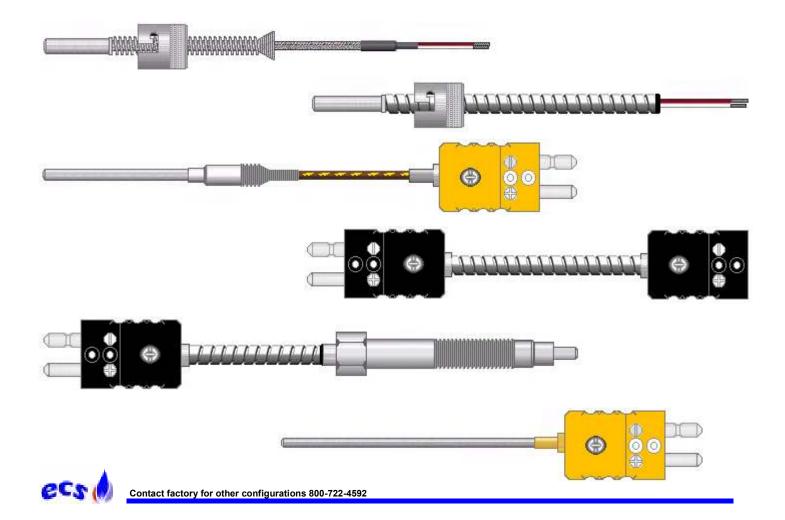


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Manufacturer of industrial temperature sensors



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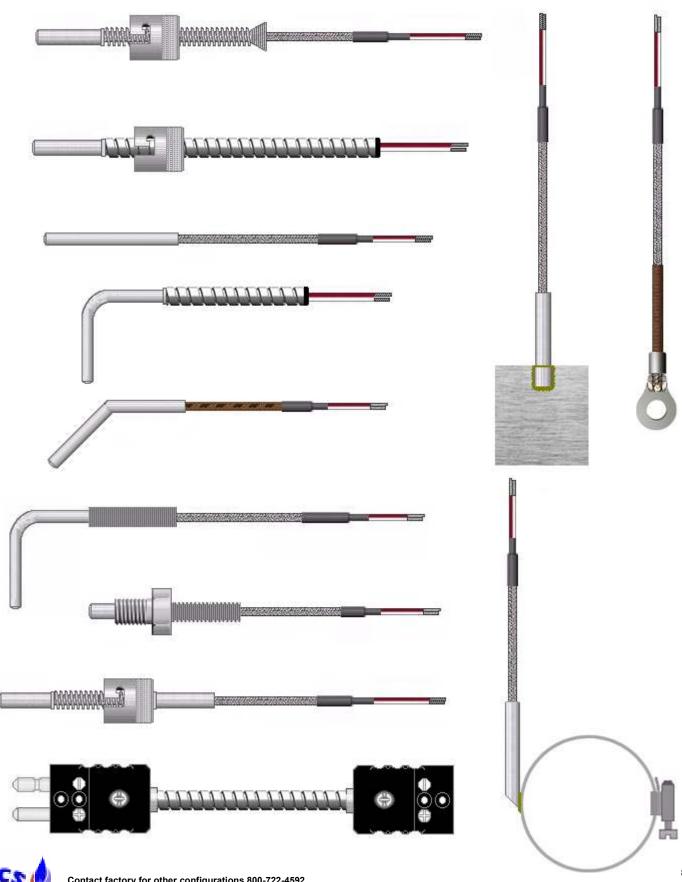
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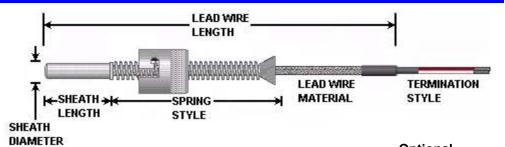
	Description	Dogo
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General purpose tube & wire Thermocouples



Adjustable bayonet spring thermocouple Series TA1



Ordering Information Part Number

rait int	IIIDEI					
① TA1	(2) Calibration	4 Sheath Length (In.)	6 Lead wire material	7 Lead wire Length (In.)	(8) Cap/Spring style	9 Termination Style
TA1						

Optional

Special features

2	Calibration
J	Type J (standard)
K	Type K
Т	Type T
E	Type E

3	Sheath Diameter
G	.118" (3mm)
н	.125" (3.2mm) (1/8")
J	.156" (4mm)
L	.188" (4.6mm) (3/16") (standard)
М	.236" (6mm)
N	.250" (6.4mm) (1/4")
Р	.314" (8mm) (5/16")
Note	Sizes for reference only (standard tolerances apply)
Note	For other diameters consult factory

4	Sheath Length (in.)
R	1/4"
s	3/8" (standard)
w	1/2"
х	5/8"
Υ	3/4"
z	1"

(5)	Junction
G	Grounded (standard)
U	Ungrounded
w	Grounded (Dual Junction)
z	Ungrounded common (Dual Junction)

6	Lead wire material
Α	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Kapton (500°F)
E	High temperature fiberglass (1200°F)
F	Fiberglass with stainless steel braid (800°F) (standard)
G	Teflon FEP with stainless steel braid (400°F)
Note	Wire gauge determined by ECS based on sheath diameter. For special requirements consult factory

)	31 ()			
012"-960"	Specify in Inches			
Note	over 960" contact factory			
8	Cap/ Spring style			
Р	7/16" ID Single slot (standard cap) / 1/4"OD x 10" spring			
Q	12.5mm ID double slot / 1/4"OD x 10" spring			

	9	Cap/ Spring Style			
	P	7/16" ID Single slot (standard cap) / 1/4"OD x 10" spring			
	Q 12.5mm ID double slot / 1/4"OD x 10" spring				
	R	14.7mm ID double slot / 1/4"OD x 10" spring			
	s	7/16" ID Single slot (standard cap) / 1/4"OD x 6" spring			
	Т	12.5mm ID double slot / 1/4"OD x 6" spring			
	w	14.7mm ID double slot / 1/4"OD x 6" spring			
ľ					





- Adjustable spring style thermocouples fit a wide variety of hole depths
- Cap spins over entire length of spring
- Spring has an OD of .254"
- 20 AWG stranded wire comes standard for .156" and larger
- 24 AWG stranded wire comes standard for .125" and .118"

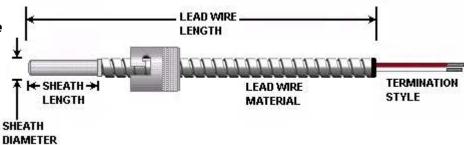
9	Termination style
Α	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
G	Solid pin plug (400°F)
Н	Standard female jack (400°F)
J	Miniature plug (400°F)
K	Miniature jack (400°F)
L	2" stripped leads w/ #6 Ring terminals
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
Р	Dual molded male connector (400°F)
w	2" stripped leads w/ wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

100	Special features (Optional)
Note	Leave blank for no special features
01	Solid conductor (Lead wire)
04	Flat tip probe
05	Drill point tip
06	Epoxy seal
07	Cable clamp
08	Bx Connector
09	Mating connector
11	International IEC 584-3 color coded leads
12	British color coded leads
13	German color coded leads
14	Japanese color coded leads
15	Reverse polarity color coded leads
16	French color coded leads
18	Moisture protection boot on connector
Note	For color code chart see pg. 62

For bayonet adapters see pg. 56 For special features see pg. 70-71



Adjustable bayonet flexible armor cable thermocouple Series TA2



Ordering Information Part Number

TA2	2 Calibration	Sheath Length (In.)	⑤ Junction	6 Lead wire material (inside armor)	8 Armor OD/ Cap Size	⑨ Termination Style
TA2						



2	Calibration
7	Type J (standard)
К	Туре К
Т	Туре Т
E	Type E

(5)	Junction	
G	Grounded (standard)	
U	Ungrounded	
w	Grounded (Dual Junction)	
z	Ungrounded (Dual Junction)	

3	Sheath Diameter
G	.118" (3mm)
Н	.125" (3.2mm) (1/8")
J	.156" (4mm)
L	.188" (4.6mm) (3/16") (standard)
М	.236" (6mm)
N	.250" (6.4mm) (1/4")
Р	.314" (8mm) (5/16")
Note	Sizes for reference only (standard tolerances apply)
Note	For other diameters consult factory

6	Lead wire material (inside armor cable)
Н	Fiberglass with armor cable (800°F) (standard)
J	Teflon FEP with armor cable (400°F)
К	Kapton with armor cable (500°F)
М	Fiberglass with stainless steel braid with armor cable (800°F)
w	Teflon FEP with stainless steel braid with armor cable (400°F)
L	High temperature fiberglass with armor cable (1200°F)
Note	Wire gauge determined by ECS based on sheath diameter. For special requirements consult factory

4	Sheath Length (in.)
R	1/4"
s	3/8" (standard)
w	1/2"
х	5/8"
Υ	3/4"
z	1"

7	Lead wire length (in.)
012"-600"	Specify in Inches
Note	Over 600" contact factory

8	Armor cable diameter/ Cap Size
Α	.275"OD/ 7/16" ID single slot (standard cap)
В	.210"OD/ 7/16" ID single slot (standard cap)
С	.275"OD/ 12.5 mm ID double slot (Metric cap)
D	.210"OD/ 12.5 mm ID double slot (Metric cap)
E	.234"OD/ 7/16" ID single slot (standard cap)
F	234" OD/ 13 mm ID single slot Werner Pfleiderer can

9	Termination style
Α	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
G	Solid pin plug (400°F)
Н	Standard female jack (400°F)
J	Miniature plug (400°F)
К	Miniature jack (400°F)
L	2" stripped leads w/ #6 Ring terminals
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
Р	Dual molded male connector (400°F)
w	2" stripped leads w/ wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

10	Special features (Optional)
Note	Leave blank for no special features
01	Solid conductor (Lead wire)
04	Flat tip probe
05	Drill point tip
06	Epoxy seal (500°F)
07	Cable clamp
08	Bx Connector
09	Mating connector
11	International IEC 584-3 color coded leads
12	British color coded leads
13	German color coded leads
14	Japanese color coded leads
15	Reverse polarity color coded leads
16	French color coded leads
18	Moisture protection boot on connector
Note	For color code chart see pg.62

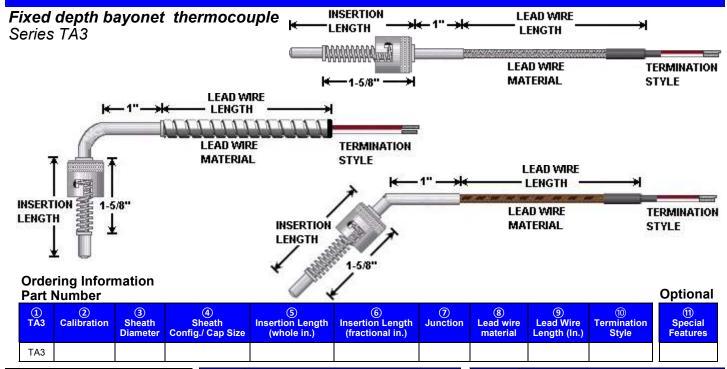




- Adjustable armor style thermocouples fit a wide variety of hole depths
- Cap spins over entire length of armor. Armor is .265" OD
- ECS custom designed armor cable compresses & decompresses easily, ideal for extrusion applications
- 20 AWG stranded wire comes standard for .156" and larger
- 24 AWG stranded wire comes standard for .125" and .118"



For bayonet adapters see pg. 56 For special features see pg. 70-71



2	Calibration
J	Type J (standard)
К	Туре К
Т	Туре Т
E	Type E

7	Junction
G	Grounded (standard)
U	Ungrounded
w	Grounded (Dual Junction)
z	Ungrounded (Dual Junction)

3	Sheath Diameter
F	.125" (3.2mm) (1/8")
Н	.188" (4.6mm) (3/16") (standard)
Note	Sizes for reference only

4	Sheath Configuration/ Cap Size
Р	Straight w/ 7/16" Single slot cap
Q 45 Degree w/ 7/16	45 Degree w/ 7/16" Single slot cap
R	90 Degree w/ 7/16" Single slot cap

(5)	Insertion Length (whole in.)
02"-20"	Specify in Inches

6	Insertion Length (fractional in.)
Α	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"

8	Lead wire material
Α	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Kapton (500°F)
F	Fiberglass with stainless steel braid (800°F)(standard)
G	Teflon FEP with stainless steel braid (400°F)
Н	Fiberglass with armor cable (800°F)
J	Teflon FEP with armor cable (400°F)
K	Kapton with armor cable (500°F)
М	Fiberglass with stainless steel braid with armor cable (800°F)
Note	Wire gauge determined by ECS based on sheath diameter

	9	Lead wire length (in.)
	012"-600"	Specify in Inches
	Note	Over 600" contact factory

- 20 AWG stranded wire comes standard for .156"and larger
- 24 AWG stranded wire comes standard for .125" and .118"

For bayonet adapters see pg. 56 For special features see pg. 70-71

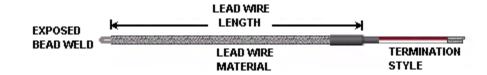
100	Termination style
A	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
G	Solid pin plug (400°F)
J	Miniature plug (400°F)
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
P	Dual molded male connector (400°F)
w	2" stripped leads w/ wire ferrules (pin terminals)
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

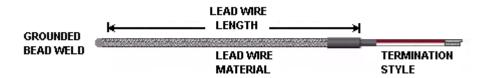
11)	Special features (Optional)
Note	Leave blank for no special features
01	Solid conductor (Lead wire)
02	1.5" long strain relief spring
03	1.5" long heat shrink where wire exits the probe
04	Flat tip probe
05	Drill point tip
06	Epoxy seal (500°F)
07	Cable clamp
08	Bx Connector
09	Mating connector
11	International IEC 584-3 color coded leads
13	German color coded leads
14	Japanese color coded leads
15	Reverse polarity color coded leads
18	Moisture protection boot on connector
Note	For color code chart see pg. 62



Bead weld thermocouple

Series TB1





Ordering Information Part Number

Fait Number							
① TB1	(2) Calibration	3 Junction	(4) Wire Size	⑤ Lead wire Material	6 Lead wire length (In.)	7 Termination Style	
TB1							

2	Calibration			
J	Type J (standard)			
K	Type K			
Т	Туре Т			
E	Type E			

3	Junction
G	Grounded
Е	Exposed

4	Wire Size		
1	24 AWG		
2	20 AWG		
Note	For other sizes contact factory		

(5)	Lead wire material
A	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Kapton (500°F)
E	High temperature fiberglass (1200°F)
F	Fiberglass with stainless steel braid (800°F) (standard)
G	Teflon FEP with stainless steel braid (400°F)
Q	Ceramic fiber with Inconel braid (2100°F) (solid conductor only)

6	Lead wire length
006"-600"	Specify in Inches
Note	Over 600" contact factory
	-

Stranded wire comes standard. See option "01" for solid conductor

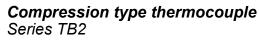
7	Termination style				
A	2" stripped leads (bare ends)				
В	2" stripped leads w/ spade lugs				
С	Standard male plug (400°F)				
D	High temp male Plug (660°F)				
E	Max temp male Plug (800°F)				
F	Ceramic male plug (1200°F)				
G	Solid pin plug (400°F)				
н	Standard female jack (400°F)				
J	Miniature plug (400°F)				
К	Miniature jack (400°F)				
L	2" stripped leads w/#6 Ring terminals				
w	2" stripped leads w/wire ferrules (pin terminals)				
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)				
006"-240"	006"-240" Specify in Inches				

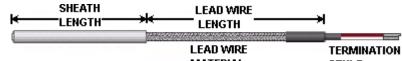
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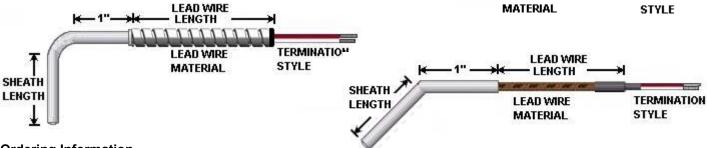
8 Special Features

8	Special features (Optional)
Note	Leave blank for no special features
01	Solid conductor (Lead wire)
07	Cable clamp
08	Bx Connector
09	Mating connector
11	International IEC 584-3 color coded leads
12	British color coded leads
13 German color coded leads	
14	Japanese color coded leads
15	Reverse polarity color coded leads
16 French color coded leads	
18	Moisture protection boot on connector
24	Teflon covered lead wire
Note	For color code chart see pg. 62









Ordering Information Part Number

Optional

T	1) B2	(2) Calibration	Sheath Diameter	Sheath Config.	Sheath Length (Whole In.)	Length	Junction	8 Lead wire material	length	10 Termination Style	Special Features	Length	Insertion Length (Frac.in.)
Т	B2												

2	Calibration
J	Type J (standard)
К	Type K
Т	Type T
E	Type E

	7	Junction
	G	Grounded (standard)
U Ungrounded		
	w	Grounded (Dual Junction)
	Z	Ungrounded (Dual Junction)

10	Termination style
Α	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
F	Ceramic male plug (1200°F)
G	Solid pin plug (400°F)
Н	Standard female jack (400°F)
J	Miniature plug (400°F)
K	Miniature jack (400°F)
L	2" stripped leads w/ #6 Ring terminals
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
Р	Dual molded male connector (400°F)
w	2" stripped leads w/ wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)

3	Sheath Diameter	
G	.118" (3mm)	
Н	.125" (3.2mm) (1/8")	
J	.156" (4mm)	
L	.188" (4.6mm) (3/16") (standard)	
s	.196" (5mm)	
М	.236 (6mm)	
N	.250" (6.4mm) (1/4")	
Р	.314" (8mm) (5/16")	
Q	.375" (9.5mm) (3/8")	
Note	Sizes for reference only (standard tolerances apply)	

8	Lead wire material	
Α	Fiberglass (800°F)	
В	Teflon FEP (400°F)	
С	Kapton (500°F)	
E	High temperature fiberglass (1200°F)	
F	Fiberglass with stainless steel braid (800°F) (standard)	
G	Teflon FEP with stainless steel braid (400°F)	
Н	Fiberglass with armor cable (800°F)	
J	Teflon FEP with armor cable (400°F)	
κ	Kapton with armor cable (500°F)	
L	High temperature fiberglass with armor cable (1200°F)	
M	Fiberglass/ Stainless steel braid with armor cable (800°F)	
Note	Wire gauge determined by ECS based on sheath diameter	

4	Sheath Configuration	
w	Straight (standard)	
Х	90 degree bend	
Υ	45 degree bend	

9	Lead wire length
006"-600"	Specify in Inches
Note	Over 600" contact factory

(11)	Special features (optional)	
Note	See next page	
12)	Attached Fitting (entional)	

006"-240" Specify in Inches

See next page

006"-240"

Note

(5)	Sheath Length (whole in.)	
000"-060"	Specify in Inches	

For compression fittings see pg. 58
For special features see pg. 70-71

(13)	Insertion length (whole in.)	
Note	See next page	

6	Sheath Length (fractional in.)
A	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"

Note See next page

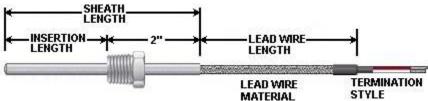
See next page for optional attached fittings

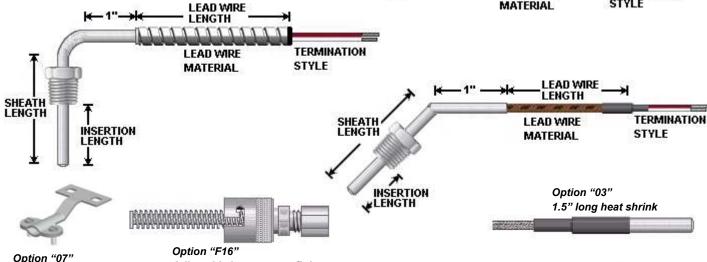
Insertion Length (fractional in.)

