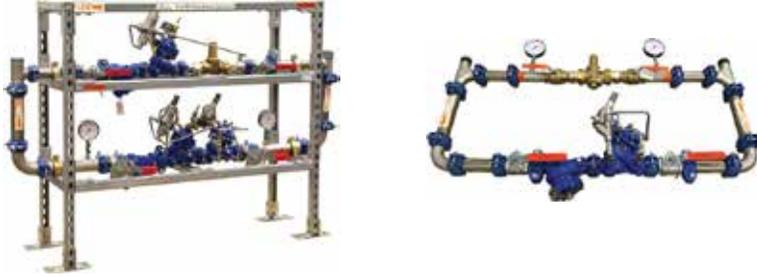


# Pressure Reducing Valve Station

## Series 386-DL



### 1.0 PRODUCT DESCRIPTION

#### Available Sizes

- 1 ½ x 1 ½"/DN40 x DN40 to 6 x 2"/DN150 x DN50

#### Pipe Material

- Stainless steel

#### Maximum Working Pressure

- 300 psi/2068 kPa/21 Bar

#### Operating Temperature Range

- +33°F to +140°F/+1°C to +60°C

#### Maximum Flowrate

- Up to 408 gpm/1544 lpm

#### Application

- Fully integrated, ready-to-install pressure reducing valve (PRV) station.
- Typically for use in potable water systems to reduce and control system pressures to specified levels, independent of upstream pressure and flow variations.
- Offered in four standard configurations to accommodate various system flowrates, pressure reduction ratios, redundancy, and pressure safety options.
- Includes integrated low-flow bypass branch for accurate control in low water demand situations.
- Features integral automatic hydraulic control valves, isolation valves, pressure gauges and strainers for each branch.
- Fully supported with integrated strut frame, ready for installation (except for 1 ½ x 1 ½").
- Connects to piping with Victaulic grooved mechanical couplings. When connecting to a copper piping system, a Victaulic Style 647 dielectric waterway fitting or a Victaulic Style 644 transition coupling is available for order separately.
- Exclusively for use with Victaulic couplings, fittings, valves, accessories and pipe which feature ends formed with Victaulic Original Groove System (OGS).

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

## 1.0 PRODUCT DESCRIPTION (CONTINUED)

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### Optional Accessories<sup>1</sup>

- Dielectric Waterway Fitting – Victaulic Style 647
- Installation-Ready™ Transition Coupling for Potable Water - Victaulic Style 644
- Pressure Relief Valve – Victaulic Series 973-Q
- Air Release Valve - Victaulic Series 9A3, 9A7, 9C3 or 9C7

<sup>1</sup> These items not offered as part of the standard Series 386 PRV Station but can be ordered separately.

### Series 386 PRV Station Part Codes

(Use the 8th place in the part code to designate which configuration is being ordered)

EXAMPLE: KC40386**A**E**B**

Series 386**A-DL** = Single Stage PRV Station with Direct Acting Low-Flow Bypass (LFB)

Series 386**B-DL** = Two Stage PRV Station with Direct Acting LFB

Series 386**C-DL** = Single Stage PRV Station with Direct Acting LFB & Emergency Downstream Over Pressure Guard "Watchdog" Combination

Series 386**D-DL** = Two Stage PRV Station with Direct Acting LFB & Emergency Downstream Over Pressure Guard "Watchdog" Combination

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## 2.0 CERTIFICATIONS/LISTINGS

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See [7.0 Reference Materials](#) section for individual component certifications/listings

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## 3.0 SPECIFICATIONS – MATERIAL

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- Schedule 10 stainless steel pipe.
- Victaulic Original Groove System (OGS).

**Coupling:** Ductile iron conforming to ASTM A536, Grade 65-45-12.

**Housing Coating Color:** Blue.

**Gasket:** Fluoroelastomer blend.

**Bolts/Nuts:** Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (metric). Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial – heavy hex nuts) and ASTM A563M Class 9 (metric – hex nuts). Track bolts and hex nuts are zinc electroplated per ASTM B633 FE/ZN5, finish Type III (imperial) or Type II (metric).

