGD0TQ120UK030
		0.188 (4.8)	AFHD0TQ060UK030	AFHD0TQ120UK030
		0.250 (6.4)	AFJD0TQ060UK030	AFJD0TQ120UK030

Thermocouples

Mineral Insulated (MI)



Connection Head Style AR

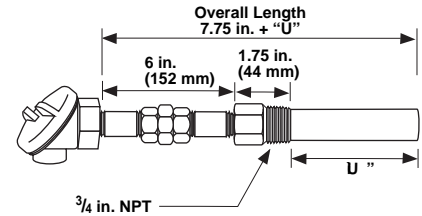
Rapid Ship sensors come double threaded 1/2 inch NPT mounting fitting, ungrounded junction, 0.250 inch sheath diameter and small aluminum (E) connection head.

Calibration	Sheath Material	Sheath Length in. (mm)		
		6 (152)	12 (305)	18 (457)
J	316 SS	ARJEF0F060UJ000	ARJEF0F120UJ000	ARJEF0F180UJ000
K	Alloy 600	ARJEF0Q060UK000	ARJEF0Q120UK000	ARJEF0Q180UK000

Style AT With Straight Thermowells

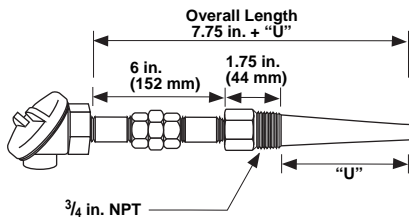
Rapid Ship style AT thermowells come with 316 stainless steel straight well, nipple-union-nipple, 0.250 inch diameter spring loaded element, small aluminum connection head and ungrounded junction.

Calibration	"U" in. (mm)	Overall Length in. (mm)	Part Number
J	2.5 (64)	10.25 (261)	ATJE1SF024UJ0Y0
	4.5 (114)	12.25 (312)	ATJE1SF044UJ0Y0
	7.5 (191)	15.25 (388)	ATJE1SF074UJ0Y0
	10.5 (267)	18.25 (465)	ATJE1SF104UJ0Y0
K	2.5 (64)	10.25 (261)	ATJE1SF024UK0Y0
	4.5 (114)	12.25 (312)	ATJE1SF044UK0Y0
	7.5 (191)	15.25 (388)	ATJE1SF074UK0Y0
	10.5 (267)	18.25 (465)	ATJE1SF104UK0Y0



Style AT With Tapered Thermowells

Rapid Ship style AT thermowells come with 316 stainless steel tapered well, nipple-union-nipple, 0.250 inch diameter spring loaded element, small aluminum connection head and ungrounded junction.



Calibration	"U" in. (mm)	Overall Length in. (mm)	Part Number
J	2.5 (64)	10.25 (261)	ATJE1TF024UJ0Y0
	4.5 (114)	12.25 (312)	ATJE1TF044UJ0Y0
	7.5 (191)	15.25 (388)	ATJE1TF074UJ0Y0
	10.5 (267)	18.25 (465)	ATJE1TF104UJ0Y0
K	2.5 (64)	10.25 (261)	ATJE1TF024UK0Y0
	4.5 (114)	12.25 (312)	ATJE1TF044UK0Y0
	7.5 (191)	15.25 (388)	ATJE1TF074UK0Y0
	10.5 (267)	18.25 (465)	ATJE1TF104UK0Y0

Industrial Base Metal

Watlow offers two basic types of base metal thermocouples: bare and ceramic insulated elements and thermocouples with protection tubes. Many variations of each type are available to meet your application needs.

Single Element

Rapid Ship Type K calibration, standard limits, eight AWG gauge with two-hole ceramic insulators, twisted and welded junction.