 Dual junction only available in diameters .156" and larger See next page for optional attached fittings & special features (Fields 11,12,13, & 14)



Compression type thermocouple Attached fittings & special features Series TB2





Ordering Information

Part Number

Option "07" Cable clamp Adjustable bayonet cap fitting

Option "02" Strain relief spring

tion Length (in.) (optional)

ion Length (fractional in.)

Continue part number from previous page

Special Features	Attached Fitting	Insertion Length (whole in.)	Insertion Length (Frac.in.)

11)	Special features (Optional)
Note	Leave blank for no special features
01	Solid conductor (Lead wire)
02	1.5" long strain relief spring
03	1.5" long heat shrink where wire exits the probe
04	Flat tip probe
05	Drill point tip
06	Epoxy seal (500°F)
07	Cable clamp
08	BX Connector
09	Mating connector
11	International IEC 584-3 color coded leads
12	British color coded leads
13	German color coded leads
14	Japanese color coded leads
15	Reverse polarity color coded leads
16	French color coded leads
18	Moisture protection boot on connector
21	Teflon coated armor cable
24	Teflon covered probe
25	Free spinning fitting (held on probe by a crimp ring)
27	Transition fitting on tube & wire sensor
Note	For color code chart see pg. 62

12	Attached Fitting type (optional)		
Note	Leave blank for no attached fitting		
F01	1/8"npt single thread		
F02	1/4"npt single thread		
F03	3/8"npt single thread		
F04	1/2"npt single thread		
F05	3/4"npt single thread		
F06	1/2"npt x 1/2"npt double thread		
F07	1/2" npt double thread. Spring loaded		
F08	1/2"npt x 1/2"npt double thread. Spring loaded w/oil seal		
F09	1/2"npt x 3/4"npt double thread		
F10	3/4"npt x 3/4"npt double thread		
F16	Adjustable 7/16"ID bayonet cap fitting (1/8"OD & 3mm OD)		
F17	Adjustable 12.5mm ID double slot bayonet cap fitting (1/8"OD & 3mm OD)		
F18	1/8"npt compression fitting (Brass)		
F19	1/8"npt compression fitting (Stainless steel)		
F20	1/4"npt compression fitting (Brass)		
F21	1/4"npt compression fitting (Stainless steel)		
Note	For other fittings not shown contact factory		

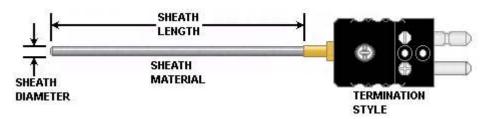
(13)	Insertion Length
001"-050"	Specify in inches
14	insertion Length
A	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"

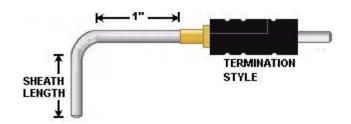
- Attached fittings are stainless steel
- See pg. 68-69 for more detail about fittings
- See pg. 70-71 for more detail about special features

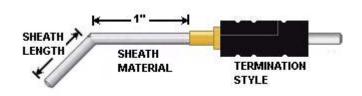


Rigid tube & wire thermocouple

Series TB3







Ordering Information

Part Number

TB3	(2) Calibration	(4) Sheath Configuration	Sheath Length (Whole In.)	Length	(inside probe)	8 Junction	9 Termination Style
TB3							

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© Special Features	Attached Fitting	Insertion Length (whole in.)	Insertion Length (Frac.in.)

2	Calibration
J	Type J (standard)
K	Туре К
Т	Type T
E	Type E

3	Sheath Diameter
Н	.125" (3.2mm) (1/8")
L	.188" (4.6mm) (3/16")(standard)
М	.236 (6mm)
N	.250" (6.4mm) (1/4")
Note	Sizes for reference only (standard tolerances apply)
Note	For other diameters consult factory

4	Sheath Configuration
w	Straight (standard)
x	90 degree bend
Y	45 degree bend

⑤	Sheath Length (whole in.)
001"-60"	Specify in inches

6	Sheath Length (fractional in.)
A	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"
7)	Wire material (Inside probe)

\mathcal{O}	Wire material (Inside probe)
A	Fiberglass (800°F)
В	Teflon (400°F) FEP
8	Junction

8	Junction
G	Grounded (standard)
U	Ungrounded
w	Grounded (Dual Junction)
Z	Ungrounded (Dual Junction)

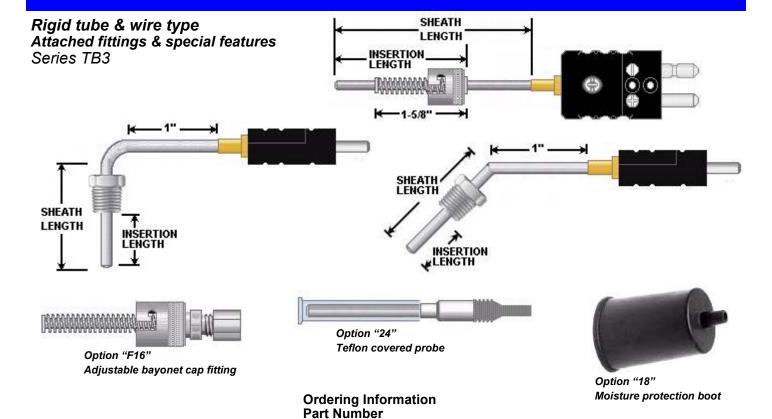
9	Termination style
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
F	Ceramic male plug (1200°F)
G	Solid pin male plug (400°F)
Н	Standard female jack (400°F)
J	Miniature male plug (400°F)
к	Miniature female jack (400°F)
N	Standard 3 pin male plug w/ ground wire (400°F)
Р	Dual molded male connector (400°F)

See next page for optional attached fittings & special features (Fields 10,11,12 & 13)

See pg. 58 for compression fittings

See pg. 65-66 for more detail about termination styles





10 Special

eatures

11 Attached

Fitting

12) Insertion

Length (whole in.)

(3) Insertion

Length (Frac.in.)

Continue part number from previous page

10	Special features (Optional)	
Note	Leave blank for no special features	
04	Flat tip probe	
05	Drill point tip	
09	Mating connector	
18	Moisture protection boot on connector	
24	FEP Teflon covered probe (400°F)	
25	Free spinning fitting (held on probe by a crimp ring)	
26	Connector mounted with tube adapter	

- Attached fittings are stainless steel
- See pg. 68-69 for more detail about fittings
- See pg. 70-71 for more detail about special features

11)	Attached Fitting type (optional)		
Note	Leave blank for no attached fitting		
F01	1/8"npt single thread		
F02	1/4"npt single thread		
F03	3/8"npt single thread		
F04	1/2"npt single thread		
F05	3/4"npt single thread		
F06	1/2"npt x 1/2"npt double thread		
F07	1/2"npt double thread. Spring loaded		
F08	1/2"npt x 1/2"npt double thread. Spring loaded w/oil seal		
F09	1/2"npt x 3/4"npt double thread		
F10	3/4"npt x 3/4"npt double thread		
F11	Fixed 7/16" iD single slot bayonet cap assembly		
F14	1/2"npt x 1"npt double thread		
F15	1"npt single thread		
F16	Adjustable 7/16"ID bayonet cap fitting (1/8"OD & 3mm OD)		
F17	Adjustable 12.5mm ID double slot bayonet cap fitting (1/8"OD & 3mm OD)		
F18	1/8"npt compression fitting (Brass)		
F19	1/8"npt compression fitting (Stainless steel)		
F20	1/4"npt compression fitting (Brass)		
F21	1/4"npt compression fitting (Stainless steel)		

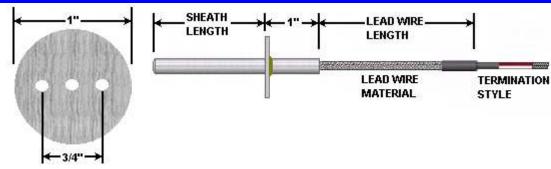
For other fittings not shown contact factory

12	Insertion Length (in.) (optional)
001"-050"	Specify in Inches
13	insertion Length

13	insertion Length (fractional in.)
A	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"



Mounting flange thermocouple Series TB4



Ordering Information Part Number

	Optional
1	

TB4	(2) Calibration	3 Sheath Diameter	(Whole In.)	Sheath Length (Fractional In.)	⑤ Junction	⑦ Lead wire material	(9) Termination Style	Special Features
TB4								

2	Calibration
J	Type J (standard)
К	Туре К
Т	Туре Т
E	Type E

6	Junction
G	Grounded (standard)
U	Ungrounded
w	Grounded (Dual Junction)
Z	Ungrounded (Dual Junction)

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3	Sheath Diameter		
Н	.125" (3.2mm) (1/8")		
J	.156" (4mm)		
L	.188" (4.6mm) (3/16") (standard)		
М	.236 (6mm)		
N	.250" (6.4mm) (1/4")		
Note	Sizes for reference only (standard tolerances apply)		

7	Lead wire material
A	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Kapton (500°F)
E	High temperature fiberglass (1200°F)
F	Fiberglass with stainless steel braid (800°F) (standard)
G	Teflon FEP with stainless steel braid (400°F)
Н	Fiberglass with armor cable (800°F)
J	Teflon FEP with armor cable (400°F)
K	Kapton with armor cable (500°F)
L	High temperature fiberglass with armor cable (1200°F)
М	Fiberglass/ stainless steel braid with armor cable (800°F)
Note	Wire gauge determined by ECS based on sheath diameter

4	Sheath Length (whole in.)
001-059"	Specify in Inches

8	Lead wire length
006"-600"	Specify in Inches
Note	Over 600" contact factory

(5)	Sheath Length (fractional in.)
Α	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
н	7/8"

- Dual junction only available in diameters .156" and larger
- Mounting holes drilled for #10 screw
- Flange is silver soldered to probe

See pg. 58 for more detail about termination styles See pg.65-66 for more detail about special features

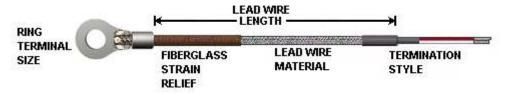
9	Termination style		
A	2" stripped leads (bare ends)		
В	2" stripped leads w/ spade lugs		
С	Standard male plug (400°F)		
D	High temp male Plug (660°F)		
E	Max temp male Plug (800°F)		
G	Solid pin plug (400°F)		
н	Standard female jack (400°F)		
J	Miniature plug (400°F)		
М	2 Standard male plugs (dual junctions) (400°F)		
N	Standard 3 pin plug w/ ground wire (400°F)		
Р	Dual molded male connector (400°F)		
w	2" stripped leads w/wire ferrules (pin terminals)		
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)		
006"-240"	006"-240" Specify in Inches		

100	Special features (Optional)	
Note	Leave blank for no special features	
01	Solid conductor (Lead wire)	
02	1.5" long strain relief spring	
03	1.5" long heat shrink where wire exits the probe	
04	Flat tip probe	
05	Drill point tip	
06	Epoxy seal (500°F)	
07	Cable clamp	
08	Bx Connector	
09	Mating connector	
11	International IEC 584-3 color coded leads	
12	British color coded leads	
13	German color coded leads	
14	Japanese color coded leads	
15	Reverse polarity color coded leads	
18	Moisture protection boot on connector	
21	Teflon coated armor cable	
24	Teflon covered probe	
Note	For color code chart see pg. 62	



Ring terminal thermocouple

Series TC1



Ordering Information Part Number

· aiti	Tallibei					
① TC1	(2) Calibration	(3) Ring Terminal Size	4 Junction	5 Lead wire material	⑥ Lead wire Length (In.)	7 Termination Style
TC1						

Optional
8 Special Features

2	Calibration	
J	Type J (standard)	
к	Туре К	
Т	Туре Т	
Е	Type E	

3	Ring Terminal Size		
F	#6 (.147" hole size)		
Н	#8 (.173" hole size)		
М	#10 (.198" hole size)		
N	1/4" (.263" hole size)		
Р	5/16" (.336" hole size)		
Q	3/8" (.393" hole size)		

4	Junction	
G	Grounded (standard)	
U	Ungrounded	
w	Grounded (Dual Junction)	
z	Ungrounded (Dual Junction)	

5	Lead wire material	
Α	Fiberglass (800°F)	
В	Teflon FEP (400°F)	
С	Kapton (500°F)	
E	High temperature fiberglass (1200°F)	
F	Fiberglass with stainless steel braid (800°F) (standard)	
G	Teflon FEP with stainless steel braid (400°F)	
Н	Fiberglass with armor cable (800°F)	
J	Teflon FEP with armor cable (400°F)	
K	Kapton with armor cable (500°F)	
L	High temperature fiberglass with armor cable (1200°F)	
М	Fiberglass with stainless steel braid with armor cable (800°F)	
Note	Wire gauge determined by ECS based on sheath diameter	

6	Lead wire length (ln.)
006"-600"	Specify in Inches
Note	Over 600" contact factory

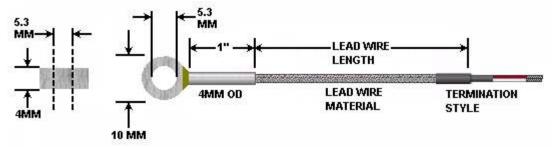
7	Termination style	
Α	2" stripped leads (bare ends)	
В	2" stripped leads w/ spade lugs	
С	Standard male plug (400°F)	
D	High temp male Plug (660°F)	
E	Max temp male Plug (800°F)	
G	Solid pin plug (400°F)	
н	Standard female jack (400°F)	
J	Miniature plug (400°F)	
К	Miniature jack (400°F)	
L	2" stripped leads w/#6 Ring terminals	
М	2 Standard male plugs (dual junctions) (400°F)	
N	Standard 3 pin plug w/ ground wire (400°F)	
w	2" stripped leads w/wire ferrules (pin terminals)	
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)	
006"-240"	006"-240" Specify in Inches	

- Ring terminal can be mounted under various different screw sizes to sense temperature of a surface
- This style offers a strain relief sleeve to prevent excess wearing, where the lead wire exits the neck of the ring terminal, improving longevity

See pg. 58 for more detail about termination styles See pg. 65-66 for more detail about special features

8	Special features (Optional)			
Note	Leave blank for no special features			
01	Solid conductor (Lead wire)			
02	1.5" long strain relief spring			
03	1.5" long heat shrink where wire exits the probe			
06	Epoxy seal (500°F)			
07	Cable clamp			
08	Bx Connector			
09	Mating connector			
11	International IEC 584-3 color coded leads			
12	British color coded leads			
13	German color coded leads			
14	Japanese color coded leads			
15	Reverse polarity color coded leads			
16	French color coded leads			
18	Moisture protection boot on connector			
Note	For color code chart see pg. 62			

Spacer Thermocouple Series TC2



Ordering Information Part Number

① TC2	② Calibration	③ Spacer Size	④ Junction	⑤ Lead wire material	⑥ Lead wire Length (In.)	7 Termination Style
TC2						

Optional

8 Special Features

2	Calibration
J	Type J
K	Туре К
Т	Туре Т
E	Type E

③ Spacer Size	
Α	5.3mm ID x 10mm OD x 4mm thick
Note	For other sizes consult factory

4	Junction
G	Grounded (standard)
U	Ungrounded

(5)	Lead wire material
Α	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Kapton (500°F)
E	High temperature fiberglass (1200°F)
F	Fiberglass with stainless steel braid (800°F)
G	Teflon FEP with stainless steel braid (400°F)
Н	Fiberglass with armor cable (800°F)
J	Teflon FEP with armor cable (400°F)
K	Kapton with armor cable (500°F)
L	High temperature fiberglass with armor cable (1200°F)
М	Fiberglass with stainless steel braid with armor cable (800°F)
Note	Wire gauge determined by ECS based on sheath diameter

•	Lead wife length
006"-600"	Specify in Inches
Note	Over 600" contact factory
7	Termination style
A	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
G	Solid pin plug (400°F)
н	Standard female jack (400°F)
J	Miniature plug (400°F)
K	Miniature jack (400°F)
L	2" stripped leads w/#6 Ring terminals
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
w	2" stripped leads w/wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

(8)	Special features (Optional)
Ŭ	Special features (Optional)
Note	Leave blank for no special features
01	Solid conductor (Lead wire)
02	1.5" long strain relief spring
03	1.5" long heat shrink where wire exits the probe
06	Epoxy seal (500°F)
07	Cable clamp
08	Bx Connector
09	Mating connector
11	International IEC 584-3 color coded leads
12	British color coded leads
13	German color coded leads
14	Japanese color coded leads
15	Reverse polarity color coded leads
16	French color coded leads
18	Moisture protection boot on connector
Note	For color code chart see pg. 62

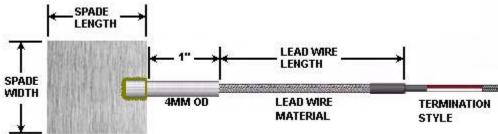
- 20 AWG stranded wire comes standard on spacer type thermocouples
- Spacer is silver soldered to probe
- Grounded junction is most common

See pg. 58 for more detail about termination styles

See pg. 65-66 for more detail about special features



Spade thermocouple Style TE1



Ordering Information Part Number

LEAD WIRE	*
LEAD WIRE	TERMINATION
MATERIAL	STYLE

Optional

① TE1	(2) Calibration	③ Spade Size	4 Spade Material	5 Junction	6 Lead wire material	Dead wire length (Inches)	8 Termination Style	9 Special Features
TE1								

J	Type J
K	Type K
Т	Туре Т
E	Type E
3	Spade size (Length x Width)
F	1/2" x 1/2"

Note	For other sizes consult factory
Q	1/2" x 5/8"
Р	3/4 x 7/8"
N	1" x 1"
М	3/4" x 3/4"
Н	5/8" x 5/8"
F	1/2" x 1/2"
3	Spade size (Length x Width)

4	Spade material
s	Stainless Steel
В	Brass

(5)	Junction	
G	Grounded (standard)	
U	Ungrounded	
w	Grounded (Dual Junction)	
Z	Ungrounded (Dual Junction)	

6	Lead wire material
A	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Kapton (500°F)
E	High temperature fiberglass (1200°F)
F	Fiberglass with stainless steel braid (800°F) (standard)
G	Teflon FEP with stainless steel braid (400°F)
Н	Fiberglass with armor cable (800°F)
J	Teflon FEP with armor cable (400°F)
К	Kapton with armor cable (500°F)
L	High temperature fiberglass with armor cable (1200°F)
М	Fiberglass with stainless steel braid with armor cable (800°F)
Note	Wire gauge determined by ECS based on sheath diameter

7	Lead wire length (In.)	
006"-600"	Specify in Inches	
Note	Over 600" contact factory	

8	Termination style
A	2" stripped leads (bare ends)
В	2" stripped w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
G	Solid pin plug
Н	Standard female jack
J	Miniature plug
К	Miniature jack
L	2" stripped leads w/#6 Ring terminals
М	2 Standard male plugs (dual junctions)
N	Standard 3 pin plug w/ ground wire
w	2" stripped leads w/wire ferrules (pin terminals)
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240	006"-240" Specify in Inches

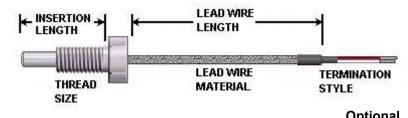
9	Special features (Optional)
Note	Leave blank for no special features
01	Solid conductor (Lead wire)
02	1.5" long strain relief spring
03	1.5" long heat shrink where wire exits the probe
06	Epoxy seal (500°F)
07	Cable clamp
08	Bx Connector
09	Mating connector
11	International IEC 584-3 color coded leads
12	British color coded leads
13	German color coded leads
14	Japanese color coded leads
15	Reverse polarity color coded leads
16	French color coded leads
18	Moisture protection boot on connector
Note	For color code chart see pg. 62

