

# CATALOGUE

2025 - 2026

edition 2



[www.minderwater.com.au](http://www.minderwater.com.au)



# WHAT'S NEW?

## Products & Organisation Update

### ALL-NEW MAB SERIES PUMP

Minder will launch the all-new MAB series pump in February 2025. It has an exceptional fan-cooled system designed for heated pool and tropical climate.



### Valvematic, Automatic

One of the most user friendly automatic backwash systems. Set-and-go, never touch your filter again.



### Windmill Laterals

It is one of the most innovative lateral design that allow total utilisation of filtration area. It also increases backwash efficiency and flow rate by 6%.

### REDESIGNED G, GS SERIES

A redesigned laminated filters has launched in December 2024. "The design will make you look" said Raj, the General manager of Minder Malaysia.



### Who don't get slippery hands after swimming?

Everyone do. That's why Minder has improved our ladder design by adding anti-slip material on the handle.

### Have you ever grab the red hot ladders handle on a sunny day?

We have. That's why the padding is also heat resistant.



refer to pg.91

### THE MOST VIVID UNDERWATER LIGHT



### Minder is officially Halal certified

Minder filtration systems are approved by Islamic Food Research Centre to process drinking water. "Every swimmers drink some water when changing breathe in the water so it is a peace of mind for Muslim swimmers." said Syekh Rafa'i Azman Malizi, B.A Al Azhar University, Islamic Researcher.



## ABOUT MINDER

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# Our Products Your Future.

**SYDNEY HARBOUR,  
AUSTRALIA.**

Minder has a long history of manufacturing filtration equipments for commercial and industrial applications.



[www.minderwater.com.au](http://www.minderwater.com.au)





Dubai Safari Park  
Dubai, UAE



Barangaroo Water Treatment Plant  
New Wale Wales,Australia



Dolphin Pool at Vin Pearl,  
Nha Trang,Vietnam



Sea World  
Gold Coast,Australia



Zhuhai Ocean World  
Guangdong,China



Bendigo Aquatic Center  
Australia

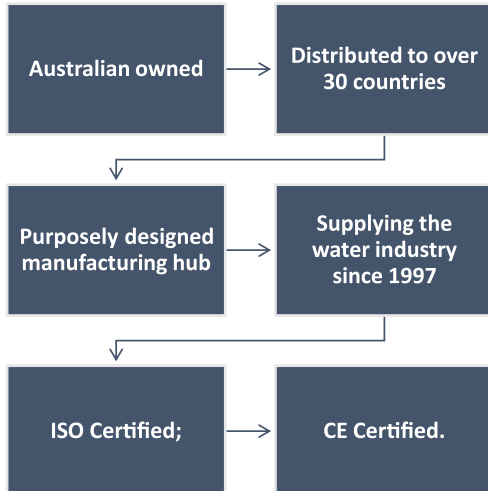


Griffith University  
Queensland,Australia



Royal Air-Force Base  
New South Wale,Australia

## General Business Background



### Certificate of Registration of a Company

This is to certify that  
**MINDER WATER INDUSTRIES PTY. LTD.**  
 Australian Company Number 620 979 375  
 is a registered company under the Corporations Act 2001 and is taken to be registered in Queensland.  
 The company is limited by shares.  
 The company is a proprietary company.  
 The day of commencement of registration is the ninth day of August 2017.



Issued by the Australian Securities and Investments Commission on this ninth day of August, 2017.

*[Signature]*  
 This is to certify that this is a true and correct copy of the original registered and filed document.  
 25/08/2017  
 [Signature]  
 Greg McCraith  
 Chairman

CERTIFICATE

## Certifications

- Recognised by the world;
- Productions;
- Products;
- Brand.





## Covering the world



- Distributed to over 30 countries;
- 40,000+ filtration systems are sold annually;





## Manufacturing Capability



In ensuring we have a stable, sustainable and cost effective supplies of plastic items, we own a plastic injection production facility since 2016. This gives us much control on our quality, flexibility and inventory management. When it comes to product development and improvement, this provide us the capability to produce and modify our tools quickly at competitive cost to react to the fast chasing market environment with new and improved products. Our plastic injection moulding machines goes up to 800 tonne and CNC machines for tools fabrication.

- **Backed by solid foundation**
- **Purposely designed manufacturing hub**
  - Plastic injections
  - Plastic blow-mouldings
  - Fibreglass mouldings
  - General assembly lines





## Quality Control



- Quality is our priority;
- ISO-9001:2015 certified;
- CE certified;
- Lab for material analysis;
- Test Bays along production lines

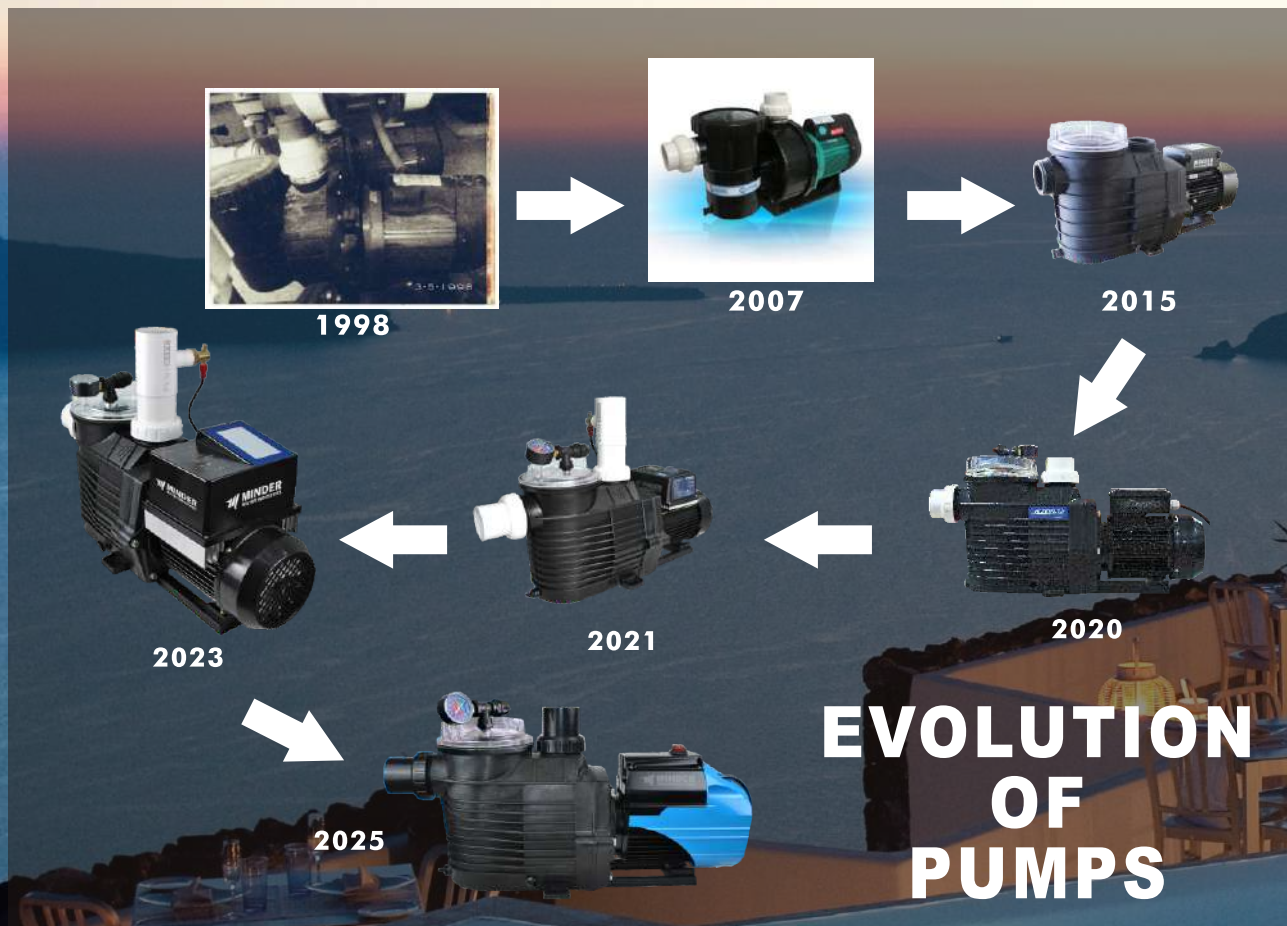
## R&D



- Drive us to the future;
- Problems -> Solutions = New Products
- All about fixing problems
  - User-friendliness;
  - Lifespan;
  - Cost;
  - Greener production.



# PUMPS



| PUMPS   | PAGE | PERFORMANCE (HP) |            |            |            |     |            |     |     |     |     |    |    |    |    |
|---------|------|------------------|------------|------------|------------|-----|------------|-----|-----|-----|-----|----|----|----|----|
|         |      | 0.5              | 0.75       | 1.0        | 1.2        | 1.5 | 2.0        | 3.0 | 4.0 | 5.0 | 7.5 | 10 | 15 | 20 | 25 |
| MXB-ECO | 19   | ✓ INVERTER       | ✓ INVERTER | ✓ INVERTER | ✓ INVERTER | ✓   | ✓ INVERTER | ✓   |     |     |     |    |    |    |    |
| MVP     | 21   | ✓                | ✓          | ✓          | ✓          |     |            |     |     |     |     |    |    |    |    |
| MXB     | 17   |                  |            | ✓          |            | ✓   | ✓          | ✓   |     |     |     |    |    |    |    |
| MAB     | 12   |                  |            | ✓          |            | ✓   | ✓          | ✓   |     |     |     |    |    |    |    |
| MDB     | 13   |                  |            |            |            |     |            |     | ✓   | ✓   |     |    |    |    |    |
| MRB     | 23   |                  |            |            |            |     |            | ✓   | ✓   | ✓   |     |    |    |    |    |
| MTX     | 25   |                  |            |            |            |     |            |     |     |     | ✓   | ✓  | ✓  |    |    |
| MUK     | 15   |                  |            |            |            |     |            |     |     |     |     | ✓  | ✓  | ✓  | ✓  |



# MAB SERIES PUMP



## POWERFUL AIR-COOLED MOTOR

Exceptional cooling performance, ideal for heated pools and hot climates.

## DEDICATED FOR HEATED POOLS

Max water and environmental temperature at 63°C

## CONTINUOUS AND RELIABLE PERFORMANCE

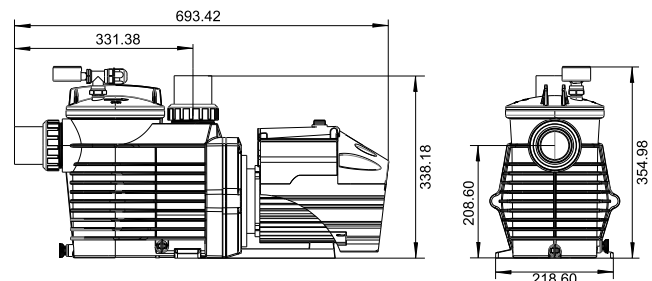
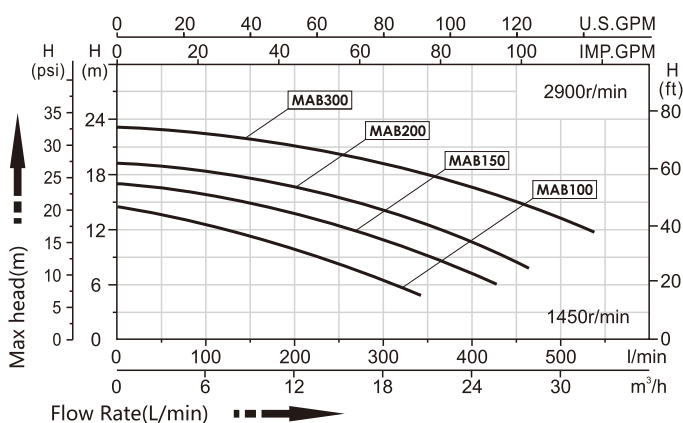
Capable of continuous operation with outstanding durability.

## START STOP BUTTON

One-touch start stop button for enhanced safety and convenience. Easy backwash operation for manual MPVs.



| MODEL  | CODE  | CONNECTIONS |        | VOLTAGE   | PHASE | FREQUENCY | AMP  | INPUT POWER | OUTPUT POWER | RPM  |
|--------|-------|-------------|--------|-----------|-------|-----------|------|-------------|--------------|------|
|        |       | IMPERIAL    | METRIC | V         |       | Hz        | A    | kw          | HP           |      |
| MAB100 | 96305 |             |        | 220 - 240 | 1     |           | 3.8  | 0.75        | 1            |      |
| MAB150 | 96306 |             |        | 220 - 240 | 1     |           | 5.2  | 1.1         | 1.5          |      |
| MAB200 | 96307 |             |        | 220 - 240 | 1     | 50        | 7.0  | 1.5         | 2            |      |
| MAB300 | 96308 |             |        | 220 - 240 | 1     |           | 7.0  | 2.2         | 3            |      |
| MAB300 | 96309 |             |        | 380 - 400 | 3     |           | 10.0 | 2.2         | 3            |      |
| MAB100 | 96310 | 2.0"        | 63mm   | 220 - 240 | 1     |           | 3.8  | 0.75        | 1            | 2850 |
| MAB150 | 96311 |             |        | 220 - 240 | 1     |           | 5.2  | 1.1         | 1.5          |      |
| MAB200 | 96312 |             |        | 220 - 240 | 1     | 60        | 7.0  | 1.5         | 2            |      |
| MAB300 | 96313 |             |        | 220 - 240 | 1     |           | 7.0  | 2.2         | 3            |      |
| MAB300 | 96314 |             |        | 380 - 400 | 3     |           | 10.0 | 2.2         | 3            |      |



Lid opener (Optional)  
Code : 20559



Outstanding cooling



One button switch

## MDB Commercial Series



### Commercial High-Performance Pump

5HP Powerful Output with a maximum flow rate of 62m<sup>3</sup>/h.

### Durable Construction

Made from 316 stainless steel and high-quality engineering plastic, suitable for seawater use and compatible with salt chlorinators.

### Large Inlet & Outlet

Features a 2.5" inlet and 2" outlet for improved water flow, enhanced lift, and balanced pressure.

### Quick-Connect Unions

Allows for easy and fast installation.



### Application

- Swimming pools
- Aquariums
- Water parks
- Aquaculture

### Warranty

|                            |         |
|----------------------------|---------|
| Pump body, impeller, union | 2 years |
| Motor, O-rings             | 1 year  |



Robust Plastic Body



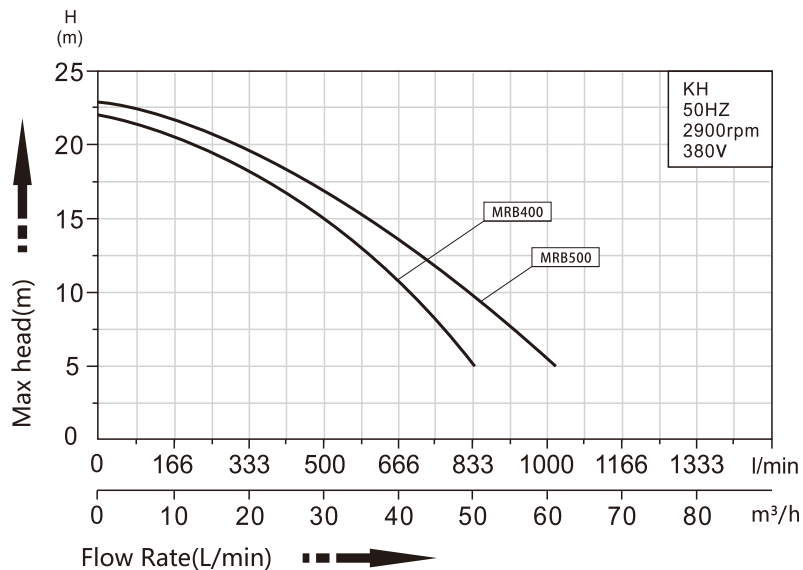
2.5" Inlet



Commercial-grade motor



## Specification



# MDB

Commercial Series

## Operating Limits

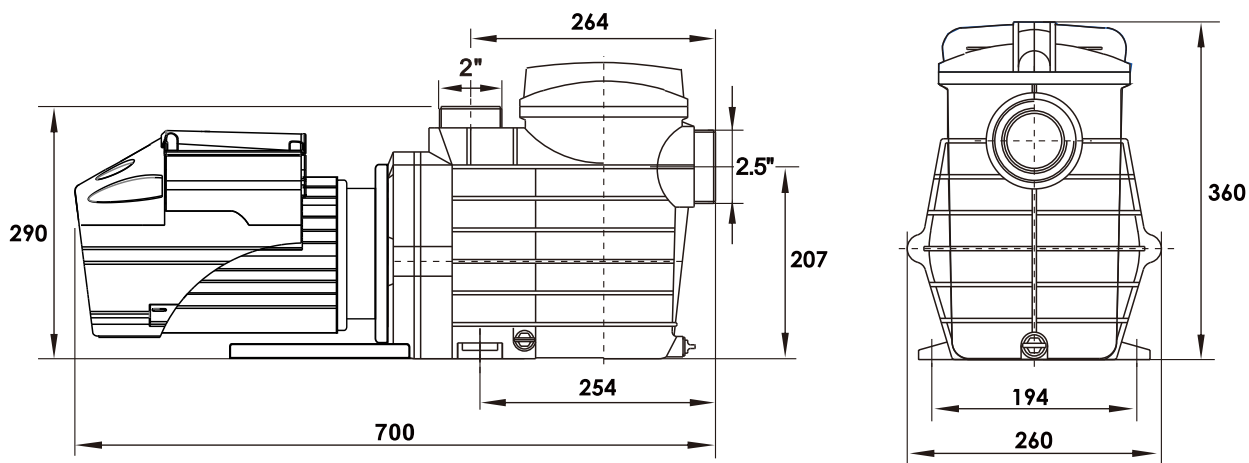
Maximum water temperature 50 °C

Maximum Ambient Temperature 50 °C

Noise at 1 meter 65 dB

| MODEL  | CODE  | CONNECTIONS |        | VOLTAGE   | PHASE | FREQUENCY | INPUT POWER | OUTPUT POWER | RPM  |
|--------|-------|-------------|--------|-----------|-------|-----------|-------------|--------------|------|
|        |       | INLET       | OUTLET |           |       |           |             |              |      |
| MDB400 | 96315 | 75mm        | 65mm   | 380 - 400 | 3     | 50        | 3           | 4            | 2850 |
| MDB500 | 96316 |             |        |           | 3     | 50        | 4           | 5            |      |
| MDB400 | 96317 |             |        |           | 3     | 60        | 3           | 4            |      |
| MDB500 | 96318 |             |        |           | 3     | 60        | 4           | 5            |      |

## Dimensions



## COMMERCIAL PERFORMANCE

Maximum output of 25HP with a flow rate of up to 198 m<sup>3</sup>/hour.



## SUITABLE FOR SEAWATER AND FRESHWATER

Metal components are made of 316 stainless steel for corrosion resistance, while plastic parts are constructed from engineered plastic for pressure and corrosion resistance.

