



MEDICAL GAS PIPELINE PRODUCTS

International Edition

Technology for a Better Future

Company Overview

Genstar Technologies Company, Inc (GENTEC), founded in 1969, is a world class manufacturer of high quality apparatus for high purity, medical and industrial markets.

For the medical industry, GENTEC provides high quality products such as medical gas flow control systems, regulators, terminal-units, architectural products, and gas alarm systems.

GENTEC manufactures its products in an ISO 9001: 2000 and ISO 13485 certified 150,000 square foot manufacturing facility in order to ensure the highest quality.



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Medical Vacuum Packages

There are many technologies available for producing vacuum for healthcare facilities. Each has its own unique advantages and disadvantages. Any product that contains hydrocarbons in the air stream may not be suitable for dedicated WAGD. Also, certain requirements apply for medical-surgical vacuum systems that are also used for WAGD. We recommend that you consult with your authorized GENTEC distributor for assistance in designing a system to suit your specific needs.



Oil-sealed Rotary Vane Pumps



Dry Rotary Vane Pumps



Liquid Ring Pumps



Dry Claw Vacuum Pumps

Medical Air Compressors

GENTEC offers a full range of oil-less reciprocating, orbital scroll, and liquid ring medical air compressor packages. All air compressor packages are complete per NFPA99, and are designed to reduce the amount of field labor required for installation.

NFPA-compliant air treatment centers, in desiccant and refrigerated versions, are available as free-standing packages or integral to the air compressor packages.

Please contact your GENTEC authorized distributor for assistance in designing your medical air source.



Oil-less Reciprocating
Medical Air Compressors



Orbital Scroll Medical Air Compressors



Liquid Ring Medical Air Compressors

Medical Air Treatment Centers

GENTEC medical air treatment centers are complete NFPA-compliant packages that require minimal field labor for installation.



Desiccant Air Treatment Centers



Refrigerated Air Treatment Centers



Instrument Air Compressors

Manifold Changeover Systems

GENTEC offers fully automatic, high-pressure manifolds for hospital use. Fully compliant with NFPA99, these manifolds require no additional work beyond the changing of the cylinders.

Liquid manifolds, as well as manifolds for high-purity and specialty gas applications, are also available. Contact your GENTEC distributor for assistance with these products.

Header bars (with pigtails) are ordered separately.

Automatic Manifold Systems



Semi Automatic Manifold Systems



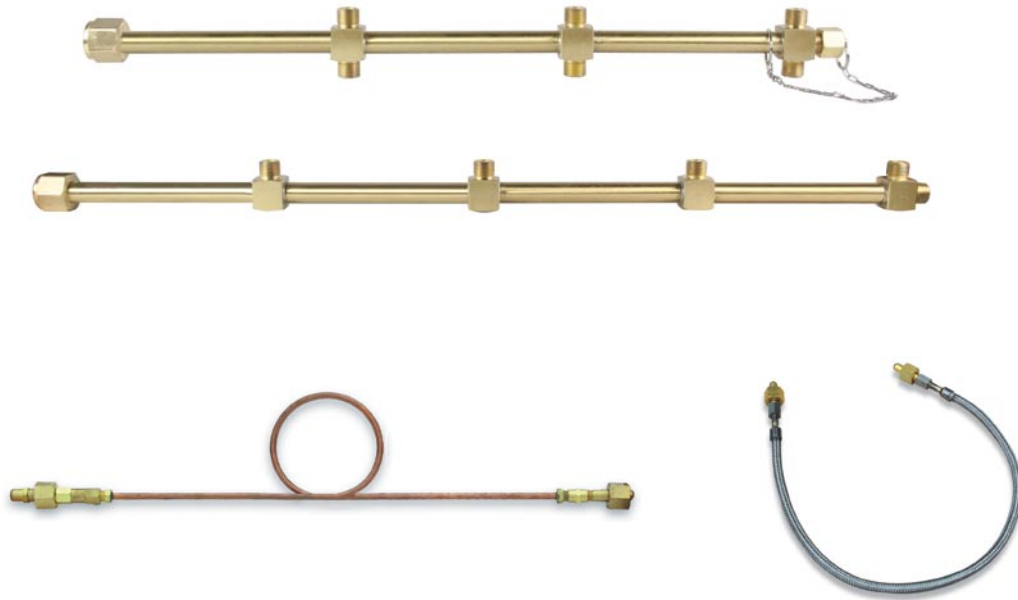
Header Bar & Pigtails

GENTEC header bars ship complete per NFPA99, in matching sets (equal number of cylinders for each bank).

