



# Sanitary Stainless Valves & Flow Components

Catalog 4270-VFC

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Instrumentation Products Division  
Huntsville, AL USA  
<http://www.parker.com/ipdus>

**Sanitary Stainless Valves & Flow Components**

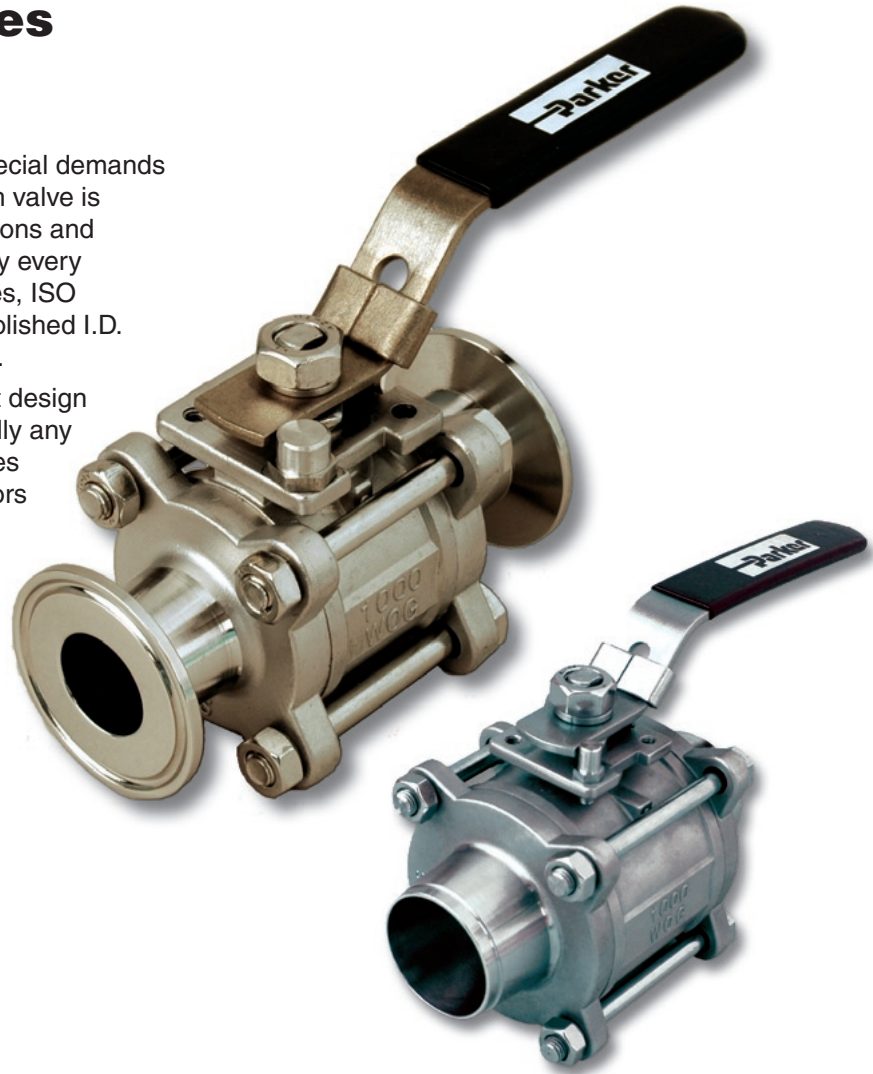
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## Sanitary Ball Valves

### Description

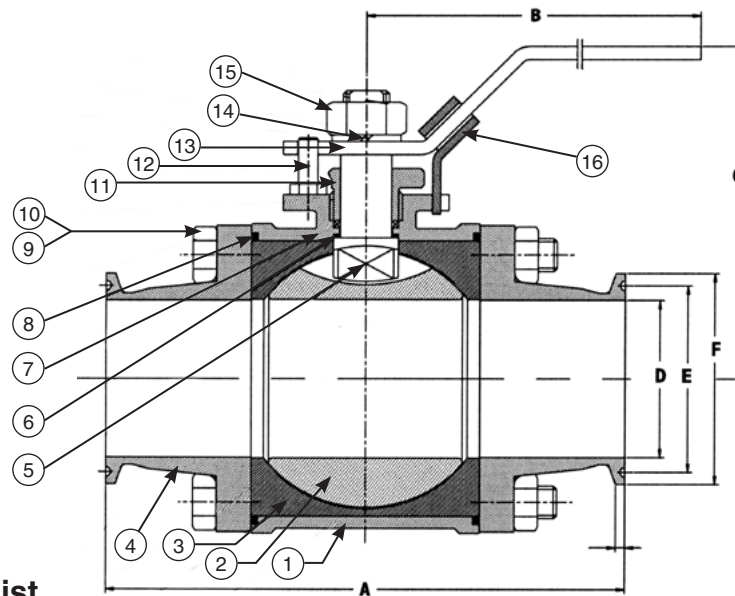
Parker Sanitary Ball Valves meet the special demands of the sanitary processing industry. Each valve is built to precise manufacturing specifications and is designed to perform reliably in virtually every processing environment. Locking handles, ISO mounting pad, PTFE cavity fillers and polished I.D. finishes are just a few standard features.

