



**MILLION GOALS,  
MILLION SOLUTIONS**



# Swimming Pool And Spa Products

PUMPS | POOL FILTERS | UNDERWATER LIGHTS | DISINFECTING EQUIPMENT | HEAT PUMP | COMPETITION POOL EQUIPMENT  
HYDROTHERAPY EQUIPMENT | POOL FITTINGS & CLEANERS | SWIM CURRENT MACHINE & FILTRATION UNITS

2023 - 2024 CATALOGUE



## Company Building



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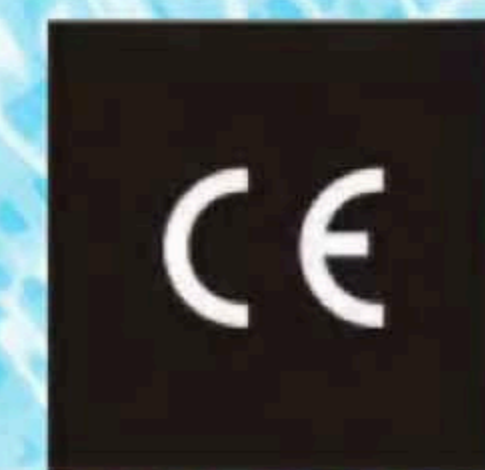
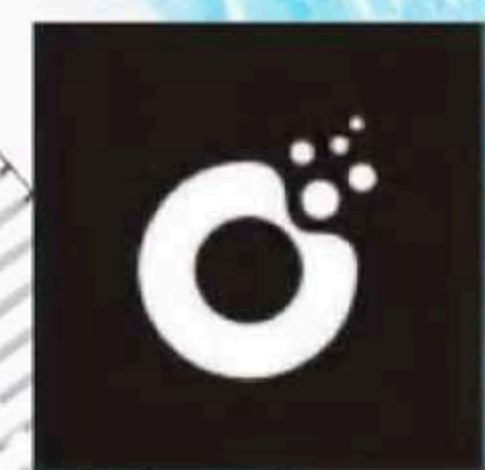
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## Quality Assurance





TO BE A PROFESSIONAL MANUFACTURER WITH A FULL RANGE OF EQUIPMENT & TECHNICAL SERVICE IN WATER ENVIRONMENT INDUSTRY



HLVSP SERIES  
VARIABLE SPEED PUMP

# HLVSP VARIABLE SPEED PUMP

MILLIAN creatively combines the most advanced technology ( Permanent magnet brushless DC motor ) with the professionally designed hydraulic structure of the swimming pool pump to create a more usable, quieter, more intelligent, more efficient and less expensive variable speed pool pumps.



**Material:**

- Pump housing: PP+35%GF
- Filter basket: PP
- Shaft: SS316
- Mechanical Seal: stationary face-SIC, rotating face-Graphite, seal bellows-NBR, Spring- 316L
- Impeller: PPO+30% GF
- Diffuser: PPO+30% GF

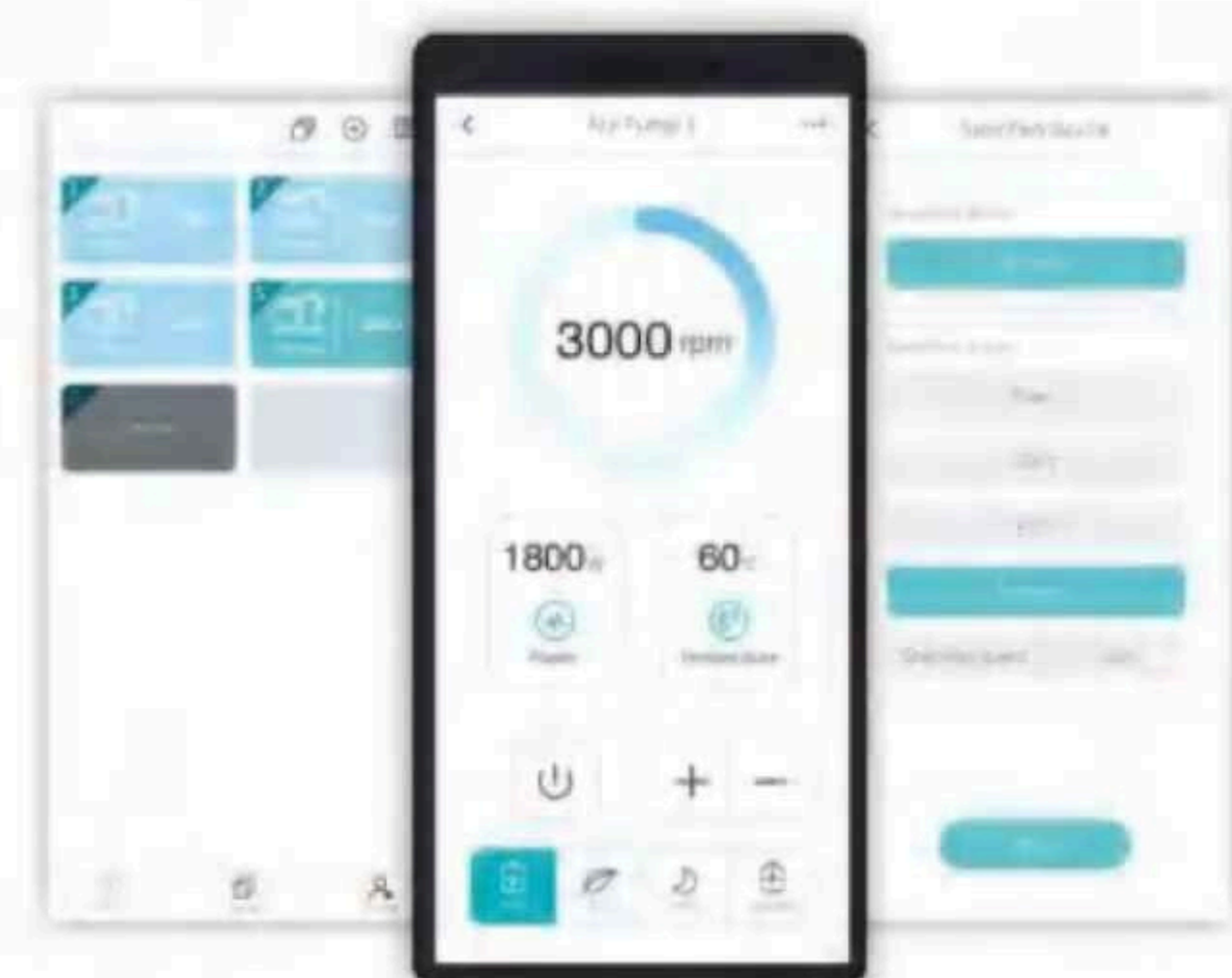
**Simple and fast operation**

- Comes with 4 pre-set most commonly used application scenarios.
- One-button tap, directly to the desired function.
- Stepless variable speed technology, 1000-2900 rpm can be adjusted freely to meet various professional needs.



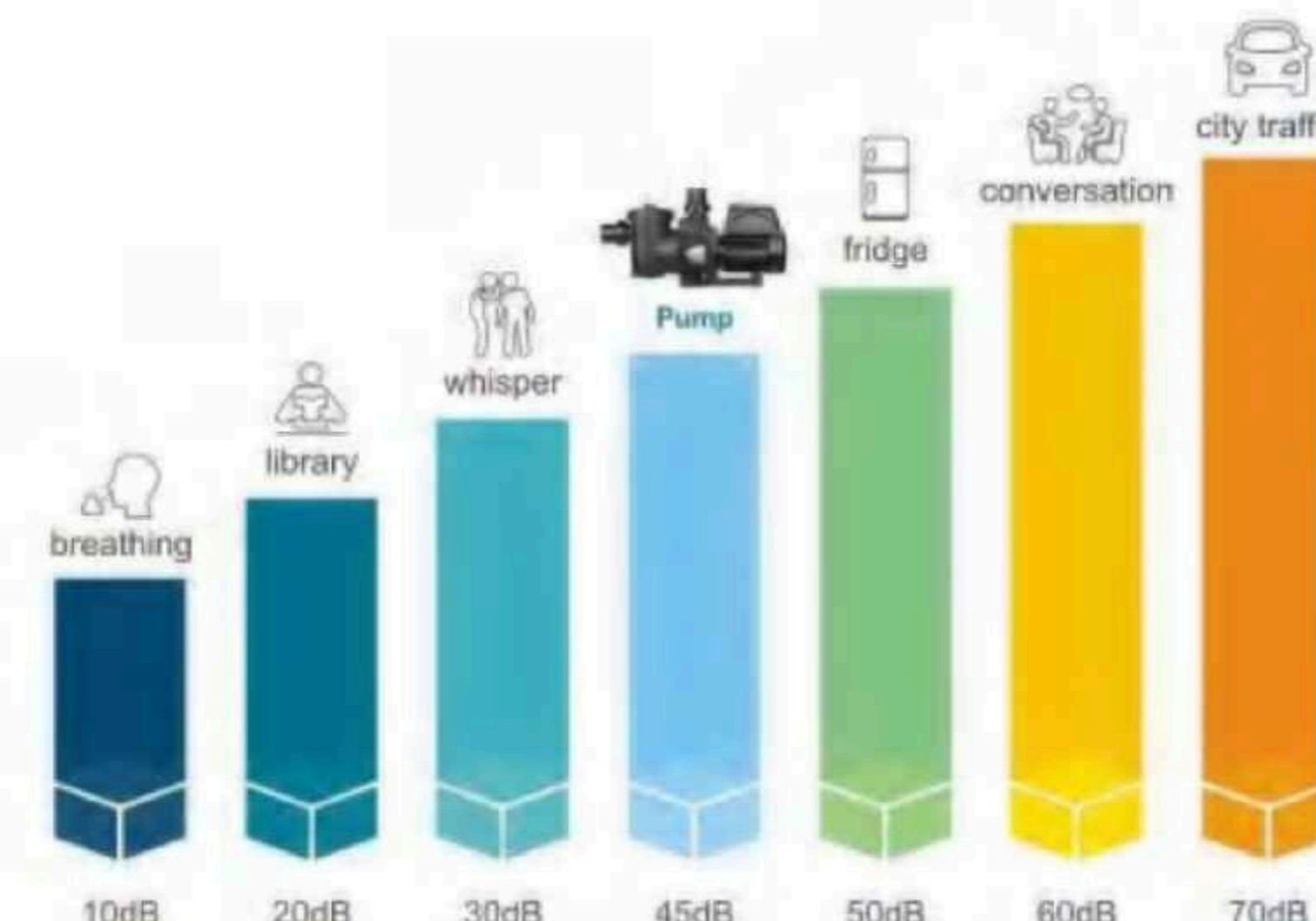
**Intelligent**

- All operations can be completed via mobile APP.
- Support centralized management of multiple devices, you can check the status of the water pump in real time, customize functions and the protection against accidental power failure.
- Support OTA upgrade, support firmware update.



**Quiet**

- HLVSP pumps reduce operating noise, featuring an upgraded motor drive that delivers quieter high-speed operation.
- Sound level 45dB in 1 meter at the speed of 1400rpm.



**Energy saving**

- HLVSP pumps reduce the energy by up to 90%, saving up to 12,614kWh(2hp pump runs in 365days).

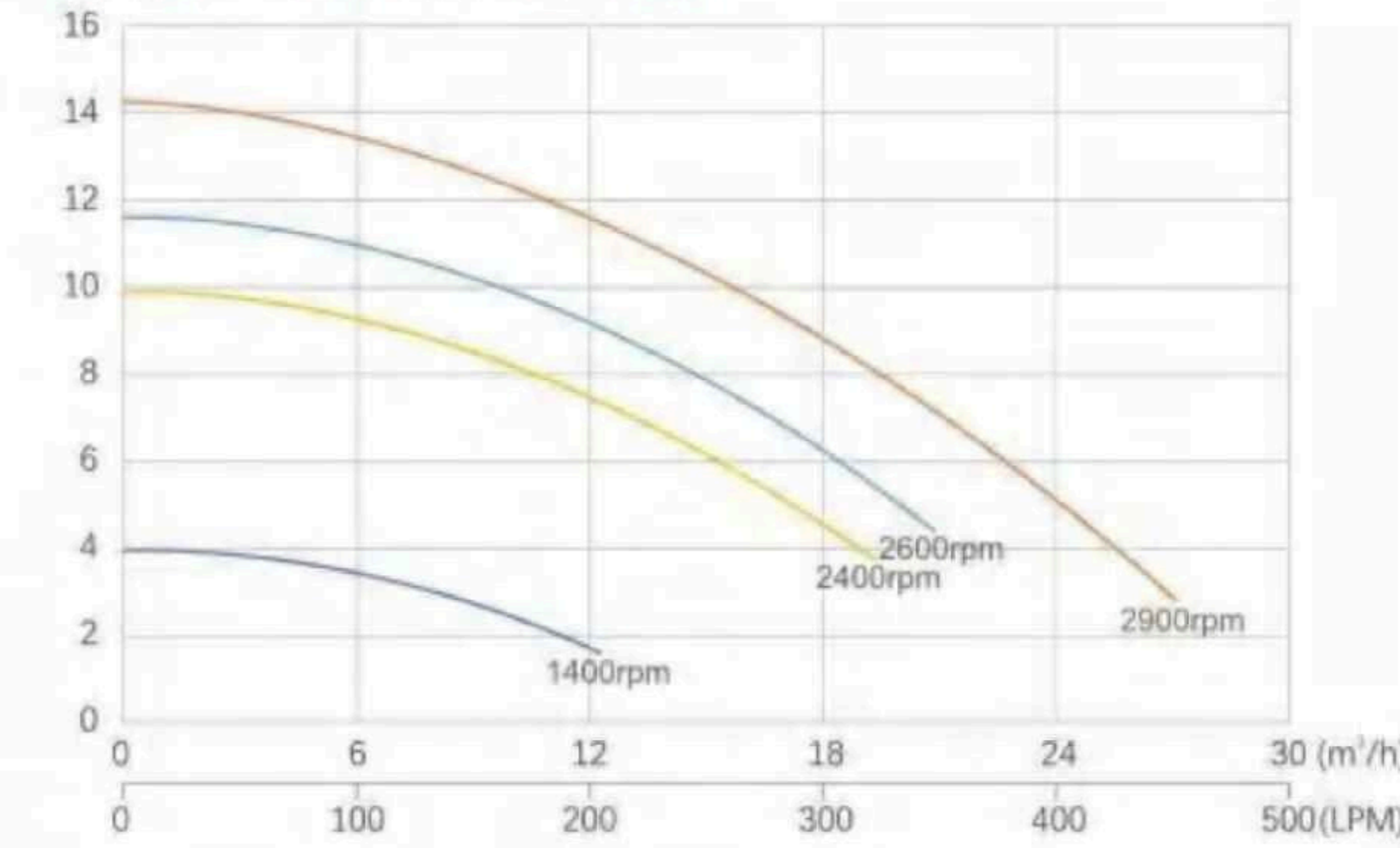


**High energy efficiency**

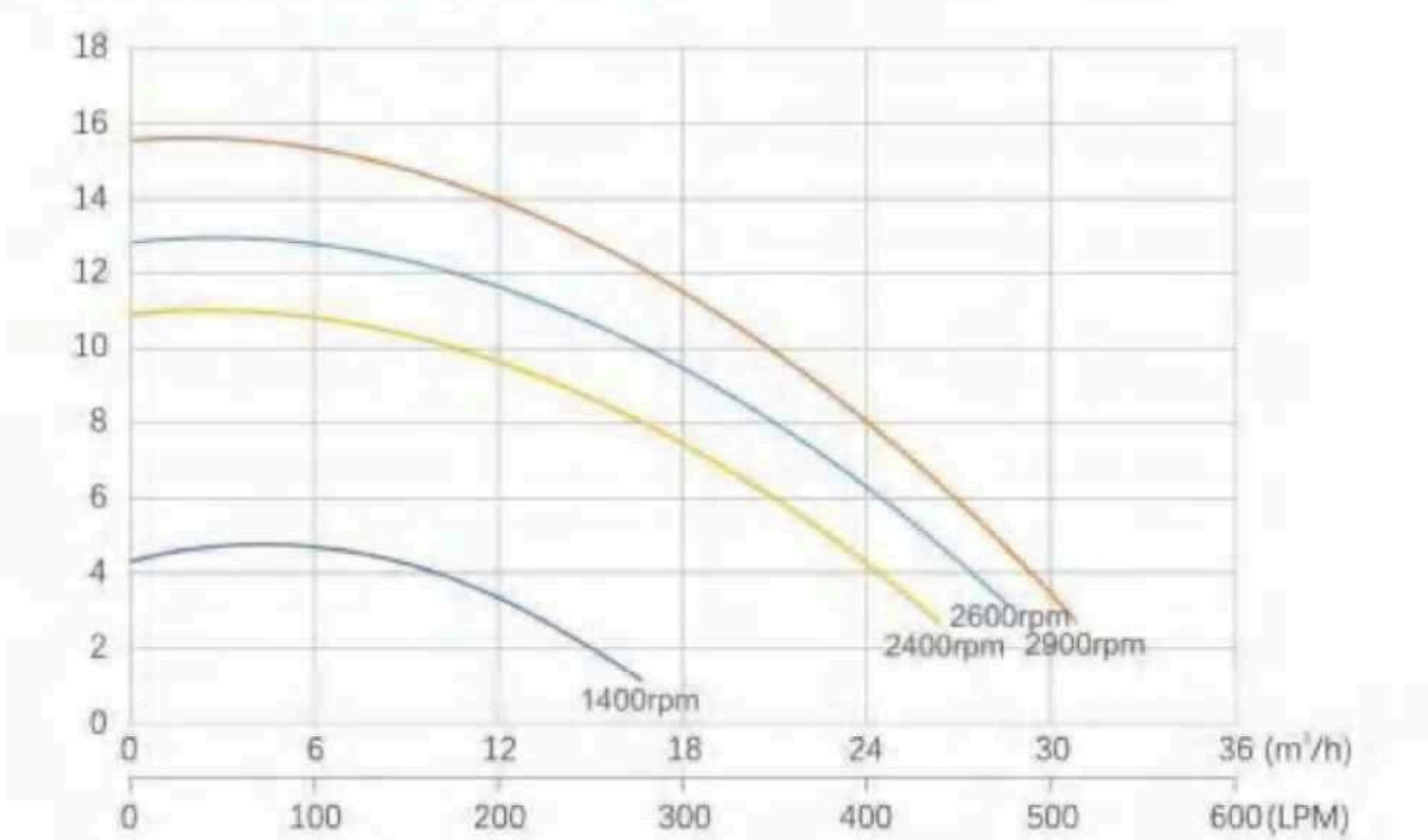
- High efficiency motor IE4.
- Ambient temperature: up to 45°C (113°F)
- Insulation Class: F
- IP55 waterproof standard.
- Liquid temperature: 5~50°C (41~122°F)
- Maximum working pressure: 3.5bar



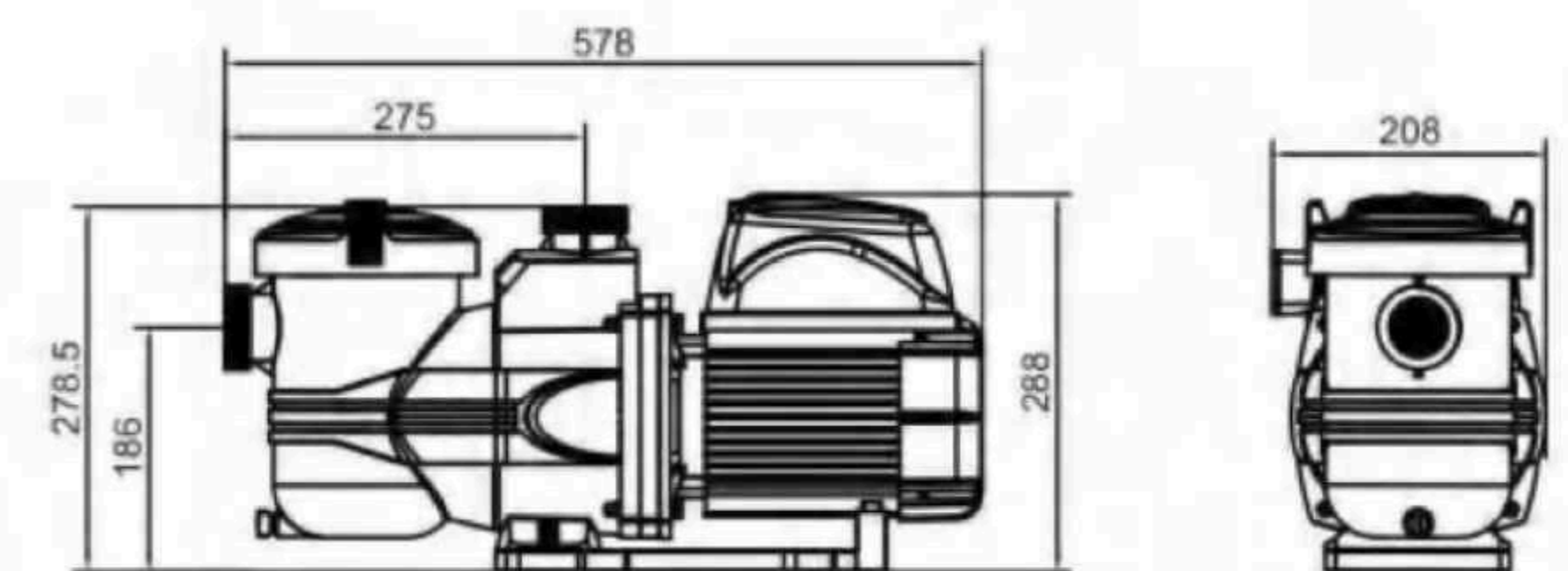
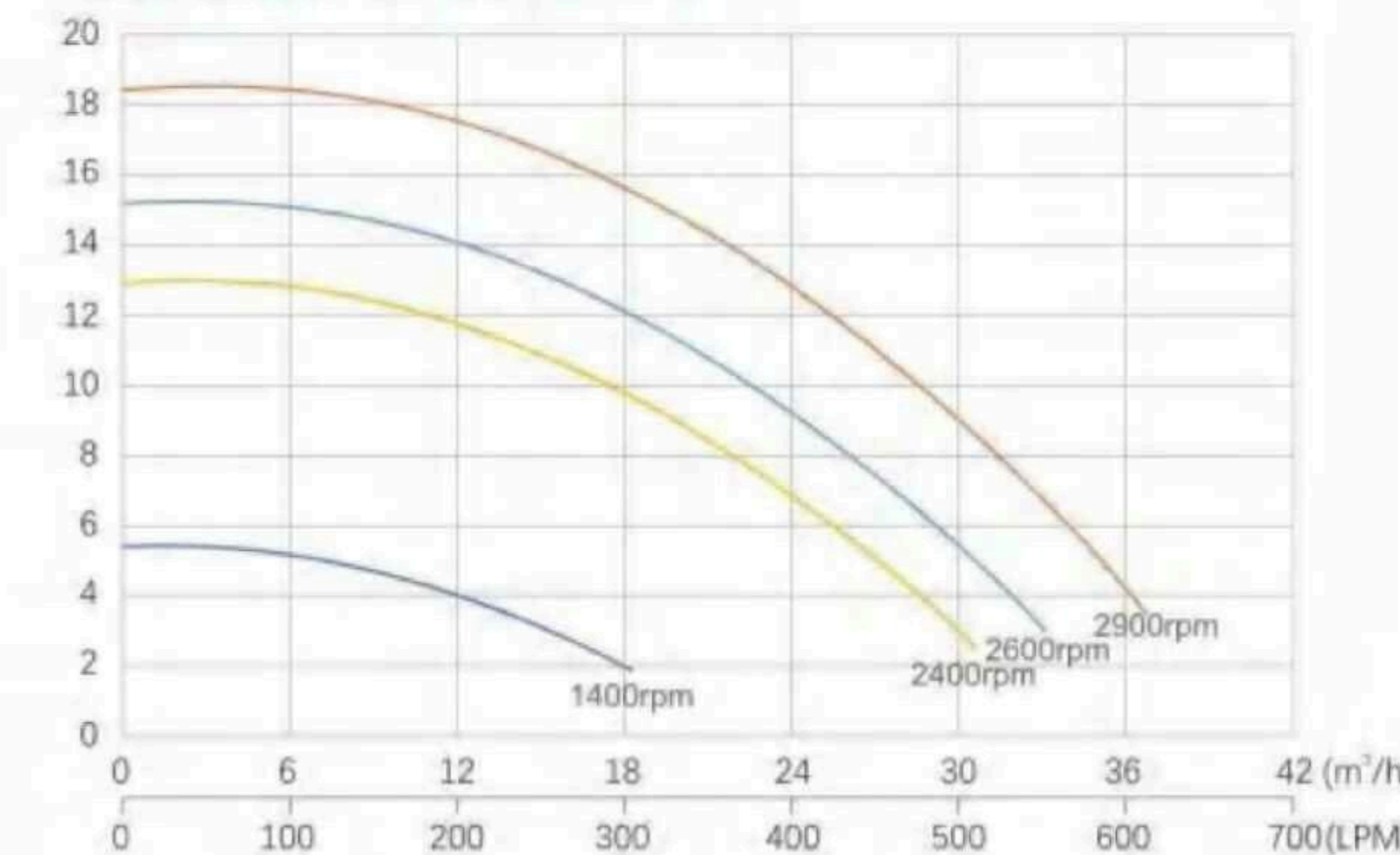
QH.Curve of HLVSP100Q



QH.Curve of HLVSP150Q



QH.Curve of HLVSP200Q



| Model     | Output power (P2) |                  | Rated power supply | Max. current (A) | RPM       | Max. Flow (m³/h) | Max.Head (m) | Circulation Flow   |                     | Connection Size | Packing size (mm) |
|-----------|-------------------|------------------|--------------------|------------------|-----------|------------------|--------------|--------------------|---------------------|-----------------|-------------------|
|           | Horse power (HP)  | Rated power (kW) |                    |                  |           |                  |              | Flow at 8 m (m³/h) | Flow at 10 m (m³/h) |                 |                   |
| HLVSP100Q | 1                 | 0.75             | 220V;<br>50Hz/60Hz | 4.1              | 1000-2900 | 27               | 14.5         | 19                 | 16                  | 2"/63mm         | 620×280×380       |
| HLVSP150Q | 1.5               | 1.1              |                    | 6.1              |           | 30               | 16           | 24                 | 21                  |                 |                   |
| HLVSP200Q | 2                 | 1.5              |                    | 8                |           | 33               | 17           | 27                 | 24                  |                 |                   |

## BDP SERIES HIGH PERFORMANCE PUMP

BDP series high performance plastic centrifugal pump delivers high flow rates. It's designed for the commercial swimming pool, spa, waterfall and water features to achieve the maximum working efficiency with the lowest noise. Suitable for operation with salt chlorinators and sea water.

### Highlight Features:

- High efficiency motors IE3.
- IPX5 waterproof standard.
- Asynchronous, two poles.
- Insulation class: F.
- The advanced diffuser and high efficiency turbine maximize water flow and energy efficiency while minimizing turbulence and noise.
- Self-priming up to 3M above water level.
- Built-in thermal protection and overload protection.
- The oversized pre-filter basket(5L) extends the interval between cleanings.
- Liquid Temperature: 5~50°C(41~122°F)
- Ambient Temperature: up to 45°C(113°F)

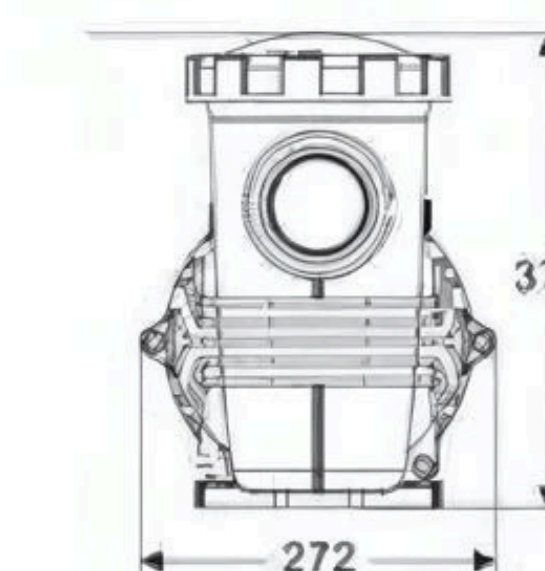
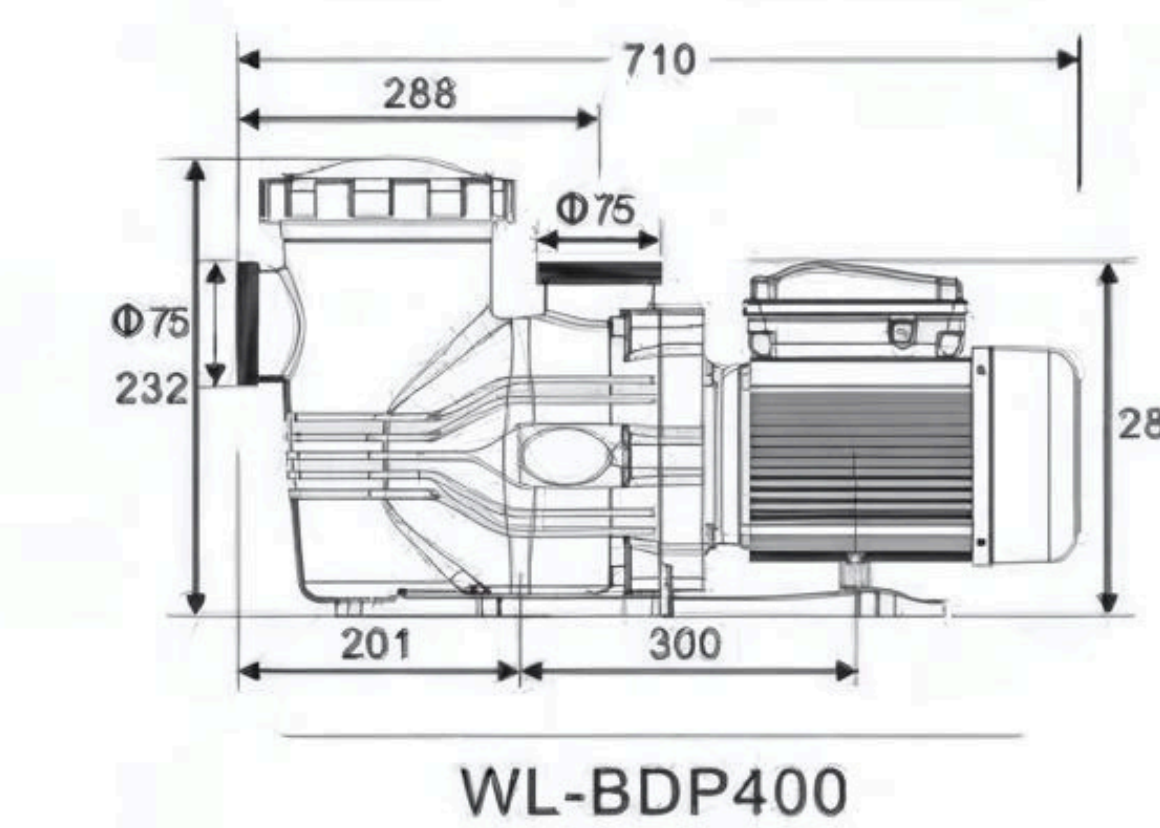
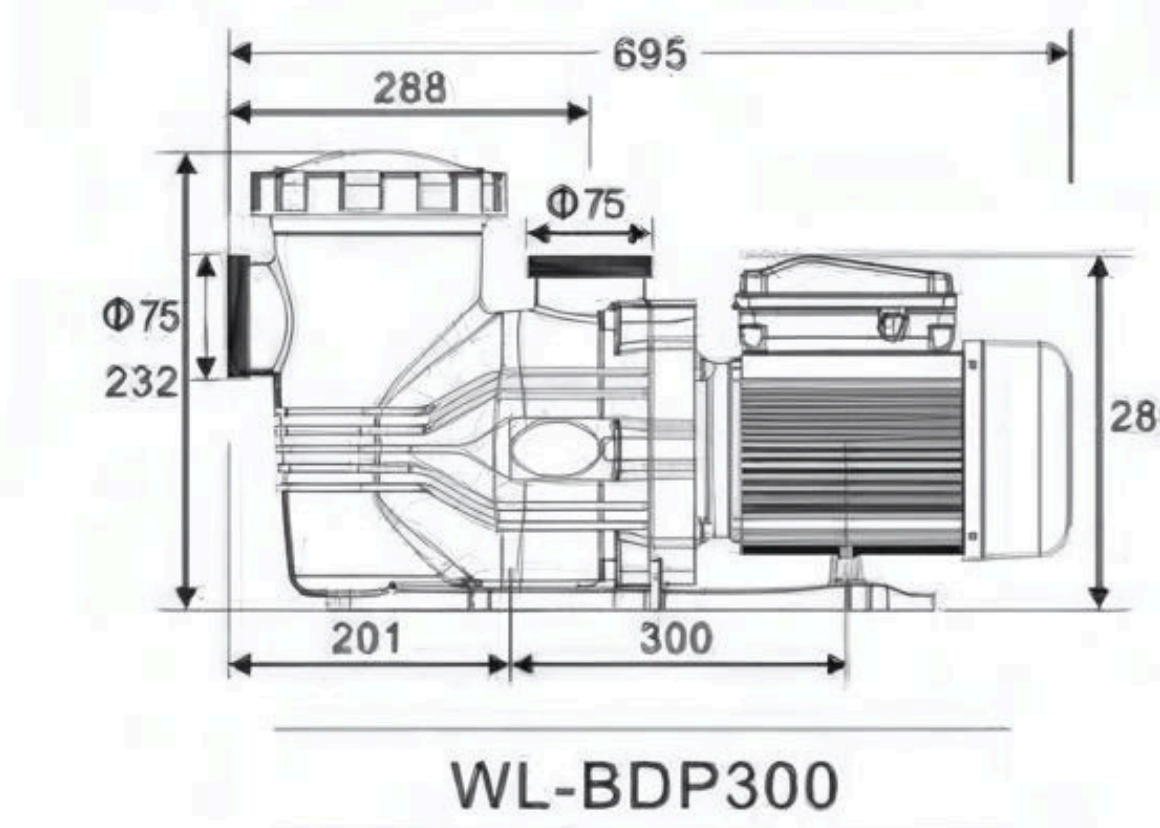
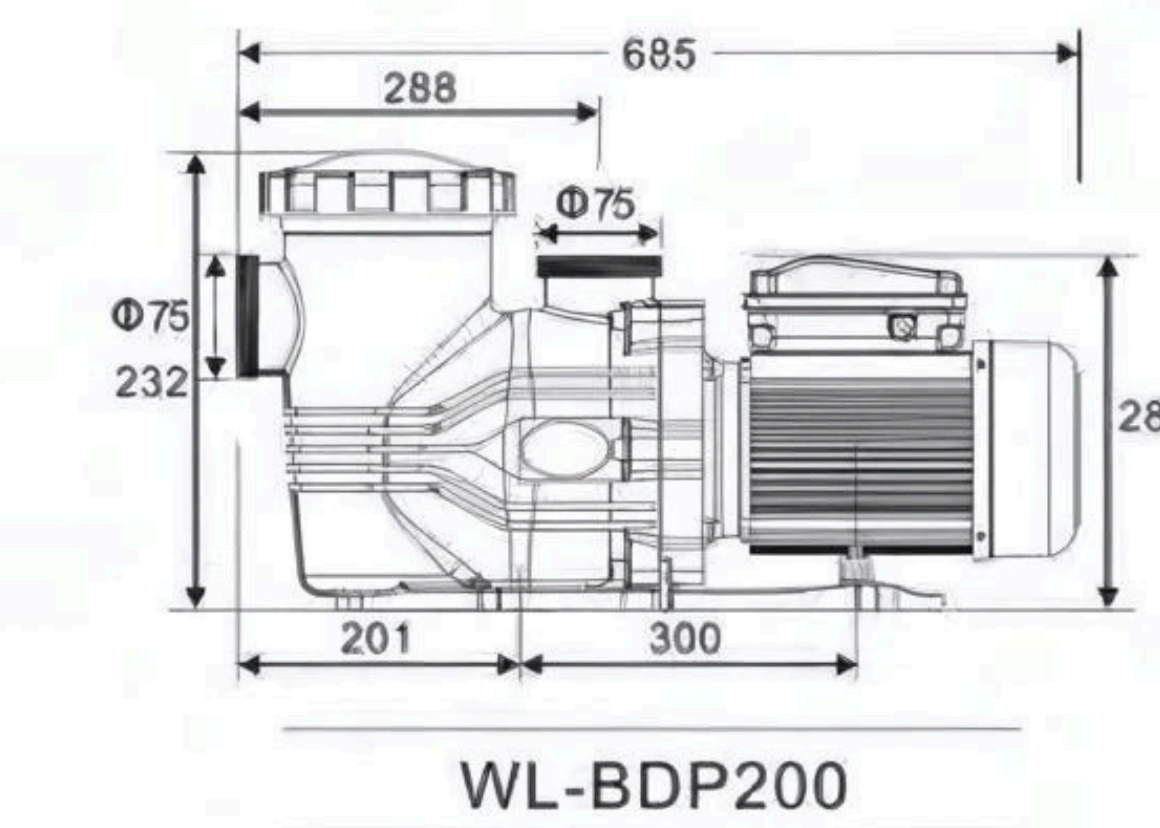
### Material:

- Pump Housing: PP+35% GF
- Filter basket: PP
- Shaft: SS316L
- Mechanical Seal: stationary face-SIC, rotating face-Graphite, seal bellows-NBR, Spring-316L
- Impeller: PPO+30% GF
- Diffuser: PPO+30% GF
- Pump base: PP+30% GF

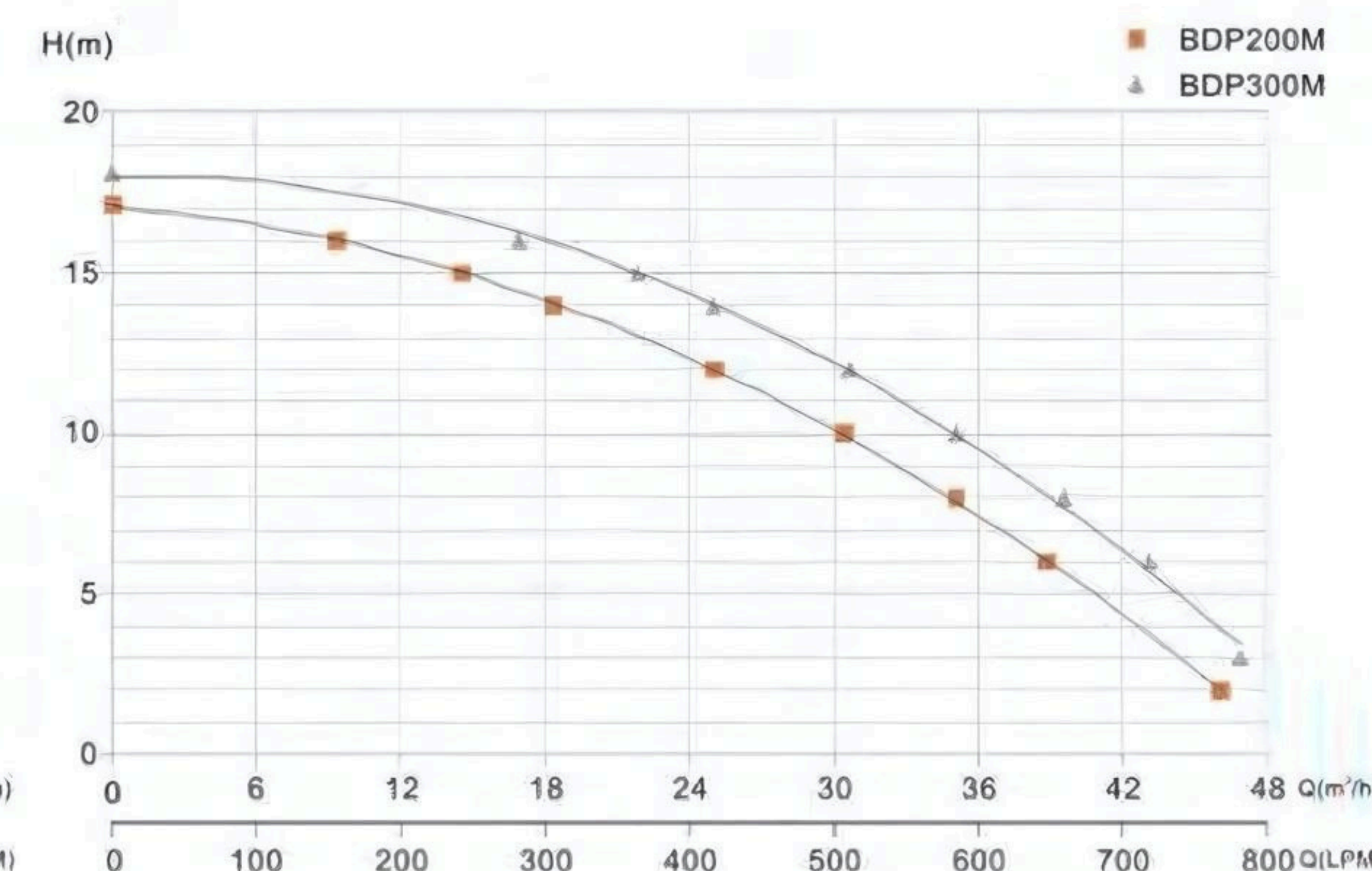
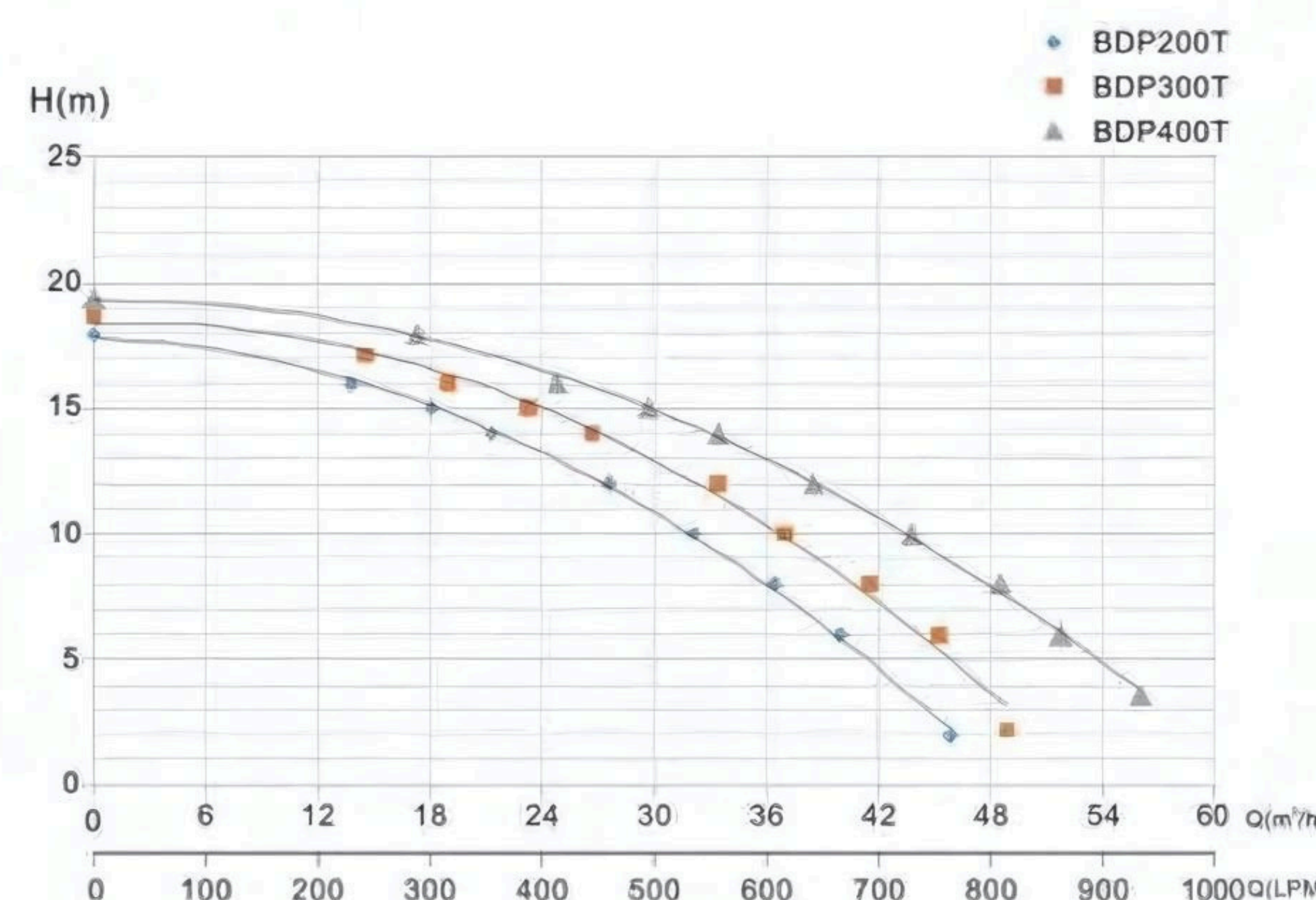


### KEY FEATURES:

The advanced diffuser and high efficiency turbine maximize water flow and energy efficiency while minimizing turbulence and noise.



### QH.Curve of The Pump



| Model      | Q-max (m <sup>3</sup> /h) | H-max (m) | Horsepower (HP) | Phase | Rated Power (kW) | Voltage (V) | Current (AMP) | Connection Size |
|------------|---------------------------|-----------|-----------------|-------|------------------|-------------|---------------|-----------------|
| WL-BDP200M | 42                        | 18        | 2               | 1     | 1.5              | 220         | 8.6           | 2" 63mm         |
| WL-BDP300M | 45                        | 18.5      | 3               | 1     | 2.2              | 220         | 10.6          | 2.5" 75mm       |
| WL-BDP200T | 43                        | 18.5      | 2               | 3     | 1.5              | 380         | 3.2           | 2" 63mm         |
| WL-BDP300T | 48                        | 19        | 3               | 3     | 2.2              | 380         | 3.8           | 2.5" 75mm       |
| WL-BDP400T | 55                        | 19.5      | 4               | 3     | 2.7              | 380         | 4.4           | 2.5" 75mm       |

## HLLF SERIES PUMP

### Material:

- Pump housing: PP+35%GF
- Filter basket: PP
- Shaft: SS304
- Bearing: NSK
- Mechanical seal: Carbon+Resin-Ceramics (Carbon, Ceramics, SS304,NBR)
- Impeller: Noryl+30% Fiberglass
- Diffuser and pump base: PP+35% Fiberglass

### Features:

- The inlet or outlet of the pump with an external thread, which can connect with metric or imperial pipes.
- The pump has excellent performance and reliable quality, which can bear 25000 times of impact test.
- Low noise: 0.75 HP can lower than 65 dB.
- Liquid Temperature: 5~ 50 °C ( 41 ~ 122 °F).
- Ambient Temperature: up to 45°C ( 113°F).
- Maximum working pressure: 2.5 bar.
- IPX5 waterproof standard
- Class I protection against electric shock.
- Thermal protection included.
- Motor: 3000r.p.m.
- Single phase:220V/50Hz
- 220V/60Hz, 380V/50Hz are available on request

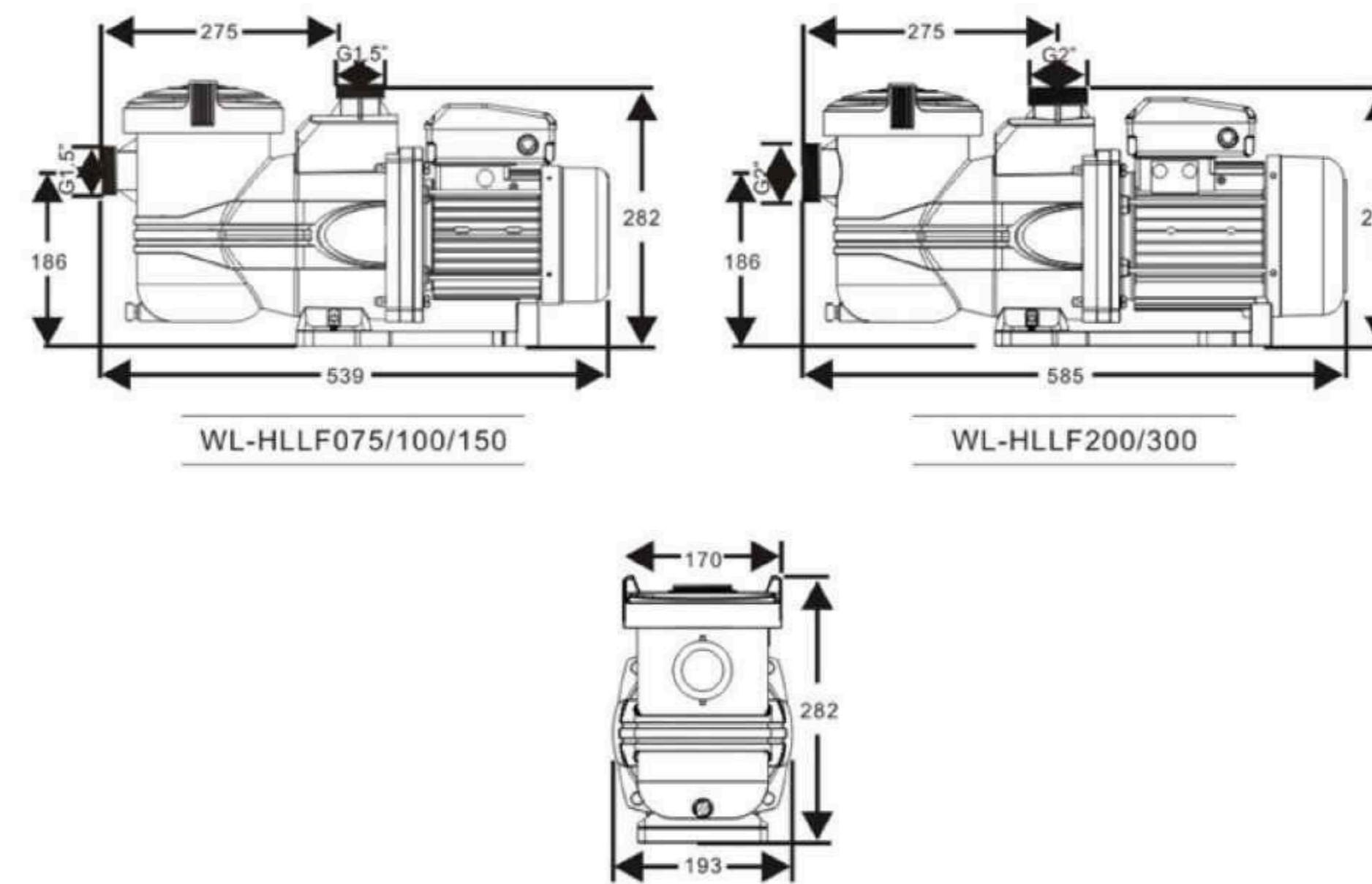
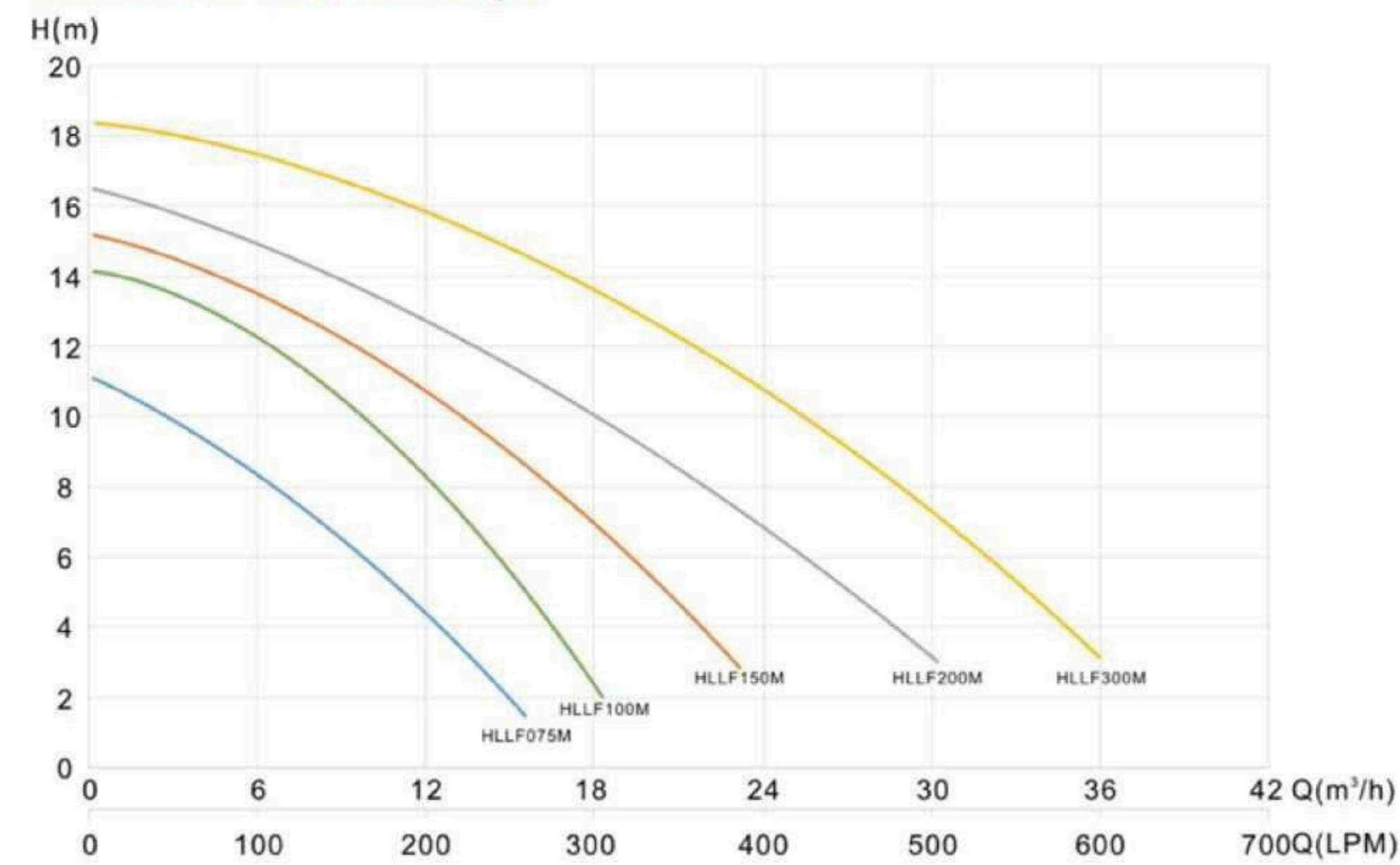


0.75HP-1.5HP



2.0HP-3.0HP

### QH.Curve of The Pump:



| Model       | Q-max (m³/h) | H-max (m) | Horsepower (HP) | Rated Power (kW) | Phase | Voltage (V) | Connection size |
|-------------|--------------|-----------|-----------------|------------------|-------|-------------|-----------------|
| WL-HLLF075M | 14.8         | 11.1      | 0.75            | 0.55             | 1     | 220         | 1.5" 50mm       |
| WL-HLLF100M | 17.4         | 14.1      | 1               | 0.75             | 1     | 220         | 1.5" 50mm       |
| WL-HLLF150M | 22.1         | 15.1      | 1.5             | 1.1              | 1     | 220         | 1.5" 50mm       |
| WL-HLLF200M | 30.2         | 16.4      | 2               | 1.5              | 1     | 220         | 2" 63mm         |
| WL-HLLF300M | 36           | 18.2      | 3               | 2.2              | 1     | 220         | 2" 63mm         |
| WL-HLLF100T | 15.8         | 13.9      | 1               | 0.75             | 3     | 380         | 1.5" 50mm       |
| WL-HLLF150T | 22.7         | 15.2      | 1.5             | 1.1              | 3     | 380         | 1.5" 50mm       |
| WL-HLLF200T | 33.1         | 16.9      | 2               | 1.5              | 3     | 380         | 2" 63mm         |
| WL-HLLF300T | 39.8         | 18.2      | 3               | 2.2              | 3     | 380         | 2" 63mm         |

## ECP SERIES PUMP

ECP series is a new silent and high-performance swimming pool centrifugal pump, suitable for small and medium-sized water application. With the independently innovative hydraulic structure design, ECP series pool pump improves the efficiency and performance, greatly reduces the vibration and operating noise as well.

### Highlight features:

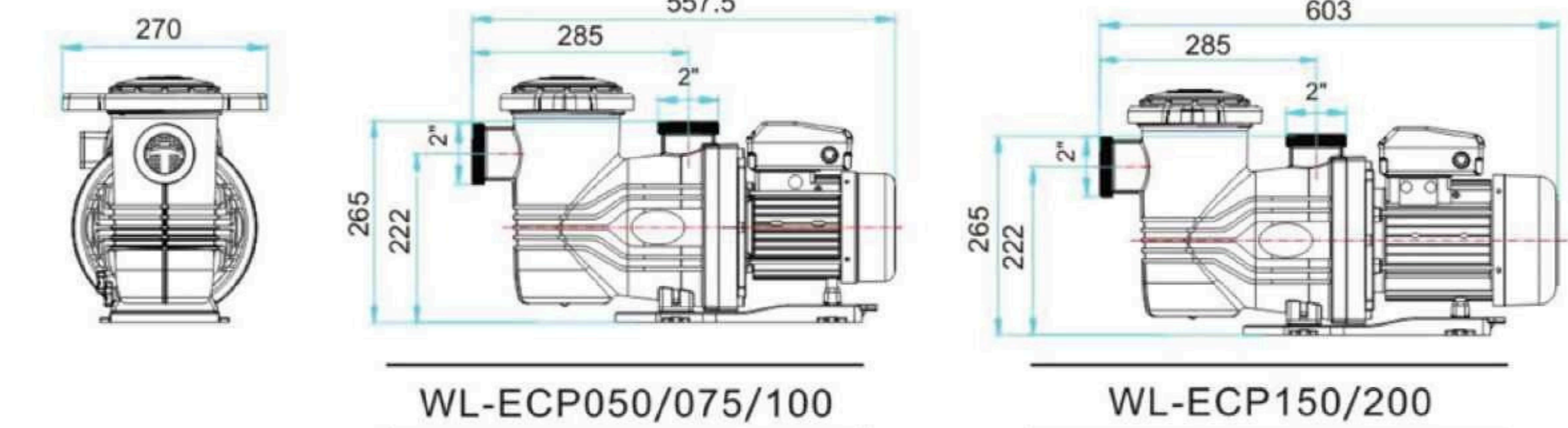
- Asynchronous motor.
- The innovative design on impeller and diffuser makes the higher pump performance and reduces the vibration and noise.
- Protection standard: IP55.
- Insulation class: F.
- Self-priming up to 3m.
- Noise: ≤ 62dB.
- Built-in thermal protection and overload protection (for single phase pump).
- Standard port size: 2", 1.5" is optional.
- Motor: 2900r.p.m
- Liquid temperature: 5-50°C(41~122°F).
- Ambient temperature: 5-50°C(41~122°F).
- Maximum working pressure: 0.35MPa



WL-ECP050/075/100



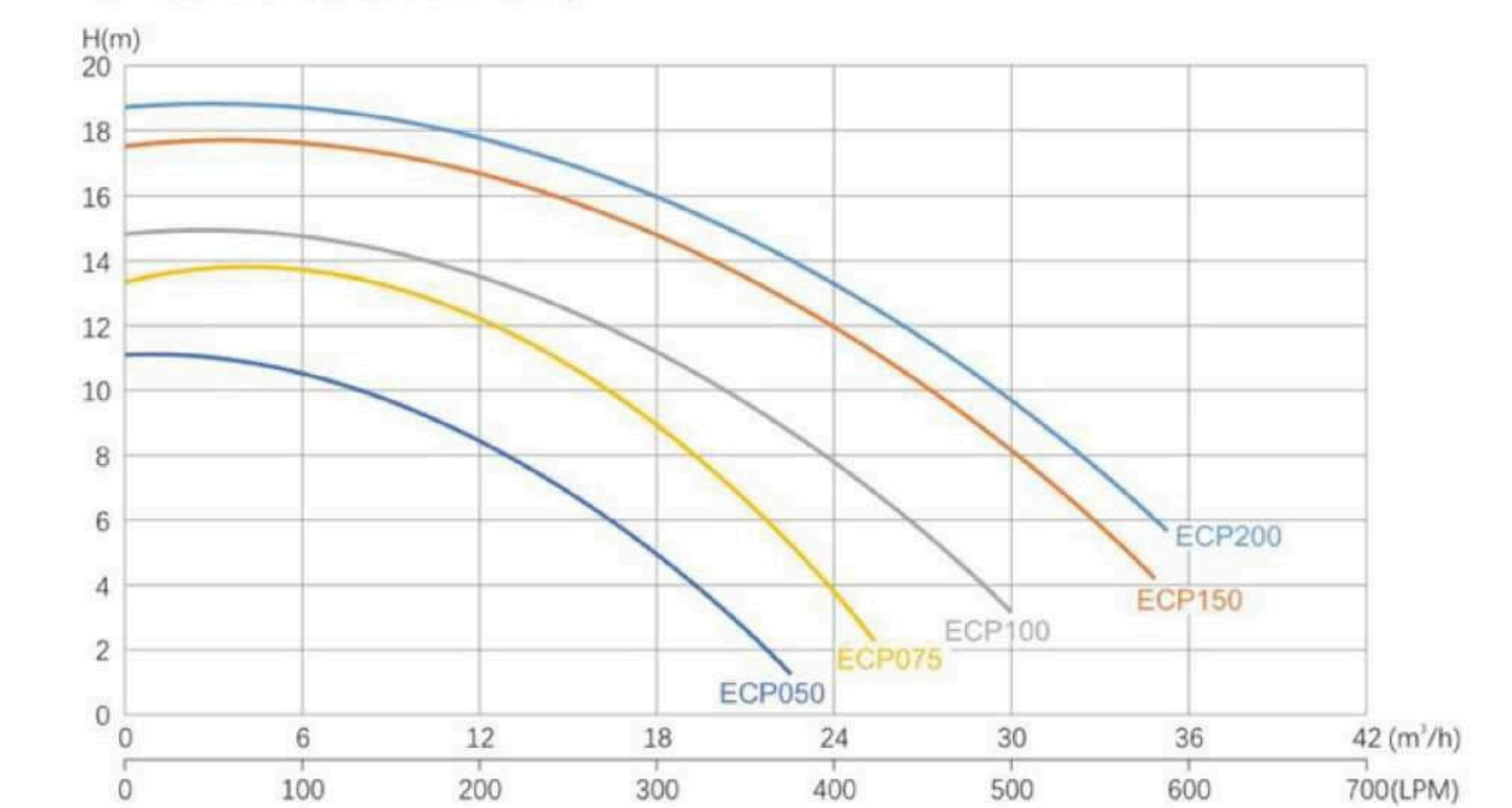
WL-ECP150/200



### Material:

- Pump housing: PP+35%GF
- Seal plate: PP+35%GF
- Diffusor: PPO+30%GF
- Impeller: PPO+30%GF+ Copper core
- Motor shaft: SS304
- Filter basket: PP
- Pump base: PP+35%GF
- Mechanical seal: stationary face-SiC, rotating face-Graphite, seal bellows-NBR, Spring-316L.

### QH.Curve of The Pump:



| Model   | Q-max (m³/h) | H-max (m) | Circulation Flow   |                     | Output HP (HP) | Input rated power (kW) | Voltage (V) | Phase | Connection Size | Noise (dB) |
|---------|--------------|-----------|--------------------|---------------------|----------------|------------------------|-------------|-------|-----------------|------------|
|         |              |           | Flow at 8 m (m³/h) | Flow at 10 m (m³/h) |                |                        |             |       |                 |            |
| ECP050M | 22           | 11.5      | 13                 | 8                   | 0.5            | 0.6                    | 220         | 1     | 2" 63mm         | 52.1       |
| ECP075M | 24           | 14        | 19.5               | 16.5                | 0.75           | 0.8                    | 220         | 1     | 2" 63mm         | 54.4       |
| ECP100M | 30           | 15        | 23.5               | 21.5                | 1              | 1.1                    | 220         | 1     | 2" 63mm         | 56.9       |
| ECP150M | 35           | 18        | 30                 | 27                  | 1.5            | 1.6                    | 220         | 1     | 2" 63mm         | 59.6       |
| ECP200M | 36           | 19        | 32.5               | 29.5                | 2              | 1.9                    | 220         | 1     | 2" 63mm         | 61         |
| ECP075T | 24           | 14        | 19.5               | 16.5                | 0.75           | 0.8                    | 380         | 3     | 2" 63mm         | 54.4       |
| ECP100T | 30           | 15        | 23.5               | 21.5                | 1              | 1.1                    | 380         | 3     | 2" 63mm         | 56.9       |
| ECP150T | 35           | 18        | 30                 | 27                  | 1.5            | 1.6                    | 380         | 3     | 2" 63mm         | 59.6       |
| ECP200T | 36           | 19        | 32.5               | 29.5                | 2              | 1.9                    | 380         | 3     | 2" 63mm         | 61         |

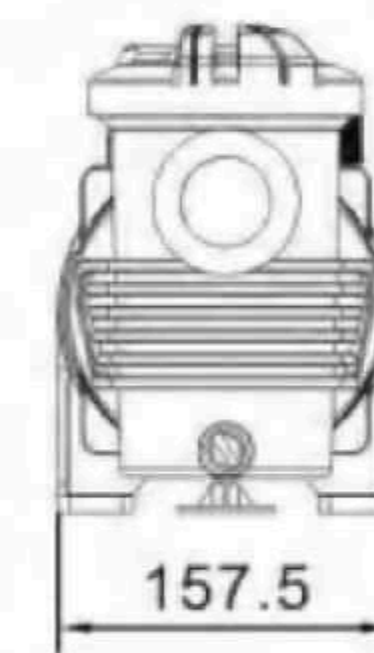
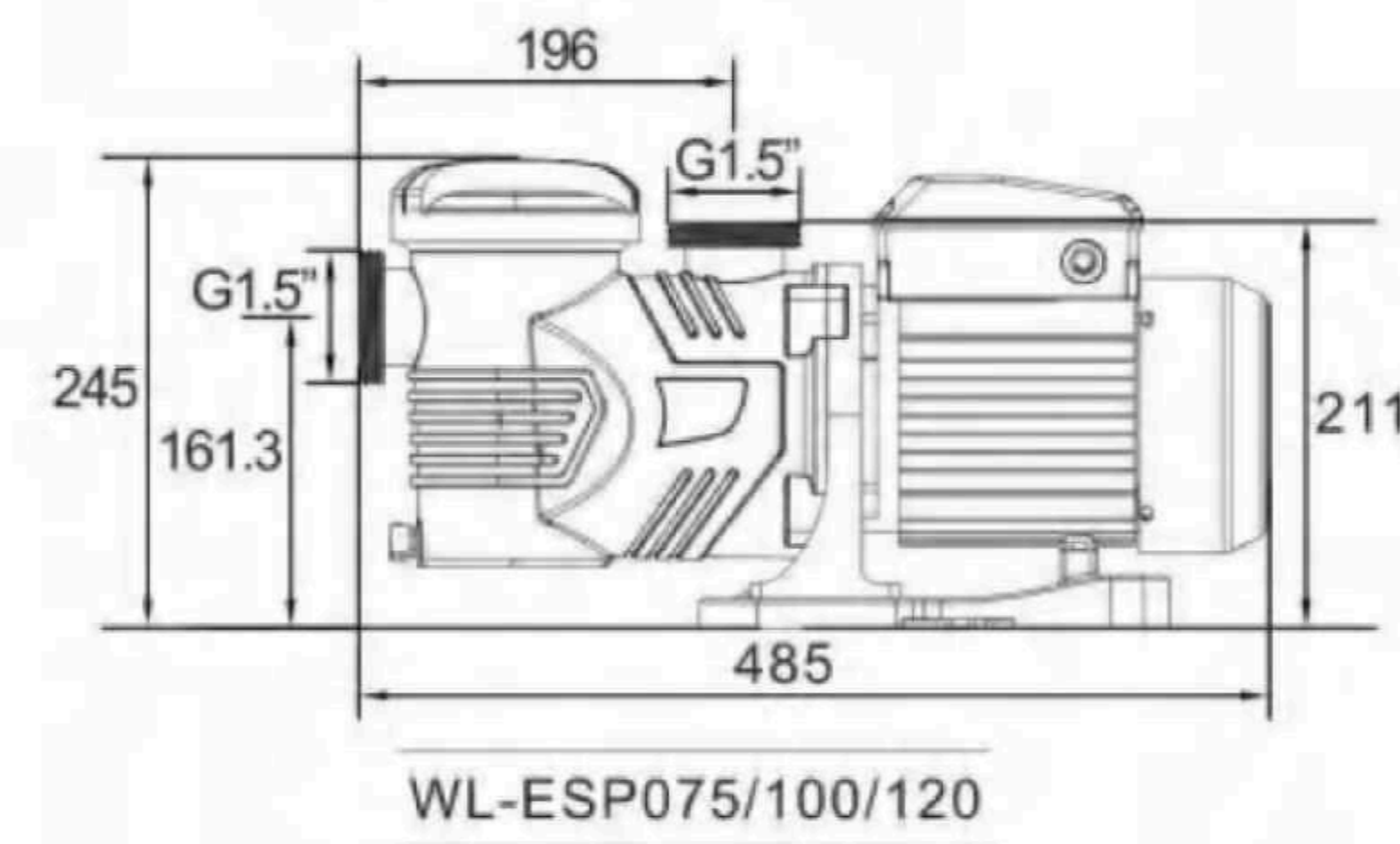
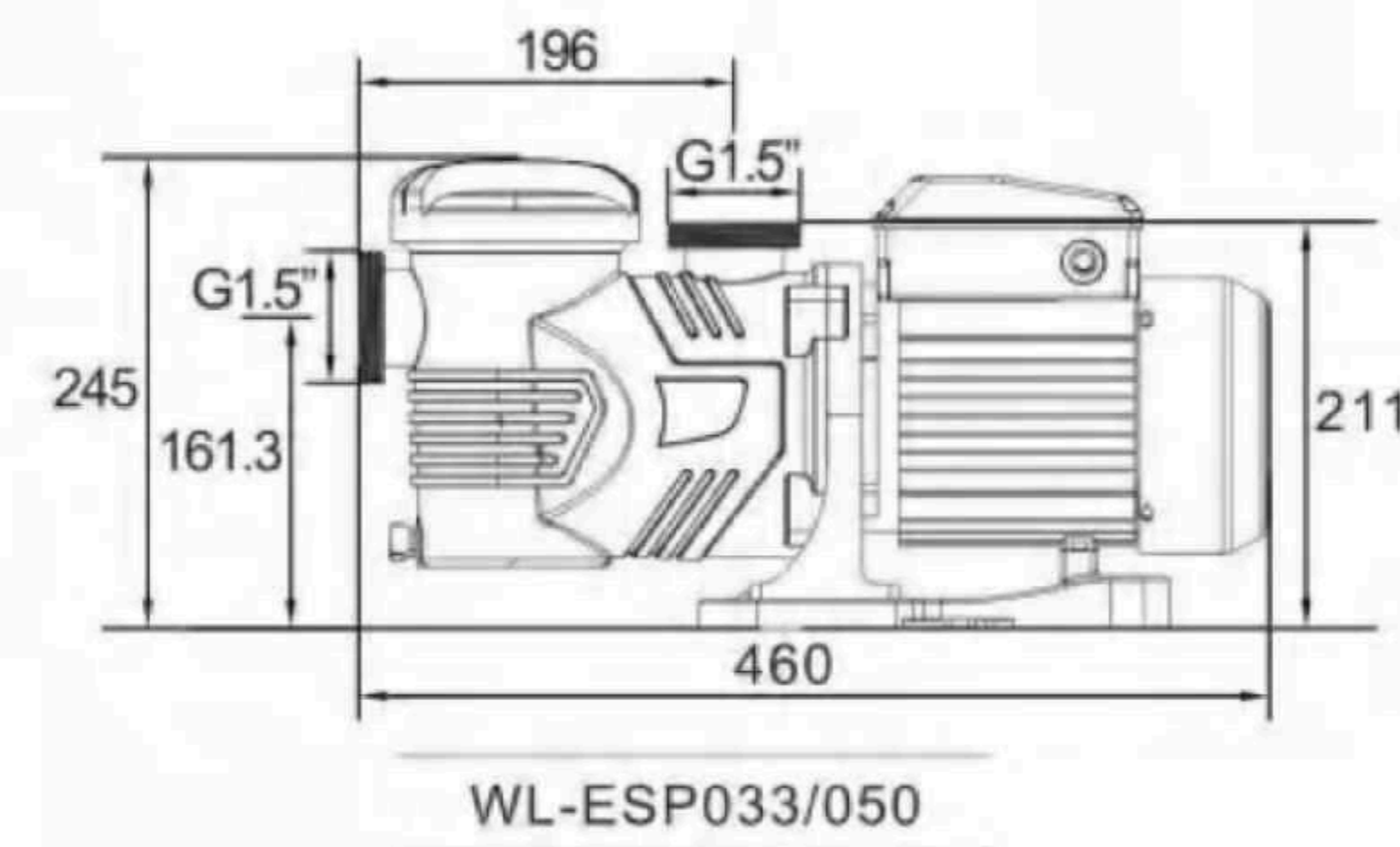
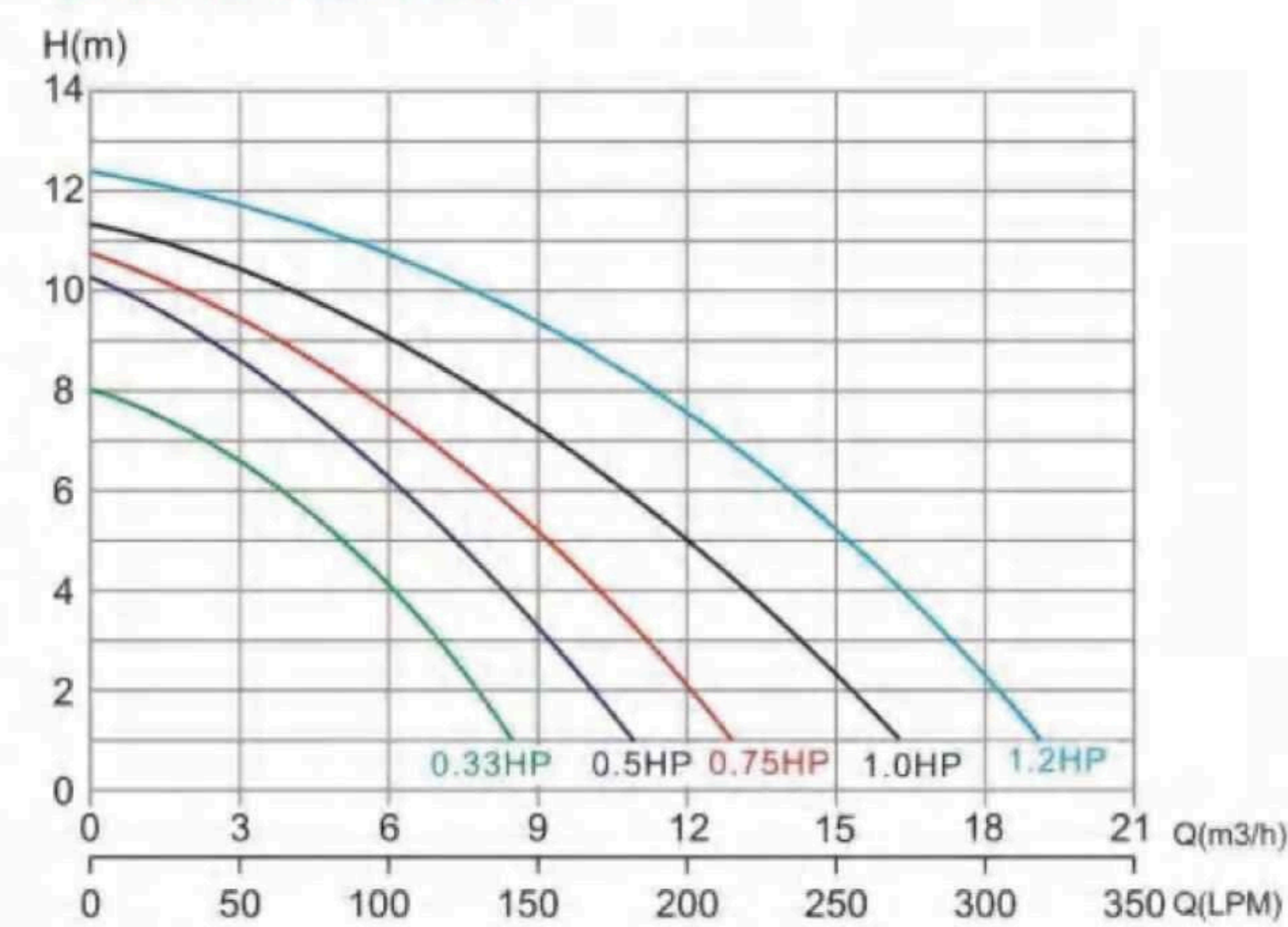
## ESP SERIES PUMP

MILLIAN series pump is a circulation pump for pools with high reliability and performance, which makes the pump more recognized in the market. Mechanical seal adopts ceramic carbon material, which is resistant to high temperature and dry grinding. With 25,000 strict life-span tests and powerful impact tests, this pump is highly recommended for its great performance and reliable quality.

### Features:

- The inlet or outlet of the pump with an external thread, which can connect with metric or imperial pipes.
- Low noise: It can lower than 67 dB.
- Thermal protection included
- Liquid Temperature: 5~ 50 °C ( 41 ~ 122 °F).
- Ambient Temperature: up to 40°C (104°F).
- IPX5 Waterproof standard.
- The pump can bear 25000 times of impact test, excellent performance and reliable quality.
- Single phase:220V/50Hz  
220V/60Hz is available on request

### QH.Curve of The Pump:



| Model      | Q-max (m³/h) | H-max (m) | Horsepower (HP) | Rated Power (kW) | Phase | Voltage (V) | Connection size |
|------------|--------------|-----------|-----------------|------------------|-------|-------------|-----------------|
| WL-ESP033M | 9            | 8         | 0.33            | 0.26             | 1     | 220         | 1.5" 50mm       |
| WL-ESP050M | 11           | 10.5      | 0.5             | 0.37             | 1     | 220         | 1.5" 50mm       |
| WL-ESP075M | 13           | 11        | 0.75            | 0.55             | 1     | 220         | 1.5" 50mm       |
| WL-ESP100M | 16.5         | 11.5      | 1.0             | 0.75             | 1     | 220         | 1.5" 50mm       |
| WL-ESP120M | 19           | 12.5      | 1.2             | 0.9              | 1     | 220         | 1.5" 50mm       |



## BHP/BHP-E SERIES PUMP

BHP/BHP-E heavy-duty pumps deliver high flow and high performance. It's designed for commercial swimming pools. Unique large diffuser and maximum performance impeller with high-performance motor maximize energy efficiency.

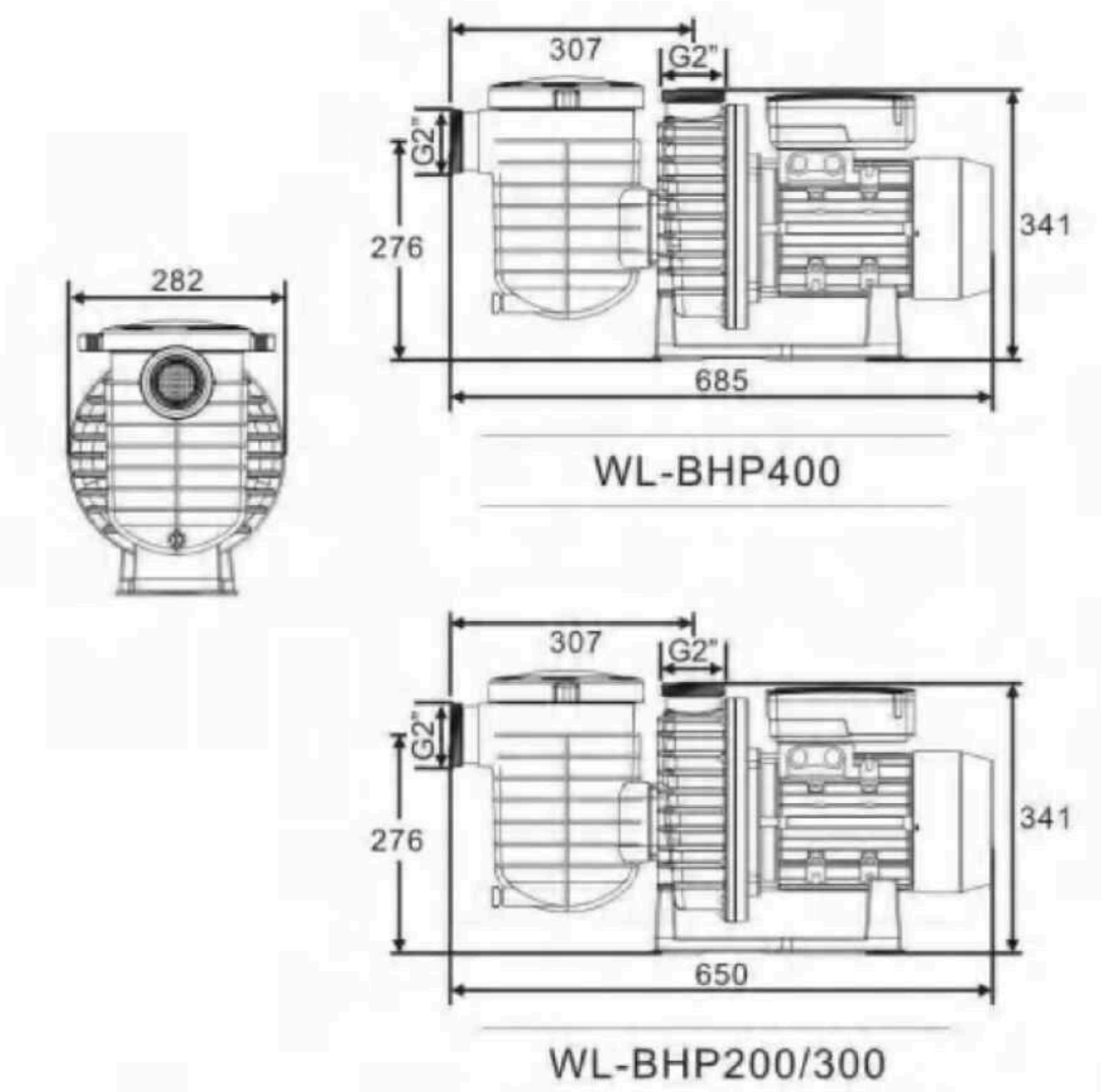
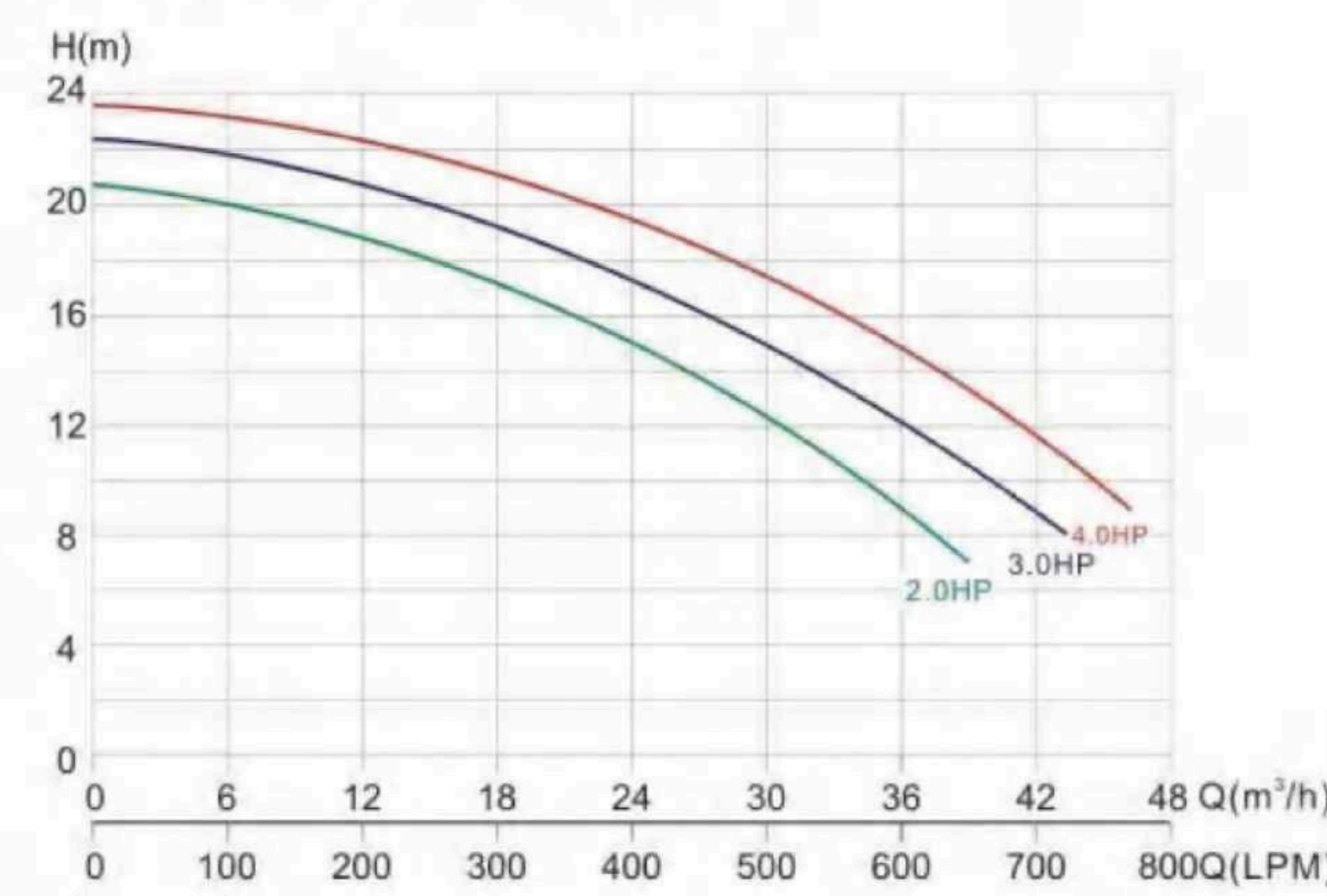
### Features:

- The inlet or outlet port can connect with metric or imperial pipes.
- The pump has excellent performance and reliable quality, which can bear 25000 times of impact test.
- Liquid Temperature: 5~ 50 °C ( 41 ~ 122 °F).
- Ambient Temperature: up to 45°C (113°F).
- Maximum working pressure: 2.5 bar.
- IPX5 waterproof standard
- Class I protection against electric shock.
- Thermal protection included.
- The motor is painted fluoride-resistant acid corrosion protective coating, resists chemical and marine corrosion. (for BHP-E series pump)
- Motor: 3000r.p.m.
- 50Hz or 60Hz is available for different necessities.

### Material:

- Pump Housing: PP+35%GF
- Filter Basket: PP
- Shaft: SS304  
SS316 (For seawater pump BHP-E series)
- Bearing: NSK
- Mechanical seal:  
Carbon+Resin-Ceramics (Carbon, Ceramics, SS304, EPDM)  
SS316+EPDM(Sealsbellows)+SIC+Graphite (For seawater pump BHP-Eseries)
- Impeller: Noryl+30%GF
- Diffuser: Noryl+30%GF
- Pump Base: PP+35%GF

### QH.Curve of The Pump



| Model                      | Q-max (m³/h) | H-max (m) | Horsepower (HP) | Rated Power (kW) | Phase | Voltage (V) | Connection size |
|----------------------------|--------------|-----------|-----------------|------------------|-------|-------------|-----------------|
| WL-BHP200M<br>WL-BHP-E200M | 38           | 20        | 2.0             | 1.5              | 1     | 220         | 2" 63mm         |
| WL-BHP300M<br>WL-BHP-E300M | 42           | 21        | 3.0             | 2.2              | 1     | 220         | 2" 63mm         |
| WL-BHP200T<br>WL-BHP-E200T | 38           | 20        | 2.0             | 1.5              | 3     | 380         | 2" 63mm         |
| WL-BHP300T<br>WL-BHP-E300T | 42           | 21        | 3.0             | 2.2              | 3     | 380         | 2" 63mm         |
| WL-BHP400T<br>WL-BHP-E400T | 45           | 22        | 4.0             | 3.0              | 3     | 380         | 2" 63mm         |

## KP SERIES PUMP

WL-KP series are used for water circulation in all kinds of small domestic swimming pools. Slightly dirty water with solids in suspension can be perfectly filtered.

