

# FireLock® Check Valves



**SERIES 717 - UL, ULC, FM, VdS, LPCB**  
**SERIES 717H HIGH PRESSURE - cULus, FM**

The FireLock Series 717 Check Valve and Series 717H High Pressure Check Valves are CAD-designed for hydrodynamic efficiency and available in 2"/50 mm – 3"/80mm (Series 717H) and 2 ½"/65mm – 12"/300 mm (Series 717) sizes.

Series 717H valves are cULus Listed and FM Approved for service up to 365 psi/2517 kPa. See chart below for approved services for the Series 717 valves.

In the Series 717H High Pressure Check Valve, the stainless steel disc seated against the O-ring seal is mounted on the electroless nickel-plated end face. This spring-assisted, single disc design achieves a leak-free seal with as little as 5 ft/1.5 m of head. The valve can be installed in horizontal and vertical positions.

The Series 717 check valve features an elastomer encapsulated disc and a welded in nickel seat for superior corrosion resistance.

In both valve designs, the single disc mechanism incorporates a spring-assisted feature for non-slamming operation. Each valve is factory tested to the rated working pressure. For systems requiring a Riser Check option refer to publication 10.09. Both valve designs include upstream and downstream pressure taps.

Grooved ends allow fast, easy installation with just two Victaulic couplings or the valve may be mounted to flanged (ANSI CL.150) equipment using either to Victaulic Style 741 Vic-Flange® or Style 744 FireLock flange adapters on either end.



Series 717  
(4 – 12"/100 – 300mm)



Series 717H High Pressure Check Valve  
(2 - 3"/50 - 80mm)

Size	Approval/Listing Service Pressures					
	Series 717H		Series 717			
	cULus	FM	cULus	FM	LPCB	VdS
2"/50mm	up to 365psi/2517 kPa	up to 365psi/2517 kPa	n/a	n/a	n/a	n/a
2 ½"/65mm	up to 365psi/2517 kPa	up to 365psi/2517 kPa	up to 250psi/1725kPa	n/a	up to 1725kPa/250psi	n/a
76.1mm	up to 365psi/2517 kPa	up to 365psi/2517 kPa	up to 250psi/1725kPa	n/a	up to 1725kPa/250psi	up to 16bar/232psi
3"/80mm	up to 365psi/2517 kPa	up to 365psi/2517 kPa	up to 250psi/1725kPa	n/a	up to 1725kPa/250psi	up to 16bar/232psi
4"/100mm	n/a	n/a	up to 350psi/2413kPa	up to 350psi/2413kPa	up to 1725kPa/250psi	up to 16bar/232psi
5"/125mm	n/a	n/a	up to 250psi/1725kPa	up to 250psi/1725kPa	up to 1725kPa/250psi	n/a
139.7mm	n/a	n/a	up to 250psi/1725kPa	up to 250psi/1725kPa	up to 1725kPa/250psi	up to 16bar/232psi
6"/150mm	n/a	n/a	up to 350psi/2413kPa	up to 350psi/2413kPa	up to 1725kPa/250psi	up to 16bar/232psi
165.1mm	n/a	n/a	up to 250psi/1725kPa	up to 250psi/1725kPa	up to 1725kPa/250psi	n/a
8"/200mm	n/a	n/a	up to 350psi/2413kPa	up to 350psi/2413kPa	up to 1725kPa/250psi	up to 16bar/232psi
10"/250mm	n/a	n/a	up to 250psi/1725kPa	up to 250psi/1725kPa	up to 1725kPa/250psi	n/a
12"/300mm	n/a	n/a	up to 250psi/1725kPa	up to 250psi/1725kPa	up to 1725kPa/250psi	n/a

**JOB/OWNER**

System No. \_\_\_\_\_  
 Location \_\_\_\_\_

**CONTRACTOR**

Submitted By \_\_\_\_\_  
 Date \_\_\_\_\_

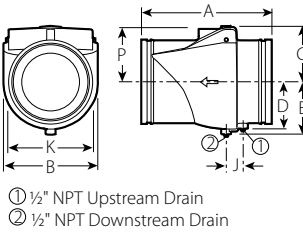
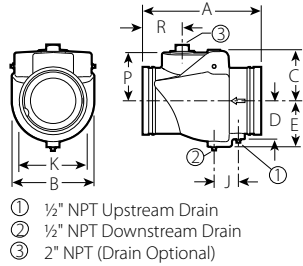
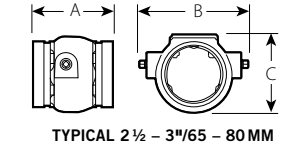
**ENGINEER**

