

## **GM2 SERIES DOME BIAS AUTOMATIC MANIFOLD**

GENTEC® GM2 series medical automatic manifold system is designed to provide an uninterrupted gas supply without any manual adjustments. This system automatically switches over when the primary cylinder bank is depleted. Even in case of a power failure, the system continues to supply gas without interruption. The system is designed to meet the latest edition of NFPA 99 and CGA standards.



#### **Features**

#### **Automatic Changeover System**

- · Microprocessor controlled intelligent switchover control system with illuminating LED System Status
  - ("IN USE"-green, "READY"-yellow, "EMPTY"-red)
- · Fail-safe solenoid valves in event of power failure
- · Dome Bias Regulator technology
- Input 110 VAC to 240 VAC, 50~60 Hz
- · Fully enclosed, tamper-resistant metal cabinet
- · Integral Alarm Buzzer
- One easy access 3-Way maintenance valve, reducing number of unnecessary valves for contamination and leak points
- · Provision for RS 485 communication and Dry Contact Output, can be integrated to a central monitoring system
- Redesigned regulators for smooth flow characteristics
- Designed to maximize consumption of gas from each cylinder before automatic switchover
- High Flow System. Rated for 120 M<sup>3</sup>/h (4200 SCFH)\* to 170 M<sup>3</sup>/HR (6000 SCFH)\*\*

#### **Pipeline**

- Open-style manifold system, designed for future expansion needs
- · Silver brazing on piping joints for maximum leak prevention
- · Unique changeover valve provides uninterrupted supply of gas from primary and reserve banks
- Easy Installation and maintenance.
- Wall mount available.

<sup>\*</sup> When delivery pressure is 50 psi

<sup>\*\*</sup> When delivery pressure is 180 psi



## **Specifications**

GENTEC® GM2 Series automatic manifold systems shall be manufac- Pigtails with integral check valves shall be gas-specific, complete with tured in an ISO 13485 certified facility. The systems shall be compliant CGA nut and nipple inlet and outlet fitting. with NFPA 99 and ISO 7396.

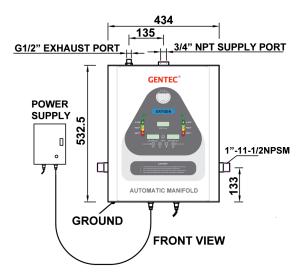
The system shall be furnished with a separate power supply to convert

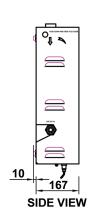
The GM2 Series automatic manifold systems shall be able to operate 220/110 V to 24 V output power. without electrical power (except for the heaters for nitrous oxide and carbon dioxide systems). Only the status indicator and alarms require Each manifold system shall be cleaned for oxygen service in strict acshall continue to supply gas without interruption. Specially designed so-prior to shipment. lenoid valves will automatically set a default priority bank in event of power failure and continue to automatically changeover without power and signal from the microprocessor.

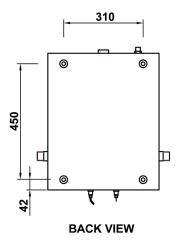
electrical power, therefore in the event of a power failure, the system cordance with CGA 4.1, and 100% factory tested for proper operation

Header bars shall be made of silver brazed, rigid, brass pipe and fittings.

#### **Dimensions**









# **Zone Valve Box Assemblies-Multiple**

#### **Features**

- 14-gauge steel valve box
- · Accepts valve sizes ½ through 2 inches
- · Factory installed copper tubing extensions
- Full port valves for high flow
- Gauges ordered separately
- Complies with NFPA99 requirements
- Cleaned for oxygen service
- 5 year warranty



## **Specifications**

Medical gas zone valve boxes shall be manufactured by Genstar Technologies Co., Inc. (GENTEC®). 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.

design, with forged bronze/ brass body and chrome-plated brass ball. (see warranty statement for details).

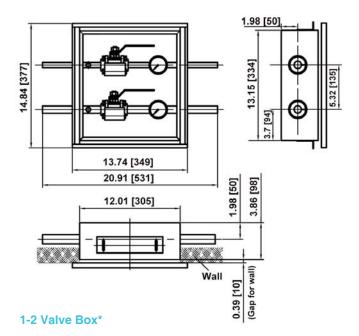
Only 1/4 turn of the handle is required to operate the valve from a fully open to fully closed position. The valves shall have a full port design and incorporate an adjustable packing and a blow-out proof stem.

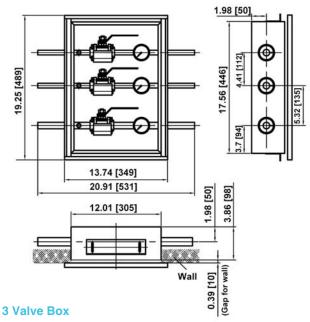
Ball valves shall be designed for working pressure up to 600 psi WOG. Valve body shall have Teflon® material ball seat and Teflon material stem seals. Seats/seals, lubricants and valve materials are compatible with USP oxygen, nitrous oxide, medical air, carbon dioxide, helium, nitrogen and mixtures 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.

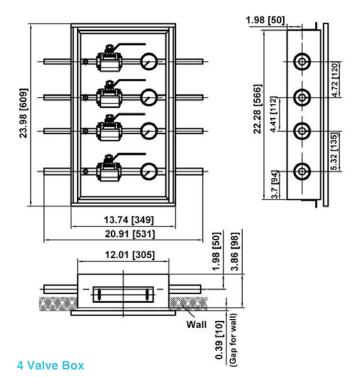
All ball valves shall be supplied clean and prepared for oxygen service in accordance with current CGA G-4.1 standards. All valves shall be 100% tested for leaks and manufactured to comply with the latest edition of NFPA 99. Valves shall be capped to keep them clean prior to installation.

Ball valves shall be double seal, three piece in-line serviceable ball-type All GENTEC zone valve boxes are backed by a standard 5-year warranty









#### **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 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



# **Zone Valve Box Assemblies-Multiple**

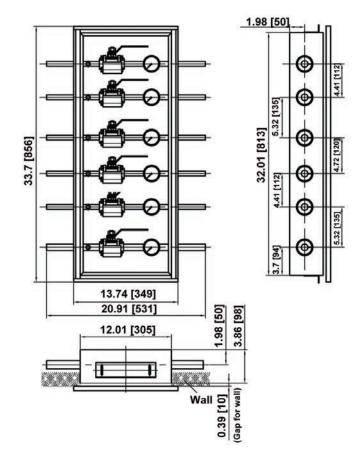
## **Dimensions (Cont)**

#### **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 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 Number of Valves	X Option	XXXX 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

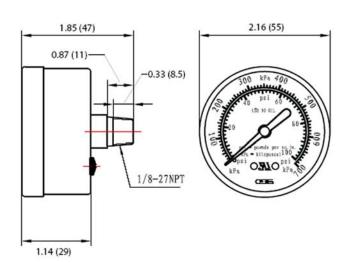
· Case: Steel

· 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)



# **Area Valve Service Unit**

#### **Features**

- · Includes shut-off valve and check valve with NIST connection, easy to operate and maintain
- Diaphragm-sensed regulator provides a consistent outlet flow
- · Pressure gauges included to provide accurate reading of pressure
- · HTM 02-01 compliant
- · Gas service: Oxygen, Nitrogen, Air, Vacuum, and other medical gas
- · Maximum operating pressure: Pressure: 200 psi; Vacuum: -8.7 psi
- · Design Pressure:

Pressure line: 232 psi; Vacuum line: -14.5 psi

· Configuration (3 valve): Both inlet pipe and outlet pipe face upward (vertical)

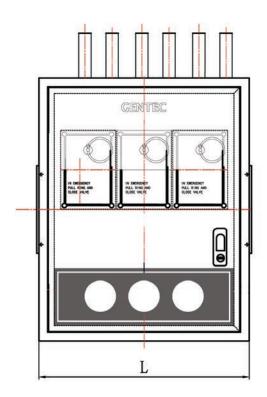


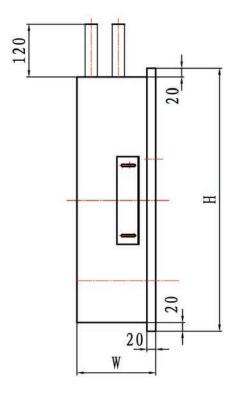
# **Ordering Information**

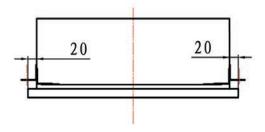
AVB	Н -	3 -	G	0 -	10
	Standard	Number of	Structure	Gas Service	Pipe Diameter
		Channels			
	H: HTM standard compliant	(1-6)	G: With Pressure Gauge	O: Oxygen	05: 1/2"
	E: ISO 7396 (EN737) compliant		R: With Regulator	V: Vacuum	07: 3/4"
	Blank: NFPA Standard		A: With Alarm	A: Medical Air	10: 1"
			D: With Digital Display	2: Nitrous Oxide	15: 1-1/2"
			V: Inlet and outlet on upper side	C: Carbon Dioxide	
			None: Without Gauge	N: Nitrogen	

Please follow the instructions below to select the correct model number.









# **Ordering Information**

Pipe Diameter	Н	L	W
1/2"	16.5"(420)	13.8"(350)	6.3"(160)
3/4"	23.6"(600)	18.9"(480)	7.1"(180)
1"	23.6"(600)	18.9"(480)	7.1"(180)
1-1/4"	31.1"(790)	25.2"(640)	7.1"(180)
1-1/2"	31.1"(790)	25.2"(640)	7.1"(180)

Note: Pipe diameter can be chosen to meet user requirements; enclosure dimensions are determined by the dimensions of the pipe.



## **Gas Control Panel**

#### **Features**

- · Aluminum front panel for ease of maintenance
- · Inlet and outlet display gauges in psi / kPa
- High flow capacity
- · Manual shut-off valve
- Outlet supply pipe for additional remote outlets
- · Maximum inlet pressure: 300 psi
- NFPA 99 compliant



## **Specifications**

Medical gas control panel(s) shall be manufactured by Genstar Tech- 0 to 300 psi. nologies Co., Inc. (GENTEC®) in an ISO 13485 certified facility. The control panel shall be oxygen cleaned and tested in strict accordance The DISS outlet shall be a Diameter Index Safety System for Air or with NFPA 99.

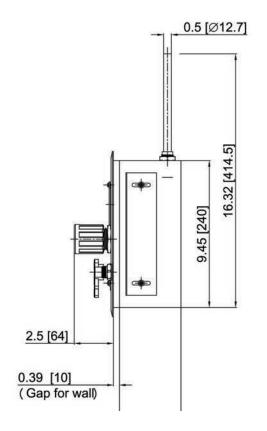
The gas control panel shall be supplied with a quarter turn shut-off matic surgical tools. stainless steel ball valve, rated

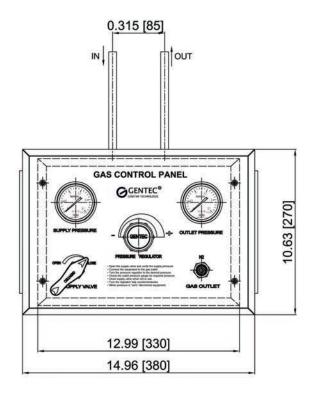
shall be provided to monitor both inlet and outlet pressures. The conponents shall be panel mounted on the front panel. trol panel shall come with a pressure regulator, adjustable between

Nitrogen outlet for pressure above 200 psi. Customized outlet connections are available. The outlets shall be used for connections to pneu-

at no less than 300 psi. Two 0-400 psi 2" diameter pressure gauges The gas control panel shall be factory piped and 100% tested. All com-







Note: All dimensions are reference.

