



Formerly
Industrial Temperature Control

Thermocouples and Accessories Product Catalog



ISO/IEC 17025:2005
ANSI/NCSL Z540-1-1994
ANSI/NCSL Z540.3-2006

Calibration
Certificate #3466.01

7282 N. Haggerty Rd. Canton, MI 48187
P. 734-451-8740 / F. 734-451-8741
www.inspec-inc.com



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EXPERT CONTROL AND INSTRUMENTATION REPAIR

- Plastics Industry Thermocouples
- Metal Industry Thermocouples
- Base Metal with Closed End Thermocouples
- Adjustable Thermocouples
- Melt Thermocouples
- Wire & Accessories
- Field Servicing
- Custom Building

PROMPT REPAIR ON ALL TYPES OF CONTROLS AND TIMERS INCLUDING:





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ABOUT THERMOCOUPLES

Thermocouple: A thermocouple is a thermoelectric device used to measure temperatures accurately, it is formed when two dissimilar metals join - so that a potential difference generated between the points of contact is a measure of the temperature difference between the points.

A thermocouple is a sensor for measuring temperature. It consists of two dissimilar metals, joined together at one end. When the junction of the two metals is heated or cooled a voltage is produced that can be correlated back to the temperature.



What are the different thermocouple types?

A thermocouple is available in different combinations of metals or calibrations. The four most common calibrations are J, K, T and E. There are high temperature calibrations R, S, C and GB. Each calibration has a different temperature range and environment, although the maximum temperature varies with the diameter of the wire used in the thermocouple. Although the thermocouple calibration dictates the temperature range, the maximum range is also limited by the diameter of the thermocouple wire. That is, a very thin thermocouple may not reach the full temperature range. The table includes international color codes for thermocouple alloys, temperature range and limits of error for almost every kind of thermocouple.

Common Thermocouple Temperature Ranges			
Calibration	Temp Range	Std. Limits of Error	Spec. Limits of Error
J	0°C to 750°C (32°F to 1382°F)	Greater of 2.2°C or 0.75%	Greater of 1.1°C or 0.4%
K	-200°C to 1250°C (-328°F to 2282°F)	Greater of 2.2°C or 0.75%	Greater of 1.1°C or 0.4%
E	-200°C to 900°C (-328°F to 1652°F)	Greater of 1.7°C or 0.5%	Greater of 1.0°C or 0.4%
T	-250°C to 350°C (-328°F to 662°F)	Greater of 1.0°C or 0.75%	Greater of 0.5°C or 0.4%

How to Choose A Thermocouple Type

- ❖ Temperature Range
- ❖ Chemical Resistance of the Thermocouple or Sheath Material
- ❖ Abrasion and Vibration Resistance
- ❖ Installation Requirements

Please Call Us At 734-451-8740 With Any Questions!



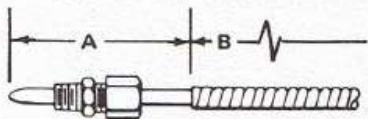
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PLASTICS INDUSTRY THERMOCOUPLES (FOR USE TO 800°F)

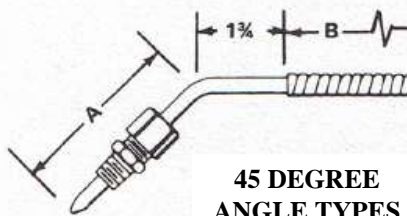
COMPRESSION FITTING

TERMINALS

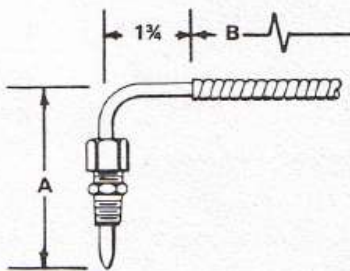
BAYONET FITTING



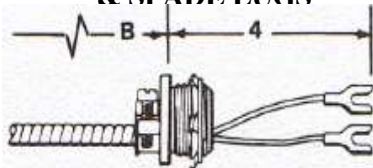
STRAIGHT TYPES



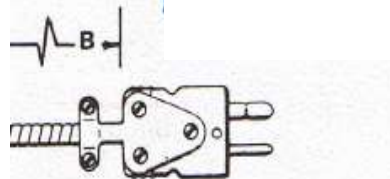
45 DEGREE
ANGLE TYPES



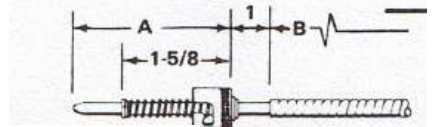
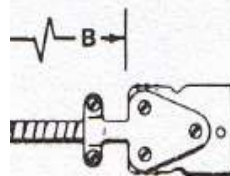
BX CONNECTOR C-375
& SPADE LUGS



