

CryoFilters™ are vacuum insulated filters designed for cryogenic applications such as LN2, LNG, LOX, LH2, and LHe services. They are designed to eliminate unwanted particles from the cryogenic fluid stream and can be tailored to your specific filtration requirements. The removable cap bayonet connection allows for filter servicing while minimizing heat input to the process fluid.

CryoWorks provides application engineering to help you select the most suitable filter and element assembly from our wide range of sizes. Customer to specify the cryogenic fluid, flow rate, operating pressure, line size, nominal micron ratings, acceptable clean pressure drop, and code of construction.

## Features:

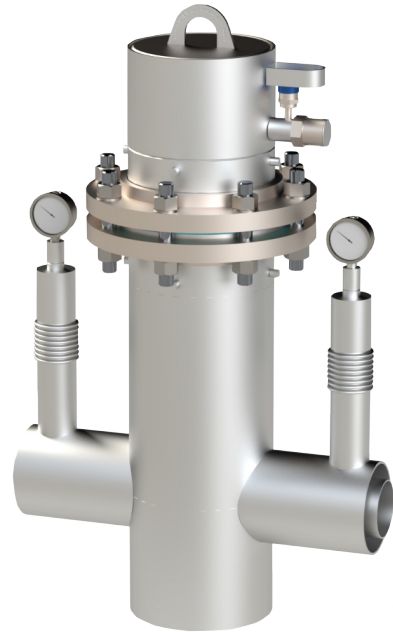
- Vacuum insulated filter body and cap.  
 Note: The body vacuum is incorporated with the connecting piping spool.
- Removable filter element.
- Flanged F-Series™ bayonet connection between body and removable cap.
- Standard material 316/316L.

## Options:

- Upstream and downstream pressure taps.
- Pressure instrumentation for ΔP monitoring.
- TC gauge tube for vacuum monitoring cap.
- Multiple filter element micron ratings available.
- Monel filter element for LOX service.

## Benefits:

- Eliminates icing compared to non-VJ or mechanically insulated filter designs.
- Low heat leak removable cap for filter element access.
- Modular design allows for quick filter servicing or filter size or type modifications to better suit particular process needs.
- Only common tools are required for filter servicing.