- 20 awg stranded wire comes standard on spade type thermocouples
- Spade is silver soldered to probe
- Spade is .010" thick

See pg. 58 for more detail about termination styles See pg. 65-66 for more detail about special features



Threaded bolt thermocouple Style TF1



Ordering Information Part Number

	① TF1	② Calibration	③ Thread Size	④ Sheath Length (In.)	5 Junction	6 Lead Wire Material	Dead Wire Length (Inches)	8 Termination Style
-	TF1							

Grounded (standard)

Optional
9 Special Features

2	Calibration
J	Type J (standard)
K	Туре К
Т	Туре Т
E	Туре Е

3	Thread size
Α	1/4-28 (standard)
В	1/4-20
С	10-32 (Grounded only)
D	8-32 (Grounded only)
E	M5 X 0.8 pitch
F	M6 x 1 pitch
G	M8 x 1 pitch
н	M8 x 1.25 pitch
J	M10 x 1 pitch
К	M10 x 1.25 pitch
Р	M10 x 1.5 pitch
R	M12 x 1.25 pitch
s	M12 x 1.5 pitch
w	M12 x 1.75 pitch

4	Sheath Length (in.)
U	1/4"
v	3/8"
w	1/2" (standard)
х	5/8"
Y	3/4"
z	1"

Step 3: Thread size

-	
EXAMPLE:	
Inches	
1/4-28 bolt = 1	1/4"OD thread x 28 TPI
Metric	
	ch = 12mm OD thread x
1.25mm peak	to peak

U	Ungrounded	
6	Lead wire material	
A	Fiberglass (800°F)	
В	Teflon FEP (400°F)	
С	Kapton (500°F)	
E	High temperature fiberglass (1200°F)	
F	Fiberglass with stainless steel braid (800°F) (standard)	
G	Teflon FEP with stainless steel braid (400°F)	
Н	Fiberglass with armor cable (800°F)	
J	Teflon FEP with armor cable (400°F)	
K	Kapton with armor cable (500°F)	
L	High temperature fiberglass with armor cable (1200°F)	
М	Fiberglass with stainless steel braid with armor cable (800°F)	
Note	Wire gauge determined by ECS based on sheath diameter	

Note	Over 600" contact factory
006"-600"	Specify in Inches
7	Lead wire length

8	Termination style	
Α	2" stripped leads (bare ends)	
В	2" stripped leads w/ spade lugs	
С	Standard male plug (400°F)	
D	High temp male Plug (660°F)	
E	Max temp male Plug (800°F)	
G	Solid pin plug (400°F)	
Н	Standard female jack (400°F)	
J	Miniature plug (400°F)	
K	Miniature jack (400°F)	
L	2" stripped leads w/#6 Ring terminals	
М	2 Standard male plugs (dual junctions) (400°F)	
N	Standard 3 pin plug w/ ground wire (400°F)	
Р	Dual molded male connector (400°F)	
w	2" stripped leads w/wire ferrules (pin terminals)	
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)	
006"-240"	006"-240" Specify in Inches	

9	Special features (Optional)	
Note	Leave blank for no special features	
01	Solid conductor (Lead wire)	
02	1.5" long strain relief spring	
03	1.5" long heat shrink where wire exits the probe	
04	Flat tip probe	
05	Drill point tip	
06	Epoxy seal (500°F)	
07	Cable clamp	
08	Bx Connector	
09	Mating connector	
11	International IEC 584-3 color coded leads	
12	British color coded leads	
13	German color coded leads	
14	Japanese color coded leads	
15	Reverse polarity color coded leads	
16	French color coded leads	
18	Moisture protection boot on connector	
Note	For color code chart see pg. 62	

INCHES	METRIC
THREADS PER INCH (TPI)	PITCH
<u></u>	_ [+]
*****	****
on	on
_ √	
MALE THREAD	MALE THREAD

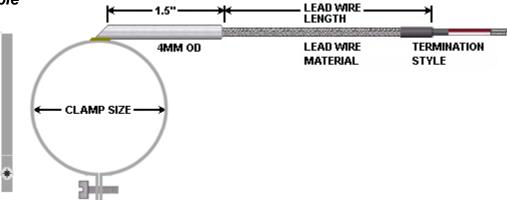
- 20 AWG stranded wire comes standard on nozzle bolt type thermocouples
- Bolt is free spinning on standard designs
- For custom thread lengths consult factory

See pg. 58 for more detail about termination styles

See pg. 65-66 for more detail about special features



Nozzle clamp thermocouple Style TG1



Ordering Information Part Number

I all IN	allibei					
① TG1	② Calibration	③ Clamp Size (mm)	4 Junction	⑤ Lead wire material	6 Lead Wire Length (In.)	7 Termination Style
TG1						

Optional

8 Special Features

2	Calibration
J	Type J (standard)
к	Туре К
Т	Туре Т
E	Туре Е

3	Clamp size (ID) (MM)
F	16MM
н	30MM
М	40MM
N	50MM
P	60MM
Q	70MM
Note	For other sizes consult factory

4	Junction
G	Grounded (standard)
U	Ungrounded

(5)	Lead wire material	
A	Fiberglass (800°F)	
В	Teflon FEP (400°F)	
С	Kapton (500°F)	
E	High temperature fiberglass (1200°F)	
F	Fiberglass with stainless steel braid (800°F) (standard)	
G	Teflon FEP with stainless steel braid (400°F)	
Н	Fiberglass with armor cable (800°F)	
J	Teflon FEP with armor cable (400°F)	
к	Kapton with armor cable (500°F)	
L	High temperature fiberglass with armor cable (1200°F)	
М	Fiberglass with stainless steel braid with armor cable (800°F)	
Note	Wire gauge determined by ECS based on sheath diameter	

	Over 600" contact factory
006"-600"	Specify in Inches
6	Lead wire length

7	Termination style
Α	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
G	Solid pin plug (400°F)
Н	Standard female jack (400°F)
J	Miniature plug (400°F)
К	Miniature jack (400°F)
L	2" stripped leads w/#6 Ring terminals
N	Standard 3 pin plug w/ ground wire (400°F)
w	2" stripped leads w/wire ferrules (pin terminals)
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

8	Special features (Optional)		
Note	Leave blank for no special features		
01	Solid conductor (Lead wire)		
02	1.5" long strain relief spring		
03	1.5" long heat shrink where wire exits the probe		
06	Epoxy seal (500°F)		
07	Cable clamp		
08	Bx Connector		
09	Mating connector		
11	International IEC 584-3 color coded leads		
12	British color coded leads		
13	German color coded leads		
14	Japanese color coded leads		
15	Reverse polarity color coded leads		
16	French color coded leads		
18	Moisture protection boot on connector		
Note	For color code chart see pg. 62		

- 20 AWG stranded wire comes standard on Nozzle clamp type thermocouples
- For other configurations contact factory

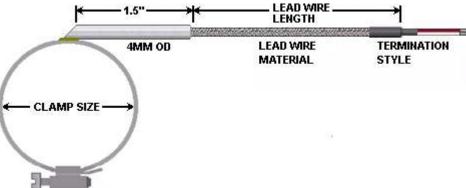
See pg. 58 for more detail about termination styles See pg. 65-66 for more detail about special features



Hose clamp thermocouple







Ordering Information Part Number

raitiv	rait Number					
① TG2	② Calibration	Clamp Size (inches)	4 Lead Wire Material	(5) Lead Wire Length (Inches)	⑤ Junction	Termination Style
TG2						

Optional

Optionic
8 Special Features

2	Calibration
J	Type J (standard)
К	Type K
Т	Туре Т
E	Type E

3	Clamp size
F	1/4" to 5/8"
н	5/8" to 1"
М	1" to 2"
N	2" to 3"
Р	3" to 4"
Q	4" to 5"
R	5" to 6"
s	6" to 7"
Т	5" to 8"
U	7" to 9"
V	9" to 11"
Note	Check with factory for custom sizes

4	Lead wire material
Α	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Kapton (500°F)
E	High temperature fiberglass (1200°F)
F	Fiberglass with stainless steel braid (800°F)
G	Teflon FEP with stainless steel braid (400°F)
Н	Fiberglass with armor cable (800°F)
J	Teflon FEP with armor cable (400°F)
К	Kapton with armor cable (500°F)
L	High temperature fiberglass with armor cable (1200°F)
М	Fiberglass with stainless steel braid with armor cable (800°F)

9	Lead wife length	
006"-600"	Specify in Inches	
Note	Over 600" contact factory	
6	Junction	
G	Grounded (standard)	
U	Ungrounded	

7	Termination style		
A	2" stripped leads (bare ends)		
В	2" stripped leads w/ spade lugs		
С	Standard male plug (400°F)		
D	High temp male Plug (660°F)		
E	Max temp male Plug (800°F)		
G	Solid pin plug (400°F)		
Н	Standard female jack (400°F)		
J	Miniature plug (400°F)		
К	Miniature jack (400°F)		
L	2" stripped leads w/#6 Ring terminals		
M	2 Standard male plugs (dual junctions) (400°F)		
N	Standard 3 pin plug w/ ground wire (400°F)		
Р	Dual molded male connector (400°F)		
w	2" stripped leads w/wire ferrules (pin terminals)		
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)		
006"-240"	006"-240" Specify in Inches		

•	20 AWG stranded wire comes s	tandard on hose	clamp type th	ermocouples
---	------------------------------	-----------------	---------------	-------------

- Most clamps come in 5/16" or 1/2" bandwidth
- For other configurations contact factory

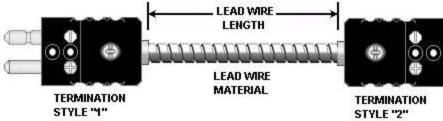
See pg. 58 for more detail about termination styles See pg. 65-66 for more detail about special features

8	Special features (Optional)
Note	Leave blank for no special features
01	Solid conductor (Lead wire)
02	1.5" long strain relief spring
03	1.5" long heat shrink where wire exits the probe
06	Epoxy seal (500°F)
07	Cable clamp
08	Bx Connector
09	Mating connector
11	International IEC 584-3 color coded leads
12	British color coded leads
13	German color coded leads
14	Japanese color coded leads
15	Reverse polarity color coded leads
16	French color coded leads
18	Moisture protection boot on connector
Note	For color code chart see pg. 62



Extension cable (Thermocouple)

Style TH1



Ordering Information Part Number

① TH1	② Calibration	③ Lead Wire Material	4 Termination Style "1"	⑤ Lead wire Length (In.)	⑥ Termination Style "2"
TH1					

⑦ Special Features	

2	Calibration
J	Type J
к	Туре К
Т	Туре Т
E	Туре Е
w	Type J (Dual)
х	Type K (Dual)
Υ	Type T (Dual)
Z	Type E (Dual)

3	Lead wire material	
Α	Fiberglass (800°F)	
В	Teflon FEP (400°F)	
С	Kapton (500°F)	
D	PVC (220°F)	
E	High temperature fiberglass (1200°F)	
F	Fiberglass with stainless steel braid (800°F)	
G	Teflon FEP with stainless steel braid (400°F)	
Н	Fiberglass with armor cable (800°F)	
J	Teflon FEP with armor cable (400°F)	
K	Kapton with armor cable (500°F)	
L	High temperature fiberglass with armor cable (1200°F)	
М	Fiberglass with stainless steel braid with armor cable (800°F)	
N	10" coil cord (extends to approx. 6ft) (220°F)	
P	24" coil cord (extends to approx. 14ft) (220°F)	
Q	Ceramic fiber with Inconel braid (2100°F)	
R	Teflon FEP with aluminum shield and drain wire	
s	Clear FEP coated stainless steel braid	
w	Teflon with stainless steel braid with armor cable (400°F)	
Note	Wire gauge determined by ECS based on sheath diameter	

•	Termination style 1			
A	2" stripped leads (bare ends)			
В	2" stripped leads w/ spade lugs			
С	Standard male plug (400°F)			
D	High temp male Plug (660°F)			
E	Max temp male Plug (800°F)			
F	Ceramic male plug (1200°F)			
G	Solid pin plug (400°F)			
н	Standard female jack (400°F)			
J	Miniature plug (400°F)			
К	Miniature jack (400°F)			
L	2" stripped leads w/#6 Ring terminals			
М	2 Standard male plugs (dual junctions) (400°F)			
N	Standard 3 pin plug w/ ground wire (400°F)			
Р	Dual molded male connector (400°F)			
R	High temp female jack (660°F)			
s	Max temp female jack (800°F)			
Т	Ceramic female jack (1200°F)			
w	2" stripped leads w/wire ferrules (pin terminals)			
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)			
006"-240"	006"-240" Specify in Inches			

(5)	Lead wire length
012"-600"	Specify in Inches
Note	Over 600" contact factory
	over too contact factory

6	Termination style "2"
Α	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
F	Ceramic male plug (1200°F)
G	Solid pin plug (400°F)
н	Standard female jack (400°F)
J	Miniature plug (400°F)
K	Miniature jack (400°F)
L	2" stripped leads w/#6 Ring terminals
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
Р	Dual molded male connector (400°F)
R	High temp female jack (660°F)
s	Max temp female jack (800°F)
Т	Ceramic female jack (1200°F)
w	2" stripped leads w/wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

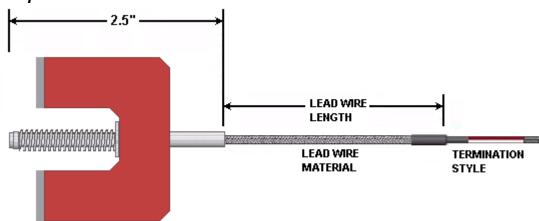
7	Special features (Optional)	
Note	Leave blank for no special features	
01	Solid conductor (Lead wire)	
07	Cable clamp	
08	Bx Connector	
11	International IEC 584-3 color coded leads	
12	British color coded leads	
13	German color coded leads	
14	Japanese color coded leads	
15	Reverse polarity color coded leads	
16	French color coded leads	
18	Moisture protection boot on connector	
21	Teflon coated armor cable	
Note	For color code chart see pg. 62	

See page 58 for more detail about termination styles
See page 65-66 for more detail about special features



Magnet mount thermocouple

Style TJ1



Ordering Information Part Number

① TJ1	(2) Calibration	3 Sheath Diameter	(4) Sheath Configuration	5 Junction	6 Lead wire material	⑦ Lead wire Length (ln.)	8 Termination Style
TJ1							

Optional
9 Special Features

2	Calibration
J	Type J
K	Type K
Т	Туре Т
E	Type E

3	Sheath Diameter
F	.188" (4.6mm) (3/16")

4	Sheath Configuration	
w	Straight (standard)	
х	90 degree bend	
Υ	45 degree bend	

(5)	Junction	
G	Grounded (standard)	
U	Ungrounded	
w	Grounded (Dual Junction)	
z	Ungrounded (Dual Junction)	

6	Lead wire material
A	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Kapton (500°F)
F	Fiberglass with stainless steel braid (800°F)
G	Teflon with stainless steel braid (400°F)
Н	Fiberglass with armor cable (800°F)
J	Teflon FEP with armor cable (400°F)
K	Kapton with armor cable (500°F)
Note	Wire gauge determined by ECS based on sheath diameter

016"-600" Note	Over 600" contact factory
016"-600"	Specify in Inches (2.5" Standard)
7	Lead wire length

8	Termination style
A	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
G	Solid pin plug (400°F)
н	Standard female jack (400°F)
J	Miniature plug (400°F)
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
w	2" stripped leads w/wire ferrules (pin terminals)
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

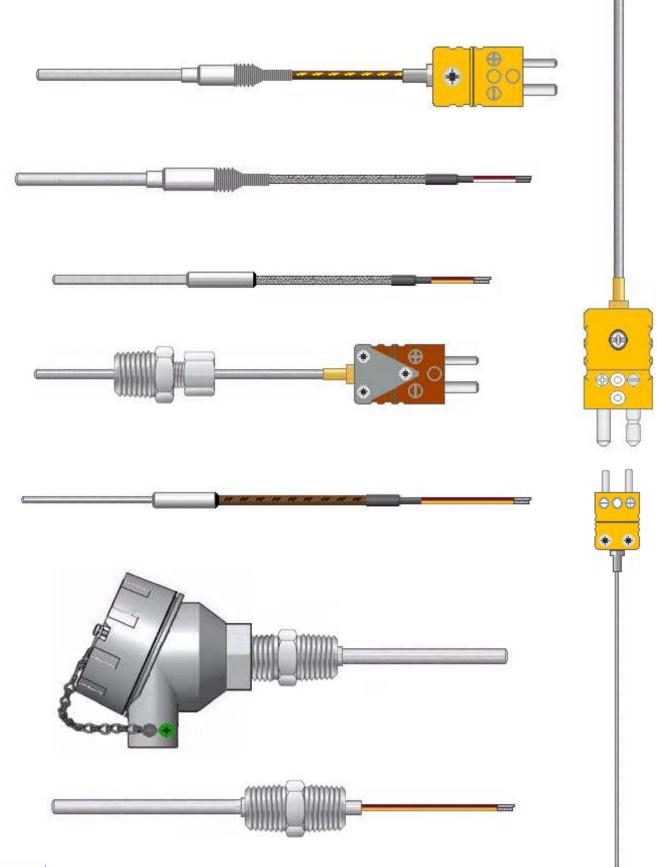
9	Special features (Optional)		
Note	Leave blank for no special features		
01	Solid conductor (Lead wire)		
02	1.5" long strain relief spring		
03	1.5" long heat shrink where wire exits the probe		
06	Epoxy seal (500°F)		
07	Cable clamp		
08	Bx Connector		
09	Mating connector		
11	International IEC 584-3 color coded leads		
12	British color coded leads		
13	German color coded leads		
14	Japanese color coded leads		
15	Reverse polarity color coded leads		
18	Moisture protection boot on connector		
Note	For color code chart see pg. 62		

- 20 AWG stranded wire comes standard on magnetic thermocouples
- Standard magnet has 26 lb pull
- For other configurations contact factory
- Thermocouple is spring loaded and has a flat tip to ensure good surface measurement

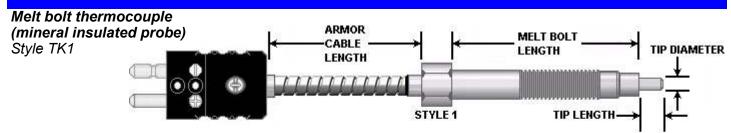
See page 58 for more detail about termination styles
See page 65-66 for more detail about special features



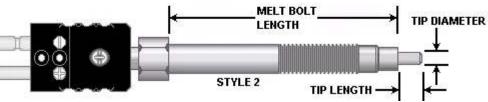
Mineral insulated Thermocouples (MGO)







ECS standard melt bolt thermocouples are mineral insulated for better tip sensitivity and durability



Ordering Information Part Number

① TK1	② Melt bolt style	③ Melt bolt Length (In.)	(4) Calibration	⑤ Tip Diameter (In.)	(In.)	⑦ Tip Material	8 Junction	Armor cable length (ln.)	① Termination style
TK1									

2	Melt bolt style		
Α	Style 1		
В	Style 2		

3	Melt bolt length (inches)	
3	3"	
4	4"	
6	6"	
7	7"	
9	9"	
12	12"	
14	14"	

4	Calibration
J	Type J (standard)
к	Туре К
Т	Туре Т
E	Type E
w	Type J (special limits)
х	Type K (special limits)
Y	Type T (special limits)
Z	Type E (special limits)

(5)	Tip Diameter (in.)
L	.125"OD (standard)
М	.188"OD
Note	For flush tip use code "L"