**Series 726S Ball Valve:** CF8M stainless steel body and end cap.

**Ball:** 316 stainless steel.

**Seat:** Reinforced polytetrafluorethylene (RTFE).

**Seal:** Fluoroelastomer.

**Lever Handle:** Carbon steel, zinc-plated; plastic grip.

**Lever Handle Bracket:** Hot rolled steel, black enamel coated.

**Bracket Bolts & Washers:** Cold rolled steel, zinc plated.

**Integral Locking Device Components:** Stamped carbon steel, zinc plated.

### 3.0 SPECIFICATIONS – MATERIAL (CONTINUED)

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**Series 722L Ball Valve:** Forged brass, per CW 509L.

**Ball:** Brass, chrome plated, per CW 510L.

**Stem:** Brass, chrome plated, per CW 510L.

**Seat:** Polytetrafluoroethylene (PTFE).

**Stem Seal:** Double O-rings rubber and PTFE friction ring.

**Handle:** Low carbon steel, zinc or cadmium plated, with vinyl grip.

**Handle Hex Nut:** Carbon steel, zinc plated.

**Butterfly Valve:** Stainless steel body conforming to ASTM A351 Grade CF8M.

**Disc:** Stainless steel conforming to ASTM A351 Grade CF8M.

**Seat:** Fluoroelastomer.

**10-Position Handle:** Zinc-plated carbon steel handle with zinc-plated carbon steel latch plate and zinc-plated carbon steel fasteners, infinitely variable, padlockable and includes memory stop. Optionally available with tamper-resistant hardware.

**Strainer:** Ductile iron body.

**Screen:** Type 304 stainless steel.

**O-Rings:** EPDM.

**Coating:** Fusion bonded epoxy, RAL 5017.

**Pressure Reducing Valve, Excessive Pressure Shut-Off Valve, and Pressure Reducing System with “Watchdog” Hydraulic Backup Valve:** Ductile iron body, cover and partition.

**Internals:** Stainless steel and bronze.

**Control Accessories:** Type 316 stainless steel.

**Tubing & Fittings:** Type 316 stainless steel.

**Diaphragm:** EPDM/FKM blend, nylon fabric-reinforced.

**O-Rings:** EPDM.

**Seal:** NBR.

**Coating:** Fusion bonded epoxy, RAL 5017.

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### 3.1 VALVE SELECTION BY STATION TYPE AND SIZE

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#### A and B Stations

**Bypass Line:** Series 722L for all sizes

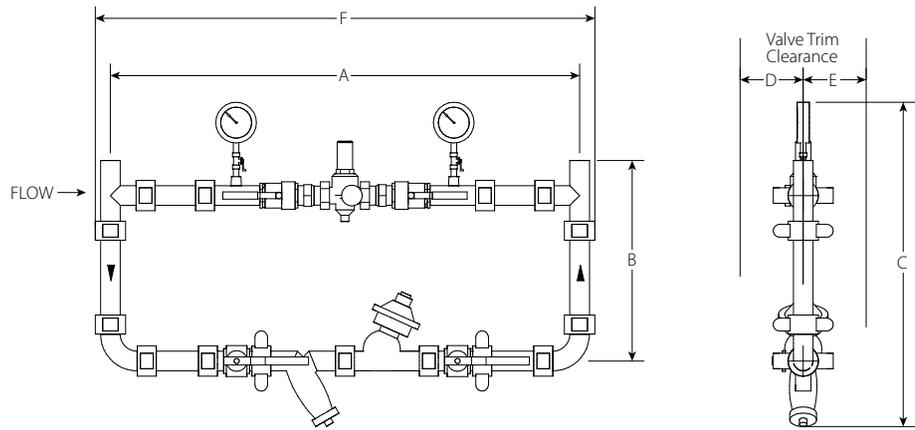
**Main Line:** Series 726S for 1 ½"/DN40 size, butterfly valve for all other sizes