**Features:**

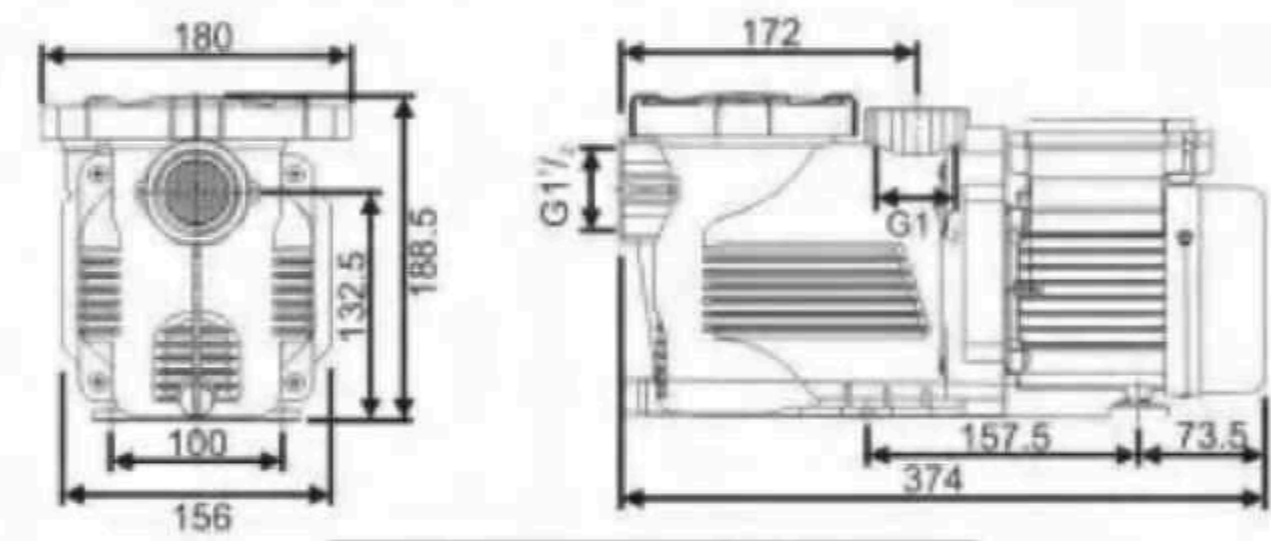
- Liquid Temperature: 5~ 50 °C ( 41 ~ 122 °F).
- Ambient Temperature: up to 40 °C ( 104 °F).
- Maximum working pressure: 3.0 bar.
- IPX5 waterproof standard.
- Insulation Class: F.
- Thermal protection included.
- Single phase: 220V/50Hz.
- 220V/60Hz, 110V/60Hz; 380V/50Hz(P≥450W) are available on request.
- Max.Suction:3M(P≥600W)



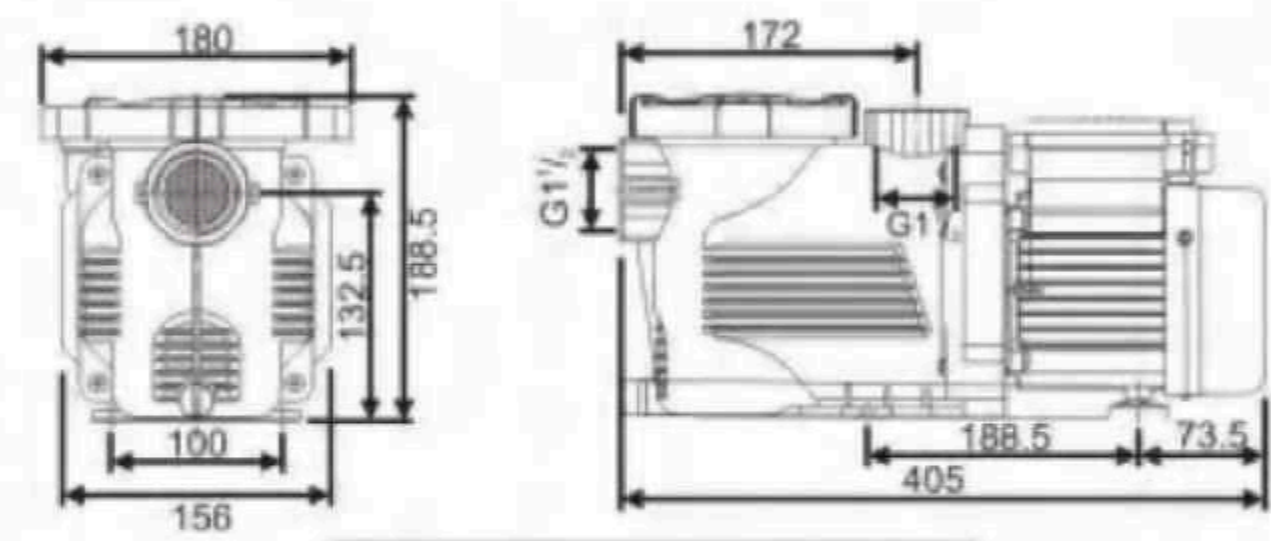
WL-KP256~WL-KP856



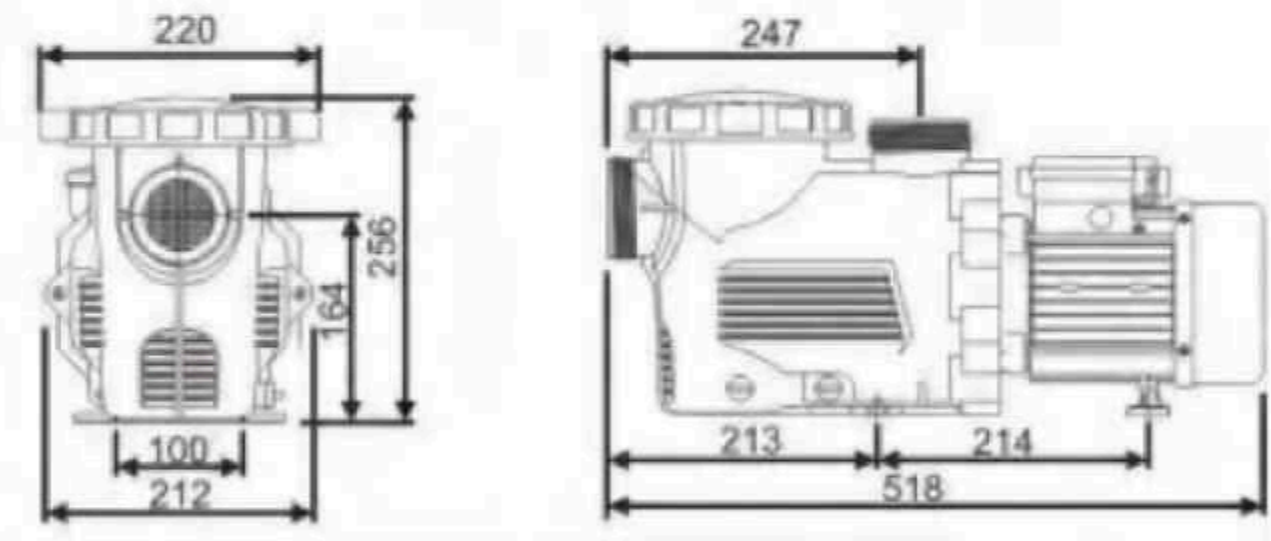
WL-KP1106~WL-KP2206



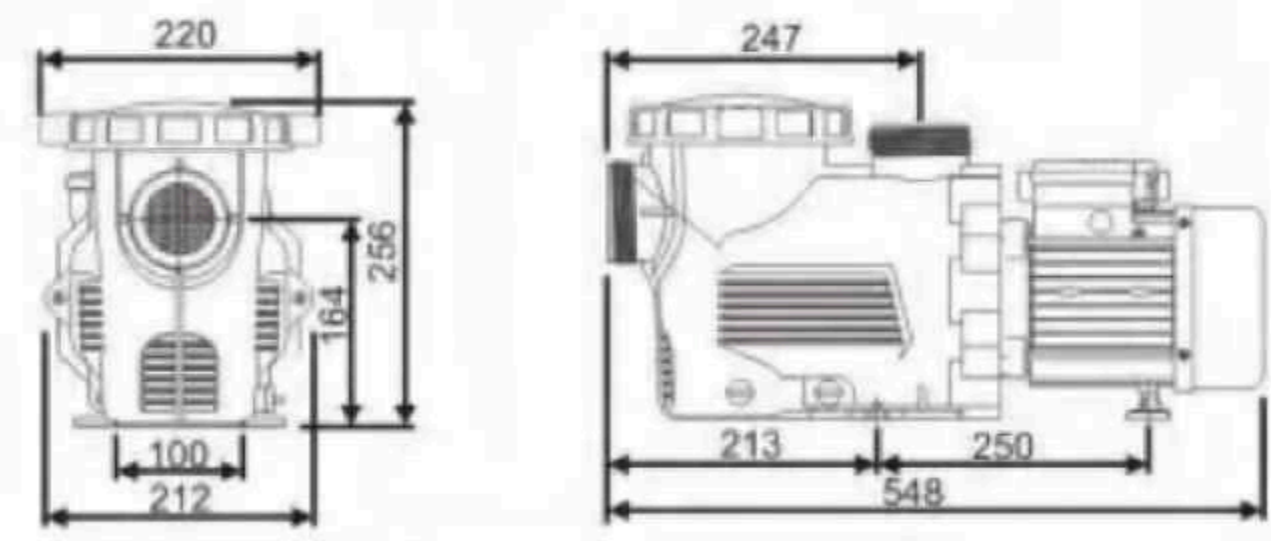
WL-KP256~WL-KP456



WL-KP556~WL-KP856

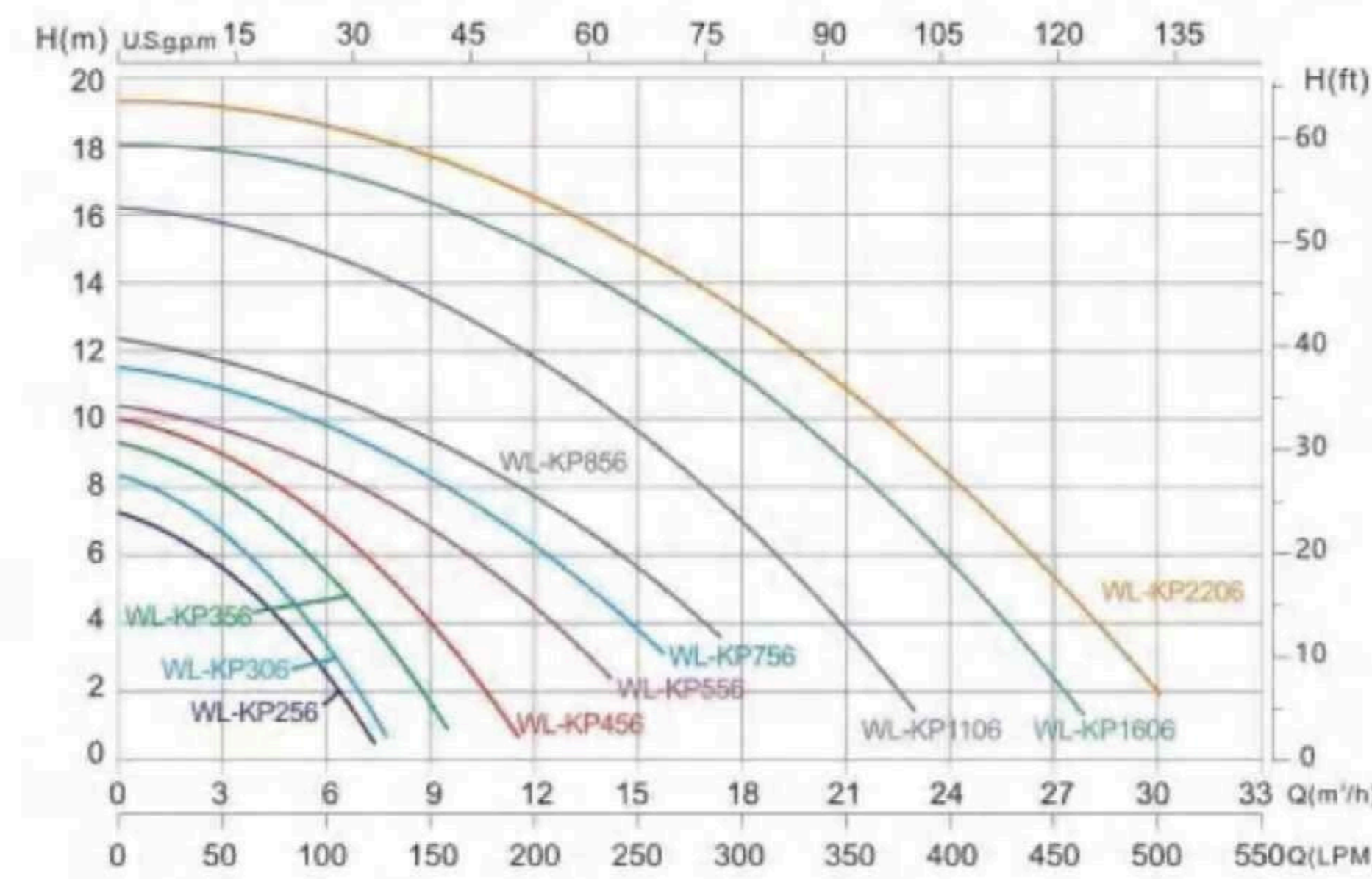


WL-KP1106



WL-KP1606~WL-KP2206

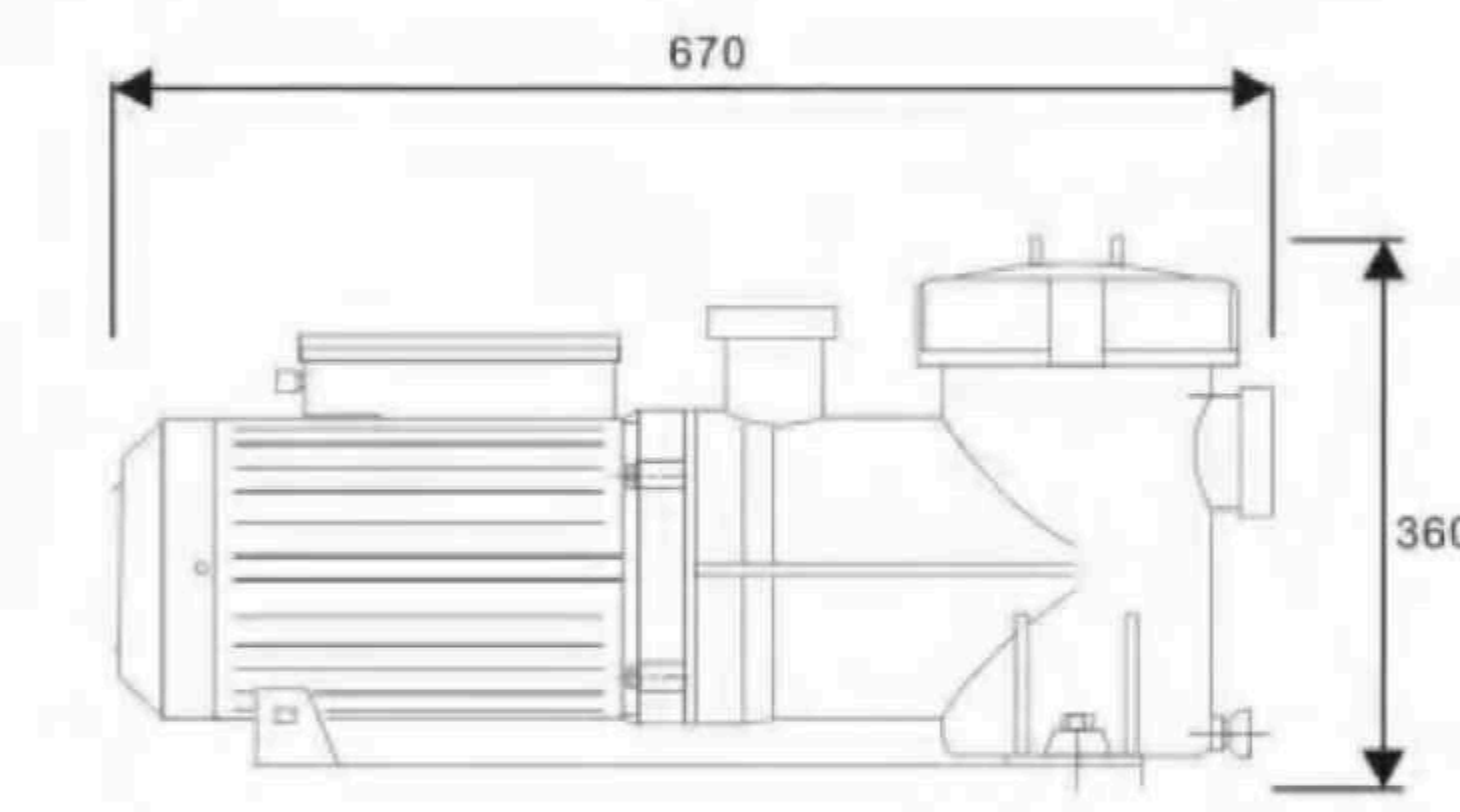
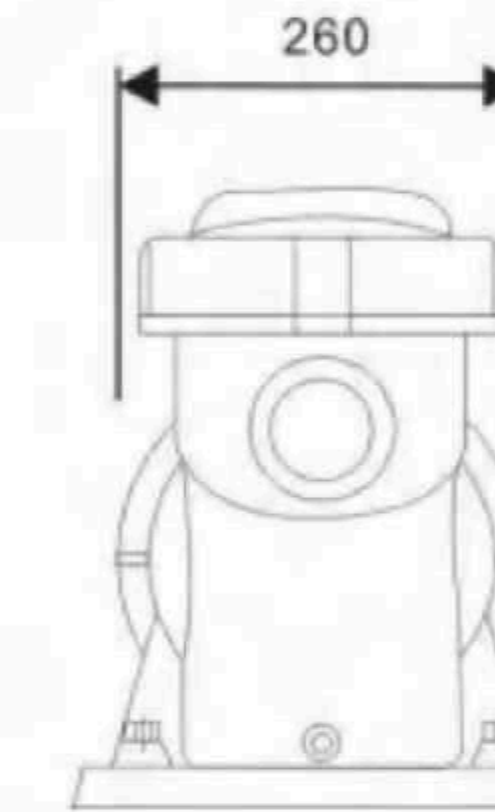
QH.Curve of The Pump



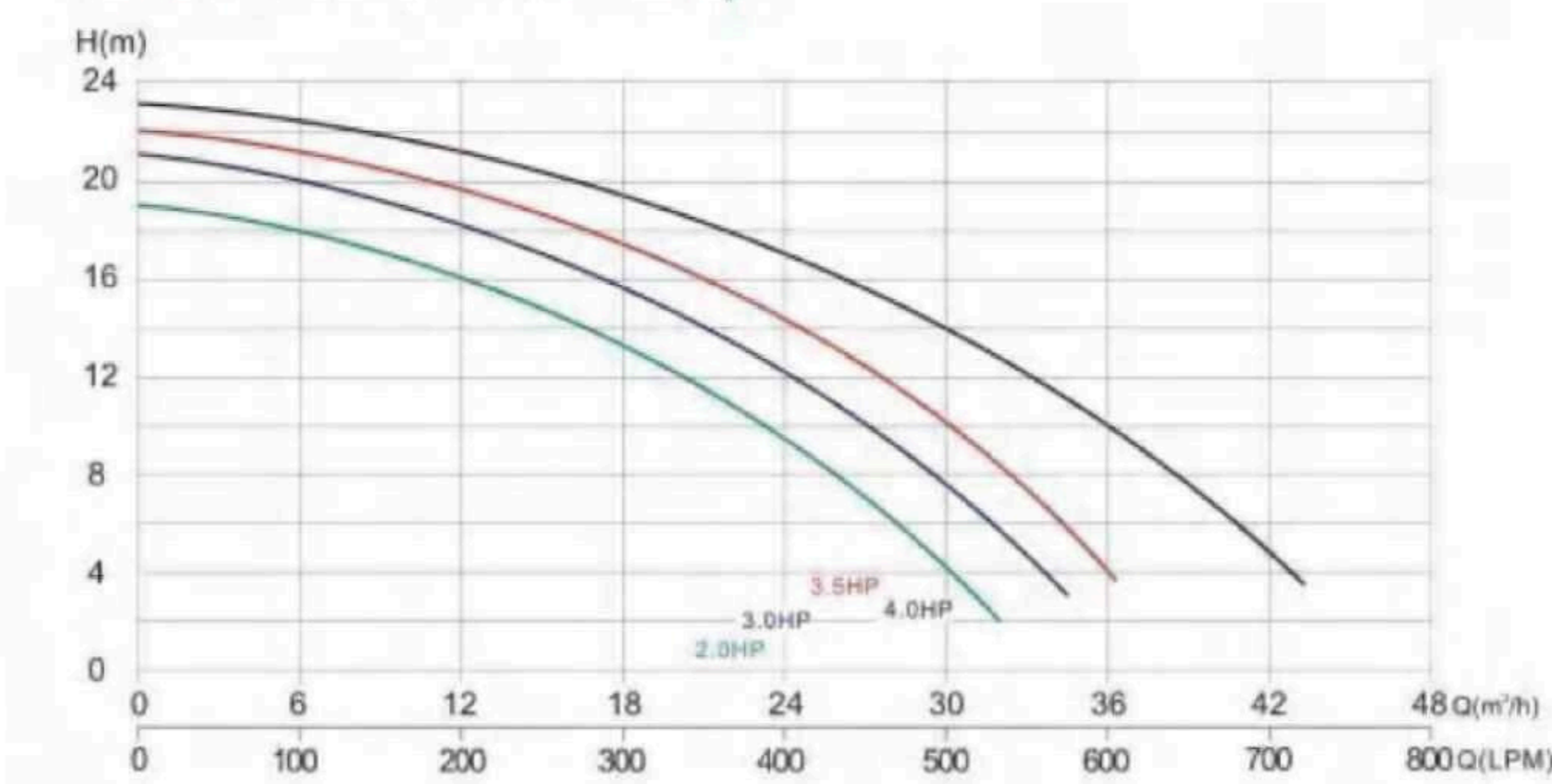
## HEP SERIES PUMP

**Features:**

- Anti-rust crust can stop water penetrating the engine. Enough power, high head, big flux and high efficient circulation.
- Lower noise and run quietly. The pump cover bears high airtight preventing the leaking.
- The main part of the pump is made of special plastic which is durable in extreme low or high temperature.
- Single phase:220/50Hz  
Three-phase:380V/50Hz



QH.Curve of The Pump



| Model      | Q-max (m³/h) | H-max (m) | Horsepower (HP) | Rated Power (kW) | Phase | Voltage (V) | Connection size |
|------------|--------------|-----------|-----------------|------------------|-------|-------------|-----------------|
| WL-HEP020M | 29           | 15.1      | 2.0             | 1.5              | 1     | 220         | 2" 63mm         |
| WL-HEP030M | 31           | 19        | 3.0             | 2.2              | 1     | 220         | 2" 63mm         |
| WL-HEP020T | 29           | 15.1      | 2.0             | 1.5              | 3     | 380         | 2" 63mm         |
| WL-HEP030T | 31           | 19        | 3.0             | 2.2              | 3     | 380         | 2" 63mm         |
| WL-HEP035T | 32           | 19.4      | 3.5             | 2.6              | 3     | 380         | 2" 63mm         |
| WL-HEP040T | 35           | 19.7      | 4.0             | 3.0              | 3     | 380         | 2" 63mm         |

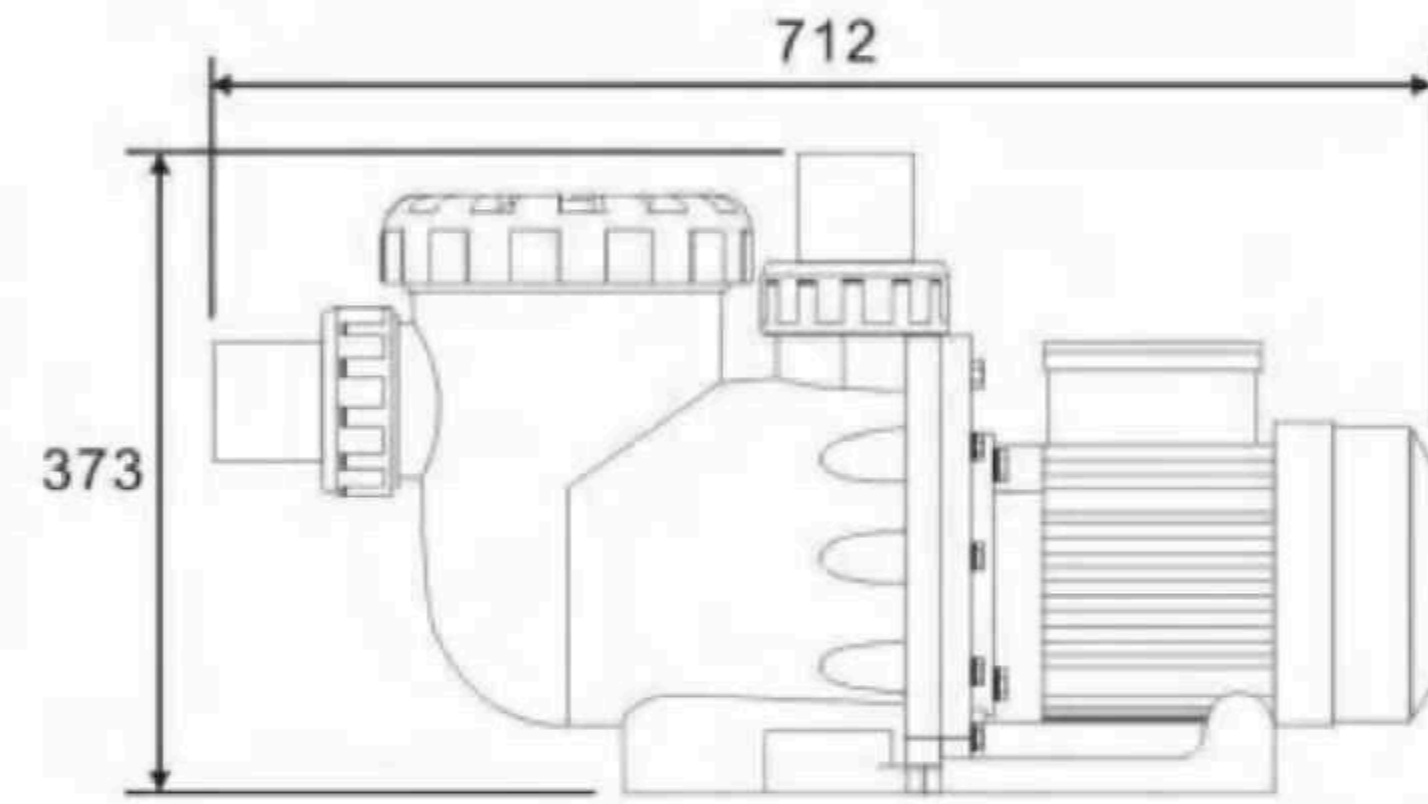
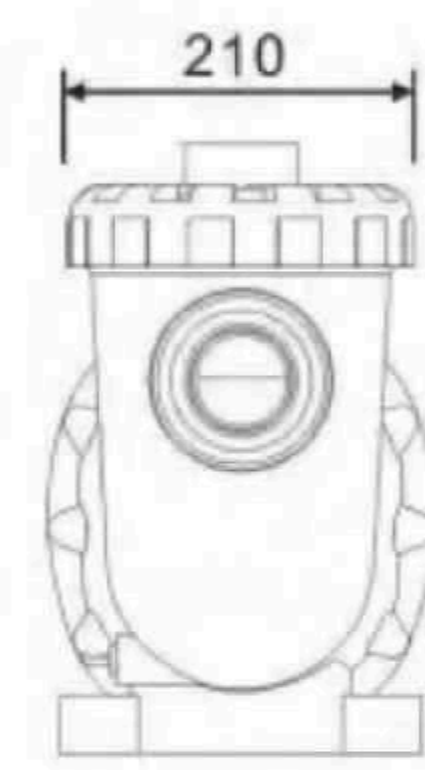
## CEP SERIES PUMP

### Features:

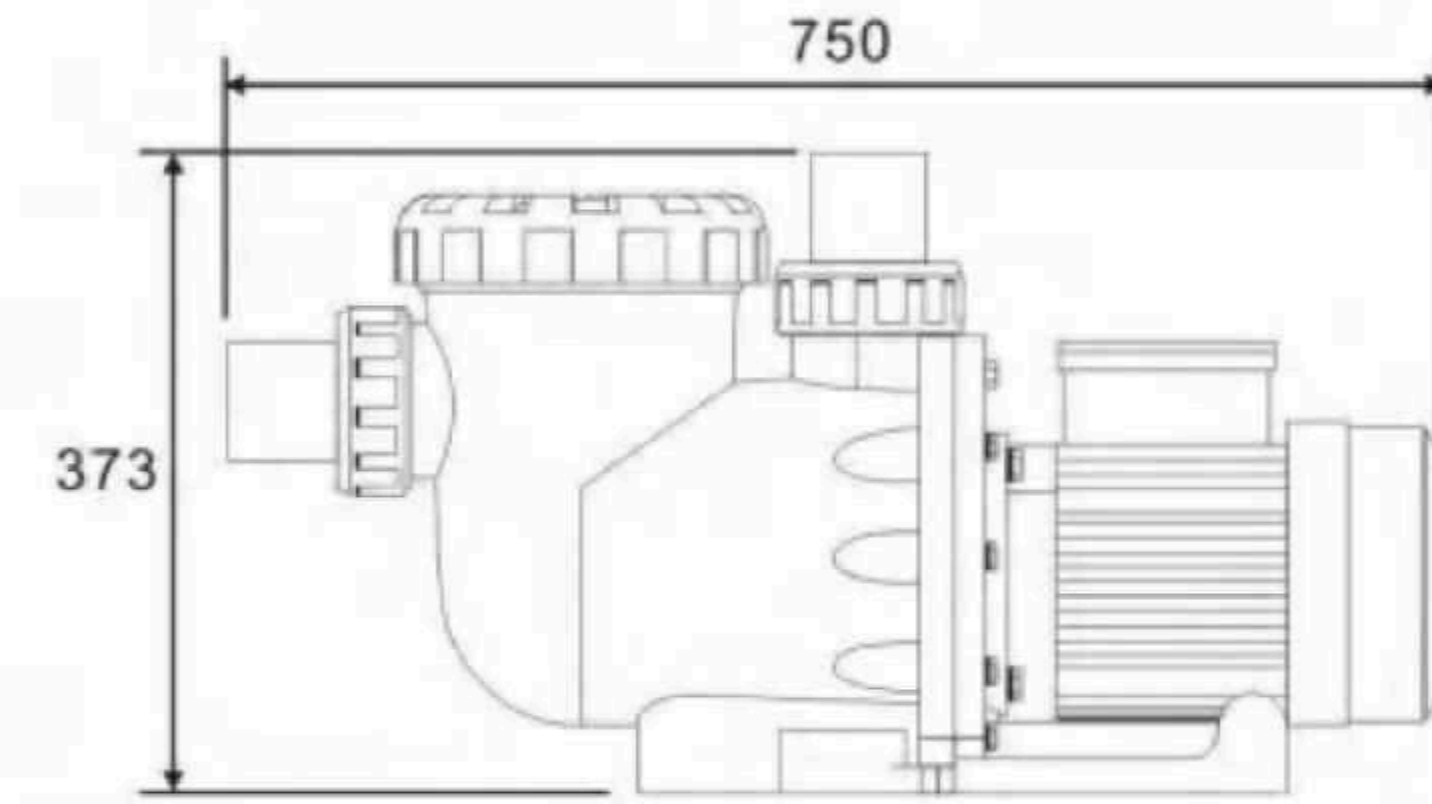
- Anit-rust crust can keep water from the engine.
- Enough power, high head, big flux and high efficient circulation.
- Lower noise and run quietly.
- The pump cover bears high airtight preventing the leaking.
- The main part of the pump is made of special plastic which is durable in extreme low or high temperature.
- Three-phase:380V/50Hz  
380V/60Hz model is available on request.



CE

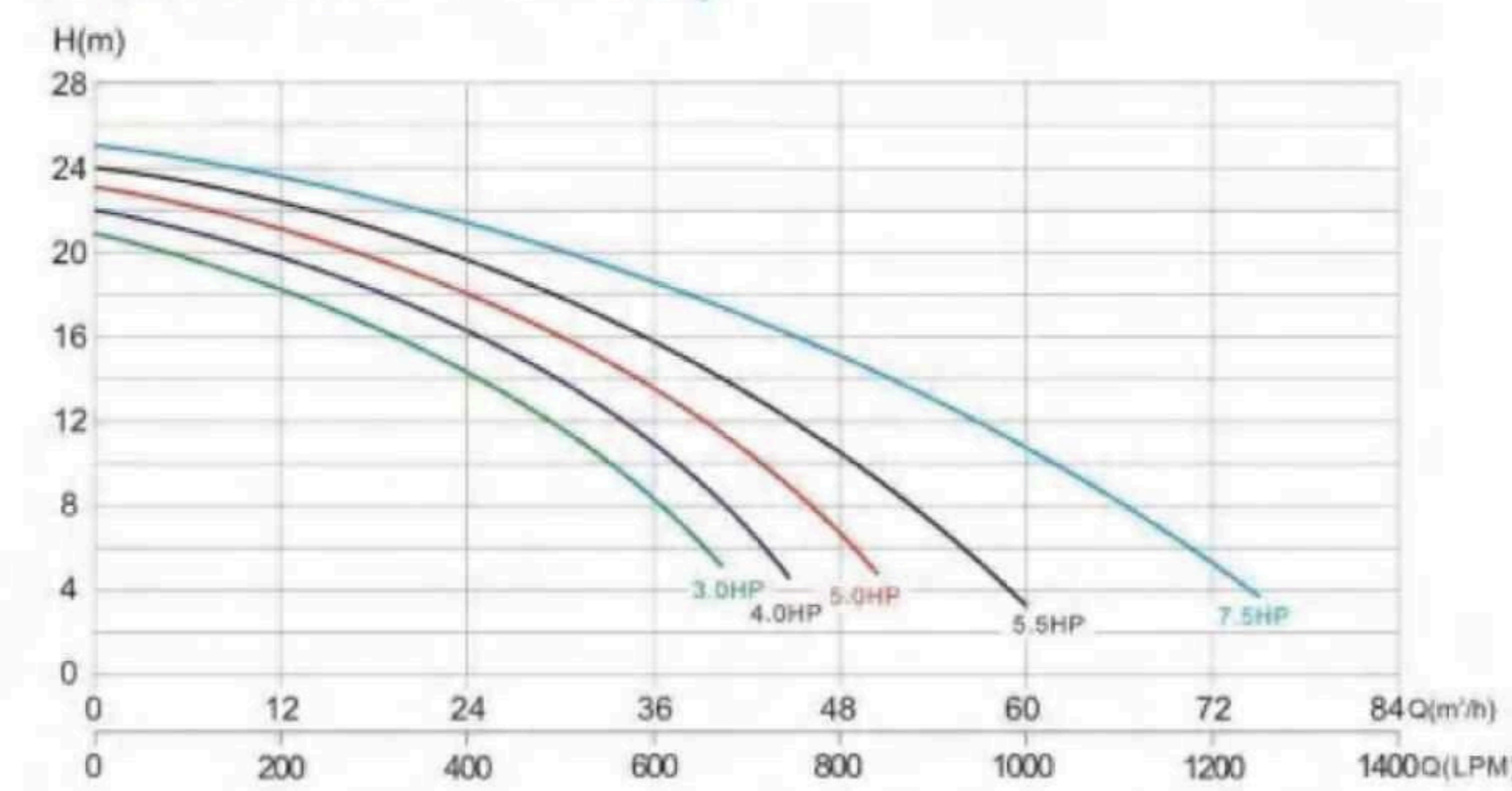


WL-CEP030T~WL-CEP040T



WL-CEP050T~WL-CEP075T

### QH.Curve of The Pump



| Model      | Q-max (m³/h) | H-max (m) | Horsepower (HP) | Rated Power (kW) | Phase | Voltage (V) | Inlet Port | Outlet Port |
|------------|--------------|-----------|-----------------|------------------|-------|-------------|------------|-------------|
| WL-CEP030T | 35.2         | 17.5      | 3.0             | 2.5              | 3     | 380         | 2" 63mm    | 2" 63mm     |
| WL-CEP040T | 39.6         | 18.3      | 4.0             | 3.0              | 3     | 380         | 2" or 75mm | 2" 63mm     |
| WL-CEP050T | 56           | 20.4      | 5.0             | 3.8              | 3     | 380         | 2" or 75mm | 2" 63mm     |
| WL-CEP055T | 62           | 21.9      | 5.5             | 4.0              | 3     | 380         | 75mm       | 75mm        |
| WL-CEP075T | 66           | 22.5      | 7.5             | 5.5              | 3     | 380         | 75mm       | 75mm        |



CE

0.35HP-1.2HP



CE

1.5HP-3.0HP

## STP SERIES PUMP

### Features:

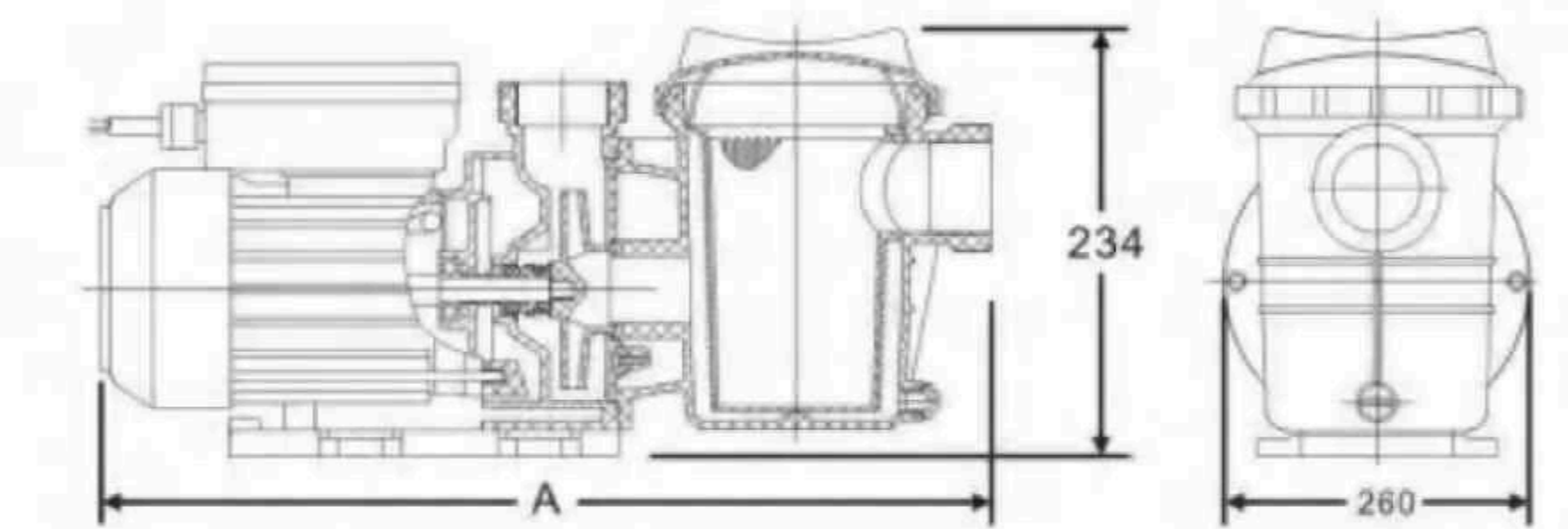
- Motor and water are completely separated.
- Total electrical separation.
- Pump housing, pump cover & impeller are made of high reinforced plastic.
- Quick record could be used with the inlet & outlet.

### Operation conditions:

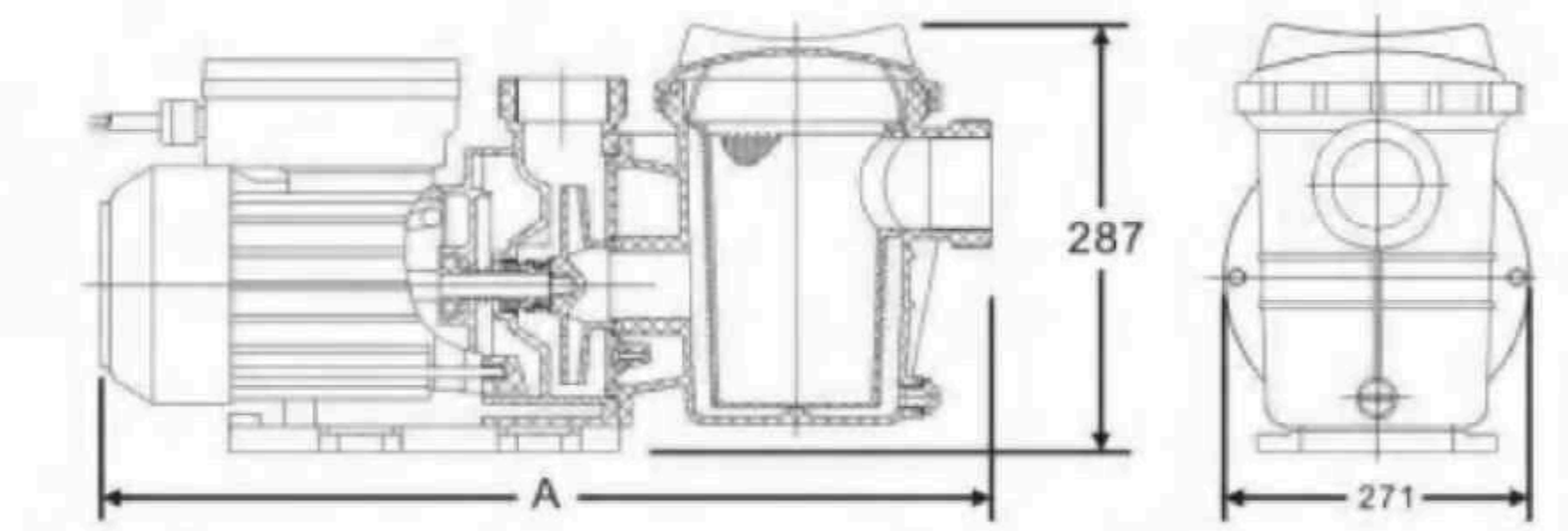
- Liquid Temperature: 5 ~ 50 °C ( 41 ~ 122 °F).
- Ambient Temperature: up to 50°C (122°F).
- Maximum working pressure: 3.0 bar.

### Applications:

Jet pump for jetted bath tubs, spa pools, swimming pools, massage stations and cleaning system.

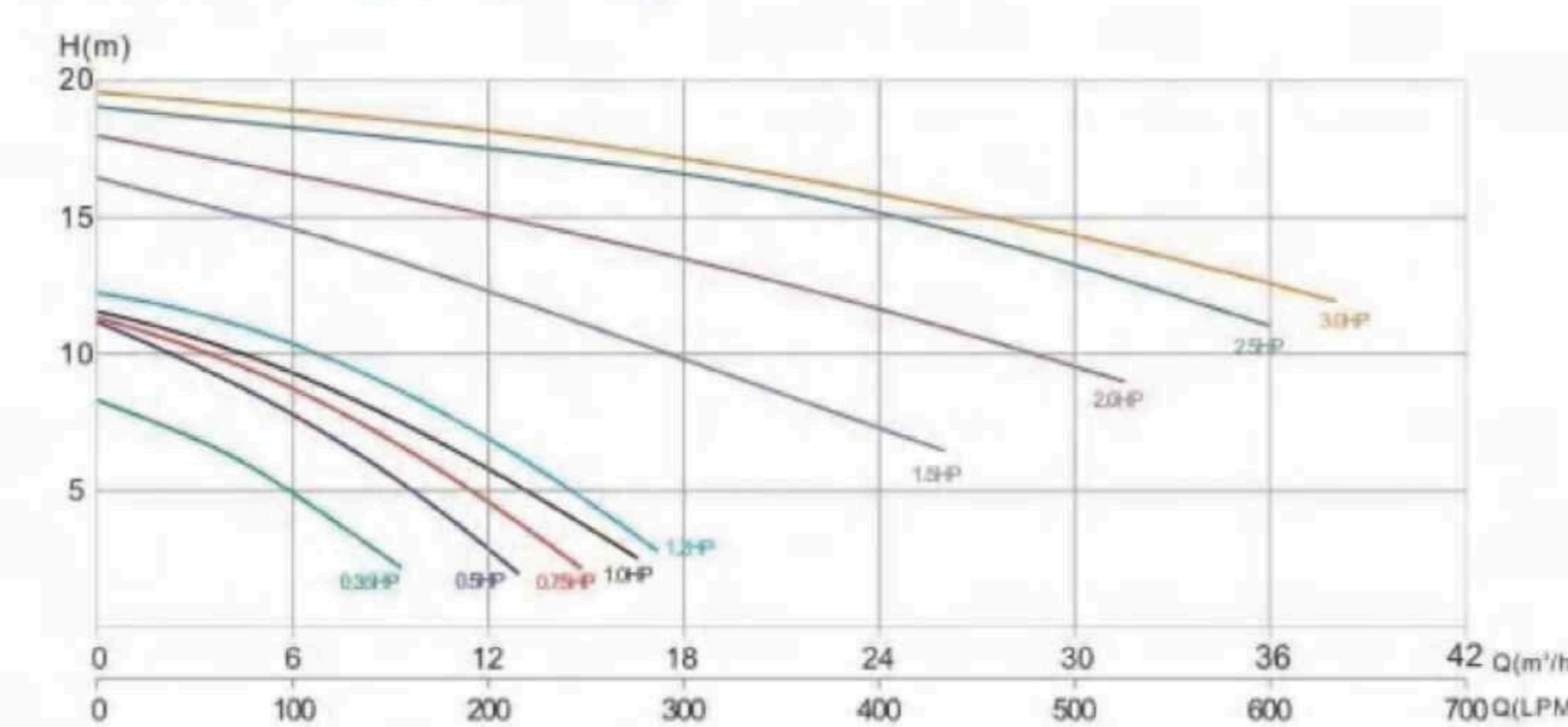


WL-STP35~WL-STP120



WL-STP150~WL-STP300

### QH.Curve of The Pump



| Model     | Q-max (m³/h) | H-max (m) | Horsepower (HP) | Rated Power (kW) | Phase | Voltage (V) | Connection size | A Length (mm) |
|-----------|--------------|-----------|-----------------|------------------|-------|-------------|-----------------|---------------|
| WL-STP35  | 9.6          | 8         | 0.35            | 0.26             | 1     | 220         | 1.5" or 50mm    | 443           |
| WL-STP50  | 12.6         | 11        | 0.5             | 0.37             | 1     | 220         | 1.5" or 50mm    | 443           |
| WL-STP75  | 14.4         | 10.5      | 0.75            | 0.56             | 1     | 220         | 1.5" or 50mm    | 465           |
| WL-STP100 | 16.5         | 11        | 1.0             | 0.75             | 1     | 220         | 1.5" or 50mm    | 465           |
| WL-STP120 | 18           | 13        | 1.2             | 0.9              | 1     | 220         | 1.5" or 50mm    | 465           |
| WL-STP150 | 25.8         | 16.5      | 1.5             | 1.1              | 1     | 220         | 2" or 63mm      | 573           |
| WL-STP200 | 31.2         | 18        | 2.0             | 1.5              | 1     | 220         | 2" or 63mm      | 573           |
| WL-STP250 | 36           | 19        | 2.5             | 1.87             | 1     | 220         | 2" or 63mm      | 573           |
| WL-STP300 | 38.1         | 19.5      | 3.0             | 2.25             | 1     | 220         | 2" or 63mm      | 598           |
| WL-STP300 | 38.1         | 19.5      | 3.0             | 2.25             | 3     | 380         | 2" or 63mm      | 598           |

## FCP SERIES PUMP

### Features:

- Anti-rust crust can stop water penetrating the engine.
- Enough power, high head, big flux and high efficient circulation.
- Smaller noise and run quietly.
- The pump cover bears high airtight preventing the leaking.
- Convenient to handle, easy to maintain, with the supplying of spareparts.



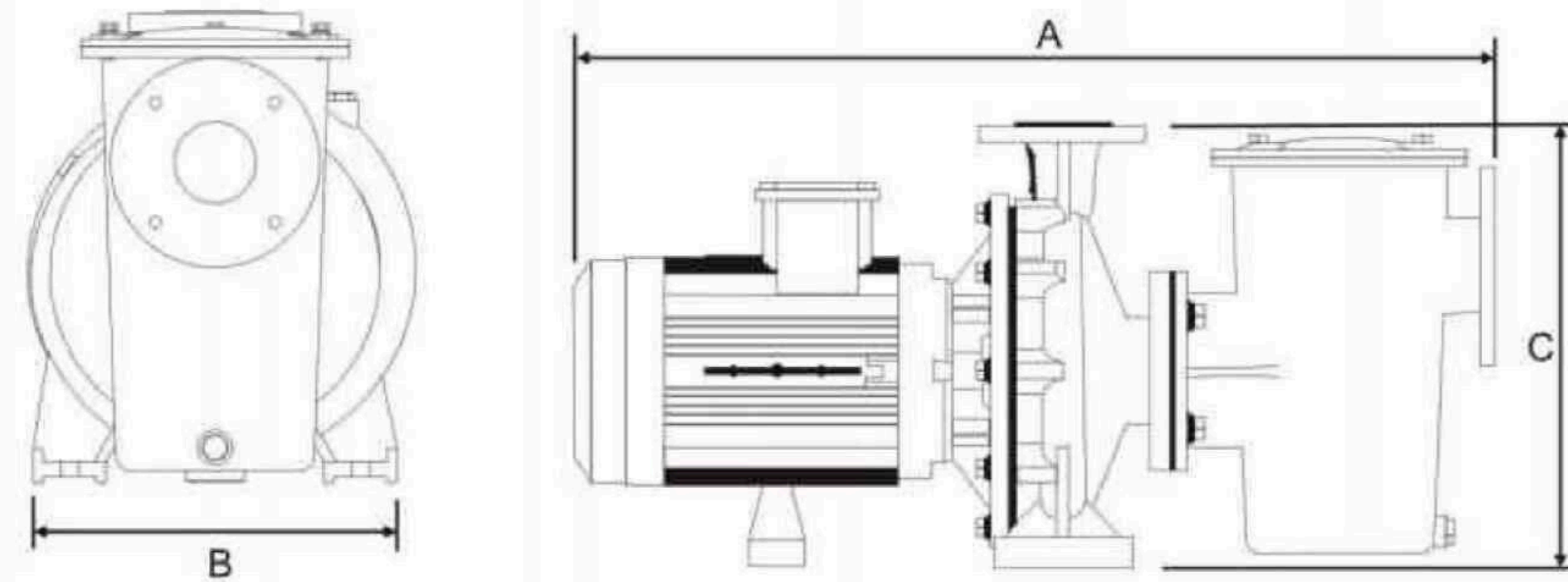
CE

### Materials:

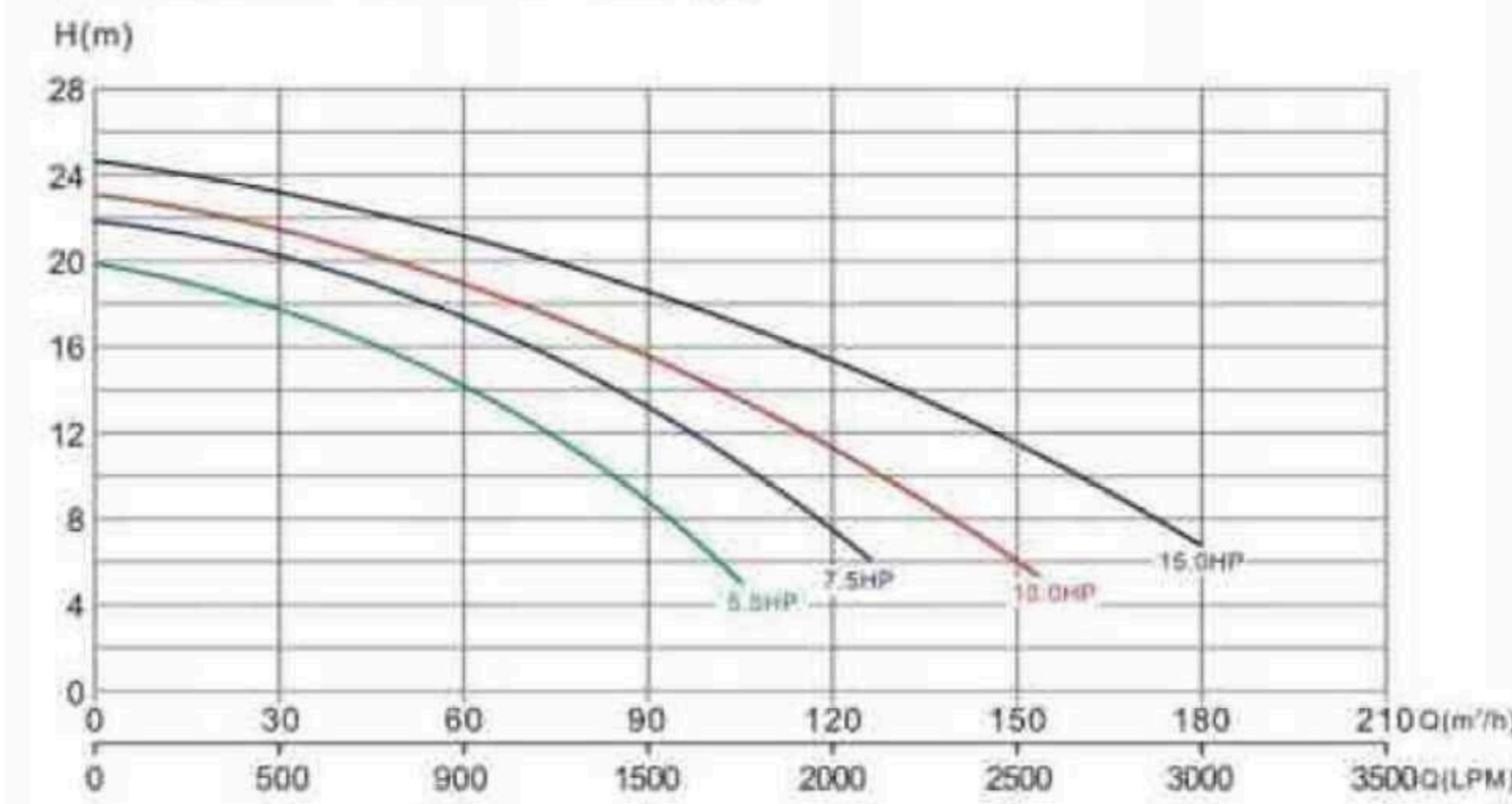
- Pump housing: Cast iron
- Pre-filter basket: Stainless steel AISI304
- Shaft: Stainless steel AISI304
- Impeller: Stainless steel AISI304

### Motor:

- Motor speed: 1450rpm
- Waterproof: IP55
- Insulation class: F



QH.Curve of The Pump



| Model     | Horsepower (HP) | Rated Power (kW) | Phase | Voltage (V) | Inlet Port Dia. (mm) | Inlet Flange Dia. (mm) | Outlet Flange Dia.(mm) | Outlet Port Dia. (mm) | A Length (mm) | B Length (mm) | C Length (mm) |
|-----------|-----------------|------------------|-------|-------------|----------------------|------------------------|------------------------|-----------------------|---------------|---------------|---------------|
| WL-FCP055 | 5.5             | 4.0              | 3     | 380         | Φ80                  | 4-Φ12 Φ90              | 4-Φ18 Φ75              | Φ65                   | 820           | 350           | 410           |
| WL-FCP075 | 7.5             | 5.5              | 3     | 380         | Φ80                  | 4-Φ18 Φ90              | 4-Φ18 Φ75              | Φ65                   | 850           | 370           | 420           |
| WL-FCP100 | 10.0            | 7.5              | 3     | 380         | Φ100                 | 4-Φ18 Φ110             | 4-Φ18 Φ90              | Φ80                   | 950           | 370           | 420           |
| WL-FCP150 | 15.0            | 11.0             | 3     | 380         | Φ100                 | 4-Φ18 Φ110             | 4-Φ18 Φ90              | Φ80                   | 950           | 370           | 420           |

## ATB SERIES PUMP

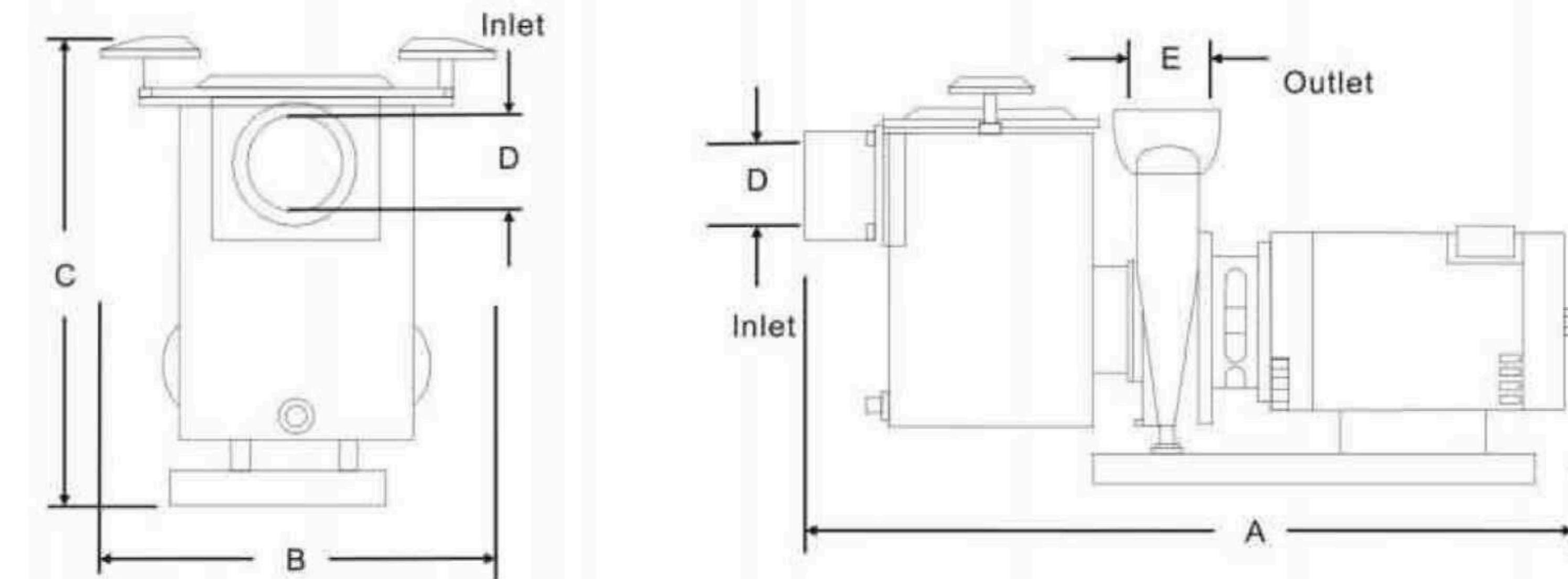
Brass pumps are designed for maximum performance and economy in swimming filtration system. Besides they are extremely quiet in operation.

### Features:

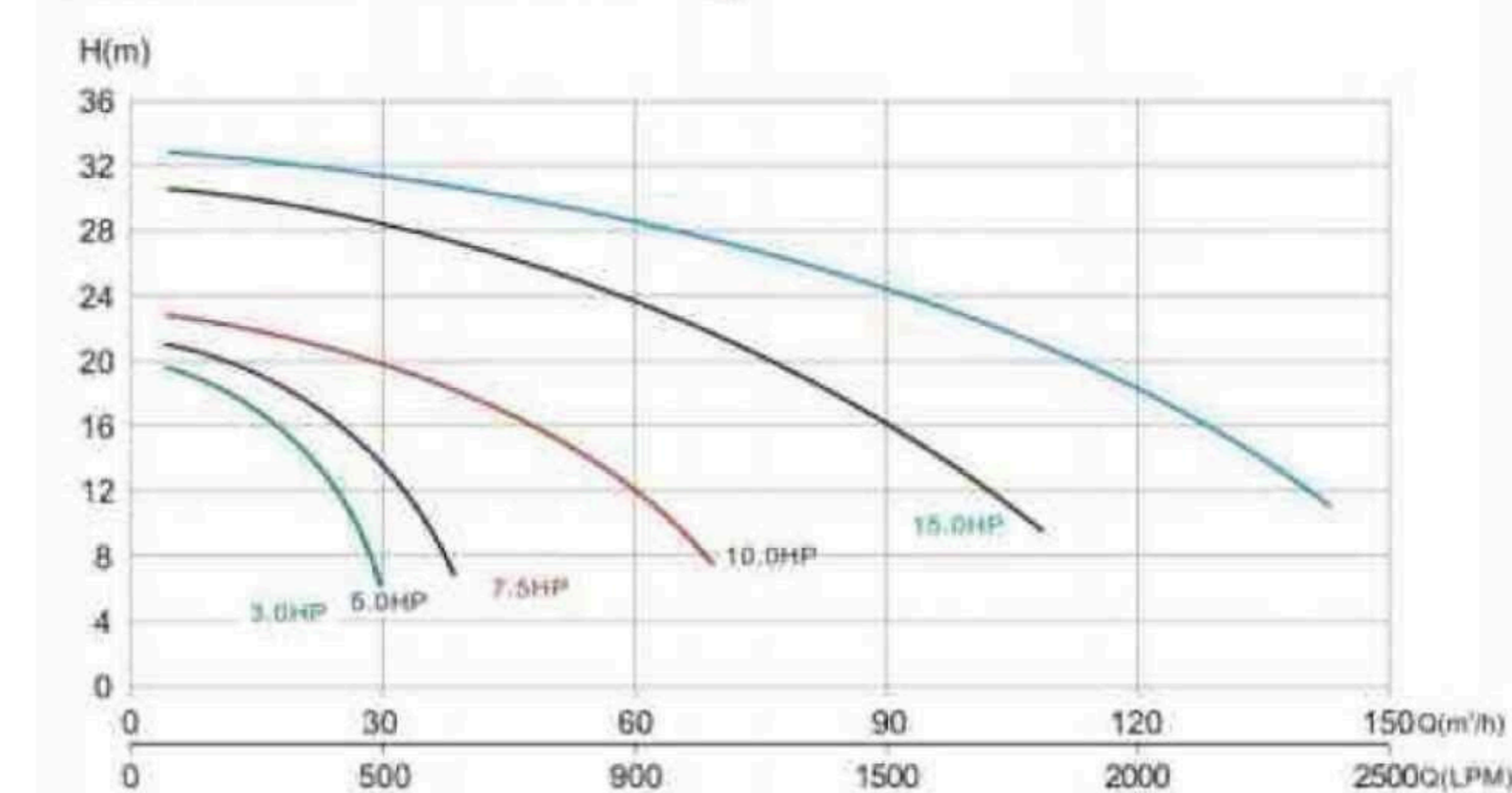
- Durable brass construction.
- High performance motors for maximum flow.
- Self-priming to insure proper filtration.
- Stainless steel mechanical seal.
- Closed impeller for longer motor bearing life.
- Heat-resistant seal.



CE



QH.Curve of The Pump



| Model     | Horsepower (HP) | Rated Power (kW) | Phase | Voltage (V) | Inlet/Outlet | A Length (mm) | B Width (mm) | C Height (mm) |
|-----------|-----------------|------------------|-------|-------------|--------------|---------------|--------------|---------------|
| WL-ATB030 | 3.0             | 2.25             | 3     | 380         | 2"/2"        | 660           | 200          | 200           |
| WL-ATB050 | 5.0             | 3.8              | 3     | 380         | 3"/2.5"      | 720           | 230          | 400           |
| WL-ATB075 | 7.5             | 5.5              | 3     | 380         | 3"/2.5"      | 720           | 266          | 400           |
| WL-ATB100 | 10.0            | 7.5              | 3     | 380         | 4"/3"        | 1060          | 340          | 570           |
| WL-ATB150 | 15.0            | 11.0             | 3     | 380         | 4"/4"        | 1090          | 340          | 570           |

## AIR BLOWER

### Features:

- Centrifugal vanes produce high pressure, great outflow, and low noise.
- A high-quality engine ensures a safe and steady effect.
- Oil free and pure compressed air.
- The machine has a wide range of power and can run a long service life.
- 50Hz or 60Hz are available on request.

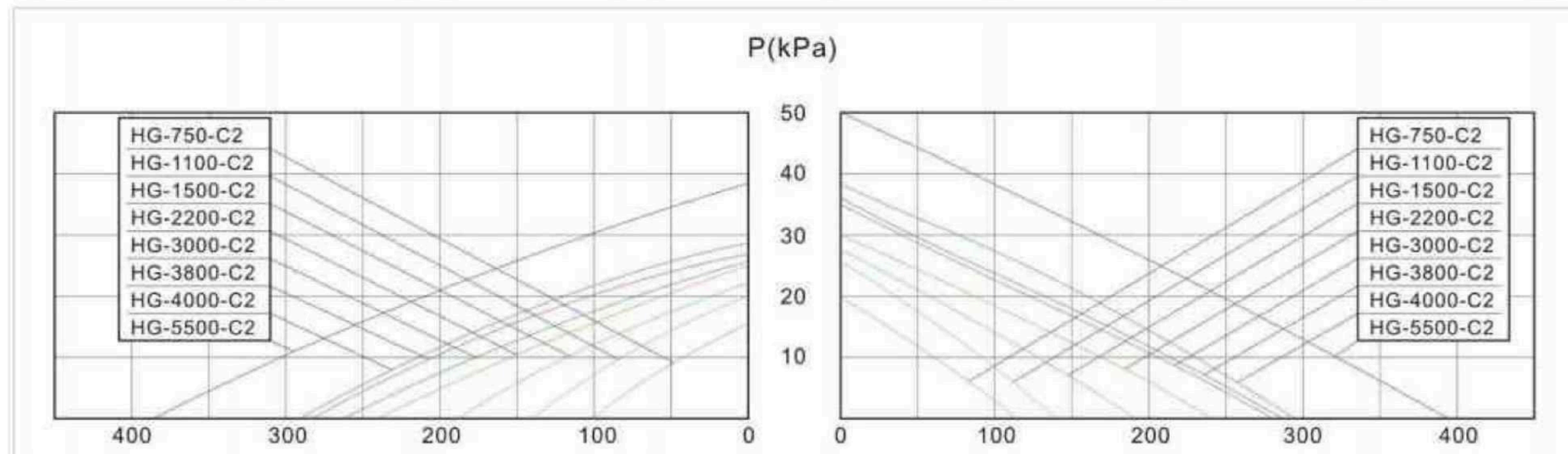
### Application:

- Swimming Pool/ Spa Pool
- Cooling for Molding
- Ultrasonic Washing and Cleaning Equipment
- Central Vacuum Cleaning System
- Printing Machine
- Sewage Treatment
- Water Treatment
- Agriculture Field
- Fish Farm
- Aquaculture



CE

### QH.Curve of The Pump



| Model      | Voltage (V) | Power (W) | Max.Pressure (Kpa) | Vacuum (Kpa) | Output (m³/h) | Pressure (KPa) | Weight (KGS) | Dimensions L*W*H(mm) |
|------------|-------------|-----------|--------------------|--------------|---------------|----------------|--------------|----------------------|
| HG-750-C2  | 220         | 750       | 20                 | -16          | 110           | <12            | 14           | 306*288*315          |
| HG-1100-C2 | 220         | 1100      | 26                 | -20          | 135           | <18            | 19           | 329*320*390          |
| HG-1500-C2 | 380         | 1500      | 28                 | -22          | 180           | <18            | 25           | 338*328*357          |
| HG-2200-C2 | 380         | 2200      | 30                 | -24          | 240           | <20            | 28           | 392*362*372          |
| HG-3000-C2 | 380         | 3000      | 35                 | -25          | 260           | <25            | 36           | 425*384*400          |
| HG-3800-C2 | 380         | 3800      | 36                 | -26          | 280           | <26            | 38           | 410*392*404          |
| HG-4000-C2 | 380         | 4000      | 38                 | -28          | 280           | <28            | 45           | 415*392*404          |
| HG-5500-C2 | 380         | 5500      | 50                 | -35          | 380           | <28            | 58           | 486*418*453          |

## POOL FILTERS



SUPER SERIES  
SAND FILTER

## SUPER SERIES SAND FILTER POOL FILTERS

Made of high density polyethylene material and integration of blow molding technology. HDPE filter tank is compatible for many different weather condition. Unique structural design gets the best clarity of filtered water and a better backwash.



SDG-17~SDG-26



SCG-20~SCG-26

### Advantages:

- More efficient: 30% more of filtration bed improves the filtration quality easily.
- Environmental, safe & corrosive-proof material: suitable to all types of swimming pools.
- Easy maintenance: no tools is required for maintenance or operation.
- Pool in need of better water clarit.
- Professional approach of getting better water.

### Features:

- Suitable for pools with different disinfection system such as salt chlorine generator, UV sterilizer, Ozone system and chemical dosing.
- Can be used for Pool, Spa and Water features.
- Easy to maintain and replace.

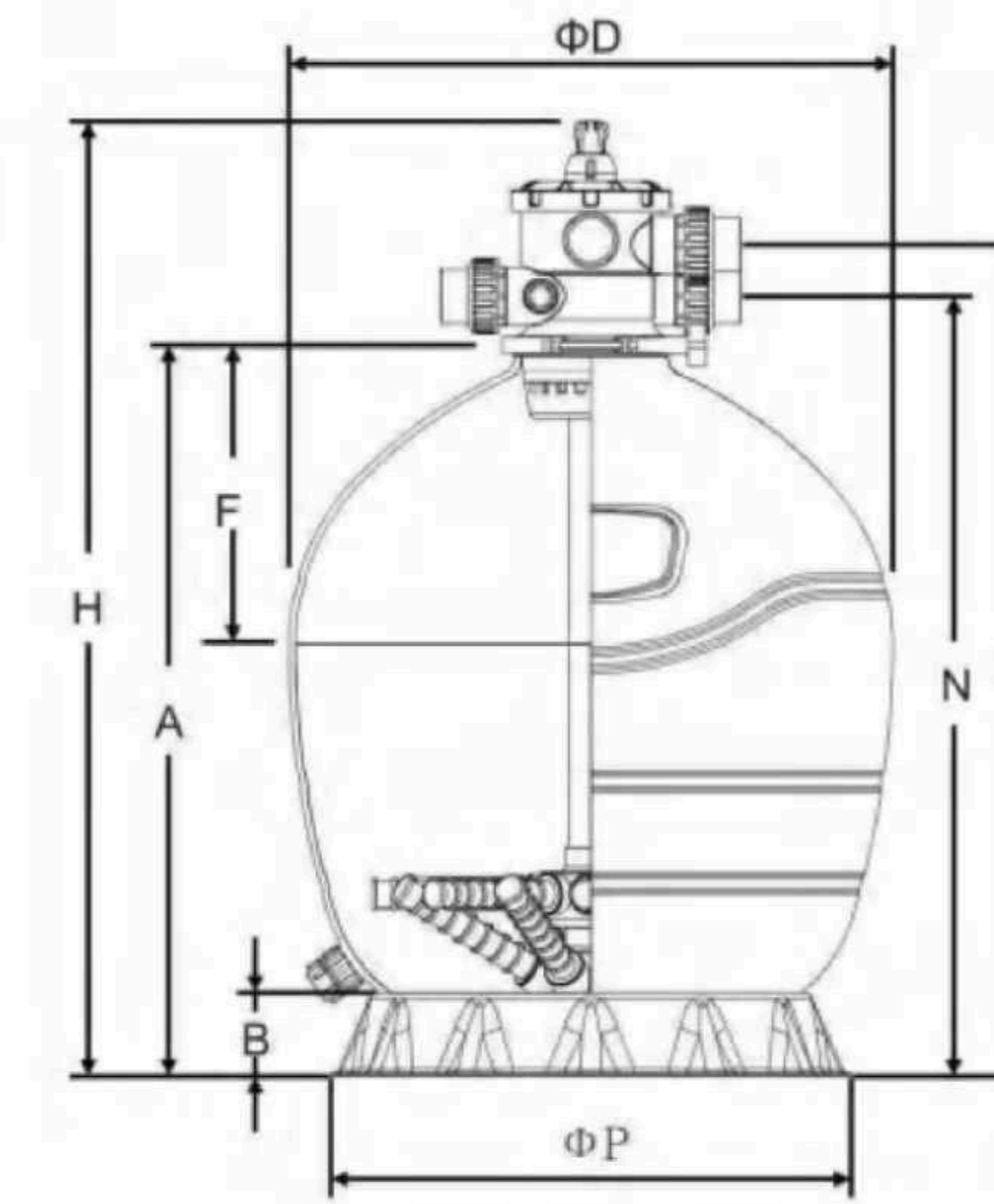
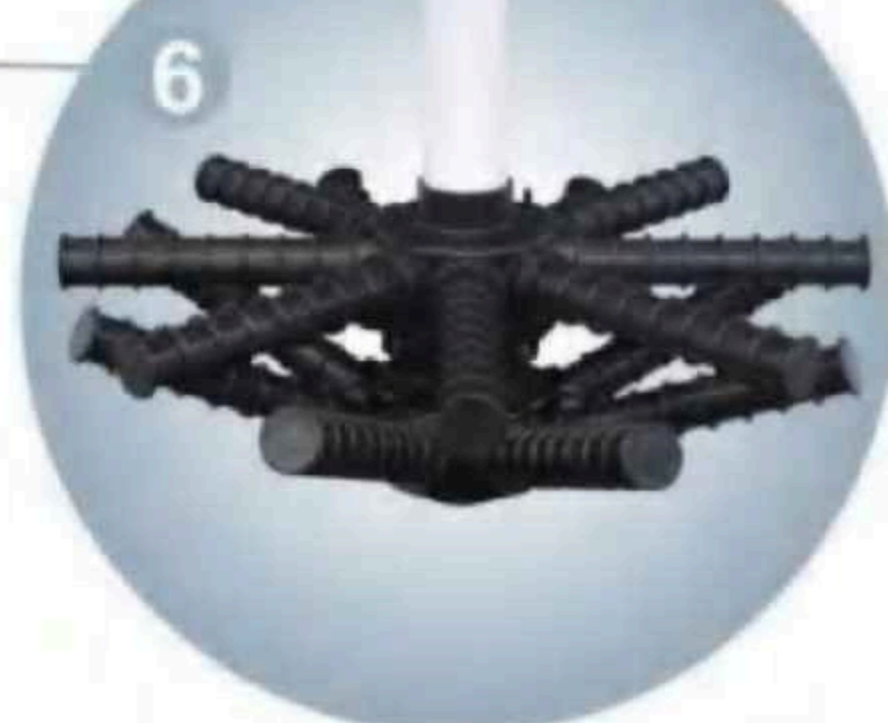
1 Inlet/outlet can meet with metric/imperial pipe, more convenient to operate.

2 One-piece plastic clamp allows 360 rotation of valve to simplify installation.

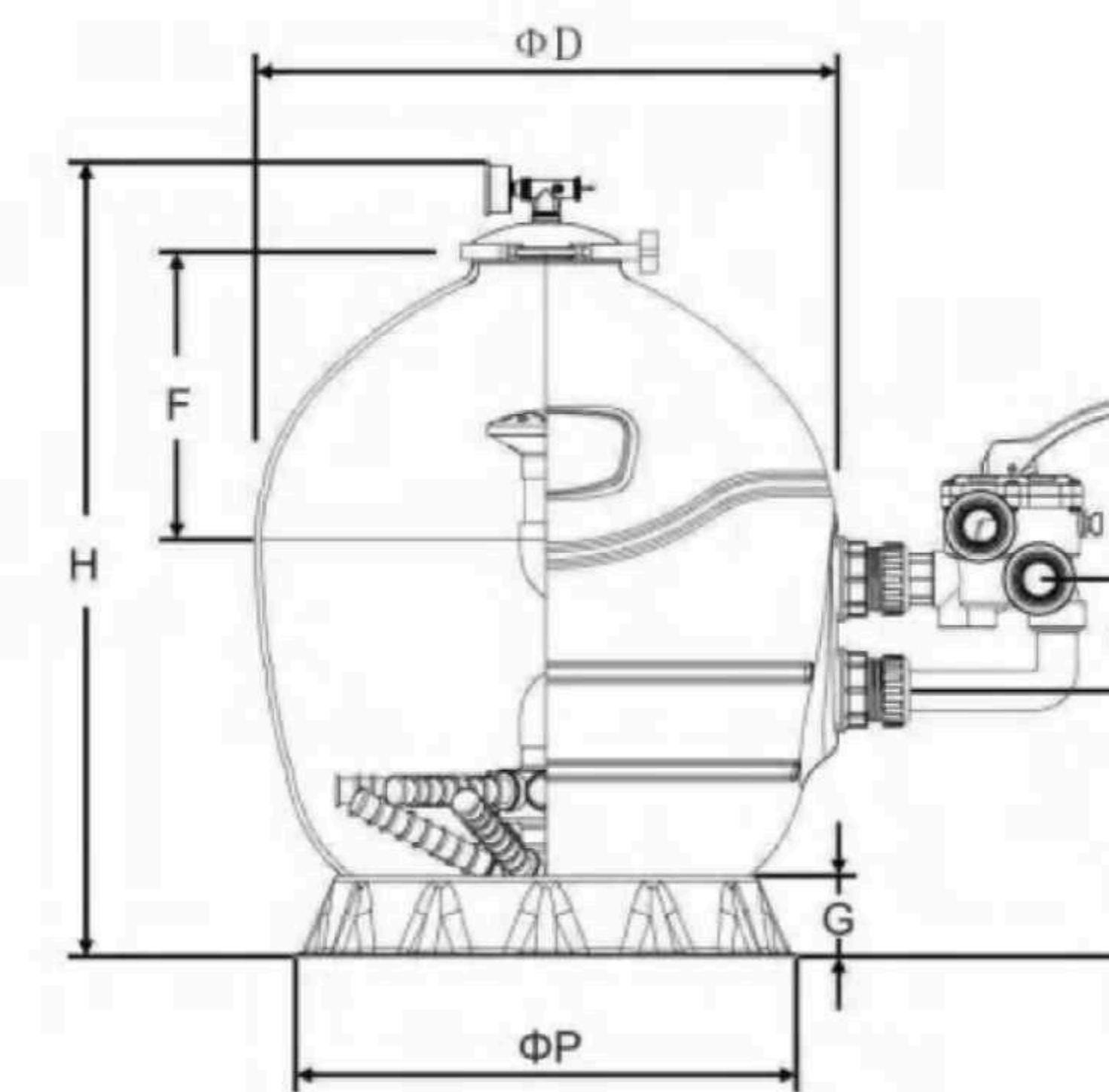
3 More volume of filtration bed gets better clarity of filtered water & less backwash.

4 High density polyethylene filter tank material manufactured to maximize the strength of the filter.

5 Unique double-layered lateral enhances filtration efficiency and allows complete backwash.



|        | SDG-17 | SDG-20 | SDG-24 | SDG-26 |
|--------|--------|--------|--------|--------|
| ΦD(mm) | 425    | 500    | 600    | 650    |
| H(mm)  | 767    | 890    | 983    | 1028   |
| B(mm)  | 75     | 75     | 75     | 90     |
| A(mm)  | 526    | 650    | 743    | 787    |
| ΦP(mm) | 390    | 390    | 390    | 560    |
| N(mm)  | 579    | 702    | 795    | 839    |
| M(mm)  | 635    | 758    | 850    | 895    |
| F(mm)  | 195    | 236    | 285    | 319    |



|        | SCG-20 | SCG-24 | SCG-26 |
|--------|--------|--------|--------|
| ΦD(mm) | 500    | 600    | 650    |
| H(mm)  | 736    | 830    | 887    |
| A(mm)  | 241    | 310    | 296    |
| ΦP(mm) | 390    | 390    | 560    |
| C(mm)  | 125    | 125    | 125    |
| G(mm)  | 75     | 75     | 90     |
| F(mm)  | 236    | 285    | 319    |

### Product parameters

| Model  | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |     | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m <sup>3</sup> ) | Valve Volume (m <sup>3</sup> ) | Tank Weight (kg) | Valve Weight (kg) |
|--------|-----------|----|-------------------------------|-------------------|-----|----------------------------|-------------------------------|--------------------------------|------------------|-------------------|
|        | inches    | mm |                               | m <sup>3</sup> /h | lpm |                            |                               |                                |                  |                   |
| SDG-17 | 1.5       | 50 | 0.14                          | 7.0               | 117 | 50                         | 0.11                          | 0.02                           | 9.8              | 3                 |
| SDG-20 | 1.5       | 50 | 0.19                          | 9.5               | 158 | 90                         | 0.16                          | 0.02                           | 12.3             | 3                 |
| SDG-24 | 1.5       | 50 | 0.27                          | 13.5              | 225 | 140                        | 0.26                          | 0.02                           | 15.2             | 3                 |
| SDG-26 | 1.5       | 50 | 0.32                          | 16.0              | 267 | 170                        | 0.34                          | 0.02                           | 18               | 3                 |

Note: The model SDG-17 is with one layer lateral.

| Model  | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |     | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m <sup>3</sup> ) | Valve Volume (m <sup>3</sup> ) | Tank Weight (kg) | Valve Weight (kg) |
|--------|-----------|----|-------------------------------|-------------------|-----|----------------------------|-------------------------------|--------------------------------|------------------|-------------------|
|        | inches    | mm |                               | m <sup>3</sup> /h | lpm |                            |                               |                                |                  |                   |
| SCG-20 | 1.5       | 50 | 0.19                          | 9.5               | 158 | 90                         | 0.16                          | 0.02                           | 13.3             | 3                 |
| SCG-24 | 1.5       | 50 | 0.27                          | 13.5              | 225 | 140                        | 0.26                          | 0.02                           | 16.2             | 3                 |
| SCG-26 | 1.5       | 50 | 0.32                          | 16.0              | 267 | 170                        | 0.34                          | 0.02                           | 19               | 3                 |

MAXIMUM WORKING PRESSURE: 40psi/2.8kg/cm<sup>2</sup>  
MAXIMUM TEMPERATURE ≤ 50 °C

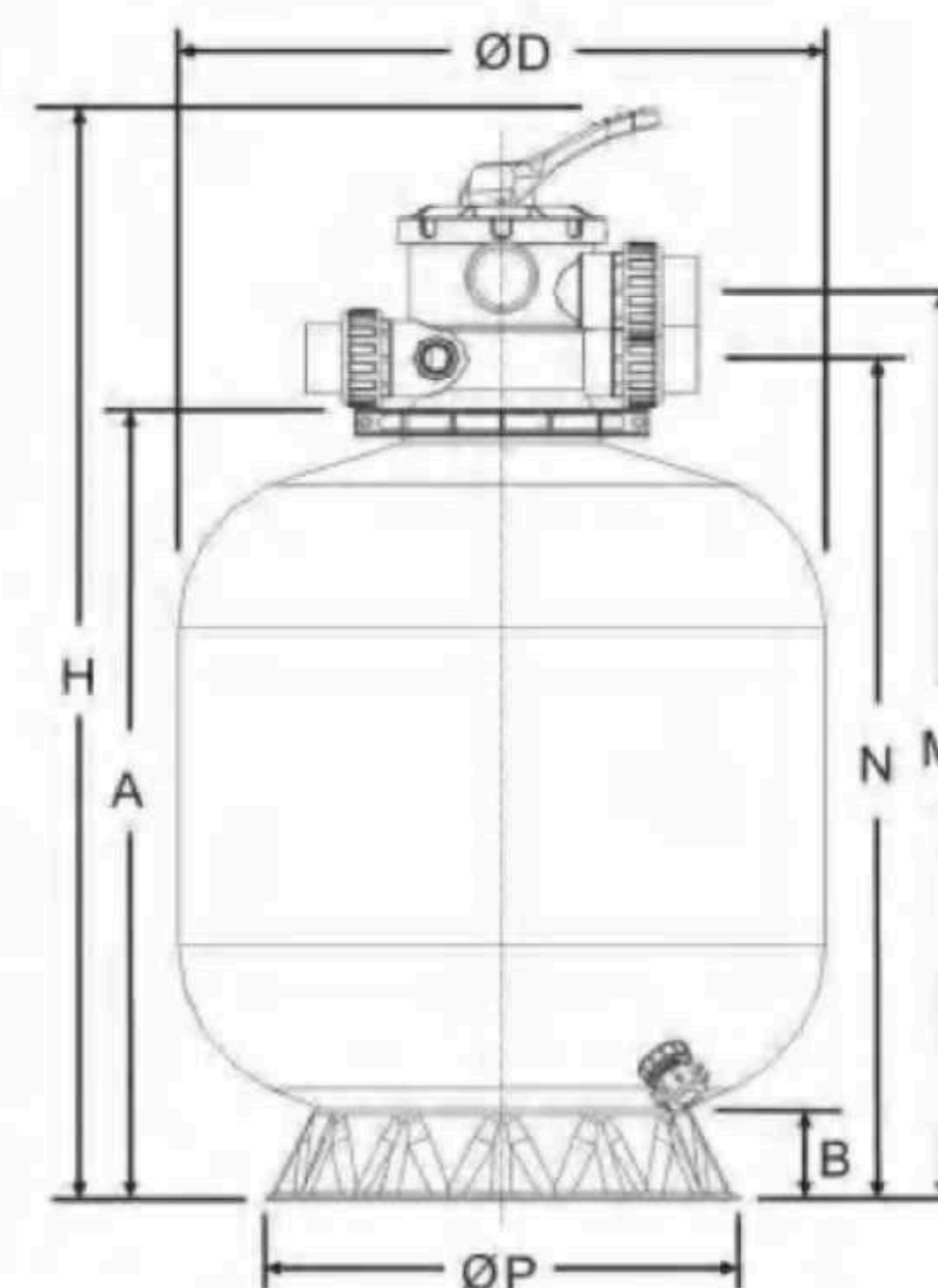
## “P-DG” SERIES FILTERS POOL FILTERS

### Features:

- Made of high density polyethylene material, corrosive-proof, safe and environmental.
- Unitized thermal plastic filter tank tough, durable and suitable for many different weather condition.
- Easy-to-use multiport valve lets you select any of the valve/filter operation with a simple lever-action.
- Clamp lock is designed to allow 360 degree rotation to simplify installation.
- Compact and save space.
- These sand filters are applicable in all types of pool, spa, fountain, waterscape and aquarium.

### Main parts:

- Easy-to-use six-position valve makes the selection of the valve/ filter simple.
  - \* FILTER (Normal filtration and vacuuming).
  - \* BACKWASH (Clean filter by reversing the flow).
  - \* RINSE (Used after backwash to flush dirt from valve).
  - \* WASTE (By-passes filter, used for vacuuming to waste or lowering water level).
  - \* RECIRCULATE (By-passes filter for circulation water to pool).
  - \* CLOSE.
- Unitized and durable tank.
- Special drainage design, easy to drain, maintain and ice-free in winter.



|        |     |     |     |     |     |      |
|--------|-----|-----|-----|-----|-----|------|
| φD(mm) | 350 | 410 | 450 | 535 | 635 | 710  |
| H(mm)  | 750 | 770 | 830 | 870 | 970 | 1040 |
| B(mm)  | 75  | 75  | 75  | 75  | 95  | 95   |
| A(mm)  | 490 | 510 | 570 | 610 | 710 | 780  |
| φP(mm) | 319 | 319 | 390 | 390 | 565 | 565  |
| N(mm)  | 545 | 565 | 625 | 665 | 765 | 835  |
| M(mm)  | 600 | 620 | 680 | 720 | 820 | 890  |

| Model   | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |     | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m <sup>3</sup> ) | Valve Volume (m <sup>3</sup> ) | Tank Weight (kg) | Valve Weight (kg) |
|---------|-----------|----|-------------------------------|-------------------|-----|----------------------------|-------------------------------|--------------------------------|------------------|-------------------|
|         | inches    | mm |                               | m <sup>3</sup> /h | lpm |                            |                               |                                |                  |                   |
| P-DG350 | 1.5       | 50 | 0.10                          | 4.50              | 75  | 25                         | 0.06                          | 0.02                           | 4.0              | 3                 |
| P-DG400 | 1.5       | 50 | 0.13                          | 6.50              | 108 | 34                         | 0.09                          | 0.02                           | 5.0              | 3                 |
| P-DG450 | 1.5       | 50 | 0.16                          | 8.00              | 133 | 50                         | 0.15                          | 0.02                           | 6.5              | 3                 |
| P-DG500 | 1.5       | 50 | 0.23                          | 11.50             | 192 | 80                         | 0.20                          | 0.02                           | 9.2              | 3                 |
| P-DG650 | 1.5       | 50 | 0.32                          | 16.00             | 267 | 160                        | 0.32                          | 0.02                           | 12.1             | 3                 |
| P-DG700 | 1.5       | 50 | 0.40                          | 20.00             | 333 | 220                        | 0.42                          | 0.02                           | 17.0             | 3                 |

MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm<sup>2</sup>(PLASTIC CLAMP)

MAXIMUM WORKING WATER TEMPERATURE≤50°C

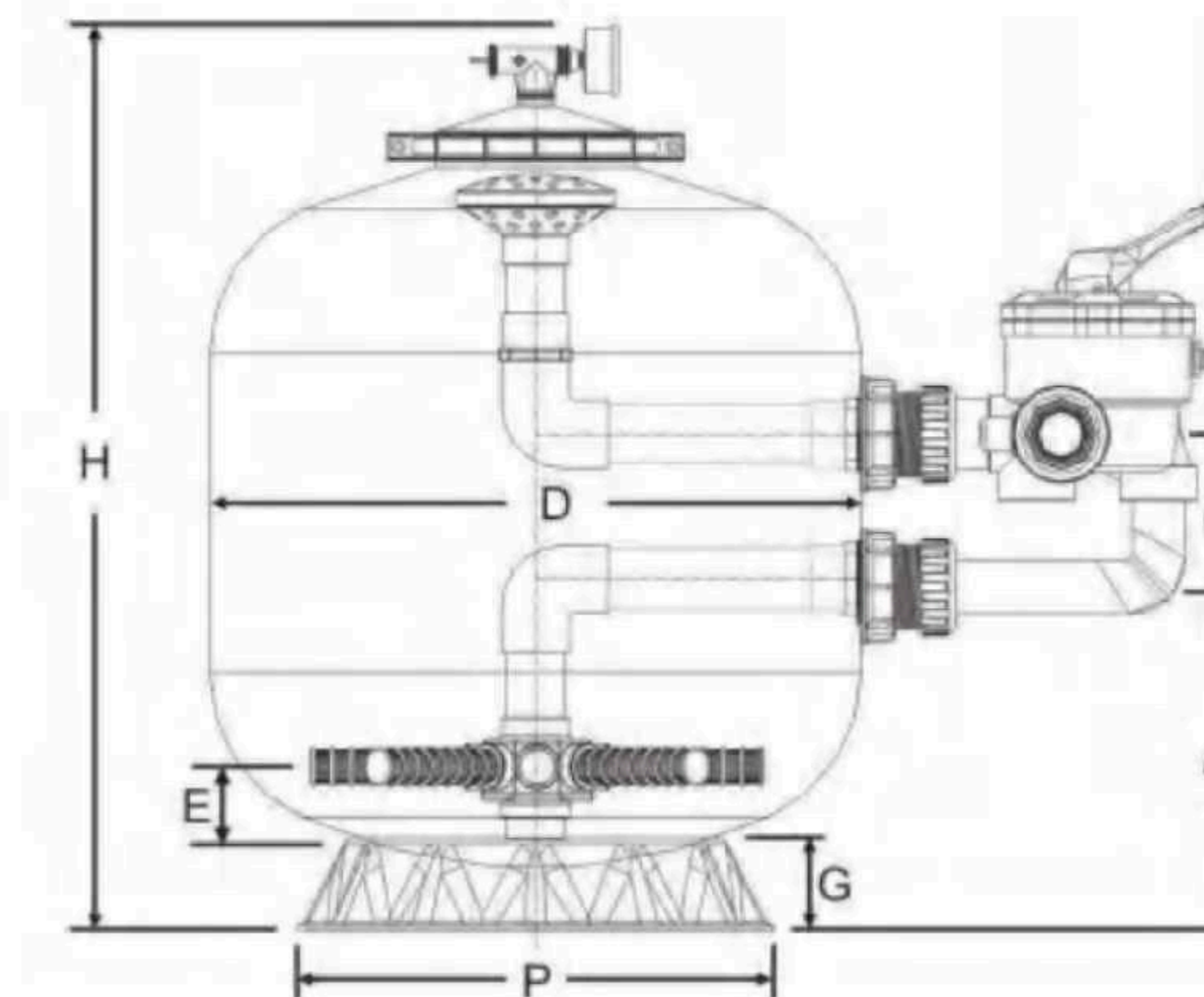
## “P-CG” SERIES FILTERS POOL FILTERS

### Features:

- Made of high density polyethylene material, corrosive-proof, safe and environmental.
- Unitized thermal plastic filter tank, tough, durable and suitable for many different weather condition.
- East-to-use multiport valve lets you select any of the valve/filter operation with a simple lever-action.
- Compact and save space.
- Top diffuser ensures even distribution of water over the top of the sand bed.
- These sand filters are applicable in all types of pool, spa, fountain, waterscape and aquarium.

