

# Commercial Water Filtration





# Water Filtration

Filtration is one of the most widely used methods of water treatment; it is the process of removing turbidity from the water. Water filters provide a physical barrier to remove undesirable elements from your water supply such as particulates, bad taste, odours and even specific trace elements.

While a single filter will work in some situations, it is often necessary to use a combination of single multiple and specialist filters to satisfy the needs of individual projects. The modular nature of BWT filtration products means that they can be tailored to provide an effective solution for both simple and more complex filtration issues.

BWT's comprehensive range of water filtration products use a mixture of traditional and modern materials, state of the art technology and many years of experience to provide filtration solutions suitable for a wide range of applications, including the protection of plant and equipment, the process water and the overall improvement of drinking water quality.

Correctly specified by our technical sales team, BWT filtration solutions can also be used to protect and increase the effectiveness and efficiency of other water treatment products, including water softeners, reverse osmosis and ultra-violet systems.

Illustrations and pictures are provided for guidance only  
Appearance of actual units vary by size.

THE SIZING OF A WATER FILTER WILL DEPEND ON A NUMBER OF FACTORS AND INCLUDE, BUT ARE NOT LIMITED TO:

- Volumes of water to be treated
- Turbidity
- Suspended Solids
- Flow Rates Required
- Temperature
- Viscosity

## TYPICAL APPLICATIONS

- Drinking water supplies
- Borehole and spring water supplies
- Rain water reclamation
- Pre-treatment & protection of plant
- Food processing plants
- Beverage processing

## MARKETS

- Offices
- Hotels and restaurants
- Horticultural and agricultural
- Sports and leisure facilities
- Manufacturing
- Food processing
- Healthcare
- Education
- Laboratories

# BWT Infinity

## RF 3/4" - 2



Manually operated backwash filter for cold water with waste water connection in accordance with DIN 1998.

- Flow rates up to 11.0m<sup>3</sup>/h
- Filter effectiveness 90 µm
- Robust and durable construction
- Impact resistant transparent cylinder with filter element
- Brass head
- Backwash reminder ring

| INFINITY RF                     | TYPE              | 3/4"    | 1"      | 1 1/4"  | 1 1/2"    | 2"        |
|---------------------------------|-------------------|---------|---------|---------|-----------|-----------|
| Connector                       |                   | module  | module  | module  | 4 hole    | 4 hole    |
| Inlet/outlet connections        | DN                | 20      | 25      | 32      | 40        | 50        |
| Flow rate at Δp 0.2 bar/0.5 bar | m <sup>3</sup> /h | 3.5/6.0 | 4.5/6.5 | 5.5/9.0 | 10.0/15.5 | 10.0/15.5 |
| Operating pressure (Min / Max)  | bar               | 2/16    |         |         |           |           |
| Water temperature (Min / Max)   | °C                | 5/30    |         |         |           |           |
| Ambient temperature (Min / Max) | °C                | 5/40    |         |         |           |           |

# BWT Infinity

## RF DN 65 - DN125

Manually operated backwash filter for cold water with waste water connection in accordance with DIN 1998.

- Flow rates up to 100 m<sup>3</sup>/h
- Filter effectiveness 100 or 200 µm
- Robust and durable construction
- Horizontal installation only



Illustrations and pictures are provided for guidance only. Appearance of actual units vary by size.

| INFINITY RF                     | TYPE              | DN 65  | DN 80   | DN 100 | DN 125  |
|---------------------------------|-------------------|--|---------|--------|---------|
| Connector                       |                   | Flange connection in accordance to DIN 2501 Part 1 |         |        |         |
| Inlet/outlet connections        | DN                | 65   | 80      | 100    | 125     |
| Flow rate at Δp 0.2 bar/0.5 bar | m <sup>3</sup> /h | 22/36.0  | 35/58.0 | 85/130 | 100/160 |
| Operating pressure (Min / Max)  | bar               | 2.5/10   |         |        |         |
| Water temperature (Min / Max)   | °C                | 5/30   |         |        |         |
| Ambient temperature (Min / Max) | °C                | 5/40   |         |        |         |



## BWT Infinity

### AP 3/4" – 2"

Automatically operated backwash filter for cold water with waste water connection in accordance with DIN 1998.