#### C and D Stations

**Bypass and Main Line:** Series 726S for 1 ½"/DN40 size, butterfly valve for all other sizes

## 4.0 DIMENSIONS

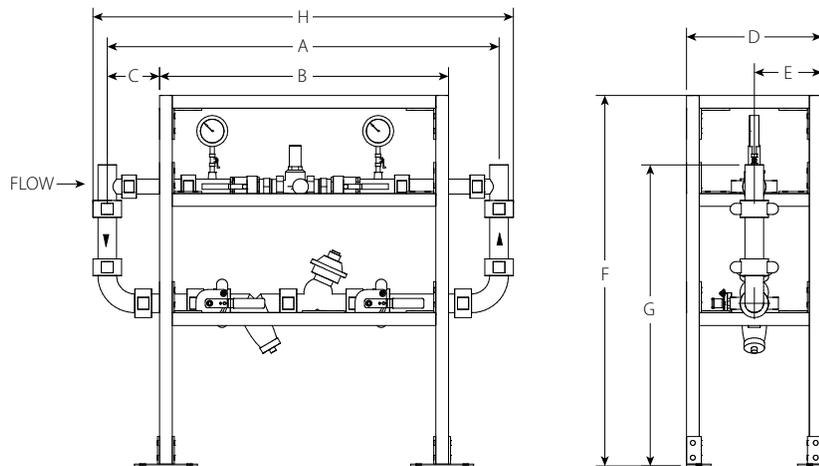
### Series 386A – DL (No Rack)



Size				Dimensions						Weight		
Nominal Primary Line inches DN	x	Low-Flow Bypass	Actual O.D. Primary Line inches mm	x	Low-Flow Bypass	A	B	C	D	E	F	Approx. (Each) lb kg
						inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	
1 ½ DN40	x	1 ½ DN40	1.900 48.3	x	1.900 48.3	45.50 1156	19.38 492	31.38 797	6.25 159	6.25 159	51.31 1303	106.00 48.1

## 4.1 DIMENSIONS

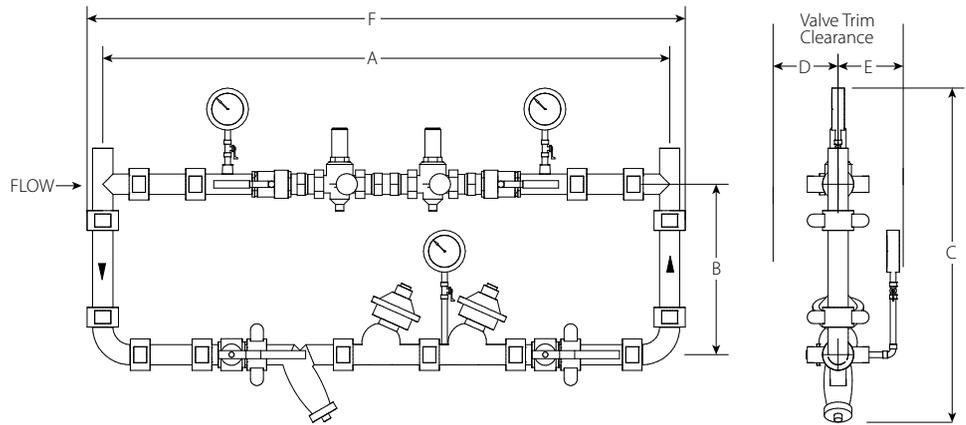
### Series 386A – DL (With Rack)



Size				Dimensions								Weight		
Nominal Primary Line inches DN	x	Low-Flow Bypass	Actual O.D. Primary Line inches mm	x	Low-Flow Bypass	A	B	C	D	E	F	G	H	Approx. (Each) lb kg
						inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	
2 DN50	x	1 ½ DN40	2.375 60.3	x	1.900 48.3	49.81 1265	36.75 933	6.63 168	17.25 438	8.63 219	47.00 1194	38.19 970	55.94 1421	261.21 118.9
2 ½	x	1 ½ DN40	2.875 73.0	x	1.900 48.3	52.75 1340	39.00 991	7.25 184	17.25 438	8.63 219	47.00 1194	38.81 986	59.50 1511	285.53 129.5
3 DN80	x	1 ½ DN40	3.500 88.9	x	1.900 48.3	56.75 1441	42.00 1067	8.38 213	19.25 489	9.63 245	50.00 1270	41.81 1062	64.25 1632	353.19 160.2
4 DN100	x	1 ½ DN40	4.500 114.3	x	1.900 48.3	67.31 1710	51.13 1299	8.19 208	20.25 514	10.13 257	55.00 1397	47.44 1205	76.06 1932	531.59 241.1