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_  
 Approved \_\_\_\_\_  
 Date \_\_\_\_\_

# FireLock® Check Valves

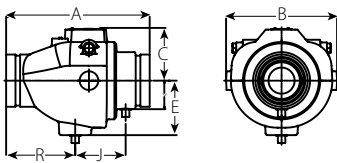
SERIES 717 - UL, ULC, FM, VdS, LPCB  
 SERIES 717H HIGH PRESSURE - cULus, FM

## DIMENSIONS - Series 717



Size		Dimensions- Inches/millimeters										Approx. Wgt. Ea.
Nominal Size Inches mm	Actual Outside Diameter Inches mm	E to E A	B	C	D	E	J	K	P	R	Lbs. kg	
2 1/2 65	2.875 73.0	3.88 99	4.26 108	3.57 91	—	—	—	—	—	—	3.6 1.6	
76.1 mm	3.000 76.1	3.88 99	4.26 108	3.57 91	—	—	—	—	—	—	3.6 1.6	
3 80	3.500 88.9	4.25 108	5.06 129	4.17 106	—	—	—	—	—	—	4.5 2.0	
4 100	4.500 114.3	9.63 245	6.00 152	3.88 99	2.75 70	3.50 89	2.00 51	4.50 114	3.50 89	3.35 85	20.0 9.1	
5 125	5.563 141.3	10.50 267	6.80 173	4.50 114	—	4.17 106	2.15 55	5.88 149	4.08 104	3.98 101	27.0 12.3	
139.7 mm	5.500 139.7	10.50 267	6.80 173	4.50 114	—	4.17 106	2.15 55	5.88 149	4.08 104	3.98 101	27.0 12.3	
6 150	6.625 168.3	11.50 292	8.00 203	5.00 127	—	4.50 114	2.38 61	6.67 169	4.73 120	3.89 99	38.0 17.2	
165.1 mm	6.500 165.1	11.50 292	8.00 203	5.00 127	—	4.50 114	2.38 61	6.67 169	4.73 120	3.89 99	38.0 17.2	
8 200	8.625 219.1	14.00 356	9.88 251	6.06 154	5.05 128	5.65 144	2.15 55	8.85 225	5.65 144	5.75 146	64.0 29.0	
10 250	10.750 273.0	17.00 432	12.00 305	7.09 180	5.96 151	6.69 170	2.15 55	10.92 277	6.73 171	—	100.0 45.4	
12 300	12.750 323.9	19.50 495	14.00 356	8.06 205	6.91 176	7.64 194	2.51 64	12.81 925	7.73 196	—	140.0 63.5	

## DIMENSIONS - Series 717H



Size	Dimensions- Inches/millimeters								
Nominal Size Inches mm	A	B	C	D	E	J	K	P	R
2 60.3	8.66 219.8	6.46 164.1	3.23 82.1	1.48 37.5	3.02 76.7	2.80 71.0	—	—	4.25 108.0
2 1/2 73	9.37 238.0	6.94 176.3	3.31 84.1	1.66 42.2	3.40 86.4	3.38 85.9	—	—	4.38 111.3
76.1 mm	9.37 238.0	6.94 176.3	3.31 84.1	1.66 42.2	3.40 86.4	3.38 85.9	—	—	4.38 111.3
3 88.9	9.62 244.3	7.44 189.0	3.53 89.7	1.91 48.5	3.65 92.7	3.38 85.9	—	—	4.63 117.6

## FireLock® Check Valves

SERIES 717 - UL, ULC, FM, VdS, LPCB

SERIES 717H HIGH PRESSURE - cULus, FM

### MATERIAL SPECIFICATIONS

**Body:** Ductile Iron conforming to ASTM A-536, grade 65-45-12. Ductile iron conforming to ASTM A-395, grade 65-45-15, is available upon special request.

**Body Coating:** Series 717H Body: Black Paint  
Series 717H Endface: Electroless Nickel  
Series 717 (2 ½ – 3"): PPS Coating  
Series 717 (4 – 12"): Black Paint

**Body Seat:** Series 717H - Nitrile O-ring installed into an electroless nickel plated endface  
Series 717 (2 ½ - 3"): PPS Coated ductile iron  
Series 717 (4 - 12"): Welded Nickel

#### Disc Seal or Coating:

- **Grade "T" Nitrile (Series 717H ONLY)**  
Nitrile (Orange color code). Temperature range -20°F to +180°F/-29°C to +82°C  
Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range; except hot, dry air over +140°F/+60°C and water over +150°F/+66°C. NOT RECOMMENDED FOR HOT WATER SERVICES.
- **Grade "E" EPDM (Series 717 ONLY)**  
EPDM (green color code). Temperature range -30°F to +230°F/-34°C to +110°C. Recommended for cold and hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. NOT RECOMMENDED FOR PETROLUUM SERVICES.

\* Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific gasket service recommendations and for a listing of services which are not recommended.

#### Discs:

- Series 717H (2 – 3"/50 – 80mm): CF8M Cast Stainless Steel
- Series 717 (2 ½ – 3"): Aluminum bronze with elastomer seal
- Series 717 (4 – 12"/100 – 300mm) Elastomer-coated ductile iron

#### Shaft:

- Series 717H (2 – 3"/50 -80mm): Brass
- Series 717 (2 ½ – 3"): Type 416 Stainless Steel
- Series 717 (4 – 12"/100 – 300mm) Type 316 Stainless Steel

**Spring:** All sizes Type 302/403 Stainless Steel

#### Shaft Plug:

- Series 717H (2 – 3"/50 – 80mm): Type 416 Stainless Steel
- Series 717 (2 ½ – 12"/65 – 300mm): Carbon steel zinc plated

#### Pipe Plug:

- Series 717H (2 – 3"/50 – 80mm): carbon steel zinc plated
- Series 717 (4 – 12"/100 – 300mm): Carbon steel zinc plated

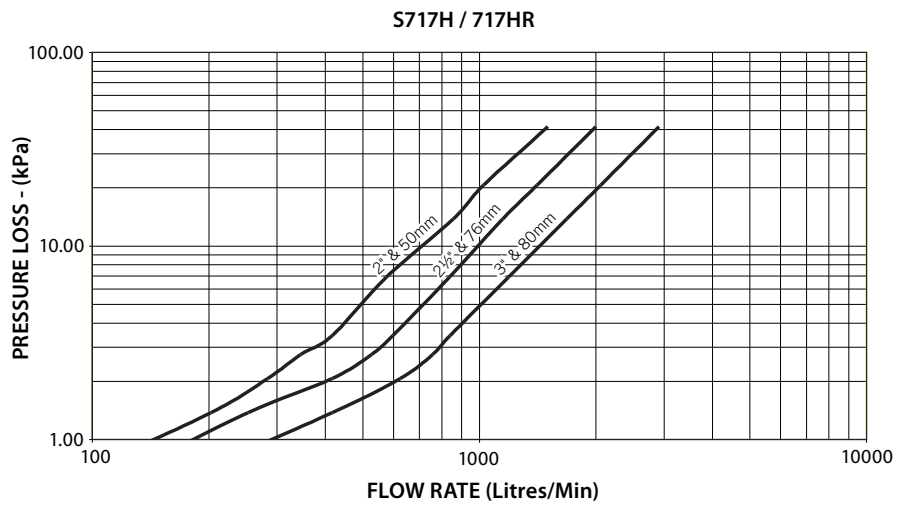
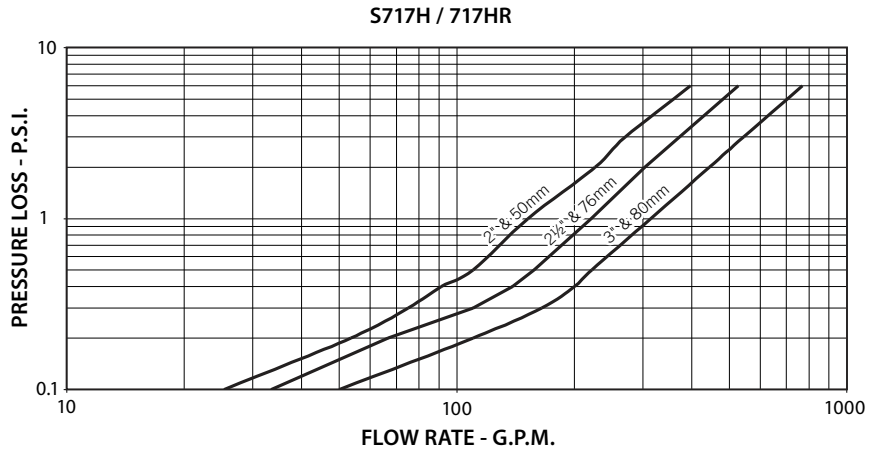
# FireLock® Check Valves

SERIES 717 - UL, ULC, FM, VdS, LPCB  
 SERIES 717H HIGH PRESSURE - cULus, FM

## FLOW CHARACTERISTICS

NOTE: Placement of check valves too close to sources of unstable flow will shorten the life of the valve and potentially may damage the system. To extend valve life, valves should be installed a reasonable distance downstream from pumps, elbows, expanders, reducers or other similar devices. Sound piping practices dictate a minimum of five (5) times the pipe diameter for general use. Distances between three (3) and five (5) diameters are allowable provided the flow velocity is less than eight (8) feet per second (2.4 meters per second). Distances less than three (3) diameters are not recommended and will violate the Victaulic product warranty.