Parker 3-piece Ball Valves are a full-port design which allows unobstructed flow of virtually any fluid media through the valve body. Valves can be matched with a variety of actuators to accurately control the flow of product (see valve actuation).



### Technical Features

<b>Material and Elastomers</b>	316 stainless steel (wetted parts), PTFE cavity filler
<b>Available Sizes</b>	.50", .75", 1.0", 1.5", 2.0", 2.5", 3.0" and 4.0"
<b>Surface Finish</b>	32 RA mechanical sanitary polish – I.D.
<b>Connections</b>	Sanitary clamp and butt weld
<b>Actuation</b>	Standard ISO5211 mounting pad allows for easy actuation
<b>Maximum Pressure</b>	1,000 PSI (69 bar) (W.O.G.) at 70°F (21°C) (sizes 1/2" - 2") 800 PSI (55 bar) (W.O.G.) at 70°F (21°C) (sizes 2-1/2" - 4")
<b>Maintenance</b>	Valve can remain connected in-line while servicing. No special tools required
<b>Other Features</b>	USDA approved design, lockable handle, double PTFE stem packing



### Material List

No.	Part Number	Description	Qty.	Material
1	SGQF-3WH-01	Valve Body	1	316
2	SGQF-3WH-01	Ball	1	316
3	SGQF-3WH-03	Seat	2	PTFE
4	SGQF-3WH-04	End Cap	2	316
5	SGQF-3WH-05	Stem	1	316
6	SGQF-3WH-06	Thrust Washer	1	PTFE
7	SGQF-3WH-07	Stem Packing	2	PTFE
8	SGQF-3WH-08	Gasket	2	PTFE
9	GB/T 5782-2000	Bolt	4	OG17Ni9Ti
10	GB/T 6170-2000	Hex Nut	4	OG17Ni9Ti
11	SGQF-3WH-09	Packing Gland	1	316
12	SGQF-3WH-10	Stop Pin	1	316
13	SGQF-3WH-11	Handle	1	OG17Ni9Ti
14		Spring Washer	1	1Cr18Ni9Ti
15	GB/T 6170-2000	Hex Nut	1	OG17Ni9Ti
16	SGQF-3WH-12	Locking Block	1	OG17Ni9Ti

### Ball Valve: Clamp Dimensions

Size	Part No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
.50	BVCF-.50-316	88	100	56	9.4	21.8	25.2
.75	BVCF-.75-316	103	132	63	15.8	21.8	25.2
1.0	BVCF-1.0-316	114	132	62	22.1	25.4	50.4
1.5	BVCF-1.5-316	138	175	98	34.8	38.1	50.4
2.0	BVCF-2.0-316	158	175	130.9	47.5	50.8	63.9
2.5	BVCF-2.5-316	197	235	141	60.2	63.5	77.5
3.0	BVCF-3.0-316	228	255	154.9	72.9	76.2	90.9
4.0	BVCF-4.0-316	242	255	175	97.4	101.6	118.9

For butt weld ends add "-W". Example: BCVF-1.0-W-316

## Sanitary Butterfly Valves

### Description

Parker Sanitary Butterfly Valves are designed and manufactured to perform reliably in the most hostile production environments. Each valve is meticulously constructed using the finest materials.

