



**Series 110**

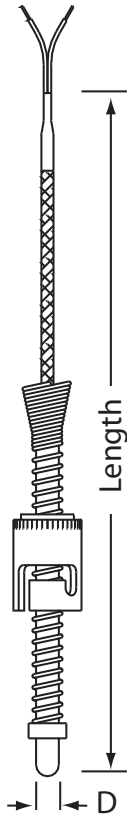


Figure 351

**Series 120**

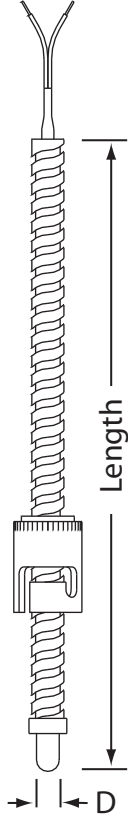


Figure 352

<b>1) Series</b>	110	120
<b>2) Diameter (D)</b>	B = 1/8",	C = 3/16", D = 1/4"
<b>3) Calibration</b>	J, K, T, E, D = RTD 2 wire F = RTD 3 wire	
<b>4) Junction</b>	G = Grounded, U = Ungrounded	
<b>5) Leads</b>	G = Fiberglass 24 ga T = Fiberglass 24 ga stainless braid F = Fiberglass 20 ga S = Fiberglass 20 ga stainless braid I = Fiberglass 24 ga stainless hose H = Fiberglass 20 ga stainless hose A = Teflon 24 ga B = Teflon 20 ga C = PVC 24 ga D = PVC 20 ga	
<b>6) Lead length</b>	In whole inches 006-999	
<b>7) Termination</b>	Choose a terminal design from pg L8	

**Ordering Code**

1	2	3	4	5	6	7



# Thermocouples - Ring Tongue and Shimstock

ASB Heating Elements Ltd.

## Series 130

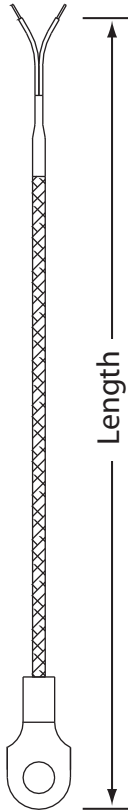


Figure 353

## Series 140

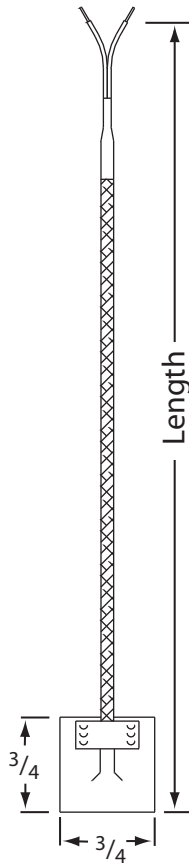


Figure 354

<b>1) Series</b>	130	140
<b>2) Lug Sizes</b>	Ring size A = #8, B = #10, C = 1/4" Shim size D = 3/4" by 3/4" Stainless steel	
<b>3) Calibration</b>	J, K, T, E, D = RTD 2 wire F = RTD 3 wire	
<b>4) Junction</b>	G = Grounded, U = Ungrounded	
<b>5) Leads</b>	T = Fiberglass 24 ga stainless braid S = Fiberglass 20 ga stainless braid I = Fiberglass 24 ga stainless hose H = Fiberglass 20 ga stainless hose A = Teflon 24 ga B = Teflon 20 ga	
<b>6) Lead length</b>	In whole inches 006-999	
<b>7) Termination</b>	Choose a terminal design from pg L8	
<b>8) Special options</b>	Enter 0 if none. Specify others at time of order	

Ordering Code

1	2	3	4	5	6	7	8



# Thermocouples - Nozzle and Pipe Clamp

ASB Heating Elements Ltd.