The charts below express the flow of water at 60°F/16°C through valve.

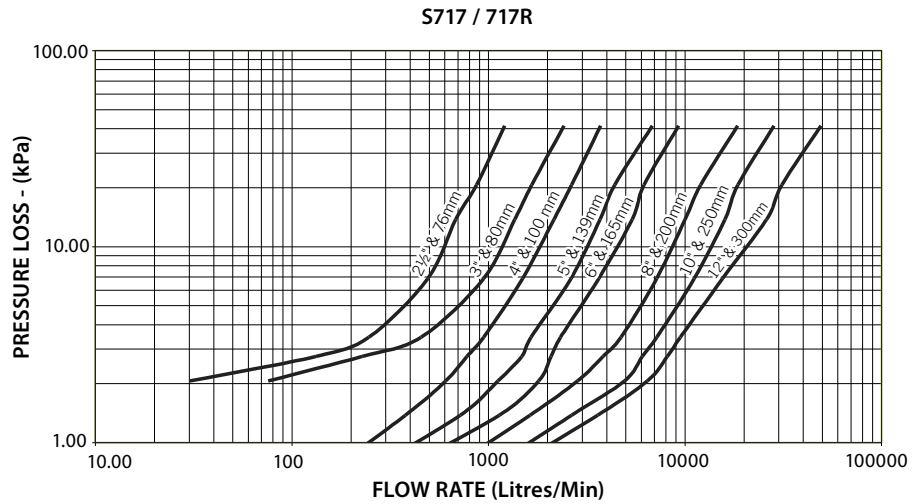
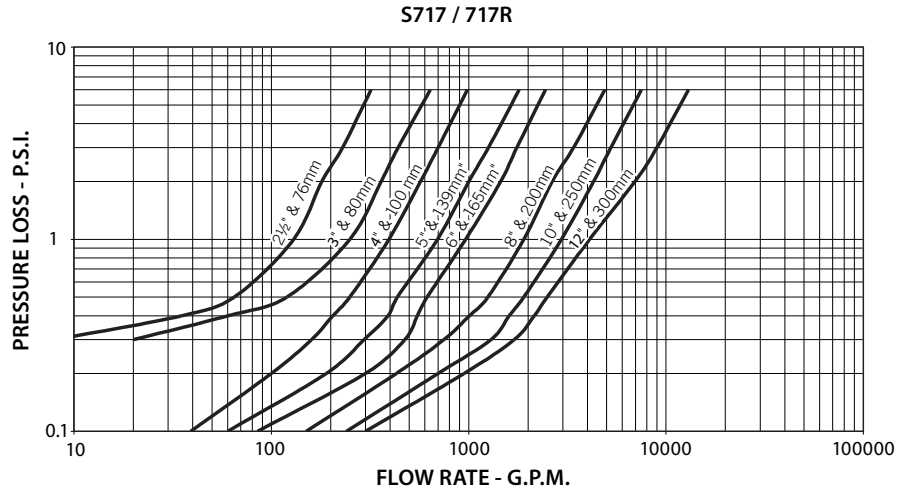


# FireLock® Check Valves

SERIES 717 - UL, ULC, FM, VdS, LPCB  
 SERIES 717H HIGH PRESSURE - cULus, FM

## FLOW CHARACTERISTICS

The charts below express the flow of water at 60°F/16°C through valve.



## FireLock® Check Valves

SERIES 717 - UL, ULC, FM, VdS, LPCB  
SERIES 717H HIGH PRESSURE - cULus, FM

---

### INSTALLATION

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com).

---

### WARRANTY

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

---

### NOTE

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

---

For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

10.08 1479 REV J UPDATED 7/2009

VICTAULIC IS A REGISTERED TRADEMARK OF VICTAULIC COMPANY. © 2009 VICTAULIC COMPANY. ALL RIGHTS RESERVED.

10.08