# **Ordering Information**

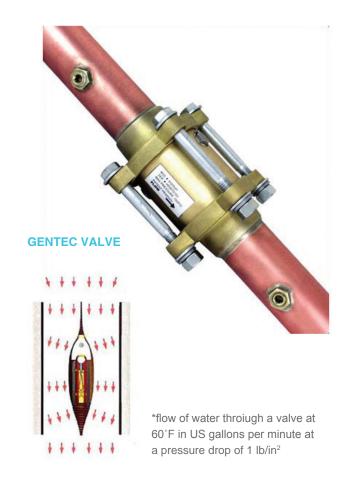
GCP200 - N Nitrogen Control Panel, Diss Connector GCP200 - A Air Control Panel, Diss Connector



# **MEDICAL CHECK VALVES** WITH EXTENSIONS

#### **Features**

- Available in Sizes 3/4 " to 4"
- · 3 Piece Design for Ease of Maintenance
- Type K Copper Extensions
- · Dual Gauge/Purge Ports
- · High Flow, Minimal Pressure Drop
- · Cleaned for Oxygen Service
- · 100% Hydrostatically Tested
- NFPA-Compliant



## **Specifications**

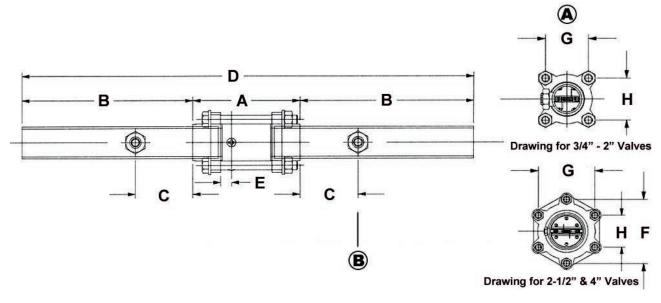
ing installation and available for sizes and services indicated.

Check valves shall be brass construction and designed for working pressures of up to 300 psi. The valve body is a 3-piece design with Viton®/EPDM/Teflon® seats. The body shall be field removable for servicing without having to cut to cut or disassemble the medical gas 5-year warranty (see warranty statement for details). lines. Valves shall be provided with factory-installed Type K copper extensions for making connections to the pipeline and shall include dual gauge/purge ports, sealed with brass HEX plugs, located upstream and downstream of check valve. The GENTEC® valve has a high coefficient of flow (Cv)\*, and a tight seal, which eliminates the chatter and leakage that is common with some ball and cone check valves.

GENTEC® medical check valves shall be designed for concealed pip- All check valves with extensions shall be cleaned for oxygen service per current CGA G-4.1 standards, and be 100% hydrostatically tested. Valves shall be capped and sealed in a polyethylene bag to keep them clean prior to installation.

All All GENTEC® medical check valves are backed by a standard





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

- A. Four bolts used on 3/4"-2"; Six bolts used on 2 1/2-4" valves
- B. Gauge port with 1/8" plug (gauge not supplied)

Dimensions: (Inches)								
Valve Size	Α	В	С	D	Е	F	G	Н
3/4"	3.21	6.00	2.00	15.21	.33		1.43	1.43
1"	3.72	6.00	2.00	15.72	.33		1.62	1.62
1-1/4"	4.06	6.00	2.00	16.06	.40		2.00	2.00
1-1/2"	4.45	6.00	2.00	16.45	.40		2.25	2.25
2"	5.18	6.00	2.00	17.18	.40		2.86	2.86
2-1/2"	6.10	6.00	2.00	18.10	.50	4.94	4.28	2.47
3"	6.76	6.00	2.00	18.76	.50	5.51	4.77	2.75
4"	8.56	6.00	2.00	20.56	.50	7.46	6.46	3.73

# **Ordering Information**

Valve Size	Catalog Number	Quantity
3/4"	CVP-07	
1"	CVP-10	
1-1/4"	CVP-12	
1-1/2"	CVP-15	
2"	CVP-20	
2-1/2"	CVP-25	
3"	CVP-30	
4"	CVP-40	

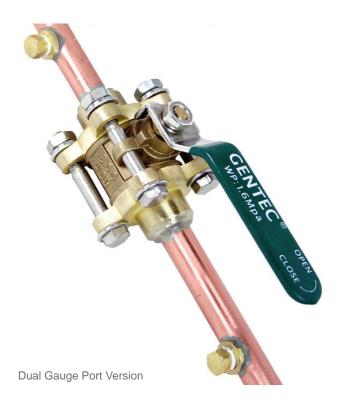




# BALL VALVES 1/2" TO 4", WITH EXTENSIONS

#### **Features**

- Available in sizes 1/2 " to 4"
- · 3 piece design for ease of maintenance
- · Quarter-turn, full port design Valves
- Blow out proof valve stem
- Teflon<sup>®</sup> seats and seals
- Dual gauge port version
- Lockable or non-lockable handles available
- · Cleaned for oxygen service
- 100% hydrostatically tested
- NFPA-Compliant



#### **Specifications**

Co., Inc. (GENTEC®). Ball valves shall be designed for concealed piping installation and available for sizes and services indicated.

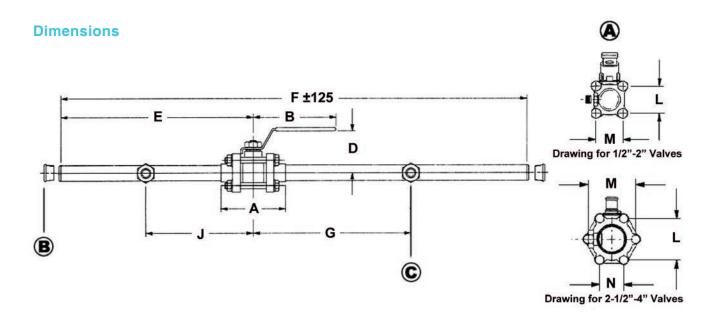
Ball valves shall be double seal, three piece in-line serviceable balltype design, with forged bronze/brass body and chrome-plated brass ball. Only ¼ turn of the handle is required to operate the valve from All ball valves shall be supplied clean and prepared for oxygen sera fully open to fully closed position. The valves shall have a full port 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

Medical gas ball shall be manufactured by Genstar Technologies 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 a single gauge/purge port sealed with a brass HEX plug. Locking or nonlocking handles are available (locks furnished and installed by others).

vice in accordance with current CGA G-4.1 standards. All valves design and incorporate an adjustable packing and a blow-out proof shall be 100% tested for leaks and manufactured to comply with the latest edition of NFPA-99. Valves shall be capped and sealed in a polyethylene bag to keep them clean prior to installation.





## **Dimensional Data Notes:**

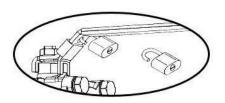
- A. Four bolts used on 1/2"-2"; Six bolts used on 2 1/2-4" valves
- B. Extension Cap
- C. Gauge port with 1/8" plug (gauge not supplied)

Dimensions: (Inches)										
Valve Size	Α	В	D	Е	F	G	J	M	N	L
1/2"	2.62	3.35	1.69	8.20	20.93	5.58	2.38	1.00	1.29	
3/4"	2.93	4.33	1.89	8.43	21.00	5.28	2.70	1.43	1.43	
"	3.44	4.33	2.03	8.58	21.00	5.09	2.89	1.62	1.62	
-1/4"	3.96	5.12	2.56	8.74	20.98	5.49	3.24	2.00	2.00	
-1/2"	4.43	5.12	2.72	8.86	20.99	4.85	3.38	2.25	2.25	
"	5.55	6.30	3.15	9.23	21.06	4.78	3.76	2.81	2.81	
!-1/2"	6.73	9.06	4.29	8.50	23.50	7.00	4.25	4.33	2.50	5.00
"	7.56	9.06	4.61	8.50	24.00	7.00	4.50	4.76	2.75	5.50
."	9.80	11.73	7.90	8.50	32.00	7.90	7.90	6.38	3.73	7.45

# **Ordering Information**

Valve	Catalog Number				
Size	Single Port Ball Valves	Dual Port Ball Valves			
	Locking Handle (Non-Locking)	Locking Handle (Non-Locking)			
1/2"	VL1-05L1 (VL1-05N1)	VL1-05L2 (VL1-05N2)			
3/4"	VL1-07L1 (VL1-07N1)	VL1-07L2 (VL1-07N2)			
1"	VL1-10L1 (VL1-10N1)	VL1-10L2 (VL1-10N2)			
1-1/4"	VL1-12L1 (VL1-12N1)	VL1-12L2 (VL1-12N2)			
1-1/2"	VL1-15L1 (VL1-15N1)	VL1-15L2 (VL1-15N2)			
2"	VL1-20L1 (VL1-20N1)	VL1-20L2 (VL1-20N2)			
2-1/2"	VL1-25L1 (VL1-25N1)	VL1-25L2 (VL1-25N2)			
3"	VL1-30L1 (VL1-30N1)	VL1-30L2 (VL1-30N2)			
4"	VL1-40L1 (VL1-40N1)	VL1-40L2 (VL1-40N2)			

## **Valve Locking Handle**







# GUMACS™ SERIES MEDICAL GAS AREA ALARM

#### **Features**

- Modular system configuration
- 1 to 16 input channels available
- Pressure units are customizable (Psi, kPa, Bar, MPa, inHg, and mmHg)
- · Can be used to monitor pressure, flow rate, temperature, humidity, concentration, and other safety indexes
- · High/low alarm limits and silence time are customizable
- Built-in RS-485 communication port for networking
- Accept 4-20 mA current inputs and single-ended voltage signals
- One contact switch output per input channel
- · Displays error message when pressure transducer is not connected
- Compact size with large four-digit LED numerical displays
- Dual color LEDs for system statuses
- · All parameters can be field adjustable
- · Labels can be customized upon request
- · Alarm volume is adjustable



Area Alarm with Local Sensors



GUMACS™ Series Area Alarm is CE marked and NFPA 99 complialarm to be networked for remote ant. Designed to accept a variety of input signals, GUMACS™ Series monitoring. The physical data will be processed and displayed on Area Alarm is often used to monitor pressure, flow rate, temperature, site by the area alarms. In addition, humidity, concentration, and other safety indexes.

If needed, GUMACS™ Series Area Alarm can also offer relay switch ules, the area alarms and master alarms. output control capability.

Built-in RS485 communication port allows each GUMACS™ Series

GUMACS™ System Console can request data from the slave mod-

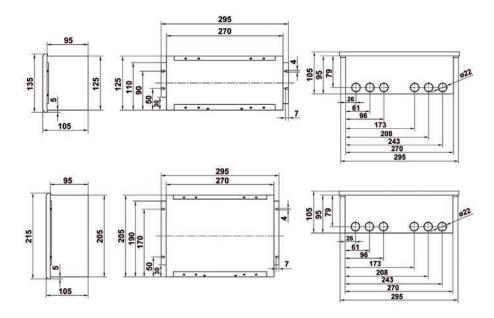


# **Electrical and Physical Specifications**

Electrical						
Power Requirements	Analog Input	Relay Output	Buzzer			
Input: 100-240 VAC, 0.5	Input Type: (1) Single-ended, voltage	Channels: 1 output per 1 input channel	Adjustable Intensity			
A Maximum	(2) Diferential, voltage	Range: 0.15 A at 48 VDC/1 A at 30 VDC/0.5 A at 120 VAC				
	(3) 4-20 mA current supplying 15 VDC					
	(4) 4-20 mA current not supplying 15 VDC					
	Working Range: ±10 VDC/4-20 mA					
	Safe Range: ±14 VDC/0-28 mA Maximum					
	Resolution: 14 bit or 1% of sensor full range					

	Communication			
Front Panel	Case Body	Physical Dimensions	Wall Opening (Width x Height)	RS-485 Port
		(Width x Height x Depth)	(Depth beneath the wall is 95 mm)	
Injection Molded Plastic	Metal Alloy	Overall: 1-4 Channel: 300 x 135 x 107mm	5-6 Channel: 272 x 165mm	9600/19200 baud,
(PCABS, V0 Flame Rated)		5-6 Channel: 300 x 175 x 107mm	1-4 Channel: 272 x 125mm	standard (8-bit data, no parity,
		7-8 Channel: 300 x 215 x 107mm	7-8 Channel: 272 x 205mm	1 stop bit)

#### **Dimensions**



# **Ordering Information**

GUMACS	- R -	3 -	OVA
Area Alarm	Sensor Type	Number of Numerical Display	Gas Type
	L: Local Sensor	(0 to 10 Normally)	O: Oxygen
	R: Remote Sensor		V: Vacuum
			A: Medical Air
			I: Instrument Air
			N: Nitrogen
			2: Nitrous Oxide
			C: Carbon Dioxide
			W: WAGD Vacuum

Example: GUMACS - R - 3 - OVA indicates an area alarm (remote sensor) for oxygen, vacuum, and medical air.

