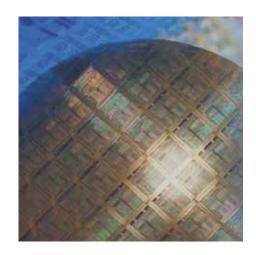
22 Series Valves

UHP Fluoropolymer Valves 1/4" and 3/8"



New! Ultra High Purity Fluoropolymer Valves

These new ultra clean valves offer increased flow and provide better seat sealing for enhanced leak-free performance and greater safety. They are designed to deliver the highest flow in the smallest package available.

CFD software was utilized to maximize the flow through these valves. The 22 Series Valve is best suited for UHP chemicals, acids, plating, and slurry chemicals.



Contact Information:

Parker Hannifin Corporation **Veriflo Division** 250 Canal Blvd Richmond, California 94804

phone 510 235 9590 fax 510 232 7396 veriflo.sales@parker.com

www.parker.com/veriflo Mobile App: m.parker.com/veriflo

Product Features:

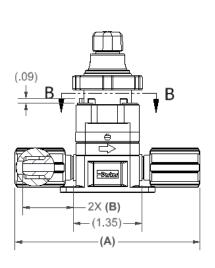
- Delivers high cycle life in acids and slurry with reduced maintenance
- Compact footprint
- Manual valve comes with a true lock-out, tag-out design
- Optimized slurry design for maximimum cycle life
- Dual point seal for slurry (patent pending)

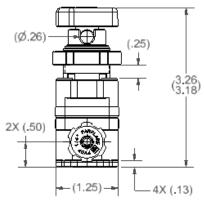
- Smooth bore, and fully swept path minimize particle entrapment areas
- High flow in small package
- 100% leak tested
- Meets SEMI-F57-0301 standards

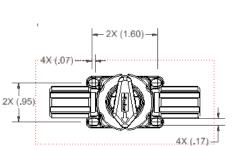


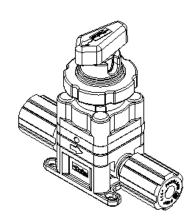
22 Series Valves 1/4" and 3/8"

Dimensional Drawings

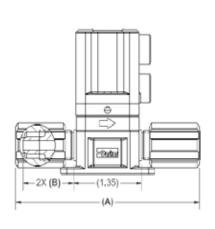


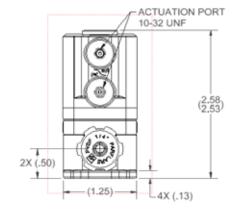


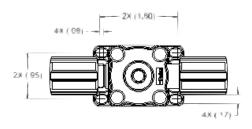


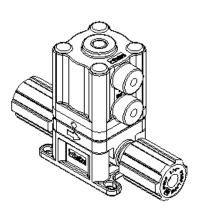


| Connection | Α | В |
|------------|------|------|
| 1/4" Flare | 3.65 | 1.00 |
| 3/8" Flare | 3.81 | 1.08 |









22 Series Valves 1/4" and 3/8"

Ordering Information

Build a 22 Series valve by replacing the numbered symbols with an option from the corresponding tables below.

Sample:

N

04

PFA

Specials

NPN Sensor PNP Sensor

*Panel mount nut sold separately PN-2204 = 1/4" 22 panel mount nut

= Pneumatic valve MV22 = Manual valve

Valve Size = 1/4"

Valve Trim Material

= PVDF PolyVinylidene-Fluoride

Valve Housing Actuator Style

Standard,

specific to each valve size

Pipe 1/8-27 FNPT,

specific to each valve size

Valve Style

2-way manual valve Normally Closed

Normally Open

Inlet End Style

Inlet End Size

3/8"

Outlet End Style

Parflare

Outlet End Size

Outlet End Nominal Valve Trim **Actuator** Valve **Inlet End Outlet End Part Number Inlet Size Nut Type Valve Size** Material Connection Style Style Type Size Normally 1/4" **PVDF** 1/4" 1/4" PV2204VN1FL04FL04T 10-32 Flare Flare PFA Closed Normally PV2204VN1FL04FL04V 1/4" PVDF 10-32 Flare 1/4" Flare 1/4" **PVDF** Closed Normally PV2204VN1FL06FL06T 1/4" **PVDF** 10-32 Flare 3/8" Flare 3/8" PFA Closed Normally 1/4" **PVDF** 3/8" 3/8" **PVDF** PV2204VN1FL06FL06V 10-32 Flare Flare Closed Normally PV2204VN2FL04FL04T 1/4" **PVDF** 10-32 Flare 1/4" 1/4" PFA Flare Open Normally PV2204VN2FL04FL04V 1/4" **PVDF** 10-32 Flare 1/4" Flare 1/4" **PVDF** Open Normally 1/4" PVDF 10-32 Flare 3/8" 3/8" PFA PV2204VN2FL06FL06T Flare Open Normally PV2204VN2FL06FL06V 1/4" PVDF 10-32 Flare 3/8" Flare 3/8" **PVDF** Open