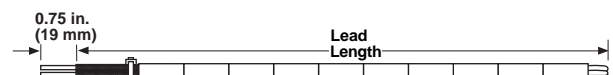
Lead Length in. (mm)	Part Number
12 (305)	1409-12
18 (457)	1409-18
24 (610)	1409-24
36 (914)	1409-36
48 (1219)	1409-48



Dual Element

Rapid Ship dual Type K calibration, standard limits, 14 AWG gauge with four-hole ceramic insulators and butt-welded junction.

Lead Length in. (mm)	Part Number
12 (305)	1442-BW-12
18 (457)	1442-BW-18
24 (610)	1442-BW-24



Resistance Temperature Devices (RTDs)

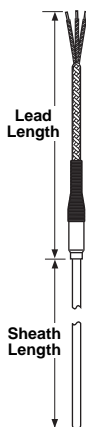
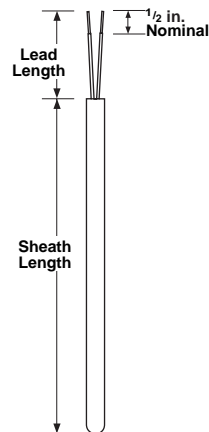
RTD Styles

Watlow's platinum resistance elements are specially designed to ensure precise and repeatable temperature versus resistance characteristics. The sensors are made with controlled purity platinum, have high purity ceramic components and are constructed in a unique strain-free manner.

RTD Style RB Standard Industrial Insulated Leads

Rapid Ship style RB RTDs come with 100Ω DIN 0.00385 curve, 316 stainless steel, 0.188 inch diameter, TFE three-wire, four foot leads, temperature rating -50 to 260°C (-58 to 500°F), standard split end lead termination and no mounting fittings.

Class Accuracy	Sheath Length in. (mm)	Part Number 4 foot (102 mm) Leads
A	2 (51)	RBHB0TA020BA040
	4 (102)	RBHB0TA040BA040
	6 (152)	RBHB0TA060BA040
	9 (229)	RBHB0TA090BA040
	12 (305)	RBHB0TA120BA040



RTD Style RF Metal Transitions

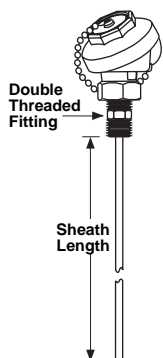
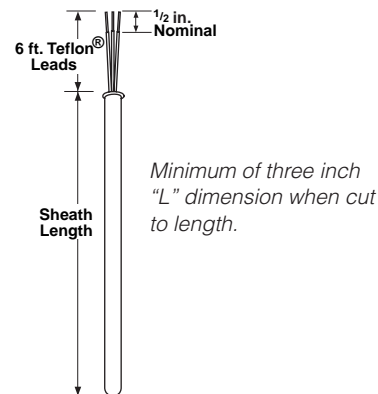
Rapid Ship style RF RTDs come with 100Ω DIN 0.00385 curve, 316 stainless steel, 0.188 inch diameter, 24 AWG stranded Teflon® three-wire, four foot leads, temperature rating -200 to 650°C (-328 to 1200°F), standard split end lead termination and no mounting fittings.

Class Accuracy	Sheath Length in. (mm)	Part Number 4 foot (102 mm) Leads
A	3 (76)	RFHB0TK030BA040
	6 (152)	RFHB0TK060BA040
	9 (229)	RFHB0TK090BA040
	12 (305)	RFHB0TK120BA040

RTD Style RK Emergency Use Cut-to-Length RTD

Rapid Ship style RK cut-to-length RTDs come with 100Ω DIN 0.00385 curve, 316 stainless steel, 0.188 and 0.250 inch diameter, 24 AWG stranded Teflon® three-wire, six foot leads, temperature rating -50 to 260°C (-58 to 500°F), standard split end leads and no mounting fittings.

