



- **Resettable**
- **Single outlet port**
- **Lightweight**
- **Low cost**

Application:

The Raft Inflation Valve (part number B44800) is an integral part of raft inflation systems. The inflation valve is a mechanically actuated cable pull device that discharges gas through a single outlet port.

This valve is used to inflate emergency life rafts on a variety of commercial aircraft. It has been qualified to and is compliant with Technical Standard Order (TSO) C70 (life rafts).

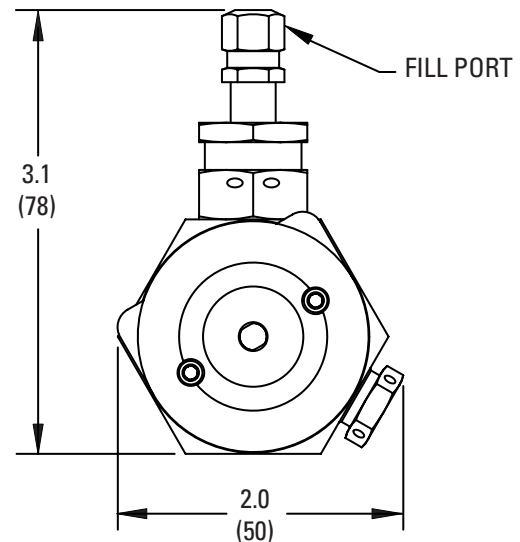
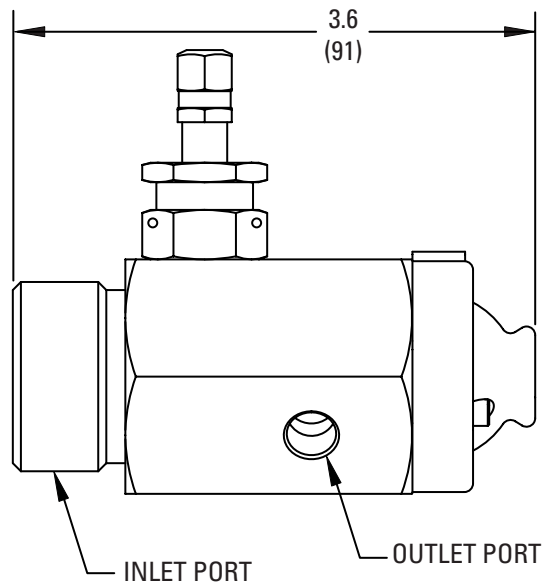
Features:

The inflation valve utilizes a simple cable pull to activate flow and incorporates a hemi-spherical pull capability. Actuation pull forces range from 20 to 30 pounds, over a temperature range of -40 to 160 deg F, with a bottle pressure of 3,300 psig at 70 deg F. Using a simple shop tool, the cable can be easily reinstalled and the valve quickly reset for actuation without the need for disassembly.

The activation cable is connected to a lever which, when rotated approximately 90 degrees by the pull of the cable, pushes a poppet device away from its seat thereby releasing the gas from an attached vessel. The poppet is a pressure-closing style which assures the least amount of pressure decay over long periods of time. The valve is a "dump" style and does not incorporate a regulator in the design.

SPECIFICATIONS

Raft Inflation Valve Part Number: B44800



All dimensions in inch (mm)

Specifications:

| | | |
|---------------------------|--|-----------|
| Operating Pressure | 3,300 psig | (228 bar) |
| Actuation Force | 30 lbs pull max 20 lbs pull min | |
| Discharge Rate | Equivalent to supply pressure through 0.133 dia. orifice | |
| Weight | 1.4 lbs max | (0.64 kg) |
| Proof Pressure | 4,950 psig | (341 bar) |
| Burst Pressure | 8,250 psig | (569 bar) |
| Media | Nitrogen, Air, Carbon Dioxide/Nitrogen mix, Air/Carbon Dioxide mix | |
| Leakage | 0.002 gram/hour at 3,300 psig (N ₂) | |
| Safety Device | Limit pressure to: 4,950 psig (341.3 bar) | |

Operating Environment:

| | | |
|----------------------------|---|-------------------|
| Temperature | -40 to 160 deg F | (-40 to 71 deg C) |
| Humidity | IAW MIL-STD-810F, Paragraph 507.2, Procedure 1 | |
| Sand and Dust | IAW MIL-STD-810F Paragraph 510.2, Procedure 1 | |
| Salt Fog | IAW MIL-STD-810F Paragraph 509.2, Procedure 1 | |
| Fungus | Resistant | |
| Vibration | 13.5 Grms each axis | |
| Linear acceleration | 9 g for 30 seconds | |
| Mechanical Shock | IAW MIL-STD-810F Paragraph 516.5, Procedure 1, 20 g for 11 ms | |

Product Interfaces:

| | |
|---------------------------|---|
| Outlet | .125-27 NPT Outlet |
| Bottle Connection | AS4395-14 or MS33656-12 Modified (1.3125 UN-3A Thread) |
| Pressure Gage Port | .125-27 NPT |