## 4.2 DIMENSIONS

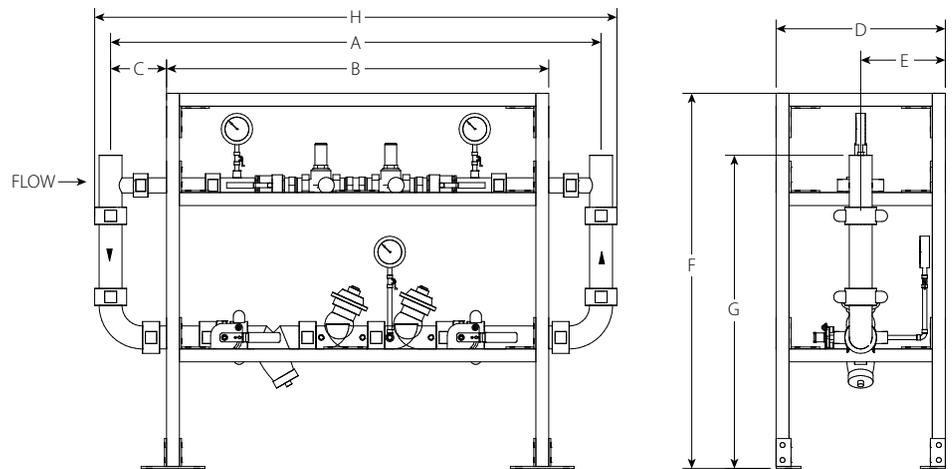
### Series 386B – DL (No Rack)



Size				Dimensions						Weight		
Nominal Primary Line inches DN	x	Low-Flow Bypass inches DN	Actual O.D. Primary Line inches mm	x	Low-Flow Bypass inches mm	A	B	C	D	E	F	Approx. (Each) lb kg
						inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	
1 1/2 DN40	x	1 1/2 DN40	1.900 48.3	x	1.900 48.3	53.38 1356	19.38 492	31.38 797	6.25 159	6.25 159	59.19 1503	138 62.6

## 4.3 DIMENSIONS

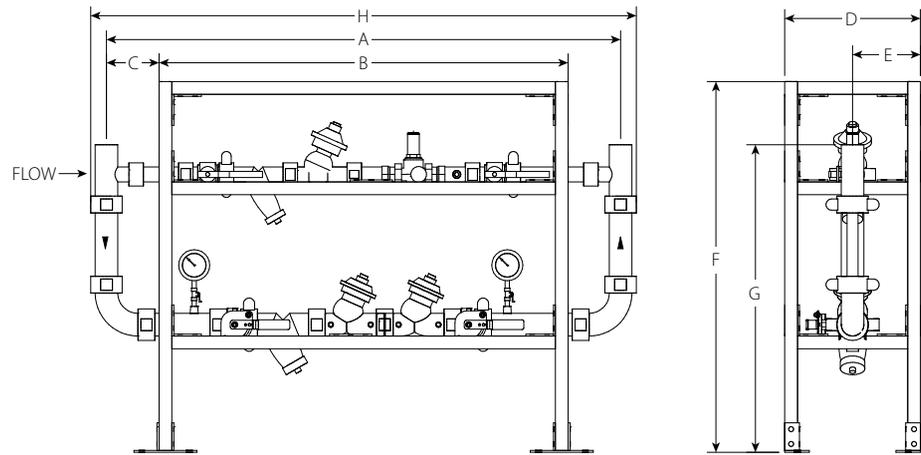
### Series 386B – DL (With Rack)



Size				Dimensions								Weight		
Nominal Primary Line inches DN	x	Low-Flow Bypass inches DN	Actual O.D. Primary Line inches mm	x	Low-Flow Bypass inches mm	A	B	C	D	E	F	G	H	Approx. (Each) lb kg
						inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	
2 DN50	x	1 1/2 DN40	2.375 60.3	x	1.900 48.3	59.00 1499	46.25 1175	6.75 171	20.25 514	10.13 257	47.00 1194	38.19 970	65.13 1654	309.85 140.5
2 1/2	x	1 1/2 DN40	2.875 73.0	x	1.900 48.3	61.56 1564	48.00 1219	7.00 178	21.25 540	10.63 270	47.00 1194	39.19 995	68.31 1735	337.93 153.9
3 DN80	x	1 1/2 DN40	3.500 88.9	x	1.900 48.3	64.56 1640	50.00 1270	7.63 194	22.25 565	11.13 283	50.00 1270	42.19 1072	72.06 1830	415.36 188.4
4 DN100	x	1 1/2 DN40	4.500 114.3	x	1.900 48.3	80.25 2038	64.00 1626	8.13 207	23.25 591	11.63 295	55.00 1397	47.31 1202	89.00 2261	640.15 290.4