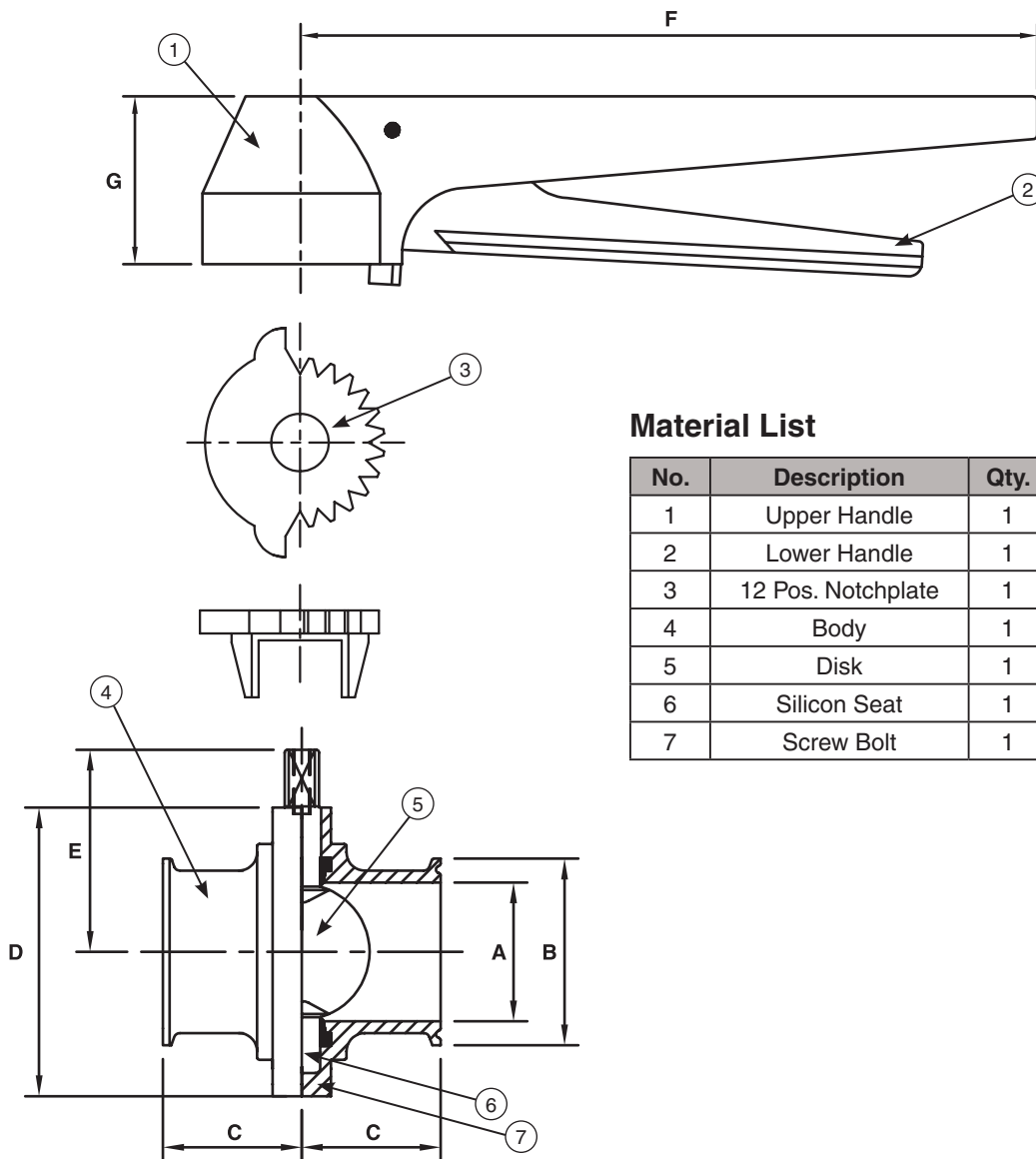
Valves come standard with a 12 position handle design for multiple flow options and feature specially designed integrated actuator mounting holes to precision align optional actuators.

Valves are precision CNC machined from 316L stainless steel and feature an I.D. finish of less than 0.6mm R.A. Body bolts are crossthreaded to help ensure a tight seal.



### Technical Features

<b>Material and Elastomers</b>	316L stainless steel (wetted parts), platinum cured silicon seats (others available)
<b>Available Sizes</b>	.50", .75", 1.0", 1.5", 2.0", 2.5", 3.0", and 4.0"
<b>Surface Finish</b>	Less than 0.6mm (RA) mechanical sanitary polish
<b>Connections</b>	Sanitary clamp and butt weld
<b>Actuation</b>	Integrated mounting slots accept a variety of Parker actuators
<b>Maximum Pressure</b>	1.0" – 4.0" to 145 PSI (10 bar) at 68°F (20°C)
<b>Maintenance</b>	No special tools required
<b>Temperature/Vacuum</b>	Vacuum to 14.2 PSI (1 bar) at 68°F (20°C), temperature rating: 15°F to 200°F (10°C to 95°C)
<b>Other Features</b>	USDA approved design, 12 position nylon reinforced handle, Derlin bushings



### Material List

No.	Description	Qty.	Material
1	Upper Handle	1	Reinforced Nylon
2	Lower Handle	1	Stainless Steel
3	12 Pos. Notchplate	1	Stainless Steel
4	Body	1	316L Stainless Steel
5	Disk	1	316L Stainless Steel
6	Silicon Seat	1	Silicone
7	Screw Bolt	1	Stainless Steel

