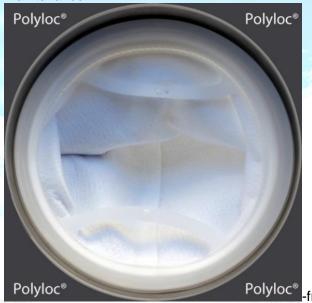
# FLOWRITE

## FSi2 SERIES FILTER BAG HOUSING



## FLOWRITE 1FSI2 BAG FILTER HOUSING

The Flowrite "xFSi2" series bag filter housings utilise modern engineering techniques to provide a robust vessel with a maximum pressure rating of 1000 kPa. Flowrite "FS" series housings are made from durable 304 or 316 stainless steel to ensure years of maintenance



reliable service. They are free-standing and are fitted

standard with 50mm or 80mm flanged inlet and outlet connections. Other sizes are available on request.

Amongst the many features of the "FS" series housings are covers secured by four swing-bolts to allow quick, easy access to the filter bag.

Internally, the filter bag is securely supported by a stainless steel perforated plate basket to provide maximum strength and minimum flow resistance.

Bag-to-housing seal is assured by FSI's proven Polyloc® ring sealing method. The Polyloc® ring ensures that no bypass occurs during the filtration process. The Flowrite FSI2 housing is a standard double-length vessel (industry standard D/L 32" filter bags) and is available in multiple bag configurations. From a1-bag up to a 12-round bag housing thereby providing one vessel for the flow rate required for your application.

## THE POLYLOC® RING ENSURES NO BYPASS

FEATURES	BENEFITS		
All stainless steel	Low maintenance and excellent chemical resistance		
Swing-bolt closure	Quick, no-tool access to filter bag		
Drain and gauge ports	Versatile threaded ports for simple multi-tasking		
Cover vent port	Easy, safe venting prior to start-up		
Versatile filter bags	Various materials and filtration ratings available		

SPECIFICATIONS	1FSI2-50 Model	1FSI2-80 Model	4FSI2	7FSI2	12FSI2
Maximum Flow (Ipm)	550	830	90 m3/h	150 m3/h	On Request
Maximum Pressure (kPa)	1000	1000	1000	1000	1000
Inlet/Outlet Flange (mm)	50mm	80mm	On Request	200mm	250mm
Filter Bag Quantity	1	1	4	7	12
Filter Bag Length	Double	Double	Double	Double	Double
Approx Weight (kg)	18	18	On Request	On Request	On Request
Dimension A (mm)	955	955	On Request	On Request	On Request
Dimension B (mm)	852	852	On Request	On Request	On Request
Dimension C (mm)	334	334	On Request	On Request	On Request
Dimension D (mm)	242	242	On Request	On Request	On Request

## INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS FOR FLOWRITE "FSI" RANGE OF BAG FILTER HOUSINGS

### **INSTALLATION**

- 1. The unit must be installed vertically.
- 2. It is not designed to be supported off the inlet and outlet piping and should, therefore, be suitably foot-mounted to ensure that it is securely positioned.
- 3. Inlet and outlet piping must also be suitably supported to ensure no strain or distortion is imparted to the bag filter. Inlet and outlet piping must be fitted with suitable valves to isolate the unit for bag change-out.
- 4. If required, piping/valving should be attached to the drain port to allow the waste during vessel draining to be led to a suitable disposal point.
- 5. Pressure gauges with a suitable range should be connected to the inlet and outlet piping to make it possible to monitor pressure differential between inlet and outlet during operation.

#### **OPERATING AND MAINTENANCE**

- 1. The unit is designed to retain solids in the fluid flow in the bag while allowing the clean fluid to pass on downstream.
- 2. The inlet is thus to the uppermost horizontal port, which will direct the flow into the throat of the bag. The flow is then through the walls of the bag and the outlet is from the lower horizontal port.
- 3. During operation, the pressure drop across the bag (differential pressure) must be monitored by subtracting the reading on the outlet gauge from the reading on the inlet gauge. When or before this figure reaches 100 kPa, the bag must be cleaned or replaced.
- 4. To do this, close the inlet and outlet valves. Remove the cover by loosening the four bolts and swinging them out of the way. If desired, open the drain to allow the level of liquid in the vessel to drop until the vessel is about half-full. Remove the bag locating clamp by lifting up vertically. Then grasp the bag and remove it vertically upwards, ensuring that the bag-retaining basket remains in the housing.
- 5. The bag can then be washed and re-used or a new bag fitted. Place the clean bag into the housing, ensuring that the ring-band seals against the vertical face above the retaining basket and that the bag is not twisted. On higher flow rates (over 30m³/h), it is advantageous to fit the bag locating clamp. This is fitted such that the ring is inserted into the throat of the bag, forcing the snap-band against the vertical sealing face of the housing. The "hoop" section of the clamp should be vertically up so that the vessel lid will press against it.
- 6. The cover "O" ring must be greased with a product such as petroleum jelly before the cover is re-installed. The cover "O" ring should be replaced if damaged. The cover bolts must be tightened evenly and securely.
- 7. Open the outlet valve and then gradually open the inlet valve to allow the vessel to fill. Air in the vessel will be entrained and carried downstream by the fluid flow. When the vessel is full and flowing smoothly, open the inlet valve fully.