## 4.4 DIMENSIONS

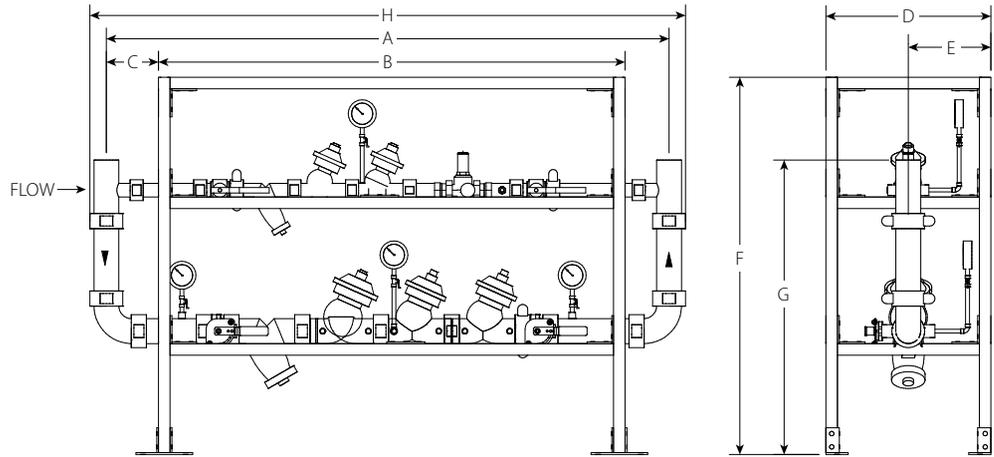
### Series 386C – DL (With Rack)



Size					Dimensions								Weight		
Primary Line	x	Low-Flow Bypass	Actual O.D.		A	B	C	D	E	F	G	H	Approx. (Each)		
			Primary Line	Low-Flow Bypass										inches	mm
2	x	1 ½	2.375	1.900	65.50	52.63	7.25	17.25	8.63	47.00	37.31	71.63	314.00		
DN50	x	DN40	60.3	48.3	1664	1337	184	438	219	1194	948	1819	142.4		
2 ½	x	1 ½	2.875	1.900	65.31	52.00	6.69	17.25	8.63	47.00	39.00	72.06	339.92		
		DN40	73.0	48.3	1659	1321	170	438	219	1194	991	1830	154.2		
3	x	1 ½	3.500	1.900	68.25	55.00	6.38	19.25	9.63	53.00	42.19	75.75	408.01		
DN80	x	DN40	88.9	48.3	1734	1397	162	489	245	1346	1072	1924	185.1		
4	x	1 ½	4.500	1.900	81.25	65.00	8.25	20.25	10.13	60.00	50.31	90.00	542.39		
DN100	x	DN40	114.3	48.3	2064	1651	210	514	257	1524	1278	2286	246.0		

## 4.5 DIMENSIONS

### Series 386D – DL (With Rack)



Size					Dimensions								Weight	
Primary Line	x	Low-Flow Bypass	Actual O.D.		A	B	C	D	E	F	G	H	Approx. (Each)	
			Primary Line	x										Low-Flow Bypass
inches			inches		inches	inches	inches	inches	inches	inches	inches	inches	lb	
DN			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	
2	x	1 ½	2.375	x	1.900	72.94	60.38	6.88	21.25	10.63	50.00	38.31	79.06	372.15
DN50		DN40	60.3		48.3	1853	1534	175	540	270	1270	973	2008	168.8
2 ½	x	1 ½	2.875	x	1.900	73.94	60.50	6.88	21.25	10.63	50.00	40.00	80.69	407.49
		DN40	73.0		48.3	1878	1537	175	540	270	1270	1016	2050	184.8
3	x	1 ½	3.500	x	1.900	79.31	65.75	7.38	23.25	11.63	53.00	41.38	86.81	497.24
DN80		DN40	88.9		48.3	2014	1670	187	591	295	1346	1051	2205	225.5
4	x	1 ½	4.500	x	1.900	93.63	77.50	8.13	23.25	11.63	60.00	50.06	102.38	669.08
DN100		DN40	114.3		48.3	2378	1969	207	591	295	1524	1272	2600	303.5