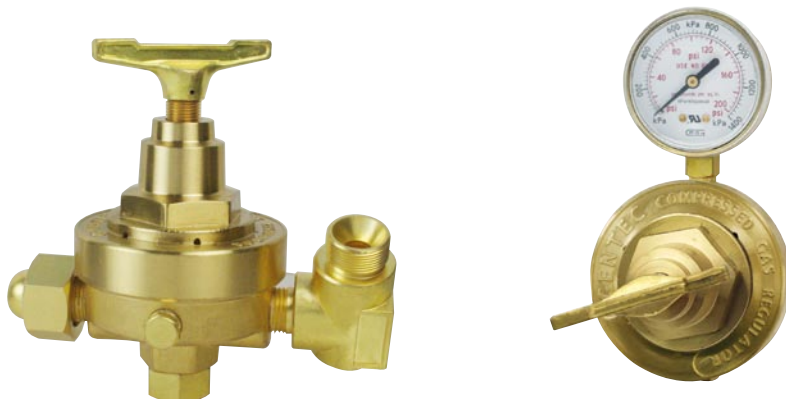
Cross headers are available for compact installations, and straight headers for single-row cylinder arrangements.

All oxygen headers ship with copper pigtails per NFPA99, all other gases ship with braided stainless steel pigtails. All pigtails include check valves for safety.

Individual headers and pigtails are also available for expansion and repair of existing systems.

