

Submittal Data Sheet

Features

Five-year parts and one year labor limited warranty*

- **Space Saving Design, up to 50% wall space saved**
- Meets NFPA 99 requirements
- Valves are piped from the top, in on the back left tube and out on the front right tube
- All valve assemblies are triple 1/8" NPT gauge ports
- 3 piece in-line repairable valves
- Adjustable packing with blow-out proof stem design
- Accommodate up to 6 valves sizes are 1/2", 3/4" & 1"
- 3-piece valve body to have a working pressure of 600 psi (29 in/Hg vacuum)
- All valves cleaned for Oxygen service
- Manufactured and tested in the USA with domestic and imported components
- NFPA and ISO color coded gas labels in English, and English/Spanish (*Standard NFPA English Labels shall be enclosed, or see additional labels on page 3*)
- 1 1/2" diameter gauges (*sold separately*)
- "Smoked" Translucent flexible plastic window provided with all models

* See Terms and Conditions, Document No. 99-0477, on our website at: <https://tri-techmedical.com> for complete details.

Specification

Vertical zone valve boxes are Tri-Tech Medical VZU series and must be installed and tested in strict accordance with NFPA 99 standards and or any other local codes before use.

Valves – The valves are triple gauge port, forged brass ball-type, with Teflon (TFE) seats and seals. 3-piece valve bodies to have a working pressure of 600 psi (29 in/Hg vacuum) and shall be operated by a lever-type handle, requiring only a quarter turn from a fully open position to a fully closed position. Valves shall incorporate an adjustable packing and a blow- out proof stem. Only full port valves having flow rates comparable to equivalent size of pipe shall be used.

All valves shall be provided with type K copper tubing extensions to facilitate installation. Valves shall be 3 piece in-line repairable type. Each valve assembly supplied are cleaned for oxygen service in accordance with current CGA standards. The valve tube ends are capped to prevent contamination prior to installation.

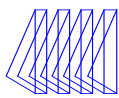


Shown above VZU22334 - 5 valve box are shown with gauges, NFPA gas identification and flow arrows applied.

Valve ports: All valve assemblies have three 1/8" NPT ports with pipe plugs.

- *1st port is used as a provision for a gauge connection located on the front valve's outlet side to register pipeline pressure or vacuum.*
- *2nd port, is also located on front valve's outlet side, it can accept a 1/8" NPT connection for a gas transducer*
- *3rd port, is located upstream of the gas transducer, or for purging during installation.*

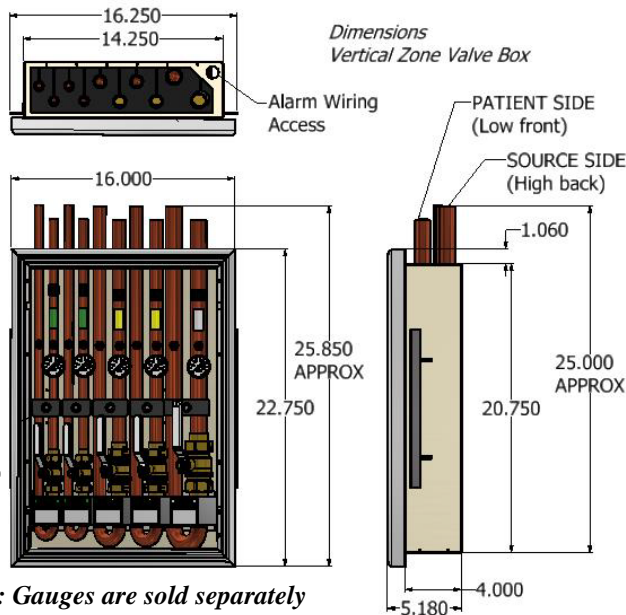
Gauges (*sold separately*) 1 1/2" diameter with 1/8" NPT port for monitoring pressure and vacuum, and shall state: "USE NO OIL". Dual scale gauges are not acceptable for U.S.A. installations.



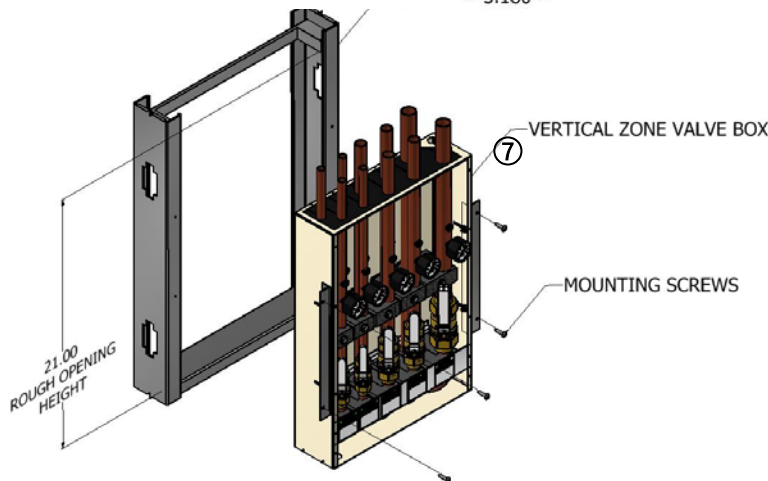
Box – The valve box shall be 18-gauge sheet steel construction powder coated painted to prevent rust. A single box shall house from one to six valves. Box shall be supplied with an adjustable plaster flange 1/2” to 3/4” for easy mounting.

