ISOLATION VALVES
Swing Check Valves - ORCA

Prevention of Backflow

Hydroseal Canada's ORCA Swing Check Valves prevent reversal of flow in larger sized tubing 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's ORCA 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.

Features

- Rated at 150 PSI
- Full Port Design
- Minimum 3 PSI Backflow
- Suitable for Vertical and Horizontal Installations
- Suitable for ASTM, DIN, JIS and CNS systems
- NSF Compliant

Cost-effective Simplicity

These valves feature a socket, threaded or flanged design. This allows for easy installation in tubing 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.

Options

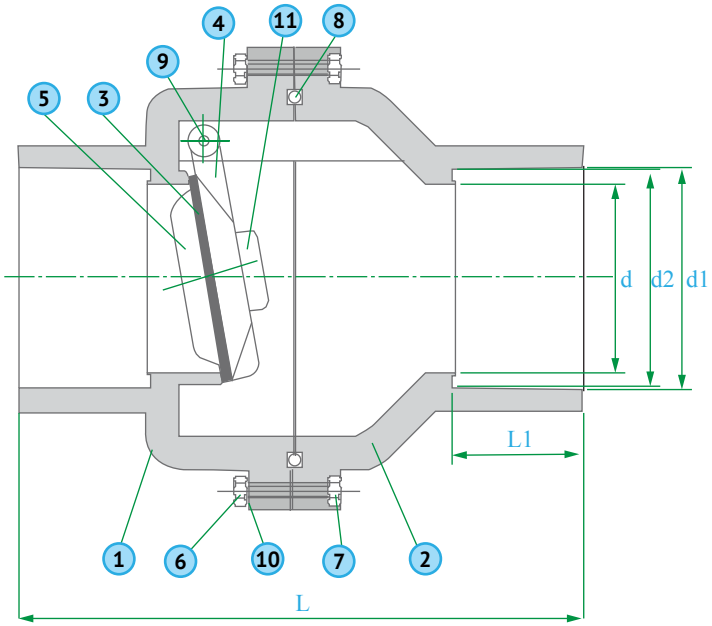
- Foot Valve Screens
- Flanged Connectors
- PVC, CPVC, PP and PVDF
- EPDM, Viton or Nitrile O-Rings

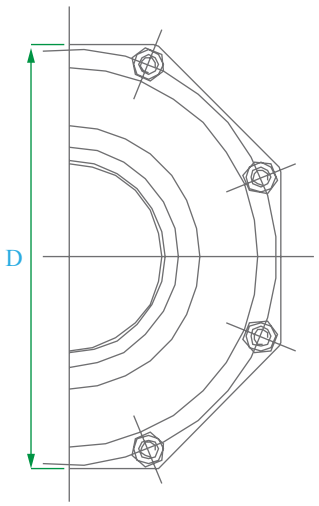
SIZE: 2 1/2" ~ 8"

JOINT END:
SOCKET - ASTM, DIN, JIS
THREAD - NPT, BSPT
FLANGE - 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
ORES.0250	2 1/2"	DN65	63.0	73.8	75.3	76.6	72.9	75.10	75.1	212.0	49.5	168.0
ORES.0300	3"	DN80	75.0	89.3	90.3	89.6	88.7	89.10	89.3	228.0	53.0	174.0
ORES.0400	4"	DN100	100.0	114.8	110.3	114.7	114.1	110.10	110.1	270.0	61.0	208.0
ORES.0600	6"	DN150	148.0	168.9	160.3	166.2	168.0	160.10	160.1	366.0	82.0	276.0
ORES.0800	8"	DN200	-	-	-	-	-	-	-	-	-	-

SELECTION CHART

SIZE	MATERIAL	CONNECTION	SEALS	PRESSURE RATING
2 1/2" ~ 8"	PVC CPVC -	SOCKET or THREAD	EPDM or VITON	150 PSI @ 73F Non-Shock

CV FACTORS

SIZE	FACTOR	SIZE	FACTOR
1/4"	-	2"	-
1/2"	-	2 1/2"	330
3/4"	-	3"	480
1"	-	4"	600
1 1/4"	-	6"	800
1 1/2"	-	8"	1000

Pressure Loss Calculation Formula

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

ΔP = Pressure Drop
Q = Flow in GPM
Cv = Flow Coefficient

OPERATING TEMPERATURE/PRESSURE