**CryoFilter**  
 Shown with optional pressure gauge.

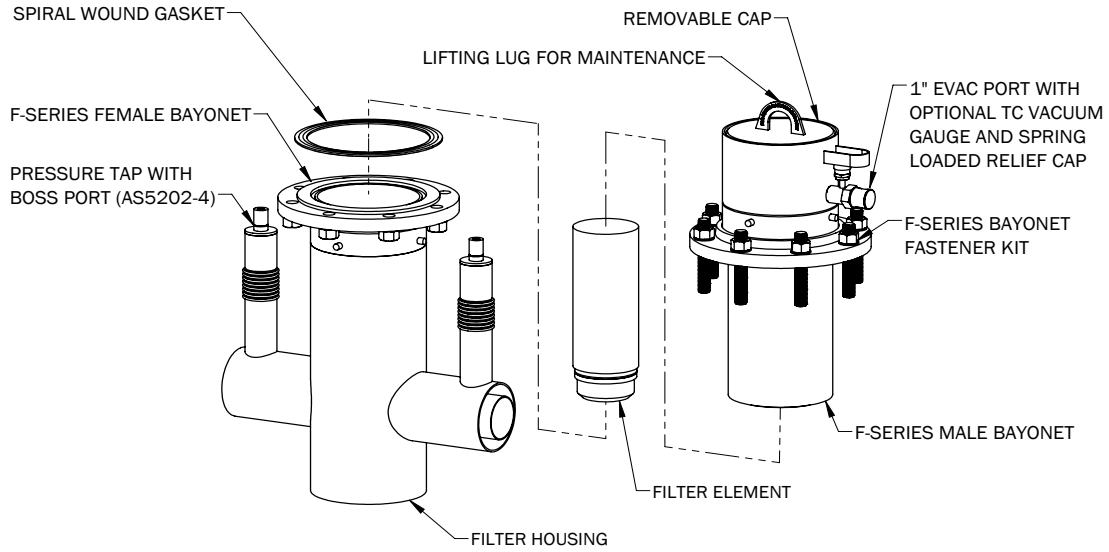


**Filter Element with Removable Cap.**

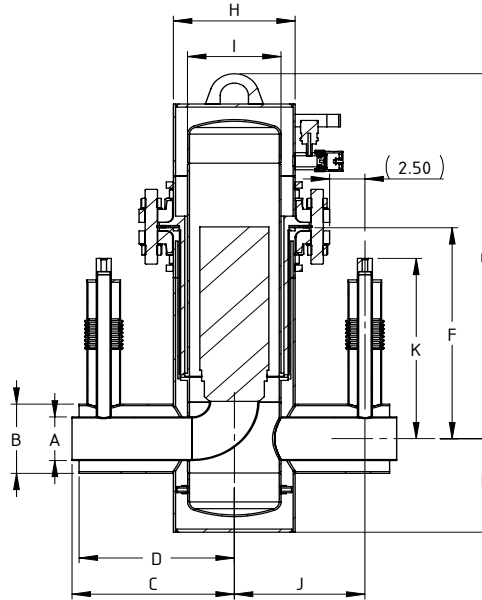


**Ready to be installed to a system!**

## Assembly Diagram



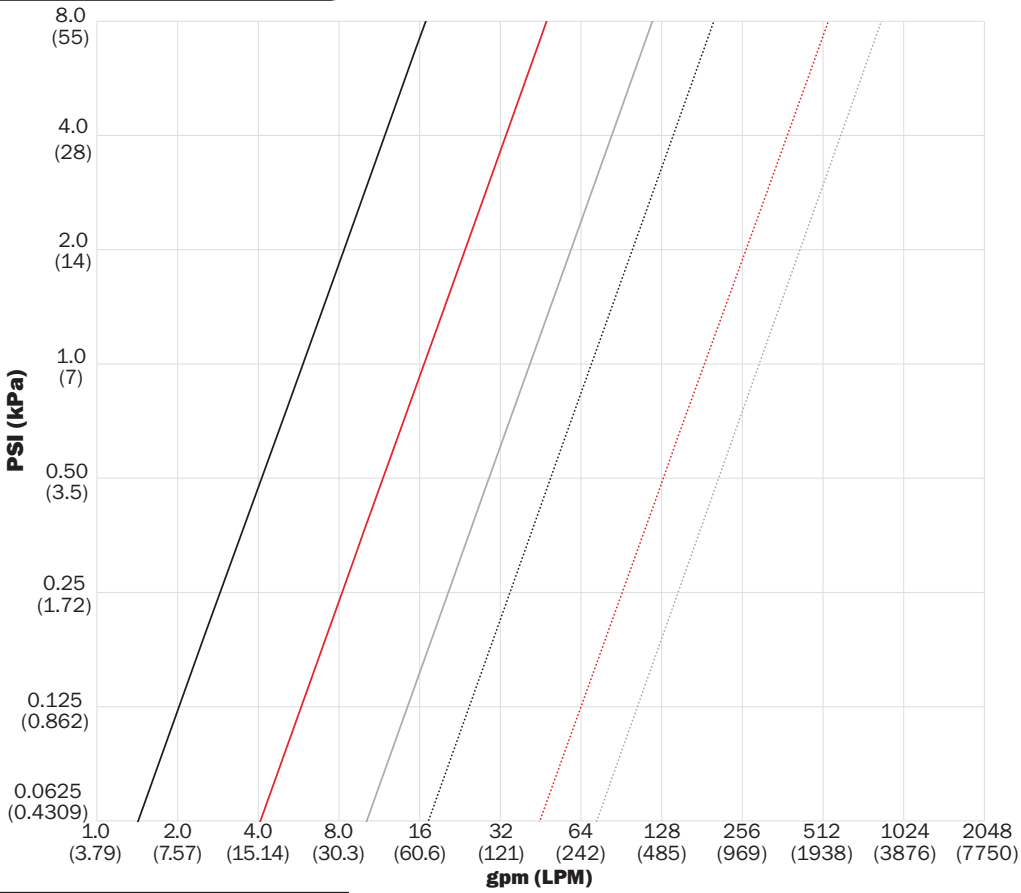
## Cutaway Diagram



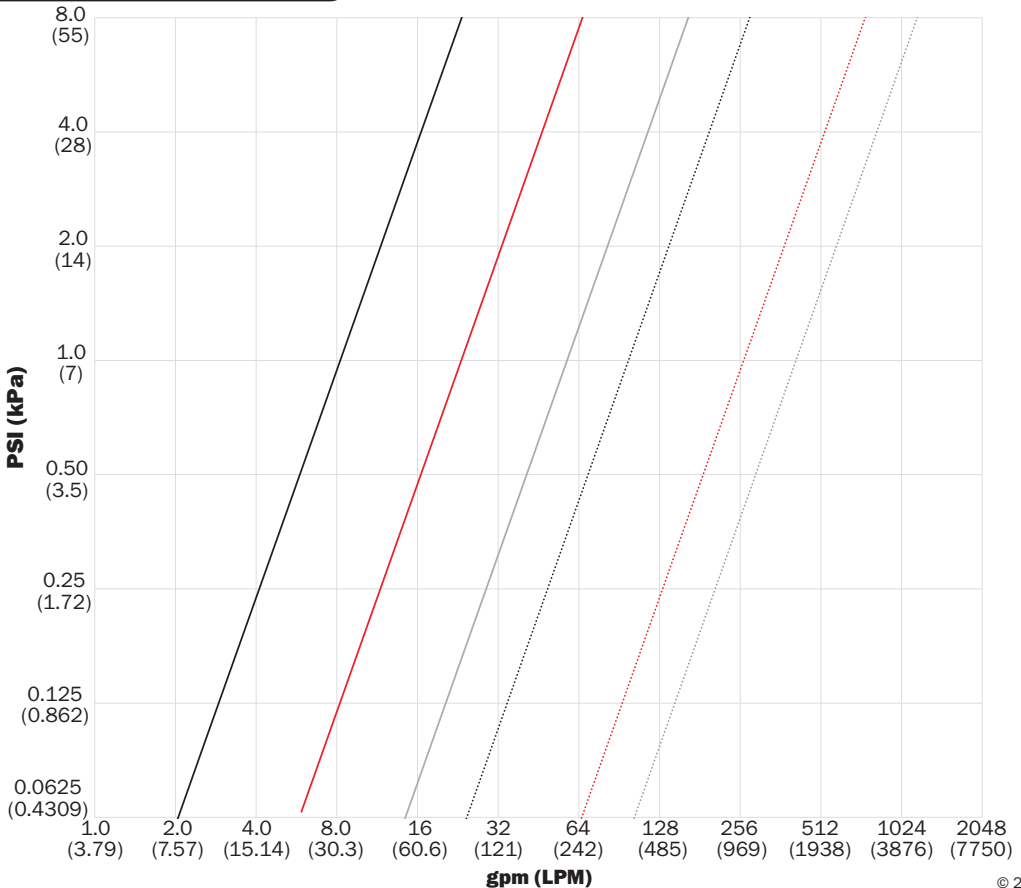
Nominal Pipe Size	Inner Line A in (mm)	Jacket B in (mm)	Dim C in (mm)	Dim D in (mm)	Dim E in (mm)	Dim F in (mm)	Dim G in (mm)	Dim H in (mm)	Dim I in (mm)	Dim J in (mm)	Dim K in (mm)
½" x 2"	0.84 (21.3)	2.38 (60.3)	10.00 (158.8)	9.00 (228.6)	4.31 (109.2)	15.50 (393.7)	25.59 (649.9)	4.50 (114.3)	2.38 (60.3)	7.00 (177.8)	12.88 (327.2)
