

SERIES 37G INLINE CHECK VALVE

Installation, Operation, and Maintenance Manual



The revolutionary design of the Series 37G Inline Check Valve provides superior backflow protection. This unique "duckbill" design eliminates costly backflow from oceans, rivers, and other waterbodies and piping systems.

The Series 37G is available in a wide variety of elastomers and is designed to meet your exact flow specifications.

The cuff of the Series 37G Valve is constructed to have the same outside diameter as the inside diameter of the mating pipe. This allows the valve to be inserted into the pipe and held in place by means of an internal expansion clamp.

Tideflex® Technologies recommends pinning all Series 37G valves for added security and stability.

The 37G effectively has a zero face-to-face dimension because they fit completely inside of the pipe. No modification of piping is required provided adequate pipe length exists.

- Simple Design
- Cost Effective
- No Hinges, Levers or Springs
- Minimal Routine Maintenance

IMPORTANT

Please take a moment to **review this manual**. Before performing any maintenance on the valve be sure the pipeline has been depressurized. The improper installation or use of this product may result in personal injury, product failure, or reduced product life. Tideflex® Technologies can accept NO liability resulting from the improper use or installation of this product. If you have any questions or problems, please call the customer service department at (412) 279-0044. We appreciate your comments. Thank you for choosing Tideflex® Technologies.

INSTALLATION

1. Inspection of Valve

Check inside diameter of pipe section for rough or damaged areas. Surface should be uniform and relatively smooth. Long gouges or cracks may allow water to pass and should be filled prior to installation. The exterior of the Series 37G should have a rough texture resembling a cloth pattern. This will help the valve grip the walls of the pipe.

2. Valve Orientation

The valve shall be installed with the bill in the vertical position. Valves to 18" (nominal) are supplied with a single clamp. The clamp turnbuckle should be oriented at top dead center.

Valves 24" – 48" (nominal) are supplied with two clamps. The turnbuckles should be oriented 180° apart. Valves 60" – 72" (nominal) are supplied with three clamps. Turnbuckles should be oriented 120° apart.

3. Pipe Dimensions

Every Series 37G is designed and built to fit into a specific pipe inside diameter. Different pipe materials such as concrete, HDPE, steel, and PVC have different I.D. dimensions for the same nominal pipe size. Do not attempt to install a Series 37G into a pipeline for which it was not intended.

4. Preparation

The Series 37G uses expanding clamp(s) to exert pressure outwards on the walls of the valve to "wedge" it in place within the pipe. The walls of the pipe should be clean and free of debris prior to installation.

5. Securing

The valve should be inserted fully into the pipe so that no part of the cuff or bill extends outside the pipe. Ensure that the valve is not "slanted" at an angle, with the bill pointing upwards or downwards. The valve centerline should be parallel to the pipe centerline.

Tideflex® Technologies recommends pinning the Series 37G on all installations. See below.

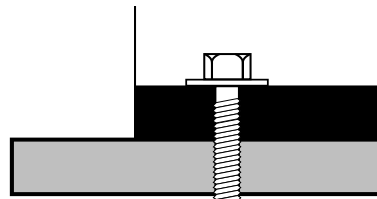
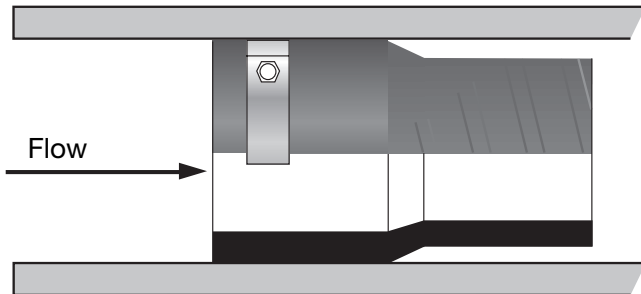
Four pre-drilled holes are provided in each expansion clamp. At least one clamp should be pinned. On exposed pipe, holes can be drilled through the valve and pipe, and a bolt run through secured with a nut. For buried pipe, silicon or similar sealant should be used to seal bolts.

NEVER...
Install the Valve at
An Angle

NEVER...
Use Sharp Tools on
Rubber

NEVER...
Exceed Design Back
Pressure

NEVER...
Install the Valve
Backwards



INSTALLATION NOTES FOR SERIES 37G

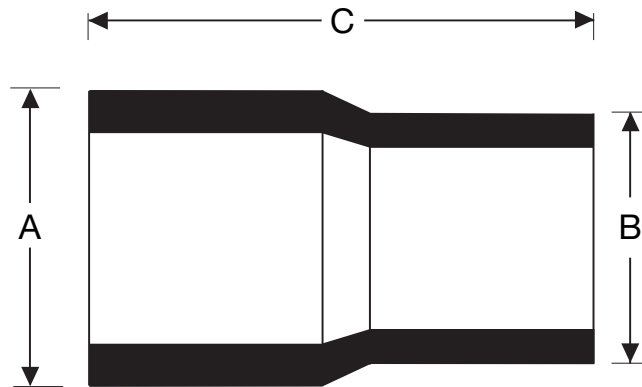
A. It is important that the Series 37G are installed level within the pipe. An equal amount of space must exist above and below the end of the bill. The Series 37G may "gap open" if installed improperly.

