



**EDDINGTON
INDUSTRIES**

WATER TREATMENT SERVICES CATALOG INDEX

EDDINGTON INDUSTRIES SAMPLE COOLER.....	2
CHECK VALVES.....	3
CORPORATION STOPS WITH INJECTION SAFETY CHAIN.....	4
CORPORATION STOPS.....	5
QB & QC SERIES INJECTION QUILLS.....	6
QBFM & QCFM SERIES INJECTION QUILLS.....	7
DUPLEX INJECTION QUILLS.....	8
TRIPLEX INJECTION QUILLS.....	9
RETRACTABLE 3 PORT INJECTION QUILLS.....	10
RETRACTABLE INJECTION QUILLS.....	11
COUPON RACKS (SERIES 2000).....	12
COUPON RACKS (SERIES 4000).....	13
CORROSION COUPON RACK KIT.....	14
CORROSION TEST COUPONS.....	15
TEST COUPON HOLDER.....	16
RETRACTABLE TEST COUPON HOLDER.....	17
FLOW REGULATORS.....	18
EDDINGTON INDUSTRIES BACK PRESSURE VALVE.....	20
GLYCOL FEEDER GL-50-E.....	21
EMBRITTLEMENT DETECTOR.....	22
ARMORED SIGHT GAUGE.....	23
STEAM SAMPLING NOZZLE.....	24



EDDINGTON INDUSTRIES SAMPLE COOLER

PRODUCT DATA SHEET



Part Number: ESC-SS

Eddington Industries Sample Coolers are a safe and convenient method of withdrawing water from boilers, steam lines, or tanks containing chemicals and for cooling the withdrawn liquid for subsequent chemical analysis.

This rugged counter flow heat exchanger is easy to install.

The inner coil is manufactured from Type 316 Stainless Steel and is of one piece construction.

Eddington Industries can also supply sample coolers with removable coils upon request.

Made in the USA.

SPECIFICATIONS

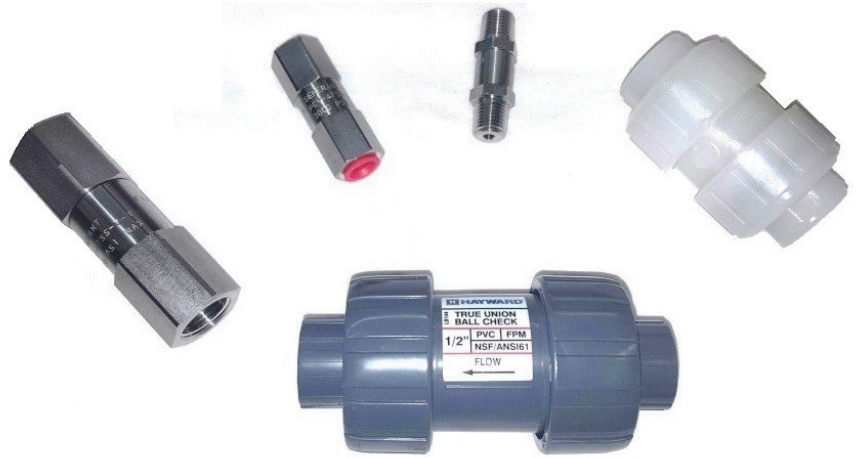
Shell:	Type 304 Stainless Steel
End Caps:	Type 304 Stainless Steel
Sample IN/OUT Adapters:	1/4" MNPT - Type 316 Stainless Steel
Cooling Water Adapters*:	3/8" or 1/2" FNPT - Type 304 Stainless Steel
Coil:	Continuous coil of Type 316 Stainless Steel
Max Coil Pressure:	2500 psi
Max Shell Pressure:	250 psi
Overall Length:	13 5/8"
Diameter of Shell:	3 1/2" OD
Mounting:	Zinc plated steel pipe clamp
Weight:	13 lbs.

*1/2" FNPT-Type 304 Stainless Steel Cooling Water Fittings are also available

Eddington Industries performs a pressure test on every stainless steel coil prior to it being enclosed in the shell (left side of picture). We then pressure test every stainless steel shell after the coil has been welded to it (right side of picture).

This ensures the unit will operate leak-free and to the specified pressure ratings.

Heat Exchange Area: One sq. ft



FEATURES

- Check Valves contain a seal which permits flow in one direction but seals against a seat when inlet flow ceases to prevent backflow which could cause damage to process equipment.
- Check Valves allow full pressure rating in the check direction.
- PVC, CPVC, and Kynar check valves contain a free floating ball that never seats in the same position twice.
- A variety of materials and sizes fill different temperature and pressure rating requirements.

	Part Number					
Body Material	Process Connection Size (FNPT)		Seals	Max Temperature Rating	Crack Pressure (psi)	Max Pressure (psi) at 70°F
	1/4"	1/2"				
Type 316 SS	CV025SS	CV050SS	Viton	375 F	0.5-1	3000
PVC		CV050PVC	Viton	140 F	1.5	235
CPVC		CV050CPVC	Viton	190 F	1.5	235
Kynar		CV050KY	Viton	250 F	1.5	150

Hastelloy and Alloy 20 Check Valves are also available upon request.

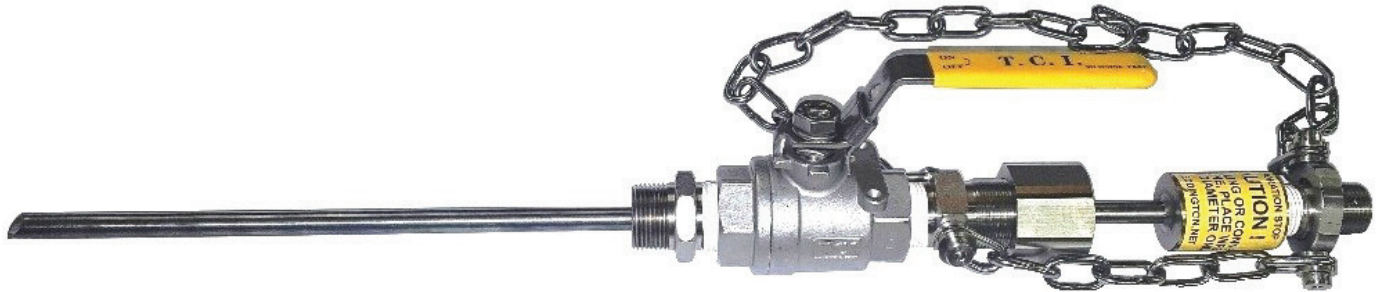
All check valves are available in different sizes.

To add a check valve to another product, please add the check valve part number to the end of the product number. (e.g. CS-075-PVC-CV050PVC or CS-075-316-SS-CV050SS)



CORPORATION STOPS WITH INJECTION SAFETY CHAIN

PRODUCT DATA SHEET



FEATURES

- Longer quill lengths up to 24" are available upon request.
- Every corporation stop comes with a safety chain to prevent the nozzle assembly from being completely withdrawn before the corporation stop is closed and is a safety feature to protect against back pressure.
- An additional injection safety chain is included for use during operation.

