

## SERIES CKS, SELF-CLOSING CHECK VALVES 1 1/2", 2", 3" & 4"

### IMPORTANT – BEFORE INSTALLING

Series CKS check valves will prevent back flow 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.

#### MAXIMUM INLET PRESSURES for WATER\*

BODY MATERIAL	COLOR	77°F / 25°C	105°F / 40°	At MAXIMUM TEMPERATURE
PVC	Medium Cool Grey	100 PSI 7 Bar	100 PSI 7 Bar	40 PSI @ 140°F 3 Bar @ 60°C
PP	Translucent White	100 PSI 7 Bar	80 PSI 5 Bar	30 PSI @ 180°F 2 Bar @ 82°C
PVDF	White/Yellowish White	100 PS 7 Bar	100 PS 7 Bar	30 PSI @ 240°F 2 Bar @ 115°C
CPVC (Corzan)	Light Cool Grey	100 PSI 7 Bar	100 PSI 7 Bar	40 PSI @ 180°F 3 Bar @ 60°C

CPVC or compatible chemical - ratings may be reduced for some applications.

Minimum temperature 40°F (5°C)

EPDM seals limited to 250°F (120°C)

See the Product Data Sheet or consult our Technical Support staff for more information.

### INSTALLATION INSTRUCTIONS

The valve must be installed in the proper flow direction as indicated by the flow label. All orientations, horizontal and vertical, are suitable.

**THREADED CONNECTION** – 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 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.

**Caution:** When using solvent cement for socket connections on PVC and CPVC check valves care should be taken. If primer or cement gets past welding area of the socket it can cause the valve to malfunction. The primer or cement may cause the seals to fail or moving parts to bind and restrict proper movement of internal parts. Keep valve rightside up when welding so that solvent and primer don't drip and destroy the valve.

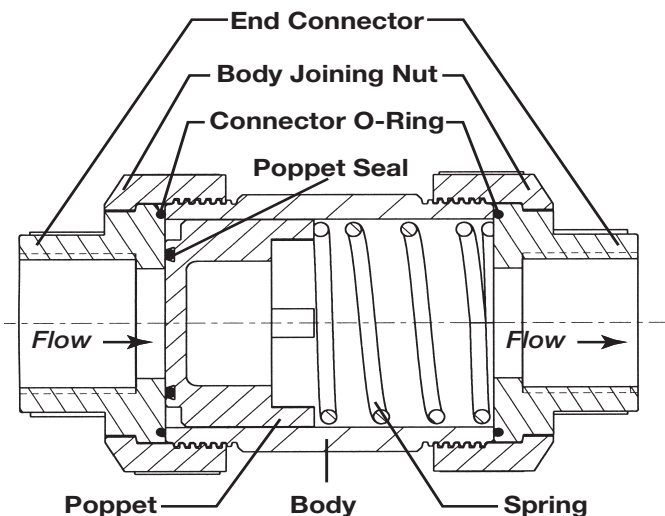
*Never trim the flat-end of the Teflon encapsulation on the spring. This may cause spring to be wetted by the process fluid.*

**Note:** Disassembly will void warranty.

### MAINTENANCE

Plast-O-Matic recommends keeping a spare seal kit 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. The seal kit part number is “SK” plus the part number. For example, the seal kit for CKS150V-NC-PV is SKCKS150V-NC-PV.

### PARTS & ILLUSTRATION



### SERIES CKS, SELF-CLOSING CHECK VALVES 1 1/2", 2", 3" & 4"

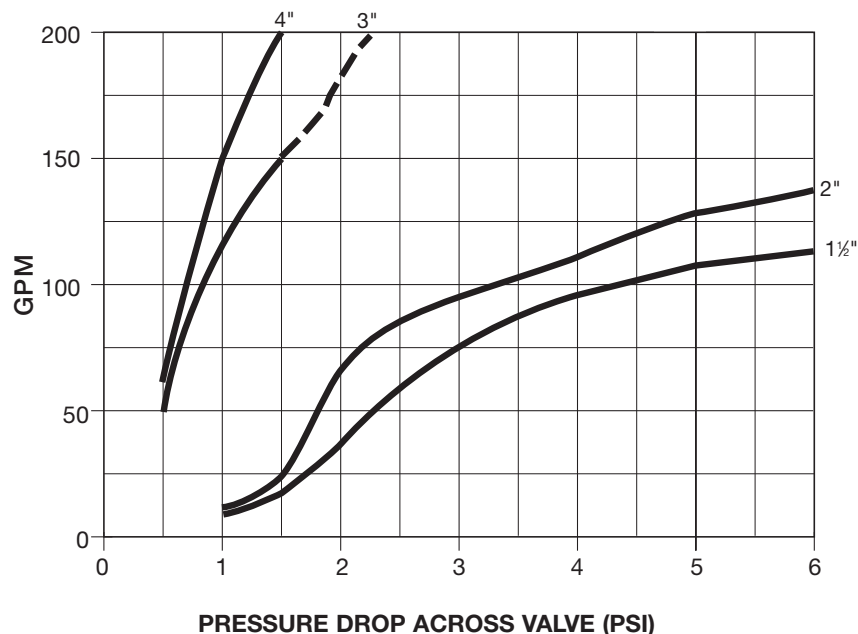
Qty.	Description	Material	Part Number		
			1 1/2" & 2"	3"	4"
1	Body	See Note 2	6788 - <sup>2</sup> <sup>3</sup>	8861	9181
1	Poppet	See Note 2	6790 - <sup>2</sup>	6845- <sup>2</sup>	9182
1	Poppet O-Ring	See Note 1	0224 - <sup>1</sup>	0230- <sup>1</sup>	0241
1	Spring	SS & PFA (Teflon)	6792	6853	9210
2	End Connector	See Note 2	varies	varies	varies
2	Body Joining Nut	See Note 2	4209 - <sup>3</sup>	8991	9179
2	Body O-Ring	See Note 1	0040 - <sup>1</sup>	0155- <sup>1</sup>	0258

<sup>1</sup> - Add seal suffix: EP for EPDM, V for Viton

<sup>2</sup> Add material suffix: PV for PVC, CP for CPVC, PP for Polypropylene, PF for PVDF.

<sup>3</sup> Part number shown is for PVC. A different number may apply for other materials.

#### CKS CHECK VALVE FLOW CHART Tested with City Water Under Laboratory Conditions



**PRESSURE DROP ACROSS VALVE (PSI)**  
Actual performance may vary due to spring force variation and application.  
Dashed line is projected data.