Class Accuracy	Diameter	"L" Dimension in. (mm)	Part Number (Contains Bag of Five Sensors)
A	0.188	12 (305)	RKH12A-05
	0.188	24 (610)	RKH24A-05
	0.250	12 (305)	RKJ12A-05
	0.250	24 (610)	RKJ24A-05
Adjustable C-Frame Tube Cutter			RK-Cutter



RTD Style RR Connection Head/Optional Transmitter

Rapid Ship style RR RTDs come with 100Ω DIN 0.00385 curve, 316 stainless steel, 0.250 inch diameter, cast aluminum industrial head, double threaded stainless steel fitting for head mount with 0.5 inch NPT process mount, three-wire configuration and a temperature rating of -50 to 260°C (-58 to 500°F).

Class Accuracy	Sheath Length in. (mm)	Part Number
A	3 (76)	RRJEF0A030BA000
	6 (152)	RRJEF0A060BA000
	18 (457)	RRJEF0A180BA000

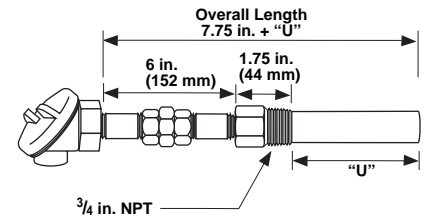
Resistance Temperature Devices (RTDs)

RTD Styles

Style RT with Thermowell Straight Well

Rapid Ship style RT straight RTDs come with 316 stainless steel straight well, nipple-union-nipple, 0.250 inch diameter spring loaded element, 100Ω DIN 0.00385 curve, Class A and three-wire RTD. Temperature rating -50 to 260°C (-58 to 500°F).

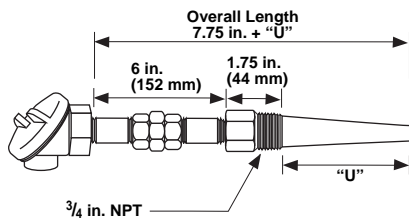
Calibration	"U" in. (mm)	Overall Length in. (mm)	Part Number
A	2.5 (64)	10.25 (261)	RTJE1SF024BA0Y0
	4.5 (114)	12.25 (312)	RTJE1SF044BA0Y0
	7.5 (191)	15.25 (388)	RTJE1SF074BA0Y0
	10.5 (267)	18.25 (465)	RTJE1SF104BA0Y0



Style RT with Thermowell Tapered Well

Rapid Ship style RT tapered RTDs come with 316 stainless steel tapered well, nipple-union-nipple, 0.250 inch diameter spring loaded element, 100Ω DIN 0.00385 curve, Class A and three-wire RTD. Temperature rating -50 to 260°C (-58 to 500°F).

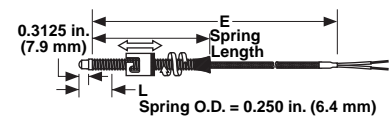
Calibration	"U" in. (mm)	Overall Length in. (mm)	Part Number
A	2.5 (64)	10.25 (261)	RTJE1TF024BA0Y0
	4.5 (114)	12.25 (312)	RTJE1TF044BA0Y0
	7.5 (191)	15.25 (388)	RTJE1TF074BA0Y0
	10.5 (267)	18.25 (465)	RTJE1TF104BA0Y0



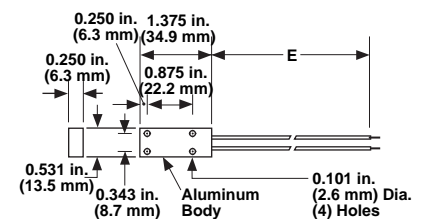
Speciality RTDs (Style S10 and S80)

Rapid Ship sensors come with 100Ω DIN 0.00385 curve RTD sensor, 24 AWG stranded three-wire leads, temperature rating -50 to 260°C (-58 to 500°F), standard split end lead termination and no mounting fittings.