- Flow rates up to 10.0m<sup>3</sup>/h
- Filter effectiveness 90 µm
- Pressure difference and time-controlled, automatically operated backwashing
- Robust and durable construction
- Impact resistant transparent cylinder with filter element

| INFINITY RF                     | TYPE              | 3/4"    | 1"      | 1 1/4"  | 1 1/2"    | 2"        |
|---------------------------------|-------------------|---------|---------|---------|-----------|-----------|
| Connector                       |                   | module  | module  | module  | 4 hole    | 4 hole    |
| Inlet/outlet connections        | DN                | 20      | 25      | 32      | 40        | 50        |
| Flow rate at Δp 0.2 bar/0.5 bar | m <sup>3</sup> /h | 4.0/7.0 | 5.0/7.5 | 5.5/9.0 | 10.0/16.0 | 10.0/16.0 |
| Operating pressure (Min / Max)  | bar               | 2.5/16  |         |         |           |           |
| Water temperature (Min / Max)   | °C                | 5/30    |         |         |           |           |
| Ambient temperature (Min / Max) | °C                | 5/40    |         |         |           |           |



## BWT Infinity

### AP DN 65 – DN125

Automatically operated backwash filter for cold water and with waste water connection in accordance with DIN 1998.

- Flow rates up to 100m<sup>3</sup>/h
- Filter effectiveness 100 or 200 µm
- Pressure difference and time-controlled, automatically operated backwashing
- Robust and durable construction
- Horizontal installation only

| INFINITY RF                     | TYPE   | 3/4"   | 1"    | 1 1/4" | 1 1/2"  |
|---------------------------------|--|--------|-------|--------|---------|
| Connector                       | Flange connection in accordance to DIN 2501 Part 1 |        |       |        |         |
| Inlet/outlet connections        | DN   | 65     | 80    | 100    | 125     |
| Flow rate at Δp 0.2 bar/0.5 bar | m <sup>3</sup> /h                                  | 22/35  | 36/55 | 85/170 | 100/160 |
| Operating pressure (Min / Max)  | bar  | 2.5/10 |       |        |         |
| Water temperature (Min / Max)   | °C   | 5/30   |       |        |         |
| Ambient temperature (Min / Max) | °C   | 5/40   |       |        |         |

# Filter Housings



Illustrations and pictures are provided for guidance only. Appearance of actual units vary by size.

Cold water filter housings for standard and high flow applications, suitable for use with a wide range of replaceable filters. Models available for the filtration of drinking and service water.

- Flow rates up to 2.4m<sup>3</sup>/h
- Durable polypropylene construction
- Support bracket
- Filter bowl wrench
- 6 models available suitable for 10" and 20" filter cartridges

|                               | INFINITY RF       | NP1       | IP2       | HF76      | HF76-1.5  | HF97      | HF97-1.5  |
|-------------------------------|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Connector                     | BSP (Male)        |           |           |           |           |           |           |
| Inlet/outlet connections      |                   | 3/4"      | 3/4"      | 1"        | 1 1/2"    | 1"        | 1 1/2"    |
| Nominal Flow*                 | m <sup>3</sup> /h | 1.2       | 2.4       | 1.2       | 1.2       | 2.4       | 2.4       |
| Maximum Pressure              | bar               | 5         | 5         | 8         | 8         | 8         | 8         |
| Water temperature (Min / Max) | °C                | 5/27      |           |           |           |           |           |
| Height x Diameter             | mm                | 336 × 115 | 135 × 585 | 350 × 185 | 350 × 185 | 610 × 185 | 610 × 185 |
| Number of Cartridges          |                   | 1 × 10"   | 1 × 20"   | 1 × 10"   | 1 × 10"   | 1 × 20"   | 1 × 20"   |

# Stainless Steel Filter Housings

Stainless steel filter housings designed and manufactured to work with a range of replacement filters at water temperatures up to 121°C, and are suitable for a wide range of commercial applications including primary and secondary filtration. They are manufactured from austenitic 316 stainless steel which contains the addition of molybdenum for improved corrosion resistance particularly in commercial environments.