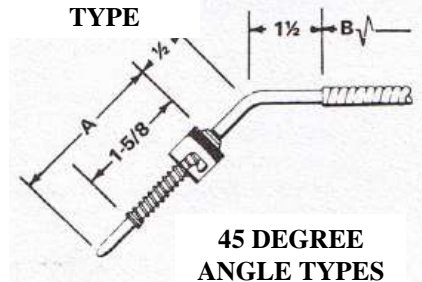
BX Connector C-375



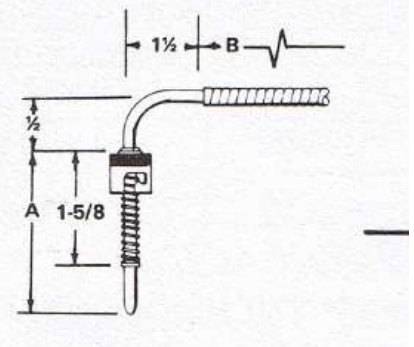
Thermocouple
Plug



STRAIGHT
TYPE



45 DEGREE
ANGLE TYPES



HOW TO ORDER:

- 7) Specify "A" Dimension
- 8) Specify "B" Dimension
- 9) Give Catalog Number (see following page)

**See Following Page
For Ordering Information**



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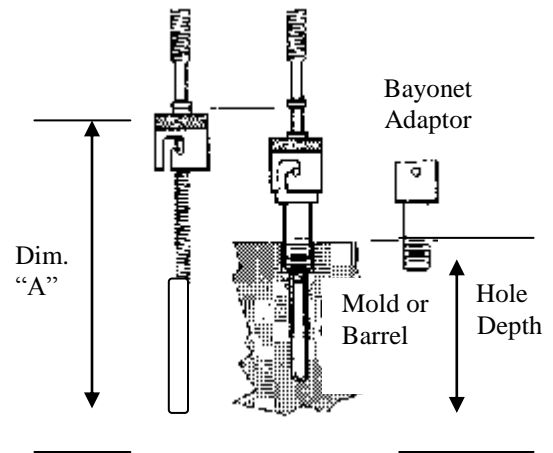
PLASTICS INDUSTRY THERMOCOUPLES
(FOR USE TO 800°F) – Continued

CATALOG NUMBER	COMPRESSION FITTING			LEAD TERMINATION	BAYONET FITTING		
	STRAIGHT	45 DEGREE BEND	90 DEGREE BEND		STRAIGHT	45 DEGREE BEND	90 DEGREE BEND
1223x	1243x	1263x	BX Connector & Spade Lugs	8823	8843	8863	
1225x	1245x	1265x	Thermocouple Plug	8825	8845	8865	
1227x	1247x	1267x	Thermocouple Jack	8827	8847	8867	

* x = Thermocouple type “J”, “K”, “T”, “E” (Except 1223K)
Nominal O.D. of tubing is 3/16 Inch (0.185 Inch to 0.191 Inch)

HOW TO DETERMINE “A” DIMENSION

- If you are using a short (7/8 inch length) Bayonet Adaptor – Add 1 Inch to hole depth.
- If you are using a long (1-3/8 Inch length) Bayonet Adaptor Add 1-1/2 Inch hole depth.
- Hole depth should be drilled with a “G” (0.261 Inch) drill for best results.
Overall O.D. is 1/4 Inch
(nominal 3/16 Inch tubing plus spring)



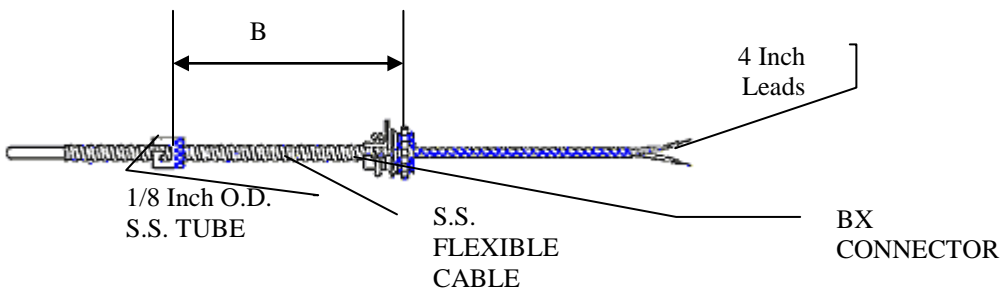
THERMOCOUPLE

NOTE: Price includes brass compression fitting with brass ferrules.
Other materials available for both fitting body and ferrule at extra cost
Thread is 1/8 – 27 N.P.T.

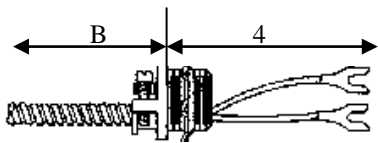
See Page 14
for Brass Compression Fittings

PLASTICS INDUSTRY THERMOCOUPLES (FOR USE TO 800°F) – Continued ADJUSTABLE THERMOCOUPLES

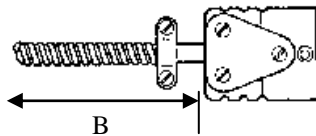
CABLE ADJUSTABLE



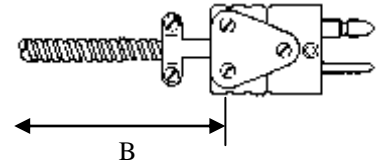
OVERALL LENGTH "B" DIMENSION				Lead Termination
4 Feet	6 Feet	8 Feet	Other	
1543	1563	1583	1593	BX Connector & Spade Lugs
1545	1565	1585	1595	Thermocouple Plug
1547	1567	1587	1597	Thermocouple Jack