### Dimensions

Size	Part No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Torque
1.0	BFLY-1.0-12-S-316	22.1	50.5	44.5	79	61	167	38	<1m/kg
1.5	BFLY-1.5-12-S-316	34.8	50.5	44.5	85	64.3	167	38	<1m/kg
2.0	BFLY-2.0-12-S-316	47.5	64.0	47.6	105	74.3	167	38	1.3m/kg
2.5	BFLY-2.5-12-S-316	60.2	77.5	48.4	112	77.6	167	38	1.5m/kg
3.0	BFLY-3.0-12-S-316	72.2	91.0	51.5	125	84.3	167	38	2.0m/kg
4.0	BFLY-4.0-12-S-316	97.6	119.0	51.5	157	101.6	167	38	3.1m/kg

For butt weld ends add "-W". Example: BFLY-1.0-12-S-W-316

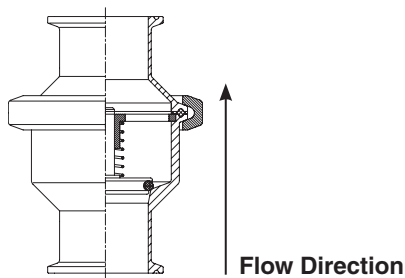
## Sanitary Check Valves

### Description

Parker Sanitary Check Valves are utilized within processing systems to avoid product return. The disk opens when the pressure under the disc is greater than that existing in the upper part of the valve. The valve closes when the pressures are balanced. A greater counter pressure will allow the valve to close.

These valves are made from high-grade 316L heat traceable stainless steel. When properly installed, these valves are fully drainable and meet 3A standards. Valves can be easily disassembled and re-assembled for cleaning or maintenance.

Standard configuration is sanitary clamp with EPDM seal and 32 RA sanitary polish. Weld and threaded versions are available upon special request.

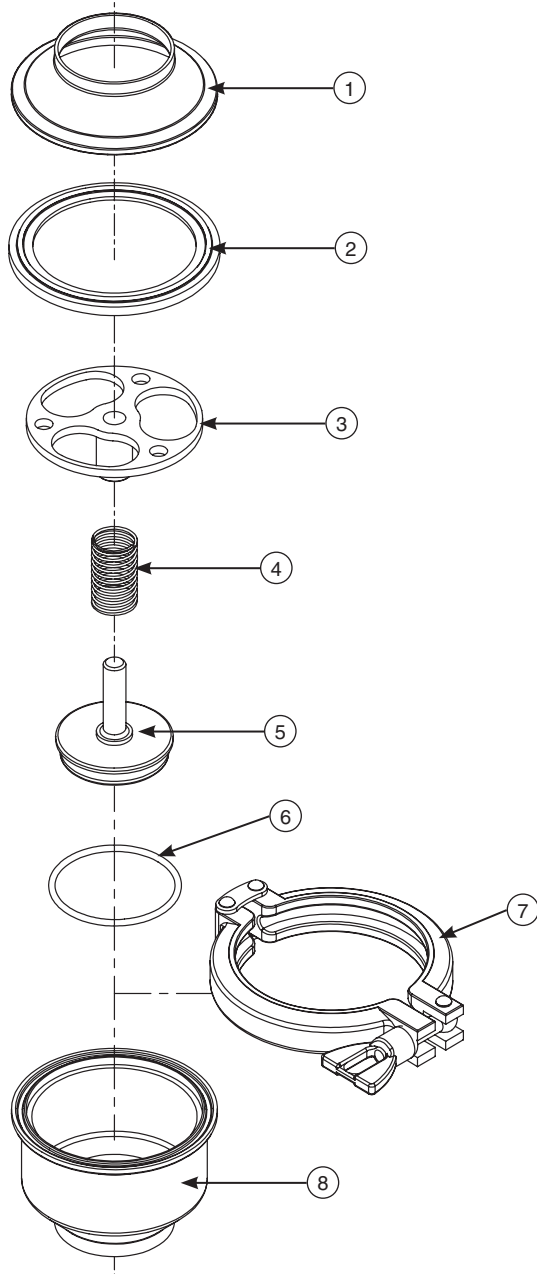


### Technical Features

<b>Material and Elastomers</b>	316L Stainless steel (construction from forged parts)		
<b>Seal Material</b>	EPDM (other materials on demand)		
<b>Surface Finish</b>	32 RA Mechanical Sanitary Polish		
<b>Connections</b>	Sanitary Clamp (standard)		
<b>Working Temperature</b>	Maximum: 250°F (121°C). (EPDM) For higher temperatures other seals will be required		
<b>Maximum Pressure</b>	145 PSI (10 bar)		
<b>Opening Pressure</b>	1.0" 4.35 PSI (0.3 bar)	1.5" 2.9 PSI (0.2 bar)	2.0"/4.0" 1.45 PSI (0.1 bar)



