

16 Series

High Pressure Diaphragm Valve
High Flow, Stainless Steel

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Value Proposition:

Veriflo Division's 16 Series valves provide a high-flow, positive shut-off for fluid systems.

This 1/2" spring type diaphragm valve offers superior leak integrity for manually and pneumatically actuated applications with pressure ranges from vacuum to 3,000 psig.



Contact Information:

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Product Features:

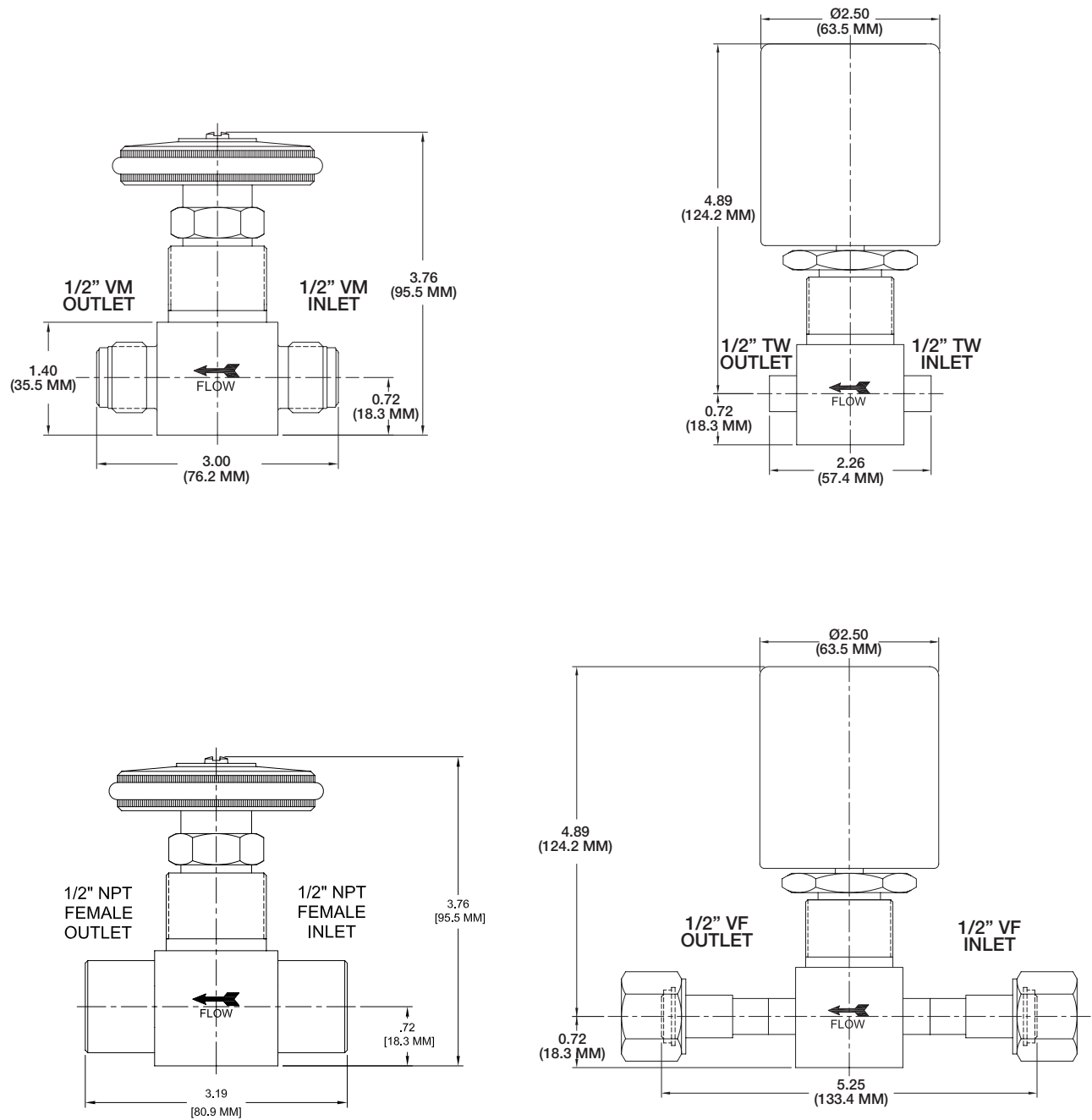
- Metal diaphragm sealed
- Spring type design
- Minimal particle generation
- High cycle life
- Cleaned for O₂ service
- 3,000 psig for both manual and pneumatic styles



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Dimensional Drawings








16 Series


Ordering Information

Build a 16 Series valve by replacing the numbered symbols with an option from the corresponding tables below.


Color Explanations: Black = Standard Lead Time Configurations
Blue = Extended Lead Time Configurations


For an explanation of Ordering options
please reference literature 25000275
at www.parker.com/veriflo


Sample:  **93-16**  **88**  **2**  **VMVM**  **-PI**
Finished Order: **93-16882VMVM-PI**

 **Basic Series**
16- = Handwheel
93-16 = Pneumatic

 **Port Size**
88 = 1/2" Inlet/Outlet

 **Body Material**
2 = 316L Stainless Steel

 **Inlet/Outlet Connection**
FF = 1/2" NPT Female
TWTW = Tube Stub
VFVF = VacuSeal™ Female
VMVM = VacuSeal™ Male

 **Optional Features**
This section can have multiple options
-PI = Vespel® Seat Material
PM = Panel Mount Rings

Additional configurations available upon request

16 Series

Specifications

| Materials of Construction | |
|---------------------------|------------------------------------|
| Wetted | |
| Body | 316L Stainless Steel |
| Seal Options | PCTFE (std) or Vespel® |
| Diaphragm | Elgiloy® or equivalent |
| Lower Stem | 316L Stainless Steel |
| Spring | 316 Stainless Steel |
| Non-wetted | |
| Manual | |
| Button | Nitronic-60 |
| Guide Pin | 303 Stainless Steel |
| Upper Stem | Nitronic-60 |
| Bonnet | 303 Stainless Steel |
| Handwheel/O-ring | Aluminum/Neoprene |
| Handwheel Screw | 18-8 Stainless Steel |
| Handwheel Label | Aluminum |
| Panel Mount Nuts | 303 Stainless Steel |
| Pneumatic | |
| Bonnet | 303 Stainless Steel |
| Set Screw | 18-8 Stainless Steel |
| Actuator Housing | Aluminum Polyurethane Paint (Grey) |

For additional information on materials of construction, functional performance and operating conditions, please contact factory.

| Functional Performance | |
|-----------------------------|---|
| Design | |
| Proof Pressure | 4,500 psig |
| Burst Pressure | 12,000 psig |
| Flow Capacity | C _v 0.3 |
| Leak Rate | |
| NPT Threaded | |
| Internal | Bubble Tight |
| External | Bubble Tight |
| Welded | |
| Design Internal | < 2 x 10 ⁻⁸ scc/sec He Inboard Test Method |
| Design External | < 2 x 10 ⁻¹⁰ scc/sec He Inboard Test Method |
| Production Leak Test | Outboard Sniffer Probe at 2000 ± 100 psig, 20-25% Helium |
| Approx. Weight | |
| Manual | 1.85 lbs (0.84 kgs) |
| Pneumatic | 2.65 lbs. (1.20 kgs) |
| Operating Conditions | |
| Operating Pressure | Vacuum to 3,000 psig |
| AOP Actuation Pressure | 70 psig min to 125 psig max |
| Temperature | -65°F to 150°F (-54°C to 66° C) |

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