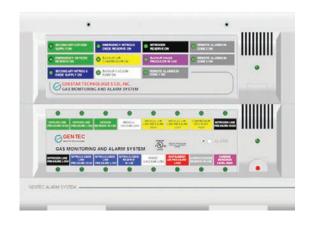




## GUMACS™ SERIES MEDICAL GAS MASTER ALARM

#### **Features**

- Can expand up to 64 TTL or contact switch inputs
- · Can offer up to 48 switch output capability
- · Built-in RS-485 communication port for networking
- · Can be upgraded to a combination alarm if numerical displays are required
- · Accept both normally open (N/O) and normally closed (N/C) switches
- · High/low alarm limits and silence time are customizable
- Can be used to monitor the conditions of area alarms
- · Labels can be customized upon request
- · Alarm volume is adjustable



GUMACS™ Series Master Alarm (up to 32 inputs)



GUMACS™ Series Master Alarm is CE marked and NFPA 99 compli- Although not done conventionally, GUMACS™ Series Master Alarm switch output control capability when required.

Built-in RS485 communication port allows each GUMACS™ Series alarm to be networked for remote monitoring. The physical data will be processed and displayed on site by the master alarm. In addition, GUMACS™ System Console can request data from the slave modules, the area alarms and master alarms.

ant. It is used to monitor the operation conditions of source equip- can be used as an Area Alarms Monitoring Center. When connected, ments such as air compressors, vacuum pumps, and/or manifold the working conditions of the area alarms will be displayed on the systems, etc. GUMACS™ Series Master Alarm can also offer relay Area Alarms Monitoring Center. This would be a good solution for a medium-sized central monitoring project.



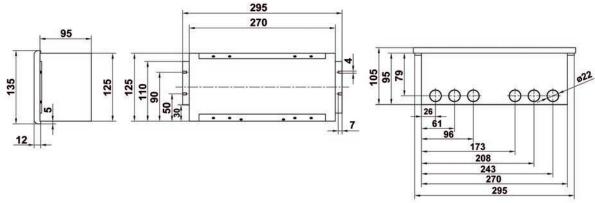
# **Electrical and Physical Specifications**

	Ele	ectrical		
Power Requirements	Analog Input (for first module)	Digital Output	Digital Input	Numerical
		(for one expansion module)	(for one expansion module)	Display
Input: 100-240 VAC, 0.5	Input Type:	5 VDC, -2.6 mA per	5 VDC, 24 mA per Channel Maximum	Resolution:
A Maximum	(1) Single-ended, voltage	Channel Maximum	Number of Channels: 16 Maximum	Large 7-segment,
	(2) Diferential, voltage	Number of Channels:	Grayhill 70-IAC5, 70-IDC5,	four-digits LED)
	(3) 4-20 mA current supplying 15 VDC	16 Maximum	and Compatibles	
	(4) 4-20 mA current not supplying 15 VDC	Omron G2R-1, G2R-14,		
	Working Range: ±10 VDC/4-20 mA	G2R-1A, G2R1A4 or		
	Channels: 16 Maximum	Grayhill 70-OAC5, 70-ODC5,		
	Safe Range: ±14 VDC/0-28 mA Maximum	and Compatibles		
	Resolution: 14 bit or 1% of sensor full range			

		Mechanical	
Front Panel	Case Body	Physical Dimensions	Wall Opening (Width x Height)
		(Width x Height x Depth)	(Depth beneath the wall is 95 mm)
Injection Molded Plastic	Metal Alloy	Overall: 1-16 Channel: 300 x 135 x 107 mm	1-16 Channel: 272 x 125 mm
(PCABS, V0 Flame Rated)		17-32 Channel: 300 x 215 x 107 mm	17-32 Channel: 272 x 205 mm
		33-48 Channel: 300 x 295 x 107 mm	33-48 Channel: 300 x 285 mm
		49-64 Channel: 300 x 375 x 107 mm	49-64 Channel: 300 x 365 mm

Communication
RS-485 and RS-232 Port
9600/19200 baud, standard (8-bit data, no parity, 1 stop bit)

## **Dimensions**



# **Ordering Information**

GUMACS -	1 -	OVA
Master Alarm	Number of	Gas Type
	LED Display	
	0: 0 LED Display	O: Oxygen
	1: 1-16 LED Display	V: Vacuum
		A: Medical Air
		I: Instrument Air
		N: Nitrogen
		2: Nitrous Oxide
		C: Carbon Dioxide
		W: WAGD Vacuum

Example: GUMACS - 1 - OVA indicates an master alarm for oxygen, vacuum, and medical air.





## GUMACS™ SERIES MEDICAL GAS COMBINATION ALARM

#### **Features**

- Can be expanded to handle up to 64 TTL or contact switch inputs and 48 TTL or relay (contact switch) outputs
- · Built-in RS-485 communication port for networking
- · High/low alarm limits and silence time are customizable
- · Relative positions of modules can be adjusted to meet the space requirements or limitations
- Displays error message when pressure transducer is not connected
- Labels can be customized upon request
- · Alarm volume is adjustable



GUMACS™ Series Combination Alarm









Flexibility of Module Placement

99 compliant. Integrating the numerical display functions and mas-ries alarm to be networked for remote monitoring. The physical ter alarm functions, the combination alarm is sometimes more prefdata will be processed and displayed on site by the combination erable. It can be used to monitor the operational conditions of alarm. In addition, GUMACSTM System Console can request data source equipment and other numerical safety indexes. GUMAC- from the slave modules, area alarms and master alarms. STM Series Combination Alarm can also offer relay switch output control capability when required.

GUMACSTM Series Combination Alarm is CE marked and NFPA Built-in RS485 communication port allows each GUMACSTM Se-

8888

e e e e e



# **Electrical and Physical Specifications**

	Ele	ectrical		
Power Requirements	Analog Input (for first module)	Digital Output	Digital Input	Numerical
		(for one expansion module)	(for one expansion module)	Display
Input: 100-240 VAC, 0.5	Input Type:	5 VDC, -2.6 mA per	5 VDC, 24 mA per Channel Maximum	Resolution:
A Maximum	(1) Single-ended, voltage	Channel Maximum	Number of Channels: 16 Maximum	Large 7-segment,
	(2) Diferential, voltage	Number of Channels:	Grayhill 70-IAC5, 70-IDC5,	four-digits LED)
	(3) 4-20 mA current supplying 15 VDC	16 Maximum	and Compatibles	
	(4) 4-20 mA current not supplying 15 VDC	Omron G2R-1, G2R-14,		
	Working Range: ±10 VDC/4-20 mA	G2R-1A, G2R1A4 or		
	Channels: 16 Maximum	Grayhill 70-OAC5, 70-ODC5,		
	Safe Range: ±14 VDC/0-28 mA Maximum	and Compatibles		
	Resolution: 14 bit or 1% of sensor full range			

	Me	echanical	
Front Panel	Case Body	Physical Dimensions	Wall Mounting Hole
Injection Molded Plastic	Metal Alloy	Customized	Customized
(PCABS, V0 Flame Rated)			

Communication	
RS-485 and RS-232 Port	
9600/19200 baud, standard (8-bit data, no parity, 1 stop b	it)

Wiring
Termination
Analog Input, I/O, and RS-485: PCB mounted screw terminal connections
AC Power: 3 pin AC power connections

# **Ordering Information**

GUMACS -	R -	1 -	3	OVA
Combination Alarm	Sensor Type	Number of	Number of	Gas Type
		LED Display	<b>Numerical Display</b>	
	L: Local Sensor	0: 0 LED Display	(0 to 10 Normally)	O: Oxygen
	R: Remote Sensor	1: 1-16 LED Display		V: Vacuum
				A: Medical Air
				I: Instrument Air
				N: Nitrogen
				2: Nitrous Oxide
				C: Carbon Dioxide
				W: WAGD Vacuum

Example: GUMACS - R - 1 - 3 - OVA indicates a combination alarm (remote sensor) with 3 LED Display (oxygen, vacuum, medical air)





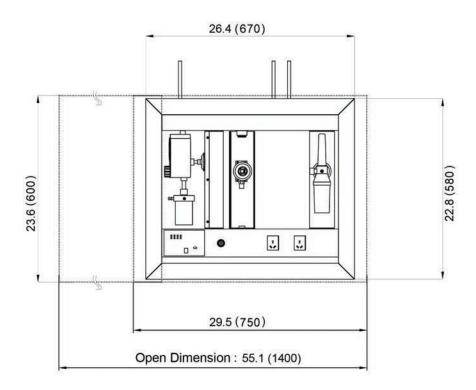
# **ART WALL ENCLOSURE**

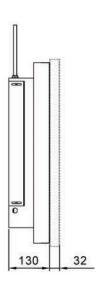
## **Features**

- Designed for hospital rooms where design is emphasized, replaces traditional bedhead units
- The painting sits on a sliding mechanism which can hide the medical equipment while they are not in use
- · The art piece and exterior design can be customized to meet or match a variety of design requirements
- · A wide range of medical products & accessories can be custom-ordered
- · Gas and electric channels are insulated to ensure safety









Note: All dimensions are reference.

# **Ordering Information**

3721 -	P01 -	GS
Series	Canvas Style	Medical Gas Outlet
3721	P01: Portrait	OH: Ohmeda® adapter
	P02: Landscape	DS: DISS hex adapter
	P03: Abstract	DH: DISS hand tight adapter
		CH: Chemetron® adapter
		PB: Puritan-bennett® adapter
		FS: French (NF S 90-116) adapter
		GS: German (DIN 13260-2) adapter
		BS: British (BS5682-1998) adapter
		JIS: Japanese Style adapter
		SIS: Australian (AS2896) adapter

Please contact Genstar for more ordering information.



# **MEDICAL BEDHEAD UNITS**

## **Features**

- Aluminum alloy, powder coated to protect against oxidation
- · Single & dual trunks available
- Gas and electrical channels are separated by trunks to ensure safety
- Easy installation and maintenance
- · Custom-ordered color available
- 100% tested for leakage

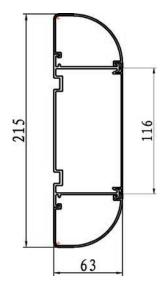


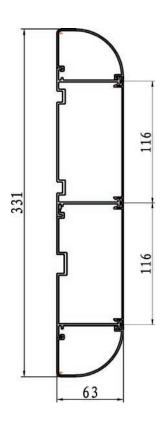
3703 Series

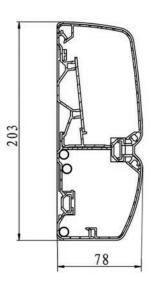


3702 Series









3701 Series 3702 Series 3703 Series

# **Ordering Information**

Please contact Genstar for ordering information.



# MEDICAL GAS CONSOLE OUTLET OHMEDA® COMPATIBLE 90° TUBING

#### **Features**

- · Accepts only Ohmeda style gas specific adapters
- Indexed to prevent interchangeability of gas services
- 360° swivel inlet tube for easy installation
- Cleaned for oxygen service
- 100% leak tested
- · Complies with NFPA 99



#### **Specifications**

gies Co., Inc. (GENTEC®) in an ISO 9001 and ISO 13485 certified facility. Console outlet shall be designed for concealed piping installation and available for gas services indicated.

Outlets shall be delivered to the customer in a gas specific rough-in The rough-in assembly shall accept any latch valve assembly of the assembly, and a matching gas specific latch valve assembly, both cleaned for oxygen use and in strict accordance with CGA G-4.1 and able, allowing conversion from one connection style to another within sealed packages. Optional trim plates can be provided to trim out shutting down the medical gas piping system. each outlet assembly and allow latch valve to be individually removed for servicing.

The latch valve assembly shall be Ohmeda quick connect compatible, and accept only corresponding gas specific type adapters. Each latch valve assembly shall be color-coded for ease of gas identification per the appropriate standards (US or ISO). Latch valve assem- All assemblies shall be 100% tested for leaks, manufactured to comblies shall have gas specific pin indexing corresponding to the roughin assembly to prevent interchangeability of gas services. Outlets can easily be converted from one adapter type to another by replacing the latch valve assembly with another of the same gas service.

