

**IMPORTANT!**

This specification is intended for use with **“YVB” Series Valve Assemblies.**  
**MAKE SURE YOU ARE USING THE CORRECT SPECIFICATION!**

**REFERENCE DATA:**

**Pressure**

Proof: 12,000 PSIG Minimum  
Test: Cylinder Service Pressure  
or 3000 PSIG  
(whichever is less)

**Temperature - Storage**

Minimum: -65 F  
Maximum: 155 F

**Temperature - Operating**

Minimum: -50 F  
Maximum: 120 F

**Cycle Life:**

Minimum: 5000 cycles

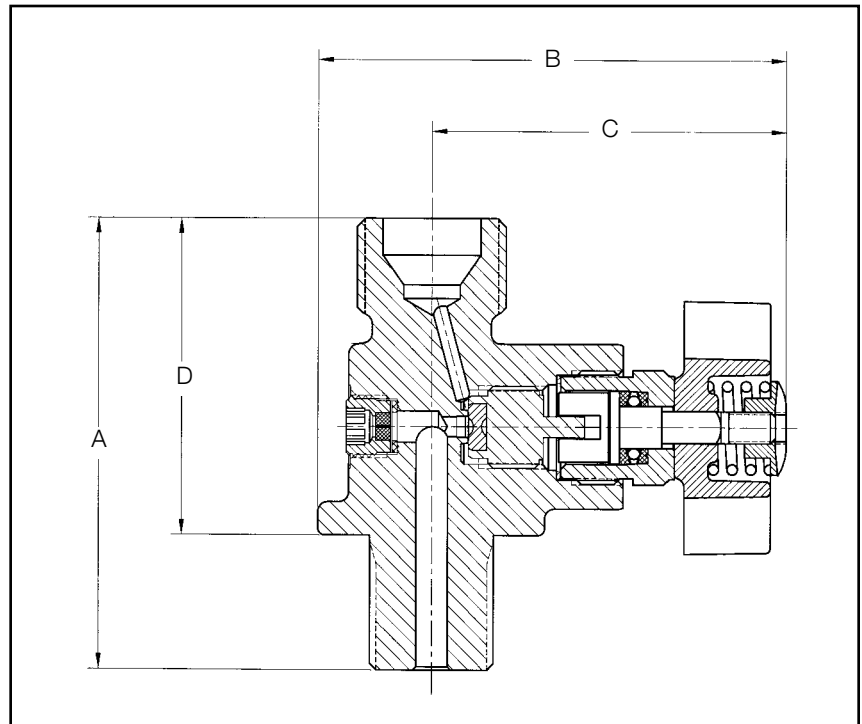
**CONFORMS TO ALL  
REQUIREMENTS OF:**

MIL-DTL-2E DOD  
Specification for Gas Cylinder Valves

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



**“YVB” SERIES VALVES**

(See Repair Section for detail parts breakdown)

**TORQUE VALUES FOR “YVB” SERIES VALVES**

Description	Torque
Operating Torque @ 0 PSIG Inlet Pressure	1 in. lb.
Closing Torque @ 2000 PSIG Inlet Pressure	1 - 2 in. lbs.
Bonnet Installation Torque	25 to 30 ft. lbs.
Pressure Relief Device Installation Torque	50 to 65 in. lbs.
Stem Nut Installation Torque	Nut Flush with top of Stem

**MATERIALS OF CONSTRUCTION FOR “YVB” SERIES VALVES**

Part Description	Material of Construction
Body	Forging Brass UNS Alloy #37700, Chrome Plated
Bonnet	Free Machining Brass UNS ASTM B-16-53, Chrome Plated
Filter (as required)	Sintered Bronze - 40 micron
Filter Retainer (as required)	Free Machining Brass UNS Alloy #36000
Gasket	Copper
Handwheel	Lexan®
Lower Plug	Leaded Naval Brass, UNS Alloy #C34200
Lower Plug Seat	Nylon: Zytel® 101 or Celanese 1000-11
O-ring	Viton®
Packing	Virgin Teflon®
Pressure Relief Device Assembly	
Body	Free Machining Brass UNS Alloy #36000 (with 212° F or 165° F fusible metal for backed devices)
Rupture Disc	Nickel Alloy 201
Retainer Gasket	Nylon: Zytel® 101 or Celanese 1000-11
Spring	Type 302 Stainless Steel, Passivated
Stem	Aluminum Silicon Bronze Alloy # 708-8, Nickel Plated
Stem Nut	Free Machining Brass, UNS Alloy 36000

**INLET O-RING FOR STRAIGHT THREADED “YVB” SERIES VALVES**

Size	Material	Part Number
0.625 UNF	Buna	G208A
	Teflon®	G208T
0.750 UNF	Buna-N	G210A9
	Teflon®	G210T

**FLOW AND DIMENSIONS FOR “YVB” SERIES VALVES: CGA OUTLET NUMBER 540**

FLOW DATA	Seat Orifice Diameter (inches)	0.120	
	Flow Constant: Cv - Full Open	0.102	
	Flow CFM @ 2000 PSIG Inlet	100.4	
APPROXIMATE DIMENSIONS (INCHES) FOR ALL INLET TYPES	Overall Height	(A)	2.71
	Overall Width	(B)	2.83
	Centerline to Face of Handwheel Nut	(C)	2.15
	Height of Valve Installed in Cylinder*	(D)	1.90

\* Valves with tapered threaded inlets are calculated to 7 ¾ threads engagement. Valves with straight threaded inlets are measured from top of the cylinder to the top of the Valve.