Wetted Material (Quill)	Part Number with Brass Valve			Insertion Length		Temperature and Pressure Rating	
	Process Connection Size (MNPT)			1/2" & 3/4"	1"	Max Temp	Max Press. (psi)
Type 316 SS	CSS-050-316	CSS-075-316	CSS-100-316	8 1/2"	7 5/8"	250°F (121°C)	150
Alloy 20	CSS-050-C20	CSS-075-C20	CSS-100-C20	8 1/2"	7 5/8"	250°F (121°C)	150
Hastelloy C 276	CSS-050-Hastelloy	CSS-075-Hastelloy	CSS-075-Hastelloy	8 1/2"	7 5/8"	250°F (121°C)	150

For Corporation Stops with STAINLESS STEEL VALVES - Add SS to the end of the part number.
(e.g. CS-075-316-SS)

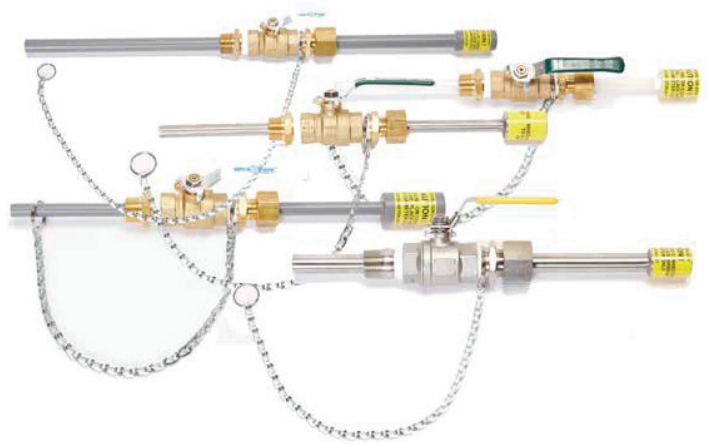
For Corporation Stops with LEAD-FREE BRASS VALVES - Add LF to the end of the part number.
(e.g. CS-075-316-LF)

For PVC Corporation Stops with AWWA THREADS - Add AWWA to the end of the part number.
(e.g. CS-075-316-AWWA)

CHECK VALVES ARE NOW AVAILABLE FOR ALL CORPORATION STOPS

Part Number	Description
CVKY	1/2" Kynar True Union Check Valve with Viton Seals
CVSS	1/2" Type 316 Stainless Steel Check Valve with Viton Seals

To select a check valve please add the part number at the end of the corporation stop part number.
(e.g. CSS-075-PVC-CVPVC or CSS-075-316-SS-CVSS)



FEATURES

- Longer quill lengths up to 24" are available upon request.
- Every corporation stop comes with a safety chain to prevent the nozzle assembly from being completely withdrawn before the corporation stop is closed and is a safety feature to protect against back pressure.

	Part Number with Brass Valve					Temperature and Pressure Rating	
Wetted Material (Quill)	Process Connection Size (MNPT)			Insertion Length		Max Temp	Max Press. (psi)
	1/2"	3/4"	1"	1/2" & 3/4"	1"		
Type 316 SS	CS-050-316	CS-075-316	CS-100-316	8 1/2"	7 5/8"	250°F (121°C)	150
CPVC	CS-050-PVC	CS-075-PVC	CS-100-PVC	8 1/2"	7 5/8"	100°F (37°C)	125
Kynar	CS-050-KY	CS-075-KY	CS-100-KY	8 1/2"	7 5/8"	200°F (93°C)	150
Alloy 20	CS-050-C20	CS-075-C20	CS-100-C20	8 1/2"	7 5/8"	250°F (121°C)	150
Hastelloy C 276	CSS-050-Hastelloy	CSS-075-Hastelloy	CSS-075-Hastelloy	8 1/2"	7 5/8"	250°F (121°C)	150

For Corporation Stops with STAINLESS STEEL VALVES - Add SS to the end of the part number.
(e.g. CS-075-316-SS)

For Corporation Stops with LEAD-FREE BRASS VALVES - Add LF to the end of the part number.
(e.g. CS-075-316-LF)

For PVC Corporation Stops with AWWA THREADS - Add AWWA to the end of the part number.
(e.g. CS-075-PVC-AWWA)

CHECK VALVES ARE NOW AVAILABLE FOR ALL CORPORATION STOPS

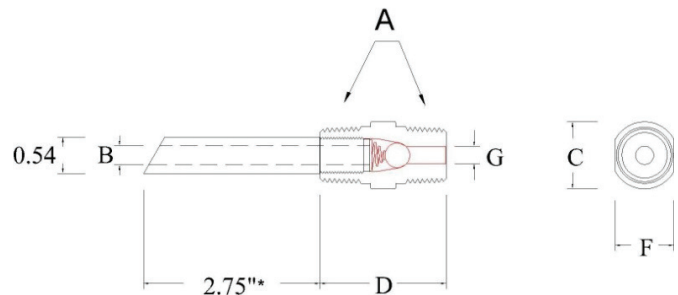
Part Number	Description
CVKY	1/2" Kynar True Union Check Valve with Viton Seals
CVSS	1/2" Type 316 Stainless Steel Check Valve with Viton Seals

To select a check valve please add the part number at the end of the corporation stop part number.
(e.g. CSS-075-PVC-CVPVC or CSS-075-316-SS-CVSS)



QB & QC SERIES INJECTION QUILLS

PRODUCT DATA SHEET



QC Injection Quill is depicted above (QB Injection Quill comes without check valve)

A	B		C	D	F	G	
	SS & Alloys	Plastics				QB Series	QC Series
1/2" MNPT	.36"	.30"	1.00"	1.87"	.87"	.25"	.25"
3/4" MNPT	.36"	.30"	1.25"	2.00"	1.12"	.31"	.25"
1" MNPT	.36"	.30"	1.50"	3.00"	1.37"	.44"	.25"

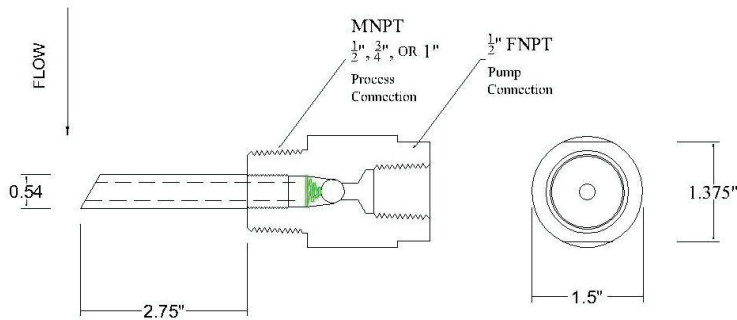
Standard injection quill length is 2 3/4" - Custom injection quill lengths up to 24"