Universal rough-in assembly shall include a rough-in plate (16 ga.) with gas inlet tubing silver brazed to the outlet body. Inlet tubing shall be type "K" copper, 1/2" O.D. (12.7 mm), extend 6-1/2 inches (165

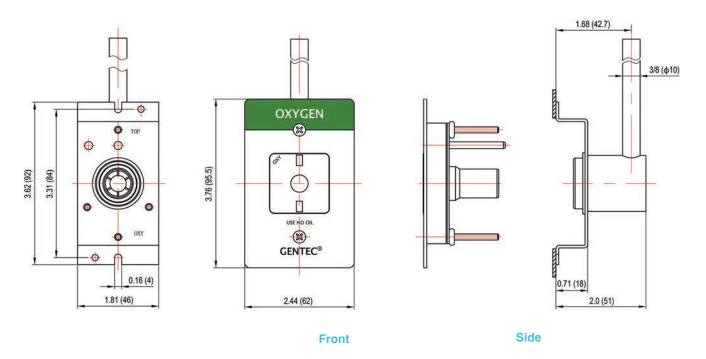
Medical gas outlet(s) shall be manufactured by Genstar Technolo- mm), and swivel 360° for ease of installation. Rough-in assembly shall accept only the specified gas service by use of indexes. A dust plug shall be provided to protect rough-in assembly from contamination during and handling and installation.

same gas service. The latch valve assembly shall be interchange-

All gas outlets shall have primary and secondary check valve, where the secondary valve in the rough-in assembly allows servicing of the latch valve assembly without having to disrupt gas service to the

ply with the latest edition of NFPA 99, and UL and CSA approved.





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

- Ohmeda compatible quick connect type latch valve shown
- 3/8" (9.5 mm) Nominal (1/2" O.D.) (12.7 mm) type K copper inlet tube allows 360° swivel on outlet body for entry from any angle
- Wall thickness 1/2" (12.7 mm) to 1" (12.5 mm)

#### **Ordering Information**

Gas Service	Catalog Number	Quantity
Oxygen	3811U-O	
Vacuum	3811U-V	
Medical Air	3811U-A	
Nitrous Oxide	3811E-2	
WAGD	3811U-W	
Carbon Dioxide		
Nitrogen		
Instrument Air		

## **Material**

Latch Valve	Rough-in	Trim Plate
Aluminum	Stainless Steel	Aluminum+Coating
ABS Plastic	ABS Plastic	
Steel/Brass+Plating		
Stainless Steel		
Brass		
Neoprene		
Rubber		

Ordering Information shows a Complete Console Outlet, including a Rough-in Assembly and a Latch Valve Assembly. Trim plate is optional. Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.







# MEDICAL GAS CONSOLE OUTLET OHMEDA® COMPATIBLE 180° TUBING

#### **Features**

- Accepts Ohmeda<sup>®</sup>, Chemetron<sup>®</sup> or Puritan-Bennett<sup>®</sup> quick connect and DISS gas specific adapters
- · Indexed to prevent interchangeability of gas services
- 100% hydrostatically tested
- · Complies with NFPA 99 and CGA G-4.1 standards



# **Specifications**

Medical gas outlet(s) shall be manufactured by Genstar Technologies tubing shall be type "K" copper, 1/2" (12.7 mm) OD, and extend 6-1/2 Co., Inc. (GENTEC®). Console outlet shall be designed for concealed inches (165 mm). piping installation and available for gas services indicated.

Outlets shall be delivered to the customer in a gas specific rough-in assembly, and a matching gas specific latch valve assembly, both cleaned for oxygen use and in sealed packages. Optional trim plates can be provided to trim each outlet assembly and allow latch valve to be individually removed for servicing.

The latch valve assembly shall be Ohmeda, Chemetron or Puritan-Bennett quick connect compatible, or have Com-pressed Gas Association (CGA) Diameter Index Safety System (DISS) threaded connector, All positive pressure gas outlets shall have a primary and secondary and accept only correspond-ing gas specific type adapters. Each latch valve assembly shall be color-coded for ease of gas identification per lows servicing of the latch valve assembly without having to disrupt gas the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the rough-in assembly to prevent interchangeability of gas services. Outlets can easily be con- All assemblies shall be 100% tested for leaks, manufactured to comply verted from one adapter typeto another by replacing the latch valve with the latest edition of NFPA 99, and UL Listed. assembly with another of the same gas service.

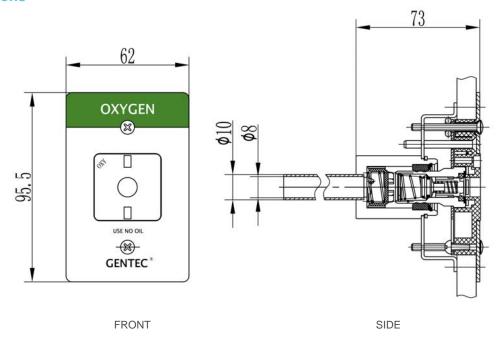
Universal rough-in assembly shall include a rough-in plate (16 ga.) and gas inlet tubing silver brazed at 180 degrees to the outlet body. Inlet

Rough-in assembly shall accept only the specified gas service by use of indexes. A dust plug shall be provided to protect rough-in assembly from contamination during handling and installation.

Rough-in assemblies shall accept any latch valve assembly of the same gas service. The latch valve assembly shall be interchangeable, allowing conversion from one connection style to another without shutting down the medical gas piping system.

check valve, where the secondary valve in the rough-in assembly alservice to the outlet.





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

- Ohmeda compatible quick connect type latch valve shown
- 3/8" (9.5 mm) Nominal (1/2" O.D.) (12.7 mm) type K copper inlet tube allows 360° swivel on outlet body for entry from any angle
- Inch (mm)
- Wall thickness 1/2" (12.7 mm) to 1" (12.5 mm)

# **Ordering Information**

	Ohmeda Compat	ible
Gas Service	Cat No.	Pipe
Oxygen	3811U-O / 3811U-O-M	1/2" / ф10 real
Vacuum	3811U-V / 3811U-V-M	1/2" / ф10 real
Medical Air	3811U-A / 3811U-A-M	1/2" / ф10 real
Nitrous Oxide	3811E-2 / 3811E-2-M	1/2" / ф10 real
WAGD	3811U-W / 3811U-W-M	1/2" / ф10 real
Carbon Dioxide		
Nitrogen		
Instrument Air		

#### **Material**

Latch Valve	Rough-in	Trim Plate
Aluminum	Stainless Steel	ABS Plastic
ABS Plastic	ABS Plastic	
Steel/Brass+Plating	Neoprene	
Stainless Steel	Steel+Plating	
Brass	Copper	
Neoprene		
Rubber		

Ordering Information shows a Complete Console Outlet, including a Rough-in Assembly and a Latch Valve Assembly. Trim plate is optional. Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.



# MEDICAL GAS CONSOLE OUTLET CHEMETRON® COMPATIBLE 90° TUBING

#### **Features**

- · Accepts only Chemetron style gas specific adapters
- · Indexed to prevent interchangeability of gas services
- 360° swivel inlet tube for easy installation
- · Cleaned for oxygen service
- 100% leak tested
- Complies with NFPA 99



# **Specifications**

Medical gas outlet(s) shall be manufactured by Genstar Technolo- be type "K" copper, 1/2" O.D. (12.7 mm), extend 6-1/2 inches (165 lation and available for gas services indicated.

Outlets shall be delivered to the customer in a gas specific rough-in cleaned for oxygen use in strict accordance with CGA G-4.1 and in outlet assembly and allow latch valve to be individually removed for out shutting down the medical gas piping system. servicing.

The latch valve assembly shall be Chemetron quick connect compat- where the secondary valve in the rough-in assembly allows servicing ible, and accept only corresponding gas specific type adapters. Each of the latch valve assembly without having to disrupt gas service to latch valve assembly shall be color-coded for ease of gas identification per the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the rough- All assemblies shall be 100% tested for leaks, manufactured to comin assembly to prevent interchangeability of gas services. Outlets ply with the latest edition of NFPA 99, and UL and CSA approved. can be easily converted from one adapter type to another by replacing the latch valve assembly with another of the same gas service.

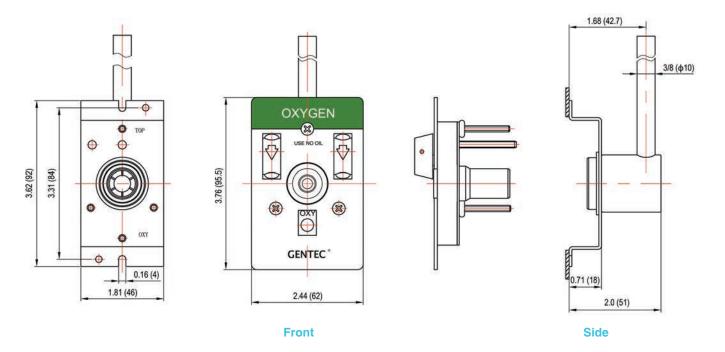
Universal rough-in assembly shall include a rough-in plate (16 ga.) with gas inlet tubing silver brazed to the outlet body. Inlet tubing shall

gies Co., Inc. (GENTEC®) in an ISO 9001 and ISO 13485 certified mm) and swivel 360° for ease of installation. Rough-in assembly facility. Console outlet shall be designed for concealed piping instal- shall accept only the specified gas service by use of indexes. A dust plug shall be provided to protect rough-in assembly from contamination during handling and installation.

assembly, and a matching gas specific latch valve assembly, both The rough-in assembly shall accept any latch valve assembly of the same gas service. The latch valve assembly shall be interchangesealed packages. Optional trim plates can be provided to trim each able, allowing conversion from one connection style to another with-

All gas outlets shall have primary and secondary check valves,





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

- Ohmeda compatible quick connect type latch valve shown
- 3/8" (9.5 mm) Nominal (1/2" O.D.) (12.7 mm) type K copper inlet tube allows 360° swivel on outlet body for entry from any angle
- Inch (mm)
- Wall thickness 1/2" (12.7 mm) to 1" (12.5 mm)

## **Ordering Information**

Gas Service	Catalog Number	Quantity
Oxygen	3813U-O	
Vacuum	3813U-V	
Medical Air	3813U-A	
Nitrous Oxide	3813E-2	
WAGD	3813U-W	
Carbon Dioxide		
Nitrogen		
Instrument Air		

#### **Material**

Latch Valve	Rough-in	Trim Plate
Aluminum	Stainless Steel	Aluminum+Coating
ABS Plastic	ABS Plastic	
Steel/Brass+Plating		
Stainless Steel		
Brass		
Neoprene		
Rubber		

Ordering Information shows a Complete Console Outlet, including a Rough-in Assembly and a Latch Valve Assembly. Trim plate is optional. Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.





# MEDICAL GAS CONSOLE OUTLET **DISS COMPATIBLE 90° TUBING**

#### **Features**

- · Accepts only DISS style gas specific adapters
- · Indexed to prevent interchangeability of gas services
- · Easy conversion of quick connection or DISS type latch valve assemblies
- · 360° swivel inlet tube for easy installation
- · Cleaned for oxygen service
- 100% leak tested
- · Complies with NFPA 99



## **Specifications**

gies Co., Inc. (GENTEC®) in an ISO 9001 and ISO 13485 certified mm) and swivel 360° for ease of installation. Rough-in assembly facility. Console outlet shall be designed for concealed piping instal- shall accept only the specified gas service by use of indexes. A dust lation and available for gas services indicated.

Outlets shall be delivered to the customer in a gas specific rough-in assembly, and a matching gas specific latch valve assembly, both The rough-in assembly shall accept any latch valve assembly of the cleaned for oxygen use in strict accordance with CGA G-4.1 and in same gas service. The latch valve assembly shall be interchangesealed packages. Optional trim plates can be provided to trim each able, allowing conversion from one connection style to another withoutlet assembly and allow latch valve to be individually removed for out shutting down the medical gas piping system. servicing.

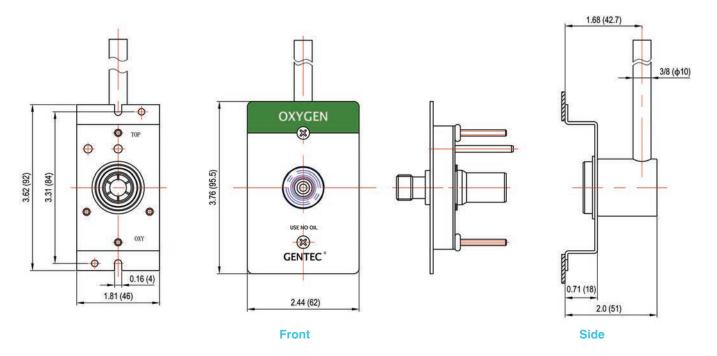
The latch valve assembly have Compressed Gas Association (CGA) where the secondary valve in the rough-in assembly allows servicing Diameter Index Safety System (DISS) threaded connector, and ac- of the latch valve assembly without having to disrupt gas service to cept only corresponding gas specific type adapters. Each latch valve the outlet. assembly shall be color-coded for ease of gas identification per the appropriate standards (US or ISO). Latch valve assemblies shall All assemblies shall be 100% tested for leaks, manufactured to comhave gas specific pin indexing corresponding to the rough-in assem- ply with the latest edition of NFPA 99, and UL and CSA approved. bly to prevent interchangeability of gas services. Outlets can be easily converted from one adapter type to another by replacing the latch valve assembly with another of the same gas service.

