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Submittal Data Sheet

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**Features**

- Meets NFPA 99 zone valve box guidelines
- Valves may be piped from left to right or right to left
- Valves include patented E Z Backfeed™ feature which allows backfeeding of zone without disturbing patients or occupying patient rooms for backfeeding
- All valves are dual gauge port full port ball valves
- 3 piece in-line repairable valves
- Adjustable packing with blow-out proof stem design
- Accommodate up to 8 valves sizes from ½” to 2”
- Valves to have a working pressure of 600 psi (29 in/Hg vacuum)
- All valves cleaned for Oxygen service
- Plastic insulators to protect from galvanic corrosion
- Provided with 1 ½” diameter gauges
- Color coded labeling

**Specification**

All zone valves shall be Tri-Tech Medical E V series and must be installed and tested in strict accordance with NFPA 99 standards and or any other local codes before use.

**NFPA Health Care Facilities Handbook** (1996 edition), section 4-3.1.1.4 states: “*Backfeeding* is a way of pressurizing a piped gas system through a station outlet and is opposite to the normal way of pressurizing a system. It is sometimes done when the supply source is interrupted or portions of the system need to be shutdown. *This is a very poor practice.* Station outlets were designed for flow in an *outward direction.*” With E Z Backfeed valves in a medical facility’s zone valve boxes this concern is eliminated.

**Valves** – The valves shall be dual gauge port, cast bronze, ball-type, with Teflon (TFE) seats and seals. All valves shall be rated at 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. Valves shall be able to be piped from left to right or right to left. Valve(s) shall include single or dual DISS gas specific backfeed port(s). Backfeed port(s) shall allow backfeeding of gas without interruption of gas service.

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 shall be supplied cleaned for oxygen service in accordance with current CGA standards. The valve tube ends shall be



*Single port E Z Backfeed™ fitting with Gauge & DISS gas specific demand valve on the right side port shown above*



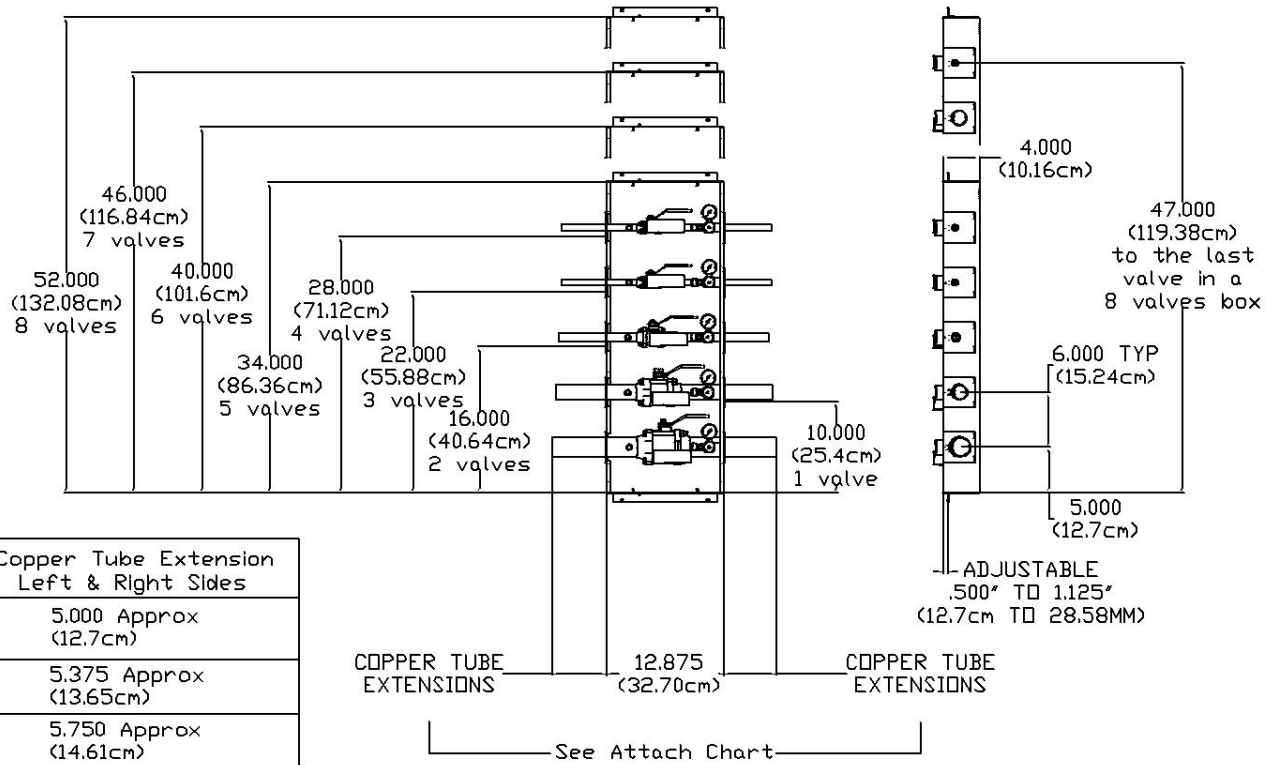
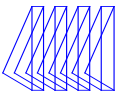
*Shown above EVU4R2AB2NB3OB4VS 4 valve box with gauges ½” Medical Air, ½” N<sub>2</sub>O, ¾” Oxygen, 1” Medical Vacuum*