- The Eddington QB & QC Series Injection Quills offer MNPT process connections X MNPT pump side connections. Stainless Steel and Alloy quills can be used for high temperature, high pressure applications.
- These injection quills are available in Type 316 Stainless Steel, PVC, Kynar, Alloy 20 and Hastelloy C276.
- The QC Injection Quill has a built-in ball check valve to prevent backflow through the nozzle and into the chemical feed line. The QB Injection Quill has no check valve.
- Crack pressure on the QC Injection Quill is 20 psi; if the pump cannot deliver at least 20 psi, then a QB Injection Quill may be appropriate.
- There are two flat surfaces on the external portion of the nozzle so a wrench can be used during installation.
- For additional lengths, please add the desired length after the part number. (e.g. QC-316-050-18)

Material	Part Number			Check Valve Material		Temperature and Pressure Rating	
	Process Connection Size (MNPT)			Ball	Spring	Max Temp	Max Press. (psi)
	1/2"	3/4"	1"				
Type 316 SS	QC-316-050	QC-316-075	QC-316-100	Type 316 SS	Type 316 SS	750°F (400°C)	3000
PVC	QC-PVC-050	QC-PVC-075	QC-PVC-100	Ceramic	HAST C	750°F (400°C)	3000
Kynar	QC-KY-050	QC-KY-075	QC-KY-100	Ceramic	HAST C	750°F (400°C)	3000
Alloy 20	QC-C20-050	QC-C20-075	QC-C20-100	HAST C	HAST C	750°F (400°C)	3000
Hastelloy C 276	QC-Hastelloy-050	QC-Hastelloy-075	QC-Hastelloy-100	HAST C	HAST C	750°F (400°C)	3000
Type 316 SS	QB-316-050	QB-316-075	QB-316-100	No Check Valve		750°F (400°C)	3000
PVC	QB-PVC-050	QB-PVC-075	QB-PVC-100	No Check Valve		750°F (400°C)	3000
Kynar	QB-KY-050	QB-KY-075	QB-KY-100	No Check Valve		750°F (400°C)	3000
Alloy 20	QB-C20-050	QB-C20-075	QB-C20-100	No Check Valve		750°F (400°C)	3000
Hastelloy C 276	QB-Hastelloy-050	QB-Hastelloy-075	QB-Hastelloy-100	No Check Valve		750°F (400°C)	3000

QBFM & QCFM SERIES INJECTION QUILLS

PRODUCT DATA SHEET



QCFM Model depicted above (QBFM comes without check valve)

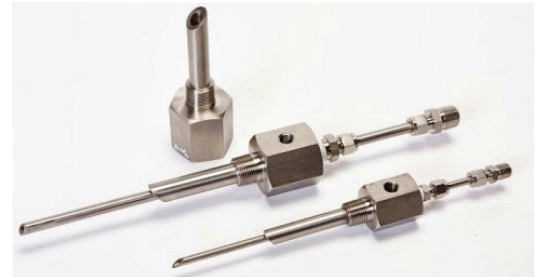
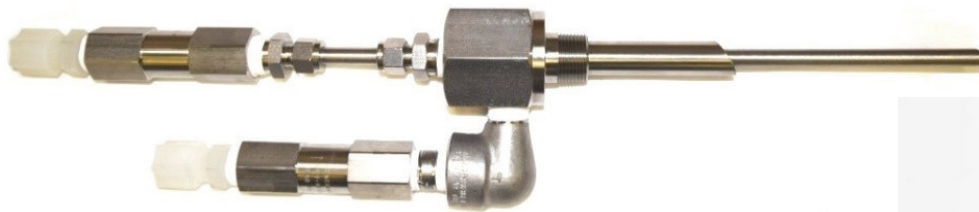
- The Eddington QCBM & QCFM Injection Quills offer MNPT process connections and 1/2" FNPT pump side connections. Quills made from Type 316 Stainless Steel, Alloy 20, Hastelloy C276 can be used for high temperature, high pressure applications.
- Crack pressure on the QCFM quills is 20 psi. If the pump cannot deliver 20 psi then a QBFM injection quill may be appropriate.
- Quills are available in Type 316 Stainless Steel, PVC, Kynar, Alloy 20 and Hastelloy C276.
- The QBFM has no check valve and the QCFM injection quills have built-in ball check valves to prevent backflow through the nozzle and into the chemical feed line.
- There are two flat surfaces on the external portion of the nozzle so a wrench can be used during installation.
- Install injection quill with V notch facing into the flow for the most rapid dispersal of injected chemicals into the stream (see diagram above).
- Standard injection quill length is 2 3/4" but custom lengths up to 24" are available. For additional lengths, please add the desired length after the part number. (e.g. QC-316-050-18)

Material	Part Number			Check Valve Material		Temperature and Pressure Rating	
	Process Connection Size (MNPT)			Ball	Spring	Max Temp	Max Press. (psi)
	1/2"	3/4"	1"				
Type 316 SS	QCFM-316-050	QCFM-316-075	QCFM-316-100	316 SS	Type 316 SS	750°F (400°C)	3000
PVC	QCFM-PVC-050	QCFM-PVC-075	QCFM-PVC-100	Ceramic	HAST C	100°F (37°C)	150
Kynar	QCFM-KY-050	QCFM-KY-075	QCFM-KY-100	Ceramic	HAST C	200°F (93.3°C)	150
Kynar w/ Teflon Check Valve	QCFM-KY-050-T	QCFM-KY-075-T	QCFM-KY-100-T	Teflon	HAST C	200°F (93.3°C)	150
Alloy 20	QCFM-C20-050	QCFM-C20-075	QCFM-C20-100	HAST C	HAST C	750°F (400°C)	3000
Hastelloy C 276	QCFM-Hastelloy-050	QCFM-Hastelloy-075	QCFM-Hastelloy-100	HAST C	HAST C	750°F (400°C)	3000
Type 316 SS	QBFM-316-050	QBFM-316-075	QBFM-316-100	No Check Valve		750°F (400°C)	3000
PVC	QBFM-PVC-050	QBFM-PVC-075	QBFM-PVC-100	No Check Valve		100°F (37°C)	150
Kynar	QBFM-KY-050	QBFM-KY-075	QBFM-KY-100	No Check Valve		200°F (93.3°C)	150
Alloy 20	QBFM-C20-050	QBFM-C20-075	QBFM-C20-100	No Check Valve		750°F (400°C)	3000
Hastelloy C 276	QBFM-Hastelloy-050	QBFM-Hastelloy-075	QBFM-Hastelloy-100	No Check Valve		750°F (400°C)	3000



DUPLEX INJECTION QUILLS

PRODUCT DATA SHEET



The Eddington Duplex Injection Quill Type 316 Stainless Steel with check valve kit - Part Number QD-316-075-CVK - is depicted above and comes with the following:

- 3/4" MNPT System Connection
- 1/2" FNPT Pump Connection
- (2) 1/2" Check Valves - Type 316 Stainless Steel
- (2) PVDF Tube Fittings
- Quill size inner: 3/8" tubing
- Quill size outer: 3/8" pipe
- Quill length inner: 2 3/4" lg
- Quill length outer: Up to 7" lg

Standard configurations are listed below; however, special configurations are also available. Please call for information.

