For Non-Health Hazard Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

LEAD FREE*

Series LF709Double Check Valve Assemblies

Sizes: 21/2" - 10" (65 - 250mm)

Series LF709 Double Check Valve Assemblies are designed to prevent the reverse flow of polluted water from entering into the potable water system. This series can be applied, where approved by the local authority having jurisdiction, on non-health hazard installations. Series LF709 features a modular check design concept to facilitate easy maintenance. Check with local jurisdictional authority as to installation requirements. The LF709 features Lead Free* construction to comply with Lead Free* installation requirements.

Features

- Replaceable stainless steel seats
- Maximum flow at low pressure drop
- Design simplicity for easy maintenance
- No special tools required for servicing
- Captured spring assemblies for safety
- Approved for vertical flow up installation

Models

Suffix:

NRS – non-rising stem resilient seated gate valves
OSY – UL/FM outside stem and yoke resilient seated gate valves
S-FDA – FDA epoxy coated strainer

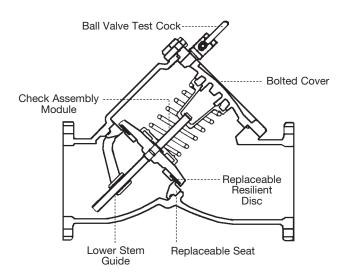
QT-FDA - FDA epoxy coated ball valve shutoffs

LF - without shutoff valves

Specifications

A Double Check Valve Assembly shall be installed at referenced cross-connections to prevent the backflow of polluted water into the potable water supply. The cross-connections shall be determined by local inspection authority for use where a high hazard situation does not exist. Valve shall feature modular check assemblies with center stem guiding. Each check module shall have a captured spring and be accessible through a bolted cover plate. Seats shall be replaceable without special tools. It shall be a complete assembly including tight-closing resilient seated shutoff valves, test cocks, and a strainer is recommended. The Lead Free* Double Check Assemblies shall comply with state codes and standards, where applicable, requiring reduced lead content. The assembly shall meet the requirements of ASSE No. 1015; AWWA C510-92; CSA B64.5 and UL Classified File No. EX3185. Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. Assembly shall be a Watts Series LF709.





Check Assembly Module

Series LF709 features a modular design concept which facilitates complete maintenance and assembly by retaining the spring load. Also, the first and second check module are identical and can be interchanged.

Now Available WattsBox Insulated Enclosures.

For more information, refer to literature ES-WB.

NOTICE

Inquire with governing authorities for local installation requirements

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.



Materials

Check Valve Bodies: Epoxy coated cast iron

Seats: Stainless Steel

Pressure — Temperature

Temperatures Range: 33°F - 110°F (0.5°C - 43°C) continuous,

140°F (60°C) intermittent

Maximum Working Pressure: 175psi (12.1 bar)

Standards

AWWA C510-92 IAPMO PA 31

USC Manual for Cross-Connection Control, 8th Edition

Approvals







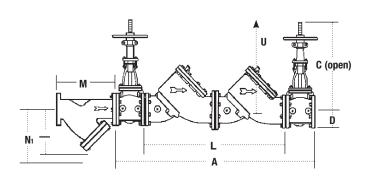


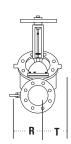
Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. Sizes 4"-10" (100-250mm) approved horizontal and vertical "flow up". Size $2\frac{1}{2}$ " and 3" (65-80mm) approved horizontal only.

Factory Mutual approved 4" – 10" (80 – 250mm) vertical "flow up" with OSY gate valves only.

Note: Model "S" not listed

Dimensions - Weights





SIZE (DN) DIMENSIONS																	
		A		C (OSY)		C (NRS)		D		L		Utt		М		N	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
21/2	65	39¾	1000	16¾	416	9%	238	31/2	89	24 ¹ / ₈	613	11	279	10	254	6 ¹ / ₂	165
3	80	403//8	1025	18 ⁷ / ₈	479	101/4	260	33/4	95	24 ¹ / ₈	613	14	356	10 ¹ /8	257	7	178
4	100	52¾	1330	22¾	578	12 ³ ⁄ ₁₆	310	41/2	114	341/8	867	14	356	12 ¹ /8	308	81/4	210
6	150	62 ⁷ /8	1597	301//8	765	16	406	5 ¹ / ₂	140	41 ¹ / ₈	1057	16	406	18 ¹ / ₂	470	13 ¹ / ₂	343
8	200	75	1905	37¾	959	19 ¹⁵ ⁄ ₁₆	506	61/2	165	52	1321	21	533	21 ⁵ /8	549	15 ¹ / ₂	394
10	250	90	2286	45¾	1162	2313/16	605	8	203	64	1626	25	635	26	660	18 ¹ / ₂	470

	SIZE (D	DN)	DIMENSIONS										STRAINER					
			N1	' †	F	}	R❖		T		NRS		OSY		QT		Weight	
i	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.
2	21/2	65	10	254	4	102	16	406	3	76	167	76	170	77	154	70	28	13
	3	80	10	254	5	127	16	406	3	76	167	76	170	77	162	73	34	15
	4	100	12	305	6	152	193/4	502	6	152	368	167	383	174	275	125	60	27
	6	150	20	508	11	279	26	660	71/2	191	627	284	707	321	611	277	122	55
	8	200	223/4	578	111/4	286	111/4	286	9	229	1201	545	1307	593	1419	644	247	112
1	10	250	28	711	121/2	318	12 ¹ / ₂	318	101/4	260	2003	909	2073	940	2466	1119	370	168

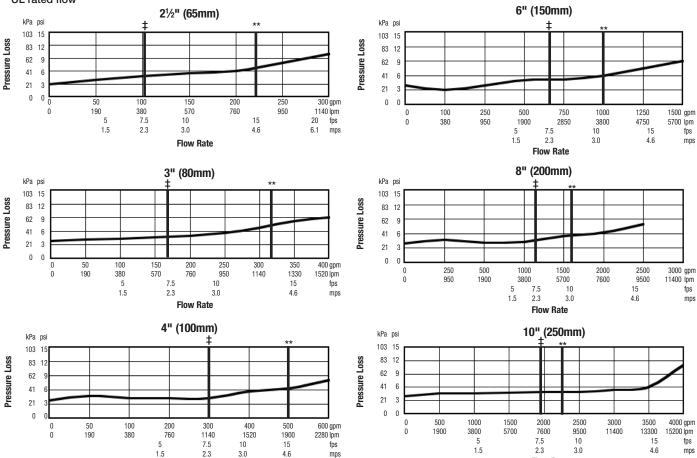
[†]Dimension required for screen removal. *Quarter-turn (QT) valve dimensions.

^{††}Service clearance for check assembly from center.

Capacity

‡Typical maximum system flow rate (7.5 feet/sec.)

**UL rated flow



mps

Flow Rate





Flow Rate