**BX CONNECTOR C-375
& SPADE LUGS**



THERMOCOUPLE JACK

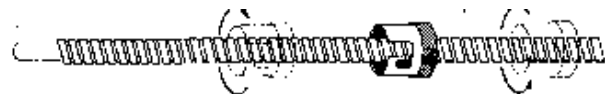


THERMOCOUPLE PLUG

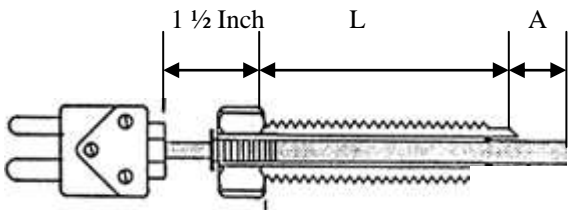
THERMOCOUPLE PLUG

SPRING ADJUSTABLE

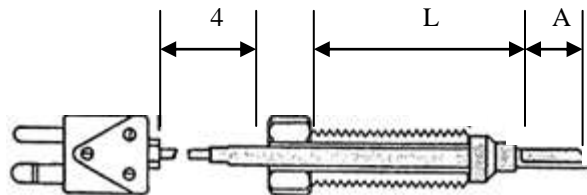
With adjustable length. Cuts inventory costs.
Fits hole depths from 1 inch to 10 inch. Bayonet
Cap turns to desired immersion length. Forms to any angle.
Made with 20 gauge stainless steel overbraid
thermocouple wire.



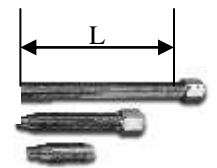
PLASTICS INDUSTRY THERMOCOUPLES (FOR USE TO 800°F) – Continued MELT THERMOCOUPLES



Rigid Plug Extension



Flexible Plug Extension

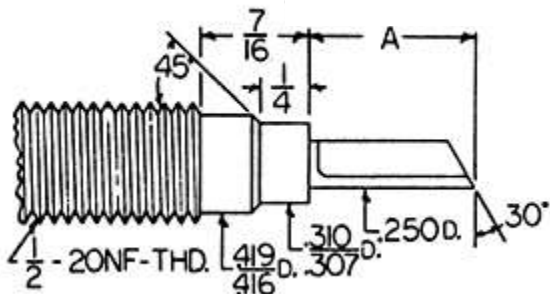


Blank Bolt

*Used to seal hole if thermocouple is removed from extruder

RIGID BODY				4 Inch FLEXIBLE				BLANK BOLT	CONSTRUCTION
Flush	1/4 Inch	1/2 Inch	3/4 Inch	Flush	1/4 Inch	1/2 Inch	3/4 Inch		IMMERSION LENGTH "A"
1431	1432	1433	1434	1435	1436	1437	1438	1439	BODY LENGTH 3 Inch "L"
1461	1462	1463	1464	1465	1466	1467	1468	1469	BODY LENGTH 6 Inch "L"

DETAILED DIMENSIONS

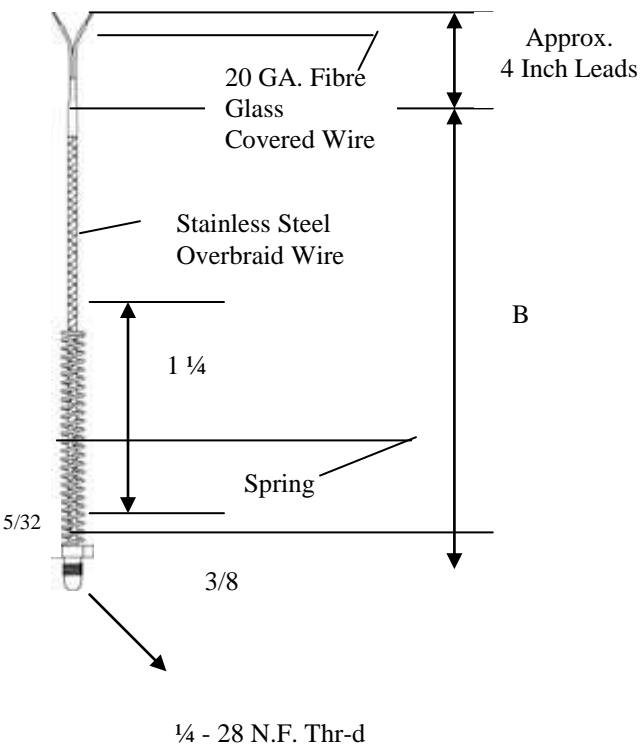


RECOMMENDED DRILLING DIMENSIONS FOR PROPER MOUNTING IN EXTRUDER

NOTE: Melt thermocouples use 24 gauge thermocouple element and threads are 1/2 - 20 N.F. calibration is ISA standard grade iron-constantan, others available on request.