## LARGE DIAMETER INLET AND OUTLET

6" (150mm) inlet and outlet with flange connections.



| MODEL   | CODE  | CONNECTIONS    | VOLTAGE | FREQUENCY | INPUT POWER |    | MAX FLOW | HEAD MAX | RPM  |
|---------|-------|----------------|---------|-----------|-------------|----|----------|----------|------|
|         |       | INLET / OUTLET | V       |           | kw          | HP | L/min    | m        |      |
| MUK1000 | 90946 | DM150 (6")     | 380     | 50        | 7.5         | 10 | 2560     | 22       | 2850 |
| MUK1500 | 90943 |                |         |           | 11          | 15 | 3000     | 26       |      |
| MUK2000 | 90944 |                |         |           | 15          | 20 | 3100     | 29       |      |
| MUK2500 | 90945 |                |         |           | 18.5        | 25 | 3300     | 31       |      |



Outstanding cooling



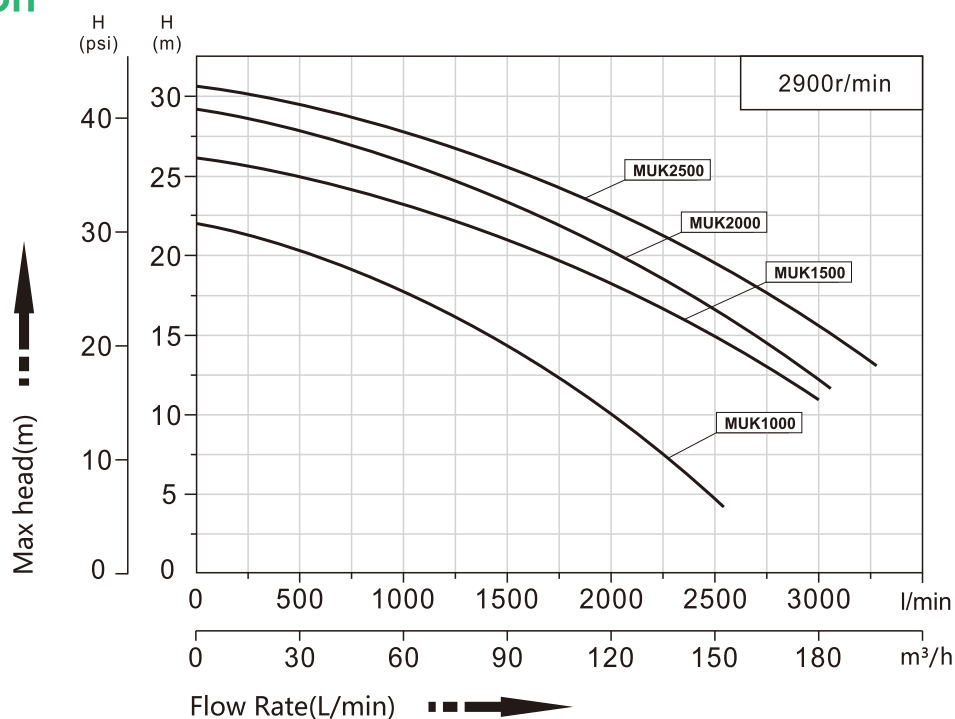
High performance induction motor



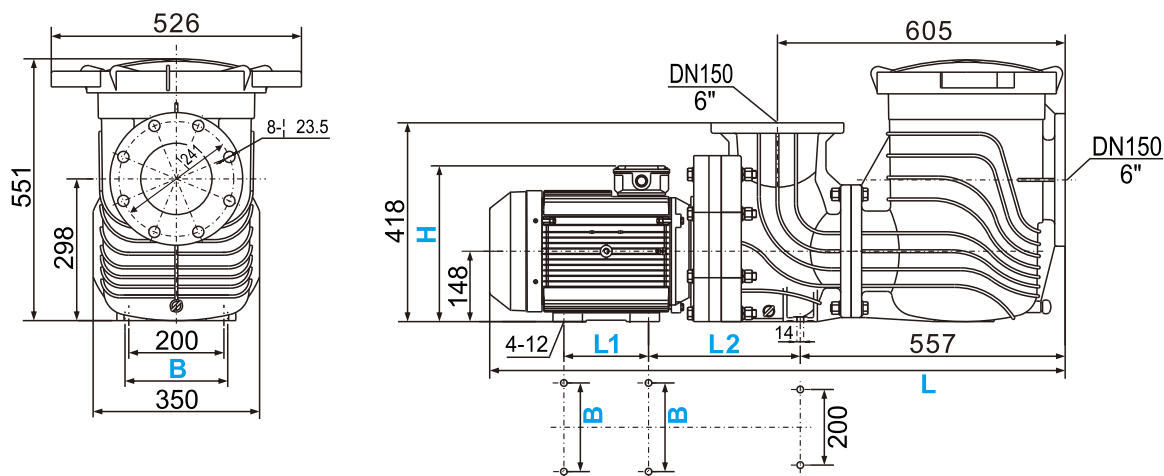
Robust plastic body for high power pump



## Specification



## Dimensions



| MODEL   | L    | L1  | L2  | B   | H   |
|---------|------|-----|-----|-----|-----|
|         | mm   |     |     |     |     |
| MUK1000 | 1155 | 140 | 320 | 190 | 309 |
| MUK1500 | 1210 | 178 | 319 | 216 | 328 |
| MUK2000 | 1251 | 178 | 319 | 216 | 328 |
| MUK2500 | 1251 | 178 | 319 | 216 | 328 |



## **PUMP****SAFE** Protection

### **Built-in SVRS System**

(Safety Vacuum Release System)

When a person or object gets trapped at the drain outlet due to suction force, the pump will automatically shut down to prevent drowning or equipment damage.

When a swimmer (typically a child) becomes trapped by the suction force generated at the pool drain outlet,



a suction entrapment hazard occurs. In some cases, the swimmer may remain trapped underwater until drowning occurs, potentially leading to serious injuries to various parts of the body. For schools or infant pools, it is recommended to use a pump equipped with an SVRS system to prevent such accidents.

### • **Protection**

Eliminate Run-Dry. Protect mechanical seal and motor.

### • **Smarter Backwash\***

Automatically maximise speed during backwash for ultimate backwash result and reduce water consumption.

### • **Money Matters**

Consumes up to 80% less power than single speed pumps, with live time running cost displays on home screen.

### • **Right Speed at the Right Time**

Low-speed at night for low noise, high-speed at off-peak electricity cycle for cost efficiency. All at your control.

### • **7-days Schedule**

3 cycles per day, Monday to Sunday.

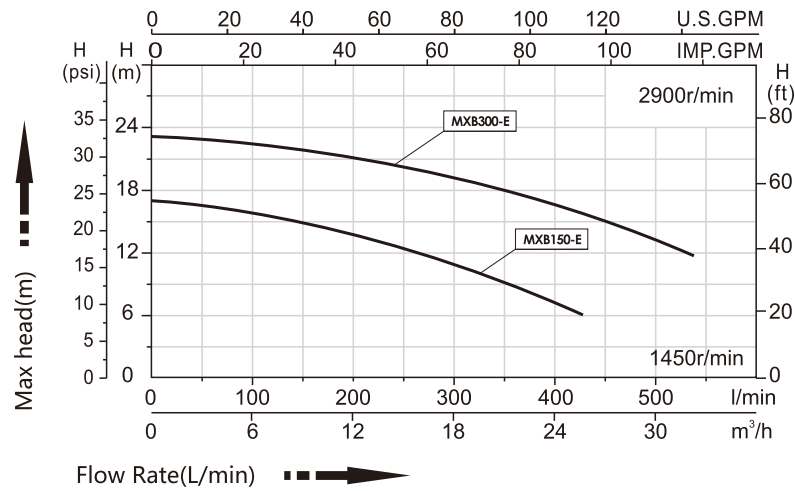
### **\*Require Valvematic to enable**

A data connection cable will be provided to connect between **MINDERSPEED<sub>ECO</sub>** & Valvematic filters.





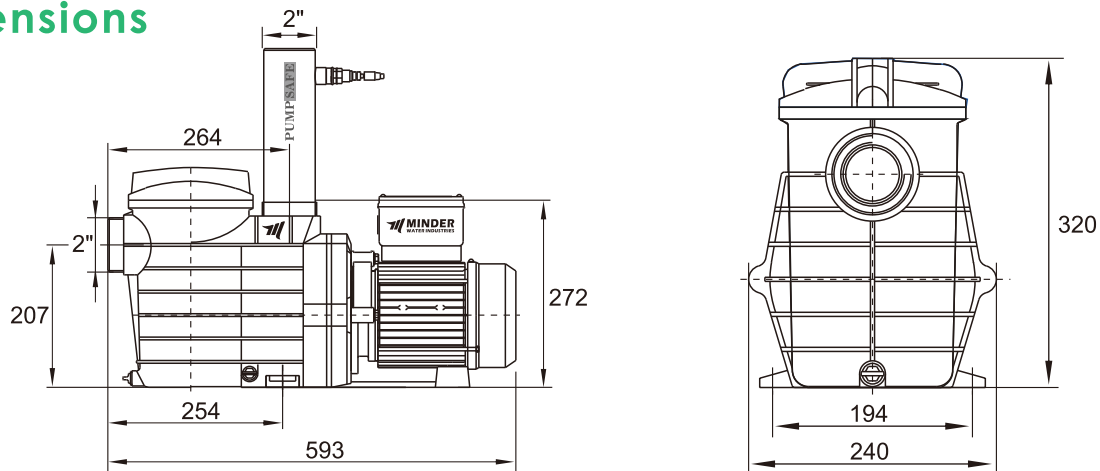
## Specification



| MODEL    | CODE<br>50HZ | CONNECTIONS | VOLTAGE   | PHASE | AMP  | INPUT<br>POWER | OUTPUT<br>POWER | RPM  |
|----------|--------------|-------------|-----------|-------|------|----------------|-----------------|------|
|          |              | INCH        | V         |       | A    | kw             | HP              |      |
| MXB150-E | 90998        | 2.0"        | 220 - 240 | 1     | 5.2  | 1.1            | 1.5             | 2850 |
| MXB300-E | 90999        |             |           |       | 10.0 | 2.2            | 3               |      |

| MODEL    | FLOW<br>@ 6M HEAD | MAX WATER<br>TEMPERATURE | MAX ENVIRONMENT<br>TEMPERATURE | NOISE<br>@ 1 METRE |
|----------|-------------------|--------------------------|--------------------------------|--------------------|
|          | m³/h              |                          |                                | dB                 |
| MXB150-E | 21.6              | 50                       | 50                             | 63                 |
| MXB300-E | 33.8              |                          |                                | 69                 |

## Dimensions





## Features & Advantages

- **Convenient** - SUPA CYCLONE™ pumps come with a tool-free strainer lid for easy removal of leaves.
- **Reliable** - Constructed from strong engineered plastic to ensure corrosive and UV proof for long-lasting life.
- **Safe** - Built-in thermal overload protection against damage from overheating.
- All models come with 1.5" (Imperial) /50m (Metric) traditional union.
- **Self - priming** at 2m
- Enclosure Class is IP55 & Insulation Class is F.

## Warranty

|                                    |         |
|------------------------------------|---------|
| Pump body and plastic components   | 2 years |
| Motor, O-rings and mechanical seal | 1 year  |

**SUPA CYCLONE™** pump series is a cost effective solution for water circulation. They have all the necessary performance for domestic pools and are engineered for easy installation and worry free operation.

## Application

- Domestic pools
- Spa jet operation
- Solar pool heating
- Water features

## Operating Limits

|                             |       |
|-----------------------------|-------|
| Maximum water temperature   | 50 °C |
| Maximum Ambient Temperature | 50 °C |
| Noise at 1 meter            | 65 dB |



Chemical resistance pump body

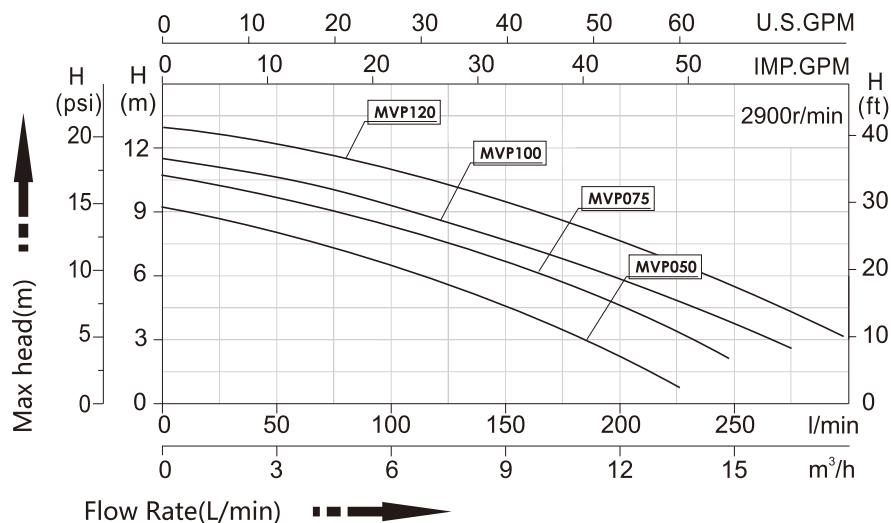


High performance induction motor



Transparent Lid  
with easy removable strainer

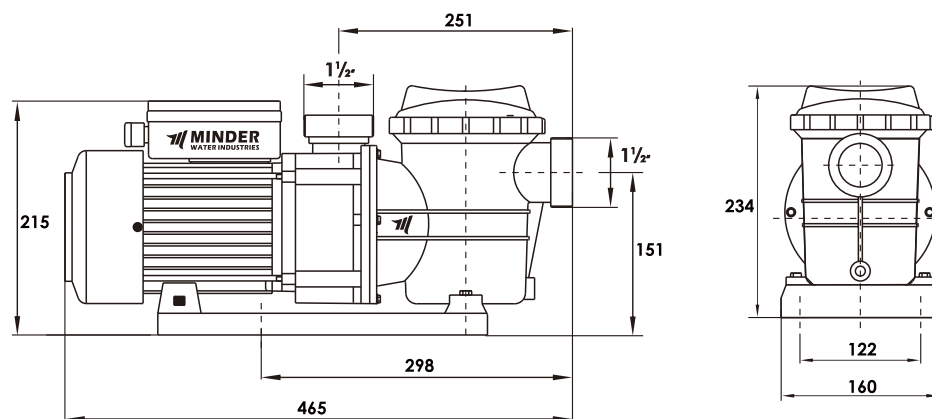
## Specification



| MODEL  | CODE<br>50HZ | CONNECTIONS | VOLTAGE   | PHASE | AMP | INPUT<br>POWER | OUTPUT<br>POWER | RPM  |
|--------|--------------|-------------|-----------|-------|-----|----------------|-----------------|------|
|        |              | INCH        | V         |       | A   | kw             | HP              |      |
| MVP050 | 90992        | 1.5"        | 220 - 240 | 1     | 1.7 | 0.37           | 0.5             | 2850 |
| MVP075 | 90993        |             |           |       | 2.5 | 0.55           | 0.75            |      |
| MVP100 | 90994        |             |           |       | 3.4 | 0.75           | 1.0             |      |
| MVP120 | 90995        |             |           |       | 4.1 | 0.90           | 1.2             |      |

| MODEL  | FLOW<br>@ 6M HEAD | MAX WATER<br>TEMPERATURE | MAX ENVIRONMENT<br>TEMPERATURE | NOISE<br>@ 1 METRE |
|--------|-------------------|--------------------------|--------------------------------|--------------------|
|        | m³/h              |                          |                                | dB                 |
| MVP050 | 13                | 50                       | 50                             | 60                 |
| MVP075 | 14                |                          |                                | 61                 |
| MVP100 | 16                |                          |                                | 62                 |
| MVP120 | 18                |                          |                                | 68                 |

## Dimensions







### Features & Advantages

- **Toughness** - Engineered for long hours operations.
- **Swap & Go** - Wet-end and motor can be easily detached on site. Just swap either component when service is required and let the system keep running to reduce down time.
- **Robust** - Unique flange connections both in Inlet and Outlet for extra stability.
- **Convenient** - Extra-large basket for long intervals between cleaning.
- All models come with flange connection 65mm Inlet and 65mm Outlet.
- Optional Shock absorber (Product Code: 90576) is available.
- **Self - priming** at 2m
- Enclosure Class is IP55 & Insulation Class is F.

### Warranty

|                                    |         |
|------------------------------------|---------|
| Pump body and plastic components   | 2 years |
| Motor, O-rings and mechanical seal | 1 year  |

**MONSOON<sup>TM</sup>** pump is designed for commercial swimming pools. The entire range comes with standard flange connection. With 75mm Inlet and 65mm Outlet, it offers well balance between flow rate and head. MRB series pumps are built for the toughest conditions with heavy duties motor and pump components.

### Operating Limits

|                             |       |
|-----------------------------|-------|
| Maximum water temperature   | 50 °C |
| Maximum Ambient Temperature | 50 °C |
| Noise at 1 meter            | 65 dB |

### Application

- Domestic pools
- Commercial pools
- Water features



Robust plastic body

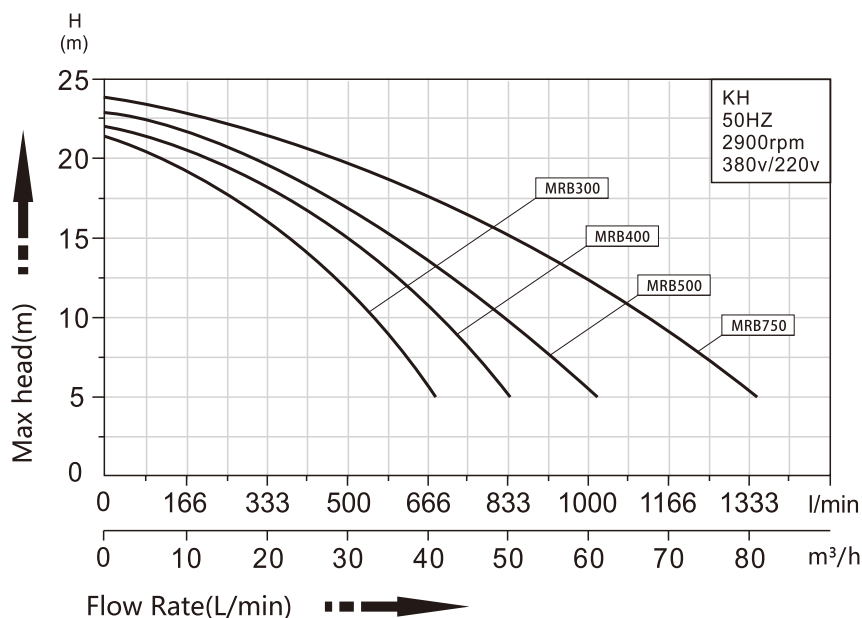


Flange connection & transparent lid



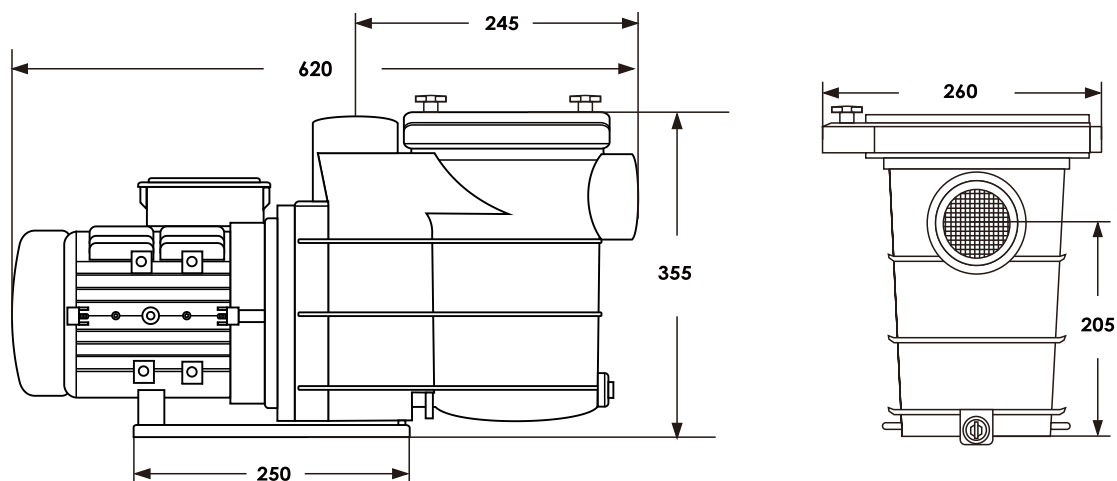
Optional shock absorber  
Order code : 90576

## Specification



| MODEL  | CODE 50HZ | CONNECTIONS |        | VOLTAGE<br>V | PHASE | INPUT POWER | OUTPUT POWER | RPM  |
|--------|-----------|-------------|--------|--------------|-------|-------------|--------------|------|
|        |           | INLET       | OUTLET |              |       | kw          | HP           |      |
| MRB300 | 70663     | 75mm        | 65mm   | 380 - 400    | 3     | 2.2         | 3            | 2850 |
| MRB400 | 70664     |             |        |              | 3     | 3           | 4            |      |
| MRB500 | 70665     |             |        |              | 3     | 4           | 5            |      |
| MRB750 | 71036     |             |        |              | 3     | 5.5         | 7.5          |      |

## Dimensions





## Features & Advantages

- Smooth airflow and quiet.
- High performance with low power consumption.
- Compact design with modern appearance.
- Long life time.
- Non-oil lubricating design to produce more purified air.

