

# 800 Series

## 855 High Purity, High Flow Diaphragm Valve

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

### Customer Value Proposition:

Parker Hannifin Corporation's Veriflo Division presents the 855 valve for use in solar and semiconductor applications. The high flow 855 has many of the 955 Series valve features, including high flow in a compact device, but at a lower price point.

The 855's maximum operating pressure is 250 psig for both the manual and air actuated versions.



### Contact Information:

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[www.parker.com/veriflo](http://www.parker.com/veriflo)

### Product Features:

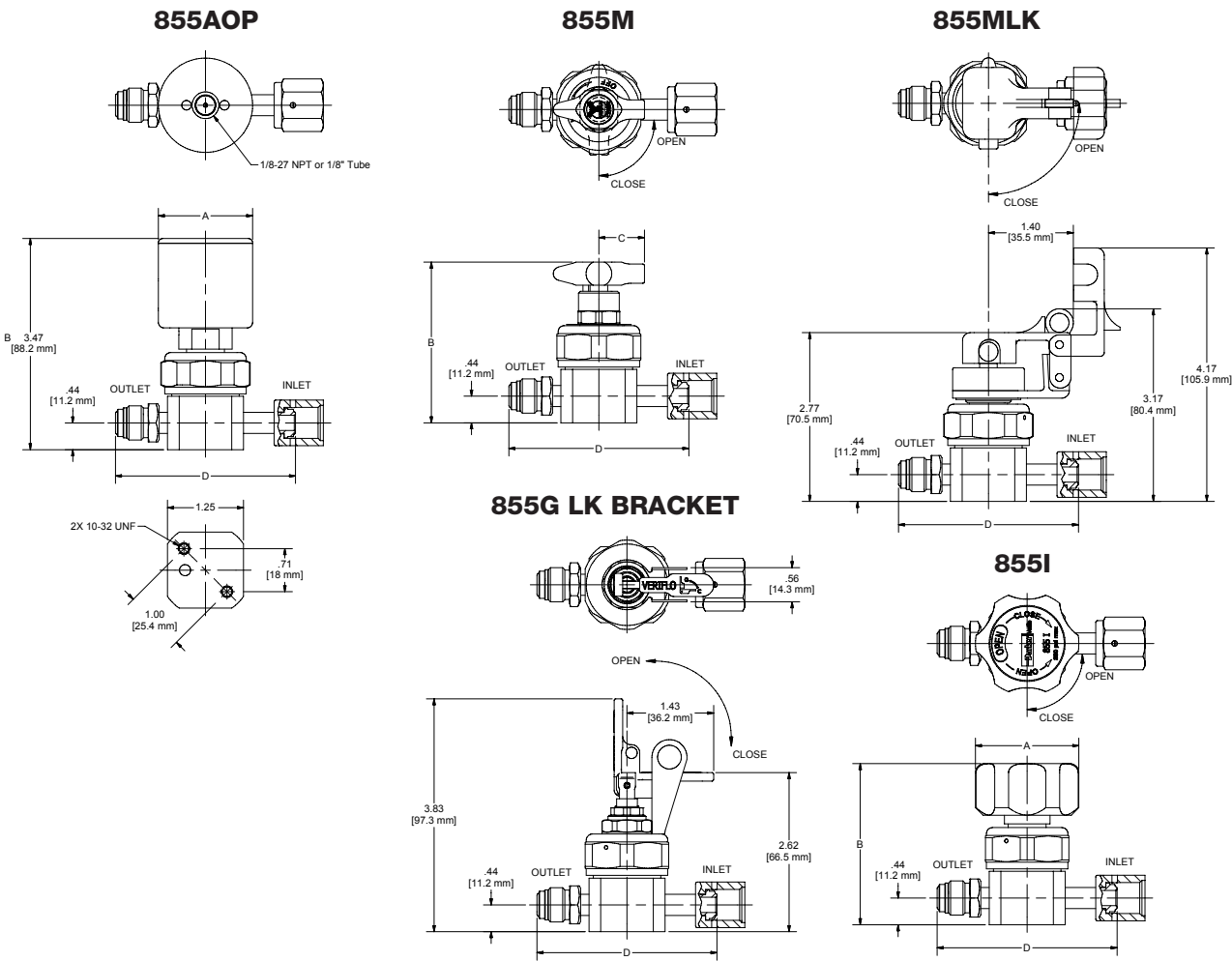
- Standard surface finish of 10 micro inch Ra with flash EP.
- Internally threadless and springless.
- Fully functional from vacuum to 250 psig.
- Maintains key dimensions of Veriflo's 955 valve.
- 100% Helium leak tested.
- Minimal particle generation and particle entrapment areas.
- Vericlean™, Veriflo's low sulfur high purity 316L Stainless Steel enhances electropolishing, welding, and corrosion resistance.



