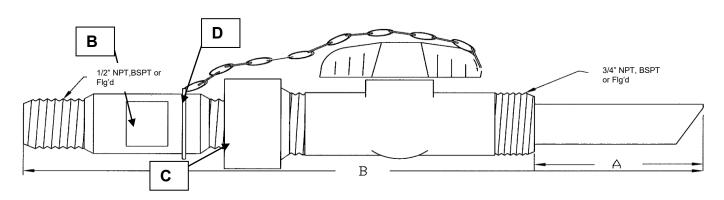
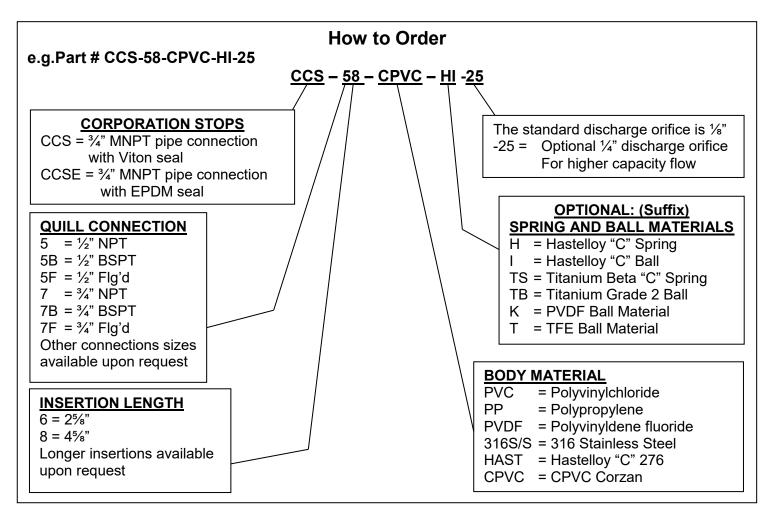
# PFS CORPORATION STOPS

Corporation Stops have been developed to allow chemical injection into the center stream of the flow. They feature a built in shut off valve, matching the material of the injection quill. This valve allows for the removal of the injection quill while the process line is still in operation for easier service. Corporation Stops are available in six materials of construction, with ½" inlet and ¾" outlet connections.





# Distributed by:

### Manufactured by:



PRIMARY FLUID TEL (905) 333-8743 SYSTEMS INC. FAX (905) 333-8746

E-Mail: primary@primaryfluid.com http://www.primaryfluid.com

# Sizing and Ordering Information

Model	Body Material	Valve Material	Gland Material	Gland Seal Material	Ball Check Material	Check Spring Material	Pressure Max.PSIG	Temperature Max.
CCS-56-PVC	PVC	PVC	PVC	VITON	Ceramic	316S/S	150*	140°F(60°C)
CCS-56-CPVC	CPVC	CPVC	CPVC	VITON	Ceramic	316S/S	150*	210°F(98°C)
CCS-56-PP	PP	PP	PVDF	VITON	Ceramic	316S/S	150*	195°F(90°C)
CCS-56-PVDF	PVDF	PVDF	PVDF	VITON	Ceramic	316S/S	150*	260°F(125°C)
CCS-56-316S/S	316S/S	316S/S	316S/S	VITON	316S/S	316S/S	2000*	350°F(176°C)
CCS-56-HASTC	HastC	HastC	HastC	VITON	HastC	HastC	2000*	350°F(176°C)
CCS-58-PVC	PVC	PVC	PVC	VITON	Ceramic	316S/S	150*	140°F(60°C)
CCS-58-CPVC	CPVC	CPVC	CPVC	VITON	Ceramic	316S/S	150*	210°F(98°C)
CCS-58-PP	PP	PP	PVDF	VITON	Ceramic	316S/S	150*	195°F(90°C)
CCS-58-PVDF	PVDF	PVDF	PVDF	VITON	Ceramic	316S/S	150*	260°F(125°C)
CCS-58-316S/S	316S/S	316S/S	316S/S	VITON	316S/S	316S/S	2000*	350°F(176°C)
CCS-58-HASTC	HastC	HastC	HastC	VITON	HastC	HastC	2000*	350°F(176°C)
*Maximum PSIG rating based on 73°F(23°C). See page 4 of PFS Injection Quill price list for temperature correction factor								