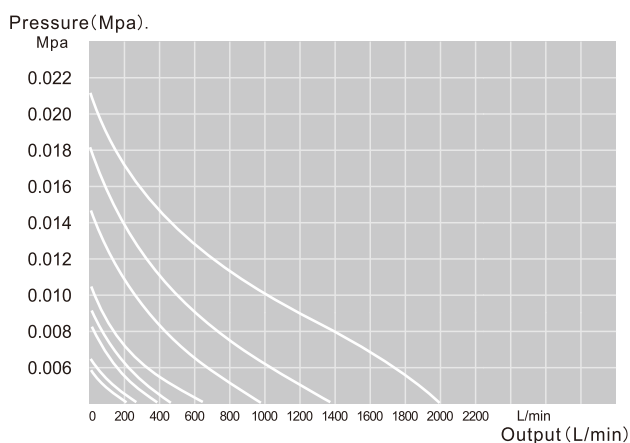
## Warranty

MVB Airblower

1 year

## Application

- Spa feature for swimming pools



## Specification

| MODEL    | CODE<br>50HZ | POWER | VOLTAGE          | PRESSURE | VOLUMETRIC<br>OUTPUT AT 0 MPA | WEIGHT | SIZE            |
|----------|--------------|-------|------------------|----------|-------------------------------|--------|-----------------|
|          |              | W     | V                | MPA      | l/min                         | kg     | mm              |
| MVB125G  | 90460        | 70    | 110 /<br>220-240 | >0.006   | 250                           | 7.0    | 236 x 179 x 186 |
| MVB185G  | 90461        | 90    |                  | >0.007   | 300                           | 7.4    | 233 x 199 x 207 |
| MVB290G  | 90462        | 120   |                  | >0.009   | 350                           | 8.0    | 230 x 199 x 215 |
| MVB390G  | 90463        | 180   |                  | >0.010   | 500                           | 10.2   | 255 x 223 x 230 |
| MVB600G  | 90464        | 250   |                  | >0.011   | 640                           | 11.0   | 256 x 246 x 256 |
| MVB800G  | 90465        | 400   |                  | >0.015   | 1000                          | 17.0   | 295 x 295 x 305 |
| MVB1200G | 90466        | 600   | 380              | >0.019   | 1317                          | 21.0   | 315 x 310 x 325 |
| MVB2200G | 90467        | 1220  |                  | >0.020   | 2100                          | 46.5   | 330 x 315 x 450 |



# FILTRATION EQUIPMENT







► Patented



**Overpressure  
Protection  
Safety Device  
(code 90577)**

## Features & Advantages

- 100% factory tested according to international and MINDER improved standard.
- Smart air relief valve for manual and automatic air pressure release.
- Designed to assemble with valve manifold.
- In-fluent manifold distribution to prevent clogging.
- Materials used are durable and suitable for all-weather performance.
- 5-15 years life time
- Available in standard 2.5bar and advance 4.0bar operating pressure model.

## Warranty

|             |        |
|-------------|--------|
| Fittings    | 1 year |
| Filter Tank | 1 year |

**F Series** vertical commercial filters are designed with top quality in mind for various high applications. F series filters size range from 1000mm to 3000mm in diameter with optional accessories.

## Operating Limits

| Model                     | 2.5bar | 4.0bar |
|---------------------------|--------|--------|
| Maximum water temperature | 43 °C  | 43 °C  |
| Operating Pressure        | 2.5bar | 4.0bar |
| Maximum Pressure          | 4.0bar | 6.0bar |

## Optional Components

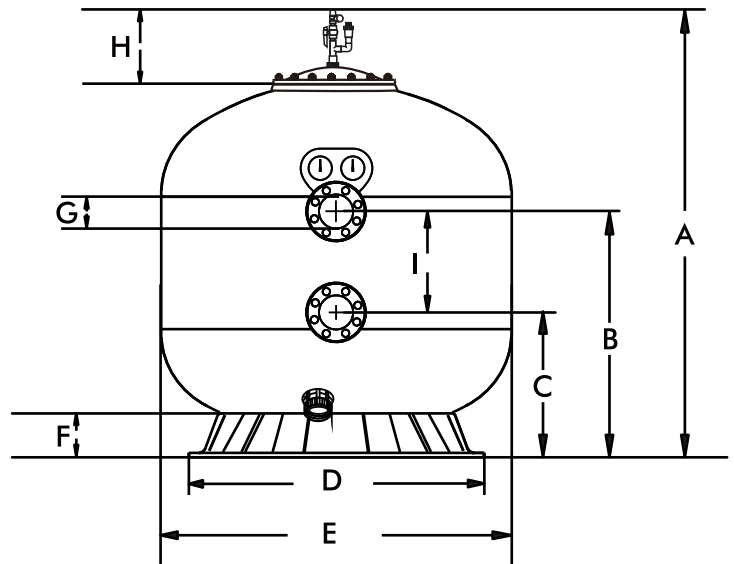
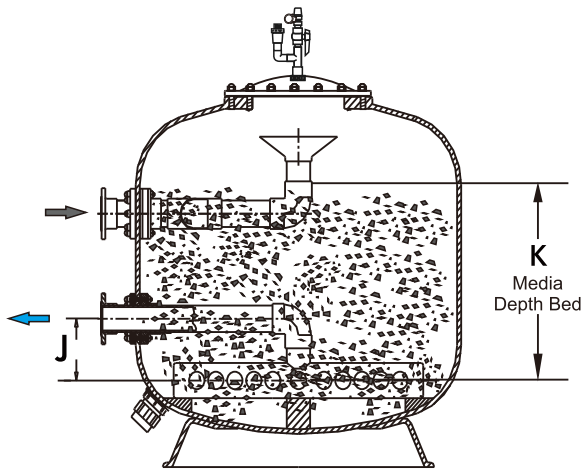
- Nozzle collection system
- Additional bed depth
- Internal sight glass
- Inline sight glass
- Side manhole
- Valve manifold (valve battery)
- Vinyl-ester internal coating

## Specification

| MODEL | CODE   |        | TANK Ø | FLANGE CONNECTION | FILTRATION AREA | DESIGNED VELOCITY                | MAXIMUM FLOW RATE |      | BACKWASH FLOW AT 40m <sup>3</sup> /h/m <sup>2</sup> |      | MEDIA DEPTH BED | SILICA SAND (kg) | GRAVEL REQUIRED (kg) | SAND REQUIRED (kg) |
|-------|--------|--------|--------|-------------------|-----------------|----------------------------------|-------------------|------|-----------------------------------------------------|------|-----------------|------------------|----------------------|--------------------|
|       | 2.5bar | 4.0bar | mm     | mm                | m <sup>2</sup>  | m <sup>3</sup> /h/m <sup>2</sup> | m <sup>3</sup> /h | lpm  | m <sup>3</sup> /h                                   | lpm  | mm              | 1-2mm            | 1-2mm                | 0.5-1mm            |
| F1000 | 70129  | 70129  | 1000   | 90                | 0.88            | 50                               | 40                | 540  | 40                                                  | 660  | 900             | 900              | 200                  | 850                |
| F1200 | 70130  | 71097  | 1200   | 90                | 1.13            |                                  | 52                | 860  | 58                                                  | 963  | 1000            | 1200             | 300                  | 1200               |
| F1400 | 70131  | 71098  | 1400   | 110               | 1.54            |                                  | 69                | 1150 | 75                                                  | 1245 | 1100            | 1900             | 450                  | 1650               |
| F1600 | 70132  | 71099  | 1600   | 110               | 2               |                                  | 80                | 1334 | 90                                                  | 1333 | 1200            | 2600             | 675                  | 2150               |
| F1800 | 70133  | 73001  | 1800   | 160               | 2.7             |                                  | 120               | 2000 | 130                                                 | 2159 | 1300            | 3200             | 750                  | 2800               |
| F2000 | 70134  | 73002  | 2000   | 160               | 3.14            |                                  | 157               | 2617 | 180                                                 | 3004 | 1440            | 4600             | 1050                 | 3800               |
| F2350 | 70135  | 73003  | 2350   | 200               | 4.3             |                                  | 206               | 3440 | 250                                                 | 4168 | 1480            | 6700             | 1800                 | 5275               |
| F2500 | 70137  | 73004  | 2500   | 200               | 4.9             |                                  | 250               | 4168 | 300                                                 | 4780 | 1500            | 8000             | 2200                 | 5950               |
| F3000 | 70138  | 73005  | 3000   | 250               | 7.07            |                                  | 353               | 5883 | 400                                                 | 6640 | 2200            | 11000            | 3300                 | 8600               |

- \* Flange connection standard: DIN (Other standard is available upon request)
- \* Silica sand data is only for reference as different sand size will weigh differently
- \* To customize a 4KG pressure model, an additional 30% will be charged on top of the standard price for the 2.5KG model

# F SERIES COMMERCIAL FILTER

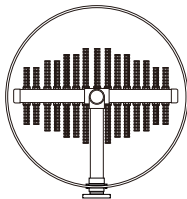
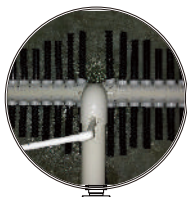


## Dimensions

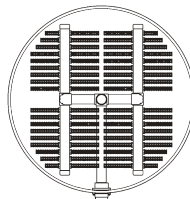
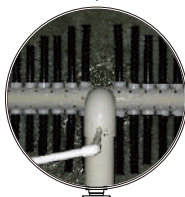
| MODEL | CODE  | A    | B    | C    | D    | E    | F   | G   | H   | I   | J   | K    |
|-------|-------|------|------|------|------|------|-----|-----|-----|-----|-----|------|
|       |       | mm   |      |      |      |      |     |     |     |     |     |      |
| F1000 | 70129 | 1430 | 800  | 480  | 920  | 1000 | 170 | 80  | 100 | 360 | 230 | 675  |
| F1200 | 70130 | 1530 | 900  | 530  | 920  | 1200 | 170 | 80  | 100 | 360 | 230 | 725  |
| F1400 | 70131 | 1600 | 1000 | 530  | 1210 | 1400 | 180 | 100 | 100 | 470 | 300 | 760  |
| F1600 | 70132 | 1880 | 1100 | 610  | 1210 | 1600 | 180 | 100 | 100 | 470 | 300 | 900  |
| F1800 | 70133 | 1980 | 1200 | 640  | 1440 | 1800 | 230 | 150 | 100 | 560 | 350 | 950  |
| F2000 | 70134 | 2230 | 1340 | 780  | 1440 | 2000 | 230 | 150 | 100 | 560 | 350 | 1075 |
| F2350 | 70135 | 2430 | 1450 | 890  | 1950 | 2350 | 280 | 200 | 100 | 560 | 500 | 1175 |
| F2500 | 70137 | 2730 | 1610 | 1050 | 1950 | 2500 | 280 | 200 | 100 | 560 | 500 | 1325 |
| F3000 | 70138 | 3120 | 1880 | 1330 | 1950 | 3000 | 280 | 250 | 100 | 560 | 700 | 1520 |

## Collection Systems ► Patented

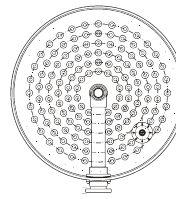
Standard Lateral System  
F1200 / F1400 / F1600



Standard Lateral System  
F1800 / F2000 / F2300 /  
F2500 / F3000



Optional Nozzle  
collection system



**Optional Nozzle collection system is made available to all F series filter.**

**Nozzle collection system provides wider and much even collection of water flow. Also, the media system can be backwashed by pairing air and water which reduce the amount of wastewater by 50% .**





## Features & Advantages

- 100% factory tested according to international and MINDER improved standard.
- Smart air relief valve for manual and automatic air pressure release.
- Designed to assemble with valve manifold.
- In-fluent manifold distribution to prevent clogging.
- Materials used are durable and suitable for all-weather performance.
- 5-15 years life time
- Available in standard 2.5bar and advance 4.0bar operating pressure model.

## Warranty

|             |        |
|-------------|--------|
| Fittings    | 1 year |
| Filter Tank | 1 year |

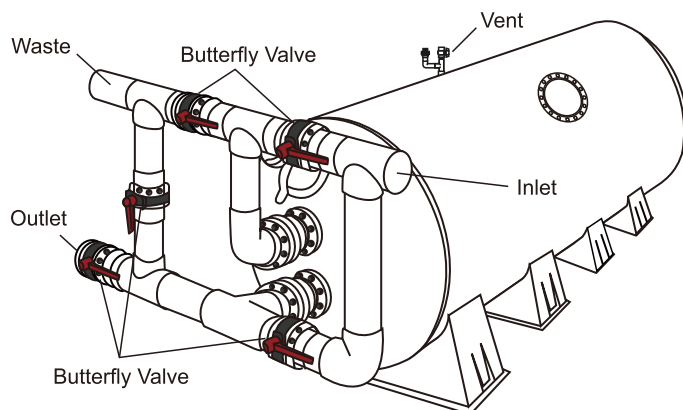
**B Series** horizontal commercial filters offer a much bigger filtration system for big commercial projects. B series filters size range from 1050mm to 2500mm in diameter with optional accessories.

## Operating Limits

| Model                     | 2.5bar | 4.0bar |
|---------------------------|--------|--------|
| Maximum water temperature | 43 °C  | 43 °C  |
| Operating Pressure        | 2.5bar | 4.0bar |
| Maximum Pressure          | 4.0bar | 6.0bar |

## Optional Components

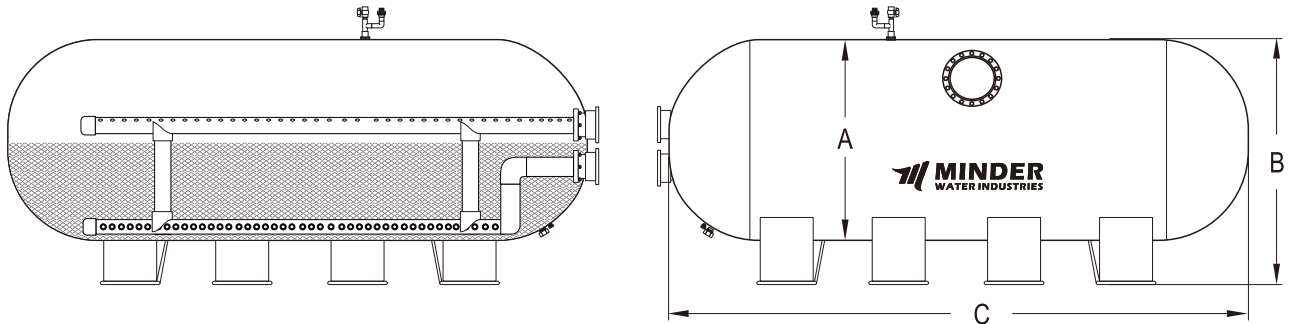
- Additional inline sight glass
- Internal sight glass
- Side manhole
- Valve manifold (valve battery)
- Vinyl-ester internal coating



► **Patented**

Optional configuration available by request

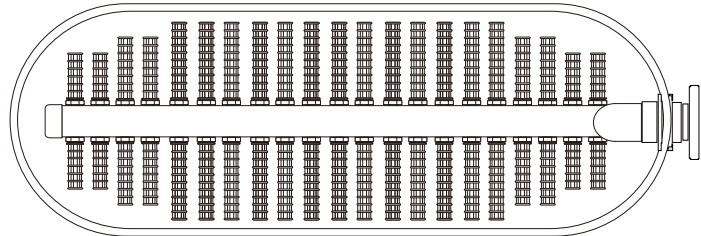
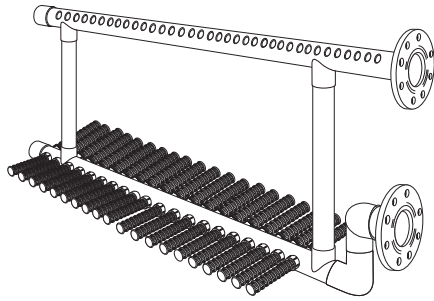
# B SERIES COMMERCIAL FILTER



## Dimensions

| MODEL                   | CODE   | TANK Ø<br>A | HEIGHT<br>B | LENGTH<br>C | FLANGE<br>CONNECTION | FILTRATION<br>AREA | DESIGNED<br>VELOCITY | MAXIMUM<br>FLOW RATE | MEDIA BED<br>DEPTH | SILICA SAND<br>(kg) | GRAVEL<br>(kg) |
|-------------------------|--------|-------------|-------------|-------------|----------------------|--------------------|----------------------|----------------------|--------------------|---------------------|----------------|
|                         | 2.5bar | mm          | mm          | mm          | mm                   | m²                 | m³/h/m²              | m³/h                 | mm                 | 1-2mm               | 0.5-1mm        |
| A: Tank Diameter 1050mm |        |             |             |             |                      |                    |                      |                      |                    |                     |                |
| B1050-1.9               | 70682  | 1050        | 1260        | 1,900       | 80                   | 1.72               | 30                   | 42                   | 500                | 350                 | 950            |
| B1050-2.3               | 70683  |             | 1260        | 2,300       | 110                  | 2.12               | 20                   | 64                   |                    | 475                 | 1,250          |
| B1050-2.5               | 70684  |             | 1260        | 2,500       | 110                  | 2.32               | 20                   | 70                   |                    | 575                 | 1,525          |
| B1050-2.7               | 70685  |             | 1260        | 2,700       | 160                  | 2.51               | 40                   | 75                   |                    | 700                 | 1,600          |
| B1050-3.0               | 70686  |             | 1260        | 3,000       | 160                  | 2.81               | 40                   | 84                   |                    | 775                 | 2,025          |
| A: Tank Diameter 1200mm |        |             |             |             |                      |                    |                      |                      |                    |                     |                |
| B1200-2.5               | 70687  | 1200        | 1500        | 2,500       | 160                  | 2.65               | 40                   | 106                  | 600                | 700                 | 1,750          |
| B1200-3.0               | 70688  |             | 1500        | 3,000       | 160                  | 3.21               | 40                   | 129                  |                    | 925                 | 2,325          |
| A: Tank Diameter 1400mm |        |             |             |             |                      |                    |                      |                      |                    |                     |                |
| B1400-2.5               | 70689  | 1400        | 1600        | 2,500       | 160                  | 3.02               | 40                   | 121                  | 800                | 800                 | 2,825          |
| B1400-3.0               | 70690  |             | 1600        | 3,000       | 160                  | 3.67               | 30                   | 147                  |                    | 1,000               | 3,450          |
| A: Tank Diameter 1600mm |        |             |             |             |                      |                    |                      |                      |                    |                     |                |
| B1600-2.5               | 70691  | 1600        | 1830        | 2,500       | 160                  | 3.36               | 30                   | 134                  | 1000               | 850                 | 3,875          |
| B1600-3.0               | 70692  |             | 1830        | 3,000       | 160                  | 4.1                | 30                   | 164                  |                    | 1,050               | 4,750          |
| A: Tank Diameter 1800mm |        |             |             |             |                      |                    |                      |                      |                    |                     |                |
| B1800-2.5               | 70693  | 1800        | 2050        | 2,500       | 160                  | 3.74               | 30                   | 150                  | 1000               | 975                 | 4,850          |
| B1800-3.0               | 70694  |             | 2050        | 3,000       | 160                  | 4.58               | 30                   | 183                  |                    | 1,225               | 5,925          |
| B1800-3.5               | 70695  |             | 2050        | 3,500       | 210                  | 5.41               | 30                   | 216                  |                    | 1,475               | 7,000          |
| B1800-4.0               | 70696  |             | 2050        | 4,000       | 210                  | 6.25               | 30                   | 250                  |                    | 1,700               | 8,075          |
| A: Tank Diameter 2000mm |        |             |             |             |                      |                    |                      |                      |                    |                     |                |
| B2000-2.5               | 70697  | 2000        | 2220        | 2,500       | 160                  | 4.34               | 30                   | 180                  | 1200               | 1,050               | 6,575          |
| B2000-3.0               | 70698  |             | 2220        | 3,000       | 160                  | 5.3                | 30                   | 212                  |                    | 1,300               | 8,025          |
| B2000-3.5               | 70699  |             | 2220        | 3,500       | 210                  | 6.25               | 30                   | 250                  |                    | 1,550               | 9,475          |
| B2000-4.0               | 70700  |             | 2220        | 4,000       | 210                  | 7.21               | 30                   | 288                  |                    | 1,800               | 10,925         |
| B2000-4.5               | 70701  |             | 2220        | 4,500       | 210                  | 8.16               | 20                   | 320                  |                    | 2,075               | 12,375         |
| A: Tank Diameter 2350mm |        |             |             |             |                      |                    |                      |                      |                    |                     |                |
| B2300-3.0               | 70702  | 2350        | 2560        | 3,000       | 160                  | 5.94               | 20                   | 238                  | 1200               | 2,575               | 9,300          |
| B2300-3.5               | 70703  |             | 2560        | 3,500       | 210                  | 7.06               | 30                   | 283                  |                    | 3,125               | 11,050         |
| B2300-4.0               | 70704  |             | 2560        | 4,000       | 260                  | 8.17               | 40                   | 320                  |                    | 3,650               | 12,800         |
| B2300-4.5               | 70705  |             | 2560        | 4,500       | 260                  | 9.28               | 40                   | 350                  |                    | 4,200               | 14,525         |
| B2300-5.0               | 70706  |             | 2560        | 5,000       | 260                  | 10.4               | 30                   | 380                  |                    | 4,750               | 16,250         |
| A: Tank Diameter 2500mm |        |             |             |             |                      |                    |                      |                      |                    |                     |                |
| B2500-3.5               | 70707  | 2500        | 2710        | 3,500       | 210                  | 7.34               | 30                   | 300                  | 1300               | 3,175               | 11,675         |
| B2500-4.0               | 70708  |             | 2710        | 4,000       | 260                  | 8.62               | 40                   | 335                  |                    | 3,725               | 13,500         |
| B2500-4.5               | 70709  |             | 2710        | 4,500       | 260                  | 9.8                | 30                   | 380                  |                    | 4,300               | 15,350         |
| B2500-5.0               | 70710  |             | 2710        | 5,000       | 260                  | 10.98              | 30                   | 410                  |                    | 4,850               | 17,200         |

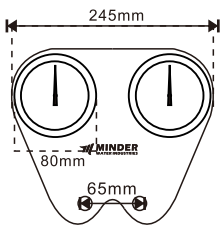
## Collection Systems



## Standard Inclusions for F and B series

All MINDER commercial filters come with the following fittings. Please inform our representative if you prefer not to have these items installed.

