

Reliable®

Model G 2½", 3", 4" & 6" (65mm, 80mm, 100mm, 150mm) Swing Check Valves

The Right-Check™

Features

1. Grooved end connections.
2. Compact, lightweight design.
3. Non-slamming, spring loaded clapper to minimize water hammer.
4. Approved for horizontal and vertical installation.
5. Streamlined body design provides very low friction loss.
6. Elastomer faced clapper provides leak-free, non-sticking sealing.

General

Reliable Model G Swing Check Valves are multiple purpose valves performing regular check valve duties with very low friction loss. All four sizes are approved for use in fire protection systems. Typical applications include connections between public water supplies and private fire systems, at the discharge from fire pumps, at gravity tank connections and at fire department pumper connections.

The 4" (80mm) Model G Check Valve is provided with a ½" NPT (R½) supply side connection (Item 12, Fig.2). This supply side connection is optional for all other valve sizes and must be specified.

Grooved end connections provide fast and easy installation using listed or approved mechanical grooved couplings. Rigid style grooved couplings can be used for positive clamping to resist flexural and torsional loads.

Right-Check™ valves and associated equipment should periodically be given a thorough inspection and test. NFPA 25 provides minimum maintenance requirements. Check valves should be inspected and operated at least annually. Parts should be replaced as required.

When Model G Swing Check Valves are installed vertically, the direction of the flow arrow must point upward. For horizontal installations, the hinge pin must be located at the top.

Valve Description

1. Rated working pressure 250 psi (17,25 bar).
2. Factory hydrostatic test pressure 500 psi (34,5 bar).

Note: 1 bar=100 kPa

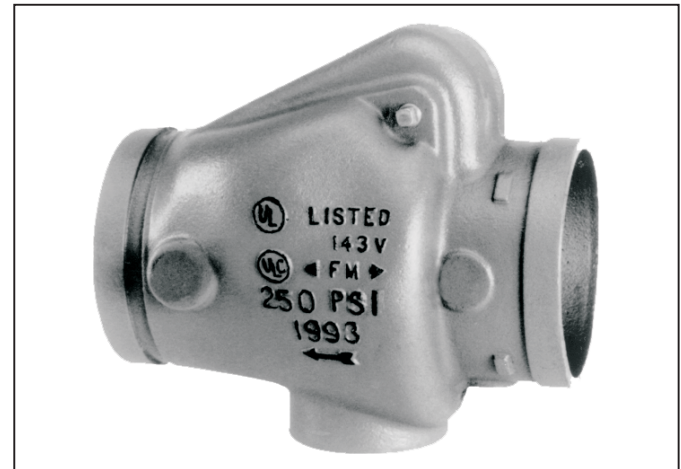
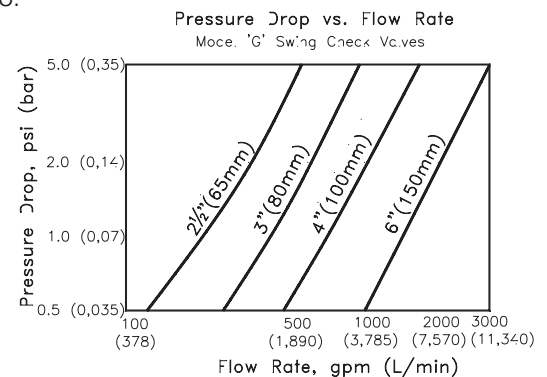


Figure 1

3. Friction loss, expressed in equivalent length of Sch. 40 pipe with C = 120 (based on Hazen and Williams formula):
 - 2½" – 7 ft. (65mm - 231cm)
 - 3" – 7 ft. (80mm - 213cm)
 - 4" – 10 ft. (100mm - 305cm)
 - 6" – 16 ft. (150mm - 488cm)
4. Standard grooved end dimensions per ANSI/AWWA C606.



Technical Data

Valve Size	Face-to-Face Dimensions	Shipping weight
2½" (65mm)	7.03" (178mm)	9 lbs. (4kg)
3" (80mm)	7.62" (193mm)	11 lbs. (5kg)
4" (100mm)	8.44" (214mm)	17 lbs. (7.7kg)
6" (150mm)	10.25" (260mm)	38 lbs. (17.25kg)

Approvals

1. Listed by Underwriters Laboratories, Inc.
2. Underwriters Laboratories certified for Canada.
3. Approved by Factory Mutual Research Corp.*
4. NYC MEA 258-93-E.

* FM Approved both a "Single" check valve and "Anti-Water Hammer" check valve.

