# **Zone Valve Box Assemblies-Multiple**

#### **Features**

- 14-gauge steel valve box
- Accepts valve sizes 1/2 through 2 inches
- · Factory installed copper tubing extensions
- Full port valves for high flow
- · Gauges ordered separately
- · Complies with NFPA 99 requirements
- · Cleaned for oxygen service
- 5 year warranty

#### **Specifications**

Medical gas zone valve boxes shall be manufactured by Genstar Technologies Co., Inc. (GENTEC<sup>®</sup>). Boxes shall be designed for concealed piping installation and available for sizes and services indicated.

The valve box shall be 14 gauge powder coated sheet steel construction. A multiple valve box houses up to a 2" valve. Valves shall be factory installed with the smallest valve at the top, largest at the bottom. The box is supplied with a 7/8" flange on top and bottom for easy mounting.

Valve box assembly shall be supplied with a powder coated steel frame, attached to the box by concealed 1-1/2-inch(38mm) screws, which encloses an easily removable flexible window panel. The frame shall be capable of adjusting for variances in wall thickness up to 1". The window panel shall be made of a translucent flexible acrylic plastic with a pull-out ring pre-mounted near the center of the panel. Clear viewing space shall be provided in the panel to display the gas service(s), the area controlled by the valve(s), and pressure gauge(s) on units so equipped. The panel is not replaceable while any valve is in a closed position. Window panel is silk screened with the following statement "CAUTION: MEDICAL GAS SHUT-OFF VALVES CLOSE ONLY IN **EMERGENCY**" The finished assembly shall be substantially dust-tight.

Ball valves shall be double seal, three piece in-line serviceable ball-type design, with forged bronze/ brass body and chrome-plated brass ball. Only 1/4



turn of the handle is required to operate the valve from a fully open to fully closed position. The valves shall have a full port design and incorporate an adjustable packing and a blow-out proof stem.

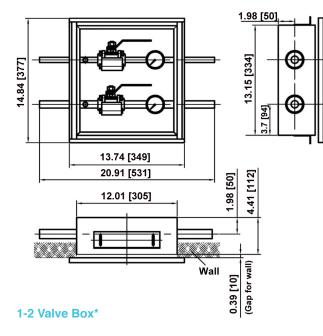
Ball valves shall be designed for working pressure up to 600 psi WOG. Valve body shall have Teflon® material ball seat and Teflon material stem seals. Seats/seals, lubricants and valve materials are compatible with USP oxygen, nitrous oxide, medical air, carbon dioxide, helium, nitrogen and mixtures thereof at continuous pressure up to 600 psi and vacuum service to 29" Hg. Ball valves shall be provided with Type K copper tube extensions, for making connections to the pipeline and shall include dual gauge/purge ports sealed with brass HEX plugs. Gauges, to be ordered separately, shall be 2" face diameter for monitoring pressure and vacuum, and will state: "USE NO OIL". A fully color coded label package shall be supplied with each valve box assembly for application by the installer. Valves are piped from left to right.

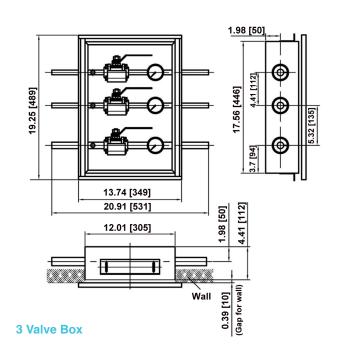
All ball valves shall be supplied clean and prepared for oxygen service in accordance with current CGA G-4.1 standards. All valves shall be 100% tested for leaks and manufactured to comply with the latest edition of NFPA 99. Valves shall be capped to keep them clean prior to installation.

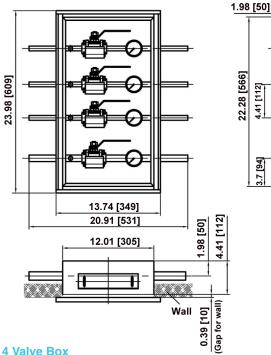
All GENTEC zone valve boxes are backed by a standard 5-year warranty (see warranty statement for details).



