

The ODIS hydrocyclone separator is a simple device, easy to operate and maintain. It has no moving parts or screens. The hydrocyclone separates sand and other solid matter with very little head loss and 90% or better efficiency, no head loss build up and no clogging by solids being separated. Its versatility in system configurations and its economy in installation are some of its great advantages.

#### **Features**

- The hydrocyclones use a tangential injection flow process, enhancing the centrifugal forces and moving solid particles outwards
- The dispersed particles move downwards in a spiral path into an underflow chamber, while clean liquid moves upwards to the centre of the spiral, towards the top outlet
- The underflow chamber can be drained manually or automatically without interfering with the proper functioning of the hydrocyclone
- Modular design suitable for use in arrays for various flow rates
- 100 micron extra-durable polyester, applied electrostatically and oven-cured on a zinc-phosphate layer for maximal anti-corrosion protection

# **Applications**

- Used for separation of sand and other solid matter from water or other liquids
- Protects pump, valves and irrigation systems from damage and abrasion caused by suspended solids
- For agriculture, domestic, industrial and municipal use

### **Specifications**

Recommended Flow Range: Up to 2666lpm Maximum recommended working pressure: 800kPa Maximum pressure: 1000kPa

End Connection Type: Threaded (25,40&50mm) & Flanged (80,100,150mm)

Part No.	Description						
20mm Flow Range: 33lpm - 50lpm							
OD50307	20mm Female BSP Hydrocyclone Sand Separator						
25mm Flow Range: 58lpm - 125lpm							
OD50410	25mm Female BSP Hydrocyclone Sand Separator						
40mm Flow Range: 125lpm - 200lpm							
OD50615	40mm Female BSP Hydrocyclone Sand Separator						
50mm Flow Range: 183lpm - 283lpm							
OD50820	50mm Female BSP Hydrocyclone Sand Separator						
80mm Flow Range: 300lpm - 566lpm							
OD50830	80mm Flanged Table D Hydrocyclone Sand Separator						
100mm Flow Range: 583lpm - 866lpm							
OD51243	100mm Inlet / 80mm Outlet Flanged Table D Hydrocyclone Sand Separator						
150mm Flow Range: 1633lpm - 2666lpm							
OD52060	150mm Flanged Table D Hydrocyclone Sand Separator						

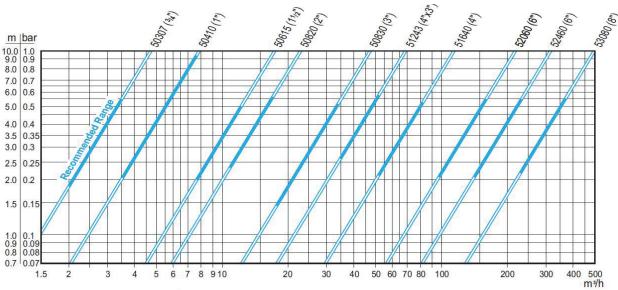




# **Head Loss**

	Head Loss dP (bar)						
Model	0.2	0.3	0.4	0.5	0.6	0.7	
			Q (m³/h)				
50307	2.1	2.6	3.0	3.3	3.6	3.9	
50410	3.4	4.2	4.9	5.4	6.0	6.4	
50615	7.6	9.3	10.8	12.0	13.2	14.2	
50820	10.1	12.4	14.3	16.0	17.5	18.9	
50830	21.1	25.9	29.9	33.4	36.6	39.5	
51243	30.4	37.2	43.0	48.1	52.7	56.9	
51640	50.1	61.3	70.8	79.2	86.8	93.7	
52060	96.2	117.8	136.0	152.0	166.5	179.9	

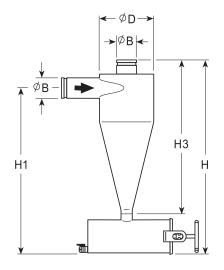
# **Head Loss / Flow Rate**

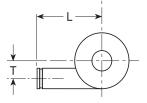


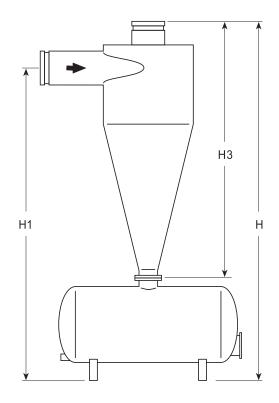
■ 1 bar=100 kPa=1.02 kg/cm<sup>2</sup>=10.2 m (W.C)=14.5 psi



#### **FILTER DIMENSIONS**







#### OD50410

#### **Filter Dimensions**

**B:** 25mm **D:** 100mm **H:** 460mm **H1:** 380mm **H3:** 345mm L: 140mm T: 40mm

Weight: 9kg

Threaded End Connection

#### OD50615

#### **Filter Dimensions**

B: 40mm
D: 150mm
H: 720mm
H1: 580mm
H3: 480mm
L: 240mm
T: 61mm
Weight: 18kg

Threaded End Connection

#### OD50820

#### **Filter Dimensions**

B: 50mm D: 200mm H: 735mm H1: 575mm H3: 530mm L: 295mm T: 80mm Weight: 20kg

Threaded End Connection

# OD50830

#### **Filter Dimensions**

B: 80mm
D: 200mm
H: 830mm
H1: 660mm
H3: 625mm
L: 300mm
T: 65mm
Weight: 27kg
Flanged Table D

# OD51243

### **Filter Dimensions**

B: 100mm in/ 80mm out D: 300mm H: 1330mm H1: 1130mm H3: 725mm L: 500mm T: 105mm Weight: 66kg

# OD52060

### **Filter Dimensions**

B: 150mm
D: 500mm
H: 1900mm
H1: 1610mm
H3: 1150mm
L: 600mm
T: 170mm
Weight: 172kg
Flanged Table D

Flanged Table D



# FLOW SCHEME OF HYDROCYCLONE AND MODE OF SEPARATION