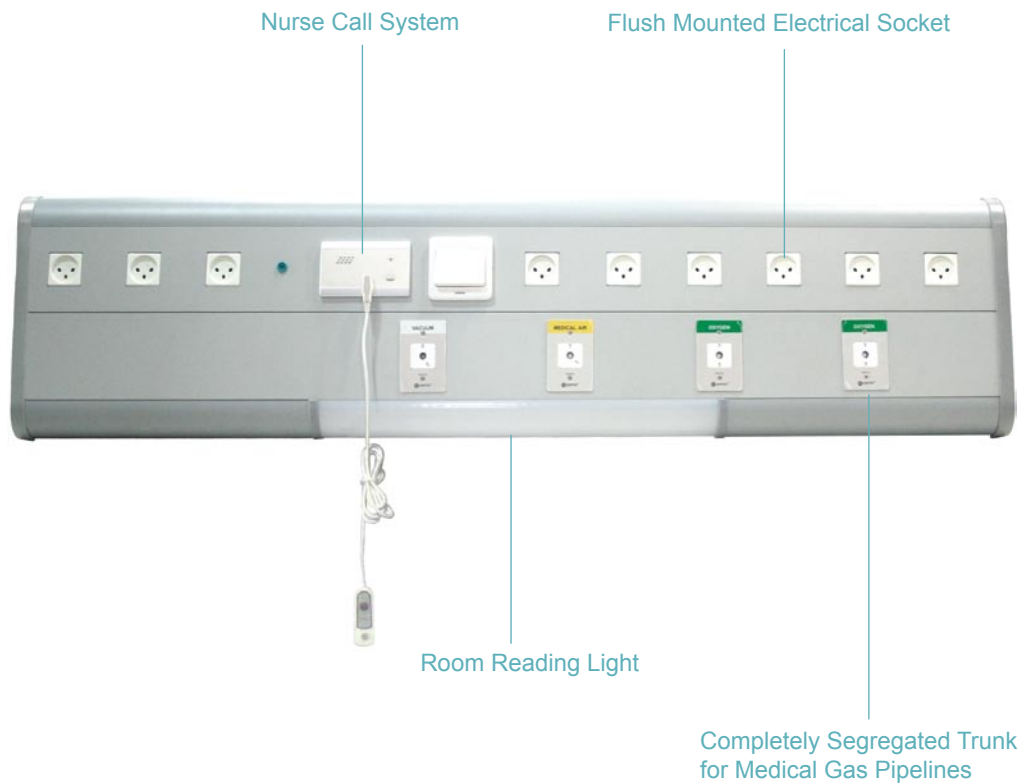


Manifold and Pipeline Regulators



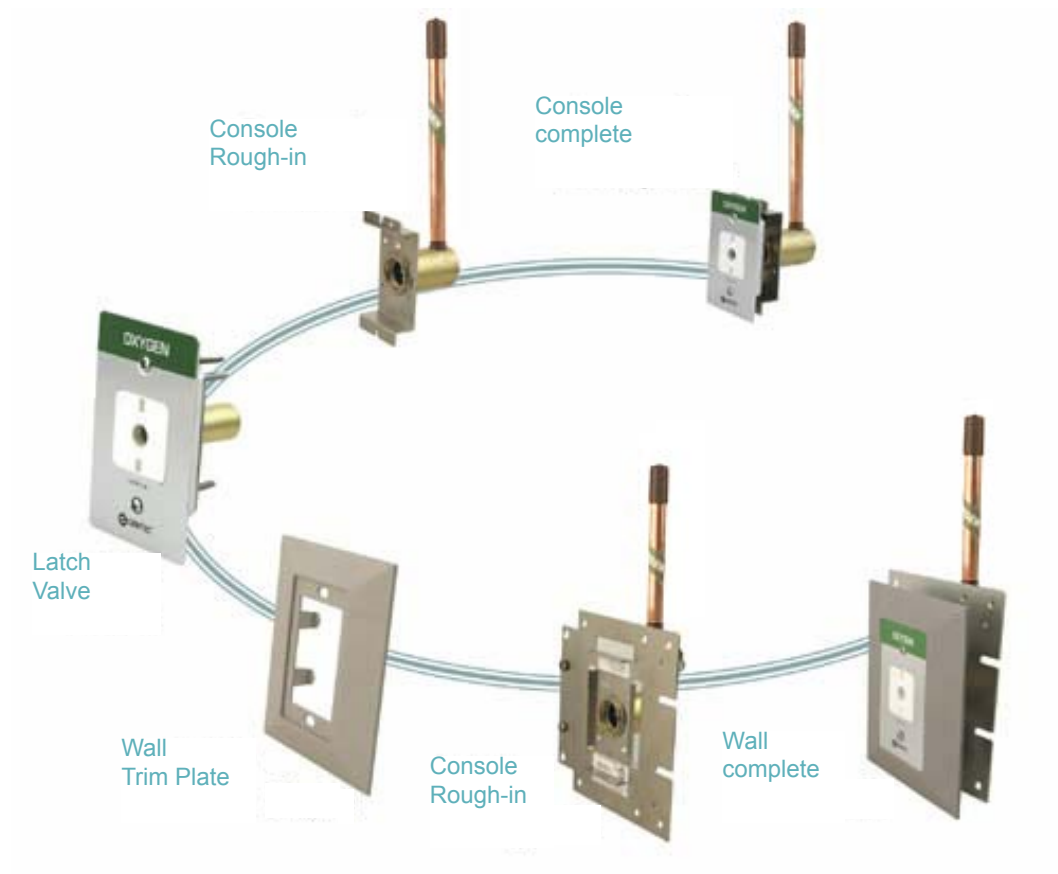
Bedhead Units

GENTEC Bedhead Consoles are available in a single trunk or dual trunk setup. Both versions can be customized to meet unique room dimensions. Consoles are designed for easy maintenance, thanks to segregated compartments covered by clip on panels. Modular design allows for customer specific customizations such as different standard electrical outlets, gas terminal units, and multimedia needs.



Medical Gas Outlet

GENTEC offers a complete selection of medical gas outlets. From wall outlets to ceiling outlets, to console and EMS outlets, GENTEC can fill any need. We also offer a complete line of international outlets, including French, British, German, Australian, and Japanese standards, in addition to ISO 32 versions of the US-style outlets (Ohio, Chemetron, Puritan-Bennett, and DISS). Outlets are sold as complete kits, rough-in assemblies, and latch valve assemblies.



Medical Gas Outlet

Wall Outlets

GENTEC wall outlets are designed with an inlet pigtail that swivels 360-degrees to allow the pipe to connect from any angle. All rough-in assemblies interlock to maintain a spacing of 5" on center, allowing full access to the patient care equipment.

**Ceiling Outlets**

The ceiling outlets have a 180-degree inlet pigtail, and are designed for mounting in the ceiling of the operating room. Generally DISS connections, they can also be ordered with Ohio, Chemetron, or Puritan-Bennett connections for in-wall installations that require the piping to come in from directly behind the outlet.



Medical Gas Outlet

Console Outlets

90-degree & 180-degree Pigtail Inlet

The 90-degree pigtail inlet assemblies allow for mounting in a vertical assembly. The pigtail rotates 360-degrees, allowing the branch piping to come in at any angle.