(56 & 58 ARE 1/2" CONNECTION X 3/4" PROCESS CONNECTION)

(76 & 78 ARE 3/4" CONNECTION X 3/4" PROCESS CONNECTION)

#### **FLOW RATES**

. 2011 101120							
PSIG	KPA	USGPM	Liter/M				
20	138	0.925	3.5				
30	207	1.19	4.5				
40	276	1.45	5.5				
50	345	1.85	7.0				
60	414	2.11	8.0				
70	483	2.38	9.0				
80	552	2.51	9.5				
90	621	2.64	10.0				
100	690	2.77	10.5				
60 70 80 90	414 483 552 621	2.11 2.38 2.51 2.64	8.0 9.0 9.1				

#### **DIMENSIONS**

# SUBJECT TO CHANGE WITHOUT NOTICE "A" & "B" ARE APPROXIMATE

Model	A (in.)	B (in.)	Model	A (in.)	B (in.)
CCS-56-PVC	2-5/8	11-1/2	CCS-58-PVC	4-5/8	13-1/2
CCS-56-CPVC	2-5/8	11-1/2	CCS-58-CPVC	4-5/8	13-1/2
CCS-56-PP	2-5/8	12	CCS-58-PP	4-5/8	14
CCS-56-PVDF	2-5/8	11-3/4	CCS-58-PVDF	4-5/8	13-3/4
CCS-56-316S/S	2-5/8	10-5/8	CCS-58-316S/S	4-5/8	12-5/8
CCS-56-HastC	2-5/8	12-1/4	CCS-58-HastC	4-5/8	14-1/4
CCS-76-PVC	2-5/8	11-7/8	CCS-78-PVC	4-5/8	13-7/8
CCS-76-CPVC	2-5/8	13-3/8	CCS-78-CPVC	4-5/8	15-3/8
CCS-76-PP	2-5/8	13-1/8	CCS-78-PP	4-5/8	15-1/8
CCS-76-PVDF	2-5/8	12-3/4	CCS-78-PVDF	4-5/8	14-3/4
CCS-76-316S/S	2-5/8	11-7/8	CCS-78-316S/S	4-5/8	13-7/8
CCS-76-HastC	2-5/8	12-7/8	CCS-78-HastC	4-5/8	14-7/8

#### **PFS Corporation Stop Instructions**

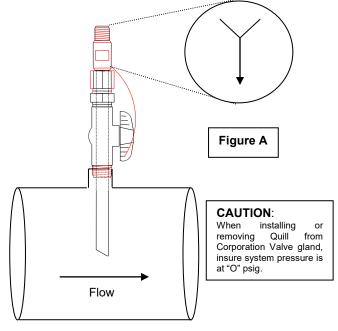
Primary Fluid Systems Inc. introduces Corporation Stops, the newest addition to their line of Metering Pump Accessories.

The Corporation Stop is ideal for the injection of chemicals into the center stream of a process pipeline. This provides for a more homogeneous mix to take place in the pipeline. Each Corporation Stop has a separate quill which can be removed from service via an isolation valve assembly. Each quill has a built in spring-loaded check to help prevent back siphoning.

The injection quill is available in two sizes, 25% insertion length suitable for 4"-6" pipe diameters and 45%" insertion length suitable for 8"-10" pipe diameters. The connection for both sizes is 1/2" NPT, BSPT or Flanged.