22 Series Valves 1/4" and 3/8"

Specifications

| Materials of Construction | | |
|--|----------------------------|--|
| Wetted | | |
| Body | PFA | |
| Diaphragm | Modified PTFE | |
| Non-wetted | | |
| Housing, Lever | PVDF | |
| Spring | SS, Fluorpolymer coated | |
| Screws | SS | |
| Operating Conditions (Operating limits based upon pressure applied at inlet port.) | | |
| Maximum Pressure | 80 psig | |
| Minimum Pressure | Vacuum | |
| Actuation Pressure | 60 to 100 psig | |
| Media Temperature | 0° to100°C/32° to 212°F | |
| Storage Temperature | -40° to 65°C/-40° to 150°F | |
| Environment Temp | 0°F to 120 °F | |

| Functional Performance | | |
|------------------------|---------------------------|--|
| Proof Pressure | 120 psig | |
| Burst Pressure | 200 psig | |
| Flow Capacity | | |
| 1/4" Flare | 0.33 | |
| 3/8" Flare | 0.82 | |
| Leak Rate | | |
| Internal | No bubbles 30 sec, N2 gas | |
| External | Bubble tight | |

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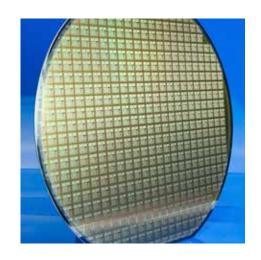
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Part Number: 25000323 Description: 22 SERIES LITERATURE 6/16



22 Series Valves

UHP Fluoropolymer Valves 1/2" and 3/4"



New! Ultra High Purity Fluoropolymer Valves

These new ultra clean valves offer increased flow and provide better seat sealing for enhanced leak-free performance and greater safety. They are designed to deliver the highest flow in the smallest package available.

CFD software was utilized to maximize the flow through these valves. The 22 Series Valve is best suited for UHP chemicals, acids, plating, and slurry chemicals.



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Product Features:

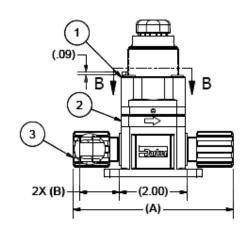
- Delivers high cycle life in acids and slurry with reduced maintenance
- Compact footprint
- Manual valve comes with a true lock-out, tag-out design
- Optimized slurry design for maximimum cycle life
- Dual point seal for slurry (patent pending)

- Smooth bore, and fully swept path minimize particle entrapment areas
- High flow in small package
- 100% leak tested
- Meets SEMI-F57-0301 standards

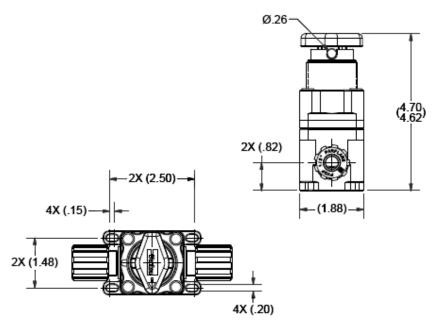


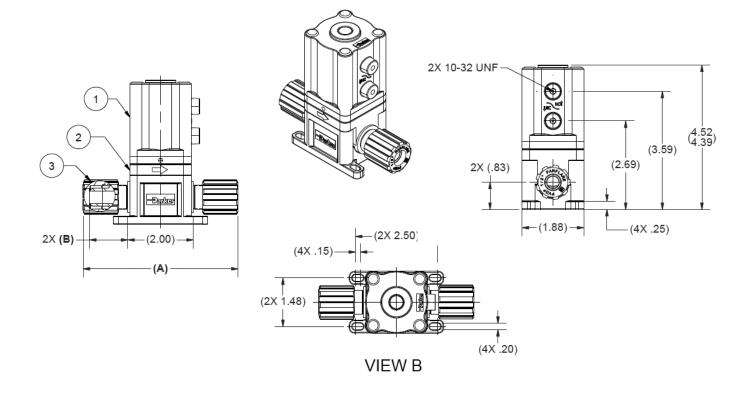
22 Series Valves 1/2" and 3/4"

Dimensional Drawings



| Connection | Α | В |
|------------|------|------|
| 1/2" Flare | 4.72 | 1.17 |
| 3/4" Flare | 4.9 | 1.08 |





22 Series Valves 1/2" and 3/4"

Ordering Information

Build a 22 Series valve by replacing the numbered symbols with an option from the corresponding tables below.