Universal rough-in assembly shall include a rough-in plate (16 ga.) with gas inlet tubing silver brazed to the outlet body. Inlet tubing shall

Medical gas outlet(s) shall be manufactured by Genstar Technolo- be type "K" copper, 1/2" O.D. (12.7 mm), extend 6-1/2 inches (165 plug shall be provided to protect rough-in assembly from contamination during handling and installation.

All gas outlets shall have primary and secondary check valves,





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

- Ohmeda compatible quick connect type latch valve shown
- 3/8" (9.5 mm) Nominal (1/2" O.D.) (12.7 mm) type K copper inlet tube allows 360° swivel on outlet body for entry from any angle
- Inch (mm)
- Wall thickness 1/2" (12.7 mm) to 1" (12.5 mm)

## **Ordering Information**

Gas Service	Catalog Number	Quantity
Oxygen	3812U-O	
Vacuum	3812U-V	
Medical Air	3812U-A	
Nitrous Oxide	3812E-2	
WAGD	3812U-W	
Carbon Dioxide	3812E-C	
Nitrogen	3812E-N	
Instrument Air	3812U-1	

#### **Material**

Latch Valve	Rough-in	Trim Plate
Aluminum	Stainless Steel	Aluminum+Coating
ABS Plastic	ABS Plastic	
Steel/Brass+Plating		
Stainless Steel		
Brass		
Neoprene		
Rubber		

Ordering Information shows a Complete Console Outlet, including a Rough-in Assembly and a Latch Valve Assembly. Trim plate is optional. Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.





# MEDICAL GAS CONSOLE OUTLET **PURITAN-BENNETT® COMPATIBLE 90° TUBING**

#### **Features**

- Accepts Ohmeda<sup>®</sup>, Chemetron<sup>®</sup> or Puritan-Bennett<sup>®</sup> quick connect and DISS gas specific adapters
- Indexed to prevent interchangeability of gas services
- 100% hydrostatically tested
- Complies with NFPA 99 and CGA G-4.1 standards



# **Specifications**

cealed piping installation and available for gas services indicated.

Outlets shall be delivered to the customer in a gas specific rough-in tion during handling and installation. assembly, and a matching gas specific latch valve assembly, both cleaned for oxygen use and in sealed packages. Optional trim plates The rough-in assembly shall accept any latch valve assembly of the can be provided to trim each outlet assembly and allow latch valve to be individually removed for servicing.

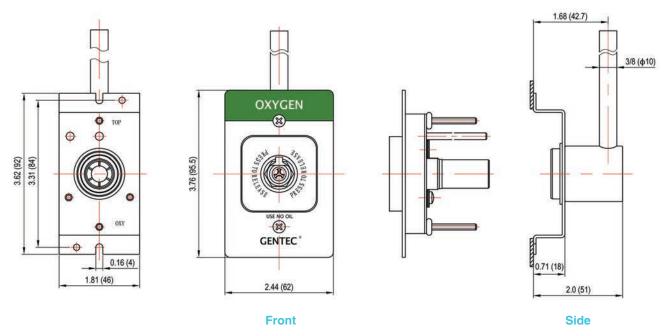
he latch valve assembly shall be Ohmeda, Chemetron or Puritan-Bennett quick connect compatible, or have Compressed Gas Asso- All gas outlets shall have primary and secondary check valves, ciation (CGA) Diameter Index Safety System (DISS) threaded con- where the secondary valve in the rough-in assembly allows servicing nector, and accept only corresponding gas specific type adapters. of the latch valve assembly without having to disrupt gas service to Each latch valve assembly shall be color-coded for ease of gas iden- the outlet. tification per the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the All assemblies shall be 100% tested for leaks, manufactured to comrough-in assembly to prevent interchangeability of gas services. Out- ply with the latest edition of NFPA 99, and UL and CSA approved. lets can easily be converted from one adapter type to another by replacing the latch valve assembly with another of the same gas service.

Universal rough-in assembly shall include a rough-in plate (16 ga.) with gas inlet tubing silver brazed to the outlet body. Inlet tubing shall

Medical gas outlet(s) shall be manufactured by Genstar Technolo- be type "K" copper, 1/2" O.D. (12.7 mm), extend 6-1/2 inches (165 gies Co., Inc. (GENTEC®) Console outlet shall be designed for con- mm), and swivel 360° for ease of installation. Rough-in assembly shall accept only the specified gas service by use of indexes. A dust plug shall be provided to protect rough-in assembly from contamina-

> same gas service. The latch valve assembly shall be interchangeable, allowing conversion from one connection style to another without shutting down the medical gas piping system.





## **Dimensional Data Notes:**

- Ohmeda compatible quick connect type latch valve shown
- 3/8" (9.5 mm) Nominal (1/2" O.D.) (12.7 mm) type K copper inlet tube allows 360° swivel on outlet body for entry from any angle
- Inch (mm)
- Wall thickness 1/2" (12.7 mm) to 1" (12.5 mm)

## **Ordering Information**

3814U-O 3814U-V	
3814U-A	
3814E-2	
3814U-W	
	3814E-2 3814U-W 

#### **Material**

Latch Valve	Rough-in	Trim Plate
Aluminum	Stainless Steel	Aluminum+Coating
ABS Plastic	ABS Plastic	
Steel/Brass+Plating		
Stainless Steel		
Brass		
Neoprene		
Rubber		

Ordering Information shows a Complete Console Outlet, including a Rough-in Assembly and a Latch Valve Assembly. Trim plate is optional. Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.





# MEDICAL GAS WALL OUTLET QUICK CONNECT **OHMEDA® COMPATIBLE**

#### **Features**

- Accepts only Ohmeda® gas specific adapters
- Indexed to prevent interchangeability of gas services
- Universal rough-in accepts quick connection (Chemetron®, Ohmeda®, Puritan-Bennett®) or DISS latch valve assemblies
- Modular design capability
- 100% hydrostatically tested
- Complies with NFPA 99 and CGA G-4.1 standards



## **Specifications**

gies Co., Inc. (GENTEC®). Wall outlet shall be designed for con- same gas service. The latch valve assembly shall be interchangecealed piping installation and available for services indicated.

The latch valve assembly shall be Ohmeda quick connect compatible and accept only gas specific Ohmeda type quick connect adapters. Each latch valve assembly shall be color-coded for ease of gas identification per the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the rough-in assembly to prevent interchangeability of gas services and shall adjust up to 1" for variations in wall thickness.

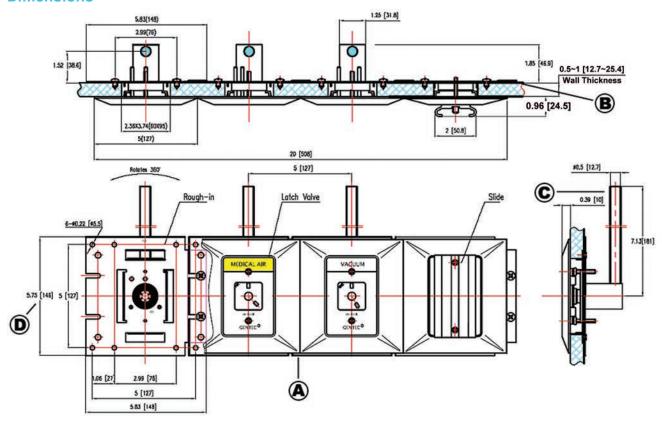
ga.) with inlet tubing silver brazed to the outlet body. Inlet tubing shall be type "K" copper, 1/2" (12.7 mm) OD, extend 6-1/2 inches (165 comply with the latest edition of NFPA 99, and UL Listed. mm), and swivel 360° for ease of installation. Rough-in assembly shall accept only the specified gas service by use of indexes. Roughin assembly shall be of modular design to permit on-site ganging of multiple outlets with assurance of accurate alignment and providing 5" centerline spacing. A dust plug and cover shall be provided to protect rough-in assembly from contamination during handling and installation at the job site.

Medical gas outlet(s) shall be manufactured by Genstar Technolo- Rough-in assemblies shall accept any latch valve assembly of the able, allowing conversion from one connection style to another without shutting down the medical gas system.

> All positive pressure gas outlets shall have a primary and secondary check valve, where the secondary valve in the rough-in assembly allows servicing of the latch valve assembly without having to disrupt gas service to the outlet.

Complete outlet shall be delivered to the customer in a gas specific rough-in assembly, a matching gas specific latch valve assembly, Universal rough-in assembly shall include the wall rough-in plate (16 both cleaned for oxygen use and in a sealed package, and a trim plate. All assemblies shall be 100% tested for leaks, manufactured to





## **Dimensional Data Notes:**

- A. Additional support needed if ganging more than 3 outlets
- B. Wall thickness may vary from 1/2" to 1" (12.7 mm to 25.4 mm)
- C. 1/2" O.D. (3/8" Nominal) type K cooper inlet tube allows 360° swivel on outlet body for entry from any angle
- D. Inch (mm)

# **Ordering Information**

Gas Service	<b>Catalog Number</b>	Quantity
Oxygen	3821U-O	
Vacuum	3821U-V	
Medical Air	3821U-A	
Nitrous Oxide	3821E-2	
WAGD	3821U-W	
Slide	3820-SLD	

# **Material**

Latch Valve	Rough-in	Trim Plate
Aluminum	Stainless Steel	Cast Aluminum
Zinc Alloy	ABS Plastic	Powder Coating
ABS Plastic		
Steel/Brass+Plating		
Stainless Steel		
Brass		
Neoprene		
Rubber		

Ordering Information for Complete Wall Outlets, (Includes Rough-in, Trim Plate and Latch Valve Assembly) Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.





## MEDICAL GAS WALL OUTLET QUICK CONNECT CHEMETRON® COMPATIBLE

#### **Features**

- Accepts only Chemetron® gas specific adapters
- Indexed to prevent interchangeability of gas services
- Universal rough-in accepts quick connection (Chemetron®, Ohmeda®, Puritan-Bennett®) or DISS latch valve assemblies
- Modular design capability
- 100% hydrostatically tested
- Complies with NFPA 99 and CGA G-4.1 standards



## **Specifications**

cealed piping installation and available for services indicated.

he latch valve assembly shall be Chemetron quick connect compatible and accept only gas specific Chemetron type quick connect. All positive pressure gas outlets shall have a primary and secondary adapters. Each latch valve assembly shall be color-coded for ease of gas identification per the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the rough-in assembly to prevent interchangeability of gas services and shall adjust up to 1" for variations in wall thickness.

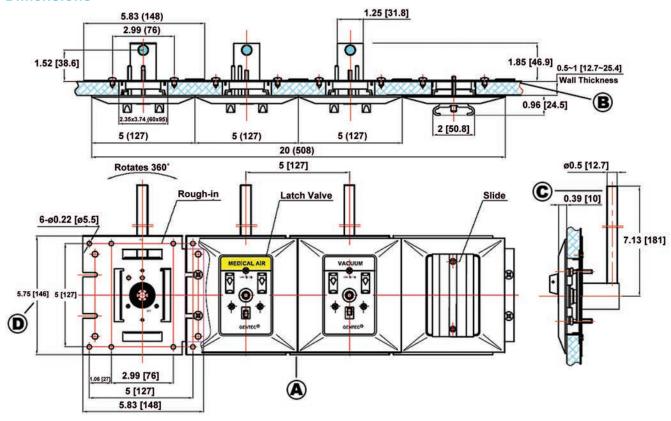
ga.) with inlet tubing silver brazed to the outlet body. Inlet tubing shall be type "K" copper, 1/2" (12.7 mm) OD, extend 6-1/2 inches (165 comply with the latest edition of NFPA 99, and UL Listed. mm), and swivel 360° for ease of installation. Rough-in assembly shall accept only the specified gas service by use of indexes. Roughin assembly shall be of modular design to permit on-site ganging of multiple outlets with assurance of accurate alignment and providing 5" centerline spacing. A dust plug and cover shall be provided to protect rough-in assembly from contamination during handling and installation at the job site.

