



## ADIR Semi – Automatic 2"-3" filters TDS

### Installation and maintenance instructions 1A

#### Box contents

- Main filter body – picture 1
- Flush valve 1/2" FM – picture 3
- Pressure indicator kit – picture 4
  - Pressure indicator.
  - 6 mm tube length 20cms (long).
  - 6 mm tube length 15cms (short).
  - 2 Female threaded couplers 6 mm
  - 2 connectors 1/4"M to 6 mm elbow
  - 1 connector 1/4"F to 6 mm elbow
  - 1 connector 1/4"F to 6 mm adaptor



Picture 1



Picture 3



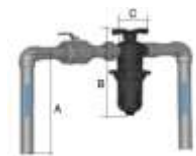
Picture 4

#### Assembly

- Connect the 1/2" flush valve to the flush screen outlet, (no need to use Teflon, valve is self-seal).
- Pressure indicator:
  - Connect two 1/4"F couplers to filter body top outlets.
  - Connect two elbow 1/4"M to the couplers.
  - Connect elbow 1/4"F to the bottom of the indicator.
  - Connect 1/4"F adaptor to side of the indicator.
  - Press fit the indicator to the slots on the filter body.
  - Connect long 20cms tube from Filter inlet port to indicator bottom (marked "+").
  - Connect long 15cms tube from Filter outlet port to indicator side (marked "-").
  - Hydraulic fitting may require Teflon to seal.
- Filter is ready for installation – picture 5



Picture 5



A	740mm
B	645mm
C	235mm

#### Installation

- Filter can be installed in vertical position or at 90° to the pipe, (Bottom of the cup pointing down or to the side).
- Ensure proper flow direction as clearly marked on the filter.
- Make sure 1/2" flush valve is closed.
- It is recommended to install a shut off valve before the filter for maintenance.
- Filter is ready for first operation



### First Operation

- Open the water source and check for leaks.
- Perform 2-3 flushing cycles as outlined below.
- Filter is ready for use.

### Flushing the filter

- The disc element needs to be cleaned when the head loss across the filter reaches 0.5-0.7 bar and the red pin protrude from the pressure indicator.
- Turn the handle ¼+ of a turn until the stop picture 8
- Wait 15–30 seconds.
- Turn the filter handle back
- Close the bottom flush valve
- Open the secondary flush valve for 10 seconds and close.

**Please note:** the strength required to turn the handle may vary according to the water quality and its source.

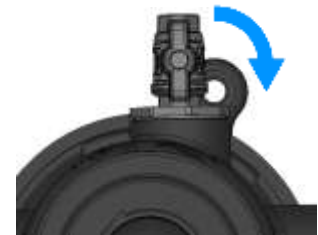
### Trouble shooting

- Head loss is not decreasing after flushing cycle:
  - Check that the pressure is not below 2 bar.
  - Check that there is no disturbance to the flushing flow.
  - Flush the internal screen by opening its flush valve.
  - Repeat the flushing cycle again, do not forget to open the filter flush valve before turning the handle.
- Filter is still not clean:
  - Clean the internal screen by disassembling and flushing manually.
  - Open the filter cup.
  - Disassemble the lower thread and remove piston
  - Check that the seal is intact and in its position.
- Filter handle is not turning
  - Check that the flush valve is fully open before turning the handle.
  - Check that water flows through the bottom valve.
  - Check that inlet pressure is lower than 6 bars
- Filter handle is still not turning
  - Partly Close the inlet maintenance valve and turn the handle
  - Perform a flushing cycle.
  - Open the inlet valve



Picture 6

Picture 7



Picture 8

Picture 9



## Periodic Maintenance

### **Warning:**

- **Before servicing the filter make sure it is empty of water and the inlet valve is closed.**
- **Never open the filter under pressure! to release pressure turn the handle to flush position and open the lsecondary flush valve**

### Secondary flush port

- The secondary flush port should be examined every 30 days or if the flush cycle does not reduce the head loss (filter does not flush effectively).
- Disassemble the female coupling with the flush valve. Picture 10.
- Rotate the screen disc counterclockwise and pull out. Picture 11.
- Flush thoroughly under stream of water.
- Return the disc to its place and rotate clockwise until it stops.
- Assemble the coupling with the flush valve and close.

### Discs manual cleaning

- The Discs should be cleaned manually at the beginning of the irrigation season, every 90 days thereafter or if the flush cycle does not reduce the head loss (filter does not flush effectively).
- Open the tightening ring counterclockwise
- Pull it down and put aside.
- Release the filter cup by shaking it and pulling down.
- Open the lower thread and remove it without dismantling the spring. Picture 12.
- Remove the piston. Picture 13
- Remove the discs carefully avoiding damage to the seal. Picture 14.
- Flush discs thoroughly under stream of water. Make sure hard adhesives are removed.
- Return all discs to the spine – make sure you returned all of them.
- Check that the seal is in its position.
- Return the piston – make certain it is in the correct orientation and push upwards.
- **Note** - In the correct position the 2 rails will slide into the 2 slots, all other rails have one slot see picture 15
- Tighten the cup to the filter body and position the cup protrusion opposite the socket in the filter body.
- Return the locking ring to its place and tighten by hand until it stops.



Picture 10



Picture 11



Picture 12



Picture 13



Picture 14



Picture 15



## Technical Specifications

- Available sizes: 2" 3".
- Max. working pressure: 10 bar.
- Max. flow rate:
  - 2" 25 m<sup>3</sup>/h
  - 3" 50 m<sup>3</sup>/h
- Available in 40 – 140 mesh.
- Required time for flushing: 10-20 seconds, depends on water quality.
- Required time to flush the secondary port - 10 seconds.
- Flushing flow rate for both sizes:
  - 2 bar – 9.3 m<sup>3</sup>/h
  - 3 bar - 12 m<sup>3</sup>/h
- Filtration area: 1025 cm<sup>2</sup>
- Construction materials:
  - Nylon + GF, Polypropylene.
  - O ring: EPDM
- Weight (empty): 9.3 Kg.