

# INDUSTRIAL THERMOCOUPLES

A	CODE	HEAD EXTENSION
	2	NIPPLE (NOTE 1)
	4	NIPPLE/UNION/NIPPLE (NOTE 1)

CONNECTION HEAD				
B	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

C	CODE	CONDUIT OPENING	D	CODE	TUBE OPENING	E	CODE	"A" LENGTH
		1/2 or 3/4NPT			1/2NPT			IN INCHES

ELEMENT CONSTRUCTION						
CODE		DIAMETER	WIRE SIZE (AWG)	INSULATION	SPRING LOADED	
F	SINGLE	DUPLEX				
	ASL18	ADSL18	1/8"	24	MgO-SHEATH	YES
	A316	AD316	3/16"	20	MgO-SHEATH	NO
	ASL316	ADSL316	3/16"	20	MgO-SHEATH	YES
	A14	AD14	1/4"	18	MgO-SHEATH	NO
	ASL14	ADSL14	1/4"	18	MgO-SHEATH	YES
	A516	AD516	5/16"	16	MgO-SHEATH	NO
	ASL516	ADSL516	5/16"	16	MgO-SHEATH	YES
	A38	AD38	3/8"	15	MgO-SHEATH	NO
	ASL38	ADSL38	3/8"	15	MgO-SHEATH	YES
	B14	BD14	.325"	14	CERAMIC BEAD	NO
	B20	BD20	.183"	20	CERAMIC BEAD	NO

CALIBRATION			
G	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)

MEASURING JUNCTION		
H	CODE	
	G	SINGLE GROUNDED, GROUNDED TO SHEATH
	U	SINGLE UNGROUNDED, ISOLATED FROM SHEATH
	DG	DUPLEX GROUNDED, GROUNDED TO SHEATH
	DU	DUPLEX UNGROUNDED, ISOLATED FROM SHEATH

STANDARD CALIBRATIONS (NOTE 6)		
J	CODE	ELEMENT SHEATH MATERIAL
	P	304 STN. STL.
	R	316 STN. STL.
	Q	310 STN. STL.
	J	INCONEL 600

DROP CODE WHEN USING CERAMIC BEADED ELEMENTS

WELL TYPE						
K	CODE	PROCESS NPT	OD-1	OD-2	ID	NECK DIAM. (MIN.)
	24	1"	.750	1.11	.385	1.38"
	25	3/4"	.750	.844	.385	1.25"
	241	1"	.750	1.11	.260	1.38"
	251	3/4"	.750	.844	.260	1.25"

WELL MATERIAL		
L	CODE	
	Y	446 STAINLESS STEEL
	H	HASTELLOY C276
	L	MONEL 400
	J	INCONEL 600
	Q	310 STAINLESS STEEL
	(F11)	1.25% CR - .5% MO
	(F22)	2.25% CR - 1% MO

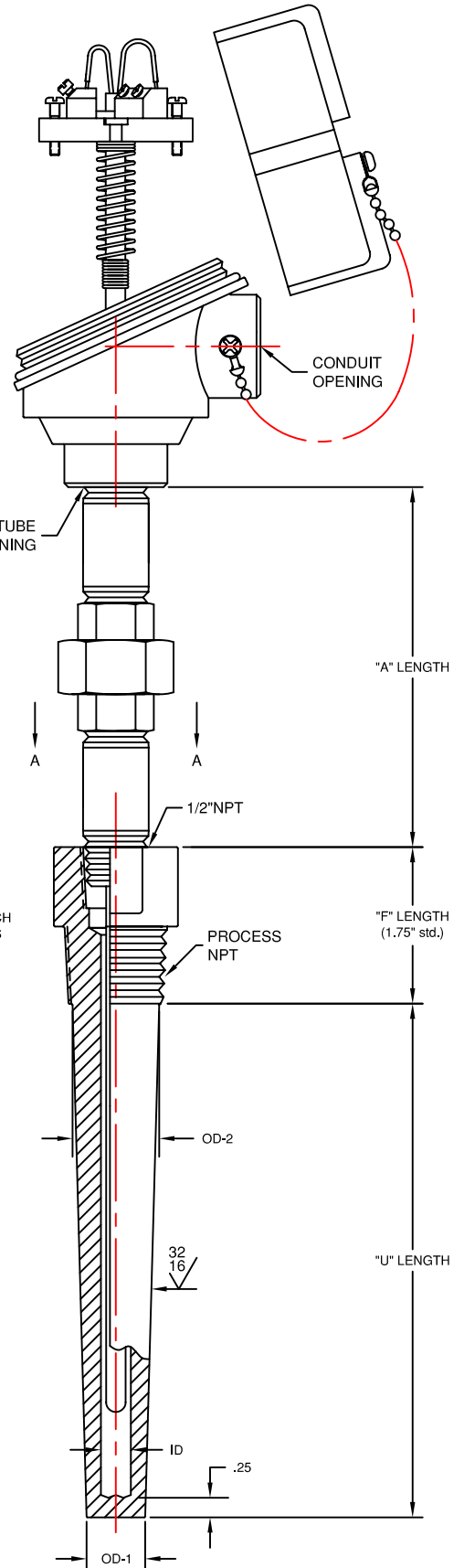
"F" LENGTH		
M	CODE	
		IN INCHES (1.75" STD.)

"U" LENGTH		
N	CODE	
		IN INCHES

- Notes:
- Standard Nipples - Steel, Schedule 40.  
Standard Unions - Black Malleable Iron, 150#.  
OPTIONAL STAINLESS STEEL  
Nipples - 304 or 316 Stainless Steel, Schedule 40 or 80.  
Unions - 304 or 316 Stainless Steel.  
Example Ordering Code: 4AE 3/4 1/2 6(R or R80).
  - Rated NEC class 1, Groups B, C and D.
  - ATEX approved EEx d IIC, T6.
  - Meets or exceeds Special Initial Calibration Tolerances per ANSI MC96.1-1982 and ASTM E230-1993
  - KKS & EES denotes stabilized thermocouple and special tolerance.
  - Contact factory for other calibration and sheath combinations.
  - 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.

EXAMPLE: 2 AE  $\frac{3}{4}$  -  $\frac{1}{2}$  - 3 - AD14 J DG Q - 25 Q 1.75 - 8

□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
A	B	C	D	E	F	G	H	J	K	L	M	N				



TEMPERATURE MEASUREMENT DESIGNER'S GUIDE  
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**SECTION INTC**  
**DRILLED THREADED WELL ASSEMBLIES**  
**TAPERED CONSTRUCTION, ALLOY METALS**  
**3/4 & 1\"/>**

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