PLASTICS INDUSTRY THERMOCOUPLES (FOR USE TO 800°F) – Continued

NOZZLE THERMOCOUPLE

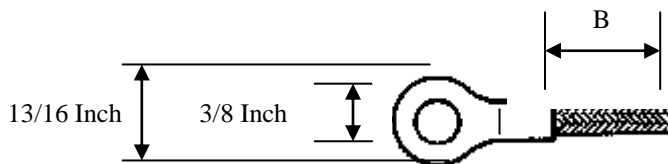


Can be used in holes which are very shallow.
Minimum hole depth.....1/8 Inch
Maximum hole depth.....3/8 Inch

Lead	CONSTRUCTION		CATALOG NUMBER
	S.S. OVERBRAID	S.S. CABLE	
BX Connector & Spade Lugs	1613	1623	
Thermocouple Plug	1615	1625	
Thermocouple Jack	1617	1627	

* Specify "B" Length

RING TYPE THERMOCOUPLE



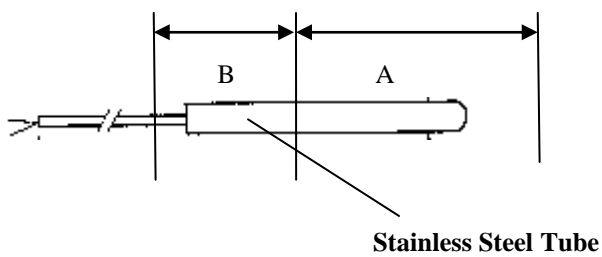
Lead Termination	LENGTH "B" DIMENSION				CATALOG NUMBER
	4 ft.	6ft.	8ft.	Other*	
BX Connector & Spade Lugs	1633	1643	1653	1663	
Thermocouple Plug	1635	1645	1655	1665	
Thermocouple Jack	1637	1647	1657	1667	

* Specify Length

Did You Find What You Are Looking For?
Our Technicians Can **Custom Build** Your Thermocouple Today!

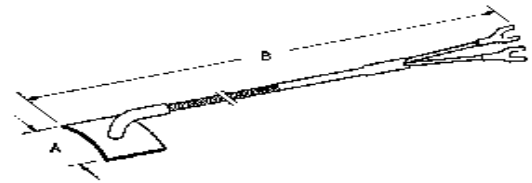
PLASTICS INDUSTRY THERMOCOUPLES (FOR USE TO 800°F) – Continued

SENSITIVE ELEMENT ONLY



Catalog No.	O.D.	B & S Gauge
1601	1/8 Inch	24
1602	3/16 Inch	20
1603	1/4 Inch	20

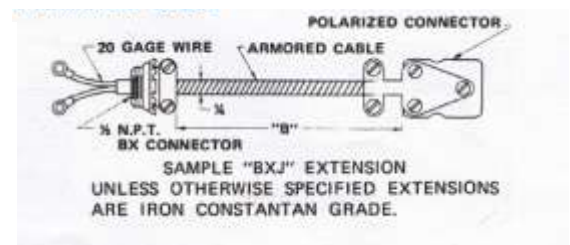
“UNDER THE BAND” THERMOCOUPLE



"A"	CONSTRUCTION		CATALOG NUMBER
	S.S. Overbraid	S.S. Cable	
3/4 Inch	1604	1607	
1 Inch	1605	1608	
1-1/2 Inch	1606	1609	

THERMOCOUPLE EXTENSION

Lead Termination	BX Connector & Spade Lugs	Thermocouple Plug	Thermocouple Jack
Thermocouple Plug	BXP	PP	JP
Thermocouple Jack	BXJ	PJ	JJ



* Specify “B” Dimension



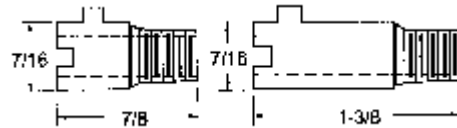
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THERMOCOUPLE ACCESSORIES FOR THE PLASTIC INDUSTRY

ADAPTORS FOR BAYONET TYPE THERMOCOUPLE

*Nickel plated standard, stainless steel available upon request.

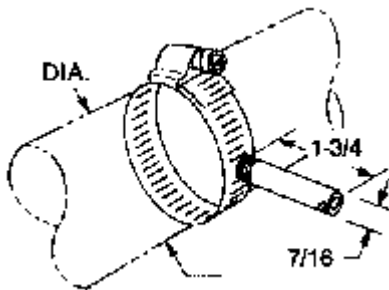
*Also available in other lengths and thread styles, including mm.



CATALOG NUMBER	LENGTH	THREAD
BA-01	7/8 Inch	1/8-27 N.P.T.
BA-02	7/8 Inch	3/8-NF-2

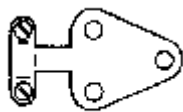
CATALOG NUMBER	LENGTH	THREAD
BA-03	1-3/8 Inch	1/8-27 N.P.T.
BA-04	1-3/8 inch	3/8-NF-2

PIPE CLAMP ADAPTOR

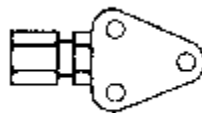


FITS DIAMETER (O.D.)	CATALOG NO.
1/2 Inch to 7/8 Inch	BA-20
7/8 Inch to 1-1/2 Inch	BA-21
1-1/4 Inch to 2 Inch	BA-22
2 Inch to 2-1/2 Inch	BA-23
2-1/4 Inch to 3-1/4 Inch	BA-24
3-1/4 Inch to 4-1/4 Inch	BA-25
3-1/2 Inch to 5 Inch	BA-26

