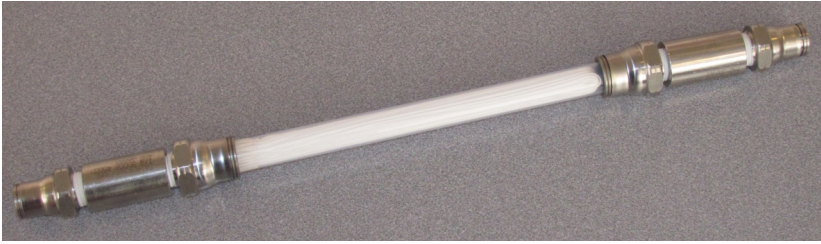


## POROUS PTFE MOTIONLESS™ OZONE CHECK VALVE



**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.— 3/8”(9.5mm) to 3/4” (19.1mm)
- Minimal Impact of Ozone Flow vs. Pressure Drop (See Figure 1)
- Porous Fiber Water Breakthrough Pressure up to 60psi

**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 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 be installed using stainless steel or PVDF compression fittings and can be sized to best match the ozone flow rate and water breakthrough pressure requirements of the application.

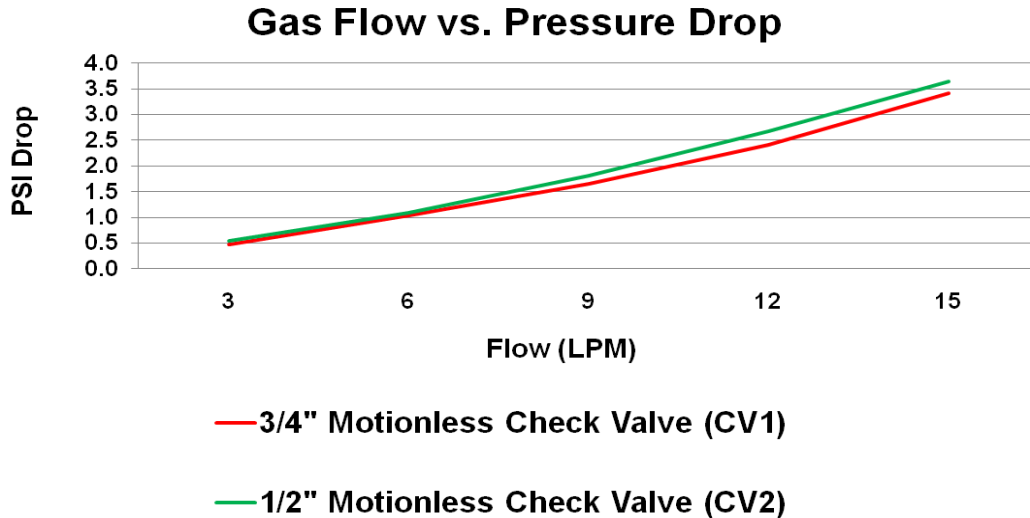
### Features

- 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

# POROUS PTFE MOTIONLESS™ OZONE CHECK VALVE



**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.

**Water Breakthrough Pressure:** The 3/8" O.D. and 1/2" O.D. Motionless™ Ozone Check Valves have been tested to block the flow of water for a minimum of 30 minutes at 25psi.

The 3/4" O.D. premium performance Motionless™ Ozone Check Valve has been tested to block the flow of water for a minimum of 30 minutes at 60 psi.

**Part Numbers for Standard Units:**

- 3/8" O.D., 6" Long Unit: MCM3A000152
- 1/2" O.D., 8" Long Unit: MCM3A000203
- 3/4" O.D., 12" Long Unit: MCM3A000304