Part Number	Process Connection	Pump Connection	Inner Quill Size (tubing)	Outer Quill Size (pipe)	Inner Quill Length	Outer Quill Length	Pressure (max)	Temperature (max)
QD-316-050	1/2" MNPT	1/4" FNPT	1/4"	1/4"	2 3/4"	Up to 7"	1000 psi	500°F (260°C)
QD-316-050-CVK	1/2" MNPT	1/4" FNPT	1/4"	1/4"	2 3/4"	Up to 7"	1000 psi	375°F (190°C)*
QD-316-075	3/4" MNPT	1/2" FNPT	3/8"	3/8"	2 3/4"	Up to 7"	1000 psi	500°F (260°C)
QD-316-075-CVK	3/4" MNPT	1/2" FNPT	3/8"	3/8"	2 3/4"	Up to 7"	1000 psi	375°F (190°C)*
QD-316-100	1" MNPT	1/2" FNPT	3/8"	3/8"	2 3/4"	Up to 7"	1000 psi	500°F (260°C)
QD-316-100-CVK	1" MNPT	1/2" FNPT	3/8"	3/8"	2 3/4"	Up to 7"	1000 psi	375°F (190°C)*

**Maximum Temperature rating is based on units provided with check valves*

APPLICATIONS

- Injection Quills are designed to ensure a more uniform and rapid dispersal of injection chemicals into the center stream of a process pipeline. This prevents corrosive liquids from clinging to the side of the pipe.
- Duplex Injection Quills are primarily made from Type 316 Stainless Steel and allow two chemicals to be inserted simultaneously.

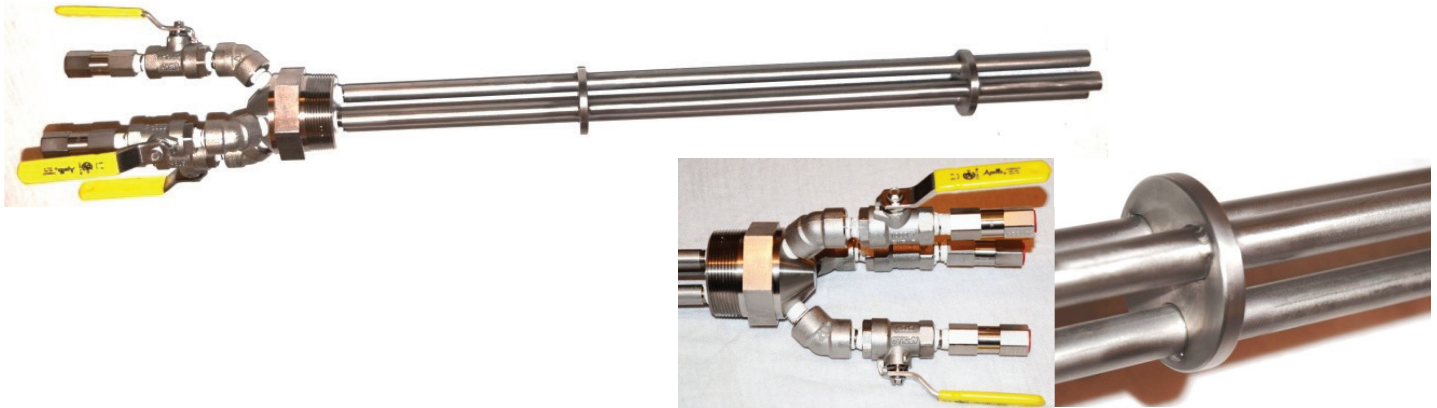
FEATURES

- Check valve kits are available on the pump side connection for easy installation and come assembled ready for use.
- Alloy 20 and Hastelloy materials are also available.
- Special quill lengths available on request.
- Insertion length of the inner tube is adjustable, based on where the customer sets the compression fitting.
- Hex shaped body allows a wrench to be used during installation.
- Made in the USA.

TRIPLEX INJECTION QUILLS

PRODUCT DATA SHEET

PATENT PENDING



The Eddington Triplex Injection Quill Type 316 Stainless Steel with check valve kit - Part Number QT-316-200-CVK - is depicted above and comes with the following:

- 2" MNPT System Connection
- (3) Port 1/4" FNPT Chemical Inlet Connection
- (3) 1/4" Check Valves - Type 316 Stainless Steel
- (3) 1/4" Apollo Isolation Valves - Type 316 Stainless Steel
- Quill size: 1/4" Type 316 Stainless Steel Sch 40 pipe
- Quill length inner: 24" lg
- Teflon tape and Teflon paste are used on all threaded connection

Standard configurations are listed below; however, special configurations are also available. Please call for information.

Part Number	Process Connection (Standard)	Chemical Inlet Connection (3 Ports)	Quill Size (Sch 40 pipe)	Quill Length (Standard)	Pressure (max)	Temperature (max)
QT-316-200	2" MNPT	1/4" FNPT	1/4"	18"	1000 psi	500°F (260°C)
QT-316-200-CVK	2" MNPT	1/4" FNPT	1/4"	18"	1000 psi	375°F (190°C)*

**Maximum Temperature rating is based on units provided with check valves*

APPLICATIONS

- Injection Quills are designed to ensure a more uniform and rapid dispersal of injection chemicals into the center stream of a process pipeline. This prevents corrosive liquids from clinging to the side of the pipe.
- De-airator applications are suited particularly well for this product.
- Triplex Injection Quills are primarily made from Type 316 Stainless Steel and allow three chemicals to be inserted simultaneously.

FEATURES

- Check valve kits are available on the chemical inlet side for easy installation and come assembled ready for use.
- Alloy 20 and Hastelloy materials are also available.
- Special quill lengths available on request.
- Hex shaped body allows a wrench to be used during installation.
- Each quill is welded to two rings to prevent quills from unscrewing.
- Made in the USA.



RETRACTABLE 3 PORT INJECTION QUILLS

PRODUCT DATA SHEET

PATENT PENDING



The Eddington Retractable 3 Port Injection Quill Type 316 Stainless Steel - Part Number QR3-316-SS-Q125 - is depicted above and comes with the following:

- 3" MNPT System Connection
- (3) Port 1/4" FNPT Chemical Inlet Connection
- (3) 1/2" Chemical Shut Off Valves - Type 316 Stainless Steel
- Quill size: 1/4" Tubing Type 316 Stainless Steel
- Quill has straight cut ends (not tapered)
- Quill Injection length: 12" lg standard
- Teflon tape and Teflon paste are used on all threaded connection

Standard configurations are listed below; however, special configurations are also available. Please call for information.

