

# SAFETY RELIEF VALVE SUB-ASSEMBLY

# CRYOTREE<sup>TM</sup> 0 - 400 PSIG



APPLICATION

On stationary cryogenic storage tanks to isolate safety relief valve and rupture discs in the event they need to be serviced. Rockwood Swendeman's CryoTree<sup>™</sup> assemblies are manufactured for use on stationary cryogenic storage tanks to isolate safety relief valves and rupture discs in the event they need to be serviced. Utilizing this system eliminates the need to shut down and evacuate the tank for service. This modular assembly provides for just a single connection to the internal tank piping.



### FEATURES

- Duel safety relief systems engineered for maximum safety and reliability
- Easy system installation
- Includes high capacity safety relief valves, full flow diverting valve, rupture discs, bleed valves, and related piping assembled
- Standardized components
- Eliminates the need to shut down and evacuate the tank for service
- Minimizes pressure drop in system
- Medical level O<sup>2</sup> cleaning in conformance with CGA G-4.1
- Sealed in 6mil poly bags to eliminate contamination prior to installation
- Handle indicates flow direction



## **APPLICABLE CODES**

#### Designed and manufactured to meet:

- CGA S-1.2 and S-1.3
- ASME Sec.VIII
- API 527
- AD-Merkblatt A2
- ANSI B31.3, B16.34



#### **Operating Ranges:**

Temperature	-423° F to +400° F
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Set Pressure	to 400 PSIG
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#### Materials of Construction:

Body	Bronze B61
End Plate	Bronze B61
Ball	Bronze
Stem	316SS

#### Sizes:

Available in 3/4" F to 1" F

#### **Testing:**

Hydrostatically tested as a complete unit to assure leak tightness.









# **DIMENSIONS & CHARACTERISTICS**

#### **HIGH FLOW DIVERTER VALVE VALUES\***

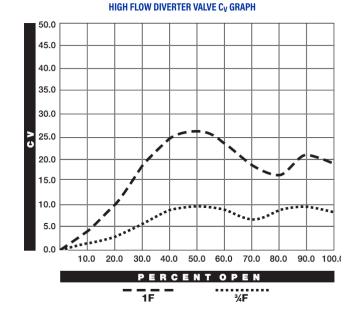
	Safety Relief Valve Outlet		Rupture Disc Outlet	
Size (inches)	CV@ mid position (90°)	CV@ full open (180°)	CV@ mid position (90°)	CV@ full open (180°)
3/4F	9.2	8.2	10.7	8.1
1F	25.3	18.3	16.4	14.0

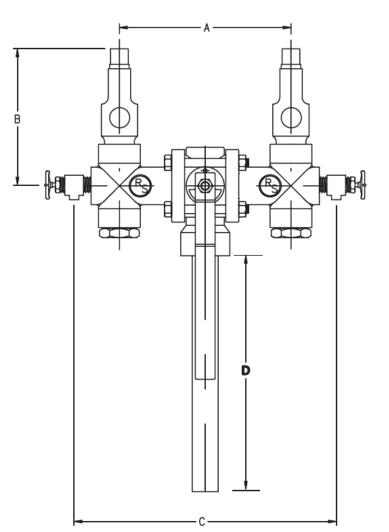
Flows may vary slightly due to outlet connection sizes.

#### **DIMENSION - INCHES**

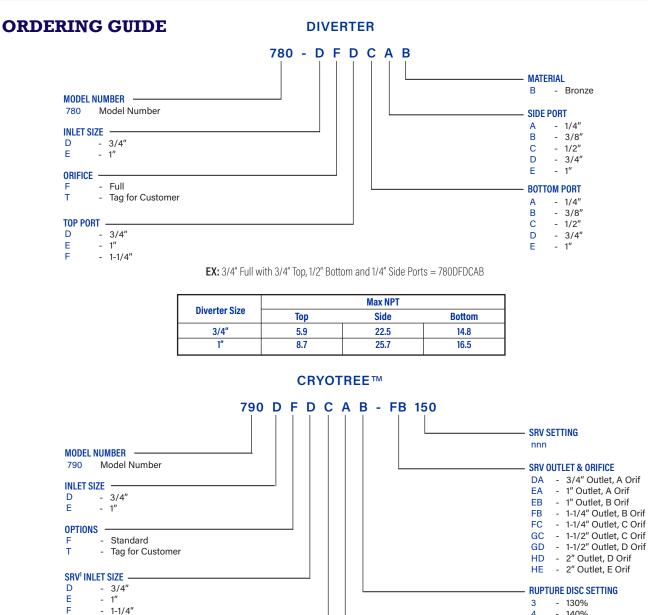
Size	A	В	C
3/4F	5.9	22.5	14.8
1F	8.7	25.7	16.5

Dimensions for reference only.





# CP2-Cryolab.



RUPTURE DISC SIZE

Α	-	1/4"
В	-	3/8'
С	-	1/2"

D - 3/4"

Е - 1″

- 140% 4 - 150% в 6 - 160% 7 - 170% 8 - 180% 9 - 190% - 200% 0

EX: 3/4" Full with 3/4" B 1-1/4" SRV @ 150psi & 1/2" Rupture Disc @ 225psi = 790DFDCAB-FB150

Discustor Circ	Max NPT		
Diverter Size	Тор	Side	Bottom
3/4"	3/4"	3/4"	1/2"
1″	1-1/4"	1"	1″

- 1. Diverter Top Port
- 2. A is the standard
- Cryotree only available with 1/4" side or bottom port 3. Rupture Disc setting over SRV set pressure

PURGE VALVE LOCATION - Side - Bottom

A2 В

- (example: 150psi X 150% = 225psi) Actual settings to be in 5psi increments (prefered
- 4. B is the standard

