

# Sample Cylinders

Cylinder Valves & Accessories



## The Solution for Gas Sample Storage

Parker offers a full line of DOT approved sample cylinders and cylinder accessories to provide a stable and secure storage and transportation environment for collected samples. Both spun end and constant pressure cylinders are available in a variety of sizes and valve configurations.



## Contact Information:

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[www.pgiint.com](http://www.pgiint.com)

## Sample Cylinders & Accessories:

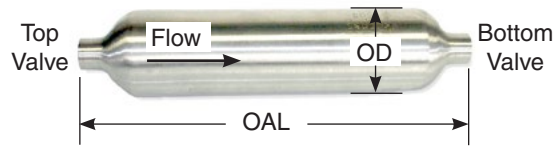
- Spun End Cylinders
- Ultra-Seal™ Constant Pressure Cylinders
- VP™ Series Cylinder Valves
- Rupture Disc Couplers
- Cylinder Cases
- Sample Valve Quick Connects
- Spare Parts



ENGINEERING YOUR SUCCESS.

# Spun End Cylinders

- 1800 PSI DOT-3E rating
- Seamless 316 stainless steel construction to NACE MR0175 / ISO 15156-3
- Heat code traceability
- Hydrostatic test certificates available



Base Model Number			Top Valve						Bottom Valve				
SE	#	—	X	X	X	X	(OPT)	—	X	X	X	X	(OPT)

Bottom Valve uses same options/codes as Top Valve

### Cylinder Size\* (316 SS std.)

Code	Description
1	150cc Spun End Cylinder
3	300cc Spun End Cylinder
5	500cc Spun End Cylinder

\* Additional cylinder sizes available.

### Valve Material

Code	Description
S	316 SS (std.)
C	Carbon steel (option for G, H, and J only)

### Soft Seat Material

Code	Description
D	Acetal Resin (std.)
K	PCTFE
P	PEEK

### Stem Seal Material

Code	Description
T	PTFE Pressure-Core® stem seal or PTFE packed stem seal (see Cylinder Body)
V	FKM O-Ring stem seal (G, H, and J only)

### Burst Disc Pressure

Code	Description
18	1800 PSI burst disc (Inconel standard)
--	__00 PSI burst disc (Inconel standard)

### Cylinder Body

Code	Description	Valve Type
A	VP-552: 1/4" M x F angle, valve only (316 SS only), T-handle std.	PTFE Pressure-Core® Stem Seal Valves
B	VP-554: 1/4" M x M straight, valve only (316 SS only), T-handle std.	
C	VP-556: 1/4" M x F straight, valve only (316 SS only), T-handle std.	
D*	VP-590: 1/4" M x M straight, valve and burst port less burst disc (316 SS only), T-handle std.	
E*	VP-591: 1/4" M x F straight, valve and burst port less burst disc (316 SS only), T-handle std.	
F*	VP-592: 1/4" M x F angle, valve and burst port less burst disc (316 SS only), T-handle std.	
G	V-552: 1/4" M x F angle, valve only (available in 316 SS or CS), round phenolic handle std.	PTFE Packed Valves
H	V-554: 1/4" M x M straight, valve only (available in 316 SS or CS), round phenolic handle std.	
J	V-556: 1/4" M x F straight, valve only (available in 316 SS or CS), round phenolic handle std.	

\* Must be used in Bottom Valve position only.

## Weights & Dimensions

Size	OAL	OD	NPT	Weight
150cc	8.25" (209.55 mm)	1.5" (38.1 mm)	1/4"	1.0 lbs. (0.45 kg)
300cc	9.25" (234.95 mm)	2" (50.8 mm)	1/4"	1.8 lbs. (0.81 kg)
500cc	13.88" (352.55 mm)	2" (50.8mm)	1/4"	2.5 lbs. (1.13 kg)

NOTE: OAL and Weight are less Valves.