Part Number	Process Connection (Standard)	Chemical Inlet Connection (3 Ports)	Quill Size (Type 316 SS Tubing - Standard)*	Quill Length (Standard)	Pressure (max)	Temperature (max)
QR3-250-316-SS	2 1/2" MNPT	1/4" FNPT	1/2"	12"	150 psi	250°F (121 °C)
QR3-250-316-SS-CVK	2 1/2" MNPT	1/4" FNPT	1/2"	12"	150 psi	250°F (121 °C)*
QR3-300-316-SS	3" MNPT	1/4" FNPT	1/2"	12"	150 psi	250°F (121 °C)
QR3-300-316-SS-CVK	3" MNPT	1/4" FNPT	1/2"	12"	150 psi	250°F (121 °C)*

**Other materials and quill lengths are available upon request.*

APPLICATIONS

- Injection Quills are designed to ensure a more uniform and rapid dispersal of injection chemicals into the center stream of a process pipeline. This prevents corrosive liquids from clinging to the side of the pipe.
- De-airator applications are suited particularly well for this product.
- Each one of the three injection quills can be removed individually and then shut off with the corresponding valve.
- Retractable 3 Port Injection Quills are primarily made from Type 316 Stainless Steel and allow three chemicals to be inserted simultaneously.

FEATURES

- Check valve kits are available on the chemical inlet side for easy installation and come assembled ready for use.
- Alloy 20 and Hastelloy materials are also available.
- Special quill lengths available on request.
- Hex shaped body allows a wrench to be used during installation.

RETRACTABLE INJECTION QUILLS

PRODUCT DATA SHEET



The Eddington Retractable Injection Quill with check valve - Part Number QR-075-SS-CV - is depicted above. Standard configurations are listed below; however, special configurations are also available. Please call for information.

Part Number	Process Connection	Pump Connection	Wetted Part (Quill) Material	Packing Material (700°F max)	Injection Length	Working Pressure	Working Temperature
QR-050-SS	1/2" MNPT	1/4" FNPT	Type 316 SS	Graphite	21.5"	300 psi	200°F
QR-050-SS-VHT	1/2" MNPT	1/4" FNPT	Type 316 SS	Graphite	21.5"	450 psi	450°F
QR-075-SS	3/4" MNPT	1/4" FNPT	Type 316 SS	Graphite	21.5"	300 psi	200°F
QR-075-SS-VHT	3/4" MNPT	1/4" FNPT	Type 316 SS	Graphite	21.5"	450 psi	450°F
QR-100-SS	1" MNPT	1/4" FNPT	Type 316 SS	Graphite	21.5"	300 psi	200°F
QR-100-SS-VHT	1" MNPT	1/4" FNPT	Type 316 SS	Graphite	21.5"	450 psi	450°F

Check Valves are available for all Eddington Retractable Injection Quills.

- Please add a -CV on the end of the part number to add a check valve.
- Standard check valves are 1/4" FNPT Type 316 Stainless Steel with Viton seals.

APPLICATIONS

- Injection Nozzle allows for proper injection into liquid, gas or mixed phase system.
- Nozzles can be removed for inspection without system shutdown.
- Adjustable quill permits precise positioning of quill in fluid flow and restrains stinger during insertion/removal.

FEATURES

- Check valves are available on the pump side connection for easy installation.
- Alloy 20 and Hastelloy materials are also available.
- Available in larger sizes, up to 3" MNPT Connection.
- Welded safety collars on all retractable injection quills.

SPECIALS

- Materials such as Hastelloy and Alloy 20 are available upon request.
- Different quill diameters are available upon request.
- Special insertion lengths are available upon request.



CORROSION COUPON RACK (SERIES 2000)

PRODUCT DATA SHEET



The Eddington Corrosion Coupon Rack is depicted above. Standard configurations are listed below; however, special configurations are also available. Please call for information.

Part Number	Pipe Size	Material	Stations Available	Available Strut Mounted (use MS in P/N)	Available with Mounting Board (use MB in P/N)	Flow Regulator (Standard)
2200	3/4"	Black Iron	1-6	Yes	Yes	5 gpm
2210	1"	Black Iron	1-6	Yes	Yes	10 gpm
2400	3/4"	PVC	1-6	Yes	Yes	5 gpm
2410	1"	PVC	1-6	Yes	Yes	10 gpm
2500	3/4"	Type 304 SS	1-6	Yes	Yes	5 gpm
2510	1"	Type 304 SS	1-6	Yes	Yes	10 gpm

Typical Part Number configuration: 2210-4MS-F10-1" Black Iron with 4 stations, mounted on strut with a 10 gpm flow regulator. All coupon racks are teflon taped, pasted and come complete with the appropriate amount of coupon holders and hardware.

APPLICATIONS

- The corrosion test rack simplifies the procedure for establishing a corrosion monitoring program. This unit is preassembled and consists of threaded PVC, Black Iron or Stainless Steel pipe and fittings.
- One to six test sites can be provided so that the multi-metallic systems can be tested. A variable in-line flow regulator comes standard in the assembly for critical measurement of water velocities. An optional Y-Strainer can be added to help maintain water velocity through the flow meter and pipe rack.
- The corrosion test rack is designed according to ASTM designation D2688-70 which specifies the monitoring of corrosivity of water in the absence of heat transfer (weight loss methods).

OPTIONS

- 1-6 Station Coupon Holders
- Available with or without strut mounting or a mounting board
- High pressure (300 psi) coupon rack available (2600 series)
- Construction materials available
- Flow meter - 2-20 gpm
- Y-Strainer
- Made in the USA

SPECIFICATIONS

Construction: Threaded PVC, Black Iron or Type 304 Stainless Steel pipe and fittings

Dimensions: 24" H x 30" W

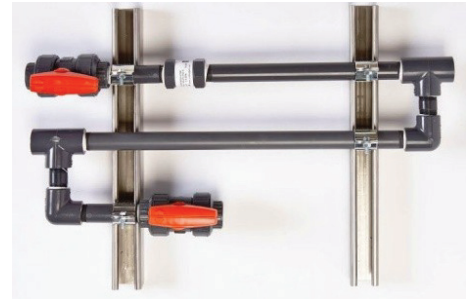
Flow Regulator: 3/4" Piping kits - 5 gpm (standard)
1" Piping kits - 10 gpm (standard)

Maximum allowable temperatures at pressure

Temp.	Pressure
80°F	280 psi
100°F	198 psi
120°F	128 psi
>140°F	Not Recommended

CORROSION COUPON RACK (SERIES 4000)

PRODUCT DATA SHEET



Our Standard 4000 Series Corrosion Test Coupon Bypass Systems are available with one to six coupon holders and have both inlet and outlet isolation ball valves. They are available in a choice of four materials: Sch 80 PVC suitable for most applications, CPVC for applications requiring higher temperature, Carbon Steel and Stainless Steel for high temperature applications. The PVC and CPVC bypass systems are mounted on galvanized steel strut for easy installation and increased rigidity.

All piping and valves for the bypass are to be either 3/4" or 1".

Made in the USA.

APPLICATIONS

- Cooling towers
- Heat exchangers
- Chillers
- Condenser units
- Boilers

Construction materials available:

- Black Iron
- PVC
- CPVC
- Type 304 Stainless Steel

OPTIONS

- Custom configurations and materials
- Flow indicators
- Back flow check valves
- Y-Strainers
- Flow control valves
- Test sample valves

Test specimens must be handled carefully to avoid coating with natural oil from the skin, thread compound or any similar material.

