

FIGURE 780 DIVERTER VALVE

SIZES $\frac{3}{4}$ " to $1\frac{1}{2}$ "
PRESSURES to 400 PSIG at 400°F

- Engineered for maximum safety and reliability
- Full flow manifold ends
- Cleaned and packaged for use in O₂ service in compliance with the CGA specification G-4.1
- 180 degree operation
- Handle indicates flow direction
- Low maintenance
- Blow out proof stem
- V-ring stem packing
- All stainless externals

APPLICATIONS DATA

- Dual safety relief systems
- Stationary cryogenic tanks
- Manifolding
- Distribution systems
- Process systems
- Liquid and Gaseous Cryogenic Applications

APPLICABLE CODES

- ANSI B31.1
- API 527
- ANSI B16.18
- ASME Sec. VIII
- CRN: 0C0945.9087YTN

MODELS

- 780 - Bronze Diverter Valve

CODE SELECTION CHART

	Model			Valve Size	Orifice	Top Port	Bottom Port	Side Port	Mat'l	
	7	8	0	G	E	D	E	B	B	
	1	2	3	4	5	6	7	8	9	
Model - Position 1, 2 & 3 780 = Diverter Valve				Orifice - Position 5 F = Full	Bottom Port - Position 7 A = $\frac{1}{4}$ B = $\frac{3}{8}$ C = $\frac{1}{2}$ D = $\frac{3}{4}$ E = 1 F = $1\frac{1}{4}$			Side Port - Position 8 A = $\frac{1}{4}$ B = $\frac{3}{8}$ C = $\frac{1}{2}$ D = $\frac{3}{4}$ E = 1 F = $1\frac{1}{4}$		Material - Position 9 B = Bronze w/316 Stem
Valve Size - Position 4 D = $\frac{3}{4}$ E = 1 G = $1\frac{1}{2}$				Top Port - Position 6 D = $\frac{3}{4}$ E = 1 F = $1\frac{1}{4}$ G = $1\frac{1}{2}$						

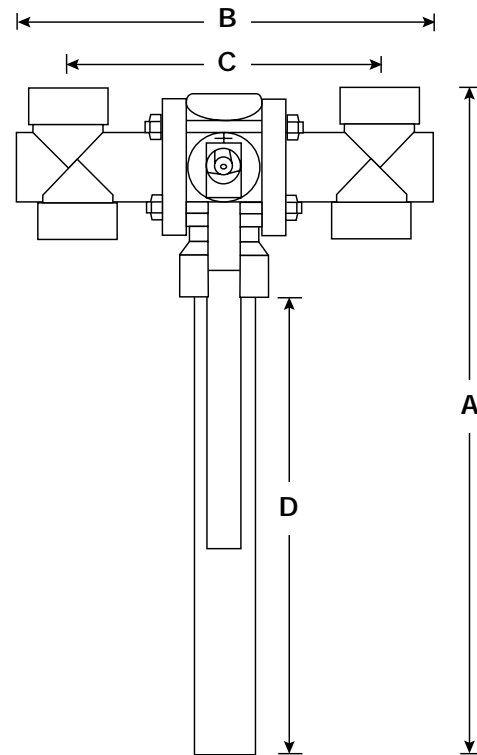
FIGURE 780 DIVERTER VALVE

SPECIFICATION

The valve shall be utilized for applications that requires full flow manifolds. The valve shall have 180 degrees of operation. The handle shall indicate the direction of flow. The stem shall be blow out proof and contain V-ring packing material. The valve shall be cleaned to CGA G-4.1.

MATERIALS OF CONSTRUCTION

Body.....	Bronze B61
End Plate	Bronze B61
Ball	Bronze
Stem	316SS
Seats	MTFE
Body Seals	TFE
Stem Seals.....	CTFE
Stem Bearing	TFE
Bellville Wsh	17-7 SS
External Hdwe	300 Series SS
Inlet Pipe	304SS ASTM A312 Schedule 10
Bolts	304SS A193



High Flow Diverter Valve CV Values*

Sizes (inches)	Safety Relief Valve Outlet		Rupture Disc Outlet		Torque
	CV@ mid position (90°)	CV@ full open (180°)	CV@ mid position (90°)	CV@ full open (180°)	Max. Value
¾F	9.2	8.2	10.7	8.1	200 in. lbs.
1F	25.3	18.3	16.4	14.0	300 in. lbs.
1½F	40.0	30.4	23.8	22.2	340 in. lbs.

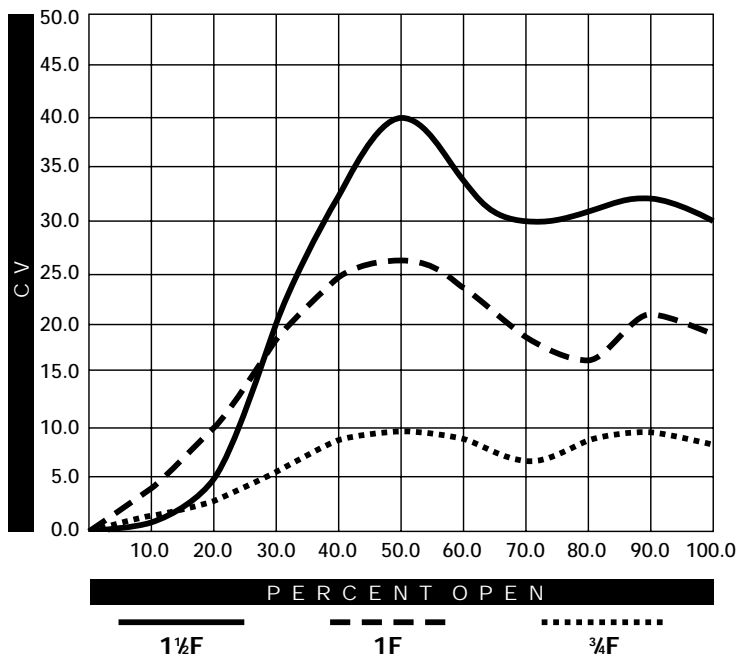
* Flows may vary slightly due to outlet connection sizes.

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

Size	A	B	C	D	WEIGHT
¾F (20)	13.00 (330.2)	9.38 (238.3)	7.25 (184.2)	7.75 (196.9)	11.5 (5.21)
1F (25)	17.66 (448.6)	11.61 (294.9)	8.73 (221.7)	12.00 (304.8)	24.5 (11.11)
1½F (40)	19.70 (500.4)	13.6 (345.4)	10.15 (257.8)	12.00 (304.8)	36.5 (16.56)

Dimensions for reference only

HIGH FLOW DIVERTER VALVE Cv GRAPH



Diverter Valve Configuration Chart

780DFxxxB ¾" Diverter Valve Largest Configuration Possible = 780DFDCDB Top = ¾" NPT Max Bottom = ½" NPT Max Side = ¾" NPT Max
780EFxxxB 1" Diverter Valve Largest Configuration Possible = 780EFFEEB Top = 1¼" NPT Max Bottom = 1" NPT Max Side = 1" NPT Max
780GFxxxB 1½" Diverter Valve Largest Configuration Possible = 780GFGFFB Top = 1½" NPT Max Bottom = 1¼" NPT Max Side = 1¼" NPT Max

FIGURE 780
DIVERTER VALVE