	Part Number	
	4 Foot (102 mm) Leads	6 Foot (152 mm) Leads
Construction 10 with fiberglass and SS overbraided leads	S10DDN4C048A	S10DDN4C072A
Construction 80 with Teflon® leads	S80ADT2A048A	S80ADT2A072A



10 = 6 in. Adjustable Spring Style



80 = Surface Mount

Accessories

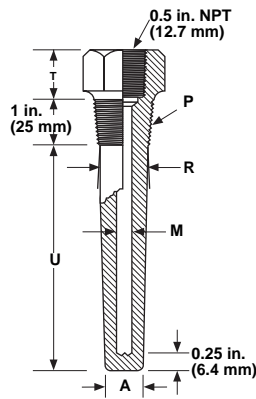
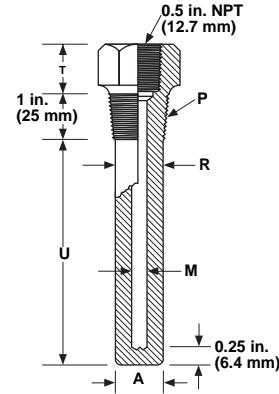
Thermowells

Watlow offers a full line of thermowells and protecting tubes to meet varying requirements. While both types are designed to protect your sensor in an application, the two are different in terms of their construction and capabilities.

Threaded Type—Straight

Rapid Ship straight thermowells come in four lengths in 316 stainless steel with a 3/8 inch NPT process connection, a 3/8 inch lag length and a 0.260 in. bore diameter with a 1/2 inch NPT connection.

"U" Length in.	(mm)	Part Number
2.5	(64)	TTS024CD00006A0
4.5	(114)	TTS044CD00006A0
7.5	(191)	TTS074CD00006A0
10.5	(267)	TTS104CD00006A0



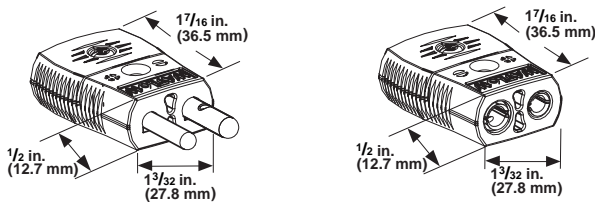
Threaded Type—Tapered

Rapid Ship tapered thermowells come in four lengths in 316 stainless steel with a 3/8 inch NPT process connection, a 3/8 inch lag length and a 0.260 in. bore diameter with a 1/2 inch NPT connection.

"U" Length in.	(mm)	Part Number
2.5	(64)	TTT024CD00006A0
4.5	(114)	TTT044CD00006A0
7.5	(191)	TTT074CD00006A0
10.5	(267)	TTT104CD00006A0

Connector Systems

"S" SERIES Standard Connectors, 218°C (425°F)



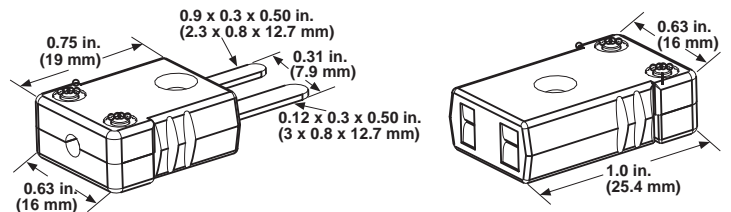
"S" SERIES Connectors

Type	Male (plug)	Female (jack)
E	SCM-E-WAT	SCF-E-WAT
J	SCM-J-WAT	SCF-J-WAT
K	SCM-K-WAT	SCF-K-WAT
S/R	SCM-S-WAT	SCF-S-WAT
T	SCM-T-WAT	SCF-T-WAT
Uncompensated	SCM-U-WAT	SCF-U-WAT

Miniature Thermocouple Connector System, 204°C (400°F)

Miniature Connectors

Type	Male (plug)	Female (jack)
E	MCM-E-WAT	MCF-E-WAT
J	MCM-J-WAT	MCF-J-WAT
K	MCM-K-WAT	MCF-K-WAT
N	MCM-N-WAT	MCF-N-WAT
R	MCM-R-WAT	MCF-R-WAT
S	MCM-S-WAT	MCF-S-WAT
T	MCM-T-WAT	MCF-T-WAT
Uncompensated	MCM-U-WAT	MCF-U-WAT

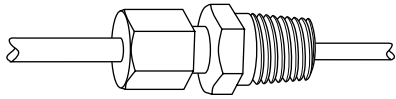


Note: Please view our full-line catalog for additional connector choices.