The 180-degree pigtail inlets are designed for installation in the bottom of a fixed ceiling column, with the pigtail extending straight up for connection to the branch piping.

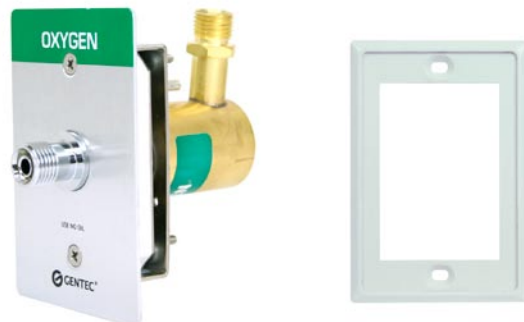


90-degree & 180-degree DISS Inlet

DISS inlet assemblies are designed for use with hose assemblies, either in ambulances, retractable ceiling columns, or booms.

Each assembly has a CGA DISS inlet, either at 90 degrees (up) for vertical surfaces, or 180-degrees (back) for horizontal surfaces.

Optional trim plate for console outlets, catalog #3900A-11



Hose Barb Inlet

Hose barb inlet assemblies are designed for installations that require a permanent, crimped connection of the medical gas hose to the rough-in assembly. The hose barb extends 90 degrees (up), and can be rotated within the mounting strap to allow the medical gas hose to come in from any angle.



Medical Gas Outlet



3816E-O
Console Type



3816E-2
Console Type



3827E-V
Wall Mount Type



3818E-O
Console Type

German Medical Gas Outlets

GENTEC German Standard Outlets, GSO series, are for use with medical gas systems. The outlets are designed with safety in mind and comply fully with DIN EN 737-1: 1998 and DIN 13620-2. Outlets are manufactured in an ISO 9001: 2000 and ISO 13485 certified facility.



Console Type Console Type 2 Wall Flush Mount Type

British Medical Gas Outlets

GENTEC British Standard Outlets, BSO series, are for use with medical gas systems. The outlets are designed with safety in mind and comply fully with EN 737-1: 1998, and HTM 2022. Outlets are manufactured in an ISO 9001: 2000 and ISO 13485 certified facility.

Japanese Medical Gas Outlets

GENTEC Japanese Standard Outlets, JSO series, are for use with medical gas systems. The outlets are designed with safety in mind and comply fully with EN 737-1: 1998, and HTM 2022. Outlets are manufactured in an ISO 9001: 2000 and ISO 13485 certified facility.

Alarm Panels

Medical Monitoring and Alarm Systems

Gentec Universal Monitoring, Alarm and Control System is a highly modular system utilizing the most advanced technologies in electronics and software. The modular design can implement limitless configurations to meet different monitoring/control requirements. Future expansion can be achieved through upgradable firmware, software, and additional panels.

GUMACSTM alarm series complies to the latest edition of NFPA 99 and optionally for HTM 02-01. GUMACSTM alarms have built-in networking capability and can be implemented to any standard RS-485 network systems.

Furthermore, GUMACSTM alarms series accept all 4-20 mA and/or voltage signals and can monitor customizable readings or alarm conditions such as humidity, temperature, concentration levels, and flow rates in addition to typical pressure readings.

AREA ALARM

Gentec Area Alarms are used to monitor safety indexes such as pressure, flow rate, temperature, humidity, concentration, etc.

SYSTEM SPECIFICATIONS:

- Up to 16 input channels
- One contact switch output per input channel
- Programmable signal input ranges and alarm conditions
- Built-in networking capability.
- Labeling and colors can be customized upon request.

MASTER ALARM

Gentec Master Alarms can be used to monitor the operating conditions of source equipments such as air compressor, vacuum pump, manifolds, etc.

SYSTEM SPECIFICATIONS:

