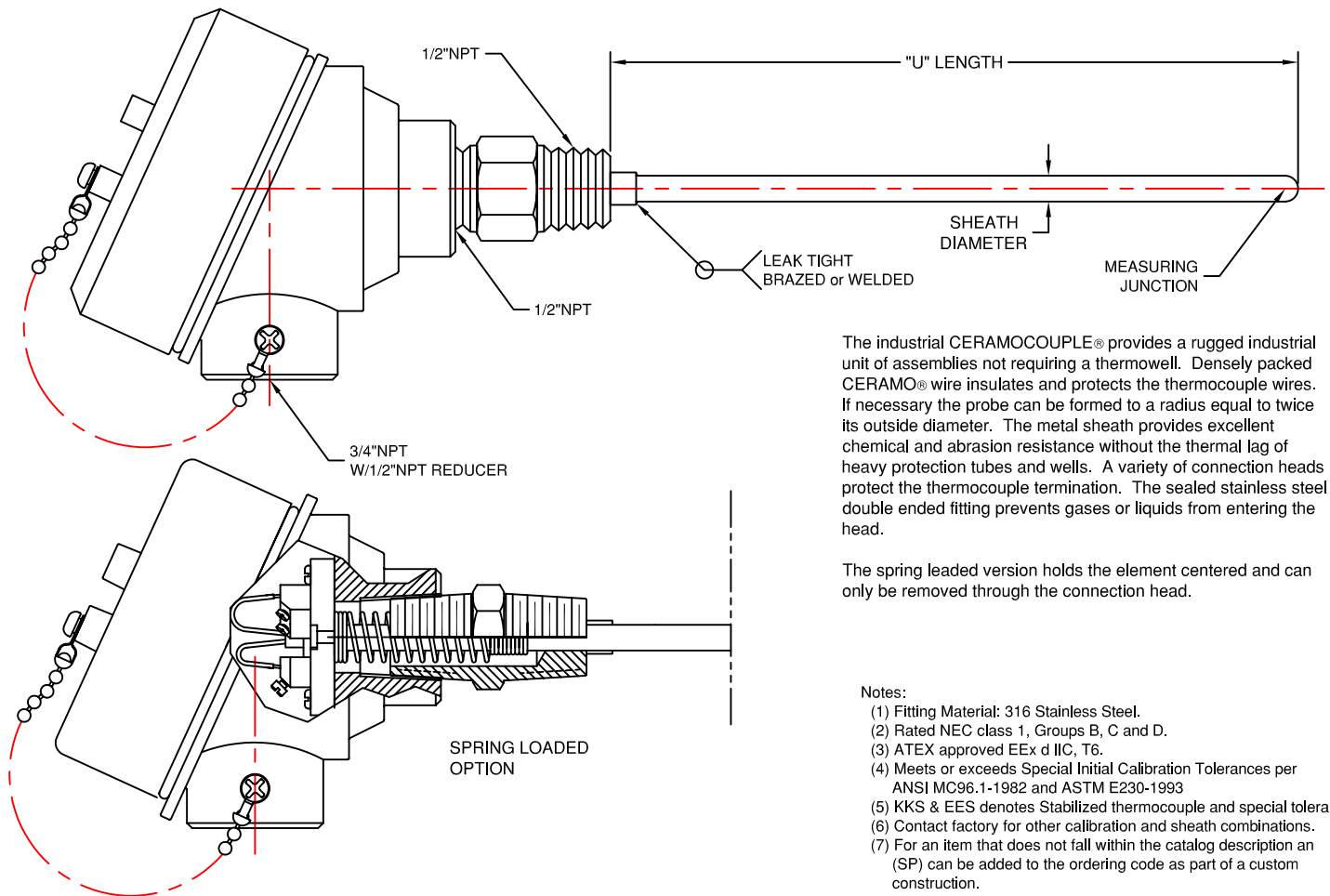


INDUSTRIAL THERMOCOUPLES



The industrial CERAMOCOUPLE® provides a rugged industrial unit of assemblies not requiring a thermowell. Densely packed CERAMO® wire insulates and protects the thermocouple wires. If necessary the probe can be formed to a radius equal to twice its outside diameter. The metal sheath provides excellent chemical and abrasion resistance without the thermal lag of heavy protection tubes and wells. A variety of connection heads protect the thermocouple termination. The sealed stainless steel double ended fitting prevents gases or liquids from entering the head.