When removed, each specimen is to be carefully disconnected from the holder and then immediately dried with hot air or by sponging with a paper towel. Do not clean or remove any residue that may be on the coupon. Insert the specimen in the original envelope or wrap in cellophane. Enclose the test coupon data card showing company name, locations of the bypass's, specimen number, date of installation and date of removal. Promptly mail to Eddington Industries for analysis.



CORROSION COUPON RACK KIT

PRODUCT DATA SHEET



Model 2410-4-F10-Kit-Clear shown.

The Corrosion Test Rack simplifies the procedure for establishing a corrosion monitoring program. The kit consists of the 3/4" or 1" threaded PVC pipe and PVC fittings. Available in both solid and clear (shown). This kit is easily assembled via threaded connections and an easy to follow instruction guide. The clear kit also includes (4) foam covers to minimize exposure to sunlight.

Four test coupon holders are provided so that multi-metallic systems can be tested. An inline 5 or 10 gpm flow regulator is incorporated in the assembly for maintaining constant water velocity. A variable in-line flow meter is also available as an option for critical measurement of water velocities. An option Y Strainer is available to help maintain water velocity through the meter and pipe rack.

The corrosion test rack is designed according to ASTM designation D2688-70 which specifies the monitoring of corrosivity of the water in the absence of heat transfer (weight loss methods).

Made in the USA.

SPECIFICATIONS

Construction:	3/4" or 1" Sch 40 PVC or Clear PVC pipe and Sch 80 PVC fittings
Dimensions:	24" H x 30" W
Flow Regulator:	5 gpm (3/4" rack) or 10 gpm (1" rack)
Coupon Holders:	4 PVC coupon holders with hardware
Foam Covers:	4 foam covers for clear PVC piping kit

Part Number	Description
2400-4-F05-Kit	3/4" 4 Station Coupon Rack Kit - PVC
2400-4-F05-Kit-Clear	3/4" 4 Station Coupon Rack Kit - Clear PVC (comes with 4 foam covers)
2410-4-F10-Kit	1" 4 Station Coupon Rack Kit - PVC
2410-4-F10-Kit-Clear	1" 4 Station Coupon Rack Kit - Clear PVC (comes with 4 foam covers)
2700108	Blue-white flow meter model F-41000LN-16, 2-20 gpm, with 1" FNPT connection
2700111	Y-Strainer, PVC Sch 80

CORROSION TEST COUPONS

PRODUCT DATA SHEET



Part Number	Material	Hole Size
100100	C101D Steel	3/16"
100200	Copper, CDA110	3/16"
100300	Admiralty Brass	3/16"
100400	Galvanized Steel	3/16"
100500	Copper Nickel, 90/10	3/16"
100600	Aluminum, 7075-T6	3/16"
100700	Type 304 Stainless Steel	3/16"
100800	Type 316 Stainless Steel	3/16"
100900	Mesh Bio Film	3/16"
101000	Deposition/Scale Coupon Steel C1010	3/16"

Made in the USA.



APPLICATIONS

- To provide a basis for estimating service life of process equipment.
- To provide an insight into corrosion mechanics.
- To compare resistance of one alloy to another.
- As a quality control test for a given heat of alloy.
- Pre-weighing and post-weighing of coupons available upon request.

FINISHES

Coupons can be furnished with a variety of finishes depending on your particular application. Some of the typical finishes available are defined below.

Mill: Finish as produced from mill

Glass Bead: Blasted with fine glass beads to remove mill scale

120 Grit: Fine finish commonly used in corrosion tests, such as, pitting studies where smooth surface finish is desired. Finishes up to 600 grit (extremely fine) can be provided.



TEST COUPON HOLDER

PRODUCT DATA SHEET



Part Number	Threaded Connection MNPT	Plug Material	Stem Material	Stem Length (3" Standard)	Hardware Provided	Working Pressure (max)
220500	3/4"	Steel	Steel	3"	Nylon	250 psi
220500-N	3/4"	Steel	Nylon	3"	SS w/ Nylon Washers	250 psi
220500-T	3/4"	Steel	Teflon	3"	Teflon	250 psi
220500-S6	3/4"	Steel	Steel	6"	Nylon	250 psi
240500	3/4"	PVC	PVC	3"	SS w/ Nylon Washers	150 psi
240500-N	3/4"	PVC	Nylon	3"	SS w/ Nylon Washers	150 psi
240500-T	3/4"	PVC	Teflon	3"	Teflon	150 psi
240500-S6	3/4"	PVC	PVC	6"	SS w/ Nylon Washers	150 psi
250500	3/4"	Type 304 SS	Type 304 SS	3"	Teflon	150 psi
250500-T	3/4"	Type 304 SS	Teflon	3"	Teflon	150 psi
250500-T-S6	3/4"	Type 304 SS	Teflon	6"	Teflon	150 psi
221500	1"	Steel	Steel	3"	Nylon	150 psi
221500-N	1"	Steel	Nylon	3"	SS w/ Nylon Washers	150 psi
221500-T	1"	Steel	Teflon	3"	Teflon	150 psi
221500-S6	1"	Steel	Steel	6"	Nylon	150 psi
241500	1"	PVC	PVC	3"	SS w/ Nylon Washers	150 psi
241500-N	1"	PVC	Nylon	3"	SS w/ Nylon Washers	150 psi
241500-T	1"	PVC	Teflon	3"	Teflon	150 psi
241500-S6	1"	PVC	PVC	3"	SS w/ Nylon Washers	150 psi
251500	1"	Type 304 SS	Type 304 SS	3"	Teflon	250 psi
251500-T	1"	Type 304 SS	Teflon	3"	Teflon	250 psi
251500-T-S6	1"	Type 304 SS	Teflon	6"	Teflon	250 psi
270600	3/4" Retractable Coupon Holder. Type 316 SS, 3/4" MNPT Process Connection, Teflon Hardware, 18" max. insertion length					
270601	1" Retractable Coupon Holder, Type 316 SS, 1" MNPT Process Connection, Teflon Hardware, 18" max. insertion length					

RETRACTABLE TEST COUPON HOLDER

PRODUCT DATA SHEET



The Eddington Retractable Test Coupon Holder with safety chain is depicted above. Standard configurations are listed below; however, special configurations are also available. Please call for information.

Part Number	Type	Process Connection MNPT	Plug Material	Coupon Holder Material	Insertion Length (18" Standard)	Hardware Provided	Working Pressure (max)
270600	Safety Chain	3/4"	Type 316 SS	Type 316 SS	18"	Teflon	150 psi
270700	Threaded Rod	3/4"	Type 316 SS	Type 316 SS	18"	Teflon	300 psi
270701	Threaded Rod	1"	Type 316 SS	Type 316 SS	18"	Teflon	300 psi

APPLICATIONS

- The retractable coupon holder is a simple retrieval system for removing corrosion test coupons.

