



- Oxygen safe design
- Integral check valves
- Low pressure drop
- Space efficient package

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### **Application:**

Carleton's B40831-1 oxygen manifold and check valve assembly is an integral component in military aircraft oxygen life support systems. The manifold and check valve assembly directs oxygen flow to the storage vessels during filling and to a downstream system pressure regulator during operation.

Carleton's oxygen manifold and check valve assembly has been qualified for use and is used as OEM equipment on the P-3 Orion Maritime Surveillance Aircraft.

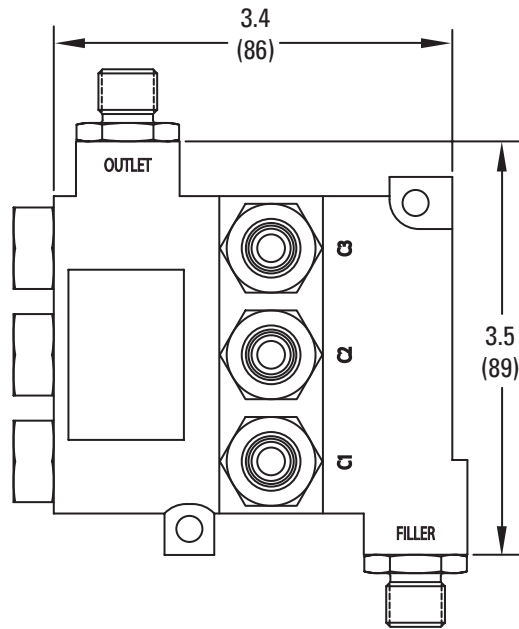
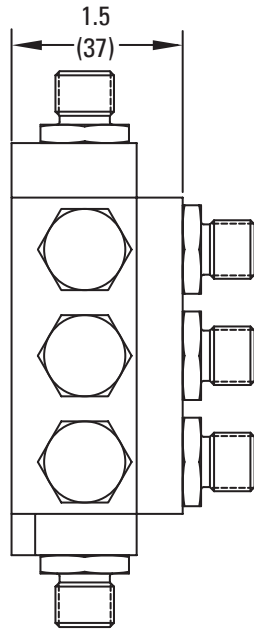
### **Features:**

Carleton's B40831-1 manifold and check valve assembly has a filler port, three inlet ports and an outlet port. The design of the manifold ensures oxygen flows safely to the storage vessels during filling and to the system pressure regulator during operation. The internal check valve configuration allows the assembly to flow oxygen with a minimal pressure drop. Additionally, the check valves prevent backflow through the filling port or between cylinders to increase system reliability.

The design of this assembly maximizes the use of the highest rated oxygen compatible materials.

# SPECIFICATIONS

## Check Valve Part Number: B40831



All dimensions in inch (mm)

### Specifications:

<b>Operating Pressure</b>	200 to 1,850 psig	(13.8 to 127.6 barg)
<b>Flow</b>	130 slpm @ 200 psig	
<b>Operating Altitude</b>	0 to 40,000 ft	(0 to 12,192 m)
<b>Weight</b>	3.6 lbs max	(1.63 kg)
<b>Pressure Drop</b>	15 psid max @ 135 slpm	

### Operating Environment:

<b>Temperature</b>	-65 to 165 deg F	(-54 to 74 deg C)
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### Product Interfaces:

<b>Inlet</b>	Flareless tube connections, MS33514E5
<b>Cylinder Ports</b>	Flareless tube connections, MS33514E5
<b>Outlet</b>	Flareless tube connections, MS33514E5