

# 17R Series

UHP Stainless Steel Diaphragm Valve  
High Pressure, High Flow

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

## Value Proposition:

The 17R Series valve provides a high flow and positive shut off for high purity fluid systems.

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



## Contact Information:

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## Product Features:

- Standard surface finish of 10 micro inch Ra
- Serialized and heat code traceable
- Fully functional from vacuum to 3000 psig for both Manual and Pneumatic styles
- 100% Helium leak tested
- Multi-diaphragm for superior cycle life
- Vericlean™, Veriflo's low sulfur high purity 316L Stainless Steel enhances electropolishing, welding, and corrosion resistance

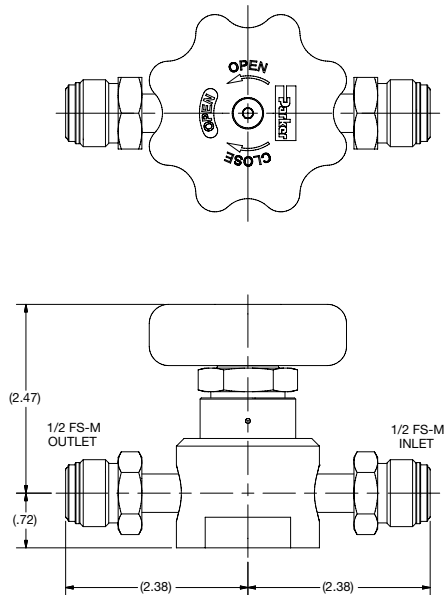


ENGINEERING YOUR SUCCESS.

