

FireLock® Check Valves

Series 717 & 717H



Series 717
(2½ – 3"/65 – 80 mm)



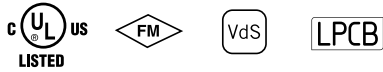
Series 717
(4 – 12"/100 – 300 mm)



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

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.

Approvals/Listings:



See Victaulic Publication 10.01 for more details.

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"/80 mm (Series 717H) and 2 ½"/65 mm – 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 both valve designs, the single-disc mechanism incorporates a spring-assisted feature for nonslamming 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.

Job/Owner

System No.	
Location	

Contractor

Submitted By	
Date	

Engineer

Spec Section	
Paragraph	
Approved	
Date	

Material Specifications:

Housing:

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"): Electroless Nickel plated

Disc Seal or Coating: (specify choice¹)

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.

¹ 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 – 80 mm): CF8M Cast Stainless Steel
- Series 717 (2 ½ – 3"): Aluminum bronze with elastomer seal
- Series 717 (4 – 12"/100 – 300 mm): Elastomer encapsulated disc with electroless nickel plated seat

Shaft:

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

Spring: All sizes Type 302/403 Stainless Steel

Shaft Plug:

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

Pipe Plug:

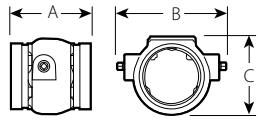
- Series 717H (2 – 3"/50 – 80 mm): carbon steel zinc plated
- Series 717 (4 – 12"/100 – 300 mm): Carbon steel zinc plated

Approval/Listing:

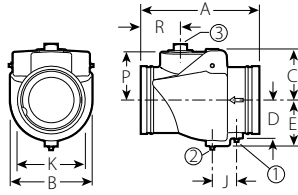
Size	Approval/Listing Service Pressures			
	Series 717H			
	cULus	FM	LPCB	Vds
2"/50 mm	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa
2½"/65 mm	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa	up to 365 psi/2517 kPa
76.1 mm	up to 365 psi/2517 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
2½"/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

Dimensions - Series 717:

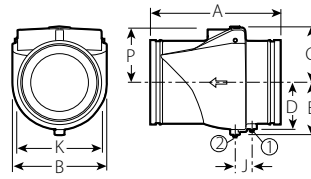


Typical 2 1/2 – 3/65 – 80 mm



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

Typical 4 – 8"/100 – 200 mm

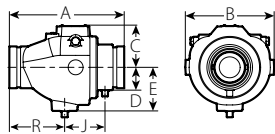


- ① 1/2" NPT Upstream Drain
- ② 1/2" NPT Downstream Drain

Typical 10 – 12"/250 – 300 mm

Nominal Size	Actual Outside Diameter	Dimensions									Approx. Weight Each
		E to E A	B	C	D	E	J	K	P	R	
inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	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:

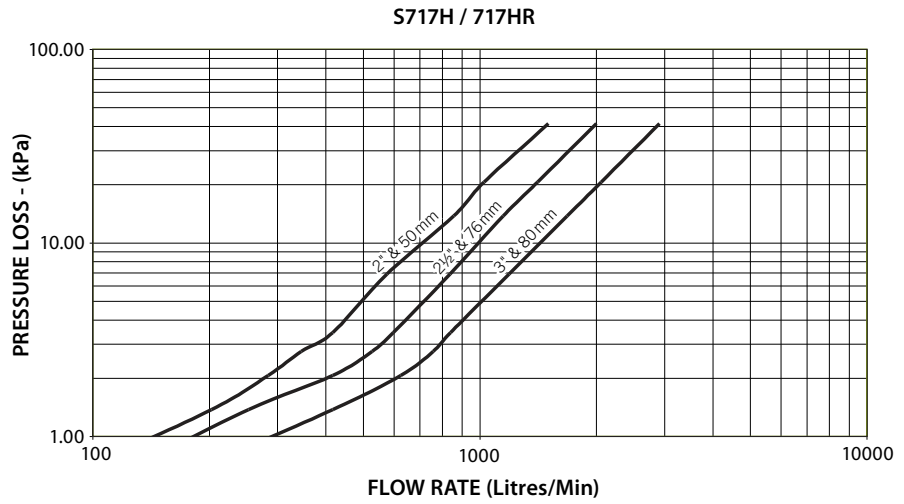
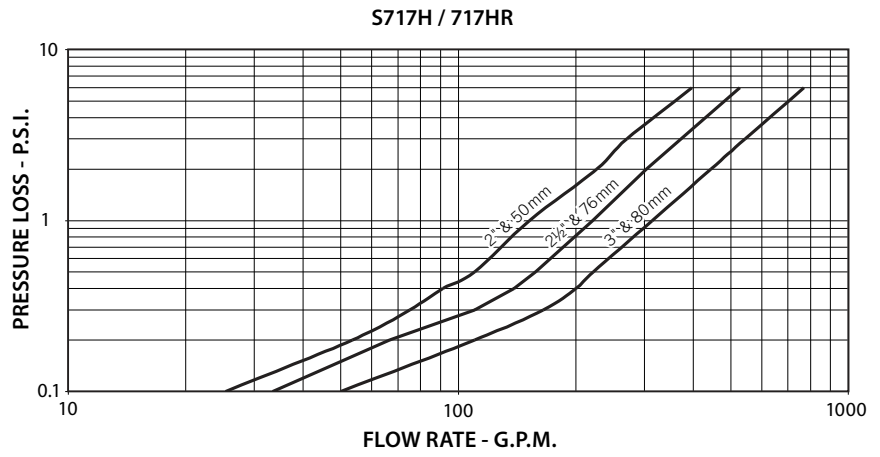