## 5.0 PERFORMANCE

PRV Station Size					Maximum Flow for 8 ft/sec (2.4 m/sec) Velocity	Maximum Flow for 10 ft/sec (3.0 m/sec) Velocity	
Primary Line	x	Low-Flow Bypass	Actual O.D.				
			Primary Line	x	Low-Flow Bypass	GPM	LPM
inches			inches				
DN			mm	mm			
1 ½	x	1 ½	1.900	x	1.900	58	72
DN40		DN40	48.3		48.3	220	273
2	x	1 ½	2.375	x	1.900	92	115
DN50		DN40	60.3		48.3	348	435
2 ½	x	1 ½	2.875	x	1.900	136	170
		DN40	73.0		48.3	515	644
3	x	1 ½	3.500	x	1.900	190	237
DN80		DN40	88.9		48.3	719	897
4	x	1 ½	4.500	x	1.900	326	408
DN100		DN40	114.3		48.3	1234	1544

## 6.0 NOTIFICATIONS

### WARNING



- Read and understand all instructions before attempting to install any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Wear safety glasses, hardhat, and foot protection.
- Verify that the proper equipment is available for handling the Pressure-Reducing Valve (PRV) Station.
- Use proper material handling techniques to prevent the PRV Station assembly from tipping.
- The PRV station shall be anchored securely to the floor or wall with appropriate fasteners for the substrate and load.
- Isolate each section and vent pressure before attempting to remove, adjust, or maintain the PRV Station.

Failure to follow these instructions could result in death or serious personal injury and property damage.

## 7.0 REFERENCE MATERIALS

[02.06: Victaulic® Approvals for Potable Water Products](#)

[06.02: Victaulic® Zero-Flex™ Rigid Coupling Style 07](#)

[06.28: Victaulic® QuickVic™ Installation-Ready™ Rigid Coupling for Potable Water Applications Style 807N](#)

[08.73: Victaulic® Brass Body Ball Valve Series 722L](#)

[17.16: Victaulic® Stainless Steel OGS Fittings](#)

[17.22: Victaulic® Stainless Steel Ball Valve Series 726S](#)

[17.45: Victaulic® Vic-300 MasterSeal Stainless Steel Butterfly Valve for Potable Water Applications Series 861](#)

[Series 935-H/Model BC-CAP-P Direct Acting Pressure Reducing Valve Submittal](#)

[Series 935-H/Model BC-CAP-P Direct Acting Pressure Reducing Valve IOM](#)

[Series 968-F/Model BC-70F-P Strainer Submittal](#)

[Series 968-F/Model BC-70F-P Strainer IOM](#)

[Series 972/Model BC-720-P Pressure Reducing Valve Submittal](#)

[Series 972/Model BC-720-P Pressure Reducing Valve IOM](#)

[Series 972S-H/Model BC-72S-H-P Pressure Reducing System Submittal](#)

[Series 972S-H/Model BC-72S-H-P Pressure Reducing System IOM](#)

[Series 972-PD/Model BC-720-PD-P Proportional Pressure Reducing Valve Submittal](#)

[Series 972-PD/Model BC-720-PD-P Proportional Pressure Reducing Valve IOM](#)

[Series 972S-2B-H/Model BC-72S-2B-H-P Watchdog PRV Combo with Integrated Low-Flow Bypass Submittal](#)

[Series 972S-2B-H/Model BC-72S-2B-H-P Watchdog PRV Combo with Integrated Low-Flow Bypass IOM](#)

[I-PRV: Victaulic® Series 386 Pressure Reducing Valve \(PRV Station\) Installation Instructions](#)

[I-100: Victaulic® Field Installation Handbook](#)

#### User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, warranty, installation instructions, or this disclaimer.

#### Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at [victaulic.com](#).

#### Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

#### Intellectual Property Rights

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#### Note

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.