Six (6) materials of construction are available that provide compatibility for most chemicals injected. Each quill comes standard with a stainless steel spring. Hastelloy C units come standard with a Hast C spring. As an option, a Hastelloy C spring is available at an extra charge (consult factory). The quill may also be ordered without a spring. (See price list for optional ball and spring materials).

Pressure and temperature are dependent on the material of construction and vary from 150 PSIG and 60°C (140°F) to 2000 PSIG and 176°C (350°F).



<sup>\*</sup>OPTIONAL GLAND SEAL MATERIAL AVAILABLE UPON REQUEST

Model	Size (Length)	Body Material	Ball Check Material	Check Spring Material	Pressure Max. PSIG	Temperature Max.	List Price
CCS-56-PVC	25/8"	PVC	Ceramic	316S/S	150*	140°F(60°C)	\$ 716.00
CCS-76-PVC	25/8"	PVC	Ceramic	316S/S	150*	140°F(60°C)	TBA
CCS-56-CPVC	25/8"	CPVC	Ceramic	316S/S	150*	210°F(98°C)	\$ 923.00
CCS-76-CPVC	25/8"	CPVC	Ceramic	316S/S	150*	210°F(98°C)	TBA
CCS-56-PP	25/8"	PP	Ceramic	316S/S	150*	195°F(90°C)	\$1,011.00
CCS-76-PP	25/8"	PP	Ceramic	316S/S	150*	195°F(90°C)	TBA
CCS-56-PVDF	25/8"	PVDF	Ceramic	316S/S	150*	260°F(125°C)	\$1,839.00
CCS-76-PVDF	25/8"	PVDF	Ceramic	316S/S	150*	260°F(125°C)	TBA
CCS-56-316S/S	25/8"	316S/S	316S/S	316S/S	2000*	350°F(176°C)	\$1,352.00
CCS-76-316S/S	25/8"	316S/S	316S/S	316S/S	2000*	350°F(176°C)	TBA
CCS-56-HASTC	25/8"	HastelloyC	HastelloyC	HastelloyC	2000*	350°F(176°C)	Call Factory
CCS-76-HASTC	25/8"	HastelloyC	HastelloyC	HastelloyC	2000*	350°F(176°C)	Call Factory
CCS-58-PVC	45/8"	PVC	Ceramic	316S/S	150*	140°F(60°C)	\$ 723.00
CCS-78-PVC	45/8"	PVC	Ceramic	316S/S	150*	140°F(60°C)	TBA
CCS-58-CPVC	45/8"	CPVC	Ceramic	316S/S	150*	210°F(98°C)	\$ 957.00
CCS-78-CPVC	45/8"	CPVC	Ceramic	316S/S	150*	210°F(98°C)	TBA
CCS-58-PP	45/8"	PP	Ceramic	316S/S	150*	195°F(90°C)	\$1,051.00
CCS-78-PP	45/8"	PP	Ceramic	316S/S	150*	195°F(90°C)	TBA
CCS-58-PVDF	45/8"	PVDF	Ceramic	316S/S	150*	260°F(125°C)	\$1,892.00
CCS-78-PVDF	45/8"	PVDF	Ceramic	316S/S	150*	260°F(125°C)	TBA
CCS-58-316S/S	45/8"	316S/S	316S/S	316S/S	2000*	350°F(176°C)	\$1,630.00
CCS-78-316S/S	45/8"	316S/S	316S/S	316S/S	2000*	350°F(176°C)	TBA
CCS-58-HASTC	45/8"	HastelloyC	HastelloyC	HastelloyC	2000*	350°F(176°C)	Call Factory
CCS-78-HASTC	45/8"	HastelloyC	HastelloyC	HastelloyC	2000*	350°F(176°C)	Call Factory

\*Max PSIG rating based on 73°F (23°C). See page 4 of PFS Injection Quill price list for temperature correction factor