Parts List - Refer to Figure 2

Item No.	Part Name	Material	Quantity	Part Number			
				2½" (65mm)	3" (80mm)	4" (100mm)	6" (150mm)
1*	Valve Body	Gray Iron, ASTM-A48 Class 30A	1	91005022	91005023	91005024	91005026
2*	Seat	Bronze C83600 or C93200, ASTM-B505	1	96020200	96020300	96020400	96020600
3	Clapper	Stainless Steel 304, ASTM-A240	1	91816112	91816113	91816114	91816116
4	Facing Seal **	EPDM Rubber	1	95520200	95520300	95520400	95520600
5	Clamping Ring	Stainless Steel 304, ASTM-A240	1	95290300	95290300	95290400	95290600
6	Gasket **	EPDM Rubber	1	93720604	93720604	93720604	93720604
7	Spring	Stainless Steel 302, ASTM-A313	1	96400300	96400300	96400400	96400600
8	Hinge Pin	Stainless Steel 303, ASTM-A582	1	95000280	95000300	95006824	95000600
9	Bolt	Stainless Steel 304, ASTM-F593	1	91090600	91090600	91090600	91090600
10	Locknut **	Stainless Steel 303, ASTM-F594	1	94913816	94913816	94913816	94913816
11	Plug, ⅜" NPT	Steel	1	95201800	95201800	95201800	95201800
12	Plug, ½" NPT	Steel	1	Optional	Optional	98604402	Optional
** Replacement Seal Kit			1	6888040025	6888040030	6888040040	6888040060

*Not field replaceable.

Valve Disassembly

1. Close the main water supply valve and drain the system.
2. Remove the check valve from the piping system.
3. Inspect the Seat (2) for any cuts, scrapes and dents. Replace the valve if any damage is found.
4. To replace the Facing Seal (4), remove the Clapper (3), unscrew the Locknut (10) and remove the Retention Bolt (9).

Valve Reassembly

1. Thoroughly clean the Clapper (3). Insert the Retention Bolt (9) with a new Gasket (6).
2. Place the new Facing Seal (4) and the Clamping Ring (5) against the Clapper (3). Tighten the new Locknut (10) to 21 in.-lbs. (2.37Nm) torque in 2½" (63mm) and 3" (76mm) sizes and to 52 in.-lbs. (5.87Nm) in 4" (101mm) and 6" (152mm) sizes.
3. Insert the clapper assembly into the valve through the downstream opening. Reinsert the Hinge Pin (8) while holding the coils of the properly oriented Spring (7) in place. Install the hinge pin Plug (11).
4. Reinstall the check valve in the system.
5. Place the system back in service.

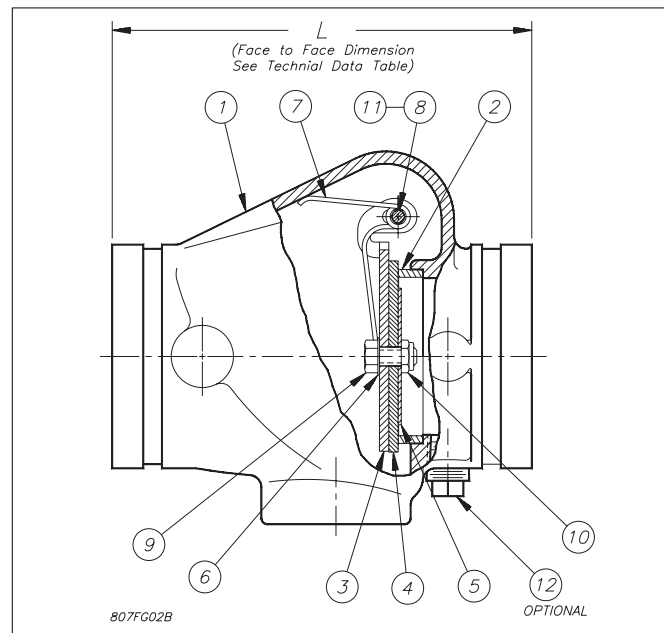


Figure 2

Ordering Information

Specify:

1. Model G Right-Check™ Valve.
2. Size.
3. ½" NPT (R½) optional supply side connection for valve sizes other than 4" (100mm).

Contact the installing contractor or Reliable if any difficulties are experienced. Should replacement parts be needed, use only genuine Reliable parts.

The equipment presented in this bulletin is to be installed in accordance with the latest pertinent Standards of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable.

Products manufactured and distributed by Reliable have been protecting life and property for over 80 years, and are installed and serviced by the most highly qualified and reputable sprinkler contractors located throughout the United States, Canada and foreign countries.

Manufactured by

Reliable®

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