Window – Valve box assembly shall be supplied with an extruded chrome anodize aluminum decorative frame which encloses an easily removable flexible window. The window shall be a “smoked” translucent, flexible plastic with a pull-out ring pre-mounted to the center of the window. The window shall not be replaceable while any valve is in a closed position. Window is silk screened with the following statement;

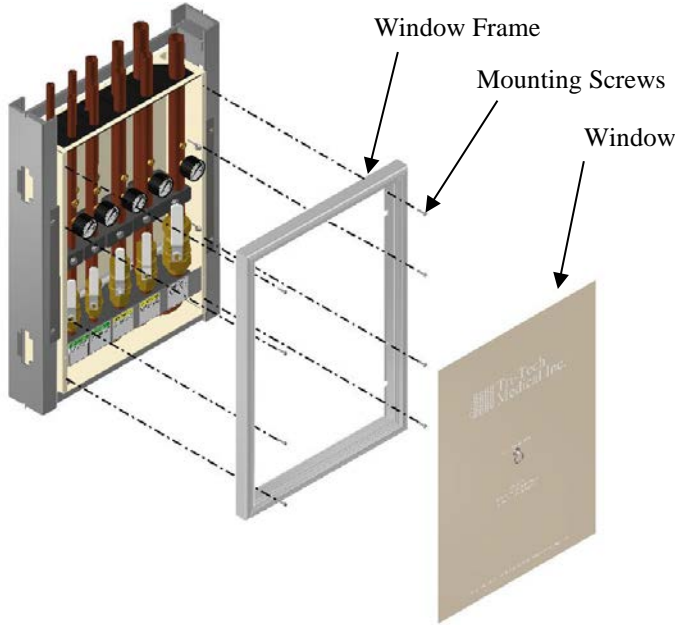
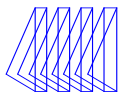
CAUTION 
**MEDICAL GAS SHUTOFF VALVES
CLOSE ONLY IN EMERGENCY**



Note: Gauges are sold separately



- ① **Space Saving Design:** Gas inlets and outlets positioned vertically diagonal to reduce wall space required, a saving of 50% or more.
- ② **Braze Point Reduction:** Vertical design eliminates elbows connections, reducing the number of braze points required, saving valuable installation time.
- ③ **Multiple installations:** Install two vertical assemblies’ side by side for up 12 valve installations, further reducing required wall space and featuring mounting brackets for precision alignment.
- ④ **Transducer Sensor Installation:** Add Area Alarm transducer sensor easily within the assembly using the 1/8” brass NPT ports. Eliminate transducer sensor installations in the ceiling or cost of piping to the alarm panel. Add transducer sensors on either side of the valve, source or patient.
- ⑤ **Anodized Aluminum Frame:** Aesthetically pleasing, anodized aluminum frame features high impact resistance and toughness.
- ⑥ **Smoke Window:** The window shall be a “smoked” translucent, flexible plastic with a pull-out ring pre-mounted to the center of the window.
- ⑦ **Valve Box:** Back Box made from 18ga. Carbon steel with epoxy powder coated for extra durability and moisture resistance. Box shall be supplied with an adjustable plaster flange 1/2” to 3/4” for easy mounting.
- ⑧ **Gauge and Labels:** Easily identifiable tube pressure/vacuum gauges with polycarbonate faceplate for durability. Gauges and color labels are easily readable without removing the window.



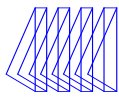
Window Dimension	
Height	Width
21.625	15.000

Pressure Gauge (Sold Separately)		
Pressure gauges 1-1/2" diameter 1/8" NPT center back mount		
Part Number	Scale	Gas Set
14-1008	0-100 psi	Oxygen, Medical Air, Nitrous Oxide, Carbon Dioxide, & Mixtures
14-1009	0-300 psi	Nitrogen, Instrument Air,
14-1010	0-30 in Hg	Medical Vacuum, WAGD

Maximum Allowable Working Pressure (Complete valve assembly with extensions)	
Valve Size	PSI
1/2"	525
3/4"	510
1"	490

Vertical Ball Valve Seal Kits		
Part Number	Valve Size	Seal Kits Includes
56-0002S	1/2"	2- Valve Seat Seals
56-0003S	3/4"	
56-0004S	1"	