1 2 3 4 5 6 7 8 9 10 11 PV22 08 V N I FL 08 FL 08 V

 $\left\langle \frac{1}{2} \right\rangle$ Base Model

Sample:

PV22 = Pneumatic valve MV22 = Manual valve

 $\left\langle \frac{2}{08} \right\rangle$ Valve Size

✓ Valve Trim Material

V = PVDF PolyVinylidene-Fluoride

Valve Housing Actuator Style

N = Standard, specific to each valve size P = Pipe 1/8-27 FNPT,

specific to each valve size

Valve Style

0 = 2-way manual valve 1 = Normally Closed 2 = Normally Open 6 Inlet End Style

FL = Parflare

7 Inlet End Size

 $\stackrel{\textstyle \langle 8 \rangle}{}$ Outlet End Style

9 Outlet End Size

10 Nut Type

V = PVDF T = PFA

11 Specials

*Panel mount nut sold separately PN-2208 = 1/2" 22 series panel mount nut

| Part Number | Nominal Valve Size | Valve Trim Material | Actuator Connection | Valve Type | Inlet End Style | Inlet Size | Outlet End Style | Outlet End Size | Nut Type |
|--------------------|-----------------------|------------------------|------------------------|--------------------|--------------------|------------|---------------------|--------------------|----------|
| PV2208VN1FL08FL08T | 1/2" | PVDF | 10-32 | Normally Closed | Flare | 1/2" | Flare | 1/2" | PFA |
| PV2208VN1FL08FL08V | 1/2" | PVDF | 10-32 | Normally Closed | Flare | 1/2" | Flare | 1/2" | PVDF |
| PV2208VN1FL12FL12T | 1/2" | PVDF | 10-32 | Normally Closed | Flare | 3/4" | Flare | 3/4" | PFA |
| PV2208VN1FL12FL12V | 1/2" | PVDF | 10-32 | Normally Closed | Flare | 3/4" | Flare | 3/4" | PVDF |
| PV2208VN2FL08FL08T | 1/2" | PVDF | 10-32 | Normally Open | Flare | 1/2" | Flare | 1/2" | PFA |
| PV2208VN2FL08FL08V | 1/2" | PVDF | 10-32 | Normally Open | Flare | 1/2" | Flare | 1/2" | PVDF |
| PV2208VN2FL12FL12T | 1/2" | PVDF | 10-32 | Normally Open | Flare | 3/4" | Flare | 3/4" | PFA |
| PV2208VN2FL12FL06V | 1/2" | PVDF | 10-32 | Normally Open | Flare | 3/4" | Flare | 3/4" | PVDF |

22 Series Valves 1/2" and 3/4"

Specifications

| Materials of Construction | | |
|---|---------------------------|--|
| Wetted | | |
| Body | PFA | |
| Diaphragm | Modified PTFE | |
| Non-wetted | | |
| Housing, Lever | PVDF | |
| Spring | SS, Fluorpolymer coated | |
| Screws | SS | |
| Operating Conditions | | |
| (Operating limits based upon pressure applied at inlet port.) | | |
| Maximum Pressure | 80 psig | |
| Minimum Pressure | Vacuum | |
| Actuation Pressure | 60 to100 psig | |
| Media Temperature | 0° to100°C/32° to 212°F | |
| Storage Temperature | -40° to 65°C/-40° to150°F | |
| Environment Temp | 0°F to 120 °F | |

| Functional Performance | | |
|------------------------|---------------------------|--|
| Proof Pressure | 120 psig | |
| Burst Pressure | 200 psig | |
| Flow Capacity | | |
| 1/2" Flare | 2.3 | |
| 3/4" Flare | 4.3 | |
| Leak Rate | | |
| Internal | No bubbles 30 sec, N2 gas | |
| External | Bubble tight | |

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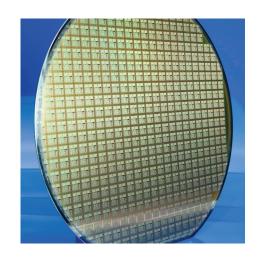
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Part Number: 25000323 Description: 22 SERIES LITERATURE 6/16



22 Series Valves

UHP Fluoropolymer Valves 1" and 1-1/4"



New! Ultra High Purity 22 Series Valves

These new ultra clean manual and pneumatic valves offer increased flow and provide better seat sealing for enhanced leak-free performance and greater safety. They are designed to deliver the highest flow in the smallest package available.