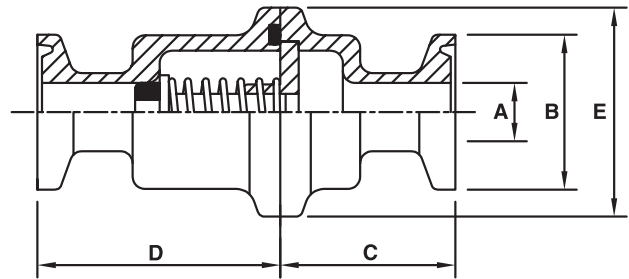
## Exploded View



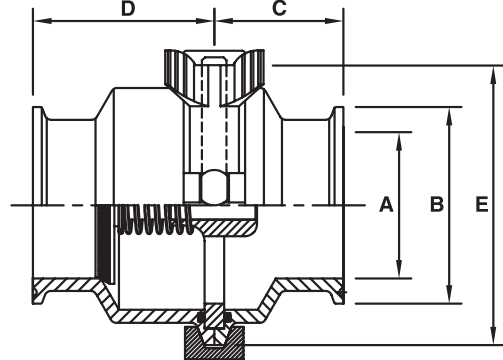
No.	Description
1	Upper Body
2	Body Gasket (EPDM Standard)
3	Guide Plate
4	Spring
5	Stem
6	O-Ring (EPDM Standard)
7	Clamp
8	Lower Body

## Dimensions

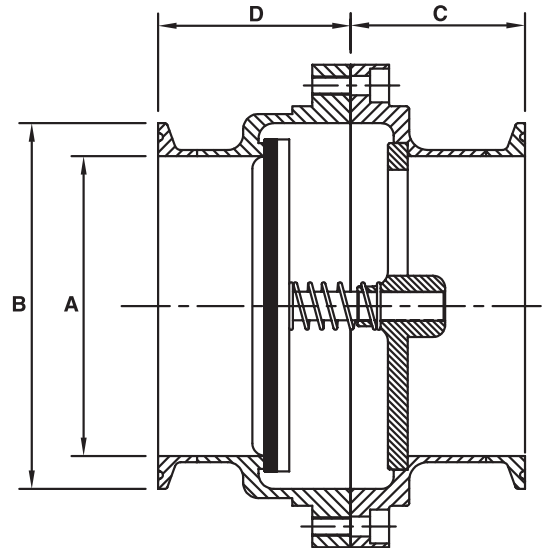
### 1/2" – 3/4" Check Valve



### 1.0" – 3.0" Check Valve



### 4.0" Check Valve



## Dimensions

Size	Part No.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
0.5	PDCV-.50-C-316L-E	9.5	25.2	28.5	39.5	50.5
0.75	PDCV-.75-C-316L-E	15.9	25.2	42.0	59.0	77.5
1.0	PDCV-1.0-C-316L-E	22.2	50.5	42.0	59.0	64.0
1.5	PDCV-1.5-C-316L-E	34.9	50.5	42.0	59.0	77.5
2.0	PDCV-2.0-C-316L-E	47.6	64.0	42.0	59.0	91.0
2.5	PDCV-2.5-C-316L-E	60.3	77.5	42.0	59.0	106.0
3.0	PDCV-3.0-C-316L-E	73.0	91.0	50.8	89.8	119.0
4.0	PDCV-4.0-C-316L-E	97.6	119.0	56.7	62.6	–

## In-Line Sight Glasses

### Description

Parker In-Line Sight Glasses offer processors the ability to easily and safely monitor product flow. Sight Glasses are designed for use in a wide variety of applications, and are manufactured from the finest grade 316L material and polished to a sanitary finish.

Sight Glasses are available in sizes from .50" to 4.0", and can be used in CIP and other harsh processing environments.

Our special compact fractional versions are available in exotic alloys and a variety of surface finishes, including electropolishing.

