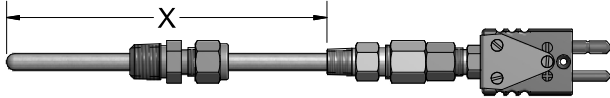
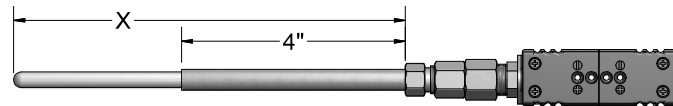


Pyromation's high-temperature thermocouples are designed to operate in a temperature range of (982 to 1871) °C [1800 to 3400] °F. They are designed for use in vacuum furnaces and other applications requiring high-temperature measurement in controlled atmospheric conditions. Metal sheaths of Alloy 600 and molybdenum are available as well as alumina ceramic sheaths. All assemblies are supplied with ungrounded, isolated hot junctions. The construction style consists of an alumina-insulated element inside the tube of choice as listed below. Special construction designs are also available.

### METAL-SHEATHED ASSEMBLY



### ALUMINA-SHEATHED ASSEMBLY



## ORDER CODES

**Example Order Number:**

1                    2                    3                    4                    5                    6                    7  
**R24U** - **403** - **24** - **05A** - **TBL. 5** - **TBL. 6** - **TBL. 7**

Select from following page

### 1 Single Elements

### 2 Sheath Size and Material

TYPE AND WIRE GAUGE	CODE	SHEATH DIA. (inches)	MAX. TEMP.	ATMOSPHERE
<b>ALLOY 600</b>	<b>ALLOY 600</b>			
B24U	303	0.188	1149 °C [2100 °F]	Oxidizing, Inert or Vacuum
C24U	303	0.188		
R24U	303	0.188		
S24U	303	0.188		
B24U	403	0.250	1149 °C [2100 °F]	
C24U	403	0.250		
R24U	403	0.250		
S24U	403	0.250		
<b>MOLYBDENUM</b>	<b>MOLYBDENUM</b>			
B24U	302	0.188	1704 °C [3100 °F]	Inert or Vacuum
C24U	302	0.188	1871 °C [3400 °F]	
R24U	302	0.188	1482 °C [2700 °F]	
S24U	302	0.188	1482 °C [2700 °F]	
B24U	402	0.250	1704 °C [3100 °F]	
C24U	402	0.250	1871 °C [3400 °F]	
R24U	402	0.250	1482 °C [2700 °F]	
S24U	402	0.250	1482 °C [2700 °F]	
<b>ALUMINA</b>	<b>ALUMINA</b>			
B24U	617	0.275 <sup>[1]</sup>	1704 °C [3100 °F]	Oxidizing, Inert or Vacuum
C24U	617	0.275 <sup>[1]</sup>	1871 °C [3400 °F]	
R24U	617	0.275 <sup>[1]</sup>	1482 °C [2700 °F]	
S24U	617	0.275 <sup>[1]</sup>	1482 °C [2700 °F]	
For duplex elements use order code pre-fix letter twice. Example: RR24U	[1] Sheath supplied with 3/8" O.D. x 4" long stainless steel sleeve on tube cold end. Only available with size B and C compression fittings.			
CC24 assemblies not available in 0.188" O.D. sheath diameter.	Consult factory for availability of other diameters or insulations.			

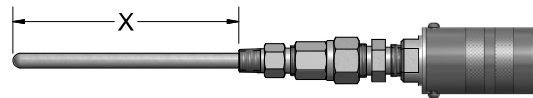
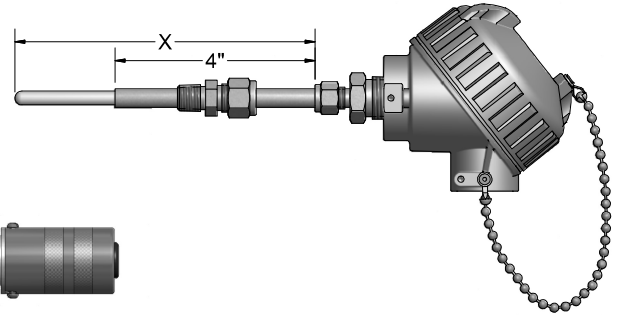
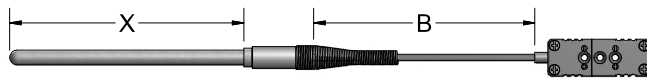
### 4 Sheath Mounting Fittings

CODE	TYPE	NPT SIZE (inches)	AVAILABLE SHEATH DIA. (inches)
00	No sheath mounting fitting		
<b>One-Time Adjustable Compression Fittings</b>			
05A	Stainless steel	1/8	3/16, 1/4
05B	Stainless steel	1/4	3/16, 1/4, 3/8
05C	Stainless steel	1/2	1/4, 3/8
<b>Re-Adjustable Compression Fittings</b>			
12A	Stainless steel	1/8	3/16, 1/4
12B	Stainless steel	1/4	1/4, 3/8
12C	Stainless steel	1/2	1/4, 3/8
FEP gland standard (400 °F max.)			

### 3 Sheath "X" Length

LENGTH (inches)	LENGTH (inches)
12	30
18	36
24	
Specify other lengths in 1" increments.	

All assemblies are provided with wire seal fitting except platinum element assemblies in Alloy protection tubes. All C24 assemblies in alumina protection tubes can only be used in inert or vacuum atmospheres.



## ORDER CODES

**Example Order Number:**

**R24U** - **403** - **24** - **05A** - **15** - **F1A036** - **4**

Select from preceding pages

### 5 Plug and Jack Terminations

CODE	DESCRIPTION	SHEATH O.D. (inches)
4	Standard plug	3/16 thru 3/8
4,HT	Standard hi-temp plug 425 °C [797 °F]	3/16 thru 3/8
MC	Mating connector	

### Head Terminations

CODE	DESCRIPTION
9CF31	Aluminum screw-cover head secured to sheath with SS compression fitting
8HN31 <sup>[1]</sup>	Aluminum screw-cover head with 1/2" NPT stainless steel hex fitting
9CF25	Mini nickel-plated steel head

### Leadwire Transitions (requires leadwire selections)

CODE	DESCRIPTION
15 <sup>[1]</sup>	Extension leadwire transition fitting with relief spring 204 °C [400 °F]
15HT <sup>[1]</sup>	Extension leadwire transition fitting with relief spring and High temperature potting 538 °C [1000 °F]

### 7 Terminations

CODE	DESCRIPTION
0	Leads not stripped
2	2" split leads, 1/4", stripped
3	2" split leads with spade lugs
4 <sup>[1]</sup>	Standard plug
6 <sup>[1]</sup>	Miniature plug

### Options

CODE	DESCRIPTION
MC <sup>[1]</sup>	Mating connector

### 6 Extension Leadwire

CODE	WIRE GAUGE INSULATION DESCRIPTION	T/C AVAILABLE
F1	Solid; fiberglass insulation	R,S,B
F1A	Solid; fiberglass insulation with flexible S.S. armor	R,S,B
T1	Solid; fluoropolymer insulation	R,S
T1A	Solid; fluoropolymer insulation with flexible S.S. armor	R,S

To complete order code, insert wire code and 3 digit "B" length code. Example: F1A036=36" "B" length

[1] Only with platinum elements in 303-403 sheaths.