6	Tip Length
Т	Flush
U	1/4"
٧	3/8" (standard)
w	1/2"
x	5/8"
Υ	3/4"
Z	1"
7	Tip Material (Sheath only)
V	Tip material (Sileath Only)

0	Tip material (Shouth Shij)	
F	304 SS (standard)	
Н	316 SS	
M	Inconel (600)	
N	446 SS	
Р	310 SS	
Q	Hastelloy	
R	Pyrosil D	
8	Junction	

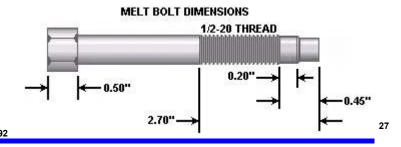
G	Grounded (Single) (standard)	
U	Ungrounded (Single)	
E	Exposed (Single)	
w	Grounded (Dual)	
x	Ungrounded & Isolated (Dual)	
Υ	Ungrounded Common (Dual)	
Z Exposed & Isolated (Dual)		

9	Armor cable length (Inches)	
х	lo flex armor (Style 2)	
F	4" (standard) (melt bolt style 1 only)	
002"-600"	For other lengths specify in Inches (melt bolt style 1 only)	
Note Over 600" contact factory		

10	Termination style			
A	" stripped leads (bare ends)			
С	Standard male plug (400°F)			
D	High temp male Plug (660°F)			
E	Max temp male Plug (800°F)			
G	Solid pin plug (400°F)			
Н	Standard female jack (400°F)			
М	2 Standard male plugs (dual junctions) (400°F)			
N	Standard 3 pin plug w/ ground wire (400°F)			
Р	Dual molded male connector (400°F)			

1	Special features (Optional)	
Note	Leave blank for no special features	
07	Cable clamp	
08	X Connector	
09	Mating connector	
18	Moisture protection boot on connector	
23	304SS tag with part # engraved	
Note	For color code chart see pg. 62	

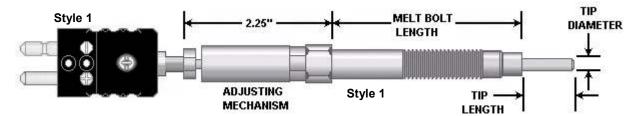
- See page 68 for more detail about termination styles
- See page 70-71 for more detail about special features

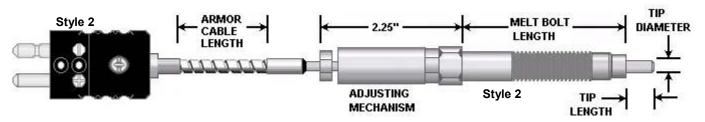




Adjustable melt bolt type thermocouple (mineral insulated probe)

Style TK2





Ordering Information Part Number

① TK2	② Melt bolt style	③ Melt bolt Length (ln.)	(4) Calibration	⑤ Tip Diameter (In.)	(In.)	⑦ Tip Material	8 Junction	Armor cable length (ln.)	(i) Termination style
TK2					Α				

2	Melt bolt style
С	Style 1
D	Style 2

3	Melt bolt length (inches)
3	3"
4	4"
6	6"
7	7"
9	9"
12	12"
14	14"

4	Calibration
J	Type J (standard)
к	Туре К
Т	Туре Т
E	Type E
w	Type J (special limits)
x	Type K (special limits)
Υ	Type T (special limits)
Z	Type E (special limits)

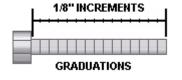
⑤	Tip Diameter (in.)
L	.125"OD (standard)
М	.188"OD

Α	Adjusts from flush to 1"	
7	Tip Material (Sheath only)	
F	304 SS (standard)	
Н	316 SS	
M	Inconel (600)	
N	446 SS	
Р	310 SS	
Q	Hastellov	

Tip Length (in.)

Pyrosil D

8	Junction	
G	Grounded (Single) (standard)	
U	Ungrounded (Single)	
E	Exposed (Single)	
w	Grounded (Dual)	
X	Ungrounded & Isolated (Dual)	
Υ	Ungrounded Common (Dual)	
Z	Exposed & Isolated (Dual)	



9	Armor cable length (Inches)			
X	No flex armor (Style 1)			
F	4" (standard) (melt bolt style 1 only)			
002"-600"	For other lengths specify in Inches (melt bolt style 2 only)			
Note	Over 600" contact factory			

10	Termination style
Α	2" stripped leads (bare ends)
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
G	Solid pin plug (400°F)
Н	Standard female jack (400°F)
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
Р	Dual molded male connector (400°F)
•	Data molded male defined of (400 T)

11)	Special features (Optional)					
Note	Leave blank for no special features					
07	Cable clamp					
08	BX Connector					
09	Mating connector					
18	Moisture protection boot on connector					
23	304SS tag with part # engraved					
Note	For color code chart see pg. 62					

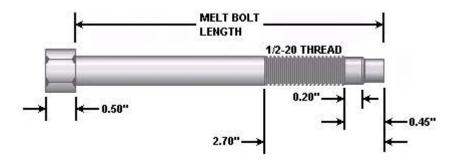
ECS standard melt bolt thermocouples are mineral insulated for better tip sensitivity and durability

- See page 68 for more detail about termination styles
- See page 70-71 for more detail about special features



R

Blank melt bolt (no sensor) Style TK3



Ordering Information

Part Number

① TK3	② Melt bolt style	③ Melt bolt Length (In.)	④ Bolt Material
TK3			

2	Melt bolt style
E	Blank bolt

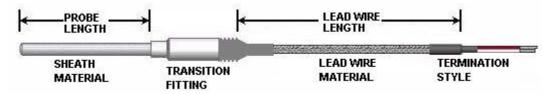
3	Melt bolt length (inches)
3	3"
4	4"
6	6"
7	7"
9	9"
12	12"
14	14"

4	Tip Material (Sheath only)
F 304 SS (standard)	
H 316 SS	
М	INCONEL (600)
N	446 SS
Р	310 SS
Q	Hastelloy

- Solid blank melt bolt (no hole)
- 1/2-20 thread
- For other configurations contact factory

Mineral insulated thermocouple w/ lead wires

Style TL1



Ordering Information Part Number

Optional

① TL1	(2) Calibration	3 Sheath Diameter	(4) Sheath Material	Sheath Length (whole In.)	© Sheath Length (Frac.in.)	7 Junction	8 Transition fitting	9 Lead wire material	Lead wire Length (In.)	Termination Style	5pecial Features	Insertion Length (whole in.)	(5) Insertion Length (Frac.in.)
TL1													

2	Calibration
J	Type J
K	Туре К
T	Туре Т
E	Type E
w	Type J (special limits)
х	Type K (special limits)
Υ	Type T (special limits)
Z	Type E (special limits)

(3)	Sheath Diameter
A	
A	.032" (0.8mm)
В	.040" (1mm)
С	.059" (1.5mm)
D	.062" (1.6mm) (1/16")
E	.079" (2mm)
F	.092" (2.3mm)
G	.118" (3mm)
Н	.125" (3.2mm) (1/8")
J	.156" (4mm)
K	.177" (4.5mm)
L	.188" (4.6mm) (3/16")
М	.236 (6mm)
N	.250" (6.4mm) (1/4")
Р	.314" (8mm) (5/16")
Q .375" (9.5mm) (3/8")	
Note	Sizes for reference only (standard tolerances apply)
Note	For other diameters consult factory

	-
4	Sheath Material
F	304 SS
Н	316 SS
М	INCONEL (600)
N	446 SS
Р	310 SS
Q	Hastelloy
R	Pyrosil D

001"-144"	Specify in Inches
6	Sheath Length (fractional in.)
Α	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
	=

Sheath Length (whole in.)

7	Junction			
G	Grounded (Single)			
U	Ungrounded (Single)			
E	Exposed (Single)			
R	Exposed & Recessed (Single)			
w	Grounded (Dual)			
x	Ungrounded & Isolated (Dual)			
Υ	Ungrounded Common (Dual)			
Z	Exposed & Isolated (Dual)			
Note	Ungrounded & Isolated (option "X") only available in .156"OD & larger			

8	Transition Fitting	
1	3/8"OD X 1.25" w/ spring (standard)	
2	1/4"OD X 1.25" w/ spring	
3	3/16"OD X 1" w/ spring	
4	3/8"OD X 1.25" (no spring)	
5	1/4"OD X 1.25" (no spring)	
6	3/16"OD X 1" (no spring)	
Note	500°F epoxy standard See special features on next page for ceramic potting	
Note		

Lead wire material				
Fiberglass (800°F)				
Teflon FEP (400°F)				
Kapton (500°F)				
PVC (220°F)				
High temperature fiberglass (1200°F)				
Fiberglass with stainless steel braid (800°F)				
Teflon FEP with stainless steel braid (400°F)				
Fiberglass with armor cable (800°F)				
Teflon FEP with armor cable (400°F)				
Kapton with armor cable (500°F)				
High temperature fiberglass with armor cable (1200°F)				
Fiberglass with stainless steel braid with armor cable (800°F)				
Wire gauge determined by ECS based on sheath diameter				
Lead wire length (In.)				

9					
006"-600"	Specify in Inches				
Note	Over 600" contact factory				
11)	Termination style				
Α	2" stripped leads (bare ends)				
В	2" stripped leads w/ spade lugs				
С	Standard male plug (400°F)				
D	High temp male Plug (660°F)				
E	Max temp male Plug (800°F)				
F	Ceramic male plug (1200°F)				
G	Solid pin plug (400°F)				
Н	Standard female jack (400°F)				
J	Miniature plug (400°F)				
κ	Miniature jack (400°F)				
L	2" stripped leads w/ #6 Ring terminals				
М	2 Standard male plugs (dual junctions) (400°F)				
N	Standard 3 pin plug w/ ground wire (400°F)				
Р	Dual molded male connector (400°F)				
w	2" stripped leads w/ wire ferrules (pin terminals)				
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)				

006"-240" Specify in Inches

006"-240"

12	Special features (optional)
Note	See next page
13	Attached Fitting (optional)
Note	See next page
14	Insertion length (whole in.)
Note	See next page
(15)	Insertion Length (fractional in.)
Note	See next page

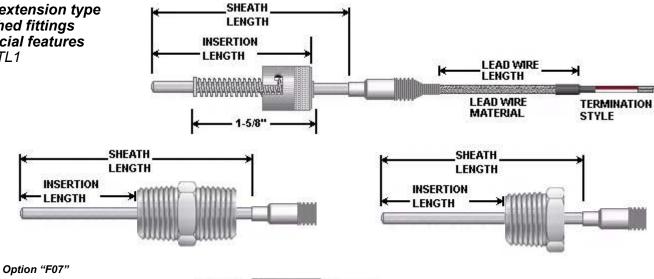
See next page for optional attached fittings & special features (Fields 12,13,14,&15)

For 90 degree bend see special features section on next page

- Solid wire is standard on MGO extension thermocouples
- For stranded wire see next page special features



MGO extension type Attached fittings & special features Style TL1











Ordering Information Part Number





Option "F16" Adjustable bayonet cap fitting

previous page				
(2)	Special features (Optional)			
Note	Add "00" for no special features			
00	No special features			

Continue part number from

12	Special features (Optional)				
Note	Add "00" for no special features				
00	No special features				
01	Stranded conductor (Lead wire)				
04	Flat tip probe				
07	Cable clamp				
08	Bx Connector				
09	Mating connector				
10	Armor cable adaptor				
11	International IEC 584-3 color coded leads				
12	British color coded leads				
13	German color coded leads				
14	Japanese color coded leads				
15	Reverse polarity color coded leads				
16	French color coded leads				
18	Moisture protection boot on connector				
19	High temp ceramic potting (1200°F)				
21	Teflon coated armor cable (FEP Teflon)				
24	Teflon covered probe				
25	Free spinning fitting (held on probe by a crimp ring)				
28	90 degree bend				
Note	For color code chart see pg.62				

13	Attached Fitting (Optional)				
F00	For no attached fitting				
F01	1/8"npt single thread				
F02	1/4"npt single thread				
F03	3/8"npt single thread				
F04	1/2"npt single thread				
F05	3/4"npt single thread				
F06	1/2"npt x 1/2"npt double thread				
F07	1/2"npt double thread spring loaded				
F08	1/2"npt x 1/2"npt double thread spring loaded w/oil seal				
F09	1/2"npt x 3/4"npt double thread				
F10 3/4"npt x 3/4"npt double thread					
F11 Fixed bayonet cap assembly					
F14 1/2"npt x 1"npt double thread					
F15	1"npt single thread				
F16	Adjustable 7/16"ID bayonet cap fitting (1/8"OD & 3mm OD)				
F17	Adjustable 12.5mm ID double slot bayonet cap fitting (1/8"OD & 3mm OD)				
F18	1/8"npt compression fitting (Brass)				
F19	1/8"npt compression fitting (Stainless steel)				
F20	1/4"npt compression fitting (Brass)				
F21	1/4"npt compression fitting (Stainless steel)				
Note	te For other fittings not shown contact factory				

	14	Insertion Length (in.) (optional)			
	001"-144"	Specify in Inches			
_	Note	See pg.68-69 for attached fitting illustrations			
-		Observation I amount to			

15	Sheath Length (fractional in.)
Α	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"

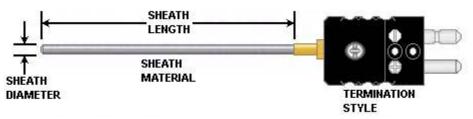


Option "19" High temp ceramic potting

- See page 68 for more detail about termination styles
- See page 70-71 for more detail about special features



Rigid mineral insulated thermocouple Style TM1



Features

Ordering Information Part Number

① TM1	2 Calibration	3 Sheath Diameter	4 Sheath Material	Sheath Length (whole In.)	6 Sheath Length (fractional In.)	7 Junction	8 Termination Style
TM1							

Optional				
10 Attached Fitting	(1) Insertion Length (whole in.)	Insertion Length (Frac.in.		

2	Calibration
J	Type J
К	Туре К
Т	Туре Т
E	Туре Е
w	Type J (special limits)
х	Type K (special limits)
Y	Type T (special limits)
z	Type E (special limits)

Sheath Length

001"-360" Specify in Inches

7	Junction
G	Grounded (Single)
U	Ungrounded (Single)
E	Exposed (Single)
w	Grounded (Dual)
х	Ungrounded & Isolated (Dual)
Υ	Ungrounded Common (Dual)
z	Exposed & Isolated (Dual)
Note	Ungrounded & Isolated (option "X") only available in .188"OD & larger

Special features (optional)
See next page
Attached Fitting (optional)
See next page
Insertion length (whole in.)
See next page
Insertion Length (frac.in.)
See next page

3	Sheath Diameter
Α	.032" (0.8mm)
В	.040" (1mm)
С	.059" (1.5mm)
D	.062" (1.57mm) (1/16")
E	.079" (2mm)
F	.092" (2.3mm)
G	.118" (3mm)
Н	.125" (3.2mm) (1/8")
L	.188" (4.6mm) (3/16")
N	.250" (6.4mm) (1/4")

Note	Over 360" contact factory	
6	Sheath Length (fractional in.)	
Α	0	
В	1/8"	
С	1/4"	
D	3/8"	
E	1/2"	
F	5/8"	
G	3/4"	
Н	7/8"	

8	Termination style
С	Standard male plug (400°F)
D	High temp male Plug (660°F)
E	Max temp male Plug (800°F)
F	Ceramic male plug (1200°F)
G	Solid pin plug (400°F)
н	Standard female jack (400°F)
J	Miniature plug (400°F)
K	Miniature jack (400°F)
М	2 Standard male plugs (dual junctions) (400°F)
N	Standard 3 pin plug w/ ground wire (400°F)
Р	Dual molded male connector (400°F)

See next page for optional attached fittings & special features (Fields 9,10,11 & 12)

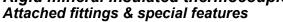
See pg. 58 for compression fittings

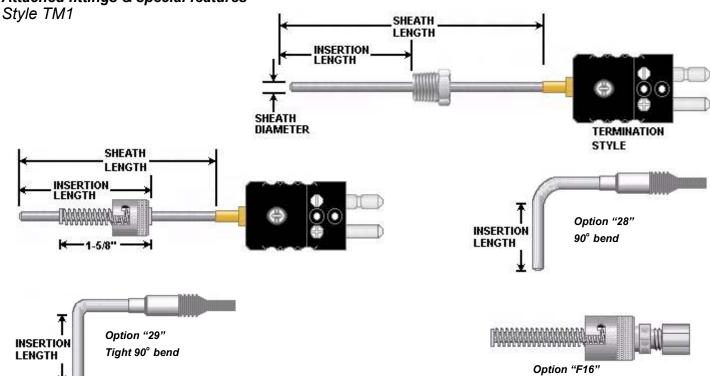
See pg. 65-66 for more detail about termination styles

See pg. 70-71 for more detail about special features



Rigid mineral insulated thermocouple





Ordering Information

Part Number

Continue part number from previous page

9 Special Features	4ttached Fitting	Insertion Length (whole in.)	Insertion Length (Frac.in.)

9	Special features (Optional)
Note	Add "00" for no special features
00	No special features
04	Flat tip probe
05	Drill point tip
09	Mating connector
18	Moisture protection boot on connector
24	Teflon covered probe
25	Free spinning fitting (held on probe by a crimp ring)
28	90 degree bend
29	Tight 90 degree bend (block bender)

See pg. 58 for compression fittings

See pg. 65-66 for more detail about termination styles

See pg. 70-71 for more detail about special features

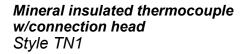
10	Attached Fitting type (optional)	
Note	Leave blank for no attached fitting	
F01	1/8"npt single thread	
F02	1/4"npt single thread	
F03	3/8"npt single thread	
F04	1/2"npt single thread	
F05	3/4"npt single thread	
F06	1/2"npt x 1/2"npt double thread	
F07	1/2"npt double thread Spring loaded	
F08	1/2"npt x 1/2"npt double thread Spring loaded w/oil seal	
F09	1/2"npt x 3/4"npt double thread	
F10	3/4"npt x 3/4"npt double thread	
F11	Fixed 7/16"ID bayonet cap assembly (on MGO probe) (1/8"OD, 3mmOD & 3/16"OD)	
F15	1"npt single thread	
F16	Adjustable 7/16"ID bayonet cap fitting (1/8"OD & 3mm OD)	
F17	Adjustable 12.5mm ID double slot bayonet cap fitting (1/8"OD & 3mm OD)	
F18	1/8"npt compression fitting (Brass)	
F19	1/8"npt compression fitting (Stainless steel)	
F20	1/4"npt compression fitting (Brass)	
F21	1/4"npt compression fitting (Stainless steel)	
Note	For other fittings not shown contact factory	

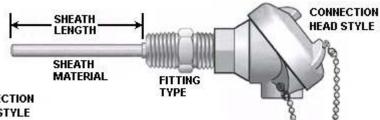
111	Insertion Length (in.) (optional)	
001"-144"	Specify in Inches	
Note	See pg. 61 for attached fitting illustrations	

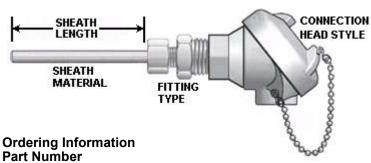
Adjustable bayonet cap fitting

12	Insertion Length (fractional in.)
A	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"









TN1 Calibration Sheath Diameter Sheath Config. Sheath (whole In.) (fractional In.) (fractional In.) Sheath (whole In.) (fractional In.) (fractional

1) pecial eatures	Transmitter temperature range	3 Scale of Temperature

Optional

2	Calibration
J	Type J (standard)
к	Type K
Т	Type T
E	Type E
w	Type J (special limits)
х	Type K (special limits)
Υ	Type T (special limits)
z	Type E (special limits)

TN1

3	Sheath Diameter
Н	.125" (3.2mm) (1/8")
L	.188" (4.6mm) (3/16")
N	.250" (6.4mm) (1/4")
Q	.375" (9.5mm) (3/8")

4	Sheath Configuration
w	Straight (standard)
X	90 degree bend
Υ	45 degree bend

(5)	Sheath Material
F	304 SS (standard)
н	316 SS
М	INCONEL (600)
N	446 SS
Р	310 SS
Q	Hastelloy
R	Pyrosil D

w .	Shouth Longar (Whole III.)
001"-144"	Specify in Inches
7	Sheath Length (fractional in.)
A	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"
	lunation

Note	Ungrounded & Isolated (option "X") only available in .156"OD & larger
Z	Exposed & Isolated (Dual)
Υ	Ungrounded Common (Dual)
х	Ungrounded & Isolated (Dual)
w	Grounded (Dual)
R	Exposed & Recessed (Single)
E	Exposed (Single)
U	Ungrounded (Single)
و	Grounded (Single)

9	Fitting type
6	1/2"npt x 1/2"npt double thread
7	1/2"npt double thread Spring loaded
8	1/2"npt x 1/2"npt double thread spring loaded w/oil seal
9	1/2"npt x 3/4"npt double thread
10	3/4"npt x 3/4"npt double thread
12	Single threaded brass compression fitting (no process thread)
13	Single threaded stainless compression fitting (no process thread)
14	1/2"npt x 1"npt double thread
Note	Fittings silver soldered (brazed) to sheath
Note	For other fittings not shown contact factory

10	Connection Head Style
A	Cast Aluminum (standard)
В	Small cast Aluminum
С	Flip top head cast aluminum
D	Cast steel
E	Stainless Steel
F	Cast Iron
G	Polypropylene
н	Explosion proof cast aluminum
Q	Explosion proof 316 Stainless steel

11)	Special features (Optional)
Note	Leave blank for no special features
04	Flat tip probe
17	4/20 Milliamp transmitter (hockey puck style)
24	Teflon covered probe

12	Transmitter temperature range (Optional)
0-0000	Specify temperature range (example: 0-1200°F)

13	Scale of temperature (Optional)
F	(°F) Fahrenheit
С	(°C) Celsius



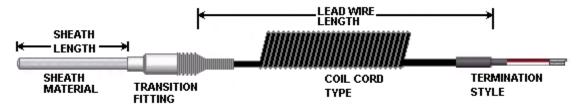
For Low profile, basic programmable 4/20 MA transmitter see option "17" in special features.

