

# Flex-Valve®

## Duck-Bill Check Valves

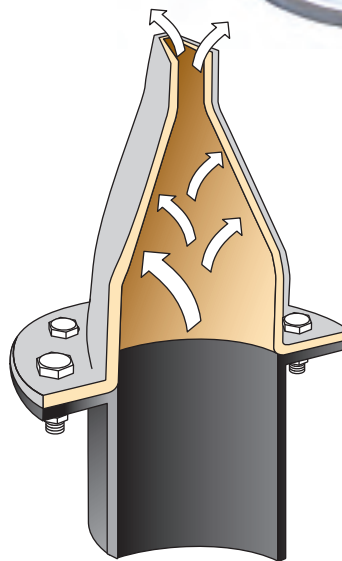
### Style 4100 Slip-on & 4200 Flanged

#### Features:

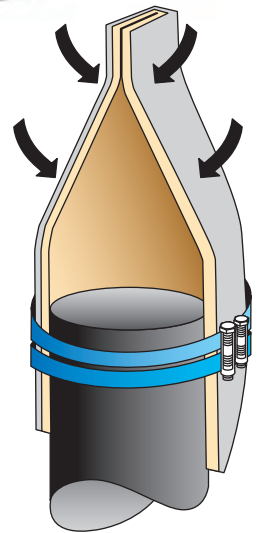
- Reliable and cost-effective alternative to flap-gate and other conventional check valves
- Eliminates backflow and seals around entrapped solids
- Rugged all-elastomer construction in a full variety of materials
- Maintenance-free operation with no mechanical components that can corrode or seize
- Lower head loss than conventional check valves
- Will open with as little as 1" W.C.
- Quiet operation (non-slamming)
- Non-plugging
- Excellent corrosion and abrasion resistance
- Versatile construction for a wide range of applications
- Style 4100 is manufactured with an integral reinforced cuff end provided with heavy duty clamps for easy attachment directly over the pipe or thimble plate
- Style 4200 is manufactured with an integral reinforced rubber flange provided with metal retaining rings for easy bolting directly to the pipe flange, tank wall or head wall
- Flanges drilled per standard ANSI B16.1/150 lb. pattern; other drilling patterns are available upon request
- Retaining ring available in galvanized, 304 stainless steel and 316 stainless steel



**Style 4200**  
Flanged Duck-Bill  
Check Valve



THE FLEX-VALVE® STYLE 4200 CHECK VALVE ILLUSTRATED OPEN WITH LINE PRESSURE TO ALLOW THE PROCESS MEDIA TO FLOW THROUGH.



THE FLEX-VALVE® STYLE 4100 CHECK VALVE ILLUSTRATED CLOSED WITH REVERSE PRESSURE SEALS THE VALVE CLOSED, EVEN ON SOLIDS, TO PREVENT BACKFLOW INTO THE PROCESS LINE.

#### Typical Applications:

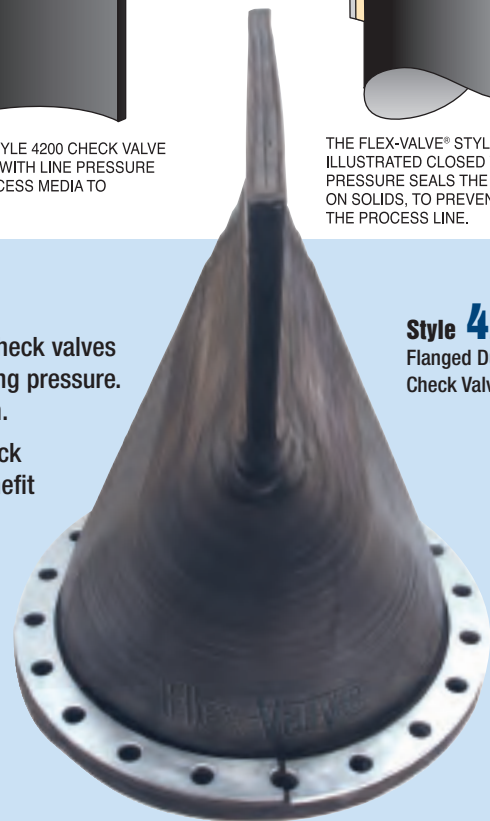
**Storm Water Outfall/Overflow:** The Flex-Valve® Style 4100 & 4200 Duck-Bill check valves provide quiet, maintenance-free operation with an added benefit of low opening pressure. The low opening pressure eliminates standing water – a major health concern.