STANDARD SPECIFICATIONS

- 3/4" or 1" MNPT are the standard process connections.
- Custom retractable holders are available upon request.

FEATURES

- Welded safety collar.
- Safety chain or threaded rod assemblies available.
- Wetted parts are Type 316 Stainless Steel construction.
- Packing is made from graphite (max. temperature 700°F).
- Teflon hardware provided.
- Made in the USA.



FLOW REGULATORS

PRODUCT DATA SHEET



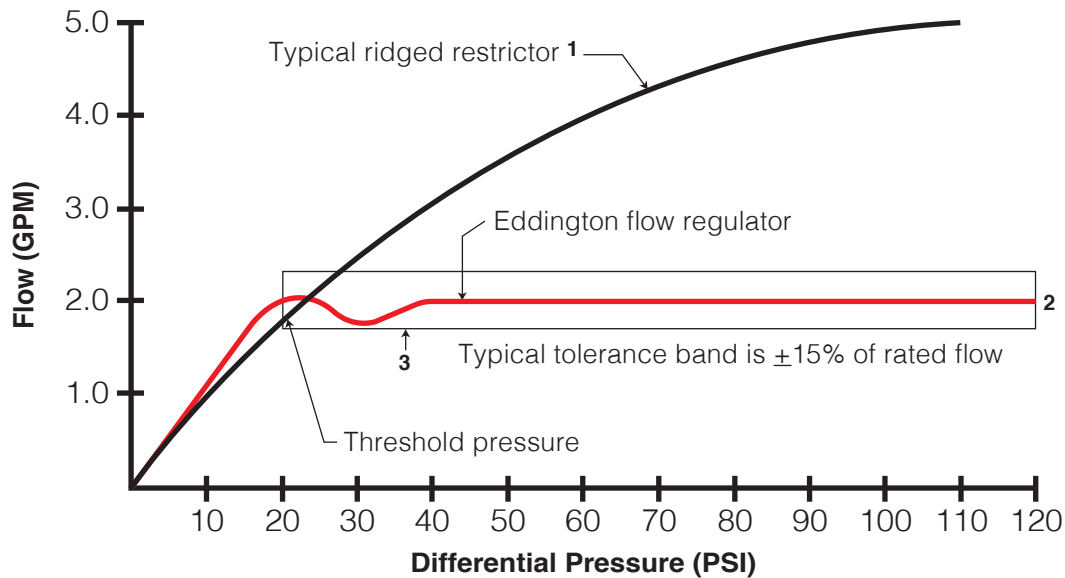
The Eddington Flow Regulator is designed to deliver a constant volume of water flow over a wide pressure drop range. The constant flow of water is maintained by the use of the flexible orifice. The flow rate is maintained within $\pm 15\%$ between 15 and 125 psi. The flow rate varies due to manufacturing tolerances and water temperature. Eddington Industries manufactures flow regulators in various materials such as Nickel Plated Brass, Type 316 Stainless Steel, and PVC. Eddington flow regulators come in various flow rates and are 3/8", 1/2", 3/4", 1" FNPT, and 1 1/4", 1 1/2", 2", 2 1/2", and 3" MNPT and flow rates range from 0.5 to 120 gallons per minute (GPM). Our flow regulators are now permanently etched with our part number which calls out the size, material and flow rate. All Eddington flow regulators are also permanently marked with an arrow indicating direction of flow. To ensure proper operation, always install regulator with the arrow pointed downstream.

Made in the USA.

Part Number (Nickel Plated Brass)	Flow (GPM)	Inlet Connection	Diameter (inches)	Length (inches)
FR-038-S	.06 to 1.0	3/8" FNPT	7/8" HEX	1 3/4"
FR-050-S	1.0 to 6.0	1/2" FNPT	1" HEX	1 15/16"
FR-075-S	1.0 to 11.5	3/4" FNPT	1 1/4" HEX	2 9/32"
FR-100-S	1.0 to 30	1" FNPT	1 1/2" HEX	2 3/4"
FR-125-S	1.0 to 30	1 1/4" MNPT	1 1/4" PIPE	3"
FR-150-S	1.0 to 30	1 1/2" MNPT	1 1/2" PIPE	3"
FR-200-S	1.0 to 30	2" MNPT	2" PIPE	3"
FR-250-S	30 to 90	2 1/2" MNPT	2 1/2" PIPE	4"
FR-300-S	30 to 120	3" MNPT	3" PIPE	4"



Flow Characteristics: FR Series Valves



(1) Calculated flow through 1/8" diameter orifice.

(2) Typical flow curve of Eddington 2 GPM Flow Regulator.

(3) Threshold pressure will vary with flow rating.

APPLICATIONS

- Cooling towers
- Water softeners
- Tankless heaters
- Water filters
- Ground water heat pumps
- Irrigation systems
- Pumps (well and packing water)
- Drinking fountains
- Water purifiers

MATERIALS

- Sizes: 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3" NPT
- Sizes: 3/8", 1/2", 3/4" and 1" are available in Lead Free Brass and Type 316 Stainless Steel
- Sizes: 1 1/4", 1 1/2", 2", 2 1/2" and 3" are available in Zinc Plated Steel and Type 316 Stainless Steel
- PVC Flow Regulators are available in 1/2" and 3/4" with a flow rate up to 8 gpm
- Rubber orifice: available in Buna (standard), Viton, and EPDM
- Custom connections, materials and sizes available.



EDDINGTON INDUSTRIES BACK PRESSURE VALVE

PRODUCT DATA SHEET



Diaphragm pressure relief valves are designed to protect pumping systems from over pressure damage caused by defective equipment or blockage in the pump system line.

- Reliable and low cost
- Adjustable from 15 to 150 psi
- 2 port (standard) and 3 port (with gauge)
- Viton diaphragm standard (others available)
- Full range of chemically resistant wetted materials
- Sizes from 1/4" to 1" depending on model

Diaphragm pressure relief valves operate when the pressure in the pumping system exceeds the preset pressure of the valve. The diaphragm is held against the valve seat by an internal spring. When the preset pressure is exceeded the diaphragm is forced up and the system fluid flows out the relief port and back to the system fluid tank or to the suction side of the pump. The valves are pre-set at 40 psi; however, they are field adjustable from 10 to 150 psi (optional 350 psi) via the adjustment screw. The relief valve should be set approximately 15 psi higher than the system pressure. Installation should be made as close to the pump as possible, without any valves or accessories between the relief valve and the pump.

Eddington Industries performs a pressure test on every back pressure relief valve prior to shipping. This ensures the unit will operate leak-free and to the specified pressure ratings.

Eddington Industries Back Pressure Valves come standard without a gauge port or gauge. When ordering please specify if a gauge port and/or gauge is required.

Made in the USA.

