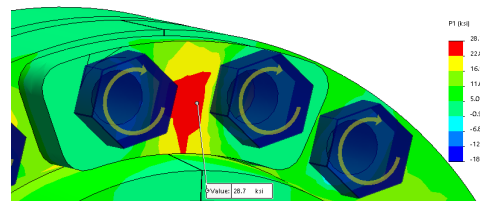
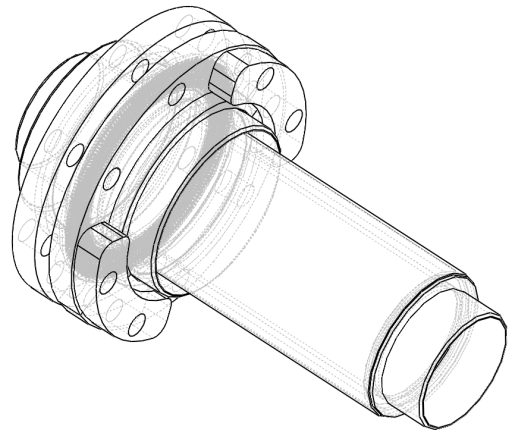


# F-Series Cryogenic Bayonet

The F-Series bayonet connections are high efficiency cryogenic couplings designed for vacuum insulated piping systems. They utilize a close tolerance fit between the length of the mating male and female components. CryoWorks has developed a proprietary treating process that provides long-term dimensional stability and allows for a closer tolerance fit that provides best in class thermal performance. These bayonets incorporate a standard ASME rated back up flange and gasket to provide the most robust and reliable pressure boundary seal.



**Bayonet Set**  
 shown with optional split flange on one side

## Bayonet Standard Features:

- Design Pressure of 275 psig for all sizes.
- Design Temperature of -425 °F (covers LH2, LN2, LOX, LNG).
- Class 150 Lap Joint Flanges (ASME B16.5).
- All components are 316/316L Stainless Steel.
- Concentric serrations on sealing surface.
- 316/PTFE spiral wound gasket with inner ring.
- Vacuum Jacket Components leak tested to  $1 \times 10^{-9}$  cc/sec.
- Flange and gasket combination rated to cryogenic service temperatures.
- Stainless steel hardware, ASTM A320-B8 CL 2 studs.

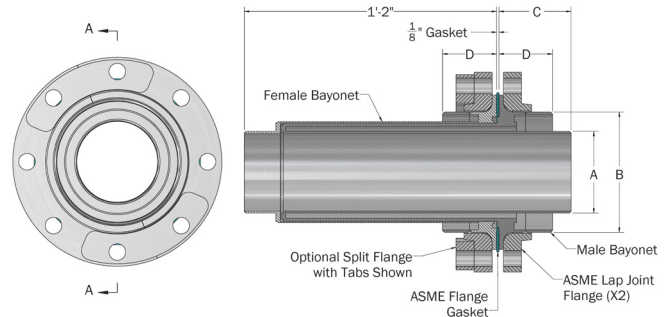
## Benefits:

- Fast and easy assembly and disassembly that does not require field welding.
- ASME flange and gasket assembly benefits:
  - Mitigates risk associated with o-rings commonly used on cryogenic bayonets, which tend to leak if the o-ring is exposed to cryogenic temperatures.
  - Standard Torque Values.
  - No Specific Installer Training required.
  - Proven industry standard sealing technology.

## Related Options:

- Split Back Up Flanges.
- Seamless or 100% RT pipe.
- Impact testing for Helium service (-425 °F) temperature rating.
- Extended Heat Path Bayonets Available for Hydrogen and Helium service.
- Alternative flange gaskets ( $\geq \frac{1}{8}$ " thick) for particular service needs.
- Domestic or DFAR compliant materials of construction.
- Precision cleaning.

## Bayonet Standard Dimensions:



Bayonet Size	Part Number*	Dim A**	Dim B**	Dim C	Dim D
½" x 2"	CA02380	½" NPS (0.84" OD)	2" NPS (2.38" OD)	4"	3"
1" x 2½"	CA02400	1" NPS (1.32" OD)	2½" NPS (2.88" OD)	4"	3"
1½" x 3½"	CA02410	1½" NPS (1.90" OD)	3½" NPS (4.00" OD)	4"	3"
2" x 4"	CA02420	2" NPS (2.38" OD)	4" NPS (4.50" OD)	4"	3"
3" x 5"	CA02430	3" NPS (3.50" OD)	5" NPS (5.56" OD)	4"	3"
4" x 6"	CA02440	4" NPS (4.50" OD)	6" NPS (6.63" OD)	4"	3"
6" x 8"	CA02450	6" NPS (6.63" OD)	8" NPS (8.63" OD)	5"	4"
8" x 10"	CA02460	8" NPS (8.63" OD)	10" NPS (10.75" OD)	6"	5"

\*Includes Male & Female Bayonet, Gasket & SST Stud Kit

\*\*Sizes are NPS Schedule 10 Standard (Inner and Jacket)