

Single Alarm Valve Combo Unit



Features:

- 2 in 1 design combines the Area Alarm and Zone Valve Box, to allow for space restrictions
- True digital, illuminated LED display is readable even in poor lighting conditions
- High/low alarm set-points are field adjustable for each gas service
- Repeat alarm, adjustable from 1 to 60 minutes or off
- Gas-specific sensor with DISS nut and nipple
- Alarm buzzer in excess of 90 decibels
- Each module marked with an approved medical gas identification label
- Pre-mounted pull-out ring allows for ease of maintenance
- Individual microprocessor for each display and sensor module digital sensor is mounted locally
- Dry contacts for remote monitoring of the high and low alarm

General Specifications:

The Alarm Valve Combo Unit shall be an Amico Alert-1 Series.

Each AVC shall consist of the following components: An 18 Gauge steel valve box complete with a baked white enamel finish which can house one shut-off ball valve with tube extensions, gas specific sensor (DISS nut and nipple connection), and a hinged gas specific compact alarm with illuminated LED digital display. It also includes an error message for an incorrect connection, an aluminum frame and a pull-out removable window.

Affixed to the opposing sides of the box will be two adjustable steel brackets for the purpose of mounting the box to the structural support. The steel brackets shall accommodate various finished wall thicknesses between 3/8" [9.5 mm] and 1-3/16" [30 mm] and shall be field adjustable. The frame assembly shall be constructed of anodized aluminum and shall be mounted to the back box assembly by standard #6 x 3/8" tapping screws as provided.

The digital alarm shall read from 0-250 psi [0-1,724 kPa] for pressure and 0-30"Hg [-100-0 HgkPa] for vacuum. The digital read-out shall provide a constant indication of each service being measured. It will indicate a green "NORMAL" and a red "HIGH" or "LOW" alarm condition. If an alarm occurs, the "RED" alarm light shall flash and the audible alarm (which exceeds 90 decibels) will sound. Pushing the "ALARM MUTE" button will cancel the audible alarm, but the unit will remain in the alarm condition until the problem is rectified. When alarm is enabled on the compact alarm module, the repeat alarm function shall be capable of turning on the buzzer again (after a present time) if the fault condition has not been rectified.

Each alarm module shall be individually microprocessor based and be field adjustable. The default set point on this alarm shall be +/- 20% variation from the normal range. In the calibration mode the following parameters shall be adjustable: High/Low set-points, Imperial/Metric units, Repeat alarm Enable/Disable (adjustable from 1 to 60 minutes), psi and kPa or Bar readout (switch selected). Set points shall be adjustable by two on-board push buttons.

Access to the shut-off valves shall be by merely pulling the ring assembly to remove the window from the frame. The window can be reinstalled without the use of tools only after the valve handles have been returned to the open position. The window shall be marked to prohibit unauthorized persons from tampering with the valves with the following caution:

**"Medical Gas Control Valves with Alarms"
"Close Valves Only in Emergency"**

The valve shall be of a 3 piece ball-type design with a brass forging body and a chrome-plated brass ball for sizes 1/2" to 3" [1.3 cm to 7.6 cm]. Ball seats, stem seals and stem washer shall be Reinforced Teflon (PTFE) with Viton stem and flange O-rings. A blow-out proof stem shall be used and the valve shall have a maximum pressure rating of 600 psi [4,137 kPa].

Valves shall be operated by a lever-type handle requiring only a quarter turn from a fully open position to a fully closed position. All valves shall be equipped with type "K" washed and degreased copper pipe stub. Each valve will be identified for gas specification as indicated on the hinged alarm label.

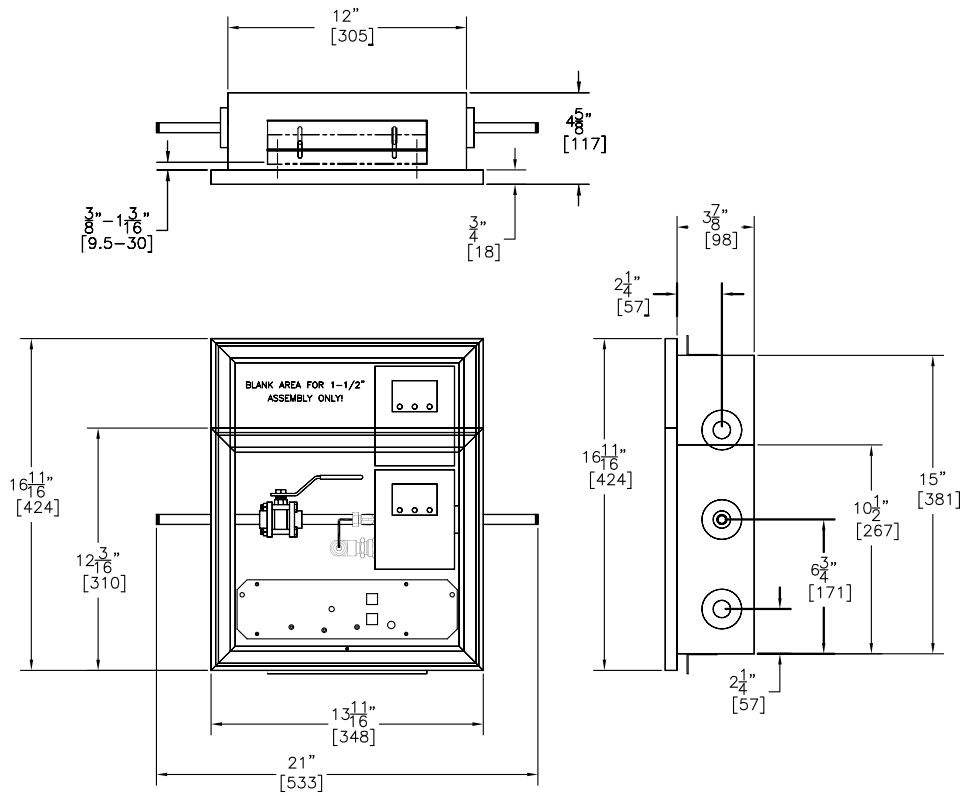
Input power to the Amico Alarm Valve Combo Unit is: 115 VAC to 220 VAC, 50 to 60 HZ.

