

PROCOTM

STYLE 740



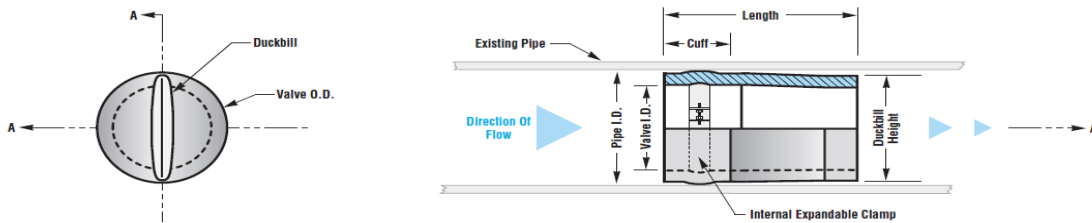
ProFlexTM in-line slip-in rubber check valves

Table 3: Sizes • Working Pressures • Weights

NOMINAL ¹ PIPE SIZE Inch / (mm)	Standard Dimensions for PROCO Style 740				MAXIMUM WORKING PRESSURE (PSIG)	WEIGHT ² lbs / (kgs)	
	Valve I.D. Inch / (mm)	Length Inch / (mm)	Duckbill Height Inch / (mm)				
2	(50)	1.250 (32)	6.750 (171)	1.875 (48)	125	4	(1.8)
3	(80)	2.250 (57)	9.000 (229)	2.875 (73)	125	9	(4.1)
4	(100)	3.000 (80)	13.000 (330)	3.875 (98)	100	10	(4.5)
5	(125)	4.000 (100)	16.000 (406)	4.875 (124)	75	12	(5.4)
6	(150)	5.000 (125)	17.000 (432)	5.875 (149)	75	15	(6.8)
8	(200)	6.625 (168)	19.000 (483)	7.875 (200)	75	18	(8.2)
10	(250)	8.625 (219)	21.000 (533)	9.875 (251)	50	28	(12.7)
12	(300)	10.000 (250)	27.000 (686)	11.875 (302)	50	43	(19.5)
14	(350)	11.500 (292)	28.000 (711)	13.000 (349)	50	55	(24.9)
16	(400)	13.500 (343)	31.000 (787)	15.000 (401)	50	92	(41.8)
18	(450)	15.250 (387)	33.000 (838)	17.000 (451)	25	152	(68.9)
20	(500)	17.000 (432)	35.000 (889)	19.000 (502)	25	236	(107.0)
24	(600)	20.500 (521)	37.000 (940)	23.000 (603)	25	300	(136.1)
28	(700)	24.500 (622)	46.000 (1168)	27.000 (686)	25	364	(165.1)
30	(750)	26.500 (673)	51.000 (1295)	29.000 (737)	25	423	(191.9)
32	(800)	28.500 (724)	58.000 (1473)	31.000 (787)	25	466	(211.4)
36	(900)	32.500 (826)	63.000 (1600)	35.000 (889)	25	501	(227.2)
42	(1050)	38.250 (972)	65.000 (1651)	41.000 (1041)	25	728	(330.2)
48	(1200)	44.250 (1073)	74.000 (1880)	47.000 (1194)	25	762	(345.6)
54	(1350)	50.250 (1276)	77.000 (1956)	53.000 (1346)	25	820	(371.9)
60	(1500)	56.000 (1422)	85.000 (2159)	59.000 (1499)	25	969	(439.5)
72	(1800)	68.000 (1727)	102.000 (2591)	71.000 (1803)	25	1089	(494.0)

Notes: Higher back pressures can be obtained by using Internal Supports, contact PROCO.
 Dimensions are approximate and may change due to pipe dimension changes, inlet, back pressures and flow rates.
 1. Larger sizes available upon request.
 2. Weights are approximate.

Detail of ProFlex In-Line Slip-In Rubber Check Valve; Style 740



FAQS

Frequently Asked Questions to help you understand the ProFlex™ In-Line Rubber Check Valves

1. Does the ProFlex In-Line Rubber Check Valve have to be installed in a certain position?

The ProFlex In-Line Rubber Check Valve can be installed in any position although it is suggested that if installed in a horizontal plane, the bill should be vertical to the plane.

2. In which degree can the ProFlex In-Line Rubber Check Valve be installed?

Because the valve is not reliant on any hinges, gates, or weights the ProFlex In-Line Rubber Check Valve can be installed in any angle from vertical to horizontal.

3. What is "Back Pressure"?

When the ProFlex In-Line Rubber Check Valve is submerged in a liquid it is subjected to external pressure. It is critical that the maximum depth that the valve will be submerged is specified as this will be considered the maximum back pressure to which the valve will be subjected.

4. What is the cracking pressure to allow the valve to open?

Required head pressure will be slightly higher on the in-line valve due their shape.

