

# FireLock® Check Valves



**SERIES 717 – cULus, FM, VdS, LPCB**

**SERIES 717H HIGH PRESSURE – cULus, FM, VdS, LPCB**

The FireLock Series 717 Check Valve and Series 717H High Pressure Check Valves are CAD-designed for hydrodynamic efficiency and available in 2"/50mm – 3"/80mm (Series 717H) and 2½"/65mm – 12"/300mm (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 both valve designs, the single-disc mechanism incorporates a spring-assisted feature for non-lamming operation. This spring-assisted, single-disc design achieves a leak-free seal with as little as 5ft /1.5m of head. Series 717 and 717H FireLock Check Valves can be installed either vertically (flow upwards only) or horizontally. A cast flow arrow indicator is provided to assist with proper valve orientation. Both valves include upstream and downstream pressure taps. Each valve is factory-tested to the rated working pressure. For systems requiring a Riser Check option, refer to publication 10.09.

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 717H**  
(2½ – 3"/65 – 80 mm)



**Series 717**  
(4 – 12"/100 – 300 mm)



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

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

Size	Approval/Listing Service Pressures			
	Series 717			
	cULus	FM	LPCB	VdS
2"/50 mm	n/a	n/a	n/a	n/a
2 ½"/65 mm	up to 250 psi/1725 kPa	n/a	up to 365 psi/2517 kPa	n/a
76.1 mm	up to 250 psi/1725 kPa	n/a	up to 365 psi/2517 kPa	up to 16bar/232 psi
3"/80 mm	up to 250 psi/1725 kPa	n/a	up to 365 psi/2517 kPa	up to 16bar/232 psi
4"/100 mm	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 16bar/232 psi
5"/125 mm	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	n/a
139.7 mm	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 16bar/232 psi
6"/150 mm	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 16bar/232 psi
165.1 mm	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	n/a
8"/200 mm	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 348 psi/2400 kPa	up to 16bar/232 psi
10"/250 mm	up to 250 psi/1725 kPa	up to 250 psi/1725 kPa	up to 1725 kPa/250 psi	n/a
12"/300 mm	up to 250 psi/1725 kPa	up to 250 psi/1725 kPa	up to 1725 kPa/250 psi	n/a

**JOB/OWNER**

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

**CONTRACTOR**

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

**ENGINEER**

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

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REV\_P

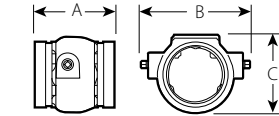


# FireLock® Check Valves

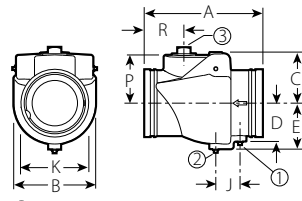
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SERIES 717H HIGH PRESSURE – cULus, FM, VdS, LPCB

## DIMENSIONS – Series 717

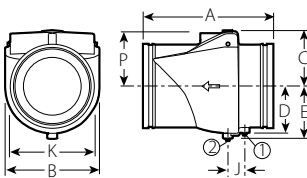


TYPICAL 2½ – 3/65 – 80MM



- ① ½" NPT Upstream Drain
- ② ½" NPT Downstream Drain
- ③ 2" NPT (Drain Optional)