### Pressure Gauge Panel

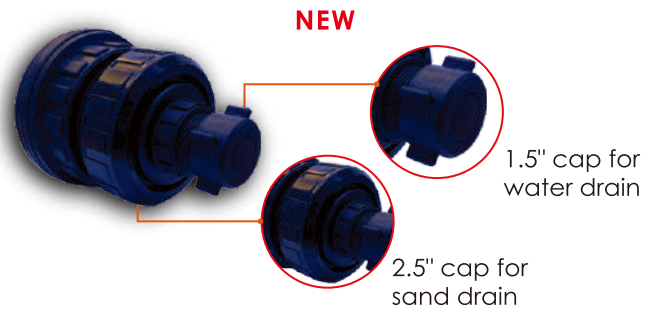


Every F or B series comes with a pressure gauge panel with dual extra large gauges.

Gauges are oil-filled for long-lasting durability.

Order Code:30144

### Water Drain



**Easy draining of sand and water for F & B series**

Order Code:70306

## Smart Air Release Valve

MINDER's unique feature "Smart Air Release Valve" can manually release the air inside the tank. Also, the one way valve is able to automatically release negative pressure during water drainage to minimize the impact to the filter tank.

**Overpressure Protection**

**Anti-Vacumm Protection**

**Code: 90577**



► **Patented**





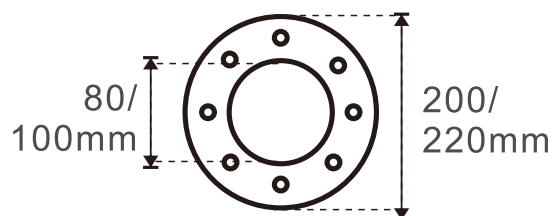
The following accessories are optional and require an additional charge

## Internal Sight Glass

SG80



SG100

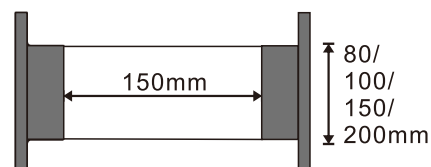


| MODEL | CODE  | INNER DIA (mm) | OUTER DIA (mm) |
|-------|-------|----------------|----------------|
| SG80  | 70713 | 80             | 200            |
| SG100 | 70714 | 100            | 200            |

Operational internal sight glass for F or B series. Available in 2 sizes. Allows observation of the sand layer inside the tank

## Inline Sight Glass (External Sight Glass)

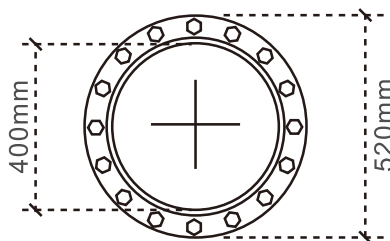
| MODEL   | CODE  | INNER DIA (mm) | LENGTH (mm) |
|---------|-------|----------------|-------------|
| ILSG80  | 70715 | 80             | 150         |
| ILSG100 | 70716 | 100            | 150         |
| ILSG150 | 70717 | 150            | 150         |
| ILSG200 | 70718 | 200            | 150         |



Optional inline sight glass for F or B series. Available in 4 sizes. Allows operators to effectively monitor water condition during backwashing.

## Manhole

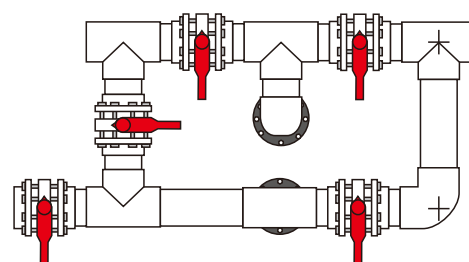
| MODEL | CODE  | INNER DIA (mm) | OUTER DIA (mm) |
|-------|-------|----------------|----------------|
| MH400 | 30234 | 400            | 520            |



Optional manhole access for F or B series

## Valve Manifold (Valve Battery)

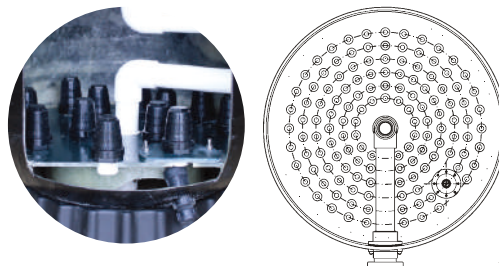
| MODEL | CODE  | INNER DIA (mm) |
|-------|-------|----------------|
| MF80  | 70719 | 90             |
| MF100 | 70720 | 110            |
| MF150 | 70721 | 160            |
| MF200 | 70722 | 210            |



## Nozzle Plate Collection System

| MODEL  | CODE  | SAND FILTER |
|--------|-------|-------------|
| NP1000 | 73149 | F1000       |
| NP1200 | 70515 | F1200       |
| NP1400 | 70516 | F1400       |
| NP1600 | 70517 | F1600       |
| NP1800 | 70518 | F1800       |
| NP2000 | 70519 | F2000       |
| NP2300 | 70520 | F2300       |
| NP2500 | 70521 | F2500       |
| NP3000 | 70522 | F3000       |

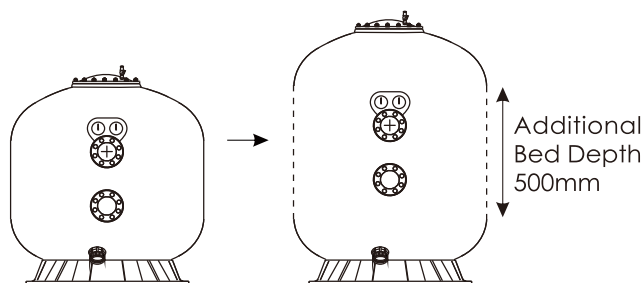
| MODEL | CODE  | SAND FILTER |
|-------|-------|-------------|
| NP635 | 73153 | MS25        |
| NP700 | 73152 | MS28        |
| NP750 | 73151 | MS30        |
| NP820 | 73154 | MS32        |
| NP920 | 73150 | MS36        |



Nozzle plate collection system allows equal distribution of water and enable air wash capability that optimize water saving. Suitable for MS and F series only.

## Additional Bed Depth

| MODEL   | CODE  | SAND FILTER |
|---------|-------|-------------|
| ABD1200 | 70612 | F1200       |
| ABD1400 | 70613 | F1400       |
| ABD1600 | 70614 | F1600       |
| ABD1800 | 70615 | F1800       |
| ABD2000 | 70616 | F2000       |
| ABD2300 | 70617 | F2300       |
| ABD2500 | 70618 | F2500       |
| ABD3000 | 70619 | F3000       |



Optional bed depth extension for deep bed filtration. Suitable for F series only. Extra depth is in 500mm block.

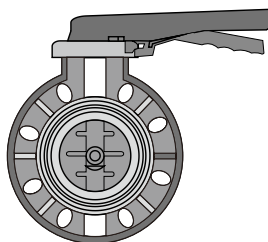
## Large bottom sand drain

| MODEL                             | CODE  | INNER DIA (mm) |
|-----------------------------------|-------|----------------|
| 4" flange large bottom sand drain | 77980 | 80             |



## Valve Butterfly

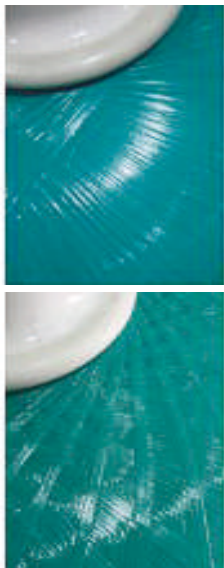
| MODEL | CODE  | INNER DIA (mm) |
|-------|-------|----------------|
| BV80  | 40247 | 80             |
| BV100 | 40248 | 100            |
| BV150 | 40249 | 150            |
| BV200 | 40251 | 200            |



## Vinyl-Ester Coating

Additional internal layer coating of Vinyl-ester for resistant against corrosion for ozone application.

## Bobbin wound material & Quality Test



Minder Offers 2 types of bobbin-wound threading: For commercial filter, the overlapping technology will be chosen, and for Minder domestic products, Minder's cross-winding technology will be chosen for great strength on Minder domestic products.

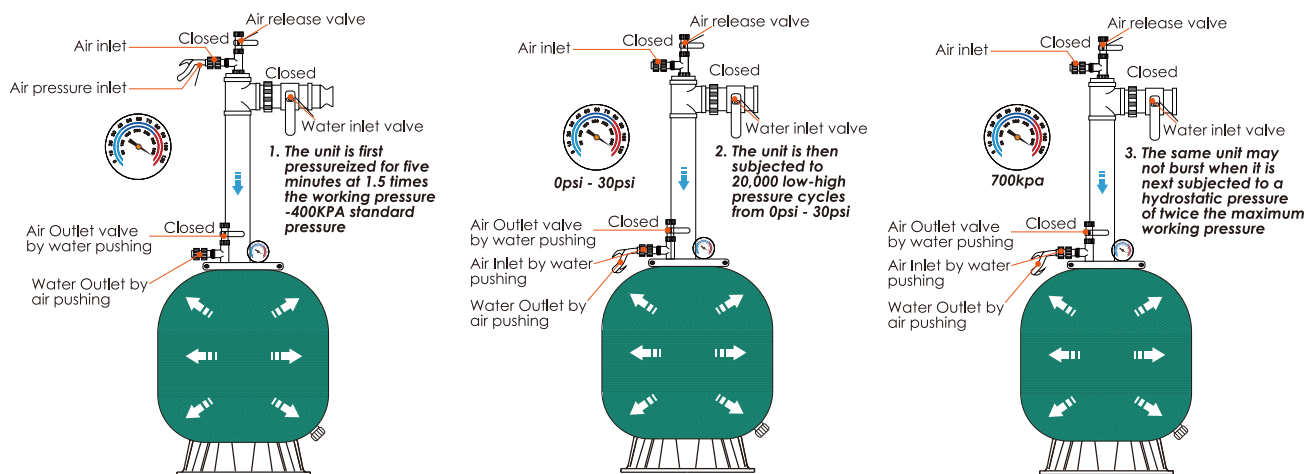
Minder filters are produced with 6 processes to achieve it's highest quality with possible extreme weather conditions in mind.

1. **Optional Vinyl-ester layer:** For resistance against corrosion for ozone application
2. **Chemical Layer:** ISO or VE laminated layer for resistance against corrosion
3. **Internal Structural Layer:** Threading of fibreglass thread with polyester resin
4. **Reinforcement Layer:** Thickening of fibreglass threading for additional strength
5. **Inner winding layer:** Further fibreglass threading for higher pressure strength
6. **Surface finishing:** UV screen coating for resistance against UV light and excellent surface finishing

Minder Filter are 100% tested with international and improved Minder standard to to ensure filters are able to withstand up to it's maximum pressure and also for any possible leakage.

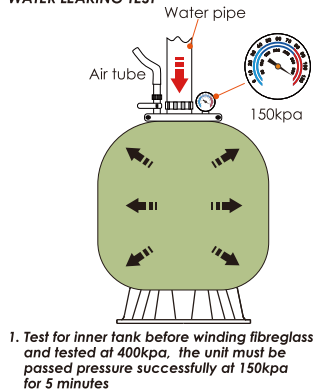
1. **Internal fibreglass layer:** Tested at operating pressure
2. **Completed filters:** Tested at maximum pressure

## Testing method

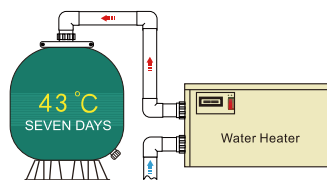


## Additional MINDER test standard

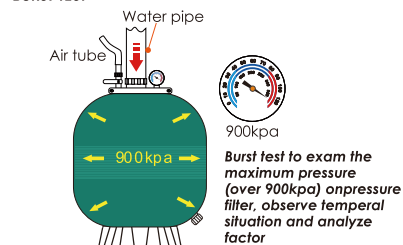
### WATER LEAKING TEST



### HEAT - RESISTANT TEST



### BURST TEST



**Situation A**  
Pressure filter under 28 diameter, the cover O'ring move place and air bleed, thus release pressure, ni crack on tank body or the plastic ring on the top mount that inserted into fibreglass, which is also a part might cause leaking. If put the O'ring back in the proper position, test can be performed again

**Situation B**  
Pressure filter above 32 diameter, water leaking from bottom of filter and air bleed, no crack on the sides. It happen based on production technology by no winding fibreglass on that side



### Features

- Bio-resistant.** Prevents bacterial growth in the filter bed;
- Fine filtration.** 50% more surface area than transitional sand;
- Water saving.** UFG is 20% lighter than sand thus save 10% of water during backwash;
- Less chemical.** Reduced water consumption means less chemical added;
- Last longer.** Replacement period up to 10 years;
- 100% Virgin Material.** Not from recycle yard.



### THE NEXT GEN FILTER MEDIA

**Ultra-Filtration Glass is a direct replacement for sand, improving the performance of sand filters without having to replace existing units.**

### Application

- Swimming pools
- Aquariums & Aquaculture
- Water treatment and filtration equipment

| Product Name | Code  | Grade       | Kg/Bag |
|--------------|-------|-------------|--------|
| UFG          | 22358 | 0.5 - 1.0mm | 25KG   |
| UFG          | 22359 | 1.0 - 2.0mm | 25KG   |



| Feature                   | UFG                    | Quartz Sand            |
|---------------------------|------------------------|------------------------|
| Filtration Precision      | 15 microns             | 30-40 microns          |
| Replacement Cycle         | 6-8 years              | 3-5 years              |
| Density                   | 1759 KG/m <sup>2</sup> | 1387 KG/m <sup>2</sup> |
| Average Backwash Water    | 250L                   | 180L                   |
| Caking Rate (Heated Pool) | Lower                  | Higher                 |



**Designed for Windmill Lateral**



**UFG**



**QUARTZ SAND**

## MINDER'S NEW MEDIA FILTER, WITH AUTO VALVE

2 YEARS  
WARRANTY

### SMART SPEED ADJUSTMENT

High when backwash, Low at night time.

### SMART WASH

Backwash the filter with a touch of a button, easy.

### MOTORISED ROTOR

Change valve position without a handle.

### BUILT-ON PRESSURE SENSOR

Backwash automatically when tank pressure is high.

### 5-INCH LCD TOUCH SCREEN

Display and control with ease.

### AutoWash OS

User friendly interface.

### WEATHER PROOF CASING

Sealed casing for weather proofing.



► Patented



## SPECIFICATIONS

MOUNTING CONFIGURATION: top or side

CONNECTIONS: 1.5" / 2" / 2.5"

AUTO-WASH FUNCTION BY: pressure switch, timer or one-touch

ADJUSTABLE PRESSURE SWITCH: 30KPA - 200KPA

MAX. TIMER WASH: 1 wash per day, 7 days schedule

ADJUSTABLE WASH TIME: 5 - 120 sec

PUMP TIMER: 7 days schedule, 2 cycles per day, speed adjustable

AUTO PROTECTION: valve to off position before system shut-down

SCREEN: 5" LCD. resistive touch-screen

PRESSURE SENSOR ACCURACY: +/- 3KPA

MAX WORKING PRESSURE: 250KPA

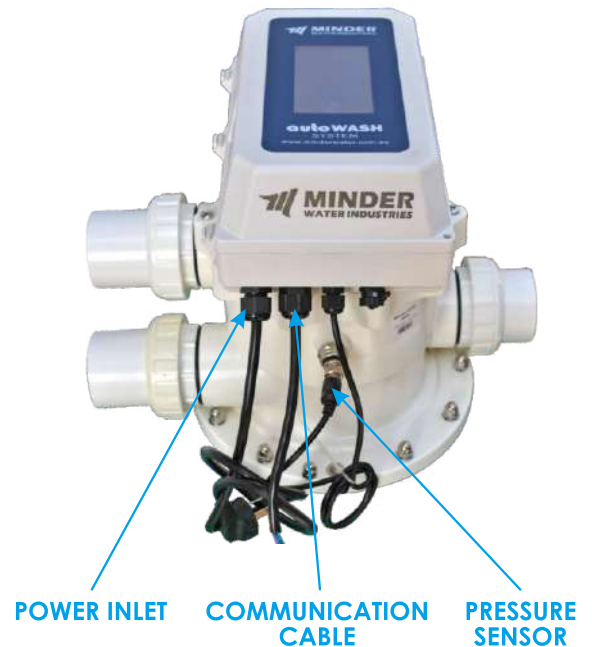
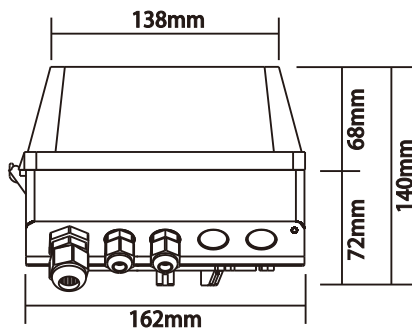
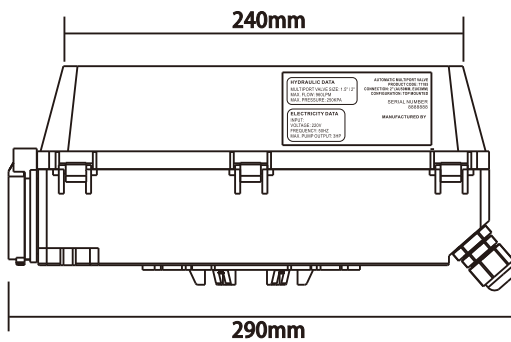
POWER VOLTAGE INPUT: 220V @ 50HZ

POWER VOLTAGE OUTPUT: 220V @ 50HZ

IP RATING: 65



RECOMMENDED TO CONNECT WITH  
MXB-ECO SERIES PUMP  
TO ENABLE  
Automatic pressurisation  
during backwash



| MODEL  | CODE  | VOLTAGE    | OUTPUT POWER | CONFIGURATION     |
|--------|-------|------------|--------------|-------------------|
|        |       | V          | HP           |                   |
| EV1.5  | 20631 | 110<br>220 | 2.2          | 1.5" TOP MOUNTED  |
| EVS1.5 | 77962 |            |              | 1.5" SIDE MOUNTED |
| EVS2.0 | 77963 |            |              | 2.0" SIDE MOUNTED |
| EV2.0  | 71185 |            |              | 2.0" TOP MOUNTED  |

No standalone purchase. Customers must buy in conjunction with filters.





► Patented

## Features

- Even water distribution that utilise the filtration area;
- 0.4mm slot, suitable for glass filtration media such as AFM;
- Ultimate backwash result;
- Special design to fit 1.5", 2" and 2.5" MPV to maxmise flow rate;
- Manufactured by Ultra-sonic welding technique - no sand leak.



## UFG

Ultra-Filtration Glass

Special filter material

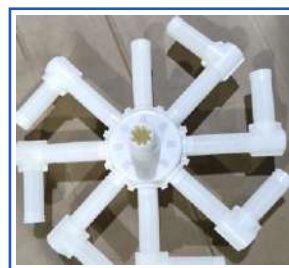
Minder's windmill lateral is specifically designed to maximise flow rate and backwash effectiveness. The system allows superior water distribution across the entire filtration area and thus bring the best water to your pool.



M14/MS18



M16/M18/MS21



M21/M25/M25B  
MS25/MS25B



M28/M28B  
MS28/MS28B



MS30/MS32



M30/M32/M36/M40/M44  
MS36/MS40/MS44



M48/M56/MS48/MS56



**M Series** filter is MINDER's innovative and cost-efficient design for domestic filtration system. The filter comes with top-mounted multiport valve and MINDER's special cross-winding bobbin-wound thread which provide more durable and long life to the filter body than other filter types in the market.



### Operating Limits

| Model                     | 2.5bar |
|---------------------------|--------|
| Maximum water temperature | 43 °C  |
| Operating Pressure        | 2.5bar |
| Maximum Pressure          | 4.0bar |

### Features & Advantages

- 100% factory tested according to international standard and MINDER improved standard.
- Easy to use durable 6-ways multiport valve fitted with angle adjustable union to prevent pipe breakage during handling.
- Materials used are dependable and suitable for all-weather performance.
- Dual layers fibreglass inner shell with UV resistant bobbin wound reinforced fibreglass surface allows the filter to work under direct sunlight.
- 5-15years life-time.