Material	Designation	Max Temperature
PVC	PVC	140°F (60°C)
CPVC	CPVC	140°F (60°C)
Polypropylene	PP	140°F (60°C)
Type 316 SS	SS	300°F (149°C)
PTFE (Teflon)	TFE	140°F (60°C)
PVDF (Kynar)	PVDF	140°F (60°C)
Alloy 20	C20	300°F (149°C)
Hastelloy C276	C276	300°F (149°C)

Back pressure valves are available in the following NPT port sizes:

	Port Size (NPT)
025	1/4"
050	1/2"
075	3/4"
100	1"

Pressure Range: 5 to 150 psi (50 to 350 psi available on metal valves)

Available Diaphragm Material: Viton - standard
EPDM - upon request

GLYCOL FEEDER GL-50-E

PRODUCT DATA SHEET



Part Number	Description
GL-50-E	Comes standard with low level switch and warning light
GL-50-E-AA	Comes with both low level switch and audible alarm
GL-50-E-RC	Comes with both low level switch and remote contact
GL-50-2A	Dual zone glycol feeder with: 2 each 1/2 HP bronze rotary gear pump (3 gpm @ 100 psi)
GL-50-M-E	Manual feeder with suction and discharge assemblies and 1/3 HP pump
GL-100-E 100	100 gallon tank with 1/2 HP pump and same options as GL-50-E
GL-Hinged Lid	Standard lid with a 1/3 hinged opening

*other options available



SPECIFICATIONS

Gear Pump: 1/3 and 1/2 HP bronze gear pump. Provides steady and even flow against pressure with an internal pressure relief bypass valve. Pump suction plumbing includes PVC drain valve, PVC ball valve, brass Y-strainer and flexible tubing. Pump discharge plumbing includes brass check valve, brass tubing, pressure switch and back-flow pressure valve.

Tank: 55 gallon polyethylene tank with a PE cover. Tank is fully supported and restrained by a painted carbon steel bottom mount stand.

Low Level Switch: The NEMA 4x control panel comes standard with a 115V power cord. The control panel comes standard with a 3 position (hand-off-auto) switch, red low level, and green main power LED lights. Mounted on a steel painted cross member for rigidity.

Pressure Switch: Polypropylene side entering low level switch with 10 amp relay.

Pressure Relief Valve: 5 to 150 psi. Manufactured by Eddington Industries.

System Connection: 3/4" brass FNPT.

Made in the USA.



EMBRITTLEMENT DETECTOR

PRODUCT DATA SHEET



Eddington Embrittlement Detector for ASTM-D807

The Embrittlement Detector is designed to simulate conditions in a boiler tube seam. By bringing boiler water in contact with the stressed specimen, the detector determines if the water causes embrittlement cracking.

Carbon steel replacement specimens are available.

Made in the USA.

FEATURES

- Assessing the tendency of industrial boiler waters to cause embrittlement
- Material construction: A108 C1018 Steel



Liquid Level Gauge:

Used to calibrate chemical injection systems. The gauge provides a visual means for checking the contents of a bulk tank and a means for checking the injection rate of a chemical metering pump. The gauge is designed to operate in low to medium pressure applications up to 500 psig.

One Minute Test:

Isolate the chemical in the tank from the gauge. The scale on the left side is for the gauge volume and the scale on the right will read the flow rate of the pump (i.e. gallons per hour - GPH). Keeping the isolation valve closed and noting the number of marks on the fluid passes in one minute will give the actual chemical pump rate.

FEATURES

- Teflon compression ferrule used to isolate the glass tube from the chamber.
- Rugged armored gauge construction protects sight glass from mechanical impact.
- Custom scales for tank volume or other calibrations are available.
- Armored frame and polycarbonate shield protect operator.
- 1/2" NPT and flange connections standard.
- Standard sight tube is 5/8" O.D. glass.
- Made in the USA.

SPECIFICATIONS

Process Connection: 1/2" MNPT

Housing Material:

- C - Zinc plated carbon steel
- A - All wetted parts Type 316 stainless steel with Type 304 stainless steel frame.
- W - All wetted parts Type 316 stainless steel with Zinc plated carbon steel frame.
- PC - All wetted parts PVC with carbon steel frame.
- PS - All wetted parts PVC with stainless steel frame.

Sight Tube Material: 5/8" O.D. standard glass.

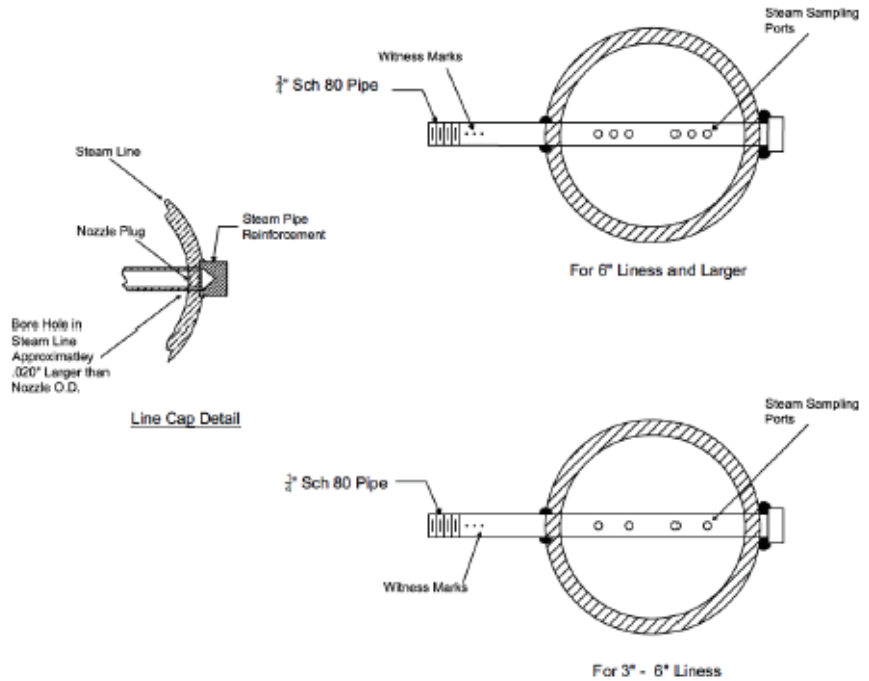
Other sight tube materials available, consult factory for options.





STEAM SAMPLING NOZZLE

PRODUCT DATA SHEET



FEATURES

- Steam sampling nozzles are based on ASTM D-1066-82.
- Non-destructive testing, welds, heat treatment, construction, materials and design must be in accordance with all applicable codes.
- The line and sampling nozzle would be the same material of construction.
- When single port nozzles cannot be installed in super heated supply tubes, multiport sampling nozzle is recommended for saturated or super heated steam in larger tubes or lines.
- One to six test sites can be provided so that the multi-metallic systems can be tested. A variable in-line flow regulator comes standard in the assembly for critical measurement of water velocities. An optional Y-strainer can be added to help maintain water velocity through the flow meter and pipe rack.
- The corrosion test rack is designed according to ASTM designation D2688-70 which specifies the monitoring of corrosivity of water in the absence of heat transfer (weight loss methods).
- Made in the USA.