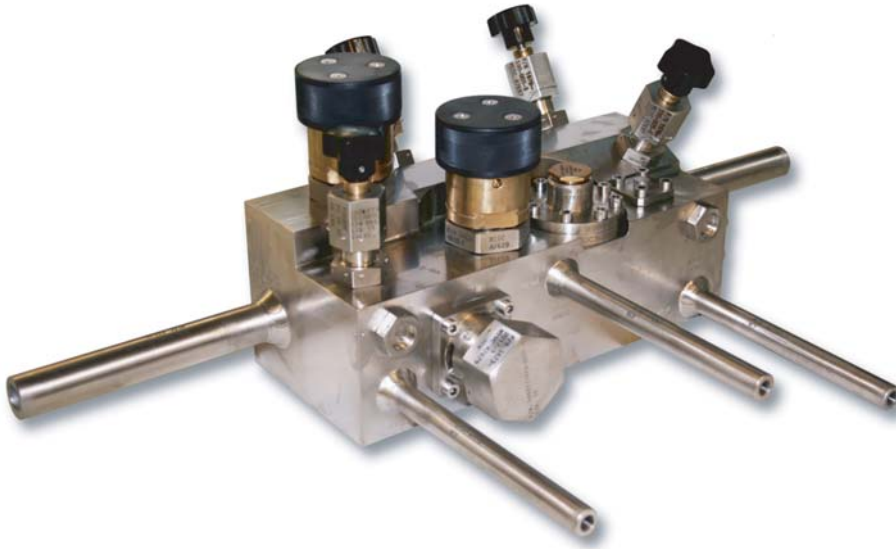


3423-0001 OXYGEN PRESSURE REDUCING STATION ASSEMBLY



- **Level I/SUBSAFE**
- **High pressure**
- **100% Oxygen**
- **High flow capacity**

Application:

The 3423-0001 series manifold is an Oxygen Pressure Reducing Station Assembly installed on many U.S. Navy Submarines. This manifold provides integrated control of pressure and flow to a breathing apparatus installed at the outlet port.

Features:

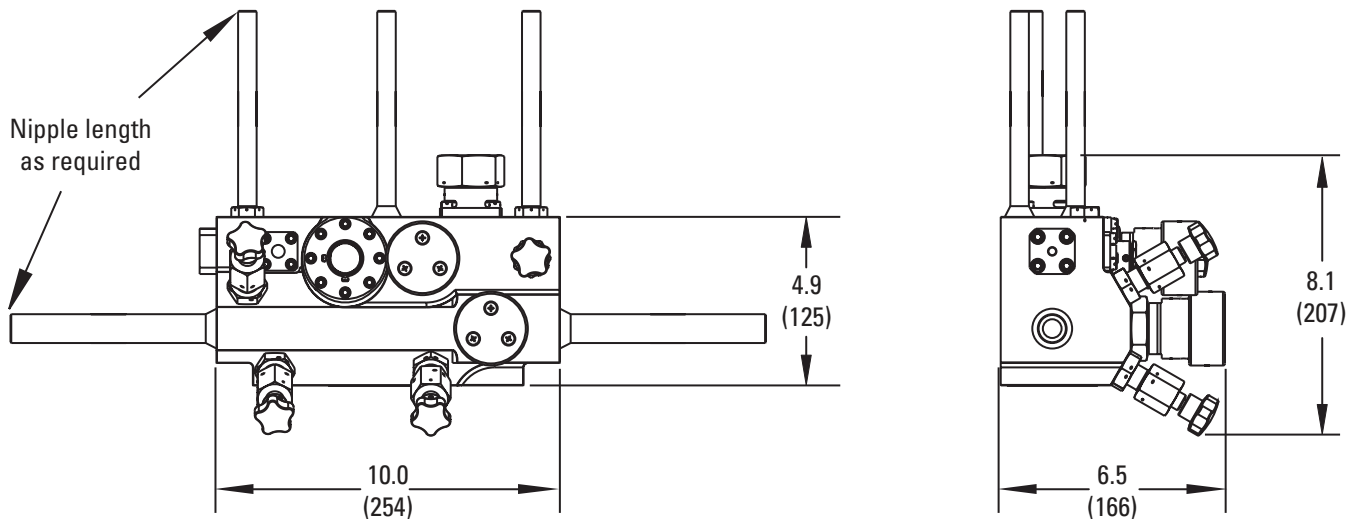
The 3423-0001 manifold is an integrated dual-loop pressure/flow control unit that takes an inlet pressure of 3,000 psig and reduces it to an outlet pressure of 70 psig. The first loop consists of a filter, a high pressure oxygen reducing regulator, and 1970 series style shutoff valves while the second loop consists of a regulator bypass needle valve and a flow control orifice. Both loops are tied into a pressure relief valve along with gage and test ports.

The regulator has the option of being non-dome loaded or dome loaded and conforms to Level I/SUBSAFE criteria. The filter is equipped with an indicator that extrudes when the pressure differential gets too high. The manifold and subassembly bodies are manufactured out of Monel for added corrosion resistance. The manifold assembly is oxygen cleaned to MIL-STD-1330D.

SPECIFICATIONS

REDUCING STATION ASSEMBLY

Part Number: 3423-0001



All dimensions in inch (mm)

Specifications:

Media	Oxygen
Inlet Pressure	200 to 3,000 psig (13.8 to 206.8 bar)
Outlet Pressure	60 to 90 psig (4.1 to 6.2 bar)
Proof Pressure	4,500 psig (310 bar)
Flow	6.3 to 15 scfm (178 to 425 slpm)
Relief Valve Crack Pressure	120 to 130 psig (8.3 to 8.9 bar)
Weight	55 to 75 lbs (25 to 34 kg) (depending on configuration)

Operating Environment:

Temperature	-65 to 160 deg F (-54 to 71 deg C)
Humidity	0 to 100%
Shock	Designed to meet MIL-S-901
Vibration	Designed to meet MIL-STD-167-1

Product Interfaces:

Inlet/Outlet	Butt Welded or Threaded Nipples ½" IPS (12.7 mm)
Gage Ports	Butt Welded or Threaded Nipples ¼" IPS (6.4 mm)