#### **Dimensions**







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#### **Dimensional Data Notes:**

- Up to 2" Valve in a Multiple-Valve Box
- For 1 Valve Box-Top Valve omitted
- The frame shall be capable of adjusting for variances in wall thickness up to 1 inch
- · All dimensions are in inches (mm)

#### Notes:

- · All valves have Full Port Design and Dual Gauge/Purge Ports
- · Gauges are Ordered Separately
- All zone valve box assemblies include dual 1/8" NPT gauge ports/plugs for each valve

• All zone valve box assemblies include one set of labels each for the following services: oxygen, nitrous oxide, medical air, nitrogen, vacuum, WAGD, carbon dioxide and instrument air

#### **4 Valve Box**

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## **Zone Valve Box Assemblies-Multiple**

#### **Dimensions**

#### **Dimensional Data Notes:**

• Up to 2" Valve in a Multiple-Valve Box

• For 5 Valve Box-Top Valve omitted

• The frame shall be capable of adjusting for variances in wall thickness up to 1 inch

· All dimensions are in inches (mm)

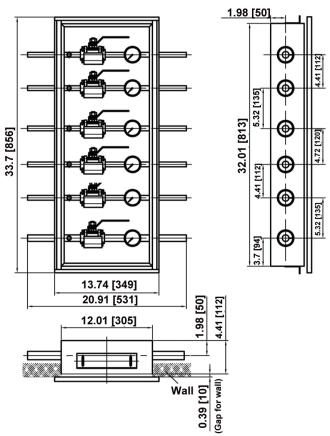
#### Notes:

All valves have Full Port Design and Dual Gauge/Purge Ports

· Gauges are Ordered Separately

• All zone valve box assemblies include dual 1/8" NPT gauge ports/plugs for each valve

• All zone valve box assemblies include one set of labels each for the following services: oxygen, nitrous oxide, medical air, nitrogen, vacuum, WAGD, carbon dioxide and instrument air



#### **Material**

Box Assembly	Front Panel	Valve	
Powder coated steel	Plastic PMMA	Body-Forged bronze/brass	
End cover-Nylon	Front panel button/washer-Aluminum	Ball-Chrome plated brass	
Bracket(s)-Powder coated steel	Front panel ring-Chrome plated steel	Ball seat and Stem seals-Teflon material	
Frame-Powder coated steel		Ball seat and Stem seals-Teflon material	
		Gauge port plug-Brass	

#### **Ordering Information**

EXAMPLE: ZVB	X	X	XXXX
	Number of Valves	Option	Tubing Dimension
	(1-6)	G: with Gauge None: without	05: 1/2" 07: 3/4" 10: 1" 15: 1-1/2"

For Example: If you would like to order a three-valve zone box with gauge:

1/2", 3/4" and 1", then the model number should be ZVB3G-050710.



### **Gauges for Zone Valve Boxes**

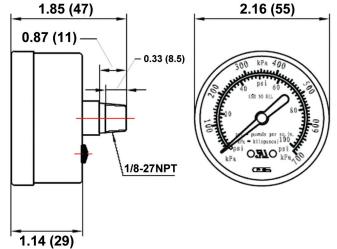
#### **Features**

- Size: 2" (50.8mm)
- Style: ASME B40.1 Grade B
- Range (dual): 0-30 inHg: 0-76 cmHg, 0-100 psi;
- 0-700 kPa 0-300 psi; 0-2000 kPa
- Temperature: -40°C to +70°C
- Connection: 1/8-27NPT center back
- Bourdon tube: Tin/Bronze
- Dial: Aluminum alloy
- Needle: Aluminum alloy
- · Case: Steel
- · Window: Polycarbonate



#### **Specifications**

Gauges shall be 2" face diameter, dual scale. Gauges will read 0-100 psi/0-700 kPa for oxygen, medical air, nitrous oxide, and other 50 psi working pressure gases; 0-300 psi/0-2000 kPa for nitrogen and instrument air; and 0-30inHg/0-76 cmHg for vacuum or WAGD. The gauge port shall be equipped with removable plug for pressure testing prior to final assembly of gauge. All gauge model zone valve box assemblies shall read pressure on the patient/point of use side of the valve per NFPA99.



#### **Ordering Information**

Gauge Type	Catalog Number	Gases	Quantity
Vacuum, 0-30" Hg	GR2005-030V	Vacuum, WAGD	
Pressure, 0-100 psi	GR2006-100	Oxygen, Medical Air, Nitrous Oxide,	
Pressure, 0-300 psi	GR2006-300	Carbon Dioxide	
		Nitrogen, Instrument Air	

(Gauges ordered separately)