### Main parts:

- Easy-to-use six-position valve makes the selection of the valve/ filter simple.
  - \* FILTER (Normal filtration and vacuuming).
  - \* BACKWASH (Clean filter by reversing the flow).
  - \* RINSE (Used after backwash to flush dirt from valve).
  - \* WASTE (By-passes filter, used for vacuuming to waste or lowering water level).
  - \* RECIRCULATION (By-passes filter for circulation water to pool).
  - \* CLOSE.
- Unitized and durable tank.
- Special drainage design, easy to drain, maintain and ice-free in winter.
- Pressure gauge makes it easier to examine and maintain.
- Air relief bolt enables easy release of trapped air during operation of the filter.



|        |     |     |     |     |
|--------|-----|-----|-----|-----|
| φD(mm) | 450 | 535 | 635 | 710 |
| H(mm)  | 670 | 710 | 810 | 880 |
| A(mm)  | 260 | 290 | 310 | 360 |
| φP(mm) | 390 | 390 | 565 | 565 |
| C(mm)  | 125 | 125 | 125 | 125 |
| G(mm)  | 75  | 75  | 95  | 90  |
| E(mm)  | 90  | 90  | 90  | 95  |

| Model   | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |     | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m <sup>3</sup> ) | Valve Volume (m <sup>3</sup> ) | Tank Weight (kg) | Valve Weight (kg) |
|---------|-----------|----|-------------------------------|-------------------|-----|----------------------------|-------------------------------|--------------------------------|------------------|-------------------|
|         | inches    | mm |                               | m <sup>3</sup> /h | lpm |                            |                               |                                |                  |                   |
| P-CG450 | 1.5       | 50 | 0.16                          | 8.00              | 133 | 50                         | 0.15                          | 0.02                           | 7.0              | 3                 |
| P-CG500 | 1.5       | 50 | 0.23                          | 11.50             | 192 | 80                         | 0.20                          | 0.02                           | 10.2             | 3                 |
| P-CG650 | 1.5       | 50 | 0.32                          | 16.00             | 267 | 160                        | 0.32                          | 0.02                           | 13.1             | 3                 |
| P-CG700 | 1.5       | 50 | 0.40                          | 20.00             | 333 | 220                        | 0.42                          | 0.02                           | 18.0             | 3                 |

MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm<sup>2</sup>(PLASTIC CLAMP)

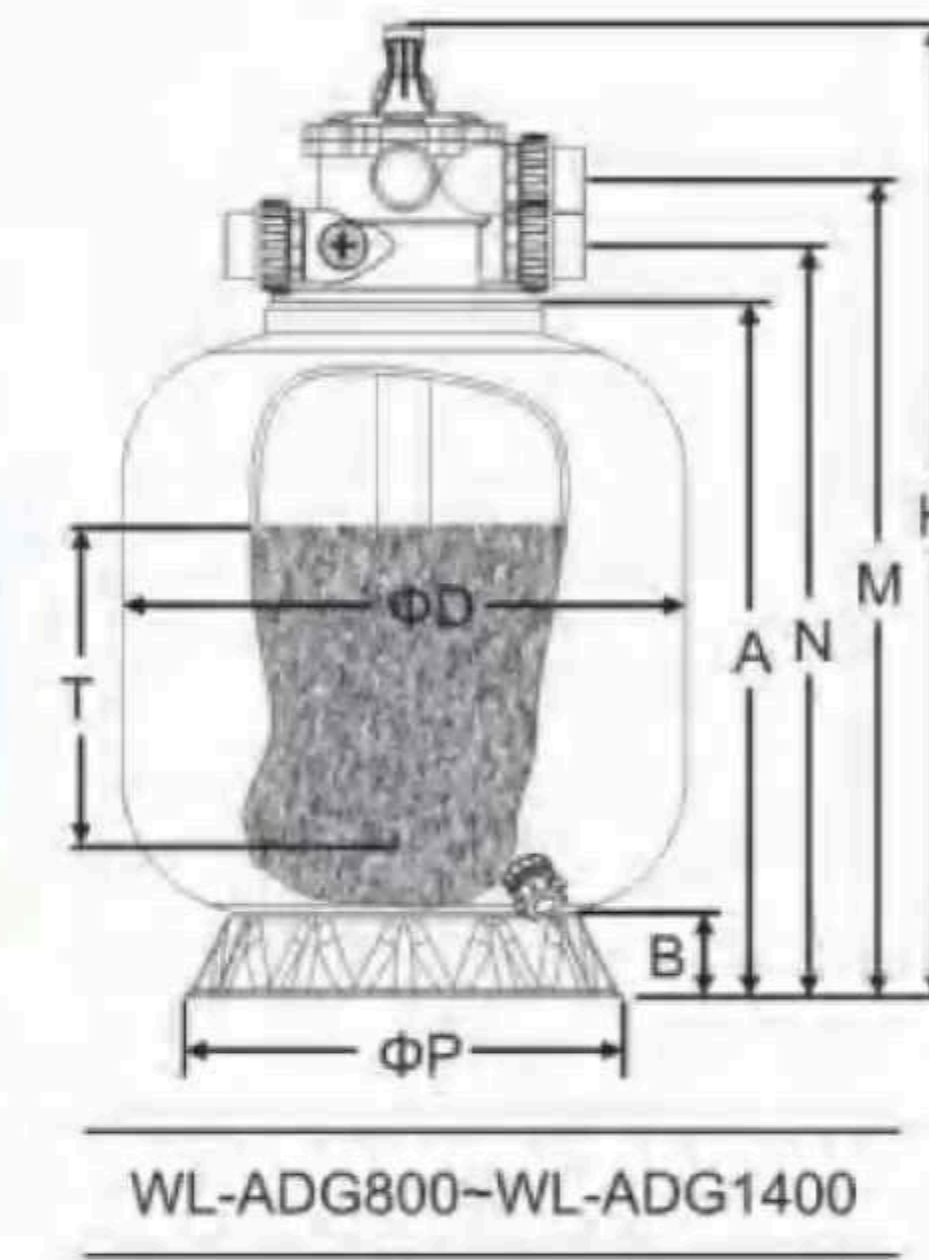
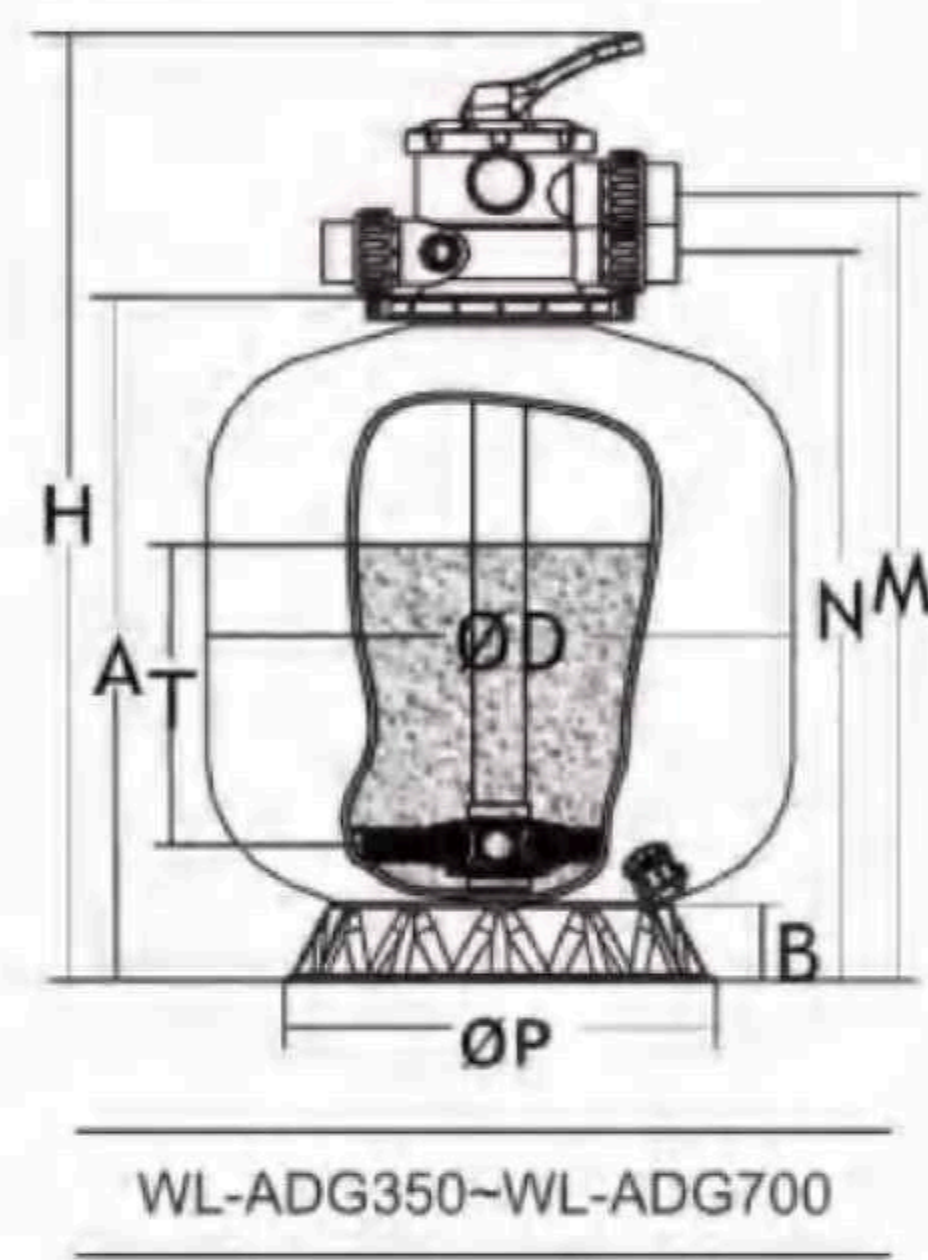
MAXIMUM OPERATING WATER TEMPERATURE≤50°C

## “WL-ADG” SERIES FILTERS POOL FILTERS

Top mount sand vertical filters are built to be tougher, longer lasting and better performing. Constructed of polyester resin and non-corrosive extra-thick fiberglass filament winding, all internal components and connections are injection molded PVC. UV-resistance surface allows working under sunshine.

Easy-to-use six-position valve makes you select any of the valve/filter operation in a proper way.

- FILTER (Normal filtration and vacuuming).
- BACKWASH (Clean filter by reversing the flow).
- RINSE (Used after backwash to flush dirt from valve).
- WASTE (By-passes filter, used for vacuuming to waste or lowering water level).
- RECIRCULATE (By-passes filter for circulating water to pool).
- CLOSE .



|        |     |     |     |     |     |      |      |      |      |      |      |      |      |
|--------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| ΦD(mm) | 350 | 410 | 450 | 535 | 635 | 710  | 750  | 800  | 900  | 1000 | 1100 | 1200 | 1400 |
| H(mm)  | 750 | 770 | 830 | 870 | 970 | 1040 | 1120 | 1130 | 1270 | 1340 | 1460 | 1540 | 1750 |
| A(mm)  | 490 | 510 | 570 | 610 | 710 | 780  | 820  | 830  | 970  | 1040 | 1160 | 1240 | 1450 |
| B(mm)  | 75  | 75  | 75  | 75  | 95  | 95   | 95   | 150  | 150  | 150  | 180  | 180  | 180  |
| M(mm)  | 600 | 620 | 680 | 720 | 820 | 890  | 962  | 973  | 1112 | 1182 | 1302 | 1392 | 1592 |
| N(mm)  | 545 | 565 | 625 | 665 | 765 | 835  | 882  | 892  | 1032 | 1102 | 1222 | 1312 | 1512 |
| ΦP(mm) | 319 | 319 | 390 | 390 | 565 | 565  | 565  | 790  | 790  | 790  | 1010 | 1010 | 1010 |
| T(mm)  | 150 | 160 | 220 | 260 | 370 | 450  | 490  | 490  | 500  | 520  | 570  | 650  | 850  |

| Model      | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m <sup>3</sup> ) | Valve Volume (m <sup>3</sup> ) | Tank Diameter (mm) | Tank Height (mm) |
|------------|-----------|----|-------------------------------|-------------------|------|----------------------------|-------------------------------|--------------------------------|--------------------|------------------|
|            | inches    | mm |                               | m <sup>3</sup> /h | lpm  |                            |                               |                                |                    |                  |
| WL-ADG350  | 1.5       | 50 | 0.10                          | 4.5               | 75   | 25                         | 0.06                          | 0.02                           | 350                | 750              |
| WL-ADG400  | 1.5       | 50 | 0.13                          | 6.5               | 108  | 34                         | 0.09                          | 0.02                           | 410                | 770              |
| WL-ADG450  | 1.5       | 50 | 0.16                          | 8.0               | 133  | 50                         | 0.15                          | 0.02                           | 450                | 830              |
| WL-ADG500  | 1.5       | 50 | 0.23                          | 11.5              | 192  | 80                         | 0.20                          | 0.02                           | 535                | 870              |
| WL-ADG650  | 1.5       | 50 | 0.32                          | 16.0              | 267  | 160                        | 0.32                          | 0.02                           | 635                | 970              |
| WL-ADG700  | 1.5       | 50 | 0.40                          | 20.0              | 333  | 220                        | 0.42                          | 0.02                           | 710                | 1040             |
| WL-ADG750  | 2.0       | 63 | 0.44                          | 22.0              | 367  | 230                        | 0.44                          | 0.03                           | 750                | 1120             |
| WL-ADG800  | 2.0       | 63 | 0.50                          | 25.0              | 417  | 260                        | 0.68                          | 0.03                           | 800                | 1130             |
| WL-ADG900  | 2.0       | 63 | 0.64                          | 30.0              | 533  | 400                        | 0.95                          | 0.03                           | 900                | 1270             |
| WL-ADG1000 | 2.0       | 63 | 0.79                          | 35.0              | 645  | 600                        | 1.29                          | 0.03                           | 1000               | 1340             |
| WL-ADG1100 | 2.0       | 63 | 0.95                          | 44.0              | 716  | 800                        | 1.40                          | 0.03                           | 1100               | 1460             |
| WL-ADG1200 | 2.0       | 63 | 1.13                          | 50.0              | 850  | 920                        | 2.26                          | 0.03                           | 1200               | 1540             |
| WL-ADG1400 | 2.0       | 63 | 1.53                          | 68.0              | 1133 | 1400                       | 3.50                          | 0.03                           | 1400               | 1750             |

STANDARD: MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE:≤50°C MAXIMUM TESTING PRESSURE:58psi/4.0kg/cm<sup>2</sup>  
OPTIONAL: MAXIMUM WORKING PRESSURE: 58psi/4.0kg/cm<sup>2</sup>(WL-ADG800-1400) MAXIMUM OPERATING WATER TEMPERATURE:≤50°C MAXIMUM TESTING PRESSURE:86psi/6.0kg/cm<sup>2</sup>

## “WL-BCG” SERIES FILTERS POOL FILTERS

Side mount sand filters are built to be tougher, longer lasting and better performing. Constructed of polyester resin and non-corrosive fiberglass filament winding, all internal components and connections are injection molded PVC. They produce more filtered water with less pump horsepower. UV-resistance surface allows working under sunshine. Easy-to-use six-position valve makes you select any of the valve/filter operation in a proper way.



|        |     |     |     |     |     |      |      |      |      |      |      |
|--------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| ΦD(mm) | 450 | 535 | 635 | 710 | 750 | 800  | 900  | 1000 | 1100 | 1200 | 1400 |
| H(mm)  | 670 | 710 | 810 | 880 | 980 | 1010 | 1100 | 1160 | 1260 | 1340 | 1570 |
| A(mm)  | 260 | 290 | 310 | 360 | 385 | 385  | 430  | 540  | 540  | 540  | 700  |
| B(mm)  | 75  | 75  | 95  | 90  | 120 | 150  | 150  | 150  | 180  | 180  | 180  |
| C(mm)  | 125 | 125 | 125 | 125 | 220 | 220  | 220  | 220  | 220  | 220  | 220  |
| M(mm)  | 440 | 460 | 490 | 540 | 680 | 680  | 725  | 835  | 835  | 835  | ---  |
| ΦP(mm) | 390 | 390 | 565 | 565 | 565 | 790  | 790  | 790  | 1010 | 1010 | 1010 |
| T(mm)  | 250 | 280 | 300 | 350 | 400 | 420  | 480  | 510  | 560  | 600  | 630  |

| Model      | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m <sup>3</sup> ) | Valve Volume (m <sup>3</sup> ) | Tank Diameter (mm) | Tank Height (mm) |
|------------|-----------|----|-------------------------------|-------------------|------|----------------------------|-------------------------------|--------------------------------|--------------------|------------------|
|            | inches    | mm |                               | m <sup>3</sup> /h | lpm  |                            |                               |                                |                    |                  |
| WL-BCG450  | 1.5       | 50 | 0.16                          | 8.0               | 133  | 50                         | 0.15                          | 0.02                           | 450                | 670              |
| WL-BCG500  | 1.5       | 50 | 0.23                          | 11.5              | 192  | 80                         | 0.20                          | 0.02                           | 535                | 710              |
| WL-BCG650  | 1.5       | 50 | 0.32                          | 16.0              | 267  | 160                        | 0.32                          | 0.02                           | 635                | 810              |
| WL-BCG700  | 1.5       | 50 | 0.40                          | 20.0              | 333  | 220                        | 0.42                          | 0.02                           | 710                | 880              |
| WL-BCG750  | 2.0       | 63 | 0.44                          | 22.0              | 367  | 230                        | 0.44                          | 0.02                           | 750                | 980              |
| WL-BCG800  | 2.0       | 63 | 0.50                          | 25.0              | 417  | 260                        | 0.68                          | 0.02                           | 800                | 1010             |
| WL-BCG900  | 2.0       | 63 | 0.64                          | 30.0              | 533  | 400                        | 0.92                          | 0.02                           | 900                | 1100             |
| WL-BCG1000 | 2.0       | 63 | 0.79                          | 35.0              | 645  | 600                        | 1.48                          | 0.02                           | 1000               | 1160             |
| WL-BCG1100 | 2.0       | 63 | 0.95                          | 44.0              | 716  | 800                        | 1.98                          | 0.02                           | 1100               | 1260             |
| WL-BCG1200 | 2.0       | 63 | 1.13                          | 50.0              | 850  | 920                        | 2.42                          | 0.02                           | 1200               | 1340             |
| WL-BCG1400 | 2.0       | 63 | 1.53                          | 68.0              | 1133 | 1400                       | 3.26                          | 0.02                           | 1400               | 1570             |

STANDARD: MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE:≤50°C MAXIMUM TESTING PRESSURE:58psi/4.0kg/cm<sup>2</sup>  
OPTIONAL: MAXIMUM WORKING PRESSURE: 58psi/4.0kg/cm<sup>2</sup>(WL-BCG800-1400) MAXIMUM OPERATING WATER TEMPERATURE:≤50°C MAXIMUM TESTING PRESSURE:86psi/6.0kg/cm<sup>2</sup>

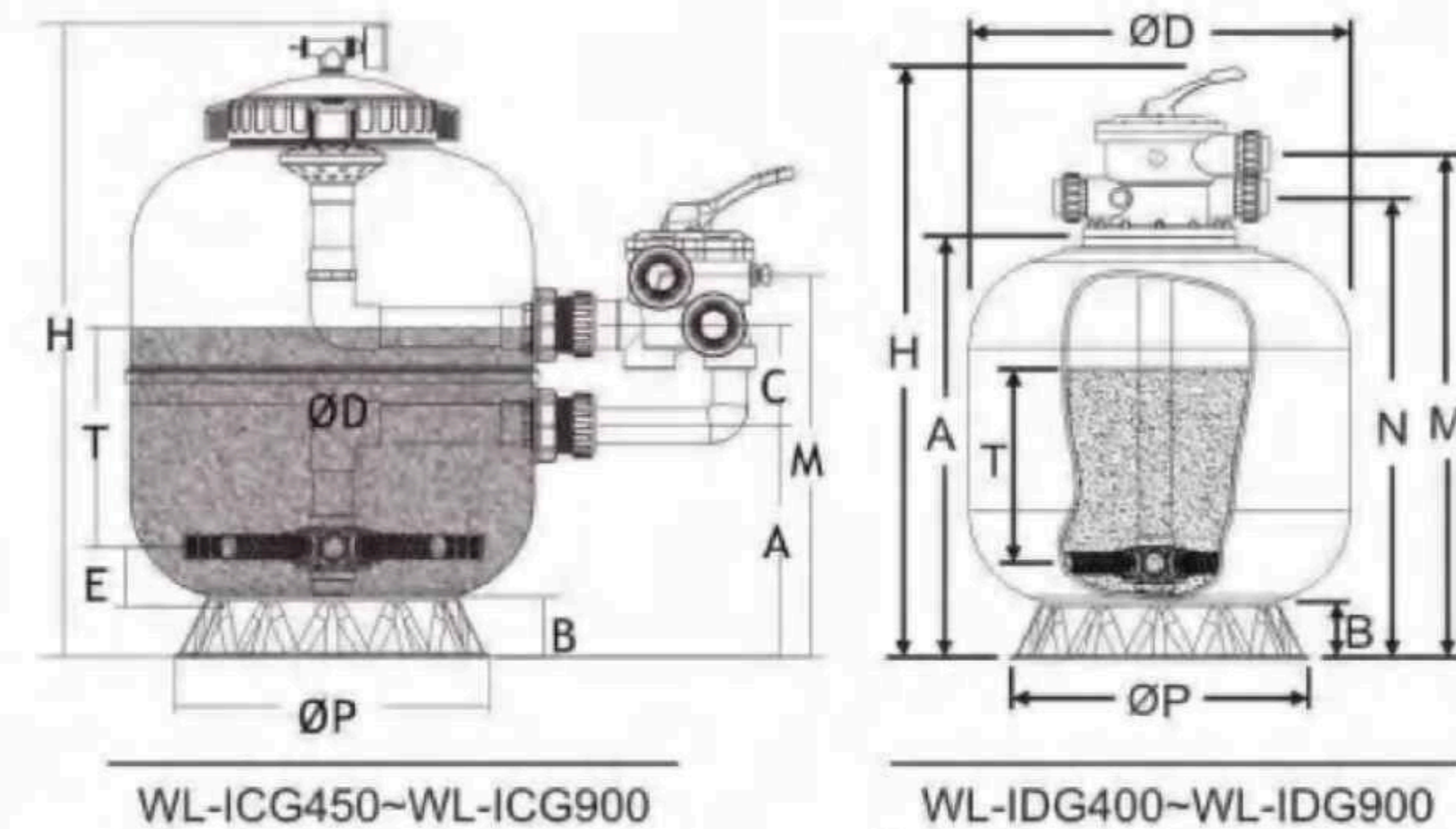
- Made of fibreglass reinforce laminated polyester.
- Smooth and high brightness appearance.
- 6-way multiport valve.
- Sight glass for inspection of filtered water.
- Easy maintenance, easy cleaning.
- Maximum Working Pressure:36psi/2.5kg/cm<sup>2</sup>.
- Maximum temperature:50°C.



WL-ICG450~WL-ICG900



WL-IDG400~WL-IDG900



WL-ICG450~WL-ICG900

WL-IDG400~WL-IDG900

| Model  | WL-ICG450 | WL-ICG500 | WL-ICG650 | WL-ICG700 | WL-ICG800 | WL-ICG900 |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|
| ΦD(mm) | 450       | 500       | 635       | 700       | 800       | 900       |
| H(mm)  | 660       | 745       | 805       | 885       | 1000      | 1115      |
| A(mm)  | 260       | 280       | 310       | 360       | 385       | 430       |
| B(mm)  | 75        | 75        | 95        | 95        | 150       | 150       |
| C(mm)  | 125       | 125       | 125       | 125       | 220       | 220       |
| M(mm)  | 444       | 464       | 494       | 534       | 680       | 725       |
| ΦP(mm) | 390       | 390       | 565       | 565       | 790       | 790       |
| T(mm)  | 250       | 280       | 300       | 350       | 420       | 480       |

| Model  | WL-IDG400 | WL-IDG450 | WL-IDG500 | WL-IDG650 | WL-IDG700 | WL-IDG800 | WL-IDG900 |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ΦD(mm) | 400       | 450       | 500       | 635       | 700       | 800       | 900       |
| H(mm)  | 750       | 815       | 870       | 875       | 980       | 1145      | 1270      |
| A(mm)  | 500       | 565       | 610       | 625       | 725       | 845       | 970       |
| B(mm)  | 73        | 75        | 75        | 95        | 95        | 150       | 150       |
| M(mm)  | 609       | 674       | 719       | 734       | 835       | 988       | 1113      |
| N(mm)  | 550       | 615       | 660       | 676       | 776       | 908       | 1032      |
| ΦP(mm) | 390       | 390       | 390       | 565       | 565       | 790       | 790       |
| T(mm)  | 160       | 220       | 260       | 300       | 400       | 500       | 550       |

| Model     | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |     | Sand Weight (kg) | Filter Diameter (mm) | Filter Height (mm) |
|-----------|-----------|----|-------------------------------|-------------------|-----|------------------|----------------------|--------------------|
|           | inches    | mm |                               | m <sup>3</sup> /h | lpm |                  |                      |                    |
| WL-ICG450 | 1.5       | 50 | 0.16                          | 8.0               | 133 | 45               | 450                  | 660                |
| WL-ICG500 | 1.5       | 50 | 0.20                          | 10.0              | 166 | 80               | 500                  | 745                |
| WL-ICG650 | 1.5       | 50 | 0.32                          | 15.0              | 250 | 130              | 635                  | 805                |
| WL-ICG700 | 1.5       | 50 | 0.38                          | 19.0              | 317 | 190              | 700                  | 885                |
| WL-ICG750 | 2.0       | 63 | 0.44                          | 22.0              | 367 | 230              | 750                  | 1000               |
| WL-ICG800 | 2.0       | 63 | 0.50                          | 25.0              | 417 | 260              | 800                  | 1000               |
| WL-ICG900 | 2.0       | 63 | 0.64                          | 32.0              | 533 | 400              | 900                  | 1115               |

| Model     | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |     | Sand Weight (kg) | Filter Diameter (mm) | Filter Height (mm) |
|-----------|-----------|----|-------------------------------|-------------------|-----|------------------|----------------------|--------------------|
|           | inches    | mm |                               | m <sup>3</sup> /h | lpm |                  |                      |                    |
| WL-IDG400 | 1.5       | 50 | 0.13                          | 6.0               | 100 | 30               | 400                  | 750                |
| WL-IDG450 | 1.5       | 50 | 0.16                          | 8.0               | 133 | 45               | 450                  | 815                |
| WL-IDG500 | 1.5       | 50 | 0.20                          | 10.0              | 166 | 80               | 500                  | 860                |
| WL-IDG650 | 1.5       | 50 | 0.32                          | 15.0              | 250 | 130              | 635                  | 875                |
| WL-IDG700 | 1.5       | 50 | 0.38                          | 19.0              | 317 | 190              | 700                  | 1000               |
| WL-IDG800 | 2.0       | 63 | 0.50                          | 25.0              | 417 | 300              | 800                  | 1145               |
| WL-IDG900 | 2.0       | 63 | 0.64                          | 32.0              | 533 | 450              | 900                  | 1270               |

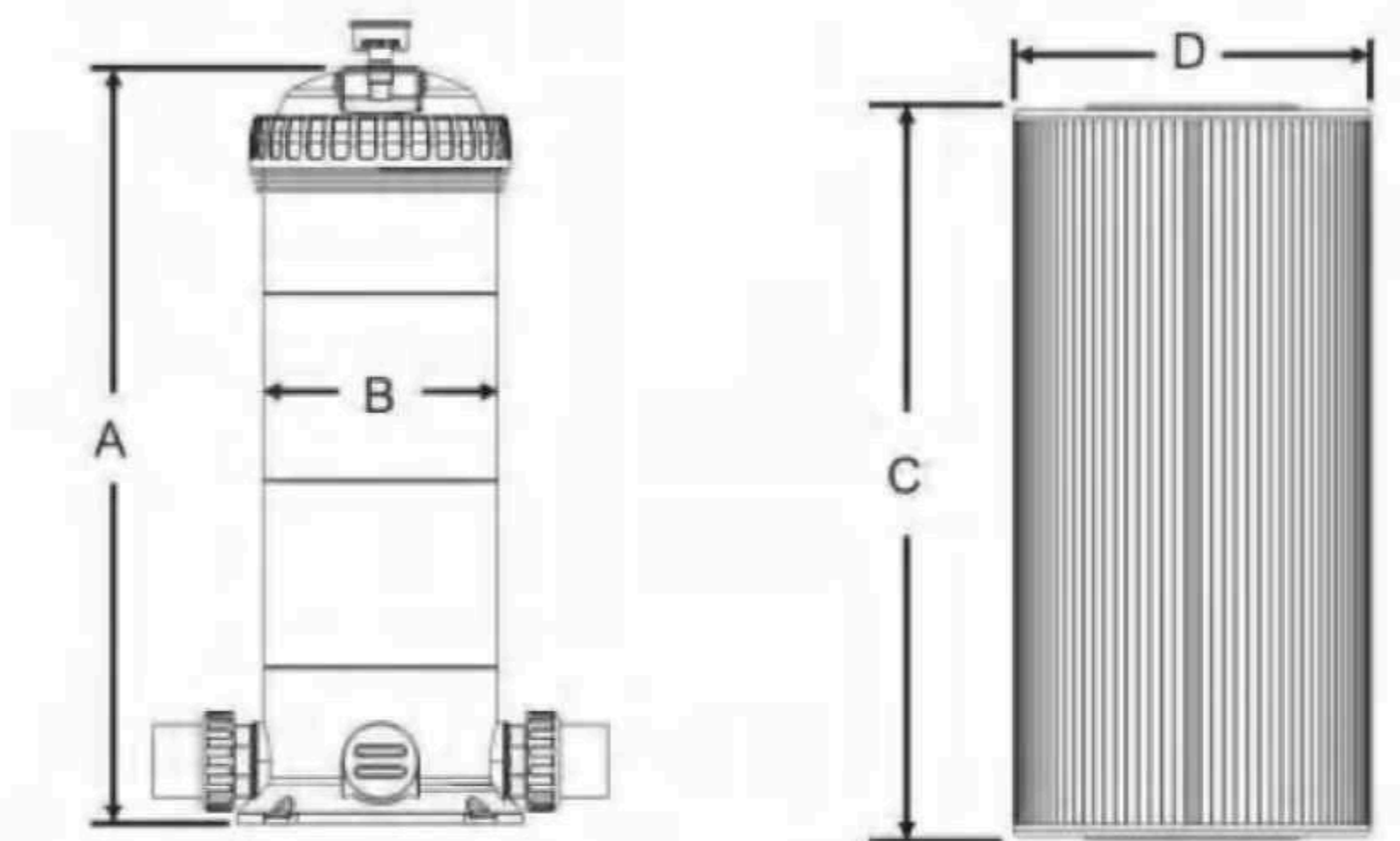
STANDARD: MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C MAXIMUM TESTING PRESSURE: 58psi/4.0kg/cm<sup>2</sup>  
 OPTIONAL: MAXIMUM WORKING PRESSURE: 58psi/4.0kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C MAXIMUM TESTING PRESSURE: 86psi/6.0kg/cm<sup>2</sup>



**Features:**

- Compact and light weight.
- UV resistant tank.
- Heavy duty ring-lock lid allows easy cleaning and replacement of the cartridge element.
- Screw type air bleeder for easy removal of trapped air inside the filter tank.
- High quality oil filled pressure gauge for easy inspection of the operation pressure.
- Application to swimming pool & spa.

- ◆ Maximum Working Pressure: 250kpa/36psi/2.5bar
- ◆ Maximum Temperature: 40°C (104F)



Cartridge Element

| Model | WL-ZXG25 | WL-ZXG50 | WL-ZXG75 | WL-ZXG100 | WL-ZXG150 | WL-ZXG200 |
|-------|----------|----------|----------|-----------|-----------|-----------|
| A(mm) | 368.3    | 548.3    | 728.3    | 908.3     | 1088.3    | 1268.3    |
| B(mm) | 225      | 225      | 225      | 225       | 225       | 225       |

| Model | WL-ZXG25 | WL-ZXG50 | WL-ZXG75 | WL-ZXG100 | WL-ZXG150 | WL-ZXG200 |
|-------|----------|----------|----------|-----------|-----------|-----------|
| C(mm) | 184.5    | 364.5    | 544.5    | 724.5     | 904.5     | 1091.0    |
| D(mm) | 183      | 183      | 183      | 183       | 183       | 183       |

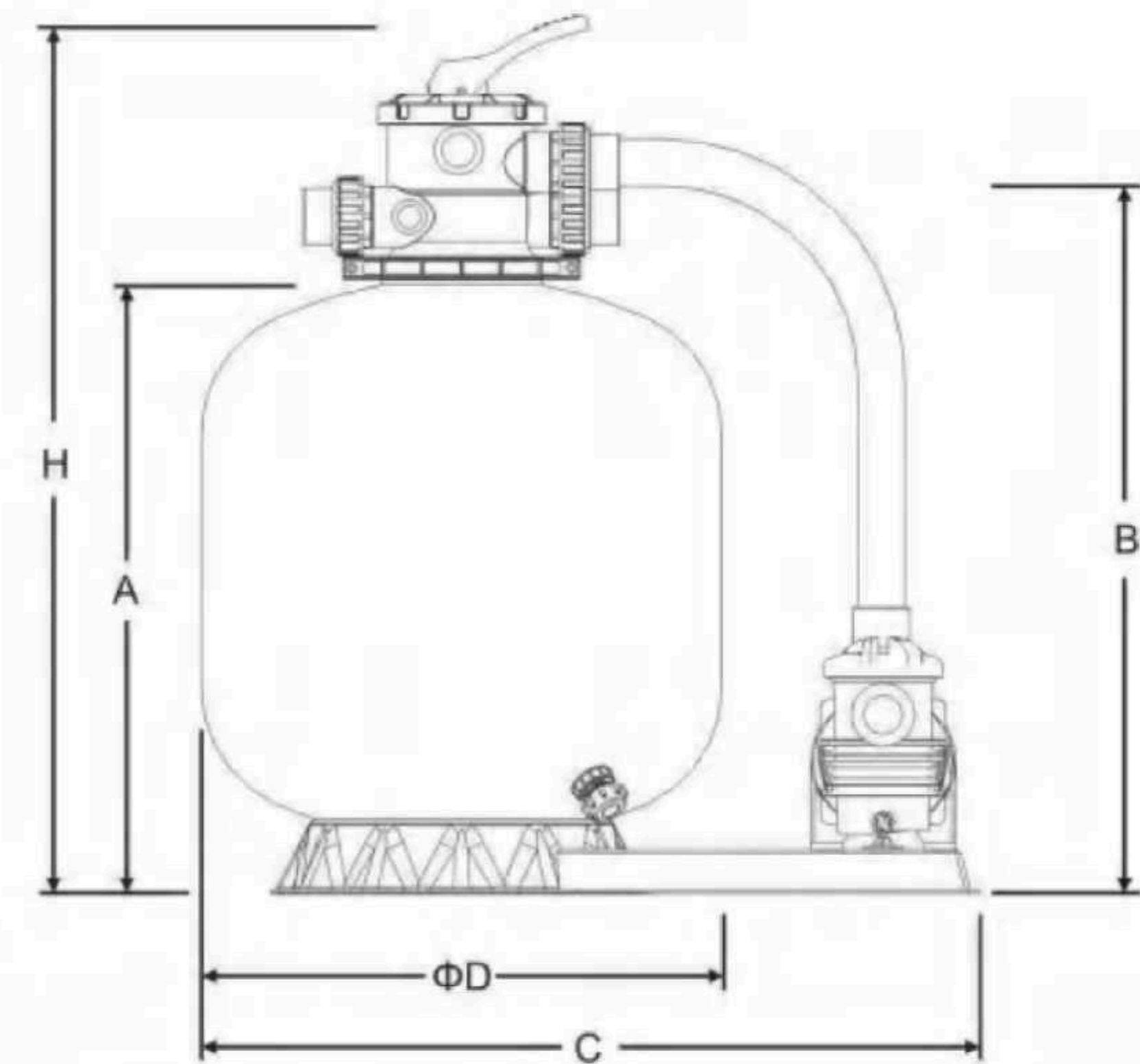
| Model     | Pipe Size |    | Filter Area (m <sup>2</sup> ) | Design Flow       |     | Micron (μm) | Tank Diameter (mm) | Tank Height (mm) |
|-----------|-----------|----|-------------------------------|-------------------|-----|-------------|--------------------|------------------|
|           | inches    | mm |                               | m <sup>3</sup> /h | lpm |             |                    |                  |
| WL-ZXG25  | 1.5       | 50 | 2.25                          | 5.50              | 92  | ≤20         | 225                | 368.3            |
| WL-ZXG50  | 1.5       | 50 | 4.63                          | 11.40             | 190 | ≤20         | 225                | 548.3            |
| WL-ZXG75  | 1.5       | 50 | 7.00                          | 17.00             | 283 | ≤20         | 225                | 728.3            |
| WL-ZXG100 | 1.5       | 50 | 9.40                          | 22.90             | 382 | ≤20         | 225                | 908.3            |
| WL-ZXG150 | 2.0       | 63 | 13.72                         | 33.40             | 556 | ≤20         | 225                | 1088.3           |
| WL-ZXG200 | 2.0       | 63 | 16.82                         | 40.90             | 681 | ≤20         | 225                | 1268.3           |

MAXIMUM WORKING PRESSURE: 36psi/2.5bar/cm<sup>2</sup>, MAXIMUM TEMPERATURE: ≤40°C

## “P-DYG” SERIES FILTERS POOL FILTERS

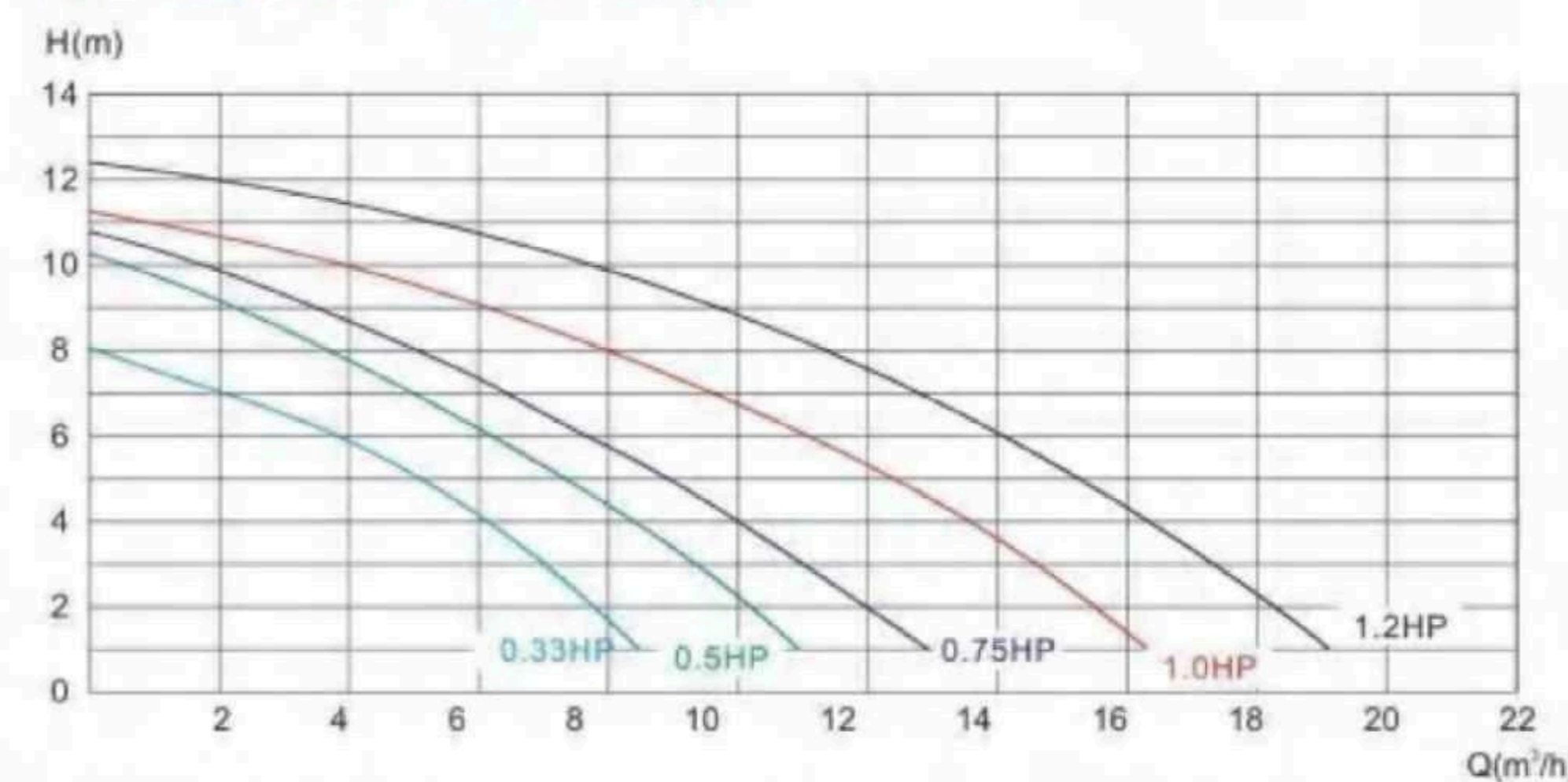
### Features:

- Easy to install.
- MILLIAN filtration system is equipped with the most optimal combination of our filter and pump.
- Injection-molded mounting base makes filtration system work more stable.
- Unitized thermal plastic filter tank, tough, durable and suitable for many different weather condition.
- Circulation pump with good performance, corrosion-proof and quiet.



|        |     |     |     |     |     |
|--------|-----|-----|-----|-----|-----|
| ΦD(mm) | 350 | 410 | 450 | 535 | 635 |
| H(mm)  | 750 | 770 | 830 | 870 | 970 |
| A(mm)  | 495 | 515 | 575 | 615 | 715 |
| B(mm)  | 545 | 565 | 625 | 665 | 765 |
| C(mm)  | 570 | 570 | 770 | 770 | 770 |

QH.Curve of The Pump



| Model    | Pipe Size |    | Filter Area (m²) | Design Flow |     | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m³) | Tank Weight (kg) | Valve Weight (kg) | Matching Pump (HP) |
|----------|-----------|----|------------------|-------------|-----|----------------------------|------------------|------------------|-------------------|--------------------|
|          | inches    | mm |                  | m³/h        | lpm |                            |                  |                  |                   |                    |
| P-DYG350 | 1.5       | 50 | 0.10             | 4.50        | 75  | 25                         | 0.06             | 4.0              | 3                 | KP256/0.33HP       |
| P-DYG400 | 1.5       | 50 | 0.13             | 6.50        | 108 | 34                         | 0.09             | 5.0              | 3                 | KP256/0.33HP       |
| P-DYG450 | 1.5       | 50 | 0.16             | 8.00        | 133 | 50                         | 0.15             | 6.5              | 3                 | KP356/0.5HP        |
| P-DYG500 | 1.5       | 50 | 0.23             | 11.50       | 192 | 80                         | 0.20             | 9.2              | 3                 | KP756/1.0HP        |
| P-DYG650 | 1.5       | 50 | 0.32             | 16.00       | 267 | 160                        | 0.32             | 12.1             | 3                 | KP856/1.2HP        |

MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm² (PLASTIC CLAMP)

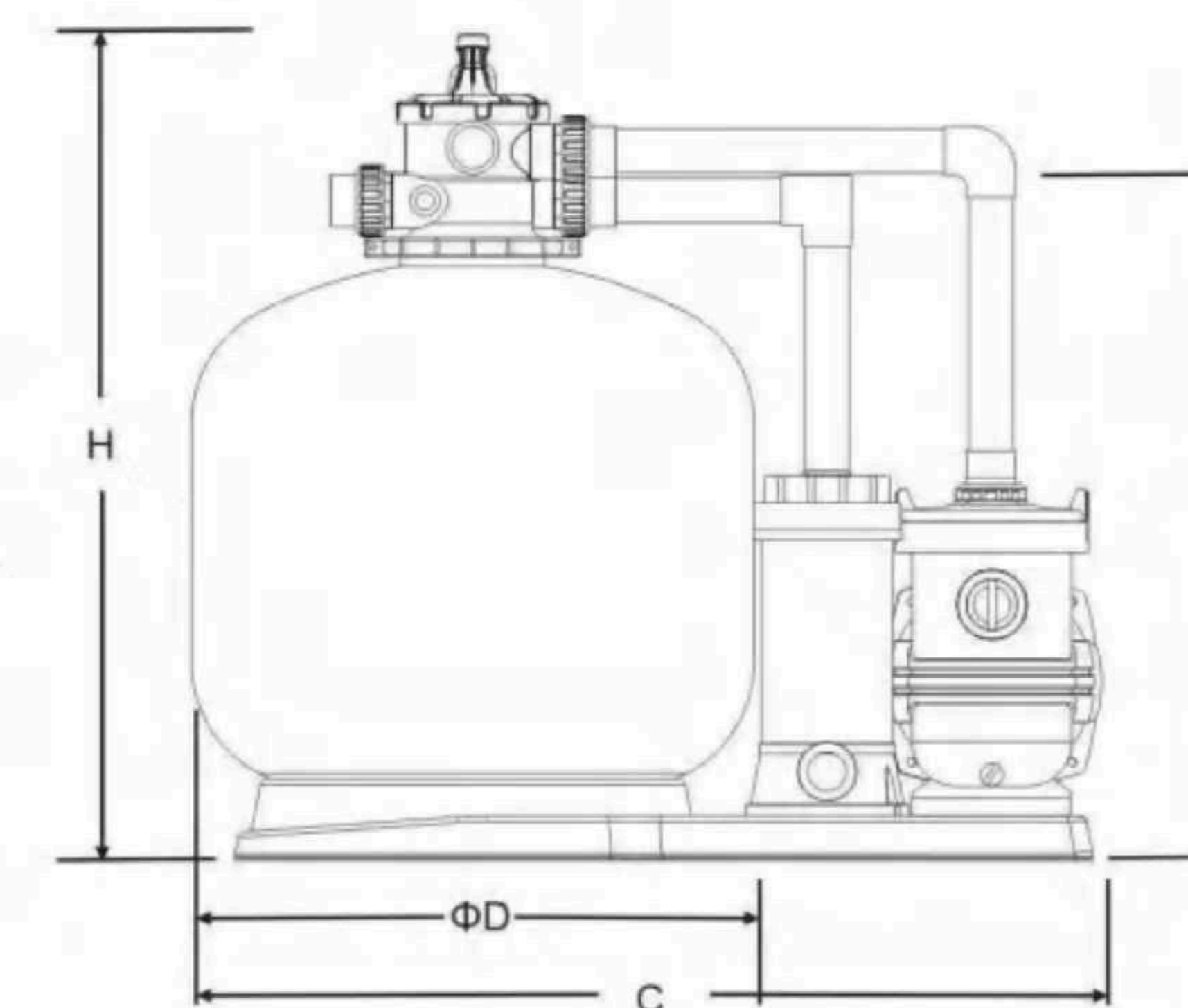
MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C

## “WL-P-DYG” SERIES FILTERS POOL FILTERS

The integrated circulation, filtration and sterilization unit is assembled with MILLIAN plastic sand filter, circulation pump and chemical feeder. The unit is a multifunctional system assembled with precision, simple to operate, easy to install. It's the optimal choice for filtering movable and inflated pools.

### Features:

- Compact design for easy carriage and quick to install. Contains all the functions of circulation, filtration and sterilization, ready to use.
- The base uses singular forming which makes the base strong and durable. The operation of the unit is stable and reliable.
- The circulation pump has superior performance and extremely quiet during operation.
- The filter uses UV proof food-level PE material to produce that is safe, eco-friendly and anti-corrosive.
- The pill dispenser uses hard tube connection, it is easy to use.
- The whole unit is accurately assembled, it is easy to install and maintain, it is suitable for moving pools and private pools.



|        |      |
|--------|------|
| ΦD(mm) | 635  |
| H(mm)  | 970  |
| A(mm)  | 715  |
| B(mm)  | 765  |
| C(mm)  | 1020 |

QH.Curve of The Pump



| Model         | Pipe Size |    | Filter Area (m²) | Design Flow |     | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m³) | Tank Weight (kg) | Valve Weight (kg) | Matching Pump (HP) | Chemical feeder |
|---------------|-----------|----|------------------|-------------|-----|----------------------------|------------------|------------------|-------------------|--------------------|-----------------|
|               | inches    | mm |                  | m³/h        | lpm |                            |                  |                  |                   |                    |                 |
| WL-P-DYG650YH | 1.5       | 50 | 0.32             | 16          | 267 | 160                        | 0.32             | 13               | 3                 | HLLF-150           | CL-200          |

MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm² (PLASTIC CLAMP)

MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C

## “RDG” SERIES FILTERS POOL FILTERS

RDG300 series filtration system is specially designed for domestic swimming pool. The component design is easy to assemble, and the installation is simple to operate; A variety of connection sizes can meet different usage scenarios. The RDG300K is equipped with strainer basket, while the RDG300X is not, so you will have more choices.



RDG300K



RDG300X

### Features:

- Simple installation and easy operation.
- The sand filter and the water pump are precisely matched, so that the performance of the unit is optimal and efficient.
- The combined base can meet the requirements of different scenarios.
- Unitized thermal plastic filter tank, tough, durable and suitable for many different weather conditions.
- Pump built-in heat protector makes the service life longer.
- The pump meets F insulation class and IPX5 protection requirement.
- The pump has good sealing and anti-corrosion performance, and runs extremely quiet.
- A variety of connection sizes, suitable for 32/38mm flexible hose, 1.5"/50mm pipe.
- The whole unit includes hoses and other necessary accessories.



### RDG300K SERIES SAND FILTER SYSTEM

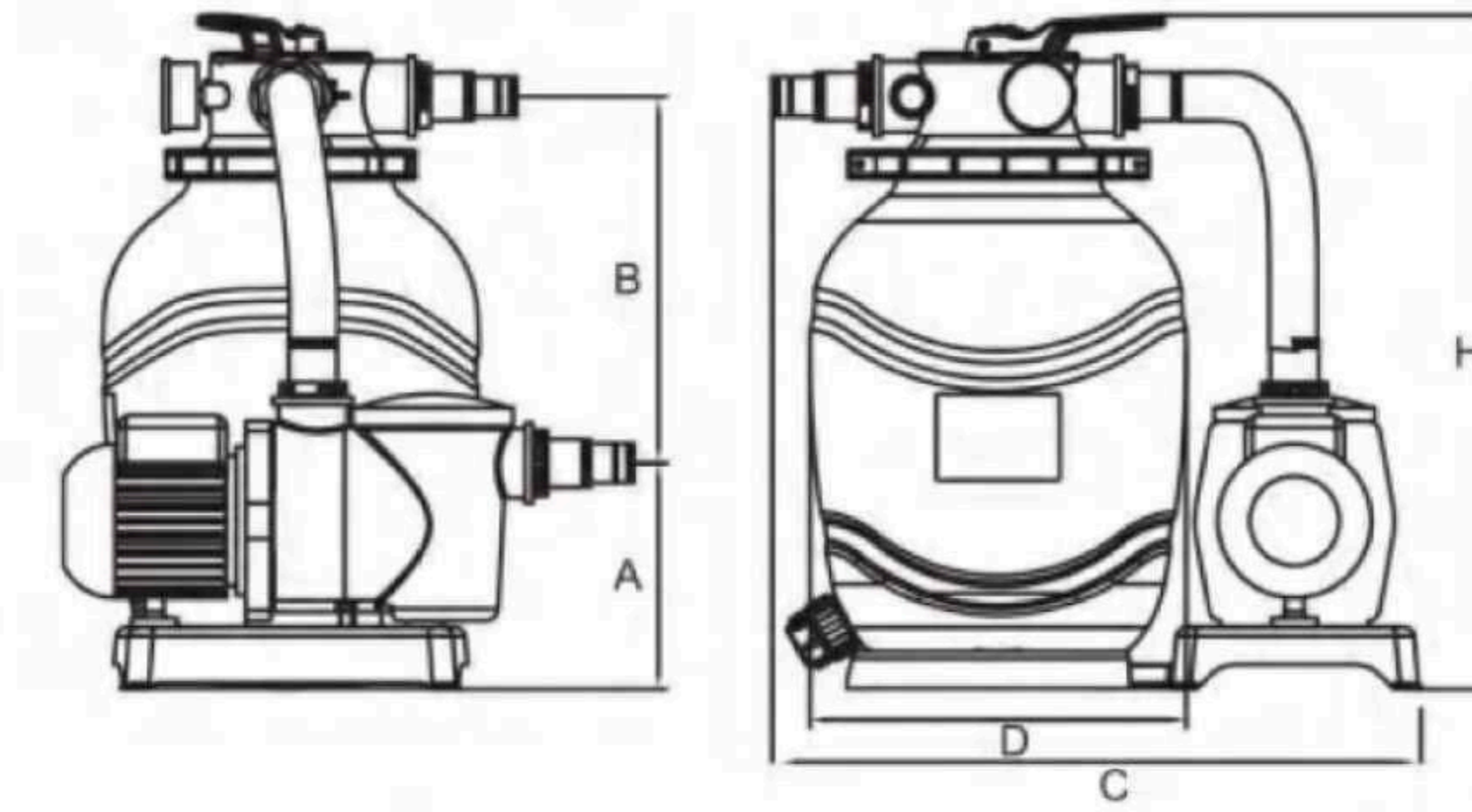
#### Includes:

- 12" Durable top mount plastic filter tank
- Standard: 4-Way Multiport Valve (Optional: 6-Way Multiport Valve)
- 0.33HP Water Pump (With Strainer Basket)

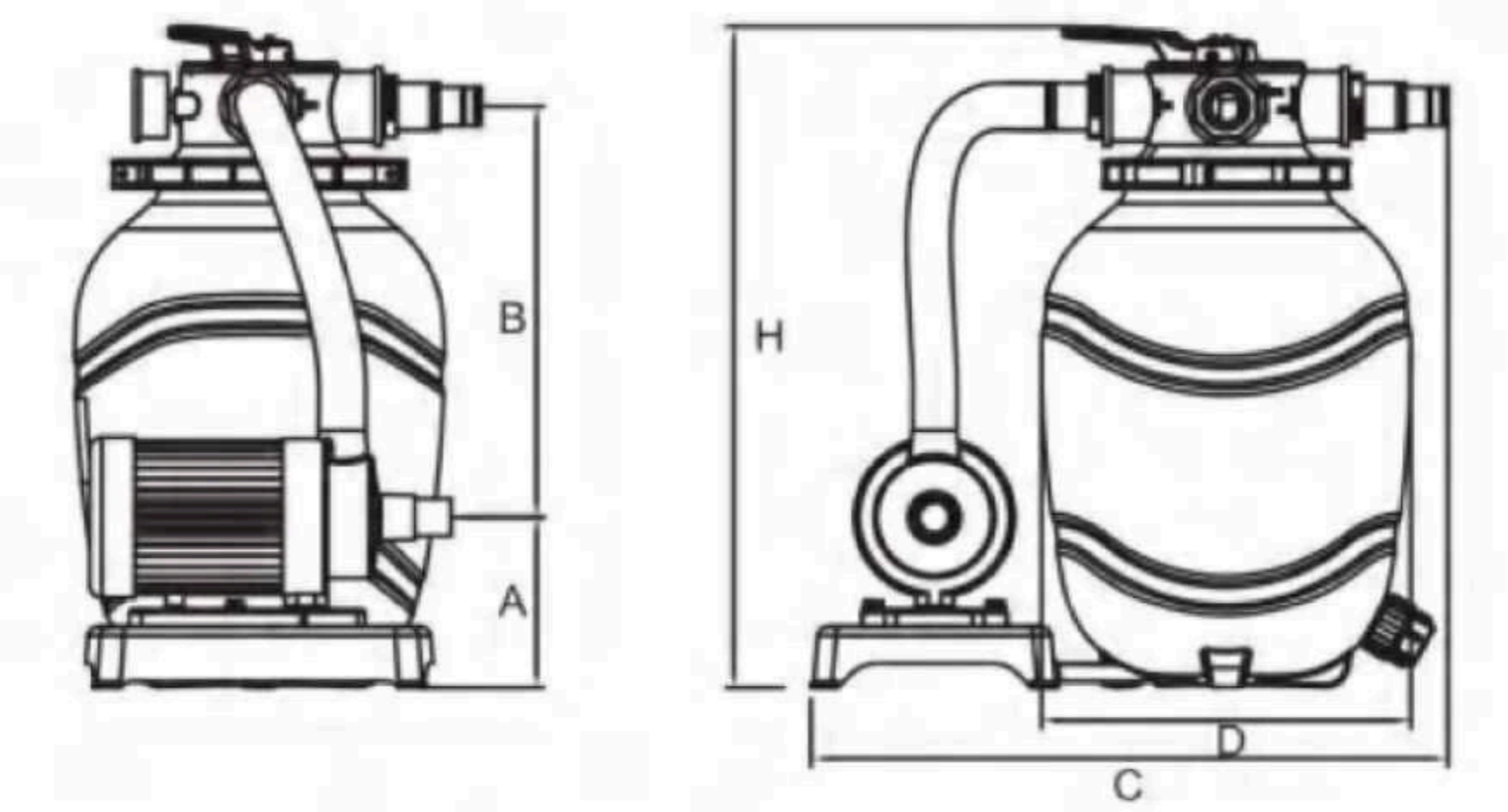
### RDG300X SERIES SAND FILTER SYSTEM

#### Includes:

- 12" Durable top mount plastic filter tank
- Standard: 4-Way Multiport Valve (Optional: 6-Way Multiport Valve)
- 0.25HP Water Pump (Without Strainer Basket)



RDG300K

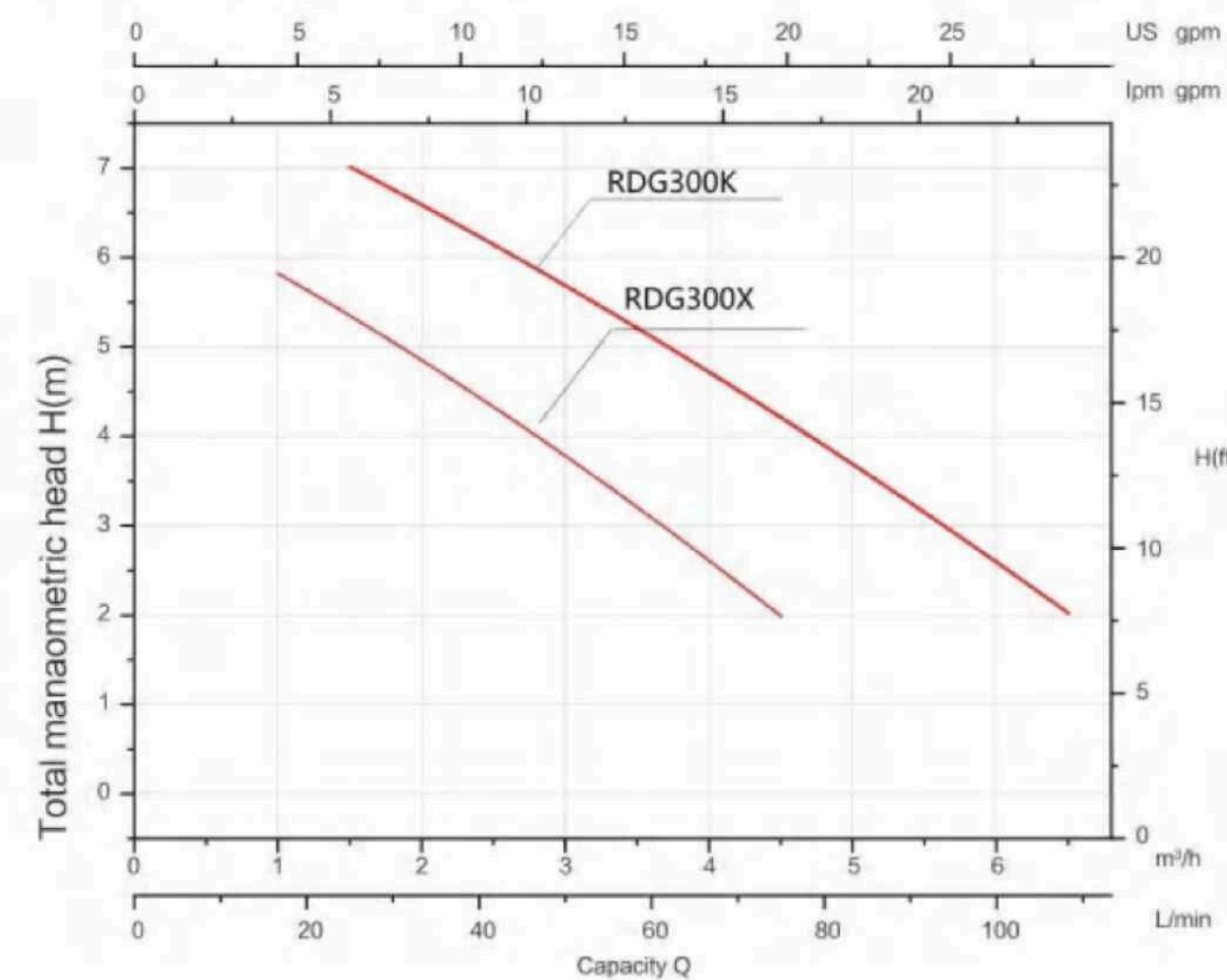


RDG300X

### Product Dimensions

| Model | RDG300K | RDG300X |
|-------|---------|---------|
| A(mm) | 183     | 140     |
| B(mm) | 297     | 340     |
| C(mm) | 525     | 525     |
| D(mm) | 305     | 305     |
| H(mm) | 546     | 546     |

### QH.Curve of the pump



### Optional:

6-way multiport valve



| Model      | Filter size | Pump Power (HP) | Filter Area (m <sup>2</sup> ) | Flow rate         |      | Pump flow rate    |        | Sand weight 0.5-0.8mm (kg) | Multiport valve | Pipe connection                  |
|------------|-------------|-----------------|-------------------------------|-------------------|------|-------------------|--------|----------------------------|-----------------|----------------------------------|
|            |             |                 |                               | m <sup>3</sup> /h | lpm  | m <sup>3</sup> /h | lpm    |                            |                 |                                  |
| RDG300K-4W | 12"         | 0.33            | 0.073                         | 3.65              | 60.8 | 8.2               | 136.67 | 20                         | 4-way           | 32/38mm;<br>1.5"/50mm (optional) |
| RDG300X-4W | 12"         | 0.25            | 0.073                         | 3.65              | 60.8 | 6.5               | 108.33 | 20                         | 4-way           |                                  |
| RDG300K-6W | 12"         | 0.33            | 0.073                         | 3.65              | 60.8 | 8.2               | 136.67 | 20                         | 6-way           |                                  |
| RDG300X-6W | 12"         | 0.25            | 0.073                         | 3.65              | 60.8 | 6.5               | 108.33 | 20                         | 6-way           |                                  |

# DEPTH SAND FILTERS

## POOL FILTERS

# "WL-GB" SERIES FILTERS

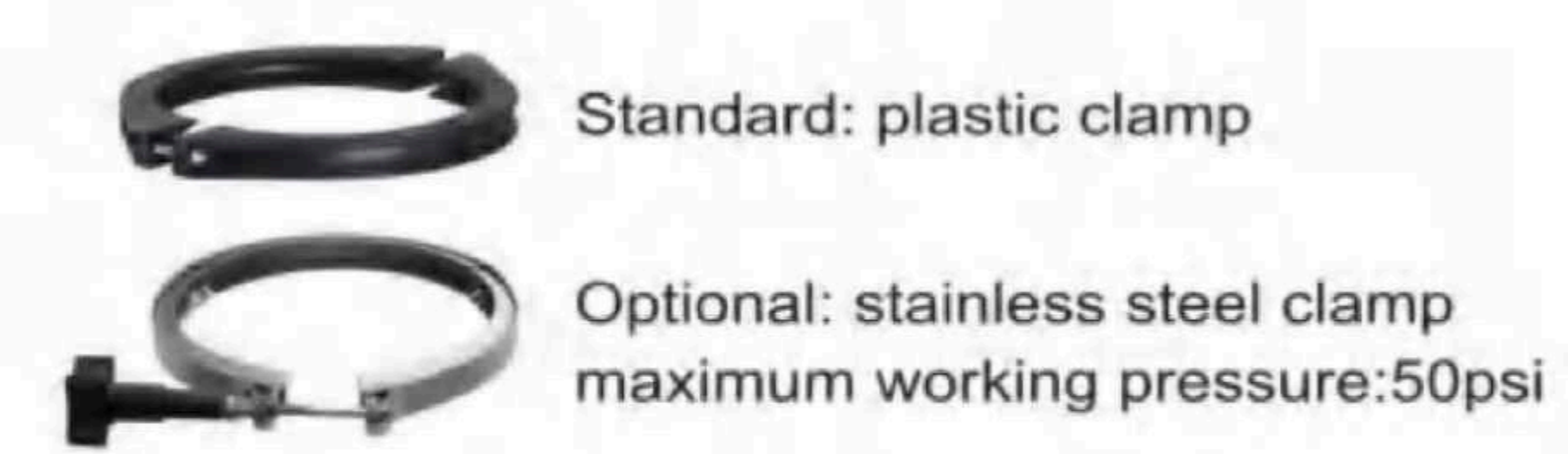
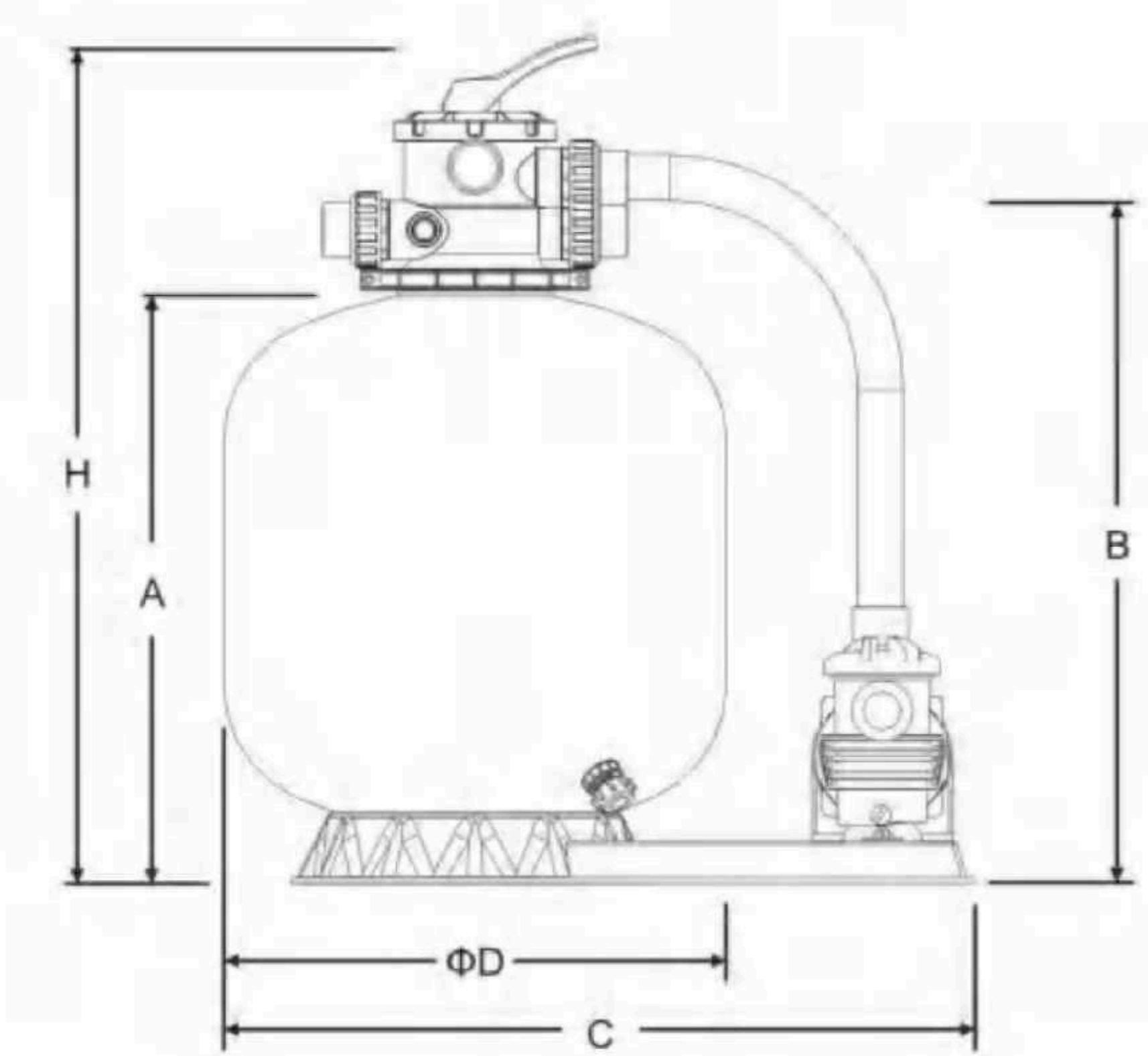
## POOL FILTERS

POOL FILTERS

POOL FILTERS

### Features:

- Easy to install.
- MILLIAN filtration system is equipped with the most optimal combination of our filter and pump.
- Injection-molded mounting base makes filtration system work more stable.
- Unitized thermal plastic inner tank with fiberglass twining around outside, much more strong, durable and suitable for many different weather condition.
- Circulation pump with good performance, corrosion-proof and quiet.



|        |     |     |     |     |     |
|--------|-----|-----|-----|-----|-----|
| ΦD(mm) | 350 | 410 | 450 | 535 | 635 |
| H(mm)  | 750 | 770 | 830 | 870 | 970 |
| A(mm)  | 495 | 515 | 575 | 615 | 715 |
| B(mm)  | 545 | 565 | 625 | 665 | 765 |
| C(mm)  | 570 | 570 | 770 | 770 | 770 |

### QH.Curve of The Pump



| Model    | Pipe Size |    | Filter Area (m²) | Design Flow |     | 0.5-0.8mm Sand Weight (kg) | Tank Volume (m³) | Tank Weight (kg) | Valve Weight (kg) | Matching Pump (HP) |
|----------|-----------|----|------------------|-------------|-----|----------------------------|------------------|------------------|-------------------|--------------------|
|          | inches    | mm |                  | m³/h        | lpm |                            |                  |                  |                   |                    |
| WL-GB350 | 1.5       | 50 | 0.10             | 4.50        | 75  | 25                         | 0.06             | 4.5              | 3                 | KP256/0.33HP       |
| WL-GB400 | 1.5       | 50 | 0.13             | 6.50        | 108 | 34                         | 0.09             | 5.5              | 3                 | KP256/0.33HP       |
| WL-GB450 | 1.5       | 50 | 0.16             | 8.00        | 133 | 50                         | 0.15             | 7.0              | 3                 | KP356/0.5HP        |
| WL-GB500 | 1.5       | 50 | 0.23             | 11.50       | 192 | 80                         | 0.20             | 9.8              | 3                 | KP756/1.0HP        |
| WL-GB650 | 1.5       | 50 | 0.32             | 16.00       | 267 | 160                        | 0.32             | 13.0             | 3                 | KP856/1.2HP        |

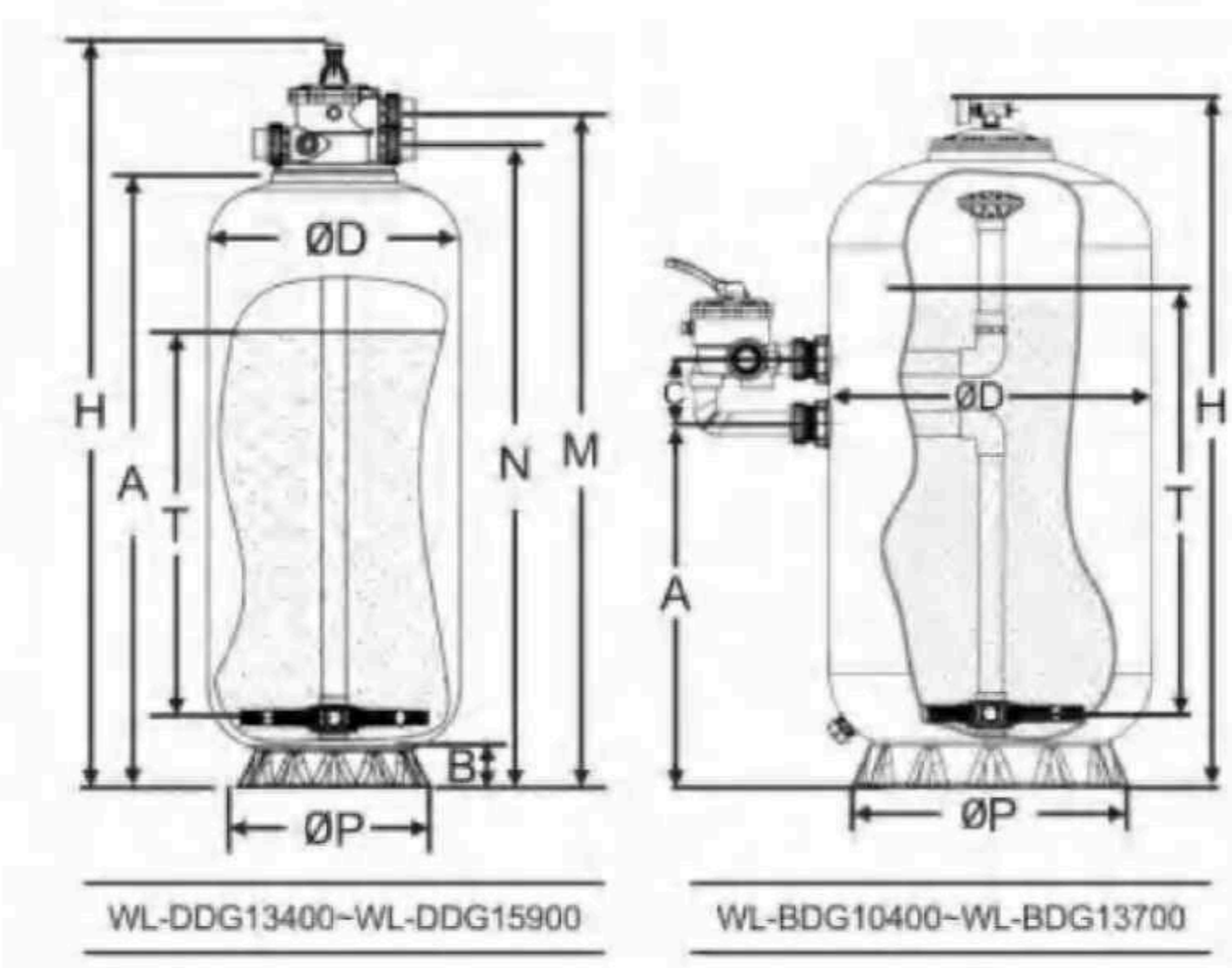
STANDARD: MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm² MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C MAXIMUM TESTING PRESSURE: 58psi/4.0kg/cm²



WL-DDG13400-WL-DDG15700 WL-BDG10400-WL-BDG13700

High quality and high performance are aesthetically designed for water treatment.

High density fiberglass sand filters are constructed by the latest engineering technology. The improvement of flow ability provides an ultra-pure water filtration. The fiberglass winding design allows the filter to have extra strength and resistance to chemical and corrosives. They're the most recommendable equipment for the application of water treatment.



WL-DDG13400-WL-DDG15700

|         |      |      |      |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|------|------|------|
| ΦD (mm) | 400  | 450  | 530  | 630  | 700  | 400  | 450  | 530  | 630  | 700  |
| H (mm)  | 1300 | 1300 | 1300 | 1300 | 1300 | 1500 | 1500 | 1500 | 1500 | 1500 |
| A (mm)  | 1062 | 1062 | 1062 | 1062 | 1062 | 1262 | 1262 | 1262 | 1262 | 1262 |
| B (mm)  | 75   | 75   | 75   | 95   | 95   | 75   | 75   | 75   | 95   | 95   |
| M (mm)  | 1174 | 1174 | 1174 | 1174 | 1174 | 1374 | 1374 | 1374 | 1374 | 1374 |
| N (mm)  | 1115 | 1115 | 1115 | 1115 | 1115 | 1315 | 1315 | 1315 | 1315 | 1315 |
| ΦP (mm) | 390  | 390  | 390  | 565  | 565  | 390  | 390  | 390  | 565  | 565  |
| T (mm)  | 650  | 650  | 650  | 630  | 630  | 850  | 850  | 850  | 830  | 830  |

WL-BDG10400-WL-BDG13700

|         |      |      |      |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|------|------|------|
| ΦD (mm) | 400  | 450  | 530  | 630  | 700  | 400  | 450  | 530  | 630  | 700  |
| H (mm)  | 1160 | 1160 | 1160 | 1160 | 1160 | 1360 | 1360 | 1360 | 1360 | 1360 |
| A (mm)  | 660  | 660  | 660  | 660  | 660  | 860  | 860  | 860  | 860  | 860  |
| C (mm)  | 125  | 125  | 125  | 125  | 125  | 125  | 125  | 125  | 125  | 125  |
| ΦP (mm) | 390  | 390  | 390  | 565  | 565  | 390  | 390  | 390  | 565  | 565  |
| T (mm)  | 650  | 650  | 650  | 650  | 650  | 850  | 850  | 850  | 850  | 850  |

| Model       | Pipe Size |    | Filter Area (m²) | Design Flow |     | 0.4-0.8mm Sand Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|-------------|-----------|----|------------------|-------------|-----|----------------------------|--------------------|------------------|
|             | inches    | mm |                  | m³/h        | lpm |                            |                    |                  |
| WL-DDG13400 | 1.5       | 50 | 0.13             | 4.5         | 75  | 120                        | 400                | 1300             |
| WL-DDG13450 | 1.5       | 50 | 0.16             | 5.6         | 93  | 150                        | 450                | 1300             |
| WL-DDG13500 | 1.5       | 50 | 0.20             | 7.0         | 117 | 185                        | 530                | 1300             |
| WL-DDG13600 | 1.5       | 50 | 0.32             | 11.2        | 187 | 245                        | 630                | 1300             |
| WL-DDG13700 | 1.5       | 50 | 0.37             | 13.0        | 217 | 345                        | 700                | 1300             |
| WL-DDG15400 | 1.5       | 50 | 0.13             | 3.9         | 65  | 150                        | 400                | 1500             |
| WL-DDG15450 | 1.5       | 50 | 0.16             | 4.8         | 80  | 195                        | 450                | 1500             |
| WL-DDG15500 | 1.5       | 50 | 0.20             | 6.0         | 100 | 240                        | 530                | 1500             |
| WL-DDG15600 | 1.5       | 50 | 0.32             | 9.6         | 160 | 325                        | 630                | 1500             |
| WL-DDG15700 | 1.5       | 50 | 0.37             | 11.0        | 183 | 400                        | 700                | 1500             |
| WL-DDG15800 | 2.0       | 63 | 0.50             | 15.0        | 250 | 500                        | 800                | 1500             |
| WL-DDG15900 | 2.0       | 63 | 0.64             | 19.2        | 320 | 590                        | 900                | 1500             |

| Model       | Pipe Size |    | Filter Area (m²) | Design Flow |     | 0.4-0.8mm Sand Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|-------------|-----------|----|------------------|-------------|-----|----------------------------|--------------------|------------------|
|             | inches    | mm |                  | m³/h        | lpm |                            |                    |                  |
| WL-BDG10400 | 1.5       | 50 | 0.13             | 4.5         | 75  | 110                        | 400                | 1160             |
| WL-BDG10450 | 1.5       | 50 | 0.16             | 5.6         | 93  | 140                        | 450                | 1160             |
| WL-BDG10500 | 1.5       | 50 | 0.20             | 7.0         | 117 | 170                        | 500                | 1160             |
| WL-BDG10600 | 1.5       | 50 | 0.32             | 11.2        | 187 | 230                        | 630                | 1160             |
| WL-BDG10700 | 1.5       | 50 | 0.37             | 13.0        | 217 | 325                        | 700                | 1160             |
| WL-BDG13400 | 1.5       | 50 | 0.13             | 3.9         | 65  | 140                        | 400                | 1360             |
| WL-BDG13450 | 1.5       | 50 | 0.16             | 4.8         | 80  | 185                        | 450                | 1360             |
| WL-BDG13500 | 1.5       | 50 | 0.20             | 6.0         | 100 | 225                        | 500                | 1360             |
| WL-BDG13600 | 1.5       | 50 | 0.32             | 9.6         | 160 | 310                        | 630                | 1360             |
| WL-BDG13700 | 1.5       | 50 | 0.37             | 11.0        | 183 | 430                        | 700                | 1360             |

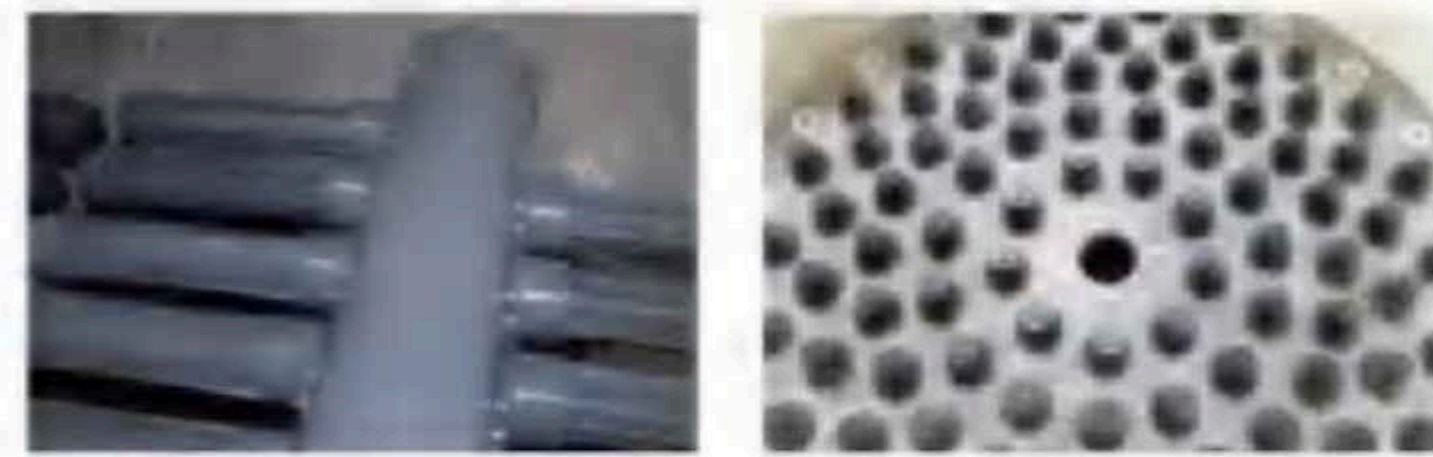
MAXIMUM WORKING PRESSURE: 58psi/4.0bar/cm², MAXIMUM TEMPERATURE ≤50°C, MAXIMUM TESTING PRESSURE: 86psi/6.0bar/cm²

# DEPTH SAND FILTER

## POOL FILTERS

It is made of high quality fiberglass which is chemical and sunlight resistance, and can be installed out-of-doors. Side Mount, easily for operating. It also can be feeded and mixed different filtrate medium ( Such as: Zeolite, Sand and Active carbon ) to make the water more clear. It is best choice for residential area and public water.