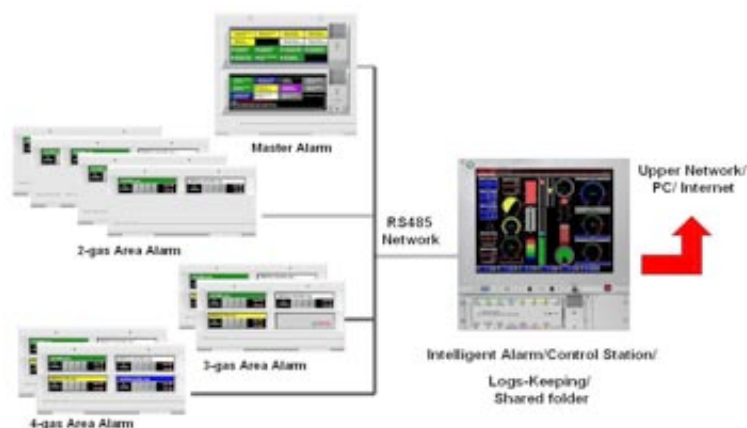
- Up to 64 TTL and/or contact switch input channels.
- Up to 48 TTL and optional relay switch output signals.
- Additional 16 analog inputs for 4-20 mA and/or voltage signals
- Programmable signal input ranges and alarm conditions
- Built-in networking capability
- Labelings and colors can be customized upon request.



Area Alarm



Master Alarm



Zone Valve Boxes



Zone Valve Boxes

GENTEC zone valve boxes are NFPA-compliant, and include dual-port ball valves for convenience.

Boxes are available for 1 to 6 valves in a single box. All boxes are factory-assembled with the smallest valve on top, largest on bottom. 1-valve boxes (1/2" through 2") and 5-valve boxes ship with the top valve slot open for future expansion.

1-valve boxes for 2-1/2", 3", and 4" valves are 1-valve boxes, with no expansion.



Dual Port Ball Valves

Our dual-port ball valves are full-port, double seal, ball-type three-piece design with forged bronze/brass body and chrome-plated brass ball. Only 1/4 turn of the handle is required to operate the valve from the fully open to the fully closed position. All valves are serviceable in line and supplied clean and prepared for oxygen service in accordance with CGA G-4.1. Valves are capped and packaged in a sealed polyethylene bag to maintain cleanliness.

Check Valves with Copper Extensions

Check valves are designed for working pressures up to 300 psig. The body is field removable for servicing without cutting the pipeline. All valves include Type-K copper extensions and dual purge/gauge ports. The unique sealing mechanism provides optimum flow and sealing, unlike traditional ball and cone check valves. All valves are supplied clean and prepared for oxygen service in accordance with CGA G-4.1. Valves are capped and packaged in a sealed polyethylene bag to maintain cleanliness.



Pressure Control Panels



Pressure Control Panels

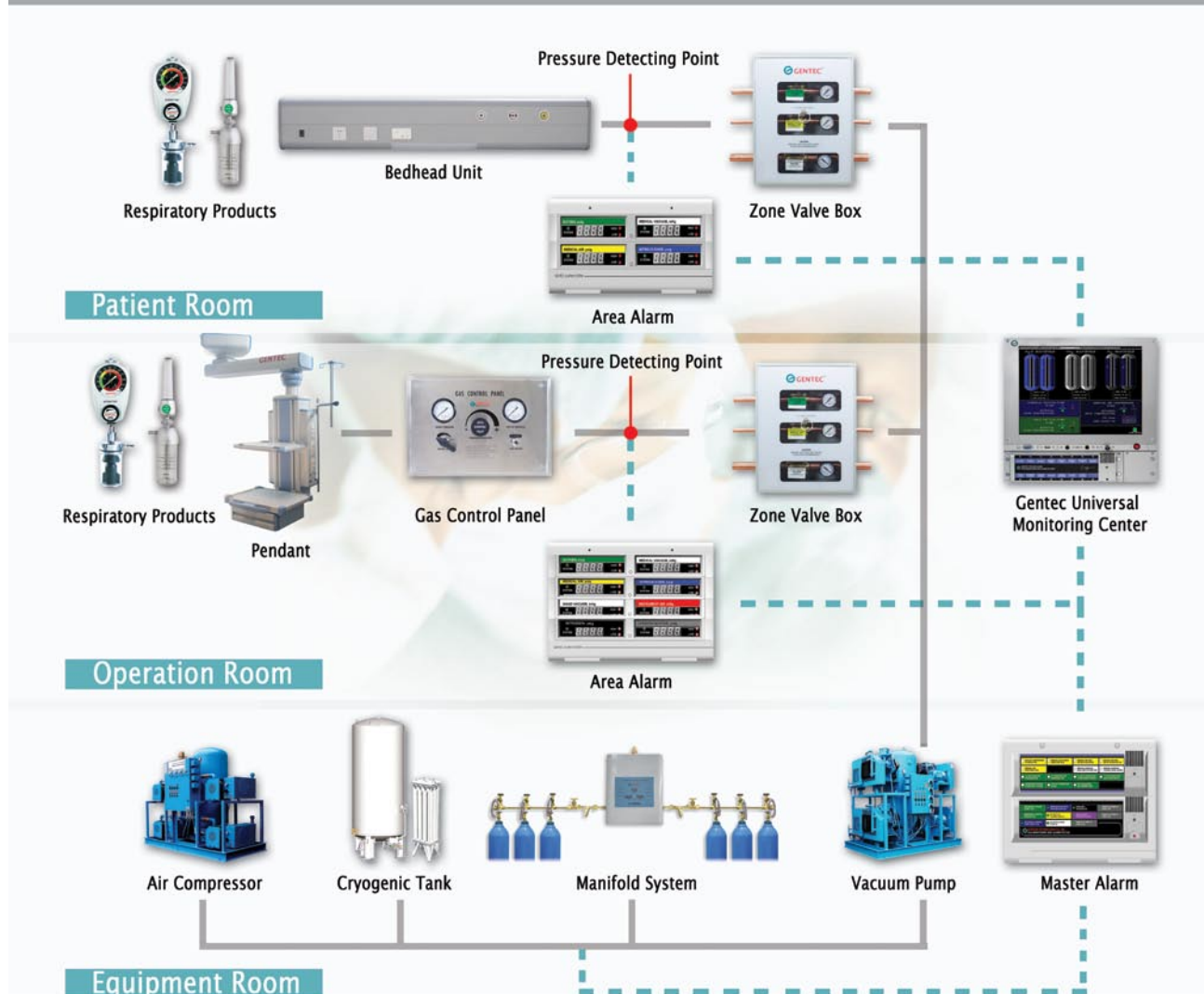
GENTEC pressure control panels are available with either Nitrogen or Instrument Air DISS fittings on the face of the panel. A regulator on the face of the panel adjusts the service pressure at the DISS fitting in the panel, and at the remote connection, if used.