capped and sealed in a protective container to prevent contamination prior to installation.

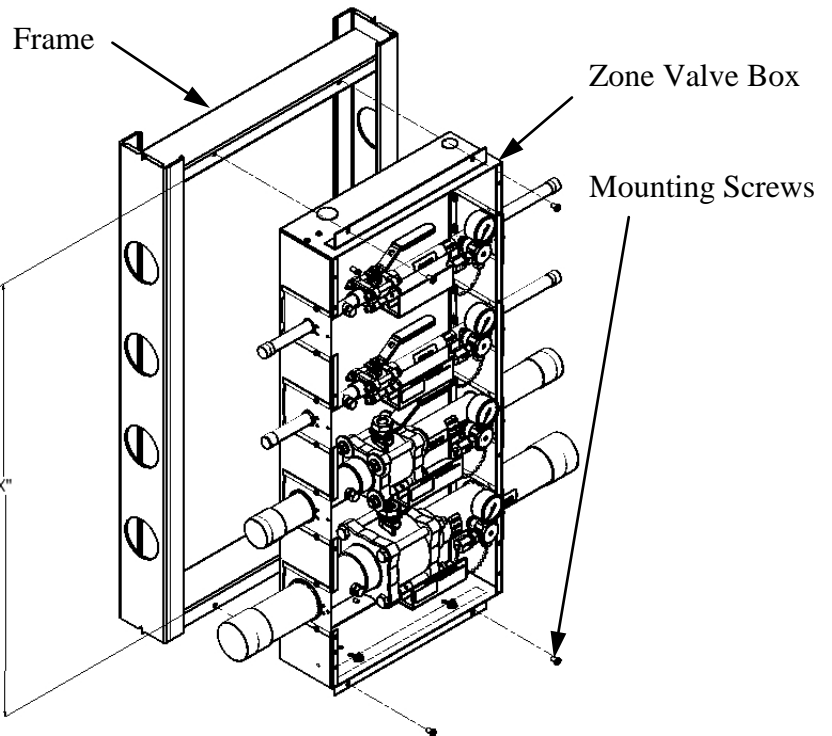
Gauges shall be 1 ½” diameter for monitoring pressure and vacuum, and shall state: “USE NO OIL”. Dual scale gauges are not acceptable for U.S.A. installations.

**Box** – The valve box shall be 18 gauge sheet steel construction painted to prevent rust. A single box shall house from one to eight valves. Box shall be supplied with an adjustable plaster flange ½” to 1 1/8” for easy mounting.

**Window** – Valve box assembly shall be supplied with a formed steel decorative frame painted white 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 shall be silk screened with the following statement “CAUTION: MEDICAL GAS SHUTOFF VALVES. CLOSE ONLY IN EMERGENCY.”