### Warranty

|             |        |
|-------------|--------|
| Fittings    | 1 year |
| Filter Tank | 1 year |

### Optional Components

- Filter Clean™ - Chemical Tablet Feeder.
- Vinyl-ester internal coating

# M SERIES TOP MOUNTED FILTER

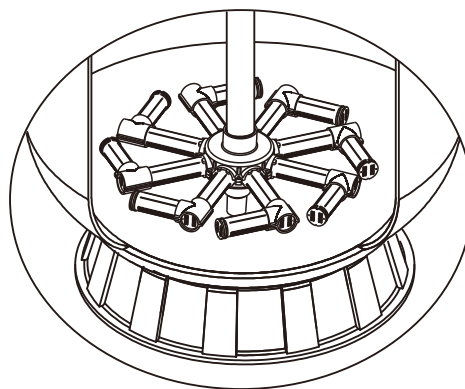
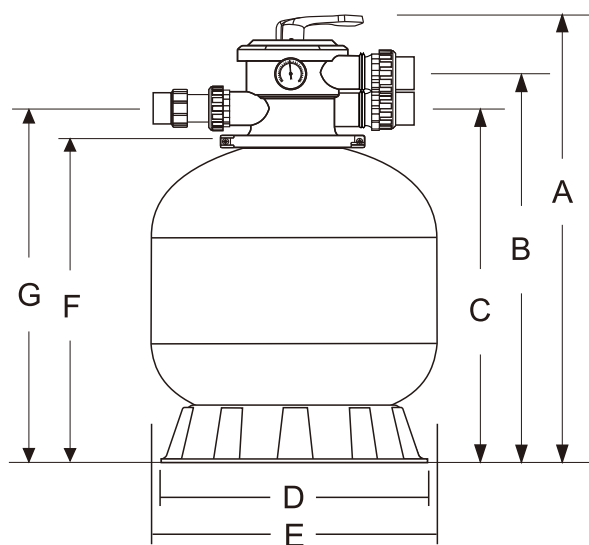
**MINDER CLASSIC™**  
MEDIA FILTER



## Specification

| MODEL                                            | CODE   | MULTIPORT VALVE UNION SIZE |        | TANK Ø | FILTRATION AREA | DESIGNED VELOCITY | MAX FLOW RATE |      | MEDIA BED DEPTH | SILICA SAND (kg) |
|--------------------------------------------------|--------|----------------------------|--------|--------|-----------------|-------------------|---------------|------|-----------------|------------------|
|                                                  | 2.5bar | IMPERIAL                   | METRIC | mm     | m²              | m³/h/m²           | m³/h          | lpm  | mm              | 1-2mm            |
| V1.5 multiport valve with union size 1.5" / 50mm |        |                            |        |        |                 |                   |               |      |                 |                  |
| M14                                              | 70049  | 1.5"                       | 50mm   | 350    | 0.10            | 48                | 5             | 80   | 240             | 20               |
| M16                                              | 70050  |                            |        | 400    | 0.13            |                   | 6             | 105  | 290             | 30               |
| M18                                              | 70051  |                            |        | 450    | 0.16            |                   | 8             | 133  | 300             | 40               |
| M21                                              | 70052  |                            |        | 550    | 0.24            |                   | 12            | 192  | 340             | 85               |
| M25                                              | 70054  |                            |        | 650    | 0.33            |                   | 16            | 270  | 400             | 155              |
| M28                                              | 70056  |                            |        | 700    | 0.38            |                   | 19            | 320  | 460             | 210              |
| V2.0 multiport valve with union size 2.0" / 63mm |        |                            |        |        |                 |                   |               |      |                 |                  |
| M25B                                             | 70055  | 2.0"                       | 63mm   | 650    | 0.33            | 48                | 17            | 290  | 400             | 155              |
| M28B                                             | 70057  |                            |        | 700    | 0.38            |                   | 22            | 365  | 460             | 210              |
| M30                                              | 70058  |                            |        | 750    | 0.44            |                   | 23            | 390  | 490             | 225              |
| M32                                              | 70059  |                            |        | 800    | 0.50            |                   | 25            | 420  | 520             | 250              |
| M36                                              | 70060  |                            |        | 900    | 0.64            |                   | 30            | 500  | 600             | 350              |
| M40                                              | 70061  |                            |        | 1000   | 0.79            |                   | 33            | 550  | 665             | 600              |
| M44                                              | 70062  |                            |        | 1100   | 0.95            |                   | 38            | 630  | 730             | 900              |
| M48                                              | 70063  |                            |        | 1200   | 1.13            |                   | 42            | 700  | 800             | 1150             |
| M56                                              | 70064  |                            |        | 1400   | 1.54            |                   | 57            | 950  | 870             | 1800             |
| V2.5 multiport valve with union size 2.5" / 75mm |        |                            |        |        |                 |                   |               |      |                 |                  |
| M40B                                             | 70647  | 2.5"                       | 75mm   | 1000   | 0.79            | 48                | 41            | 683  | 665             | 600              |
| M44B                                             | 70648  |                            |        | 1100   | 0.95            |                   | 50            | 833  | 730             | 900              |
| M48B                                             | 70649  |                            |        | 1200   | 1.13            |                   | 59            | 975  | 800             | 1150             |
| M56B                                             | 70650  |                            |        | 1400   | 1.54            |                   | 62            | 1033 | 870             | 1800             |





### Dimensions

| MODEL                                            | A    | B    | C    | D    | E    | F    | G    |
|--------------------------------------------------|------|------|------|------|------|------|------|
|                                                  | mm   |      |      |      |      |      |      |
| V1.5 multiport valve with union size 1.5" / 50mm |      |      |      |      |      |      |      |
| M14                                              | 680  | 550  | 490  | 330  | 346  | 431  | 490  |
| M16                                              | 775  | 690  | 620  | 395  | 410  | 550  | 620  |
| M18                                              | 825  | 740  | 670  | 395  | 454  | 600  | 670  |
| M21                                              | 867  | 770  | 700  | 395  | 534  | 630  | 700  |
| M25                                              | 985  | 900  | 830  | 490  | 635  | 760  | 830  |
| M28                                              | 1017 | 863  | 783  | 490  | 700  | 775  | 831  |
| V2.0 multiport valve with union size 2.0" / 63mm |      |      |      |      |      |      |      |
| M25B                                             | 1050 | 920  | 840  | 490  | 635  | 760  | 835  |
| M28B                                             | 1080 | 926  | 846  | 490  | 700  | 780  | 846  |
| M30                                              | 1100 | 950  | 870  | 700  | 750  | 800  | 870  |
| M32                                              | 1180 | 1026 | 946  | 700  | 820  | 880  | 946  |
| M36                                              | 1285 | 1131 | 1051 | 700  | 920  | 950  | 1051 |
| M40                                              | 1406 | 1252 | 1172 | 700  | 1016 | 1106 | 1172 |
| M44                                              | 1480 | 1350 | 1270 | 930  | 1092 | 1210 | 1270 |
| M48                                              | 1500 | 1450 | 1370 | 930  | 1210 | 1310 | 1370 |
| M56                                              | 1615 | 1565 | 1485 | 1200 | 1404 | 1425 | 1485 |
| V2.5 multiport valve with union size 2.5" / 75mm |      |      |      |      |      |      |      |
| M40B                                             | 1486 | 1265 | 1173 | 700  | 1016 | 1106 | 1173 |
| M44B                                             | 1560 | 1369 | 1277 | 930  | 1092 | 1210 | 1277 |
| M48B                                             | 1580 | 1469 | 1377 | 930  | 1210 | 1310 | 1377 |
| M56B                                             | 1695 | 1584 | 1492 | 1200 | 1404 | 1425 | 1492 |

# MS SERIES SIDE MOUNTED FILTER

**MINDER CLASSIC™**  
MEDIA FILTER



**MS Series** filter is MINDER's innovative and professional design for domestic filtration system. The filter comes with side-mounted multiport valve and MINDER's special cross-winding bobbin-wound thread technology which provide more durable and long life to the filter body than other filter types in the market.



## Operating Limits

| Model                     | 2.5bar |
|---------------------------|--------|
| Maximum water temperature | 43 °C  |
| Operating Pressure        | 2.5bar |
| Maximum Pressure          | 4.0bar |

## Features & Advantages

- 100% factory tested according to international standard and MINDER improved standard.
- Automatic air release valve enables automatic release of trapped air during filter operation or negative pressure during water drain.
- Easy to use durable 6-ways multiport valve fitted with angle adjustable union to prevent pipe breakage during handling.
- Materials used are dependable and suitable for all-weather performance.
- Dual layers fibreglass inner shell with UV resistant bobbin wound reinforced fibreglass surface allows the filter to work under direct sunlight.
- 5-15 years life-time.

## Warranty

|             |        |
|-------------|--------|
| Fittings    | 1 year |
| Filter Tank | 1 year |

## Optional Components

- Nozzle collection system
- The advanced model (4.0 bar) is only compatible with pipe fittings
- Vinyl-ester internal coating

### Optional Nozzle System



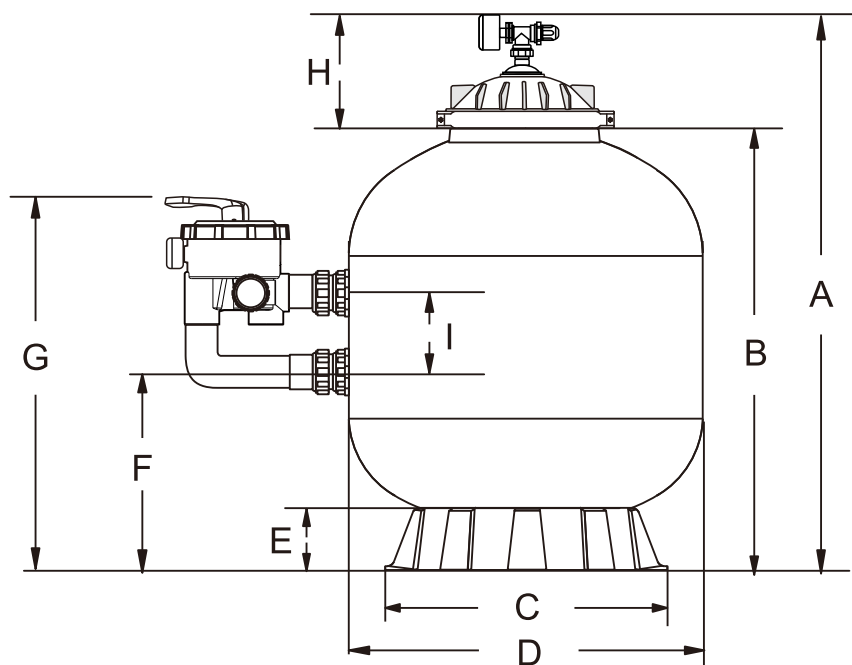
### Specification

| MODEL                                             | CODE   | MULTIPORT VALVE UNION SIZE |        | TANK Ø | FILTRATION AREA | DESIGNED VELOCITY | MAX FLOW RATE |      | MEDIA BED DEPTH | SILICA SAND (kg) |
|---------------------------------------------------|--------|----------------------------|--------|--------|-----------------|-------------------|---------------|------|-----------------|------------------|
|                                                   | 2.5bar | IMPERIAL                   | METRIC | mm     | m²              | m³/h/m²           | m³/h          | lpm  | mm              | 1-2mm            |
| VS1.5 multiport valve with union size 1.5" / 50mm |        |                            |        |        |                 |                   |               |      |                 |                  |
| MS18                                              | 70065  | 1.5"                       | 50mm   | 450    | 0.16            | 48                | 8             | 133  | 300             | 40               |
| MS21                                              | 70066  |                            |        | 550    | 0.22            |                   | 12            | 200  | 340             | 85               |
| MS25                                              | 70067  |                            |        | 650    | 0.33            |                   | 16            | 267  | 420             | 155              |
| MS28                                              | 70068  |                            |        | 700    | 0.38            |                   | 19            | 317  | 460             | 210              |
| VS2.0 multiport valve with union size 2.0" / 63mm |        |                            |        |        |                 |                   |               |      |                 |                  |
| MS25B                                             | 70652  | 2.0"                       | 63mm   | 650    | 0.33            | 48                | 18            | 325  | 420             | 155              |
| MS28B                                             | 70069  |                            |        | 700    | 0.38            |                   | 20            | 333  | 460             | 210              |
| MS30                                              | 70070  |                            |        | 750    | 0.44            |                   | 23            | 390  | 485             | 225              |
| MS32                                              | 70071  |                            |        | 800    | 0.50            |                   | 25            | 417  | 500             | 250              |
| MS36                                              | 70072  |                            |        | 900    | 0.64            |                   | 30            | 500  | 570             | 350              |
| MS40                                              | 70073  |                            |        | 1000   | 0.79            |                   | 33            | 550  | 610             | 600              |
| MS44                                              | 70074  |                            |        | 1100   | 0.98            |                   | 38            | 633  | 660             | 900              |
| MS48                                              | 70075  |                            |        | 1200   | 1.13            |                   | 42            | 700  | 710             | 1150             |
| MS56                                              | 70076  |                            |        | 1400   | 1.54            |                   | 57            | 950  | 810             | 1800             |
| VS2.5 multiport valve with union size 2.5" / 75mm |        |                            |        |        |                 |                   |               |      |                 |                  |
| MS40B                                             | 70653  | 2.5"                       | 75mm   | 1000   | 0.79            | 48                | 41            | 683  | 610             | 600              |
| MS44B                                             | 70654  |                            |        | 1100   | 0.98            |                   | 50            | 833  | 660             | 900              |
| MS48B                                             | 70655  |                            |        | 1200   | 1.13            |                   | 58            | 967  | 710             | 1150             |
| MS56B                                             | 70656  |                            |        | 1400   | 1.54            |                   | 62            | 1033 | 810             | 1800             |



# MS SERIES SIDE MOUNTED FILTER

**MINDER CLASSIC™**  
MEDIA FILTER



## Dimensions

| MODEL                                             | A    | B    | C    | D    | E   | F   | G    | H   | I   |
|---------------------------------------------------|------|------|------|------|-----|-----|------|-----|-----|
|                                                   | mm   |      |      |      |     |     |      |     |     |
| VS1.5 multiport valve with union size 1.5" / 50mm |      |      |      |      |     |     |      |     |     |
| MS18                                              | 720  | 650  | 395  | 454  | 75  | 239 | 635  | 155 | 125 |
| MS21                                              | 757  | 635  | 395  | 541  | 90  | 254 | 576  | 155 | 125 |
| MS25                                              | 880  | 760  | 490  | 635  | 90  | 310 | 634  | 155 | 125 |
| MS28                                              | 888  | 775  | 490  | 705  | 90  | 350 | 675  | 155 | 125 |
| VS2.0 multiport valve with union size 2.0" / 63mm |      |      |      |      |     |     |      |     |     |
| MS28B                                             | 908  | 780  | 490  | 705  | 90  | 322 | 744  | 175 | 195 |
| MS30                                              | 970  | 800  | 700  | 750  | 125 | 350 | 772  | 175 | 195 |
| MS32                                              | 1053 | 878  | 700  | 821  | 125 | 361 | 786  | 175 | 195 |
| MS36                                              | 1225 | 1050 | 700  | 921  | 125 | 405 | 846  | 175 | 195 |
| MS40                                              | 1243 | 1068 | 700  | 1016 | 150 | 475 | 900  | 175 | 195 |
| MS44                                              | 1315 | 1140 | 930  | 1092 | 150 | 530 | 960  | 175 | 195 |
| MS48                                              | 1415 | 1240 | 930  | 1210 | 170 | 635 | 1065 | 175 | 195 |
| MS56                                              | 1590 | 1415 | 1200 | 1404 | 200 | 635 | 1065 | 175 | 195 |
| VS2.5 multiport valve with union size 2.5" / 75mm |      |      |      |      |     |     |      |     |     |
| MS40B                                             | 1243 | 1068 | 700  | 1016 | 150 | 475 | 864  | 175 | 195 |
| MS44B                                             | 1315 | 1140 | 930  | 1092 | 150 | 530 | 919  | 175 | 195 |
| MS48B                                             | 1415 | 1240 | 930  | 1210 | 170 | 635 | 1024 | 175 | 195 |
| MS56B                                             | 1590 | 1415 | 1200 | 1404 | 200 | 635 | 1024 | 175 | 195 |



**MH Series** filter is designed and built with higher media bed depth requirement for an improved filtration performance. With MINDER's innovative cross-winding bobbin wound technology, the filter tank is greatly improved for long life. The MH filter comes with top-mounted multiport valve with union size 1.5" or 2".



## Features & Advantages

- 100% factory tested according to international and MINDER improved standard.
- Easy to use durable 6-ways multiport valve fitted with angle adjustable union to prevent pipe breakage during handling.
- Large pressure sand / water drain for rapid winterizing or servicing.
- Materials used are dependable and suitable for all-weather performance.
- Dual layers fibreglass inner shell with UV resistant bobbin wound reinforced fibreglass surface allows the filter to work under direct sunlight.
- 5-10 years life-time.

## Warranty

|             |        |
|-------------|--------|
| Fittings    | 1 year |
| Filter Tank | 1 year |

## Operating Limits

| Model                     | 2.5bar |
|---------------------------|--------|
| Maximum water temperature | 43 °C  |
| Operating Pressure        | 2.5bar |
| Maximum Pressure          | 4.0bar |

## Optional Components

- Internal Sight glass
- Filter Clean™ - Chemical Tablet Feeder.
- Vinyl-ester internal coating

# MH SERIES

## TOP MOUNTED DEEP BED FILTER

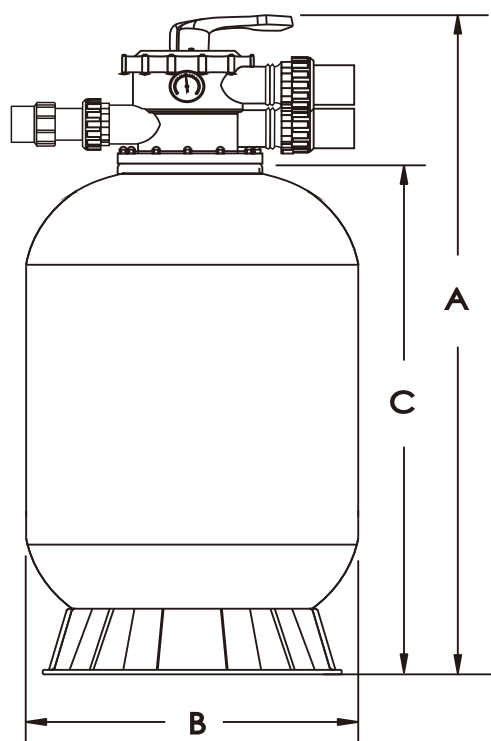


### Specification

| MODEL                                            | CODE   | MULTIPORT VALVE UNION SIZE |        | TANK Ø | FILTRATION AREA | DESIGNED VELOCITY | MAX FLOW RATE |     | MEDIA BED DEPTH | SILICA SAND (kg) |
|--------------------------------------------------|--------|----------------------------|--------|--------|-----------------|-------------------|---------------|-----|-----------------|------------------|
|                                                  | 2.5bar | IMPERIAL                   | METRIC | mm     | m²              | m³/h/m²           | m³/h          | lpm | mm              | 1-2mm            |
| V1.5 multiport valve with union size 1.5" / 50mm |        |                            |        |        |                 |                   |               |     |                 |                  |
| MH16                                             | 71628  | 1.5"                       | 50mm   | 400    | 0.13            | 48                | 6             | 105 | 700             | 53               |
| MH18                                             | 71629  | 1.5"                       | 50mm   | 450    | 0.16            |                   | 8             | 133 | 700             | 63               |
| MH21                                             | 71630  | 1.5"                       | 50mm   | 550    | 0.22            |                   | 12            | 192 | 800             | 125              |
| MH25                                             | 71631  | 1.5"                       | 50mm   | 650    | 0.30            |                   | 16            | 270 | 800             | 230              |
| MH28                                             | 71632  | 1.5"                       | 50mm   | 700    | 0.38            |                   | 19            | 320 | 850             | 268              |
| V2.0 multiport valve with union size 2.0" / 63mm |        |                            |        |        |                 |                   |               |     |                 |                  |
| MH28B                                            | 71633  | 2.0"                       | 63mm   | 700    | 0.38            | 48                | 20            | 333 | 850             | 268              |
| MH32                                             | 71634  | 2.0"                       | 63mm   | 800    | 0.50            |                   | 25            | 420 | 850             | 350              |
| MH36                                             | 71635  | 2.0"                       | 63mm   | 900    | 0.64            |                   | 30            | 500 | 850             | 500              |
| MH40                                             | 71636  | 2.0"                       | 63mm   | 1000   | 0.79            |                   | 33            | 550 | 870             | 750              |
| MH48                                             | 71638  | 2.0"                       | 63mm   | 1200   | 1.13            |                   | 42            | 700 | 920             | 1300             |

### Dimensions

| MODEL                                            | A    | B    | C    |
|--------------------------------------------------|------|------|------|
| V1.5 multiport valve with union size 1.5" / 50mm |      |      |      |
| MH16                                             | 1130 | 400  | 900  |
| MH18                                             | 1130 | 450  | 900  |
| MH21                                             | 1130 | 550  | 900  |
| MH25                                             | 1310 | 650  | 1080 |
| MH28                                             | 1380 | 700  | 1150 |
| V2.0 multiport valve with union size 2.0" / 63mm |      |      |      |
| MH28B                                            | 1420 | 700  | 1150 |
| MH32                                             | 1420 | 800  | 1150 |
| MH36                                             | 1500 | 900  | 1150 |
| MH40                                             | 1700 | 1000 | 1350 |
| MH48                                             | 1800 | 1200 | 1450 |







**MSH Series** filter is designed and built with higher media bed depth requirement for an improved filtration performance. With MINDER's innovative cross-winding bobbin wound technology, the filter tank is greatly improved for long life. The MSH filter comes with side-mounted multiport valve with union size 1.5" or 2".