This filter can be with flange or valve  
 With Manhole, Sight glass, Collector arm,  
 Optional : Nozzle plate



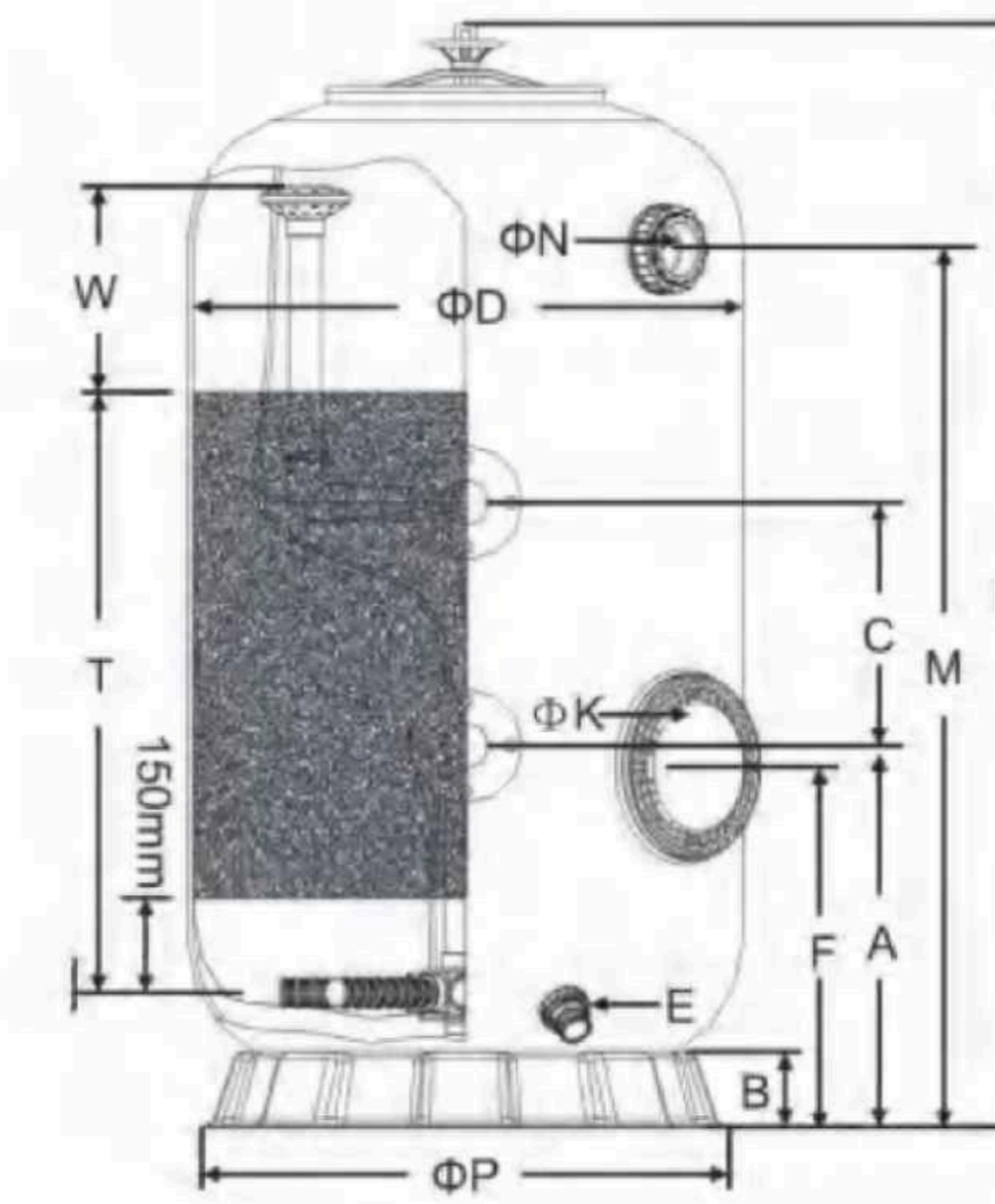
Collector Arms

Nozzle Plate

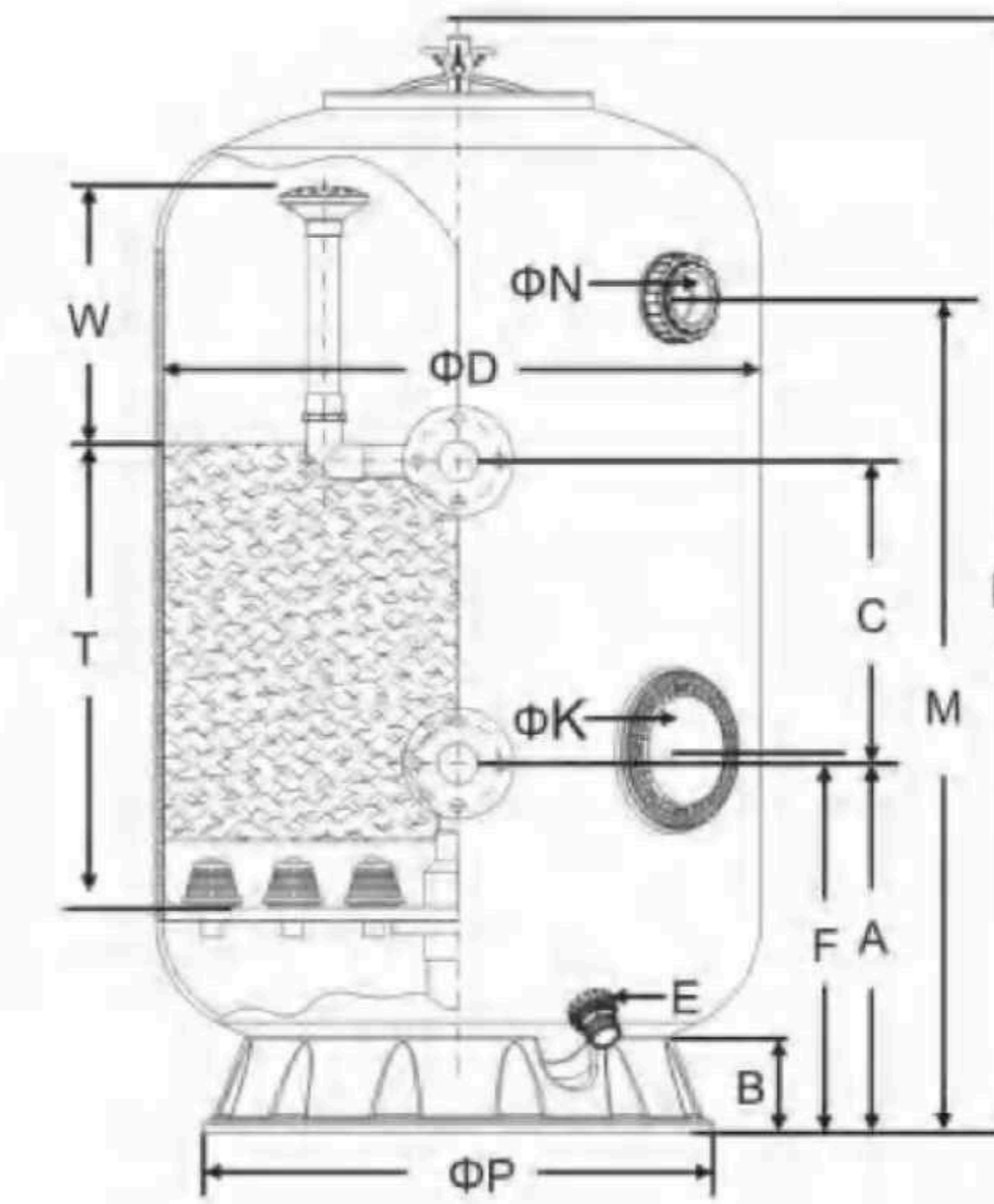


With Flange

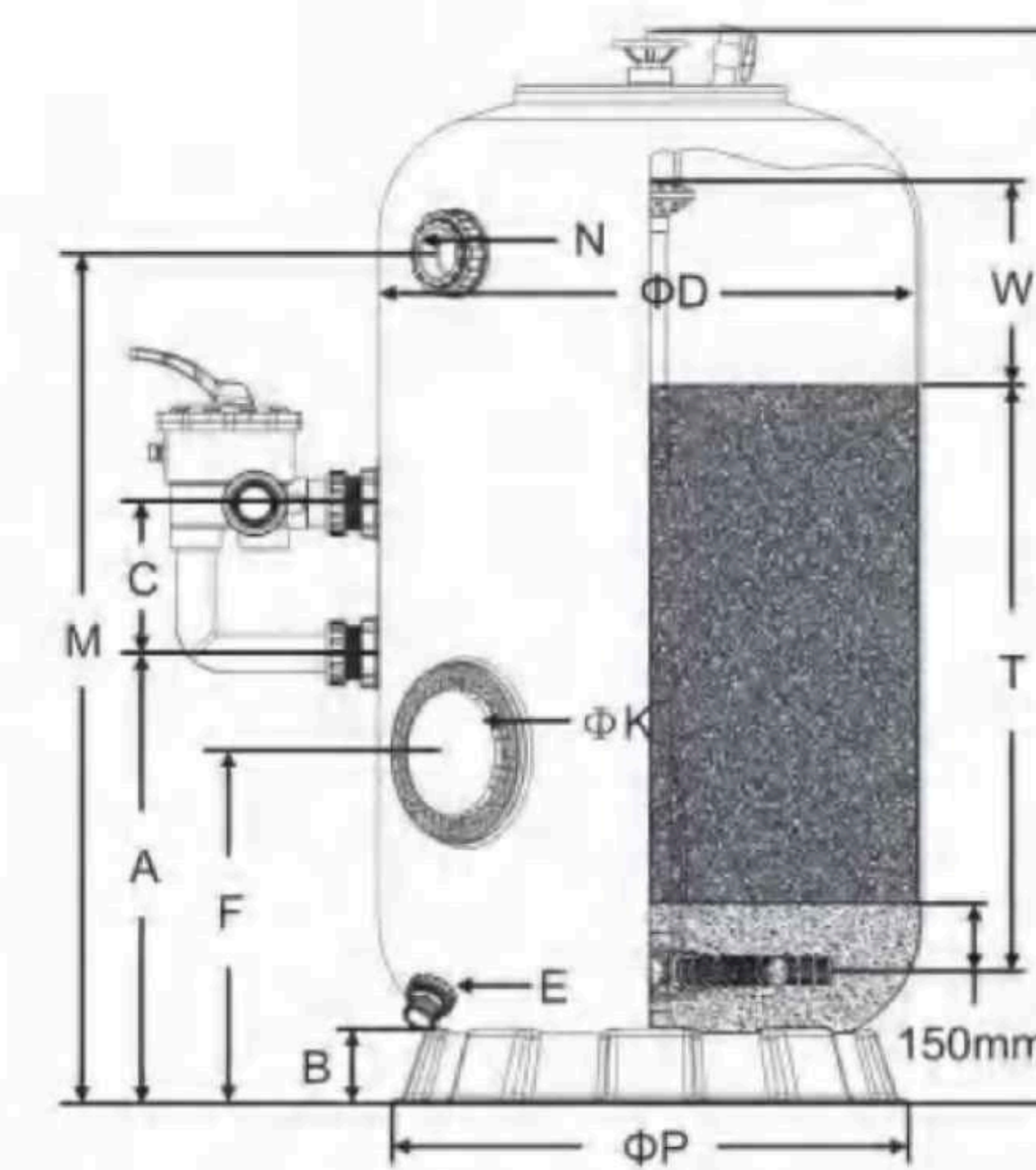
With Valve



With Lateral



With Nozzle Plate



With Valve

| Model  | 15800 | 15900 | 151000 | 151200 | 20800 | 20900 | 201000 | 201200 |
|--------|-------|-------|--------|--------|-------|-------|--------|--------|
| D (mm) | 800   | 900   | 1000   | 1200   | 800   | 900   | 1000   | 1200   |
| H (mm) | 1600  | 1600  | 1600   | 1600   | 2100  | 2100  | 2100   | 2100   |
| A (mm) | 550   | 550   | 550    | 650    | 800   | 800   | 800    | 800    |
| B (mm) | 150   | 150   | 150    | 180    | 150   | 150   | 150    | 180    |
| C (mm) | 350   | 350   | 350    | 350    | 350   | 350   | 350    | 350    |
| E (mm) | 40    | 40    | 40     | 40     | 40    | 40    | 40     | 40     |
| F (mm) | 520   | 520   | 520    | 600    | 520   | 520   | 520    | 600    |
| K (mm) | 180   | 180   | 180    | 180    | 180   | 180   | 180    | 180    |
| M (mm) | 1120  | 1120  | 1120   | 1120   | 1600  | 1600  | 1600   | 1600   |
| N (mm) | 80    | 80    | 80     | 80     | 80    | 80    | 80     | 80     |
| P (mm) | 790   | 790   | 790    | 1010   | 790   | 790   | 790    | 1010   |
| T (mm) | 800   | 800   | 800    | 800    | 1250  | 1250  | 1250   | 1250   |
| W (mm) | 350   | 350   | 350    | 350    | 400   | 400   | 400    | 400    |

| Model  | 15800 | 15900 | 151000 | 151200 | 20800 | 20900 | 201000 | 201200 |
|--------|-------|-------|--------|--------|-------|-------|--------|--------|
| D (mm) | 800   | 900   | 1000   | 1200   | 800   | 900   | 1000   | 1200   |
| H (mm) | 1600  | 1600  | 1600   | 1600   | 2100  | 2100  | 2100   | 2100   |
| A (mm) | 550   | 550   | 550    | 650    | 800   | 800   | 800    | 800    |
| B (mm) | 150   | 150   | 150    | 180    | 150   | 150   | 150    | 180    |
| C (mm) | 350   | 350   | 350    | 350    | 350   | 350   | 350    | 350    |
| E (mm) | 40    | 40    | 40     | 40     | 40    | 40    | 40     | 40     |
| F (mm) | 600   | 600   | 600    | 680    | 600   | 600   | 600    | 680    |
| M (mm) | 1120  | 1120  | 1120   | 1120   | 1600  | 1600  | 1600   | 1600   |
| K (mm) | 180   | 180   | 180    | 180    | 180   | 180   | 180    | 180    |
| N (mm) | 80    | 80    | 80     | 80     | 80    | 80    | 80     | 80     |
| P (mm) | 790   | 790   | 790    | 790    | 790   | 790   | 790    | 1010   |
| T (mm) | 800   | 800   | 800    | 800    | 1250  | 1250  | 1250   | 1250   |
| W (mm) | 160   | 160   | 160    | 160    | 160   | 160   | 160    | 160    |

| Model  | 15800 | 15900 | 151000 | 151200 | 20800 | 20900 | 201000 | 201200 |
|--------|-------|-------|--------|--------|-------|-------|--------|--------|
| D (mm) | 800   | 900   | 1000   | 1200   | 800   | 900   | 1000   | 1200   |
| H (mm) | 1600  | 1600  | 1600   | 1600   | 2100  | 2100  | 2100   | 2100   |
| A (mm) | 550   | 550   | 550    | 650    | 800   | 800   | 800    | 800    |
| B (mm) | 120   | 120   | 145    | 165    | 120   | 120   | 145    | 165    |
| C (mm) | 220   | 220   | 220    | 220    | 220   | 220   | 220    | 220    |
| E (mm) | 40    | 40    | 40     | 40     | 40    | 40    | 40     | 40     |
| F (mm) | 520   | 520   | 520    | 600    | 520   | 520   | 520    | 600    |
| K (mm) | 180   | 180   | 180    | 180    | 180   | 180   | 180    | 180    |
| M (mm) | 1120  | 1120  | 1120   | 1120   | 1600  | 1600  | 1600   | 1600   |
| N (mm) | 80    | 80    | 80     | 80     | 80    | 80    | 80     | 80     |
| P (mm) | 790   | 790   | 790    | 980    | 790   | 790   | 790    | 1010   |
| T (mm) | 800   | 800   | 800    | 800    | 1250  | 1250  | 1250   | 1250   |
| W (mm) | 350   | 350   | 350    | 350    | 400   | 400   | 400    | 400    |

| Model             | Connections |    | Filter Area (m <sup>2</sup> ) | Design Flow       |     | Sand Weight 0.5-0.8mm(kg) | Grave Weight 1-2mm(kg) | Tank Diameter (mm) | Tank Height (mm) |
|-------------------|-------------|----|-------------------------------|-------------------|-----|---------------------------|------------------------|--------------------|------------------|
|                   | inches      | mm |                               | m <sup>3</sup> /h | lpm |                           |                        |                    |                  |
| WL-ECG15800V      | 2           | 63 | 0.50                          | 20.0              | 333 | 455                       | 170                    | 800                | 1600             |
| WL-ECG15900V      | 2           | 63 | 0.64                          | 25.6              | 426 | 585                       | 230                    | 900                | 1600             |
| WL-ECG151000V     | 2           | 63 | 0.79                          | 31.6              | 526 | 720                       | 270                    | 1000               | 1600             |
| WL-ECG151200V     | 2           | 63 | 1.13                          | 40.0              | 666 | 1030                      | 450                    | 1200               | 1600             |
| WL-ECG151200V-2.5 | 2.5         | 75 | 1.13                          | 45.2              | 753 | 1030                      | 450                    | 1200               | 1600             |
| WL-ECG20800V      | 2           | 63 | 0.50                          | 15.0              | 250 | 770                       | 170                    | 800                | 2100             |
| WL-ECG20900V      | 2           | 63 | 0.64                          | 19.0              | 317 | 990                       | 230                    | 900                | 2100             |
| WL-ECG201000V     | 2           | 63 | 0.79                          | 23.7              | 395 | 1220                      | 270                    | 1000               | 2100             |
| WL-ECG201200V     | 2           | 63 | 1.13                          | 30.0              | 500 | 1740                      | 450                    | 1200               | 2100             |
| WL-ECG201200V-2.5 | 2.5         | 75 | 1.13                          | 33.9              | 565 | 1740                      | 450                    | 1200               | 2100             |

### With Flange

| Model         | Connections |    | Filter Area (m <sup>2</sup> ) | Design Flow       |      | Sand Weight 0.5-0.8mm(kg) | Grave Weight 1-2mm(kg) | Tank Diameter (mm) | Tank Height (mm) |
|---------------|-------------|----|-------------------------------|-------------------|------|---------------------------|------------------------|--------------------|------------------|
|               | inches      | mm |                               | m <sup>3</sup> /h | lpm  |                           |                        |                    |                  |
| WL-ECG15800F  | 2           | 63 | 0.50                          | 20.0              | 333  | 455                       | 170                    | 800                | 1600             |
| WL-ECG15900F  | 2           | 63 | 0.64                          | 25.6              | 426  | 585                       | 230                    | 900                | 1600             |
| WL-ECG151000F | 2           | 63 | 0.79                          | 31.6              | 526  | 720                       | 270                    | 1000               | 1600             |
| WL-ECG151200F | 3           | 90 | 1.13                          | 45.2              | 753  | 1030                      | 450                    | 1200               | 1600             |
| WL-ECG151400F | 3           | 90 | 1.54                          | 61.6              | 1026 | 1030                      | 450                    | 1400               | 1600             |
| WL-ECG20800F  | 2           | 63 | 0.50                          | 15.0              | 250  | 770                       | 170                    | 800                | 2100             |
| WL-ECG20900F  | 2           | 63 | 0.64                          | 19.0              | 317  | 990                       | 230                    | 900                | 2100             |
| WL-ECG201000F | 2           | 63 | 0.79                          | 23.7              | 395  | 1220                      | 270                    | 1000               | 2100             |
| WL-ECG201200F | 3           | 90 | 1.13                          | 33.9              | 565  | 1740                      | 450                    | 1200               | 2100             |
| WL-ECG201400F | 3           | 90 | 1.54                          | 46.2              | 770  | 2100                      | 500                    | 1400               | 2100             |

### With Nozzle

| Model        | Connections |    | Filter Area (m <sup>2</sup> ) | Design Flow       |      | Sand Weight 0.5-0.8mm(kg) | Grave Weight 1-2mm(kg) | Tank Diameter (mm) | Tank Height (mm) |
|--------------|-------------|----|-------------------------------|-------------------|------|---------------------------|------------------------|--------------------|------------------|
|              | inches      | mm |                               | m <sup>3</sup> /h | lpm  |                           |                        |                    |                  |
| WL-ECG15800  | 2           | 63 | 0.50                          | 20.0              | 333  | 455                       | 110                    | 800                | 1600             |
| WL-ECG15900  | 2           | 63 | 0.64                          | 25.6              | 426  | 585                       | 145                    | 900                | 1600             |
| WL-ECG151000 | 2           | 63 | 0.79                          | 31.6              | 526  | 720                       | 175                    | 1000               | 1600             |
| WL-ECG151200 | 3           | 90 | 1.13                          | 45.2              | 753  | 1030                      | 255                    | 1200               | 1600             |
| WL-ECG151400 | 3           | 90 | 1.54                          | 61.6              | 1026 | 1100                      | 320                    | 1400               | 1600             |
| WL-ECG20800  | 2           | 63 | 0.50                          | 15.0              | 250  | 770                       | 110                    | 800                | 2100             |
| WL-ECG20900  | 2           | 63 | 0.64                          | 19.0              | 317  | 990                       | 145                    | 900                | 2100             |
| WL-ECG201000 | 2           | 63 | 0.79                          | 23.7              | 395  | 1220                      | 175                    | 1000               | 2100             |
| WL-ECG201200 | 3           | 90 | 1.13                          | 33.9              | 565  | 1740                      | 255                    | 1200               | 2100             |
| WL-ECG201400 | 3           | 90 | 1.54                          | 46.2              | 770  | 2100                      | 320                    | 1400               | 2100             |

STANDARD: MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C MAXIMUM TESTING PRESSURE: 58psi/4.0kg/cm<sup>2</sup>  
 OPTIONAL: MAXIMUM WORKING PRESSURE: 58psi/4.0kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C MAXIMUM TESTING PRESSURE: 86psi/6.0kg/cm<sup>2</sup>

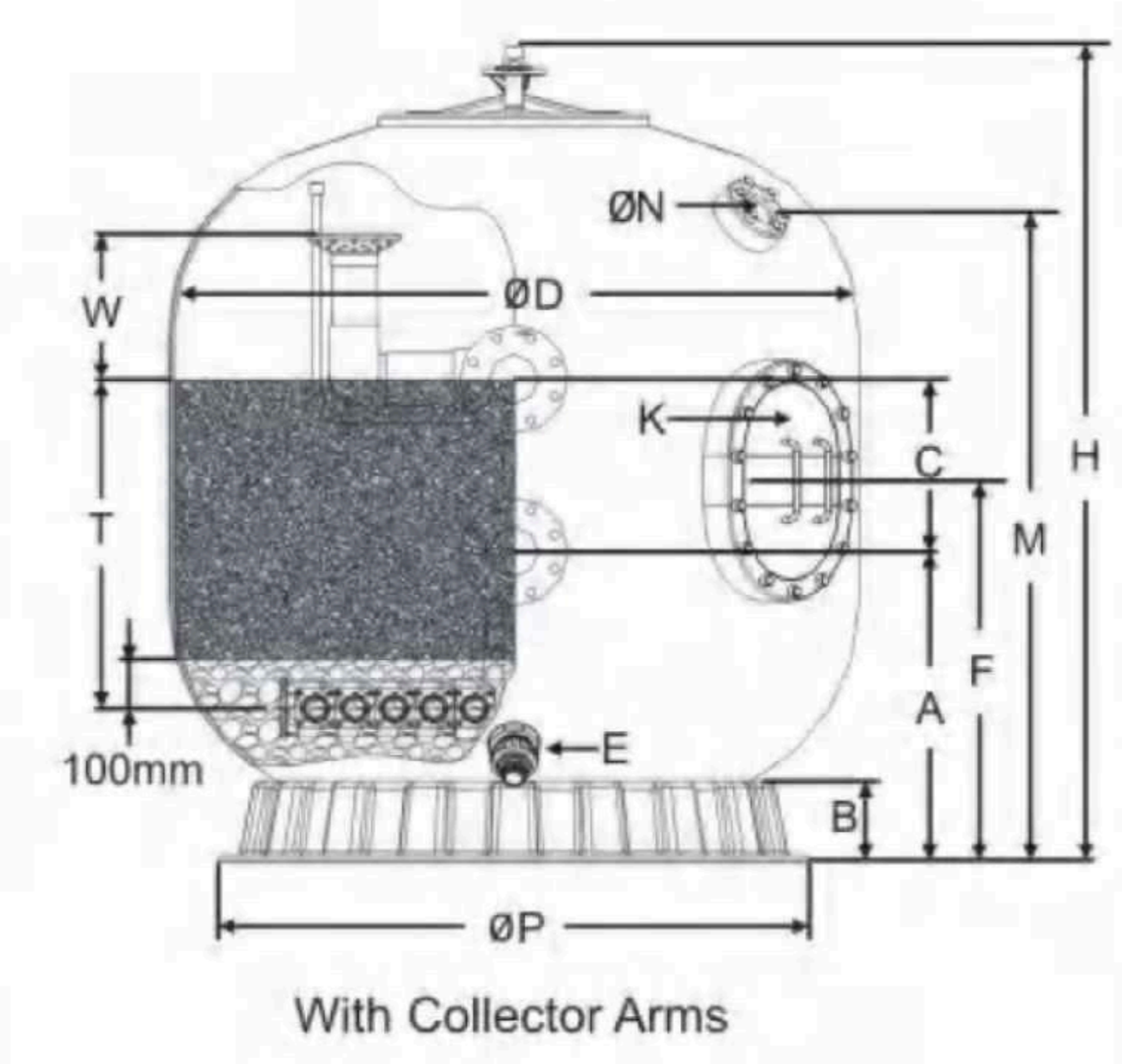
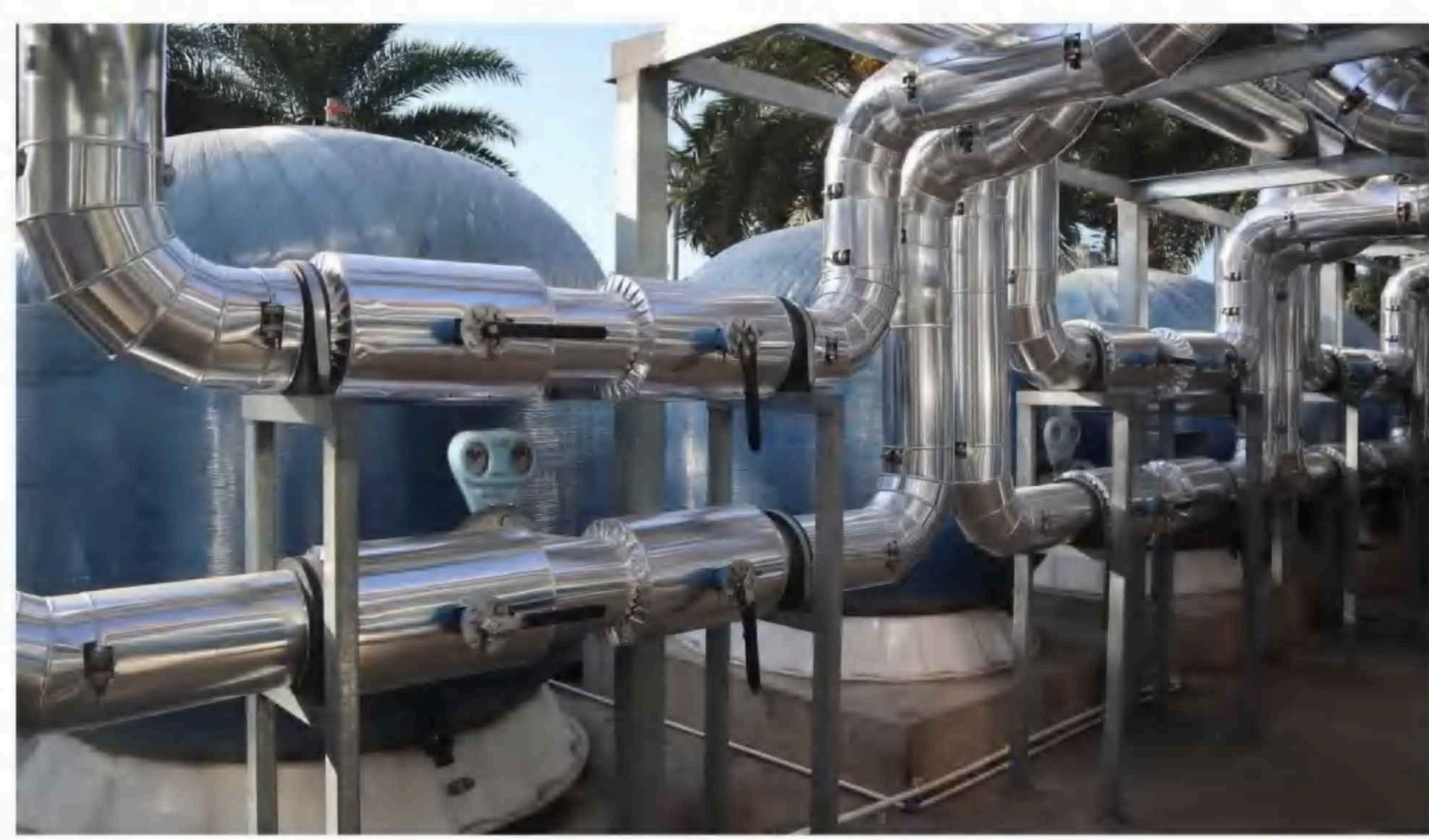
## COMMERCIAL HI-RATE SAND FILTERS POOL FILTERS

Superior engineering and a company-wide commitment to customer satisfaction have produced a series of vertical filters that are built to be tougher, longer lasting and better performing than any other competing vertical commercial hi-rate sand filter.

Constructed of polyester resin and non-corrosive fiberglass filament winding, all internal components and connections are injection molded PVC. UV-resistance surface allows working under sunshine.

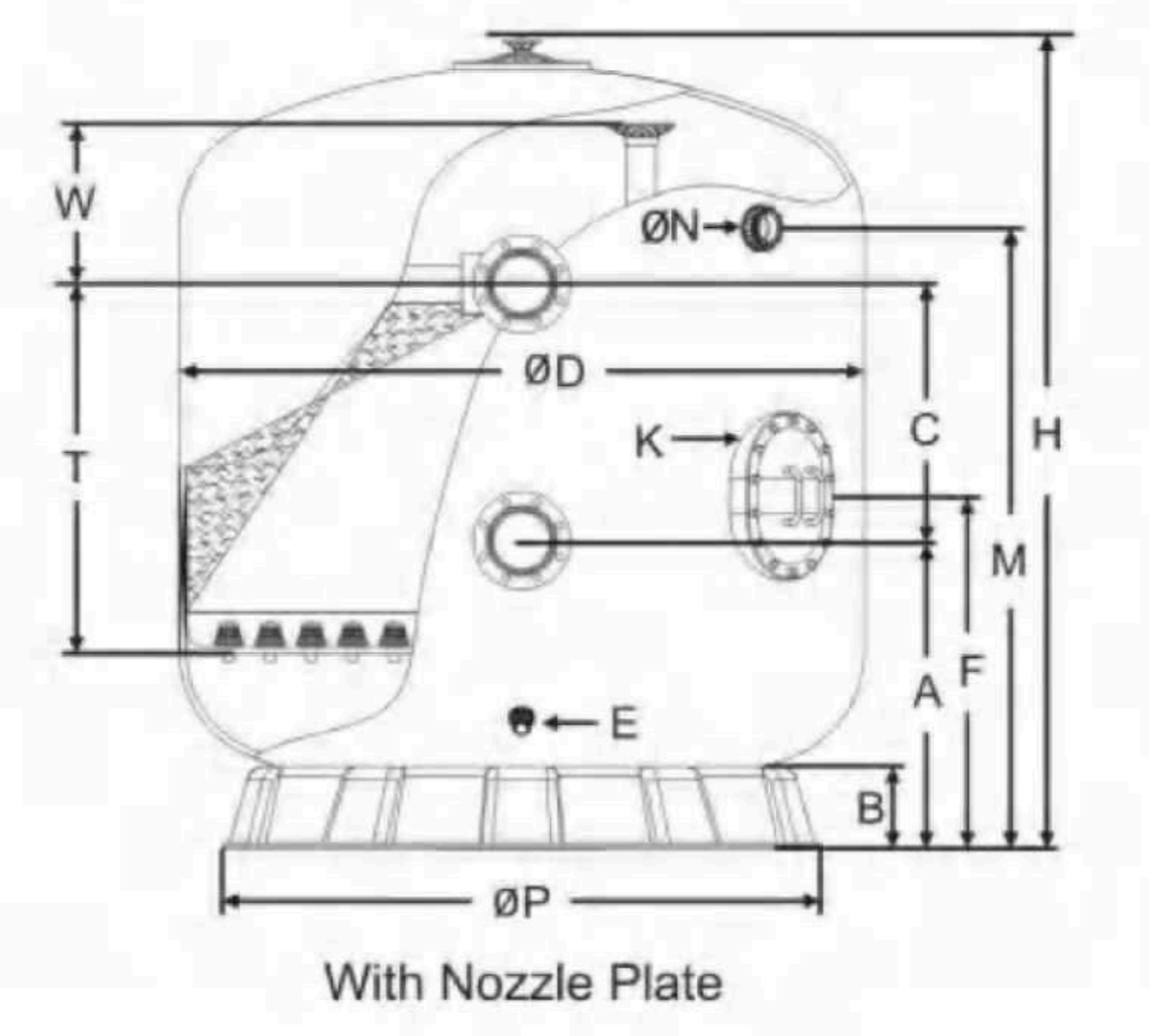


Optional: Sight glass, manhole, nozzle plate.



|        |         |         |         |         |         |         |         |
|--------|---------|---------|---------|---------|---------|---------|---------|
| D (mm) | 1200    | 1400    | 1600    | 1800    | 2000    | 2300    | 2500    |
| H (mm) | 1400    | 1600    | 1750    | 1950    | 2140    | 2350    | 2450    |
| A (mm) | 560     | 650     | 680     | 730     | 800     | 940     | 960     |
| B (mm) | 165     | 165     | 215     | 215     | 240     | 240     | 240     |
| C (mm) | 340     | 350     | 450     | 550     | 550     | 600     | 600     |
| E (mm) | 60      | 60      | 60      | 60      | 60      | 60      | 60      |
| F (mm) | 740     | 800     | 875     | 910     | 1050    | 1070    | 1100    |
| K (mm) | 180x180 | 400x300 | 400x300 | 400x300 | 400x300 | 450x300 | 450x350 |
| M (mm) | 1150    | 1250    | 1450    | 1650    | 1700    | 1800    | 1900    |
| N (mm) | 80      | 80      | 80      | 80      | 80      | 80      | 80      |
| P (mm) | 1010    | 1215    | 1450    | 1610    | 1800    | 2010    | 2010    |
| T (mm) | 600     | 700     | 800     | 850     | 900     | 1000    | 1050    |
| W (mm) | 300     | 300     | 320     | 320     | 350     | 400     | 400     |

| Model      | Flange Connections |     | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.4-0.8mm Sand Weight (kg) | 1-2mm Gravel Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|------------|--------------------|-----|-------------------------------|-------------------|------|----------------------------|--------------------------|--------------------|------------------|
|            | inches             | mm  |                               | m <sup>3</sup> /h | lpm  |                            |                          |                    |                  |
| WL-CCG1200 | 3                  | 90  | 1.13                          | 45                | 750  | 750                        | 300                      | 1200               | 1400             |
| WL-CCG1400 | 4                  | 110 | 1.54                          | 61                | 1016 | 1200                       | 500                      | 1400               | 1600             |
| WL-CCG1600 | 4                  | 110 | 2.01                          | 80                | 1333 | 1850                       | 750                      | 1600               | 1750             |
| WL-CCG1800 | 6                  | 160 | 2.54                          | 101               | 1683 | 2500                       | 1050                     | 1800               | 1950             |
| WL-CCG2000 | 6                  | 160 | 3.14                          | 125               | 2083 | 3300                       | 1150                     | 2000               | 2140             |
| WL-CCG2200 | 6                  | 160 | 3.80                          | 152               | 2532 | 4150                       | 1470                     | 2200               | 2350             |
| WL-CCG2300 | 8                  | 200 | 4.15                          | 166               | 2766 | 4900                       | 1600                     | 2300               | 2350             |
| WL-CCG2500 | 8                  | 200 | 4.90                          | 196               | 3265 | 6000                       | 2200                     | 2500               | 2450             |
| WL-CCG3000 | 8                  | 200 | 7.07                          | 282               | 4698 | 8600                       | 3300                     | 3000               | 2650             |



|        |         |         |         |         |         |         |
|--------|---------|---------|---------|---------|---------|---------|
| D (mm) | 1420    | 1620    | 1830    | 2030    | 2300    | 2500    |
| H (mm) | 1900    | 2000    | 2100    | 2200    | 2350    | 2400    |
| A (mm) | 700     | 810     | 850     | 900     | 940     | 960     |
| B (mm) | 165     | 215     | 215     | 240     | 240     | 240     |
| C (mm) | 550     | 550     | 550     | 550     | 600     | 600     |
| E (mm) | 40      | 40      | 40      | 40      | 40      | 40      |
| F (mm) | 850     | 900     | 980     | 1030    | 1070    | 1100    |
| K (mm) | 400X300 | 400X300 | 400X300 | 400X300 | 450X350 | 450x350 |
| M (mm) | 1400    | 1500    | 1600    | 1700    | 1800    | 1900    |
| N (mm) | 80      | 80      | 80      | 80      | 80      | 80      |
| P (mm) | 1215    | 1450    | 1610    | 1800    | 2010    | 2010    |
| T (mm) | 1000    | 1000    | 1000    | 1000    | 1000    | 1050    |
| W (mm) | 300     | 320     | 320     | 350     | 400     | 400     |

| Model      | Flange Connections |     | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.4-0.8mm Sand Weight (kg) | 1-2mm Gravel Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|------------|--------------------|-----|-------------------------------|-------------------|------|----------------------------|--------------------------|--------------------|------------------|
|            | inches             | mm  |                               | m <sup>3</sup> /h | lpm  |                            |                          |                    |                  |
| WL-CCG1400 | 4                  | 110 | 1.54                          | 61                | 1016 | 1800                       | 220                      | 1420               | 1900             |
| WL-CCG1600 | 4                  | 110 | 2.01                          | 80                | 1333 | 2300                       | 300                      | 1620               | 2000             |
| WL-CCG1800 | 6                  | 160 | 2.54                          | 101               | 1683 | 2900                       | 360                      | 1830               | 2100             |
| WL-CCG2000 | 6                  | 160 | 3.14                          | 125               | 2083 | 3600                       | 440                      | 2030               | 2200             |
| WL-CCG2300 | 8                  | 200 | 4.15                          | 166               | 2766 | 4800                       | 580                      | 2300               | 2350             |
| WL-CCG2500 | 8                  | 200 | 4.90                          | 196               | 3265 | 5700                       | 680                      | 2500               | 2400             |
| WL-CCG3000 | 8                  | 200 | 7.07                          | 282               | 4698 | 8250                       | 980                      | 3000               | 2650             |

STANDARD: MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE: 50°C MAXIMUM TESTING PRESSURE: 58psi/4.0kg/cm<sup>2</sup>  
 OPTIONAL: MAXIMUM WORKING PRESSURE: 58psi/4.0kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE: 50°C MAXIMUM TESTING PRESSURE: 86psi/6.0kg/cm<sup>2</sup>

## HORIZONTAL SAND FILTERS POOL FILTERS

Horizontal sand filters are made of polyester reinforced with fiberglass; they are totally anti-corrosive, and have high mechanical, chemical and thermal resistance, higher quality water is achieved with their greater filtering capacity. Indexes of turbidity and contaminants of the filtered water are reduced due to their increased retention capacity. The time between back washes increases proportionally with the height of the filter bed, meaning there are fewer interruptions in filtration, and lower water consumption, because the number of back washes needed is decreased and there is less erosion of the filtering material.

A horizontal filter is the ideal choice in cases where a great volume of water is to be treated, and in cases which require optimization of the available space, as a single horizontal filter can substitute up to 3 vertical filters of the same diameter simply by increasing its length.



Collector Arms

Top Diffuser

Cover Lid

Sand Drain

Pressure Control Manometer Panel



| Φ1200mm     |               |                    |     |                               |                   |      |                            |                          |                    |                  |
|-------------|---------------|--------------------|-----|-------------------------------|-------------------|------|----------------------------|--------------------------|--------------------|------------------|
| Model       | L Length (mm) | Flange Connections |     | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.4-0.8mm Sand Weight (kg) | 1-2mm Gravel Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|             |               | inches             | mm  |                               | m <sup>3</sup> /h | lpm  |                            |                          |                    |                  |
| WL-HF121900 | 1900          | 4                  | 110 | 1.96                          | 59                | 983  | 1100                       | 430                      | 1200               | 1390             |
| WL-HF122300 | 2300          | 6                  | 160 | 2.42                          | 73                | 1216 | 1430                       | 550                      | 1200               | 1390             |
| WL-HF122500 | 2500          | 6                  | 160 | 2.65                          | 79                | 1316 | 1750                       | 700                      | 1200               | 1390             |
| WL-HF122700 | 2700          | 6                  | 160 | 2.87                          | 86                | 1433 | 2080                       | 830                      | 1200               | 1390             |
| WL-HF123000 | 3000          | 6                  | 160 | 3.21                          | 96                | 1599 | 2330                       | 925                      | 1200               | 1390             |

| Φ1400mm     |               |                    |     |                               |                   |      |                            |                          |                    |                  |
|-------------|---------------|--------------------|-----|-------------------------------|-------------------|------|----------------------------|--------------------------|--------------------|------------------|
| Model       | L Length (mm) | Flange Connections |     | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.4-0.8mm Sand Weight (kg) | 1-2mm Gravel Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|             |               | inches             | mm  |                               | m <sup>3</sup> /h | lpm  |                            |                          |                    |                  |
| WL-HF141900 | 1900          | 4                  | 110 | 2.23                          | 67                | 1116 | 2000                       | 580                      | 1400               | 1600             |
| WL-HF142500 | 2500          | 6                  | 160 | 3.02                          | 91                | 1516 | 2750                       | 800                      | 1400               | 1600             |
| WL-HF143000 | 3000          | 6                  | 160 | 3.67                          | 110               | 1833 | 3375                       | 1000                     | 1400               | 1600             |

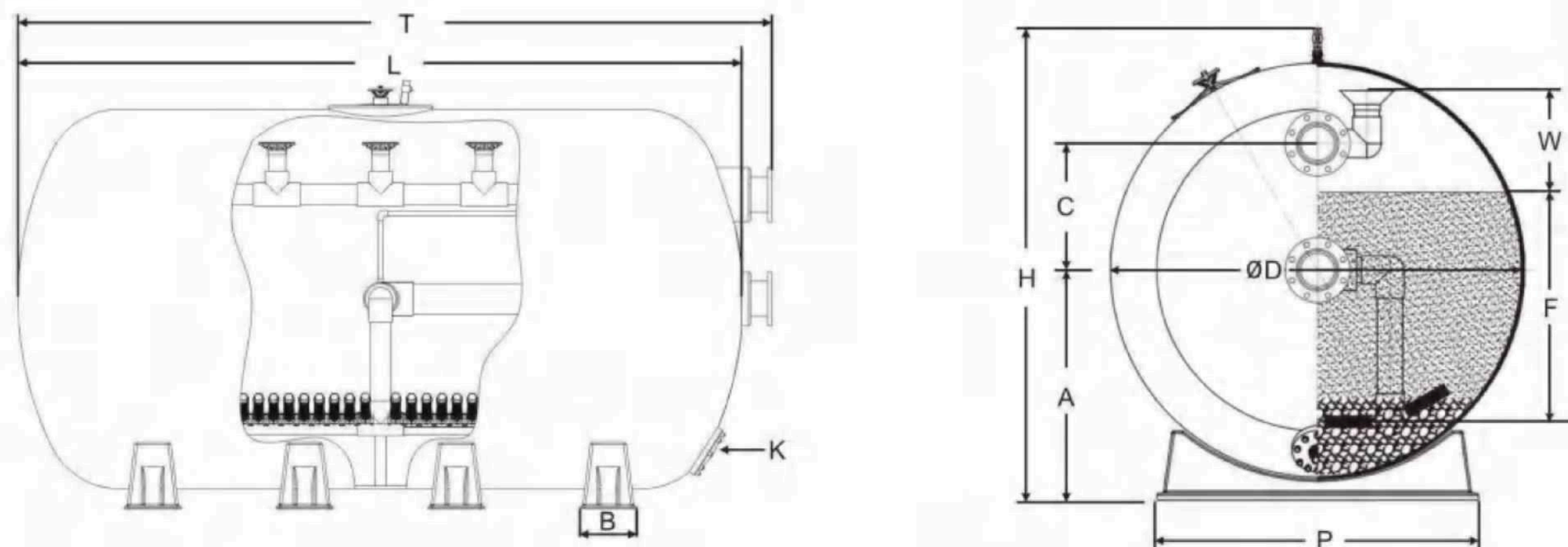
| Φ1600mm     |               |                    |     |                               |                   |      |                            |                          |                    |                  |
|-------------|---------------|--------------------|-----|-------------------------------|-------------------|------|----------------------------|--------------------------|--------------------|------------------|
| Model       | L Length (mm) | Flange Connections |     | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.4-0.8mm Sand Weight (kg) | 1-2mm Gravel Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|             |               | inches             | mm  |                               | m <sup>3</sup> /h | lpm  |                            |                          |                    |                  |
| WL-HF161900 | 1900          | 6                  | 160 | 2.47                          | 74                | 1233 | 2800                       | 600                      | 1600               | 1830             |
| WL-HF162500 | 2500          | 6                  | 160 | 3.36                          | 101               | 1683 | 3800                       | 850                      | 1600               | 1830             |
| WL-HF163000 | 3000          | 6                  | 160 | 4.10                          | 123               | 2049 | 4700                       | 1050                     | 1600               | 1830             |

| Φ1800mm     |               |                    |     |                               |                   |      |                            |                          |                    |                  |
|-------------|---------------|--------------------|-----|-------------------------------|-------------------|------|----------------------------|--------------------------|--------------------|------------------|
| Model       | L Length (mm) | Flange Connections |     | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.4-0.8mm Sand Weight (kg) | 1-2mm Gravel Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|             |               | inches             | mm  |                               | m <sup>3</sup> /h | lpm  |                            |                          |                    |                  |
| WL-HF182500 | 2500          | 6                  | 160 | 3.74                          | 112               | 1866 | 4850                       | 980                      | 1800               | 2050             |
| WL-HF183000 | 3000          | 6                  | 160 | 4.58                          | 137               | 2282 | 5930                       | 1230                     | 1800               | 2050             |
| WL-HF183500 | 3500          | 8                  | 200 | 5.41                          | 162               | 2699 | 7000                       | 1480                     | 1800               | 2050             |
| WL-HF184000 | 4000          | 8                  | 200 | 6.25                          | 187               | 3115 | 8080                       | 1700                     | 1800               | 2050             |

| Φ2000mm     |               |                    |     |                               |                   |      |                            |                          |                    |                  |
|-------------|---------------|--------------------|-----|-------------------------------|-------------------|------|----------------------------|--------------------------|--------------------|------------------|
| Model       | L Length (mm) | Flange Connections |     | Filter Area (m <sup>2</sup> ) | Design Flow       |      | 0.4-0.8mm Sand Weight (kg) | 1-2mm Gravel Weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|             |               | inches             | mm  |                               | m <sup>3</sup> /h | lpm  |                            |                          |                    |                  |
| WL-HF202500 | 2500          | 6                  | 160 | 4.34                          | 130               | 2166 | 6000                       | 1050                     | 2000               | 2220             |
| WL-HF203000 | 3000          | 6                  | 160 | 5.30                          | 159               | 2649 | 7450                       | 1300                     | 2000               | 2220             |
| WL-HF203500 | 3500          | 8                  | 200 | 6.25                          | 187               | 3282 | 8900                       | 1550                     | 2000               | 2220             |
| WL-HF204000 | 4000          | 8                  | 200 | 7.21                          | 216               | 3599 | 10350                      | 1800                     | 2000               | 2220             |
| WL-HF204500 | 4500          | 8                  | 200 | 8.16                          | 245               | 4082 | 11800                      | 2080                     | 2000               | 2220             |

STANDARD: MAXIMUM WORKING PRESSURE: 36psi/2.5kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C MAXIMUM TESTING PRESSURE: 58psi/4.0kg/cm<sup>2</sup>  
 OPTIONAL: MAXIMUM WORKING PRESSURE: 58psi/4.0kg/cm<sup>2</sup> MAXIMUM OPERATING WATER TEMPERATURE: ≤50°C MAXIMUM TESTING PRESSURE: 86psi/6.0kg/cm<sup>2</sup>

## HORIZONTAL SAND FILTERS POOL FILTERS

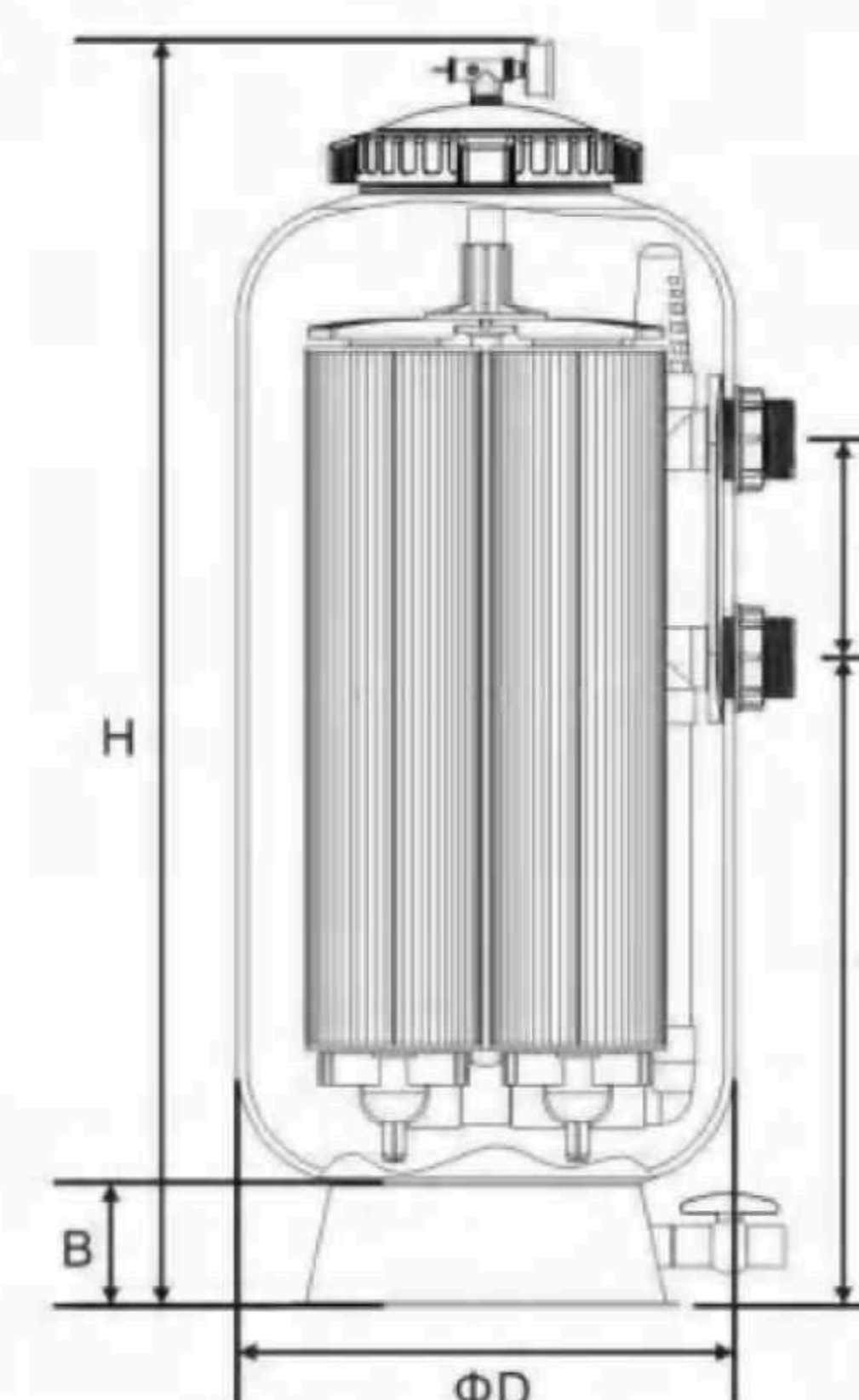


| L (mm)         | H (mm) | A (mm) | B (mm) | C (mm) | T (mm) | P (mm) | K(mm) | W(mm) | F(mm)     |
|----------------|--------|--------|--------|--------|--------|--------|-------|-------|-----------|
| <b>Φ1200mm</b> |        |        |        |        |        |        |       |       |           |
| 1900           | 1390   | 725    | 250    | 340    | 2050   | 900    | 180   | 225   | 550       |
| 2300           | 1390   | 725    | 250    | 340    | 2450   | 900    | 180   | 225   | 550       |
| 2500           | 1390   | 725    | 250    | 340    | 2650   | 900    | 180   | 225   | 550       |
| 2700           | 1390   | 725    | 250    | 340    | 2850   | 900    | 180   | 225   | 550       |
| 3000           | 1390   | 725    | 250    | 340    | 3150   | 900    | 180   | 225   | 550       |
| <b>Φ1400mm</b> |        |        |        |        |        |        |       |       |           |
| 1900           | 1600   | 810    | 300    | 400    | 2150   | 960    | 180   | 225   | 750       |
| 2500           | 1600   | 810    | 300    | 400    | 2650   | 960    | 180   | 225   | 750       |
| 3000           | 1600   | 810    | 300    | 400    | 3150   | 960    | 180   | 225   | 750       |
| <b>Φ1600mm</b> |        |        |        |        |        |        |       |       |           |
| 1900           | 1830   | 925    | 300    | 450    | 2100   | 1230   | 180   | 250   | 910       |
| 2500           | 1830   | 925    | 300    | 450    | 2700   | 1230   | 180   | 250   | 910       |
| 3000           | 1830   | 925    | 300    | 450    | 3200   | 1230   | 180   | 250   | 910       |
| <b>Φ1800mm</b> |        |        |        |        |        |        |       |       |           |
| 2500           | 2050   | 1040   | 300    | 550    | 2700   | 1380   | 180   | 300   | 1000      |
| 3000           | 2050   | 1040   | 300    | 550    | 3200   | 1380   | 180   | 300   | 1000      |
| 3500           | 2050   | 1040   | 300    | 550    | 3700   | 1380   | 180   | 300   | 1000      |
| <b>Φ2000mm</b> |        |        |        |        |        |        |       |       |           |
| 2500           | 2220   | 1090   | 330    | 550    | 2730   | 1500   | 180   | 400   | 1000-1200 |
| 3000           | 2220   | 1090   | 330    | 550    | 3230   | 1500   | 180   | 400   | 1000-1200 |
| 3500           | 2220   | 1090   | 330    | 550    | 3730   | 1500   | 180   | 400   | 1000-1200 |
| 4000           | 2220   | 1090   | 330    | 550    | 4230   | 1500   | 180   | 400   | 1000-1200 |
| 4500           | 2220   | 1090   | 330    | 550    | 4730   | 1500   | 180   | 400   | 1000-1200 |

## CONVERTIBLE CARTRIDGE & DIATOMACEOUS EARTH FILTER POOL FILTERS



- UV inhibited filament wound structural fiberglass tanks.
- 2" or 63mm Inlet/Outlet PVC unions.
- Either 6 way Multiport or Push-Pull valve available for DE models.
- Easy removal or installation of cartridges or DE elements.
- Cartridges in 20.9, 23.2, 35.3, 41.8 Sq.m<sup>2</sup> sizes, fully convertible to DE.
- DE elements in 3.25, 4.18, 6.97, 8.39 Sq.m<sup>2</sup> sizes, fully convertible to Cartridges.
- Large clear lock ring sealed lid for easy interior viewing and media installation/removal.
- Exclusive integral Inlet/Outlet manifold eliminates conventional bulkhead fittings.
- Hose bib drain valve allows removal of tank debris away from mechanical area.



| Model  | BZX225 | BZX250 | BZX350 | BZX450 | BZX520 |
|--------|--------|--------|--------|--------|--------|
|        | BDE35  | BDE45  | BDE75  | BDE90  |        |
| ΦD(mm) | 500    | 500    | 500    | 500    | 500    |
| H(mm)  | 965    | 965    | 1270   | 1270   | 1270   |
| A(mm)  | 341    | 341    | 646    | 646    | 646    |
| B(mm)  | 125    | 125    | 125    | 125    | 125    |
| C(mm)  | 220    | 220    | 220    | 220    | 220    |

| Model  | Pipe Size |    | Filtration area |                 | Design flow       |     | Diatomite weight (kg) | Tank Diameter (mm) | Tank Height (mm) |
|--------|-----------|----|-----------------|-----------------|-------------------|-----|-----------------------|--------------------|------------------|
|        | inches    | mm | m <sup>2</sup>  | Ft <sup>2</sup> | m <sup>3</sup> /h | lpm |                       |                    |                  |
| BZX225 | 2         | 63 | 20.9            | 225             | 19.08             | 318 | -                     | 500                | 965              |
| BZX250 | 2         | 63 | 23.2            | 250             | 21.35             | 356 | -                     | 500                | 965              |
| BZX350 | 2         | 63 | 35.3            | 380             | 32.30             | 538 | -                     | 500                | 1270             |
| BZX450 | 2         | 63 | 41.8            | 450             | 34.07             | 568 | -                     | 500                | 1270             |
| BZX520 | 2         | 63 | 44.8            | 482             | 36.50             | 608 | -                     | 500                | 1270             |
| BDE35  | 2         | 63 | 3.25            | 35              | 15.90             | 265 | 1.59                  | 500                | 965              |
| BDE45  | 2         | 63 | 4.18            | 45              | 20.44             | 341 | 2.04                  | 500                | 965              |
| BDE75  | 2         | 63 | 6.97            | 75              | 34.07             | 568 | 3.40                  | 500                | 1270             |
| BDE90  | 2         | 63 | 8.36            | 90              | 41.80             | 696 | 4.08                  | 500                | 1270             |

MAXIMUM WORKING PRESSURE: 36psi/2.5bar/cm<sup>2</sup>, MAXIMUM TEMPERATURE: ≤50°C, MAXIMUM TESTING PRESSURE: 58psi/4.0bar/cm<sup>2</sup>

## DIATOMACEOUS EARTH FIBREGLASS FILTERS POOL FILTERS

D.E. is historically the media of choice for the designers of some of the largest and most beautiful pools in the world, it is now more practical for all backyard pools as well. It brings you the proven performance of diatomaceous earth media in the world's safest and easiest-to-operate filter.

The greater cycle times and minimized maintenance of the filter, coupled with superior grid system, gives you the finest D.E. filter available.

- Good and crude media for filtration--Diatomaceous(D.E.)
- High Filter precision, can reach 2 ~ 3 $\mu$ m.
- Shorter time to backwash, save water and energy sources.
- "Deep bed" designed, save area.



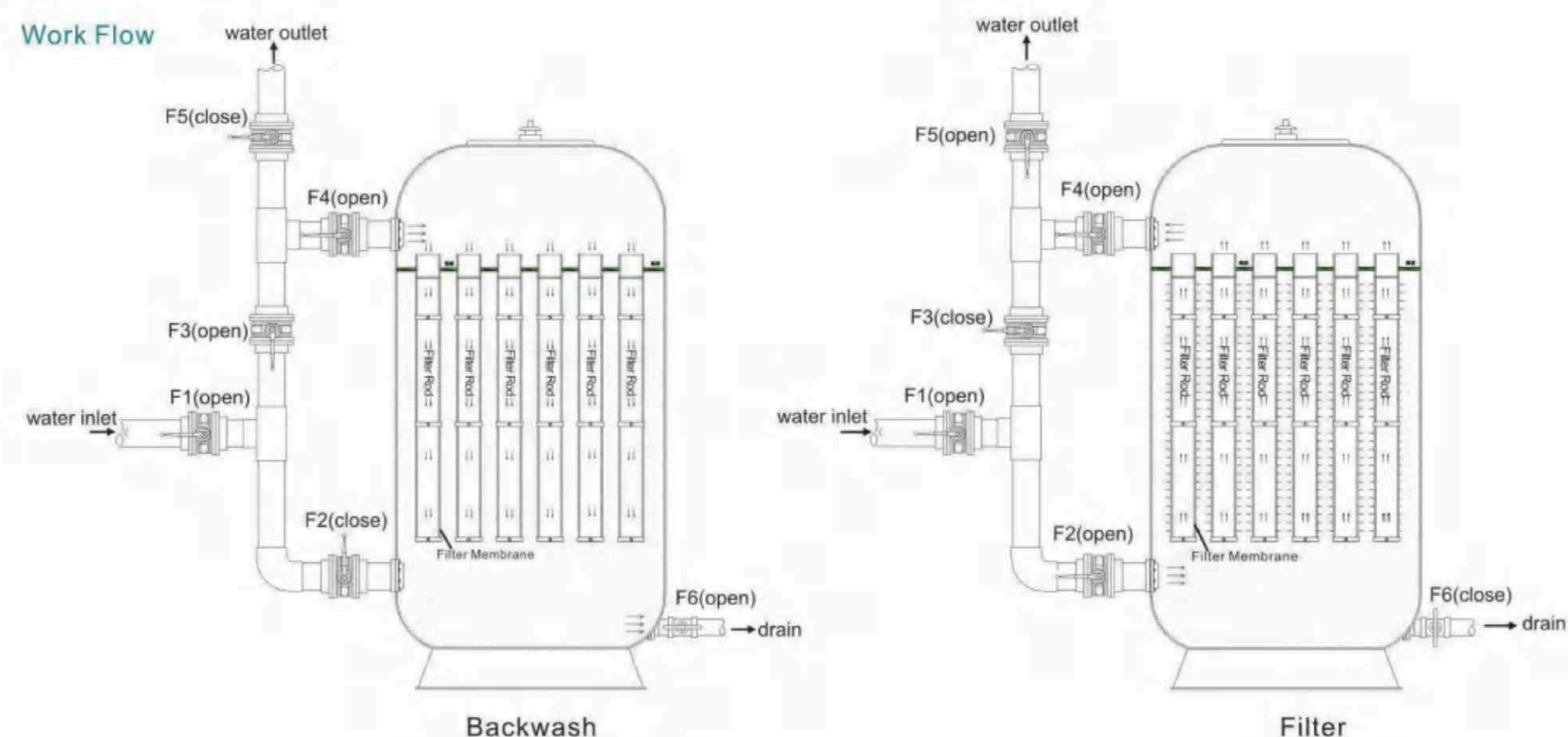
DE650-DE700

With Valve

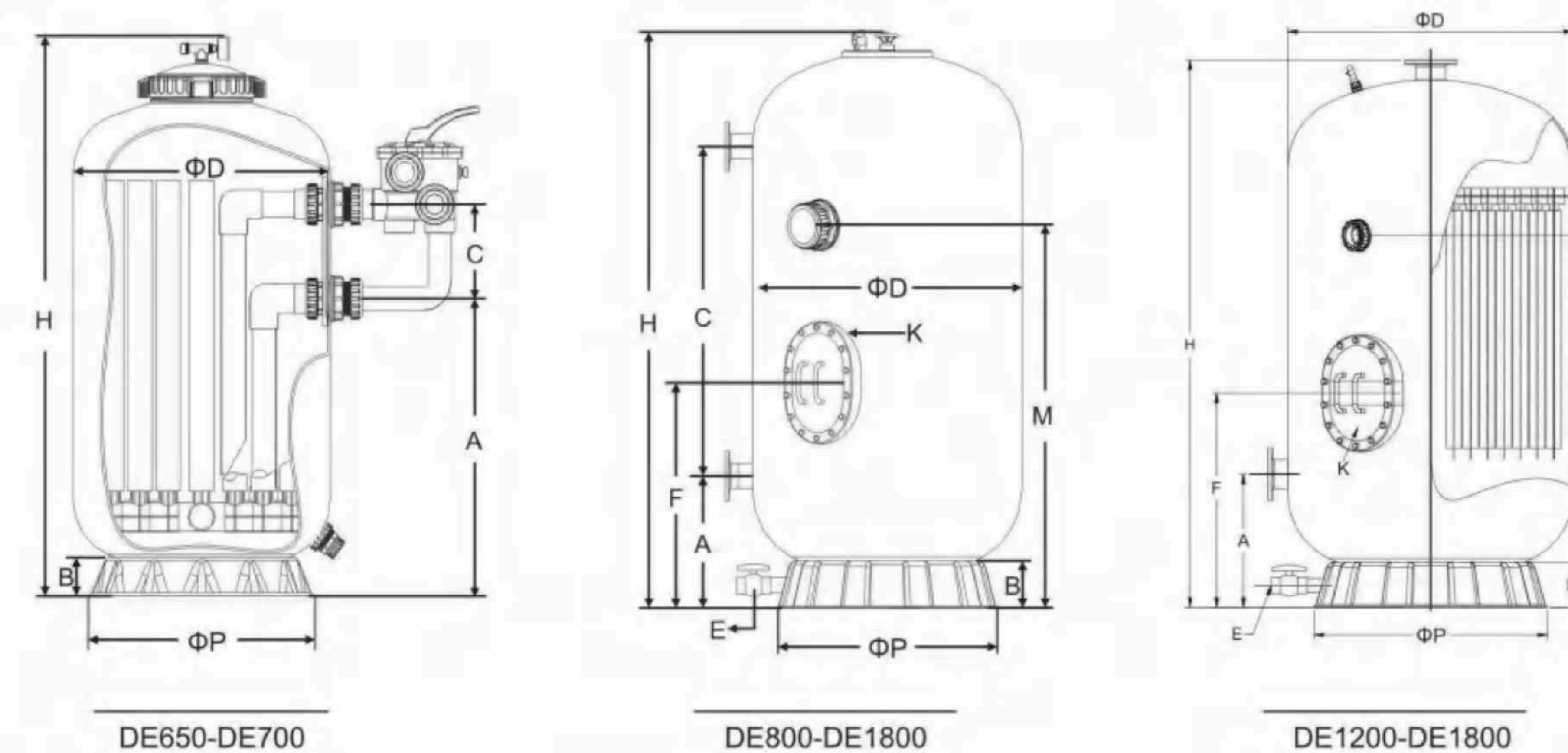
DE800-DE1800

With Flange

### Work Flow



- ◆ Standard: Maximum Working Pressure 250kpa/36psi/2.5bar
- ◆ Optional: Maximum Working Pressure 400kpa/58psi/4.0bar
- ◆ Maximum Temperature 50°C



DE650-DE700

DE800-DE1800

DE1200-DE1800

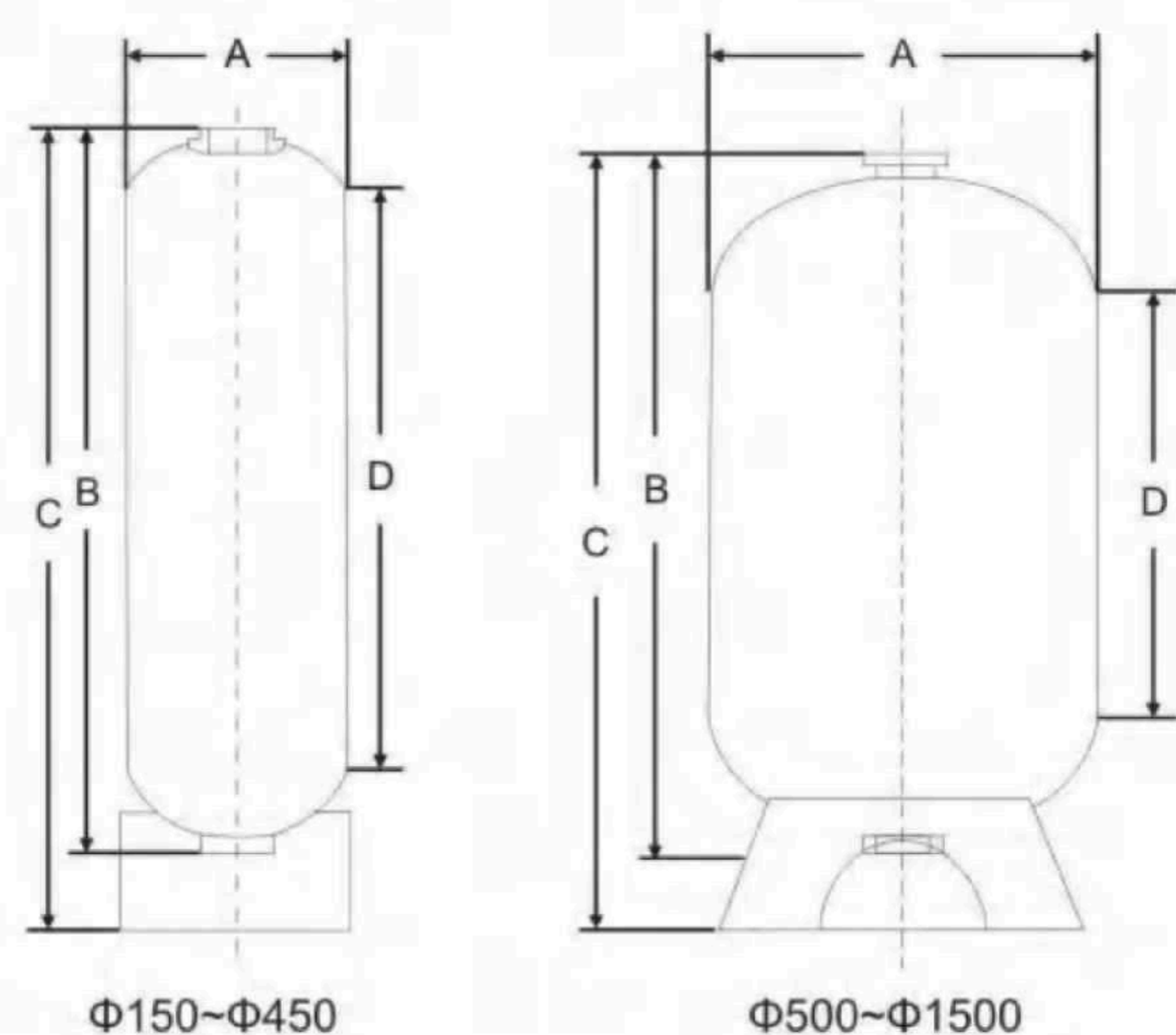
| ΦD(mm) | 635  | 700  | 800     | 900     | 1000    | 1200    | 1400    | 1600    | 1800    |
|--------|------|------|---------|---------|---------|---------|---------|---------|---------|
| H(mm)  | 1310 | 1340 | 2100    | 2100    | 2100    | 2300    | 2350    | 2350    | 2450    |
| A(mm)  | 700  | 730  | 400     | 400     | 400     | 500     | 600     | 600     | 650     |
| B(mm)  | 95   | 95   | 115     | 115     | 140     | 165     | 165     | 215     | 215     |
| C(mm)  | 220  | 220  | 1300    | 1300    | 1300    | —       | —       | —       | —       |
| E(mm)  | —    | —    | 50      | 50      | 50      | 50      | 63      | 63      | 63      |
| F(mm)  | —    | —    | 900     | 900     | 900     | 900     | 900     | 900     | 1000    |
| K(mm)  | —    | —    | 400X300 | 400X300 | 400X300 | 400X300 | 400X300 | 400X300 | 400X300 |
| M(mm)  | —    | —    | 1350    | 1350    | 1350    | 1400    | 1400    | 1400    | 1450    |
| ΦP(mm) | 565  | 565  | 690     | 760     | 830     | 980     | 1215    | 1450    | 1610    |

| Model    | Pipe Size |    | Filter Area    |                 | Design Flow       |     | Required D.E (kg) | Tank Diameter (mm) | Tank Height (mm) |
|----------|-----------|----|----------------|-----------------|-------------------|-----|-------------------|--------------------|------------------|
|          | inches    | mm | m <sup>2</sup> | Ft <sup>2</sup> | m <sup>3</sup> /h | lpm |                   |                    |                  |
| WL-DE650 | 2         | 63 | 3.64           | 39              | 18                | 300 | 2.2               | 635                | 1310             |
| WL-DE700 | 2         | 63 | 5.07           | 55              | 25                | 417 | 3.0               | 700                | 1340             |

| Model     | Flange Connections | Filter Area    |                 | Design Flow       |      | Required D.E (kg) | Tank Diameter (mm) | Tank Height (mm) |
|-----------|--------------------|----------------|-----------------|-------------------|------|-------------------|--------------------|------------------|
|           |                    | m <sup>2</sup> | Ft <sup>2</sup> | m <sup>3</sup> /h | lpm  |                   |                    |                  |
| WL-DE800  | 90                 | 9.40           | 101             | 47                | 783  | 5.0               | 800                | 2100             |
| WL-DE900  | 90                 | 11.00          | 118             | 55                | 916  | 6.0               | 900                | 2100             |
| WL-DE1000 | 110                | 15.00          | 161             | 75                | 1250 | 8.0               | 1000               | 2100             |
| WL-DE1200 | 110                | 23.40          | 252             | 117               | 1949 | 13.0              | 1200               | 2300             |
| WL-DE1400 | 160                | 32.60          | 351             | 163               | 2716 | 19.0              | 1400               | 2350             |
| WL-DE1600 | 160                | 40.60          | 437             | 203               | 3382 | 22.0              | 1600               | 2350             |
| WL-DE1800 | 200                | 53.40          | 575             | 267               | 4448 | 30.0              | 1800               | 2450             |

## HIGH PRESSURE FIBERGLASS FILTERS POOL FILTERS

- High-performance material satisfies customers' different application
- Apply to water feeding and sewage water treatment, chemical, electronic, petroleum, food etc.
- $\Phi 150\text{mm}-\Phi 900\text{mm}$  filters are made of PE blow molding inner tank with fiberglass.
- $\Phi 1000\text{mm}-\Phi 1500\text{mm}$  filters are made of PE rotational molding innertank with fiberglass.
- Above  $\Phi 700$  filters are specially equipped with destruction of negative pressure device.
- Strong ability of pressure-bearing



| Model      | Volume(L) | Top opening | Bottom opening | Diameter (mm) | Filter height (mm) | A(mm) | B(mm) | C(mm) |
|------------|-----------|-------------|----------------|---------------|--------------------|-------|-------|-------|
| WL-HA2045  | 11.5      | 2.5"-8NPSM  | /              | 200           | 450                | 200   | 430   | 450   |
| WL-HA2090  | 24.8      | 2.5"-8NPSM  | /              | 200           | 900                | 200   | 805   | 900   |
| WL-HA2011  | 35        | 2.5"-8NPSM  | /              | 200           | 1100               | 200   | 1070  | 1100  |
| WL-HA2590  | 38.4      | 2.5"-8NPSM  | /              | 250           | 900                | 250   | 855   | 900   |
| WL-HA2514  | 50        | 2.5"-8NPSM  | /              | 250           | 1400               | 250   | 1430  | 1400  |
| WL-HA3014  | 70        | 2.5"-8NPSM  | /              | 300           | 1450               | 300   | 1430  | 1450  |
| WL-HA3016  | 100       | 2.5"-8NPSM  | /              | 300           | 1650               | 300   | 1630  | 1650  |
| WL-HA3516  | 130       | 2.5"-8NPSM  | /              | 350           | 1650               | 350   | 1630  | 1650  |
| WL-HA4016  | 180       | 4"-8UN      | /              | 400           | 1650               | 400   | 1630  | 1650  |
| WL-HA4516  | 185       | 4"-8UN      | /              | 400           | 1650               | 450   | 1620  | 1650  |
| WL-HA5018  | 280       | 4"-8UN      | 4"-8UN         | 500           | 1800               | 500   | 1650  | 1800  |
| WL-HA6018  | 400       | 4"-8UN      | 4"-8UN         | 600           | 1850               | 600   | 1650  | 1850  |
| WL-HA6020  | 460       | 4"-8UN      | 4"-8UN         | 600           | 2000               | 600   | 1850  | 2000  |
| WL-HA7518  | 650       | 4"-8UN      | 4"-8UN         | 750           | 1850               | 750   | 1620  | 1850  |
| WL-HA7520  | 700       | 4"-8UN      | 4"-8UN         | 750           | 2000               | 750   | 1850  | 2000  |
| WL-HA9020  | 1040      | 4"-8UN      | 4"-8UN         | 900           | 2000               | 900   | 1950  | 2000  |
| WL-HA9024  | 1170      | 4"-8UN      | 4"-8UN         | 900           | 2400               | 900   | 2030  | 2400  |
| WL-HA10018 | 1040      | 4"-8UN      | 4"-8UN         | 1000          | 1850               | 1000  | 1650  | 1850  |
| WL-HA10024 | 1332      | 4"-8UN      | 4"-8UN         | 1000          | 2400               | 1000  | 2030  | 2400  |
| WL-HA12024 | 1909      | 6" Flange   | 6" Flange      | 1200          | 2400               | 1200  | 2000  | 2400  |
| WL-HA15024 | 2588      | 6" Flange   | 6" Flange      | 1500          | 2400               | 1500  | 2000  | 2400  |

Maximum Working Pressure: 600kpa/87psi/6.0bar    Factory Testing Pressure: 900kpa/130psi/9.0bar  
 Max Vacuum: 127mmHg    Filtration Media: silica sand, activated carbon, etc

Maximum Temperature:  $\leq 49^{\circ}\text{C}$

## WPSB SERIES PROTEIN SKIMMER LIFE SUPPORT SYSTEM

### Features:

- Environment friendly and high efficient, low energy consumption.
- High performance venturi injection system to produce sufficient air bubble.
- Remove the suspended solids while increasing oxygen in the water.
- The body is made from FRP (polyester reinforced with fiberglass), anti-corrosion and anti-UV.
- Reduce the load imposed on bio-filtration system and stabilize water's pH value.
- Trouble-free design, for easy installation and maintenance.
- With collecting tank, easy for disassembling and cleaning.



### Technical parameters

| Model       | Reaction chamber diameter (mm) | Height of water column (mm) | Flow rate (m <sup>3</sup> /h) | Water inlet (mm) | Water outlet (mm) | Foam outlet (mm) | Venturi quantity (pcs) | Pump power (kW) |
|-------------|--------------------------------|-----------------------------|-------------------------------|------------------|-------------------|------------------|------------------------|-----------------|
| WL-WPSB400  | 400                            | 2500                        | 10/7.5                        | 63               | 90                | 50               | 1X1"                   | 0.75X1          |
| WL-WPSB600  | 600                            | 2700                        | 22/16                         | 90               | 110               | 50               | 1X1.5"                 | 1.1X1           |
| WL-WPSB800  | 800                            | 3100                        | 45/34                         | 90               | 110               | 50               | 1X1.5"                 | 1.5X1           |
| WL-WPSB900  | 900                            | 3100                        | 55/42                         | 90               | 140               | 50               | 1X2"                   | 2.2X1           |
| WL-WPSB1000 | 1000                           | 3600                        | 85/65                         | 110              | 160               | 63               | 2X1.5"                 | 1.1X2           |

## LLDPE PROTEIN SKIMMER LIFE SUPPORT SYSTEM

The body of Millian LLDPE series protein skimmer is made from UV rated and corrosion-resistant linear low density polyethylene (LLDPE) material, adopts one-piece rotational molding design, which minimize potential leaks and failures at seams and weld points. Equipped with an automatic washdown system and touch screen controller(optional) for easy and convenient programming of rinse cycles for the internal and external cone. The protein skimmer is designed to carry out the protein fractionation process efficiently and help to save the operation and maintenance cost. At the same time, stocking densities and growth rates are all enhanced and animal health improved. It is applicable for use in freshwater and seawater environments.



### Features:

- High venturi air flow direct injection system.
- LLDPE main body, anti-UV and ozone rated.
- Large top cup for more contact surface for foam rise.
- Cost-saving dual rinse system, seawater for internal rinse and fresh water for top cup side rinse, with adjustable timer control.
- Retracting top cup seawater rinse spray head.
- Special tuned venturi injection pump for power efficiency and match performance with venturi injector.
- Air flow control for adjustment of air and ozone gas.
- Built in anti-backflow system for air and ozone gas piping.
- Floor mount location built-in for ease of installation.
- All clear acrylic top cup and funnel.
- Ozone vent and fresh air make up vent on top cup (optional).
- Pillow base included for injector pump.
- Sand blasted surface finish on main body for wear and cleanliness.
- 3 years warranty for main body, 1 year for other parts.

### Application



### Seawater venturi pump

|                       |                                      |
|-----------------------|--------------------------------------|
| Pump material         | PPO+PPE+30% FRP                      |
| Shaft                 | 316SS+PVC                            |
| Mechanical seal       | High density silicon carbide surface |
| O-ring                | Viton(high corrosion resistance)     |
| Water proof standard  | IP55(ODP)                            |
| Pump housing          | Aluminum alloy                       |
| Power supply          | 220V/1N/50Hz, 380V/3N/50Hz           |
| Motor                 | 2950rpm                              |
| Liquid temperature    | 5-50°C                               |
| Ambient temperature   | ≤50°C                                |
| Max. working pressure | 0.3MPa                               |

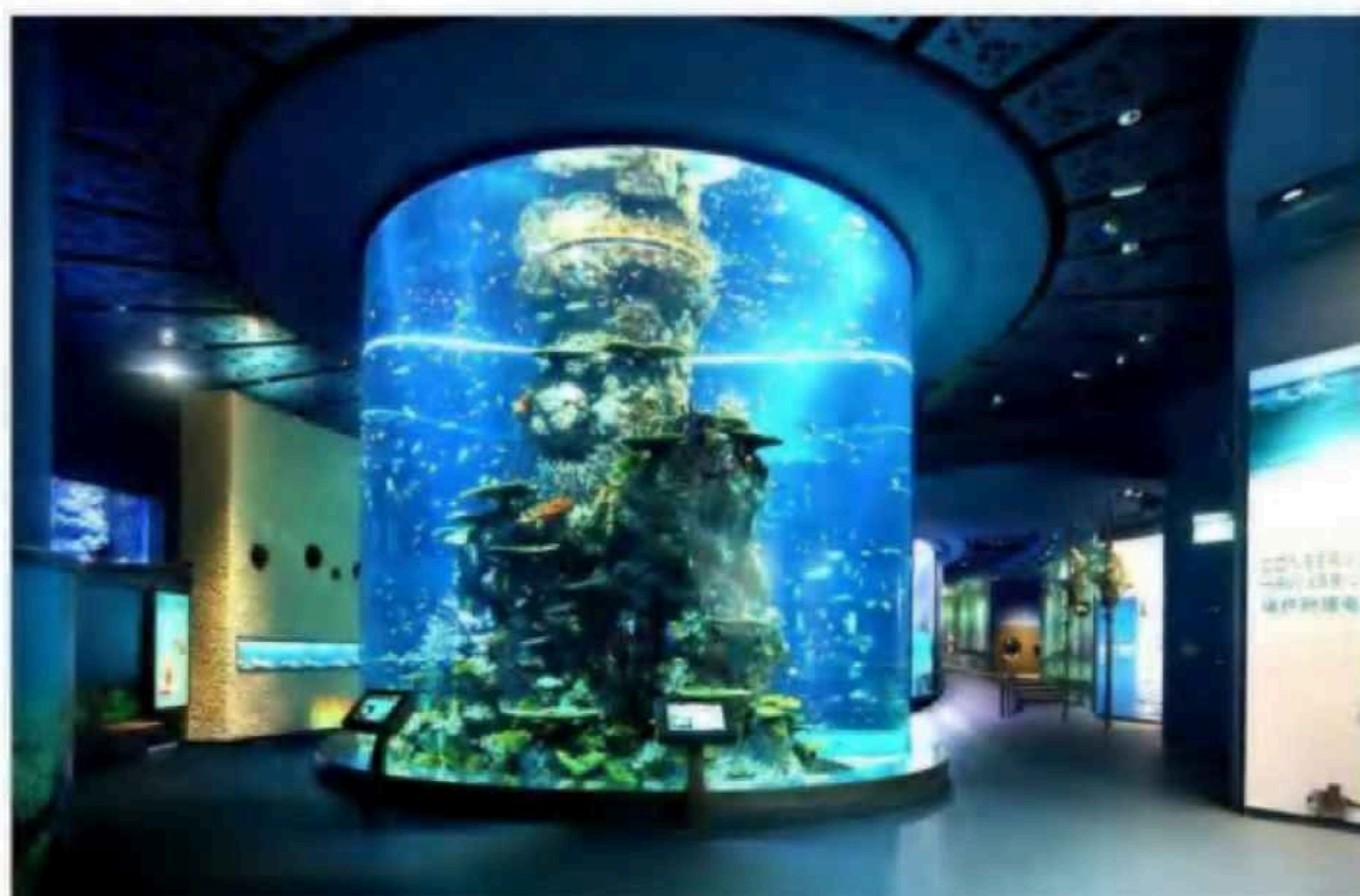


### Technical parameters

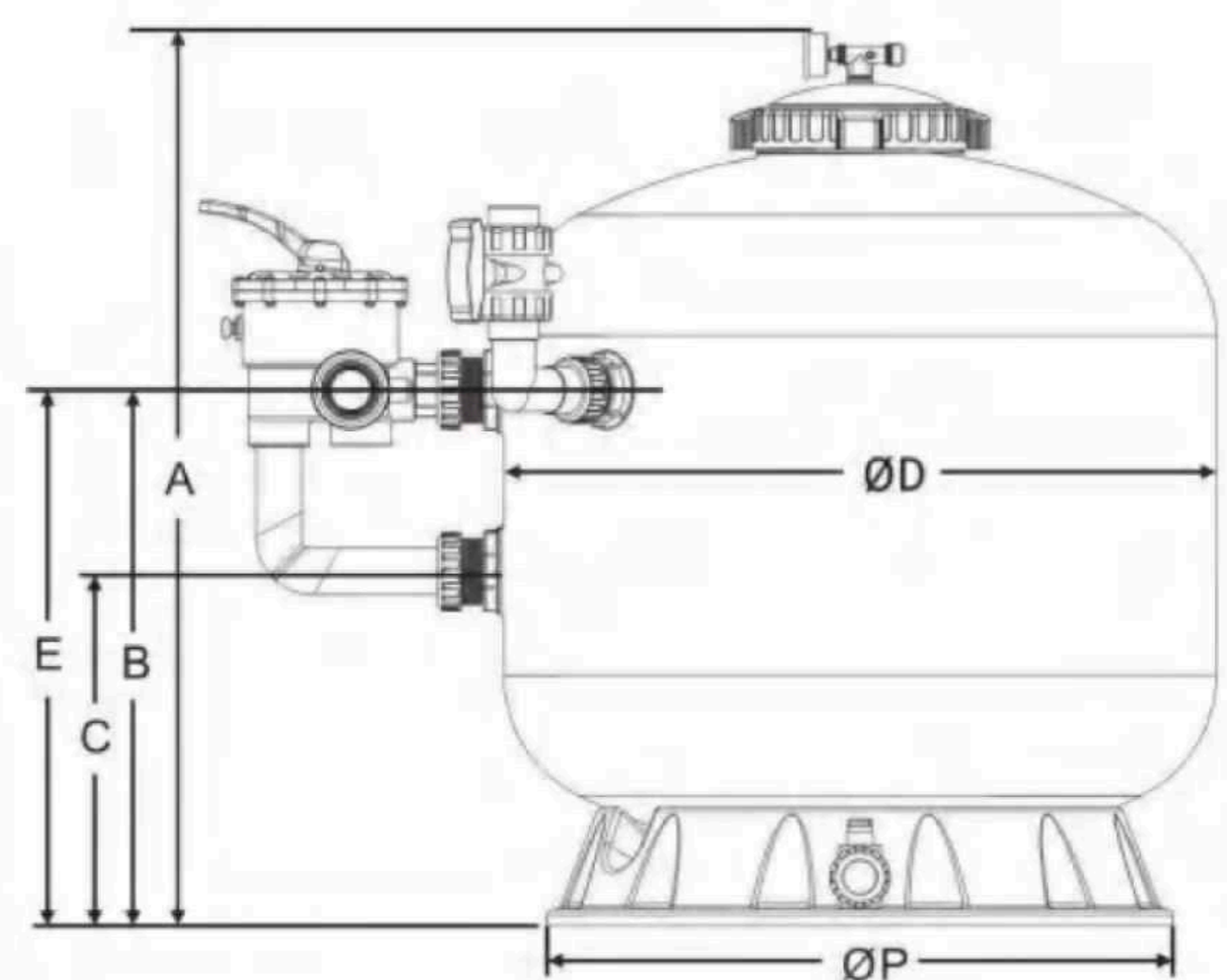
| Model        | Flow rate (@120S) m <sup>3</sup> /h | Flow rate (@90S) m <sup>3</sup> /h | Diameter of reaction chamber(mm) | Total height (mm) | Total volume (L) | Venturi quantity | Water inlet (mm) | Water outlet (mm) |
|--------------|-------------------------------------|------------------------------------|----------------------------------|-------------------|------------------|------------------|------------------|-------------------|
| WL-LLDPE25   | 7                                   | 9                                  | 420                              | 2134              | 226              | 1                | Φ50              | Φ90               |
| WL-LLDPE50   | 14                                  | 18                                 | 550                              | 2515              | 452              | 1                | Φ63              | Φ110              |
| WL-LLDPE75   | 24                                  | 32                                 | 730                              | 2591              | 797              | 1                | Φ63              | Φ110              |
| WL-LLDPE150  | 40                                  | 54                                 | 950                              | 2565              | 1350             | 1                | Φ90              | Φ140              |
| WL-LLDPE300  | 84                                  | 112                                | 1350                             | 2794              | 2800             | 1                | 2XΦ90            | Φ160              |
| WL-LLDPE600  | 166                                 | 222                                | 1650                             | 3658              | 5540             | 2                | 2XΦ110           | Φ225              |
| WL-LLDPE1000 | 282                                 | 376                                | 2134                             | 3658              | 9407             | 4                | 2XΦ160           | Φ315              |
| WL-LLDPE2000 | 344                                 | 458                                | 2134                             | 4267              | 11445            | 4                | 2XΦ225           | Φ400              |

## BIOLOGICAL FILTER LIFE SUPPORT SYSTEM

Bead filter are closed pressure filter containing food grade polyethylene granules or beads. The form and size of the beads create a large surface on which bacteria and suspended solid can attached it. It provides mechanical and biological filtration at a single unit which compete with bobbin wound filter, 6-way multiport valve, pipings, circulation pump, air blower, control box and base. It has been engineered uniquely for pond and aquarium.



| Model   | BFG 450 | BFG 500 | BFG 650 | BFG 700 | BFG 800 | BFG 900 | BFG 1200 |
|---------|---------|---------|---------|---------|---------|---------|----------|
| ΦD (mm) | 450     | 500     | 630     | 700     | 800     | 900     | 1200     |
| A (mm)  | 660     | 730     | 790     | 885     | 1020    | 1110    | 1350     |
| B (mm)  | 385     | 405     | 435     | 520     | 605     | 650     | 820      |
| C (mm)  | 260     | 280     | 310     | 300     | 385     | 430     | 600      |
| E (mm)  | 385     | 405     | 435     | 480     | 600     | 650     | 820      |
| ΦP (mm) | 390     | 390     | 565     | 565     | 790     | 790     | 1010     |



| Model      | Design Flow       |     | Pond Size (m <sup>3</sup> ) | Fish Load (kg) | Blower (watt) | Media (kg) | Filter Diameter (mm) | Filter Height (mm) |
|------------|-------------------|-----|-----------------------------|----------------|---------------|------------|----------------------|--------------------|
|            | m <sup>3</sup> /h | lpm |                             |                |               |            |                      |                    |
| WL-BFG450  | 8                 | 133 | 6                           | 20             | 700           | 18         | 450                  | 660                |
| WL-BFG500  | 11                | 183 | 10                          | 35             | 700           | 30         | 500                  | 730                |
| WL-BFG650  | 16                | 267 | 30                          | 78             | 700           | 50         | 650                  | 745                |
| WL-BFG700  | 19                | 317 | 34                          | 94             | 900           | 75         | 700                  | 830                |
| WL-BFG800  | 25                | 417 | 52                          | 124            | 900           | 100        | 800                  | 905                |
| WL-BFG900  | 30                | 500 | 73                          | 172            | 1000          | 125        | 900                  | 1005               |
| WL-BFG1200 | 42                | 700 | 148                         | 310            | 2*1000        | 325        | 1200                 | 1325               |

## MULTIPOINT VALVES

### 6-WAY MULTIPOINT VALVE

New type of multiport control valve, made of ABS and engineered for maximum flow at lower pressure drops will be the first choice in the same ones. All the valves feature an easy-to-use lever action handle that lets you "dial" up to six valve/filter functions : filter, backwash, waste, rinse, closed or recirculate. Complete with an integral sight glass that lets you see when the backwashing cycle is completed, our wide selection of valve configurations allows you to the proper application: residential and commercial.



1.5" Multiport valve for top mounted clamp lock filter



2" Multiport valve for top mounted filter



1.5" Multiport valve for side mounted filter



2" Multiport valve for side mounted filter

### 4-WAY MULTIPOINT VALVE



1.5" Multiport valve for top mount filter

### BUTTERFLY VALVE FOR COMMERCIAL FILTERS



4-Way Valve Manifold

Size: 3"- 8"



5-Way Valve Manifold

Size: 3"- 8"

## MANIFOLD

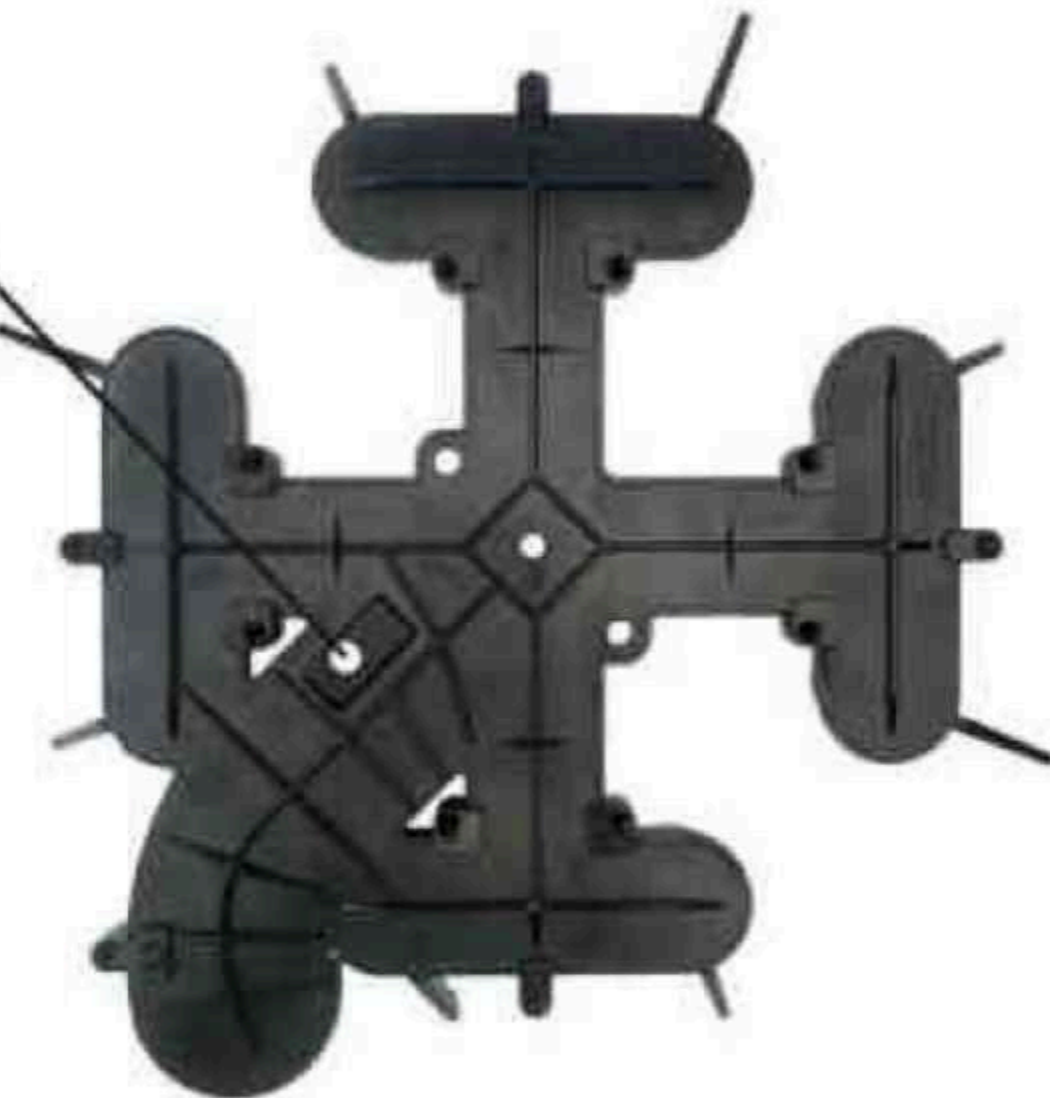
### DE FILTER TOP MANIFOLD WITH BUILT IN AIR RELIEF VENT

- Heavy-duty materials
- Top manifold with built in air relief vent
- Manufactured to the highest standards to provide you with a quality product
- Suitable to use with only one rod



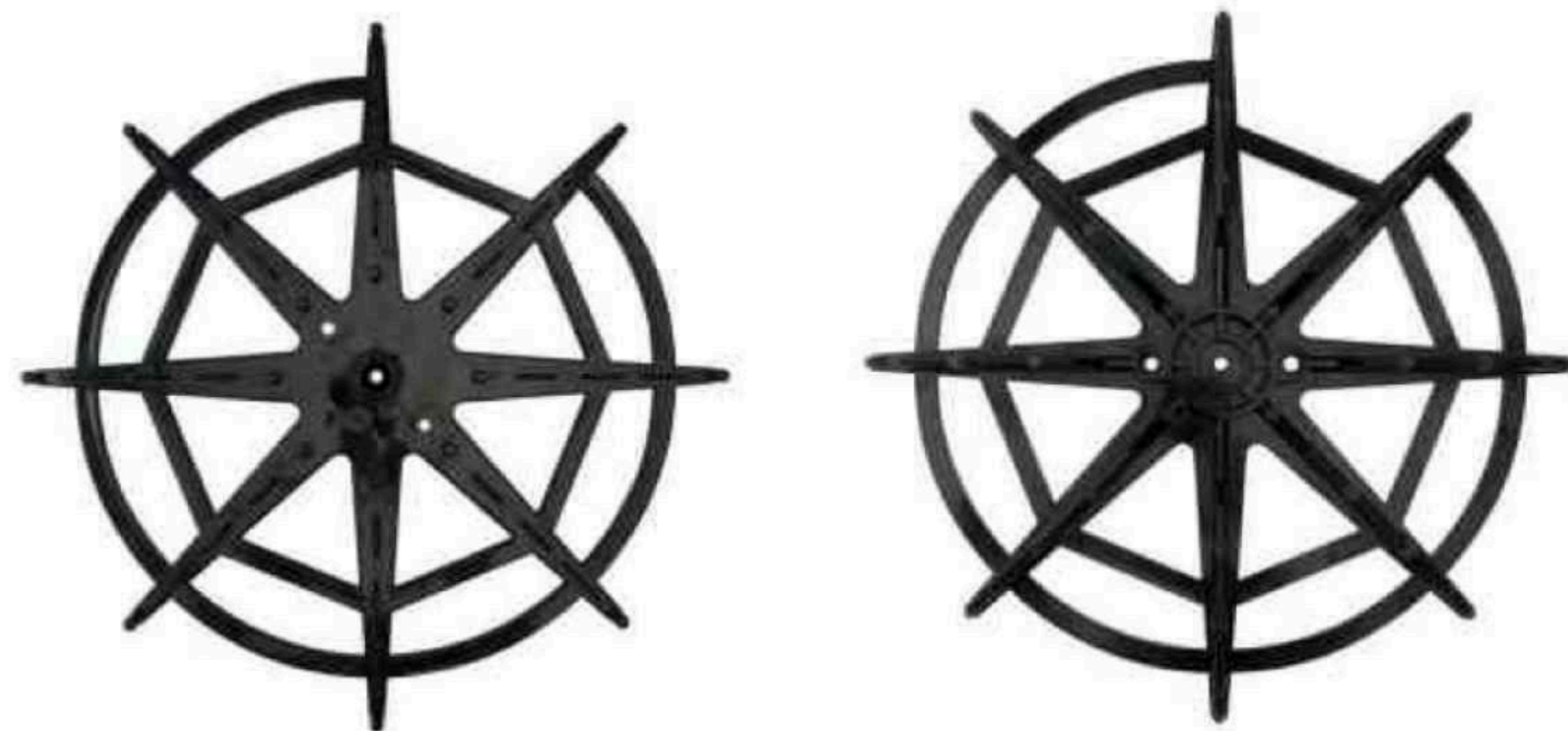
DKC2021

Built-in air relief vent



### DE FILTER SPIDER BOTTOM MANIFOLD

- Heavy-duty materials
- Manufactured to the highest standards to provide you with a quality product



DKC2021B

# Underwater Lights



UNDERWATER LIGHTS

## UNDERWATER LIGHTS

The light source is the core part of the underwater light, and its technical characteristics determine the performance and structure of the underwater light. At present, the light source of MILLIAN underwater light application has silicon filled LED panel, variable voltage LED, DIP LED, SMD LED, halogen and incandescent. In order to make it easier for you to understand our products, we will introduce you to the characteristics of the light source so that you can select underwater light products more conveniently.

### 1. RESIN FILLED LED LAMP

By full enclosing resin, the LED lamp and the interior of the lamp body are fully packaged, so as to achieve complete waterproof and moisture proof.

#### Features:

- Resin-filled LED panel allows 100% water proofing with special epoxy, even if only the led panel still keeps working.
- High efficient, supper bright, low heat LED board and control board, low power consumption.
- Color: cool white, warm white, RGB and single blue.
- RGB mode features 19 pre-programmed lighting patterns.

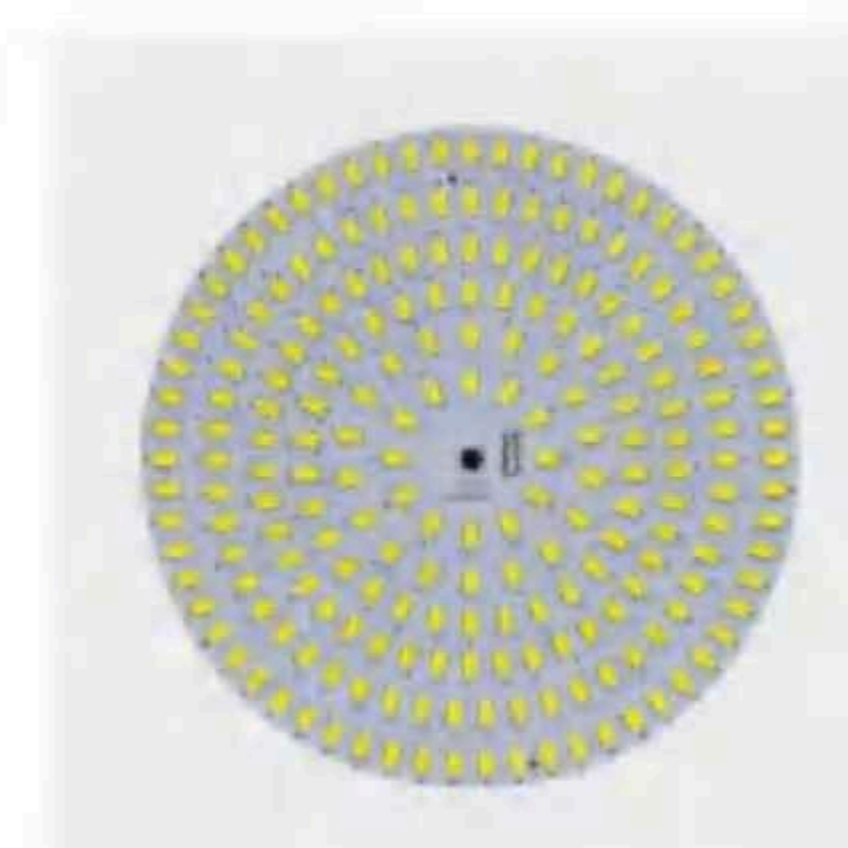


### 2. Variable voltage LED light:

Variable voltage AC12V-20V led light would be provided you much better and reliable quality even though your pool power supply with voltage fluctuation. Your pool lights would be ensured their working performance and prolonged their lifespan.

#### Features:

- Safe low voltage: AC12V-20V.
- Can be applied to the voltage fluctuation range of occasion.
- No flicker, high purity, soft light, no glare.
- High brightness (high lumen), strong light transmission.
- Low power consumption, low heat while working.



### 3. DIP LED light

DIP LED using potting form for packaging. Potting process is injected liquid epoxy resin in LED the molding cavity at first, and then insert the pressure LED bracket welding good put them into the oven for epoxy resin after curing in order to make the LED molded from the mold cavity. Due to the simple fabrication process, low cost, it have a higher market share. In large volume, can be used to artificial insert or AI machine operation, because of the DIP LED high brightness, easy to waterproof processing, so this kind light source widely using in general pool lights, and high power available as well.