If require a filter with larger flow rates, please contact our technical team on **01494 838117** for free no obligation advice.

- Flow rates up to 90m<sup>3</sup>/h
- Manufactured from high grade 316 stainless steel
- Clean and dirty water drain points for easier maintenance
- Designed to treat the higher flow rates found in commercial applications



| MODEL NUMBER    | CONNECTOR  | INLET/OUTLET CONNECTIONS | NOMINAL FLOW* (M3/H) | MAXIMUM PRESSURE | WATER TEMPERATURE (MAX °C) | HEIGHT X DIAMETER | NUMBER OF CARTRIDGES |
|-----------------|------------|--------------------------|----------------------|------------------|----------------------------|-------------------|----------------------|
| SS38            | BSP (Male) | 3/4"                     | 1.2                  | 21               | 121                        | 341 × 120         | 1 × 10"              |
| SS76            | BSP (Male) | 1"                       | 2.4                  | 21               | 121                        | 595 × 120         | 1 × 20"              |
| SS114           | BSP (Male) | 1"                       | 3.6                  | 21               | 121                        | 849 × 120         | 1 × 30"              |
| FSS120          | BSP (Male) | 2"                       | 3.6                  | 10               | 121                        | 476 × 262         | 3 × 10"              |
| FSS240          | BSP (Male) | 2"                       | 7.2                  | 10               | 121                        | 731 × 262         | 3 × 20"              |
| FSS318          | BSP (Male) | 2"                       | 10.8                 | 10               | 121                        | 986 × 262         | 3 × 30"              |
| FSS416          | BSP (Male) | 2"                       | 18.0                 | 10               | 121                        | 1079 × 300        | 5 × 30"              |
| FSS473          | BSP (Male) | 2"                       | 24.0                 | 10               | 121                        | 1334 × 300        | 5 × 40"              |
| FSS510          | Flange     | 3"                       | 36.0                 | 10               | 121                        | 1191 × 470        | 10 × 30"             |
| FSS765 (7 BAR)  | Flange     | 4"                       | 54.0                 | 7                | 121                        | 1208 × 520        | 15 × 30"             |
| FSS765 (10 BAR) | Flange     | 4"                       | 54.0                 | 10               | 121                        | 1208 × 520        | 15 × 30"             |
| FSS1135         | Flange     | 4"                       | 72.0                 | 10               | 95                         | 1463 × 520        | 15 × 40"             |
| FSS2200         | Flange     | 4"                       | 90.0                 | 10               | 121                        | 1687 × 568        | 19 × 40"             |

\*Flow rates on this page are measured at 3 BAR. All flow rates stated are nominal flow and are based around a 5 micron sediment removal cartridge. Flow rates will differ dependent on type of cartridge used.

# SoluTECH Clarifer Filters

## HVAC Service Filtering



SoluTECH Clarifier Filters



SoluTECH Clarifier Units

### OPERATION

SoluTECH CLARIFIER FILTERS are designed to continuously eliminate the following:

- Oxides and magnetisable particles using a powerful magnetic bar.
- Solid impurities, sludge and suspended matter using a felt filtering bag that traps particles bigger than 20 µm depending on the model (other filtering grades to order).

### SOLUTECH CLARIFIER FILTERS - STANDARD EQUIPMENT

- 20 µm filter bag
- Magnetic candle
- A cover with swing bolts for easy cleaning
- Adjustable stand: adjustable height for easier connection – Flow rates – 0 to 320 m<sup>3</sup>/h

### SOLUTECH CLARIFIER UNITS - STANDARD EQUIPMENT

- Circulator included
- Inlet/outlet valve and purge valve included
- Automatic purger
- Adjustable stand height (easy connection)