B. The bill of the Series 37G must have room to expand outwards, while bottom of the bill area rises. The area around the bill must be kept free of debris to allow the bill to close in order for the valve to seal properly.

C. The Series 37G effectively reduces the inside diameter of the pipe in which it is installed, creating a restriction. It may also create a "ledge" inside the pipe, causing standing water.

D. Back pressure in excess of the maximum line pressure may invert the sleeve and cause valve failure.

E. Should the conditions that the Series 37G was designed for change, (line pressure, back pressure, chemical compatibility) the performance of the valve may suffer.



Nominal Pipe I.D./Valve Size* (A)	Maximum Bill Height (B)	Maximum Length (C)	Maximum Back Pressure (psi)
6"	5-7/8"	11"	75
8"	7-3/4"	12-1/4"	75
10"	9-3/4"	15-1/4"	65
12"	11-3/4"	18-1/4"	65
14"	13-1/2"	21-1/4"	50
16"	15-1/2"	22-3/4"	50
18"	17-1/2"	23-3/4"	25
20"	19-1/2"	31-3/4"	25
24"	22"	37"	25
30"	27"	40-1/2"	15
36"	34"	46-3/4"	15
42"	40"	49"	10
48"	45"	51-1/2"	10
60"	57"	63-7/8"	10
72"	69"	72-1/2"	10

*For pipe I.D.'s other than the nominal pipe I.D.'s shown, consult factory to verify 37G dimensions.

MAINTENANCE

1. Inspection

Valves should occasionally be inspected for damage, wear, and buildup of debris. The frequency of the inspections should be determined by the severity of the service and the environment in which it operates.

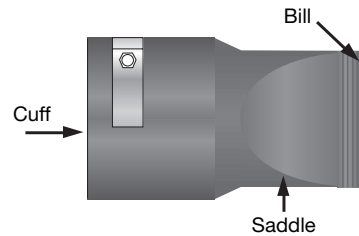
The clamp should be checked for proper tension, and be sure that the inside of the valve is free of debris. Soft marine growth is normal on valves in submerged applications, and because hard marine growth such as barnacles will not bond well to the Tideflex® they can be easily removed. Also insert pins to ensure they are tight.

STORAGE

If your Series 37G is to be stored for a period of time prior to installation, the following storage guidelines will help to preserve the valve and assure a trouble-free installation.

1. Store in a clean, cool, dry location. Avoid exposure to light, electric motors, dirt, or chemicals.
2. Store valve vertically on floor or pallet.
3. Store valve to prevent other items from contacting check sleeve to prevent possible damage.

4. Store this manual with the valve, so that is readily available at time of installation.



TROUBLESHOOTING GUIDE

SLEEVE INVERTED

- Excessive back pressure, water surge, or water hammer.

LEAKING AROUND PERIMETER OF VALVE

- Tighten Clamp
- Check for cracks and holes in surface of pipe

BACKFLOW

- Debris lodged inside bill
- Debris built up beneath bill

TIDEFLEX® TECHNOLOGIES WARRANTY

WARRANTIES - REMEDIES - DISCLAIMERS - LIMITATION OF LIABILITY

Unless otherwise agreed to in writing signed by Tideflex® Technologies, all Products supplied by Tideflex® Technologies will be described in the specifications set forth on the face hereof.

THE WARRANTIES SET FORTH IN THIS PROVISION ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER STATUTORY, EXPRESS OR IMPLIED (INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OR TRADE).

Tideflex® Technologies Products are guaranteed for a period of one year from date of shipment, against defective workmanship and material only, when properly installed, operated and serviced in accordance with Tideflex® Technologies' recommendations. Replacement for items of Tideflex® Technologies manufacture will be made free of charge if proved to be defective within such year; but not claim for transportation, labor or consequential damages shall be allowed. We shall have the option of requiring the return of the defective product to our factory, with transportation charges prepaid, to establish the claim and our liability shall be limited to the repair or replacement of the defective product, F.O.B. our factory. Tideflex® Technologies will not assume costs incurred to remove or install defective products nor shall we incur back charges or liquidated damages as a result of warranty work. Tideflex® Technologies does not guarantee resistance to corrosion erosion, abrasion or other sources of failure, nor does Tideflex® Technologies guarantee a minimum length of service, or that the product shall be fit for any particular service. Failure of purchaser to give prompt written notice of any alleged defect under this guarantee forthwith upon its discovery, or use, and possession thereof after an attempt has been made and completed to remedy defects therein, or failure to return product or part for replacement as herein provided, or failure to install and operate said products and parts according to instructions furnished by Tideflex® Technologies, or failure to pay entire contract price when due, shall be a waiver by purchaser of all rights under these representations. All orders accepted shall be deemed accepted subject to this warranty which shall be exclusive of any other or previous warranty, and shall be the only effective guarantee or warranty binding on Tideflex® Technologies, anything on the contrary contained in purchaser's order, or represented by any agent or employee of Tideflex® Technologies in writing or otherwise, not withstanding implied warranties. TIDEFLEX® TECHNOLOGIES MAKES NO WARRANTY THAT THE PRODUCTS, AUXILIARIES AND PARTS ARE MERCHANTABILITY OR FIT FOR ANY PARTICULAR PURPOSE.



37G IOM 5/18

600 North Bell Avenue

Carnegie, PA 15106

phone: 412 279-0044

fax: 412 279-7878

WEB: www.tideflex.com