#### Features:

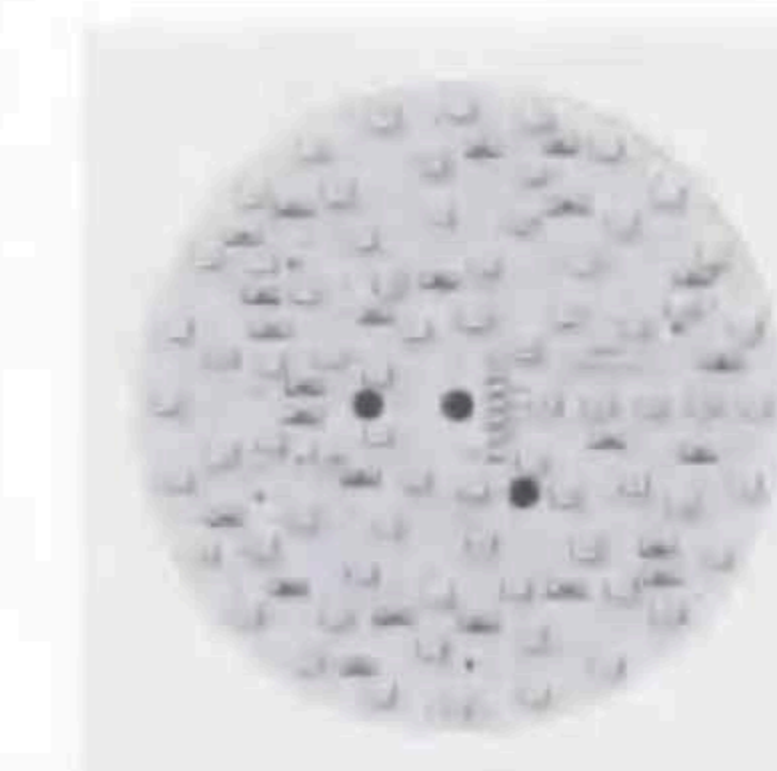
- High brightness, high efficient, low power consumption.
- Safety voltage: AC 12V.
- RGB mode features 19 pre-programmed lighting patterns.



## UNDERWATER LIGHTS

### 4. SMD LED light

SMD LED is attached on the surface of PCB, suitable for SMT processing, can be reflow, solves the brightness, angle of view, flatness, consistency, reliability and other issues, the lighter PCB plate and a reflecting layer material, improvement of removing heavier carbon steel pin of DIP LED, the display epoxy resin less reflective layer to fill, to reduce the size, reduce weight. Thus, surface mount LED can easily integrate product weight by half; eventually make the application more perfect.



#### Features:

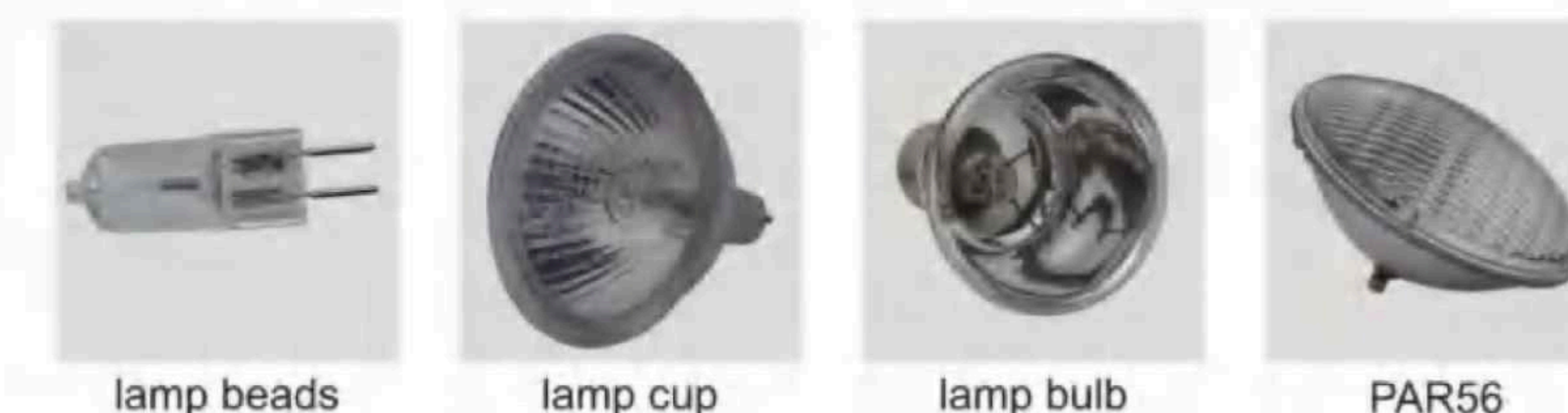
- High efficient SMD LED, power saving up to 80% consumption than halogen lamp and incandescent lamp.
- Beam angle: 120°.
- Safety low voltage: AC 12V.

### 5. Halogen / Incandescent bead/Lamp cup:

The halogen light bulb or lamp is a type of incandescent lamp which uses a halogen gas in order to increase both light output and rated life. They are known for moderately high efficiency, quality of light, and high rated life compared to regular incandescent lamps.

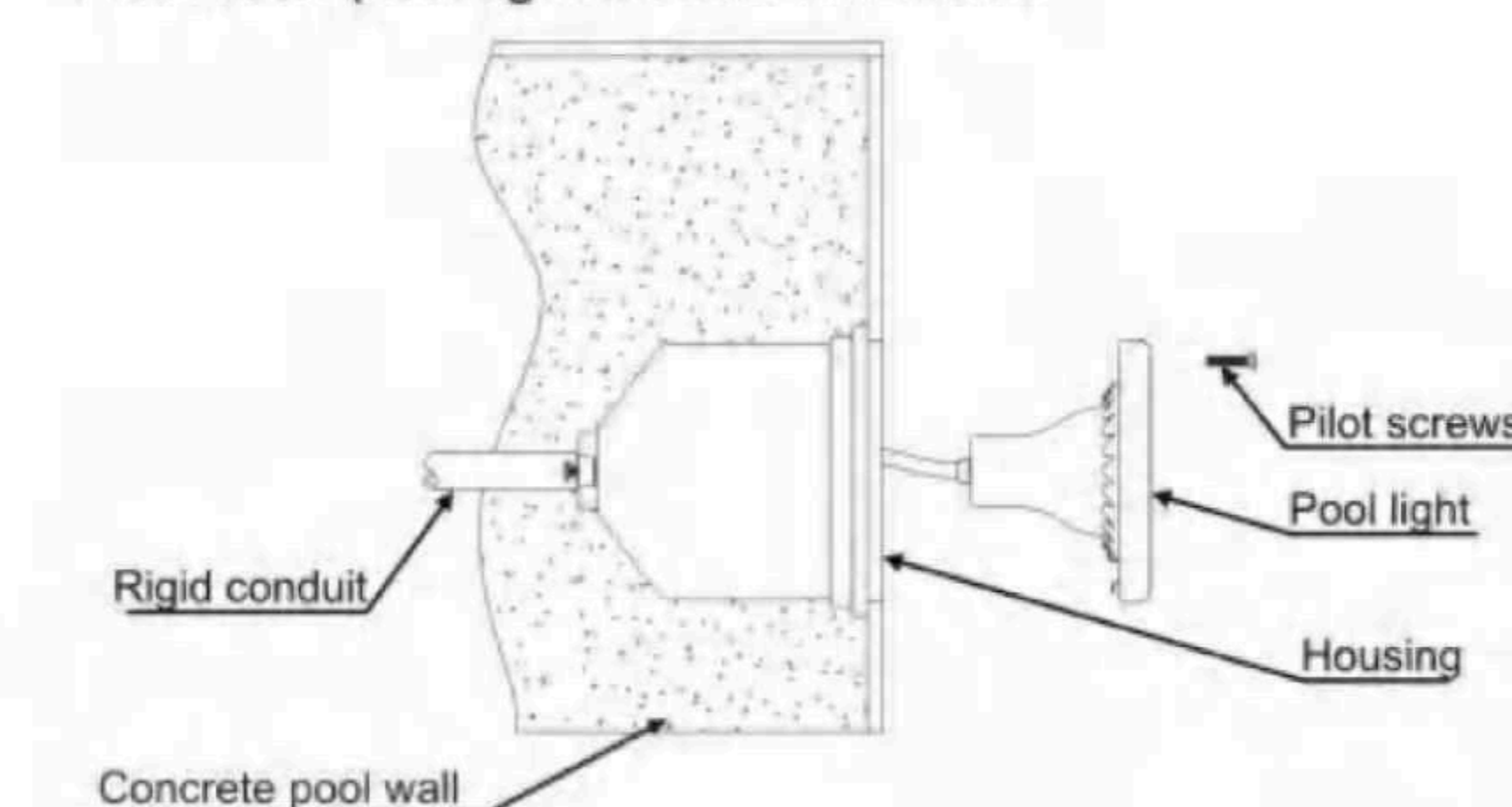
#### Features:

- Super brightness, high efficient.
- Safe low voltage: AC12V.
- Competitive cost.

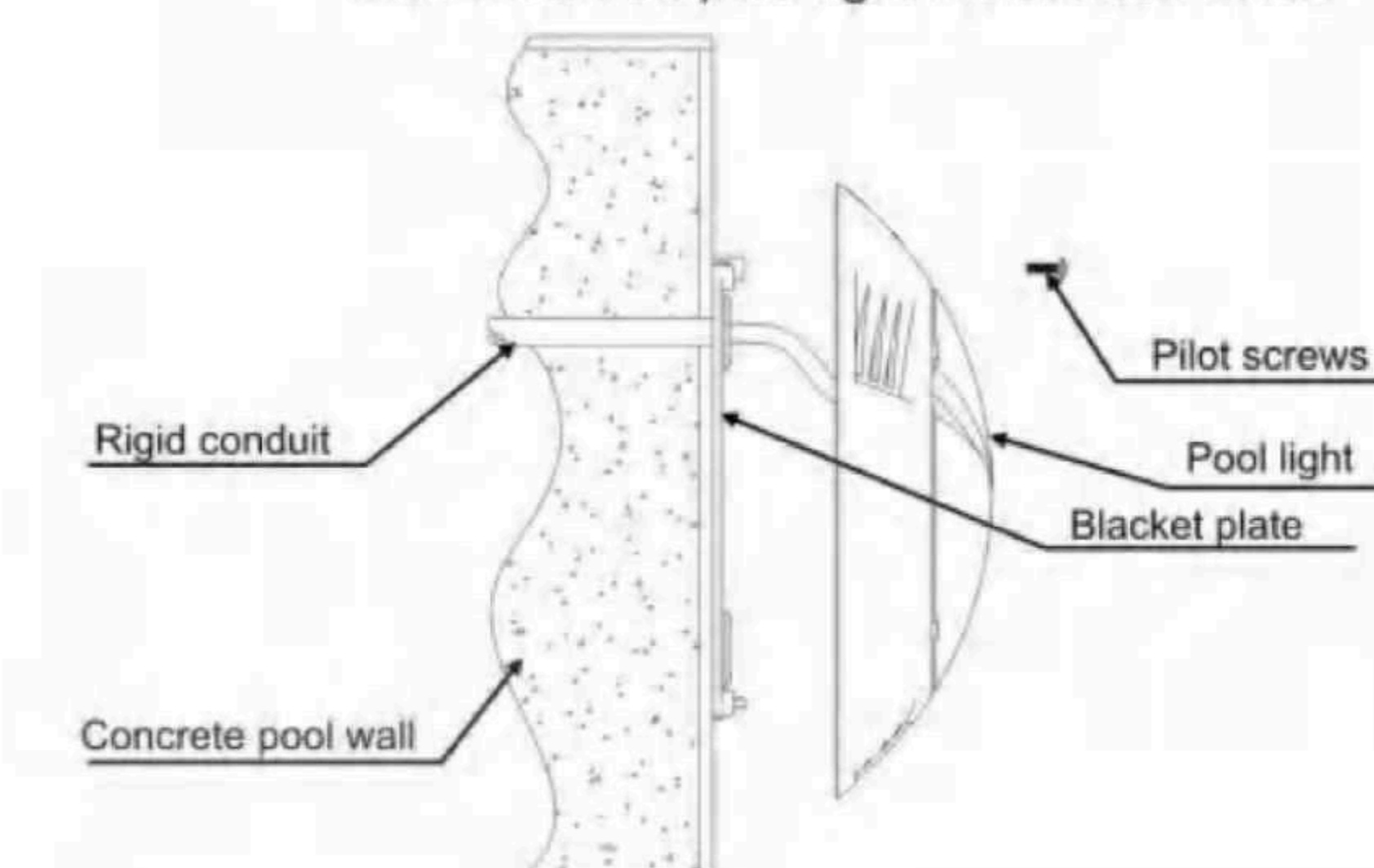


### LASWIM lights installation modes:

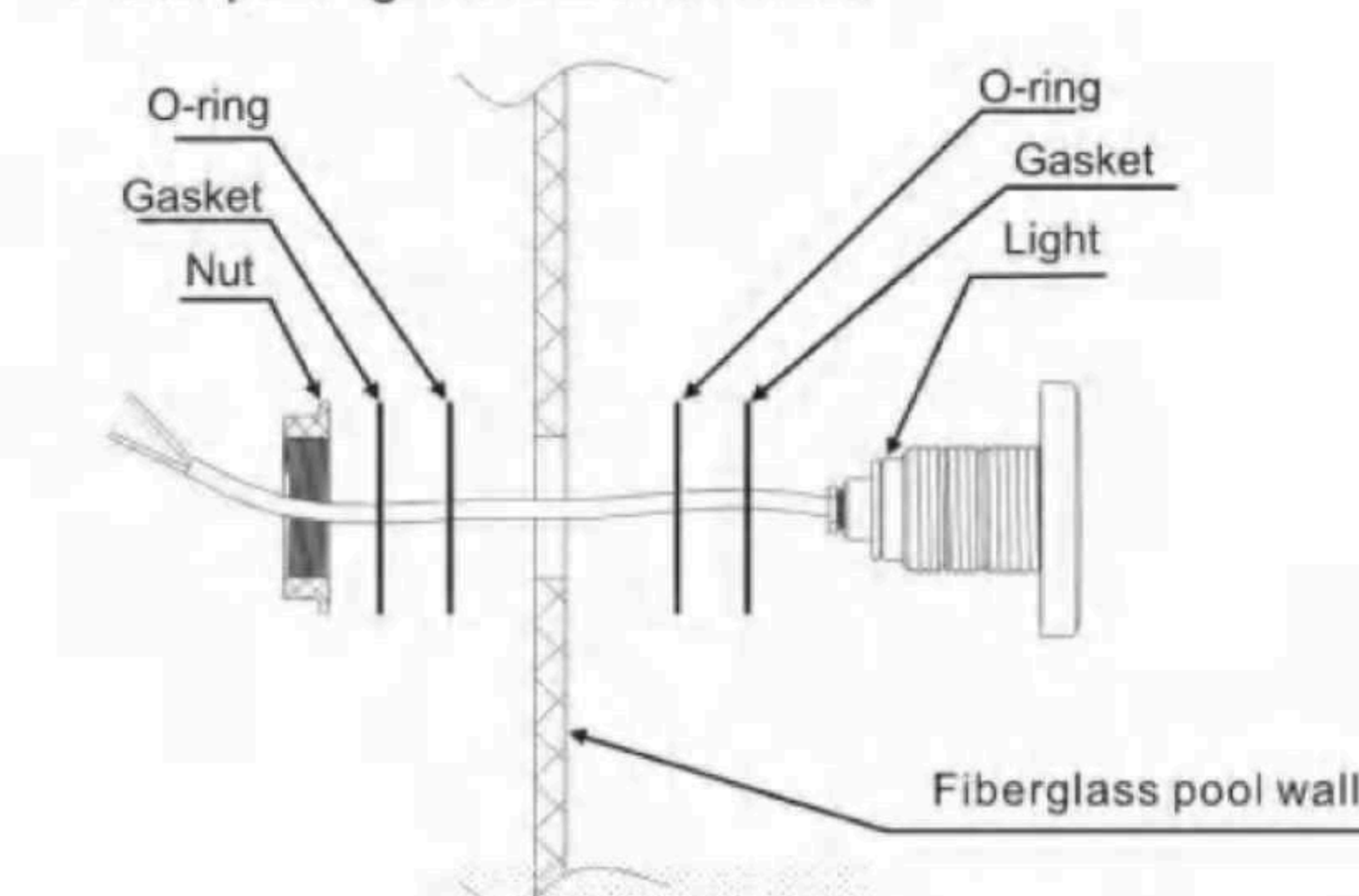
#### Recessed pool light installation mode



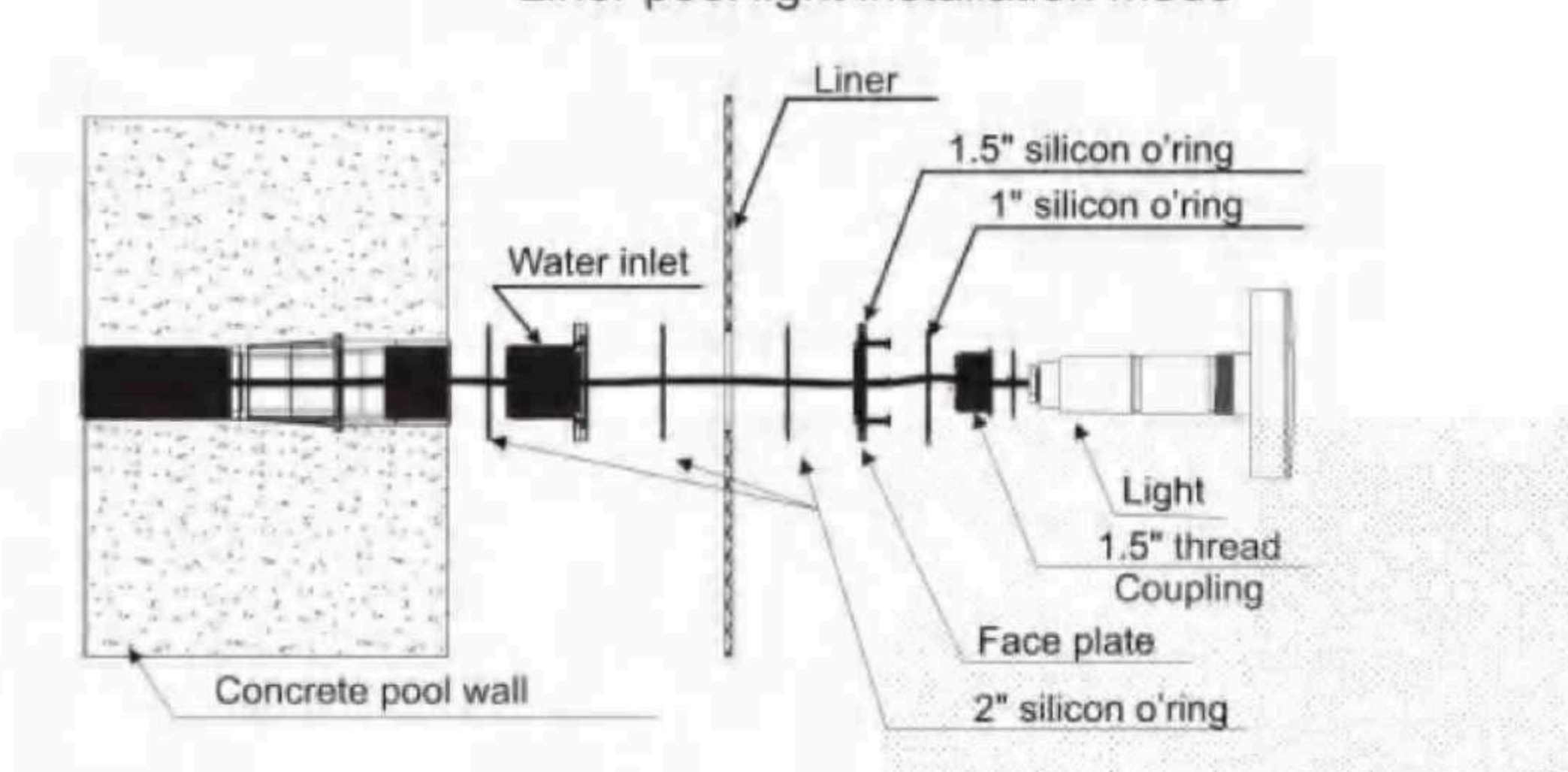
#### Wall-mounted pool light installation mode



#### Panel pool light installation mode



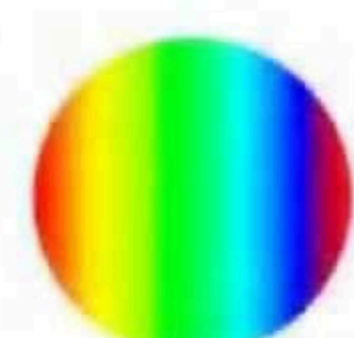
#### Liner pool light installation mode



## WL-MAG/WL-MBG/WL-MCG



WL-MAG



Colour Change



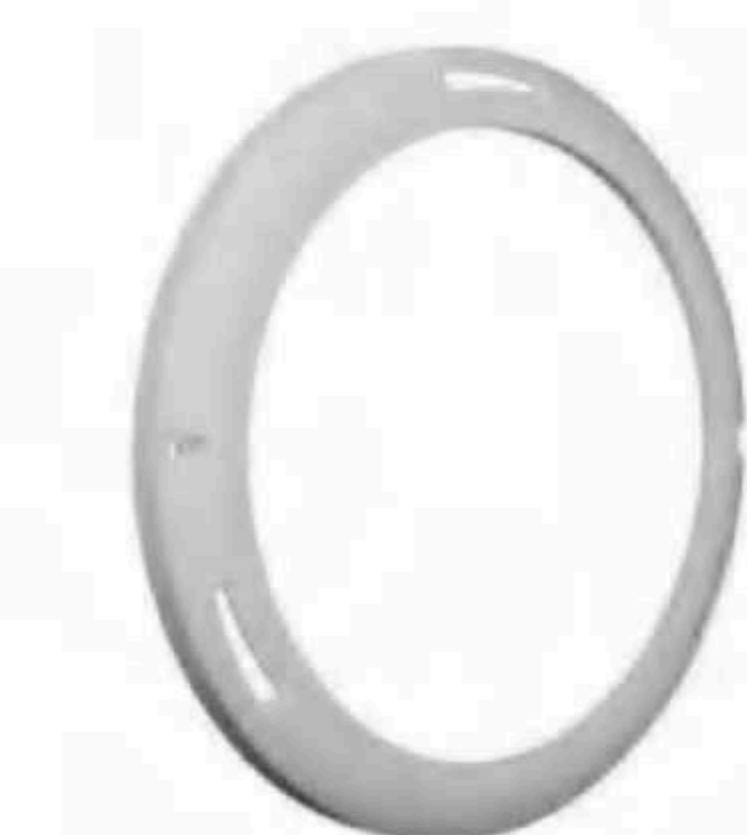
PC board with resin to protect from water penetration, convenient wiring

Compatible to be with niche and bracket plate, you're able to choose recessed or wall mount installation mode much more flexible. MAG/MBG/MCG lights full filled resin allows 100% water proofing with special epoxy, even if only the led panel still keeps working.

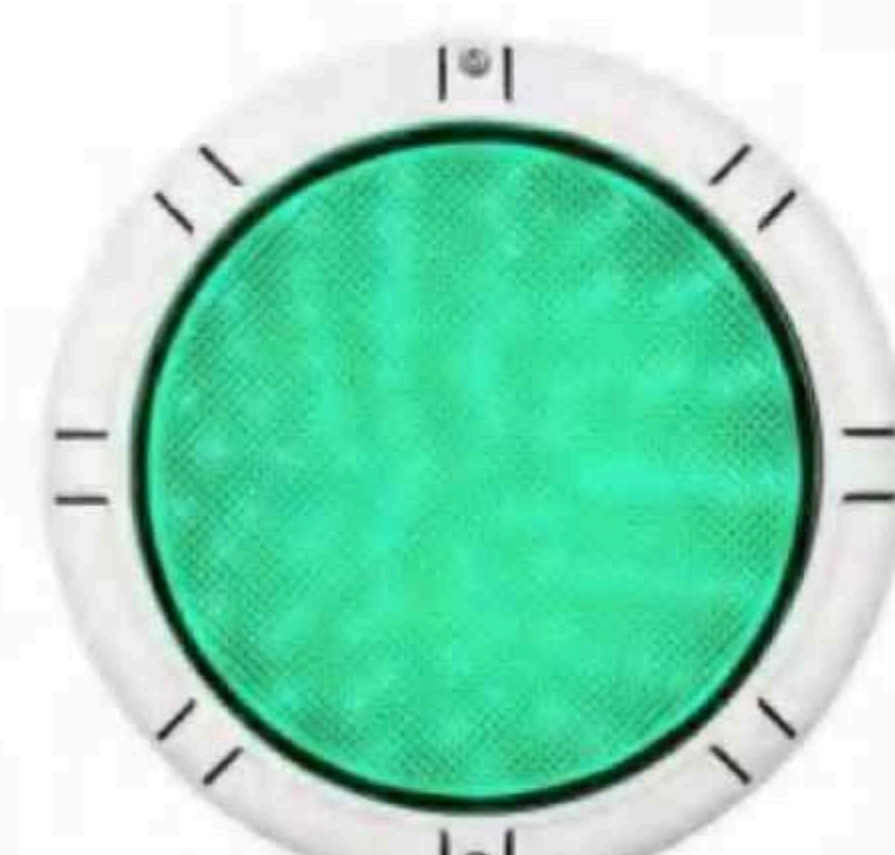
With the best technology, the heat radiation is wasted fast when producing brightness, preventing from reducing in attenuation of and extend lamp life.

### Main features:

- Fully resin enclosing the light cable connection, to achieve complete waterproof and moisture proof.
- High efficient, supper bright, big lumen.
- Waterproof standard: IP68.
- Color: cool white, warm white, RGB and single color.
- RGB mode features 19 pre-programmed patterns.
- Installation mode: compatible to housing type with niche and wall-mounted with bracket plate.
- Color temperature: cool white 6000K, warm white: 3000K.



MAG led light



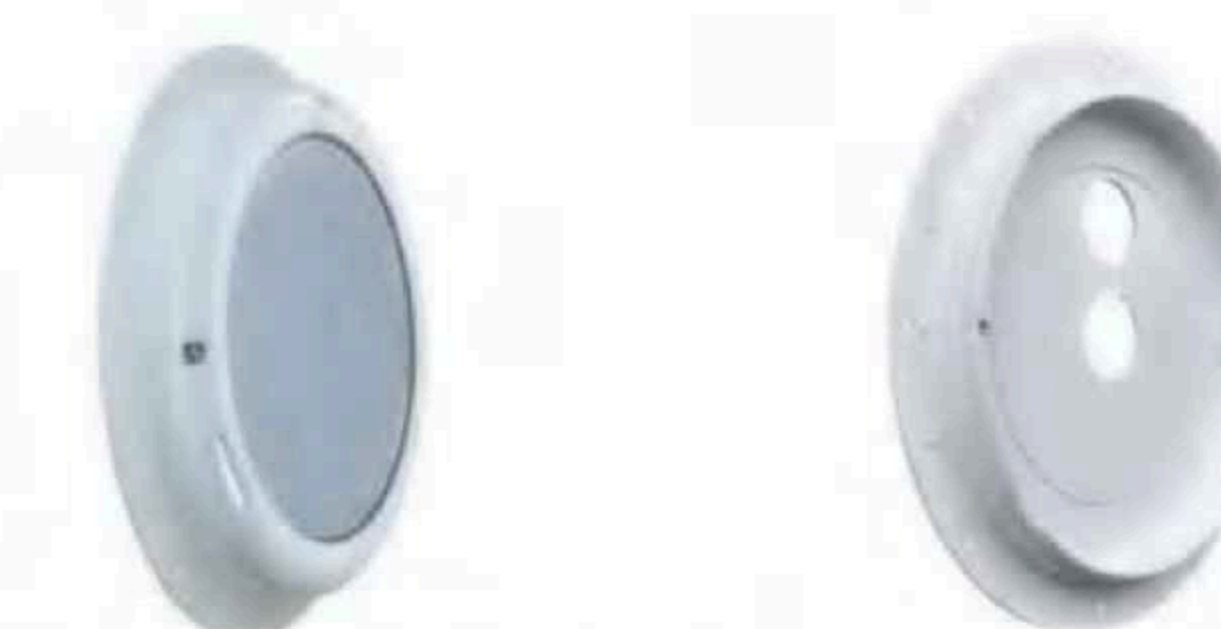
MBG led light



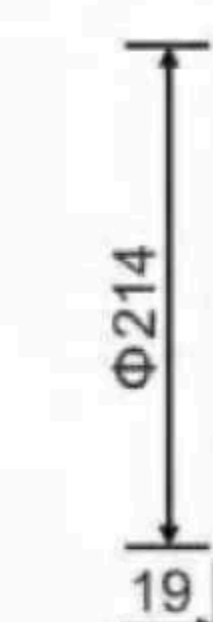
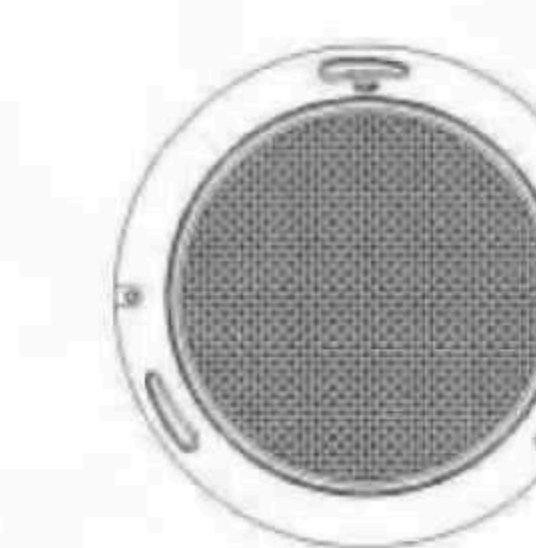
MCG led light

This series lights are available to choose different face ring

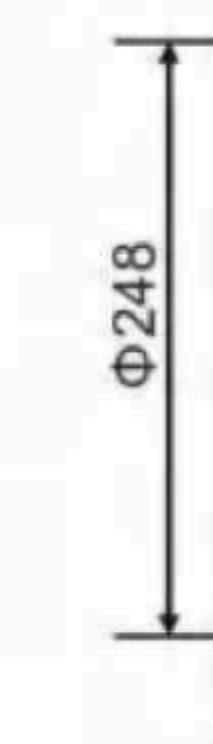
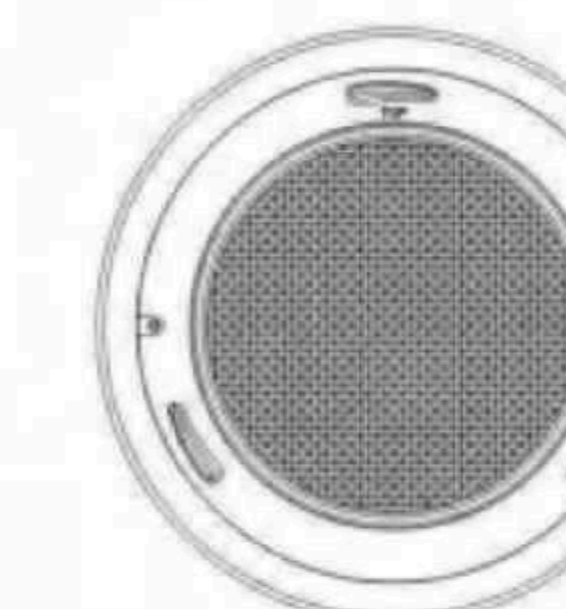
## WL-MAG/WL-MBG/WL-MCG



Recessed light with niche



Wall mounted light with bracket plate



### WL-MAG.1

| Model            | Power (W) | Voltage (V) | LED QTY | Light source | Color       | Lumination (lux) | Installation type                |
|------------------|-----------|-------------|---------|--------------|-------------|------------------|----------------------------------|
| WL-MAG-LED072TB  | 6W        | 12V         | 72      | Resin filled | White color | 255              | Housing type & wall-mounted type |
| WL-MAG-LED072TC  | 6W        | 12V         | 72      | Resin filled | RGB         | 90               | Housing type & wall-mounted type |
| WL-MAG-LED144TB  | 12W       | 12V         | 144     | Resin filled | White color | 455              | Housing type & wall-mounted type |
| WL-MAG-LED144TC  | 12W       | 12V         | 144     | Resin filled | RGB         | 110              | Housing type & wall-mounted type |
| WL-MAG-LED252TB  | 18W       | 12V         | 252     | Resin filled | White color | 731              | Housing type & wall-mounted type |
| WL-MAG-LED252TC  | 18W       | 12V         | 252     | Resin filled | RGB         | 255              | Housing type & wall-mounted type |
| WL-MAG-LED324TB  | 24W       | 12V         | 324     | Resin filled | White color | 1075             | Housing type & wall-mounted type |
| WL-MAG-LED324TC  | 24W       | 12V         | 324     | Resin filled | RGB         | 355              | Housing type & wall-mounted type |
| WL-MAG-LED126JTB | 18W       | 12-20V      | 126     | Resin filled | White color | 1250             | Housing type & wall-mounted type |
| WL-MAG-LED126JTC | 18W       | 12-20V      | 126     | Resin filled | RGB         | 780              | Housing type & wall-mounted type |
| WL-MAG-LED162JTB | 18W       | 12-20V      | 162     | Resin filled | White color | 1370             | Housing type & wall-mounted type |
| WL-MAG-LED162JTC | 18W       | 12-20V      | 162     | Resin filled | RGB         | 880              | Housing type & wall-mounted type |
| WL-MAG-LED216JTB | 24W       | 12-20V      | 216     | Resin filled | White color | 1950             | Housing type & wall-mounted type |
| WL-MAG-LED216JTC | 24W       | 12-20V      | 216     | Resin filled | RGB         | 1300             | Housing type & wall-mounted type |

### WL-MAG.2 Non-resin filled LED

| Model              | Power (W) | Voltage (V) | LED QTY | Light source    | Color       | Lumination (lux) | Installation type                |
|--------------------|-----------|-------------|---------|-----------------|-------------|------------------|----------------------------------|
| WL-MAG.2-LED162JTB | 18W       | 12-20V      | 162     | High brightness | White color | 1500             | Housing type & wall-mounted type |
| WL-MAG.2-LED162JTC | 18W       | 12-20V      | 162     | High brightness | RGB         | 970              | Housing type & wall-mounted type |
| WL-MAG.2-LED216JTB | 24W       | 12-20V      | 216     | High brightness | White color | 2150             | Housing type & wall-mounted type |
| WL-MAG.2-LED216JTC | 24W       | 12-20V      | 216     | High brightness | RGB         | 1500             | Housing type & wall-mounted type |

# WL-MD

# WL-MD



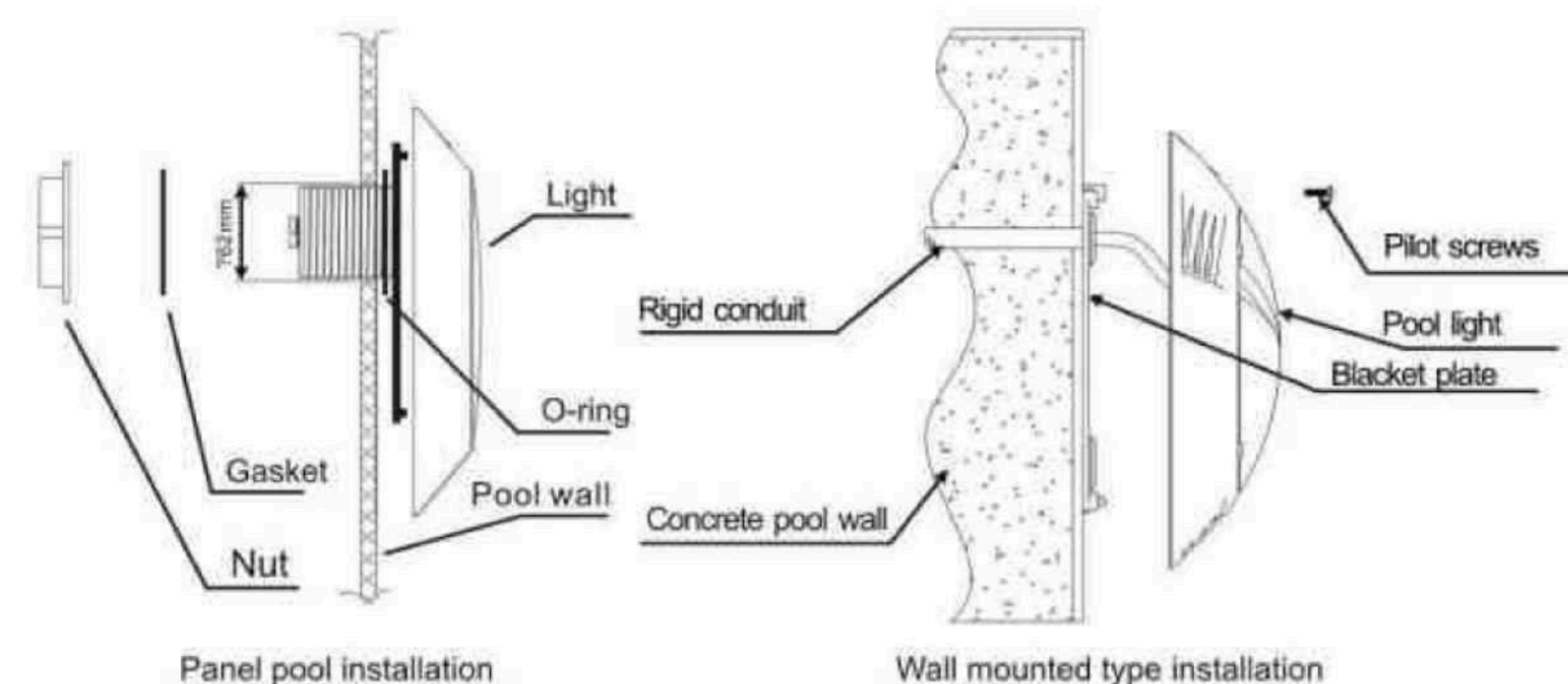
**MILLIAN** series flat light is elegant in design, ultra-thin lamp againsts to the pool wall much more closely. It not only provides super brightness and high efficiency, but also very convenient installation to mount to the pool with bracket plate directly.



- Code 3040930059 bracket for concrete pool (non-niche).
- Code 3040930061 Mounting set for panel pool.
- Code 1219800009 retrofit plate for light with European or American Niche.

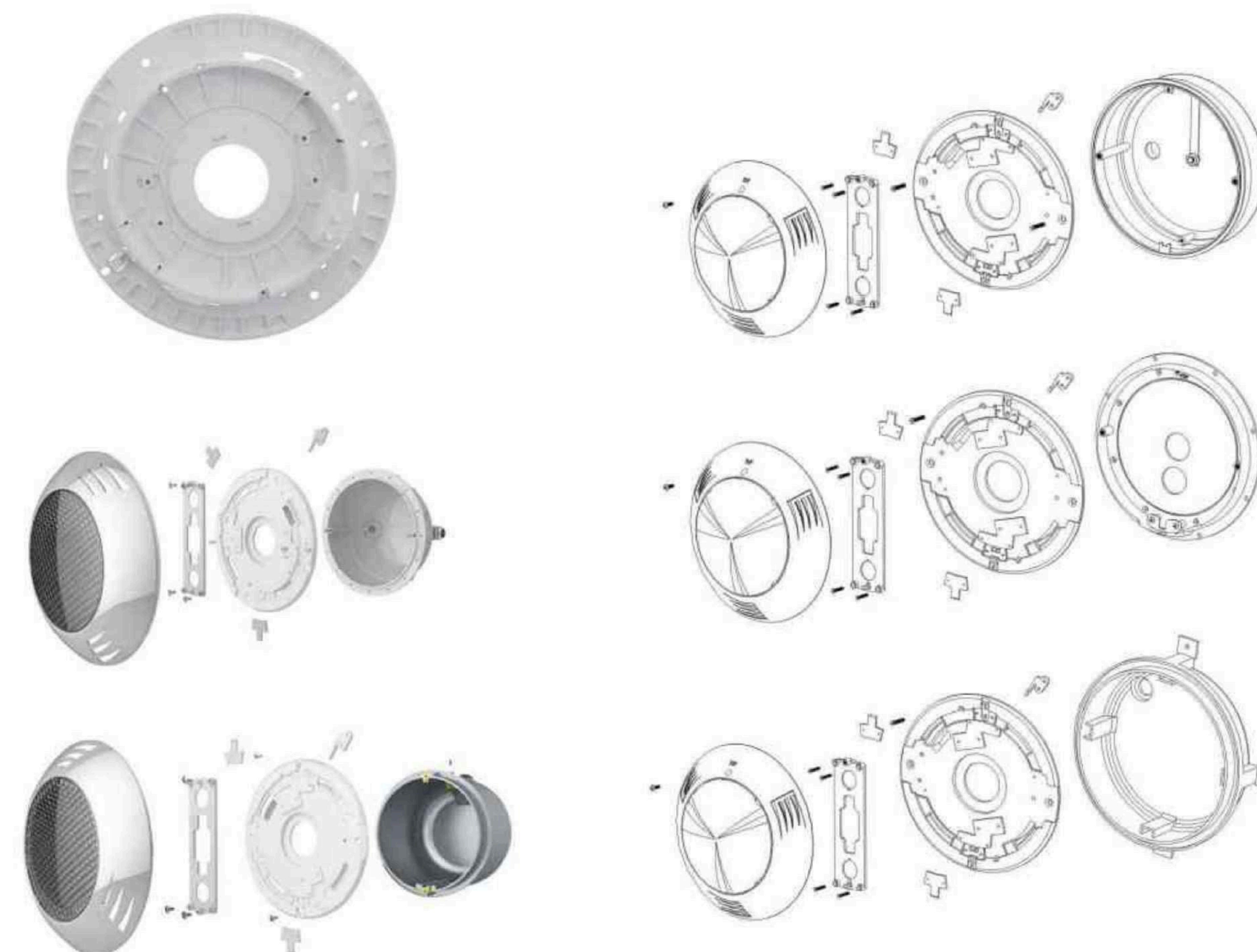


## INSTALLATION DRAWING



## RETROFIT PLATE

Universal Retrofit Bracker for Niche Lights, fit for most type of niches all over the world.



## TECHNICAL DATA

| Model           | Power (W) | Voltage (V) | LED QTY | Light source | Color                     | Lumination (lux) | Installation type |
|-----------------|-----------|-------------|---------|--------------|---------------------------|------------------|-------------------|
| WL-MD-LED162JTB | 18W       | AC 12-20V   | 162     | Wide voltage | White color               | 1500             | Wall mounted type |
| WL-MD-LED162JTC | 18W       | AC 12-20V   | 162     | Wide voltage | RGB                       | 970              | Wall mounted type |
| WL-MD-LED216JTB | 24W       | AC 12-20V   | 216     | Wide voltage | White color               | 2150             | Wall mounted type |
| WL-MD-LED216JTC | 24W       | AC 12-20V   | 216     | Wide voltage | RGB                       | 1500             | Wall mounted type |
| WL-MD-LED018JTB | 18W       | AC 12V      | 54      | SMD LED      | White color               | 1185             | Wall mounted type |
| WL-MD-LED018JTC | 18W       | AC 12V      | 54      | SMD LED      | RGB                       | 245              | Wall mounted type |
| WL-MD-LED16PC   | 18W       | DC12V       | 16      | SMD LED      | RGB+cool white+warm white | 1380             | Wall mounted type |
| WL-MD-LED24PC   | 24W       | DC12V       | 16      | SMD LED      | RGB+cool white+warm white | 1650             | Wall mounted type |
| WL-MD-LED024JTB | 24W       | AC12V       | 72      | SMD LED      | White color               | ---              | Wall mounted type |
| WL-MD-LED024JTC | 24W       | AC12V       | 72      | SMD LED      | RGB                       | ---              | Wall mounted type |

WL-ME

WL-MF

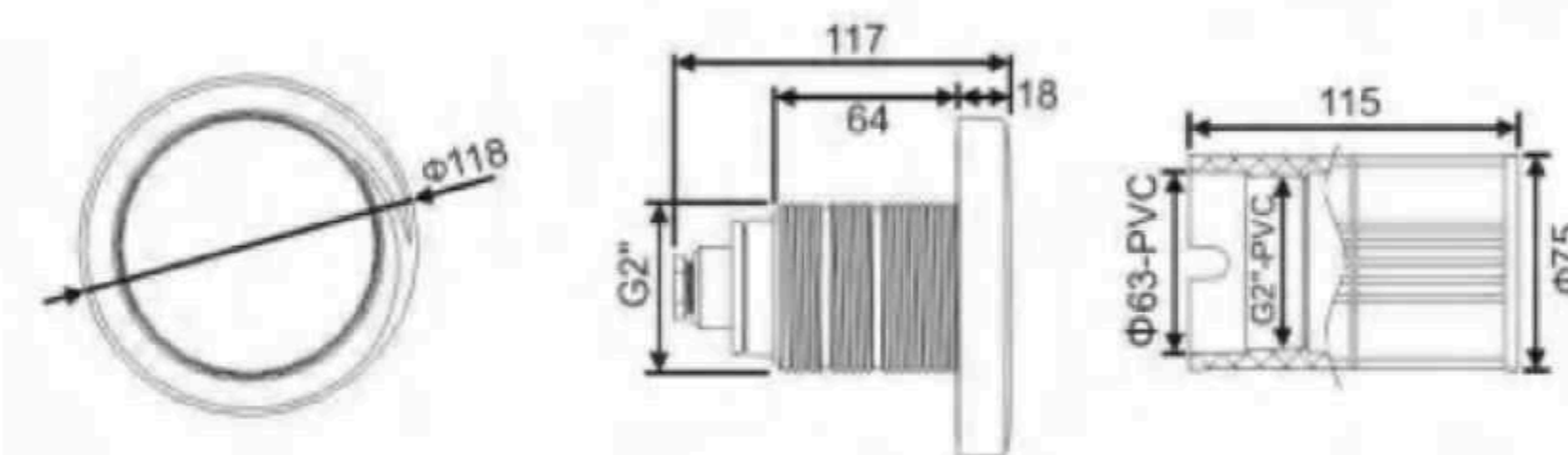
UNDERWATER LIGHTS

UNDERWATER LIGHTS

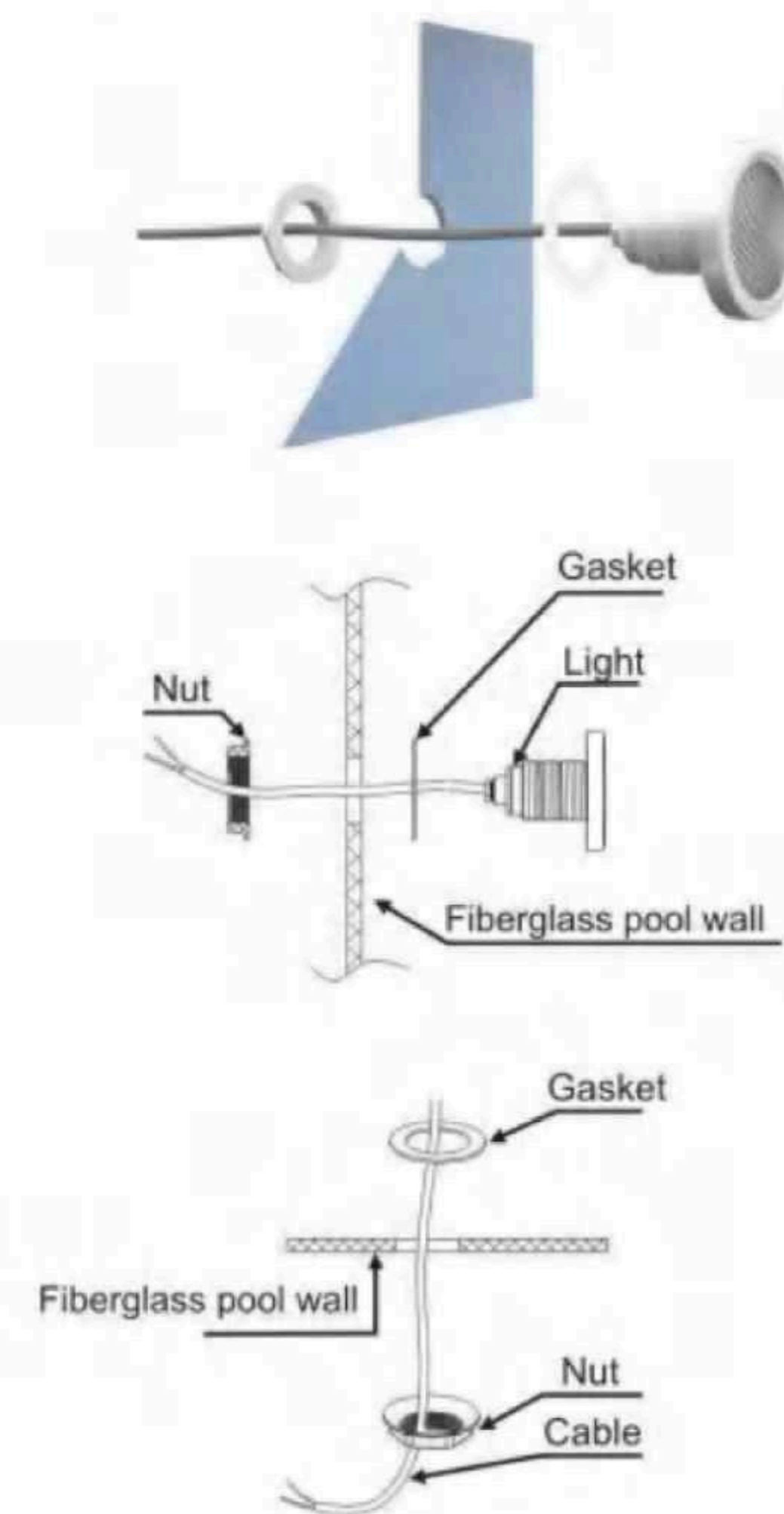


MILLIAN light with 2" thread coupling is compatible to 2" int.thread wall conduit and pvc pipe. This series light is widely used in different kind pool, spa and water features. Its crystal PC lens improves its corrosion resistance and transparency to a new level.

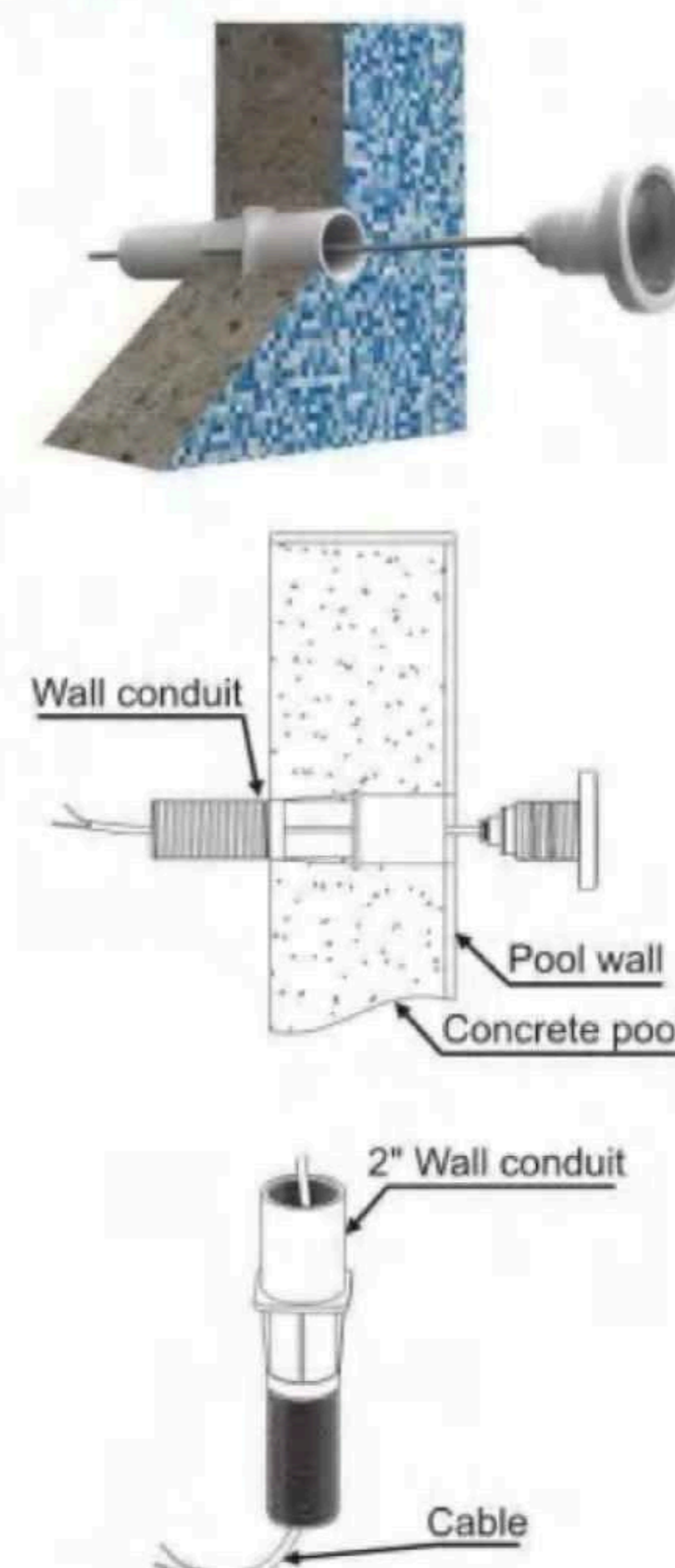
- Code 3040930063 kits for panel pool installation.
- ME light is able to connect to 2" wall conduit directly.
- Code 3040930062 kits for concrete pool with 2" or 63mm pvc pipe.



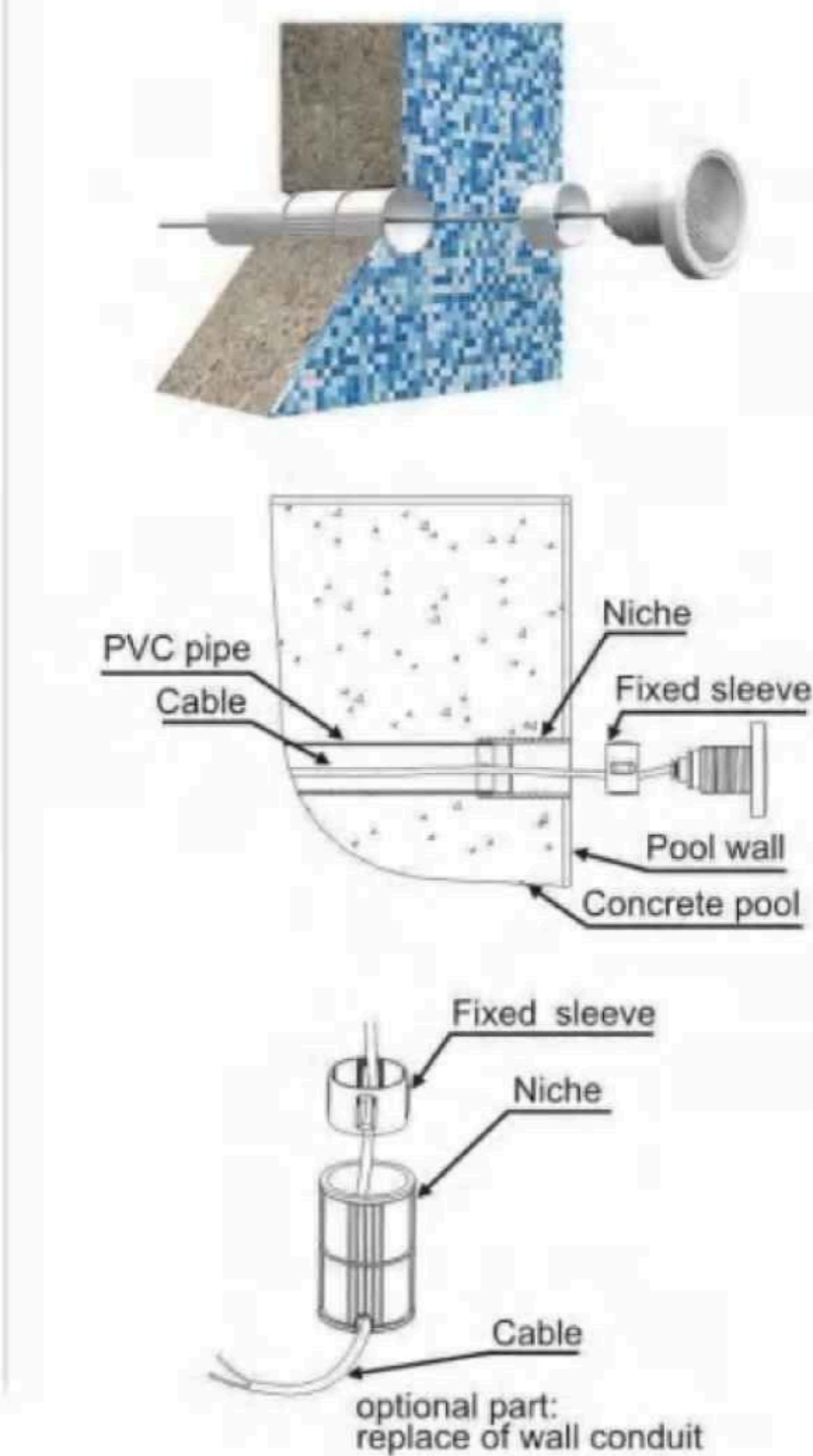
Panel pool installation



Concrete pool installation with wall conduit:



Concrete pool installation to 2"/63mm pipe



TECHNICAL DATA

| Model           | Power(W) | Voltage(V) | LED QTY | Light source | Color       | Lumination (lux) | Installation type   |
|-----------------|----------|------------|---------|--------------|-------------|------------------|---|
| WL-ME-LED054JTB | 6W       | 12-20V     | 54      | Wide voltage | White color | 485              | <input type="checkbox"/> for fiberglass pool<br><input type="checkbox"/> for panel pool<br><input type="checkbox"/> for concrete pool |
| WL-ME-LED054JTC | 6W       | 12-20V     | 54      | Wide voltage | RGB         | 120              |   |
| WL-ME-LED081JTB | 9W       | 12-20V     | 81      | Wide voltage | White color | 760              |   |
| WL-ME-LED081JTC | 9W       | 12-20V     | 81      | Wide voltage | RGB         | 200              |   |
| WL-ME-LED108JTB | 12W      | 12-20V     | 108     | Wide voltage | White color | 1000             |   |
| WL-ME-LED108JTC | 12W      | 12-20V     | 108     | Wide voltage | RGB         | 300              |   |

MILLIAN TORCH LED LIGHT

MF series torch led light is with an unique designed and new technology, featuring an innovation, energy efficient and fast cooling. Just need to slip into a standard 1.5" pvc pipe or return fitting, easy and simple operation.

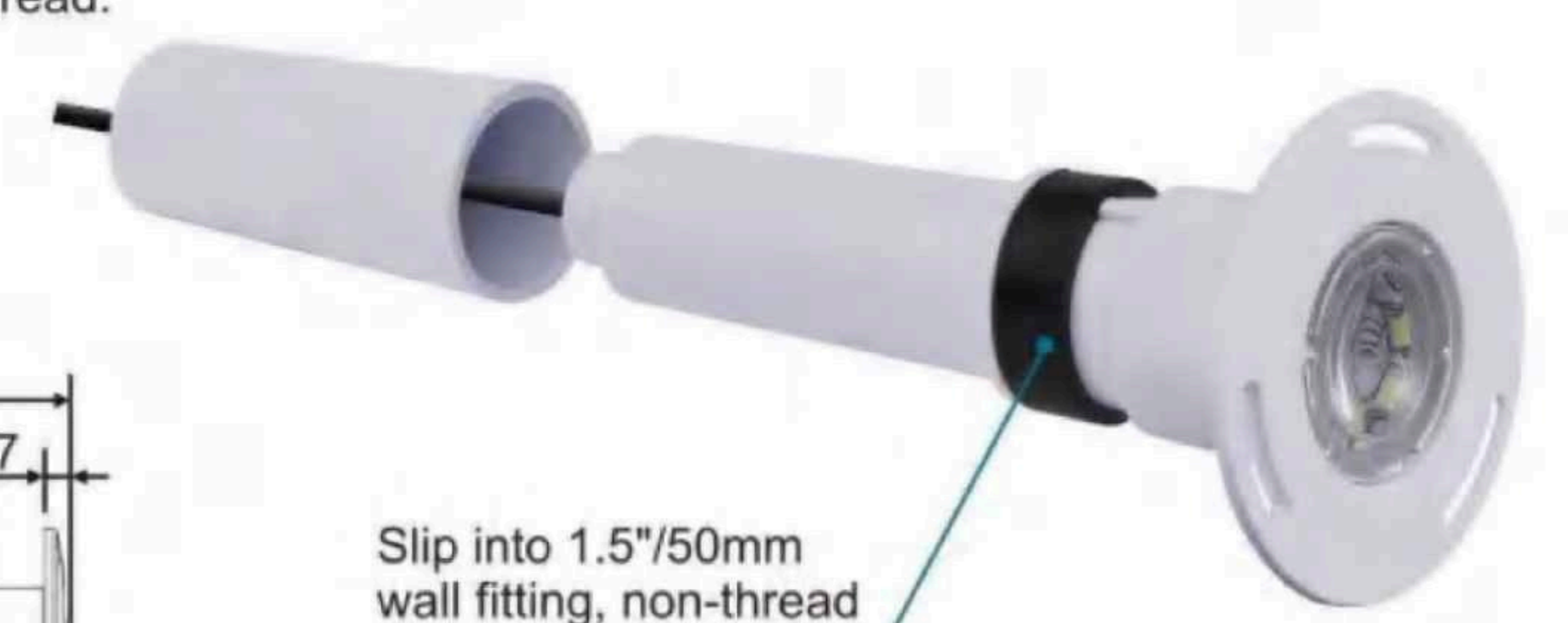
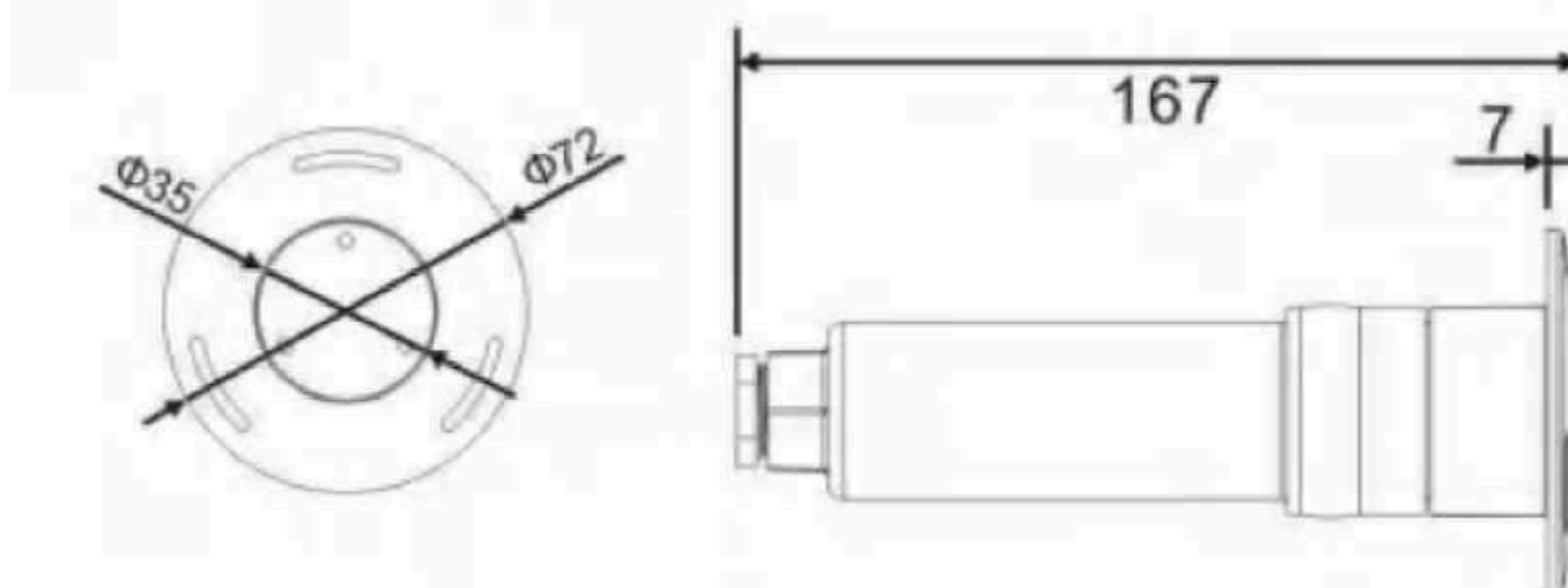
Main features:

- Low wattages but brilliant illumination.
- Low energy consumption.
- Variable voltage range AC12-20V.
- No flicker, high purity, soft light, no glare.
- Multi-color and white color available.
- High brightness (high lumen), strong light transmission.
- IP68 waterproof standard.
- Suitable to small space installation, such as pool step, spa, etc.
- Installation mode: Housing type, slip into 1.5"/50mm wall fitting or pvc pipe.
- Color: cool white, warm white, RGB and single color.



INSTALLATION GUIDANCE

- Slip into 1.5"/50mm pvc rigid hose or socket, non-thread.
- Slip into 1.5"/50mm wall fitting non-thread.



TECHNICAL DATA

| Model            | Power(W) | Voltage(V) | LED QTY | Light source | Color      | Lumination (lux) | Installation type                |
|------------------|----------|------------|---------|--------------|------------|------------------|----------------------------------|
| WL-MF-LED003PB-C | 3W       | 12-20V     | 1       | Wide voltage | Cool white | 180              | Directly slip into 1.5" PVC pipe |
| WL-MF-LED003PB-W | 3W       | 12-20V     | 1       | Wide voltage | Warm white | 180              |                                  |
| WL-MF-LED003PC   | 3W       | 12-20V     | 1       | Wide voltage | RGB        | 150              |                                  |

## WL-MG

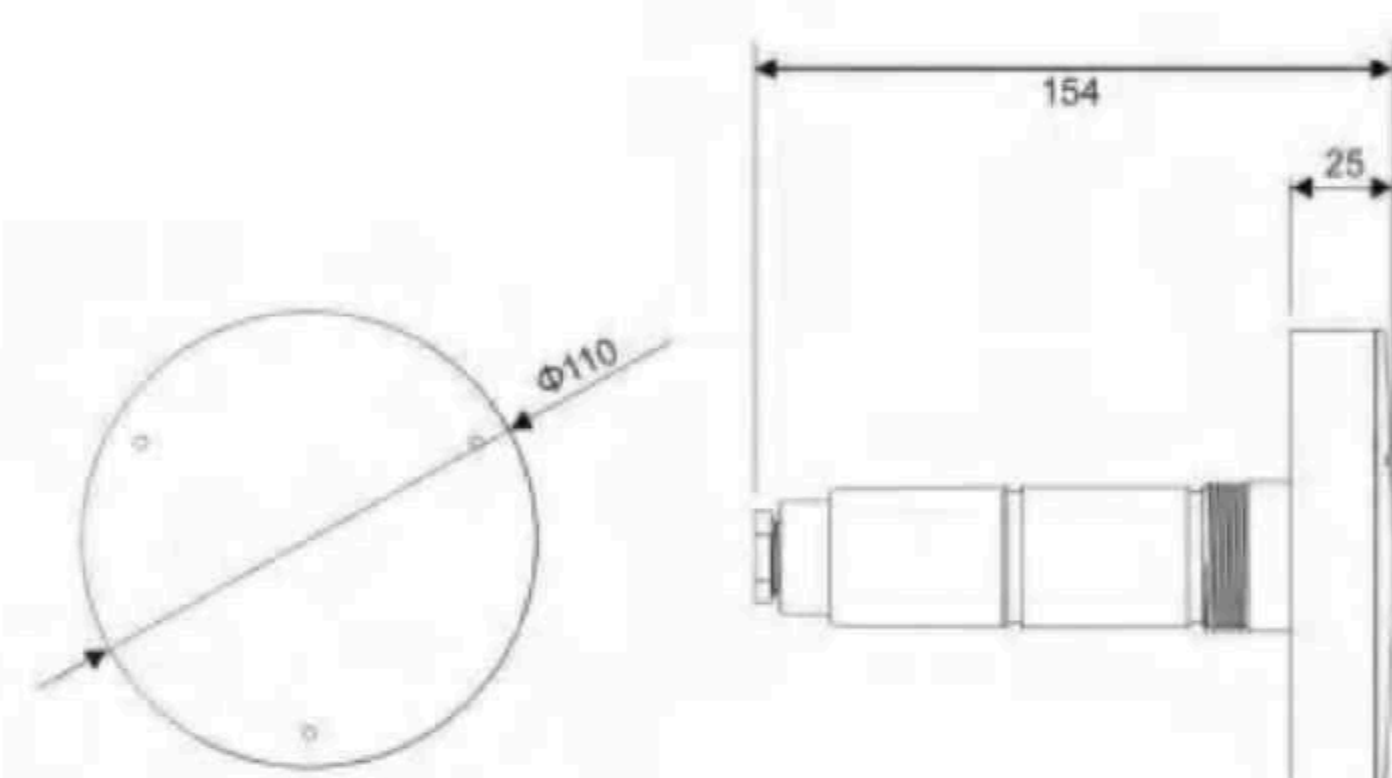
## WL-MH



With distinctive design lens, MG light performances extraordinary and gorgeous lighting effect. Its thread is compatible to connect to 1.5" and 2" int. thread wall fitting or wall conduit, very convenient and widely used in all kinds of pools and spas, especial different liner pools.

### Main features:

- High quality silicon gasket, it's not easy to age, seepage and leak.
- Variable voltage range AC 12-20V.
- No flicker, high purity, soft light, no glare.
- High brightness (high lumen), strong light transmission.
- Low power consumption, low heat while working.
- IP68 waterproof standard.
- Color: cool white, warm white, RGB & single blue.



### Selection guidance

- 1 Screw to 1.5" wall fitting directly.
- 2 Adapt to 1.5" or 2" interior thread wall conduit or pvc pipe.
- 3 With niche part, the light can be connected to 2"/63mm slipy pvc pipe.
- 4 Adapt to 2" wall fitting special for different liner pools.

### Suitable for all kinds of pools



### TECHNICAL DATA

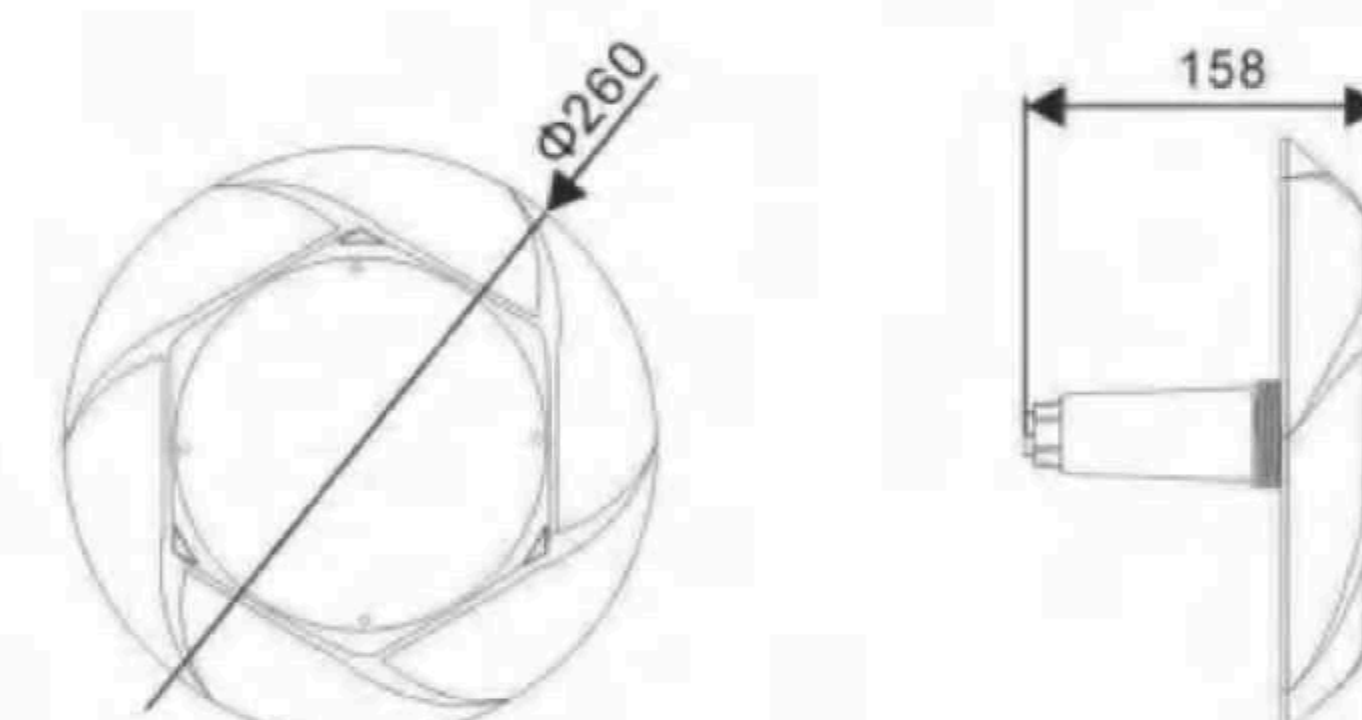
| Model           | Power (W) | Voltage (V) | LED QTY | Light source | Color       | Lumination (lux) | Installation type  |
|-----------------|-----------|-------------|---------|--------------|-------------|------------------|--|
| WL-MG-LED054JTB | 6W        | 12-20V      | 54      | Wide voltage | White color | 485              | <input type="checkbox"/> For fiberglass pool<br><input type="checkbox"/> For panel pool+liner<br><input type="checkbox"/> For concrete pool+tile<br><input type="checkbox"/> For concrete pool+liner |
| WL-MG-LED054JTC | 6W        | 12-20V      | 54      | Wide voltage | RGB         | 120              |  |
| WL-MG-LED081JTB | 9W        | 12-20V      | 81      | Wide voltage | White color | 760              |  |
| WL-MG-LED081JTC | 9W        | 12-20V      | 81      | Wide voltage | RGB         | 200              |  |
| WL-MG-LED108JTB | 12W       | 12-20V      | 108     | Wide voltage | White color | 1000             |  |
| WL-MG-LED108JTC | 12W       | 12-20V      | 108     | Wide voltage | RGB         | 300              |  |

The combination of high power led bulbs and wide angle led bulbs improves the brightness space and illumination range, very suitable to medium and large swimming pool.

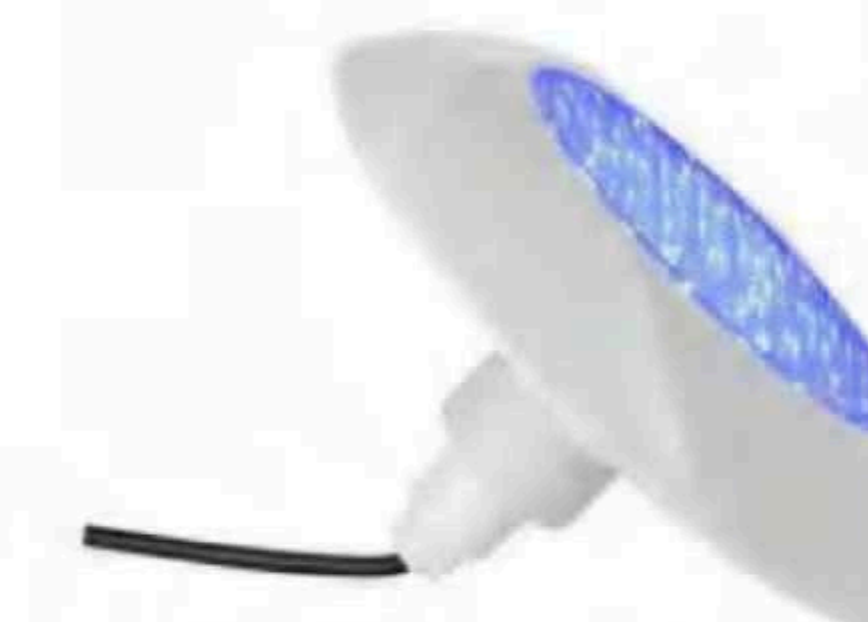
It is threaded for universal 1.5" female inlet and wall conduit, very easy to install and widely used in various swimming pools and spas, especial liner pools.

### Main features:

- Durable ABS structure.
- Safety low voltage: AC12V, AC12-20V.
- Great compatibility: A variety installation methods bring you convenience for different pool installations: concrete pool, fiberglass pool, liner pool.



Combination light source brings super brightness

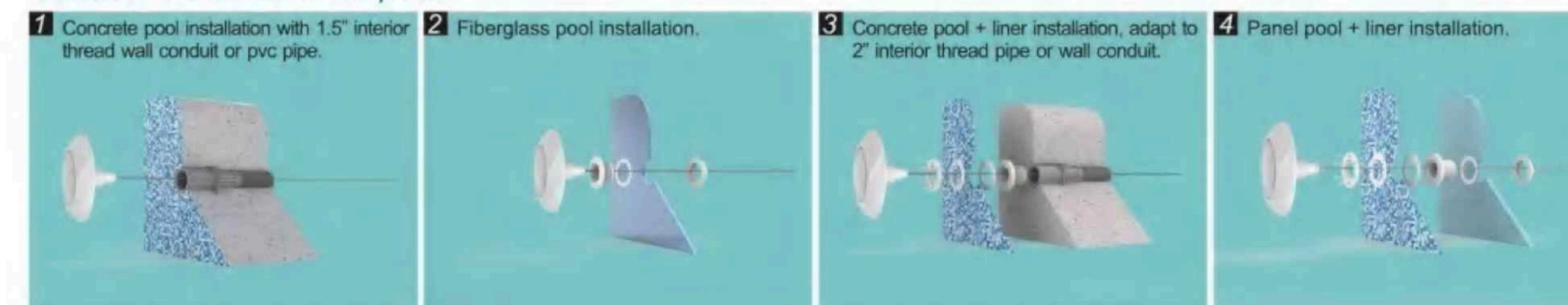


Compatible with universal 1.5" wall fitting/wall conduit



Liner pool kits

### Suitable for all kinds of pools



### TECHNICAL DATA

| Model           | Power(W) | Voltage(V) | LED QTY | Color       | Installation type  |
|-----------------|----------|------------|---------|-------------|--|
| WL-MH-LED072JTB | 24W      | 12V        | 72      | White color | <input type="checkbox"/> For fiberglass pool<br><input type="checkbox"/> For panel pool+liner<br><input type="checkbox"/> For concrete pool+tile<br><input type="checkbox"/> For concrete pool+liner |
| WL-MH-LED072JTC | 24W      | 12V        | 72      | RGB         |  |
| WL-MH-LED126JTB | 24W      | 12-20V     | 126     | White color |  |
| WL-MH-LED126JTC | 24W      | 12-20V     | 126     | RGB         |  |
| WL-MH-LED162JTB | 30W      | 12-20V     | 162     | White color |  |
| WL-MH-LED162JTC | 30W      | 12-20V     | 162     | RGB         |  |

### TECHNICAL DATA

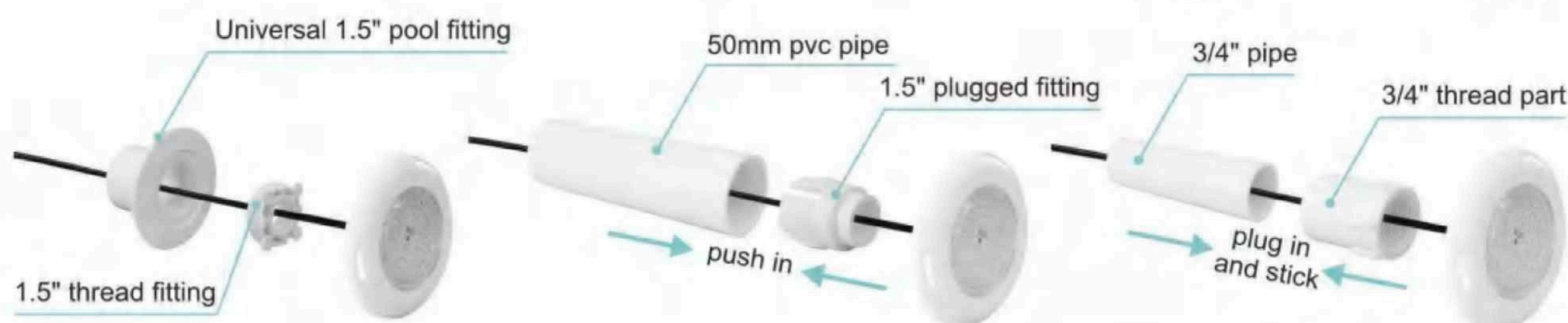
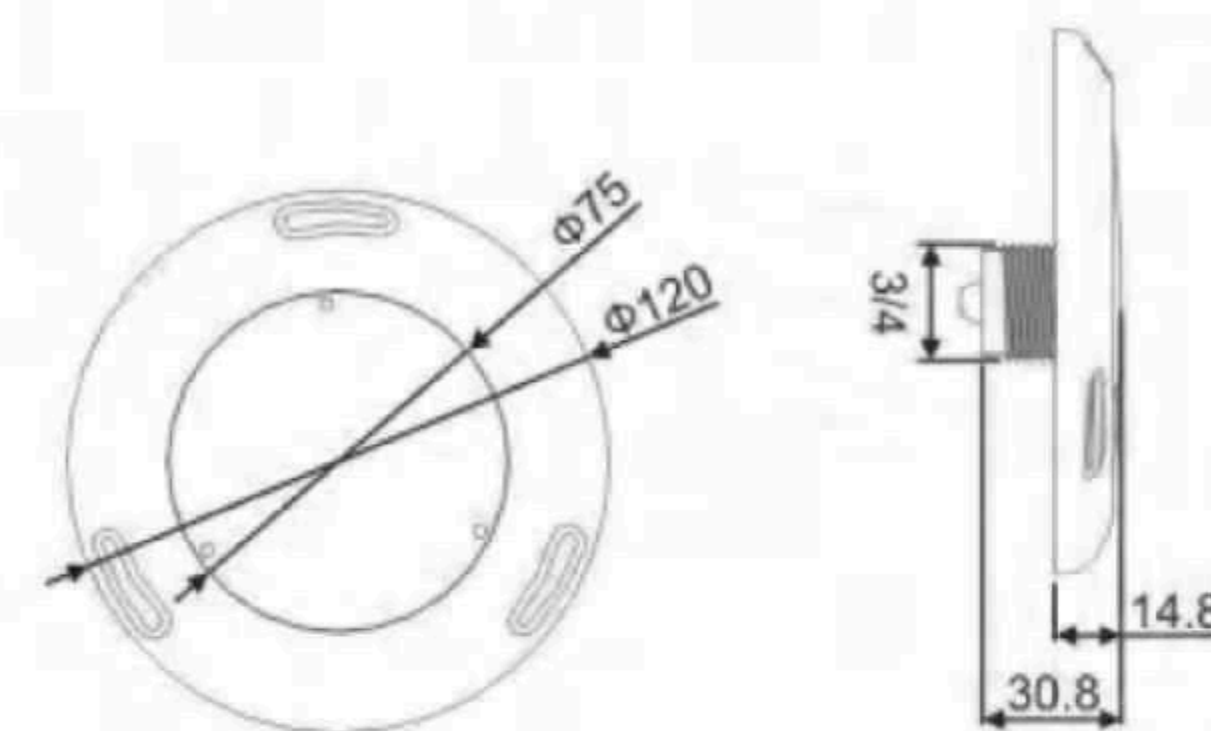
| Model            | Power(W) | Voltage(V) | LED QTY  |
|------------------|----------|------------|--|
| WL-MH-LED168JTBW | 24W      | 12-20V     | 162pcs SMD leds white color+6pcs high power leds white color |
| WL-MH-LED168JTCW | 24W      | 12-20V     | 162pcs SMD leds RGB color+6pcs high power leds white color   |

# WL-LA



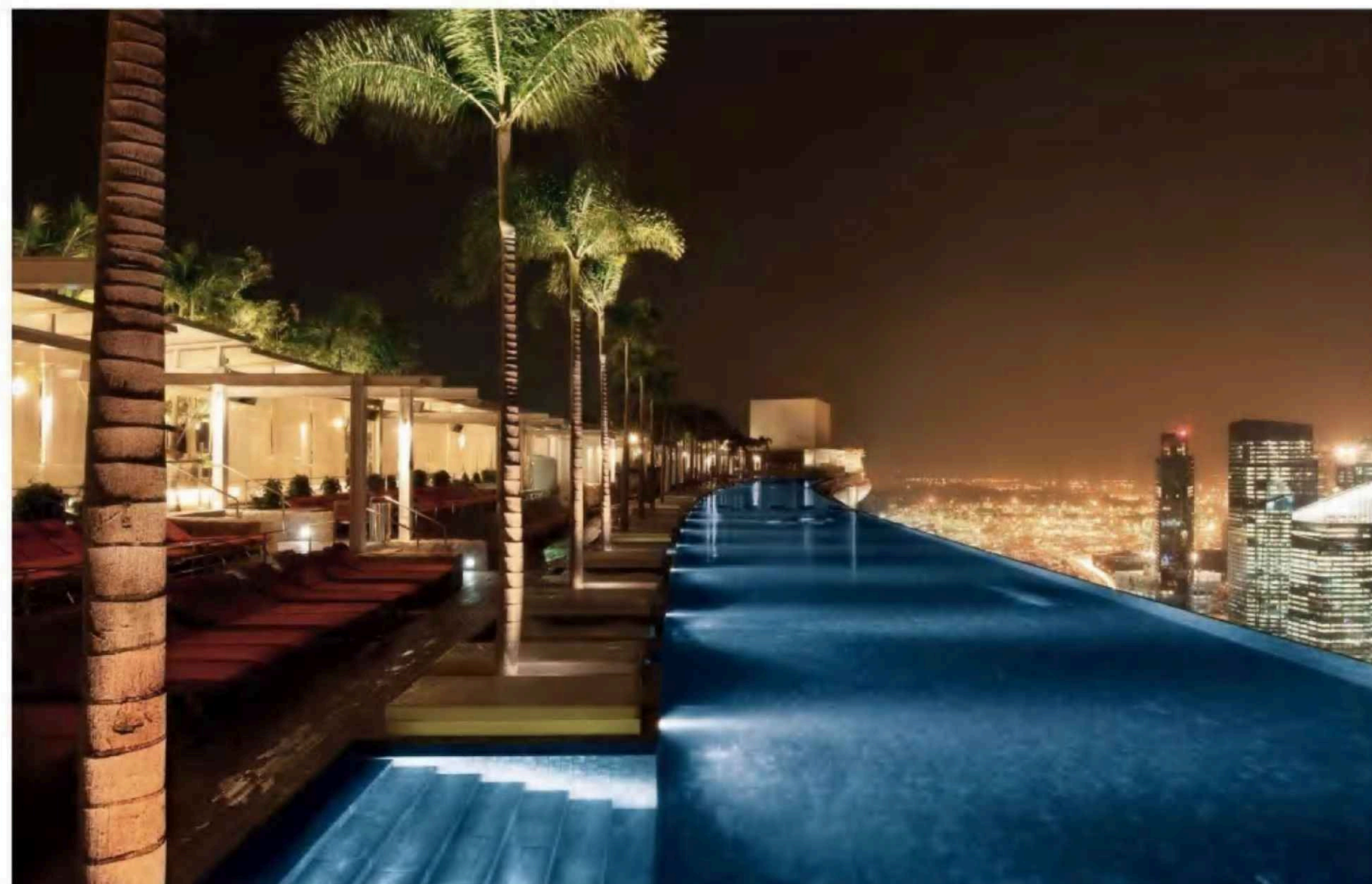
### Main features:

- Ultra-thin design, perfectly integrated with the pool wall.
- Very convenient installation, directly insert into 3/4" pipe or 1.5" water inlet.
- Four-core wire stepless dimming remote control technology can achieve hundreds of color changes.
- Suitable for all kinds of pools using.



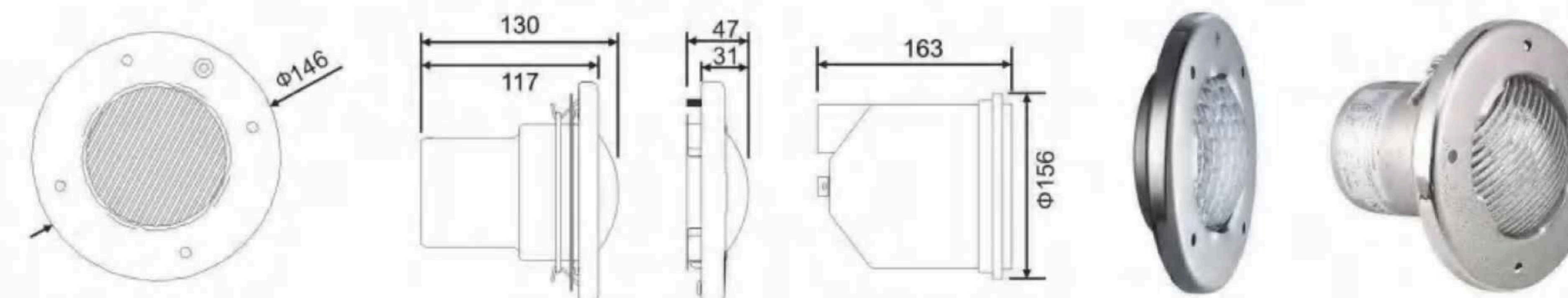
### TECHNICAL DATA

| Model           | Power (W) | Voltage (V) | LED QTY | Light source | Color      | Lumination (lux) | Installation type            |
|-----------------|-----------|-------------|---------|--------------|------------|------------------|------------------------------|
| WL-LA-LED063JTB | 6W        | AC/DC 12V   | 63      | SMD LED      | Cool white | 483              | Wall mounted & Wall Recessed |
| WL-LA-LED063JTW | 6W        | AC/DC 12V   | 63      | SMD LED      | Warm white | 483              |                              |
| WL-LA-LED063JTC | 6W        | AC/DC 12V   | 63      | SMD LED      | RGB        | 155              |                              |



# WL-QB

QB series features stainless steel material, non-corrosive and well cooling operation, tempered glass lens increase transparency and compatible to American and European niches. It's very simple to install in concrete pool.



### TECHNICAL DATA

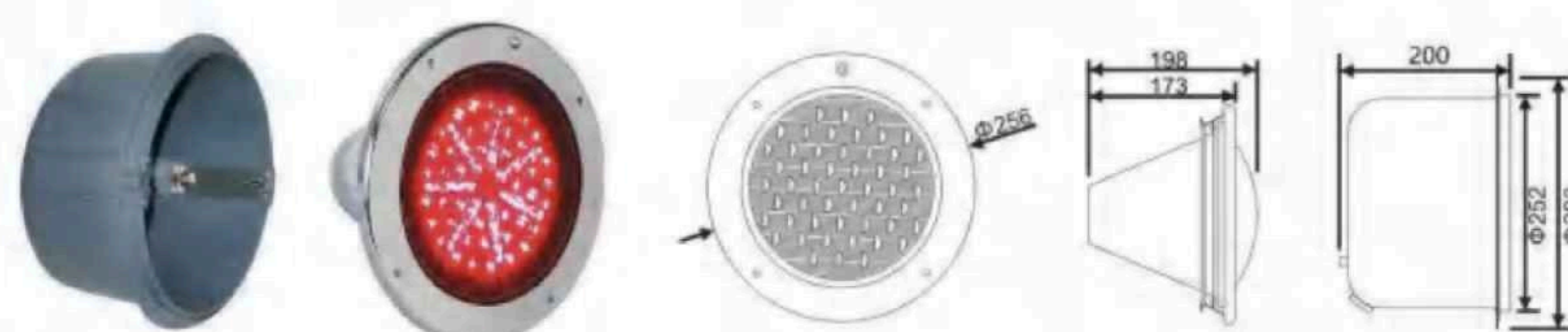
| Model           | Power (W) | Voltage (V) | LED QTY                             | Light source     | Color       | Lumination (lux) | Installation type |
|-----------------|-----------|-------------|-------------------------------------|------------------|-------------|------------------|-------------------|
| WL-QB-LED108JTB | 12W       | 12-20V      | 108                                 | Wide voltage     | White color | 2150             | Housing type      |
| WL-QB-LED108JTC | 12W       | 12-20V      | 108                                 | Wide voltage     | RGB         | 1500             | Housing type      |
| WL-QBG-LED012PB | 12W       | 12V         | 12                                  | Resin filled     | White color | 885              | Housing type      |
| WL-QBG-LED012PC | 12W       | 12V         | 12                                  | Resin filled     | RGB         | 200              | Housing type      |
| WL-QBG-LED072TB | 6W        | 12V         | 72                                  | Resin filled     | White color | 255              | Housing type      |
| WL-QBG-LED072TC | 6W        | 12V         | 72                                  | Resin filled     | RGB         | 90               | Housing type      |
| WL-QBG-LED144TB | 12W       | 12V         | 144                                 | Resin filled     | White color | 455              | Housing type      |
| WL-QBG-LED144TC | 12W       | 12V         | 144                                 | Resin filled     | RGB         | 110              | Housing type      |
| WL-QB-LED072BB  | 6W        | 12V         | 72                                  | Standard DIP LED | White color | 150              | Housing type      |
| WL-QB-LED072BC  | 6W        | 12V         | 72                                  | Standard DIP LED | RGB         | 88               | Housing type      |
| WL-QB-LED009PB  | 9W        | 12V         | 9                                   | High power       | White color | 580              | Housing type      |
| WL-QB-LED009PC  | 9W        | 12V         | 9                                   | High power       | RGB         | 130              | Housing type      |
| WL-QB-LED012PB  | 12W       | 12V         | 12                                  | High power       | White color | 885              | Housing type      |
| WL-QB-LED012PC  | 12W       | 12V         | 12                                  | High power       | RGB         | 200              | Housing type      |
| WL-QBP100       | 100W      | 12V         | E27 light bulb, tempered glass lens |                  | ---         | ---              | Housing type      |
| WL-QBC100       | 100W      | 12V         | Lamp cup, tempered glass lens       |                  | ---         | ---              | Housing type      |

## WL-QD



### Main features:

- Material: stainless steel, non-corrosive.
- Tempered glass lens increases transparency.
- High efficient, low heat LED board and control board, low power consumption.
- Compatible to American and European niches.
- Different lamp available: LED lamp and E27 bulb.