Accessories

Hardware

Brass Compression Fitting, Non-Adjustable

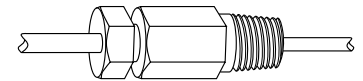


Brass Compression Fitting, Assembled

Part No.	Sheath O.D. in.	Bore +0.10, -0.000 in.	Male NPT in.	Length in.
TH-185-2	0.125	0.130	1/8	1
TH-185-3	0.188	0.192	1/8	1 1/8
TH-185-4	0.250	0.256	1/8	1 3/16
TH-185-5	0.250	0.256	1/4	1 3/8

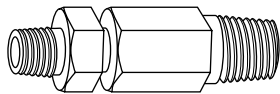
Stainless Steel Compression Fitting, Non-Adjustable, Single Threaded

Part No.	Length in.	Sheath O.D. in.	Bore ±0.001 in.	Male NPT in.	Hex Across Flats in.
TH-2745-063	1 1/4	0.063	0.067	1/8	1/2
TH-2745-125	1 1/4	0.125	0.129	1/8	1/2
TH-2745-188	1 5/16	0.188	0.194	1/8	1/2
TH-2745-250	1 5/16	0.250	0.257	1/8	1/2



Single Threaded

Stainless Steel Compression Fitting, Non-Adjustable, Double Threaded

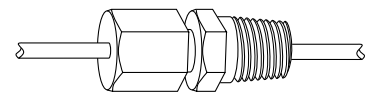


Double Threaded

Part No.	Length in.	Sheath O.D. in.	Bore ±0.001 in.	Male NPT in.	Hex Across Flats in.
TH-2749-063	1 1/16	0.063	0.067	1/8	1/2
TH-2749-125	1 1/16	0.125	0.129	1/8	1/2
TH-2749-188	1 1/16	0.188	0.194	1/8	1/2
TH-2749-250	1 1/16	0.250	0.257	1/8	1/2

Stainless Steel Compression Fitting, Adjustable, Single Threaded Neoprene Gland

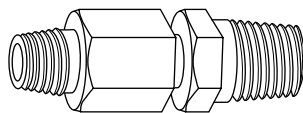
Part No.	Length in.	Sheath O.D. in.	Bore ±0.001 in.	Male NPT in.	Hex Across Flats in.
TH-2747-N-063	1 1/4	0.063	0.067	1/8	1/2
TH-2747-N-125	1 1/4	0.125	0.136	1/8	1/2
TH-2747-N-188	1 1/4	0.188	0.193	1/8	1/2
TH-2747-N-250	2 7/16	0.250	0.257	1/4	7/8



Single Threaded

*If lava or TFE sealant glands are desired, substitute L or T in place of the N in the part number.

Stainless Steel Compression Fitting, Adjustable, Double Threaded Neoprene Gland



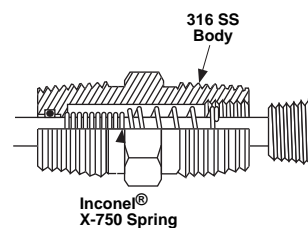
Double Threaded

Part No.	Length in.	Sheath O.D. in.	Bore ±0.001 in.	Male NPT in.	Hex Across Flats in.
TH-2751-N-063	1 5/8	0.063	0.067	1/8	1/2
TH-2751-N-125	1 5/8	0.125	0.136	1/8	1/2
TH-2751-N-188	1 5/8	0.188	0.193	1/8	1/2
TH-2752-N-250	3 1/4	0.250	0.257	1/4	7/8

*If lava or TFE sealant glands are desired, substitute L or T in place of the N in the part number.

