

## 6500 Series digital valve

### 6500-MAN-DV

- Suitable for Zone 1 & 21 operation, ATEX/IECEx certification
- Intrinsically safe when connected to the 6500 control unit
- Manifold combines the digital valve for purging and the needle valve for pressurization in one housing
- Suitable for steel or plastic tubing
- Mounting hardware, pneumatic fittings and tubing included

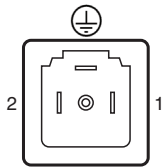
Type Ex px purge and pressurization system



### Function

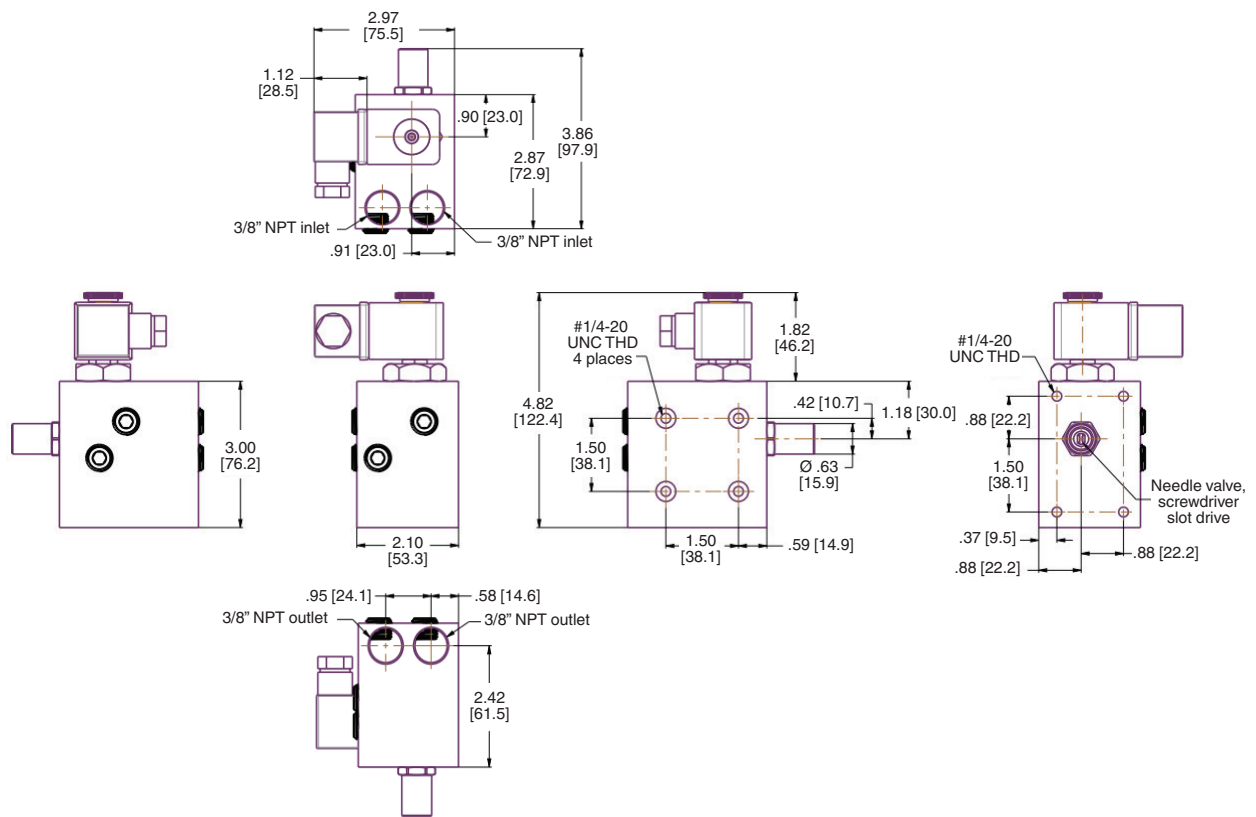
The 6500-MAN-DV-01 combines a digital valve for purging and a needle valve for pressurization in to one manifold design. When the valve is energized, the digital valve opens and allows for a high flow rate of protective gas into the enclosure. When the valve is de-energized, the flow through the internal needle valve is adjustable by a flathead screw driver through the needle stem on the manifold. The digital valve is used for purging, excess leakage compensation (pressure as input), and temperature control through user selected functions in the 6000/6500 control unit. Mounting hardware includes 10 mm tube compression fittings mounted on the manifold for input and output flow, 10mm tube compression bulkhead fitting for getting flow into the enclosure, and seal washers with bolts to mount the manifold to the enclosure. Also included is a 1 meter of 3/8" polytubing with 10 mm poly tube stiffener inserts which allows the connection of plastic tubing to compression fittings without collapsing the tubing.

### Connection



	GND
1	-
2	+

## Dimensions



## Technical Data

### General specifications

Operating mode	automatic purging + pressurization
Series	6500
System	Ex pxb Purge , Ex pyb Purge
Hazardous environment	gas or dust

### Supply

Rated power	Intrinsically safe supply from the 6500 control unit
-------------	--

### Pneumatic parameters

Protective gas supply	instrument grade air or inert gas
Pressure requirement	1.4 (20 psig) to 8.3 bar (120 psig)
Safe pressure	Gas: 0.87 mbar (0.35" wc) Dust: 0.87 mbar (0.35" wc) Gas+Dust: 0.87 mbar (0.35" wc)
Purge flow rate	Digital valve : Cv (flow coefficient) = 1.4

Connections	Inlet and outlet of valves 3/8"NPT, double ferrule 10mm compression fittings (included)
-------------	--

### Ambient conditions

Ambient temperature	-28 ... 50 °C (-18.4 ... 122 °F)
Storage temperature	-28 ... 50 °C (-18.4 ... 122 °F)

### Mechanical specifications

Connection type	10 mm stainless steel ferrule tube fittings
Cable gland	I.S. connection type: PG9, DIN 43650-A connector
Degree of protection	IP65 (DIN connector)

Release date: 2025-06-18 Date of issue: 2025-06-18 Filename: t179868\_eng.pdf

**Technical Data**

Material	<b>Housing:</b> marine-grade aluminum (6082-T6 or 6061-T6) <b>3/8" compression fittings:</b> 316L stainless steel <b>Pressure ports:</b> 3/8" NPT to 10mm <b>Bulkhead fitting:</b> 10 mm fitting, 316L stainless steel <b>Mounting bolts:</b> 1/4 - 20 (-20 =Threads per Inch), 316 stainless steel <b>Sealing washers:</b> silicone rubber <b>Input/Output ports:</b> 10 mm tube compression fittings
Mass	907 g (2.0 lbs)
Dimensions	75.5 x 97.9 x 122.4 mm (2.97" x 3.86" x 4.82")