Medical gas outlet(s) shall be manufactured by Genstar Technolo- Rough-in assemblies shall accept any latch valve assembly of the gies Co., Inc. (GENTEC®). Wall outlet shall be designed for con- same gas service. The latch valve assembly shall be interchangeable, allowing conversion from one connection style to another without shutting down the medical gas system.

> check valve, where the secondary valve in the rough-in assembly allows servicing of the latch valve assembly without having to disrupt gas service to the outlet.

Complete outlet shall be delivered to the customer in a gas specific rough-in assembly, a matching gas specific latch valve assembly, Universal rough-in assembly shall include the wall rough-in plate (16 both cleaned for oxygen use and in a sealed package, and a trim plate. All assemblies shall be 100% tested for leaks, manufactured to





### **Dimensional Data Notes:**

- A. Additional support needed if ganging more than 3 outlets
- B. Wall thickness may vary from 1/2" to 1" (12.7 mm to 25.4 mm)
- C. 1/2" O.D. (3/8" Nominal) type K cooper inlet tube allows 360° swivel on outlet body for entry from any angle
- D. Inch (mm)

## **Ordering Information**

Gas Service	Catalog Number	Quantity	
Oxygen	3823U-O		
Vacuum	3823U-V		
Medical Air	3823U-A		
Nitrous Oxide	3823E-2		
WAGD	3823U-W		
Slide	3820-SLD		

#### **Material**

Latch Valve	Rough-in	Trim Plate		
Aluminum	Stainless Steel	Cast Aluminum		
Zinc Alloy	ABS Plastic	Powder Coating		
ABS Plastic				
Steel/Brass+Plating				
Stainless Steel				
Brass				
Neoprene				
Rubber				

Ordering Information for Complete Wall Outlets, (Includes Latch Valve Assembly, Trim Plate and Rough-in Assembly) Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.





# MEDICAL GAS WALL OUTLET DISS (Diameter Index Safety System)

#### **Features**

- Accepts only DISS gas specific adapters
- Indexed to prevent interchangeability of gas services
- Universal rough-in accepts quick connection (Chemetron®, Ohmeda®, Puritan-Bennett®) or DISS latch valve assemblies
- Modular design capability
- 100% hydrostatically tested
- Complies with NFPA 99 and CGA G-4.1 standards



## **Specifications**

gies Co., Inc. (GENTEC®). Wall outlet shall be designed for concealed piping installation and available for services indicated.

The latch valve assembly shall be Compressed Gas Association (CGA) Diameter Index Safety System (DISS) threaded connectors and accept only gas specific type nut and nipple adapters. Each latch valve assembly shall be color-coded for ease of gas identification per the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the roughin assembly to prevent interchangeability of gas services and shall. Complete outlet shall be delivered to the customer in a gas specific adjust up to 1" for variations in wall thickness.

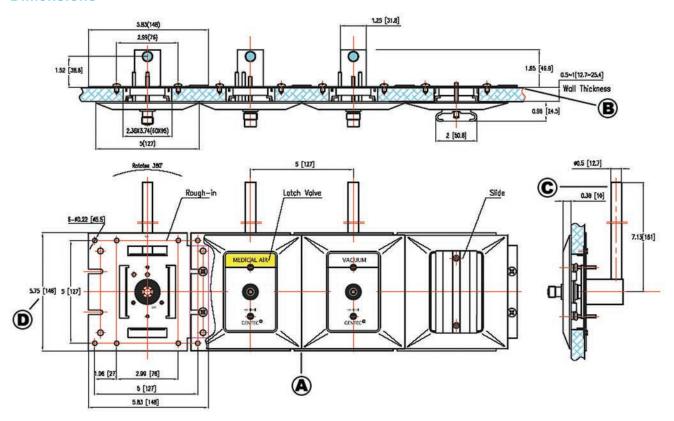
Universal rough-in assembly shall include the wall rough-in plate (16 ga.) with inlet tubing silver brazed to the outlet body. Inlet tubing shall be type "K" copper, 1/2" (12.7 mm) OD, extend 6-1/2 inches (165 mm), and swivel 360° for ease of installation. Rough-in assembly shall accept only the specified gas service by use of indexes. Roughin assembly shall be of modular design to permit on-site ganging of multiple outlets with assurance of accurate alignment and providing 5" centerline spacing. A dust plug and cover shall be provided to protect rough-in assembly from contamination during handling and installation at the job site.

Medical gas outlet(s) shall be manufactured by Genstar Technolo- Rough-in assemblies shall accept any latch valve assembly of the same gas service. The latch valve assembly shall be interchangeable, allowing conversion from one connection style to another without shutting down the medical gas piping system.

> All positive pressure gas outlets shall have a primary and secondary check valve, where the secondary valve in the rough-in assembly allows servicing of the latch valve assembly without having to disrupt gas service to the outlet.

> rough-in assembly, a matching gas specific latch valve assembly, both cleaned for oxygen use and in a sealed package, and a trim plate. All assemblies shall be 100% tested for leaks, manufactured to comply with the latest edition of NFPA 99, and UL Listed.





## **Dimensional Data Notes:**

- A. Additional support needed if ganging more than 3 outlets
- B. Wall thickness may vary from 1/2" to 1" (12.7 mm to 25.4 mm)
- C. 1/2" O.D. (3/8" Nominal) type K cooper inlet tube allows 360° swivel on outlet body for entry from any angle
- D. Inch (mm)

## **Ordering Information**

Gas Service	Catalog Number	Quantity			
Oxygen	3822U-O				
Vacuum	3822U-V				
Medical Air	3822U-A				
Nitrous Oxide	3822E-2				
WAGD	3822U-W				
Carbon Dioxide	3822E-C				
Nitrogen	3822E-N				
Slide	3820-SLD				

### **Material**

Latch Valve	Rough-in	Trim Plate		
Aluminum	Stainless Steel	Cast Aluminum		
ABS Plastic	ABS Plastic	Powder Coating		
Steel/Brass+Plating				
Stainless Steel				
Brass				
Neoprene				
Rubber				

Ordering Information for Complete Wall Outlets, (Includes Latch Valve Assembly, Trim Plate and Rough-in Assembly) Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.











## MEDICAL GAS WALL OUTLET QUICK CONNECT **PURITAN-BENNETT® COMPATIBLE**

#### **Features**

- Accepts only Puritan-Bennett® gas specific adapters
- Indexed to prevent interchangeability of gas services
- Universal rough-in accepts quick connection (Chemetron®, Ohmeda®, Puritan-Bennett®) or DISS latch valve assemblies
- Modular design capability
- 100% hydrostatically tested
- Complies with NFPA 99 and CGA G-4.1 standards



### **Specifications**

Medical gas outlet(s) shall be manufactured by Genstar Technologies Co., Inc. (GENTEC®). Wall outlet shall be designed for con- same gas service. The latch valve assembly shall be interchangecealed piping installation and available for services indicated.

The latch valve assembly shall be Puritan-Bennett quick connect compatible and accept only gas specific Puritan-Bennett type quick All positive pressure gas outlets shall have a primary and secondary connect adapters. Each latch valve assembly shall be color-coded for ease of gas identification per the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the rough-in assembly to prevent interchangeability of gas services and shall adjust up to 1" for variations in wall thick- Complete outlet shall be delivered to the customer in a gas specific ness

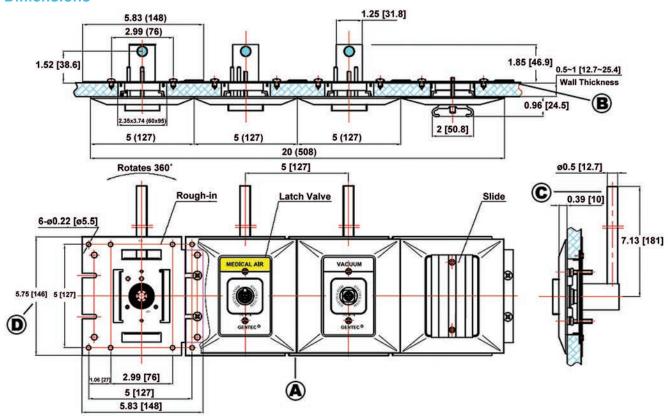
Universal rough-in assembly shall include the wall rough-in plate (16 ga.) with inlet tubing silver brazed to the outlet body. Inlet tubing shall comply with the latest edition of NFPA 99, and UL Listed. be type "K" copper, 1/2" (12.7 mm) OD, extend 6-1/2 inches (165 mm), and swivel 360° for ease of installation. Rough-in assembly shall accept only the specified gas service by use of indexes. Roughin assembly shall be of modular design to permit on-site ganging of multiple outlets with assurance of accurate alignment and providing 5" centerline spacing. A dust plug and cover shall be provided to protect rough-in assembly from contamination during handling and installation at the job site.

Rough-in assemblies shall accept any latch valve assembly of the able, allowing conversion from one connection style to another without shutting down the medical gas system.

check valve, where the secondary valve in the rough-in assembly allows servicing of the latch valve assembly without having to disrupt gas service to the outlet.

rough-in assembly, a matching gas specific latch valve assembly, both cleaned for oxygen use and in a sealed package, and a trim plate. All assemblies shall be 100% tested for leaks, manufactured to





## **Dimensional Data Notes:**

- A. Additional support needed if ganging more than 3 outlets
- B. Wall thickness may vary from 1/2" to 1" (12.7 mm to 25.4 mm)
- C. 1/2" O.D. (3/8" Nominal) type K cooper inlet tube allows 360° swivel on outlet body for entry from any angle
- D. Inch (mm)

## **Ordering Information**

Gas Service	Catalog Number	Quantity	
Oxygen	3824U-O		
Vacuum	3824U-V		
Medical Air	3824U-A		
Nitrous Oxide	3824E-2		
WAGD	3824U-W		
Slide	3820-SLD		

#### **Material**

Latch Valve	Rough-in	Trim Plate		
Aluminum	Stainless Steel	Cast Aluminum		
Zinc Alloy	ABS Plastic	Powder Coating		
ABS Plastic				
Steel/Brass+Plating				
Stainless Steel				
Brass				
Neoprene				
Rubber				

Ordering Information for Complete Wall Outlets, (Includes Latch Valve Assembly, Trim Plate and Rough-in Assembly) Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.





## MEDICAL GAS DISS CEILING OUTLET

#### **Features**

- Accepts Ohmeda<sup>®</sup>, Chemetron<sup>®</sup> or Puritan-Bennett<sup>®</sup> quick connect and DISS gas specific adapters
- Indexed to prevent interchangeability of gas services
- 100% hydrostatically tested
- Complies with NFPA 99 and CGA G-4.1 standards



## **Specifications**

Outlets shall be delivered to the customer in a gas specific latch Rough-in assembly shall accept only the specified gas service by valve assembly, and a matching gas specific rough-in assembly, both cleaned for oxygen use and in sealed packages. Optional trim sembly from contamination during handling and installation. plates can be provided to trim each outlet assembly and allow latch valve to be individually removed for servicing.

The latch valve assembly shall be Ohmeda, Chemetron or Puritan-Bennett quick connect compatible, or have Compressed Gas Association (CGA) Diameter Index Safety System (DISS) threaded connector, and accept only corresponding gas specific type adapters. All positive pressure gas outlets shall have a primary and secondary semblies shall have gas specific pin indexing corresponding to the gas service to the outlet. rough-in assembly to prevent interchangeability of gas services. Outlets can be easily converted from one adapter type to another by All assemblies shall be 100% tested for leaks, manufactured to comreplacing the latch valve assembly with another of the same gas ply with the latest edition of NFPA 99, and UL Listed. service.

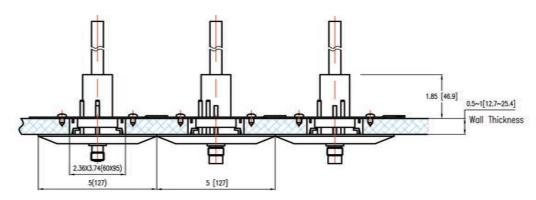
Medical gas outlet(s) shall be manufactured by Genstar Technolo- Universal rough-in assembly shall include a rough-in plate (16 ga.) gies Co., Inc. (GENTEC®). DISS ceiling outlet shall be designed for with gas inlet tubing silver brazed at 180 degrees to the outlet body. concealed piping installation and available for gas services indicat- Inlet tubing shall be type "K" copper, 1/2" O.D. (12.7 mm), and extend 6-1/2 inches (165 mm).