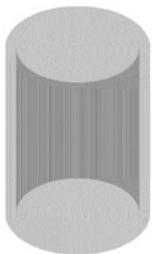


### Technical Features

<b>Material</b>	316L stainless steel
<b>Available Sizes</b>	.50", .75", 1.0", 1.5", 2.0", 2.5", 3.0", and 4.0"
<b>Seal Material</b>	Silicone (others available)
<b>Surface Finish</b>	32 RA (special finishes upon request)
<b>Working Temperature</b>	20°F to 240°F (-7°C to 116°C)
<b>Glass Material</b>	Pyrex (Polysulfone for fractional sizes only)

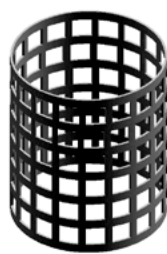
### Accessories/Replacement Parts

#### Replacement Glass



Part #: PRSG-(Size)

#### Safety Screen



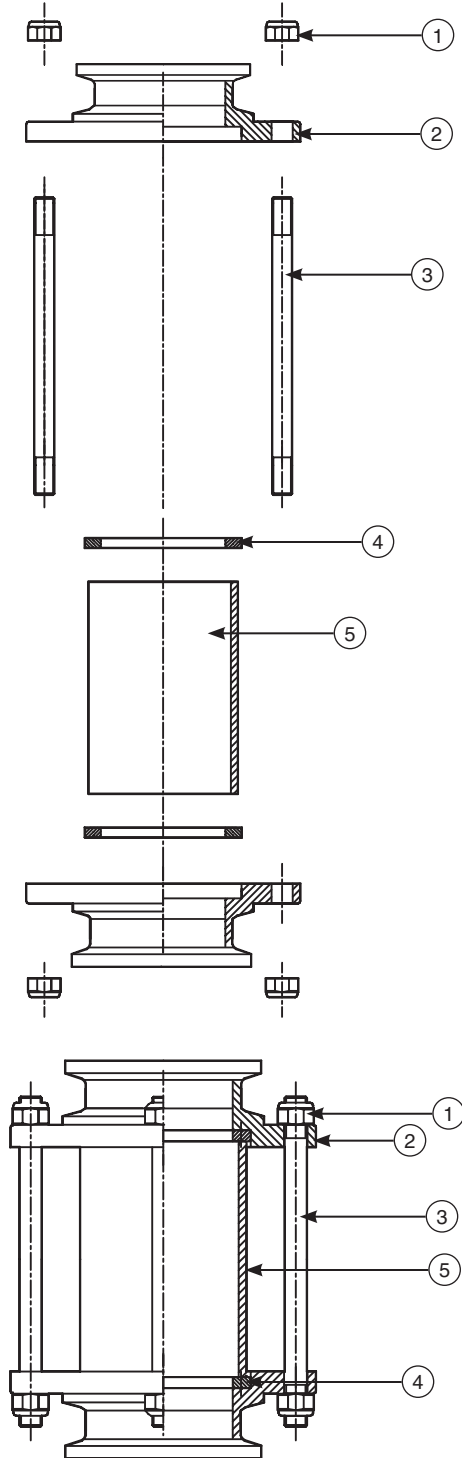
Part #: PSGSC-(Size)

#### Silicone Seal (2)



Part #: PSGS-(Size)

## Exploded View

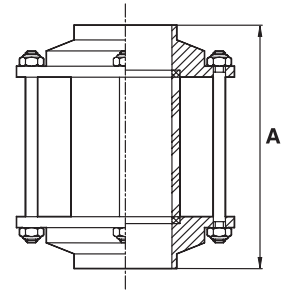


No.	Description	Material	Qty
1	Self Locking Nuts	A2	8
2	Lateral	AISI-316	2
3	Pin	AISI-304	4
4	Seal	Silicone	2
5	Body	Pyrex	1

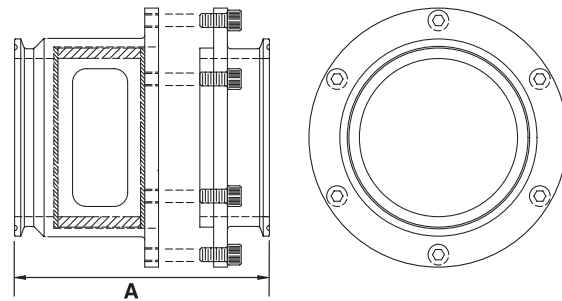
## Dimensions

### In-Line Sight Glass – Clamp

Size	Part No.	A (in.)
1.0	PSG-1.0-C-316L	4-9/16
1.5	PSG-1.5-C-316L	5-9/32
2.0	PSG-2.0-C-316L	5-7/8
2.5	PSG-2.5-C-316L	6-19/64
3.0	PSG-3.0-C-316L	6-19/64
4.0	PSG-4.0-C-316L	8-45/64



### Compact Flange Style Sight Glass – Clamp



Size	Part No.	A-Weld (in.)	A-Clamp (in.)	Pyrex Glass Max PSI	Max PSI
.50	PCSG-.50-C-316L	3.0	4.5	378	1740
.75	PCSG-.75-C-316L	3.0	4.5	325	524
1.0	PCSG-1.0-C-316L	3-5/8	5-1/8	215	557
1.5	PCSG-1.5-C-316L	3-5/8	5-1/8	150	354
2.0	PCSG-2.0-C-316L	3-5/8	5-1/8	130	259
2.5	PCSG-2.5-C-316L	3-5/8		100	204
3.0	PCSG-3.0-C-316L	3-5/8		95	169
4.0	PCSG-4.0-C-316L	3-5/8		60	NA

Parker offers a variety of actuation options for use with our sanitary processing valves. Products include pneumatic actuators, electric actuators and a wide range of control accessories. Product development is based on modular construction that allows for fast delivery from stock components and easy upgrade to fully-fledged control units.