### Options

Code	Description
HA	Extruded aluminum round handle (VP series only)
H5	Carbon steel round handle (G, H, and J only)
H6	Stainless steel round handle (G, H, and J only)
L	316 SS burst disc (option adder to "18" burst disc)
Q	Sample Bottle Quick Mount Adapter (for use with Parker Heated Enclosure – valid with top valve only)
W1	316 SS I.D. tag

# Ultra-Seal™ Constant Pressure Cylinders

- 316 SS shut-off valves on each end with Acetal Resin soft seats and PTFE Pressure-Core® stem seals — standard with 5-year no-leak warranty
- Meets the requirements of NACE MR0175/ ISO 15156-3
- Burst disc holder and 2,000 PSI SS pressure gauges
- Mag-N-Tube™ volume indicator
- Gas and liquid designs
- Patented piston with ceramic magnets and magnetic field intensifier
- DOT approved 300cc to 1000cc



- Optional 80% fill switch provides additional operator safety
- CRN — Canadian registration certificates available

C	X	X	X	XX	—	XX	XXXXXX																						
		<b>Cylinder Body</b>		<b>Cylinder Capacity</b>		<b>Burst Disc Pressure</b>																							
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## Materials of Construction

Description	Material
Cylinder	316 Stainless Steel
Tie Rods and Nuts	304 Stainless Steel
End Caps	316 Stainless Steel
Purge Valve	316 Stainless Steel; PEEK seats
Shut-Off Valves	316 Stainless Steel

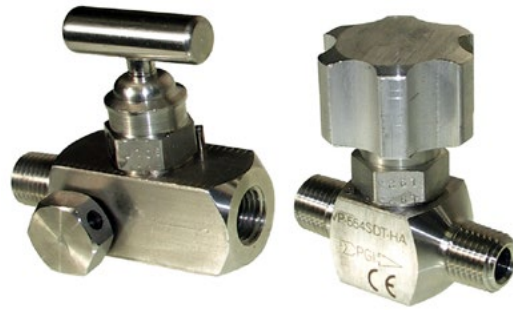
## Weights & Dimensions

Size	OAL	Weight
300cc	16.5" (419.1 mm)	10 lbs. (4.53 kg)
500cc	21.4" (543.6 mm)	13.5 lbs. (6.12 kg)
1000cc	33.7" (855.9 mm)	18 lbs. (8.16 kg)

**NOTE:** OAL includes Gauges and Valves.

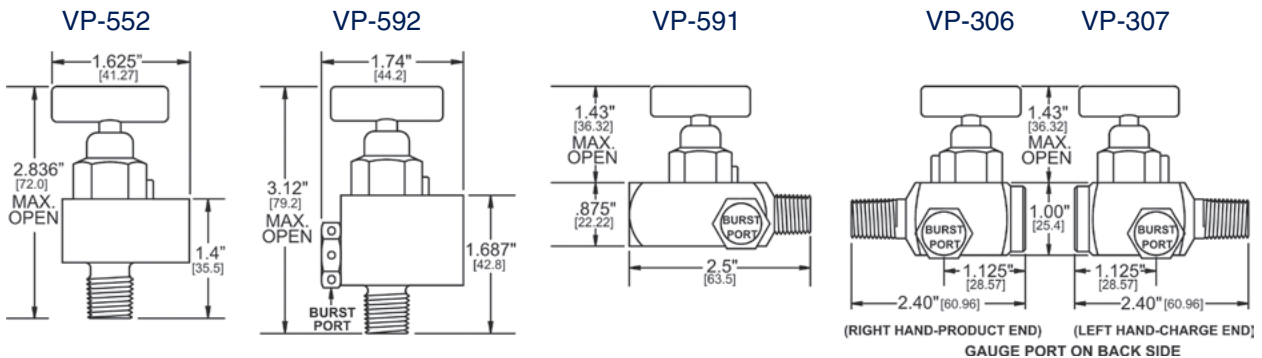
# VP™ Series Cylinder Valves

- Feature patented Pressure-Core® stem seal technology
  - standard with 5-year no-leak warranty
- 316 SS design meets NACE MR0175 / ISO 15156-3
- Provides 4 times the sealing areas of a standard Mini Seat — 6,000 PSI @ 200° max
- CO<sub>2</sub> and H<sub>2</sub>S compatible materials standard
- Same C<sub>v</sub> rating (.22 max) as the conventional mini bonnet
- Integral rupture disc and gauge ports available



