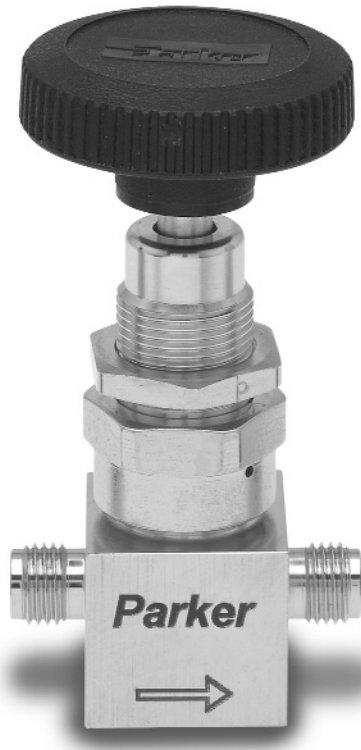




Parker Hannifin Corporation's Veriflo Division presents the P Series manual bellows valve. These valves are multi-purpose packless externally pressurized bellows valves that may be used in a wide variety of gas or liquid systems.

The P Series manual bellows valve offers clean, reliable operation at full system pressures in either flow direction.



features

- ▶ Bottom or Panel mountable.
- ▶ Minimal PCTFE to reduce outgassing and moisture absorption.
- ▶ Electropolish surface finishes available at 10 Ra; GP finishes at 20 Ra.

materials of construction

Wetted

Body 316L Stainless Steel
Bellows 321 Stainless Steel
Bellows Assembly 316L Stainless Steel
Seat PCTFE, Vespel®, Stainless Steel
Gasket Teflon® Coated Stainless Steel,
Nickel with Stainless Steel seat

Non-wetted

Handle Nylon6/6
Bonnet 316L Stainless Steel
Bonnet Nut 316L Stainless Steel

operating conditions

Pressure Rating Vacuum to
1250 psig (86.9 barg)

Temperature:

PCTFE -150°F to 300°F (-101°C to 148.9°C)
Vespel® -150°F to 400°F (-101°C to 204.4°C)
Stainless Steel -150°F to 600°F (-101°C to 316°C)

surface finishes

20 Ra for A, W or Z type connections
10 Ra Electropolished

functional performance

Flow Capacity see chart

Design Leak Rate

across the seat 4×10^{-9} cc/sec He

internal volume

0.09 in³ (1.55 cm³)

P Series Manual

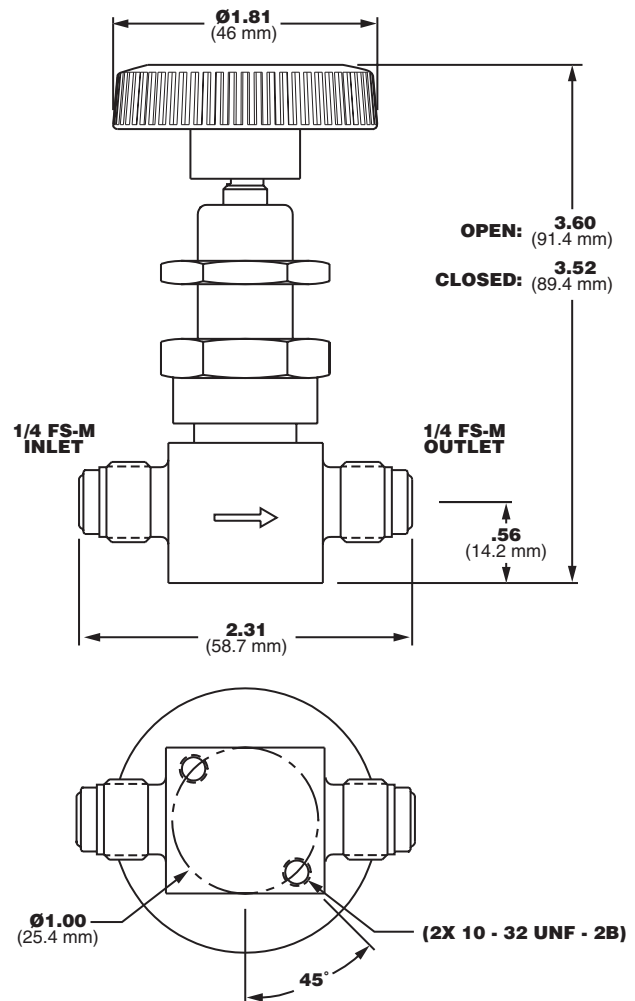
Dimensional Drawings

All Metal Stem Tips (R Stem)

Valve Series	Orifice	Maximum Flow Coefficient, C_v	Pressure Drop To Atmospher (ΔP)	Air SCFM @ 70° F (21° C)	Water GPM @ 70° F (21° C)
P4	.156	$C_v = .37$	10	5.12	1.17
P4	.156		50	14.15	2.62
P4	.156		100	25.09	3.70
P4A	.156	$C_v = .45$	10	6.23	1.42
P4A	.156		50	17.21	3.18
P4A	.156		100	20.52	4.50
P6	.281	$C_v = .73$	10	10.10	2.31
P6	.281		50	27.92	5.16
P6	.281		100	49.50	7.30
P8	.312	$C_v = .80$	10	11.07	2.53
P8	.312		50	30.60	5.66
P8	.312		100	54.25	8.00

Soft Seat Stem Tips (K & VE)

Valve Series	Orifice	Maximum Flow Coefficient, C_v	Pressure Drop To Atmospher (ΔP)	Air SCFM @ 70° F (21° C)	Water GPM @ 70° F (21° C)
P4	.156	$C_v = .38$	10	5.26	1.20
P4	.156		50	14.54	2.69
P4	.156		100	25.77	3.80
P4A	.156	$C_v = .47$	10	6.50	1.49
P4A	.156		50	17.98	3.32
P4A	.156		100	31.87	4.70
P6	.281	$C_v = .87$	10	12.04	2.75
P6	.281		50	33.28	6.15
P6	.281		100	59.00	8.70
P8	.312	$C_v = .93$	10	12.87	2.94
P8	.312		50	35.57	6.58
P8	.312		100	63.07	9.30



Ordering Information

4 V - P4 K - SSV - PE

INLET & OUTLET CONNECTION SIZE

4 = 1/4"
6 = 3/8"
8 = 1/2"

INLET & OUTLET CONNECTION TYPE

V1* = Female VacuSeal™
V* = Male VacuSeal™
VH* = Male VacuSeal™ Swivel
BW = Tube Stub
T3 = Tube Stub (3" Long)
W = Socket Weld
A = A-LOK®
Z = CPI™

SURFACE FINISH

= 20 Ra (Only Available for A, W or Z Type Connections)
PE = 10 Ra Electropolish

MATERIAL

SSV = 316L Stainless Steel VeriClean

STEM TIP MATERIAL

K = PCTFE
VE = Vespel®
R = Stainless Steel**

BASIC SERIES

P4, P6, P8 = Inline Pattern
P4A = Angle Pattern
PT4 = Toggle Inline Pattern
PT4A = Toggle Angle Pattern

* Only available in P4 and P8 versions.

** P6R & P8R standard with Tee Handle.

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CPI™ is a trademark of Parker Hannifin Corporation.