Series 145

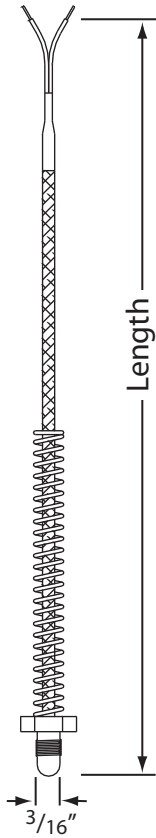


Figure 355

Series 146

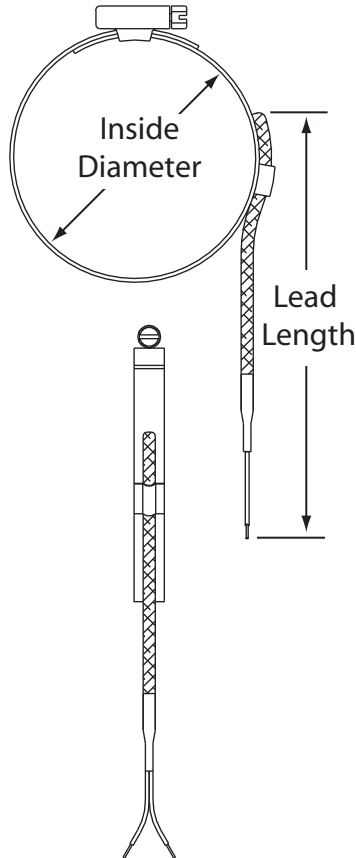


Figure 356

<b>1) Series</b>	145	146
<b>2) Bolt Sizes</b>	A = 1/4 x 28 UNF, B = 8-32, C = 10-32, D = M6 x 1	
<b>Band diameters</b>	E = 1 1/16 - 1 1/4, F = 1 1/4 - 2 1/4, G = 2 1/4 - 3 1/4, H = 3 1/4 - 4 1/4, I = 4-5, J = 5-6, K = 6-7,	
<b>3) Calibration</b>	J, K, T, E	
<b>4) Junction</b>	G = Grounded, U = Ungrounded	
<b>5) Leads</b>	T = Fiberglass 24 ga stainless braid S = Fiberglass 20 ga stainless braid I = Fiberglass 24 ga stainless hose H = Fiberglass 20 ga stainless hose A = Teflon 24 ga B = Teflon 20 ga	
<b>6) Lead length</b>	In whole inches 006-999	
<b>7) Termination</b>	Choose a terminal design from pg L8	
<b>8) Special options</b>	Enter 0 if none. Specify others at time of order	

Ordering Code

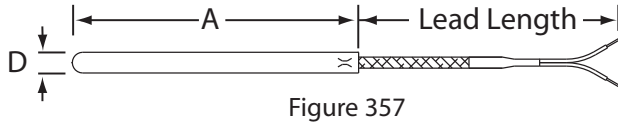
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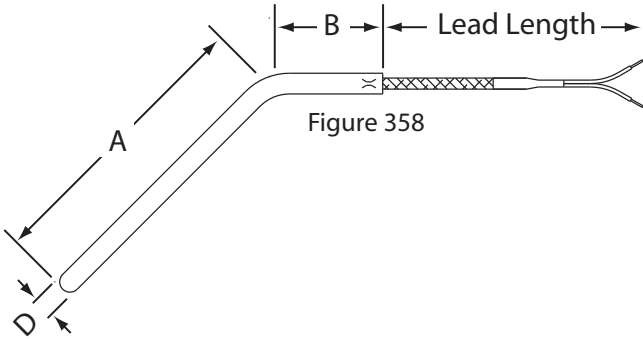
# Thermocouples & RTD - Tube and Wire

ASB Heating Elements Ltd.

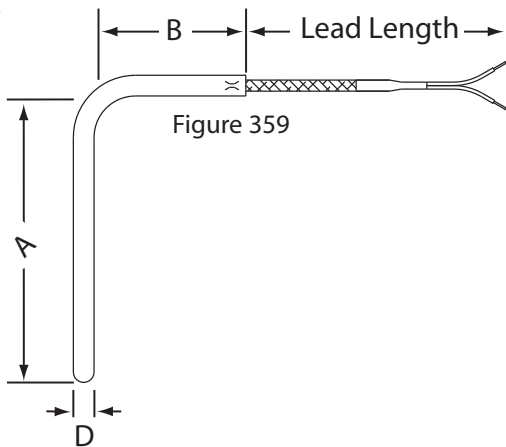
## Series 150



## Series 151



## Series 152



**1) Series** 150 151 152

**2) Diameter (D)** B = 1/8", C = 3/16", D = 1/4",

**3) Calibration** J, K, T, E, D = RTD 2 wire  
F = RTD 3 wire

**4) Junction** G = Grounded, U = Ungrounded

**5) A Dimension** A=1/2, B=1, C=1 1/2, D=2, E=2 1/2, F=3  
G=3 1/2, H=4, I=4 1/2, J=5, K=5 1/2, L=6,  
M=6 1/2, N=7, O=7 1/2, P=8, Q=8 1/2, R=9  
S=9 1/2, T=10, U=12, V=18, W=24, Y=36  
Z=48, X=Special length