#### (Options)

Optional gland seal material available upon request

- For **Hastelloy "C"** spring material add suffix H to part number and add \$46.00 to the list price
- For Hastelloy "C" ball material add suffix I to part number and add \$57.00 to the list price
  (i.e. CCS-56-PVC quill with Hastelloy spring and ball would be part # CCS-56-PVC-HI with a list price
  of \$716.00 plus \$103.00 = \$819.00 list)
- For **Titanium Beta "C"** spring material add suffix TS to part number and add \$113.00 to the list price
- For **Titanium Grade 2** ball material add suffix TB to part number and add \$154.00 to the list price
- For **PVDF** ball material add suffix K to part number and add \$57.00 to the price
- For **TFE** ball material add suffix T to part number and add \$57.00 to the price
- For Flanged see How to Order consult factory for pricing

The standard discharge orifice is  $\frac{1}{8}$ ", which helps increase chemical discharge velocity Optional  $\frac{1}{4}$ " discharge orifice available for higher capacity flow add suffix -25 & add \$15.00 to the list price

All taxes are extra <u>if applicable</u> F.O.B. Burlington, Ont. Ship prepaid and charge Payable in Canadian Funds

Terms: (OAC) 5% 20 day discount, firm, Net 30 days, firm

Prices are subject to change without notice

#### PFS CORPORATION STOPS VALVE ASSEMBLY INSTALLATION

- Install the Corporation Stop Valve assembly using the appropriate piping compound and PTFE tape.
- 2. All Corporation Stops come standard with a spring assisted injection quill. It is recommended however, if you order a unit without a spring that the unit be installed in the process line at a 6 o'clock position. This will assist in the check valve seating.
- 3. 25%" insertion length quills are suitable for 4"-6" pipe diameters. Pipe sizes smaller than 4", the quill can be trimmed so that the injection quill is in the centerline of the process pipe. 45%" insertion length quills are suitable for 8"-10" pipe diameters.
- 4. See Fig. A (previous page). Install the valve assembly in the process line so that the stamped arrow in the injection quill body is facing downstream. This positions the angle face of the quill into the process stream, increasing the dispersion of the chemical into the process fluid.

#### SAFETY PRECAUTION

Always ensure system pressure is at "O" psig before unthreading Quill from Corporation Stop gland. Always wear protective clothing and face shield working on chemical metering pumps and accessories.

# Removal of Injection Quill from Corporation Stop for Service

1. Slowly unthread the injection quill counter clockwise (B) from the gland (C), (see Figure A), making sure *not* to unthread gland or the union fittings on the valve.

#### **CAUTION**

Loosening the gland fitting or the union nuts on the valve may result in a hazardous situation where pressurized fluids or chemical may be released, which could cause serious injury or damage.

- 2. Once the quill has been unthreaded, slowly withdraw the injection quill out of the gland (C), using a twisting action to ease the quill out of the gland. Withdraw the quill until the chain is almost taught or the Blue and/or Mark indicator on the guill becomes visible at the gland.
- 3. Turn the handle to close the ball valve, which will isolate the process line.

#### **CAUTION**

Completely removing the injection quill without closing the isolation valve will result in a hazardous situation where pressurized fluids or chemical may be released which could cause serious injury or damage.

4. Continue to remove the injection quill once the valve has been closed.

# Re-installation of Injection Quill into Corporation Stop for Service

- 1. Always ensure the safety chain is properly attached (D). <u>Failure to do so can allow for the quill to be removed without closing the valve and can result in injury or damage</u>.
- 2. Insert injection quill (B) into the gland (C), using a twisting action to ease the quill into the gland. Continue to insert the quill until it stops and rests up against the ball of the valve.
- 3. Securely holding the quill, slowly turn the handle to open the ball valve.
- 4. Continue to insert quill body into the gland. Once the threaded section of the quill reaches the gland, thread the quill body (B) clockwise into the gland (C) by hand until snug. Using a 1/8" wrench, tighten down the quill body so that no more than 2 (two) threads show on the quill body. This will insure a good seal for the quill.