TUBE ADAPTORS & TABLE CLAMPS



CABLE CLAMP

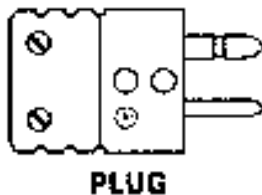


TUBE ADAPTOR

CATALOG NUMBER	DESCRIPTION
6720	Cable Clamp
6723	1/16 Inch and 1/8 Inch Tube Adaptor
6724	3/16 Inch Tube Adaptor
6725	1/4 Inch Tube Adaptor
6730	Jack or Plug Panel Mounting Bracket

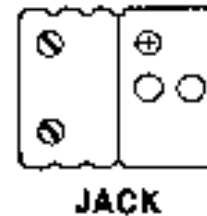
THERMOCOUPLE CONNECTORS (CONTACTS CONSTRUCTED OF ACTUAL THERMOCOUPLE MATERIAL)

COLOR CODED PLUGS



CATALOG NUMBER	CALIBRATION
2510	(J) Iron / Constantan
2512	(K) Chromel / Alumel
2514	(R) or (S) Plat. / Plat. & Rhodium
2516	(T) Copper / Constantan
2518	(E) Chromel / Constantan
2520	(N) Nicrosil / Nisil
2522	(U) Copper / Copper (uncompensated)

COLOR CODED JACKS



CATALOG NUMBER	CALIBRATION
3510	(J) Iron / Constantan
3512	(K) Chromel / Alumel
3514	(R) or (S) Plat. / Plat. & Rhodium
3516	(T) Copper / Constantan
3518	(E) Chromel / Constantan
3520	(N) Nicrosil / Nisil
3522	(U) Copper / Copper (uncompensated)



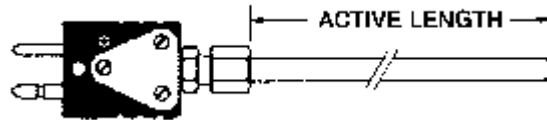
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MINIATURE AND MgO INSULATION THERMOCOUPLES

FEMALE CONNECTOR



MALE CONNECTOR



The following assemblies are normally supplied with grounded junctions.
Exposed or ungrounded types may be supplied at extra cost.
Specify active length.

*Other thermocouple types and sheath materials available upon request.

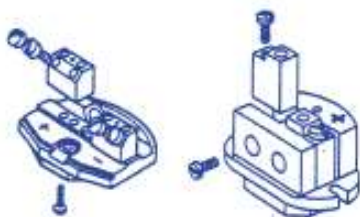
SWAGED MgO THERMOCOUPLES (Inconel Sheath)

NOMINAL SHEATH O.D.	THERMOCOUPLE CALIBRATION	MALE CONNECTOR	FEMALE CONNECTOR	OPEN HEAD	SCREW HEAD
1/16 Inch	Iron / Constantan J	3163M	3163F	3163H	3863
	Chromel / Alumel K	3263M	3263F	3263H	3963
1/8 Inch	Iron / Constantan J	3112M	3112F	3212H	3812
	Chromel / Alumel K	3212M	3212F	3118H	3912
3/16 Inch	Iron / Constantan J	3118M	3118F	3118H	3818
	Chromel / Alumel K	3218M	3218F	3218H	3918
1/4 Inch	Iron / Constantan J	3125M	3125F	3125H	3825
	Chromel / Alumel K	3225M	3225F	3225H	3925

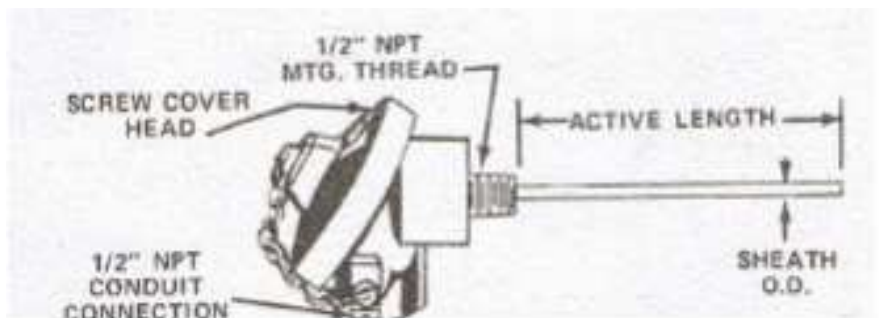
Terminal Block / Open Head Type

Max Temp. 400 ° F

- Connected to Stainless Steel Tube



Screw Cover Head



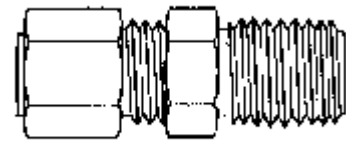


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COMPRESSION FITTINGS

Compression fittings for mounting thermocouples. Available in brass or stainless steel types. Brass fittings may be used when the corrosion resistance and high temperature resistance of stainless steel are not required. It can be applied at any point along the sheath and cannot be moved after it is tightened the first time. The stainless steel fittings are available with either stainless ferrules or Teflon ferrules. The Teflon units may be readjusted along the sheath as often as is required. Specify ordering number.

