



Parker Hannifin Corporation's Veriflo Division presents the Quantum 955 Air-Operated diaphragm valve. The 955AOPLP is ideal for low vapor pressure gasses such as WF6 and BCL3.



features

- ▶ .55 Cv flow capacity.
- ▶ "VeriClean" low sulfur high purity 316L VAR Stainless Steel™, which enhances electropolishing, welding, and corrosion resistance.
- ▶ Internally threadless and springless.
- ▶ Fully functional from vacuum to 125 psig.
- ▶ Ideal for low vapor pressure gasses.
- ▶ Aerodynamic, smooth flow passages.
- ▶ Minimum particle generation and entrapment.
- ▶ High cycle life (including corrosive service).
- ▶ 100% Helium leak tested.
- ▶ "Hurricane" cleaning, proprietary cleaning process, removes metallic ions, organic films and surface adhering particles.

materials of construction

Wetted

Body "VeriClean", Veriflo's custom high purity type 316L VAR Stainless Steel™, Hastelloy C-22®
Seat PCTFE, optional Vespel®, PEEK™
Diaphragm Elgiloy® or equivalent

Non-Wetted

Nut 316L Stainless Steel
Cap 316L Stainless Steel
Actuator Housing Aluminum

operating conditions

Maximum operating pressure 125 psig (8.6 barg)

Minimum operating pressure Vacuum

Temperature -40°F to 150°F (-40°C to 66°C)

Bake out 250°F (121°C) in the open position

Actuator pressure 60-120 psig (4-8.3 barg)

functional performance

Flow capacity $C_v = .55$
(SEMI Flow Coefficient Test #F-32-0998)

Design Leak Rate:

Outboard 1×10^9 scc/sec He

Inboard 2×10^{10} scc/sec He

Across seat 4×10^9 scc/sec He

standard connections

Any combination of 1/4" FS male and/or female fittings:

Gland to gland length 2.96 in. (75.1 mm)

Optional 2.78 in. (70.6 mm)

Tube stubs inlet and outlet:

End to end length 2.25 in. (57.1 mm)

Other configurations available as options— including as many as four ports. see Valve Selection Guide

internal volume

3.29 cc (including face seal fittings)

surface finishes

Standard Ra 5 micro inch
(.13 micro meter) or less

approximate weight

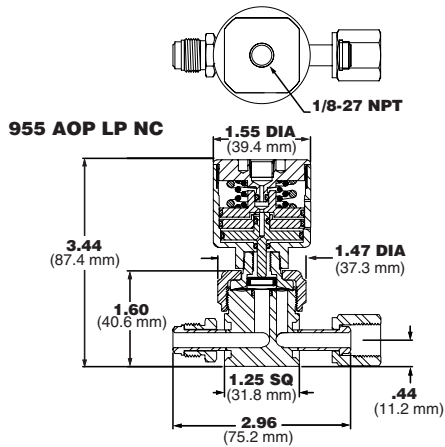
.81 lbs (.36 kg)

Catalog: 4505
LitPN: 25000179
Revision: A • 10/03

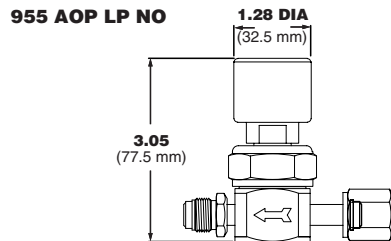
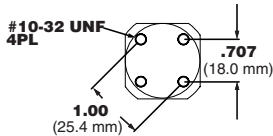


QUANTUM 955AOPLP

Dimensional Drawing



SEE TABLE FOR OTHER CONNECTION DIMENSIONS



Ordering Information

955AOPLP NC S FSMM VESP

BASIC SERIES

955AOPLP = 955 Air Operated, Low Pressure

TYPE

NC = Normally Closed

NO = Normally Open

MATERIAL

S = 316L VAR Stainless Steel

H = Hastelloy C-22®

* Recommended for Nitrous Oxide (N₂O) Service

Note: Refer to Valve Selection Guide for multiple porting selections.

Hastelloy C-22® is a registered trademark of Haynes International, Inc.

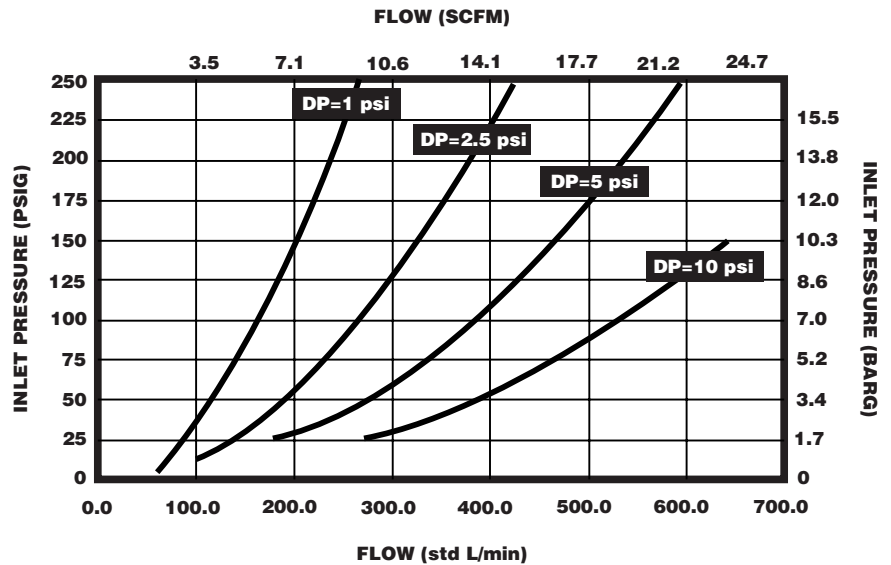
Vespe® is a registered trademark of DuPont Company.

Viton® is a registered trademark of DuPont Elastomers Company.

Elgiloy® is a registered trademark of Elgiloy Company.

PEEK™ is a registered trademark of Vitrex plc.

Flow Curve



Connection	End to End Length
1/4" FS	2.96" (75.1 mm) STD
1/4" FS	2.78" (70.6 mm) Optional
1/4" TS	2.25" (57.1 mm) STD
3/8" TS6	2.25" (57.1 mm) STD
1/2" TS8	2.25" (57.1 mm) STD
1/2" FS8	4.20 (106.7 mm) STD

OPTIONAL FEATURES

BL008 = Bleed Valve .008 Orifice

BL015 = Bleed Valve .015 Orifice

LS = Limit Switch

PEEK = PEEK™ Seat

VESP = Vespe® Seat*

2.78 = 2.78" End-To-End (1/4" FS Only)

CONNECTIONS

FSMM = 1/4" Face Seal, Male in-Male out

FSFF = 1/4" Face Seal, Female in-Female out

FSFM = 1/4" Face Seal, Female in-Male out

FSMF = 1/4" Face Seal, Male in-Female out

FS8MM = 1/2" Face Seal, Male in-Male out

FS8FF = 1/2" Face Seal, Female in-Female out

FS8FM = 1/2" Face Seal, Female in-Male out

FS8MF = 1/2" Face Seal, Male in-Female out

TS = 1/4" Tube Stub

TS6 = 3/8" Tube Stub

TS8 = 1/2" Tube Stub