**6) B Dimension** A=1/2, B=1, C=1 1/2, D=2, E=2 1/2, F=3  
G=3 1/2, H=4, I=4 1/2, J=5, K=5 1/2, L=6,  
M=6 1/2, N=7, O=7 1/2, P=8, Q=8 1/2, R=9  
S=9 1/2, T=10, U=12, V=18, W=24, Y=36  
Z=48, X=Special length  
(Enter 0 for series 150)

**7) Leads**  
G = Fiberglass 24 ga  
T = Fiberglass 24 ga stainless braid  
F = Fiberglass 20 ga  
S = Fiberglass 20 ga stainless braid  
I = Fiberglass 24 ga stainless hose  
H = Fiberglass 20 ga stainless hose  
A = Teflon 24 ga  
B = Teflon 20 ga  
C = PVC 24 ga  
D = PVC 20 ga

**8) Lead length** In whole inches 006-999

**9) Termination** Choose a terminal design from pg L8

**10) Special options** Fittings, flanges etc. Specify at time of order. Enter 0 if none

Ordering Code


1 2 3 4 5 6 7 8 9 10



# Thermocouples & RTD - Tube and Wire

ASB Heating Elements Ltd.

## Series 160

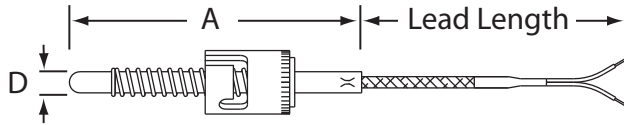


Figure 360

## Series 161

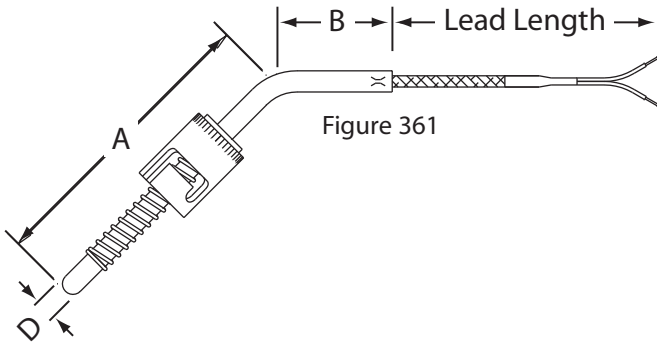


Figure 361

## Series 162

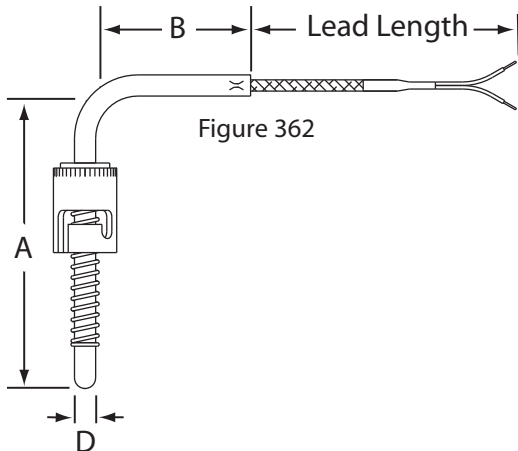


Figure 362

**1) Series** 160 161 162

**2) Diameter (D)** B = 1/8", C = 3/16", D = 1/4",

**3) Calibration** J, K, T, E, D = RTD 2 wire  
F = RTD 3 wire

**4) Junction** G = Grounded, U = Ungrounded

**5) A Dimension** A=1/2, B=1, C=1 1/2, D=2, E=2 1/2, F=3  
G=3 1/2, H=4, I=4 1/2, J=5, K=5 1/2, L=6,  
M=6 1/2, N=7, O=7 1/2, P=8, Q=8 1/2, R=9  
S=9 1/2, T=10, U=12, V=18, W=24, Y=36  
Z=48, X=Special length

**6) B Dimension** A=1/2, B=1, C=1 1/2, D=2, E=2 1/2, F=3  
G=3 1/2, H=4, I=4 1/2, J=5, K=5 1/2, L=6,  
M=6 1/2, N=7, O=7 1/2, P=8, Q=8 1/2, R=9  
S=9 1/2, T=10, U=12, V=18, W=24, Y=36  
Z=48, X=Special length  
(Enter 0 for series 160)