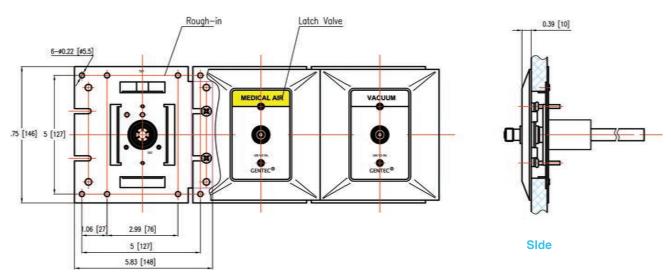
use of indexes. A dust plug shall be provided to protect rough-in as-

Rough-in assemblies shall accept any latch valve assembly of the same gas service. The latch valve assembly shall be interchangeable, allowing conversion from one connection style to another without shutting down the medical gas piping system.

Each latch valve assembly shall be color-coded for ease of gas iden- check valve, where the secondary valve in the rough-in assembly tification per the appropriate standards (US or ISO). Latch valve as- allows servicing of the latch valve assembly without having to disrupt







## **Ordering Information**

Ohmeda Compatible					
Gas Service Catalog Number Pipe					
Oxygen	3842U-O	1/2" / ф 10 real			
Vacuum	3842U-V	1/2" / ф 10 real			
Medical Air	3842U-A	1/2" / ф 10 real			
Nitrous Oxide	3842E-2	1/2" / ф 10 real			
WAGD	3842U-W	1/2" / ф 10 real			

### **Material**

Latch Valve	Rough-in	Trim Plate		
Aluminum	Stainless Steel	ABS Plastic		
ABS Plastic	ABS Plastic			
Steel/Brass+Plating				
Stainless Steel				
Brass				
Neoprene				
Rubber				



# MEDICAL GAS CONSOLE OUTLET 90 DEGREE DISS (Diameter Index Safety System)

#### **Features**

- Accepts Ohmeda<sup>®</sup>, Chemetron<sup>®</sup> or Puritan-Bennett<sup>®</sup> guick connect and DISS gas specific adapters
- · Indexed to prevent interchangeability of gas services
- · Easy conversion of quick connection or DISS type latch valve assemblies
- 360° swivel inlet for easy installation
- · Cleaned for oxygen service
- · 100% hydrostatically tested
- Complies with NFPA 99 and CGA G-4.1 standards



## **Specifications**

Medical gas outlet(s) shall be manufactured by Genstar Technolo- specific DISS connection extending 1-1/2 inches (38 mm), and swivgies Co., Inc. (GENTEC®). Console outlet shall be designed for con- el 360° for ease of installation. cealed piping installation and available for gas services indicated.

Outlets shall be delivered to the customer in a gas specific rough-in same gas service. The latch valve assembly shall be interchangeassembly, and a matching gas specific latch valve assembly, both cleaned for oxygen and in sealed packages. Optional trim plates can be provided to trim each outlet assembly and allow latch valve to be individually removed for servicing.

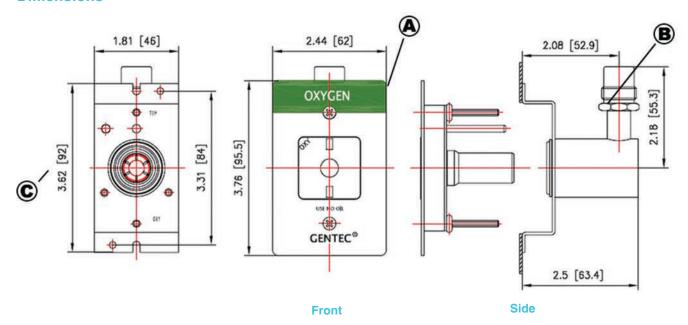
The latch valve assembly shall be Ohmeda, Chemetron or Puritan-Bennett quick connect compatible, or have Compressed Gas Association (CGA) Diameter Index Safety System (DISS) threaded connector, and accept only corresponding gas specific type adapters. All assemblies shall be 100% tested for leaks, manufactured to com-Each latch valve assembly shall be color-coded for ease of gas iden-ply with the latest edition of NFPA 99, and UL Listed. tification per the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the rough-in assembly to prevent interchangeability of gas services. Outlets can easily be converted from one adapter type to another by replacing the latch valve assembly with another of the same gas service.

Universal rough-in assembly shall include a rough-in plate (16 ga.) and gas inlet silver brazed to the outlet body. Inlet shall be a gas

Rough-in assemblies shall accept any latch valve assembly of the able, allowing conversion from one connection style to another without shutting down the medical gas piping system.

All positive pressure gas outlets shall have primary and secondary check valve, where the secondary valve in the rough-in assembly allows servicing of the latch valve assembly without having to disrupt gas service to the outlet.





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

- A. Ohmeda compatible quick connect type latch valve shown
- B. DISS connection inlet allows 360° swivel on outlet body for entry from any angle
- C. Inch (mm)

#### Material

Latch Valve	Rough-in	Trim Plate		
Aluminum	Stainless Steel	Aluminum+Coating		
ABS Plastic	ABS Plastic			
Steel/Brass+Plating				
Stainless Steel				
Brass				
Neoprene				
Rubber				

## **Ordering Information**

	Ohmeda		DISS	DISS Chemetron		Puritan-Bennett	Rough-in Only	
Compatible			Standard		Compatible		Compatible	
Gas Service	Catalog Number	Qty	Catalog Number	Qty	Catalog Number	Qty	Catalog Number	Catalog Number Qty
Oxygen	3851U-O		3852U-O		3853U-O		3854U-O	3850U-O
Vacuum	3851U-V		3852U-V		3853U-V		3854U-V	3850U-V
Medical Air	3851U-A		3852U-A		3853U-A		3854U-A	3850U-A
Nitrous Oxide	3851E-2		3852E-2		3853E-2		3854E-2	3850E-2
WAGD	3851U-W		3852U-W		3853U-W		3854U-W	3850U-W
Carbon Dioxide			3852E-C					3850E-C
Nitrogen			3852E-N					3850E-N
Instrument Air			3852U-I					3850U-I
Trim Plate	3900A-11		3900A-11		3900A-11		3900A-11	3900A-11

Ordering Information shows a Complete Console Outlet, including a Rough-in Assembly and a Latch Valve Assembly. Trim plate is optional. Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.









## MEDICAL GAS CONSOLE OUTLET 90 DEGREE HOSE BARB

#### **Features**

- Accepts Ohmeda<sup>®</sup>, Chemetron<sup>®</sup> or Puritan-Bennett<sup>®</sup> quick connect and DISS gas specific adapters
- Indexed to prevent interchangeability of gas services
- 360° swivel inlet for easy installation
- Cleaned for oxygen service
- 100% hydrostatically tested
- Complies with NFPA 99 and CGA G-4.1 standards



## **Specifications**

Medical gas outlet(s) shall be manufactured by Genstar Technologies Co., Inc. (GENTEC®). Console outlet shall be designed for concealed piping installation and available for gas services indicated.

Outlets shall be delivered to the customer in a gas specific rough-in assembly, and a matching gas specific latch valve assembly, both cleaned for oxygen use and in sealed packages. Optional trim plates can be provided to trim each outlet assembly and allow latch valve to be individually removed for servicing.

The latch valve assembly shall be Ohmeda, Chemetron or Puritan-Bennett quick connect compatible, or have Compressed Gas Association (CGA) Diameter Index Safety System (DISS) threaded connector, and accept only corresponding gas specific type adapters. Each latch valve assembly shall be color-coded for ease of gas identification per the appropriate standards (US or ISO). Latch valve assemblies shall have gas specific pin indexing corresponding to the All assemblies shall be 100% tested for leaks, manufactured to comrough-in assembly to prevent interchangeability of gas services. Out- ply with the latest edition of NFPA 99, and UL Listed. lets can easily be converted from one adapter type to another by replacing the latch valve assembly with another of the same gas service.

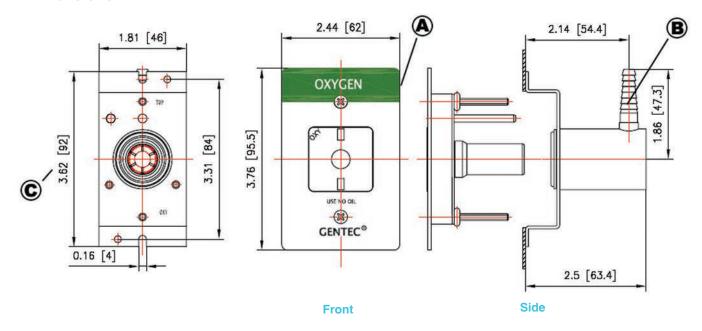
Universal rough-in assembly shall include a rough-in plate (16 ga.) and gas inlet silver brazed to the outlet body. Inlet shall be a hose

barb fitting extending 1-1/4 inches (32 mm), and swivel 360° for ease of installation. Rough-in assembly shall accept only the specified gas service by use of indexes. A dust plug shall be provided to protect rough-in assembly from contamination during and handling and installation.

Rough-in assemblies shall accept any latch valve assembly of the same gas service. The latch valve assembly shall be interchangeable, allowing conversion from one connection style to another without shutting down the medical gas piping system.

All positive pressure gas outlets shall have primary and secondary check valve, where the secondary valve in the rough-in assembly allows servicing of the latch valve assembly without having to disrupt gas service to the outlet.





### **Dimensional Data Notes:**

- A. Ohmeda compatible quick connect type latch valve shown
- B. Hose barb connection inlet allows 360° swivel on outlet body for entry from any angle
- C. Inch (mm)

#### **Material**

Latch Valve	Rough-in	Trim Plate
Aluminum	Stainless Steel	Aluminum+Coating
ABS Plastic	ABS Plastic	
Steel/Brass+Plating		
Stainless Steel		
Brass		
Neoprene		
Rubber		

## **Ordering Information**

	Ohmeda		DISS Chemetron			Puritan-Bennett	Rough-in Only	
	Compatible	Standard	Standard			Compatible		
Gas Service	Catalog	Catalog		Catalog		Catalog	Catalog	
	Number	Qty Number	Qty	Number	Qty	Number	Number Qty	
Oxygen	3861U-O	3862U-O		3863U-O		3864U-O	3860U-O	
Vacuum	3861U-V	3862U-V		3863U-V		3864U-V	3860U-V	
Medical Air	3861U-A	3862U-A		3863U-A		3864U-A	3860U-A	
Nitrous Oxide	3861E-2	3862E-2		3863E-2		3864E-2	3860E-2	
WAGD	3861U-W	3862U-W		3863U-W		3864U-W	3860U-W	
Carbon Dioxide		3862E-C					3860E-C	
Nitrogen		3862E-N					3860E-N	
Instrument Air		3862U-I					3860U-I	
Trim Plate	3900A-11	3900A-11		3900A-11		3900A-11	3900A-11	

Ordering Information shows a Complete Console Outlet, including a Rough-in Assembly and a Latch Valve Assembly. Trim plate is optional. Note: US colors listed. For ISO 32 colors replace "U" with "E" in the above catalog numbers.