(not available w/ small cast aluminum head)



Mineral insulated thermocouple w/ coil cord

Style TW1



Ordering Information Part Number

① TW1	② Calibration	3 Sheath Diameter	(4) Sheath Material	Sheath Length (whole In.)	© Sheath Length (Frac.ln.)	Junction	8 Transition fitting	© Coil cord type	(i) Lead wire Length (in.)	Termination Style
TW1										

Sheath Length (whole in.)

2	Calibration			
J	Type J			
K	Туре К			
Т	Туре Т			
E	Type E			
w	Type J (special limits)			
X	Type K (special limits)			
Υ	Type T (special limits)			
Z	Type E (special limits)			

3	Sheath Diameter
D	.062" (1.6mm) (1/16")
E	.079" (2mm)
F	.092" (2.3mm)
G	.118" (3mm)
Н	.125" (3.2mm) (1/8")
J	.156" (4mm)
K	.177" (4.5mm)
L	.188" (4.6mm) (3/16")
М	.236 (6mm)
N	.250" (6.4mm) (1/4")
Note	Sizes for reference only (standard tolerances apply)
Note	For other diameters consult factory

4	Sheath Material
F	304 SS
Н	316 SS
М	INCONEL (600)
N	446 SS
P	310 SS
Q	Hastelloy
R	Pyrosil D

001"-144"	Specify in Inches			
6	Sheath Length (fractional in.)			
Α	0			
В	1/8"			
С	1/4"			
D	3/8"			
E	1/2"			
F	5/8"			
G	3/4"			
Н	7/8"			
7	Junction			
G	Grounded (Single)			
U	Ungrounded (Single)			
E	Exposed (Single)			
R	Exposed & Recessed (Single)			

8	Transition Fitting
1	3/8"OD X 1.25" w/ spring (standard)
4	3/8"OD X 1.25" (no spring)
Note	500°F epoxy standard

9	Coil cord type
N	10" coil cord (extends to approx. 6ft) (220°F)
Р	24" coil cord (extends to approx. 14ft) (220°F)

	10	Lead wire length (ln.)
	006"-600"	Specify in Inches
	Note	Over 600" contact factory

111	Termination style	
Α	2" stripped leads (bare ends)	
B 2" stripped leads w/ spade lugs		
С	Standard male plug (400°F)	
G	Solid pin plug (400°F)	
Н	Standard female jack (400°F)	
J	Miniature plug (400°F)	
K Miniature jack (400°F)		
L 2" stripped leads w/ #6 Ring terminals		
W 2" stripped leads w/ wire ferrules (pin terminals)		

12	Special features (Optional)			
Note	Leave blank for no special features			
05	Drill point tip			
07	Cable clamp			
08	Bx Connector			
09	Mating connector			
18	Moisture protection boot on connector			
24	Teflon covered probe			

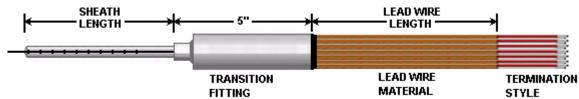
See page 58 for compression fittings

See page 65-66 for more detail about termination styles

See page 70-71 for more detail about special features



Multipoint thermocouple Style TMP1



Ordering Information Part Number

① TMP1	② Calibration	3 Sheath Diameter	4 Sheath Material	Sheath Length (whole In.)	© Sheath Length (Fractional. In.)	7 Junction	8 Transition fitting	9 Lead wire material	10 Lead wire Length	11) Termination Style
TMP1										

2	Calibration
J	Type J
K	Туре К
w	Type J (special limits)
х	Type K (special limits)

3	Sheath Diameter
Н	.125" (3.2mm) (1/8")
L	.188" (4.6mm) (3/16")
N	.250" (6.4mm) (1/4")
Note	Sizes for reference only (standard tolerances apply)
Note	For other diameters consult factory

4	Sheath Material
F	304 SS
Н	316 SS
М	INCONEL (600)

(5)	Sheath Length (whole in.)
001"-144"	Specify in Inches

6	Sheath Length (fractional in.)
A	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"

See page 65-66 for more detail about termination styles

7	Junction
G	Grounded
U	Ungrounded

8	Transition fitting
х	18MM OD X 5" Long

9	Lead wire material
Α	Fiberglass solid (800°F)
В	Teflon solid (400°F)
С	Kapton solid (500°F)
Note	Wire gauge determined by ECS based on sheath diameter

10	Lead wire length
006"-300"	Specify in Inches
Note	Over 600" contact factory

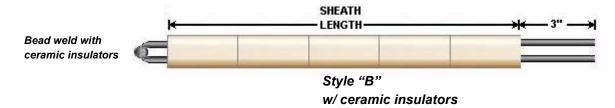
111	Termination style
A	2" stripped leads (bare ends)
В	2" stripped leads w/ spade lugs
С	Standard male plug (400°F)
G	Solid pin plug (400°F)
Н	Standard female jack (400°F)
J	Miniature plug (400°F)
К	Miniature jack (400°F)
w	2" stripped leads w/ wire ferrules (pin terminals)

Points	Point locations (From tip)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Note	Fill in each point location in inches from tip (ex. 06" = 6" from tip)
Note	For a junction at the tip fill in "tip"



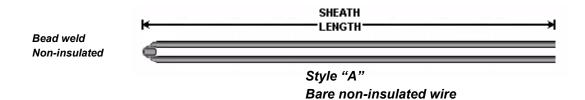
Base Metal Style

TX1 Series



Twisted weld with ceramic insulators

Style "B" w/ ceramic insulators



Ordering Information Part Number

① TX1	② Calibration	③ Style	Wire Gauge	(5) Weld type	© Sheath Length (Whole In.)
TX1					

2	Calibration
J	J
К	К

3	Style
A	Non insulated (bare wires)
В	Oval ceramic insulator
С	Round ceramic insulator

4	Wire Gauge
08	8 gauge
14	14 gauge

(5)	Weld type
F	Bead weld
н	Twisted weld

6	Sheath Length (whole in.)
012"-060"	Specify in Inches
Note	For other configurations not shown contact factory



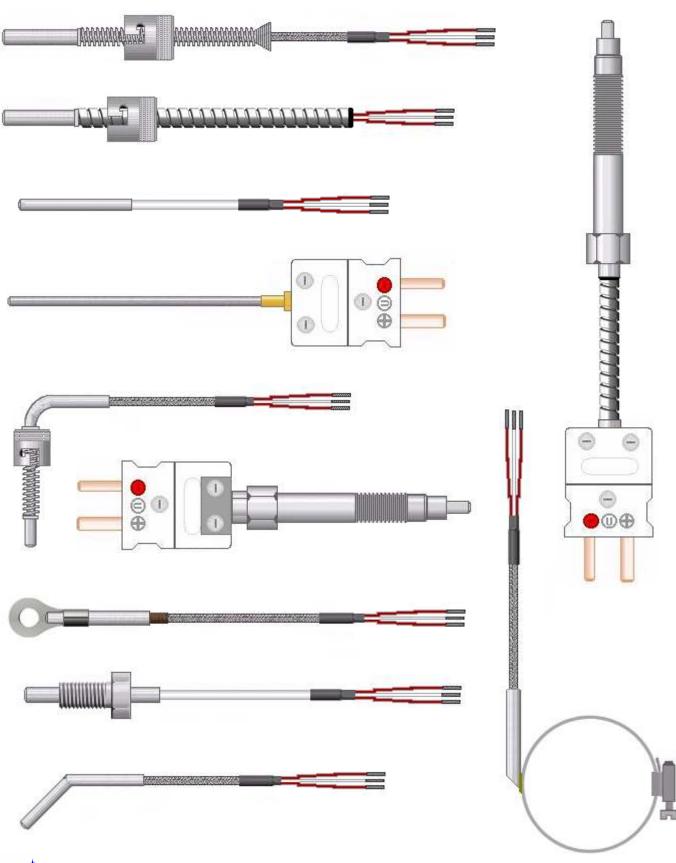
Option "B" Oval shaped ceramic insulator



Option "C" Round shaped ceramic insulator

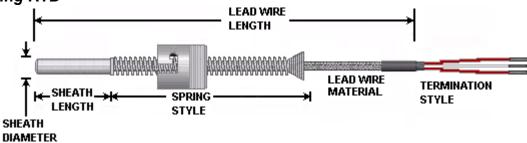


General purpose tube & wire RTDs



Adjustable bayonet Spring RTD





Ordering Information Part Number

Optional

F	① RA1	② Element Type	③ Element Accuracy	Wire Configuration	Sheath Diameter	6 Sheath Length (In.)	⑦ Lead Wire Material	8 Lead wire Length (ln.)	9 Cap Size	© Spring Style	Termination Style	② Special Features
F	RA1											

2	Element type		
Т	100 Ω DIN 00385 (thin film)		
U	500 Ω DIN 00385 (thin film)		
w	1000 Ω DIN 00385 (thin film)		
x	120 Ω Nickel DIN 00672 (thin film)		
Υ	100 Ω DIN 003916 (wire wound)		
Z	500 Ω DIN 003916 (wire wound)		

6	Sheath Length (inches)		
R 1/4"			
s	3/8" (standard)		
w	1/2"		
х	5/8"		
Υ	3/4"		
Z	1"		

100	Termination style
A	2" stripped leads (bare ends) (standard)
В	2" stripped leads w/ #8 spade lugs
С	Standard male 2 pin plug (400°F)
D	Standard male 3 pin plug (400°F)
F	Standard 2 pin female jack (400°F)
G	Standard 3 pin female jack (400°F)
Н	Miniature male 2 pin plug (400°F)
I	Miniature male 3 pin plug (400°F)
J	Miniature female 2 pin jack (400°F)
K	Miniature female 3 pin jack (400°F)
w	2" stripped leads w/wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

Special features (Optional)

3	Element Accuracy (0 °C)
Α	Class A (0.06%)
В	Class B (0.12%)

Lead wire material
Fiberglass (800°F)
Teflon FEP (400°F)
Fiberglass with stainless steel braid (800°F)
Teflon FEP with stainless steel braid (400°F)

4	Wire Configuration	
2	2-wire	
3	3-wire	
4	4-wire	
5	2-wire (Dual)	
6	3-wire (Dual)	

8	Lead wire length	
012-600"	Specify in Inches	
Note	Over 600" contact factory	

	Note	Leave blank for no special features			
	04	Flat tip probe			
_	05	Drill point tip			
_	06 Epoxy seal (500°F)				
	07	Cable clamp			
	08	Bx Connector			
	09	Mating connector			
╛	18	Moisture protection boot on connector			

(5)	Sheath Diameter		
G	.118" (3mm)		
Н	.125" (3.2mm) (1/8")		
J	.156" (4mm)		
L	.188" (4.6mm) (3/16")		
М	.236 (6mm)		
N	.250" (6.4mm) (1/4")		
Р	.314" (8mm) (5/16")		
Note	For reference only (standard tolerances apply)		
Note	For other diameters consult factory		

Cap/ Spring style	
7/16" ID single slot (standard cap) / 1/4"OD x 10" spring	
12.5 mm ID double slot / 1/4"OD x 10" spring	
14.7 mm ID double slot / 1/4"OD x 10" spring	
7/16" ID single slot (standard cap) / 1/4"OD x 6" spring	
12.5 mm ID double slot / 1/4"OD x 6" spring	
14.7 mm ID double slot / 1/4"OD x 6" spring	

•	Adiustable spring	style RTDs fit a	ı wide varietv d	of hole depths

- Cap spins over entire length of spring
- Spring has an od of .254"
- 24 AWG stranded wire comes standard

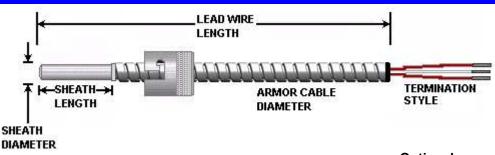




For bayonet adapters see pg. 50 See pg. 67 for more detail about termination styles See pg. 70-71 for more detail about special features



Adjustable Bayonet RTD with flexible armor cable RA2 Style



Ordering Information Part Number

① RA2	② Element Type	③ Element Accuracy	Wire Configuration	Sheath Diameter	6 Sheath Length (inches)	7 Lead Wire Material	8 Lead wire Length (inches)	9 Cap Size	Termination Style
RA2									



2	Element type	
Т	100 Ω DIN 00385 (thin film)	
U	500 Ω DIN 00385 (thin film)	
w	1000 Ω DIN 00385 (thin film)	
x	120 Ω Nickel DIN 00672 (thin film)	
Υ	100 Ω DIN 003916 (wire wound)	
Z	500 Ω DIN 003916 (wire wound)	

4)	Sheath Length (in.) 1/4"	
R		
s	3/8" (standard)	
w	1/2"	
x	5/8"	
Υ	3/4"	
Z	1"	

Lead wire material (inside armor cable)

Fiberglass with armor cable (800°F) Teflon with armor cable (400°F)

	10	Termination style		
	A	2" stripped leads (bare ends) (standard)		
	В	2" stripped leads w/ #8 spade lugs		
	С	Standard male 2 pin plug (400°F)		
	D	Standard male 3 pin plug (400°F)		
	F	Standard 2 pin female jack (400°F)		
	G	Standard 3 pin female jack (400°F)		
ı	н	Miniature male 2 pin plug (400°F)		
	I	Miniature male 3 pin plug (400°F)		
	J	Miniature female 2 pin jack (400°F)		
	К	Miniature female 3 pin jack (400°F)		
	w	2" stripped leads w/wire ferrules (pin terminals)		
l	х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)		
	006"-240"	006"-240" Specify in Inches		
ı				

3	Element Accuracy (0 °C)	
Α	Class A (0.06%)	
В	Class B (0.12%) (standard)	

		G	Fiberglass with stainless steel braid (800°F) w/ armor cable
4	Wire Configuration	н	Teflon FEP with stainless steel braid (400°F) w/ armor cable
2	2-wire		
3	3-wire	8	Lead wire length
4	4-wire	012"-600"	Specify in Inches
5	2-wire (Dual)	Note	Over 600" contact factory
6	3-wire (Dual)	9	Armor cable diameter/ Can Size

8	Lead wire length
012"-600"	Specify in Inches
Note	Over 600" contact factory
9	Armor cable diameter/ Cap Size
^	275"OD/ 7/16" ID single slot (standard can)

11)	Special features
Note	Leave blank for no special features
04	Flat tip probe
05	Drill point tip
06	Epoxy seal (500°F)
07	Cable clamp
08	BX Connector
09	Mating connector

(5)	Sheath Diameter
G	.118" (3mm)
Н	.125" (3.2mm) (1/8")
J	.156" (4mm)
L	.188" (4.6mm) (3/16")
М	.236 (6mm)
N	.250" (6.4mm) (1/4")
Р	.314" (8mm) (5/16")
Note	For reference only (standard tolerances apply)
Note	For other diameters consult factory

	.210 OD/ 7/16 ID single slot (standard cap)		
	.275"OD/ 12.5 mm ID double slot (Metric cap)		
	.210"OD/ 12.5 mm ID double slot (Metric cap)		
	.234"OD/ 7/16" ID single slot (standard cap)		
	.234" OD/ 13 mm ID single slot Werner Pfleiderer cap		
CAP ID			



For bayonet adapters see pg. 50 See pg. 67 for more detail about termination styles

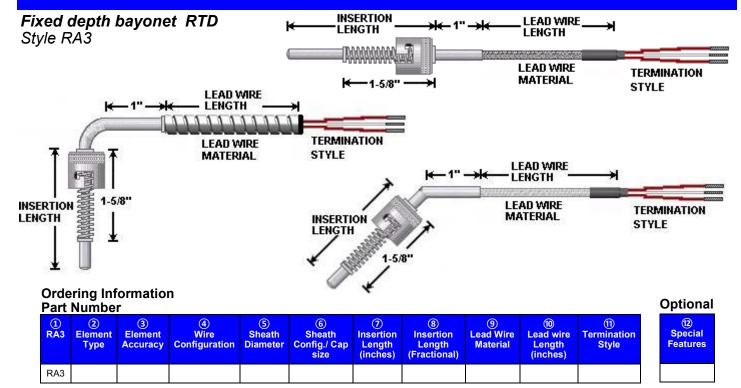
See pg. 70-71 for more detail about special features

Adjustable armor style RTDs fit a wide variety of hole depths

Е

- Cap spins over entire length of armor
- Armor is .265" OD
- ECS custom designed armor cable compresses & decompresses easily, ideal for extrusion applications
- 24 AWG stranded wire comes standard for





2	Element type
Т	100 Ω DIN 00385 (thin film)
U	500 Ω DIN 00385 (thin film)
w	1000 Ω DIN 00385 (thin film)
х	120 Ω Nickel DIN 00672 (thin film)
Υ	100 Ω DIN 003916 (wire wound)
z	500 Ω DIN 003916 (wire wound)

3	Element Accuracy (0 °C)
Α	Class A (0.06%)
В	Class B (0.12%)

4	Wire Configuration
2	2-wire
3	3-wire
4	4-wire
5	2-wire (Dual)
6	3-wire (Dual)

(5)	Sheath Diameter
F	3/16" (standard)
Н	1/8"
L	1/4"
М	3mm
N	4mm
Р	6mm
Q	8mm

6	Sheath Configuration/ Cap Size	
P	Straight w/ 7/16" Single slot cap	
Q	45 Degree w/ 7/16" Single slot cap	
R	90 Degree w/ 7/16" Single slot cap	
\mathcal{O}	Insertion Length (whole in.)	