### ON BMS MODELS

- Control cabinet to control and protect pump
- Light Indicator to show the filter condition: Clean or Clogged
- Dry contact output for clogged filter fault
- Flow rates – 0 to 50 m<sup>3</sup>/h

| TECHNICAL SPECIFICATIONS          |                   | 5/9             | 10/20    | 21/50     | 80       | 120       | 160      | 220      | 320      |
|-----------------------------------|-------------------|-----------------|----------|-----------|----------|-----------|----------|----------|----------|
| Coupling diameter                 | DN                | DN 32           | DN 50    | DN 80     | DN 100   | DN 150    | DN 150   | DN 200   | DN 250   |
| Rated flow                        | m <sup>3</sup> /h | 9               | 20       | 50        | 80       | 120       | 160      | 220      | 320      |
| Filtering grade                   | microns           | 25              | 50       | 50        | 50       | 50        | 50       | 50       | 50       |
| Max service pressure              | bar               | 10              | 10       | 10        | 10       | 10        | 10       | 10       | 10       |
| Min/max water temperature         | °C                | 85              | 85       | 85        | 85       | 85        | 85       | 85       | 85       |
| Number of bags                    |                   | 1               | 1        | 1         | 2        | 3         | 4        | 5        | 7        |
| Steel version item code           |                   | -               | -        | -         | P0003652 | P0003653  | P0003654 | P0003655 | P0003656 |
| Stainless steel version item code |                   | P0069208        | P0069209 | P00692011 | P0003657 | P0003658  | P0003659 | P0003660 | P0003661 |
| SIZE SPECIFICATIONS               |                   |                 |          |           |          |           |          |          |          |
| Width                             | mm                | 200             | 290      | 290       | 700      | 800       | 900      | 1000     | 1100     |
| Min height                        | mm                | 590             | 785      | 1225      | 1410     | 1630      | 1700     | 1780     | 2020     |
| TYPE                              |                   | XS              |          | 5/9       |          | 10/20     |          | 21/50    |          |
| TECHNICAL SPECIFICATIONS          |                   |                 |          |           |          |           |          |          |          |
| Coupling diameter                 | DN                | 32              |          | 32        |          | 50        |          | 80       |          |
| Rated flow                        | m <sup>3</sup> /h | 4               |          | 9         |          | 20        |          | 50       |          |
| Filtering grade                   | microns           | 25              |          | 50        |          | 50        |          | 50       |          |
| Max service pressure              | bar               | 10              |          | 10        |          | 10        |          | 10       |          |
| Min/max water temperature         | °C                | 85              |          | 85        |          | 85        |          | 85       |          |
| Number of bags                    |                   | 1               |          | 1         |          | 1         |          | 1        |          |
| Filter material                   |                   | Stainless Steel |          | Steel     |          | Steel     |          | Steel    |          |
| Item code                         |                   | P0003884        |          | P0003637  |          | P0003638  |          | P0003640 |          |
| BMS version item code             |                   | -               |          | P0003641  |          | P0003642  |          | P0003643 |          |
| SIZE SPECIFICATIONS               |                   | XS              | 5/9      | 5/9 GTC   | 10/20    | 10/20 GTC | 21/50    | 21/50GTC |          |
| Width                             | mm                | 380             | 324      | 363       | 441      | 466       | 480      | 480      |          |
| Length                            | mm                | 423             | 562      | 668       | 668      | 785       | 1320     | 1320     |          |
| Min Height                        | mm                | 883             | 685      | 686       | 875      | 875       | 1530     | 1508     |          |

On request, the filters can be sized to adapt to non standard pressures and temperatures.

# Filter Cartridges

Available in a range of sizes and materials, each filter should be selected to suit the specific application and the appropriate filter housing. A combination of filter types and other water treatment equipment may be necessary to achieve any given specific water quality required. Filter cartridges can be used to remove unwanted substances including, but not limited to:

- Sediment
- Pesticides
- Taste and odour
- Organic chemicals

| TO SUIT FILTER HOUSING    | MODEL NUMBER | MATERIAL                        | APPLICATION** (SEE KEY) | MICRON RATING | CLEANABLE | WATER TEMPERATURE (MAX °C) | NOMINAL LENGTH (**) |
|---------------------------|--------------|---------------------------------|-------------------------|---------------|-----------|----------------------------|---------------------|
| SS38, FSS120, NP-H10      | SB10-1       | Polypropylene                   | SR                      | 1             | X         | 95                         | 10                  |
| SS38, FSS120, NP-H10      | SB10-5       | Polypropylene                   | SR                      | 5             | X         | 95                         | 10                  |
| SS38, FSS120, NP-H10      | SB10-25      | Polypropylene                   | SR                      | 25            | X         | 95                         | 10                  |
| IP2, SS76, FSS240, NP-H20 | SB20-1       | Polypropylene                   | SR                      | 1             | X         | 95                         | 20                  |
| IP2, SS76, FSS240, NP-H20 | SB20-5       | Polypropylene                   | SR                      | 5             | X         | 95                         | 20                  |
| IP2, SS76, FSS240, NP-H20 | SB20-25      | Polypropylene                   | SR                      | 25            | X         | 95                         | 20                  |
| SS114, FSS1800            | SB30-5       | Polypropylene                   | SR                      | 5             | X         | 95                         | 30                  |
| FSS1135, FSS2200          | SB40-5       | Polypropylene                   | SR                      | 5             | X         | 95                         | 40                  |
| HF76                      | HSB10-1      | Polypropylene                   | SR                      | 1             | X         | 95                         | 10                  |
| HF76                      | HSB10-5      | Polypropylene                   | SR                      | 5             | X         | 95                         | 10                  |
| HF76                      | HSB10-20     | Polypropylene                   | SR                      | 20            | X         | 95                         | 10                  |
| HF97                      | HSB20-1      | Polypropylene                   | SR                      | 1             | X         | 95                         | 20                  |
| HF97                      | HSB20-5      | Polypropylene                   | SR                      | 5             | X         | 95                         | 20                  |
| HF97                      | HSB20-20     | Polypropylene                   | SR                      | 20            | X         | 95                         | 20                  |
| HF76                      | HFPL5        | Pleated Cellulose/<br>Polyester | SR                      | 5             | Yes       | 63                         | 10                  |
| HF97                      | HFPL5-20     | Pleated Cellulose/<br>Polyester | SR                      | 5             | Yes       | 63                         | 20                  |
| HF76                      | HFGAC5       | Granular Activated<br>Carbon    | SR                      | 5             | X         | 52                         | 10                  |
| HF97                      | HFGAC5       | Granular Activated<br>Carbon    | SR                      | 5             | X         | 52                         | 20                  |
| HF76                      | HFR10        | Resin                           | SC                      |               | X         | 38                         | 10                  |
| HF76                      | HFCR10       | Carbon/Resin                    | TO, SC, OC, P           | 5             | X         | 38                         | 10                  |
| HF97                      | HFR20        | Resin                           | SC                      |               | X         | 38                         | 20                  |
| HF97                      | HFC20        | Carbon                          | TO, OC, P               | 5             | X         | 38                         | 20                  |
| HF97                      | HFCR20       | Carbon/Resin                    | TO, SC, OC, P           | 5             | X         | 38                         | 20                  |
| IP2                       | MX-1         | Carbon Block                    | SR, TO, OC, P           | 5             | X         | 52                         | 20                  |
| IP2                       | C20          | Carbon                          | TO, OC, P               | 5             | X         | 38                         | 20                  |
| IP2                       | R20          | Resin                           | SC                      |               | X         | 38                         | 20                  |
| IP2                       | CR20         | Carbon/Resin                    | SC, TO, OC, P           | 5             | X         | 38                         | 20                  |
| NP1                       | C1           | Carbon                          | TO, OC, P               | 5             | X         | 38                         | 10                  |
| NP1                       | R1           | Resin                           | SC                      |               | X         | 38                         | 10                  |

There are a number of filtering materials available. It is important to select the correct cartridge for the application. **Cartridge Selection Chart provided for guidance only.**

**SR** - Sediment Removal      **OC** - Organic Chemicals  
**P** - Pesticides                      **SC** - Scale  
**TO** - Taste and Odour



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FOR YOU AND PLANET BLUE.

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