Additional Labels: One Sheet per Label Type		
Part Number	Description	Gas Set
<i>Standard label sheets shall be enclosed with each Vertical Zone Valve Box</i>		
92-0405	Standard Room Gas ID Label Sheet, NFPA English	2 ea. Oxygen, Medical Air, & Medical Vacuum 1 ea. Nitrous Oxide, Carbon Dioxide, Nitrogen, WAGD, Instrument Air, Tri-Gas, Gas Mixture, HP Gas Mixture, Dental Air, Dental Vacuum, Helium, Argon, Laboratory Air, Laboratory Vacuum,
92-0407	Standard Gas ID/Arrow Label Sheet, NFPA English	
<i>Please contact Sales for your specific label sheet needed for your application</i>		
92-0408	Room Gas ID Label Sheet, NFPA English/Spanish	
92-0409	Gas ID/Arrow Label Sheet, NFPA English/Spanish	
92-0410	Room Gas ID Label Sheet, ISO English	
92-0411	Gas ID/ Arrow Label Sheet, ISO English	
92-0412	Room Gas ID Label Sheet, ISO English/Spanish	
92-0413	Gas ID/ Arrow Label Sheet, ISO English/Spanish	
92-0414	Room Gas ID Label Sheet, NFPA/ISO English	
92-0415	Gas ID/Arrow Label Sheet, NFPA/ISO English	



How to Order: Easy to use modular System.

Fill in the blanks to specify the Vertical Zone Valve Box that meets your

Model Numbering:



S = Valve Size

2 – 1/2" valve 3 – 3/4" valve 4 – 1" valve

VZU = Vertical Zone Valve Box

Vertical Zone Valve Box Assemblies	
Item Number	Valve Size
<i>Single Vertical Zone Valve Box</i>	
2	1/2"
3	3/4"
4	1"
<i>Double Vertical Zone Valve Box</i>	
22	1/2" x 1/2"
23	1/2" x 3/4"
24	1/2" x 1"
33	3/4" x 3/4"
34	3/4" x 1"
44	1" x 1"
<i>Triple Vertical Zone Valve Box</i>	
222	1/2" x 1/2" x 1/2"
223	1/2" x 1/2" x 3/4"
224	1/2" x 1/2" x 1"
233	1/2" x 3/4" x 3/4"
234	1/2" x 3/4" x 1"
244	1/2" x 1" x 1"
333	3/4" x 3/4" x 3/4"
334	3/4" x 3/4" x 1"
344	3/4" x 1" x 1"
444	1" x 1" x 1"

Vertical Zone Valve Box Assemblies	
Item Number	Valve Size
<i>Quad Vertical Zone Valve Box</i>	
2222	1/2" x 1/2" x 1/2" x 1/2"
2223	1/2" x 1/2" x 1/2" x 3/4"
2224	1/2" x 1/2" x 1/2" x 1"
2233	1/2" x 1/2" x 3/4" x 3/4"
2234	1/2" x 1/2" x 3/4" x 1"
2244	1/2" x 1/2" x 1" x 1"
2444	1/2" x 1" x 1" x 1"
2333	1/2" x 3/4" x 3/4" x 3/4"
2334	1/2" x 3/4" x 3/4" x 1"
2344	1/2" x 3/4" x 1" x 1"
3333	3/4" x 3/4" x 3/4" x 3/4"
3334	3/4" x 3/4" x 3/4" x 1"
3344	3/4" x 3/4" x 1" x 1"
3444	3/4" x 1" x 1" x 1"
4444	1" x 1" x 1" x 1"
<i>Quin Vertical Zone Valve Box</i>	
22222	1/2" x 1/2" x 1/2" x 1/2" x 1/2"
22223	1/2" x 1/2" x 1/2" x 1/2" x 3/4"
22224	1/2" x 1/2" x 1/2" x 1/2" x 1"
22233	1/2" x 1/2" x 1/2" x 3/4" x 3/4"
22234	1/2" x 1/2" x 1/2" x 3/4" x 1"
22244	1/2", 1/2", 1/2", 1", 1"
22333	1/2" x 1/2" x 3/4" x 3/4" x 3/4"
22334	1/2" x 1/2" x 3/4" x 3/4" x 1"
22344	1/2" x 1/2" x 3/4" x 1" x 1"
23333	1/2" x 3/4" x 3/4" x 3/4" x 3/4"
23334	1/2" x 3/4" x 3/4" x 3/4" x 1"
33333	3/4" x 3/4" x 3/4" x 3/4" x 3/4"
<i>Six Vertical Zone Valve Box</i>	
222222	1/2" x 1/2" x 1/2" x 1/2" x 1/2" x 1/2"
222223	1/2" x 1/2" x 1/2" x 1/2" x 1/2" x 3/4"

Part No. Examples:

VZU234 = 3 gas vertical zone valve box - 1/2", 3/4", and 1" valves with standard NFPA color labels

VZU2234 = 4 gas vertical zone valve box - 1/2", 1/2", 3/4" and 1" valves with standard NFPA color labels.