002"-020" Specify in Inches

8	Insertion Length (fractional in.)
Α	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"

9	Lead wire material
Α	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Fiberglass with stainless steel braid (800°F)
D	Teflon FEP with stainless steel braid (400°F)
E	Fiberglass with armor cable (800°F)
F	Teflon with armor cable (400°F)
G	Fiberglass with stainless steel braid (800°F) w/ armor cable
Н	Teflon FEP with stainless steel braid (400°F) w/ armor cable

Note	Over 600" contact factory
006"-600"	Specify in Inches
10	Lead wire length

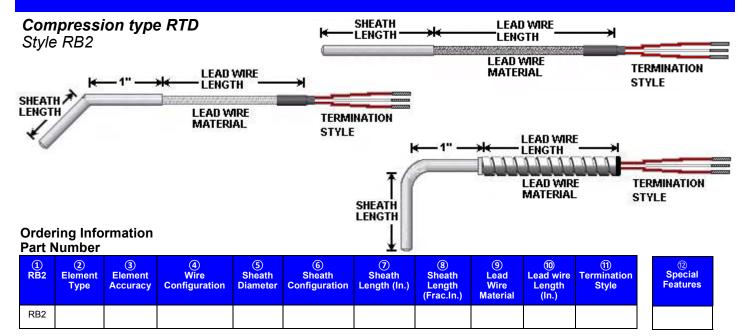
11)	Termination style
Α	2" stripped leads (bare ends) (standard)
В	2" stripped leads w/ #8 spade lugs
С	Standard male 2 pin plug (400°F)
D	Standard male 3 pin plug (400°F)
F	Standard 2 pin female jack (400°F)
G	Standard 3 pin female jack (400°F)
н	Miniature male 2 pin plug (400°F)
1	Miniature male 3 pin plug (400°F)
J	Miniature female 2 pin jack (400°F)
К	Miniature female 3 pin jack (400°F)
w	2" stripped leads w/wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

12	Special features (Optional)
Note	Leave blank for no special features
02	1.5" long strain relief spring
03	1.5" long heat shrink where wire exits the probe
04	Flat tip probe
05	Drill point tip
06	Epoxy seal (500°F)
07	Cable clamp
08	Bx Connector
09	Mating connector
21	Teflon coated armor cable

• 24 AWG stranded wire comes standard for .125" and .118"

For bayonet adapters see pg. 56 For special features see pg. 70-71





2	Element type
Т	100 Ω DIN 00385 (thin film)
U	500 Ω DIN 00385 (thin film)
w	1000 Ω DIN 00385 (thin film)
х	120 Ω Nickel DIN 00672 (thin film)
Y	100 Ω DIN 003916 (wire wound)
z	500 Ω DIN 003916 (wire wound)

3	Element Accuracy (0 °C)
Α	Class A (0.06%)
В	Class B (0.12%)

4	Wire Configuration
2	2-wire
3	3-wire
4	4-wire
5	2-wire (Dual)
6	3-wire (Dual)

(5)	Sheath Diameter
G	.118" (3mm)
Н	.125" (3.2mm) (1/8")
J	.156" (4mm)
K	.177" (4.5mm)
L	.188" (4.6mm) (3/16")
М	.236 (6mm)
N	.250" (6.4mm) (1/4")
P	.314" (8mm) (5/16")
Q	.375" (9.5mm) (3/8")
Note	For reference only (standard tolerances apply)
Note	For other diameters consult factory

Sheath Configuration
Straight
45 Degree
90 Degree

Sheath Length

5/8"

3/4" 7/8"

G

001"-060"	Specify in Inches
8	Sheath Length (fractional in.)
A	0
В	1/8"
С	1/4"
D	3/8"
F	1/2"

9	Lead wire material RTD
Α	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Fiberglass with stainless steel braid (800°F)
D	Teflon FEP with stainless steel braid (400°F)
E	Fiberglass with armor cable (800°F)
F	Teflon with armor cable (400°F)
G	Fiberglass with stainless steel braid (800°F) w/ armor cable
Н	Teflon FEP with stainless steel braid (400°F) w/ armor cable

See pg. 58 for compression fittings
See pg. 67 for more detail about termination styles
See pg. 70-71 for more detail about special features

100	Lead wire length
006"-600"	Specify in Inches
Note	Over 600" contact factory

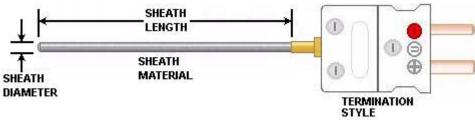
11)	Termination style
A	2" stripped leads (bare ends) (standard)
В	2" stripped leads w/ #8 spade lugs
С	Standard male 2 pin plug (400°F)
D	Standard male 3 pin plug (400°F)
F	Standard 2 pin female jack (400°F)
G	Standard 3 pin female jack (400°F)
Н	Miniature male 2 pin plug (400°F)
I	Miniature male 3 pin plug (400°F)
J	Miniature female 2 pin jack (400°F)
К	Miniature female 3 pin jack (400°F)
w	2" stripped leads w/wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

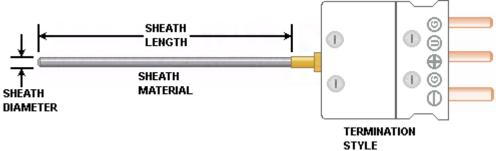
(12)	Special features (Optional) RTDS
Note	Leave blank for no special features
02	1.5" long strain relief spring
03	1.5" long heat shrink where wire exits the probe
04	Flat tip probe
05	Drill point tip
06	Epoxy seal (500°F)
07	Cable clamp
08	Bx Connector
09	Mating connector
10	Armor cable adaptor
18	Moisture protection boot on connector
21	Teflon coated armor cable
27	Transition Fitting on tube & wire sensor



Rigid RTD w/connector

Style RB3





Ordering Information Part Number

	are realise.								
① RB3	② Element Type	③ Element Accuracy	Wire Configuration	Sheath Diameter	6 Sheath Length (inches)	⑦ Bend Type	8 Termination Style	9 Special Features	
RB3									

2	Element type	
Т	100 Ω DIN 00385 (thin film)	
U	500 Ω DIN 00385 (thin film)	
٧	1000 Ω DIN 00385 (thin film)	
w	120 Ω Nickel DIN 00672 (thin film)	
x	100 Ω DIN 003916 (wire wound)	
Υ	500 Ω DIN 003916 (wire wound)	

Α	Class A (0.06%)		
В	Class B (0.12%)		
_			
4	Wire Configuration		
2	2-wire		
3	3-wire		
4	4-wire		
5	2-wire (Dual)		
•	Ourier (Burel)		

Element Accuracy (0 °C)

(5		Sheath Diameter				
F		3/16" (standard)				
Н		/8"				
L		1/4"				
N		4mm				
Р	P 6mm					

6	Sheath Length	
006"-060" Specify in Inches		
(2)	Shooth Longth (fractional in)	

	7	Sheath Length (fractional in.)
	Α	0
I	В	1/8"
	С	1/4"
	D	3/8"
	E	1/2"
	F	5/8"
	G	3/4"
1	н	7/8"

	8	Termination style RTDs			
	С	Standard male 2 pin plug (400°F)			
	D	Standard male 3 pin plug (400°F)			
	F	Standard 2 pin female jack (400°F)			
	G	Standard 3 pin female jack (400°F)			
	Н	Miniature male 2 pin plug (400°F)			
	1	Miniature male 3 pin plug (400°F)			
	J	Miniature female 2 pin jack (400°F)			
Ī	K	Miniature female 3 pin jack (400°F)			

9	Special features (Optional)		
Note	Leave blank for no special features		
04	Flat tip probe		
05	Drill point tip		
07	Cable clamp		
08	Bx Connector		
09	Mating connector		
18	Moisture protection boot on connector		
24	Teflon covered probe		
26	Connector mounted with tube adapter		

- 24 awg stranded fiberglass wire inside (700°F) max
- For other configurations contact factory
- Single lead (White) is on the (pin) for 3-wire RTD connectors

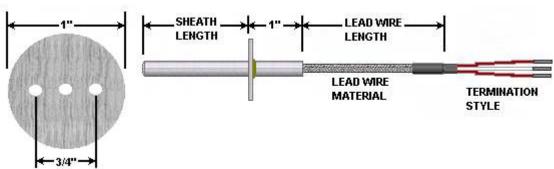
See pg. 58 for compression fittings

See pg. 67 for more detail about termination styles



Mounting flange RTD

Series RB4



Ordering Information

Parti	latilibe								
① RB4	② Element Type	③ Element Accuracy	Wire Configuration	Sheath Diameter	6 Sheath Length (In.)	⑦ Sheath Length (Frac.In.)	8 Lead Wire Material	9 Lead wire Length (In.)	Termination Style
RB4									

Optional

Special Features

2	Element type	
Т	100 Ω DIN 00385 (thin film)	
U	500 Ω DIN 00385 (thin film)	
W 1000 Ω DIN 00385 (thin film)		
x	120 Ω Nickel DIN 00672 (thin film)	
Y 100 Ω DIN 003916 (wire wound)		
Z	500 Ω DIN 003916 (wire wound)	

3	Element Accuracy (0 °C)	
Α	Class A (0.06%)	
В	Class B (0.12%)	

4	Wire Configuration	
2	2-wire	
3	3-wire	
4	4-wire	
5	2-wire (Dual)	
6	3-wire (Dual)	

(5)	Sheath Diameter
Н	.125" (3.2mm) (1/8")
J	.156" (4mm)
L	.188" (4.6mm) (3/16")
М	.236 (6mm)
N	.250" (6.4mm) (1/4")
Note	For reference only (standard tolerances apply)
Note	For other diameters consult factory

•	Sheath Length
001"-060"	Specify in Inches
7	Sheath Length (fractional in.)
A	0
В	1/8"
С	1/4"
D	3/8"
E	1/2"
F	5/8"
G	3/4"
Н	7/8"

8	Lead wire material RTD
Α	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Fiberglass with stainless steel braid (800°F)
D	Teflon FEP with stainless steel braid (400°F)
E	Fiberglass with armor cable (800°F)
F	Teflon with armor cable (400°F)
G	Fiberglass with stainless steel braid (800°F) w/ armor cable
н	Teflon FEP with stainless steel braid (400°F) w/ armor cable

- Mounting holes drilled for #10 screw
- Flange is silver soldered to probe

9	Lead wire length
006"-600"	Specify in Inches
Note	Over 600" contact factory

Termination style	
2" stripped leads (bare ends) (standard)	
2" stripped leads w/ #8 spade lugs	
Standard male 2 pin plug (400°F)	
Standard male 3 pin plug (400°F)	
Standard 2 pin female jack (400°F)	
Standard 3 pin female jack (400°F)	
Miniature male 2 pin plug (400°F)	
Miniature male 3 pin plug (400°F)	
Miniature female 2 pin jack (400°F)	
Miniature female 3 pin jack (400°F)	
2" stripped leads w/wire ferrules (pin terminals)	
Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)	
006"-240" Specify in Inches	

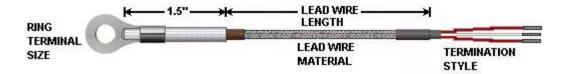
11)	Special features (Optional) RTDS		
Note	Leave blank for no special features		
02	1.5" long strain relief spring		
03	1.5" long heat shrink where wire exits the probe		
04	Flat tip probe		
05	Drill point tip		
06	Epoxy seal (500°F)		
07	Cable clamp		
08	Bx Connector		
09	Mating connector		
18	Moisture protection boot on connector		
21	Teflon coated armor cable		
Note	For color code chart see pg. 57		

See pg. 67 for more detail about termination styles



Ring Terminal RTD

Style RC1



Ordering Information Part Number

i dit i dilibei							
① RC1	② Element Type	③ Element Accuracy	Wire Configuration	© Ring Terminal size	⑥ Lead Wire Material	(inches)	8 Termination Style
RC1							

Optional

•	
9 Special Features	

2	Element type	
Т	100 Ω DIN 00385 (thin film)	
U	500 Ω DIN 00385 (thin film)	
w	1000 Ω DIN 00385 (thin film)	
х	120 Ω Nickel DIN 00672 (thin film)	
Υ	100 Ω DIN 003916 (wire wound)	
z	500 Ω DIN 003916 (wire wound)	

)	
F	#6 (.147" hole size)
н	#8 (.173" hole size)
М	#10 (.198" hole size)
N	1/4" (.263" hole size)
Р	5/16" (.336" hole size)
Q 3/8" (.393" hole size)	
	H M N

	®
	A
	В
	С
	D
	F
	G
	Н

	,	
3	Element Accuracy (0 °C)	6
4	Class A (0.06%)	Α
3	Class B (0.12%)	В

6	Lead wire material RTD		
Α	Fiberglass (800°F)		
В	Teflon FEP (400°F)		
С	Fiberglass with stainless steel braid (800°F)		
D	Teflon FEP with stainless steel braid (400°F)		
E	Fiberglass with armor cable (800°F)		
F	Teflon with armor cable (400°F)		
G	Fiberglass with stainless steel braid (800°F) w/ armor cable		
н	Teflon FEP with stainless steel braid (400°F) w/ armor cable		

(8) Termination style			
A	2" stripped leads (bare ends) (standard)		
В	2" stripped leads w/ #8 spade lugs		
С	Standard male 2 pin plug (400°F)		
D	Standard male 3 pin plug (400°F)		
F	Standard 2 pin female jack (400°F)		
G	Standard 3 pin female jack (400°F)		
н	Miniature male 2 pin plug (400°F)		
I	Miniature male 3 pin plug (400°F)		
J	Miniature female 2 pin jack (400°F)		
К	Miniature female 3 pin jack (400°F)		
w	2" stripped leads w/wire ferrules (pin terminals)		
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)		
006"-240"	-240" 006"-240" Specify in Inches		

4	Wire Configuration
2	2-wire
3	3-wire
4	4-wire
5	2-wire (Dual)
6	3-wire (Dual)

Note	Over 600" contact factory
006"-600"	Specify in Inches
7	Lead wire length
	,

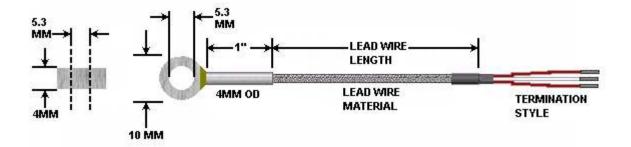
9	Special features (Optional)		
Note	Leave blank for no special features		
01	Solid conductor (Lead wire)		
02	1.5" long strain relief spring		
03	1.5" long heat shrink where wire exits the probe		
06	Epoxy seal (500°F)		
07	Cable clamp		
08	Bx Connector		
09	Mating connector		
18	Moisture protection boot on connector		
21	Teflon coated armor cable		

- Ring terminal can be mounted under various different screw sizes to sense temperature of a surface
- This style offers a strain relief sleeve to prevent excess wearing, where the lead wire exits the neck of the ring terminal, improving longevity

See pg. 67 for more detail about termination styles



Spacer RTD Style RC2



Ordering Information Part Number

are realison							
① RC2	② Element Type	③ Element Accuracy	Wire Configuration	© Ring Terminal size	⑥ Lead Wire Material	7 Lead wire Length (inches)	8 Termination Style
RC2							

Optional



2	Element type	
Т	100 Ω DIN 00385 (thin film)	
U	500 Ω DIN 00385 (thin film)	
w	1000 Ω DIN 00385 (thin film)	
x	120 Ω Nickel DIN 00672 (thin film)	
Υ	100 Ω DIN 003916 (wire wound)	
Z	500 Ω DIN 003916 (wire wound)	

3	Element Accuracy (0 °C)	
A	Class A (0.06%)	
В	Class B (0.12%)	

4	Wire Configuration
2	2-wire
3	3-wire
4	4-wire
5	2-wire (Dual)
6	3-wire (Dual)

(5)	Spacer Size	
х	5.3mm ID x 10mm OD x 4mm thick	
Note	Check with factory for custom sizes	
6	Lead wire material	
A	Fiberglass (800°F)	
В	Teflon FEP (400°F)	
С	Fiberglass with stainless steel braid (800°F)	
D	Teflon FEP with stainless steel braid (400°F)	
E	Fiberglass with armor cable (800°F)	
F	Teflon with armor cable (400°F)	
G	Fiberglass with stainless steel braid (800°F) w/ armor cable	
Н	Teflon FEP with stainless steel braid (400°F) w/ armor cable	
7	Lead wire length	
006"-600"	Specify in Inches	
Note	Over 600" contact factory	

8	Termination style			
Α	2" stripped leads (bare ends) (standard)			
В	2" stripped leads w/ #8 spade lugs			
С	Standard male 2 pin plug (400°F)			
D	Standard male 3 pin plug (400°F)			
F	Standard 2 pin female jack (400°F)			
G	Standard 3 pin female jack (400°F)			
Н	Miniature male 2 pin plug (400°F)			
I	Miniature male 3 pin plug (400°F)			
J	Miniature female 2 pin jack (400°F)			
к	Miniature female 3 pin jack (400°F)			
w	2" stripped leads w/wire ferrules (pin terminals)			
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)			
006"-240"	006"-240" Specify in Inches			

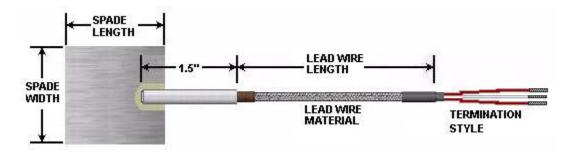
9	Special features	
02	1.5" long strain relief spring	
03	1.5" long heat shrink where wire exits the probe	
06	Epoxy seal (500°F)	
07	Cable clamp	
08	BX Connector	
09	Mating connector	

- 24 AWG stranded wire comes standard on spacer type thermocouples
- Spacer is silver soldered to probe

See pg. 67 for more detail about termination styles



Spade RTD Style RE1



Ordering Information Part Number

① RE1	② Element Type	③ Element Accuracy	Wire Configuration	Spade Size	⑥ Lead Wire Material	7 Lead wire Length (inches)	8 Termination Style
RE1							

Optional
9 Special Features

2	Element type
Т	100 Ω DIN 00385 (thin film)
U	500 Ω DIN 00385 (thin film)
V	1000 Ω DIN 00385 (thin film)
w	120 Ω Nickel DIN 00672 (thin film)
x	100 Ω DIN 003916 (wire wound)
Υ	500 Ω DIN 003916 (wire wound)

3	Element Accuracy (0 °C)			
Α	Class A (0.06%)			
В	Class B (0.12%)			

Wire Configuration		
2	2-wire	
3	3-wire	
4	4-wire	
5	2-wire (Dual)	
6	3-wire (Dual)	

(5)	Spade size	
F	1/2" x 1/2"	
н	5/8" x 5/8"	
М	3/4" x 3/4"	
N	1" x 1"	
P	3/4 x 7/8"	
Q	1/2" x 5/8"	
Note	Check with factory for custom sizes	

6	Lead wire material		
A	Fiberglass (800°F)		
В	Teflon FEP (400°F)		
С	Fiberglass with stainless steel braid (800°F)		
D	Teflon FEP with stainless steel braid (400°F)		
E	Fiberglass with armor cable (800°F)		
F	Teflon with armor cable (400°F)		
G	Fiberglass with stainless steel braid (800°F) w/ armor cable		
Н	Teflon FEP with stainless steel braid (400°F) w/ armor cable		

