

## Model DD7L Double Check Detector Check 3" to 10"

### FEATURES

- Low head loss
- Ductile iron bodies - Epoxy coated
- By-pass line has meter in series with an approved double check valve

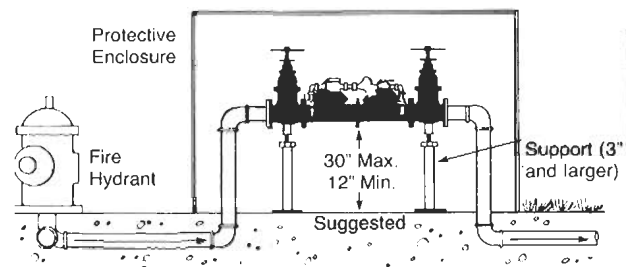
### OPERATION

In a non-flow condition check valves in the by-pass and mainline units are closed. Flows from zero to approximately 5 GPM will flow through the by-pass. This operation at low flow rates is accomplished by designing the differential pressure drop across the by-pass line to be slightly lower than the mainline check valve. Therefore, any flow through the fireline system is registered by the by-pass meter.

Flows in excess of approximately 5 GPM will open the mainline check valves causing flow to occur through the mainline assembly and the by-pass line.

### APPLICATIONS

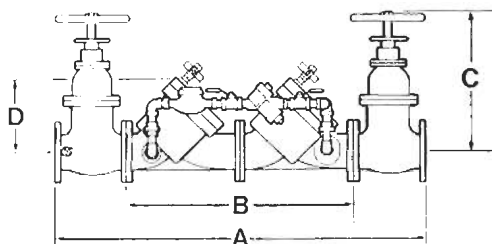
Automatic fire sprinkler systems containing non-toxic substances.



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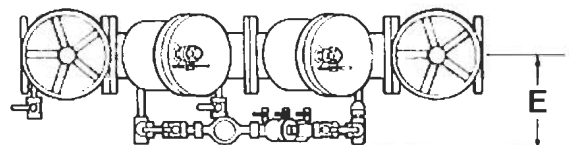
### INSTALLATION

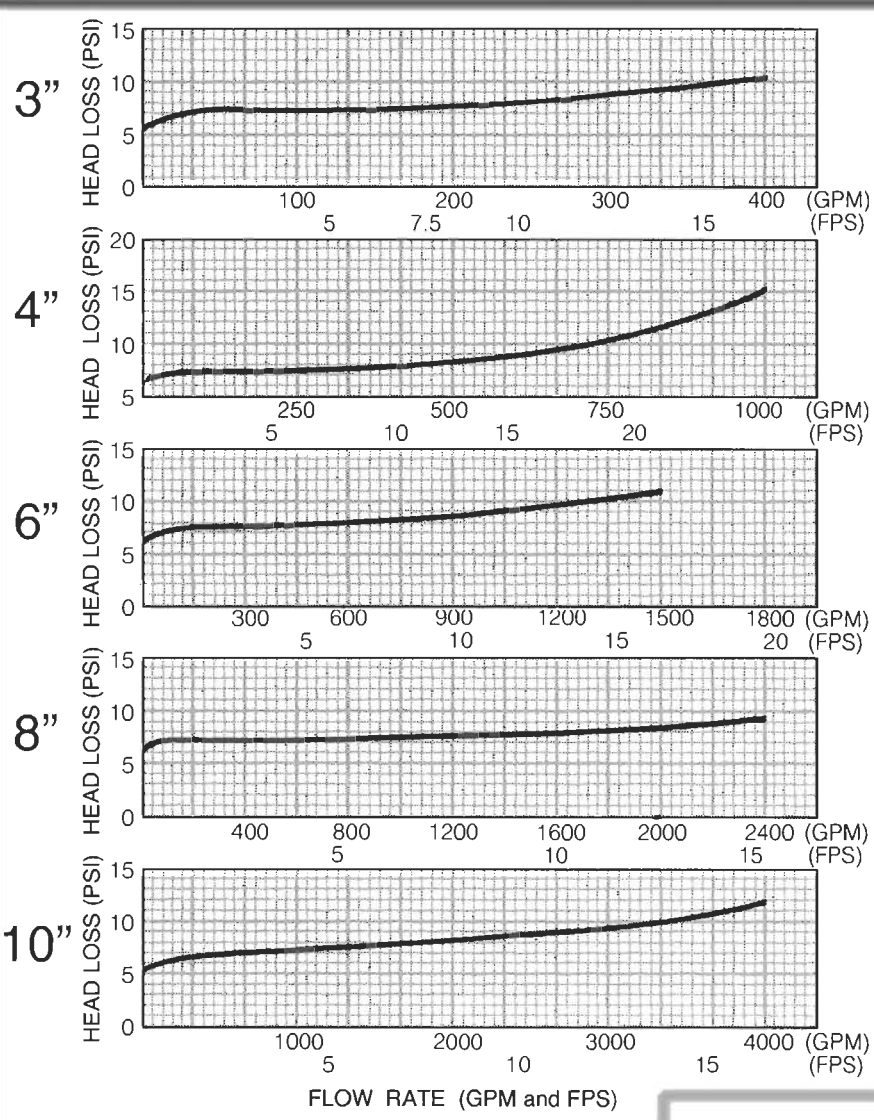
Double check detector assemblies should be installed with adequate clearance and easy accessibility for testing and maintenance and must be protected from freezing. The assembly may be installed horizontally or vertically with flow up. Larger sizes should be installed horizontally for ease of service. Thermal water expansion and/or water hammer downstream of the assembly can cause excessive pressure, which should be eliminated to avoid possible damage to the system and assembly.



### DIMENSIONS & WEIGHTS

SIZE	A	B	C	D	E	NET WT.(Lbs.)	NET WT.(Lbs.)
3"	41 1/16	25 5/16	22 1/4	8 1/8	14 1/2	375	180
4	50 7/16	32 5/16	23 3/4	11	15	515	265
6	59 1/16	38 9/16	32 5/8	14	16	740	400
8	69 3/16	46 1/16	41 7/8	18	17	1115	600
10	84 3/16	58 1/16	50 1/2	22	20	1750	900





**FLOW CURVES**

**CLA-VAL  
Model DD7L**

*American Backflow Specialties*  
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(800) 66-BKFLO  
(619) 527-2525  
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**Characteristics & Materials**

Sizes	Mainline: 3", 4", 6", 8", 10" By-pass: 3/4"
Maximum working pressure	175 PSI
Hydrostatic test pressure	350 PSI
Temperature range	32°F to 140°F
Fluid	Water
End detail (shut-offs)	Flanged ANSI B16.1
Main valve body	Ductile iron ASTM A536 grade 65-45-12 epoxy coated internal 10-20 mils
Trim	Bronze ASTM B-61
By-pass valve body	Bronze ASTM B584-78
By-pass meter	Totalizing, 1 to 20 gpm Size 3/8" x 3/4"
Mainline shutoff valves	OS&Y, UL/FM
Elastomers	Nitrile ASTM D-2000
Mainline check assembly	Stainless steel, 300 series
Shut-offs	Standard gates OS & Y, resilient wedge
Remote reading flow meter available.	