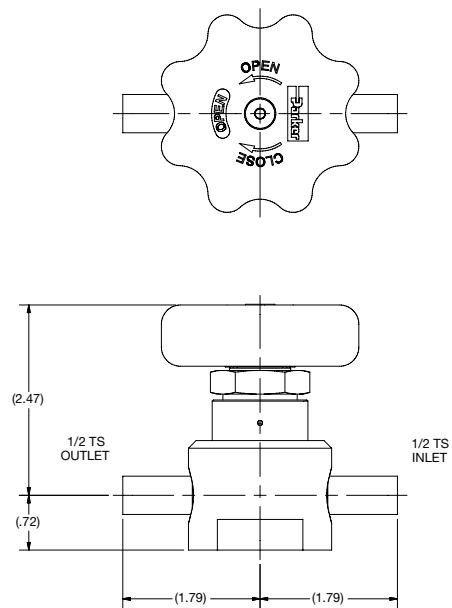
# 17R Series

## Dimensional Drawing

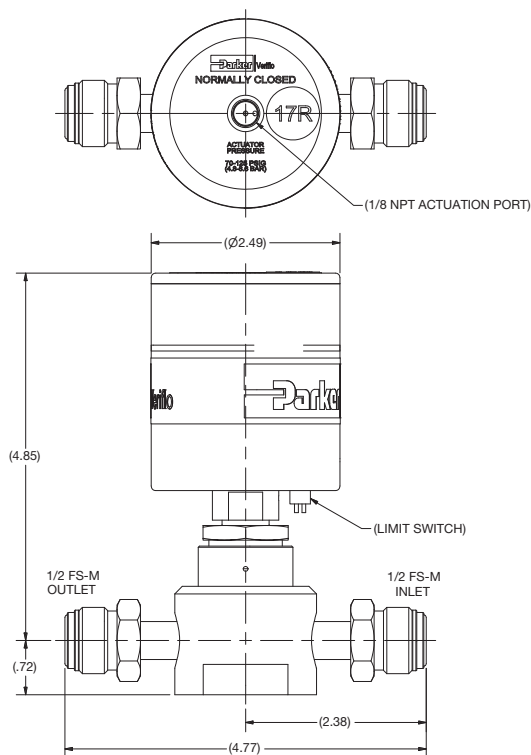
**17RI SERIES VACUSEAL™**



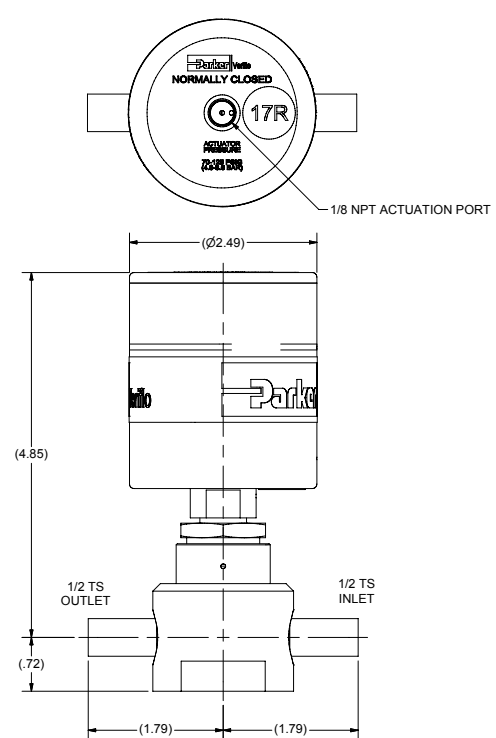
**17RI SERIES TUBE STUB**



**17R AOPNC SERIES VACUSEAL™**



**17R AOPNC SERIES TUBE STUB**



# 17R Series

## Ordering Information


Build a 17R 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](http://www.parker.com/veriflo)


Sample:  **17R**  **AOPNC**  **S**  **FS8MM** 


Finished Order: **17RAOPNC SFS8MM**

 **Basic Series**  
17R = 17R

 **Type**  
AOPNC = Air Operated,  
Normally Closed *Air*  
*Connection is 1/8" NPT*  
I = Indicating Hand  
wheel

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

 **Inlet/Outlet Connection**  
FS8MM = 1/2" Face Seal  
FS8FF = 1/2" Face Seal  
**TS6** = **3/8" Tube Stub**  
*End-to-End length: 2.74"*  
TS8 = 1/2" Tube Stub  
FS12MM = 3/4" Face Seal  
*End-to-End length: 5.79"*  
FS12FF = 3/4" Face Seal  
*End-to-End length: 5.79"*

 **Optional Features**  
This section can have multiple options  
**LSC** = **Limit Switch Closed** *Available*  
*with AOPNC option only*  
**LSO** = **Limit Switch Open** *Available*  
*with AOPNC option only*  
**PI** = **Polyimide Seat**  
**3.25** = **1/2" Fixed Male Face**  
**Seal** *Inlet/Outlet*

Additional configurations available upon request

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## Specifications

Materials of Construction	
<b>Wetted</b>	
Body	VeriClean™ 316L Stainless Steel (Electropolished)
Diaphragm	Elgiloy® or equivalent
Seat Options	PCTFE (std) or Polyimide
Lower Stem	VeriClean™ 316L Stainless Steel (Passivated)
Spring	316 Stainless Steel (Electropolished)
<b>Non-wetted</b>	
<b>Pneumatic</b>	
Actuator Housing	Aluminum
Piston	303 Stainless Steel
Bonnet	17-4 Stainless Steel
Support Diaphragm	Sliver plated Beryllium Copper/ Elgiloy® or equivalent
<b>Manual</b>	
Hand Wheel	Aluminum
Bonnet	17-4 Stainless Steel
Upper Stem	Aluminum Silicon Bronze
Screw	18-8 Stainless Steel
Support Diaphragm	Sliver plated Beryllium Copper/ Elgiloy® or equivalent
Sleeve	Nylon
<b>Limit Switch (Optional)</b>	
Type	Single Pole, Single Throw (SPST) momentary action, non-adjustable
	26 AWG wire, 7", w/o connector
Rating	
AOPNCLSC	1/4 amp at 115 vac (normally closed)
AOPNCLSO	1/2 amp at 115 vac (normally open)

Functional Performance	
<b>Flow Capacity</b>	
Manual	C <sub>V</sub> 0.8
Pneumatic	C <sub>V</sub> 0.75
<b>Leak Rate</b>	
Design Internal	< 4 X 10 <sup>-9</sup> scc/sec He Inboard Test Method
Design External	< 1 X 10 <sup>-9</sup> scc/sec He Inboard Test Method
Production Leak Test	Outboard sniffer probe at 2000-2500 psig, 20-25% Helium
<b>Surface Finish</b>	10 micro inch Ra
<b>Internal Volume</b>	11.77 cc
<b>Approx. Weight</b>	
Manual	1.85 lbs. (0.84 kgs)
Pneumatic	3.35 lbs. (1.52 kgs)
<b>Operating Conditions</b>	
Operating Pressure	
Manual, Pneumatic	Vacuum to 3,000 psig (206.8 barg)
Actuator	70 psig (4.8 barg) minimum to 125 psig (8.6 barg) maximum
Max Differential Back Pressure	200 psid (13.8 barg)
Temperature	
Manual	-40°F to 150°F (-40°C to 65°C)
Pneumatic	+15°F to 150°F (-9°C to 65°C)

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

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Vericlean™ is a trademark of Parker Hannifin Corporation

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