1" x 2½"	1.32 (33.4)	2.88 (73.0)	10.00 (254.0)	9.50 (241.3)	5.19 (131.8)	15.75 (400.1)	25.59 (649.9)	5.56 (141.3)	3.50 (88.9)	7.50 (190.5)	13.44 (341.4)
1½" x 3"	1.90 (48.3)	3.50 (88.9)	10.00 (254.0)	9.50 (241.3)	5.19 (131.8)	15.75 (400.1)	25.59 (649.9)	5.56 (141.3)	3.50 (88.9)	7.50 (190.5)	13.44 (341.4)
2" x 4"	2.38 (60.3)	4.50 (114.3)	10.50 (266.7)	10.00 (254.0)	5.81 (147.6)	16.06 (407.9)	26.34 (669.0)	6.63 (168.3)	4.50 (114.3)	8.00 (203.2)	13.94 (354.1)
3" x 5"	3.50 (88.9)	5.56 (141.3)	11.50 (292.1)	11.00 (279.4)	7.50 (190.5)	16.93 (430.0)	29.28 (743.7)	8.63 (219.1)	6.63 (168.3)	9.25 (234.9)	14.50 (368.3)
4" x 6"	4.50 (114.3)	6.63 (168.3)	13.00 (330.2)	12.50 (317.5)	9.00 (228.6)	17.50 (444.5)	31.34 (796.0)	10.75 (273.1)	8.63 (219.1)	10.50 (266.7)	15.00 (381.0)

