



Established 1915

CATALOG 77-D

Mark VIII Tube Fittings

for direct braze or weld installation



Up to 6000 psi – gases or liquids

Mark VIII Tube Fittings

for direct braze or weld installation

...for use wherever permanent, hermetically-sealed tube connections are desired

...Ideal, economical companion to separable Mark VIII O-SEAL, the flat-faced fitting with the O-ring seal



CPV offers a full range of Mark VIII fittings for direct brazing or welding to tube ends. These Mark VIII direct braze/weld fittings are designed for pressures from vacuum up to 6000 psi, and are offered in a variety of configurations and sizes (Refer to pages 18 and 19 of Mark VIII O-SEAL Tube Fittings Catalog 74 for specific maximum working pressures and engineering data). These fittings complement our complete line of fully separable Mark VIII O-SEAL tube and hose fittings.

Low Cost, Hermetically-Sealed Connections

Mark VIII direct braze/weld fittings are designed for use wherever a permanent, leaktight connection is required. Because these fittings are brazed or welded directly to tube ends, they provide a truly hermetically-sealed connection ...at significant cost savings over most other types of tube fittings.

The Companion Components to Mark VIII O-SEAL

Mark VIII direct braze/weld fittings complement our complete line of fully separable Mark VIII O-SEAL fittings. Our direct braze/weld fittings are ideal for use wherever the break/remake capability of the Mark VIII fittings is not required. They can be used in a system which also employs separable fittings such as Mark VIII O-SEAL ... or in a completely heat-sealed system (For details on the complete Mark VIII O-SEAL line, request Catalog 74, or visit our website: www.cpvvmfg.com).

Wide Variety of Configurations

To meet specific application needs, Mark VIII direct braze/weld fittings are offered in a variety of configurations, including couplings, elbows and tees in O.D. tube sizes from 1/4" thru 2".

All these components are readily available in 316L stainless steel and can also be furnished in most other alloys. Consult the factory. In addition, reducing inserts for making permanent, one-step line size changes are also available, as detailed on page 4.

Exceptional Application Versatility

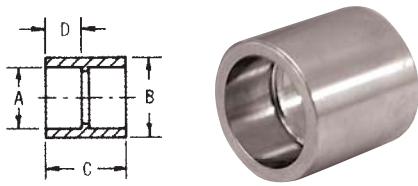
Mark VIII direct braze/weld tube fittings can be used in virtually any system up to 6000 psi wherever tube connections do not have to be broken and remade. Where permanent branch lines are required in a system, for example, a Mark VIII direct braze/weld tee provides the low cost, leakproof means of making the connection. Any tight, 90° bend in the tubing can better be accomplished by employing a Mark VIII direct braze/weld elbow than by actually bending and possibly crimping the tube. And there are countless other applications in a typical system which can benefit from these fittings.

Mark VIII Reliability

For years, our Mark VIII O-SEAL tube fittings have been used in applications requiring the very highest reliability — including critical life support systems in aerospace and undersea apparatus. With Mark VIII direct braze/weld fittings, you are assured of that same reliability in your permanent tube connections.

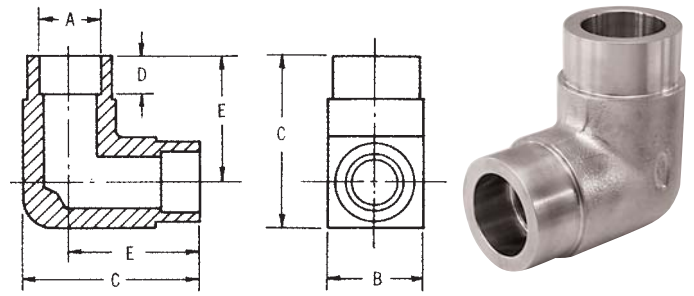
COUPLING – H847

Tube O.D.				
Part No.	A	B	C	D
H847-4	1/4	7/16	7/16	3/16
H847-6	3/8	9/16	9/16	1/4
H847-8	1/2	11/16	11/16	5/16
H847-10	5/8	13/16	13/16	3/8
H847-12	3/4	1 1/16	1	7/16
H847-16	1	1 5/16	1 1/8	1/2
H847-20	1 1/4	1 9/16	1 1/4	9/16
H847-24	1 1/2	1 7/8	1 3/8	5/8
H847-32	2	2 5/8	1 7/8	7/8



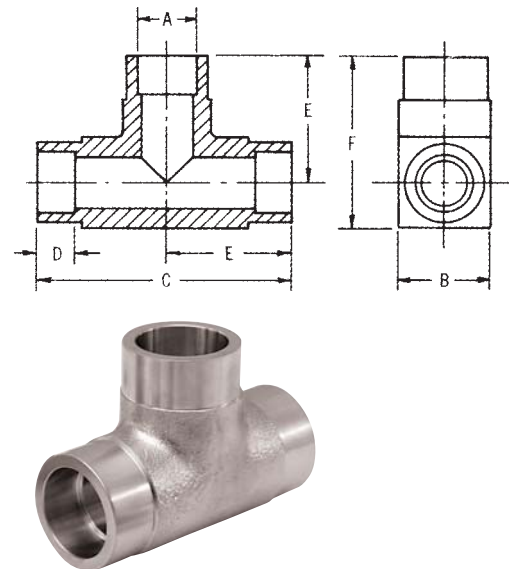
90° ELBOW – H840

Tube O.D.					
Part No.	A	B	C	D	E
H840-4	1/4	5/8	1 1/8	3/16	13/16
H840-6	3/8	5/8	1 1/8	1/4	13/16
H840-8	1/2	3/4	1 7/16	5/16	1 1/16
H840-10	5/8	7/8	1 5/8	3/8	1 3/16
H840-12	3/4	1 1/8	2	7/16	1 7/16
H840-16	1	1 3/8	2 1/4	1/2	1 9/16
H840-20	1 1/4	1 5/8	2 3/4	9/16	1 15/16
H840-24	1 1/2	1 7/8	3 1/8	5/8	2 3/16
H840-32	2	2 3/4	4 1/4	7/8	2 7/8