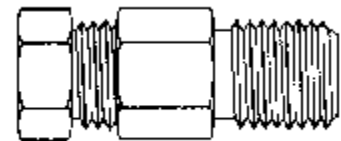
FOR SHEATH O.D.	TYPE	FERRULE	MALE N.P.T.	ORDERING NUMBER
0.063	Stainless	Stainless	1/8 Inch	4010
0.063	Stainless	Teflon	1/8 Inch	4011
0.125	Stainless	Stainless	1/8 Inch	4012
0.125	Stainless	Teflon	1/8 Inch	4013
0.125	Brass	Brass	1/8 Inch	4014



Brass

* Other sheath materials and N.P.T. styles available

FOR SHEATH O.D.	TYPE	FERRULE	MALE N.P.T.
0.188	Stainless	Stainless	1/8 Inch
0.188	Stainless	Teflon	1/8 Inch
0.188	Brass	Brass	1/8 Inch
0.25	Stainless	Stainless	1/8 Inch
0.25	Stainless	Teflon	1/8 Inch
0.25	Brass	Brass	1/8 Inch

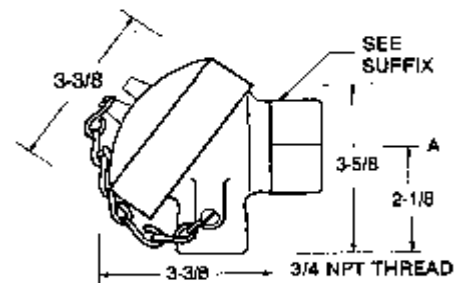


Stainless Steel

THERMOCOUPLES AND ACCESSORIES FOR THE METAL INDUSTRY

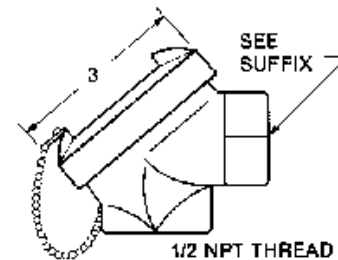
SCREW COVER HEAD No. 8600

Cast iron body and cover.
For protection against weather and corrosive atmospheres.
Slots in head for assembling with wrench or screwdriver.



GENERAL PURPOSE HEAD No. 8605

Cast Aluminum body and cover.
Non-Weather Proof.



SUFFIX	A	B	C	D
Protection Tube N.P.T. Thread	1 Inch	3/4 Inch	1/2 Inch	1/4 Inch



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BASE METAL REPLACEMENT THERMOCOUPLE ELEMENTS

BARE ELEMENTS



ELEMENTS WITH DOUBLE BORE INSULATORS

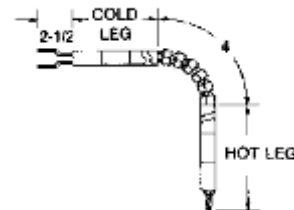


B&S GAUGE	BARE ELEMENT		DOUBLE BORE INSULATOR		FISH SPINE BEADS	
	I/C J	C/A K	I/C J	C/A K	I/C J	C/A K
8	8671	8672	8681	8682	8691	8692
14	8673	8674	8683	8684	8693	8694
20	8675	8676	8685	8686	8695	8696

*Fish spine beads not shown. Always give "specified length" when ordering.

BASE METAL REPLACEMENT ANGLE TYPE THERMOCOUPLE ELEMENTS WITH DOUBLE BORE INSULATORS ON STRAIGHT SECTIONS AND FISH SPINE BEAD INSULATORS AT BEND

THERMOCOUPLE	WIRE GAUGE		
	8	14	20
Iron/Constantan	8611	8613	8615
Chromel/Alumel	8612	8614	8616

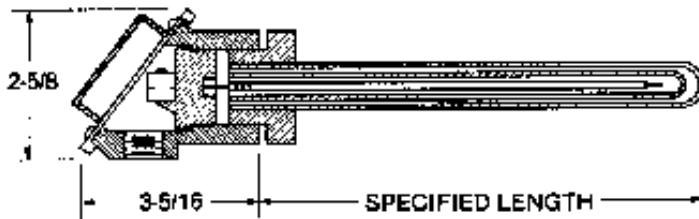


Always specify length of hot and cold legs.
Manufacturing allowance will always be made for bend and terminal connection.

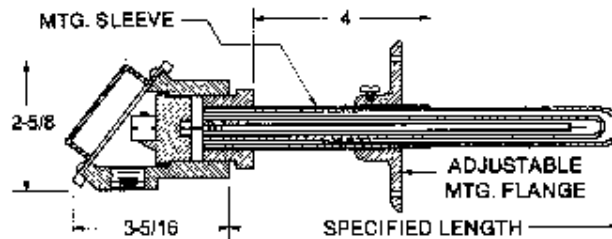


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TUNGSTEN & PLATINUM THERMOCOUPLES WITH DOUBLE CERAMIC PROTECTION TUBES



**READY TO
ORDER?
CALL NOW
734-451-8740**



T/C ELEMENT	PRIMARY TUBE (INNER)	SECONDARY TUBE (OUTER)		WIRE SIZE	MOUNTING ACCESSORIES	CATALOG NUMBER
		MATERIAL	O.D.			
Platinum 10% Rhodium-Platinum	High Temperature Porcelain	High Temperature Porcelain	11/16 Inch	24	None	8761
					Flange & Sleeve	8762
					3/4 Inch N.P.T Mounting Bushing	8763
Platinum 13% Rhodium-Platinum	High Temperature Porcelain	High Temperature Porcelain	11/16 Inch	24	None	8767
					Flange & Sleeve	8768
					Mounting Bushing	8769



