

## Tideflex® Waterflex WF-3 Check Valve



- High backpressure rating
- Drop-tight seal eliminates backflow
- No springs or packing seals
- Lightweight
- Non-slamming
- Low profile, short face-to-face
- Full-face flange with bolt drilling mounts between two pipe flanges

**Patent No. 76412514**

### Materials of Construction

- **Waterflex Membrane:** Natural Rubber (NR), Ethylene Propylene Diene Terpolymer (EPDM)\*, Acrylonitrile-Butadiene (NBR), Fluoroelastomer (FKM), Chloroprene (CR), Chlorosulfonated Polyethylene (CSM), Chloro-Isobutylene-Isoprene (CIIR)  
\*EPDM is NSF/ANSI 61 Certified
- **Disc:** Carbon steel, 304 Stainless, 316 Stainless Steel, PVC (low pressure only)

The Tideflex® Waterflex WF-3 is a wafer-style check valve designed specifically for water applications. The WF-3 provides very low head loss characteristics with high backpressure ratings comparable to other valve styles such as lever and weight or spring-loaded discs.

The WF-3 operates solely on line pressure and backpressure to open and close without an additional energy source. As line pressure builds, the 100% elastomer Waterflex Membrane is folded away from the perforated disc, allowing water to pass. The memory of the elastomer membrane will cause it to return flat and backpressure will seal the membrane against the disc to prevent backflow. The WF-3 features a full-face flange and ASME bolt drilling to mount it between two pipe flanges.

The Waterflex WF-3 is more cost effective than other valve styles. Moving parts such as hinges and springs can seize if routine maintenance and lubrication are not performed. The WF-3 has no moving parts and requires virtually no maintenance or repairs. Operational costs are low and service life is long. The WF-3 also eliminates the need for machined metal parts, further keeping costs down.

### Waterflex WF-3

NOMINAL PIPE SIZE*	DIMENSIONS in/mm		MAX. BACKPRESSURE** psi/kPa
	ASME FLANGE SIZE	OUTSIDE DIAMETER	
4" 100mm	4.00 102	9.00 229	150 1030
6" 150mm	6.00 152	11.00 279	150 1030
8" 200mm	8.00 203	13.50 343	125 860
10" 250mm	10.00 254	16.00 406	100 690
12" 300mm	12.00 305	19.00 483	75 520
14" 350mm	14.00 356	21.00 533	75 520
16" 400mm	16.00 406	23.50 597	75 520
18" 450mm	18.00 457	25.00 635	75 520
20" 500mm	20.00 508	27.50 699	75 520
24" 600mm	24.00 610	32.00 813	50 350
30" 750mm	30.00 762	38.75 984	50 350
36" 900mm	36.00 914	46.00 1168	50 350
42" 1050mm	42.00 1067	53.00 1346	50 350
48" 1200mm	48.00 1219	59.50 1511	50 350

\* For sizes 54" and up, consult factory.

\*\*Consult factory for higher backpressure.

### Head Loss Versus Pipe Velocity