**7) Leads**  
G = Fiberglass 24 ga  
T = Fiberglass 24 ga stainless braid  
F = Fiberglass 20 ga  
S = Fiberglass 20 ga stainless braid  
I = Fiberglass 24 ga stainless hose  
H = Fiberglass 20 ga stainless hose  
A = Teflon 24 ga  
B = Teflon 20 ga  
C = PVC 24 ga  
D = PVC 20 ga

**8) Lead length** In whole inches 006-999

**9) Termination** Choose a terminal design from pg L8

**10) Special options** Fittings, flanges etc. Specify at time of order. Enter 0 if none

Ordering Code

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Series T3

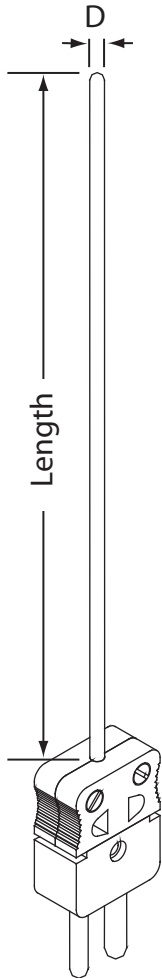


Figure 363

Series T2

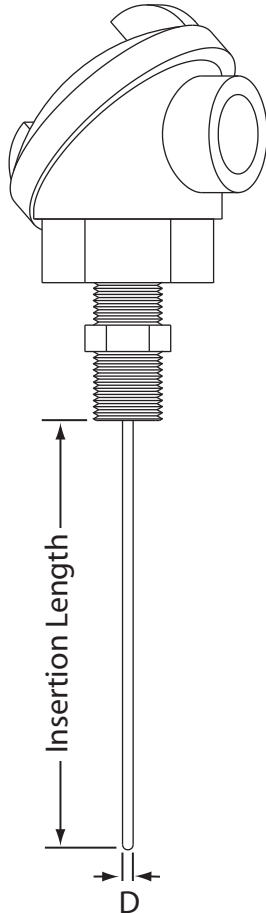


Figure 364

Series T1

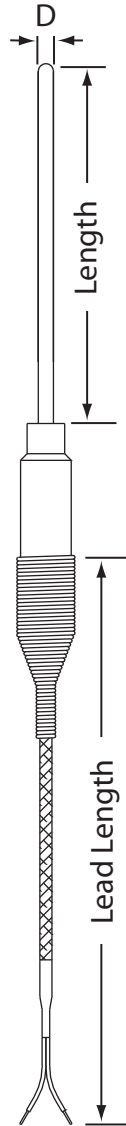


Figure 365

<b>1) Series</b>	T1	T2	T3
<b>2) Diameter (D)</b>	A = 1/16", B = 1/8", C = 3/16", D = 1/4"		
<b>3) Calibration</b>	J, K, T, E, R, S		
<b>4) Junction</b>	G = Grounded, U = Ungrounded E = Exposed		
<b>5) Sheath Material</b>	A = 304SS, B = 316SS, C = Incoloy		
<b>6) L Dimension</b>	In whole inches 00-99		
<b>7) L Dimension</b>	A = 0, B = 1/8", D = 1/4", F = 3/8", Fractional inches H = 1/2", J = 5/8", L = 3/4", N = 7/8"		
<b>8) Leads</b>	F = Fiberglass braid S = Fiberglass with stainless braid H = Fiberglass with stainless hose B = Teflon D = PVC K = Kapton		
<b>T2 terminations</b>	A = Aluminium head 1/2 x 1/2 ss fitting L = Aluminium head 1/2 x 1/2 ss fitting spring loaded E = Expulsion proof 1/2 x 1/2 ss fitting I = Cast iron 1/2 x 1/2 ss fitting P = Polypropylene 1/2 x 1/2 ss fitting		
<b>9) Lead length</b>	In whole inches 066-999		
<b>10) Termination</b>	Choose a terminal design from pg L8		
<b>11) Special options</b>	Fittings, flanges etc. Specify at time of order. Enter 0 if none		

Ordering Code

1	2	3	4	5	6	7	8	9	10	11
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Series R3

