



- **Lightweight, compact design**
- **High flow**
- **Precise pressure control**
- **Integral pressure transducer**
- **Integral fill/check valve**

### **Application:**

Carleton's Oxygen Pressure Reducer is an integral part of an aircraft crew oxygen system. The valve mounts directly to an oxygen cylinder and valve assembly and provides a regulated pressure supply to the flight deck quick donning masks (QDM's).

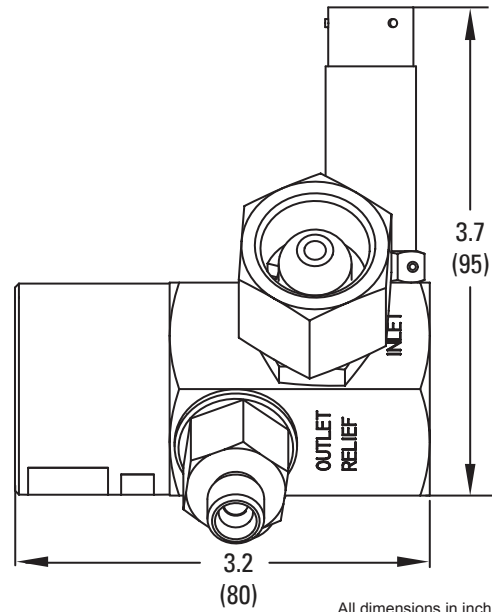
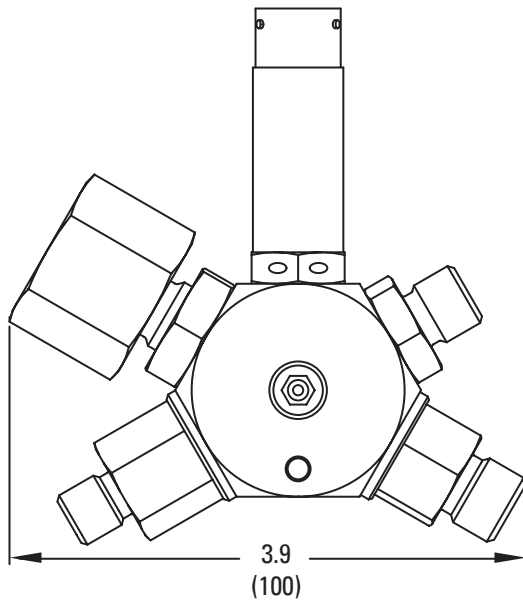
Carleton's Oxygen Pressure Reducer (part number B44585-1) has been qualified for the Crew Oxygen System on many commercial aircraft.

### **Features:**

The compact lightweight, single-stage Pressure Reducer uses a balanced poppet design to provide precise pressure control, low leakage, and high flow capacity. The outlet pressure is tightly controlled between 64 and 80 psig over an inlet pressure range of 100 to 2,175 psig, with a flow capacity of 0 to 220 slpm (NTPD). The design and construction of the valve maximizes oxygen safety. The reducer features a fill port, an over-pressure relief valve, an outlet check valve, and a pressure transducer.

# SPECIFICATIONS

## Pressure Reducer Part Number: B44585-1



All dimensions in inch (mm)

### Specifications:

<b>Weight</b>	2.53 lbs	(1.15 kg)
<b>Inlet Pressure</b>	100 to 2,175 psig	(7 to 150 barg)
<b>Outlet Pressure</b>	64 to 80 psig	(4.4 to 5.5 barg)
<b>Lock up Pressure</b>	94 psig max	(6.5 barg)
<b>Flow</b>	0 to 220 slpm	
<b>Transducer Power Supply</b>	8 to 16 VDC	
<b>Transducer Output Signal</b>	4 to 20 mA	
<b>Media</b>	Gaseous Oxygen per MIL-PRF-27210	

### Operating Environment:

<b>Operating Temperature</b>	5 to 158 deg F	(-15 to 70 deg C)
<b>Storage Temperature</b>	-67 to 185 deg F	(-55 to 85 deg C)
<b>Shock</b>	6 g operational	20 g crash
<b>Vibration</b>	5.83 Grms each axis	
<b>Humidity</b>	0 to 100% relative humidity	
<b>Altitude</b>	41,000 ft max	(12,497 m)

### Product Interfaces:

<b>Inlet Port</b>	CGA-540 (.903-14NGO-RH int thread)
<b>Outlet Port</b>	MS33514-E6
<b>Fill Port</b>	MS33514-E5
<b>Relief Valve</b>	MS33514-E4
<b>Transducer Connector</b>	ASNE0053R10B6SN