Amico products comply with NFPA 99 and CSA Z7396.1.

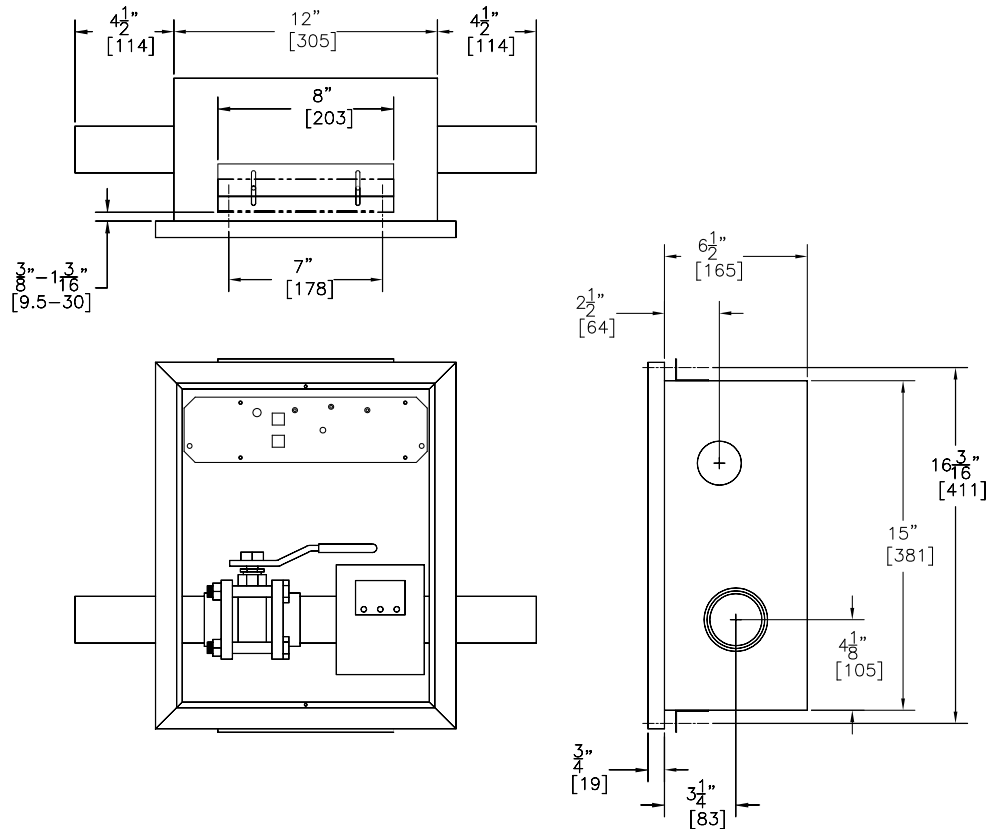
Technical Specifications

Inch
[mm]

