

# CryoFlex

Flexible transfer hose mainly used to overcome misalignment in rigid piping system; and as a final tie-in from rigid piping to equipment such as bulk tank & process equipment.

All hoses comes with static vacuum as standard or dynamic vacuum as option. Static vacuum hose is vacuum sealed at the factory, providing many years of trouble free vacuum insulation.

## CryoFlex VJ Hose

Cryo-Flex is a vacuum insulated stainless steel flexible hose designed to meet high flow capacity without compromising its flexibility.

Engineered as modular section with close tolerance bayonet connections. It can be used on its own, or as part of StatiRigid sections for misalignment offset. Cryo-Flex pipe is evacuated and sealed at the factory as a static vacuum and is available in dynamic vacuum.

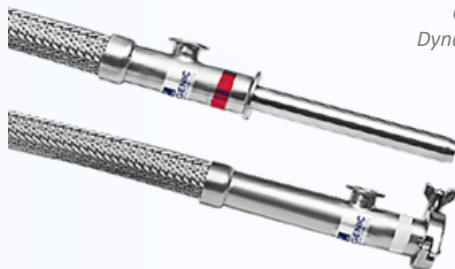
Cryo-Flex are available in wide variety of sizes from DN16 up to DN50 to meet most the standard or custom requirements.

CSM offers a complete line of components such as in-line venting devices, phase separators and gas traps to maximize the system performance.

Cryo-Flex is used in a wide variety of applications including biotech, cryogenic storage, food and beverage, nanotech, environmental temperature chambers and R&D applications.



All Semiflex products come with CSM renowned customer service, from conceptual design to implementation, and are backed by a 3-years Vacuum Warranty, & 1-year Defect Warranty.



*CryoFlex with Dynamic Vacuum option*

## Features and Benefits

- Superior vacuum insulation eliminates moisture, condensation and frost build-up.
- Due to very low heat gain, liquid nitrogen losses can be reduced by 10 to 20 times.
- Quick delivery of LN2 to equipment improves cooling performance and production cycle time.
- Flexibility of Cryoflex facilitates installation especially above drop tile ceilings and below raised test floors.

## CryoFlex Specifications

Model	CF16	CF25	CF32	CF40	CF50
Inner Diameter	DN16 $\frac{5}{8}$ " (16.2 mm)	DN25 1" (25.1 mm)	DN32 $1\frac{3}{8}$ " (34.2 mm)	DN40 $1\frac{1}{2}$ " (40 mm)	DN50 2" (50.1 mm)
Outer Diameter	DN40 (52.1 mm)	DN50 (62.8 mm)	DN65 (81.2 mm)	DN100 (120 mm)	DN100 (120 mm)
Steady State Heat Leak	1.4 BTU/hr/ft (1.3 W/m)	1.5 BTU/hr/ft (1.4 W/m)	1.6 BTU/hr/ft (1.5 W/m)	1.8 BTU/hr/ft (1.7 W/m)	1.7 BTU/hr/ft (1.6 W/m)
Bayonet Heat Leak	4.0 BTU/hr (1.2 W)	8.1 BTU/hr (2.4 W)	8.1 BTU/hr (2.4 W)	9.2 BTU/hr (2.7 W)	11.3 BTU/hr (3.3 W)
Max. Operating Pressure (Bayonet)	200 psi (13.8 bar)	200 psi (13.8 bar)	200 psi (13.8 bar)	200 psi (13.8 bar)	200 psi (13.8 bar)
Weight (exclude Bayonet)	1.6 lb/ft (2.4 kg/m)	2.1 lb/ft (3.2 kg/m)	3.0 lb/ft (4.5 kg/m)	5.3 lb/ft (7.9 kg/m)	5.5 lb/ft (8.2 kg/m)
Min. Bend Radius	8" (20 cm)	12" (30 cm)	18" (45 cm)	24" (60 cm)	28" (72 cm)
Max. Length	Single Line Length 33 ft (10.00 m)				
Vacuum Insulation Type	Static or Dynamic Vacuum				
Material Construction	Stainless Steel Series 300				
Protective Outer Covering	RFB - Regular Flex Braid				
Standard Testing	Dimensional Check He Leak Test at $1.0 \times 10^{-9}$ cc/s				
Optional	Pneumatic pressure test, Vacuum retention testing, LN2 cold shock, pre-material certs., X-ray, ASME B31.3 certification, CFOS cleaning for O2 services				

## Typical StatiRigid-P, Engineered Modular Piping System