Adjustable Spring-Loaded Hex Fitting

Part No.	Sheath			Male NPT in.	Hex Across Body Flats in.
	Length in.	O.D. in.	Material		
6556-250	2	0.250	316 SS	1/2	7/8



Inconel® is a registered trademark of Special Metals Corporation.



Stock Wire Products By Temperature

Since 1914, SERV-RITE® thermocouple wire and thermocouple extension wire have been known for premium performance and reliability. All stock and custom wire is manufactured in our plant where careful selection of materials, manufacturing equipment and quality controls assure superior uniformity.

Thermocouple Wire Max. Op. Temp.		Insulation	Part Number	Limits of Error
°C	(°F)			
1427	(2600)	Ceramic	K20-1-350	Standard
			K20-1-355	Standard
			K20-2-350	Special
			K20-2-355	Special
1093	(2000)	Vitreous Silica	K20-1-301	Standard
			K20-1-365	Standard
			K20-2-301	Special
			K20-2-365	Special
871	(1600)	High Temp. Fiberglass	J20-1-321	Standard
			J20-2-314	Special
			J20-2-321	Special
			K20-1-321	Standard
			K20-2-314	Special
			K20-2-321	Special
538	(1000)	Standard Fiberglass	B20-5-304*	Standard
			E20-1-304	Standard
			J16-5-313	Standard
			J20-1-304	Standard
			J20-1-S-304	Standard
			J20-2-304	Special
			J20-3-304	Standard
			J20-3-S-304	Standard
			J24-1-304	Standard
			J24-2-304	Special
			J24-3-304	Standard
			J28-1-305	Standard
			J28-2-305	Special
			J30-1-305	Standard
			J30-2-305	Special
			K16-5-313*	Standard
			K20-1-304	Standard
			K20-1-S-304	Standard
			K20-2-304	Special
			K20-3-304	Standard
			K20-3-S-304	Standard
			K24-1-304	Standard
			K24-2-304	Special
			K24-2-306	Special
			K24-3-304	Standard
			K28-2-305	Special
			K30-1-305	Standard
			K30-2-305	Special
			S20-5-304*	Standard
			T20-1-304	Standard
			T24-1-304	Standard

CONTINUED

Thermocouple Wire Max. Op. Temp.		Insulation	Part Number	Limits of Error
°C	(°F)			
427	(800)	Polyimide Tape	J20-1-512	Standard
			J20-2-513	Special
			J20-3-512	Standard
			J24-2-511	Special
			K20-2-513	Special
			K20-3-512	Standard
			K24-2-513	Special
343	(650)	SERV TEX	K16-5-155*	Standard
			K16-5-157*	Standard
			K16-7-155*	Standard
			S16-5-157*	Standard
316	(600)	TFE Tape	J20-1-508	Standard
			J20-2-508	Special
			J24-1-508	Standard
			J24-2-508	Special
			K20-1-508	Standard
			K20-2-508	Special
			K24-1-508	Standard
			K24-2-508	Special
			T20-2-508	Special
			T24-1-508	Standard
			T24-2-508	Special
			288	(550)
K20-1-517	Standard			
260	(500)	FEP	K24-2-516	Special
			E20-1-507	Standard
			J16-5-509	Standard
			J20-1-507	Standard
			J20-1-509	Standard
			J20-2-507	Special
			J20-3-507	Standard
			J20-5-507	Standard
			J20-5-509	Standard
			J24-1-507	Standard
			J24-2-507	Special
			J24-3-507	Standard
			J30-2-506	Special
			K16-5-509	Standard
			K20-1-507	Standard
			K20-1-509	Standard
			K20-2-507	Special
K20-2-509	Standard			
K20-3-507	Standard			
K20-5-507	Standard			

CONTINUED

*Recommended operating temperature limited to the extension grade alloy recommended temperature of 204°C (400°F).

