

# Series TF-1

- ▶ Ideal for installations when invert is close to the floor
- ▶ Minimal bottom clearance required
- ▶ Engineered with a curved bill
- ▶ Custom designed for various backpressure ratings
- ▶ Strong spine designed for long term water weight

## Materials of Construction:

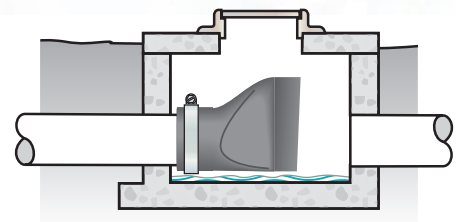
Neoprene, Hypalon®, Buna-N, EPDM, Viton®

## Mounting Bands:

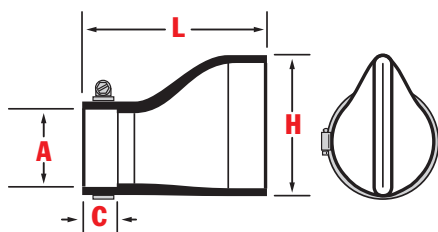
304 or 316 Stainless Steel

The TF-1 was engineered through extensive research and field experience. Engineered designed features of the TF-1 include:

- A strong engineered spine provides long-term performance while handling long-term water weight.
- The bill is formed into a curve that returns to a closed position, allowing for a tighter seal in backflow applications. An increased bill area also allows for a tighter seal, particularly at low flow rates.
- The flat bottom and offset design of the TF-1 allows it to be installed without modifications to structures such as interceptors, manholes and vaults where the invert of the pipe is close to the floor.
- The TF-1 is custom engineered in various constructions so that the valve can handle various backpressure with minimal headloss.
- The TF-1 is ideal for sewer systems and stormwater because it will seal around small debris. The TF-1 design is available with a slip-on or flanged pipe connection. Tideflex® TF-1 valves are constructed with a curved bill as standard in sizes 18" and larger.



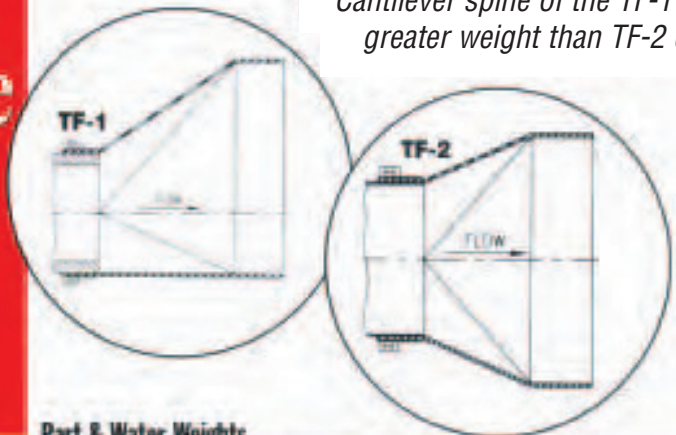
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Pipe O.D. (A)	Length (L)	Bill Height (H)	Cuff Length (C)
4	10	8	1 1/2
5	10	8	1 1/2
6	16	12	2
8	18	16	2
10	23	19	3
12	28	23	4
14	30	27	4
16	35	30	5
18	37	34	6
20	45	37	8
22	45	37	8
24	49	44	8
26	49	44	8
28	49	44	8
30	58	55	9
32	62	59	10
36	68	70	10
38	68	70	10
40	68	70	10
42	68	73	10
44	68	73	10
48	74	81	10
50	74	81	10
54	79	90	12
58	79	90	12
60	82	94	14
68	82	94	14
72	104	120	16
84	104	120	16
90	112	145	16
96	112	145	16

Dimensions are subject to change due to customized construction.

# TF-1 Curved Bill Engineered Spine to handle long-term water weight



Cantilever spine of the TF-1 supports greater weight than TF-2 design.

Since the spine of the TF-1 is at a greater vertical angle compared to the TF-2, the TF-1 is stronger at withstanding the cantilever effect when water is flowing through the valve.



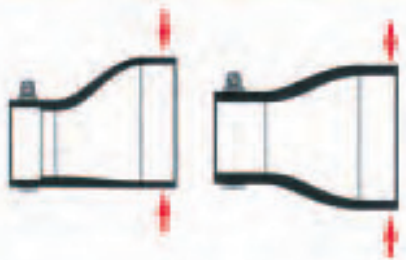
The spine of the TF-1 is at a greater angle, reducing the cantilever effects of water weight.

Part & Water Weights

SIZE	TF-1/TF-1 WEIGHT	WATER WEIGHT	TOTAL WEIGHT	TOTAL WEIGHT TONS
INCHES	POUNDS	POUNDS	POUNDS	TONS
24	130	637	767	0.3
30	220	1072	1292	0.6
36	300	1380	1680	0.7
42	560	1801	2361	1.1
48	800	2702	3502	1.6
48	1027	3855	4882	2.2
60	1660	7556	9216	4.1
72	2620	13958	16578	7.4
84	3660	18411	22271	10.0
90	4664	23030	27694	12.4

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# TF-1 Curved Bill Less Bottom Clearance



Both the TF-1 and TF-2 have the same bill height. The TF-1, however, flares at the top only. The bottom remains horizontal and does not flare downward. Therefore, not as much bottom clearance is required.

Bottom Clearance Required

SIZE	TF-1	TF-2
12	2	6
24	3	9.5
36	4	16.5
48	5	20
72	7	29.5
90	9	34.5

Chart indicated in inches.



The TF-1 is ideal for sewer systems because it will seal around small debris. The TF-1 design is available with a slip-on or flanged pipe connection. Tideflex® TF-1 Valves are constructed with a curved bill as standard.

Ideal for manholes because influent pipes are close to the bottom of the vault. The TF-1 requires minimal bottom clearance compared to the TF-2.