**Submerged Outfall Diffuser:** The Flex-Valve® Style 4100 & 4200 Duck-Bill check valves will eliminate marine fouling and backflow intrusion with an added benefit of higher jet velocities. The high jet velocity is also found at low flow rates, providing a more uniform port discharge distribution.

The versatile construction and our creative design team can adapt the Flex-Valve® Style 4100 & 4200 Duck-Bill check valves to additional applications including, but not limited to: water mixing systems, overflow vents, anti-siphon devices, coarse bubble diffusers, floor drains, sparging devices, or when needed, a device to increase back pressure in a pipe line.

#### Elastomers Available:

Pure Gum Rubber, Neoprene, EPDM, Buna-N (Nitrile), Hypalon®, Chlorobutyl, and Viton®.



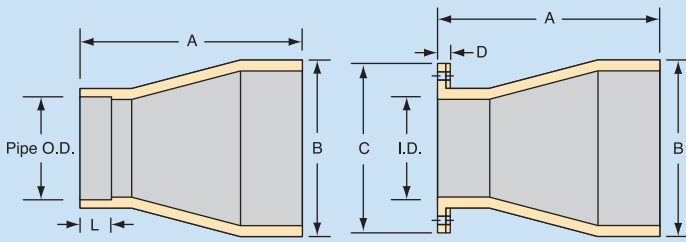
**Style 4200**  
Flanged Duck-Bill  
Check Valve

# Flex-Valve®

## Duck-Bill Check Valves

### Style 4100

Slip-on Duck-Bill  
Check Valve



Style 4100 Slip-on Duck Bill Check Valve

Style 4200 Flanged Duck Bill Check Valve



### D I M E N S I O N S

Pipe Size	STYLE 4100		STYLE 4200			Height B
	Mating Pipe O.D.	Cuff Slip-on Length L	Flange O.D. C	Flange Thickness D	Length A	
1/2	5/8	1/2	3-1/2	7/8	2-1/2	1-1/2
3/4	1	1	3-7/8	7/8	3	1-1/2
1	1-5/16	1	4- 1/4	7/8	3	1-1/2
1-1/4	1-13/16	1	4-5/8	7/8	5-3/4	2-3/4
1-1/2	1-15/16	1	5	7/8	6	3
2	2-3/8	1-1/2	6	7/8	6	4
2-1/2	2-7/8	2	7	7/8	8	5
3	3-1/2	3	7-1/2	1-1/8	9	5-1/2
4	4-1/2	3	9	1-1/8	12	7
5	5-9/16	3	10	1-1/8	15-1/2	9
6	6-5/8	4	11	1-3/8	16	10-1/2
8	8-5/8	4	13-1/2	1-3/8	16-1/2	13
10	10-3/4	4	16	1-3/8	21-1/2	17
12	12-3/4	6	19	1-3/8	26	20-1/2
14	14	6	21	1-3/8	26	22
16	16	6	23-1/2	1-3/8	26	27
18	18	6	25	1-3/8	30	29
20	20	8	27-1/2	1-7/8	33	33
22	22	8	29-1/2	1-7/8	38	33
24	24	8	32	1-7/8	40	37
30	30	10	38-3/4	1-7/8	42	50
32	32	10	41-3/4	1-7/8	48	53
36	36	10	46	1-7/8	50	61
42	42	12	50 3/4	2-3/8	54	71
48	48	12	53	2-3/8	60	78

Notes: 1) Style 4100 sizes are based on Schedule 40 pipe. Other I.D. dimensions are available. 2) Dimensions are subject to change due to customized construction. Steel, Concrete, and Ductile Iron Pipe O.D.s vary. 3) Flex-Valve®, Duck-Bill Check Valve's dimensions are based on actual pipe and therefore it is important to verify pipe O.D. for proper sizing. 4) For full product specifications and installation instructions, see SPEC4100-1, SPEC4200-1 and ININ4100-1, ININ4200-1, respectively. 5) All dimensions expressed in inches. Contact General Rubber for sizes not shown and higher pressure ratings. 6) Customer to provide head pressure and maximum back pressure when ordering.