Emergency Oxygen Connections

Emergency low pressure oxygen connection boxes are required by NFPA99 for most bulk oxygen installations. The GENTEC emergency oxygen connection is available in surface or recessed mount versions, with either a 3/4" or a 1-1/4" connection. Order check valves, pressure relief valves, and pipe-away adapters separately.



MEDICAL GAS FLOW SOLUTIONS



Patient Care Products

GENTEC also offers a full line of patient-care related products, including suction regulators, flowmeters, click-style oxygen regulators, and medical gas adapters.

Suction Regulators

GENTEC suction regulators are available in 0-160 mmHg and 0-300 mmHg ranges for continuous/intermittent versions; and in 0-300 mmHg and 0-760 mmHg ranges for continuous only versions.

These regulators feature a large, color-coded, glow-in-the-dark gauge, and easy-to-use controls.

A complete selection of US and international adapters are available, as well as reusable vacuum trap assemblies. Trap assemblies are also available for individual purchase.



Flowmeters

GENTEC offers flowmeters for use with oxygen and medical air, with brass or aluminum bodies. 0-15 LPM Thorpe tube versions are available, and click-style flowmeters are available in 0-2, 4, 8, 12, 15, and 25 LPM flows.



Click-style Oxygen Regulators

GENTEC offers click-style oxygen regulators in both aluminum body (brass core) and solid brass designs, with flow ranges to 8, 15, and 25 LPM. All regulators include a single hose barb as standard. One or two DISS power take-offs are also available.



Other Catalogs



For a detailed view of GENTEC patient care products please browse our Medical Respiratory Gas Products catalog.

- ▶ Medical Gas Outlets
- ▶ Flowmeter Regulators
- ▶ Flowmeters
- ▶ Humidifiers & Cylinders
- ▶ Suction Regulators
- ▶ Collection Jars
- ▶ Medical Gas Adapters
- ▶ Click Style Regulators
- ▶ Flow Gauge Regulators



For detailed view of Gentec laboratory accessories and equipment, please view our Special Gas Equipment Catalog.

- ▶ Single-stage Low Flow Regulators
- ▶ Single-stage Medium Flow Regulators
- ▶ Two Stage Regulators
- ▶ Special Purpose Regulators
- ▶ Manifolds
- ▶ Switchover Systems, Alarm & Header Extensions
- ▶ Flashback Arrestors, Pigtails, Filters, Valves
- ▶ Relief Valves, Ball Valves, Check Valves, Diaphragm Valves
- ▶ Connections



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