



- **Resettable**
- **Regulated outlet pressure**
- **High flow capacity**

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### **Application:**

The Carleton Inflation Valve / Regulator Assembly (part number B19250-3) is an integral part of aircraft slide inflation systems. It is a mechanically actuated pull cable device that discharges gas through a single outlet port. The outlet pressure is regulated to an aspirator. This system is used to inflate emergency evacuation slides on large commercial aircrafts.

The inflation valve is compliant with Technical Standard Order (TSO) C69b (emergency evacuation slides) and has been qualified for use on a wide variety of large commercial aircraft.

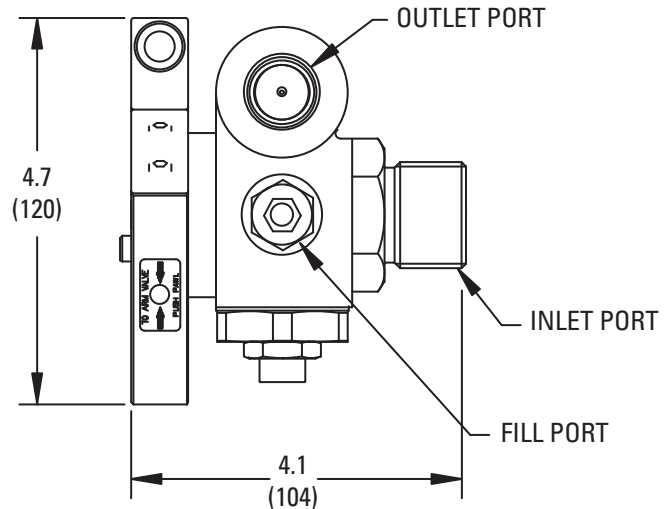
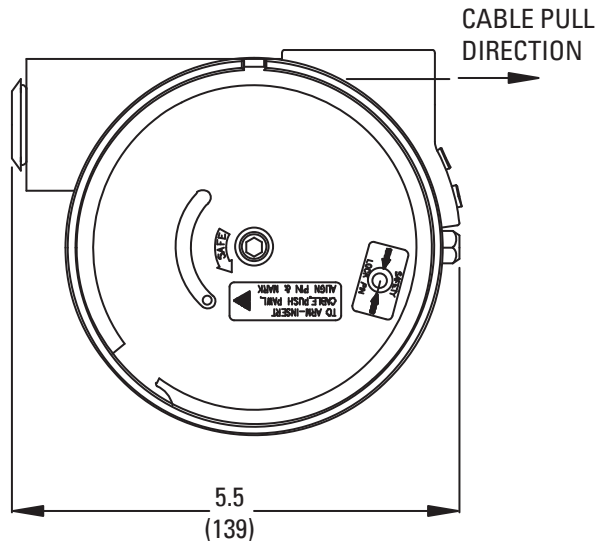
### **Features:**

The inflation valve utilizes a simple cable pull to activate flow. Actuation pull forces range from 4 to 20 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 activating cable opens the valve portion of the assembly thereby releasing the gas from an attached vessel. A ratchet mechanism is provided to prevent counter rotation of the valve from the open to closed position. The output pressure is capable of preset adjustment to any value between 400 and 600 psig. Using the flow of pressurized gas from the regulator, the aspirator draws ambient air into the emergency slide via the Venturi Effect.

# SPECIFICATIONS

## Inflation Valve Part Number: B19250-3



All dimensions in inch (mm)

### Specifications:

<b>Operating Pressure</b>	3,300 psig	(228 bar)
<b>Actuation Force</b>	20 lbs pull max 4 lbs pull min	
<b>Discharge Rate</b>	Equivalent to supply pressure through 0.500 dia. orifice	
<b>Weight</b>	3.0 lbs max	(1.36 kg)
<b>Proof Pressure</b>	4,950 psig	(341 bar)
<b>Burst Pressure</b>	9,900 psig	(683 bar)
<b>Media</b>	Nitrogen, Air, Helium, Carbon Dioxide/Nitrogen mix, Air/Carbon Dioxide mix	
<b>Leakage</b>	0.0025 gram/hour at 3,300 psig (N <sub>2</sub> )	
<b>Safety Device</b>	Limit pressure to: 4,950 psig (341.3 bar)	

### Operating Environment:

<b>Temperature</b>	-40 to 160 deg F	(-40 to 71 deg C)
<b>Humidity</b>	IAW MIL-STD-810F, Paragraph 507.2, Procedure 1	
<b>Sand and Dust</b>	IAW MIL-STD-810F Paragraph 510.2, Procedure 1	
<b>Salt Fog</b>	IAW MIL-STD-810F Paragraph 509.2, Procedure 1	
<b>Fungus</b>	Resistant	
<b>Vibration</b>	6.1 Grms each axis	
<b>Linear acceleration</b>	9 g for 30 seconds	
<b>Mechanical Shock</b>	IAW MIL-STD-810F Paragraph 516.5, Procedure 1, 20 g for 11 ms	

### Product Interfaces:

<b>Inlet Port</b>	MS33656-16
<b>Discharge Port</b>	MS16142-12
<b>Gage Port</b>	MS16142-4