7	Lead wire length	
006"-600" Specify in Inches		
Note	Over 600" contact factory	

8	Termination style	
Α	2" stripped leads (bare ends) (standard)	
В	2" stripped leads w/ #8 spade lugs	
С	Standard male 2 pin plug (400°F)	
D	Standard male 3 pin plug (400°F)	
F	Standard 2 pin female jack (400°F)	
G	Standard 3 pin female jack (400°F)	
Н	Miniature male 2 pin plug (400°F)	
I	Miniature male 3 pin plug (400°F)	
J	Miniature female 2 pin jack (400°F)	
К	Miniature female 3 pin jack (400°F)	
w	2" stripped leads w/wire ferrules (pin terminals)	
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)	
006"-240"	006"-240" Specify in Inches	

	9	Special features		
	02	1.5" long strain relief spring		
	03	1.5" long heat shrink where wire exits the probe		
ĺ	06	Epoxy seal (500°F)		
ĺ	07	Cable clamp		
ĺ	08	BX Connector		
	09	Mating connector		

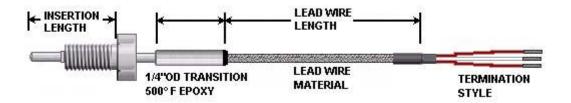
- 24 awg stranded wire comes standard
- Spade is silver soldered to probe
- Spade is .010" thick

See pg. 67 for more detail about termination styles



Threaded bolt (nozzle) RTD

Style RF1



Ordering Information Part Number

① RF1	② Element Type	③ Element Accuracy	Wire Configuration	⑤ Thread size	⑥ Lead Wire Material	7 Lead wire Length (inches)	8 Termination Style
RF1							

Optional
9 Special Features

2	Element type
Т	100 Ω DIN 00385 (thin film)
U	500 Ω DIN 00385 (thin film)
٧	1000 Ω DIN 00385 (thin film)
w	120 Ω Nickel DIN 00672 (thin film)
х	100 Ω DIN 003916 (wire wound)
Υ	500 Ω DIN 003916 (wire wound)

3	Element Accuracy (0 °C)
Α	Class A (0.06%)
В	Class B (0.12%)

4	Wire Configuration
2	2-wire
3	3-wire
4	4-wire
5	2-wire (Dual)
6	3-wire (Dual)

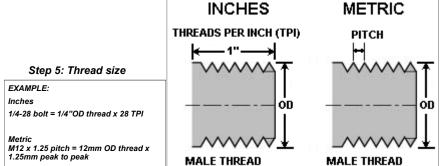
	⑤	Thread size			
	F	1/4-28			
	Н	1/4-20			
	M	M6 x 1 pitch			
	N	M8 x 1 pitch			
	Р	M8 x 1.25 pitch			
Q 10-32 (Grounded only)		10-32 (Grounded only)			
	R	8-32 (Grounded only)			

6	Lead wire material
A	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Fiberglass with stainless steel braid (800°F)
D	Teflon FEP with stainless steel braid (400°F)
E	Fiberglass with armor cable (800°F)
F	Teflon with armor cable (400°F)
G	Fiberglass with stainless steel braid (800°F) w/ armor cable
Н	Teflon FEP with stainless steel braid (400°F) w/ armor cable

7	Lead wire length
006"-600"	Specify in Inches
Note	Over 600" contact factory

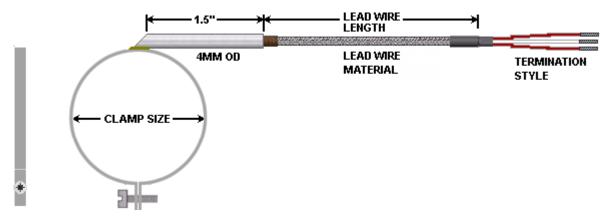
8	Termination style			
Α	2" stripped leads (bare ends) (standard)			
В	2" stripped leads w/ #8 spade lugs			
С	Standard male 2 pin plug (400°F)			
D	Standard male 3 pin plug (400°F)			
F	Standard 2 pin female jack (400°F)			
G	Standard 3 pin female jack (400°F)			
Н	Miniature male 2 pin plug (400°F)			
1	Miniature male 3 pin plug (400°F)			
J	Miniature female 2 pin jack (400°F)			
К	Miniature female 3 pin jack (400°F)			
w	2" stripped leads w/wire ferrules (pin terminals)			
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)			
006"-240"	006"-240" Specify in Inches			

9	Special features		
02	1.5" long strain relief spring		
03	1.5" long heat shrink where wire exits the probe		
06	Epoxy seal (500°F)		
07	Cable clamp		
08	BX Connector		
09	Mating connector		





Nozzle Clamp RTD Style RG1



Ordering Information Part Number

① RG1	② Element Type	③ Element Accuracy	Wire Configuration	⑤ Clamp Size (mm)	⑥ Lead Wire Material	7 Lead Wire Length (Inches)	8 Termination Style
RG1							

Optional



2	Element type
Т	100 Ω DIN 00385 (thin film)
U	500 Ω DIN 00385 (thin film)
٧	1000 Ω DIN 00385 (thin film)
w	120 Ω Nickel DIN 00672 (thin film)
X	100 Ω DIN 003916 (wire wound)
Υ	500 Ω DIN 003916 (wire wound)

9	Element Accuracy (0 °C)
Α	Class A (0.06%)
В	Class B (0.12%)
	Miles On a fire working
4	Wire Configuration
2	2-wire

4	Wire Configuration
2	2-wire
3	3-wire
4	4-wire
5	2-wire (Dual)
6	3-wire (Dual)

(5)	Clamp size (mm)
F	16MM
Н	30MM
М	40MM
N	50MM
Р	60MM
Q	70MM
Note	Check with factory for custom sizes

6	Lead wire material	
A	Fiberglass (800°F)	
В	Teflon FEP (400°F)	
С	Fiberglass with stainless steel braid (800°F)	
D	Teflon FEP with stainless steel braid (400°F)	
E	Fiberglass with armor cable (800°F)	
F	Teflon with armor cable (400°F)	
G	Fiberglass with stainless steel braid (800°F) w/ armor cable	
н	Teflon FEP with stainless steel braid (400°F) w/ armor cable	

7	Lead wire length
006"-600"	Specify in Inches
Note	Over 600" contact factory

8	Termination style		
A	2" stripped leads (bare ends) (standard)		
В	2" stripped leads w/ #8 spade lugs		
С	Standard male 2 pin plug (400°F)		
D	Standard male 3 pin plug (400°F)		
F	Standard 2 pin female jack (400°F)		
G	Standard 3 pin female jack (400°F)		
Н	Miniature male 2 pin plug (400°F)		
I	Miniature male 3 pin plug (400°F)		
J	Miniature female 2 pin jack (400°F)		
К	Miniature female 3 pin jack (400°F)		
w	2" stripped leads w/wire ferrules (pin terminals)		
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)		
006"-240"	006"-240" Specify in Inches		

9	Special features		
02	1.5" long strain relief spring		
03	1.5" long heat shrink where wire exits the probe		
06	Epoxy seal (500°F)		
07	Cable clamp		
08	BX Connector		
09	Mating connector		

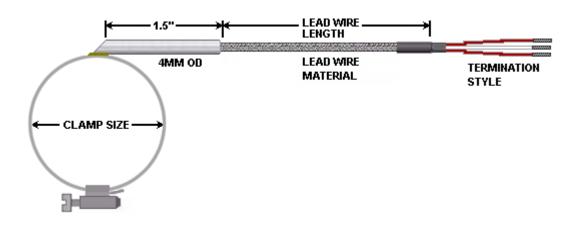
- 24 AWG stranded wire comes standard
- For other configurations contact factory

See pg. 67 for more detail about termination styles See pg. 70-71 for more detail about special features



Hose Clamp RTD Style RH1





Ordering Information Part Number

① RH1	② Element Type	③ Element Accuracy	(4) Wire Configuration	⑤ Clamp Size (Inches)	⑥ Lead Wire Material	7 Lead Wire Length (Inches)	8 Termination Style
RH1							



2	Element type	
Т	100 Ω DIN 00385 (thin film)	
U	500 Ω DIN 00385 (thin film)	
٧	1000 Ω DIN 00385 (thin film)	
w	120 Ω Nickel DIN 00672 (thin film)	
X	100 Ω DIN 003916 (wire wound)	
Υ	500 Ω DIN 003916 (wire wound)	

3	Element Accuracy (0 °C)		
Α	Class A (0.06%)		
В	Class B (0.12%)		

4	Wire Configuration
2	2-wire
3	3-wire
4	4-wire
5	2-wire (Dual)
6	3-wire (Dual)

•		
F	1/4" to 5/8"	
н	5/8" to 1"	
М	1" to 2"	
N	2" to 3"	
Р	3" to 4"	
Q	4" to 5"	
R	5" to 6"	
s	6" to 7"	
Note	Check with factory for custom sizes	
6	Lead wire material	

6	Lead wire material	
Α	Fiberglass (800°F)	
В	Teflon FEP (400°F)	
С	Fiberglass with stainless steel braid (800°F)	
D	Teflon FEP with stainless steel braid (400°F)	
E	Fiberglass with armor cable (800°F)	
F	Teflon with armor cable (400°F)	
G	Fiberglass with stainless steel braid (800°F) w/ armor cable	
Н	Teflon FEP with stainless steel braid (400°F) w/ armor cable	

7	Lead wire length	
006"-600"	Specify in Inches	
Note	Over 600" contact factory	

8	Termination style
Α	2" stripped leads (bare ends) (standard)
В	2" stripped leads w/ #8 spade lugs
С	Standard male 2 pin plug (400°F)
D	Standard male 3 pin plug (400°F)
F	Standard 2 pin female jack (400°F)
G	Standard 3 pin female jack (400°F)
н	Miniature male 2 pin plug (400°F)
1	Miniature male 3 pin plug (400°F)
J	Miniature female 2 pin jack (400°F)
К	Miniature female 3 pin jack (400°F)
w	2" stripped leads w/ wire ferrules (pin terminals)
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
006"-240"	006"-240" Specify in Inches

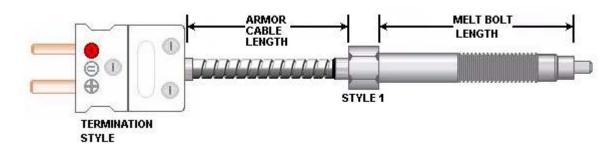
9	Special features
02	1.5" long strain relief spring
03	1.5" long heat shrink where wire exits the probe
06	Epoxy seal (500°F)
07	Cable clamp
08	Bx Connector
09	Mating connector

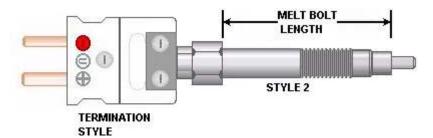
- 24 awg stranded wire comes standard on hose clamp type RTDs
- Most clamps come in 5/16" or 1/2" bandwidth
- For other configurations contact factory

See pg. 67 for more detail about termination styles



Melt bolt RTD Style RJ1





Ordering Information Part Number

① RJ1	② Melt bolt style	③ Melt bolt length	4 Element Type	⑤ Element Accuracy	© Wire Configuration	⑦ Sheath Diameter	8 Sheath Length	Armor Cable Length (inches)	(f) Termination Style
RJ1									

В	Style 2
3	Melt bolt length (inches)
3	3"
4	4"
6	6"
7	7"
9	9"
12	12"

Melt bolt style Style 1

4	Element type
Т	100 Ω DIN 00385 (thin film)
U	500 Ω DIN 00385 (thin film)
v	1000 Ω DIN 00385 (thin film)
w	120 Ω Nickel DIN 00672 (thin film)
х	100 Ω DIN 003916 (wire wound)
Υ	500 Ω DIN 003916 (wire wound)

6	Wire Configuration
2	2-wire
3	3-wire
4	4-wire
5	2-wire (Dual)
6	3-wire (Dual)

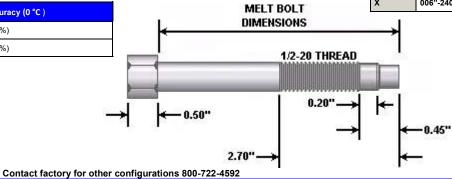
7	Sheath Diameter
L	.125"OD
М	.188"OD

8	Sheath Length						
Т	Flush						
U	1/4"						
٧	3/8" (standard)						
w	1/2"						
X	5/8"						
Y	3/4"						
Z	1"						

9	Armor cable length					
F	4" (standard) (melt bolt style 1 only)					
006"-600"	For other length specify in Inches (melt bolt style 1 only)					
X	Style 2 (no armor cable)					
Note	Over 600" contact factory					

100	Termination style RTDs
A	2" stripped leads (bare ends) (standard)
В	2 "stripped leads w/ #8 spade lugs
С	Standard male 2 pin plug (400°F)
D	Standard male 3 pin plug (400°F)
F	Standard 2 pin female jack (400°F)
G	Standard 3 pin female jack (400°F)
Н	Miniature male 2 pin plug (400°F)
I	Miniature male 3 pin plug (400°F)
J	Miniature female 2 pin jack (400°F)
К	Miniature female 3 pin jack (400°F)
w	2" stripped leads w/wire ferrules (pin terminals)
x	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)
x	006"-240" Specify in Inches

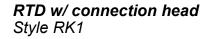
Element Accuracy (0 °C) Class A (0.06%) В Class B (0.12%)

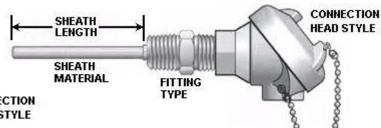


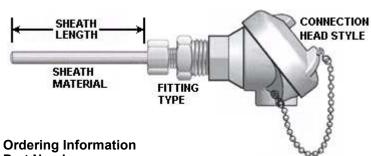


14

14"







Part Number

① RK1	② Element Type	③ Element Accuracy	Wire Config.	Sheath Diameter	6 Sheath Construction	Sheath Length (whole In.)	Sheath Length (fractional In.)	© Connection Head Style	© Fitting Type	Special Features (Optional)	Transmitter temperature range	(3) Scale of Temperature
RK1												

2	Element type
Т	100 Ω DIN 00385 (thin film)
U	500 Ω DIN 00385 (thin film)
w	1000 Ω DIN 00385 (thin film)
х	120 Ω Nickel DIN 00672 (thin film)
Υ	100 Ω DIN 003916 (wire wound)
Z	500 Ω DIN 003916 (wire wound)

3	Element Accuracy (0 °C)	
Α	Class A (0.06%)	
В	Class B (0.12%)	

4	Wire Configuration			
2	2-wire			
3	3-wire			
4	4-wire			
5	2-wire (Dual)			
6	3-wire (Dual)			

(5)	Sheath Diameter				
F	3/16" (standard)				
Н	1/8"				
L	1/4"				
М	3mm				
N	4mm				
Р	6mm				
Q	8mm				

I	6	Sheath Construction			
	A	FEP Teflon insulation (400°F)			
	В	Fiberglass insulation (800°F)			
ĺ	С	Mineral Insulated (900°F)			
ĺ	Note	Option "C" is flexible MGO RTD cable			
•					

٠	7	Sheath Length (whole In.)
	02"-60"	Specify in Inches
	Note	For longer lengths consult factory

(8)	Sheath Length (fractional in.)			
Α	0			
В	1/8"			
С	1/4"			
D	3/8"			
E	1/2"			
F	5/8"			
G	3/4"			
Н	7/8"			

9	Connection Head Style
Α	Cast Aluminum
В	Small cast Aluminum
С	Flip top head cast aluminum
D	Cast steel
E	Stainless Steel
F	Cast Iron
G	Polypropylene
н	Explosion proof cast aluminum

10	Fitting type		
F06	1/2"npt x 1/2"npt double thread		
F07	1/2"npt double thread Spring loaded		
F08	1/2"npt x 1/2"npt double thread Spring loaded w/oil seal		
F09	1/2"npt x 3/4"npt double thread		
F10	3/4"npt x 3/4"npt double thread		
F12	Single threaded brass compression fitting (no process thread)		
F13	Single threaded stainless compression fitting (no process thread)		
F14	1/2"npt x 1"npt double thread		
Note	For other fittings not shown contact factory		

Optional

11)	Special features (Optional)
Note	Leave blank for no special features
04	Flat tip probe
05	Drill point tip
17	4/20 Milliamp transmitter (hockey puck style)
22	HART- compatible 4/20 milliamp transmitter
24	Teflon covered probe
Note	For color code chart see pg. 57

12	Transmitter temperature range (Optional)			
0-0000	Specify temperature range (example: 0-1200°F)			

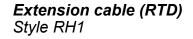
13	Scale of temperature (Optional)
F	(°F) Fahrenheit
С	(°C) Celsius

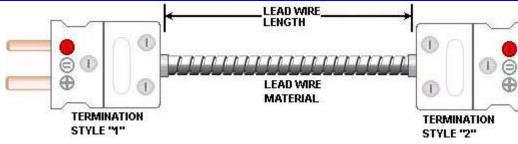


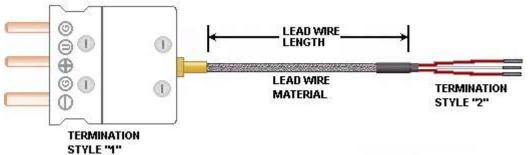
For HART-compatible transmitter see option "22" in special features



- For Low profile, basic programmable 4/20 MA transmitter see option "17" in special features
- For MGO RTD see option "C".







