YVBA Series

Vertical Outlet Oxygen Valves



YVBA



YVBA5454-XX-75G

Compact and designed for home healthcare use on small medical aluminum and composite cylinders.

Key Features & Benefits

- Compact design
- · Chamber designed for easy operation
- Aluminum Silicon Bronze stem design for dependable service and long life
- Durable lower plug made of tough naval brass resists wear
- Lower plug is PTFE coated to add lubricity, which minimizes seizing and galling especially under high-pressure operation
- Internal bonnet gasket seal resists damage to chamber sealing area
- Compact molded Lexan[®] polycarbonate handwheel is easy to operate
- Single unit, compact Pressure Relief Device incorporates 165° F fusible metal backing to resist premature rupture and provide maximum cylinder protection
- · Chrome plated for corrosion resistance and cosmetic appeal
- Cleaned for oxygen service and oil free per CGA G-4.1

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Design Specifications		
	English	Metric
Maximum Working Pressure	3000 PSI	207 Bar
Storage Temperature Range	$\text{-65}^\circ\text{F}\rightarrow\text{+155}^\circ\text{F}$	$-54^{\circ} \text{ C} \rightarrow +68^{\circ} \text{ C}$
Operating Temperature Range	$-50^{\circ} \text{ F} \rightarrow +120^{\circ} \text{ F}$	$-45^{\circ} \text{ C} \rightarrow +49^{\circ} \text{ C}$
Minimum Cycle Life	5000 Cycles	5000 Cycles
Operating Torque	3–5 inIbs.	.3–.6 N-m
Closing Torque	5–7 inIbs.	.6–.8 N-m
Bonnet Installation Torque	25–30 ftlbs.	33.9–7.3 N-m
Pressure Relief Device Installation Torque	50-65 inIbs.	5.6–7.3 N-m
Stem Nut Installation Torque	Nut Flush with Top of Stem	

Materials of Construction		
Sherwood Part Number	Part Description	Materials of Construction
N/A	Body	Brass C37700 Chrome Plated
1-3606-14	Bonnet	Brass, UNS ASTMB-16-53 Chrome Plated
3506-10	Gasket	Copper
1389-2D	Handwheel	Lexan®
	Plug and Seat Assembly	
3506-9	Plug	Aluminum Silicon Bronze C34200
	Seat	Nylon, Zytel 101 or Celanese 1000-11
3506-18	Packing	Viton
3506-7	Packing	PTFE
9-3011A-2	Panel Mount Nut (as required)	Brass C36000, Chrome Plated
19-3506-11	Spring	Type 302 Stainless Steel, Passivated
9-3506-12	Stem	Aluminum Silicon Bronze Alloy #708-8 Nickel Plated
1-3506-8	Stem Nut	Brass C36000

Standards Conformance	
CGA V-9	Standard for Gas Cylinder Valves
CGA S1.1	Standard for Pressure Relief Devices
CGA V-1	Compressed Gas Cylinder Valve Outlet and Inlet Specifications
A-A-59860	U.S. General Services Administration Standards for Gas Cylinder Valves

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Inlet O-Ring for Straight Threaded YVB Valves			
Sherwood Part Number	Size	Material	
G016B	605 LINE	Buna-N	
G016T	.020 UNF		
G210A9		Buna-N	
G210T	.750 UNF	PTFE	
G210J	.750 UNF	Viton®	

Ordering Information				
Sherwood Part Number	CGA Outlet	Outlet Thread Size	Inlet Thread Size	Gauge
YVBA5454-XX-62	540	.903–14 NGO RH Ext.	.625–18 UNF-2A	None
YVBA5454-XX-62G	540	.903–14 NGO RH Ext.	.625–18 UNF-2A	1⁄8" NPTF
YVBA5454-XX-75	540	.903–14 NGO RH Ext.	.750–16 UNF-2A	None
YVBA5454-XX-75G	540	.903–14 NGO RH Ext.	.750–16 UNF-2A	1⁄8" NPTF

All valves supplied with CG-4 165° F fusible metal backed, flush-style Pressure Relief Devices and nickel rupture discs.

XX denotes Pressure Relief Device burst disc rupture pressure.

Valves are available in -28 (3000 Max. PSI), -32 (3360 Max. PSI) and -48 (5000 Max. PSI).

Special features available:

- · CG-1 Pressure Relief Devices without fusible metal
- · Hex-style, exhaust-equalizing Pressure Relief Device plugs
- .750–16 UNF inlets with 0-ring glands in conformance with military specifications
- Round, barrel-style Lexan[®] handwheel

Key Replacement Parts		
Sherwood Part Number	Description	
19-3506-11	Spring	
3506-9	Lower Plug	
6521S	Handwheel	