



### Prevention of Backflow

Hydroseal Canada's **orca** Swing Check Valves prevent reversal of flow in larger sized piping systems using swing action. They are ideal for trouble-free backflow prevention in any application. Swing check valves can be used in both horizontal and vertical installations.

### Trouble-free Operation

Hydroseal Canada Swing Check Valves operate especially well with viscous slurries that may adversely affect other types of check valves. The default position of the valve is closed - line pressure moves the solid wafer seal off its EPDM gasket allowing slurry through the body of the valve. When the inlet flow stops, swing action moves the seal back onto the seat - stopping the flow.

### Cost-effective Simplicity

These valves feature a socket, threaded or flanged design. This allows for easy installation in piping systems with minimal cost. Adequate housing and simple operation ensures years of trouble free operation without any need for maintenance.

### Corrosion-free

Because of their all-plastic construction, these valves will never jam or stick as a result of rust or corrosion. Also they will not contaminate sensitive fluids that come into contact with them.

### Features

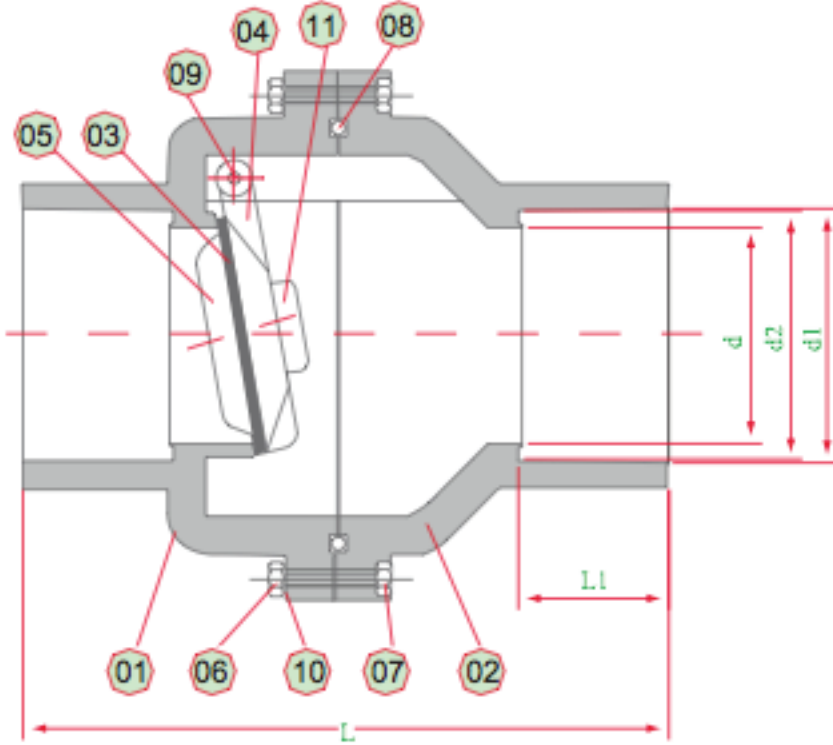
- Rated at 200 PSI
- Full Port Design to 8"
- Only 3 PSI Backflow Required
- EPDM Seals
- Suitable for Vertical and Horizontal Use

### Options

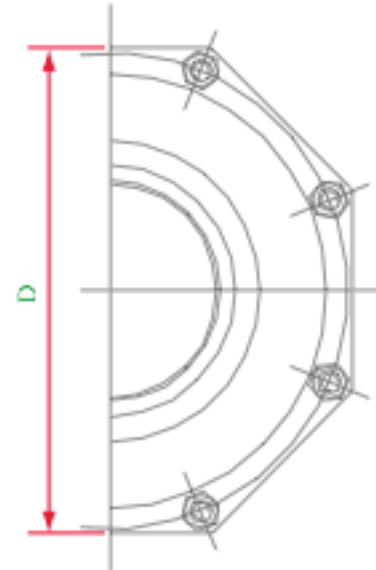
- Socket or Threaded Pipe Connectors
- Flanged Option Available
- Suitable for ASTM, DIN, JIS systems

# Technical Information

**SIZE:** 2 1/2" ~ 6" (8" FLANGED TYPE)  
**JOINT END:** THREADED (PT.NPT.BSPF)  
 SOCKET (ASTM,DIN,JIS)  
**WORKING PRESSURE:** 150 PSI



CONSTRUCTION			
NO.	PARTS	PCS	MATERIALS
1	ENTRANCE BODY	1	PVC
2	EXIT BODY	1	PVC
3	SHEET GASKET	1	EPDM
4	DISK	1	PVC
5	SHEET GASKET HOLDER	1	PVC
6	NUT	8	SUS304
7	BOLT	8	SUS304
8	O-RING	1	EPDM
9	PIN	1	SUS304
10	WASHER	8	SUS304
11	COUNTER WEIGHT	1	PVC



PART	NOMINAL SIZE	SOCKET, THREAD TYPE	ASTM	DIN	JIS	ASTM	DIN	JIS	UNIT OF MEASURE: MM			
		DN	d	d1	d1	d1	d2	d2	d2	L	L1	D
60077	2 1/2"	DN65	63.00	73.38	75.30	76.60	72.85	75.10	75.10	212.00	49.50	168.00
60078	3"	DN80	75.00	89.31	90.10	89.60	88.70	89.30	89.30	228.00	53.00	174.00
60079	4"	DN100	100.00	114.76	110.40	114.70	114.07	110.10	110.10	270.00	61.00	208.00
60082	6"	DN150	148.00	168.83	160.00	166.20	168.00	160.10	160.10	366.00	82.00	276.00
60084	8"	DN200	-	-	-	-	-	-	-	-	-	-

SELECTION CHART				
SIZE	MATERIAL	END CONN.	SEALS	PRESSURE RATING
-	-	-	EPDM	150 PSI @ 70F NON-SHOCK
2 1/2" ~ 6"	PVC	Socket or Threaded		
8"	PVC	Flanged		

CV FACTORS			
SIZE	FACTOR	SIZE	FACTOR
1/4"	-	2"	-
1/2"	-	2 1/2"	330.0
3/4"	-	3"	480.0
1"	-	4"	600.0
1 1/4"	-	6"	800.0
1 1/2"	-	8"	1000.0

**Pressure Loss Calculation Formula**

$$\Delta P = \left[ \frac{Q}{Cv} \right]^2$$

$\Delta P$  = Pressure Drop  
 $Q$  = Flow in GPM  
 $Cv$  = Flow Coefficient

