

General Catalog  
**Manifolds, Valves and  
Connection Systems**

## Fully Automatic Nitrous Oxide Manifold Control System



The automatic control system provides two stages of pressure regulation for nitrous oxide. A single stage primary regulator, one for each cylinder bank is used to initially reduce cylinder pressure and two single stage pressure regulators are provided for regulating the final delivery pressure. One line pressure in service and one ready for service in standby mode. The control system also provides pressure relief valves in downstream of the first reducing stage set at 200 psi and at the downstream of the second reduction pressure a relief valve set at 75 psi.

The control panel is fully automatic with a digital synoptic light showing the pressure level at each cylinder bank. As the pressure reduces the colour of the level also changes until it turns red at the empty stage. The supply of gas will have no fluctuation during the change for the second bank.

## Control Module Manifold



The manifold links multiple cylinders to make a supply source for a gas distribution system.

The valve bodies are made of CW614N brass, as well as the blocks, connected by copper tubing braze welded with a high silver content, cadmium-free alloy.

The identification is by the name and/or symbol of the gas supplied written on a label and the production lot punched on a plate. Inlet and outlet fittings are made of CW614N brass with specific gas threads as shown in the table.

## Copper Connection

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Flexible connection made of  $\varnothing$  8 mm annealed copper tube, chemically nickel-plated, used for High Pressure connection of the manifold at the inlet to the device downstream or of two manifolds.

The connection nuts are also chemically nickel-plated CW614 brass, with a specific thread for the type of gas.

## Copper Coil

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Flexible connection made of  $\varnothing$  8 mm chemically nickel-plated copper pipe, used to make a High Pressure connection between the cylinder and the manifold or control module. The connection nuts are also chemically nickel-plated CW614N brass, with a specific thread for the type of gas.

## Medical Grade Copper Tube

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Flexible High Pressure connection consisting of a parallel spiral metal hose made of AISI 316 stainless steel with a double AISI 304 stainless steel reinforcement braid and an anti-kink cable, used to connect bottles to manifolds.

The inlet and outlet connections are gas specific. The incoming connection is specific to the gas used while the outlet connection G1/4" FR has a conical sealing nut.

## Purge Valve

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The purge valve is installed at the end of a manifold to purge the residual pressure in the line between the cylinders and the manifold itself and for maintenance or replacement of supply lines; the valve is supplied with a gas specific threaded connector and can be connected to a drain using the Ø 12 mm weld-on pipe connector

## Cylinder Rack

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The cylinder rack is used to wall mount one or more 40/50 l compressed gas cylinders; are available 1, 2 and 3 fold types and are equipped with a chain with snap hook to install cylinders safely and prevent them from accidentally falling. It is also possible to combine multiple racks of different types for space reasons or simply to increase the number of cylinders to be installed.

## Area Valve with 2 Outlets UCPAVB

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The UCPAVB area valve is developed to meet the safety requirements of Standard 7396-1 and at the same time guarantee notable savings in terms of the time required for installation and building work, to achieve this we managed to combine the pendant shut-off valve with the area valve; the area valve can be fitted with a valve status sensor.

The valve also has an emergency inlet and a block for physical disconnection. An optional pressure gauge or a pressure gauge with electrical contacts can be installed.

## Area Valve with Gas Shut-Off Box



The atmospheric vacuum breaker is made of chemically nickel-plated die-cast brass. A 16 mm diameter welded connection is fitted at the inlet and outlet. The input can be shut off using a ball valve and optionally fitted with a proximity sensor.

The valve also includes an emergency inlet and a block for physical disconnection. An optional pressure gauge or a pressure gauge with electrical contacts can be installed.

## Maintenance Supply Assembly



Maintenance supply assembly in accordance with EN ISO 7396-1: 2019 which provides for the presence, downstream of the medical gas manifold, of a specific gas inlet for powering the plant.

The device consists of an emergency gas supply specific NIST or AFNOR standard socket, a 15 bar pre-calibrated overpressure valve, 4 shut-off valves 1/2", a pressure gauge and the predisposition for the installation of a pressure switch or transducer for the alarm, complete with a check valve; the device is recovered on a steel plate and protected by an abs cover.

## Conjunto de corte al Vacío



The VAC 2nd stage unit is used to shut off VACUUM line pipes; it consists of a Ø 28 mm chemically nickel-plated copper pipe, a 1" ball valve and a G 1/4" F R threaded stub end for the installation of a pressure gauge with electrical contacts and a range of -1/0 bar. Weld-on pipe inlet and outlet connections.

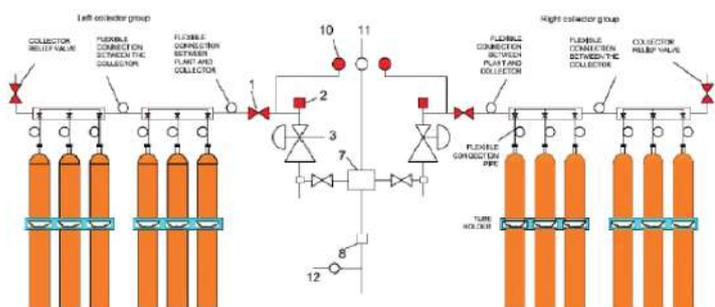
## Emergency Box with Shut-off Valve AVSU



For safety and service reasons, a central gas system should be equipped with shut-off valves located so that the gas supply can be easily interrupted.

The valves are mounted in a box. The boxes of the emergency shut-off valves must be positioned so that the gas can be closed in section. This means that the boxes must be placed before each ward, operating unit, part of the ward for critical treatment and individual surgeries. The emergency shut-off valve box is delivered with connecting tubes and each box has been tested, pressurized and leak tight. The emergency shutoff valve has large ergonomic handles.

## Emergency Oxygen Supply System

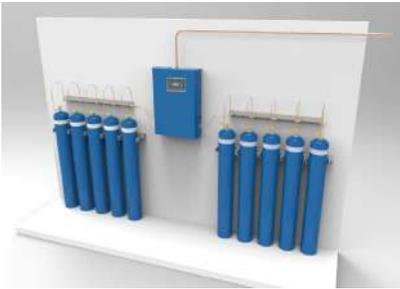


This image may not correspond to the system in your quotation

The emergency oxygen supply system is constructed in accordance with the requirement of international standards. The oxygen manifold complies with ISO-7396-1 standards. It is CE certified according to the European Directive 93/42/EEC with CE-1984.

The manifold size includes 1 branch of 10 cylinders which are compatible with Class-D type bulk cylinders. It shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies.

## Oxygen Manifold



The oxygen manifold is constructed in accordance with the requirement of international standards. It consists of 2 rows of respective numbers of class D - type bulk oxygen cylinders.

The size of the manifold includes 2 banks of 16 cylinders. It shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies.

## Copper Valve



Service shut-off valves are required to shut off each riser, branch and circuit of a medical gas and vacuum system.

Each specific gas supply line must be shut off to complete maintenance or work downstream of the valve. Valve sizes range from 3/8" to 2" and the 3-piece weld-on pipe connectors at the outlets range from Ø 10 mm to Ø 54 mm. On the Ø 3/4" valves and larger, the 3-piece connectors are fitted with O-Rings to provide the best seal under pressure.

## Line Isolation Valve



The valves VIP-3P are suitable for medical oxygen and all medical gases and vacuum. The complete valve is supplied with stuffed pipe & fittings and factory tested.

The shut-off valves are of the ball type with a straight cylindrical bore. Easy to operate - 90 ° turn between fully open and fully closed. No maintenance needed. The ball valve doesn't need service. These valves comply with ISO 7396-1.