VP	—	XXX	S	X	T	—	XX	XXX																																
		<b>Valve Material</b> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>S</td> <td>316 SS (std.)</td> </tr> </tbody> </table>		Code	Description	S	316 SS (std.)	<b>Stem Seal Material</b> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>T</td> <td>PTFE Pressure-Core® (std.)</td> </tr> </tbody> </table>		Code	Description	T	PTFE Pressure-Core® (std.)	<b>Soft Seat Material*</b> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>D</td> <td>Acetal Resin (std.)</td> </tr> <tr> <td>K</td> <td>PCTFE</td> </tr> <tr> <td>P</td> <td>PEEK</td> </tr> </tbody> </table> <p>* 6,000 psig (413.7 bar) @ 200°F (93°C)</p>		Code	Description	D	Acetal Resin (std.)	K	PCTFE	P	PEEK	<b>Burst Disc Pressure</b> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>18</td> <td>Inconel 1800 PSI burst disc (2 discs)</td> </tr> <tr> <td>—</td> <td>__00 PSI burst disc, Inconel with matching gauges</td> </tr> </tbody> </table>		Code	Description	18	Inconel 1800 PSI burst disc (2 discs)	—	__00 PSI burst disc, Inconel with matching gauges	<b>Options</b> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>HA</td> <td>Extruded aluminum round handle</td> </tr> <tr> <td>L</td> <td>316 SS burst disc (option adder to Burst Disc Pressure code "18")</td> </tr> <tr> <td>XXI</td> <td>316 SS 1/4" Pipe-Away burst disc cap</td> </tr> </tbody> </table>	Code	Description	HA	Extruded aluminum round handle	L	316 SS burst disc (option adder to Burst Disc Pressure code "18")	XXI	316 SS 1/4" Pipe-Away burst disc cap
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Model Number	
Code	Description
306	1/4" MNPT x 1/4" FNPT straight, RH (product end) with burst & gauge port (less disc)
307	1/4" MNPT x 1/4" FNPT straight, LH (charge end) with burst & gauge port (less disc)
552	1/4" MNPT x 1/4" FNPT angle, valve only
554	1/4" MNPT x 1/4" MNPT straight, valve only
556	1/4" MNPT x 1/4" FNPT straight, valve only
590	1/4" MNPT x 1/4" MNPT straight, valve and burst port (less disc)
591	1/4" MNPT x 1/4" FNPT straight, valve and burst port (less disc)
592	1/4" MNPT x 1/4" FNPT angle, valve and burst port (less disc)



# Cylinder Valves

- Mini valves with FKM O-ring stem seals or PTFE stem packing
- .22 Cv rating



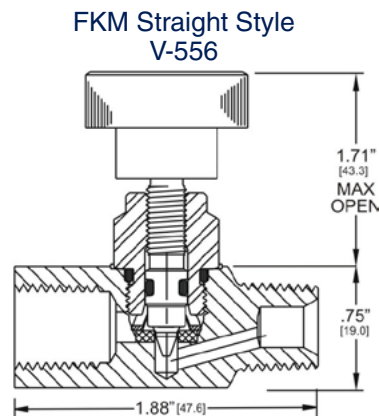
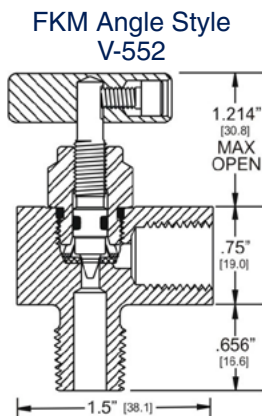
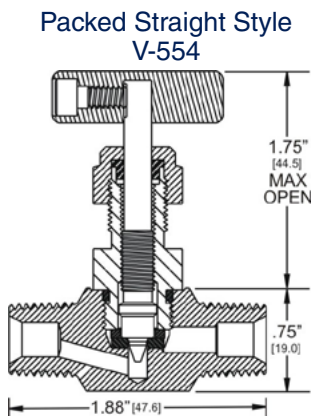
V	—	XXX	X	X	X	—	XX	XXX
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Valve Material		Stem Seal Material		Options	
Code	Description	Code	Description	Code	Description
S	316 SS (std.)	T	PTFE packed	Q	Sample Bottle Quick Mount Adapter (required on Heated Enclosure Bottle Mount)
C	Carbon steel	V	FKM O-ring	W1	316 SS tag