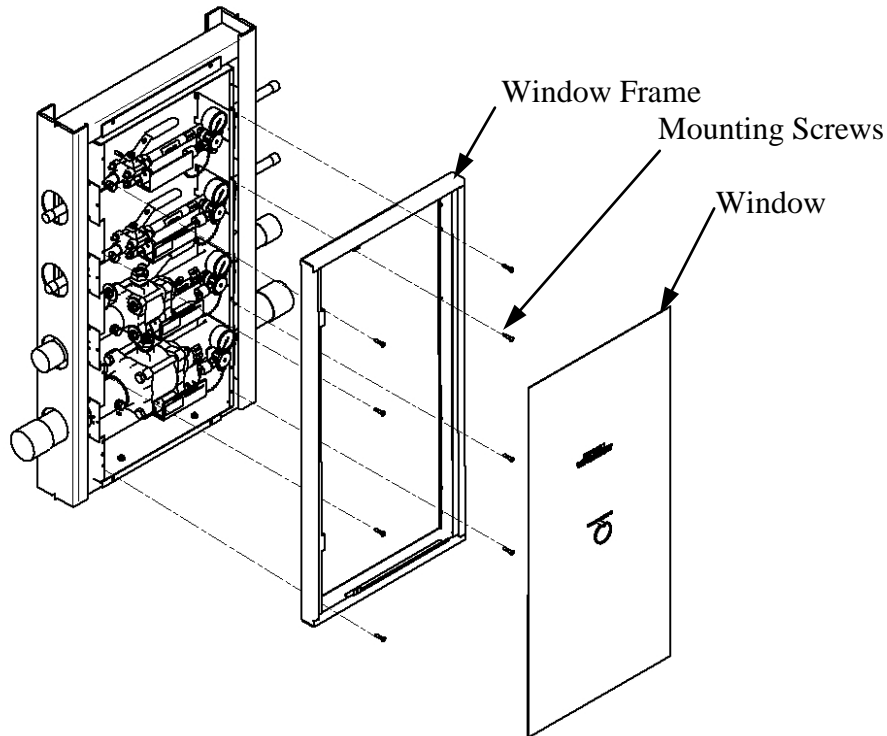
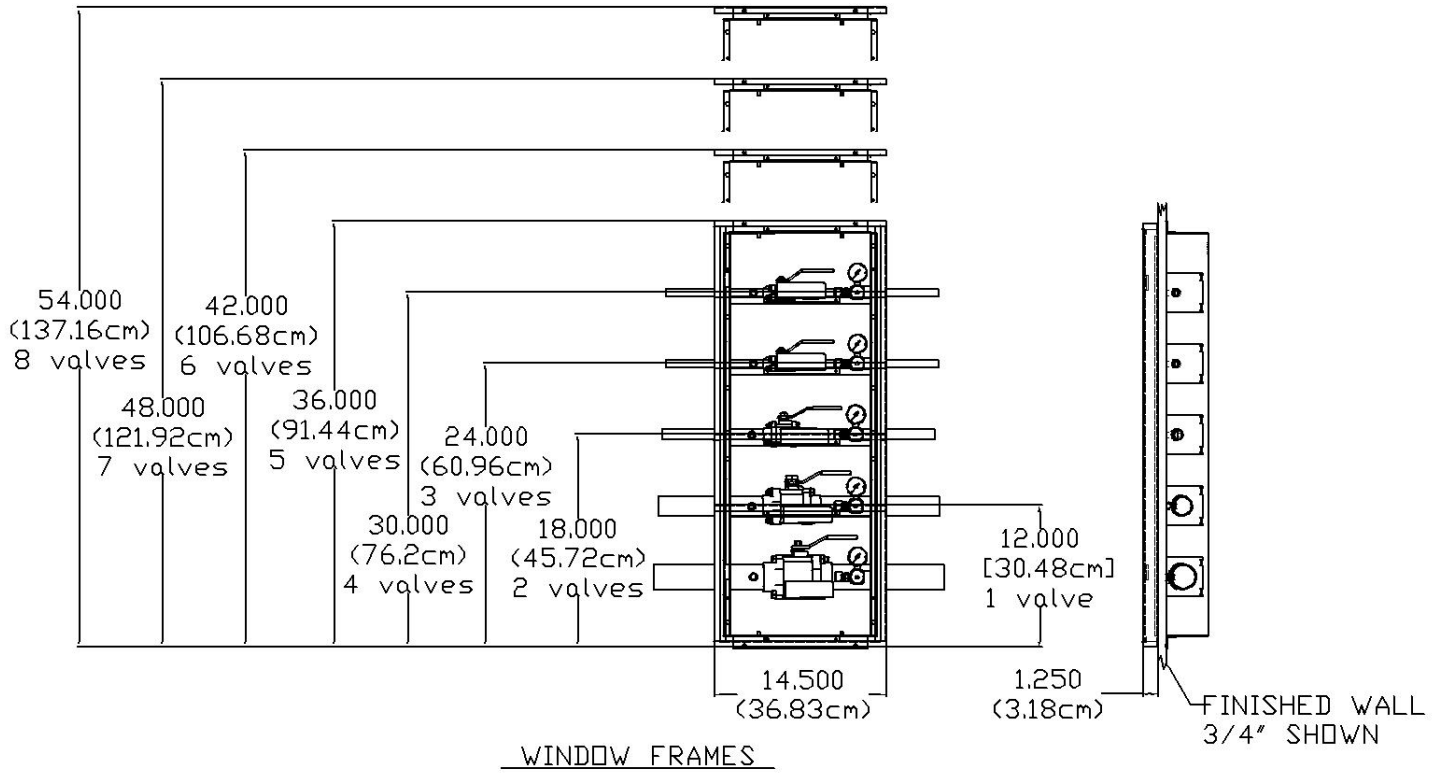
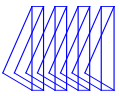