### TECHNICAL DATA

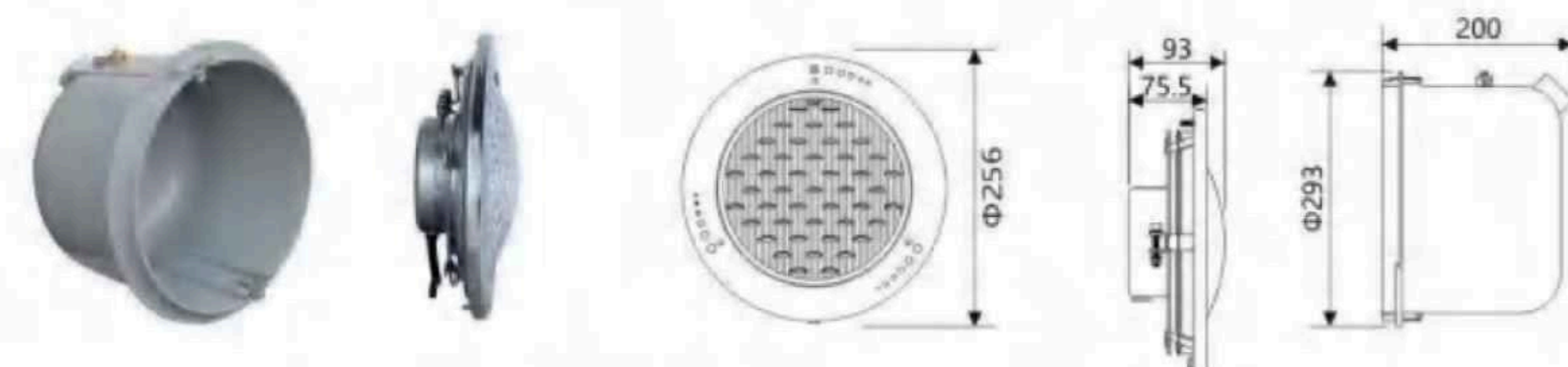
| Model          | Power(W) | Voltage(V) | LED QTY                   | Light source     | Color       | Lumination (lux) | Installation type |
|----------------|----------|------------|---------------------------|------------------|-------------|------------------|-------------------|
| WL-QD-LED144BB | 12W      | 12V        | 144                       | Standard DIP LED | White color | 302              | Housing type      |
| WL-QD-LED144BC | 12W      | 12V        | 144                       | Standard DIP LED | RGB         | 168              | Housing type      |
| WL-QD-LED252BB | 18W      | 12V        | 252                       | Standard DIP LED | White color | 530              | Housing type      |
| WL-QD-LED252BC | 18W      | 12V        | 252                       | Standard DIP LED | RGB         | 257              | Housing type      |
| WL-QDP300      | 300W     | 12V        | E27 bulb, toughened glass |                  | ---         | ---              | Housing type      |

## WL-QG



MILLIAN QG series light is a high power series light, and features stainless steel material with good heat dissipation and tempered glass lens to increase transparency and super brightness. There are different lamp sources available: variable voltage LED lamp, DIP LED lamp and SMD led lamp.

Compatible to American and European niches.



### TECHNICAL DATA

| Model            | Power(W) | Voltage(V) | LED QTY | Light source | Color       | Lumination (lux) | Installation type |
|------------------|----------|------------|---------|--------------|-------------|------------------|-------------------|
| WL-QGB-LED216JTB | 24W      | 12-20V     | 216     | Wide voltage | White color | 1420             | Housing type      |
| WL-QGB-LED216JTC | 24W      | 12-20V     | 216     | Wide voltage | RGB         | 522              | Housing type      |
| WL-QGB-LED012PB  | 12W      | 12V        | 12      | High power   | White color | 885              | Housing type      |
| WL-QGB-LED012PC  | 12W      | 12V        | 12      | High power   | RGB         | 200              | Housing type      |
| WL-QGB-LED024PB  | 24W      | 12V        | 24      | High power   | White color | 1300             | Housing type      |
| WL-QGB-LED024PC  | 24W      | 12V        | 24      | High power   | RGB         | 352              | Housing type      |
| WL-QGB-LED036PB  | 36W      | 12V        | 36      | High power   | White color | 1395             | Housing type      |
| WL-QGB-LED036PC  | 36W      | 12V        | 36      | High power   | RGB         | 410              | Housing type      |
| WL-QGB-LED024JTB | 24W      | 12V        | 72      | SMD LED      | White color | 1240             | Housing type      |
| WL-QGB-LED024JTC | 24W      | 12V        | 72      | SMD LED      | RGB         | 375              | Housing type      |

## WL-QH/QI



WL-QH



WL-QI

### Main features:

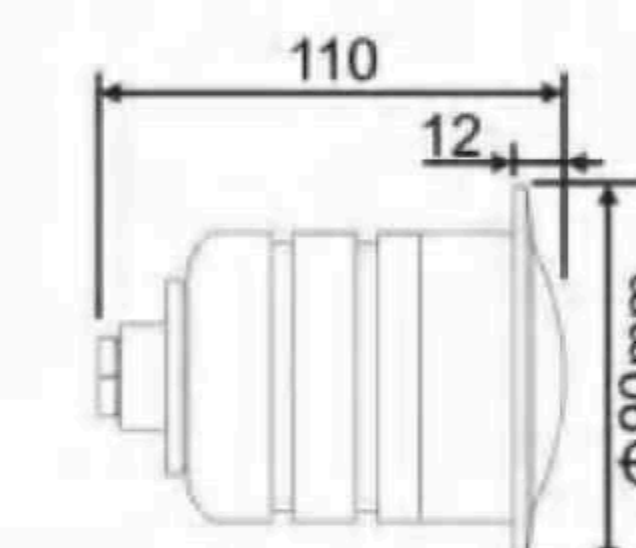
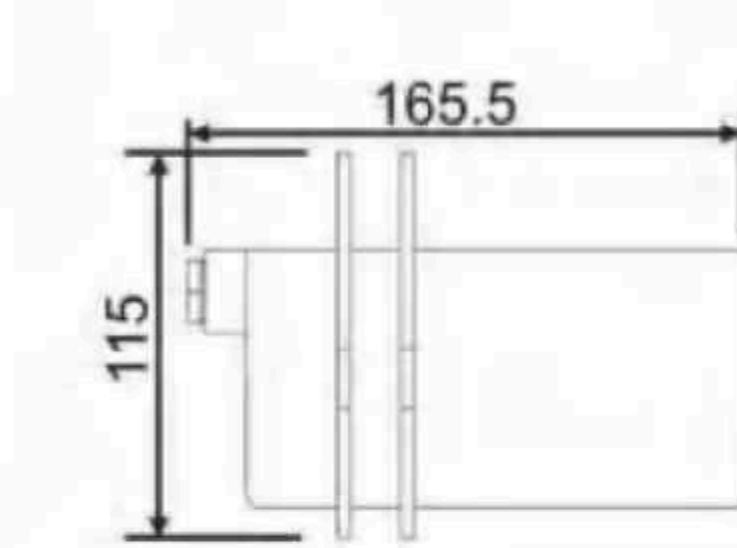
- Safety low voltage: AC12V.
- Standard cable: 2.0meter.
- Waterproof standard: IP68.
- Color: cool white, warm white, RGB and single blue.
- RGB mode features 19 pre-programmed lighting patterns.
- QHB/QIB: for concrete pool with housing.
- QHT/QIT: for fiberglass pool, stainless steel pool.



Concrete Niche



Fiberglass Niche



### TECHNICAL DATA

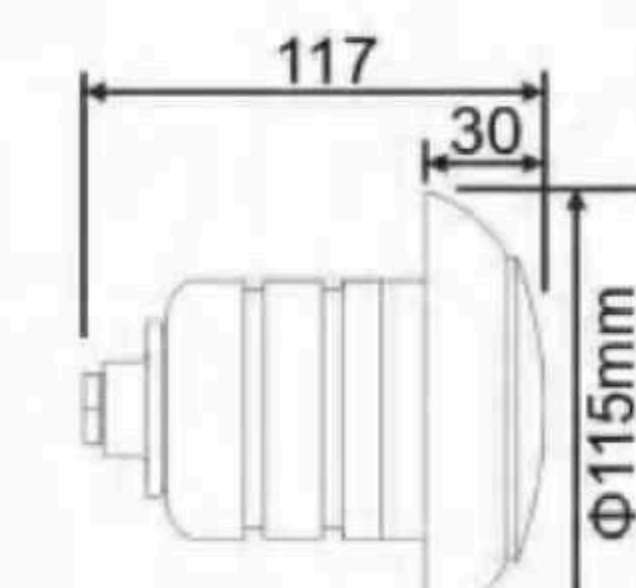
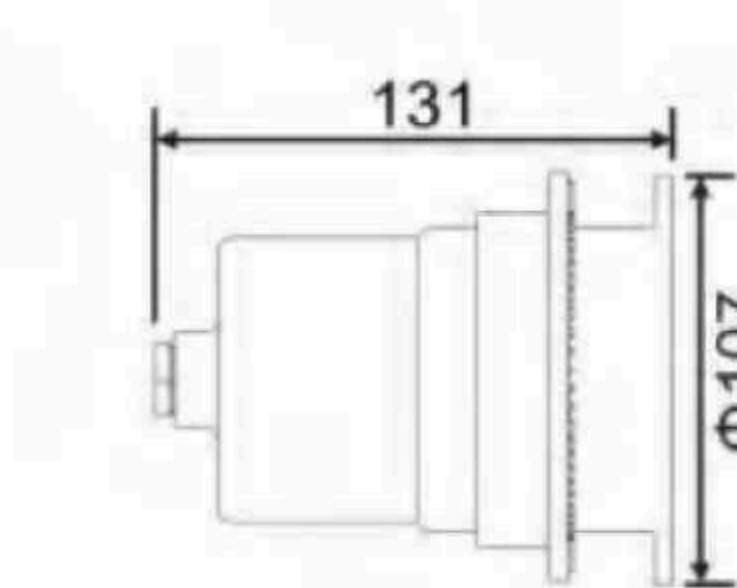
| Model           | Power(W) | Voltage(V) | LED QTY | Light source         | Color       | Lumination (lux) | Installation type |
|-----------------|----------|------------|---------|----------------------|-------------|------------------|-------------------|
| WL-QHB-LED036HB | 3W       | 12V        | 36      | High quality DIP LED | White color | 95               | Concrete pool     |
| WL-QHB-LED036HC | 3W       | 12V        | 36      | High quality DIP LED | RGB         | 42               | Concrete pool     |
| WL-QHT-LED036HB | 3W       | 12V        | 36      | High quality DIP LED | White color | 95               | Fiberglass pool   |
| WL-QHT-LED036HC | 3W       | 12V        | 36      | High quality DIP LED | RGB         | 42               | Fiberglass pool   |



Concrete Niche



Fiberglass Niche



### TECHNICAL DATA

| Model           | Power(W) | Voltage(V) | LED QTY | Light source         | Color       | Lumination (lux) | Installation type |
|-----------------|----------|------------|---------|----------------------|-------------|------------------|-------------------|
| WL-QIB-LED072HB | 6W       | 12V        | 72      | High quality DIP LED | White color | 188              | Concrete pool     |
| WL-QIB-LED072HC | 6W       | 12V        | 72      | High quality DIP LED | RGB         | 70               | Concrete pool     |
| WL-QIT-LED072HB | 6W       | 12V        | 72      | High quality DIP LED | White color | 188              | Fiberglass pool   |
| WL-QIT-LED072HC | 6W       | 12V        | 72      | High quality DIP LED | RGB         | 70               | Fiberglass pool   |

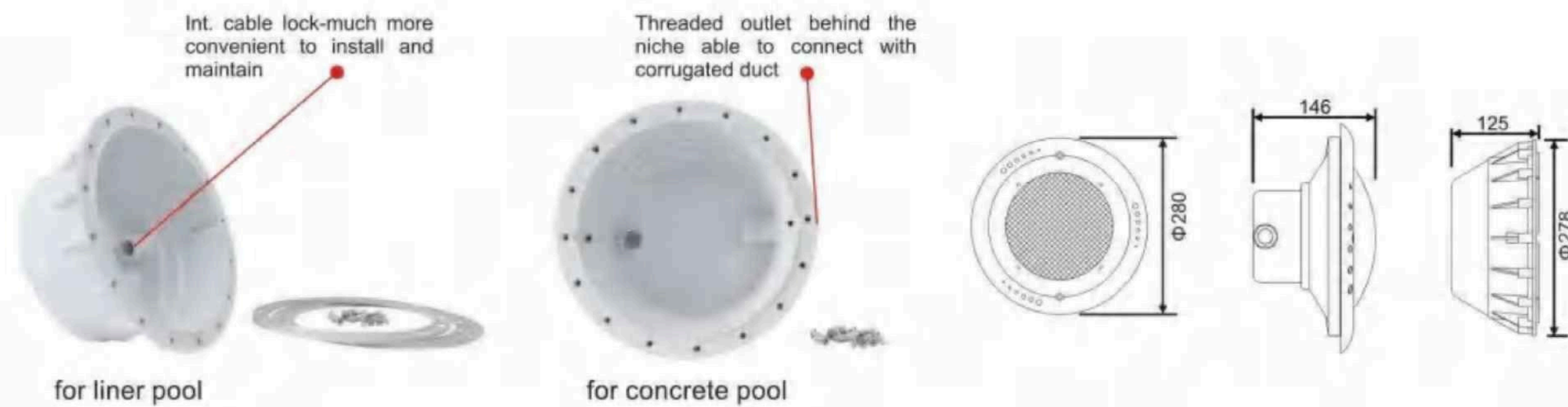
## WL-QJ



Built-in remote control system let you to manage your pool more convenient and easily. (Optional)

### Main features:

- Standard PAR56 lamp install into standard PAR56 niche of QJ series underwater light, with high brightness and strong luminosity.
- Curved PC lens expands the light refraction, and the crystal lens brings high brightness.
- Different LED lamps in option.
- Compatible with all pools



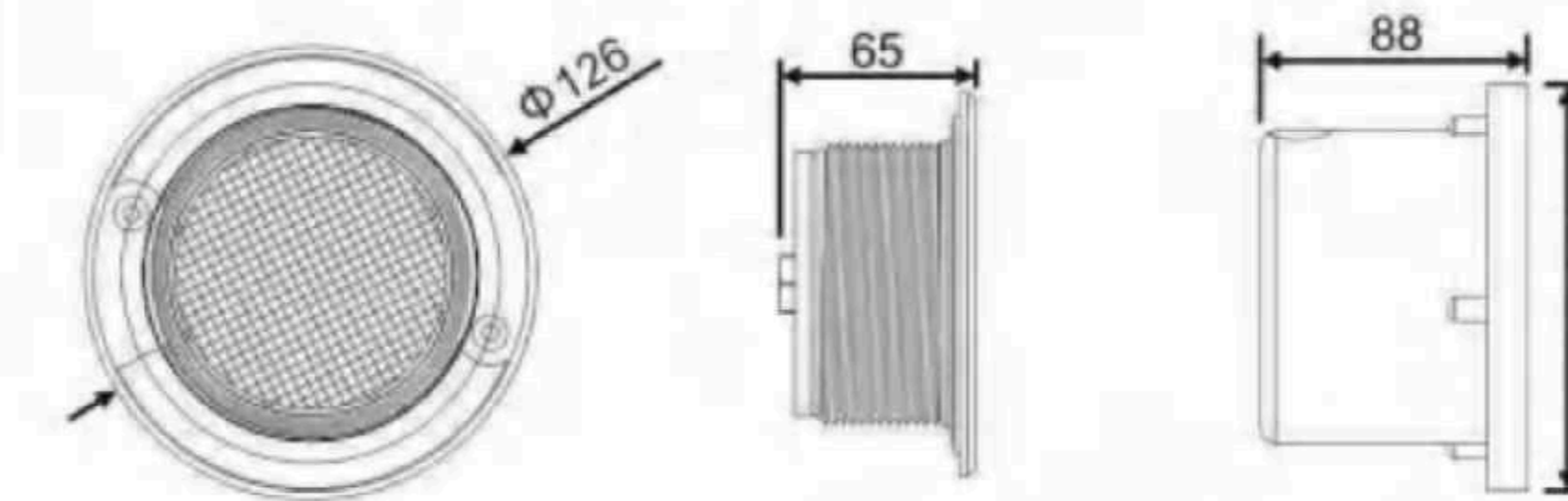
### TECHNICAL DATA

| Model           | Power (W) | Voltage (V) | LED QTY | Light source       | Color       | Lumination (lux) | Installation type   | Optional remote control |
|-----------------|-----------|-------------|---------|--------------------|-------------|------------------|---|-------------------------|
| WL-QJ-LED144BB  | 12W       | 12V         | 144     | Standard DIP LED   | White color | 302              | <input type="checkbox"/> Housing type for concrete pool with niche<br><input type="checkbox"/> For fiberglass pool installation<br><input type="checkbox"/> For different liner pool installation | ×                       |
| WL-QJ-LED144BC  | 12W       | 12V         | 144     | Standard DIP LED   | RGB         | 168              |   | ✓                       |
| WL-QJ-LED252BB  | 18W       | 12V         | 252     | Standard DIP LED   | White color | 530              |   | ×                       |
| WL-QJ-LED252BC  | 18W       | 12V         | 252     | Standard DIP LED   | RGB         | 257              |   | ✓                       |
| WL-QJ-LED018JTB | 18W       | 12V         | 54      | SMD LED            | White color | 1185             |   | ×                       |
| WL-QJ-LED018JTC | 18W       | 12V         | 54      | SMD LED            | RGB         | 245              |   | ✓                       |
| WL-QJ-LED024JTB | 24W       | 12V         | 72      | SMD LED            | White color | 1240             |   | ×                       |
| WL-QJ-LED024JTC | 24W       | 12V         | 72      | SMD LED            | RGB         | 375              |   | ✓                       |
| WL-QJ-LED162JTB | 18W       | 12-20V      | 162     | Wide voltage       | White color | 1500             |   | ×                       |
| WL-QJ-LED162JTC | 18W       | 12-20V      | 162     | Wide voltage       | RGB         | 970              |   | ×                       |
| WL-QJ-LED216JTB | 24W       | 12-20V      | 216     | Wide voltage       | White color | 2150             |   | ×                       |
| WL-QJ-LED216JTC | 24W       | 12-20V      | 216     | Wide voltage       | RGB         | 1500             |   | ×                       |
| WL-QJ-LED216HTB | 35W       | 12-20V      | 216     | Wide voltage       | White color | 2580             |   | ×                       |
| WL-QJ-LED216HTC | 35W       | 12-20V      | 216     | Wide voltage       | RGB         | 1800             |   | ×                       |
| WL-QJ-LED16PC   | 18W       | DC12V       | 16      | SMD LED            | RGBW        | 1380             |   | ×                       |
| WL-QJP300       | 300W      | 12V         | ----    | PAR56 halogen lamp | ----        | ----             |   | ×                       |

## WL-QMC/QNV

### Main features:

- Safety low voltage: AC12V.
- Standard cable: 2.0meter.
- Waterproof standard: IP68.
- Color: cool white, warm white, RGB and single blue.
- RGB mode features 19 pre-programmed lighting patterns.
- Installation mode: Housing type and above ground pool.



WL-QMC

WL-QNV

Concrete pool light

Fiberglass pool

### TECHNICAL DATA

| Model           | Power(W) | Voltage(V) | LED QTY | Light source         | Color       | Lumination (lux) | Installation type |
|-----------------|----------|------------|---------|----------------------|-------------|------------------|-------------------|
| WL-QMC-LED036HB | 3W       | 12V        | 36      | High quality DIP LED | White color | 95               | Concrete pool     |
| WL-QMC-LED036HC | 3W       | 12V        | 36      | High quality DIP LED | RGB         | 42               | Concrete pool     |
| WL-QMC-LED072HB | 6W       | 12V        | 72      | High quality DIP LED | White color | 188              | Concrete pool     |
| WL-QMC-LED072HC | 6W       | 12V        | 72      | High quality DIP LED | RGB         | 70               | Concrete pool     |
| WL-QNV-LED036HB | 3W       | 12V        | 36      | High quality DIP LED | White color | 95               | Fiberglass pool   |
| WL-QNV-LED036HC | 3W       | 12V        | 36      | High quality DIP LED | RGB         | 42               | Fiberglass pool   |
| WL-QNV-LED072HB | 6W       | 12V        | 72      | High quality DIP LED | White color | 188              | Fiberglass pool   |
| WL-QNV-LED072HC | 6W       | 12V        | 72      | High quality DIP LED | RGB         | 70               | Fiberglass pool   |

## WL-QQC

QQC mode light is an ultra-thin series light with niche for concrete pool installation. Its smooth front plate provides simplicity yet elegant.

### Main features:

- Material: ABS body+stainless steel base.
- Standard cable: 2.0meters.
- Waterproof: IP68.
- Installation mode: Housing type for concrete pool.
- Color: cool white, warm white, RGB and single blue.
- RGB mode features 19 pre-programmed lighting patterns.
- Color temperature: cool white 6000K, warm white 3000K.



### TECHNICAL DATA

| Model           | Power(W) | Voltage(V) | LED QTY | Light source | Color       | Lumination (lux) | Installation type |
|-----------------|----------|------------|---------|--------------|-------------|------------------|-------------------|
| WL-QQC-LED012PB | 12W      | 12V        | 12      | High power   | White color | 885              | Housing type      |
| WL-QQC-LED012PC | 12W      | 12V        | 12      | High power   | RGB         | 200              | Housing type      |
| WL-QQC-LED024PB | 24W      | 12V        | 24      | High power   | White color | 1300             | Housing type      |
| WL-QQC-LED024PC | 24W      | 12V        | 24      | High power   | RGB         | 352              | Housing type      |
| WL-QQC-LED036PB | 36W      | 12V        | 36      | High power   | White color | 1395             | Housing type      |
| WL-QQC-LED036PC | 36W      | 12V        | 36      | High power   | RGB         | 410              | Housing type      |

## WL-QSG

QSG series is stainless steel LED light with simplicity and elegant design, anti-corrosive and well cooling operation. This ultra thin niche is designed to fit any pool structure with a thin concrete wall.

### Features:

- Low voltage: AC12V & AC12-20V(variable voltage).
- Low power consumption, low heat while working.
- High brightness, strong light transmission.
- IP 68 waterproof standard.



Very convenient wiring

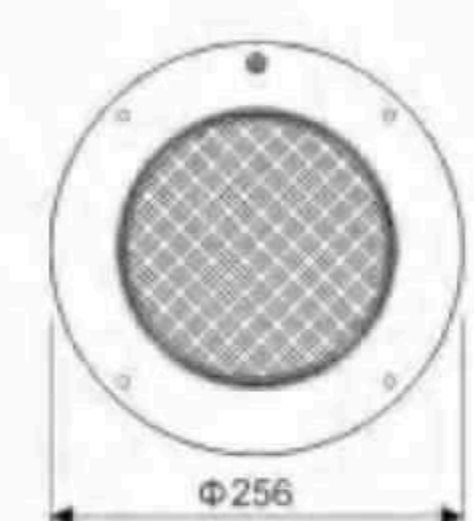
Classic and ultra niches are available to mount QSG light.



Ultra thin niche (standard)



Classic niche (Optional)



### TECHNICAL DATA

| Model            | Power(W) | Voltage(V) | LED QTY | Light source | Color       | Lumination (lux) | Installation type |
|------------------|----------|------------|---------|--------------|-------------|------------------|-------------------|
| WL-QSG-LED072TB  | 6W       | 12V        | 72      | Resin filled | White color | 255              | Housing type      |
| WL-QSG-LED072TC  | 6W       | 12V        | 72      | Resin filled | RGB         | 90               | Housing type      |
| WL-QSG-LED144TB  | 12W      | 12V        | 144     | Resin filled | White color | 455              | Housing type      |
| WL-QSG-LED144TC  | 12W      | 12V        | 144     | Resin filled | RGB         | 110              | Housing type      |
| WL-QSG-LED252TB  | 18W      | 12V        | 252     | Resin filled | White       | 885              | Housing type      |
| WL-QSG-LED252TC  | 18W      | 12V        | 252     | Resin filled | RGB         | 255              | Housing type      |
| WL-QSG-LED324TB  | 24W      | 12V        | 324     | Resin filled | White       | 1075             | Housing type      |
| WL-QSG-LED324TC  | 24W      | 12V        | 324     | Resin filled | RGB         | 355              | Housing type      |
| WL-QSG-LED162JTB | 18W      | 12-20V     | 162     | Resin filled | White color | 1370             | Housing type      |
| WL-QSG-LED162JTC | 18W      | 12-20V     | 162     | Resin filled | RGB         | 880              | Housing type      |
| WL-QSG-LED216JTB | 24W      | 12-20V     | 216     | Resin filled | White color | 1950             | Housing type      |
| WL-QSG-LED216JTC | 24W      | 12-20V     | 216     | Resin filled | RGB         | 1300             | Housing type      |

### WL-QSG.2 Non-resin filled LED

| Model              | Power(W) | Voltage(V) | LED QTY | Light source | Color       | Lumination (lux) | Installation type |
|--------------------|----------|------------|---------|--------------|-------------|------------------|-------------------|
| WL-QSG.2-LED162JTB | 18W      | 12-20V     | 162     | Wide voltage | White color | 1500             | Housing type      |
| WL-QSG.2-LED162JTC | 18W      | 12-20V     | 162     | Wide voltage | RGB         | 970              | Housing type      |
| WL-QSG.2-LED216JTB | 24W      | 12-20V     | 216     | Wide voltage | White color | 2150             | Housing type      |
| WL-QSG.2-LED216JTC | 24W      | 12-20V     | 216     | Wide voltage | RGB         | 1500             | Housing type      |
| WL-QSG.2-LED216HTB | 35W      | 12-20V     | 216     | Wide voltage | White color | 2580             | Housing type      |
| WL-QSG.2-LED216HTC | 35W      | 12-20V     | 216     | Wide voltage | RGB         | 1800             | Housing type      |

## WL-BPB/BPC

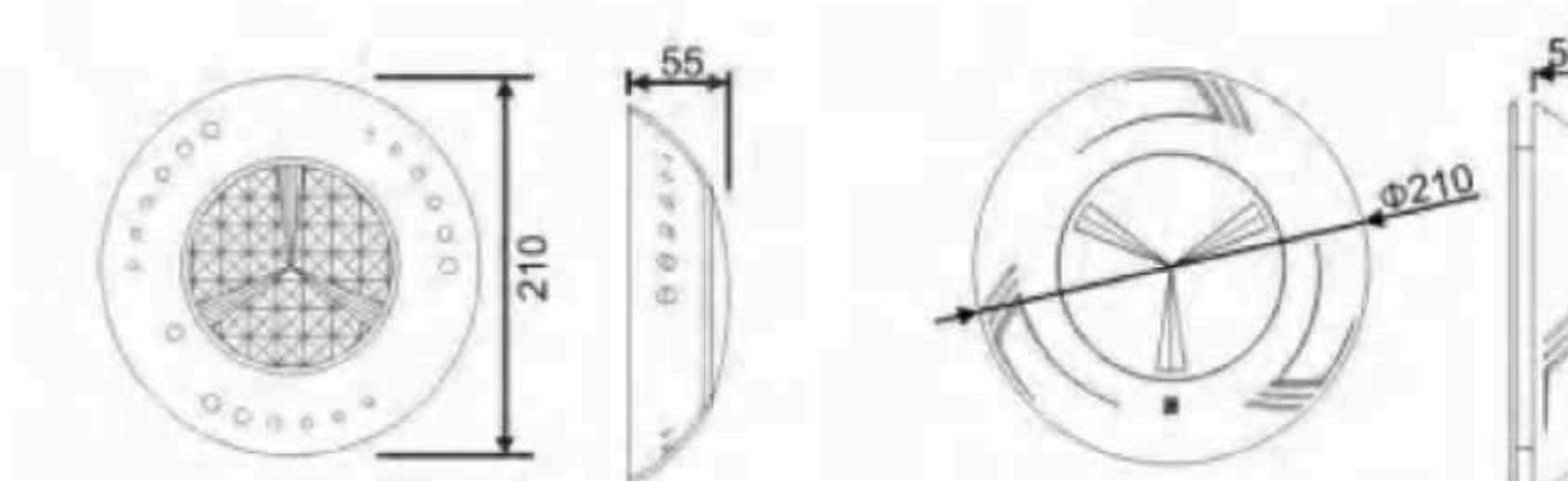
### Main features:

- Material: anti-UV ABS.
- Safety low voltage: AC12V.
- Installation mode: wall-mounted type.
- Color: cool white, warm white, RGB and single blue.
- Color temperature: cool white 6000K, warm white: 3000K.



WL-BPB

WL-BPC

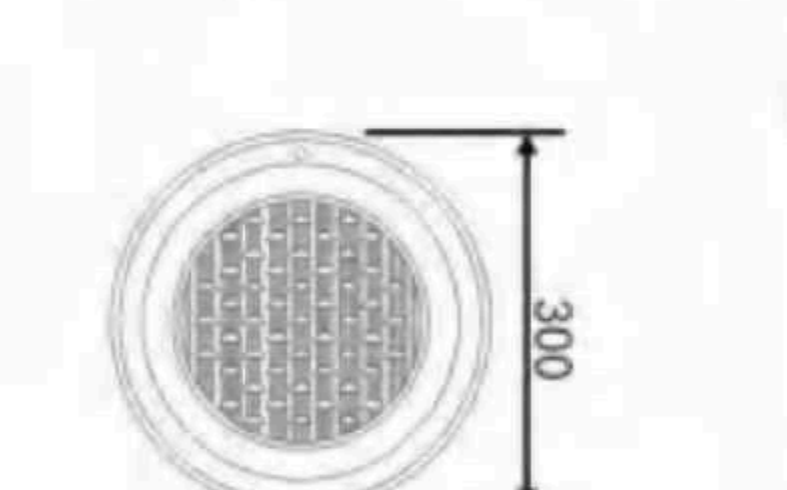


### TECHNICAL DATA

| Model            | Power(W) | Voltage(V) | LED QTY | Light source     | Color       | Lumination (lux) | Installation type |
|------------------|----------|------------|---------|------------------|-------------|------------------|-------------------|
| WL-BPB-LED072BB  | 6W       | 12V        | 72      | Standard DIP LED | White color | 150              | Wall mounted type |
| WL-BPB-LED072BC  | 6W       | 12V        | 72      | Standard DIP LED | RGB         | 88               | Wall mounted type |
| WL-BPC-LED006JTB | 6W       | 12V        | 18      | SMD LED          | White color | 485              | Wall mounted type |
| WL-BPC-LED006JTC | 6W       | 12V        | 18      | SMD LED          | RGB         | 85               | Wall mounted type |
| WL-BPC-LED012JTB | 12W      | 12V        | 36      | SMD LED          | White color | 903              | Wall mounted type |
| WL-BPC-LED012JTC | 12W      | 12V        | 36      | SMD LED          | RGB         | 215              | Wall mounted type |

## WL-PA

Millian PA series lights features stainless steel material with gliding and elegant design and good heat radiation. Nicheless flat light directly to mount to pool wall with bracket plate, simple and convenient. PC and tempered glass lens are available to select in this series lights.



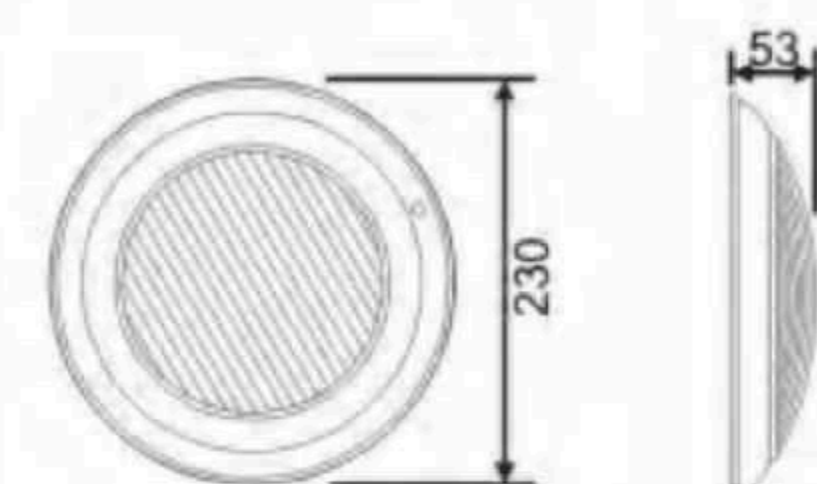
### TECHNICAL DATA

| Model          | Power(W) | Voltage(V) | LED QTY                            | Light source     | Color       | Lumination (lux) | Installation type |
|----------------|----------|------------|------------------------------------|------------------|-------------|------------------|-------------------|
| WL-PA-LED252BB | 18W      | 12V        | 252                                | Standard DIP LED | White color | 530              | Wall mounted type |
| WL-PA-LED252BC | 18W      | 12V        | 252                                | Standard DIP LED | RGB         | 257              | Wall mounted type |
| WL-PA-LED012PB | 12W      | 12V        | 12                                 | High power       | White color | 885              | Wall mounted type |
| WL-PA-LED012PC | 12W      | 12V        | 12                                 | High power       | RGB         | 200              | Wall mounted type |
| WL-PA-LED024PB | 24W      | 12V        | 24                                 | High power       | White color | 1300             | Wall mounted type |
| WL-PA-LED024PC | 24W      | 12V        | 24                                 | High power       | RGB         | 352              | Wall mounted type |
| WL-PA-LED036PB | 36W      | 12V        | 36                                 | High power       | White color | 1395             | Wall mounted type |
| WL-PA-LED036PC | 36W      | 12V        | 36                                 | High power       | RGB         | 410              | Wall mounted type |
| WL-BPA100      | 100W     | 12V        | Lamp bead and toughened glass lens | ---              | ---         | ---              | Wall mounted type |
| WL-BPA150      | 150W     | 12V        | Lamp bead and toughened glass lens | ---              | ---         | ---              | Wall mounted type |
| WL-BPC150      | 150W     | 12V        | Lamp bead and pc lens              | ---              | ---         | ---              | Wall mounted type |

## WL-PE

### Main features:

- Material: Stainless steel.
- Lens: PC.
- Safety low voltage: AC12V.
- Installation mode: wall-mounted type.
- Color: cool white, warm white, RGB and single blue.
- Cable: 2.0meters.



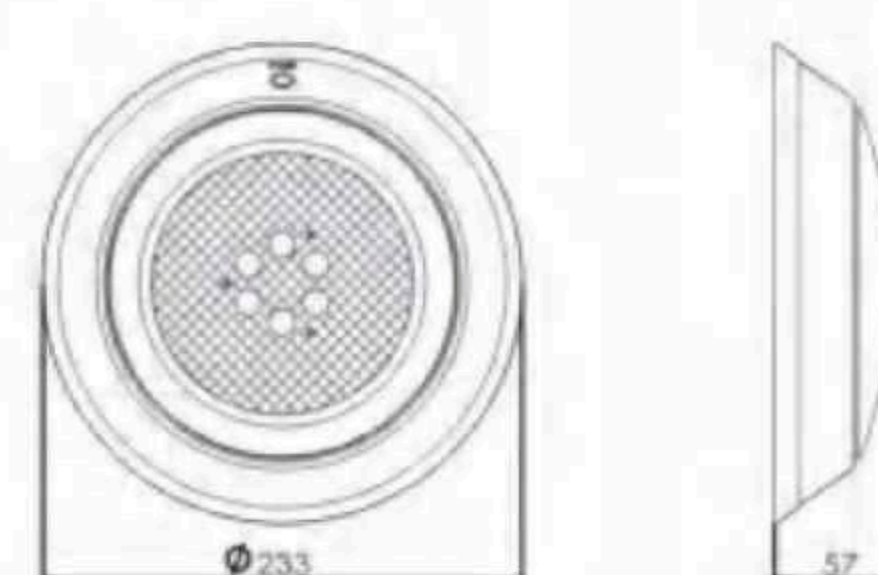
### TECHNICAL DATA

| Model           | Power(W) | Voltage(V) | LED QTY | Light source          | Color       | Lumination (lux) | Installation type |
|-----------------|----------|------------|---------|-----------------------|-------------|------------------|-------------------|
| WL-PE-LED072BB  | 6W       | 12V        | 72      | Standard DIP LED      | White color | 150              | Wall mounted type |
| WL-PE-LED072BC  | 6W       | 12V        | 72      | Standard DIP LED      | RGB         | 88               | Wall mounted type |
| WL-PE-LED144BB  | 12W      | 12V        | 144     | Standard DIP LED      | White color | 302              | Wall mounted type |
| WL-PE-LED144BC  | 12W      | 12V        | 144     | Standard DIP LED      | RGB         | 168              | Wall mounted type |
| WL-PE-LED252BB  | 18W      | 12V        | 252     | Standard DIP LED      | White color | 500              | Wall mounted type |
| WL-PE-LED252BC  | 18W      | 12V        | 252     | Standard DIP LED      | RGB         | 245              | Wall mounted type |
| WL-PE-LED006JTB | 6W       | 12V        | 18      | SMD LED               | White color | 485              | Wall mounted type |
| WL-PE-LED006JTC | 6W       | 12V        | 18      | SMD LED               | RGB         | 85               | Wall mounted type |
| WL-PE-LED012JTB | 12W      | 12V        | 36      | SMD LED               | White color | 903              | Wall mounted type |
| WL-PE-LED012JTC | 12W      | 12V        | 36      | SMD LED               | RGB         | 215              | Wall mounted type |
| WL-BPE075       | 75W      | 12V        |         | Lamp bead and PC lens | ---         | ---              | Wall mounted type |
| WL-BPE100       | 100W     | 12V        |         | Lamp bead and PC lens | ---         | ---              | Wall mounted type |

## WL-PE

### Main features:

- Stainless steel, non-corrosion and well cooling operation.
- Light source: 12W SMD led light+ 6W high power LED light.
- No flicker, high purify, soft light, no glare.
- High brightness (high lumen), strong light transmission.
- Low power consumption, low heat while working.
- Wall-mounted type, easy to install.
- Safety low voltage: AC 12-20V.
- IP68 waterproof standard.
- Color: cool white, warm white, RGB mixing



### TECHNICAL DATA

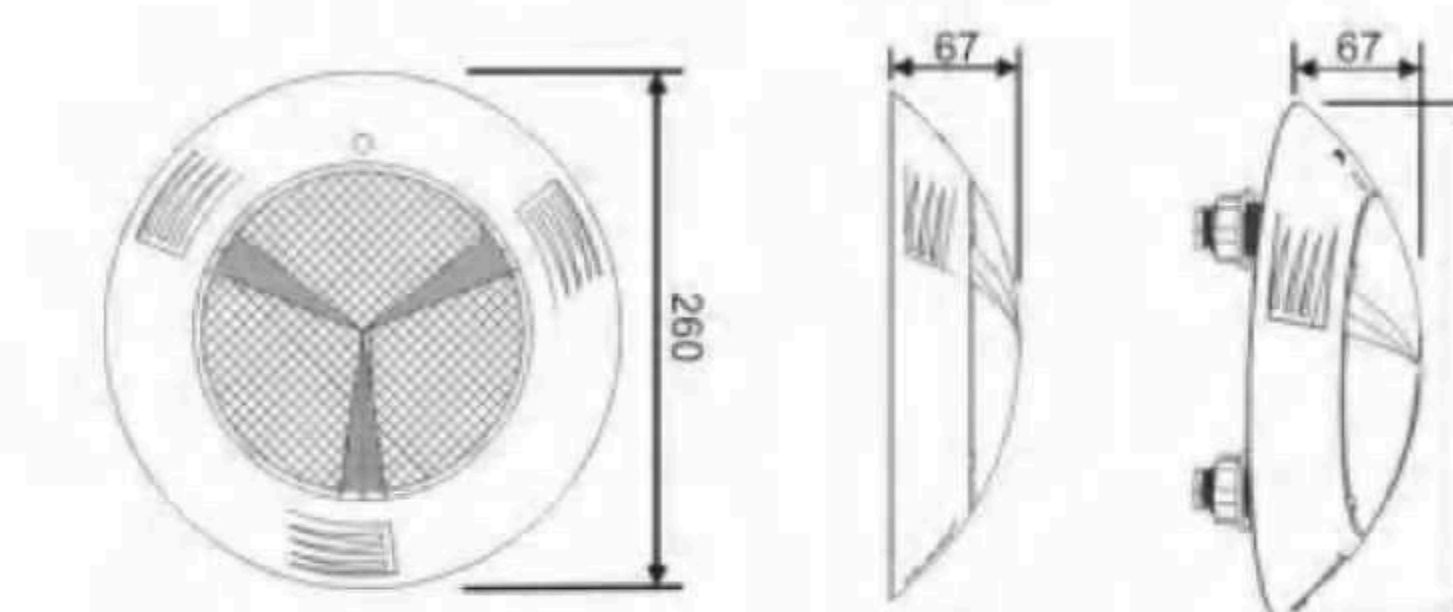
| Model           | Power(W) | Voltage(V) | LED QTY | Light source   | Color       | Lumination (lux) |
|-----------------|----------|------------|---------|--|-------------|------------------|
| WL-PE-LED87JTBW | 18W      | 12-20V     | 87      | 81pcs SMD leds white color, 6pcs high power leds white color | White color | 1500             |
| WL-PE-LED87JTCW | 18W      | 12-20V     | 87      | 81pcs SMD leds RGB color, 6pcs high power leds white color   | RGB+white   | 900              |



Remote control (optional)

### Main feature:

- Flat LED light, wall-mounted, easy to install.
- With mounting accessories able to install in above ground pool.
- Safety low voltage: AC12V/AC12-20V.
- Different lamp source bring you different effect.
- The built-in remote control allows you to manage your swimming pool more conveniently and easily.
- Waterproof standard: IP68.



mounting part for above ground pool

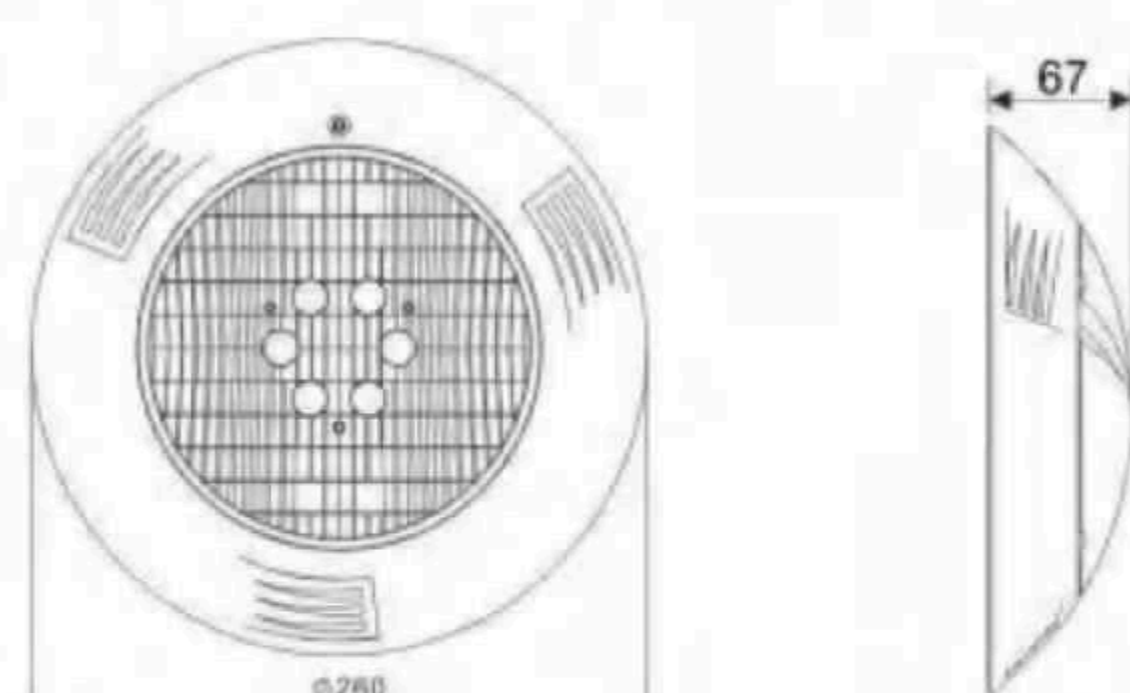
### TECHNICAL DATA

| Model            | Power (W) | Voltage (V) | LED QTY | Light source     | Color       | Lumination (lux) | Installation type                     | Optional remote control |
|------------------|-----------|-------------|---------|------------------|-------------|------------------|---------------------------------------|-------------------------|
| WL-PS-LED216JTB  | 24W       | 12V-20V     | 216     | Wide voltage     | White color | 2150             | Wall mounted type & Above ground pool | x                       |
| WL-PS-LED216JTC  | 24W       | 12V-20V     | 216     | Wide voltage     | RGB         | 1500             | Wall mounted type & Above ground pool | x                       |
| WL-PSC-LED216JTB | 24W       | 12V-20V     | 216     | Wide voltage     | White color | 2150             | Wall mounted type & Above ground pool | x                       |
| WL-PSC-LED216JTC | 24W       | 12V-20V     | 216     | Wide voltage     | RGB         | 1500             | Wall mounted type & Above ground pool | x                       |
| WL-PS-LED072BB   | 6W        | 12V         | 72      | Standard DIP LED | White color | 150              | Wall mounted type & Above ground pool | x                       |
| WL-PS-LED072BC   | 6W        | 12V         | 72      | Standard DIP LED | RGB         | 88               | Wall mounted type & Above ground pool | √                       |
| WL-PS-LED144BB   | 12W       | 12V         | 144     | Standard DIP LED | White color | 302              | Wall mounted type & Above ground pool | x                       |
| WL-PS-LED144BC   | 12W       | 12V         | 144     | Standard DIP LED | RGB         | 168              | Wall mounted type & Above ground pool | √                       |
| WL-PS-LED252BB   | 18W       | 12V         | 252     | Standard DIP LED | White color | 530              | Wall mounted type & Above ground pool | x                       |
| WL-PS-LED252BC   | 18W       | 12V         | 252     | Standard DIP LED | RGB         | 257              | Wall mounted type & Above ground pool | √                       |
| WL-PS-LED018JTB  | 18W       | 12V         | 54      | SMD LED          | White color | 1185             | Wall mounted type & Above ground pool | x                       |
| WL-PS-LED018JTC  | 18W       | 12V         | 54      | SMD LED          | RGB         | 245              | Wall mounted type & Above ground pool | √                       |
| WL-PSC-LED018JTB | 18W       | 12V         | 54      | SMD LED          | White color | 1185             | Wall mounted type & Above ground pool | x                       |
| WL-PSC-LED018JTC | 18W       | 12V         | 54      | SMD LED          | RGB         | 245              | Wall mounted type & Above ground pool | √                       |
| WL-BPS075        | 75W       | 12V         |         | Lamp bead        | ---         | ---              | Wall mounted type & Above ground pool | ----                    |
| WL-BPS100        | 100W      | 12V         |         | Lamp bead        | ---         | ---              | Wall mounted type & Above ground pool | ----                    |

## WL-PS

### Main feature:

- Light source: 18W SMD led light+ 6W high power LED light.
- No flicker, high purify, soft light, no glare.
- High brightness (high lumen), strong light transmission.
- Low power consumption, low heat while working.
- Wall-mounted type, easy to install.
- Safety low voltage: AC 12-20V.
- IP68 waterproof standard.
- Color: cool white, warm white, RGB mixing



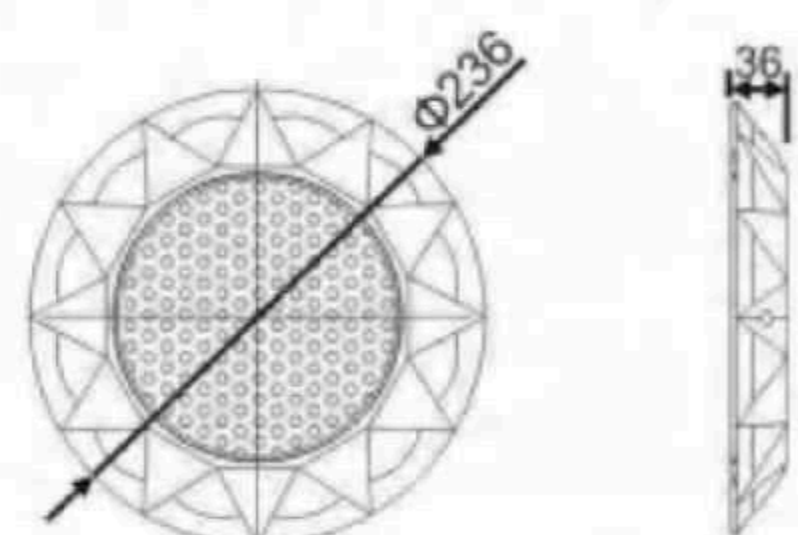
### TECHNICAL DATA

| Model            | Power(W) | Voltage(V) | LED QTY | Light source  | Color       | Lumination (lux) |
|------------------|----------|------------|---------|---|-------------|------------------|
| WL-PS-LED168JTBW | 24W      | 12-20V     | 168     | 162pcs SMD leds white color, 6pcs high power leds white color | White color | 2100             |
| WL-PS-LED168JTCW | 24W      | 12-20V     | 168     | 162pcs SMD leds RGB color, 6pcs high power leds white color   | RGB+white   | 1400             |

## WL-PQ

### Main features:

- Material: ABS face ring+stainless steel base.(It's special made of stainless steel base much better heat radiation for high power lamp than other models.)
- Lamp source: big power led lamp.
- Installation mode: wall-mounted type .
- Color: cool white, warm white, RGB and single blue.
- RGB mode features 19 pre-programmed lighting patterns.
- Color temperature: cool white 6000K, warm white: 3000K.



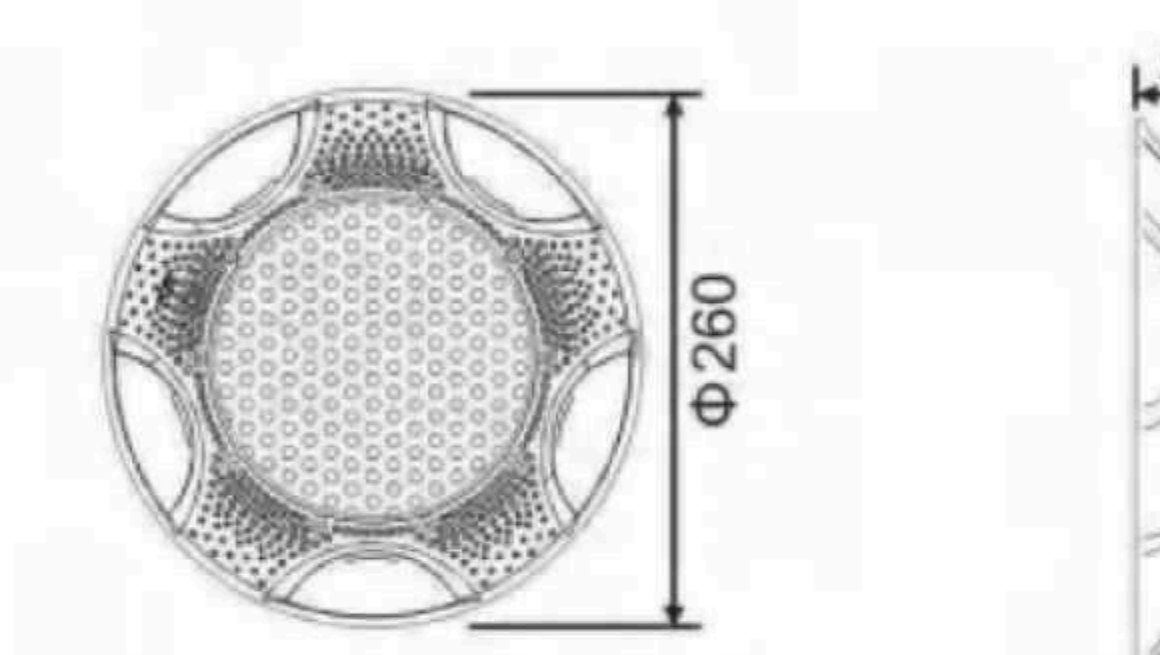
### "PQ" SERIES LED FLAT UNDERWATER LIGHTS

| Model          | Power(W) | Voltage(V) | LED QTY | Light source | Color       | Lumination (lux) | Installation type |
|----------------|----------|------------|---------|--------------|-------------|------------------|-------------------|
| WL-PQ-LED012PB | 12W      | 12V        | 12      | High power   | White color | 885              | Wall mounted type |
| WL-PQ-LED012PC | 12W      | 12V        | 12      | High power   | RGB         | 200              | Wall mounted type |
| WL-PQ-LED024PB | 24W      | 12V        | 24      | High power   | White color | 1300             | Wall mounted type |
| WL-PQ-LED024PC | 24W      | 12V        | 24      | High power   | RGB         | 352              | Wall mounted type |
| WL-PQ-LED036PB | 36W      | 12V        | 36      | High power   | White color | 1395             | Wall mounted type |
| WL-PQ-LED036PC | 36W      | 12V        | 36      | High power   | RGB         | 410              | Wall mounted type |

## WL-PX

### Main feature:

- Flat LED light, wall-mounted, easy to install.
- With mounting accessories able to install in above ground pool.
- Safety low voltage: AC12V/AC12-20V.
- Different lamp source bring you different effect.
- The built-in remote control allows you to manage your swimming pool more conveniently and easily.
- Waterproof standard: IP68.



Built-in remote control system let you to manage your pool more convenient and easily.

### TECHNICAL DATA

| Model           | Power (W) | Voltage(V) | LED QTY | Light source     | Color       | Lumination (lux) | Installation type | Optional remote control |
|-----------------|-----------|------------|---------|------------------|-------------|------------------|-------------------|-------------------------|
| WL-PX-LED216JTB | 24W       | 12V-20V    | 216     | Wide voltage     | White color | 2150             | Wall mounted type | ×                       |
| WL-PX-LED216JTC | 24W       | 12V-20V    | 216     | Wide voltage     | RGB         | 1500             | Wall mounted type | ×                       |
| WL-PX-LED072BB  | 6W        | 12V        | 72      | Standard DIP LED | White color | 150              | Wall mounted type | ×                       |
| WL-PX-LED072BC  | 6W        | 12V        | 72      | Standard DIP LED | RGB         | 88               | Wall mounted type | ×                       |
| WL-PX-LED144BB  | 12W       | 12V        | 144     | Standard DIP LED | White color | 302              | Wall mounted type | ×                       |
| WL-PX-LED144BC  | 12W       | 12V        | 144     | Standard DIP LED | RGB         | 168              | Wall mounted type | ×                       |
| WL-PX-LED252BB  | 18W       | 12V        | 252     | Standard DIP LED | White color | 530              | Wall mounted type | ×                       |
| WL-PX-LED252BC  | 18W       | 12V        | 252     | Standard DIP LED | RGB         | 257              | Wall mounted type | ×                       |
| WL-PX-LED018JTB | 18W       | 12V        | 54      | SMD LED          | White color | 1185             | Wall mounted type | ×                       |
| WL-PX-LED018JTC | 18W       | 12V        | 54      | SMD LED          | RGB         | 245              | Wall mounted type | √                       |

## WL-PAR56

### Main features:

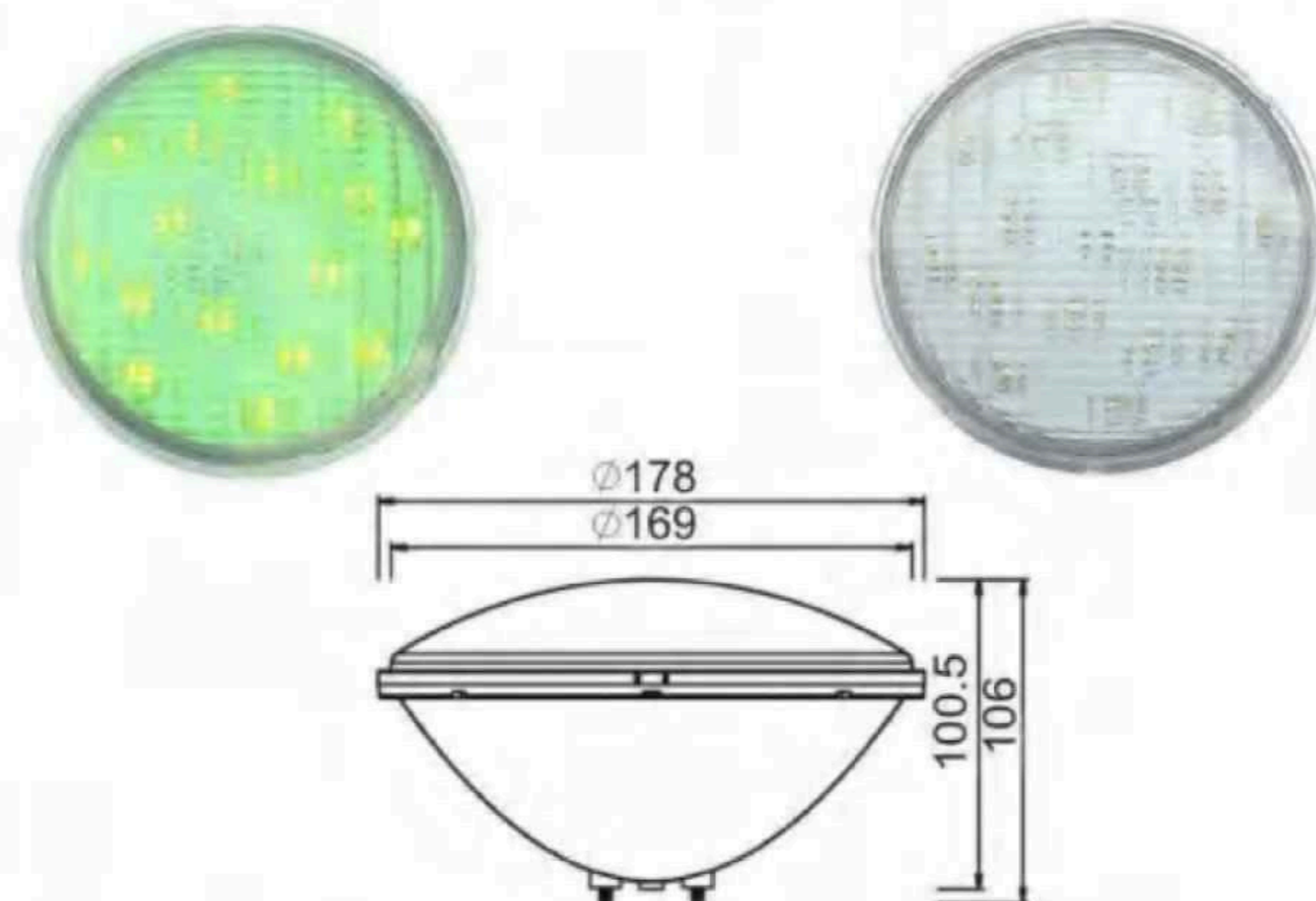
- Standard PAR56 lamp install into standard PAR56 niche.
- Curved PC lens expands the light refraction, and the crystal lens brings high brightness.
- Different LED lamps in option.
- Monochrome and multicolor are available.



Remote control (optional)

### RGB and RGBW

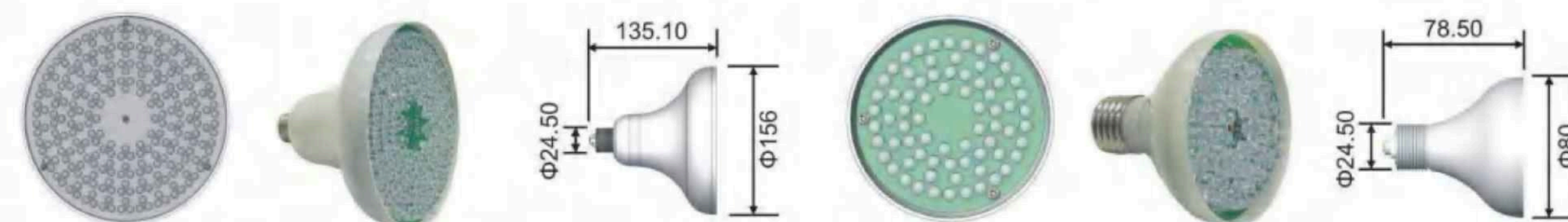
- Common RGB LED bulbs are made by three colours of red, green and blue and create gradients, blinks and blending modes.
- RGBW contains four colors of red, green, blue and white, and expands to millions colours and changing modes to create natural cool white, warm white and infinity other colours



### LED PAR56 BULBS

| Model            | Power (W) | Voltage (V) | LED QTY | Light source     | Color       | Lumination (lux) | Optional: remote control |
|------------------|-----------|-------------|---------|------------------|-------------|------------------|--------------------------|
| WL-PAR-LED252BB  | 18W       | 12V         | 252     | Standard DIP LED | White color | 530              | ×                        |
| WL-PAR-LED252BC  | 18W       | 12V         | 252     | Standard DIP LED | RGB         | 257              | ✓                        |
| WL-PAR-LED012PB  | 12W       | 12V         | 12      | High power LED   | White color | 885              | ×                        |
| WL-PAR-LED012PC  | 12W       | 12V         | 12      | High power LED   | RGB         | 200              | ×                        |
| WL-PAR-LED024PB  | 24W       | 12V         | 24      | High power LED   | White color | 1300             | ×                        |
| WL-PAR-LED024PC  | 24W       | 12V         | 24      | High power LED   | RGB         | 352              | ×                        |
| WL-PAR-LED018JTB | 18W       | 12V         | 54      | SMD LED          | White color | 1185             | ×                        |
| WL-PAR-LED018JTC | 18W       | 12V         | 54      | SMD LED          | RGB         | 245              | ✓                        |
| WL-PAR-LED024JTB | 24W       | 12V         | 72      | SMD LED          | White color | 1240             | ×                        |
| WL-PAR-LED024JTC | 24W       | 12V         | 72      | SMD LED          | RGB         | 375              | ✓                        |
| WL-PAR-LED162JTB | 18W       | 12V-20V     | 162     | Wide voltage     | White color | 1500             | ×                        |
| WL-PAR-LED162JTC | 18W       | 12V-20V     | 162     | Wide voltage     | RGB         | 970              | ×                        |
| WL-PAR-LED216JTB | 24W       | 12V-20V     | 216     | Wide voltage     | White color | 2150             | ×                        |
| WL-PAR-LED216JTC | 24W       | 12V-20V     | 216     | Wide voltage     | RGB         | 1500             | ×                        |
| WL-PAR-LED216HTB | 35W       | 12V-20V     | 216     | Wide voltage     | White color | 2580             | ×                        |
| WL-PAR-LED216HTC | 35W       | 12V-20V     | 216     | Wide voltage     | RGB         | 1800             | ×                        |
| WL-PAR-LED16PC   | 18W       | DC12V       | 16      | SMD LED          | RGBW        | 1380             | ×                        |

## E27 LED LIGHT BULBS



### E27 LED LIGHT BULBS

| Model     | Description   | Power (W) | Voltage (V) | Lumination (lux)                   | Installation type |
|-----------|---|-----------|-------------|------------------------------------|-------------------|
| WL-LED072 | Standard size E27 lamp with 72 leds, able to replace traditional 100W/300W incandescent lamp of light with niche  | 6W        | 12V         | 150 (Cool/warm white)<br>88 (RGB)  | Housing type      |
| WL-LED144 | Standard size E27 lamp with 144 leds, able to replace traditional 100W/300W incandescent lamp of light with niche | 12W       | 12V         | 302 (Cool/warm white)<br>168 (RGB) | Housing type      |
| WL-LED252 | Standard size E27 lamp with 252 leds, able to replace traditional 100W/300W incandescent lamp of light with niche | 18W       | 12V         | 530 (Cool/warm white)<br>257 (RGB) | Housing type      |

## TRANSFORMER



### WATER-PROOF TRANSFORMER FOR POOL LIGHTS

| Model      | Description                                       | Power (W) | Waterproof standard |
|------------|---|-----------|---------------------|
| WL-FSBY50  | Transformer 50W, input AC110V/220V, output AC12V  | 50W       | IP44/IP68           |
| WL-FSBY100 | Transformer 100W, input AC110V/220V, output AC12V | 100W      | IP44/IP68           |
| WL-FSBY150 | Transformer 150W, input AC110V/220V, output AC12V | 150W      | IP44/IP68           |
| WL-FSBY200 | Transformer 200W, input AC110V/220V, output AC12V | 200W      | IP44/IP68           |
| WL-FSBY250 | Transformer 250W, input AC110V/220V, output AC12V | 250W      | IP44/IP68           |
| WL-FSBY300 | Transformer 300W, input AC110V/220V, output AC12V | 300W      | IP44/IP68           |
| WL-FSBY400 | Transformer 400W, input AC110V/220V, output AC12V | 400W      | IP44/IP68           |
| WL-FSBY600 | Transformer 600W, input AC110V/220V, output AC12V | 600W      | IP44/IP68           |

## LIGHT CONTROL BOX

### Features:

- All of the AC12V and AC12-20V input LED lights can be controlled by this system.
- If the system is installed out-of-doors, a housing must be provided to prevent rain and sunlight .
- It is also better to keep the system away from electromagnetism radicalization.
- One system can control the LED lights with total power not more than 100W.
- Electrical overload & leakage protection.
- Easy and simple operation with 4 keys.



### LIGHT CONTROL BOX

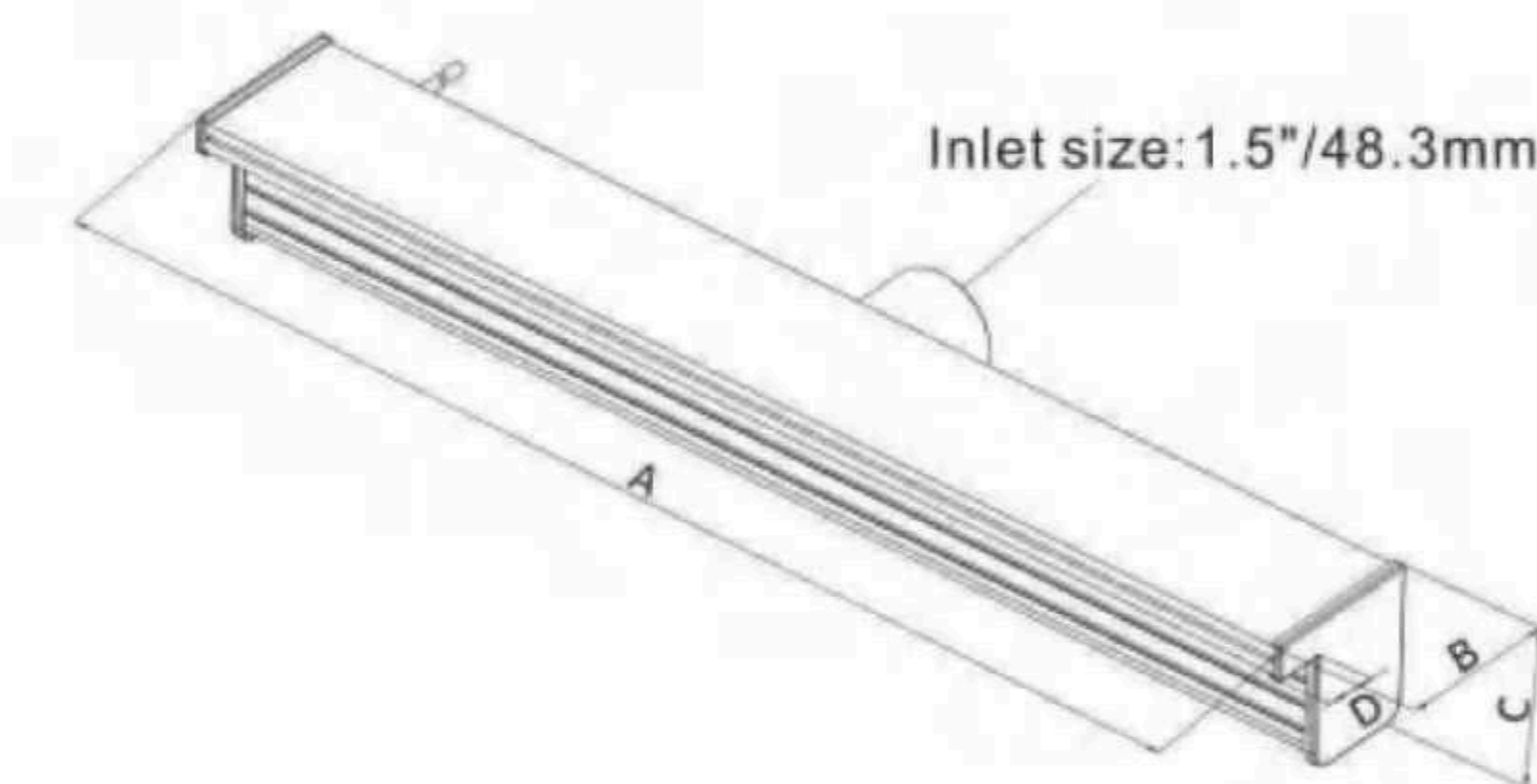
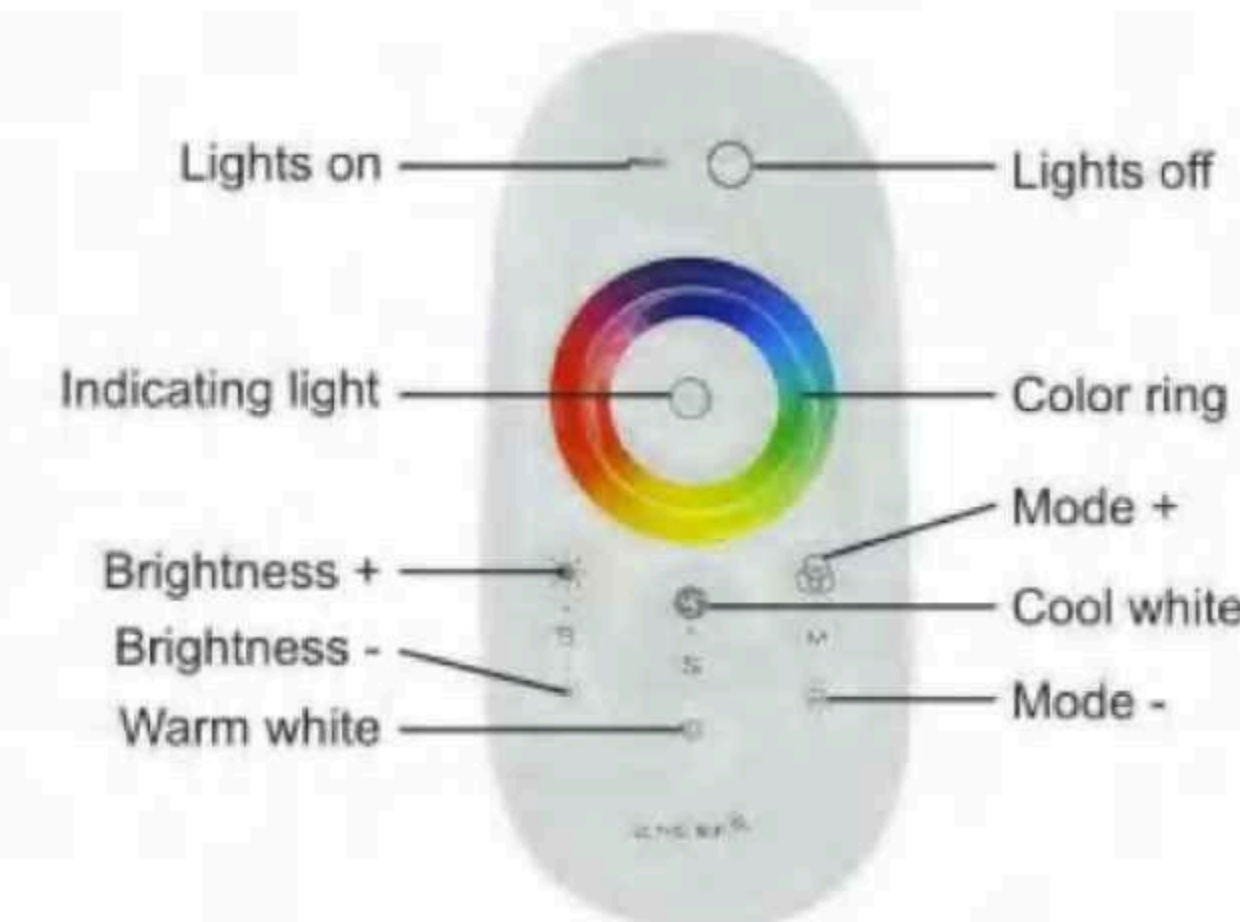
| Model        | Description   | Remote controller | Remote control area |
|--------------|---|-------------------|---------------------|
| WL-LED-YAQ01 | Control box with transformer 100W, input 110-220V, output AC12V | With              | 100 meters          |
| WL-LED-YAQ02 | Control box without transformer, input AC12V, output AC12V      | With              | 100 meters          |

## RGBW TOUCH CONTROLLER

This control system uses the advanced microcomputer technology to easily control the LED underwater lights, with thousands colors and 12 automatic change modes to choose from. With 2.4G wireless high frequency remote control technology, it has the characteristics of lower power consumption, long distance transmission, and strong anti-interference capability, high speed telecommunication, etc. All buttons are with sensitive touch function to achieve color changing and brightness dimming.



- Model: WL-LED-YAQ06.
- Input power: AC100-230V/47-63Hz/1200mA.
- Output power: DC12V/5A/60W.
- Effective control of distance : 30 meters.
- Programs: 12 modes.



The water descent are suitable for installation on finished walls and new construction walls.

Product design unique, novel, beautiful; with the optional RGB LED strip, the unit provides you colourful waterfall, which will bring elegance and visual interest to your life; Efficient to hide outlet, to a beautiful linear effect the water.

### Features:

- The water descent can be widely used in swimming pool, parks or gardens.
- Different lengths available: 300mm, 600mm, 900mm, 1200mm, 1500mm.
- Free choice: with or without led strip.
- Safety power DC12V output is more reliable and security.
- Multiple color is available to switch by remote controller.
- The LED lights can be operated through remote control,18 light modes are available.
- Lip:25mm.



### Technical Data

| Model       | A (mm) | B (mm) | C (mm) | D (mm) | LED        | Type Of Wall Installation |
|-------------|--------|--------|--------|--------|------------|---------------------------|
| WDA300-25   | 300    | 138    | 79     | 25     | ----       | Existing wall             |
| WDA600-25   | 600    | 138    | 79     | 25     | ----       | Existing wall             |
| WDA900-25   | 900    | 138    | 79     | 25     | ----       | Existing wall             |
| WDA1200-25  | 1200   | 138    | 79     | 25     | ----       | Existing wall             |
| WDA1500-25  | 1500   | 138    | 79     | 25     | ----       | Existing wall             |
| WDA300-25L  | 300    | 138    | 79     | 25     | DC 12V/4W  | Existing wall             |
| WDA600-25L  | 600    | 138    | 79     | 25     | DC 12V/8W  | Existing wall             |
| WDA900-25L  | 900    | 138    | 79     | 25     | DC 12V/12W | Existing wall             |
| WDA1200-25L | 1200   | 138    | 79     | 25     | DC 12V/17W | Existing wall             |
| WDA1500-25L | 1500   | 138    | 79     | 25     | DC 12V/22W | Existing wall             |



Control system with transformer



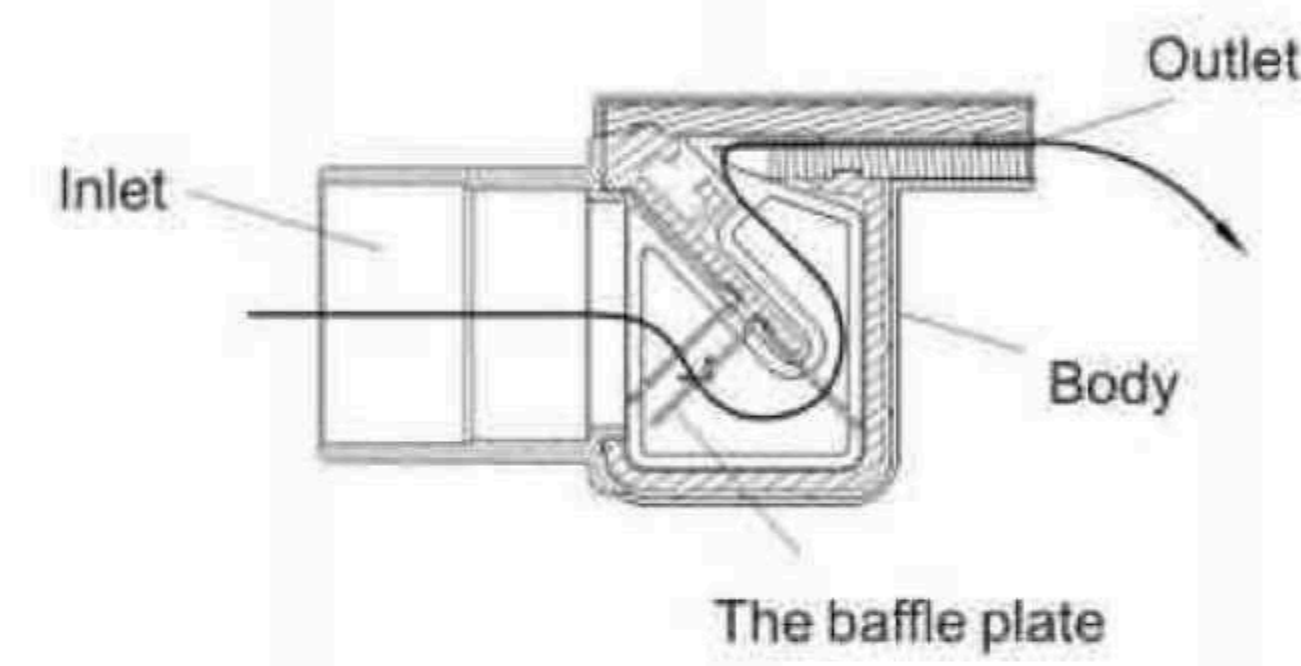
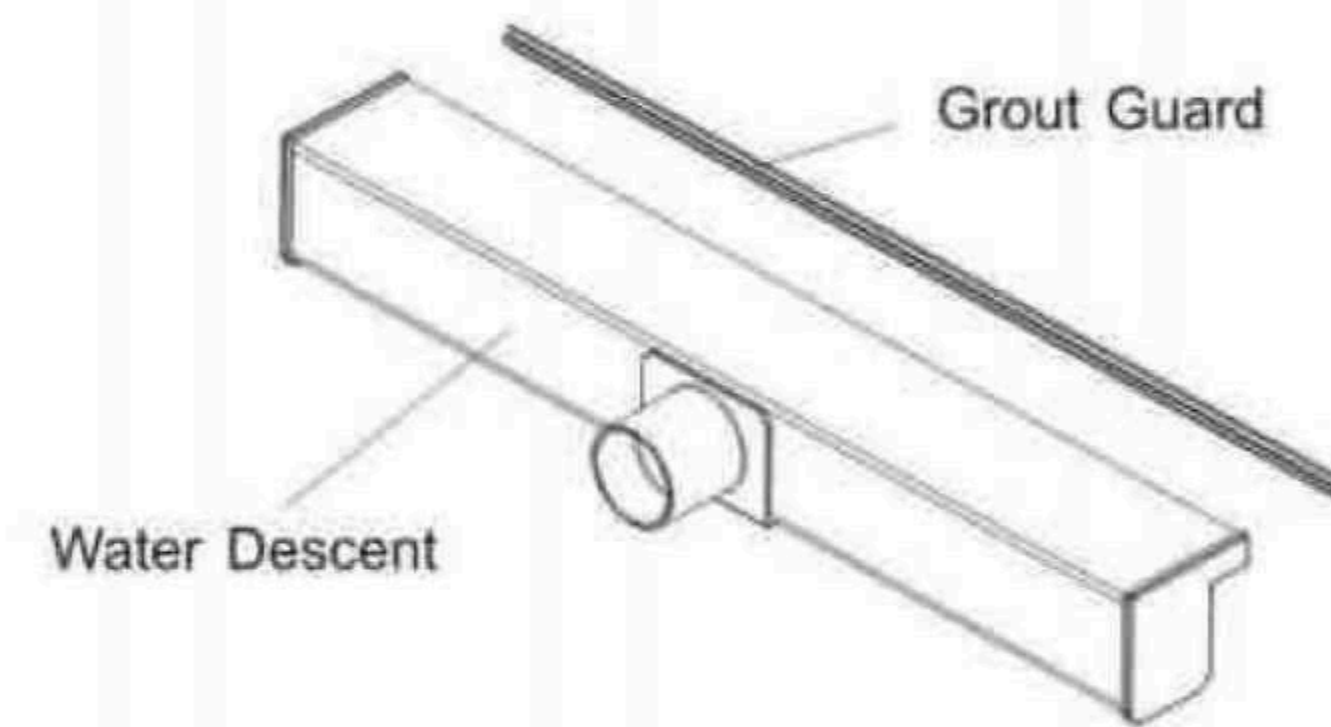
Transformer



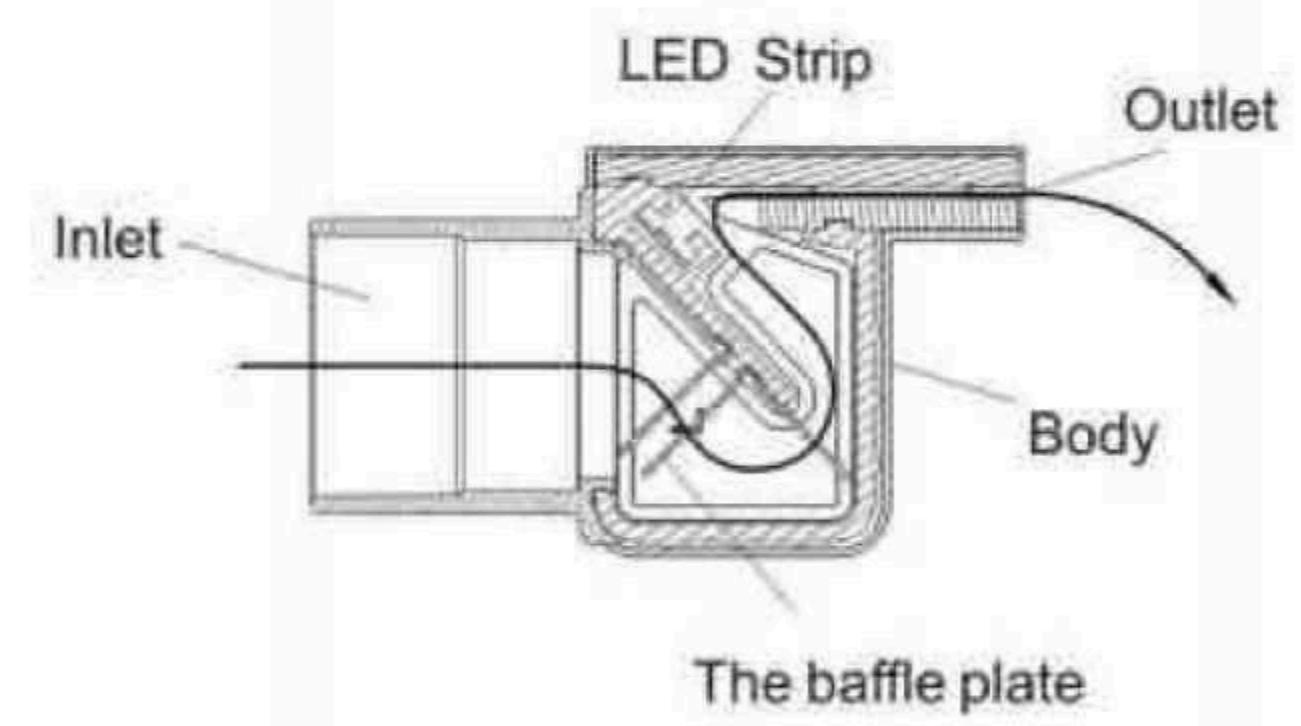
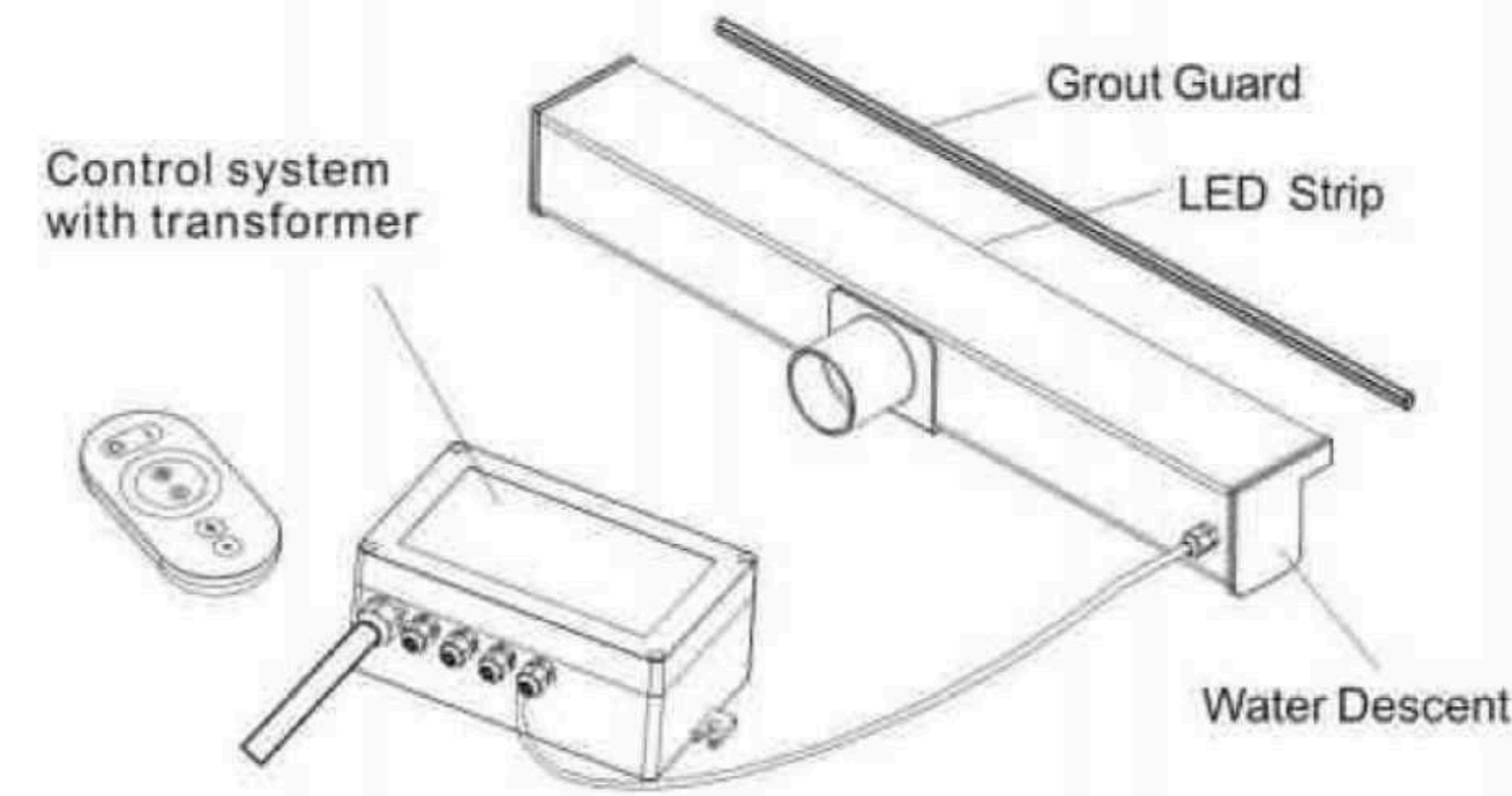
Control board+controller

**Specification:**

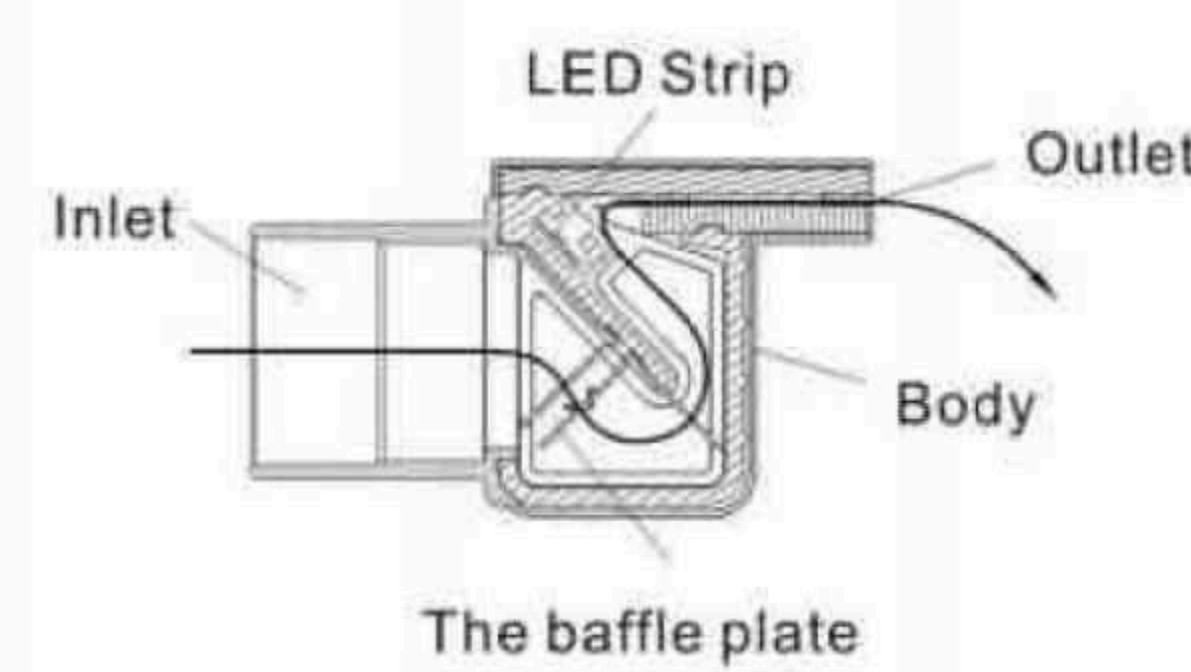
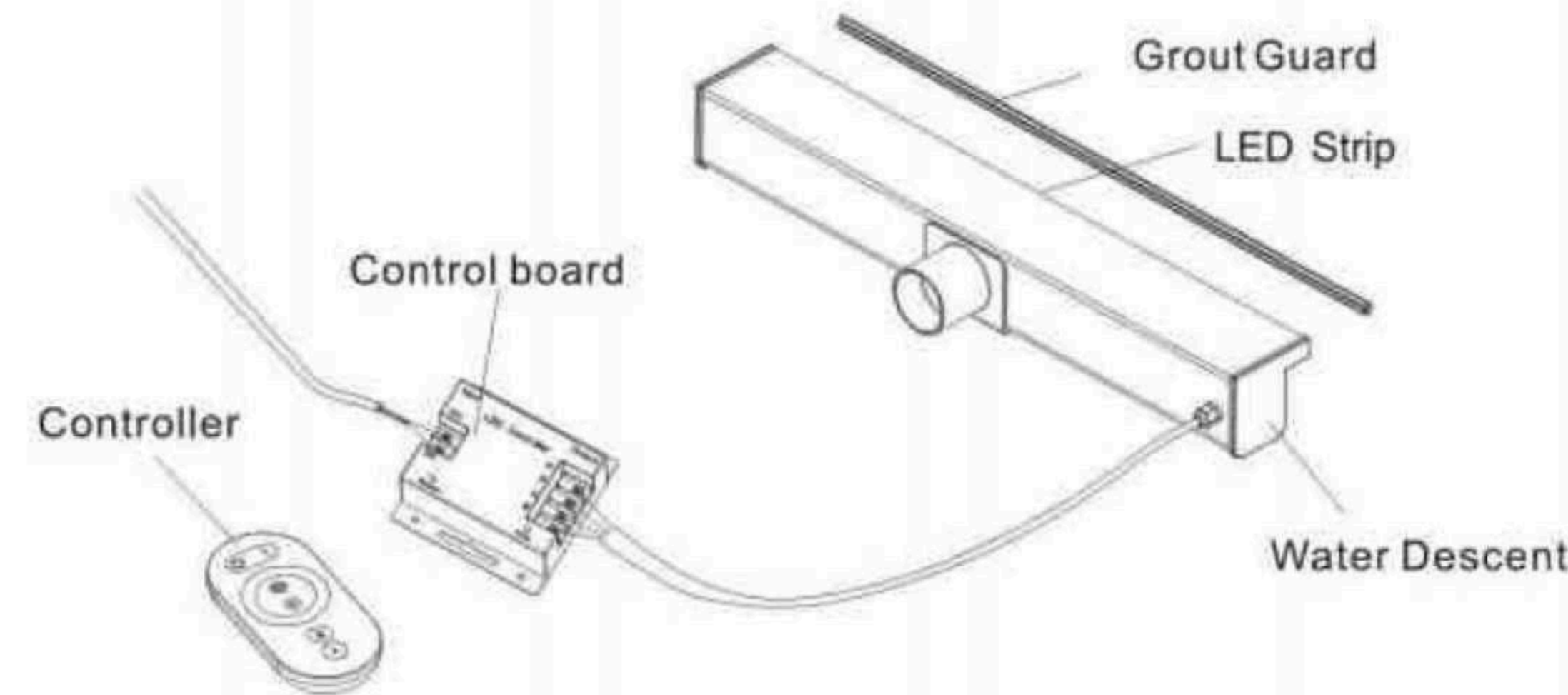
- Water descent



- Water descent with control system & transformer

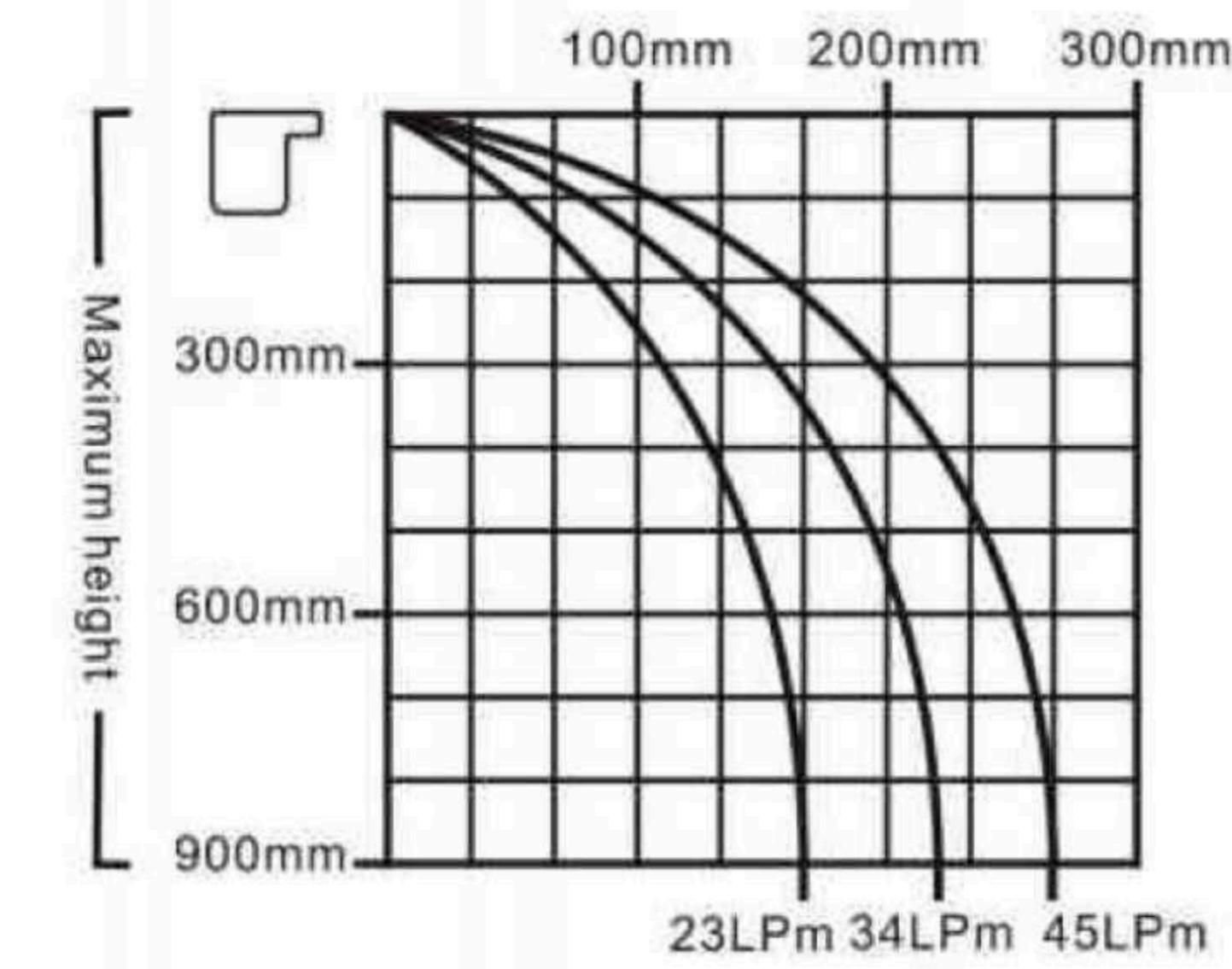


- Water descent with control board+controller

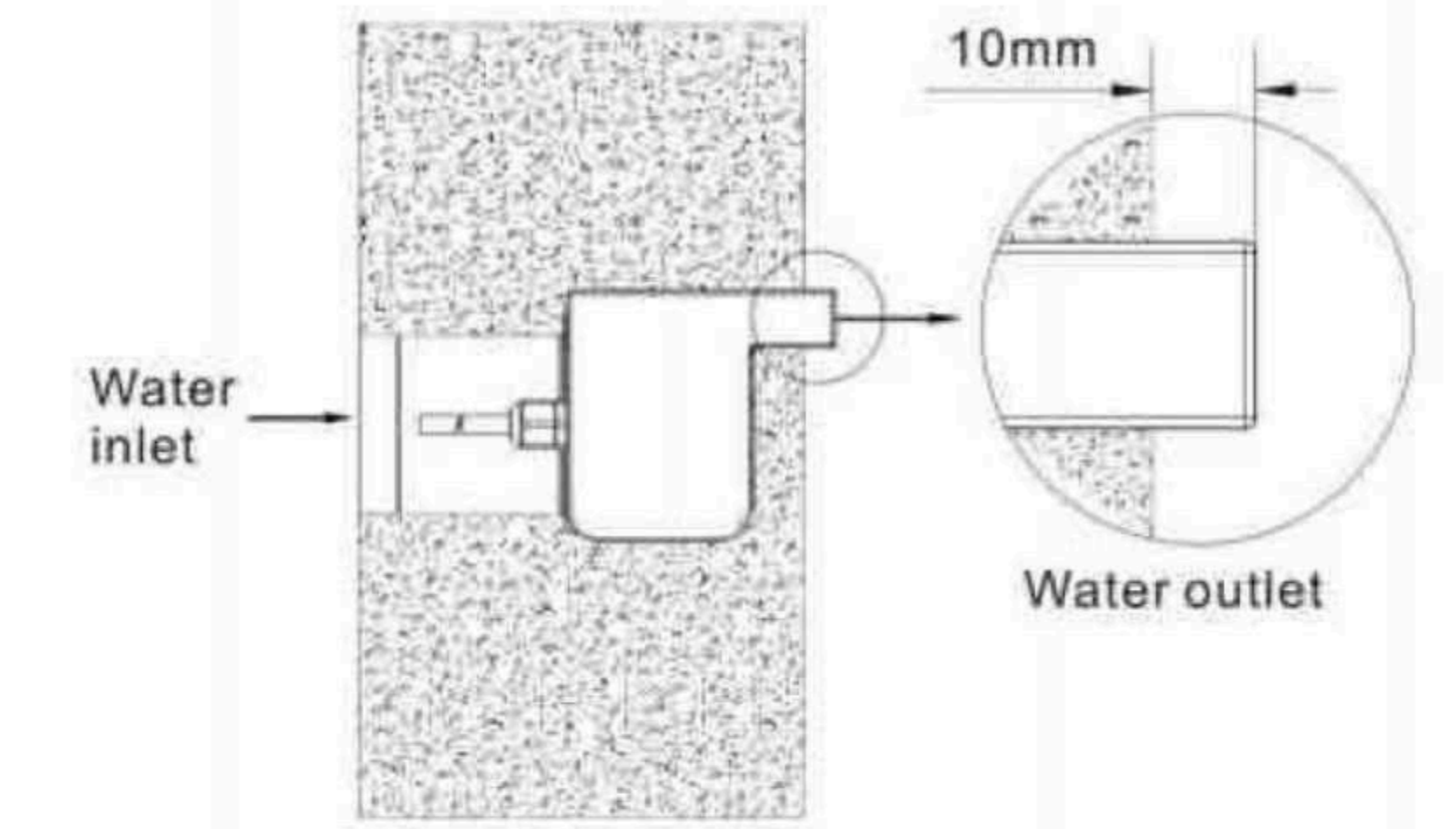


Note: Must be mounted in a waterproof enclosure.

