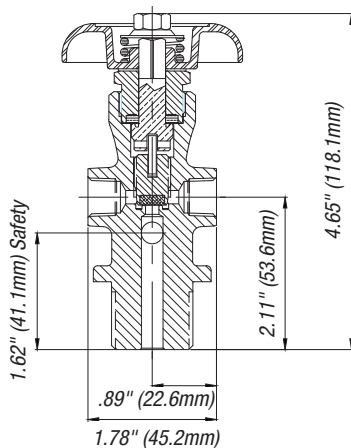
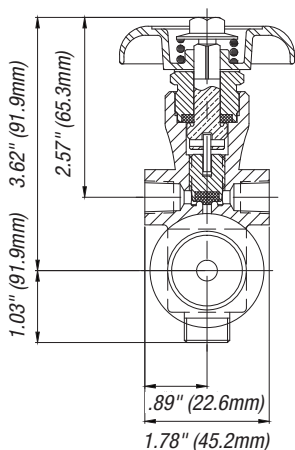


## DF Series

### Alternative Fuel Valves



DFN11650-XX



DFN1550-XX

#### Key Features & Benefits

- Dual outlet valves for fuel gas manifold use
- Dual outlet design allows for manifolding without use of adapters or tees, eliminating multiple joints
- Location of outlets above valve seat enables individual cylinder isolation without shutting off manifold
- Designed for direct manifold connections, reducing components and leak points
- Crimped seat feature prevents seat extrusion and cold flow of the polymer seat
- Available in multiple seat material configurations to accommodate all high-purity gas applications
- Increased flow (Cv) to aid in reducing vent and purge times
- Low operating torque design to ensure ease of operation during filling and use
- Available with unitized Pressure Relief Device having fuse-metal backed or unbacked burst disc
- Available with standard CGA connections as well as international inlets and outlets

#### Design Specifications

	English	Metric
<b>Maximum Working Pressure</b>	6250 PSI	431 Bar
<b>Burst Pressure</b>	20,000 PSI	1379 Bar
<b>Storage Temperature Range</b>	-65° F → +155° F	-54° C → +68° C
<b>Operating Temperature Range</b>	-50° F → +120° F	-46° C → +49° C
<b>Minimum Cycle Life</b>	5000 Cycles	
<b>Operating Torque</b>	15–25 in.-lbs.	1.7–2.8 N-m
<b>Closing Torque</b>	25–35 in.-lbs.	2.8–3.9 N-m
<b>Bonnet Installation Torque</b>	45–55 ft.-lbs.	61–74.5 N-m
<b>Pressure Relief Device Installation Torque</b>	30–40 ft.-lbs.	40.7–54 N-m
<b>Stem Nut Installation Torque</b>	Nut Flush with Top of Stem	

## DF Series

### Alternative Fuel Valves

Materials of Construction		
Sherwood Part Number	Part Description	Materials of Construction
N/A	Body	Brass C37700
1250-2	Bonnet	Brass C36000
1401	Handwheel	Aluminum per ASTM SC84B
47-1003	Handwheel Nut	ANSI 1010 Steel, Plated with Organic Zinc Chromate
	Washer	Polypropylene
1250-40KV	<b>Plug &amp; Seat Assembly</b>	
	Plug	PTFE Coated Brass C48500
	Seat	PCTFE
1250-6	Packing	PTFE
650-19SBF9-XX	<b>Pressure Relief Device Assembly</b>	
	Body	Brass C36000 (212° F or 165° F for backed devices)
	Disc	Nickel Alloy 201
	Gasket	Copper, Dead Soft
45-1012	Spring	Zinc Plated, Steel Spring Wire, Hard Drawn
1250-30	<b>Stem &amp; Tang Assembly</b>	
	Tang	Type 303 or 304 Stainless Steel, Passivated
	Stem	Brass C36000
	Pin	Type 18-8 or 302 Stainless Steel, Passivated

Standards Conformance	
CGA V-9	Standard for Gas Cylinder Valves
CGA S-1.1	Standard for Pressure Relief Devices
CGA V-1	Compressed Gas Cylinder Valve Outlet and Inlet Connections
A-A-59860	U.S. General Services Administration Standards for Gas Cylinder Valves

Inlet O-Ring for Straight Threaded DF Valves		
Sherwood Part Number	Material	Size
G216B	Buna-N 70 Durometer	1.125 UNF

For further ordering information, refer to the Valve Part Numbering Matrix on page 71.

Ordering Information					
Sherwood Part Number	Gas Service	Number of Outlets	Outlet Orientation	Outlet Thread Size	Inlet Thread Size
DF11551-XXHFKF DF11651-XXFKF	Air/Oxygen, Inert Gas	Two 180° Apart	Horizontal Vertical	¼"–18 NPT Female	1.125 UNF-2A Straight
DF11561-XXHFKF DF11661-XXFKF	Air/Oxygen, Inert Gas	Two 180° Apart	Horizontal Vertical	¼"–18 NPT Female	¾"–14 NGT Tapered
DFN11555-XXHFKF DF11655-XXFKF	CNG/Hydrogen, Methane	Two 180° Apart	Horizontal Vertical	¼"–18 NPT Female	1.125 UNF-2A Straight
DF11565-XXHFKF DF11665-XXFKF	CNG/Hydrogen, Methane	Two 180° Apart	Horizontal Vertical	¼"–18 NPT Female	¾"–14 NGT Tapered
DFN16550-XXHFKP	Air/Oxygen, Inert Gas, CNG/Hydrogen, Methane	Two 180° Apart	Horizontal	.4375–20 UNF-2B Straight	1.125 UNF-2A Straight
DFN11550-XXHFKP	Air/Oxygen, Inert Gas, CNG/Hydrogen, Methane	Two 180° Apart	Horizontal	¼"–18 NPT Female	¾"–14 NGT Tapered
DFN11650-XXXKP	Air/Oxygen, Inert Gas, CNG/Hydrogen, Methane	Two 180° Apart	Vertical	¼"–18 NPT Female	1.125 UNF-2A Straight
DFN16550-XXHFKP	Air/Oxygen, Inert Gas, CNG/Hydrogen, Methane	Two 180° Apart	Horizontal	.4375–20 UNF-2B Straight	1.125 UNF-2A Straight

PLEASE NOTE: Part numbers beginning with "DFN" represent Electroless Nickel Plated valves.

For Product Markings Reference, see **F** on page 66.