

SAFETY RELIEF VALVE SUB-ASSEMBLY

CRYOTREETM

0 to 400 PSIG



APPLICATIONS

On stationary cryogenic storage tanks to isolate safety relief valves and rupture discs in the event they need to be serviced. Rockwood-Swendemans' CryoTree™ 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 O² cleaning in conformance with CGA G-4 1
- Sealed in 6mil poly bags to eliminate contamination prior to installation
- Handle indicates flow direction



Valve Size:

Available in 3/4" F to 1" F



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

Max. Operating Pressure 400 PSIG



TECHNICAL DATA

Materials of Construction:

 Body
 Bronze B61

 End Plate
 Bronze B61

 Ball
 Bronze

 Stem
 316SS

Testing:

Hydro-statically tested as a complete unit to assure leak tightness.

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HIGH FLOW DIVERTER VALVE VALUES*

Size (inches)	Safety Relief Valve Outlet		Rupture Disc Outlet	
	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

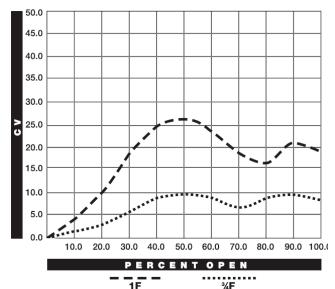
Flows may vary slightly due to outlet connection sizes.

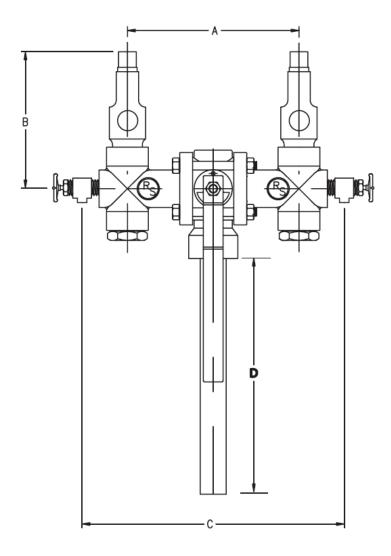
DIMENSION - INCHES

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Size	Α	В	C
3/4F	5.9	22.5	14.8
45	0.7	25.7	
IF.	8./	25./	16.5

Dimensions for reference only.

HIGH FLOW DIVERTER VALVE CV GRAPH





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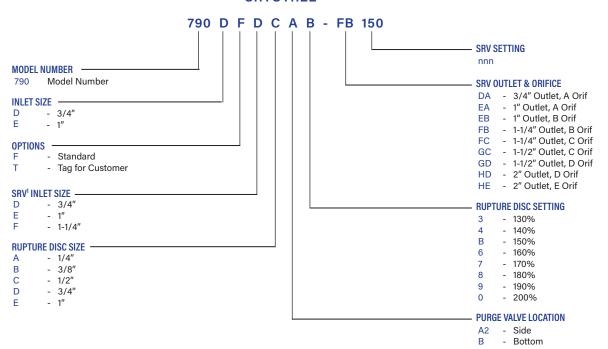


ORDERING GUIDE DIVERTER 780 - D F D C A B В - Bronze MODEL NUMBER -780 Model Number SIDE PORT - 1/4" INLET SIZE -В - 3/8" - 3/4" С - 1/2" - 1" D - 3/4" ORIFICE -- Full **BOTTOM PORT** - Tag for Customer - 3/8" - 1/2" - 3/4" TOP PORT -C - 3/4" D - 1" - 1" - 1-1/4"

EX: 3/4" Full with 3/4" Top, 1/2" Bottom and 1/4" Side Ports = 780DFDCAB

Diverter Size	Max NPT		
	Тор	Side	Bottom
3/4"	5.9	22.5	14.8
1"	8.7	25.7	16.5

CRYOTREE™



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

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