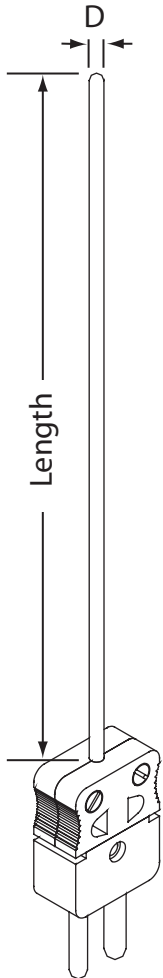


Figure 366

Series R2

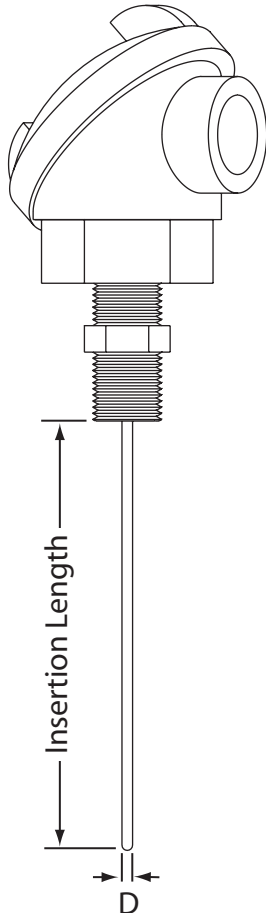


Figure 367

Series R1

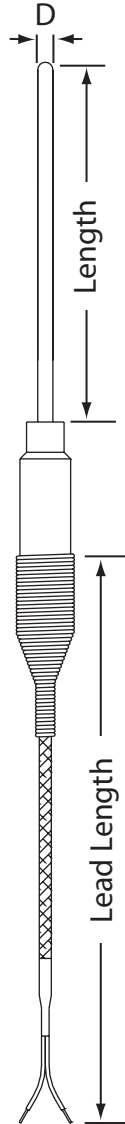


Figure 368

<b>1) Series</b>	R1	R2	R3
<b>2) Diameter (D)</b>	A = 1/16", B = 1/8", C = 3/16", D = 1/4"		
<b>3) Coefficient</b>	D = Din 3850, J = JIS 3916 (100 ohm)		
<b>4) Lead Construction</b>	D = 2 wire, T = 3 wire, F = 4 wire		
<b>5) Sheath Material</b>	A = 304SS, B = 316SS, C = Incoloy		
<b>6) L Dimension</b>	In whole inches 00-99		
<b>7) L Dimension</b>	A = 0, B = 1/8", D = 1/4", F = 3/8"		
<b>Fractional inches</b>	H = 1/2", J = 5/8", L = 3/4", N = 7/8"		
<b>8) Leads</b>	F = Fiberglass braid S = Fiberglass with stainless braid H = Fiberglass with stainless hose B = Teflon D = PVC K = Kapton		
<b>T2 terminations</b>	A = Aluminium head 1/2 x 1/2 ss fitting L = Aluminium head 1/2 x 1/2 ss fitting spring loaded E = Expolsion proof 1/2 x 1/2 ss fitting I = Cast iron 1/2 x 1/2 ss fitting P = Polypropylene 1/2 x 1/2 ss fitting		
<b>9) Lead length</b>	In whole inches 066-999		
<b>10 Termination</b>	Choose a terminal design from pg L8		
<b>11) Special options</b>	Fittings, flanges etc. Specify at time of order. Enter 0 if none		