**For Ordering Information:** Call your local Parker distributor or Instrumentation Sales at (256) 881-2040.



## Pneumatic Actuators



Pneumatic actuators come in two versions: double acting and single acting (spring return). Both versions are designed in such a way that (with the exception of the position indicator) there are no moving parts on the outside. This makes them safe, easy to install and virtually maintenance free. Furthermore, the compact rack and pinion construction means that actuators are lightweight and occupy a minimum of space.

### Features & Specifications

- For use with ball and butterfly valves.
- Actuators are made of high duty aluminium alloys, providing optimum strength and corrosion resistance.
- Mounting for solenoid valves and position signalers to the NAMUR standard (VDI/VDE 3845).
- Mounting standard (ISO 5211), Drive dimensions (DIN 3337).
- Drive shaft can be provided with insert for low cost, versatile direct valve mountings.
- Anti-blow-out shaft.

## Electric Actuators



The basic version of the Electric Actuator is intended for simple open/close applications. For more sophisticated applications, a variety of options provides the solution. These include positioner servo boards, output transmitters, LCD displays and local/remote control stations. The unit is also available in explosion proof housings for hazardous areas and is also available with DC motors.

### Features & Specifications

- Low power consumption.
- Torque ranges to 26,000 inch pounds.
- Hard anodized powder coated housing for atmospheric corrosion protection.
- Manual overrides standard on all models. All models except the smallest have pad lockable override systems.
- Heater and thermostat standard for humid environments.
- Mechanical torque sensing for overload conditions.
- Large dial indicator for greater visibility.
- Removable drive bushing for custom machining.

## Stainless Steel Actuators



Stainless steel spring return actuators that can be mounted in the fail open or fail closed position. The actuators are suitable for wash-down areas. The housing is 316 SS and can be ordered with or without internal controls. Control options includes an integral pilot solenoid valve and two limit switches. Both switches and solenoid are pre-wired to an internal terminal. Two additional limit switches are an available option. For use on all butterfly valves and ball valves up to 1.5".

### Features & Specifications

- Easily mounts to ball or butterfly valves.
- Suitable for wash-down applications.
- All 316 SS construction.
- Easy thumb screw access to controls.
- Compact spring return design.
- Optional proximity sensors.
- Optional internal pilot solenoid.

## Optional Accessories

Actuators can be provided with controls or communication with field buses or other digital systems. Optional accessories include switch boxes for position indication, solenoid valves for control signalling and positioners for modulating control.

- Solenoid Valves
- Limit Switches
- Lock-Out Devices
- Position Indicators
- Positioners
- Position transmitters



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**2. Payment:** Payment shall be made by Buyer net 30 days from the date of delivery of the items purchased hereunder. Amounts not timely paid shall bear interest at the maximum rate permitted by law for each month or portion thereof that the Buyer is late in making payment. Any claims by Buyer for omissions or shortages in a shipment shall be waived unless Seller receives notice thereof within 30 days after Buyer's receipt of the shipment.

**3. Delivery:** Unless otherwise provided on the face hereof, delivery shall be made F.O.B. Seller's plant. Regardless of the method of delivery, however, risk of loss shall pass to Buyer upon Seller's delivery to a carrier. Any delivery dates shown are approximate only and Seller shall have no liability for any delays in delivery.

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**7. Special Tooling:** A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and not withstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

**8. Buyer's Property:** Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property, Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

**9. Taxes:** Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

**10. Indemnity For Infringement of Intellectual Property Rights:** Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. Patents, U.S. Trademarks, copyrights, trade dress and trade secrets (hereinafter 'Intellectual Property Rights'). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgments resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

**11. Force Majeure:** Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter 'Events of Force Majeure'). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.

**12. Entire Agreement/Governing Law:** The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain thereto. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of the sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.

11/98-P



# Parker's Motion & Control Technologies

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 1-800-C-Parker.