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BASE METAL THERMOCOUPLES WITH CLOSED-END METAL PROTECTION TUBES

HOW TO ORDER:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Select Protection Tube 2. Select Wire Gauge 3. Select Straight or Angle 4. Select Thermocouple 5. Specify hot leg length | <ol style="list-style-type: none"> 6. Specify cold leg length if angle 7. Specify options: <ul style="list-style-type: none"> A. Flange B. Mtg. Bushing – specify thr'd and immersion length |
|---|---|

PROTECTION TUBE			WIRE SIZE	STRAIGHT		ANGLE		TUBE ONLY
MATERIAL	O.D.	IPS		I/C	C/A	I/C	C/A	
Mild Steel	0.5403	1/4 Inch	14	8110	8210	8310	8410	8510
Mild Steel	0.84	1/2 Inch	8	8111	8211	8311	8411	8511
12 Inch Cast Iron	1.687	1-1/4 Inch	8	8120	8220	8320	8420	8520
18 Inch Cast Iron	1.687	1-1/4 Inch	8	8121	8221	8321	8421	8521
24 Inch Cast Iron	1.687	1-1/4 Inch	8	8123	8223	8323	8423	8523
Stainless Steel Type 304	0.405	1/8 Inch	14	8130	8230	8330	8430	8530
Stainless Steel Type 304	0.540	1/4 Inch	14	8131	8231	8331	8431	8531
Inconel Std. Sch. 40	0.840	1/2 Inch	8	8140	8240	8340	8440	8540
Inconel Std. Sch. 40	1.050	3/4 Inch	8	8141	8241	8341	8441	8541
Inconel Ex. Heavy Sch. 80	1.050	3/4 Inch	8	8142	8242	8342	8442	8542
Inconel Ex. Heavy Sch. 80	1.315	1 Inch	8	8143	8243	8343	8443	8543
Chrome Iron	0.840	1/2 Inch	8	8150	8250	8350	8450	8550
Chrome Iron	1.05	3/4 Inch	8	8151	8251	8351	8451	8551
12 Inch Silicon Carbide T	1.750	1/2 Inch	8	8170	8270	8370	8470	8570
18 Inch Silicon Carbide T	1.750	1/2 Inch	8	8171	8271	8371	8471	8571
24 Inch Silicon Carbide T	1.750	1/2 Inch	8	8172	8272	8372	8472	8572
30 Inch Silicon Carbide T	1.750	1/2 Inch	8	8173	8273	8373	8473	8573
36 Inch Silicon Carbide T	1.750	1/2 Inch	8	8174	8274	8374	8474	8574
42 Inch Silicon Carbide T	1.750	1/2 Inch	8	8175	8275	8375	8475	8575



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THERMOCOUPLE WIRE



INSULATED DUPLEX CONDUCTOR THERMOCOUPLE GRADE WIRE

INSULATION EACH CONDUCTOR	OVERALL	MAX TEMP.	B & S GAUGE AND TYPE	CALIBRATION	SIZE	CATALOG NUMBER
Silicone				Iron/Constantan (J)		4720
Impregnated	Silicone Impregnated			Chromel / Alumel (K)		4820
0.006 Inch	0.006 Inch Glass Braid	900 Degrees F	20 - Solid	Copper/Constantan (T)	0.057 X 0.102	4920
Glass				Iron/Constantan (J)		4722
Braid				Chromel / Alumel (K)		4822
			24 - Solid	Copper/Constantan (T)	0.045 X 0.078	4922
Silicone	Silicone Impregnated			Iron/Constantan (J)		4724
Impregnated	Double 0.006 Inch	900 Degrees F		Chromel / Alumel (K)	0.072 X 0.132	4824
Double 0.006 Inch	Glass Braid					
Glass Braid	Stainless Stl. Overbraid		20 - Standed	Iron/Constantan (J)	0.095 X 0.150	4736
Extruded 0.008 Inch	Extruded 0.010 Inch			Iron/Constantan (J)		4726
Teflon	Teflon	400 Degrees F	20 - Solid	Chromel / Alumel (K)	0.070 X 0.120	4826
Fused Teflon	Fused Teflon			Iron/Constantan (J)		4728
Tape 0.005 Inch	Tape 0.005 Inch	500 Degrees F	24 - Solid	Chromel / Alumel (K)	0.047 X 0.078	4828
Fused KAPTON				Iron/Constantan (J)		4730
Tape 0.004 Inch			20 - Solid	Chromel / Alumel (K)	0.087	4830
				Iron/Constantan (J)		4732
	None - Twisted	700 Degrees F	24 - Solid	Chromel / Alumel (K)	0.063	4832
Extruded Polyvinyl	None-Wires	(20) Degrees F		Iron/Constantan (J)		4734
0.012 Inch	Molded Together	221 Degrees F	24 - Solid	Chromel / Alumel (K)	0.048 X 0.096	4834
	Ripcord Construction			Copper/Constantan (T)		4924