## SLIDE BRACKET WALL AND CONSOLE

## **Features**

- · For use on all surfaces
- Fits reuseable and disposable bottle brackets

## **Ordering Information**

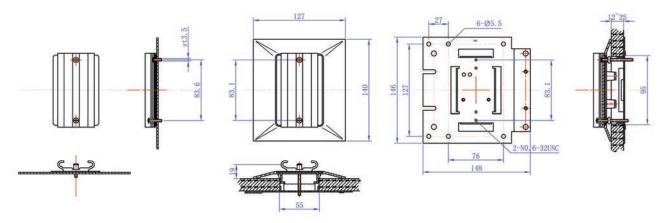
Model	Description
3910-Sld	Slide Bracket for Console
3820-Sld	Slide Bracket for Wall







## **Dimensions** units in millimeter(s)





## **Assembly Chart**









# French, German, British, Japanese Medical Gas Outlets

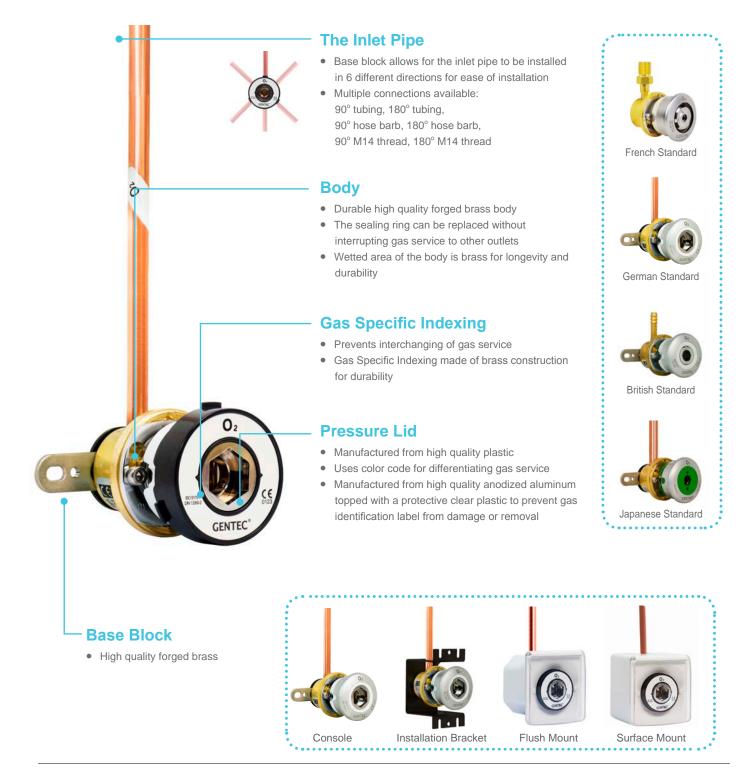
38X5, 38X6, 38X7, 38X8 Series

- · Color-coded for easy gas service identification
- · Modular structure, convenient maintenance
- · A variety of installation, easy to use
- · 100% tested and individually packaged
- French Standard is compliant with ISO 9170-1 and NFS 90 116
- German (DIN) Gas Outlet is CE listed and compliant with EN ISO 9170-1 and DIN 13620-2
- British Standard is CE listed and compliant with HTM 02-01, ISO 9170-1 and BS 5682-1998
- Japanese Standard is compliant with ISO 9170-1 and JIST 7101



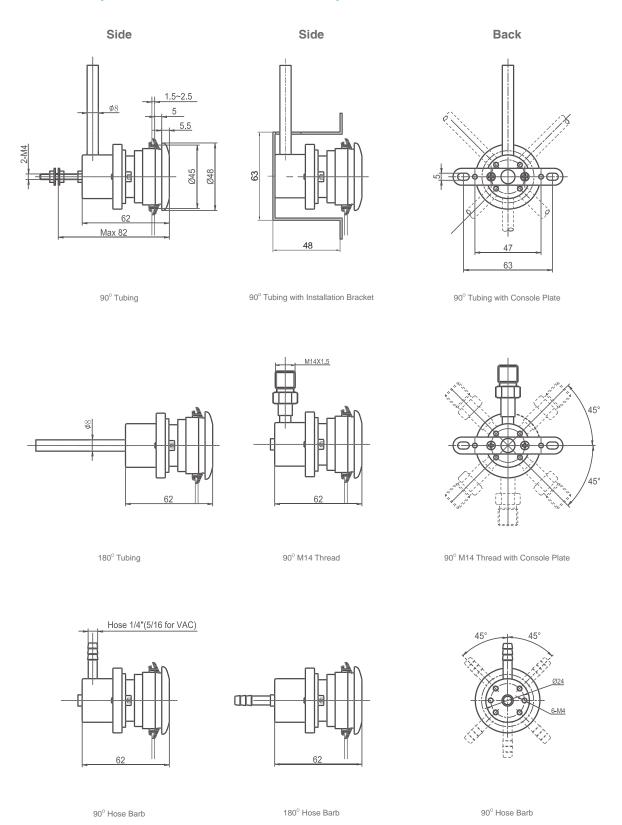
## **Specifications**

**GENTEC**<sup>®</sup> gas outlets are designed for delivery of medical gas from a central pipeline system. These outlets are 100% individually tested for leaks to ensure safety. The outlets are designed with safety in mind and comply fully with ISO 9170-1.



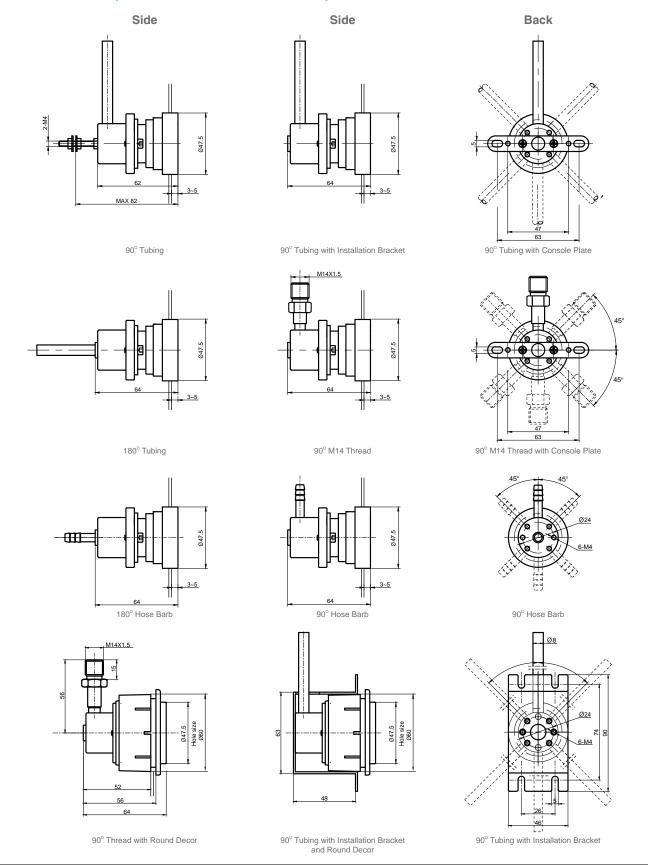


# Dimensions (Round-faced Pressure Lid) units in millimeter(s)





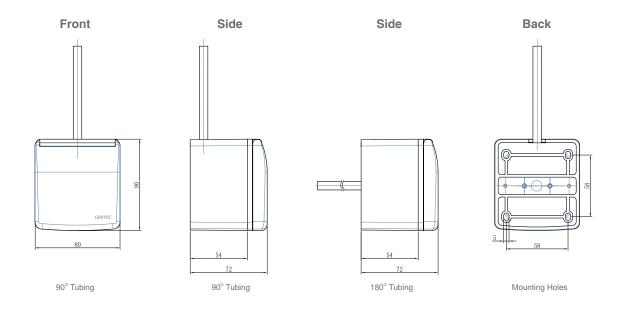
# Dimensions (Flat-faced Pressure Lid) units in millimeter(s)



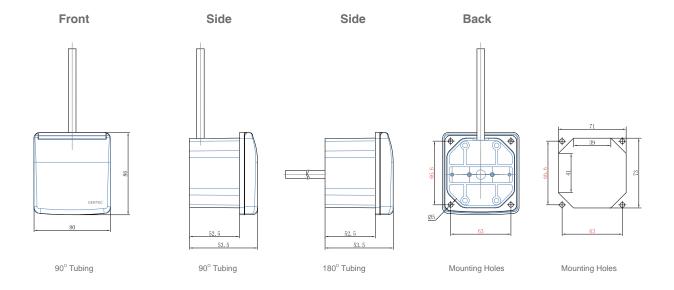


## **Dimensions** units in millimeter(s)

## **Surface Mount**



### **Flush Mount**

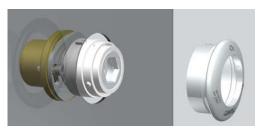




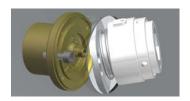
## **Repair Schematics (Round-faced Pressure Lid)**



1. Pull the pressure lid off



2. Loosen the two retaining bolts 2-3 mm

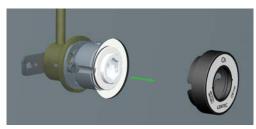


3. Pull out the body at an angle



4. Replace the sealing ring without disassembling the panel mount

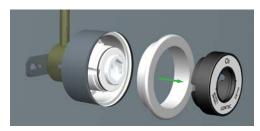
# **Repair Schematics (Flat-faced Pressure Lid)**



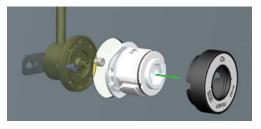
1. Pull the pressure lid off



2. Loosen the two retaining bolts 2-3 mm Pull out the body at an angle



1A. Pull the pressure lid and the decor off



3. Replace the sealing ring without disassembling the panel mount



# **Ordering Information ( Console Type )**

381	6 -	V -	S	P08 -	P /	С	(VII)
Series	Туре	Gas Service	Inlet Direction	Inlet Connection	Lid Type	Type of Mounting	Version Number
	5: FSO	O: Oxygen	S: 90°	P08: 8 mm O.D. Tubing	S: Round-faced pressure lid	C: With console plate	
	6: GSO	V: Vacuum	R: 180°	P10: 10 mm O.D. Tubing	P: Flat-faced pressure lid	B: With installation	
	7: BSO	A: Air (400 kPa)		P12: Straight, O.D. of 12mm	P1: Flat-faced pressure lid	bracket	
	8: JSO	2: N <sub>2</sub> O		HB4: 1/4" Hose Barb	with square decor		
		C: CO <sub>2</sub> *		HB5: 5/16" Hose Barb			
		N: N <sub>2</sub> -800*		M14: M14 X 1. 5 VCR Thread			
		A8: Air-800*					

<sup>\*:</sup> Please ask GENTEC or your local distributor for availability.

Type of Mounting	Configuration	Type of Mounting	Configuration
S/C	Round-faced pressure lid, console type with console plate	S/B	Round-faced pressure lid, console type with installation bracket
P/C	Flat-faced pressure lid, console type with console plate	P/B	Flatfaced pressure lid, console type with installation bracket
P1 / C	Flatfaced pressure lid with round decor, console type with console plate	P1 / B	Flatfaced pressure lid with round decor, console type with installation bracket



# **Ordering Information (Wall Type)**

382	6 -	V -	S	P08 -	P /	F	(VII)
Series	Туре	Gas Service	Inlet Direction	Inlet Connection	Lid Type	Type of Mounting	Version Number
	5: FSO 6: GSO 7: BSO 8: JSO	O: Oxygen V: Vacuum A: Air (400 kPa) 2: N <sub>2</sub> O C: CO <sub>2</sub> * N: N <sub>2</sub> -800*	S: 90° R: 180°	P08: 8 mm O.D. Tubing P10: 10 mm O.D. Tubing P12: Straight, O.D. of 12mm HB4: 1/4" Hose Barb HB5: 5/16" Hose Barb M14: M14 X 1. 5 VCR Thread	S: Round-faced pressure lid P: Flat-faced pressure lid P1: Flat-faced pressure lid with square decor	F: Flush Mount W: Surface Mount	
		A8: Air-800*					

<sup>\*:</sup> Please ask GENTEC or your local distributor for availability.

Type of Mounting	Configuration	Type of Mounting	Configuration
S/F	Round-faced pressure lid, wall type, flush mount with protective cover	S/W	Round-faced pressure lid, wall type, surface mount with protective cover
P/F	Flat-faced pressure lid, wall type, flush mount with protective cover	P/W	Flatfaced pressure lid, wall type, surface mount with protective cover
P1 / F	Flat-faced pressure lid with square decor, wall type, flush mount	P1/W	Flat-faced pressure lid with square decor, wall type, surface mount



# 3826E Series Genman Outlets (Old Type)



# **Ordering Information**

3826E	- O	- W	
Series	Gas Service	Installation	
3826E	O: Oxygen	None: Flush Mount	
	V: Vacuum	W: Surface Mount	
	A: Air (400 kPa)		
	2: N <sub>2</sub> O		
	W: WAGD (ISO 9170-2 TYPE Ⅱ)		
	C: CO <sub>2</sub> *		
	N: N <sub>2</sub> -800*		
	A8: Air-800*		

<sup>\*:</sup> Please ask GENTEC or your local distributor for availability.

Installation	Configuration	Installation	Configuration
Flush Mount		Surface Mount	





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