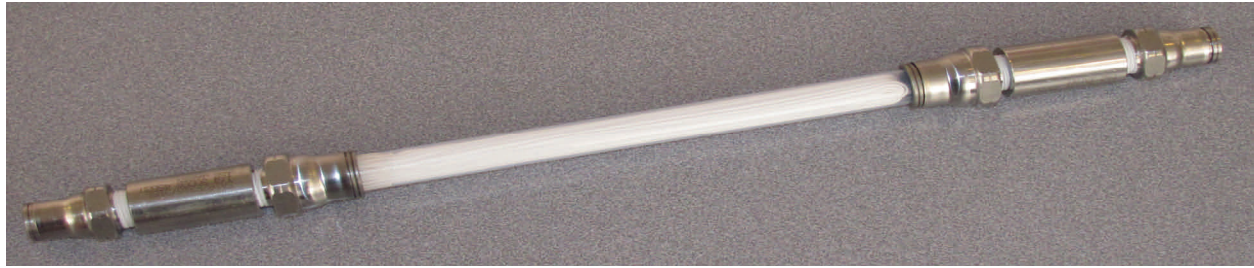


POROUS PTFE MOTIONLESS™ OZONE CHECK VALVE



USE: The Motionless™ ozone check valve provides an additional level of protection for ozone generator systems, protecting them against the detrimental effects of water contamination.

DESCRIPTION: The Markel Motionless™ ozone check valve has no moving parts and is constructed entirely of fluoropolymers, which are impervious to ozone attack. This unique check valve design consists of a number of porous PTFE hollow fibers mounted in a fluoropolymer housing. The porous hollow fibers allow the free passage of ozone while preventing the backflow of water.

CAPABILITY RANGES:

- Fluoropolymer Tube O.D.— 1/4" (6.35mm) to 1.5" + (38.1mm)
- Minimal Impact of Ozone Flow vs. Pressure (See Figure 1)
- Porous Fiber Water Breakthrough Time and Pressure (see Figure 2)



APPLICATIONS: The unique design of the Markel Motionless™ ozone check valve has been proven to be more effective than PVDF or stainless steel valves as a low pressure protective component when used in ozone generating systems. The design is especially effective at blocking the passage of water during upsets where low water pressure can “leak by” mechanical check valves that contain degraded plastic or elastomeric parts impacted by the detrimental effects of exposure to ozone. The Markel Motionless™ ozone check valve can be easily installed and many have been in service for extended lengths of time without failure in ozone generating systems. This unique check valve can use conventional stainless steel or PVDF compression fittings and can be sized to best match the ozone flow rate requirements of the application and can be designed to a specific water breakthrough time and pressure.

Features

- All Fluoropolymer Construction
- Many Tube and Fiber Sizes Available
- Porous PTFE Hollow Fibers Block the Flow of Water and Aqueous Based Solutions

Benefits

- Resistant to Degradation from Ozone
- Custom Flow vs. Pressure Options Available
- Prevents Water from Damaging Ozone Generators

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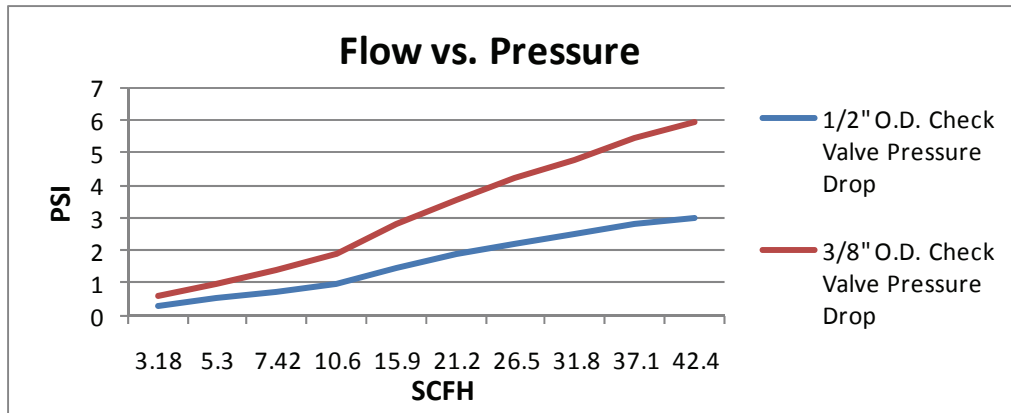


Figure 1

Note: Flow vs. Pressure can be adjusted by changing the flow characteristics of the porous PTFE hollow fiber membrane, the number of porous PTFE hollow fibers used, and the size of the fluoropolymer tube.

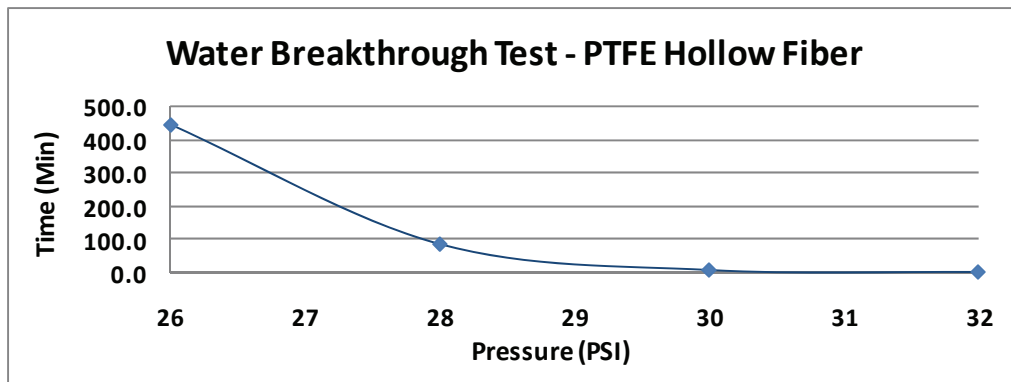


Figure 2

Note: Markel Motionless™ ozone check valves are tested to block the flow of water for a minimum of 1 hour at 10 psi.

Part Numbers for Standard Units:

3/8" O.D., 6" Long Unit: MCM3A000152

1/2" O.D., 8" Long Unit: MCM3A000203