Computational Fluid Dynamics software was utilized to maximize the flow through these valves. The 22 Series Valve is best suited for UHP chemicals, acids, plating, and slurry.



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Product Features:

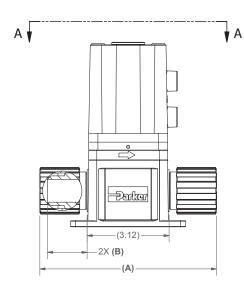
- Delivers high cycle life in acids and slurry with reduced maintenance
- Compact footprint with a true lock-out, tag-out design
- Optimized slurry design for maximum cycle life
- Dual point seal for slurry (patent pending)

- Smooth bore, and fully swept path minimize particle entrapment areas
- High flow in small package
- 100% leak tested
- Meets SEMI-F57-0301 standards

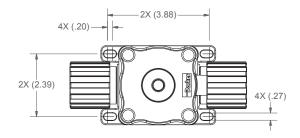


22 Series Valves 1" and 1-1/4"

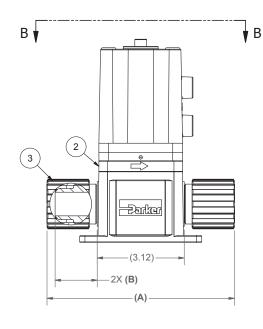
Dimensional Drawings

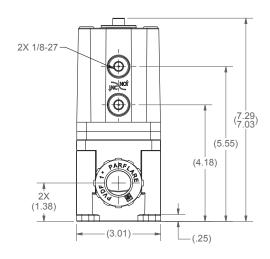


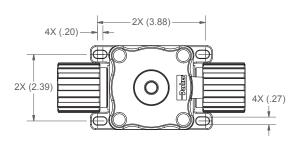
| 2X 1/8-27 | | (7.29) |
|-----------|--------|------------------------------|
| 2X (1.38) | (3.01) | (4.18) (4.18) 4X (.25) |



| Connection | Α | В |
|--------------|------|------|
| 1" Flare | 6.72 | 1.51 |
| 1 1/4" Flare | 7.44 | 1.87 |
| 1" S300 | 6.50 | 1.06 |
| 1 1/4" S300 | 8.02 | 1.50 |







22 Series Valves 1" and 1-1/4"

Ordering Information

Build a 22 Series valve by replacing the numbered symbols with an option from the corresponding tables below.

1 2 3 4 5 6 7 8 9 10 PV22 16 V P 1 FL 16 FL 16 V

Finished: PV2216VP1FL16FL16V

1 Base Model

Sample:

PV22 = Pneumatic valve MV22 = Manual valve

Valve Size 16 = 1"

(3) Valve Trim Material

/ = PVDF PolyVinylidene-Fluoride

 \langle 4 \rangle Valve Housing Actuator Style

P = Pipe 1/8-27 FNPT T = Multi-turn

S = Multi-turn panel nut

 $\overline{5}$ Valve Style

0 = 2-way manual valve 1 = Normally Closed 2 = Normally Open

6 Inlet End Style

B = Fusebond FL = Parflare SP = S300

7 Inlet End Size

16 = 1" 20 = 1-1/4" \langle 8 \rangle Outlet End Style

B = Fusebond FL = Parflare SP = S300

9 Outlet End Size

16 = 1" 20 = 1-1/4"

10 Nut Material

V = PVDFT = PFA

C = Clicker ring only for S300

S = S300

22 Series Valves 1" and 1-1/4"

Specifications

| Materials of Construction | | |
|---|-------------------------------------|--|
| Wetted | | |
| Body | PFA | |
| Diaphragm | Modified PTFE | |
| Non-wetted | | |
| Housing, Lever | PVDF | |
| Spring | SS, Fluoropolymer coated | |
| Screws | SS | |
| Operating Conditions | | |
| (Operating limits based upon pressure applied at inlet port.) | | |
| Maximum Pressure | 100 psig forward / 80 psig backward | |
| Minimum Pressure | Vacuum | |
| Actuation Pressure | 60 to 100 psig | |
| Media Temperature | 0° to 100°C/32° to 212°F | |
| Storage Temperature | -40° to 65°C/-40° to 150°F | |
| Environment Temp | 0°F to 120°F | |

| Functional Performance | | |
|------------------------|---------------------------------------|--|
| Proof Pressure | 120 psig | |
| Burst Pressure | 200 psig | |
| Flow Capacity | | |
| 1" Flare | 11.8 | |
| 1-1/4" Flare | 12.9 | |
| Leak Rate | | |
| Internal | No bubbles 30 sec, N ₂ gas | |
| External | Bubble tight | |

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