UHP Stainless Steel Diaphragm Valve High Pressure Manifold

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

Value Proposition:

The 945Y valve offers the same benefits as the standard two way valve. The "Y" valve configuration allows for a mix of operator combinations, reduces space requirements, and has fewer welds over standard valve alignments.

Pressure and flow requirements are unique to each valve in this offering, please reference the two way data sheet to ensure proper selection.



Contact Information:

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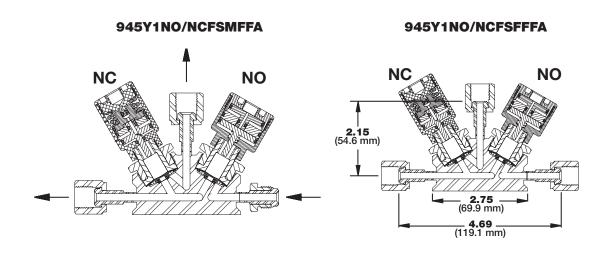
Product Features:

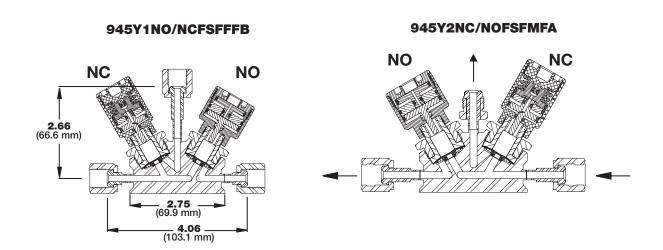
- Standard surface finish of 10 micro inch Ra
- Internally threadless and springless
- Unique compression member which loads the seal uniformly without the need for threaded components or crimping operations
- Fully functional from vacuum to 3500 psig

- 100% Helium leak tested
- Standard full internal electropolish
- Minimal particle generation and particle entrapment areas
- VericleanTM, Veriflo's low sulfur high purity 316L Stainless Steel enhances electropolishing, welding, and corrosion resistance

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Dimensional Drawings





Safety Guide and Installation and Operating Instructions available at www.parker.com/veriflo

Ordering Information

Build a 945Y Series valve by replacing the numbered symbols with an option from the corresponding tables below.

Contact factory for most up to date lead time information.

Blue = Configurations that have selections in blue may have an extended lead time and a minimum order quantity.

Finished Order: 945Y1NC/NOFSMMFVESPA

Basic Series 45Y = 945Y

Flow Path

1 = Down Stream Purge 2 = Up Stream Purge

3 = Common

Activating Device Type (V1/V2)

HP = Air Operated, High Pressure, Normally Closed HP can only be used in combination with HP or M actuators

NC = Air Operated, Low Pressure, Normally Closed

NO = Air Operated, Low Pressure, Normally Open

M = Mini-Lever

Port Style

= 1/4" Face Seal FS8 = 1/2" Face Seal = 1/4" Tube Stub TS6 = 3/8" Tube Stub TS8 = 1/2" Tube Stub

Port Configuration

= Male Face Seal = Female Face Seal **Optional Features**

PEEK = PEEK™ Seats

VESP = Vespel® Seats Recommended for Nitrous Oxide (N2O) Service

Dimensions

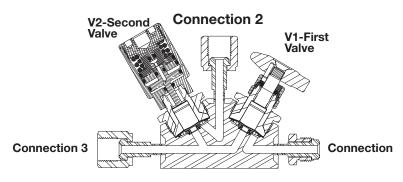
Dimensions applicable to all actuating device types except HP. For HP actuating device type dimensions, see table below.

 $= 4.69 \times 2.15$

= 4.06 x 2.66 FSF or TS Only.

DIMENSION TABLE - HP Actuating Device Type			
Style	Α	Α	В
Fitting Type	FS-M	FS-F	FS-F
End-To-End Connection	4.69	4.69	4.06
Vertical Connection	3.75	3.25	3.25

Ordering Example



945Y1M/NCFSMFFA

Specifications

Materials of Construction		
Wetted		
Body	VeriClean™ 316L Stainless Steel	
Compression Member	316L Stainless Steel	
Diaphragm	Elgiloy® or equivalent	
Seat Options	PCTFE (std), PEEK™ or Vespel®	
Non-wetted		
Cap	17-4 Stainless Steel	
Nut	316L Stainless Steel	
Actuator Housing	Anodized Aluminum	
Operating Conditions (Operating limits based upon pressure applied at inlet port.)		
Maximum Pressure		
HP, I, M	3,500 psig (241 barg)	
NC, NO	125 psig (8.6 barg)	
Minimum Pressure	Vacuum	
AOP Actuation Pressure	75 psig (5 barg) nominal	
AOP Air Inlet	1/8-27 NPT	
Temperature	-40°F to 150°F (-40°C to 66°C)	

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

Functional Performance		
Design		
Proof Pressure		
HP, I, M	5,250 psig (362 barg)	
NC, NO	188 psig (13 barg)	
Burst Pressure		
HP, I, M	10,500 psig (724 barg)	
NC, NO	375 psig (26 barg)	
Flow Capacity		
Process Valve		
HP, NC, NO, I	C _V 0.25	
Lever (M)	C _V 0.18	
Purge Valve	C _V 0.17	
Leak Rate	Inboard Test Method	
Internal	\leq 1 X 10 ⁻⁹ scc/sec He	
External	≤ 2 X 10 ⁻¹⁰ scc/sec He	
Surface Finish	10 micro inch Ra	
Internal Volume	4.26 cc	
Approx. Weight	2.1 lbs. (0.98 kg)	

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