TEE – H830

Tube O.D.						
Part No.	A	B	C	D	E	F
H830-4	1/4	5/8	1 5/8	3/16	1 3/16	1 1/8
H830-6	3/8	5/8	1 5/8	1/4	1 3/16	1 1/8
H830-8	1/2	3/4	2 1/8	5/16	1 1/16	1 7/16
H830-10	5/8	7/8	2 3/8	3/8	1 3/16	1 5/8
H830-12	3/4	1 1/8	2 7/8	7/16	1 7/16	2
H830-16	1	1 3/8	3 1/8	1/2	1 9/16	2 1/4
H830-20	1 1/4	1 5/8	3 7/8	9/16	1 15/16	2 3/4
H830-24	1 1/2	1 7/8	4 3/8	5/8	2 3/16	3 1/8
H830-32	2	2 3/4	5 3/4	7/8	2 7/8	4 1/4



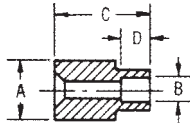
Ordering information: When ordering any stainless steel Mark VIII fitting, use the appropriate part number and suffix for the desired material.

As an example, a **1/2" 90° elbow in stainless steel** is specified as: **H840-8-SS**.

Note: Preformed, Grade VII sil-braze alloy rings (H801) are available if a brazed joint is desired. See page 18 of Catalog 74 for details.

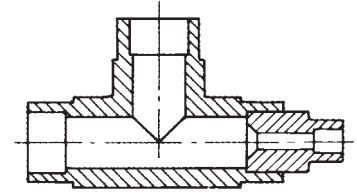
Mark VIII Reducing Inserts H867

for direct braze
or weld installation



These compact inserts are ideal for making line size reductions from any Mark VIII coupling, elbow or tee to a smaller tube size. CPV offers a full range of reducing insert sizes, making it possible to accommodate any size change from 2" all the way down to 1/8" and every size combination in between.

Mark VIII Reducing Inserts can be easily brazed or welded into any of the appropriate-sized fittings. All components are readily available in 316L stainless steel and can also be furnished in most other alloys. Consult the factory.



Typical use of an H867 Reducing Insert in an H830 Tee.

REDUCING INSERTS – H867

Part No.	Tube O.D.		Socket I.D. ¹	
	A	B	C	D
H867-6-4	3/8	1/4	11/16	3/16
H867-6-2	3/8	1/8	11/16	3/16
H867-8-6	1/2	3/8	13/16	1/4
H867-8-4	1/2	1/4	13/16	3/16
H867-8-2	1/2	1/8	13/16	3/16
H867-10-8	5/8	1/2	15/16	5/16
H867-10-6	5/8	3/8	15/16	1/4
H867-10-4	5/8	1/4	15/16	3/16
H867-12-10	3/4	5/8	11/16	3/8
H867-12-8	3/4	1/2	7/8	5/16
H867-12-6	3/4	3/8	7/8	1/4
H867-12-4	3/4	1/4	7/8	3/16
H867-16-12	1	3/4	11/4	7/16
H867-16-10	1	5/8	11/16	3/8
H867-16-8	1	1/2	11/16	5/16
H867-16-6	1	3/8	11/16	1/4
H867-16-4	1	1/4	11/16	3/16

¹ Tube-to-Pipe size fittings are available. Consult the factory.

Dimensions and specifications in this catalog are subject to change.

REDUCING INSERTS – H867

Part No.	Tube O.D.		Socket I.D. ¹	
	A	B	C	D
H867-20-16	1 1/4	1	1 3/8	1/2
H867-20-12	1 1/4	3/4	1 1/4	7/16
H867-20-10	1 1/4	5/8	1 1/4	3/8
H867-20-8	1 1/4	1/2	1 1/4	5/16
H867-20-6	1 1/4	3/8	1 1/4	1/4
H867-20-4	1 1/4	1/4	1 1/4	3/16
H867-24-20	1 1/2	1 1/4	1 1/2	9/16
H867-24-16	1 1/2	1	1 1/2	1/2
H867-24-12	1 1/2	3/4	1 1/2	7/16
H867-24-10	1 1/2	5/8	1 1/2	3/8
H867-24-8	1 1/2	1/2	1 3/8	5/16
H867-24-6	1 1/2	3/8	1 3/8	1/4
H867-32-24	2	1 1/2	1 7/8	5/8
H867-32-20	2	1 1/4	1 7/8	9/16
H867-32-16	2	1	1 7/8	1/2
H867-32-12	2	3/4	1 7/8	7/16
H867-32-10	2	5/8	1 7/8	3/8
H867-32-8	2	1/2	1 3/4	5/16

For Separable Connections: Mark VIII O-SEAL Tube Fittings

Wherever you need the ability to break and remake connections as often as you like, nothing rivals our line of Mark VIII O-SEAL tube fittings. These flat-faced, O-ring sealed fittings assure leaktight sealing, even with vibration and pressure surges in the system. They never need retightening...let you slip components in and out of the system

without springing or cutting the line... permit easy installation, even in tight quarters... and eliminate tube or fitting damage due to overtorquing because they are brazed or welded to tube ends. Mark VIII O-SEAL fittings are available in unions, connectors (shown), tees, elbows and crosses in sizes to 2". Details are given in Catalog 74 which can be viewed on our website.