Note: Other constructions are available on a custom basis.

SERV-RITE Wire and Cable



Stock Wire Products By Temperature

Thermocouple Wire Max. Op. Temp.		Insulation	Part Number	Limits of Error
°C	(°F)			
260	(500)	FEP	K20-5-509	Standard
			K24-1-507	Standard
			K24-2-507	Special
			K24-3-507	Standard
			K30-2-506	Special
			S20-5-507	Standard
			T20-1-507	Standard
			T20-1-509	Standard
			T20-2-507	Special
			T20-3-507	Standard
			T24-2-507	Special
			T30-2-506	Special
			199	(390)
K16-7-515	Standard			
105	(221)	PVC	E20-5-502	Standard
			E20-5-510	Standard
			J16-5-502	Standard
			J16-5-510	Standard
			J16-5-510-UL	Standard
			J20-5-1004	Standard
			J20-5-1008	Standard
			J20-5-502	Standard
			J20-5-510	Standard
			J20-5-510-UL	Standard
			J20-7-502	Standard
			J20-7-510	Standard
			J24-1-505	Standard
			J24-2-505	Special
			K16-5-502	Standard
			K16-5-510	Standard
			K16-5-510-UL	Standard
			K20-5-1004	Standard
			K20-5-1008	Standard
			K20-5-502	Standard
			K20-5-510	Standard
			K20-5-510-UL	Standard
			K20-7-502	Standard
			K20-7-510	Standard

CONTINUED

Thermocouple Wire Max. Op. Temp.		Insulation	Part Number	Limits of Error
°C	(°F)			
105	(221)	PVC	K24-1-505	Standard
			K24-2-505	Special
			S20-5-502	Standard
			S20-5-510	Standard
			T16-5-510	Standard
			T20-5-1004	Standard
			T20-5-1008	Standard
			T20-5-502	Standard
			T20-5-510	Standard
			T20-7-502	Standard
			T24-1-505	Standard
			T24-2-505	Special
88	(190)	Cotton	J30-2-308-002	Special
RTD Lead Wire				
538	(1000)	Standard Fiberglass	RT3-24-8-705	N/A
260	(500)	FEP	RT3-22-8-704	N/A
105	(221)	PVC	RT3-22-4-701	N/A

