

CWF - Tideflex® Waterflex WF-2 Check Valve



- High backpressure rating
- Drop-tight seal eliminates backflow
- No springs or packing seals
- Lightweight
- Non-slamming
- Low profile, short face-to-face
- No bolt drilling, insert between two mating 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), NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372 certified EPDM
- **Disc:** Carbon steel, 304 Stainless Steel, 316 Stainless Steel, PVC (low pressure only)

The Tideflex® Waterflex WF-2 is a wafer-style check valve designed specifically for water applications. The WF-2 provides very low head loss characteristics, with high backpressure ratings compared to other valve styles such as lever and weight or spring-loaded discs.

The WF-2 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-2 is designed to be inserted between two mating flanges. Its face-to-face dimension is the smallest available for any check valve.

The Waterflex WF-2 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-2 has no moving parts and requires virtually no maintenance or repairs. Operational costs are low and service life is long.

Waterflex WF-2

NOMINAL PIPE SIZE*	OUTSIDE DIAMETER in/mm	MAX. BACKPRESSURE** psi/kPa
4"	6.19	150
100mm	157	1030
6"	8.50	150
150mm	216	1030
8"	10.63	125
200mm	270	860
10"	12.75	100
250mm	324	690
12"	15.00	75
300mm	381	520
16"	18.50	75
400mm	470	520
24"	27.25	50
600mm	692	350
30"	34.50	50
750mm	876	350
36"	41.00	50
900mm	1041	350
42"	47.75	50
1050mm	1213	350
48"	54.25	50
1200mm	1378	350

* For sizes 54" and up, consult factory.

**Consult factory for higher backpressure.

Head Loss Versus Pipe Velocity