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# 855 Series

## Dimensional Drawing



Actuator Style	Actuator Diameter (A)	Height (B)	Lever Radius (C)
AOPLPNC	1.55	3.47	-
AOPLPNO	1.29	3.08	-
G	-	*	-
I	1.70	2.62	-
L	-	2.64	1.75
M	-	2.64	.75
S	2.00	2.88	-

\* See dimensional drawing

Port Style	End-To-End Length (D)
FS	2.96
FS8	4.20
TS	1.76
TS6	2.24
TS8	2.24

# 855 Series

## Ordering Information

Build an 800 Series - 855 valve by replacing the numbered symbols with an option from the corresponding tables below.

Sample: **8**

1

55

2

AOPLPNC

3

S

4

FS

5

FM

6

VESP

Finished Order: **855AOPLPNCFSFMVESP**

1

Basic Series

55 = 855

2

Type

AOPLPNC = Air Operated, Low Pressure, Normally Closed

AOPLPNO = Air Operated, Low Pressure, Normally Open

I = Indicating Handwheel

L = Lever

M = Mini Lever

S = Spin Handwheel

3

Body Material

S = Vericlean™ 316L Stainless Steel

4

Port Style

FS = 1/4" Face Seal

FS8 = 1/2" Face Seal

TS = 1/4" Tube Stub

TS6 = 3/8" Tube Stub

TS8 = 1/2" Tube Stub

Note: For 3 port: See 4504 Valve Selection Guide for A, B, C, F, G & M configuration selections.

5

Port Configuration

M = Male Face Seal

F = Female Face Seal

6

Optional Features

This section can have multiple options

LK = LockOut-TagOut *LK includes LockOut-TagOut bracket for G-Type Valve; LOTO Clamp for M type Valve*

LSC = Limit Switch Closed *Available with AOPLPNC option only*

LSO = Limit Switch Open *Available with AOPLPNC option only*

PM = Panel Mount *Not available on I and AOP versions*

PEEK = PEEK™ Seat

VESP = Vespel™ Seat *Recommended for Nitrous Oxide (N2O) Service*

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## Specifications

Materials of Construction	
<b>Wetted</b>	
Body	VeriClean™ 316L Stainless Steel
Diaphragm	Elgiloy® or equivalent
Seat Options	PCTFE (std), Vespel®, PEEK™
<b>Non-wetted</b>	
Cap	17-4 PH
Nut	316L Stainless Steel
Actuator Housing	Anodized Aluminum
Functional Performance	
<b>Flow Capacity</b>	C <sub>v</sub> 0.55
<b>Design</b>	
Leak Rate	Inboard Test Method
External	≤ 2 X 10 <sup>-10</sup> scc/sec He
Internal	≤ 1 X 10 <sup>-9</sup> scc/sec He
Proof Pressure	375 psig (26 barg)
Burst Pressure	750 psig (52 barg)

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

Standard Configuration	
<b>Surface Finish</b>	10 micro inch Ra with flash EP
<b>Internal Volume</b>	3.29 cc
<b>Approx. Weight</b>	0.81 lbs. (0.36 kg)
Operating Conditions	
<i>(Operating limits based upon pressure applied at inlet port.)</i>	
Maximum Pressure	250 psig (17.22 barg)
Minimum Pressure	Vacuum
Temperature	-40°F to 150°F (-40°C to 66°C)
AOP Actuation Pressure	75 psig (5 barg) nominal
AOP Air Inlet	1/8-27 NPT
Limit Switch (Optional)	
Type	Single Pole, Single Throw (SPST) momentary action, non-adjustable
Rating	
AOPLPLSC	1/4 amp at 115 vac (normally closed)
AOPLPLSO	1/2 amp at 115 vac (normally open)

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