

# Reliable®

## Model G Swing Check Valve

1-1/2", 2", 2-1/2", 3", 4", 6", 8", & 10" Sizes

cULus Listed, FM Approved

### Features

- Grooved end connections.
- Compact, lightweight design.
- Non-slamming, spring loaded clapper to minimize water hammer.
- Approved for horizontal and vertical installation.
- Streamlined body design provides very low friction loss.

### Product Description

Reliable Model G Swing Check Valves are low friction loss check valves 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. All Model G Check Valves are provided with 1/2" NPT (R1/2) supply side and discharge side connections (Item 12, Figure 1). 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.

### Installation

The Model G Check Valve shall be installed in accordance with NFPA 13, "Standard for the Installation of Sprinkler Systems," as well as the requirements of any authorities having jurisdiction. When installed vertically, the direction of flow shall be up through the valve (install with flow arrow pointed up). For horizontal installations, the hinge pin must be located to the top. Failure to follow installation instructions may void the warranty and listing of the valve. Verify compatibility of the Model G Check Valve materials with the water supply and the environment where the valve will be installed prior to installation. Do not apply lubricants, sealants, or other chemicals to the clapper seal or seat.



Reliable Model G Swing Check Valve (3")

**Note:** Model G Check Valves may be damaged by excessively turbulent water flow. Model G Check Valves should be installed a reasonable distance from pipe transitions, such as pumps, elbows, expanders, reducers, or similar devices. Typical piping practices suggest a minimum distance of five times the pipe diameter for general use.

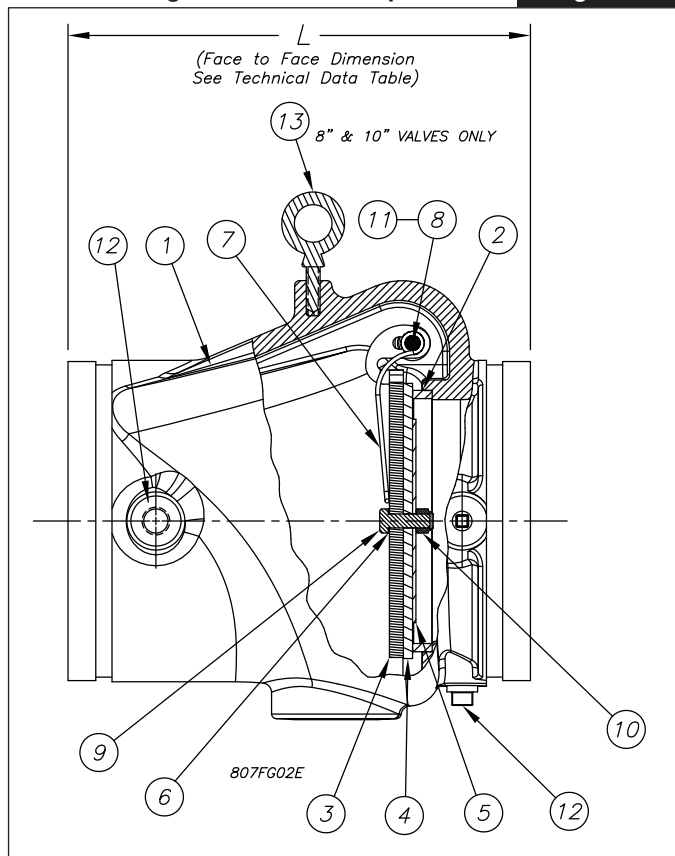
### Technical Data

Table A

Valve Size	Pressure Rating	Face-to-Face Dimension	Eq. Length C = 120	Eq. Length C = 100	Cv Factor	Shipping Weight
1-1/2" (40 mm)	300 psi (20.7 bar)	6-1/4" (159 mm)	6.7' (2.0 m)	4.8' (1.5 m)	36	5 lbs (2.3 kg)
2" (50 mm)		6-1/2" (165 mm)	9.6' (2.9 m)	6.8' (2.1 m)	67	6 lbs (2.7 kg)
2-1/2" (65 mm)	250 psi (17.3 bar)	7.12" (181 mm)	6.0' (1.8m)	4.3' (1.3m)	212	9 lbs (4.1 kg)
76 mm		7.12" (181 mm)	6.0' (1.8m)	4.3' (1.3m)	212	9 lbs. (4.1 kg)
3" (80 mm)		7.62" (194 mm)	5.3' (1.6m)	3.8' (1.2m)	376	11 lbs. (5.0 kg)
4" (100 mm)		8.44" (214 mm)	7.1' (2.2m)	5.0' (1.5m)	656	17 lbs. (7.7 kg)
6" (150 mm)		10.25" (260 mm)	13.7' (4.2m)	9.8' (3.0m)	1395	38 lbs. (17.2 kg)
165 mm		10.25" (260 mm)	13.7' (4.2m)	9.8' (3.0m)	1395	38 lbs. (17.2 kg)
8" (200 mm)	300 psi (20.7 bar)	12.5" (318 mm)	15.9' (4.8m)	11.3' (3.4m)	2818	63 lbs. (28.6 kg)
10" (250 mm)		14.5" (368 mm)	28.8' (8.8m)	20.6' (6.3m)	3928	102 lbs. (46.3 kg)

**Model G Swing Check Valve Components**

**Figure 1**



**Valve Components (refer to Figure 1)**

**Table B**

Item No.	Part Name	Material
1	Valve Body	Gray Cast Iron Class 30
2	Seat	Bronze C83600 or C93200
3	Clapper	Stainless Steel 304 or 17-4
4	Facing Seal *	EPDM Rubber
5	Clamping Ring	Stainless Steel 304
6	Gasket *	EPDM Rubber or PTFE
7	Spring	Stainless Steel 302
8	Hinge Pin	Stainless Steel 303
9	Bolt	Stainless Steel 18-8
10	Locknut *	Stainless Steel 18-8
11	Plug, 1/8" NPT	Steel
12	Plug, 1/2" NPT	Steel
13	Shoulder Eye	Steel

\* Part of Replacement Seal Kit

**Replacement Seal Kit Part Numbers**

**Table C**

Part Number									
1-1/2" (40 mm)	2" (50 mm)	2 1/2" (65 mm)	76 mm	3" (80 mm)	4" (100 mm)	6" (150 mm)	165 mm	8" (200 mm)	10" (250 mm)
6888000015	6888000020	6888040025	6888040025	6888040030	6888040040	6888040060	6888040060	6888040080	6888040090

**Maintenance**

The owner is responsible for maintaining the fire protection system in proper operating condition. Any system maintenance or testing that involves placing a system out of service may eliminate the fire protection that is provided by the fire protection system. Notify any required authorities having jurisdiction and implement appropriate precautions prior to proceeding.

The Reliable Model G Check Valve shall periodically be given a thorough inspection and test. NFPA 25, "Inspection, Testing and Maintenance of Water Based Fire Protection Systems," provides minimum maintenance requirements. Inspect the interior of the valve and all components for corrosion, damage, and wear at least every five (5) years. Replace any components found to be corroded, damaged, or worn. Increase the frequency of inspections when the valve is exposed to corrosive conditions or chemicals that could impact the valve materials.

**Guarantee**

For Reliable Automatic Sprinkler Co., Inc. guarantee, terms, and conditions, visit [www.reliablesprinkler.com](http://www.reliablesprinkler.com).

**Ordering Information**

- Specify:
1. Model G Check Valve.
  2. Size.