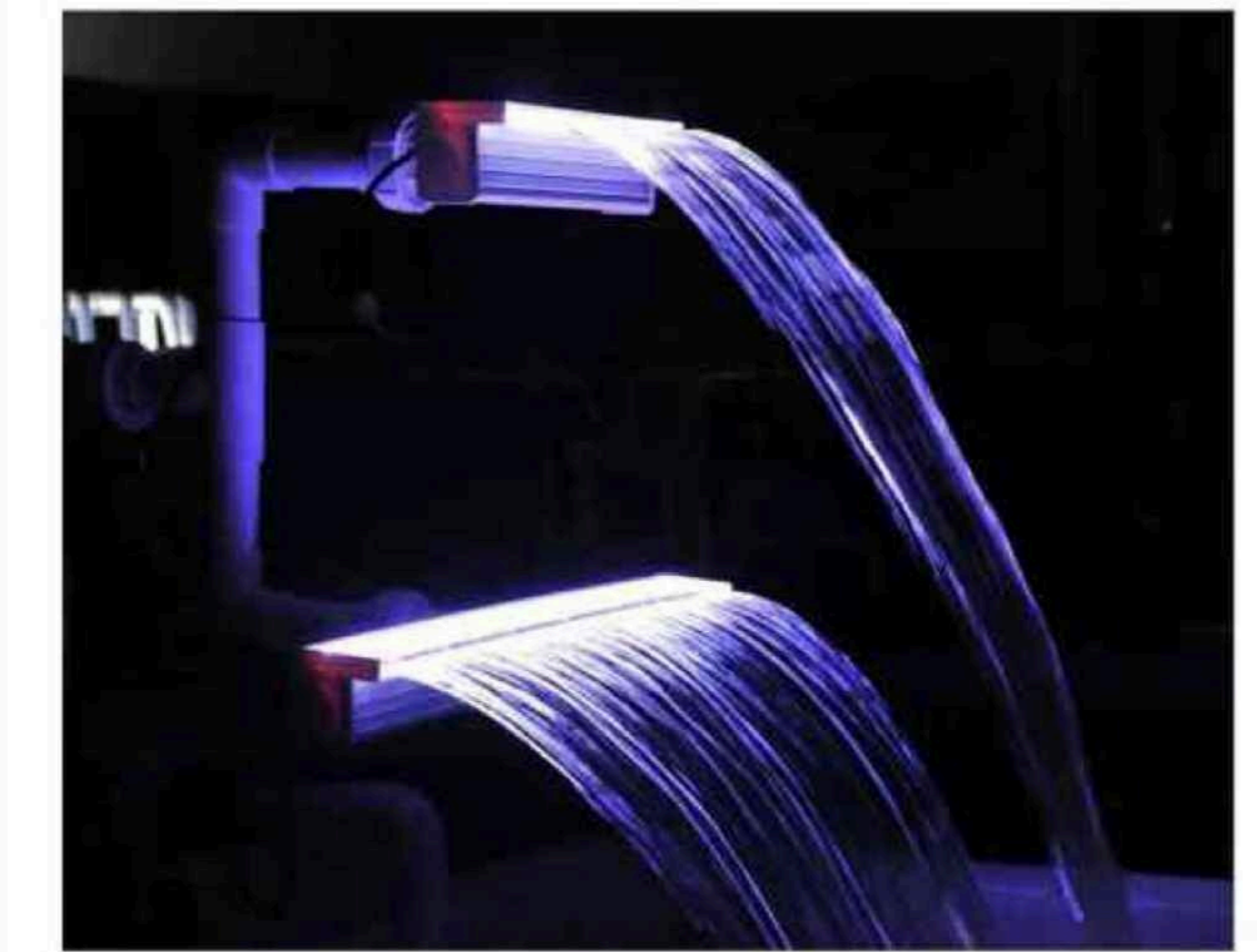
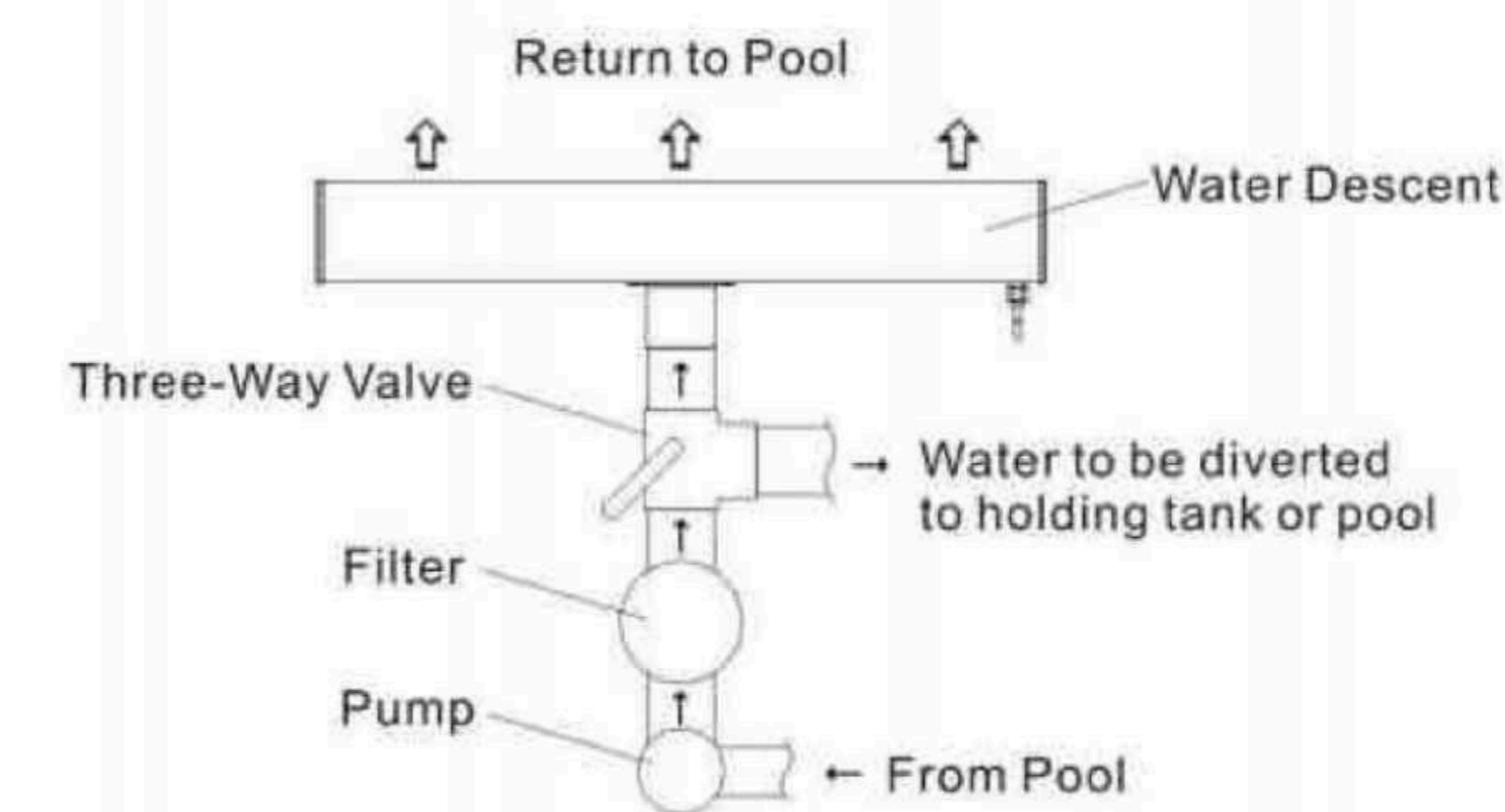
Approximate projection of sheet of water per 300mm of waterfall length



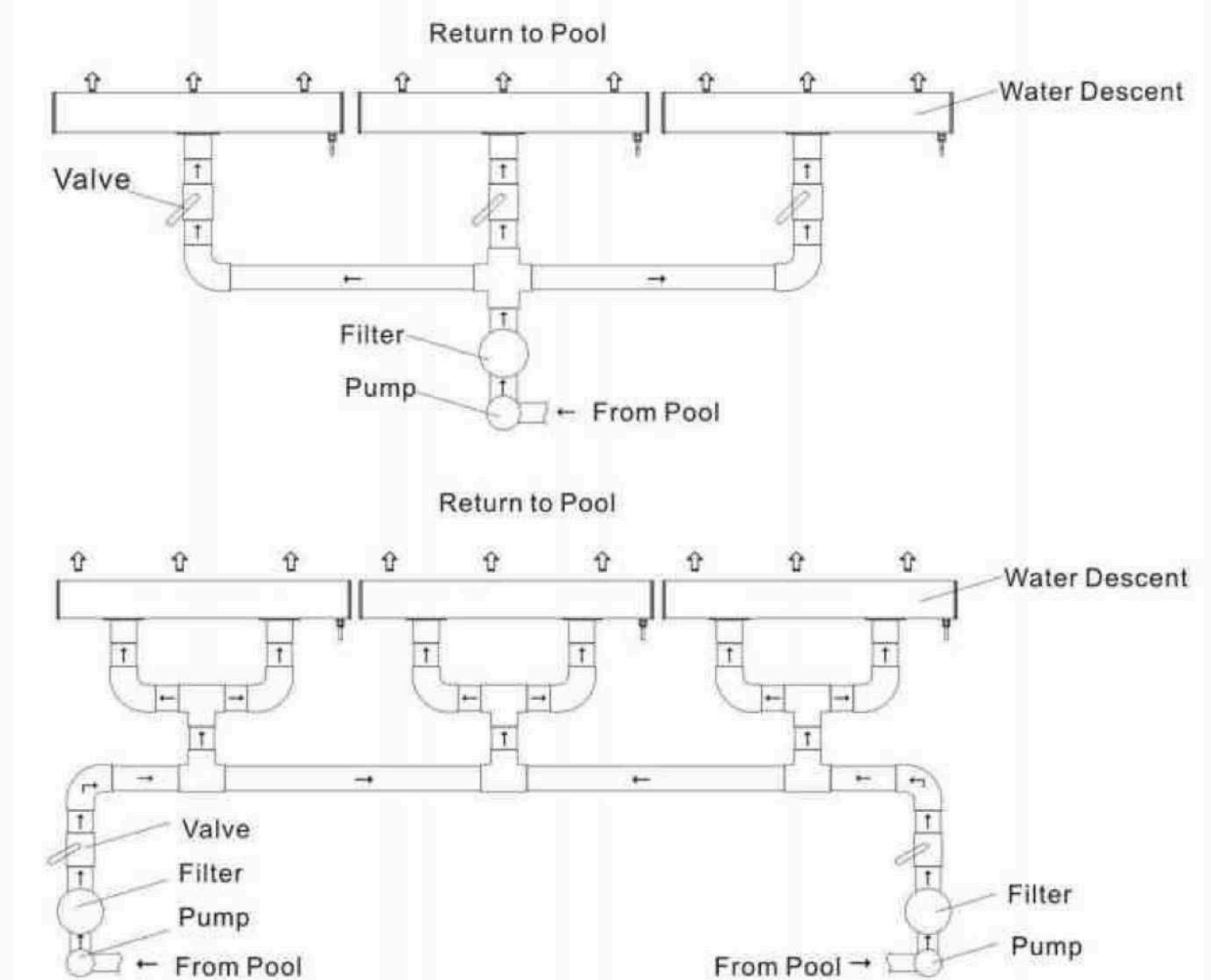
Waterfall installation icon applies to existing wall styles



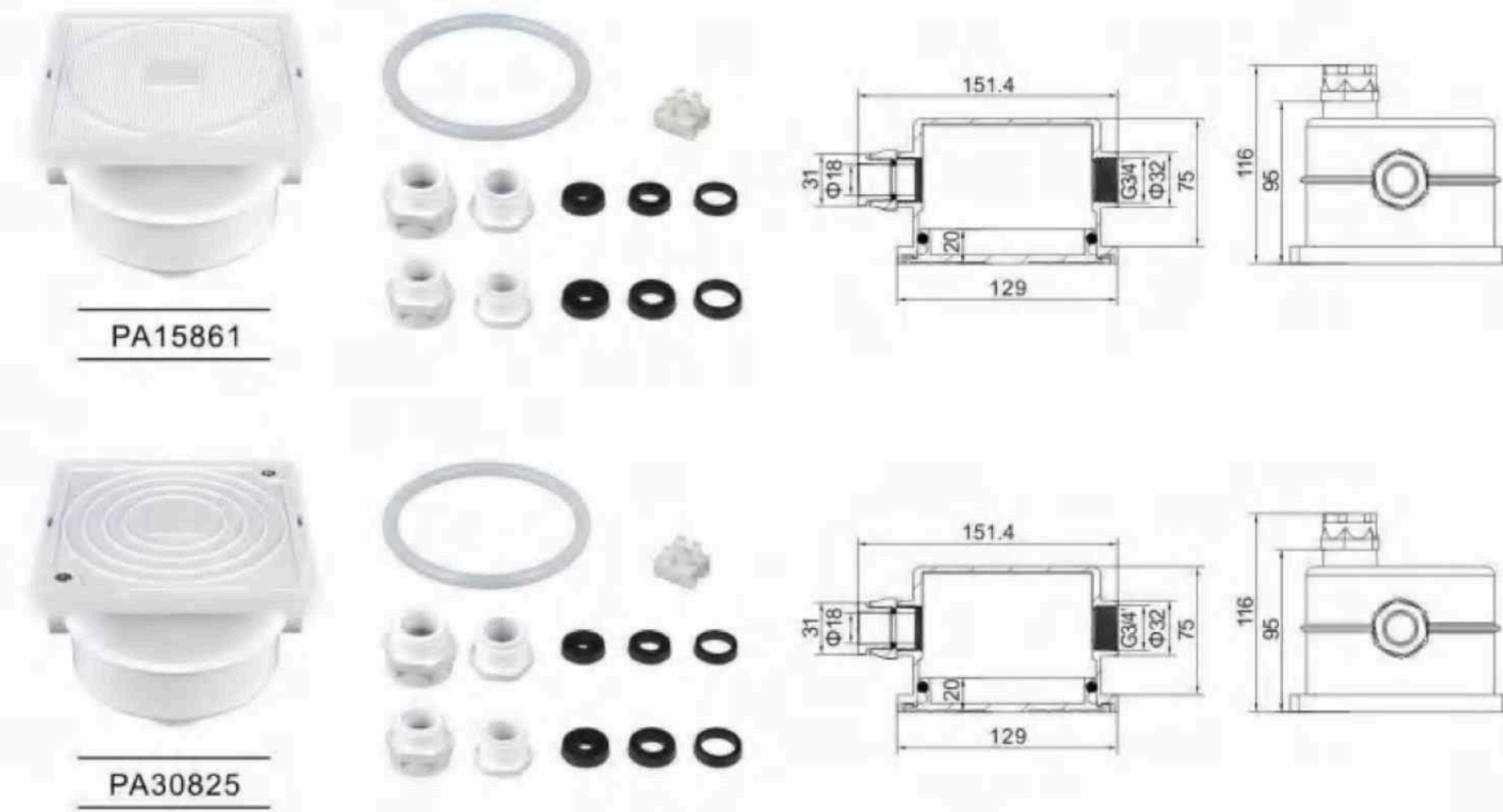
**Installation for piping single unit with ball valve**



**Multiple units ball valve. (It is best to valve each unit)**



## JUNCTION BOX & FLEXIBLE HOSE



| Products | Junction Box |
|----------|--------------|
| Model    | PA15861      |
| Colour   | White color  |
| Material | ABS          |

| Products | Junction Box |
|----------|--------------|
| Model    | PA30825      |
| Colour   | White color  |
| Material | ABS          |



| Products   | Flexible hose    |
|------------|------------------|
| Model      | PA00394          |
| Colour     | Gray             |
| Material   | ABS              |
| Length     | 1meter           |
| Connection | 3/4" ext. thread |

## WATERPROOF WIRE CONNECTORS

- Model: LS-M20-10
- Description: 2-ways 3-pole wire connector, Cage spring type.
- Cable size:  $\varnothing 6-10\text{mm}$ , including live wire, neutral wire and earth wire.
- Rated voltage: 300V.
- Rated current: 10A.
- Overvoltage category: III.
- Insulation resistance:  $\geq 100\text{M}\Omega$ .
- Operating temperature:  $-40^{\circ}\text{C}-125^{\circ}\text{C}$ .
- IP degree protection: IP67/IP68.

Wide Usability: Suitable for fast connection to the outdoor lighting, underwater lighting, underfloor heating, etc. Can be used to repair and extend power cables.



## WATERPROOF WIRE CONNECTORS

- Model: LS-M20S-11
- Description: 2-ways 3-pole wire connector, Screw type.
- Cable size:  $\varnothing 7-10.5\text{mm}$ , including live wire, neutral wire and earth wire.
- Rated voltage: 400V.
- Rated current: 10A.
- Overvoltage category: III.
- Insulation resistance:  $\geq 100\text{M}\Omega$ .
- Operating temperature:  $-40^{\circ}\text{C}-125^{\circ}\text{C}$ .
- IP degree protection: IP67/IP68.

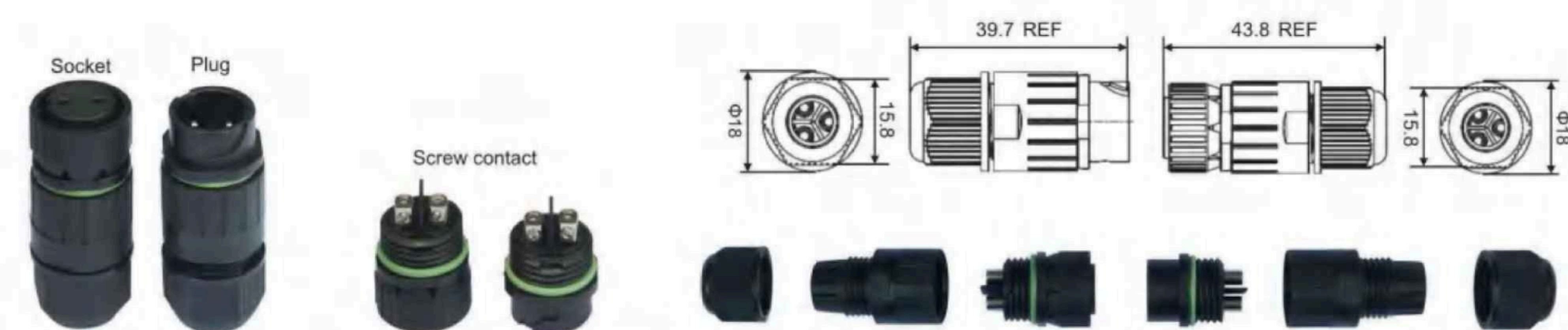
Wide Usability: Suitable for fast connection to the outdoor lighting, underwater lighting, underfloor heating, etc. Can be used to repair and extend power cables.



## WATERPROOF WIRE CONNECTORS

- Model: LS-YN1200WN-P.
- Description: 2-ways 2-pin wire connector, plug and play.
- Cable size:  $\varnothing 3.5-5.5\text{mm}$ , including live wire, neutral wire and earth wire.
- Rated voltage: 230V/AC/DC.
- Rated current: 13A.
- IP degree protection: IP67.

Wide Usability: Suitable for fast connection to the outdoor lighting, underwater lighting, underfloor heating, etc. Can be used to repair and extend power cables.





# Disinfecting Equipment



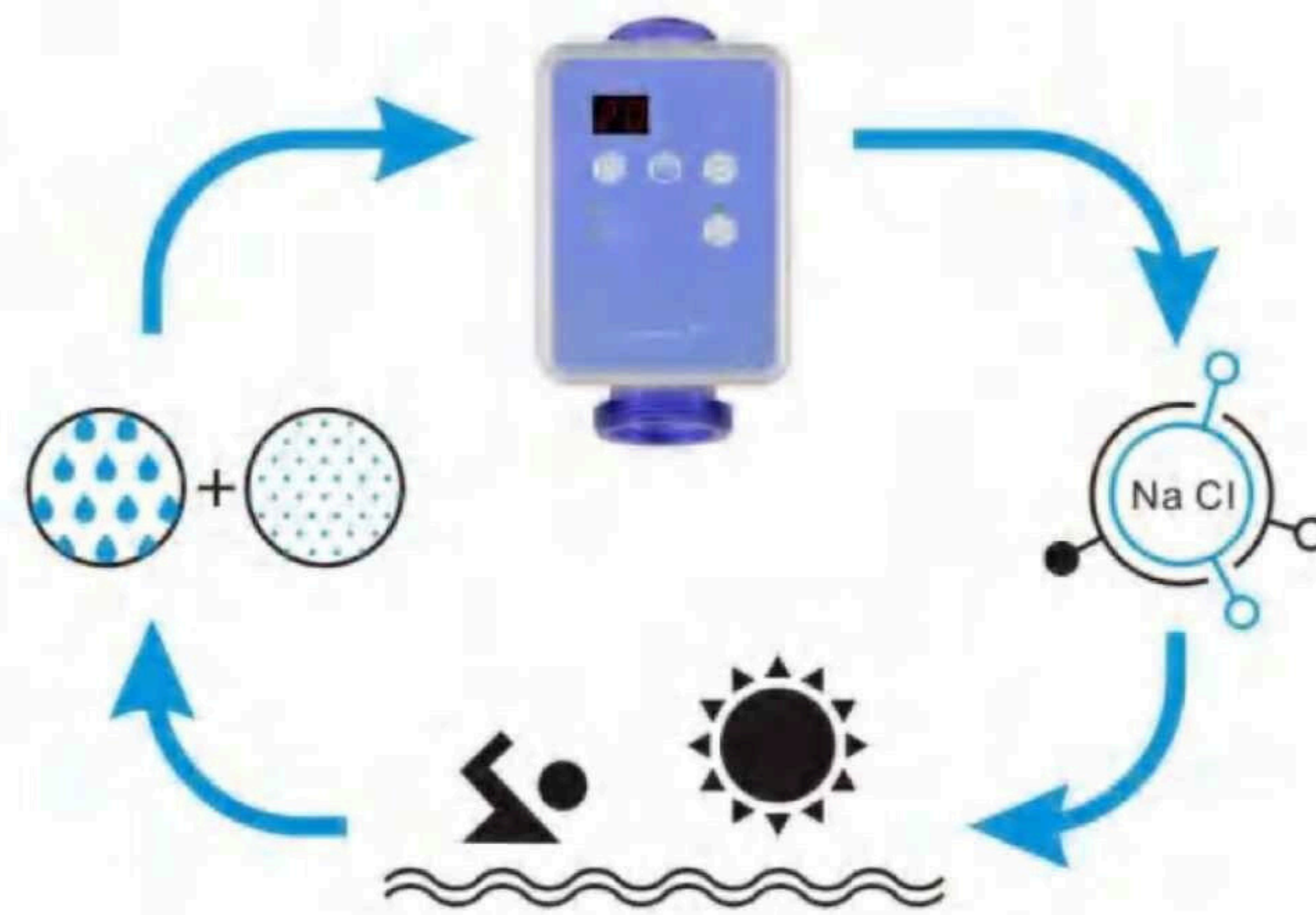
HQ/SQ  
SALT CHLORINATOR

# SR SALT CHLORINATOR DISINFECTING EQUIPMENT

SR series salt chlorinator is specially designed for small pools. It can't be easier to realize chlorine disinfecting and micro ozone disinfecting by adding salt to swimming pools which can turn into active chlorine and active oxygen. What's more, this salt chlorinator is easy to maintain with the titanium cells' self-cleaning function and easy-control panel. Easily running a safe and clean swimming pool with SR series salt chlorinator. You will never have trouble of traditional chlorine disinfection.



IPX4



AUDIO AND VISUAL ALARM

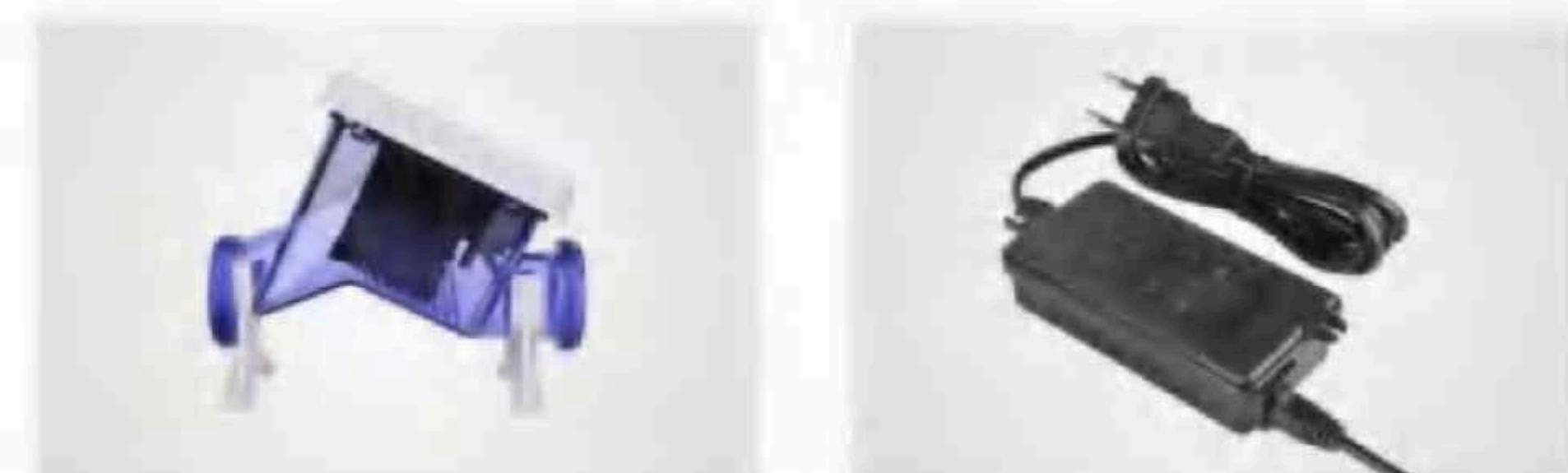
SMART MEMORY SYSTEM

CHLORINE OUTPUT ADJUSTABLE

SELF-CLEAN

WATER FLOW SWITCH

LOW SALT ALARM



### Feature:

- 2 types connections available: 50mm/1.5" unions must be sealed with PVC cement or 32/38mm flexible hose locked with stainless steel collars. (stainless steel collar is optional)
- Integrated water flow switch, water temperature sensor and salinity monitor, which is easy to monitor the water quality.
- Preset multiple intelligent operation modes, one-button switching, simple operation, time and worry saving.
- It is easy to maintain and alerts abnormalities with the built-in warning function.
- The unique housing design with transparent material is easy to observe the operation.



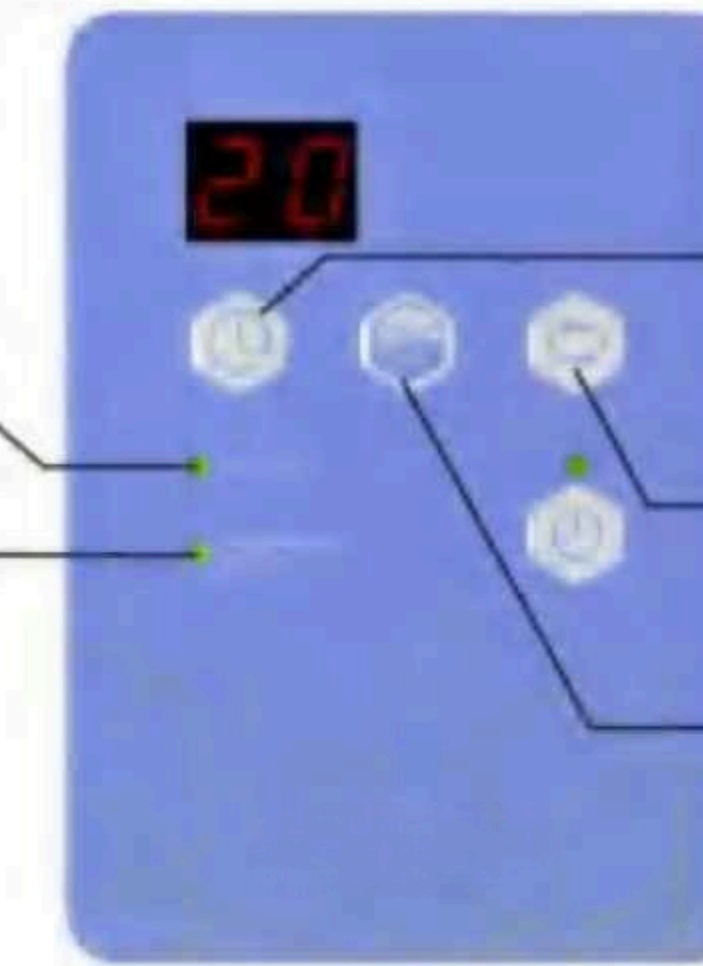
D50mm/1.5"connection



32/38mm connection

Low salt alarm, when the salinity is too low, the chlorinator will alarm with error code.

Operating status  
Red: stop/standby  
Green: working

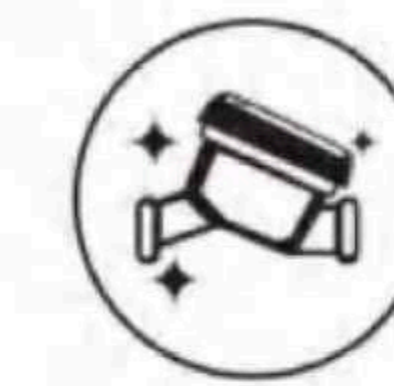


Working time selection.

Self-cleaning reverse polarity, to reduce the scaling forming and prolong the electrode lifetime.

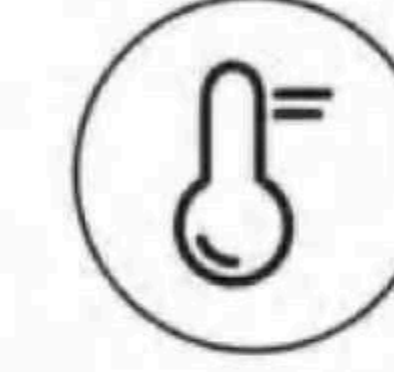
HALF/FULL chlorine output selection.

### Advantages:



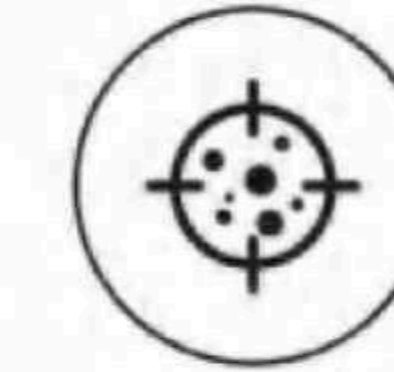
#### Self-cleaning

Self-cleaning can prevent calcium from accumulating and can be set to reverse polarity every 4, 8, or 12 hours, which can extend the life of the titanium plates.



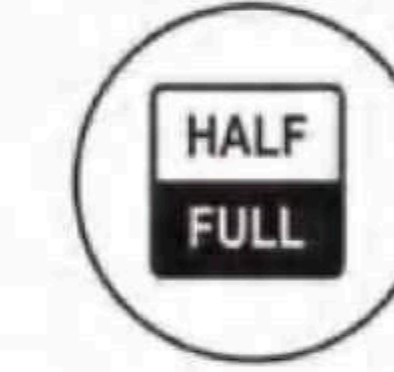
#### Water Temperature Monitoring

It warns if the water temperature is more than 45°C(113°F) or lower than 10°C(50°F). It will shut down while more than 45°C.



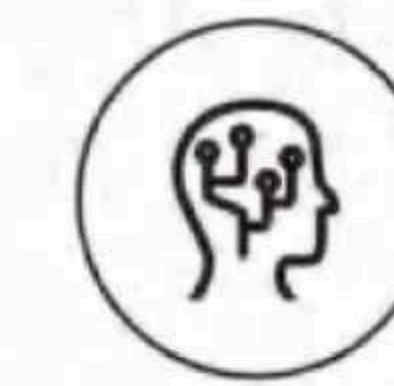
#### Salinity Monitoring

It warns if the salinity is too low to maintain effective disinfection.



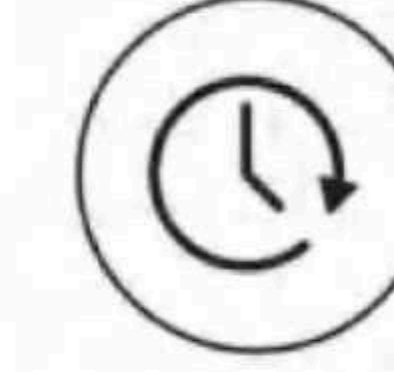
#### Chlorine Production

One key to chose HALF/FULL chlorine output.



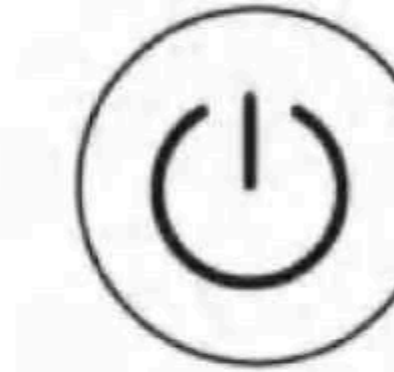
#### Memory

The salt chlorinator turns on automatically and reverses the polarity after powering on. At the same time, it can revert to the settings of the last operation.



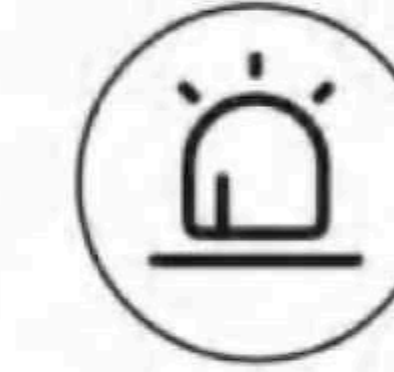
#### Operation Time Setting

You can set the operation time according to different pools to save energy. Working time can be set by manual.



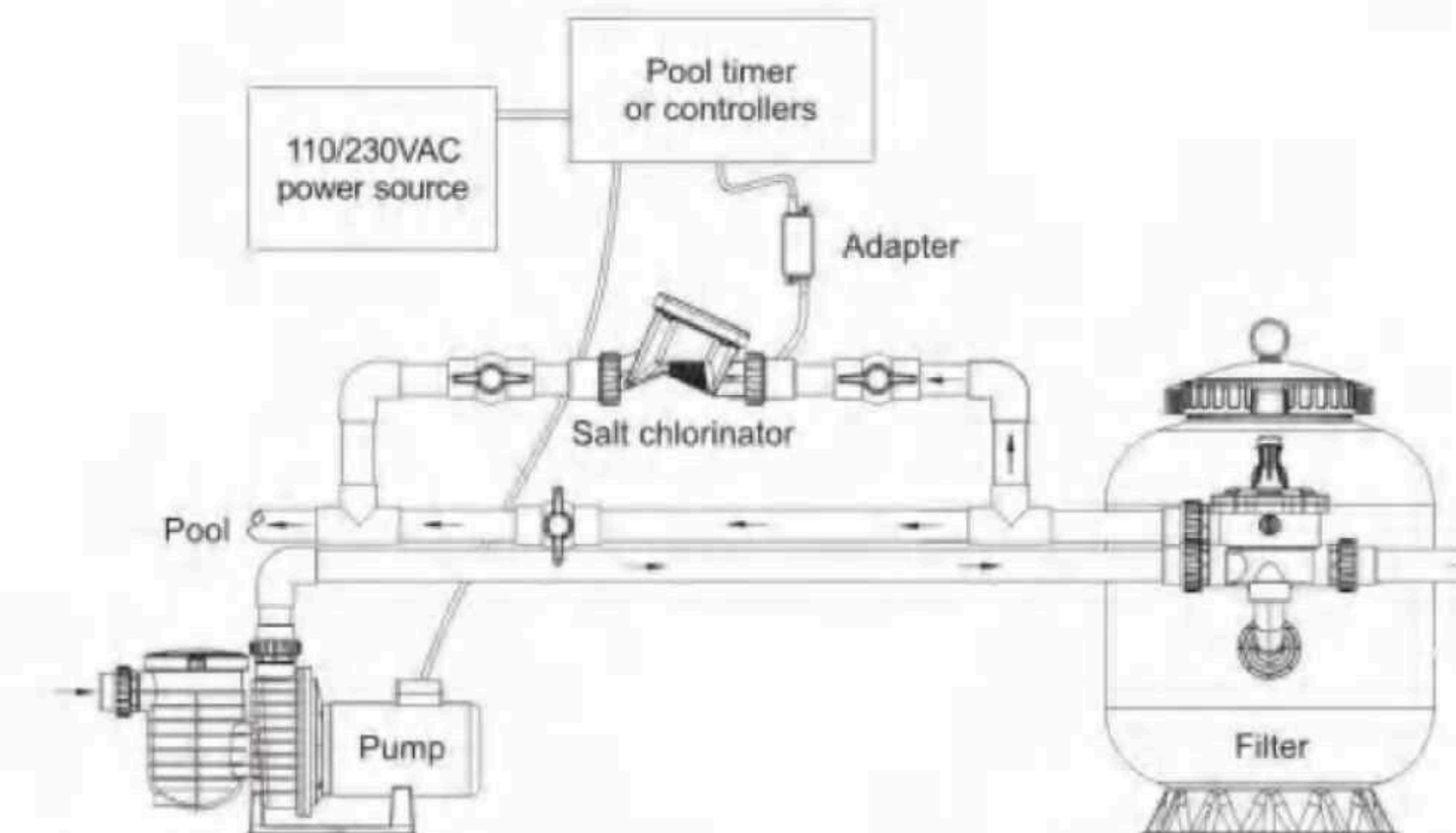
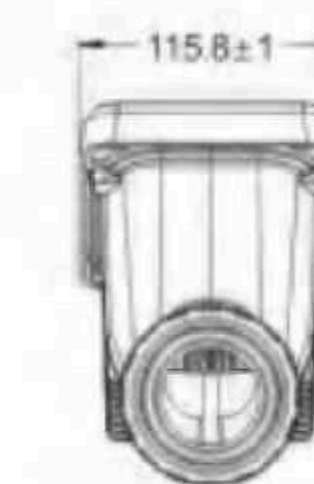
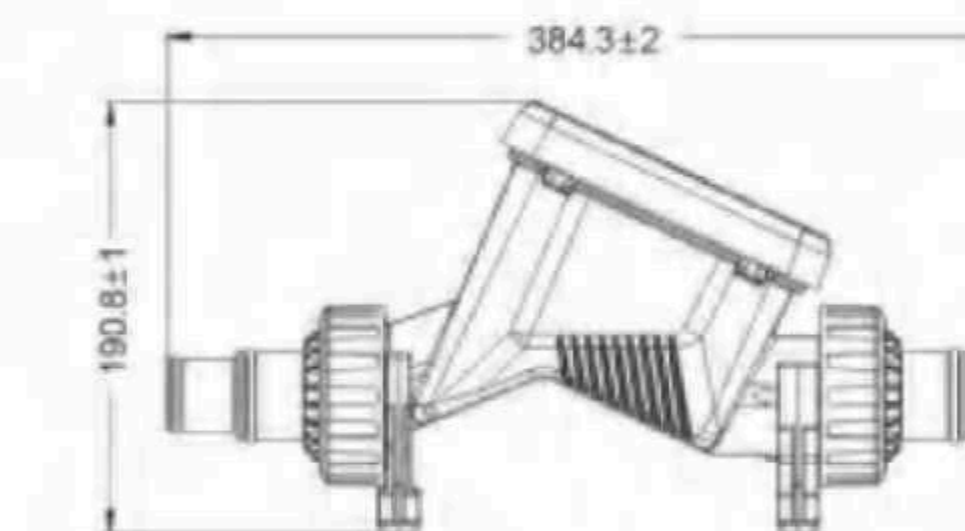
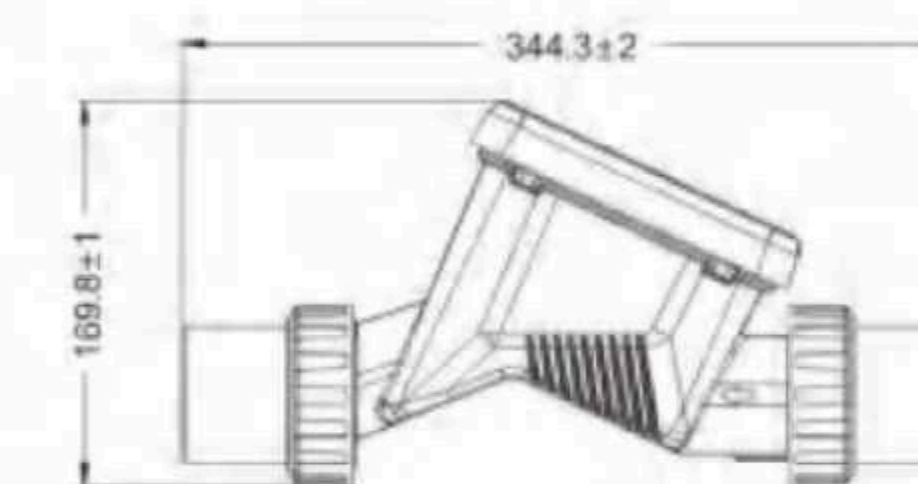
#### Restore Default Settings

Back to default setting by pressing the restore button.



#### Error Alarm For Troubleshooting

The salt chlorinator automatically shuts down in case of abnormalities due to the protection function of voltage, current and water flow. It extends the life of the salt chlorinators.



| Model | Power input          | Power output | Chlorine production | Ideal salinity | Recommended pool volume(m <sup>3</sup> ) |
|-------|----------------------|--------------|---------------------|----------------|--|
| SR050 | AC100-240V 50Hz/60Hz | DC24V        | 5g/h                | 2700-4500PPM   | ≤22m <sup>3</sup>                        |
| SR075 | AC100-240V 50Hz/60Hz | DC24V        | 7.5g/h              | 2700-4500PPM   | ≤34m <sup>3</sup>                        |
| SR100 | AC100-240V 50Hz/60Hz | DC24V        | 10g/h               | 2700-4500PPM   | ≤45m <sup>3</sup>                        |

Note: • In practice, the local pool standards and professional habits should be considered, and the adjusting allowance of 20-30% should be reserved.  
• For outdoor pool, cyanuric acid (stabilizer) should be added to pool water, the ideal range for cyanuric acid is 25-50ppm when used.

## HQ/SQ SALT CHLORINATOR DISINFECTING EQUIPMENT

HQ/SQ salt chlorinator improves your pool water quality by using harmless table salt, instead of using harsh chemicals. It is reliable, low maintenance, much more safety to health. Easy and simple programming and fully automatic operation lets you enjoy a relaxed swimming time.

Salt chlorinators are an alternative means of sanitizing your pool with chlorine by electrolysis process. The electrolysis process is achieved by passing the salty water through an electrolytic cell, sodium chloride in the water is converted into chlorine to achieve pool water disinfection.

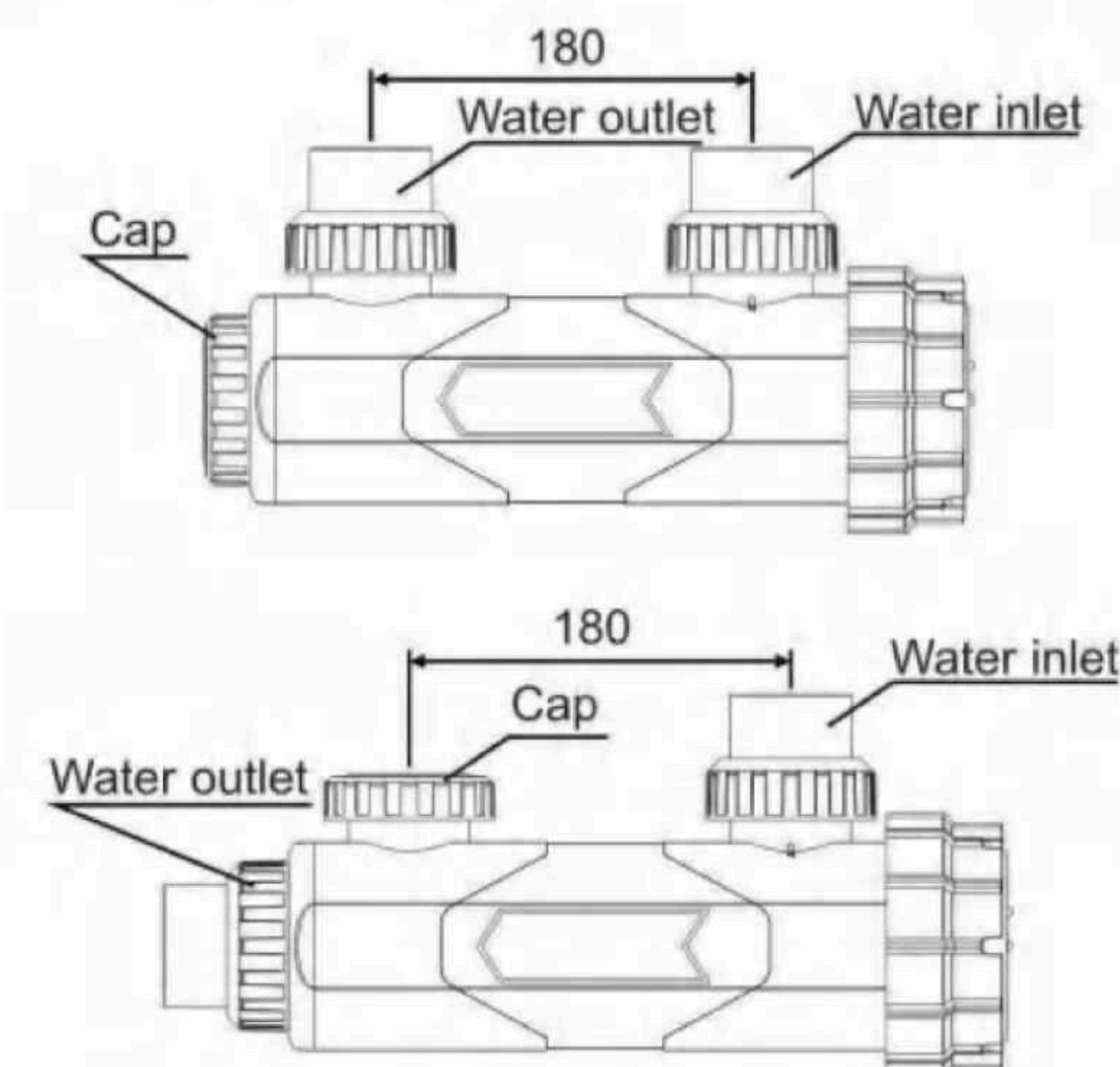


HQ salt chlorinator control panel

### Features:

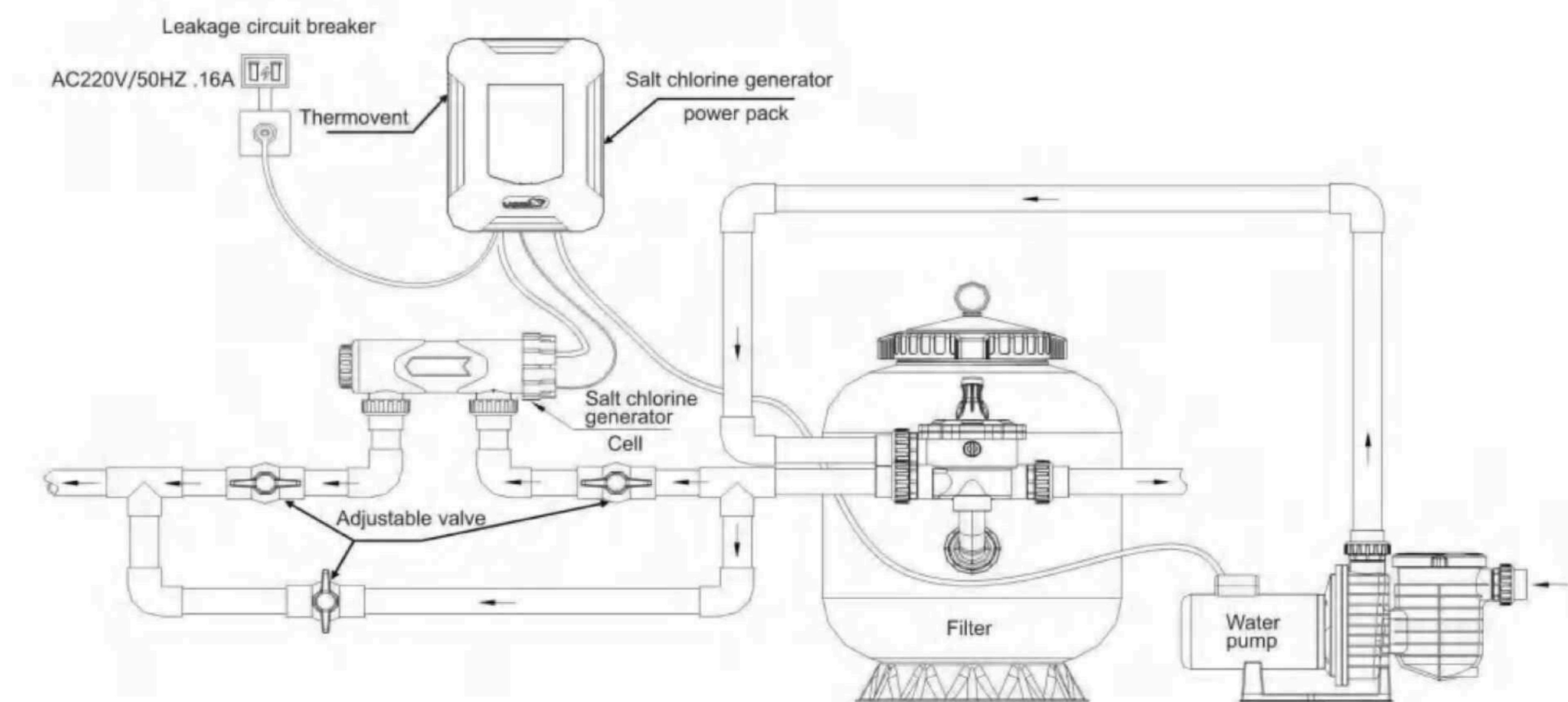
- Self clean function: by reverse the polarity automatically, which prevents calcium from accumulating and therefore prolong the cell's lifetime.
- Six different chlorine output control: easy adjustment of chlorine level, to meet demand of different time, this will save energy and environment friendly.
- HQ salt chlorinators are equipped with timer for pump and timer for underwater light.
- Smart cooling: the cooling intensity can be adjustment according to the temperature inside the control box.
- Protect from no adequate water causing the generator or cell destroyed.
- Overheat protection: prolong the control system life span.
- Alarm system: automatic protection for your system and pool if salt level is too low.
- Temperature sensor could be changed separately, reduce the maintenance cost.

### Humanized design of two outlets



### Titanium panels with fast, efficient and stable chlorine output

- Titanium panels with coating enable to generate chlorine fast, efficiently and stably.
- Cell housing is made of high strength and Corrosion-resistant PC, which prolong the life time.
- Detachable titanium panels are easy to install, clean and daily maintain.
- Two optional outlets make installation more convenient.



HQ salt chlorinators are equipped with timers for pump and underwater light.

| Model | Electrolytic cell dimensions LxWxH (mm) | Max Chlorine production (g/h) | Voltage (V) | Total power (W) | Pump power (Max) | Light power (Max) | Max Pool Volume (m <sup>3</sup> ) |
|-------|---|-------------------------------|-------------|-----------------|------------------|-------------------|-----------------------------------|
| HQ 20 | 365x260x140                             | 16                            | AC220~240V  | 1.70kW          | 1.5kW/6.8A       | AC12V/100W        | 68                                |
| HQ 30 | 365x260x140                             | 25                            | AC220~240V  | 1.75kW          | 1.5kW/6.8A       | AC12V/100W        | 105                               |
| HQ 40 | 365x260x140                             | 33                            | AC220~240V  | 1.80kW          | 1.5kW/6.8A       | AC12V/100W        | 140                               |
| HQ 50 | 365x260x140                             | 42                            | AC220~240V  | 1.85kW          | 1.5kW/6.8A       | AC12V/100W        | 175                               |
| SQ 20 | 365x260x140                             | 16                            | AC220~240V  | 0.25kW          | ---              | ---               | 68                                |
| SQ 30 | 365x260x140                             | 25                            | AC220~240V  | 0.25kW          | ---              | ---               | 105                               |
| SQ 40 | 365x260x140                             | 33                            | AC220~240V  | 0.25kW          | ---              | ---               | 140                               |
| SQ 50 | 365x260x140                             | 42                            | AC220~240V  | 0.25kW          | ---              | ---               | 175                               |

### Note:

- In practice, the local pool standards and professional habits should be considered, and the adjusting allowance of 20-30% should be reserved.
- For outdoor pool, cyanuric acid (stabilizer) should be added to pool water, the ideal range for cyanuric acid is 25-50ppm when used.

## EC SALT CHLORINE GENERATORS DISINFECTING EQUIPMENT

The MILLIAN EC Series Salt Chlorinator applied advanced micro-computer technology and customer oriented design, to provide the most energy saving and environmental friendly method to sanitize small and medium pools. To achieve this simple, smart and safe chlorine production, all the chlorinator require is only salt.

### Featured Highlights:

- Simple  
Easy installation, simple operation and maintenance.

- Smart  
Smart adjustment  
Chlorine output is adjustable from 20% to 100% by simply pressing two buttons, satisfying different needs for different pools.

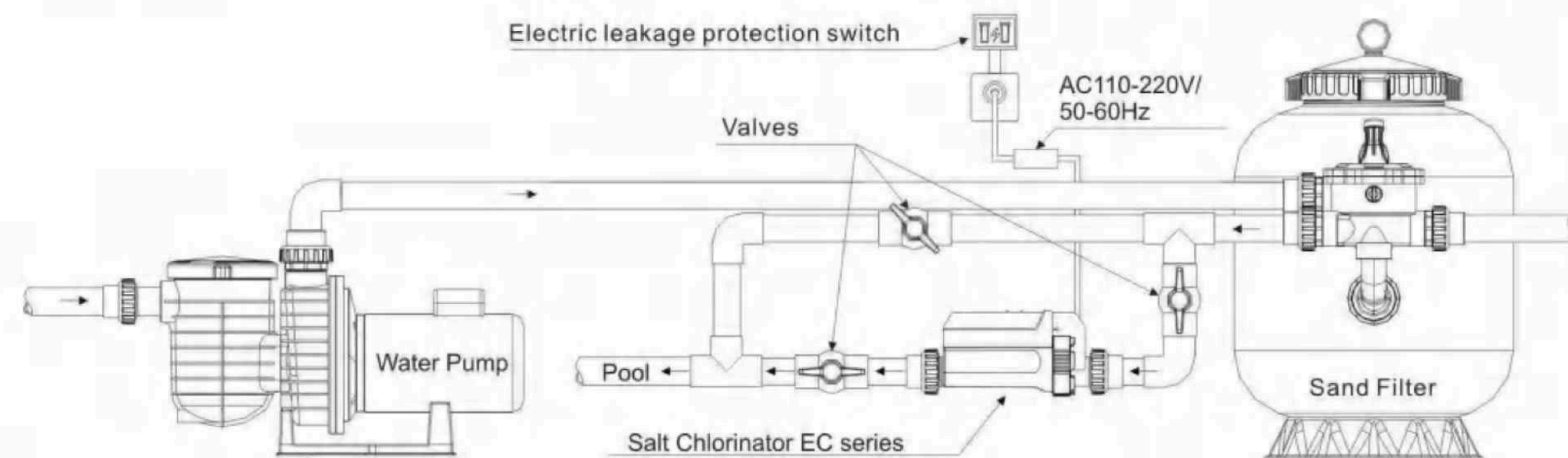
- Smart cleaning  
Self-cleaning function by reversing the polarity automatically, which prevents calcium from accumulating and therefore prolong the cell's lifetime.

- Smart alarm  
Fault auto alarm with error code, which is easy to find corresponding solutions.

- Smart protection  
When the water temperature is too high or too low, the chlorinator will automatically stop running, in order to protect the unit and prolong the cell's life. The integrated sensors in the cell also ensure that water is adequate for safe operation.



- Smart memory system  
Each time the chlorinator restarts, it can automatically initiate the last work status, with this smart memory function.
- Safe  
Safe disinfection, safe water quality, and safe working voltage

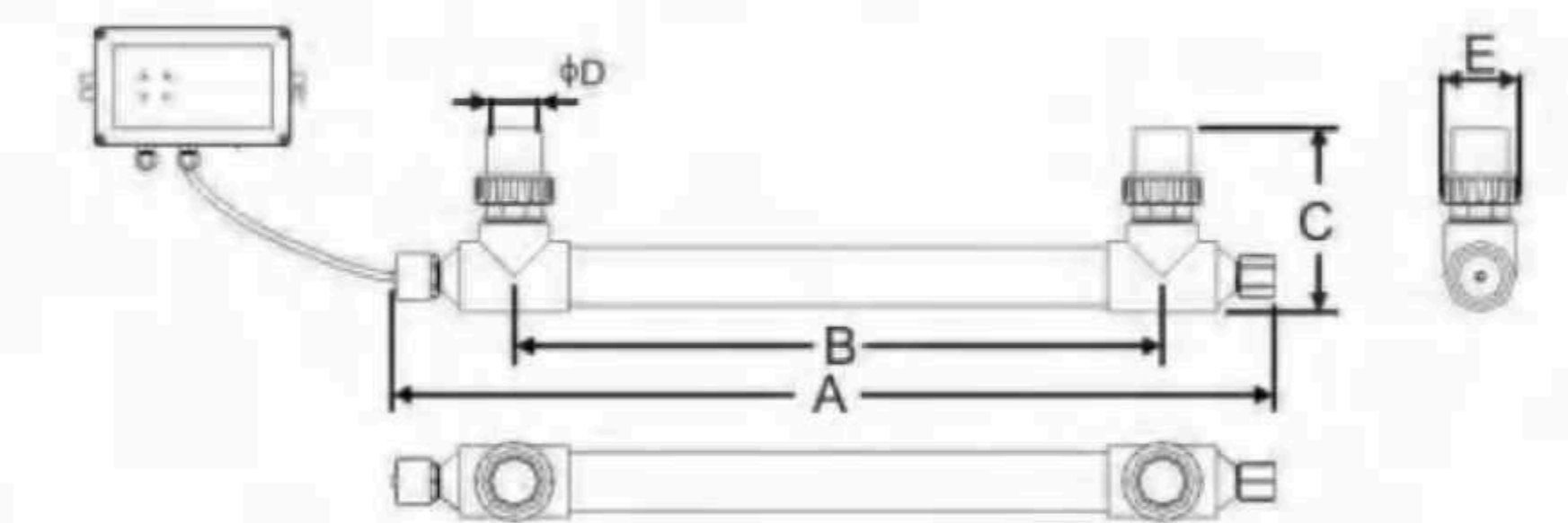


| Model | Size (mm)   | Working Voltage (V) | Working Current (A) | Max Chlorine production(g/h) | Dia. of Water Inlet and Outlet | Max Pool Volume (m <sup>3</sup> ) |
|-------|-------------|---------------------|---------------------|------------------------------|--------------------------------|-----------------------------------|
| EC 8  | 387x122x152 | DC 24               | 4                   | 8                            | 1.5"/50mm                      | 35                                |
| EC 12 | 387x122x152 | DC 24               | 4                   | 12                           | 1.5"/50mm                      | 50                                |
| EC 16 | 387x122x152 | DC 24               | 4                   | 16                           | 1.5"/50mm                      | 68                                |
| EC 20 | 387x122x152 | DC 24               | 4                   | 20                           | 1.5"/50mm                      | 85                                |

Note: In practice, the local pool standards and professional habits should be considered, and the adjusting allowance of 20-30% should be reserved.  
 For outdoor pool, cyanuric acid (stabilizer) should be added to pool water, the ideal range for cyanuric acid is 25-50ppm when used.

## UV STERILIZER DISINFECTING EQUIPMENT

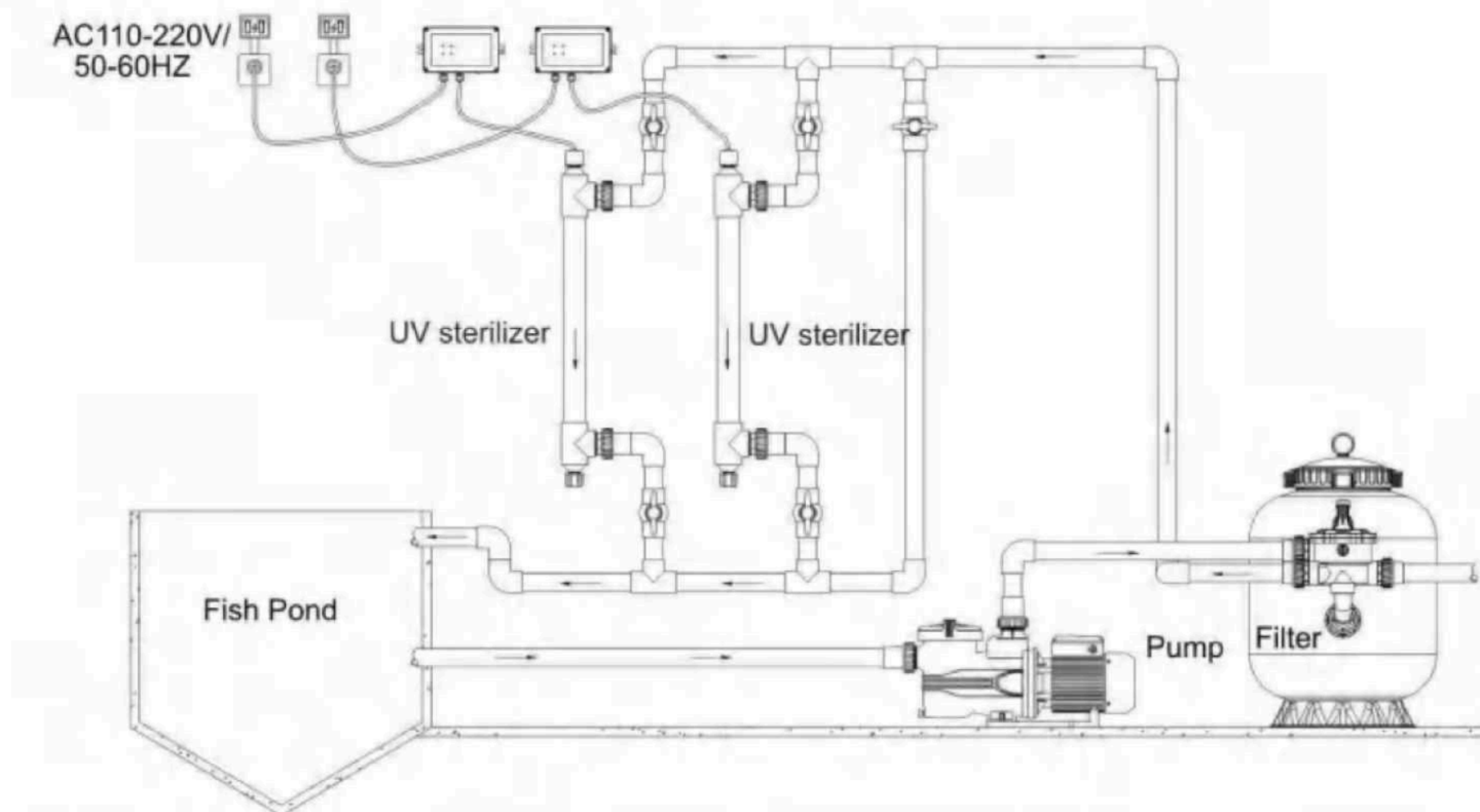
UV sterilizer is an effective product to destroy the genetic structure of bacterial and viruses, and inhibits their ability to multiply, rendering them harmless.



### Features:

- High quality UV-C lamp that achieve 98% sterilization rate
- Durable UV-C lamp more than 8,000 hours life time
- High quality quartz Sleeve has more than 90% transmittance rate
- Available in 50Hz or 60Hz when request.
- Application in swimming pool and fish pond

|       |     |     |      |      |
|-------|-----|-----|------|------|
| A(mm) | 900 | 900 | 1055 | 1200 |
| B(mm) | 662 | 662 | 817  | 962  |
| C(mm) | 235 | 235 | 235  | 235  |
| E(mm) | 101 | 101 | 101  | 101  |



| Model     | Power (W) | Flow rate (m <sup>3</sup> /h) | Voltage (V) | Lamp quantity | Pipe size (inch/mm) | Fish pond volume (m <sup>3</sup> ) | Pool volume (m <sup>3</sup> ) |
|-----------|-----------|-------------------------------|-------------|---------------|---------------------|------------------------------------|-------------------------------|
| WL-UVD40  | 40        | 5                             | 220         | 1             | 1.5" 50mm           | 15                                 | 30                            |
| WL-UVD80  | 80        | 8                             | 220         | 1             | 1.5" 50mm           | 24                                 | 48                            |
| WL-UVD100 | 100       | 10                            | 220         | 1             | 1.5" 50mm           | 30                                 | 60                            |
| WL-UVD120 | 120       | 12                            | 220         | 1             | 1.5" 50mm           | 36                                 | 72                            |

## UV STERILIZER DISINFECTING EQUIPMENT

### Features:

- Special safe design for public swimming pool and private pool. No risk to swimmer because of safety voltage of 12V.
- Different from the normal revolving design, it adopts particular buckle for UV tube to avoid its damage during installation.
- It uses purely physical method to sterilize the pool water, no chemical residue, non-corrosive, non-toxic side effect after sterilizing by UV sterilizer. No health hazards to human skin and body.
- Compared with CH and ozone generator, UV sterilizer is easy to install, economical and low maintenance too.
- A humanistic design to caution the working situation of UV sterilizer by LED light, and this make the repair and maintenance so easy.
- The sterilization rate of bacteria and virus could reach 99% to 99.9% within 2s, includes flu, hepatitis virus, coli, staphylococci, bacillus subtilis, etc.



WL-UV14×2



WL-UV14×18

| Model      | Size (mm)   | Power (W) | Design Flow (m <sup>3</sup> /h) | Voltage (V) | Lamp Quantity | Inlet/Outlet (Inch) | Life       | Ballast               |
|------------|-------------|-----------|---------------------------------|-------------|---------------|---------------------|------------|-----------------------|
| WL-UV14×2  | 460×125×320 | 28        | 1.5~2                           | 12          | 14W×2         | 1.5"                | 8000~10000 | Inductance / Electron |
| WL-UV14×4  | L700×Φ170   | 56        | 3~4                             | 12          | 14W×4         | 1.5"                | 8000~10000 | Inductance / Electron |
| WL-UV14×6  | L700×Φ170   | 84        | 5~6                             | 12          | 14W×6         | 1.5"                | 8000~10000 | Inductance / Electron |
| WL-UV14×8  | L700×Φ170   | 112       | 7~8                             | 12          | 14W×8         | 1.5"                | 8000~10000 | Inductance / Electron |
| WL-UV14×10 | L700×Φ170   | 140       | 9~10                            | 12          | 14W×10        | 1.5"                | 8000~10000 | Inductance / Electron |
| WL-UV14×12 | L700×Φ170   | 168       | 11~12                           | 12          | 14W×12        | 2.0"                | 8000~10000 | Inductance / Electron |
| WL-UV14×14 | L700×Φ170   | 196       | 13~14                           | 12          | 14W×14        | 2.0"                | 8000~10000 | Inductance / Electron |
| WL-UV14×16 | L700×Φ170   | 224       | 15~16                           | 12          | 14W×16        | 2.0"                | 8000~10000 | Inductance / Electron |
| WL-UV14×18 | L700×Φ170   | 252       | 17~18                           | 12          | 14W×18        | 2.0"                | 8000~10000 | Inductance / Electron |
| WL-UV14×20 | L700×Φ170   | 280       | 18~20                           | 12          | 14W×20        | 2.0"                | 8000~10000 | Inductance / Electron |

## UV STERILIZER DISINFECTING EQUIPMENT

Ultraviolet is accepted all over the world as a reliable, cost-effective and above all environmentally friendly aquarium water disinfection solution.

UV-C radiation destroys the genetic structure of bacteria and viruses, and inhibits their ability to multiply, rendering them harmless.

### Features:

- Physical sterilization, no side effects, no secondary pollution.
- Simple, efficient, small occupation.



Thread connection

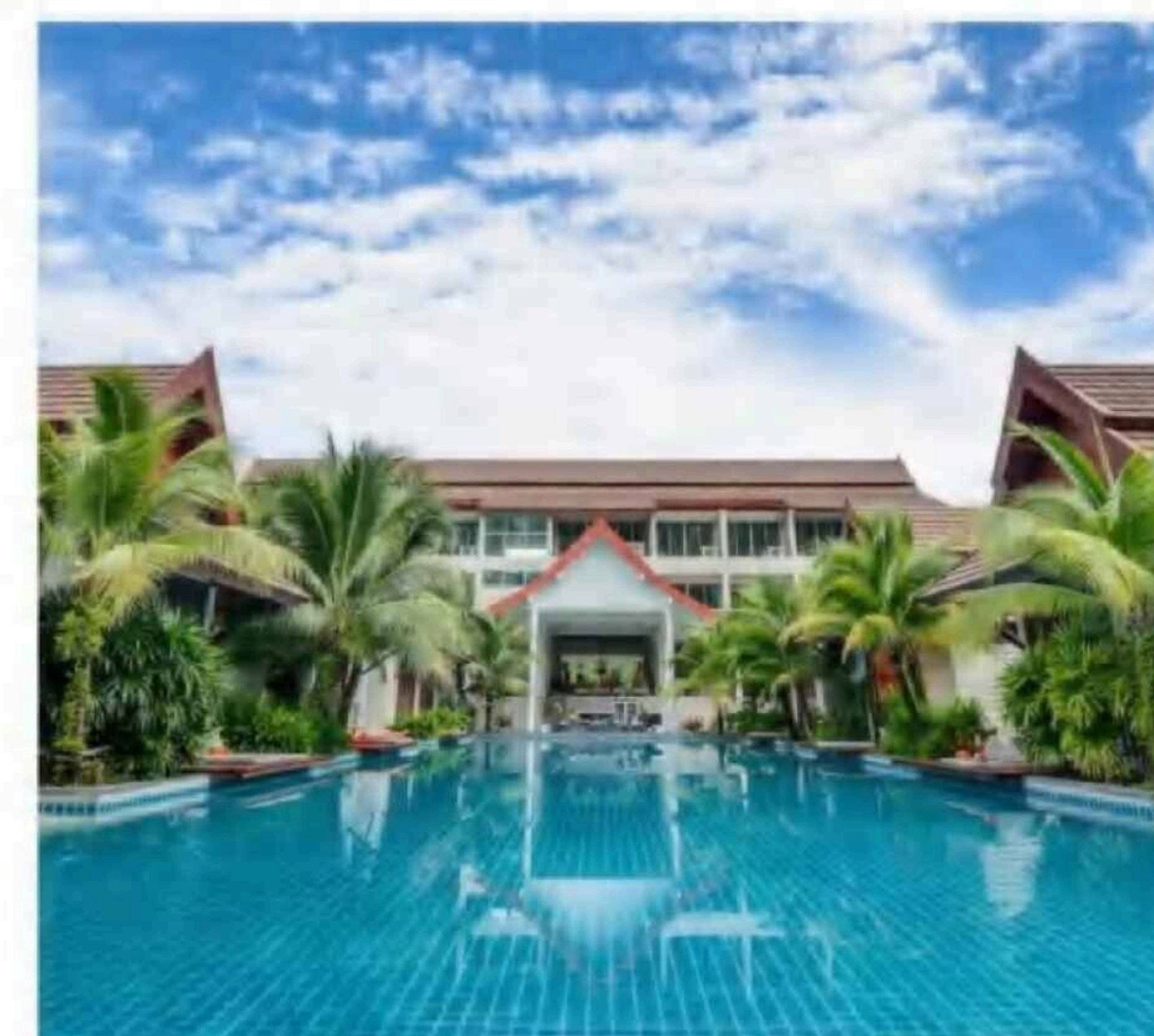


Flange connection

WL-UVC series full flow ultraviolet disinfectant device uses a special made high power ozone free ultraviolet germicidal lamp. The device is also equipped with a micro carbon austenite stainless steel barrel with a specially processed interior, while the exterior of the barrel is also specially polished. The result of this is the water passing the barrel would be radiated and receive 253.7nm (UVC) of ultraviolet with passing through the barrel, providing a excellent disinfectant effect.

### Features:

- The reactor use 304 polished stainless steel, the smooth interior leaves no blind spot for sterilization.
- The ultraviolet light tube is equipped with a quartz sleeve, to ensure optimal working temperature.
- The electrical configuration of the device is suitable to most electrical specifications.
- Special exterior design makes the device convenient to use.
- All rounded sterilization, highly efficient, sterilization rate up to 99.9%.
- High output, physical sterilization, no side effects, no secondary pollution.
- The amount of water that can be sterilized ranges from 5.5-250T/H. The device adapts to swimming pools, spa and water parks of various sizes.



## UV STERILIZER DISINFECTING EQUIPMENT

| Model        | Power (W) | Rated flow (m <sup>3</sup> /h) | Working voltage (V) | Cabinet | Cabinet size L×D×H (mm) | Control box  |                      | Lamp power W x Qty | Inlet & outlet diameter DN |
|--------------|-----------|--------------------------------|---------------------|---------|-------------------------|--------------|----------------------|--------------------|----------------------------|
|              |           |                                |                     |         |                         | With/without | Material             |                    |                            |
| WL-UVCn-78   | 78        | 5.5                            | 220V/50Hz           | 304SS   | 930×108×720             | With         | Painted carbon steel | 39W×2              | Dn32 screw                 |
| WL-UVCn-160  | 160       | 12                             | 220V/50Hz           | 304SS   | 930×108×720             | With         | Painted carbon steel | 80W×2              | Dn50 screw                 |
| WL-UVC-240   | 240       | 20                             | 220V/50Hz           | 304SS   | 930×159×780             | With         | Painted carbon steel | 80W×3              | Dn65                       |
| WL-UVC-320   | 320       | 25                             | 220V/50Hz           | 304SS   | 930×159×780             | With         | Painted carbon steel | 80W×4              | Dn80                       |
| WL-UVC-465   | 465       | 35                             | 220V/50Hz           | 304SS   | 1630×219×830            | With         | Painted carbon steel | 155W×3             | Dn100                      |
| WL-UVC-620   | 620       | 45                             | 220V/50Hz           | 304SS   | 1630×219×830            | With         | Painted carbon steel | 155W×4             | Dn80 or 100                |
| WL-UVC-775   | 775       | 60                             | 220V/50Hz           | 304SS   | 1630×219×1080           | With         | Painted carbon steel | 155W×5             | Dn150                      |
| WL-UVC-930   | 930       | 80                             | 220V/50Hz           | 304SS   | 1630×325×1180           | With         | Painted carbon steel | 155W×6             | Dn150                      |
| WL-UVC-1280  | 1280      | 90                             | 220V/50Hz           | 304SS   | 1630×325×1180           | With         | Painted carbon steel | 320W×4             | Dn150                      |
| WL-UVCP-1085 | 1085      | 100                            | 220V/50Hz           | 304SS   | 1630×325×1180           | With         | Painted carbon steel | 155W×7             | Dn150                      |
| WL-UVCP-1395 | 1395      | 125                            | 220V/50Hz           | 304SS   | 1630×325×1200           | With         | Painted carbon steel | 155W×9             | Dn150                      |
| WL-UVCP-1600 | 1600      | 110                            | 220V/50Hz           | 304SS   | 1630×325×1400           | With         | Painted carbon steel | 320W×5             | Dn150                      |
| WL-UVCP-1705 | 1705      | 150                            | 220V/50Hz           | 304SS   | 1630×325×1500           | With         | Painted carbon steel | 155W×11            | Dn200                      |
| WL-UVCP-1920 | 1920      | 130                            | 220V/50Hz           | 304SS   | 1630×325×1500           | With         | Painted carbon steel | 320W×6             | Dn150                      |
| WL-UVCP-2240 | 2240      | 150                            | 220V/50Hz           | 304SS   | 1630×377×1500           | With         | Painted carbon steel | 320W×7             | Dn200                      |
| WL-UVCP-2560 | 2560      | 180                            | 220V/50Hz           | 304SS   | 1630×377×1500           | With         | Painted carbon steel | 320W×8             | Dn200                      |
| WL-UVCP-2880 | 2880      | 200                            | 220V/50Hz           | 304SS   | 1630×377×1500           | With         | Painted carbon steel | 320W×9             | Dn200                      |
| WL-UVCP-3840 | 3840      | 250                            | 220V/50Hz           | 304SS   | 1630×426×1500           | With         | Painted carbon steel | 320W×12            | Dn250                      |

Note: • Lamp service life ≥9000H

- UVCn: thread connection; UVC: flange connection; UVCP: flange connection; all the control box are painted carbon steel.
- Can be equipped with manual cleaning device, automatic flushing device, or advanced online monitoring instrument and remote control system.



## UVX SERIES UV STERILIZER FOR SEAWATER DISINFECTING EQUIPMENT

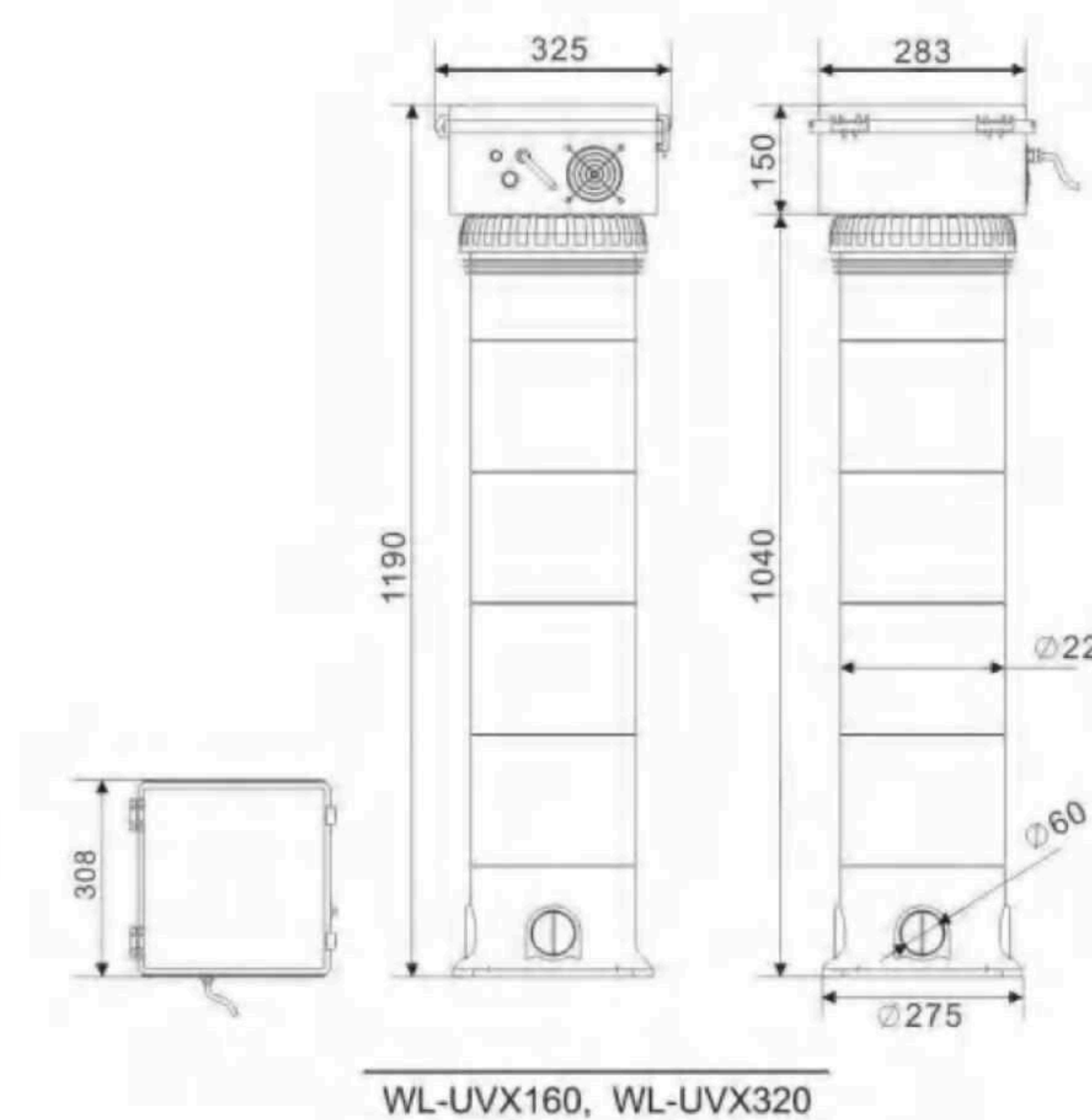
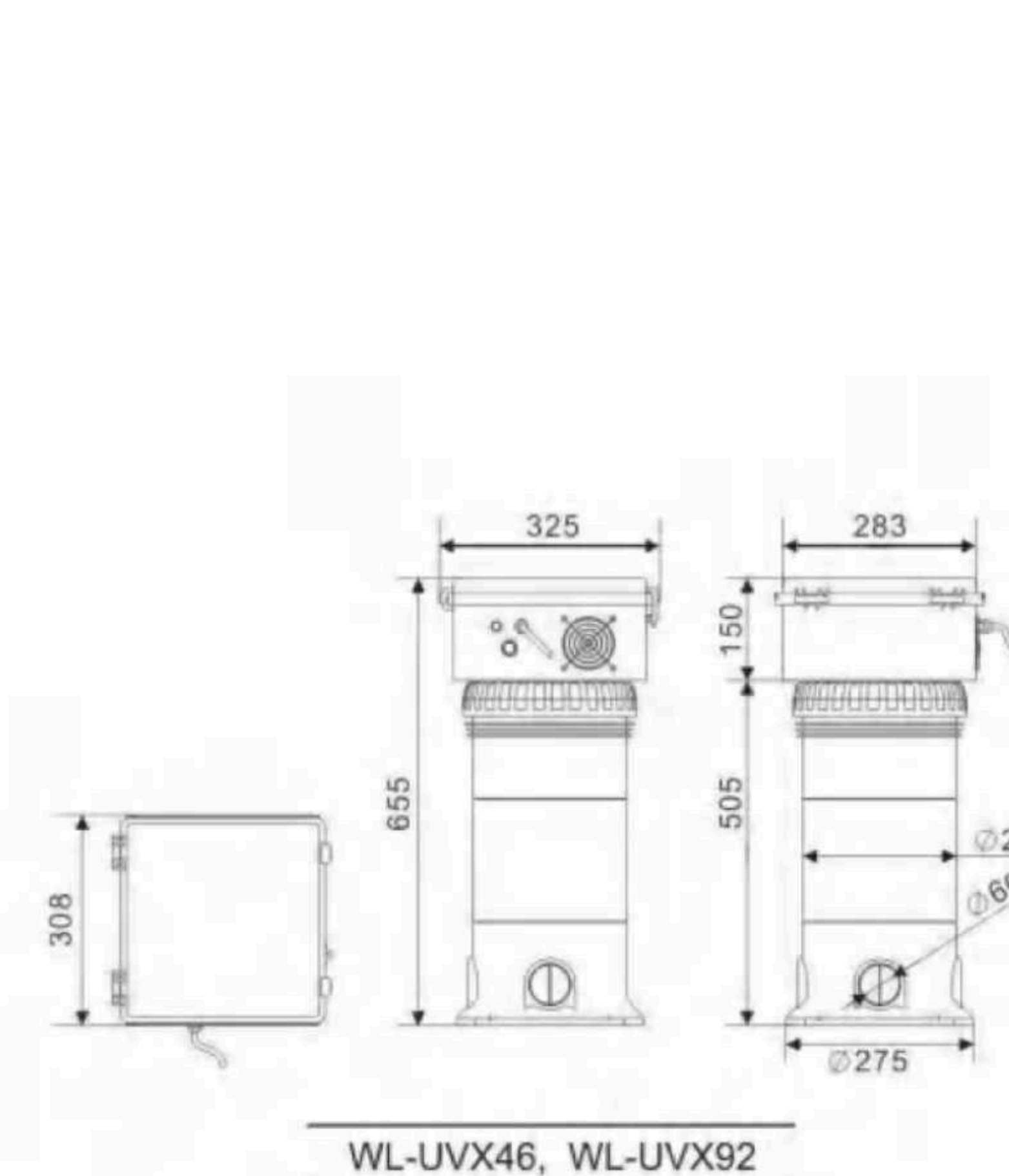


Specially designed for sea water environment. The housing is made of high quality PVC, which is anti-corrosion and durable. Equipped with UV-C lamp and high purity quartz sleeves for high efficient and long term sterilization. The disinfection process is fully closed, with sound and light alarm device, no chemical reaction and by-products.

