

VACUUM INSULATED PIPE

DISSIMILAR METAL BAYONET CONNECTIONS

Chart'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.

When cryogenic liquid passes through the bayonet, 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 precision 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) is used at the flange. To disassemble the system, simply drain the line of liquid and warm it to ambient temperature.

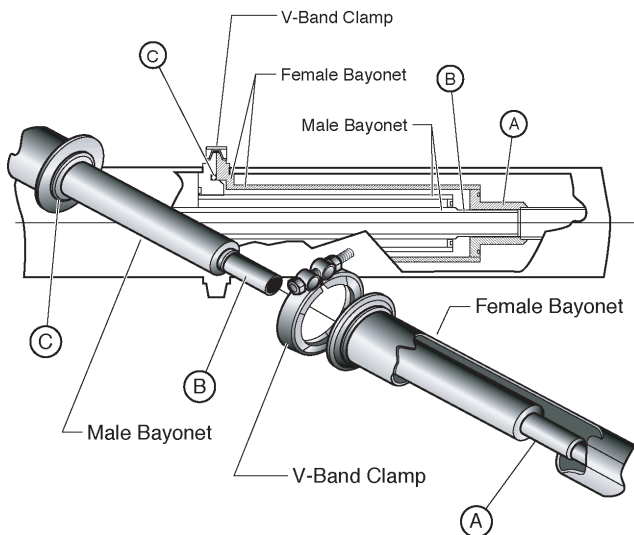
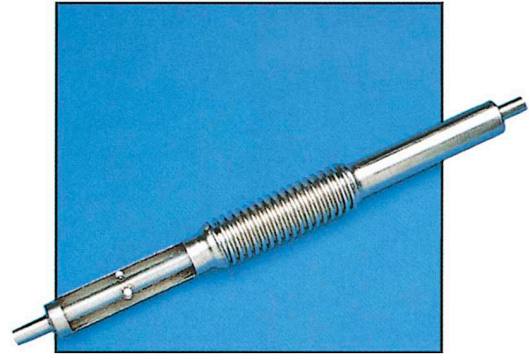


Chart Bayonet Connection

BENEFITS AND FEATURES

- Lowest heat leak in the industry
- Most reliable cryogenic connection on the market
- Back-up flange option available
- Easy to install or disassemble
- Meets ANSI B31.3 specifications
- Available in 1/2", 1", 1-1/2", and 2" pipe sizes

Specify Chart's Vacuum Insulated Piping (VIP), with Chart's bayonet, for your next cryogenic pipe job.

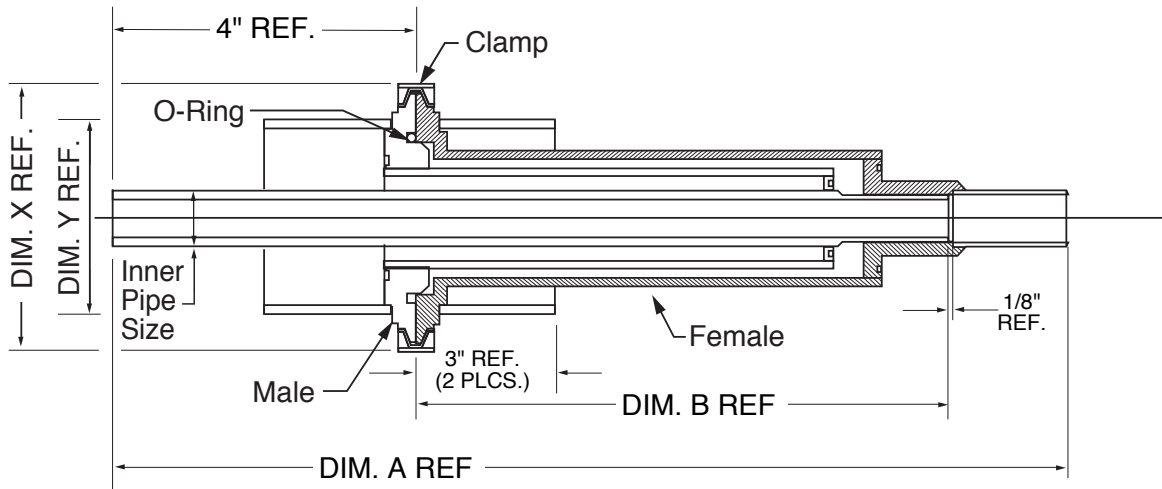
NOTE: Close tolerance stainless steel bayonets are also available.



Cooler By Design. ®

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Inner Pipe Size	PART NUMBERS				DIMENSIONS				Outer Pipe Size
	O-Ring	Male	Female	Clamp	Dim. A	Dim. B	Dim. X	Dim. Y	
1/2" PS	2322231	20627708	3513241	3514751	16-5/8"	11"	3-1/8"	1-1/2" PS 1.90"	2" PS
1" PS	2322291	20627710	3513261	3514771	17-1/4"	11-5/8"	4-1/4"	2-1/2" PS 2.875"	3" PS
1-1/2" PS	2322341	20627711	10473961	3514781	20-3/4"	15-1/8"	4-3/4"	3" PS 3.50"	3-1/2" PS
2" PS	2300321	20627713	3516151	3514761	23"	17-5/16"	5-1/4"	4" PS 4.50"	3-1/2" PS

TECHNICAL DATA			
Line Size	Max Design Pressure	Weight	
		Male	Female
1/2" x 2"	366 psig	2.03 lbs	1.36 lbs
1" x 3"	275 psig	3.23 lbs	2.49 lbs
1-1/2" x 3-1/2"	250 psig	6.48 lbs	4.49 lbs
2" x 3-1/2"	200 psig	8.29 lbs	4.81 lbs