

## ALPHADISC™ INLINE DISC FILTERS



### DISC FILTERS

AlphaDisc™ has proved itself in the field as a lean and mean filtration machine. The AlphaDisc™ Inline range is now also available.

AlphaDisc™ is the ultimate irrigation system protection thanks to a combination of precise depth filtration, high dirt-holding capacity and a unique easy-to-scale modular design that covers a wide range of flow rates and water quality needs. AlphaDisc™ prevents clogging and partial clogging, ensuring system longevity and uniformly irrigated crops leading to better ROI, cost saving and peace of mind.

### / Application

Primary or secondary filtration for use with surface water that contains algae and other organic matter. Typical water sources are reservoirs, canals, rivers and waste water.

### / Benefits & Features

#### HIGH EFFICIENCY

Unique and improved disc design with precise filtration grade through all depths of the disc for better clogging protection.

#### HIGH DIRT-HOLDING CAPACITY

High filtration volume and area, coupled with lowest head loss in the industry, ensures higher particles capture, fewer backflush cycles, and less downstream disruption.

#### COST EFFECTIVE

Low backflush flow rate and low head loss results in a significantly more cost-effective irrigation system.

#### SMART

AlphaDisc™ smart controller is an innovative controller with always-on access to filtration data.

#### DURABLE

Manufactured with durable anti-corrosive materials.

### / Technical Specifications

|               | FILTRATION AREA | FILTRATION VOLUME | INLET/OUTLET DIAMETER | CONNECTION TYPE | MAX OPERATING PRESSURE |
|---------------|-----------------|-------------------|-----------------------|-----------------|------------------------|
|               | cm <sup>2</sup> | cm <sup>3</sup>   | mm                    |                 | Bar                    |
| Inline PP 3-1 | 10 480          | 12 568            | 250                   | Flange          | 10                     |
| Inline PP 3   | 15 720          | 18 852            |                       |                 |                        |
| Inline PP 4   | 20 960          | 25 136            |                       |                 |                        |
| Inline PP 6-2 | 20 960          | 25 136            |                       |                 |                        |
| Inline PP 6-1 | 26 200          | 31 420            |                       |                 |                        |
| Inline PP 6   | 31 440          | 37 704            |                       |                 |                        |

## / Recommended Flow Rate

| WATER QUALITY | Inline PP 3-1 |         |      |         | Inline PP 3 |         |      |         | Inline PP 4 |         |      |         |
|---------------|---------------|---------|------|---------|-------------|---------|------|---------|-------------|---------|------|---------|
|               | GOOD          | AVERAGE | POOR | EXTREME | GOOD        | AVERAGE | POOR | EXTREME | GOOD        | AVERAGE | POOR | EXTREME |
| Micron        | m³/h          |         |      |         |             |         |      |         |             |         |      |         |
| 100           | 132           | 108     | 72   | 36      | 198         | 162     | 108  | 54      | 264         | 216     | 144  | 72      |
| 130           | 132           | 132     | 96   | 48      | 234         | 198     | 144  | 72      | 264         | 264     | 192  | 96      |

| WATER QUALITY | Inline PP 6-2 |         |      |         | Inline PP 6-1 |         |      |         | Inline PP 6 |         |      |         |
|---------------|---------------|---------|------|---------|---------------|---------|------|---------|-------------|---------|------|---------|
|               | GOOD          | AVERAGE | POOR | EXTREME | GOOD          | AVERAGE | POOR | EXTREME | GOOD        | AVERAGE | POOR | EXTREME |
| Micron        |               |         |      |         |               |         |      |         |             |         |      |         |
| 100           | 264           | 216     | 144  | 72      | 330           | 270     | 180  | 90      | 396         | 324     | 216  | 108     |
| 130           | 264           | 264     | 192  | 96      | 330           | 330     | 240  | 120     | 396         | 396     | 288  | 144     |

## / Flushing Data

|               | MIN PRESSURE FOR BACK-FLUSH | BACKFLUSH FLOW RATE* | RECOMMENDED FLUSHING TIME | REJECT WATER VOLUME PER FLUSH CYCLE* | BACKFLUSH MANIFOLD DIAMETER | BACKFLUSH MANIFOLD CONNECTION TYPE |
|---------------|-----------------------------|----------------------|---------------------------|--------------------------------------|-----------------------------|------------------------------------|
|               | bar                         | m³/h                 | seconds                   | ℓ                                    | mm                          |                                    |
| Inline PP 3-1 | 1,5                         | 13                   | 18                        | 65                                   | 80                          | GROOVED/ FLANGED                   |
| Inline PP 3   |                             |                      |                           |                                      |                             |                                    |
| Inline PP 4   |                             |                      |                           |                                      |                             |                                    |
| Inline PP 6-2 |                             |                      |                           |                                      |                             |                                    |
| Inline PP 6-1 |                             |                      |                           |                                      |                             |                                    |
| Inline PP 6   |                             |                      |                           |                                      |                             |                                    |

\*At 1.5 bar pressure and one spine at a time.

\*When downstream pressure is more than 6 bar during the backwash cycle, installing an orifice valve in the drain manifold is recommended to prevent damage to the spines and discs.

## / Contraction Materials and Temperature

|                        |                                      |
|------------------------|--------------------------------------|
| FILTER HOUSING AND LID | RPA (REINFORCED POLYAMIDE)           |
| DISCS                  | PP (POLYPROPYLENE) or PA (POLYAMIDE) |
| CLEANING MECHANISM     | ALL POLYMERIC                        |
| EXHAUST VALVE          | ALL POLYMERIC                        |
| SEALS                  | EPDM                                 |
| OPERATING TEMPERATURE  | 5 – 60 °C                            |