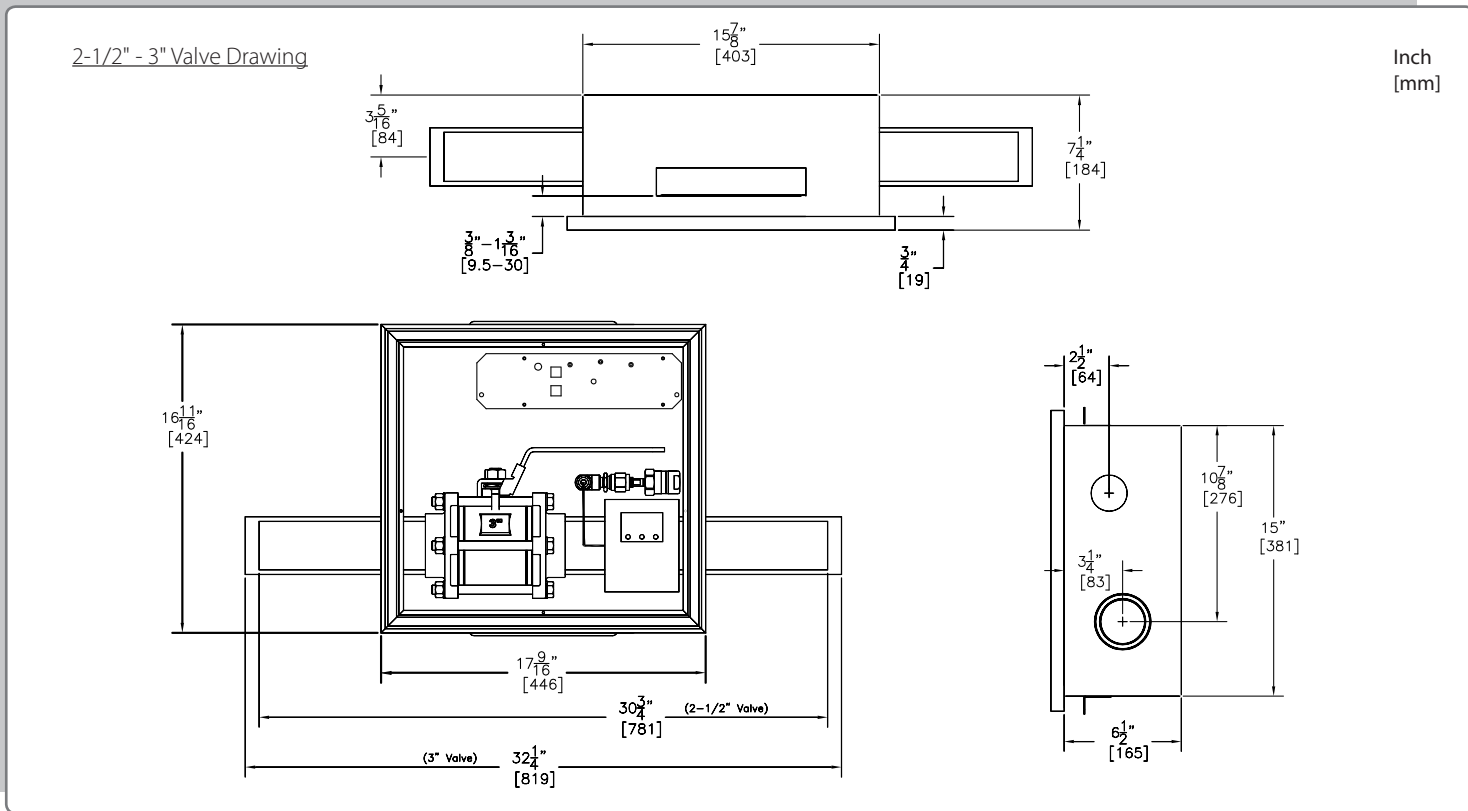
1/2" - 1-1/2" Valve Drawing



2" Valve Drawing



Technical Specifications



Model Numbers AVL-XG

Replace "L" with the Language:

- U = English (NFPA)
- E = English (CSA/ISO)
- F = French (CSA/ISO)
- S = Spanish (NFPA)

The Letter "X" Defines the Valve Size:

1 = 1/2" [1.3 cm]	05
2 = 3/4" [1.9 cm]	07
3 = 1" [2.5 cm]	10
4 = 1-1/4" [3.2 cm]	12
5 = 1-1/2" [3.8 cm]	15
6 = 2" Full Port [5.1 cm]	20F
7 = 2 1/2" [6.35 cm]	25
8 = 3" [7.62 cm]	30

The Letter "G" Defines the Type of Gas:

- O = Oxygen
- A = Medical Air
- V = MedVac
- 2 = Nitrous Oxide
- N = Nitrogen
- C = Carbon Dioxide
- W = WAGD (NFPA)
- E = AGSS (ISO)
- I = Instrument Air

NOTE:

All valves are full port.

The power supply will require 1 gang per box.

Example: English, 1 valve, 1/2" [1.3 cm] Oxygen will be in a 2 gang box. AVU-10.

The 1-1/2" [3.8 cm] valve will have an empty space above the valve.

Example: A box with 1-1/2" [3.8 cm] Medical Vacuum and a power supply, will require a 3 gang box not 2 gang.

The circuit board shall be positioned above the valve. Refer to 1/2" and 1-1/2" [1.3 cm and 3.8 cm] assembly drawing.

The 2" [5.1 cm] valve will be assembled in a 6-1/2" [16.5 cm] deep box.

The 2" [5.1 cm] valve shall be positioned on the bottom of the assembly, with the power supply above the valve.

The 2-1/2" [6.4 cm] and 3" [7.6 cm] valve assembly will be assembled in a 15-1/2" [39.4 cm] wide x 6-1/2" [16.5 cm] deep box. With the valve positioned on the bottom and the power supply on top. Refer to the 2-1/2" [6.4 cm] and 3" [7.6 cm] assembly drawing.

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