## Features & Advantages

- 100% factory tested according to international and MINDER improved standard.
- Easy to use durable 6-ways multiport valve fitted with angle adjustable union to prevent pipe breakage during handling.
- Transparent cover allows easy inspection of the sand bed.
- Top diffuser ensure even distribution of water over the top of the sand bed.
- Automatic air release valve enables automatic release of trapped air during filter operation or negative pressure during water drain.
- Materials used are dependable and suitable for all-weather performance.

## Warranty

|             |        |
|-------------|--------|
| Fittings    | 1 year |
| Filter Tank | 1 year |

## Operating Limits

| Model                     | 2.5bar |
|---------------------------|--------|
| Maximum water temperature | 43 °C  |
| Operating Pressure        | 2.5bar |
| Maximum Pressure          | 4.0bar |

## Optional Components

- The advanced model (4.0 bar) is only compatible with pipe fittings (with an additional winding layer)
- Vinyl-ester internal coating
- Nozzle collection system

# MSH SERIES

## SIDE MOUNTED DEEP BED FILTER

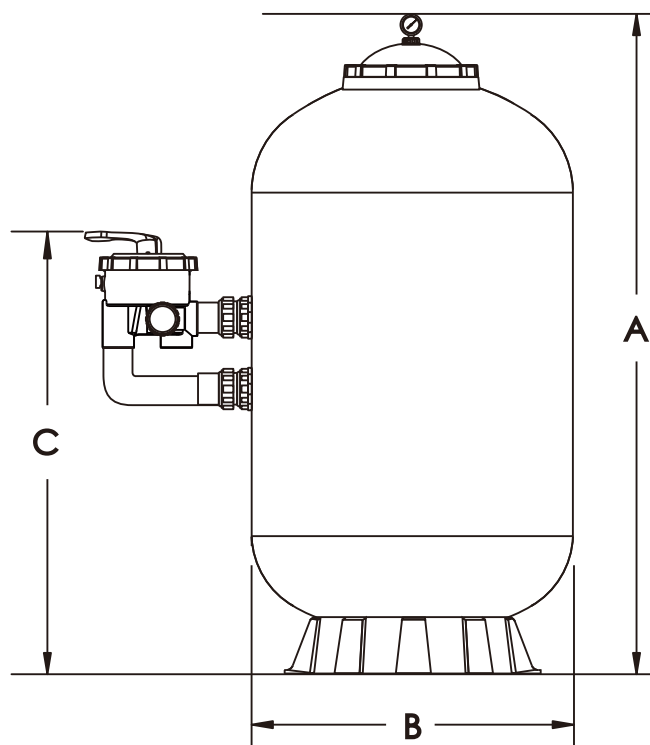


### Specification

| MODEL                                             | CODE   | MULTIPORT VALVE UNION SIZE |        | TANK Ø | FILTRATION AREA | DESIGNED VELOCITY | MAX FLOW RATE |     | MEDIA BED DEPTH | SILICA SAND (kg) |
|---------------------------------------------------|--------|----------------------------|--------|--------|-----------------|-------------------|---------------|-----|-----------------|------------------|
|                                                   | 2.5bar | IMPERIAL                   | METRIC | mm     | m²              | m³/h/m²           | m³/h          | lpm | mm              | 1-2mm            |
| VS1.5 multiport valve with union size 1.5" / 50mm |        |                            |        |        |                 |                   |               |     |                 |                  |
| MSH21                                             | 71640  | 1.5"                       | 50mm   | 550    | 0.22            | 48                | 12            | 192 | 800             | 125              |
| MSH25                                             | 71641  |                            |        | 650    | 0.30            |                   | 16            | 270 | 800             | 230              |
| MSH28                                             | 71642  |                            |        | 700    | 0.38            |                   | 19            | 320 | 850             | 268              |
| VS2.0 multiport valve with union size 2.0" / 63mm |        |                            |        |        |                 |                   |               |     |                 |                  |
| MSH28B                                            | 71643  | 2.0"                       | 63mm   | 700    | 0.38            | 48                | 20            | 333 | 850             | 268              |
| MSH32                                             | 71644  |                            |        | 800    | 0.50            |                   | 25            | 420 | 850             | 350              |
| MSH36                                             | 71646  |                            |        | 900    | 0.64            |                   | 30            | 500 | 850             | 500              |
| MSH40                                             | 71648  |                            |        | 1000   | 0.79            |                   | 33            | 550 | 870             | 750              |
| MSH48                                             | 71652  |                            |        | 1200   | 1.13            |                   | 42            | 700 | 920             | 1300             |

### Dimensions

| MODEL                                             | A    | B    | C    |
|---------------------------------------------------|------|------|------|
| VS1.5 multiport valve with union size 1.5" / 50mm |      |      |      |
| MSH21                                             | 1000 | 550  | 500  |
| MSH25                                             | 1180 | 650  | 600  |
| MSH28                                             | 1250 | 700  | 750  |
| VS2.0 multiport valve with union size 2.0" / 63mm |      |      |      |
| MSH28B                                            | 1250 | 700  | 750  |
| MSH32                                             | 1250 | 800  | 800  |
| MSH36                                             | 1400 | 900  | 850  |
| MSH40                                             | 1500 | 1000 | 900  |
| MSH48                                             | 1800 | 1200 | 1050 |





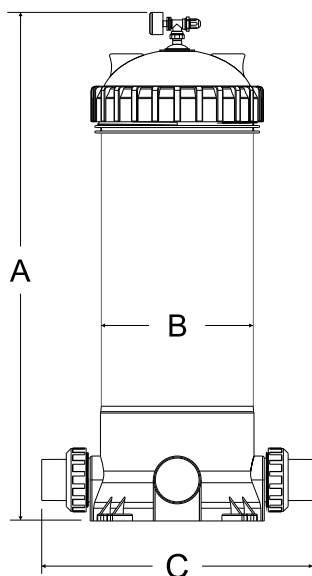
## Features & Advantages

- Max temperature: 45 °C
- Maximum Pressure: 2.8bar
- Automatic air bleed available
- Heavy duty and UV resistant tank

## Warranty

Filter Tank

1 year



## Specification & Dimensions

| CODE  | MODEL | SURFACE AREA | MAX FLOW | DIMENSION |     |     | IN / OUTLET | ELEMENT        |
|-------|-------|--------------|----------|-----------|-----|-----|-------------|----------------|
|       |       | sq           | lpm      | A         | B   | C   |             |                |
| 90657 | CM50  | 50ft         | 205      | 530       | 235 | 430 | 1.5"        | Single Element |
| 90658 | CM75  | 75ft         | 270      | 715       | 235 | 430 | 1.5"        |                |
| 90659 | CM100 | 100ft        | 340      | 895       | 235 | 430 | 1.5"        |                |
| 90660 | CM150 | 150ft        | 450      | 1065      | 235 | 430 | 1.5"        |                |
| 90661 | CM175 | 175ft        | 540      | 1255      | 235 | 430 | 1.5"        |                |
| 90662 | CM225 | 225ft        | 670      | 1435      | 235 | 430 | 1.5"        | Dual Element   |





## Features & Advantages

- Excellent for mechanical and bio-filtration purpose.
- Works well for natural swimming pool, fish pond, aquarium and aquaculture.
- Able to attach air blower for high efficient back-washing.
- Comes with 6 ways multiport valve with laser engraved label, angle adjustable union and transparent lid.

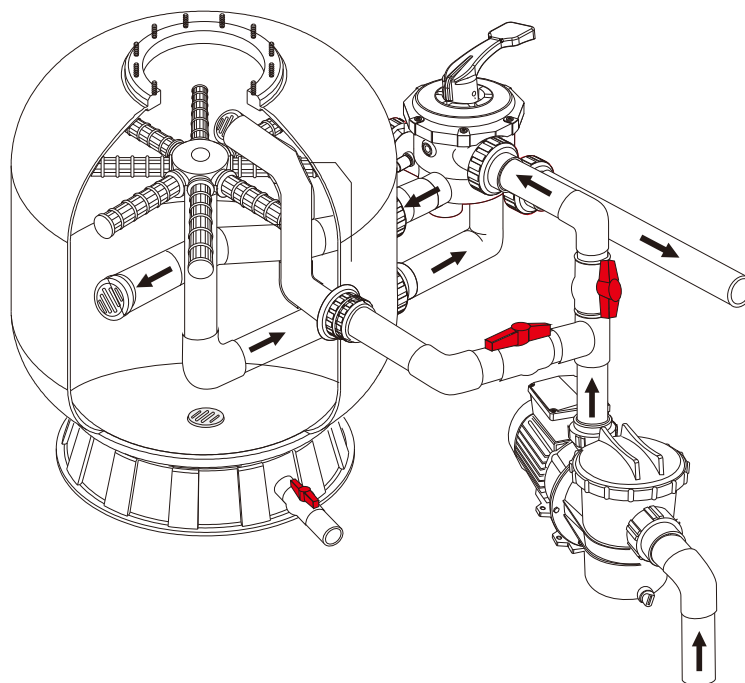
**The bead filter** holds bio media which acts as mechanical filtration by entrapping dirt particles. Furthermore, the bead media houses the nitrifying bacteria and is the primary site where biological nitrification occurs. Nitrifying bacteria process dissolved nitrogenous waste products excreted by the aquatic organisms being cultured. For natural swimming pool, a specific bacteria can be housed on bio media for filtration and sanitation of natural pool.

## Operating Limits

| Model                     | 2.5bar |
|---------------------------|--------|
| Maximum water temperature | 43 °C  |
| Operating Pressure        | 2.5bar |
| Maximum Pressure          | 4.0bar |

## Warranty

|             |        |
|-------------|--------|
| Fittings    | 1 year |
| Filter Tank | 1 year |



# UF-MS SERIES BEAD FILTER

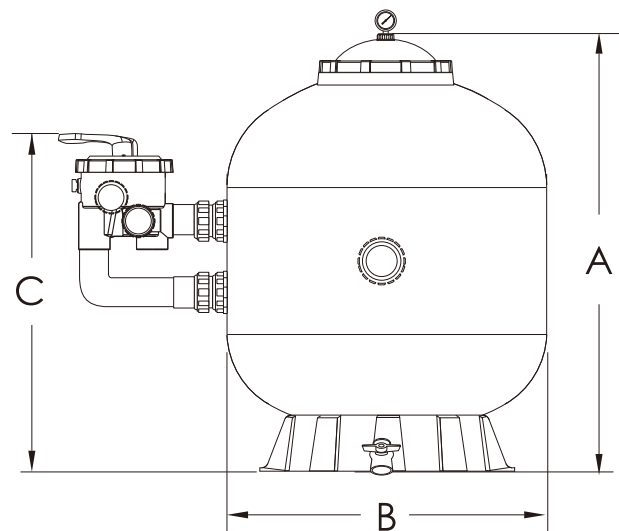


## Specification

| MODEL                                             | CODE   | MULTIPORT VALVE UNION SIZE |        | TANK Ø | FILTRATION AREA | DESIGNED VELOCITY | MAX FLOW RATE |     | FORM BEAD |
|---------------------------------------------------|--------|----------------------------|--------|--------|-----------------|-------------------|---------------|-----|-----------|
|                                                   | 2.5bar | IMPERIAL                   | METRIC | mm     | m²              | m³/h/m²           | m³/h          | lpm | kg        |
| VS1.5 multiport valve with union size 1.5" / 50mm |        |                            |        |        |                 |                   |               |     |           |
| UF-MS18                                           | 70077  | 1.5"                       | 50mm   | 450    | 0.16            | 50                | 8             | 133 | 1         |
| UF-MS21                                           | 70078  |                            |        | 550    | 0.22            |                   | 12            | 192 | 1.2       |
| UF-MS25                                           | 70079  |                            |        | 650    | 0.30            |                   | 16            | 270 | 1.8       |
| UF-MS28                                           | 70080  |                            |        | 700    | 0.38            |                   | 19            | 320 | 2.5       |
| VS2.0 multiport valve with union size 2.0" / 63mm |        |                            |        |        |                 |                   |               |     |           |
| UF-MS28B                                          | 71048  | 2.0"                       | 63mm   | 700    | 0.38            | 50                | 20            | 333 | 2.5       |
| UF-MS30                                           | 70081  |                            |        | 750    | 0.44            |                   | 23            | 390 | 4         |
| UF-MS32                                           | 70082  |                            |        | 800    | 0.50            |                   | 25            | 420 | 5         |
| UF-MS36                                           | 70083  |                            |        | 900    | 0.64            |                   | 30            | 500 | 7.5       |
| UF-MS40                                           | 70084  |                            |        | 1000   | 0.79            |                   | 40            | 667 | 10        |
| UF-MS48                                           | 71057  |                            |        | 1200   | 1.13            |                   | 57            | 950 | 12        |
| VS2.5 multiport valve with union size 2.5" / 75mm |        |                            |        |        |                 |                   |               |     |           |
| UF-MS36B                                          | 71761  | 2.5"                       | 75mm   | 900    | 0.64            | 50                | 32            | 533 | 7.5       |
| UF-MS48B                                          | 71762  |                            |        | 1200   | 1.13            |                   | 59            | 983 | 12        |

## Dimensions

| MODEL                                             | A    | B    | C   |
|---------------------------------------------------|------|------|-----|
| VS1.5 multiport valve with union size 1.5" / 50mm |      |      |     |
| UF-MS18                                           | 670  | 450  | 590 |
| UF-MS21                                           | 710  | 550  | 630 |
| UF-MS25                                           | 830  | 650  | 660 |
| UF-MS28                                           | 895  | 700  | 690 |
| VS2.0 multiport valve with union size 2.0" / 63mm |      |      |     |
| UF-MS28B                                          | 895  | 700  | 750 |
| UF-MS30                                           | 1000 | 750  | 800 |
| UF-MS32                                           | 1030 | 800  | 900 |
| UF-MS36                                           | 1130 | 900  | 930 |
| UF-MS40                                           | 1230 | 1000 | 930 |
| UF-MS48                                           | 1310 | 1200 | 990 |
| VS2.5 multiport valve with union size 2.5" / 75mm |      |      |     |
| UF-MS36B                                          | 1130 | 900  | 930 |
| UF-MS48B                                          | 1310 | 1200 | 990 |







## MULTIPOINT VALVES



## Features & Advantages

- 100% water pressure, performance and leakage tested.
- Unions sizes in Metric and Imperial standard available
- SS316 spring & screw, non-corrosive in saltwater.
- Designed, manufactured and quality controlled by MINDER.
- Sleek & robust design for long lasting usage.
- Laser engraved label marking to prevent fading or peeling off.

**MINDER SUPER FLOW** Multiport valves are designed for maximum flow, quietness and durability. It is engineered and constantly improved to withstand working pressure for up to 400kpa (4.0 bar) which is suitable for domestic and commercial application. Both top and side mounted and different sizes configuration are available.

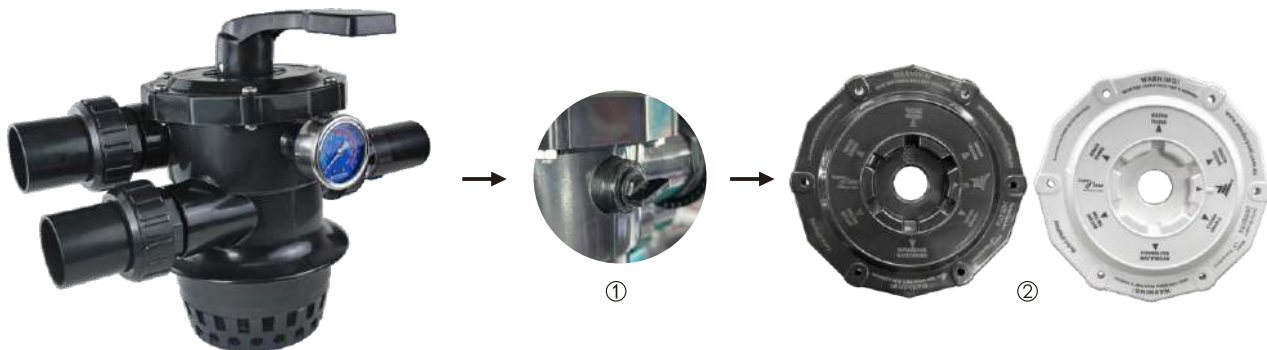
## Operating Limits

| Model                     |        |
|---------------------------|--------|
| Maximum water temperature | 43 °C  |
| Maximum Pressure          | 4.0bar |

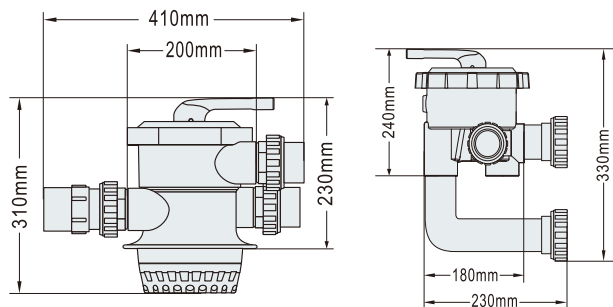
## Warranty

|                 |        |
|-----------------|--------|
| Multiport Valve | 1 year |
|-----------------|--------|

## 1.5" TOP & SIDE - MOUNT 6-ways Multiport Valve



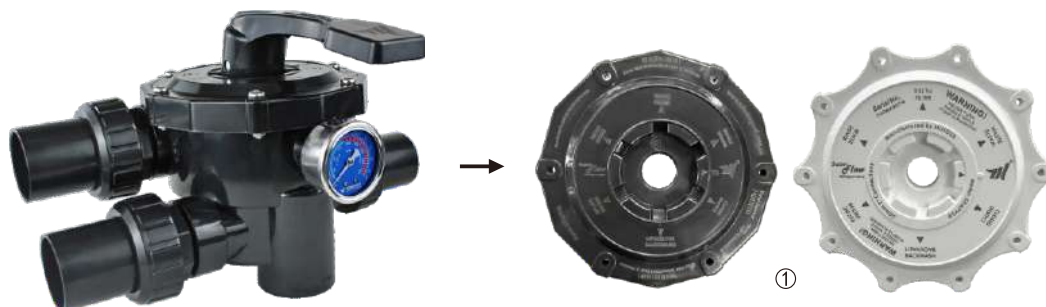
- 1) Dual-pressure gauge port for flexible installation ► **Patented**
- 2) Available in White or Black color
- 3) Standard Inclusion: Angle-adjustable unions; In-line sight glass on waste Output; Dual Oil Pressure Gauge
- 4) Optional traditional Unions available upon request



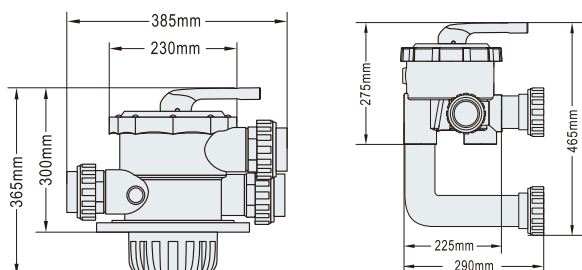
| MODEL | CODE  | COLOUR | MULTIPORT VALVE UNION SIZE |        |
|-------|-------|--------|----------------------------|--------|
|       |       |        | IMPERIAL                   | METRIC |
| V1.5  | 70001 | WHITE  | 1.5"                       | 50mm   |
| V1.5  | 70003 | BLACK  | 1.5"                       | 50mm   |
| VS1.5 | 70005 | WHITE  | 1.5"                       | 50mm   |
| VS1.5 | 70007 | BLACK  | 1.5"                       | 50mm   |



## 2.0" TOP & SIDE - MOUNT 6-ways Multiport Valve



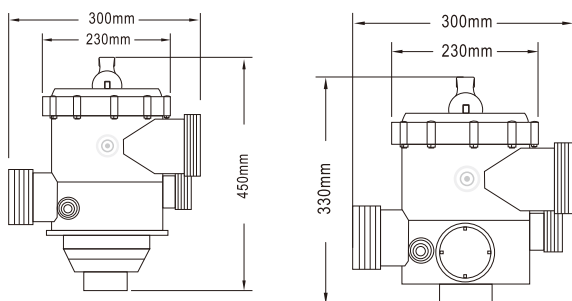
- 1) Available in White or Black color
- 2) Standard Inclusion: Angle-adjustable unions; Cylinder type sight glass; MINDER Dual Oil Pressure Gauge
- 3) Optional traditional Unions available upon request



| MODEL | CODE  | COLOUR | MULTIPOINT VALVE UNION SIZE |        |
|-------|-------|--------|-----------------------------|--------|
|       |       |        | IMPERIAL                    | METRIC |
| V2.0  | 70002 | WHITE  | 2.0"                        | 63mm   |
| V2.0  | 70004 | BLACK  | 2.0"                        | 63mm   |
| VS2.0 | 70006 | WHITE  | 2.0"                        | 63mm   |
| VS2.0 | 70008 | BLACK  | 2.0"                        | 63mm   |

## 2.5" TOP & SIDE - MOUNT 6-ways Multiport Valve

- 1) Available in White or Black color
- 2) Standard Inclusion:
  - Traditional unions;
  - Cylinder type sight glass;
  - MINDER Dual Oil Pressure Gauge



| MODEL | CODE  | COLOUR | MULTIPOINT VALVE UNION SIZE |        |
|-------|-------|--------|-----------------------------|--------|
|       |       |        | IMPERIAL                    | METRIC |
| V2.5  | 71187 | BLACK  | 2.5"                        | 75mm   |
| VS2.5 | 70923 | BLACK  | 2.5"                        | 75mm   |

## 6-Ways Multiport Valve Position



MINDER's Innovative Multiport valve are designed and built with top quality in mind. Our multiport valve is 100% water pressure tested up to 6 bar pressure to ensure no water leakage. Furthermore, we do cycle test, stress test on rotor etc. To make sure the valve has long life.