Ordering Code

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### A- Standard Plug

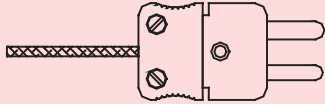


Figure 369

### B- Standard Jack

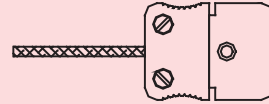


Figure 370

### C- Standard Plug / Mating Jack

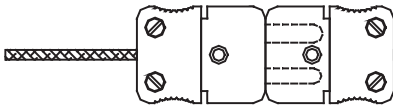


Figure 371

### D - Mini Plug

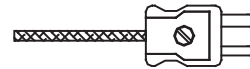


Figure 372

### E - Mini Jack

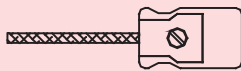


Figure 373

### F - Mini Plug / Mating Jack

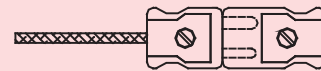


Figure 374

### L - Split Leads



Figure 375

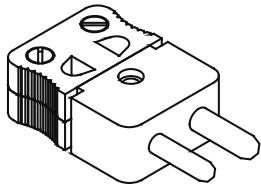
### M - Leads with Spade Lugs



Figure 376



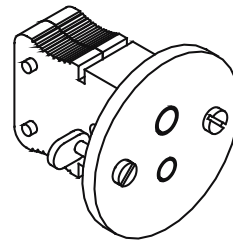
### Plug - Male



400°F Hollow pins  
Part number **\_MP**  
*Insert callibration J.K.T.R.U.E.N*

Figure 377

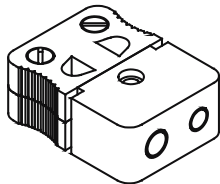
### Panel Jack



400°F Hollow pins  
Part number **\_PMJ**  
*Insert callibration J.K.T.R.U.E.N*

Figure 378

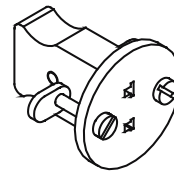
### Jack - Female



400°F Hollow pins  
Part number **\_FP**  
*Insert callibration J.K.T.R.U.E.N*

Figure 379

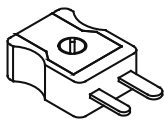
### Mini Panel Jack



400°F Hollow pins  
Part number **\_PMJ - mini**  
*Insert callibration J.K.T.R.U.E.N*

Figure 380

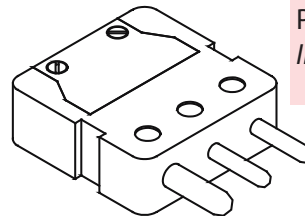
### Mini Plug - Male



400°F Hollow pins  
Part number **\_MP - mini**  
*Insert callibration J.K.T.R.U.E.N*

Figure 381

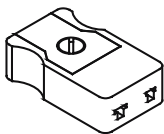
### 3 Pin Plug - Male



400°F Hollow pins  
Part number **\_MP-3**  
*Insert callibration J.K.T.R.U.E.N*

Figure 382

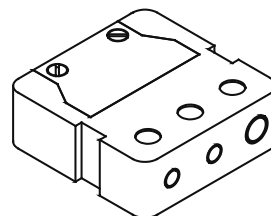
### Mini Jack - Female



400°F Hollow pins  
Part number **\_FP - mini**  
*Insert callibration J.K.T.R.U.E.N*

Figure 383

### 3 Pin Jack - Female



400°F Hollow pins  
Part number **\_FP-3**  
*Insert callibration J.K.T.R.U.E.N*

Figure 384

## Bayonet adaptors

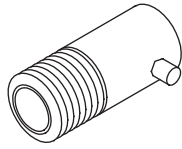


Figure 385

Part No.	Length	Thread
BA1	7/8"	1/8" NPT
BA2	1 1/2"	1/8" NPT
BA3	2"	1/8" NPT
BA4	2 1/2"	1/8" NPT
BA5	3"	1/8" NPT

## Compression Fittings

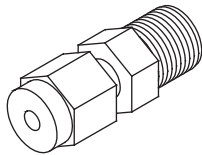


Figure 386

Part No.	Sheath O.D.	Material	Male NPT
CFB1/16ID	1/16"	Brass	1/8"
CFS1/16ID	1/16"	Stainless	1/8"
CFB1/8ID	1/8"	Brass	1/8"
CFS1/8ID	1/8"	Stainless	1/8"
CFB3/16ID	3/16"	Brass	1/8"
CFS3/16ID	3/16"	Stainless	1/8"
CFB1/4ID	1/4"	Brass	1/8"
CFS1/4ID	1/4"	Stainless	1/8"

## Thermocouple wire

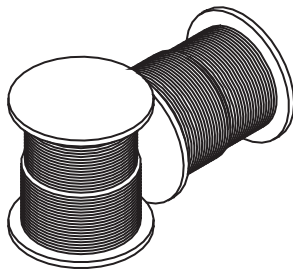


Figure 387

Construction	Overall jacket jacket	Single Conductors	Temperature ratings	
			Continuous	Single reading
<b>PVC</b> Polyvinyl Chloride	PVC	PVC	-20 to +221°F -29 to +105°F	N/A
<b>FEP</b> Extruded Teflon	FEP Teflon	FEP Teflon	-90 to +400°F -67 to +204°C	500°F 260°C
<b>Kapton</b>	Kapton	Kapton	500°F 260°C	N/A
<b>Fiberglass Braid</b>	Silicone imp. glass braid	Silicone imp. glass braid	900°F 482°C	1000°F 538°C
<b>Vitreous Silica Fiber</b>	Vitreous Silica Fiber	Vitreous Silica Fiber	1600°F 871°C	2000°F 1093°C
<b>Ceramic Fiber</b>	Ceramic Fiber	Ceramic Fiber	2200°F 1204°C	2600°F 1204°C