**MAKE SURE TO INDICATE
CATALOG NUMBER WHEN
ORDERING
CALL NOW 734-451-8740
NEED ASSISTANCE WITH ORDERING?
LET US HELP**





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INSULATED DUPLEX CONDUCTOR THERMOCOUPLE EXTENSION GRADE LEAD WIRE

INSULATION EACH CONDUCTOR	OVERALL	B & S GAUGE AND TYPE	CALIBRATION	SIZE	CATALOG NUMBER
Moisture Barrier			Chromel / Alumel (KX)		5820
0.020 Inch Felted		16 - Stranded	Iron / Constantan (JX)	0.178 x 0.286	5720
Asbestos	Impregnated		Plat. 13% or 10% (RX or SX)		5620
Felted Asbestos	Asbestos		Chromel / Alumel (KX)		5822
0.020 Inch	Braid	16 - Stranded	Iron / Constantan (JX)	0.170 x 0.270	5722
			Plat. 13% or 10% (RX or SX)		5622
		14 - Solid	Chromel / Alumel (KX)	0.205 x 0.300	5823
			Chromel / Alumel (KX)		5824
		20 - Stranded	Iron / Constantan (JX)	0.115 x 0.190	5724
Polyvinyl	Polyvinyl		Chromel / Alumel (KX)		5826
0.012 Inch	0.016 Inch	20 - Solid	Iron / Constantan (JX)	0.092 x 0.150	5726
			Plat. 13% or 10% (RX or SX)		5624
			Copper / Constantan (TX)		5920
			Chromel / Alumel (KX)		5828
Polyvinyl 0.015 Inch	Twisted with Cotton	17 - Stranded	Iron / Constantan (JX)	0.250 Inch	5728
	Filler + 0.030 Polyvinyl		Plat. 13% or 10% (RX or SX)		5628
	PVC Twisted /				
PVC (Drain Computer)	Aluminum Mylar	20 - Solid	Iron / Constantan (JX)	0.200 Inch	5734
Extruded Teflon	Extruded Teflon	20 - Stranded	Iron / Constantan (JX)	0.160 x 0.100	5730

NON-INSULATED SINGLE CONDUCTOR THERMOCOUPLE GRADE WIRE (BARE)

DIAMETER INCHES	B & S GAUGE	IRON	CONSTANTAN	CHROMEL	ALUMEL
0.1285	8	6012	6022	6032	6042
0.0641	14	6015	6025	6035	6045
0.0508	16	6016	6026	6036	6046
0.032	20	6018	6028	6038	6048
CATALOG NUMBER					

NOTE: Extra charges for straightening and cutting of bare wire, CALL 734-451-8740 FOR MORE DETAILS

INFORMATION KEY

COLOR CODE:

Type J (Iron-White; Constantan-Red; Overall-Brown with Black Tracer.)
 Type K (Chromel-Yellow; Alumel-Red; Overall-Brown with Yellow Tracer.)
 Type T (Copper-Blue; Constantan-Red; Overall-Brown with Blue Tracer.)
 Type R or S (Copper-Black; No. 11 Alloy-Red; Overall-Green.)

COLOR CODE: EXTENSION GRADE

Type J (Iron-White; Constantan-Red; Overall-Black.)
 Type K (Chromel-Yellow; Alumel-Red; Overall-Yellow.)
 Type T (Copper-Blue; Constantan-Red; Overall-Blue.)

ON ALL TYPES, NEGATIVE SIDE IS COLOR CODED RED



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TERMS & CONDITIONS

❖ Expert Technical Staff

Repair is performed by experienced technicians and includes thorough testing, cleaning, electrical repair, and calibration with precision test equipment traceable to the National Bureau of Standards. After repair and calibration, the units are retested and monitored to ensure our high standards and quality of repair.

❖ Fast Quality Service

Normal turn around time is two (2) weeks or less. Expedited service is also available with a nominal surcharge. A large inventory of repair parts is maintained for major product lines.

❖ Field Service

Emergency field – service is performed in your plant by ITC technicians on a time and material basis. Periodic service contracts including the cleaning and calibration of instruments in your plant and blanket repair and calibration contracts are available. For periodic and blanket orders ITC can maintain an inventory of critical instruments for instant replacement.

❖ One Year Limited Warranty

All standardized items are covered by a one year limited warranty that all components of the standardized items will be free from defects in workmanship and material under normal use and service. Items repaired other than standardized items are warranted to be free from defects in material and workmanship of the component(s) actually replaced by the company for a period of one year under normal use. Equipment returned transportation prepaid to the company twelve (12) months from the company repair number as labeled on the device which is found by the company's inspection to be defective in workmanship or material, as warranted above, will be repaired or replaced at the company's option above, and repair or replacement by the company is the exclusive remedy. All consequential damage to property, loss of profit or injury to person is specifically excluded. The warranties contained herein shall be construed pursuant to the U.C.C. as adopted in the State of Michigan.

Because of the continuous rise in the cost of material, prices are subject to change without notice. We reserve the right to determine if units are repairable. Units that are badly damaged, have broken faces or have missing parts can be repaired but with an additional charge. We will advise the customer of any additional charges prior to repair of the units.

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