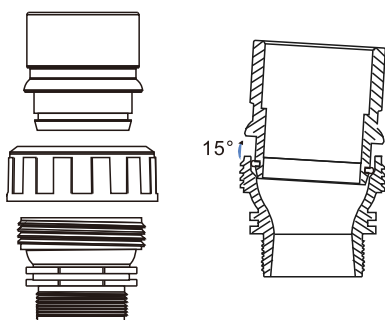
- **FILTER:** Normal filtration and vacuuming
- **WASTE:** By-passes filter, used for vacuuming waste or lowering water level in pool
- **CLOSED:** Shuts off all flow to filter or pool
- **RINSE:** Use after backwash to flush dirt from valve
- **RECIRCULATE:** By-passes filter to circulate water to pool
- **BACKWASH:** Cleaning filter by reversing the flow

## Angle Adjustable Union (New Feature)



► Patented

MINDER's unique design **Angle-adjustable Union** allows up to 15 degree angle adjustable capability which will minimize the system vibration and provide installation flexibility (prevent user installation error). In turn, the product life span is increased.



| MODEL         | CODE  | COLOUR | UNION SIZE |
|---------------|-------|--------|------------|
|               |       |        | inch / mm  |
| 1.5" Metric   | 90511 | WHITE  | 50mm       |
| 1.5" Imperial | 90512 | WHITE  | 1.5"       |
| 1.5" Metric   | 90513 | BLACK  | 50mm       |
| 1.5" Imperial | 90514 | BLACK  | 1.5"       |
| 2.0" Metric   | 90515 | WHITE  | 63mm       |
| 2.0" Imperial | 90516 | WHITE  | 2.0"       |
| 2.0" Metric   | 90517 | BLACK  | 63mm       |
| 2.0" Imperial | 90518 | BLACK  | 2.0"       |



# SANITATION SYSTEM





## Features & Advantages

- User friendly operation system and suitable for non-professional.
- Equipped with industrial pH, Free Chlorine and temperature probe. It allows accurate reading under high velocity.
- 7" IPS display with LED backlit
- Powered by SAMSUNG Chip sets for responsive operation.
- Pair capability with dosing pumps and / or MINDER Chlor chlorine generator.

## Warranty

Hydrosmart

1 year

**HYDROSMART Water Management System** employs the latest water analysis technologies and applies them to the pool industry. The system is equipped with a 7" touch screen that display real-time pH, Free Chlorine and Water Temperature. The system can determine and display whether the current reading is acceptable based on the pool water quality regulation in your country. The system will automatically activate the dosing system when the reading level is out of the regulated range.

## Optional Components



**Dosing Pump**



**MINDER Chlor Chlorine Generator**

## Operating Limits

|                     |                    |
|---------------------|--------------------|
| Voltage (Frequency) | 220-240V (50/60Hz) |
| Power               | 45.5W              |
| pH                  | 2-9                |
| Chlorinem           | 0-5.0 ppm          |
| Tempreture          | 4-50 °C            |



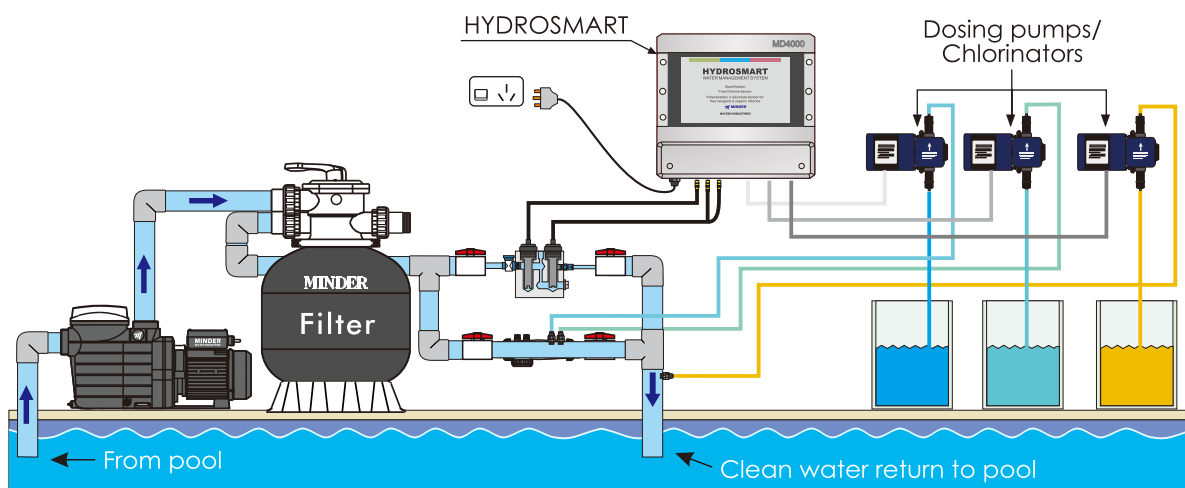
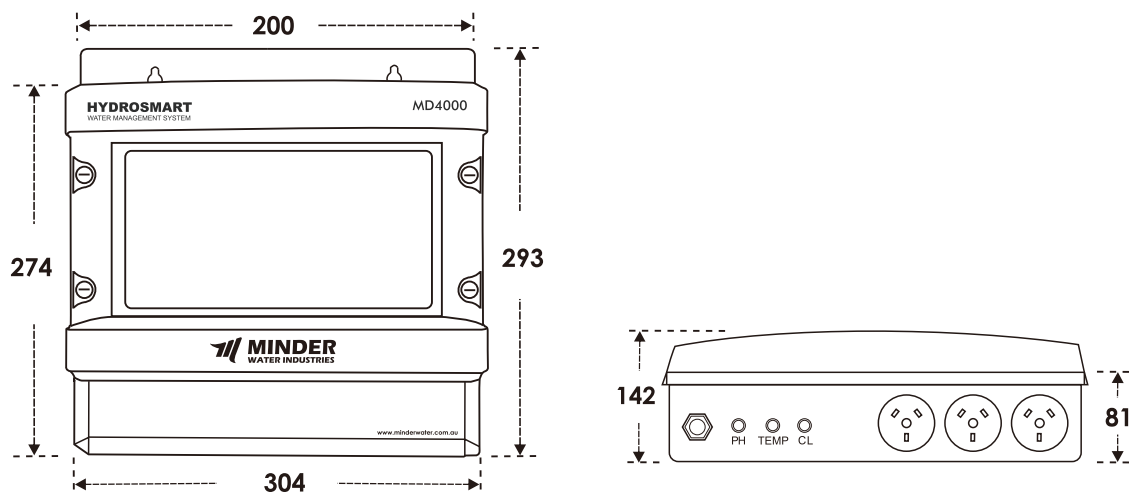
### Free Chlorine Sensor

- Potentiostatic 3-electrode sensor for free inorganic & organic chlorine.
- Measurement variable: HOCl, no significant cross sensitive to combined Chlorine (Chloramines)
- Measuring range: 0-20 ppm
- Measuring accuracy: 2% or +/- 10ppb HOCl
- Temperature range 0-60 °C
- ABS body
- Sensitive xenon membrane
- Measuring principle, technology: Amperometric, 2 electrodes, membrane-covered

### pH Sensor

- pH glass electrode
- ABS body
- pH range 0-14
- zero potential 7.0 +/- 0.3
- Temperature 0-60 °C
- Pressure range 0-3 bar
- Fixed sensor protector
- Waterproof rating: IP68

### Dimensions (mm)





## Features & Advantages

- Auto Clean Technology with self-cleaning electrolytic cell.
- High Efficiency toroidal transformer.
- Over temperature and over current protection.
- External reset button available.
- LED light indicator for reverse polarity and warning light for water fault.
- Low sale operation: 3500 to 4500ppm.
- Technically advanced digital micro processing PCB.
- Premium grade long life electrolytic cell.
- Energy efficient low kW consumption.

## Warranty

MINDER chlor

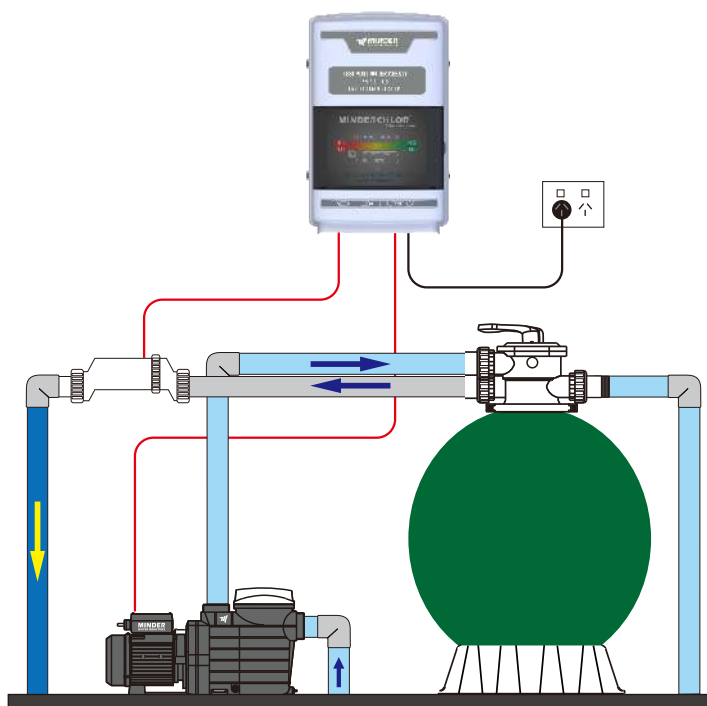
1 year

**MINDER Chlor Chlorine Generator** is engineered for reliability and easy operation. Electrolytic chlorine generation is the most effective and convenient way to maintain clean pool water. It has the same sanitation performance as manual chlorine dosing without the need to buy, transport and store expensive chlorine compounds.



## Ideal Operating Condition

|                  |                 |
|------------------|-----------------|
| pH               | 7.2 - 7.4       |
| Total Alkalinity | 90ppm - 150ppm  |
| Cyanuric Acid    | 40ppm - 65ppm   |
| Salt             | 4000 ppm        |
| Chlorine         | 1.5ppm - 2.0ppm |

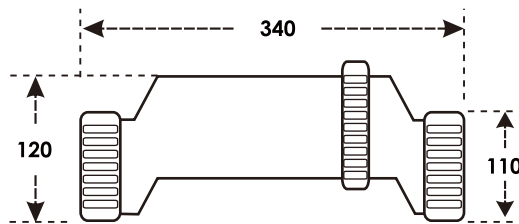
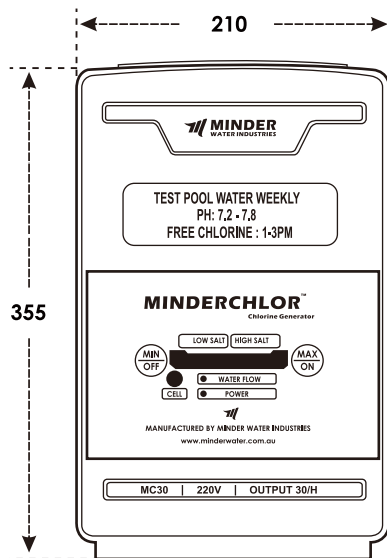




### Specification

| MODEL | CODE  | VOLTAGE             | POWER | SALINITY    | MAX CHLORINE OUTPUT |      | CONNECTION SIZE | MAX POOL SIZE | WATERPROOF GRADE |
|-------|-------|---------------------|-------|-------------|---------------------|------|-----------------|---------------|------------------|
|       |       |                     | w     |             | g/h                 | ml/h |                 | m³            |                  |
| MC20  | 90154 | 220-240V<br>50/60Hz | 200   | 3500 - 4500 | 20                  | 200  | 1.5" - 2.0"     | 65            | IP24             |
| MC25  | 90155 |                     | 200   |             | 25                  | 250  |                 | 80            |                  |
| MC30  | 90156 |                     | 350   |             | 30                  | 300  |                 | 100           |                  |

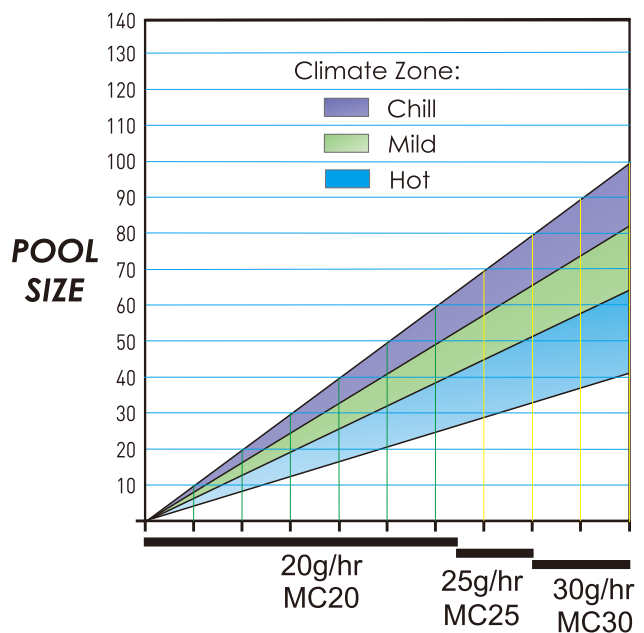
### Dimensions (mm)



### Choose your MINDER chlor™

1. Determine your pool size (in thousand litres)
2. Move horizontally until you reach your climate zone
3. Do down to determine the amount of chlorine you require
4. If you budget allows, add extra 10-20%
5. In commercial installations, allow at least 100% extra

Chlorinator Sizing Chart





## Features & Advantages

- Permanent lubricated gear motor for quiet and durable operation.
- Output up to 389GPD.
- Double ball ceramic check valve.
- Adjustable output at 27:1.
- Side mounted mechanical flow control switch.
- Enclosure Class is IP20.

## Warranty

Dosing Pump

1 year

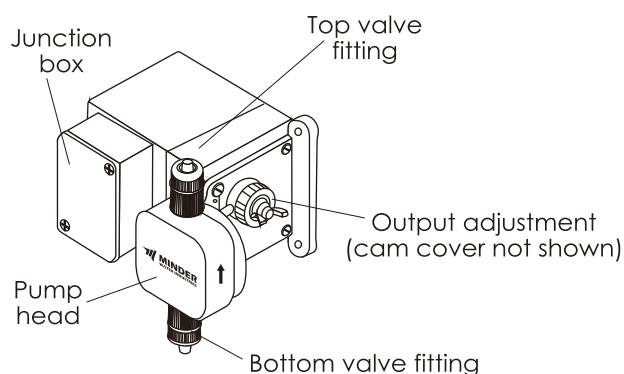
**DOSING STAR™** dosing pump is designed to dose liquid chemical to the swimming pool in a safe and controllable way. It can help avoiding direct contact with the chlorine tablet.

## Application:

Domestic pools, Commercial pool & Water treatment.

## Operating Limits

|                             |                  |
|-----------------------------|------------------|
| Voltage                     | 220V             |
| Amperage                    | 0.378A           |
| Maximum torque              | 23.47 N.m        |
| Input power                 | 45.5W            |
| Maximum fluid temperature   | 50° C            |
| Maximum ambient temperature | 43° C            |
| Maximum viscosity           | 1,000 centipoise |
| Maximum suction lift        | 3m               |



## Specification

| MODEL | CODE   | MAXIMUM OUTPUT AT 0 psi |      | DOSING FREQUENCY | MAXIMUM PRESSURE |
|-------|--------|-------------------------|------|------------------|------------------|
|       |        | gal/h                   | l/h  |                  |                  |
| 70142 | M614P  | 1                       | 3.8  | 14               | 125              |
| 70143 | M630P  | 2.4                     | 9.3  | 30               | 125              |
| 70144 | M645P  | 3.8                     | 15   | 45               | 80               |
| 70145 | M660P  | 4.6                     | 17.4 | 60               | 60               |
| 70146 | M6125P | 9.9                     | 37.0 | 125              | 30               |
| 91039 | M6250P | 16.2                    | 61   | 250              | 10               |



**Replacement Kit**  
(Product code: 90583)

## C500 CHEMICAL FEEDER

### EXTRA LARGE CAPACITY

Up to 10kg of capacity, suitable for commercial applications

### 1.5" CONNECTIONS

Suitable for in-line or off-line installations

### CHEMICAL RESISTANCE MATERIAL

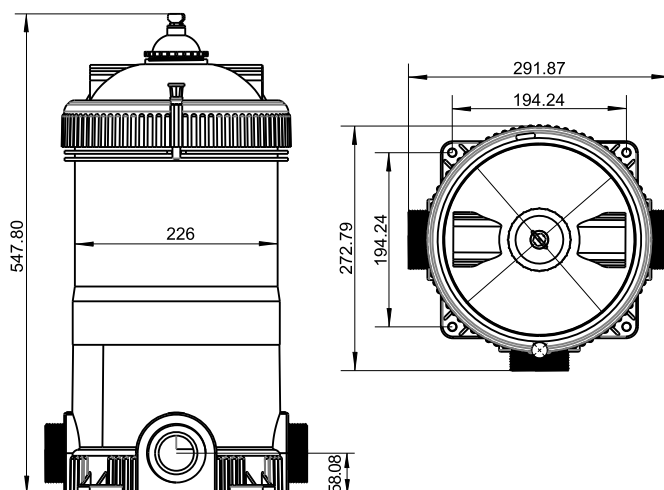
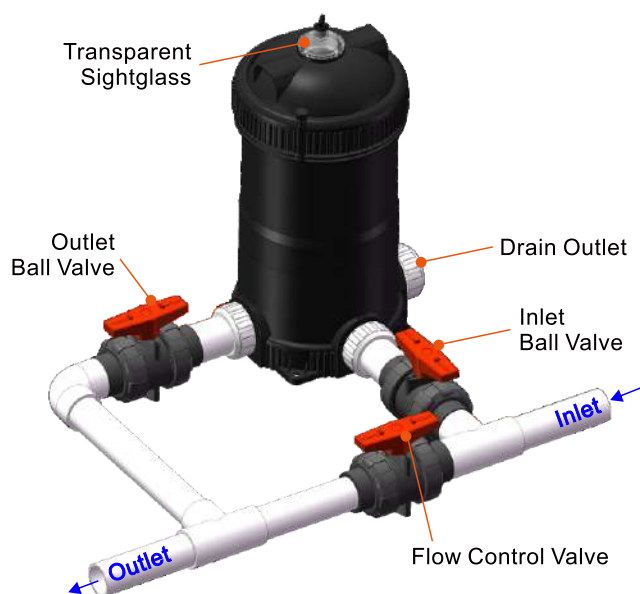
Manufactured from engineered plastic

### SIGHT GLASS

Easy observation of chlorine level

### LARGE OPENING

Refill chlorine within 10 seconds, no tool required



## Disinfecting Chemicals

SS-Chlor 50/20



SS-Chlor 90/20



SS-Chlor 90/200



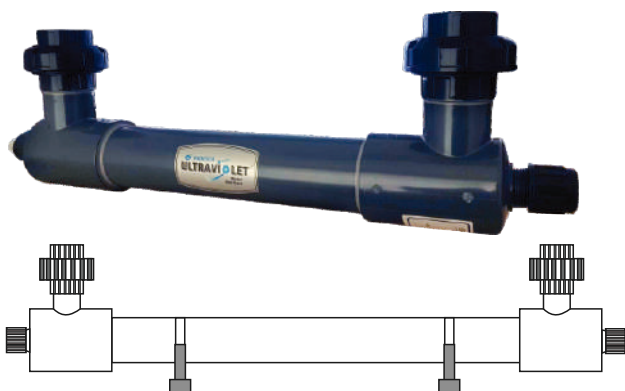
Toilet duck bleach drop in



## Specification

| MODEL | CODE  |
|-------|-------|
| C500  | 91056 |





## Features & Advantages

- Able to disinfect bacteria and other microorganism at 99.9% efficiency.
- Environmental friendly.
- Reduce chlorine consumption at 87%.
- Cost efficient PVC casing for better affordability of UV-lamp.