TYPICAL 4 – 8/100 – 200MM

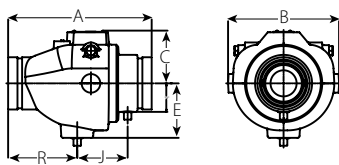


- ① ½" NPT Upstream Drain
- ② ½" NPT Downstream Drain

TYPICAL 10 – 12/250 – 300MM

Size		Dimensions- Inches/millimeters										Approx. Wgt. Ea.
Nominal Size Inches	Actual Outside Diameter Inches	E to E A	B	C	D	E	J	K	P	R	Lbs. kg	
2½	2.875	3.88	4.26	3.57	—	—	—	—	—	—	3.6	
65	73.0	99	108	91	—	—	—	—	—	—	1.6	
76.1 mm	3.000	3.88	4.26	3.57	—	—	—	—	—	—	3.6	
	76.1	99	108	91	—	—	—	—	—	—	1.6	
3	3.500	4.25	5.06	4.17	—	—	—	—	—	—	4.5	
80	88.9	108	129	106	—	—	—	—	—	—	2.0	
4	4.500	9.63	6.00	3.88	2.75	3.50	2.00	4.50	3.50	3.35	20.0	
100	114.3	245	152	99	70	89	51	114	89	85	9.1	
5	5.563	10.50	6.80	4.50	—	4.17	2.15	5.88	4.08	3.98	27.0	
125	141.3	267	173	114	—	106	55	149	104	101	12.3	
139.7 mm	5.500	10.50	6.80	4.50	—	4.17	2.15	5.88	4.08	3.98	27.0	
	139.7	267	173	114	—	106	55	149	104	101	12.3	
6	6.625	11.50	8.00	5.00	—	4.50	2.38	6.67	4.73	3.89	38.0	
150	168.3	292	203	127	—	114	61	169	120	99	17.2	
165.1 mm	6.500	11.50	8.00	5.00	—	4.50	2.38	6.67	4.73	3.89	38.0	
	165.1	292	203	127	—	114	61	169	120	99	17.2	
8	8.625	14.00	9.88	6.06	5.05	5.65	2.15	8.85	5.65	5.75	64.0	
200	219.1	356	251	154	128	144	55	225	144	146	29.0	
10	10.750	17.00	12.00	7.09	5.96	6.69	2.15	10.92	6.73	—	100.0	
250	273.0	432	305	180	151	170	55	277	171	—	45.4	
12	12.750	19.50	14.00	8.06	6.91	7.64	2.51	12.81	7.73	—	140.0	
300	323.9	495	356	205	176	194	64	325	196	—	63.5	

## DIMENSIONS - Series 717H



TYPICAL 2"/60.3 mm – 3"/88.9 mm

Size		Dimensions- Inches/millimeters									Approx. Wgt. Ea.
Nominal Size Inches		A	B	C	D	E	J	K	P	R	Lbs. kg
2	8.66	6.46	3.23	1.48	3.02	2.80	—	—	4.25	10.7	
60.3	219.8	164.1	82.1	37.5	76.7	71.0	—	—	108.0	4.9	
2½	9.37	6.94	3.31	1.66	3.40	3.38	—	—	4.38	13.8	
73	238.0	176.3	84.1	42.2	86.4	85.9	—	—	111.3	6.3	
76.1 mm	9.37	6.94	3.31	1.66	3.40	3.38	—	—	4.38	13.8	
	238.0	176.3	84.1	42.2	86.4	85.9	—	—	111.3	6.3	
3	9.62	7.44	3.53	1.91	3.65	3.38	—	—	4.63	20.0	
88.9	244.3	189.0	89.7	48.5	92.7	85.9	—	—	117.6	9.1	

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### 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 (2½ – 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 (2½ – 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 (2½ – 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 (2½ – 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 (2½ – 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

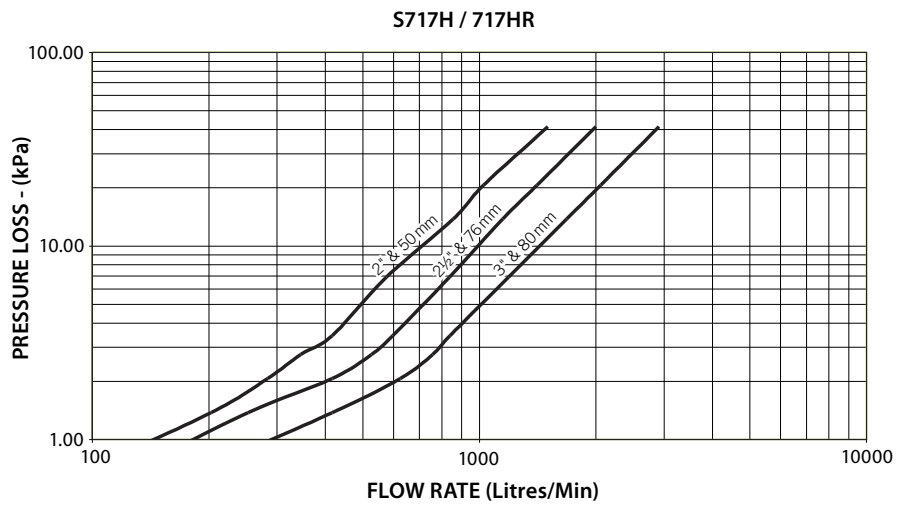
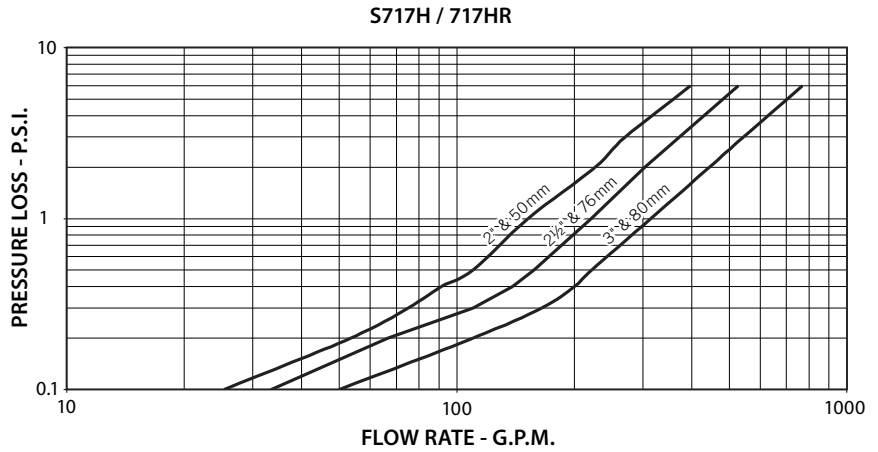
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## FLOW CHARACTERISTICS