The spring loaded version holds the element centered and can only be removed through the connection head.

- Notes:
- (1) Fitting Material: 316 Stainless Steel.
 - (2) Rated NEC class 1, Groups B, C and D.
 - (3) ATEX approved EEx d IIC, T6.
 - (4) Meets or exceeds Special Initial Calibration Tolerances per ANSI MC96.1-1982 and ASTM E230-1993
 - (5) KKS & EES denotes Stabilized thermocouple and special tolerance.
 - (6) Contact factory for other calibration and sheath combinations.
 - (7) For an item that does not fall within the catalog description an (SP) can be added to the ordering code as part of a custom construction.

ORDERING CODE:

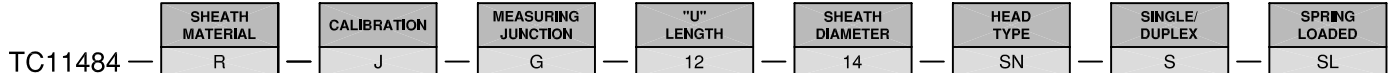
CODE		CALIBRATION
STANDARD	SPECIAL (NOTE 4)	
J	JJ	IRON (+) vs CONSTANTAN (-)
K	KK	CHROMEL (+) vs ALUMEL (-)
T	TT	COPPER (+) vs CONSTANTAN (-)
E	EE	CHROMEL (+) vs CONSTANTAN (-)
N	NN	NICROSIL (+) vs NISIL (-)
-	KKS	CHROMEL (+) vs ALUMEL (-) (NOTE 5)
-	EES	CHROMEL (+) vs CONSTANTAN (-) (NOTE 5)

CODE	MEASURING JUNCTION	CODE	SINGLE/DUPLEX
G	SINGLE GROUNDED, GROUNDED TO SHEATH	S	SINGLE CONSTRUCTION
U	SINGLE UNGROUNDED, ISOLATED FROM SHEATH	D	DUPLEX CONSTRUCTION
DG	DUPLEX GROUNDED, GROUNDED TO SHEATH		
DU	DUPLEX UNGROUNDED, ISOLATED FROM SHEATH		

CODE	"U" LENGTH IN INCHES	CODE	SHEATH DIAMETER
	18		1/8" (.125)
	316		3/16" (.188)
	14		1/4" (.25")
	516		5/16" (.313)
	38		3/8" (.375)

USE ONLY IF SPRING LOADED

CODE	OPTIONAL
SL	SPRING LOADED



CODE	ELEMENT SHEATH MATERIAL	STANDARD CALIBRATIONS (NOTE 6)
P	304 STN. STL.	J, K, T
R	316 STN. STL.	J, K, T, E, N
Q	310 STN. STL.	J, K, E
J	INCONEL 600	K, N, KKS, EES (NOTE 5)

CONNECTION HEAD			
CODE	MATERIAL	TYPE	NEMA
AN	ALUMINUM	WATER PROOF	4
SN	STAINLESS STEEL	WATER PROOF, CORROSION RESISTANT	4, 4X
AE	ALUMINUM	EXPLOSION PROOF (NOTE 2)	4
SE	STAINLESS STEEL	EXPLOSION PROOF, CORROSION RESISTANT (NOTE 2)	4, 4X
XD	ALUMINUM	EXPLOSION PROOF, FM, CSA APPROVED (NOTES 2 & 3)	4, 4X
A	CAST IRON	WEATHER PROOF, RUGGED	
L	POLYPROPYLENE	WEATHER PROOF, LIGHT WEIGHT	
AX	ALUMINUM, LARGE DEVICE, EPOXY COATED	EXPLOSION PROOF, ATEX APPROVED (NOTE 3)	4

TEMPERATURE MEASUREMENT DESIGNER'S GUIDE
WWW.THERMO-ELECTRIC-DIRECT.COM

SECTION INTC
CERAMOCOUPLES®

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