## Warranty

UV lamp

1 year

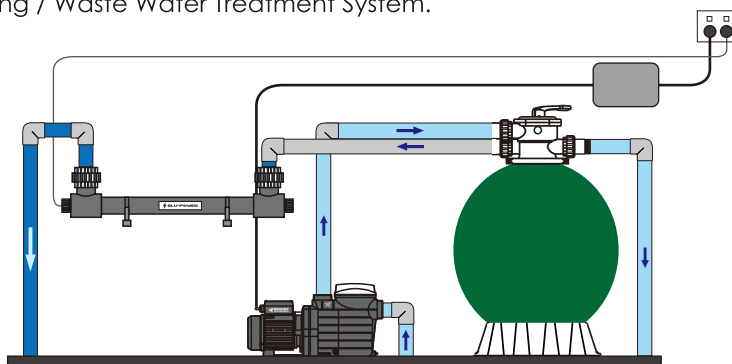
**MINDER BP series UV lamp** kills the bacteria and other microorganism in the water. It is one of the safest disinfection system for swimming pool. UV lamp is made from corrosion resistant engineered PVC, which is suitable for swimming pool installation. The high quality UV lamp last for 9,000 hours, with 95 efficiency that kills up to 99% bacteria. The product insulation class is IP68, which is durable and reliable.

## Application:

Domestic pools, Commercial pools, Ponds, Drinking / Waste Water Treatment System.

## Operating Limits

|                  |               |
|------------------|---------------|
| Maximum pressure | 300kpa (3bar) |
| Lamp life        | 9000 hours    |
| Voltage          | 220-240V      |
| Frequency        | 50/60 Hz      |
| Enclosure class  | 68            |



## Specification

| MODEL | CODE | MAX FLOW RATE | POWER OUTPUT | CONNECTION SIZE | PIPE DIAMETER | LENGTH |
|-------|------|---------------|--------------|-----------------|---------------|--------|
|       |      | m³/h          | W            | INCH            | mm            | mm     |
| 71063 | BP5  | 5.7           | 33           | 2.0             | 3             | 786    |
| 71064 | BP10 | 10.1          | 65           |                 | 3             | 786    |
| 71065 | BP15 | 15            | 85           |                 | 3             | 946    |
| 71066 | BP20 | 18.5          | 85           |                 | 4             | 946    |
| 71067 | BP25 | 23.7          | 120          |                 | 4             | 1241   |
| 71068 | BP35 | 37            | 120          |                 | 4             | 988    |
| 71069 | BP45 | 46            | 120          |                 | 4             | 1288   |
| 71090 | BP55 | 55            | 125          |                 | 8             | 988    |
| 71091 | BP90 | 88            | 225          |                 | 8             | 1288   |



## Features & Advantages

- Counter current head with LED light.
- On/Off switch on the head for easy switching underwater.
- Adjustable valve to control bubble effect.
- Adjustable water flow.

## Warranty

|             |        |
|-------------|--------|
| Current jet | 1 year |
|-------------|--------|

## Application

Current creation for swimming in small pool, underwater message for spa.

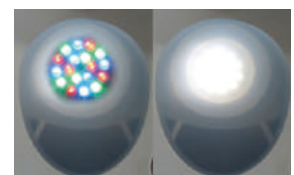


Durable ABS structure



Adjustable Nozzle

Under water On/Off Switch



RGB colour & White Water Light

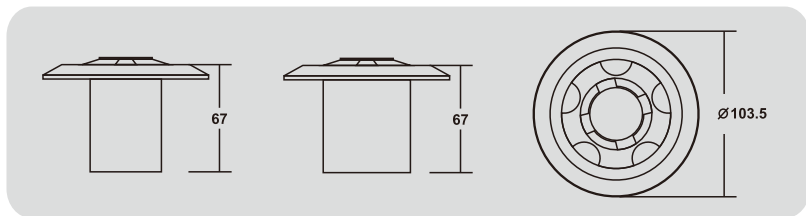




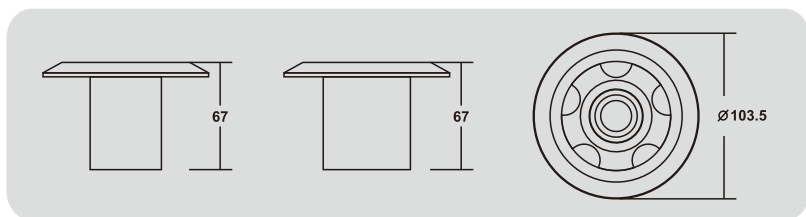
WHITE FITTINGS



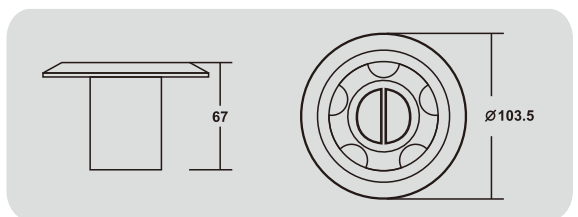
# WHITE FITTINGS



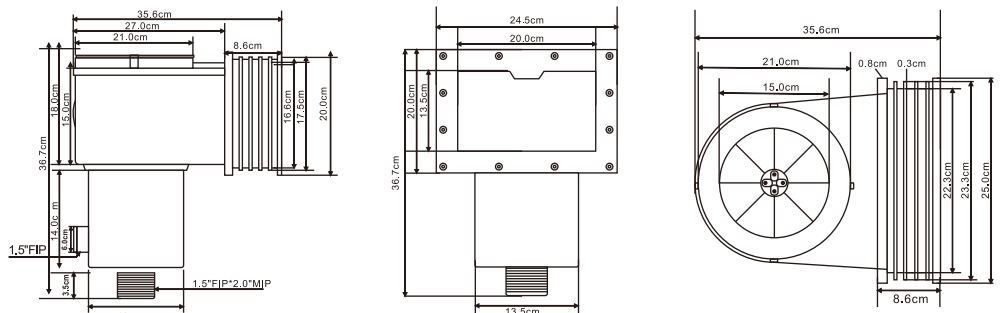
| MODEL | CODE  | MATERIAL | COLOR | CONNECTION SIZE |
|-------|-------|----------|-------|-----------------|
| 81087 | 81087 | ABS      | White | 1.5" Metric     |
| 81088 | 81088 | ABS      | White | 2.0" Metric     |
| 81093 | 81093 | ABS      | White | 1.5" Imperial   |
| 81094 | 81094 | ABS      | White | 2.0" Imperial   |



| MODEL | CODE  | MATERIAL | COLOR | CONNECTION SIZE |
|-------|-------|----------|-------|-----------------|
| 81091 | 81091 | ABS      | White | 1.5" Metric     |
| 81097 | 81097 | ABS      | White | 2.0" Metric     |
| 81098 | 81098 | ABS      | White | 1.5" Imperial   |
| 81099 | 81099 | ABS      | White | 2.0" Imperial   |



| MODEL | CODE  | MATERIAL | COLOR | CONNECTION SIZE |
|-------|-------|----------|-------|-----------------|
| 81100 | 81100 | ABS      | White | 1.5" Metric     |
| 81101 | 81101 | ABS      | White | 1.5" Imperial   |

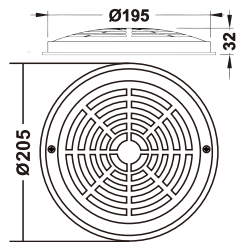


| MODEL  | CODE  | MATERIAL | COLOR | CONNECTION SIZE |           |
|--------|-------|----------|-------|-----------------|-----------|
|        |       |          |       | INNER DIA       | OUTER DIA |
| MD0040 | 90602 | ABS      | White | 1.5"            | 2"        |

# WHITE FITTINGS



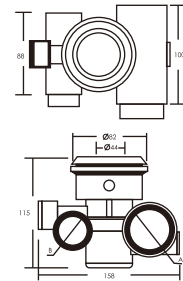
Suction Fitting



| MODEL   | CODE  | MATERIAL | COLOR |
|---------|-------|----------|-------|
| HT-1030 | 81012 | ABS      | White |



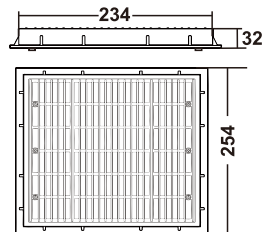
Air & Water Tee Body



| MODEL  | CODE  | MATERIAL | COLOR |
|--------|-------|----------|-------|
| MD0031 | 80090 | ABS      | White |



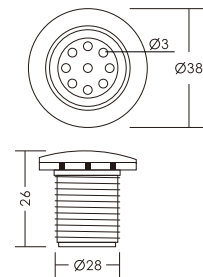
Square Main Drain(S)



| MODEL   | CODE  | MATERIAL | COLOR |
|---------|-------|----------|-------|
| HT-1031 | 81013 | ABS      | White |



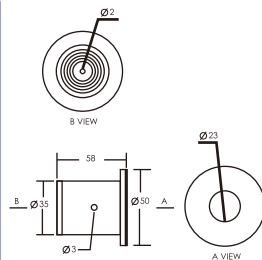
Face (Air Jet) With Gasket



| MODEL  | CODE  | MATERIAL | COLOR |
|--------|-------|----------|-------|
| MD2211 | 80050 | ABS      | White |



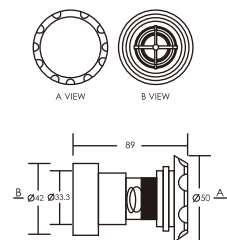
Air Button



| MODEL  | CODE  | MATERIAL | COLOR |
|--------|-------|----------|-------|
| MD1844 | 60938 | ABS      | White |



Air Control



| MODEL  | CODE  | MATERIAL | COLOR |
|--------|-------|----------|-------|
| MD1834 | 80047 | ABS      | White |

Standard leaf skimmer



| MODEL | CODE  |
|-------|-------|
| CM026 | 80004 |

Deep bag skimmer



| MODEL | CODE  |
|-------|-------|
| CM034 | 80009 |

Standard curved wall brush in PVC  
(18" - 45cm)



| MODEL | CODE  |
|-------|-------|
| CM036 | 80010 |

Deluxe liner vacuum with side brush  
(Cast iron weighted)



| MODEL  | CODE  |
|--------|-------|
| CMS023 | 80001 |

Flexible vacuum head with side  
Brush for in-ground pool



| MODEL  | CODE  |
|--------|-------|
| CMS051 | 80014 |

Telescopic pole



| MODEL | CODE  | DESCRIPTION |
|-------|-------|-------------|
| CM132 | 80028 | 2 x 120cm   |
|       | 80029 | 2 x 180cm   |
|       | 80030 | 2 x 240cm   |
|       | 80031 | 2 x 350cm   |
|       | 80032 | 3 x 100cm   |

Basic PH & CL Test Kit



| MODEL | CODE  |
|-------|-------|
| CM029 | 80008 |



# Disclaimer Policy

The information contained within this catalogue and the functions offered are intended to provide information about products available for purchase from Minder Water Industries Pty. Ltd. All reasonable efforts have been made to ensure the accuracy of the information. However Minder cannot be held responsible for any errors or unexpected un-fulfilment of shipments. Minder does not warrant the accuracy and reserves the right to make changes to the catalogue and its function at any time without notice.

Except where otherwise noted or superseded by process of law, minder accepts no responsibility or liability for any losses or damages of any kind arising out of the use of this catalogue or any of OTS related function.

# Product Warranty

## **Lost or Damaged of Goods Policy**

Our responsibility for any shipment ceases when the carrier signs the Bill of Lading. Thoroughly inspect each shipment immediately upon arrival.

If cartons, packages, or crates are received in short or damaged condition, it is important that you notify the driver and insist on a notation of the loss or damage across the face of the delivery receipt; otherwise, no claim can be enforced against the carrier.

If concealed loss or damage is discovered, you must notify the carrier at once and request an inspection. It is also important that you do not discard the shipping carton or container. A concealed damage report must be made within fifteen (15) days of delivery of the shipment. If this is not done, the carrier will not entertain any claim for the loss. The carrier agent will make an inspection and usually will grant a concealed damage notation. If you give the carrier a clear receipt for the goods that have been damaged in transit, you do so at your own risk and expense.

We are willing to assist you in every possible manner to collect claims for loss or damage, but our willingness does not make us responsible for collection of claims or replacement of material.

## Warranty Coverage

If a defect occurs in any Minder product during the warranty period, Minder will at its discretion, repair the product or replace and install the defective part, free of charge provided that the defect results solely from poor workmanship or materials and subject to these terms and conditions. Customer will need to follow the below warranty claim process from Minder in order to obtain the benefit of this warranty. Minder is not, however, responsible under this warranty for any cost of shipping or transportation for the return of the products to Minder and the delivery of repaired or replacement product to customer. Minder shall not be liable for any loss of time, inconvenience, incidental expenses such as labour cost, phone calls, legal cost or material cost incurred in connection with the replacement or removal of the product, and any other consequential or incidental damage on persons or assets. Minder will not be responsible for any business profit loss due to operation stop and the non-conformity product. No indemnity or damages can be claimed on any account whatsoever.

# Warranty Period

All products sold by Minder are covered by a one year warranty. The exceptions to this are the products listed in the schedule (which also specifies relevant warranty periods). All warranty periods commence on the date of invoice.

| Product                         | Warranty Period                                |
|---------------------------------|------------------------------------------------|
| Filters                         | 1 Year (Valve : 1 year)                        |
| Pumps                           | 2 Years (O-ring, Gasket, Seal, motor - 1 year) |
| Underwater Lights               | 1 year ( Bulbs - 90 days)                      |
| Pool Ladders                    | 1 year                                         |
| Water Management System         | 1 year                                         |
| Chlorine Generator              | 1 year                                         |
| UV Lights                       | 1 year                                         |
| Fittings                        | 1 year                                         |
| Cleaning Equipment & All Others | 1 year                                         |

# Conditions of Warranty

This warranty only applies where:

1. The products requiring installation have been sold with installation included and have been installed by a licensed plumber, electrician, technician or a person supervised by one of these people, in accordance with any written installation instructions provided.
2. The products have been operated in accordance with written instructions supplied by Minder;
3. The products has been serviced and maintained regularly. (at least once a month)
4. Any pump has not been allowed to run dry or to run on electrical extension cord.
5. Any pool and spa equipment has been used in water with a temperature not exceeding 40 degrees Celsius and non-salt water (except mild saline water which are compatible with swimming pool salt water chlorination systems), unless otherwise stated by Minder in both the respective product labels and brochures that it is suitable for seawater applications.



# Exclusions

This warranty does not cover, and Minder will not be responsible for, any defect or damage caused or contributed to by:

- a) Installation or use of the product other than in accordance with Minder's written instructions, any statutory requirements and these terms and conditions;
- b) Use of the product for a purpose other than for which it was designed or sold;
- c) Abuse, misuse, corrosion, internal and external, or normal wear and tear;
- d) Any repairs or modifications whatsoever carried out by any person, other than a Minder authorized service dealer;
- e) Damage caused by careless handling, improper repackaging or shipping;
- f) Damage caused by failure to maintain water chemistry in conformity with the standards of the swimming pool industry for any length of time.
- g) Damage due to unauthorized product modifications or failure to use original replacement parts from Minder.
- h) Damage caused by negligence or failure to properly maintain products as specified in the Minder's written instruction.
- i) Damage caused by misapplication of electricity, natural calamities, or physical force.
- j) Damage caused by water freezing inside the product.
- k) Accidental damage, fire or other circumstances outside the control of Minder.

# Claim Process

Minder's Claim Process in 3 steps:-

1. Customer contacts Minder's salesperson and provides completed details of the claim which includes:
  - Description of the complaint/failure
  - Information about the failed/damaged products e.g. the product part number(s) and serial number(s)
  - Relevant photos/videos (good quality images/ videos)
2. Minder Quality Assurance Department will review the claim in accordance to the "Minder Warranty Policy" in the 2019 Minder Product Catalogue.
3. After investigation, Minder will inform the customer of the said claim and follow up with the customer accordingly.

Minder Water Industries reserves the final right to exercise all warranties in case of disputes.

## **Purchasing Terms and Conditions – MINDER WATER INDUSTRIES**

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prices</b>                       | All prices are in USD, except when otherwise specified (Other currency usage has to be agreed on the exchange rate). All prices are excluding VAT, value added tax. Price is Ex Works and all local taxes and charges are excluded. Freight is not included. For certain items there could be a packaging fee.                                                                                                                                                                                                                                                                      |
| <b>Terms of payment</b>             | MINDER standard payment term is 30% deposit payment and 70% balance payment before delivery. All orders are to be confirmed with at least 30% deposit payment if nothing else is agreed to. Date of dispatch is based on date of deposit. All items remain the property of MINDER until paid in full. We reserve the rights to demand return shipment of any unpaid items. Past due accounts are charged 2% per month.                                                                                                                                                              |
| <b>Delivery delay</b>               | Normal delivery delay, date for dispatch, for in-stock items is 1 week from firm order, taken into account certain backorders. Part shipments are possible if purchaser does not specify otherwise. Date of dispatch might be specified differently for all non-in-stock items, indicated in offer or communications.                                                                                                                                                                                                                                                               |
| <b>Warranty</b>                     | <p>All products have it's specific warranty period. This warranty is not valid if the products have been used differently than instructions or differently from expected usage.</p> <p>Our responsibility is limited to shipment of new products only. Any return for repair or reimbursement has to be pre-approved, and subject to our evaluation only. In no case can we be held responsible for direct or indirect injuries, secondary injury or losses to the buyer.</p> <p><b>For complete products warranty policy, please refer to MINDER's "Warranty Policy 2020".</b></p> |
| <b>Transport</b>                    | If nothing else has been agreed products are delivered Ex-Works our facilities. The freight company is responsible for delivery according to his delivery terms, and any transport damages shall be dealt with the freight company directly. When we arrange for transport the responsibility is according to national and international conventions for transport. Any delay on transportation availability will not be held accountable by MINDER WATER INDUSTRIES.                                                                                                               |
| <b>Returns</b>                      | All complaints regarding transport shall be done in writing within 4 days of delivery. All damages during shipment shall be indicated at reception on the shipping documents before accepting the goods. Any invoicing complaint is to be done within 8 days of reception.                                                                                                                                                                                                                                                                                                          |
| <b>Changes without Notification</b> | We reserve the rights to change constructions, dimensions and information in this price list, as well as prices, without prior notification. We reserve the rights for possible printing and information errors in pricelist                                                                                                                                                                                                                                                                                                                                                        |

## General Terms and Conditions for Delivery – MINDER WATER INDUSTRIES

|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicable</b>                                       | These general terms and conditions for delivery are to be applied to all MINDER deliveries. Any exceptions to these terms and conditions are to be agreed upon in writing in order to be valid.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Delivery</b>                                         | All deliveries are Ex Work MINDER's place of inventories (INCOTERMS 2018).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Delays</b>                                           | <p>In case of delays, that is that MINDER fails to deliver within an agreed time frame for delivery, the buyer reserves the right to, by written notification only, inform MINDER of a reasonable date for delivery and to inform MINDER of their intentions to cancel order if said reasonable date for delivery is not met. If so, the buyer reserves the right for cancellation of the contract, but only for said products.</p> <p>If the buyer cancels the agreement according to the delays above, he reserves a right for compensation from MINDER but only for the additional costs absorbed due to the delay and proven that it was necessary to purchase these products from another supplier. By doing so, the buyer cannot claim other compensations for delays from MINDER. If the buyer does not cancel the agreement, he is not eligible for compensation due to the delays.</p> |
| <b>Price adjustment</b>                                 | If customs and duties, taxes or other fees, are changed after the price has been agreed upon, the price will be adjusted accordingly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Full Payment and Reserved rights of ownership</b>    | 30% deposit upon order confirmation and 70% balance payment before delivery are the norm unless agreed upon. After 30 days from the date of delivery, a 2 % interest rate is applicable on all unpaid accounts. <b>MINDER reserve the right to ownership of all products sold until full payment has been received.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Responsibility for damaged or defective products</b> | <p>MINDER agrees to that within the warranty period from invoice date, exchange products that are defective or damaged when received by buyer.</p> <p><b>For complete products warranty policy, please refer to MINDER's "Warranty Policy 2020".</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Force Majeure</b>                                    | MINDER cannot be held responsible for any breach of contract if the circumstances are such that they are beyond our control, in case of a general strike, lockout, war, fire and wrongful or delayed deliveries from a MINDER supplier.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Applicable jurisdiction</b>                          | Any disagreement shall be judged according to Australian law.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |





Printed in Australia  
By BPA

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