5. What back pressures can the ProFlex In-Line Rubber Check Valve withstand?

Back pressures are in direct relation to the size of the valve, on the smaller diameters it is acceptable to specify up to 200 psi of back pressure and on larger diameters a back pressure limitation would be approximately 12 psi. Each ProFlex In-Line Rubber Check Valve is manufactured to the exact line pressure, back pressure and flow rates which we require from you for manufacture.

6. What are the most common installations?

The ProFlex 720 In-Line Flanged Rubber Check Valve is bolted between two pipe flanges replacing typical internal swing type check valves, the ProFlex 740 In-Line Slip-In Rubber Check Valves are clamped internally utilizing a stainless steel expanding clamp. The in-line valves are commonly used as pump protection and can be used in vacuum applications.

7. Can I use the ProFlex In-Line Rubber Check Valve on potable water applications?

The standard material for the ProFlex In-Line Rubber Check Valve is NSF61 approved Nitrile. Due to the large demand for clean water and potable applications, PROCO will be the leader in supplying NSF61 as its check valve material of choice. This will eliminate the concerns commonly affiliated with contaminants or leaching of elastomers in potable water systems.

8. Can the ProFlex In-Line Rubber Check Valve be installed on an "out-of-round" pipe?

Yes, the 740 Slip-In Style is especially suited for out-of-round or badly worn pipe as the expandable clamp applies pressure to the I.D. of the check valve forcing complete sealing against the pipe I.D.

9. Can the ProFlex In-Line Rubber Check Valves be used to create back pressure?

Due to their designs, the 720 and 740 ProFlex In-Line Rubber Check Valves will inevitably create back pressure. The valves have been designed to fit inside an existing pipe, therefore the nominal pipe I.D. has been reduced by at least one pipe diameter creating higher head loss and higher inlet pressure to open the valve.

10. Can PROCO make a special design to suit my requirements?

In most instances the ProFlex In-Line Rubber Check Valve can be fabricated to suit different applications. Contact PROCO for your requirements.

11. What types of elastomer are available?

The ProFlex In-Line Rubber Check Valve can be manufactured and supplied to withstand almost any type of media. Most commonly supplied are Nitrile (NSF61 approved), Neoprene, Gum Rubber, Hypalon®, Chlorobutyl, EPDM, and Viton®.

12. What types of materials are available for the internal clamps?

The ProFlex In-Line Slip-In Rubber Check Valves (Style 740) are supplied with 316 stainless steel internal expanding clamps. Other materials are available upon request. The In-Line Flanged Rubber Check Valve (Style 720) does not require a backing ring as it is installed between mating pipe flanges. A gasket is not required as the Style 720 creates its own sealing face.

13. Can the ProFlex 720 In-Line Flanged Rubber Check Valve be supplied with special flanges or drilling?

Yes, the standard drilling pattern is ANSI 125/150# drilling. Other drilling standards such as: ANSI 250/300#, BS-10, DIN NP-10 and DIN NP-16, JIS-5K and JIS-10K, and square flanges are available upon special request.

14. Can I install a ProFlex In-Line Rubber Check Valve near a residential area?

Yes, one of the unique features of the ProFlex In-Line Rubber Check Valve is the design of the bill section. While the bill will open and allow passage of fluid when head pressure is present, the bill will close and not allow children or animals to crawl inside when there is no head pressure.

15. Can the ProFlex In-Line Rubber Check Valve be used to prevent the common problem often affiliated with manhole flooding?

Yes. The ProFlex In-Line Rubber Check Valve is uniquely designed to fit directly inside a manhole which will prevent reverse flow from flooded manholes.

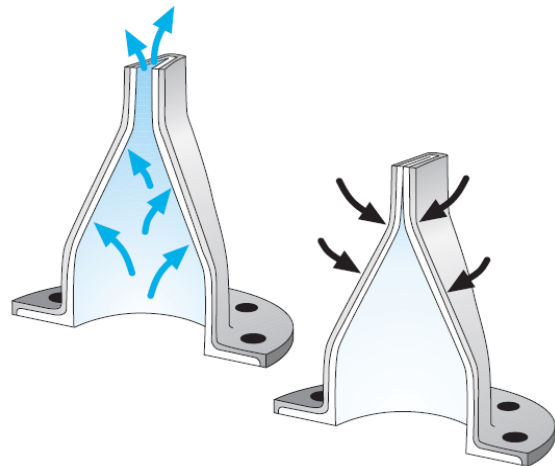
16. Can I use a ProFlex In-Line Rubber Check Valve in winter conditions?

Yes, as in any installation the ProFlex In-Line Rubber Check Valve will not be hindered by winter or sub-zero installations. If the valve is installed in a running water application the valve will continue to operate satisfactorily, due to the elastomers' unique chemical makeup.

17. What is the maximum temperature that the ProFlex In-Line Rubber Check Valve can handle?

Temperature capabilities can range from -65° F (-54° C) to +250 (+121° C) depending on the specified elastomer.

The specified Inlet Pressure opens the ProFlex In-Line Rubber Check Valve allowing flow.



The specified Back Pressure forces the ProFlex In-Line Rubber Check Valve to close preventing backflow.

