

## SERIES CK & CKM DIAPHRAGM CHECK VALVE INSTALLATION AND MAINTENANCE INSTRUCTIONS

### 1. IMPORTANT – BEFORE INSTALLING

Series CK and CKM check valves will open when forward pressure is applied and when properly installed and used within the recommended ranges of pressure, temperature, and chemical compatibility. The ultimate determination of material compatibility is previous successful use in the same application. Call our Technical Support for information about your application.

**Caution:** Plastic materials will degrade in ultraviolet (UV) light or sunlight.

**Caution:** Polypropylene and PVDF (Kynar) often look similar. Do not install in your system if you are not sure.

### 2. INSTALLATION

The check valve will operate mounted in any position. Be careful to install the valve in the correct flow direction (see illustration, flow label.)

**Threaded Connections:** A suitable thread sealant (ex. Teflon® tape) should be applied to male tapered threads to assure a “leak-tight” seal. The assembly need only be made “hand-tight” followed by a quarter (1/4) turn with a strap wrench. Do not over tighten or use pipe wrenches on plastic pipe and components.

**Caution:** Teflon® tape will “string” as pipe threads are joined. Loose “strings” could lay across the seating surface and prevent the check valve from completely closing. To avoid this problem, clean out old tape and do not apply tape to the first thread.

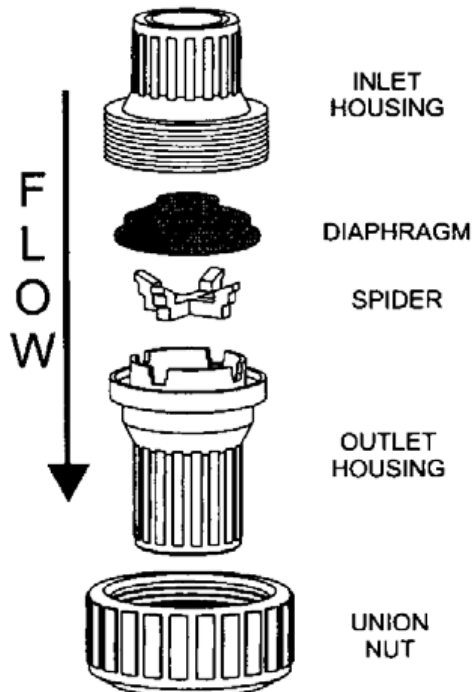
**Caution:** Connections should be made only to plastic fittings; metal pipe should only be installed with an intervening plastic nipple. Metal pipe and straight threaded pipe tend to cut, stretch and distort the plastic bodies, which could result in cracking or leaking over time.

**Non-Threaded Connections:** For solvent cementing or heat fusion, follow instructions supplied with the cement or fusion equipment, or contact your distributor.

### 3. MAINTENANCE

Plast-O-Matic recommends keeping a spare diaphragm available for repairs. Seal life will vary in applications due to cycles, temperatures, pressures, chemicals, and concentration. Based on the application, a periodic inspection and maintenance plan should be established.

### 4. PARTS AND ILLUSTRATION

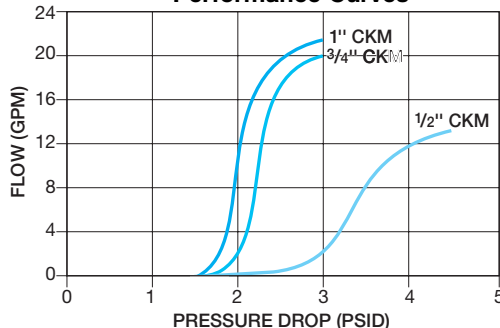


**Shown as CKM (molded body type)**  
(Series CK has no SPIDER or UNION NUT, and Six SCREWS and NUTS are used for assembly.)

### DIAPHRAGM PART NUMBERS

CKM050 1/2"	CKM 3/4" & 1"	CK 3/4" & 1"	
Molded Body	Molded	Machined	
1021B	4054B	0721B	Buna Diaphragm
1021EP	4054EP	0721EP	EPDM Diaphragm
1021V	4054V	0721V	Viton Diaphragm

### Series CKM – Flow vs. Pressure Drop Performance Curves



Series CKM is a normally-closed design requiring 1.5 PSI or less to open



CK/CKM-I-1120