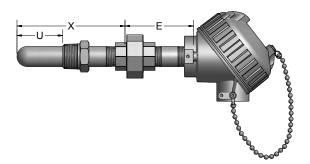


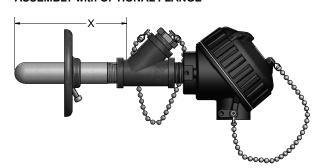
# Thermocouples with Metal-Alloy Protection Tubes

The straight base metal thermocouple assemblies illustrated on this page are those most commonly used in industrial process heating applications. All listed assemblies are provided with schedule 40 protection tubes, and are available with listed options. Heavier pipe schedule protection tubes and special construction designs are also available. **Note: Welded bushings will be welded at maximum length possible when X and U dimensions are specified as the same length. Actual U dimension will be 1 to 2 inches shorter than specified depending on bushing size.** 

#### **ASSEMBLY with WELDED BUSHING**



#### **ASSEMBLY with OPTIONAL FLANGE**



## ORDER CODES

## **Example Order Number:**

K8C - 7 - 50 - 24 - 6E20 - 34

## 1 Thermocouple Type and Wire Gauge Size

CODE		
J8C	K8C K11C	N8C
J14C	K14C	N14C
Thermocouples of 8 ga. wire require minimum of 1/2" NPT tube		
DUPLEX T/C ASSEMBLIES		
For duplex assemblies use the T/C type code letter twice. Example: K8C - 7 - 75 becomes KK8C - 7 - 75		

# 2 Protection Tube

## 3 NPT Thread Size

CODE	MATERIAL	CODE		(inches)	
CODE	WATERIAL	1/4	1/2	3/4	1
6	CARBON STEEL	25	50	75	100
8	316 SS	25	50	75	100
5	446 SS		50	75	100
3	ALLOY 600		50	75	
7	ALLOY 601		50	75	100
41	HR 160®		50	75	100

#### 4 Tube "X" Length

LENGTH (inches)	LENGTH (inches)
12	30
18	36
24	

Specify other lengths in 1" increments up to 240". Consult factory for lengths above 20'.

Duplex 8, 11, and 14 ga. assemblies require a minimum 1/2" NPT protection tube size (size codes 50 and larger).

8 gauge duplex thermocouple elements supplied in 1/2" NPT protection tubes will be supplied with round insulators.

# 5 Optional Welded Bushings

CODE		DESCRIPTION	
STEEL	316SS	BUSHING SIZE (inches)	
6C(U)	8C(U)	1/2 NPT Bushing (25 tubes only)	
6D(U)	8D(U)	3/4 NPT Bushing (25 and 50 tubes only)	
6E(U)	8E(U)	1 NPT Bushing (25, 50 and 75 tubes only)	
6F(U)	8F(U)	1(1/4) NPT Bushing	
6G(U)	8G(U)	1(1/2) NPT Bushing	

Substitute insertion length, in inches, measured from hot tip to bottom of bushing for (U) above. Insert NW in place of insertion length (U) for bushing supplied loose on tube.

### Optional Union and Nipple Head Connection

STEEL	316 SS	Union-nipple supplied as material specified
6PU(E) <sup>[1]</sup>	8PU(E) <sup>[1]</sup>	Omon-mpple supplied as material specified

[1] Insert extension length, in inches, for (E) above.

### 6 Head Terminations

CODE	DESCRIPTION		
31 Aluminum screw-cover head			
34 Cast-Iron screw-cover head			
49	Flip-top aluminum head		
71 <sup>[1]</sup> Cast-Iron aluminum explosion-proof head 81 <sup>[1]</sup> 316L SS explosion-proof head 91 <sup>[1]</sup> 316L SS screw-cover head			
		[1] Not available with 1" NPT protection tubes.	

## 6-1 Assembly Options

CODE	DESCRIPTION	
SB	1/2" NPT conduit reducer bushing	
GS	Ground screw	
Н	Adjustable steel mounting flange	
I	Stainless tag	
6Y	Steel temperature check fitting	
L	Insulated hot junction	

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