

Order Code example:

HF2 — **24** — **Cu** — **48"/96"** — **A**
OR
HF1 — **12** — **K** — **72"/144"** — **A**
Type No. of wires² Wire material Wire lengths each side of sealed tube¹ Cap Style
(specify to the nearest inch)

HF - High density tube assembly

A - Mounting thread only
B - Cap End is also threaded

No. of wires	12	24	40	60
Type				
HF1				
HF2				
HF3				
HF4				

¹ The wire lengths on each side of the sealed tube are the actual lengths of wire specified and do not include the length of the metal tube. Dimensions of the sealed tube can be found in the table below. Both ends of each wire, or thermocouple pair, are identified with numbered markers. Minimum wire length 18" each side.

² The number of wires refers to the total number of single wires, both copper and thermocouple-material wires passing through each size of sealed tube. Each series HF assembly can be specified, if required, with a combination of single copper wires and thermocouple pairs. When a combination is specified the following typical examples show how the order code can be configured:

HF2 - 12Cu, 12J - 36" / 72" and **HF3 - 20K, 12T, 8Cu - 60" / 120"**

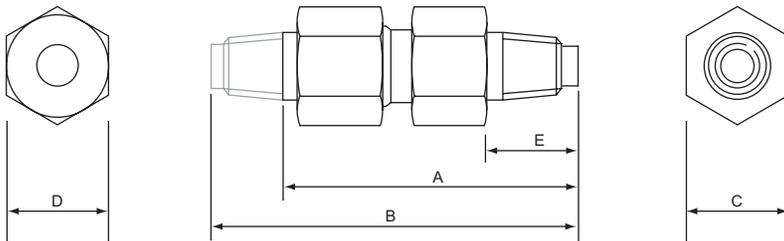
In the first example 12 single copper wires and 6 type-J thermocouple pairs are specified – total 24 wires. In the second example 10 type-K pairs, 6 type-T pairs and 8 single copper wires are specified – total 40 wires. When configuring these combinations of wires it is essential to verify that the total number of wires specified equals the possible number of wires for the size of tube assembly required, remembering that each thermocouple-material pair is two wires.

Temperature rating: -40°F to +260°F (-40°C to +125°C).

Dimensions

Type	HF1	HF2	HF3	HF4
Tube diameter	0.187"	0.250"	0.315"	0.393"
Tube length	3.25"	4"	4"	4"
Wire length	Customer specified			

Dimensions - Series WF Feedthroughs



Process Connection	Overall length with plain cap	Overall length with cap with extension thread	Body hex.	Cap hex.	Body to process end
	Dim A	Dim B	Dim C	Dim D	Dim E
1/8"	1.378"	-	0.591"	0.591"	0.472"
1/4"	2.283"	2.854"	0.748"	0.748"	0.689"
1/2"	2.972"	3.760"	1.000"	1.000"	0.984"
3/4"	3.701"	4.488"	1.260"	1.496"	0.984"

All dimensions in inches.

For further information on cap styles, see page 5 under 'ordering information' and the back cover of this catalog.

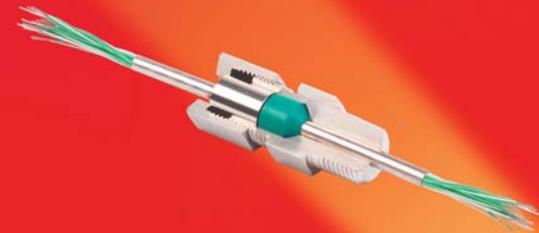
SPECTITE®

Series HF

High density, insulated wire, sealed tube assemblies

A Teflon-lined, stainless steel tube is swaged over multiple, usually Teflon, insulated, single-core copper and/or thermocouple-material wires to make a continuous wire, high-density, sealed feedthrough tube. These are used for thermocouples, resistance thermometers and low voltage instrumentation. The sealed tube assembly is usually mounted in a series PF or MF feedthrough. Series HF feedthroughs are manufactured with customer-specified wire lengths.

Epoxies and other sealants are not used in the construction of HF feedthroughs. They are suitable for use where outgassing is not permitted.



- Saves time and costs by allowing multiple sensor wires to pass through a feedthrough fitting for a single element
- Sealed tubes with continuous, multiple, insulated conductors
- Stainless steel tube (316L) is sealed without potting, epoxies or glues
- Copper or thermocouple-material wires types J, K, T & N
- Max. current rating 500mA at 100Vdc
- Pressure range: Vacuum to 5,000 psi with low leak rate
- 4 tube sizes for 12, 24, 40 or 60 size 24AWG copper or thermocouple material wires
- Single tube assembly mounts in a series PF or PSF feedthrough
- Multiple tubes mount in a series MF or MF feedthrough

ETA Process Instrumentation

119 Foster Street, Bldg #6 | Peabody, MA 01960

Tel: (978) 532-1330 | Fax: (978) 532-7325

www.etapii.com | sales@etapii.com