## AEROSPACE

### Key Markets

- Aircraft engines
- Business & general aviation
- Commercial transports
- Land-based weapons systems
- Military aircraft
- Missiles & launch vehicles
- Regional transports
- Unmanned aerial vehicles

### Key Products

- Flight control systems & components
- Fluid conveyance systems
- Fluid metering delivery & atomization devices
- Fuel systems & components
- Hydraulic systems & components
- Inert nitrogen generating systems
- Pneumatic systems & components
- Wheels & brakes



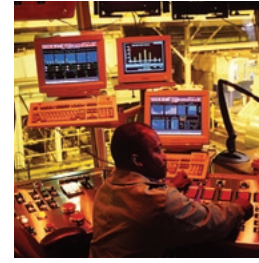
## CLIMATE CONTROL

### Key Markets

- Agriculture
- Air conditioning
- Food, beverage & dairy
- Life sciences & medical
- Precision cooling
- Processing
- Transportation

### Key Products

- CO<sub>2</sub> controls
- Electronic controllers
- Filter driers
- Hand shut-off valves
- Hose & fittings
- Pressure regulating valves
- Refrigerant distributors
- Safety relief valves
- Solenoid valves
- Thermostatic expansion valves



## ELECTROMECHANICAL

### Key Markets

- Aerospace
- Factory automation
- Life science & medical
- Machine tools
- Packaging machinery
- Paper machinery
- Plastics machinery & converting
- Primary metals
- Semiconductor & electronics
- Textile
- Wire & cable

### Key Products

- AC/DC drives & systems
- Electric actuators, gantry robots & slides
- Electrohydraulic actuation systems
- Electromechanical actuation systems
- Human machine interface
- Linear motors
- Stepper motors, servo motors, drives & controls
- Structural extrusions



## FILTRATION

### Key Markets

- Food & beverage
- Industrial machinery
- Life sciences
- Marine
- Mobile equipment
- Oil & gas
- Power generation
- Process
- Transportation

### Key Products

- Analytical gas generators
- Compressed air & gas filters
- Condition monitoring
- Engine air, fuel & oil filtration & systems
- Hydraulic, lubrication & coolant filters
- Process, chemical, water & microfiltration filters
- Nitrogen, hydrogen & zero air generators



## FLUID & GAS HANDLING

### Key Markets

- Aerospace
- Agriculture
- Bulk chemical handling
- Construction machinery
- Food & beverage
- Fuel & gas delivery
- Industrial machinery
- Mobile
- Oil & gas
- Transportation
- Welding

### Key Products

- Brass fittings & valves
- Diagnostic equipment
- Fluid conveyance systems
- Industrial hose
- PTFE & PFA hose, tubing & plastic fittings
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



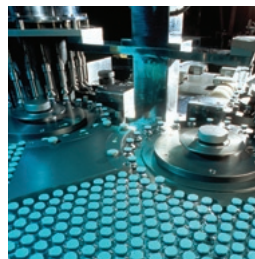
## HYDRAULICS

### Key Markets

- Aerospace
- Aerial lift
- Agriculture
- Construction machinery
- Forestry
- Industrial machinery
- Mining
- Oil & gas
- Power generation & energy
- Truck hydraulics

### Key Products

- Diagnostic equipment
- Hydraulic cylinders & accumulators
- Hydraulic motors & pumps
- Hydraulic systems
- Hydraulic valves & controls
- Power take-offs
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



## PNEUMATICS

### Key Markets

- Aerospace
- Conveyor & material handling
- Factory automation
- Life science & medical
- Machine tools
- Packaging machinery
- Transportation & automotive

### Key Products

- Air preparation
- Brass fittings & valves
- Manifolds
- Pneumatic accessories
- Pneumatic actuators & grippers
- Pneumatic valves & controls
- Quick disconnects
- Rotary actuators
- Rubber & thermoplastic hose & couplings
- Structural extrusions
- Thermoplastic tubing & fittings
- Vacuum generators, cups & sensors



## PROCESS CONTROL

### Key Markets

- Chemical & refining
- Food, beverage & dairy
- Medical & dental
- Microelectronics
- Oil & gas
- Power generation

### Key Products

- Analytical sample conditioning products & systems
- Fluoropolymer chemical delivery fittings, valves & pumps
- High purity gas delivery fittings, valves & regulators
- Instrumentation fittings, valves & regulators
- Medium pressure fittings & valves
- Process control manifolds



## SEALING & SHIELDING

### Key Markets

- Aerospace
- Chemical processing
- Consumer
- Energy, oil & gas
- Fluid power
- General industrial
- Information technology
- Life sciences
- Military
- Semiconductor
- Telecommunications
- Transportation

### Key Products

- Dynamic seals
- Elastomeric o-rings
- EMI shielding
- Extruded & precision-cut, fabricated elastomeric seals
- Homogeneous & inserted elastomeric shapes
- High temperature metal seals
- Metal & plastic retained composite seals
- Thermal management



ENGINEERING YOUR SUCCESS.

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