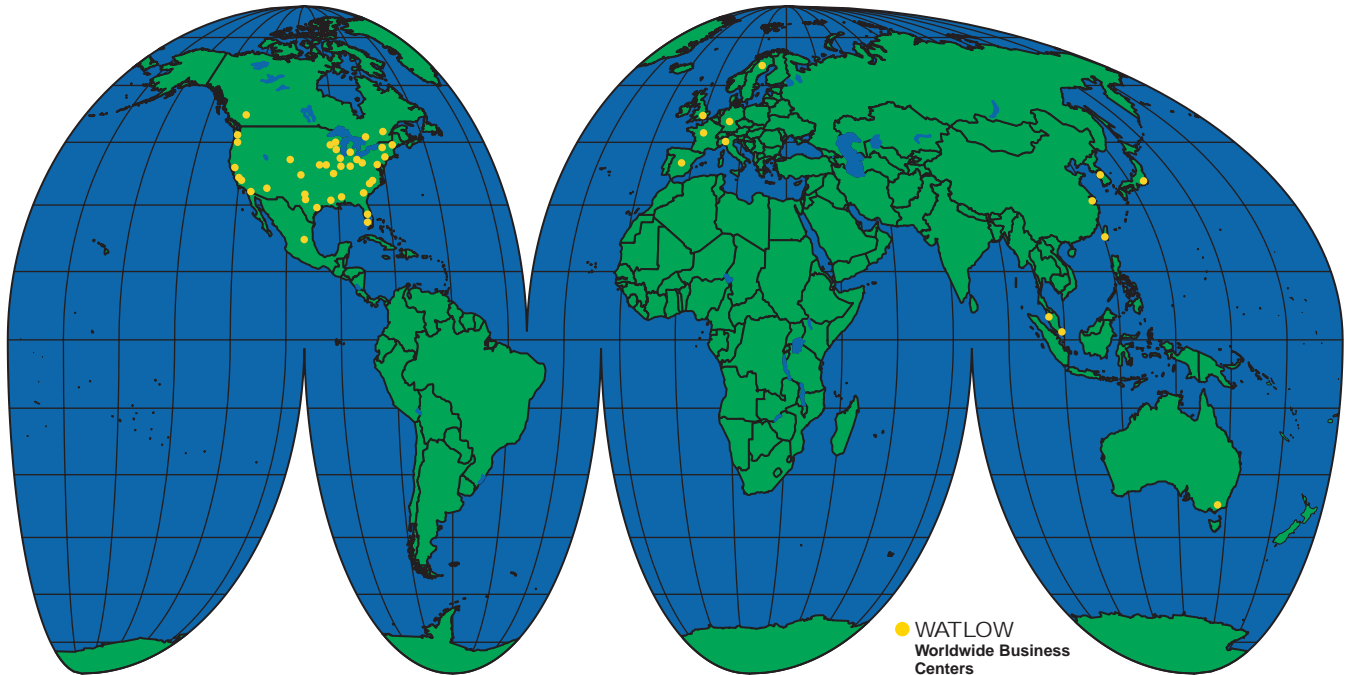
*Recommended operating temperature limited to the extension grade alloy recommended temperature of 204°C (400°F).

Note: Other constructions are available on a custom basis.

Thermocouple and Extension Wire Color Codes

ASTM Code	ASTM T/C	ASTM Extension	UK BS 1843	Germany DIN 43710	Japan JIS C1610-1981	IEC 584-3
Type B						
Type E						
Type J						
Type K						
Type N						
Type R						
Type S						
Type T						

Watlow Products and Technical Support Delivered Worldwide



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Malaysia	+60 (4) 641-5977
Singapore	+65 6773-9488
Taiwan	+886 (0) 7-288-5168

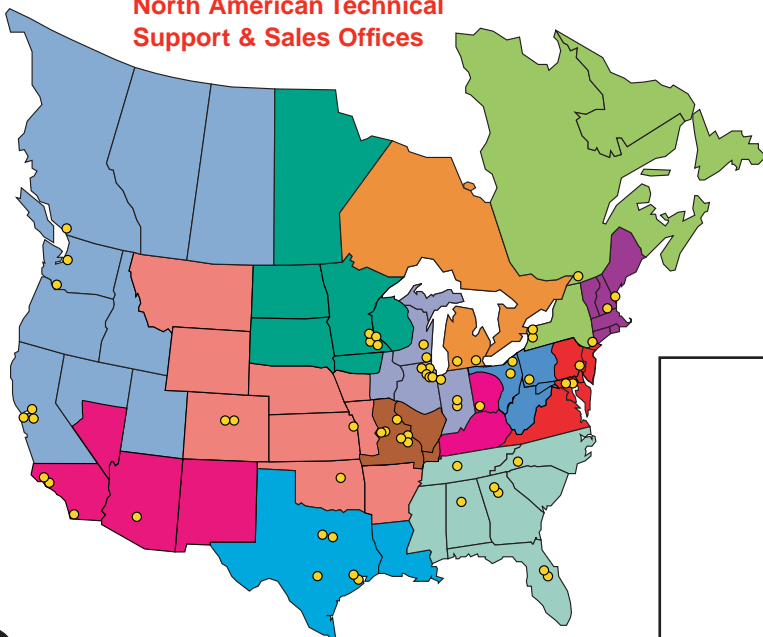
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Sweden	+46 31 7014959
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