# CryoFilters™ - Pressure Drop vs Flow Rate

## LN2

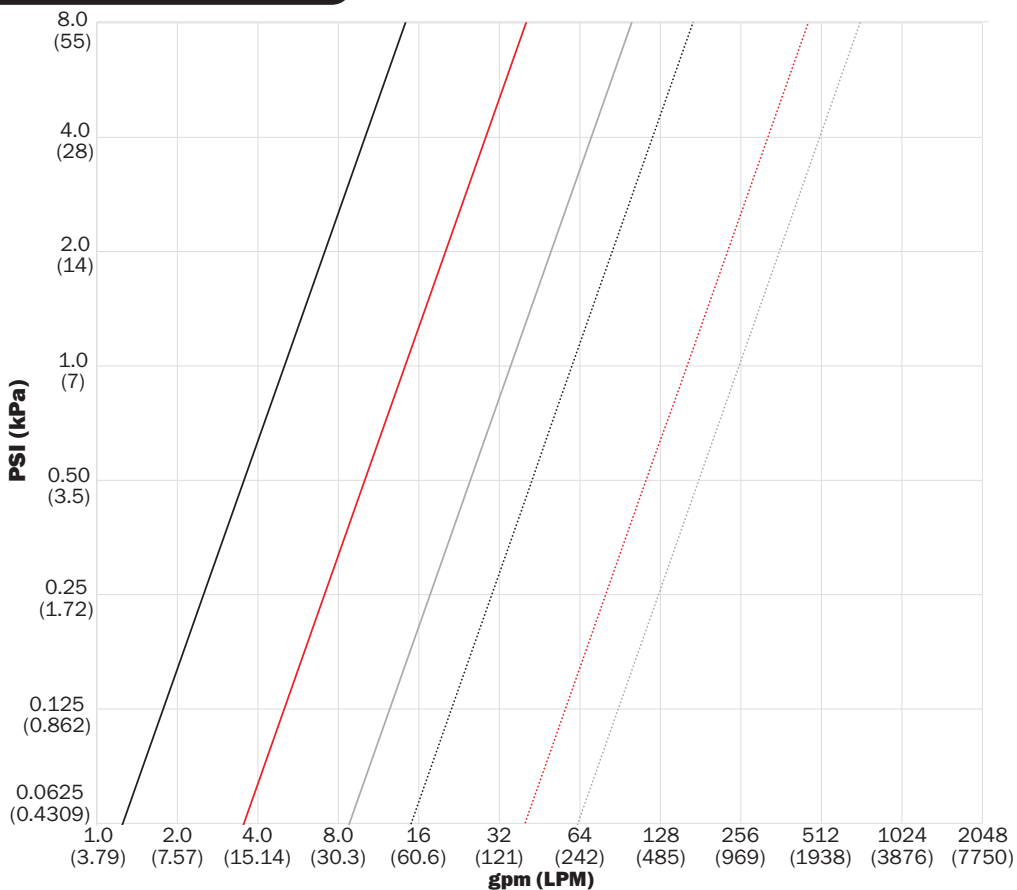


## LNG



# CryoFilters™ - Pressure Drop vs Flow Rate

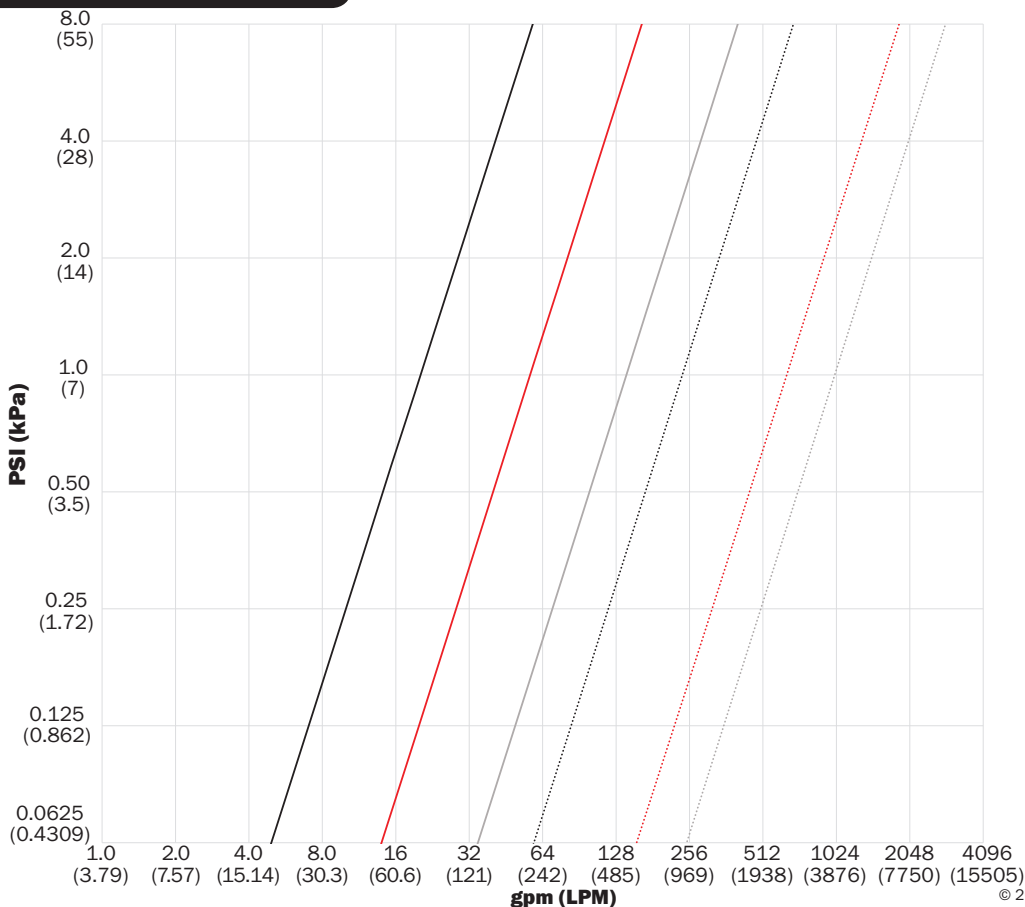
## LOX



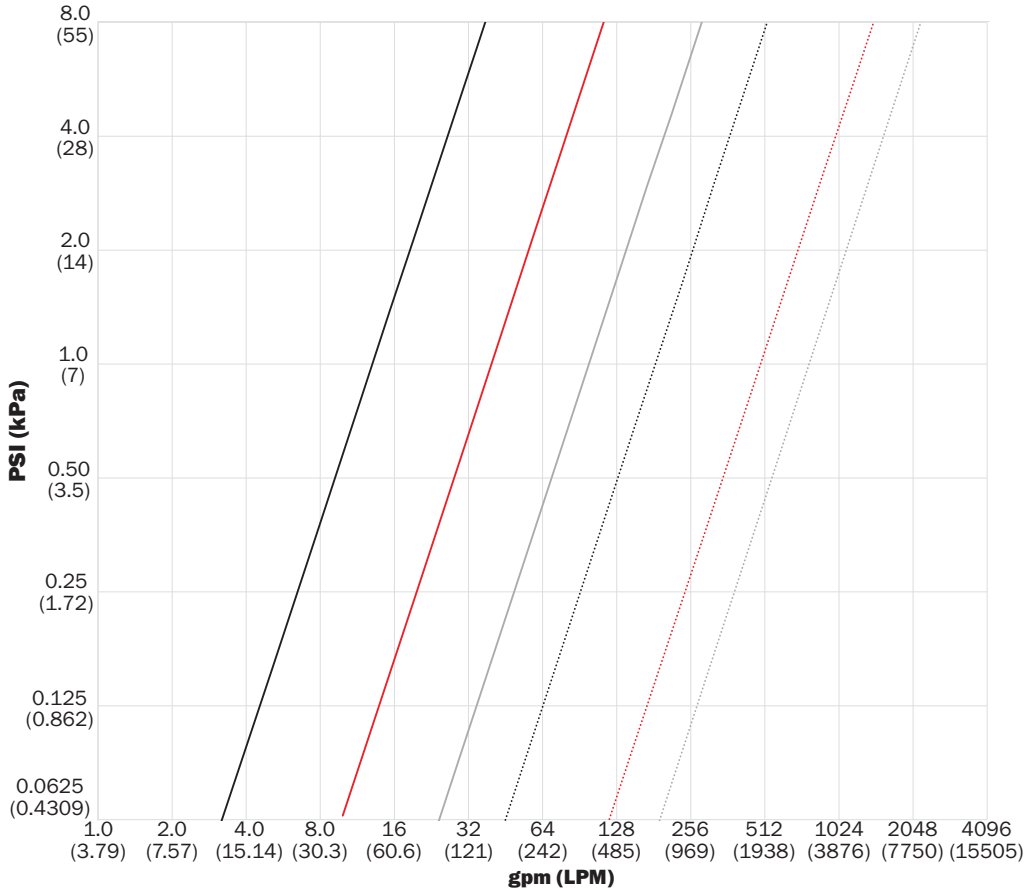
### Legend:

- 0.5 Inch
- 1 Inch
- 1.5 Inch
- ..... 2 Inch
- ..... 3 Inch
- ..... 4 Inch

## LH2



LHe



**Legend:**

- 0.5 Inch
- 1 Inch
- 1.5 Inch
- ..... 2 Inch
- ..... 3 Inch
- ..... 4 Inch

Contact Your Local CryoWorks Rep to add a CryoFilter to your existing or new system design!