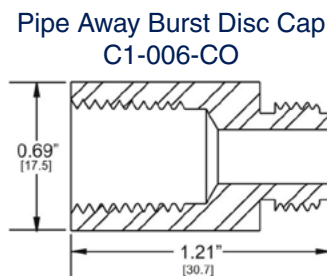
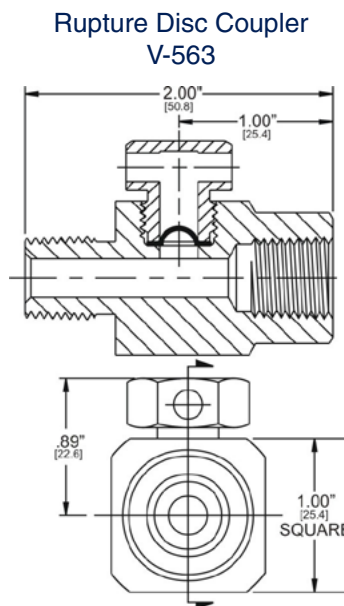
Model Number		Soft Seat Material		Handle Options	
Code	Description	Code	Description	Code	Description
552	1/4" MNPT x 1/4" FNPT angle	D	Acetal Resin (std.)	H5	Carbon steel round handle
554	1/4" MNPT x 1/4" MNPT straight	K	PCTFE	H6	Stainless steel round handle
556	1/4" MNPT x 1/4" FNPT straight	P	PEEK		



# Rupture Disc Couplers

- Rupture disc couplers available with Pipe Away disc caps

Part No.	Description
V-563C	Carbon steel 1/4" MNPT x 1/4" FNPT, coupler only
V-563C-18	Carbon steel 1/4" MNPT x 1/4" FNPT, coupler and 1800# Inconel rupture disc
V-563S	316 SS 1/4" MNPT x 1/4" FNPT, coupler only
V-563S-18	316 SS 1/4" MNPT x 1/4" FNPT, coupler and 1800# Inconel rupture disc
C1-006-CO	316 SS 1/4" Pipe Away burst disc cap for rupture disc vent port



# Cylinder Cases

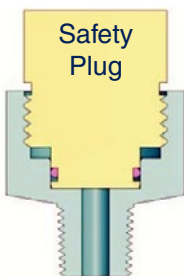
- Solid foam insert
- Unbreakable, water-tight, dust-proof, chemical resistant and corrosion-proof design
- Black ultra high impact structure, ABS latches seal, O-ring seal
- Wheeled end for ease of transport



Part Number	Capacity	Weight	Temperature Rating	Inside Dimensions	Outside Dimensions
PC-500	150cc, 300cc, (1) 500cc cylinders	19 lbs. (8.61 kg)	Minimum: -10°F (-23°C)	35-3/4" x 13-13/16" x 5-1/4" (91 cm x 35.1 cm x 13.3 cm)	38-1/8" x 17-13/16" x 6-1/8" (96.8 cm x 45.2 cm x 15.5 cm)
PC-1000	(1) 1000cc cylinder	26 lbs. (11.79 kg)	Maximum: +210°F (+99°C)	50-1/2" x 13-7/16" x 5-1/4" (128.3 cm x 34.1 cm x 13.3 cm)	53" x 17-7/16" x 6-1/16" (134.6 cm x 44.36 cm x 15.4 cm)

# Sample Valve Quick Connects

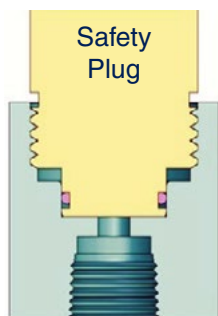
For use with Hot-Shot™ Natural Gas Sampling System Heated Enclosures



- Adapts a sample bottle having a female shut-off valve outlet for use with the heated enclosure system
- Available with safety plug and O-ring for guaranteed sample retention in transit
- 1/4" male NPT inlet x "Q" adapter outlet

Part Number	Description
QA-M-14-S	*316 SS 1/4" male NPT inlet x "Q" adapter outlet – includes safety plug and O-ring
QA-M-14-CS	Carbon steel 1/4" male NPT inlet x "Q" adapter outlet – includes safety plug and O-ring
HE-037-C0	*316 SS 1/4" male NPT inlet x "Q" adapter outlet
HE-037-10	Carbon steel 1/4" male NPT inlet x "Q" adapter outlet