Typical 2"/50 mm – 3"/80 mm

Nominal Size	Dimensions									Approx. Weight Each
	E to E A	B	C	D	E	J	K	P	R	
inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	lbs. kg
2 50	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	10.7 4.9
2 1/2 65	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	13.8 6.3
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	13.8 6.3
3 80	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	20.0 9.1

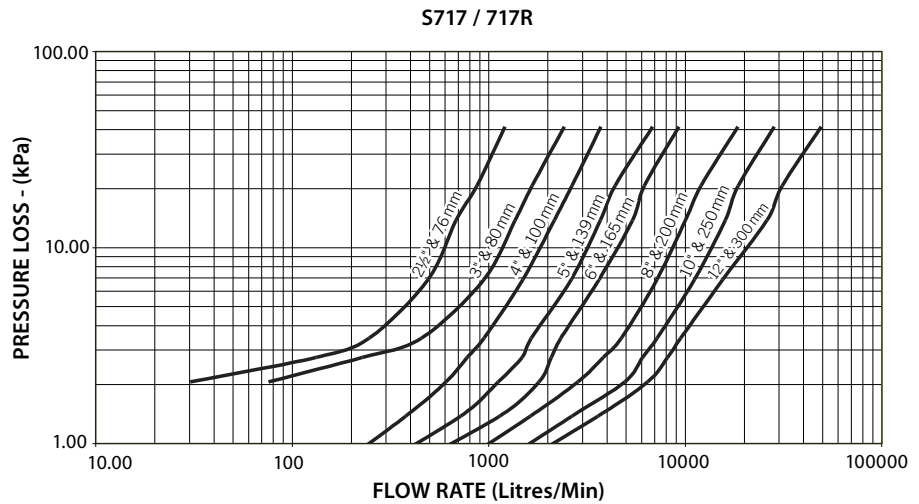
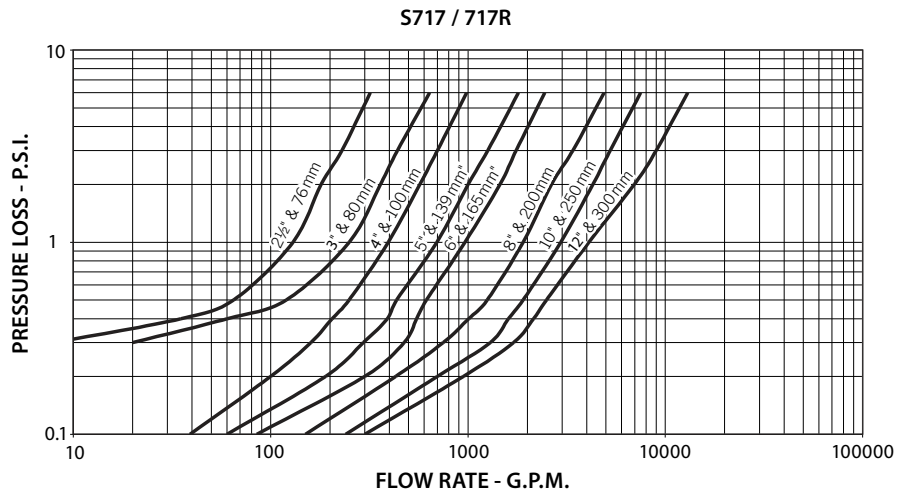
Flow Characteristics

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



Flow Characteristics

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



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.

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.

Trademarks

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