Ordering Information Part Number

1 dit italiiboi						
① RH1	② Wire configuration	③ Termination Style "1"	④ Lead wire material	⑤ Lead wire Length (In.)	⑥ Termination Style "2"	
RH1						



2	Wire Configuration	
2	2-wire	
3	3-wire	
4	4-wire	
5	2-wire (Dual)	
6	3-wire (Dual)	

3	Termination style "1"	
Α	2" stripped leads (bare ends) (standard)	
В	2 "stripped leads w/ #8 spade lugs	
С	Standard male 2 pin plug (400°F)	
D	Standard male 3 pin plug (400°F)	
F	Standard 2 pin female jack (400°F)	
G	Standard 3 pin female jack (400°F)	
Н	Miniature male 2 pin plug (400°F)	
ı	Miniature male 3 pin plug (400°F)	
J	Miniature female 2 pin jack (400°F)	
к	Miniature female 3 pin jack (400°F)	
w	2" stripped leads w/wire ferrules (pin terminals)	
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)	
x	006"-240" Specify in Inches	

4)	Lead wire material
A	Fiberglass (800°F)
В	Teflon FEP (400°F)
С	Fiberglass with stainless steel braid (800°F)
D	Teflon FEP with stainless steel braid (400°F)
E	Fiberglass with armor cable (800°F)
F	Teflon with armor cable (400°F)
G	Fiberglass with stainless steel braid (800°F) w/ armor cable
н	Teflon FEP with stainless steel braid (400°F) w/ armor cable
-	_
©	Load wire length

(5)	Lead wire length	
006"-600"	Specify in Inches	
Note	Over 600" contact factory	
6	Termination style "2"	

6	Termination style "2"	
U	Termination style 2	
A	2" stripped leads (bare ends) (standard)	
В	2 "stripped leads w/ #8 spade lugs	
С	Standard male 2 pin plug (400°F)	
D	Standard male 3 pin plug (400°F)	
F	Standard 2 pin female jack (400°F)	
G	Standard 3 pin female jack (400°F)	
Н	Miniature male 2 pin plug (400°F)	
I	Miniature male 3 pin plug (400°F)	
J	Miniature female 2 pin jack (400°F)	
К	Miniature female 3 pin jack (400°F)	
w	2" stripped leads w/wire ferrules (pin terminals)	
х	Extra long lead wire length (beyond 2" stripped leads) (specify extra long lead wire length below)	
006"-240"	006"-240" Specify in Inches	

7	Special features (Optional) RTDS	
Note	Leave blank for no special features	
02	1.5" long strain relief spring	
03	1.5" long heat shrink where wire exits the probe	
04	Flat tip probe	
05	Drill point tip	
06	Epoxy seal (500°F)	
07	Cable clamp	
08	Bx Connector	
09	Mating connector	
10	Armor cable adaptor	
18	Moisture protection boot on connector	
21	Teflon coated armor cable	
27	Transition Fitting on tube & wire sensor	

See page 67 for more detail about termination styles



Accessories



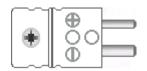




Thermocouple Connectors

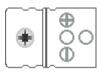
Standard size & Miniature





Thermoplastic (Hollow Pin) Standard Size Male Connector

Part Number	Calibration
TP-J	Type J
TP-K	Туре К
TP-T	Туре Т
TP-E	Туре Е



Thermoplastic Standard Size Female Connector	
Part Number	Calibration
TJ-J	Type J
TJ-K	Туре К
TJ-T	Туре Т
TJ-E	Type E



Thermoplastic	
Miniature Male Connector	

Part Number	Calibration
MTP-J	Type J
MTP-K	Type K
MTP-T	Туре Т
MTP-E	Type E



Thermoplastic Miniature Female Connector	
Part Number	Calibration
MTJ-J	Type J
MTJ-K	Type K
MTJ-T	Type T
MTJ-E	Type E

 Other calibrations & configurations available upon request



Bayonet Adapters 1/8" NPT & 3/8"-24 Thread



Standard size bayonet adapters	
Part Number	Length
BA-078	7/8"
BA-100	1"
BA-114	1-1/4"
BA-138	1-3/8"
BA-112	1-1/2"
BA-200	2"
BA-214	2-1/4"
BA-212	2-1/2"
BA-300	3"
BA-312	3-1/2"



- 1/8"NPT
- 7/16" diameter
- Single pin
- Other thread sizes and lengths available
- Mates with standard bayonet cap



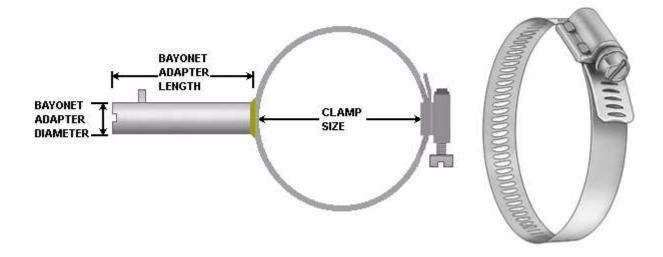
Standard size bayonet adapters			
Part Number Length			
BAS-078	7/8"		
BAS-114	1-1/4"		
BAS-138	1-3/8"		
BAS-112	1-1/2"		
BAS-214	2-1/4"		
BAS-212	2-1/2"		
BAS-300	3"		
BAS-312	3-1/2"		

- Zinc plated steel
- 3/8-24 Straight thread
- 7/16" diameter
- Single pin
- Other thread sizes and lengths available
- Mates with standard bayonet cap
- For other bayonet adapters consult factory
- Length includes threads



Hose clamp bayonet adapter

Style HCA1



Ordering Information Part Number

① HCA1	② Clamp Size	③ Bayonet adapter diameter	④ Bayonet adapter length			
HCA1						

2	Clamp size
F	1/4" to 5/8"
н	5/8" to 1"
М	1" to 2"
N	2" to 3"
Р	3" to 4"
Q	4" to 5"
R	5" to 6"
s	6" to 7"
Note	Check with factory for custom sizes

3	Bayonet adapter diameter
F	7/16" (standard) single pin
Н	12mm double pin
М	14mm double pin

4	Bayonet adapter length
01	1"
02	1.5"
03	2"
04	2.5"
05	3"
06	3.5"
07	4"
08	4.5"
09	5"
10	5.5"

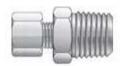
- Bayonet adapters constructed of Nickel plated brass
- Hose clamps constructed of 301 stainless steel
- Single pin & double pin available
- Mates with standard or metric bayonet cap
- Not all bayonet adapter configurations are in stock. Minimum order quantities may apply on some configurations



Compression Fitting Brass & Stainless Steel

CFS &CFB style





Stainless Steel (single ferrule)

Part Number	NPT Thread Size	Probe Size (bore)
CFS16-16	1/16"NPT	1/16"
CFS18-16	1/8"NPT	1/16"
CFS18-18	1/8"NPT	1/8"
CFS18-316	1/8"NPT	3/16"
CFS18-14	1/8"NPT	1/4"
CFS14-116	1/4"NPT	1/16"
CFS14-18	1/4"NPT	1/8"
CFS14-316	1/4"NPT	3/16"
CFS14-14	1/4"NPT	1/4"
CFS14-516	1/4"NPT	5/16"
CFS14-38	1/4"NPT	3/8"
CFS38-18	3/8"NPT	1/8"
CFS38-316	3/8"NPT	3/16"
CFS38-14	3/8"NPT	1/4"
CFS38-38	3/8"NPT	3/8"
CFS12-18	1/2"NPT	1/8"
CFS12-316	1/2"NPT	3/16"
CFS12-14	1/2"NPT	1/4"
CFS12-516	1/2"NPT	5/16"
CFS12-38	1/2"NPT	3/8"
CFS12-12	1/2"NPT	1/2"



Brass (single ferrule)

Part Number	NPT Thread Size	Probe Size (bore)
CFB18-18	1/8"NPT	1/8"
CFB18-316	1/8"NPT	3/16"
CFB18-14	1/8"NPT	1/4"
CFB14-18	1/4"NPT	1/8"
CFB14-316	1/4"NPT	3/16"
CFB14-14	1/4"NPT	1/4"
CFB12-18	1/2"NPT	1/8"
CFB12-316	1/2"NPT	3/16"
CFB12-14	1/2"NPT	1/4"



PTFE Ferrule (single ferrule)

Part Number	Probe Size (bore)
TF16	1/16"
TF18	1/8"
TF316	3/16"
TF14	1/4"
TF516	5/16"
TF38	3/8"
TF12	1/2"
Note: fits brass &SS	



Thermocouple & RTD wire



Thermocouple Wire Type J & K Calibration



Туре Ј

Part Number	Description	Wire Gauge (AWG)	Calibration	
J24GG	Type J. 24 AWG. Solid. Fiberglass	24 AWG	Type J	
J24-7-GG	Type J. 24 AWG. Stranded. Fiberglass	24 AWG	Type J	
J20GG	Type J. 20 AWG. Solid. Fiberglass	20 AWG	Type J	
J20-7-GG	Type J. 20 AWG. Stranded. Fiberglass	20 AWG	Type J	
J24TT	Type J. 24 AWG. Solid. FEP Teflon	24 AWG	Type J	
J24-7-TT	Type J. 24 AWG. Stranded. FEP Teflon	24 AWG	Type J	
J20TT	Type J. 20 AWG. Solid. FEP Teflon	20 AWG	Type J	
J20-7-TT	Type J. 20 AWG. Stranded. FEP Teflon	20 AWG	Type J	
J24GGSS	Type J. 24 AWG. Solid. Fiberglass w/ Stainless steel braid	24 AWG	Type J	
J24-7-GGSS	Type J. 24 AWG. Stranded. Fiberglass w/ Stainless steel braid	24 AWG	Type J	
J20GGSS	Type J. 20 AWG. Solid. Fiberglass w/ Stainless steel braid	20 AWG	Type J	
J20-7-GGSS	Type J. 20 AWG. Stranded. Fiberglass w/ Stainless steel braid 20 AWG		Type J	
J24TTSS	Type J. 24 AWG. Solid. FEP Teflon w/ Stainless steel braid	24 AWG	Type J	
J24-7-TTSS	Type J. 24 AWG. Stranded. FEP Teflon w/ Stainless steel braid	24 AWG	Type J	
J20TTSS	Type J. 20 AWG. Solid. FEP Teflon w/ Stainless steel braid	20 AWG	Type J	
J20-7-TTSS	Type J. 20 AWG. Stranded. FEP Teflon w/ Stainless steel braid	20 AWG	Type J	
JX20PP	Type J. 20 AWG. Solid. PVC extension wire	20 AWG	Type J	
JX20-7-PP	Type J. 20 AWG. Stranded. PVC extension wire	20 AWG	Type J	

Type K

Part Number	Description	Wire Gauge (AWG)	Calibration	
K24GG	Type K. 24 AWG. Solid. Fiberglass	24 AWG	Туре К	
K24-7-GG	Type K. 24 AWG. Stranded. Fiberglass	24 AWG	Type K	
K20GG	Type K. 20 AWG. Solid. Fiberglass	20 AWG	Type K	
K20-7-GG	Type K. 20 AWG. Stranded. Fiberglass	20 AWG	Type K	
K24TT	Type K. 24 AWG. Solid. FEP Teflon	24 AWG	Type K	
K24-7-TT	Type K. 24 AWG. Stranded. FEP Teflon	24 AWG	Type K	
K20TT	Type K. 20 AWG. Solid. FEP Teflon	20 AWG	Type K	
K20-7-TT	Type K. 20 AWG. Stranded. FEP Teflon	20 AWG	Туре К	
K24GGSS	Type K. 24 AWG. Solid. Fiberglass w/ Stainless steel braid	24 AWG	Type K	
K24-7-GGSS	Type K. 24 AWG. Stranded. Fiberglass w/ Stainless steel braid	24 AWG	Type K	
K20GGSS	Type K. 20 AWG. Solid. Fiberglass w/ Stainless steel braid 20 AW		Type K	
K20-7-GGSS	Type K. 20 AWG. Stranded. Fiberglass w/ Stainless steel braid 20 AWG		Type K	
K24TTSS	Type K. 24 AWG. Solid. FEP Teflon w/ Stainless steel braid 24 AW		Type K	
K24-7-TTSS	Type K. 24 AWG. Stranded. FEP Teflon w/ Stainless steel braid 24 AW		Type K	
K20TTSS	Type K. 20 AWG. Solid. FEP Teflon w/ Stainless steel braid 20 AWG		Туре К	
K20-7-TTSS	Type K. 20 AWG. Stranded. FEP Teflon w/ Stainless steel braid	20 AWG	Туре К	
KX20PP	Type K. 20 AWG. Solid. PVC extension wire	20 AWG	Туре К	
KX20-7-PP	Type K. 20 AWG. Stranded. PVC extension wire	20 AWG	Туре К	



RTD Wire

3 & 4 conductor



Part Number	Description	Wire Gauge (AWG)	Calibration
RTD-24-F-3-SPC-GG-AAB	RTD. 24 AWG.3 Wire. Fiberglass insulation (Red, Red, White)	24 AWG	RTD (Silver plated)
RTD-24-F-3-GGSS-AAB	RTD. 24 AWG.3 Wire. Fiberglass insulation (Red, Red, White) w/stainless steel braid	24 AWG	RTD (Silver plated)
RTD-24-F-6-GGSS-AAAABB	RTD. 24 AWG.6 Wire. Fiberglass insulation w/ stainless steel braid (4 Reds, 2 Whites)	24 AWG	RTD (Silver plated)
RTD-24-F-3-TT-AAB	RTD. 24 AWG.3 Wire. FEP Teflon insulation (Red, Red, White)	24 AWG	RTD (Silver plated)
RTD-24-F-3-TTSS-AAB	RTD. 24 AWG.3 Wire. FEP Teflon insulation (Red, Red, White) w/stainless steel braid	24 AWG	RTD (Silver plated)
RTD-24-F-3-TT-ADB	RTD. 24 AWG.3 Wire. FEP Teflon insulation (Red, Black, White)	24 AWG	RTD (Silver plated)
RTD-24-F-3-TT-CEB	RTD. 24 AWG.3 Wire. FEP Teflon insulation (Blue, Orange, White)	24 AWG	RTD (Silver plated)
RTD-24-F-4-TT-AABB	RTD. 24 AWG.4 Wire. FEP Teflon insulation (2 Reds, 2 Whites)	24 AWG	RTD (Silver plated)
RTD-26-F-3-TT-AAB	RTD. 26 AWG.3 Wire. FEP Teflon insulation (Red, Red, White)	26 AWG	RTD (Silver plated)
RTD-28-F-3-TT-AAB	RTD. 28 AWG.3 Wire. FEP Teflon insulation (Red, Red, White)	28 AWG	RTD (Silver plated)

RTD Wire General Information

- RTD wire available in 24, 26, & 28 gauge
- Available with fiberglass & FEP Teflon insulation
- Both fiberglass & Teflon available with stainless steel braid
- All RTD wire is silver plated copper
- 3 & 4 conductors
- Standard color code is 2 Reds & 1 White

For other configurations consult factory



Thermocouple color codesGeneral Information

For color codes other than US & Canada, ECS applies color coded heat shrink over stripped portion of the lead. The internal conductors do not have the specific color codes

	*	<u>IEC</u>				
Thermocouple Type	US & Canada	International IEC 584-3	Czech British to BS 1843	Netherland German to DIN 43710	Japanese to JIS C 1610-1981	French to NFC 42-324
J	*	-	-	**************************************		-
К	+-		-	-	6 -	-
T	*	\$ + -	*-	**************************************	\$\frac{1}{2} \\ \frac{1}{2} \\ \frac	-
E	*	**************************************	*	**************************************	-	-

ANSI Calibration letter	Conductor alloys	T/C
J	Iron	JP
	Constantan	JN
	Chromel	KP
К	Alumel	KN
_	Copper	TP
Т	Constantan	TN
_	Chromel	EP
E	Constantan	EN



Transition fittingsFor MGO sensors

Transition Fitting	Description	Code
2.375" → 1	3/8"OD X 1.25" w/ spring (standard)	1
2.25" → 1	1/4"OD X 1.25" w/ spring	2
← 1.75" → <u> </u>	3/16"OD X 1" w/ spring	3
 	3/8"OD X 1.25" (no spring)	4
←──1.25"——> 	1/4"OD X 1.25" (no spring)	5
←─1" → <u></u> .190"	3/16"OD X 1" (no spring)	6

Thermocouple JunctionsSingle & Dual

Junction Type	Description	Code
	Grounded	G
	Ungrounded	U
=	Exposed	E
	Exposed & Recessed	R
	Grounded (Dual)	w
(E	Ungrounded & Isolated	х
Œ	Ungrounded (common)	Y
=	Exposed & Isolated	Z

General InformationJunction Types

Single Junctions

Grounded- The sheath & conductors are welded together, forming a junction

Ungrounded– The conductors are welded together and fully insulated from the welded sheath tip

Exposed– The conductors are welded together , forming a junction that is not protected by a welded sheath tip

Exposed and Recessed– The conductors are welded together, forming a junction that is protected by the sheath wall but is not protected by a welded sheath tip

Dual Junctions

Grounded- The sheath & all conductors are welded together, forming a junction

Ungrounded & Isolated— Each junction is welded together, separate from each other & fully insulated from the welded sheath tip

Ungrounded (common)- All the conductors are welded together and fully insulated from the welded sheath tip

Exposed and Isolated– Each junction is welded together, separate from each other. The junction is not protected by a welded sheath tip



Thermocouple termination style

Termination	Description	Code
	2" stripped leads (bare ends)	Α
	2 "stripped leads w/ spade lugs	В
	Standard male plug (400°F)	С
	High temp male Plug (660°F)	D
	Max temp male Plug (800°F)	E
	Ceramic male plug (1200°F)	F
	Solid pin plug (400°F)	G
	Standard female jack (400°F)	н
• • •	Miniature plug (400°F)	J
О ОО Ф	Miniature jack (400°F)	К
8	2" stripped leads w/#6 Ring terminals	L
	2 Standard male plugs (dual junctions) (400°F)	М
	Standard 3 pin plug w/ ground wire (400°F)	N
	Dual molded male connector(4-pin) (400°F)	Р



Thermocouple termination style

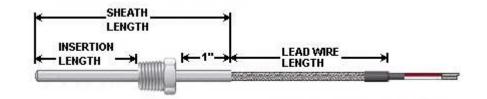
Termination	Description	Code
	High temp female jack (660°F)	R
	Max temp female jack (800°F)	S
	Ceramic female jack (1200°F)	Т
	2" stripped leads w/wire ferrules (pin terminals)	W
	Extra long lead wire length (beyond 2" stripped leads)	х



RTD termination style

Termination Style	Description	Code
	2" stripped leads (bare ends)	Α
76466	2 "stripped leads w/ spade lugs	В
	Standard male 2 pin plug (400°F)	С
	Standard male 3 pin plug (400°F)	D
	Standard female 2 pin jack (400°F)	F
	Standard female 3 pin jack (400°F)	G
	Miniature male 2 pin plug (400°F)	н
	Miniature male 3 pin plug (400°F)	ı
	Miniature female 2 pin jack (400°F)	J
	Miniature female 3 pin jack (400°F)	к
	2" stripped leads w/wire ferrules (pin terminals)	w
	Extra long lead wire length (beyond 2" stripped)	Х

Attached Fittings



Attached fitting	Description	Code
	1/8"npt single thread hex fitting	F01
	1/4"npt single thread hex fitting	F02
	3/8"npt single thread hex fitting	F03
	1/2"npt single thread hex fitting	F04
	3/4" npt single thread hex fitting	F05
	1/2" npt double threaded hex fitting	F06
	1/2" npt double threaded hex fitting spring loaded	F07
	1/2" npt double threaded hex fitting spring loaded w/oil seal	F08



Attached Fittings

Attached fitting	Description	Code
Attached fitting	Description	Code
	1/2"npt x 3/4"npt double threaded hex fitting	F09
	3/4"npt x 3/4"npt double threaded hex fitting	F10
	Fixed bayonet cap assembly	F11
	Single threaded brass compression fitting head mount (no process thread)	F12
	Single threaded stainless steel compression fitting head mount (no process thread)	F13
	1/2"npt x 1"npt double thread	F14
	1"npt single thread	F15
	Adjustable 7/16"ID bayonet cap fitting (1/8"OD & 3mm OD)	F16
	Adjustable 12.5mm ID double slot bayonet cap fitting (1/8"OD & 3mm OD)	F17
	1/8"npt compression fitting (Brass)	F18
	1/8"npt compression fitting (Stainless steel)	F19
	1/4"npt compression fitting (Brass)	F20
	1/4"npt compression fitting (Stainless steel)	F21

Special Features

Special Feature	Description	Code
Opecial Feature	Doonprion	Code
	Solid conductor (lead wire)	01
←──1.5"──→	1.5" long strain relief spring	02
★ —1.5"— →	1.5" long heat shrink where wire exits the probe	03
	Flat tip probe	04
	Drill point tip	05
	Epoxy seal	06
	Cable clamp	07
	BX Connector	08
+	Mating Connector	09
	Armor cable adapter	10
\$-	International IEC 584-3 color coded leads	11 (see PG. 62)
\$ -	British color coded leads	12 (see PG. 62)
	German color coded leads	13 (see PG. 62)
3 -	Japanese color coded leads	14 (see PG. 62)
\$-	Reverse polarity color coded leads	15 (see PG. 62)
\$-	French color coded leads	16 (see PG. 62)
	4/20 Milliamp Transmitter (Basic)	17
(Moisture protection boot on connector	18

Special Feature	Description	Code
	High temp ceramic potting (1200F°)	19
	Teflon coated armor cable	21
HART COMMUNICATION PROTOCOL	HART– compatible 4/20 MA transmitter	22
	304SS tag with part # engraved	23
	Teflon covered probe	24
	Free spinning fitting (held on probe by crimp ring)	25
	Connector mounted with tube adapter	26
	3/8" OD transition fitting & spring on tube & wire sensor	27
	90° bend (Mineral insulated probe)	28
	Tight 90 degree bend (block bender)	29
	45° bend (Mineral insulated probe)	30
← 3/4"→	1" circular mounting flange (MGO)	31
	1/4-28 bolt w/ 5/16" hex (small hex)	32
	1/4-28 bolt w/ 7/8" long thread (regular hex)	33