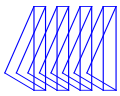
Valve Size	Copper Tube Extension Left & Right Sides
1/2", 3/4" 1", 1-1/4"	5.000 Approx (12.7cm)
1-1/2"	5.375 Approx (13.65cm)
2"	5.750 Approx (14.61cm)



Rough Opening Height Dimension for "X"

	IN	CM
1 valve	10.125	25.72
2 valves	16.125	40.96
3 valves	22.125	56.20
4 valves	28.125	71.44
5 valves	34.125	86.68
6 valves	40.125	101.92
7 valves	46.125	117.16
8 valves	52.125	132.40





**How to Order:** Easy to use modular ordering system.

Fill in the blanks to specify the Zone Valve Box that meets **your** needs.

**Model Numbering:**

E	V	C	N	P	S	G	E	S	G	E	S	G	E	S	G	E	S	G	E	S	G	E	S	G	E	S	G	E	S	G	E
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*Repeat 3 character set for each valve*

**E = EZ Option**  
**Q** – 1 Port      **B** – 2 Ports      **X** – No EZ Option

**G = Gas Service**  
**A** – Medical Air  
**C** – Carbon Dioxide – 50 psig  
**D** – Carbon Dioxide – 80 psig  
**H** – Hyperbaric Oxygen  
**I** – Instrument Air  
**J** – Carbon Dioxide-Oxygen Mixt DISS 1080 (CO<sub>2</sub>>7%)  
**K** – Helium-Oxygen Mixt DISS 1060 (He>80%)  
**L** – Helium  
**N** – Nitrous Oxide  
**O** – Oxygen  
**R** – Tri-Gas  
**S** – AGSS  
**T** – Nitrogen  
**V** – Medical Vacuum  
**W** – WAGD/EVAC  
**X** – No Gas

**S = Size of Valve**  
**2** – 1/2" valve      **3** – 3/4" valve      **4** – 1" valve      **5** – 1 1/4" valve  
**6** – 1 1/2" valve      **7** – 2" valve      **X** – No valve

**P = Port Position on Valves**  
**R** – Right Side      **L** – Left Side

**N = Number of Valves**  
**1** Through **8**

**C = Country**  
**U** – USA      **C** – Canada

“**Q**” EZ 1 Port for either Transducer (Not Included) or EZ Backfeed

“**B**” EZ 2 Ports for Transducer (Not Included) and EZ Backfeed

**EV**  
EV - Type of Valve Box

**Part No. Examples**

**EVU3R2AB3OB5VB** = 3 gas valve box with 2 port option feature and gauges on right side only of all 3 valves with 1/2" AIR, 3/4" OXY, 1 1/4" VAC valves with U.S. Labels

**EVU2R2NQ3OQ** = 2 gas valve box with 1 port option feature and gauges on right side of both valves with 1/2" N<sub>2</sub>O, 3/4" OXY valves with U.S. Labels