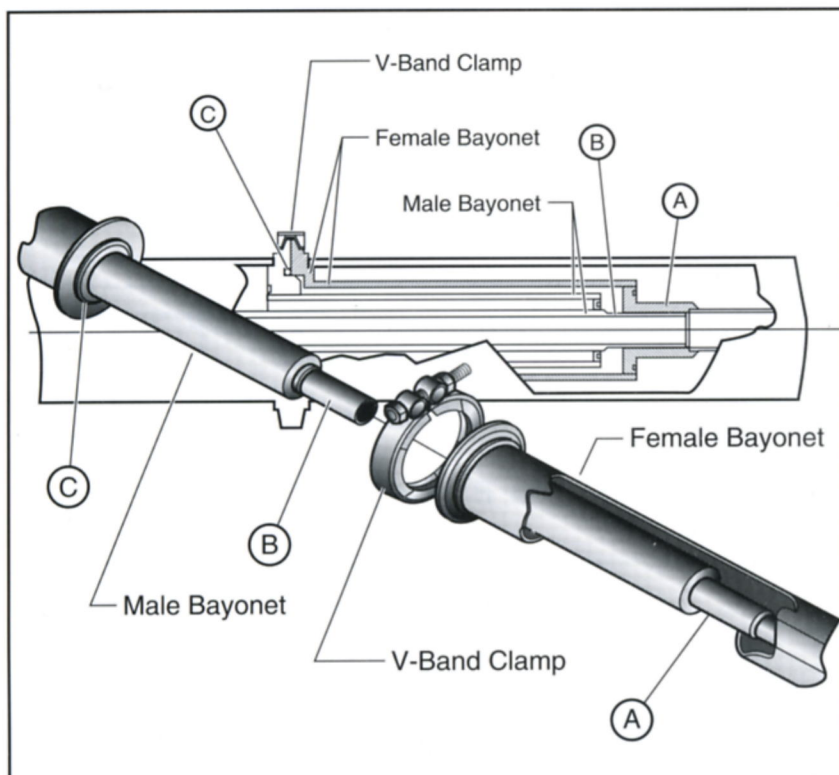


# MVE Vacuum Insulated Pipe

Dissimilar Metal Bayonet Connections for Cryogenic Liquid Transfer



*Pictured above is the MVE Bayonet Connection*

When cryogenic liquid passes through the MVE style bayonet joint, the stainless steel nose of the female bayonet (Item A) contracts and forms a tight seal on the nose of the male bayonet (Item B). The nose piece of the male bayonet is machined out of INVAR 36. INVAR

36 was developed, with the help of NASA, to produce a material that does not shrink when exposed to cryogenic temperatures. A secondary o-ring seal (Item C) at the flange is used for a moisture seal. To disassemble the system, simply drain the line of liquid and warm it to ambient temperature.

MVE's dissimilar metal bayonet design uses the thermal contraction/expansion that low cryogenic temperature gives to metals. It provides a mechanical connection for sections of vacuum jacketed pipe that have a leak tight shrink fit seal.

## Features:

- ◆ Lowest Heat Leak in Industry
- ◆ Most Reliable Cryogenic Connection on the Market.
- ◆ Exceeds Life of Conventional Close Tolerance Bayonet.
- ◆ No Teflon Seals or Nose Pieces that Harden or Crack.
- ◆ Back-up Flange Option Available
- ◆ Easy to Install.
- ◆ Meets ANSI B31.3 Specifications.
- ◆ Available in 1/2", 1", 1-1/2" and 2" Pipe Sizes.

Specify MVE Vacuum Jacketed Piping, with MVE's patented bayonet, for your next cryogenic pipe job.

Note: Standard close tolerance stainless steel bayonets are also available.

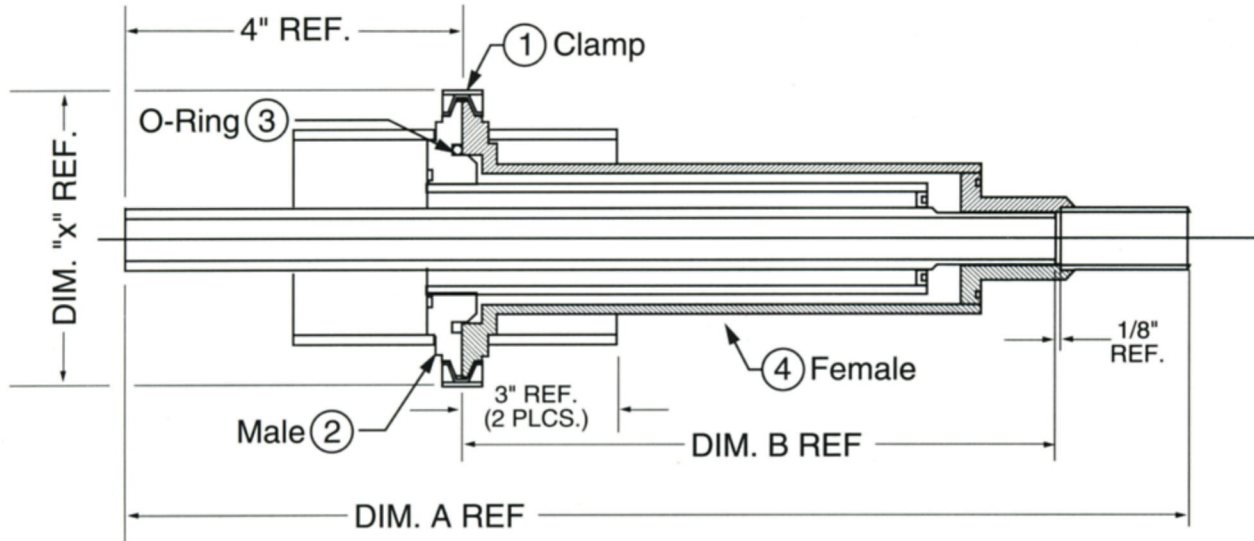
*Distributed By:*

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# Specifications



DIMENSIONS							
Size	O-Ring	Male	Female	Clamp	Dim. A	Dim. B	Dim. "X"
1/2"	2322231	3513231	3513241	3514751	16-39/64"	11"	3-1/8"
1"	2322291	3513251	3513261	3514771	17-1/4"	11-5/8"	4-1/4"
1-1/2"	2322341	10473928	10473961	3514781	20-3/4"	15-1/4"	4-3/4"
2"	2300321	3516191	3516151	3514761	23"	17-5/16"	5-1/4"

TECHNICAL DATA							
Line Size	Code Section	Max Design Pressure	Heat Leak B.T.U. / per hour			Weight	
			Male	Female	Pair	Male	Female
1/2" x 1-1/2"	ASME Sec 8	366 psig	3.51	3.87	7.38	2.03 lbs.	1.36 lbs.
1" x 2-1/2"	ASME Sec 8	206 psig	5.67	6.04	11.71	3.23 lbs.	2.49 lbs.
1-1/2" x 3"	ASME Sec 8	150 psig	5.60	6.30	11.90	6.48 lbs.	4.49 lbs.
2" x 3-1/2"	ASME Sec 8	150 psig	5.60	6.30	11.90	8.29 lbs.	4.81 lbs.