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



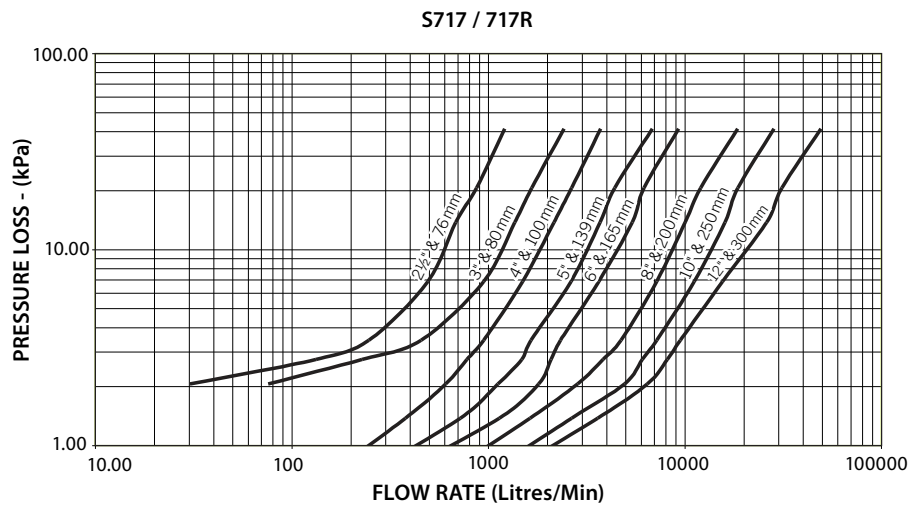
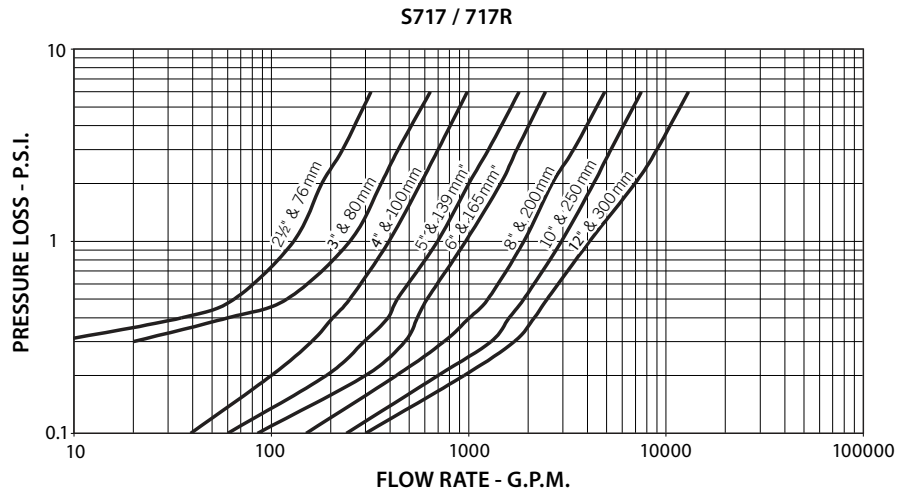
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### INSTALLATION

Series 717 and Series 717H Check Valves can be installed either vertically (flow up only) or horizontally (with hinge on top) - making sure the flow arrow matches the flow direction through the pipeline.

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).

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### WARRANTY

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

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### 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.

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

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