\* Parker 316 SS products meet the requirements of NACE MR0175/ISO 15156-3



- Adapts a sample bottle having a male shut-off valve outlet for use with the heated enclosure system
- Available with safety plug and O-ring for guaranteed sample retention in transit
- 1/4" female NPT inlet x "Q" adapter outlet

Part Number	Description
QA-F-14-S	*316 SS 1/4" female NPT inlet x "Q" adapter Outlet – includes safety plug and O-ring
QA-F-14-CS	Carbon steel 1/4" female NPT inlet x "Q" adapter outlet – includes safety plug and O-ring
HE-080-C0	*316 SS 1/4" female NPT inlet x "Q" adapter outlet
HE-080-10	Carbon steel 1/4" female NPT inlet x "Q" adapter outlet

\* Parker 316 SS products meet the requirements of NACE MR0175/ISO 15156-3

# Spare Parts

Part Number	Description
<b>Ultra-Seal™ Constant Pressure Cylinder</b>	
SA-CY	80% Fill Switch (includes 5' cable)
SS-C9E-500-C0	Gauge 2-1/2" dial, 1/4" MNPT, 316 SS (0-2000 PSI)
SS-C9E-500-CL	Liquid Filled Gauge 2-1/2" dial, 1/4" MNPT, 316 SS (0-2000 PSI) Center Back Mount
SS-C9E-516-CL	Liquid Filled Gauge 2-1/2" dial, 1/4" MNPT, 316 SS (0-300 PSI) Center Back Mount
SS-C9E-517-CL	Liquid Filled Gauge 2-1/2" dial, 1/4" MNPT, 316 SS (0-600 PSI) Center Back Mount
SS-C9E-518-CL	Liquid Filled Gauge 2-1/2" dial, 1/4" MNPT, 316 SS (0-1000 PSI) Center Back Mount
SP7-031-G0-18	1/4" MNPT Inconel 1800 PSI Rupture Disc
SK-CYL-02	Liquid Mixer & Piston Kit — includes End Cap O-Rings, Piston & Jet-Flo
SK-CYL-03	Standard Cylinder O-Ring Kit
SK-CYL-04	Gas Mixture Kit
SK-CYL-05	Gas Piston Kit
SK-CYL-06	CO <sub>2</sub> Service O-Ring Kit
<b>VPTM Series Cylinder Valve Spare Parts - Pressure-Core® Stem Seal</b>	
SP3-010-R1	PCTFE Seats
SP3-010-R2	PTFE Seats
SP3-010-R3	Acetal Resin Seats
SP3-010-R4	PEEK Seats
SP7-031-G0-18	1/4" Inconel 1800 PSI Rupture Disc
SAV-004-A0	Tee Handle (std.)
SF6-508-M0	Extruded Aluminum Handle (option HA)
SAV117S-T-HA	Bonnet Assembly 316 SS - Mini Pressure-Core® Stem Seal
<b>Miniature Valves (.136 Orifice) Spare Parts</b>	
P5-020-R0	Mini PTFE Seat
P5-020-R1	Mini PCTFE Seat
P5-020-R2	Mini Acetal Resin Seat
P5-020-R3	Mini PEEK Seat
P7-024-C0	Wavey Washer
SP5-019-R0	Mini Packed PTFE Seal
P7-025-C0	Mini Packed PTFE Seal Stainless Backup Washer
<b>Miniature Valves Bonnet Assemblies</b>	
SAV106C-V	Carbon Steel with FKM O-Ring Seal
SAV106S-V	Stainless Steel with FKM O-Ring Seal
SAV107C-T	Carbon Steel with Packed PTFE
SAV107S-T	Stainless Steel with Packed PTFE
<b>Miniature Valves Handles (Non-VP Style)</b>	
SAV-001-10	Carbon Steel Round Handle
SAV-001-A0	Stainless Steel Round Handle
SAV-002-10	Carbon Steel Bar Handle
SAV-002-A0	Stainless Steel Bar Handle

# Sales Offices Worldwide

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Safety Guide – See [www.parker.com/safety](http://www.parker.com/safety).

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PGI-CYL 03/2015-DDP



Parker Hannifin Corporation

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