### Advantages:

- High quality UV-C lamp which can achieve 99% sterilization rate.
- Stable and accurate dosage, service life of lamp is more than 10,000 hours.
- Excellent quartz tube provides transmittance over 99%.
- Safe and reliable operation, simplified operation and reduced maintenance.

| Model     | Flow rate (m <sup>3</sup> /h) | Total power (W) | Voltage (V) | Connection size (mm) |
|-----------|-------------------------------|-----------------|-------------|----------------------|
| WL-UVX46  | 5                             | 46              | 220/50Hz    | DN63                 |
| WL-UVX92  | 8                             | 92              | 220/50Hz    | DN63                 |
| WL-UVX160 | 15                            | 160             | 220/50Hz    | DN63                 |
| WL-UVX320 | 25                            | 320             | 220/50Hz    | DN63                 |



## HIGH CONCENTRATION OZONE WATER GENERATOR DISINFECTING EQUIPMENT

DN-OWS high concentration ozone water generator offers the unique advance oxidation treatment of commercial pool water. The process combines the disinfection and oxidation properties of ozone and UV making the most advanced pool water purification system available.

Widely used in swimming pool and pond.



### Benefits :

- It integrates power supply protection, current indication and Low water flow alarm functions
- Effective disinfection and safely lower free chlorine residual including chlorine resistant micro-organisms.
- Chloramines destruction reducing "red eye" and irritation of skin and respiratory system.
- Trihalomethane (THM) levels are minimised.
- Compact unit footprint suitable for small plant rooms.
- Designed for maximum operator and bather safety.
- Low installation cost-minimal connections required.
- Air-cooled design.
- The low water flow alarm and automatically power shutdown can effectively protect the equipment.
- Ozone water has high concentration and good sterilization efficiency.
- With UV germicidal lamp, double sterilization, better effect.
- With a concentration regulator, which can adjust the ozone output concentration according to needs.
- The Ozone generator has high conversion efficiency, low energy consumption, continuous operation and long service life.
- PSA technology to prepare oxygen.
- High intensity long life low pressure 8,000 hour UV lamps.

| Model                     | DN-OWS-10G                | DN-OWS-20G                | DN-OWS-30G                |
|---------------------------|---------------------------|---------------------------|---------------------------|
| Ozone Output              | 10g/h                     | 20g/h                     | 30g/h                     |
| Power Supply              | 220v/50Hz                 | 220v/50Hz                 | 220v/50Hz                 |
| Power Consumption         | 0.75kW                    | 1.2kW                     | 1.55kW                    |
| L x W x H                 | 70*60*170cm               | 70*60*170cm               | 70*60*170cm               |
| Weight                    | 124.7kg                   | 160kg                     | 180kg                     |
| Flow Rate                 | 2t/h                      | 4.5t/h                    | 7.5t/h                    |
| Ozone Water concentration | 1-3ppm                    | 1-3ppm                    | 1-3ppm                    |
| Water Inlet               | 1"Male                    | 1.5"Male                  | 1.5"Male                  |
| Water Outlet              | 1.5"Male                  | 1.5"Male                  | 1.5"Male                  |
| Cooling                   | Fan                       | Fan                       | Fan                       |
| Feed Gas                  | Built-in Oxygen Generator | Built-in Oxygen Generator | Built-in Oxygen Generator |
| Material                  | Epoxy Coated Mild Steel   | Epoxy Coated Mild Steel   | Epoxy Coated Mild Steel   |

Notes: with the product update, the parameters are slightly deviated without notice. Please take the physical parameters as the standard.

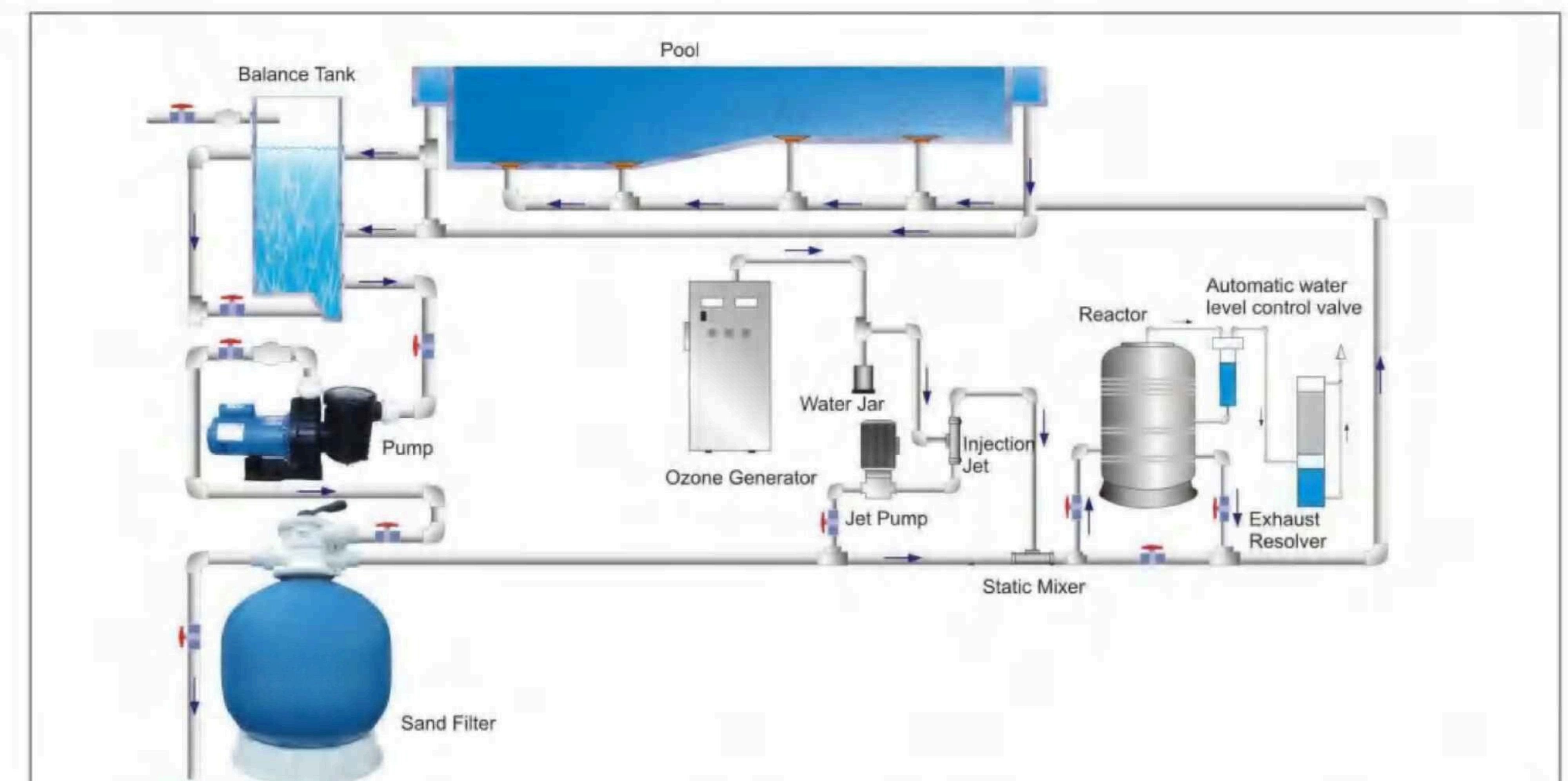
## WALL-MOUNTED OZONE GENERATOR DISINFECTING EQUIPMENT



The wall-mounted ozone generator is suitable for disinfection and sterilization of individual space. Wall mount design is easier for ozone gas to reach anywhere for disinfection. It can be widely used in swimming pool and pond.

### Advantages:

- Air cooling design.
- Microcomputer timer, the working time can be preset according to needs.
- The shell is designed with stainless steel, which is durable.
- The ozone generating tube has high conversion efficiency, low energy consumption, can work continuously, and has a long service life.
- Built-in anti-backwater solenoid valve.



| Model             | DNA-3G                            | DNA-5G             | DNA-7G             | DNA-10G             | DNA-15G             | DNA-20G             |
|-------------------|-----------------------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Ozone Output      | 3g/h                              | 5g/h               | 7g/h               | 10g/h               | 15g/h               | 20g/h               |
| Power             | 60 W                              | 80 W               | 120 W              | 140 W               | 250 W               | 270 W               |
| Cooling Method    | Air Cooled                        | Air Cooled         | Air Cooled         | Air Cooled          | Air Cooled          | Air Cooled          |
| Outlet Diameter   | 4mm                               | 4mm                | 4mm                | 4mm                 | 10mm                | 10mm                |
| Unit Weight       | 4kg                               | 4.2kg              | 7.8kg              | 8.4kg               | 13.2kg              | 14.6kg              |
| Disinfection Area | 0-30m <sup>2</sup>                | 0-50m <sup>2</sup> | 0-70m <sup>2</sup> | 0-100m <sup>2</sup> | 0-150m <sup>2</sup> | 0-200m <sup>2</sup> |
| Dimension(L*W*H)  | 23*18*46cm                        | 23*18*46cm         | 32*25*52.5cm       | 32*25*52.5cm        | 40*30*62cm          | 40*30*62cm          |
| Feed gas          | Clean And Dry Air(inner air pump) |                    |                    |                     |                     |                     |
| Voltage           | 110V/60Hz;220-240V/50Hz;220V/60Hz |                    |                    |                     |                     |                     |

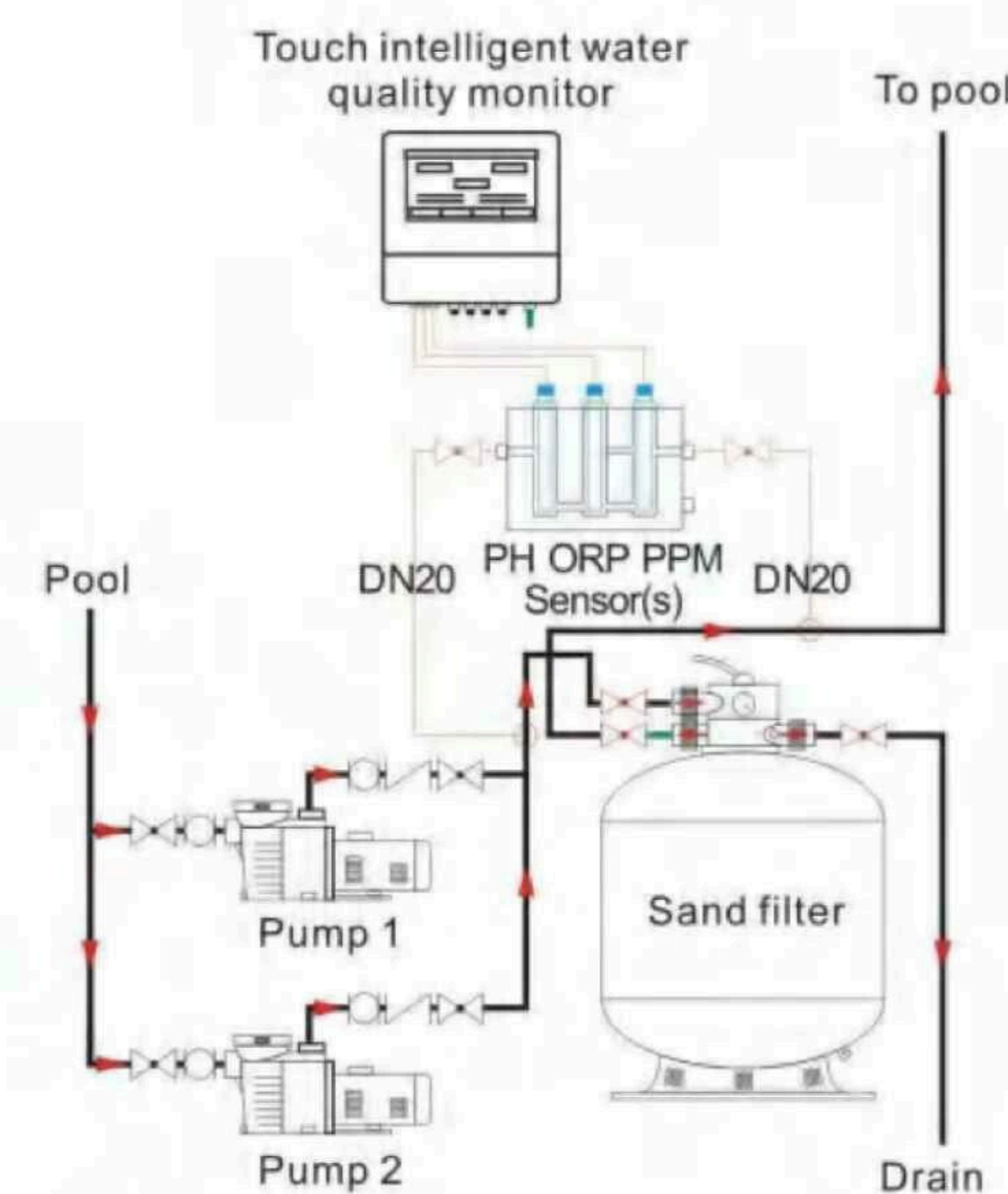
## TOUCH INTELLIGENT WATER QUALITY MONITOR DISINFECTING EQUIPMENT

- Electrode plug and play, no conversion module is needed, three-point probe calibration, more precise data. Water quality parameter standards include European, Chinese and other national standards;
- Switch free between Chinese and English interfaces, more convenient to operate by full touch screen;
- Less failure, high accuracy, low maintenance.
- Can control 3 sets of dosing pump;



### Installation Guide :

- Close the water valves at the front and back of the installation site to keep the installation section free of water, so as to avoid accidents.
- The water intake point shall be located behind the water pump and in front of the filter in the return water pipeline of the swimming pool. There is a certain pressure difference between the water inlet and the outlet to make the water flow through the flow trough. Use tools to drill a DN15 hole at this main pipeline or change it to DN15 through tee, and fix the DN15 ball valve at the water intake;
- Install the acrylic flow trough and the water quality monitor. Use the wall mounting method to connect the flow trough with the DN15 ball valve of the water intake through 6x4mm hose;
- The water outlet of the flow trough is directly discharged by pressure relief through 6x4mm hose (discharged to the water collecting well or returned to the equalization tank);
- Open the water valve to confirm whether there is water flow through the flow trough and the water flow is enough.



### Technical Parameter

|                     |  |
|---------------------|--|
| Product Model       | WL-SZI202  |
| PH measurement      | Electrode method , measurement range : 0 -14PH , measurement accuracy : <0.01PH , suitable temperature : 0-80 °C |
| ORP measurement     | Electrode method, measurement range : 0→+1200mv , measurement accuracy : <2mv , suitable temperature : 0-80 °C   |
| Input power         | 220-250V , 50/60Hz   |
| Output              | 3 sets of dosing pump output ( 5A , 220V-240V )  |
| Display             | 4.3-inch LCD screen  |
| Operation           | Touch  |
| Dimensions          | 200(height) x 235(width) x70 (depth) mm  |
| Weight              | 1.7kg  |
| Installation method | Wall-mounted   |
| Housing material    | Plastic  |
| Protection grade    | IP65   |
| Working environment | Normal temperature and keep dry  |
| Others              | Built-in water quality standards. Support Chinese and English bilingual  |

Notes : Each machine corresponds to a pair of probes, not to be mixed up. Clean and calibrate the probe every 3 months.

## METERING PUMP DISINFECTING EQUIPMENT



The metering pump is designed to inject chemicals into piping systems. All models are equipped with a side mounted mechanical flow rate adjustment knob. Optional on/off cycling timers are available.

| Model      | Strokes Per Minute | Maximum Chemical Flow (ml/m) | Maximum Pressure (kpa) | Power source |
|------------|--------------------|------------------------------|------------------------|--------------|
| WL-AYB660P | 60                 | 290                          | 420                    | 220V/50Hz    |

## CHEMICAL FEEDER

### Features:

- No special venting required.
- Completely sealed, no escape of gas.
- Positive external, no-clog control valve.
- Feeder is designed to automatically lower the water level so tablets are not soaking during off period of pump. This allows more efficient use of tablets.
- No equipment damage. Feeds sanitizer directly to pool or spa.
- To prevent over feeding during use, completely close the control valve and the built in check valve will prevent chemical from being fed into pool or spa.
- All parts replaceable.
- Never connect with brass pipe.



WL-AYJ01



PCF01

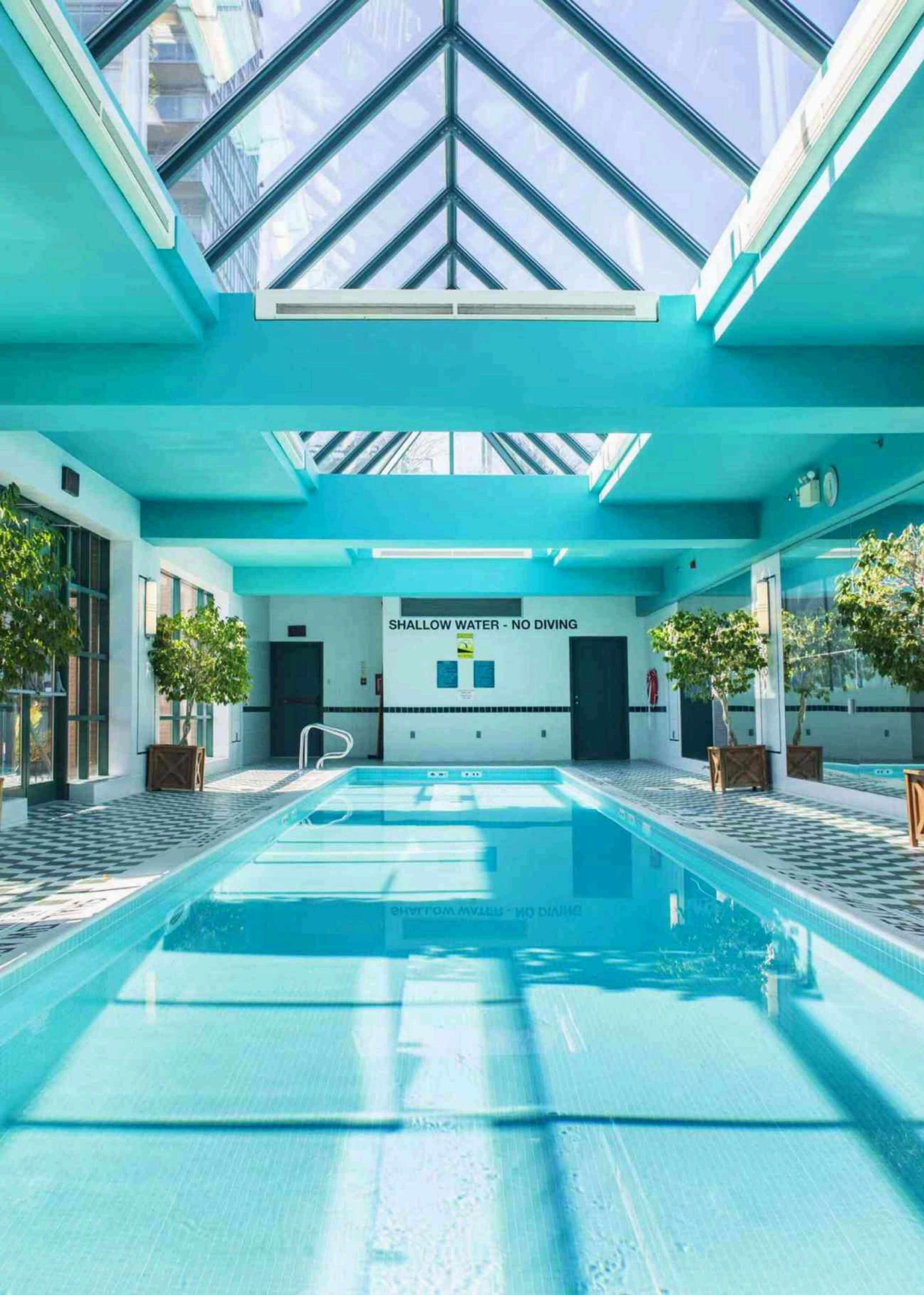
4.2lbs (1.9kgs) Inline Chlorine Feeder Body



CL-200

### Features:

- 9lb inline chlorine feeder.
- Chlorine feeder rate is adjustable by regulating the valve setting.
- Easy-lock cover for total tightness.



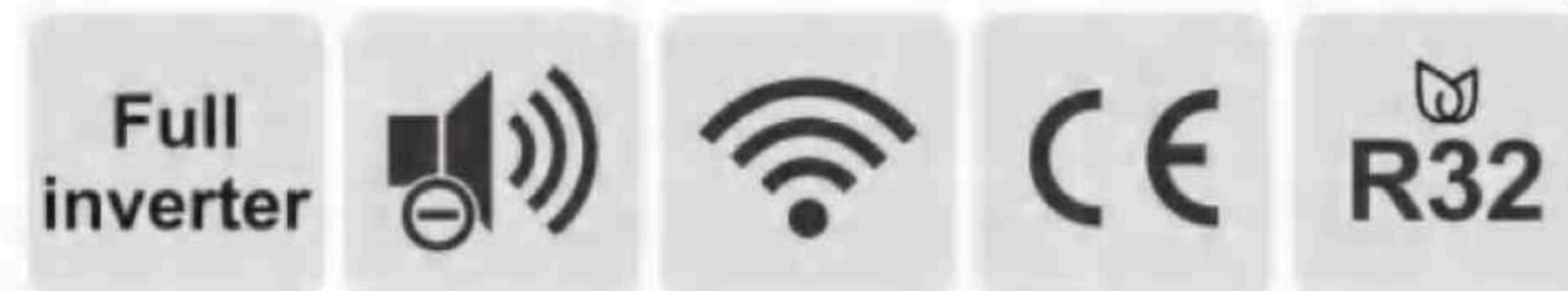
# Heat Pump



SWIMMING POOL  
HEAT PUMP

# FULL INVERTER SWIMMING POOL HEAT PUMP PREMIUM SERIES

MILLIAN Premium series swimming pool heat pump is powered by mature stepless DC inverter technology, which helps to greatly reduce the energy consumption while running silently, enabling the unit to reach extremely high COP up to 14. By smart conversion of compressor speed, fan motor speed and system pressure, this Premium series heat pump can provide amazing energy saving and silent performance.



## Stepless DC Inverter

MILLIAN full inverter series core technology is stepless DC inverter. It adopts stepless inverter compressor and DC brushless fan motor. The speed can be adjusted as low as one hertz and one round, which provides amazing energy saving and super silence performance.

## Intelligent protection

Can adapt to wide voltage of 180V ~ 260V and adjusts the system in different tough condition. For example, if there is electricity fluctuation or during electricity peak period, the system can slow down intelligently for comfortable operation. Thus, it brings longer service life than normal on/off heat pump.

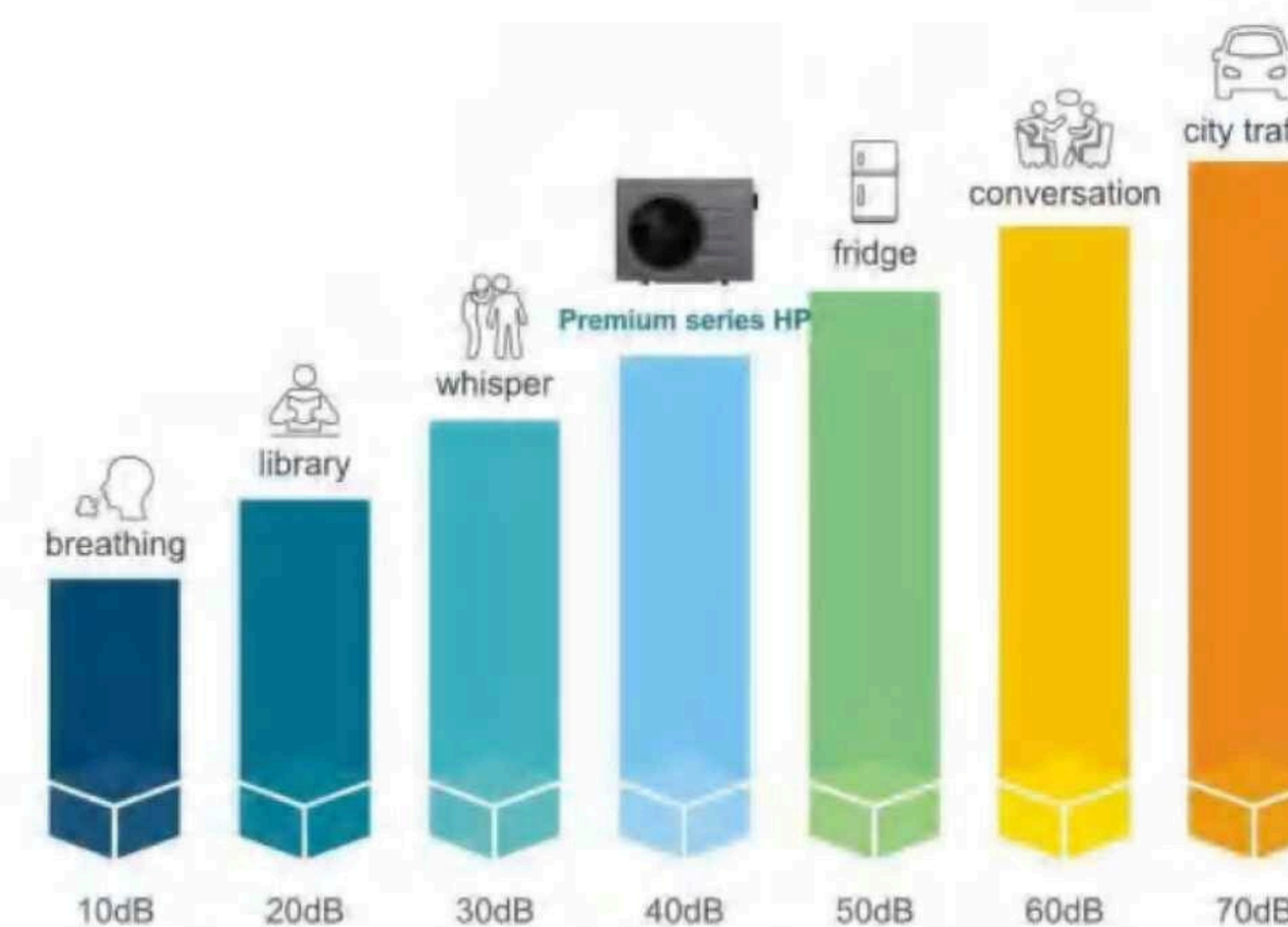
## Specially designed inverter control system

The control system is specially designed for pool heating. It can adjust the heating capacity precisely according to different heating loss in the swimming season. The design philosophy is to achieve fast heating at high speed in the beginning of the season, and slow down at middle & low speed when the pool water reaches the target temperature, for better energy saving and silent performance in the rest of the season.



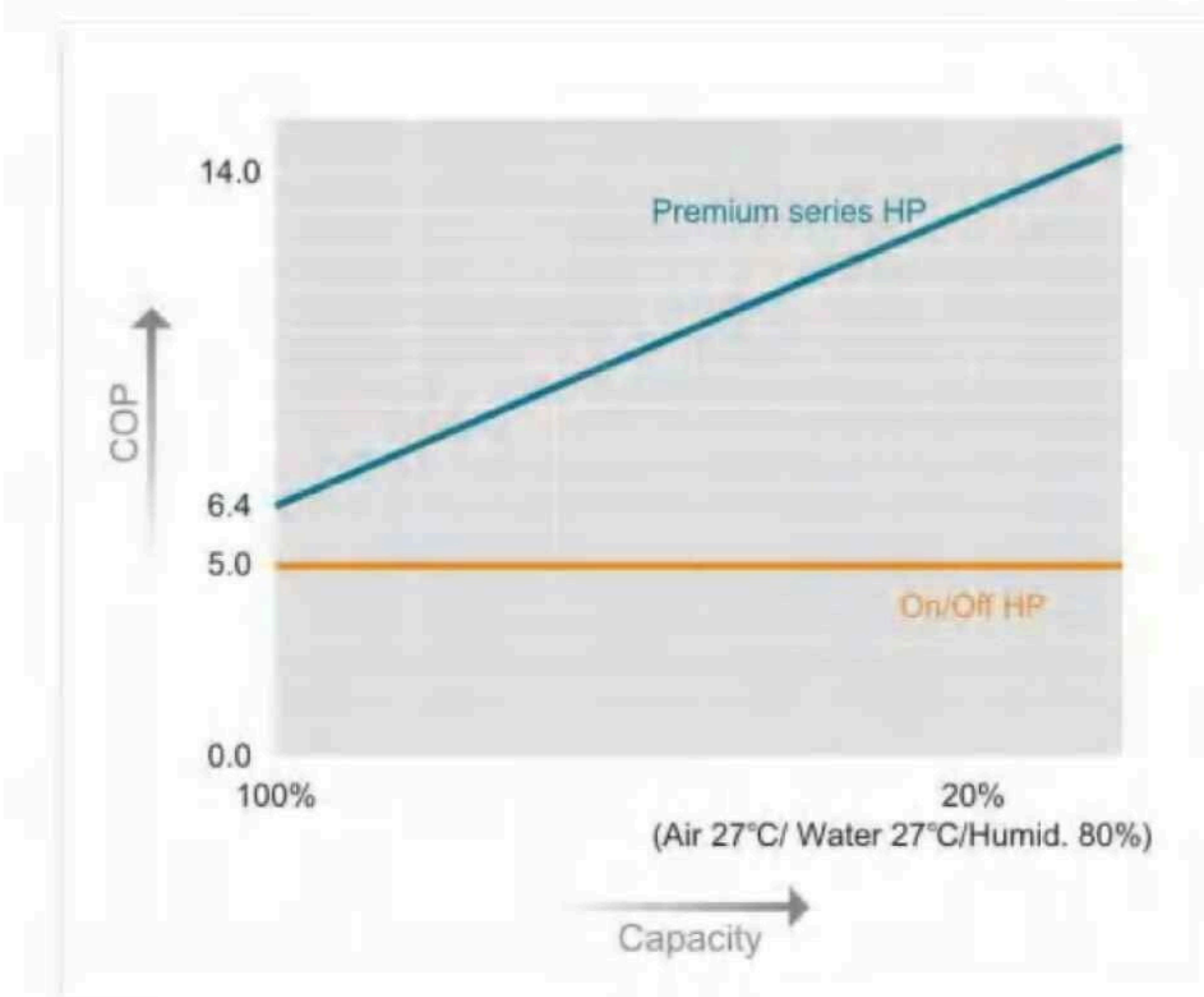
## Super silent running

Thanks to the full inverter technology, this Premium series pool heat pump can bring you much quieter swimming environment than a normal on/off pool heat pump, which is more friendly to your neighborhood.



## COP up to 14

When maintaining pool temperature at 95% of pool season, the COP of this Premium series heat pump can be up to 14 when running at middle & low speed, which leads to the best energy saving performance and most silent pool environment.



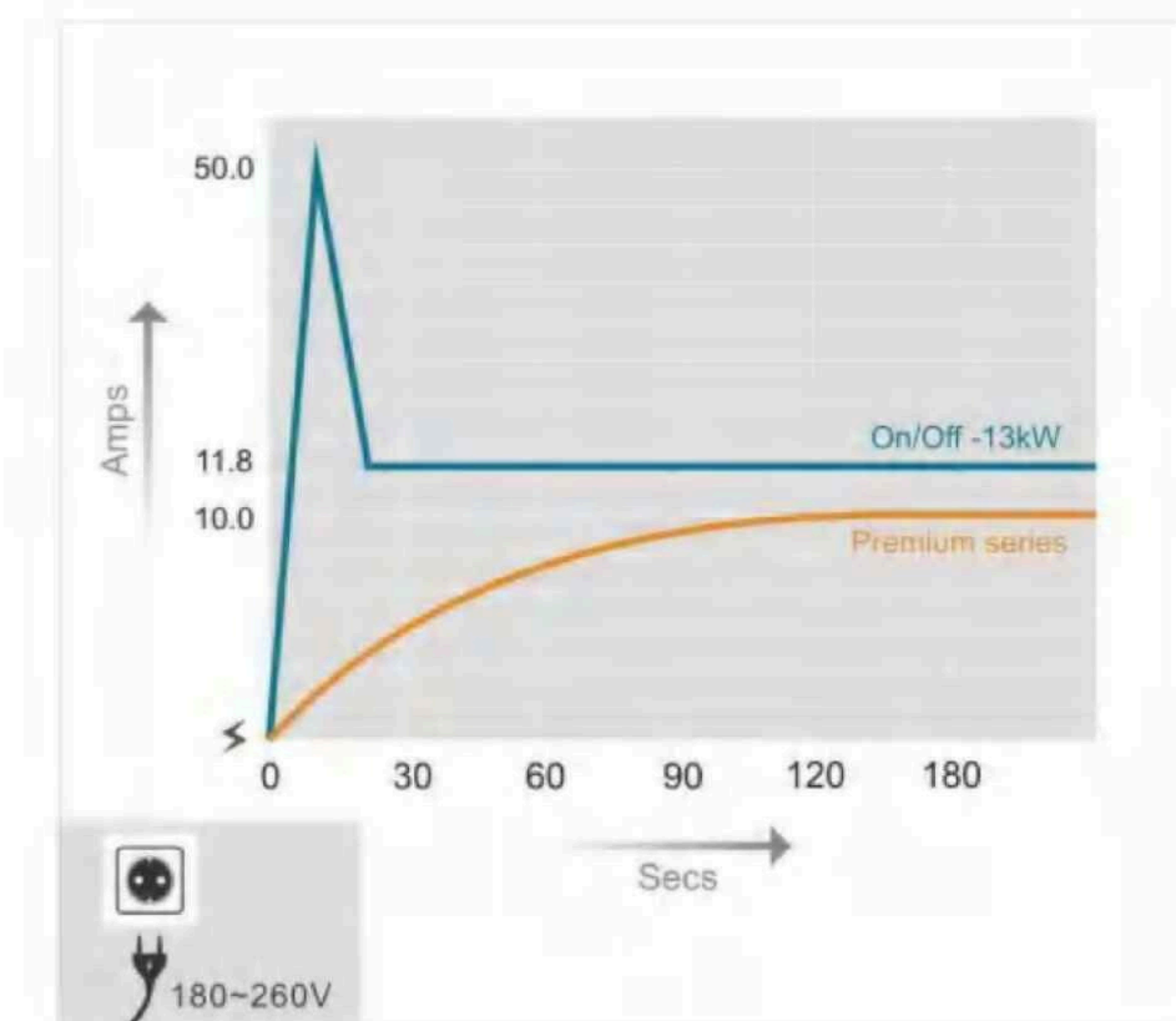
## Energy saving

Adjusting the operating frequency of its compressor and fan motor automatically according to the heating or cooling demand, Premium series heat pump runs at middle & low speed most of the time, it is nearly double energy saving than On/Off heat pump.



## Soft start & wide voltage application

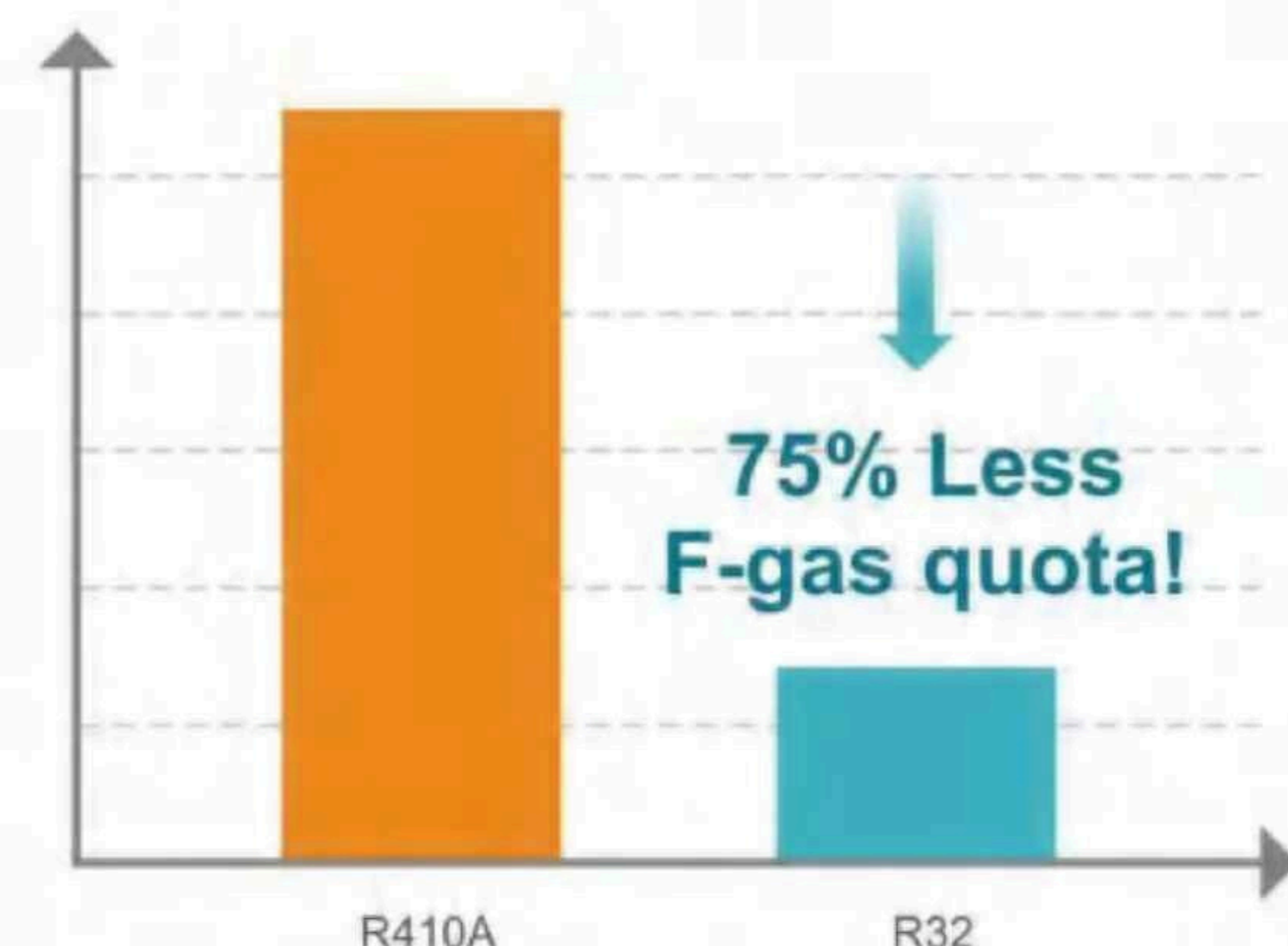
By using stepless DC inverter compressor, the input current will start from 0 Amps to rated Amps steadily, to better protect the house electricity system. With its smart conversion, this premium series heat pump can be also adapted to wide voltage from 180~260V.



# FULL INVERTER SWIMMING POOL HEAT PUMP PREMIUM SERIES

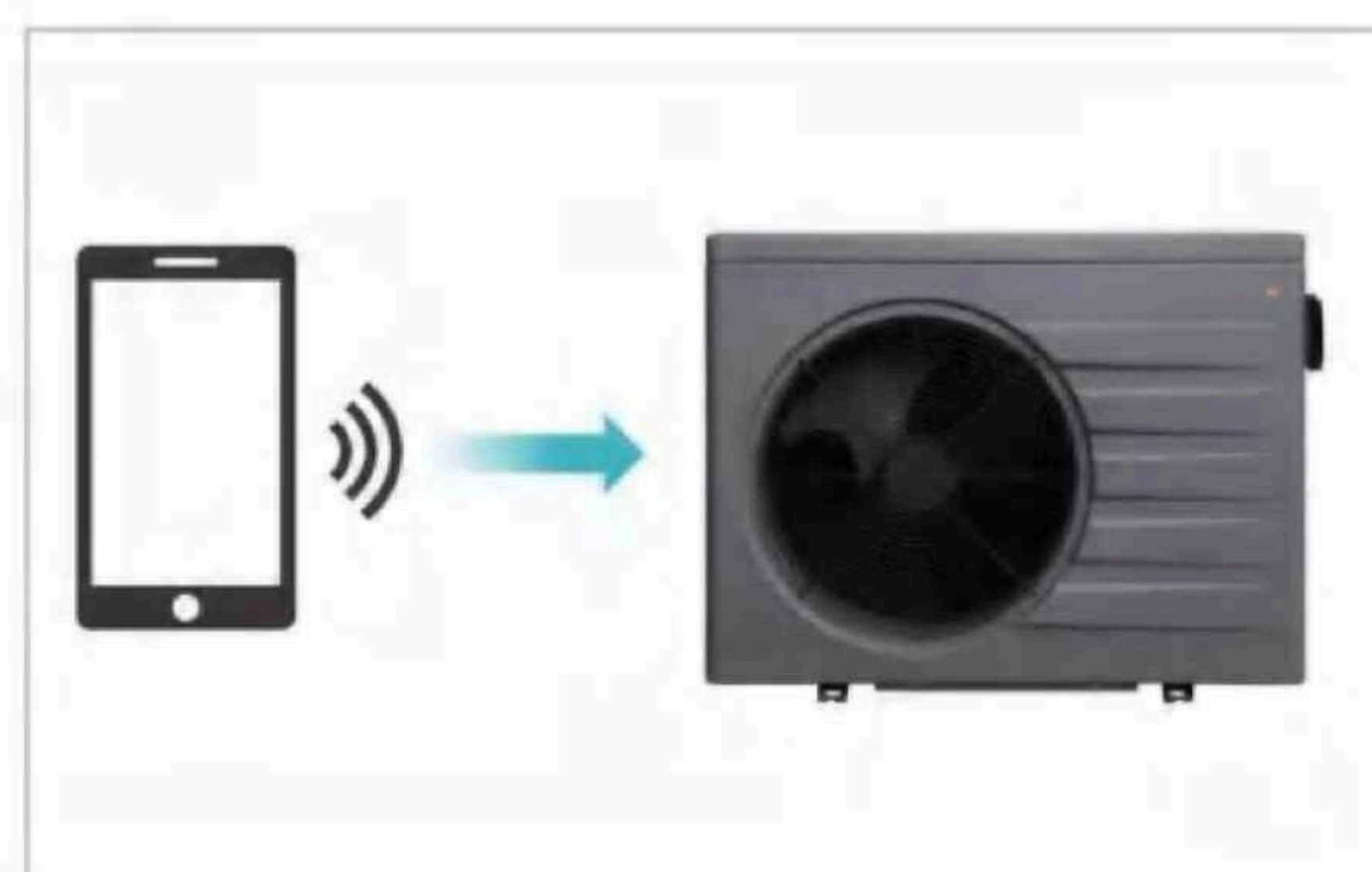
## Eco-friendly refrigerant R32

- Compared to other refrigerants widely used today, R32 is remarkable for its small environment impact and has a global warming potential(GWP) of 675, which is two-third lower than R410A, cuts 75% carbon emission and 75% F-gas quota cost.



## Built-in Wi-Fi function

- With Wi-Fi function, you can control your heat pump through a smart APP on the phone easily anywhere and anytime.



## Technical parameters

| Model  | LS07-IFP1-S2C1                     | LS09-IFP1-S2C1 | LS13-IFP1-S2C1 | LS16-IFP1-S2C1 | LS20-IFP1-S2C1 | LS24-IFP1-S2C1 |
|--|------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Performance condition: Air: 27°C / Water: 27°C / Humidity: 80% |                                    |                |                |                |                |                |
| Heating capacity (kW)  | 1.4-7.2                            | 1.9-9.3        | 2.6-13         | 3.2-16         | 4.1-20.5       | 4.8-24.4       |
| Heating capacity (BTU)   | 4800-24600                         | 6500-31700     | 8900-44400     | 10900-54600    | 14000-70000    | 16400-83300    |
| COP Range  | 14.8-6.4                           | 14.8-6.7       | 14.9-6.4       | 14.5-6.4       | 14.6-6.4       | 14.8-6.0       |
| Average COP at 50% Speed                                       | 9.8                                | 9.7            | 9.8            | 9.6            | 9.7            | 9.8            |
| Performance condition: Air: 15°C / Water: 26°C / Humidity: 70% |                                    |                |                |                |                |                |
| Heating capacity (kW)  | 1.0-5.0                            | 1.3-6.5        | 1.8-9.1        | 2.3-11.5       | 2.9-14.4       | 3.4-17.1       |
| Heating capacity (BTU)   | 3400-17000                         | 4400-22200     | 6100-31000     | 7850-39200     | 9600-47800     | 11600-57300    |
| COP Range  | 8.6-4.1                            | 8.7-4.2        | 8.4-4.0        | 8.7-4.2        | 8.8-4.1        | 8.6-4.1        |
| Average COP at 50% Speed                                       | 6.9                                | 6.8            | 6.9            | 6.7            | 6.8            | 6.9            |
| Technical specific   |                                    |                |                |                |                |                |
| Advised pool volume (m <sup>3</sup> ) *                        | 15-30                              | 20-45          | 35-65          | 40-75          | 50-90          | 60-110         |
| Operating air temperature (°C)                                 | -10°C~43°C                         |                |                |                |                |                |
| Power supply   | 220-240V / 1Ph / 50-60Hz           |                |                |                |                |                |
| Heat exchanger   | Spiral titanium tube in PVC        |                |                |                |                |                |
| Refrigerant  | R32                                |                |                |                |                |                |
| Casing   | ABS(Galvanized steel is available) |                |                |                |                |                |
| Compressor   | Twin-rotary                        |                |                |                |                |                |
| Rated input power (kW)   | 0.1-1.13                           | 0.13-1.39      | 0.17-2.03      | 0.22-2.5       | 0.28-3.2       | 0.32-4.1       |
| Input power at 50% Speed (kW)                                  | 0.4                                | 0.5            | 0.7            | 0.9            | 1.2            | 1.3            |
| Rated input current (A)  | 0.40-4.9                           | 0.52-6.0       | 0.8-8.8        | 1.0-10.9       | 1.2-14.0       | 1.4-17.7       |
| Maximum input current (A)                                      | 5.8                                | 7.2            | 10.6           | 13.1           | 16.7           | 21             |
| Power cord (mm <sup>2</sup> )                                  | 3*1.5                              | 3*1.5          | 3*2.5          | 3*2.5          | 3*4.0          | 3*4.0          |
| Sound level at 1m dB(A)  | 36.8-50.2                          | 38.6-52.5      | 42.5-52.0      | 42.5-52.0      | 44.3-57.0      | 44.9-58.7      |
| Sound level by 50% speed 1m dB(A)                              | 42.5                               | 45.8           | 47.5           | 47.5           | 48.6           | 48             |
| Sound level at 10m dB(A)                                       | 17.9-30.2                          | 19.6-31.4      | 22-32.5        | 24.2-35.4      | 24.3-36.2      | 25.9-37.6      |
| Advised water flow (m <sup>3</sup> /h)                         | 2-4                                | 3-5            | 4-6            | 6-8            | 7-10           | 10-12          |
| Water connection (mm)  | 50                                 |                |                |                |                |                |
| R32 Net weight (g)   | 450                                | 600            | 750            | 1500           | 1500           | 1750           |
| Gross weight (kg)  | 50                                 | 52             | 53             | 65             | 68.5           | 79.5           |
| Net weight (kg)  | 42                                 | 44             | 45             | 56             | 59             | 70             |
| Net dimension LxWxH (mm)                                       | 891x370x665                        | 891x370x665    | 891x370x665    | 981x370x665    | 981x440x765    | 981x440x765    |
| Packing Size (mm)  | 936x385x695                        | 936x385x695    | 936x385x695    | 1026x385x695   | 1026x455x800   | 1026x455x800   |
| Qty per 20'FT / 40'HQ (sets)                                   | 102/216                            | 102/216        | 102/216        | 90/198         | 50/165         | 50/165         |

### Remarks:

- The above data will be subject to change without further notice, please refer to the nameplate on the unit.
- Advised pool volume applies to a private pool with an isothermal cover, from April to September.

## Other features

- DC** Twin-rotary DC inverter compressor
- Reverse cycle defrosting with 4-way valve for quick & efficient defrosting
- 10°C** Design for operating air temperature as low as -10°C

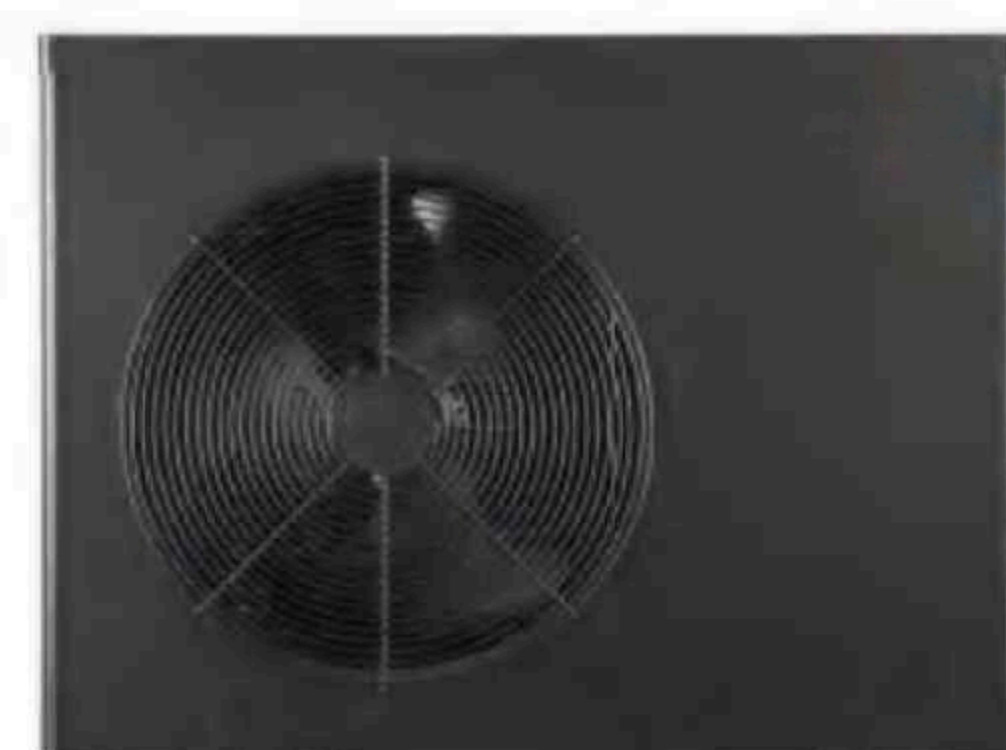
- EEV** EEV technology: 10 times flexibility to adjust the gas flow and increase the COP by up to 20%.
- Spiral titanium heat exchanger: 40% higher efficiency than normal titanium heat exchanger.
- Can be used for swimming pool heating or cooling.

## Customizable Appearance

In order to choose your most preferable color or appearance of the heat pumps, customized appearances service is available .



Grey



Black



Dark grey



Silver white



Royal blue



Brown

# SUPER SILENT FULL INVERTER SWIMMING POOL HEAT PUMP INFINITY SERIES

MILLIAN super silent full inverter swimming pool heat pump Infinity series is specially designed for silent and comfortable user experience, with COP up to 15 while sound level is down to 42dB. Thanks to the DC inverter compressor, stepless inverter control system and brushless fan motor, the speed can be adjusted Hz by Hz and round by round, to achieve energy saving and super silence.

**Stepless DC Inverter**  
COP up to 15

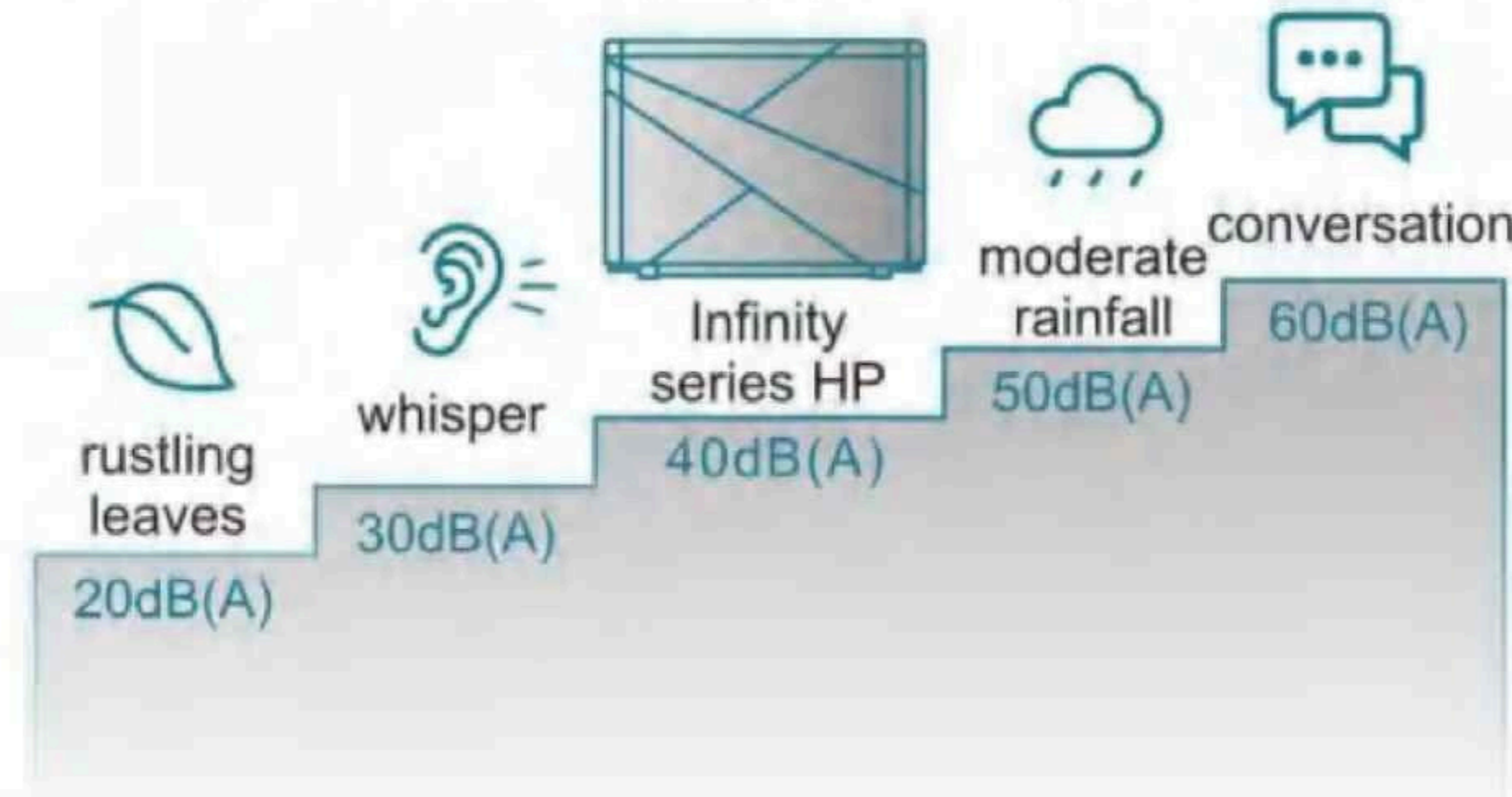
**42dB(A) at 1m**  
Comfort Silence

WIFI



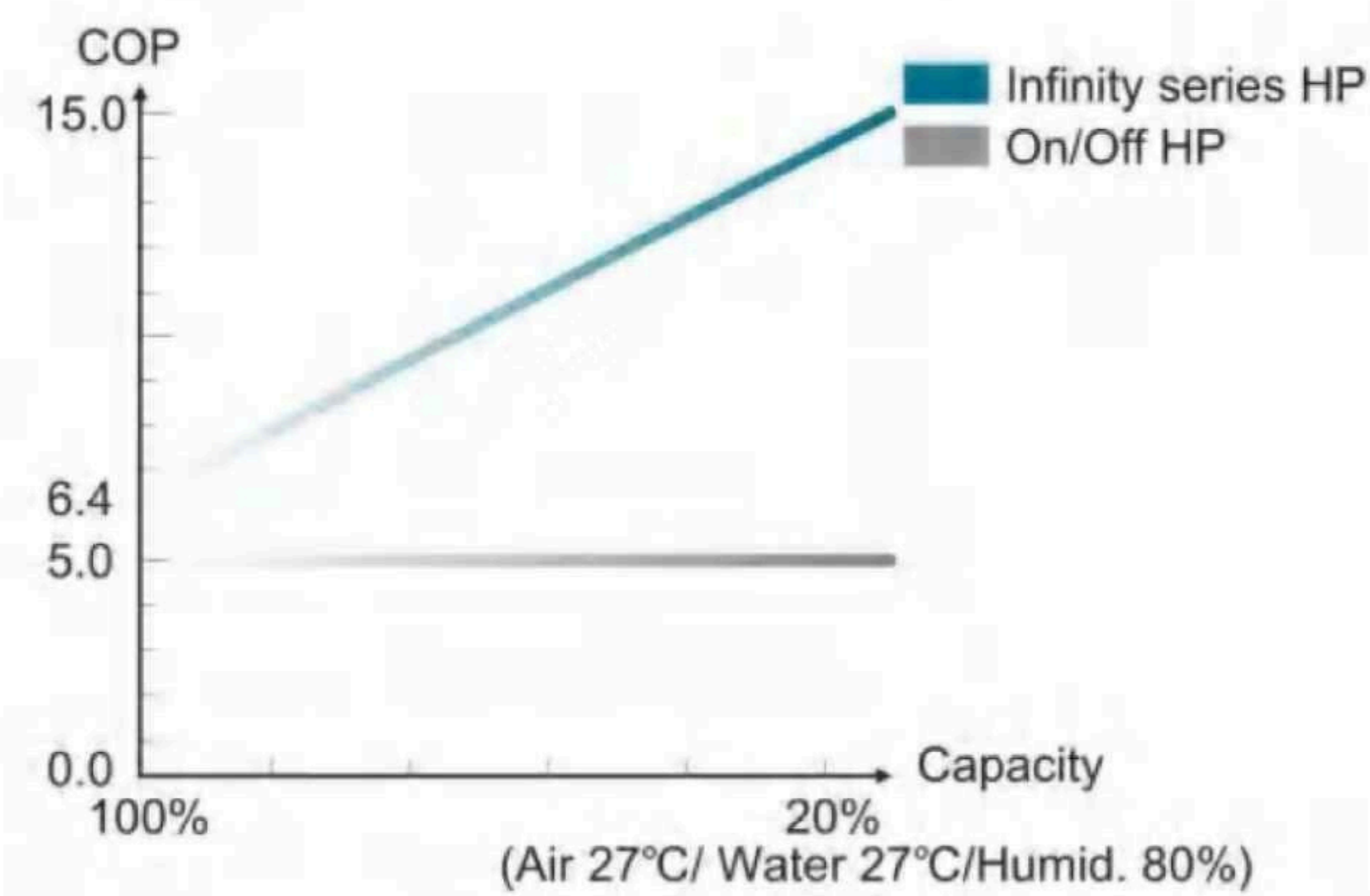
### Super silence

Unique backward airflow helps to provide comfort silence swimming experience. It adopts invisible fan to draw air from two sides and bottom side, and exhaust out from back side to eliminate every possible noise to realize silence and comfort, and achieve a sound level down to 42dB(A) at 1m, 10dB(A) lower than On/Off heat pump, you'll hardly notice it's there.



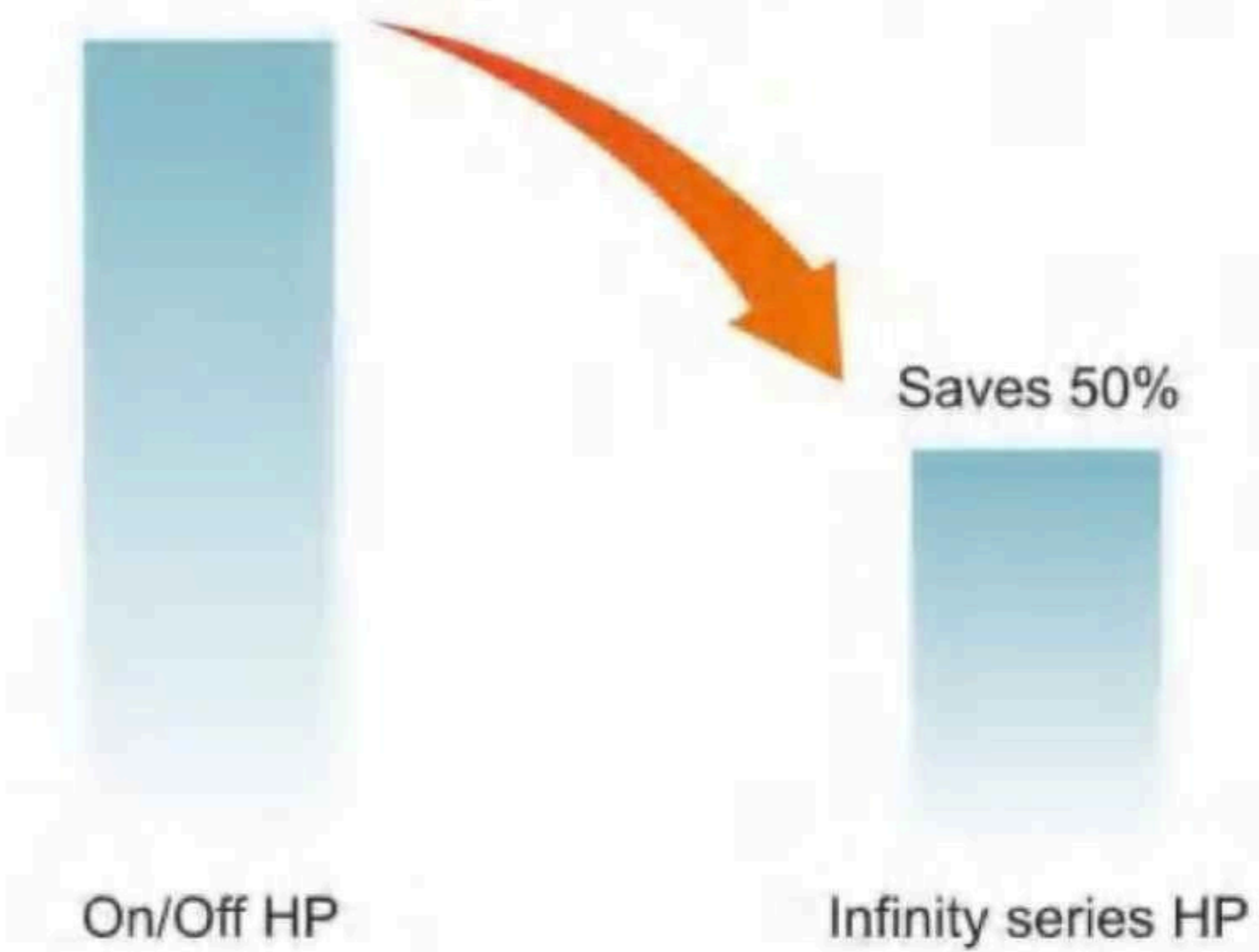
### COP up to 15

Infinity series heat pump runs at middle & low speed to maintain pool temperature for 95% of swimming season, COP can be up to 15.



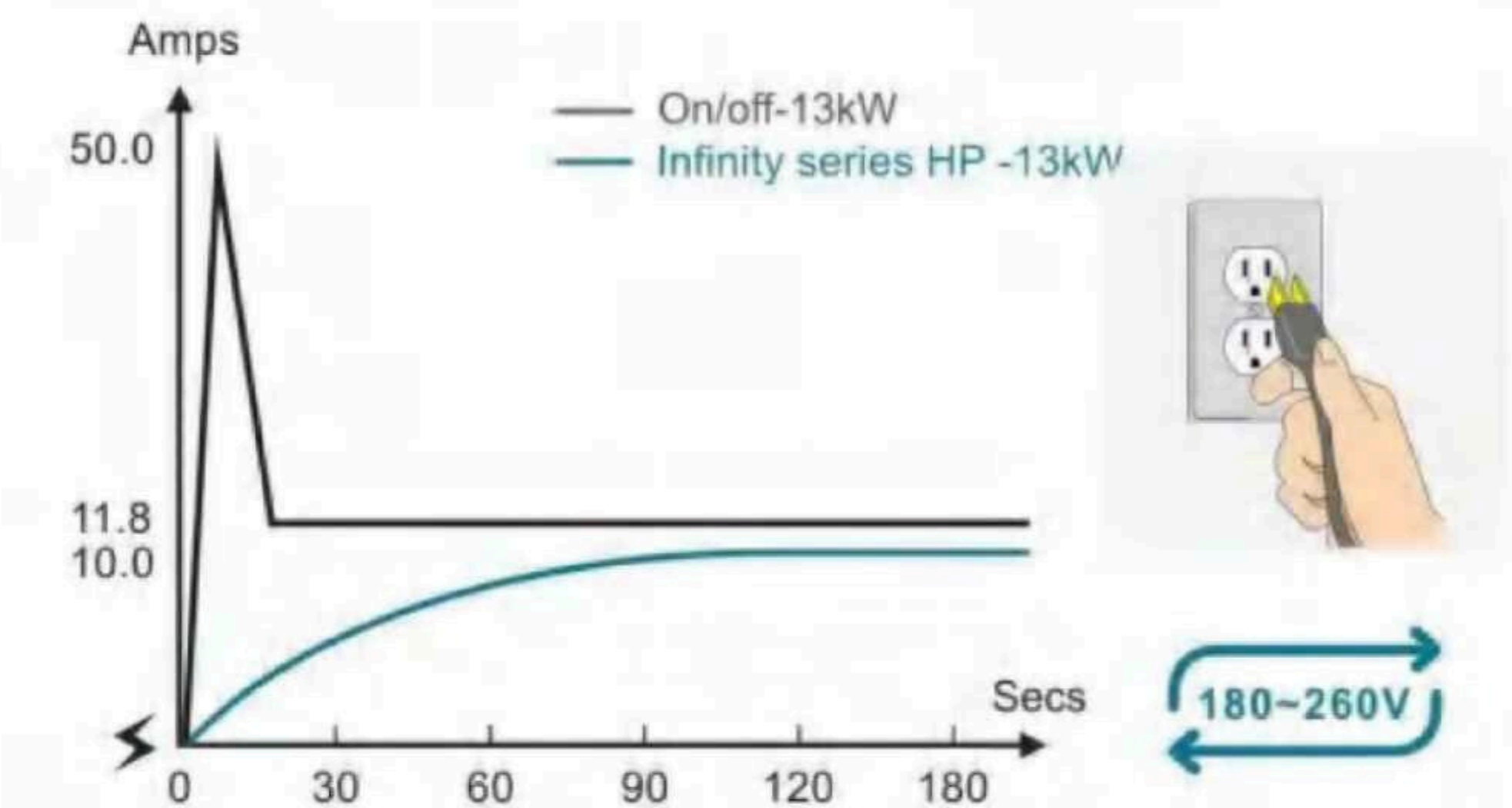
### Energy saving

With low-speed running most of the time, Infinity series heat pump is double energy saving than On/Off heat pump, as it will adjust the operating speed of its compressors and fan motors automatically according to the heating or cooling demand.



### Soft start & wide voltage application

The input current will start from 0 Amps to rated Amps steadily. More friendly to house electricity system. Infinity series heat pump can be also adapted to wide voltage from 180~260V.



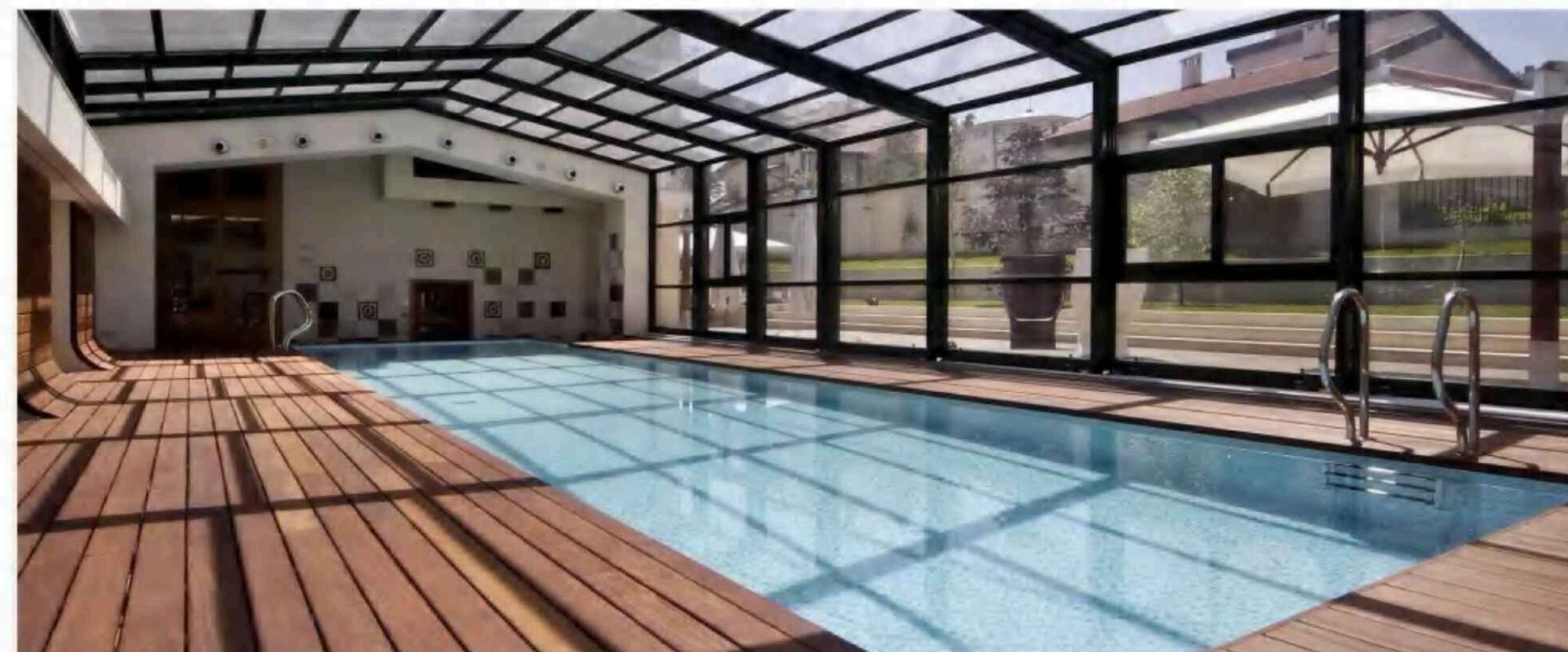
### Built-in Wi-Fi function

With Wi-Fi function, you can control your heat pump with a smart APP on the phone easily at anywhere and anytime.



### Other features

- EEV technology**  
 10 times flexibility to adjust the gas flow and increase the COP by up to 20%.
- ECO-Friendly refrigerant**  
 32% GWP comparing to R410A, 25% CO<sub>2</sub> carbon consumption and 25% quota cost
- Twisted titanium heat exchanger**  
 40% higher efficiency than normal titanium heat exchanger.
- DC**  
 Twin-Rotary DC Inverter compressor.
- 10°C**  
 Designed for down to Air -10 °C Operation.
- Reverse cycle defrosting**  
 With Saginomiya 4-way valve for quick and efficient defrosting.



## SUPER SILENT FULL INVERTER SWIMMING POOL HEAT PUMP INFINITY SERIES

### Technical parameters

| Model   | LAS13-IFPQ1-S4C2         | LAS16-IFPQ1-S4C2 | LAS20-IFPQ1-S4C2 | LAS24-IFPQ1-S4C2 |
|---|--------------------------|------------------|------------------|------------------|
| Performance condition: Air 27°C/ Water 27°C/ Humid. 80% |                          |                  |                  |                  |
| Heating capacity (kW)                                   | 2.6-13.2                 | 3.2-16.0         | 4.1-20.8         | 4.5-24.0         |
| Heating capacity (BTU)                                  | 8900-45100               | 11000-54600      | 14000-71000      | 15400-81900      |
| COP Range   | 14.9-6.0                 | 14.5-5.9         | 15.2-6.1         | 15.0-5.7         |
| Average COP at 50% Speed                                | 9.8                      | 9.6              | 9.7              | 9.8              |
| Performance condition: Air 15°C/ Water 26°C/ Humid. 70% |                          |                  |                  |                  |
| Heating capacity (kW)                                   | 1.8-9.1                  | 2.3-11.5         | 2.9-14.4         | 3.4-15.9         |
| Heating capacity (BTU)                                  | 6200-31100               | 7900-39300       | 9900-49200       | 11600-54300      |
| COP Range   | 8.4-4.0                  | 8.7-4.2          | 8.8-4.1          | 8.7-4.2          |
| Average COP at 50% Speed                                | 7.4                      | 7.1              | 7.3              | 7.2              |
| Technical specifications                                |                          |                  |                  |                  |
| Advised pool volume (m <sup>3</sup> )*                  | 20-45                    | 35-65            | 50-90            | 60-110           |
| Operating air temperature (°C)                          | -10°C~43°C               |                  |                  |                  |
| Compressor  | Twin-rotary Compressor   |                  |                  |                  |
| Heat exchanger  | Titanium                 |                  |                  |                  |
| Power supply  | 220-240V / 1Ph / 50-60Hz |                  |                  |                  |
| Refrigerant   | R32                      |                  |                  |                  |
| Material  | ABS+Galvanized Sheet     |                  |                  |                  |
| Rated input power (kW)                                  | 0.17~2.03                | 0.2~2.3          | 0.28~3.2         | 0.30~4.2         |
| Input power at 50% Speed (kW)                           | 0.7                      | 0.8              | 1.2              | 1.3              |
| Rated input current (A)                                 | 0.8~8.8                  | 0.9~10.0         | 1.2~14.0         | 1.3~18.2         |
| Maximum input current (A)                               | 10.6                     | 12.0             | 16.7             | 22.0             |
| breaker rated current (A)                               | 15.0                     | 20.5             | 23.5             | 25.0             |
| Power cord (mm <sup>2</sup> )                           | 3×2.5                    | 3×2.5            | 3×4.0            | 3×4.0            |
| Sound level at 1m dB(A)                                 | 42.2~52.8                | 42.5~54.0        | 43.8~54.5        | 42.9~56.7        |
| Sound level by 50% speed 1m dB(A)                       | 45.8                     | 45.5             | 47.1             | 48               |
| Sound level at 10m dB(A)                                | 22.2~31.8                | 22~34.5          | 23.6~34.2        | 21.9~37.6        |
| Advised water flux (m <sup>3</sup> /h)                  | 4~6                      | 6~8              | 7~10             | 10~12            |
| Water connection (mm)                                   | 50                       |                  |                  |                  |
| R32 Net weight (g)                                      | 900                      | 1100             | 1300             | 1400             |
| Net weight / Gross weight (kg)                          | 53/67                    | 58/72            | 70/86            | 76/92            |
| Net dimension LxWxH (mm)                                | 900x430x670              | 900x430x670      | 1060x430x780     | 1060x430x780     |
| Packing size LxWxH (mm)                                 | 960x450x700              | 960x450x700      | 1150x450x810     | 1150x450x810     |
| Qty per 20'FT / 40'HQ (sets)                            | 95/180                   | 95/180           | 50/150           | 50/150           |

#### Remarks:

- The above data will be subject to change without further notice, please refer to the nameplate on the unit.
- Advised pool volume applies to a private pool with an isothermal cover, from April to September.

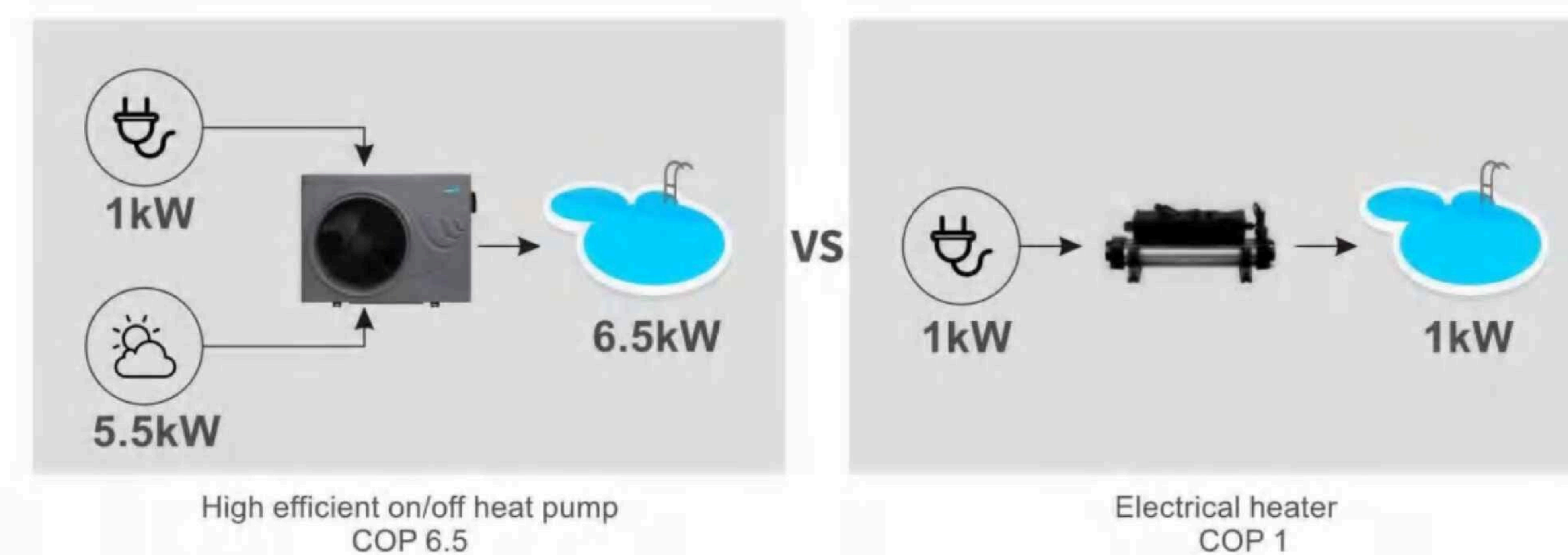
## HIGH EFFICIENT SWIMMING POOL HEAT PUMP COMFORT SERIES



MILLIAN high efficient Comfort series swimming pool heat pump is specially developed for energy saving and fast pool heating. With a COP as high as 6.5, it helps to extend the swimming season in a high cost-effective way. This Comfort series pool heat pump offers over 6 times heat power than electrical power input, it is your best choice for enjoying pool fun.

### COP up to 6.5, over 6 times energy saving

- At the condition of Air 27°C/Water 27°C/Humid.80%, the COP can be as high as 6.5, this comfort series heat pump offers over 6 times heat power than electric power input, giving you exceptional performance at a high cost-effective way.



### Spiral titanium heat exchanger

- Spiral titanium heat exchanger enlarges the area of heat exchanging by at least 30%.

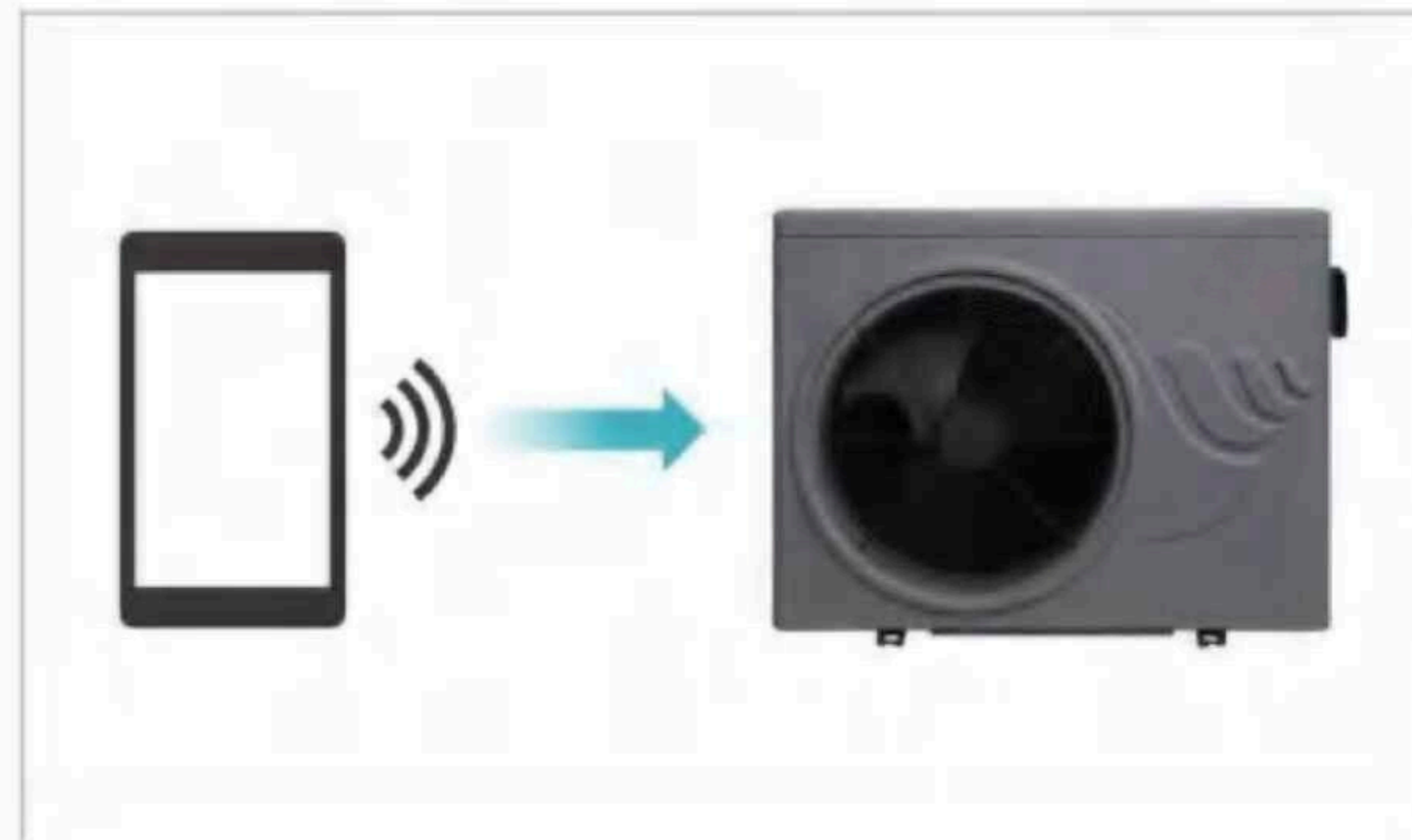


# HIGH EFFICIENT SWIMMING POOL HEAT PUMP

## COMFORT SERIES

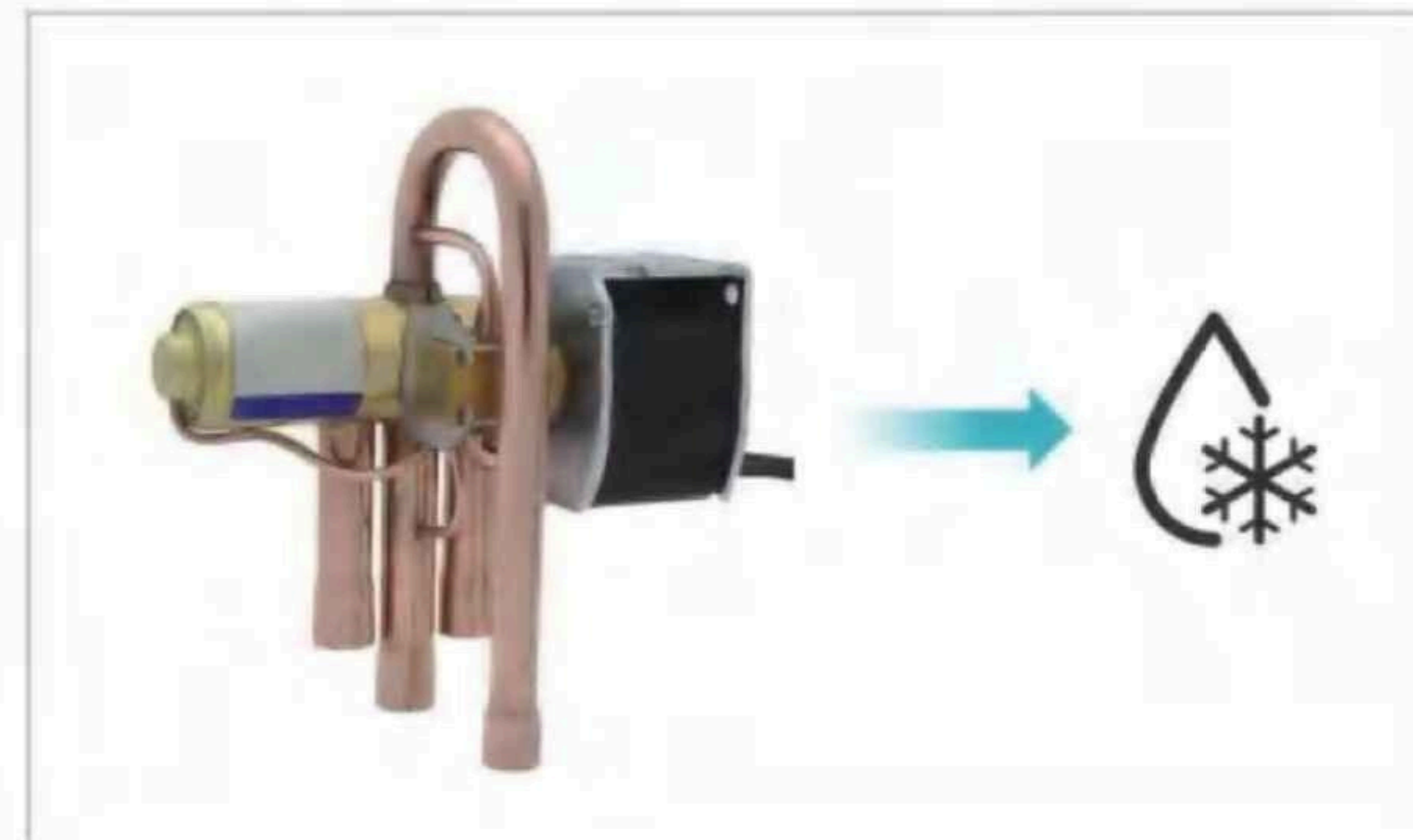
### Built-in Wi-Fi function

- With Wi-Fi function, you can control the heat pump with a smart APP on the phone easily anywhere and anytime.

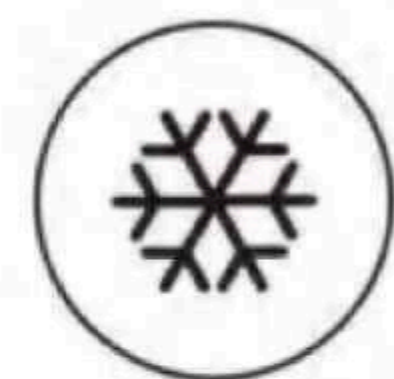


### Intelligent defrost

- With a 4-way valve for quick and efficient reverse cycle defrosting, ensuring the unit is running in high efficiency.



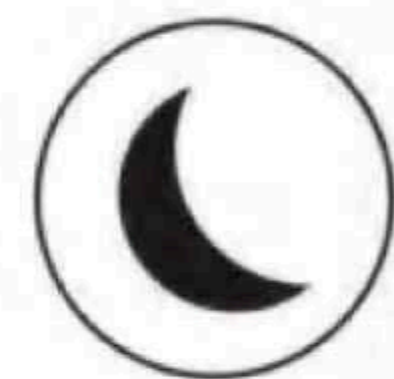
### Other features



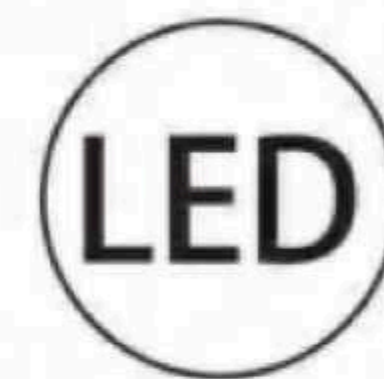
Down to -5°C running, help to extend the swimming season



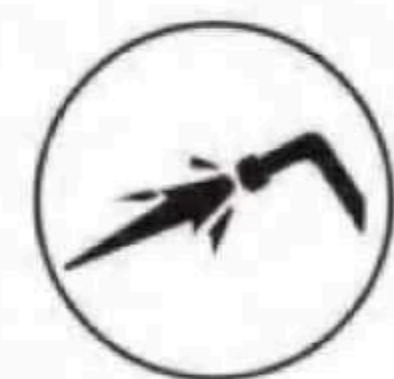
ECO-friendly refrigerant  
Compared to R410A, only 32% GWP, 25% CO2 carbon emission and 25% quota cost



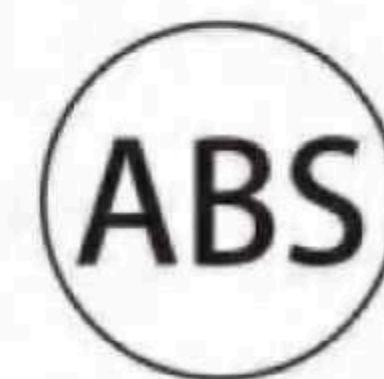
Quiet operation, comfortable swimming environment



Simple LED digital controller



Silver welding for reliable refrigerant system



ABS casing  
Anti-UV and anti-corrosion



### Technical parameters

| Model   | LS06-CFP1-S1C1              | LS10-CFP1-S1C1 | LS12-CFP1-S1C1 | LS14-CFP1-S1C1 | LS17-CFP1-S1C1 |
|---|-----------------------------|----------------|----------------|----------------|----------------|
| Performance condition: Air 27°C/ Water 27°C/ Humid. 80% |                             |                |                |                |                |
| Heating capacity (kW)                                   | 6.0                         | 10.2           | 12.0           | 14.0           | 17.0           |
| Heating capacity (BTU)                                  | 20500                       | 34800          | 40960          | 47800          | 58000          |
| COP Range   | 5.8                         | 6.3            | 6.5            | 6.5            | 6.4            |
| Performance condition: Air 15°C/ Water 26°C/ Humid. 70% |                             |                |                |                |                |
| Heating capacity (kW)                                   | 4.2                         | 7.1            | 8.4            | 9.8            | 11.9           |
| Heating capacity (BTU)                                  | 14300                       | 24200          | 28700          | 33400          | 40600          |
| COP Range   | 4.3                         | 4.4            | 4.6            | 4.6            | 4.5            |
| Technical specifications                                |                             |                |                |                |                |
| Advised pool volume (m <sup>3</sup> )                   | 0~30                        | 25~45          | 35~55          | 40~65          | 45~75          |
| Operating air temperature (°C)                          | -5°C~43°C                   |                |                |                |                |
| Power supply  | 220-240V/ 1Ph / 50Hz        |                |                |                |                |
| Heat exchanger  | Spiral titanium tube in PVC |                |                |                |                |
| Refrigerant   | R32                         |                |                |                |                |
| Casing  | ABS                         |                |                |                |                |
| Compressor  | Rotary                      |                |                |                |                |
| Rated input power (kW)                                  | 1.0                         | 1.6            | 1.8            | 2.2            | 2.6            |
| Rated input current (A)                                 | 4.5                         | 7.0            | 8.0            | 9.4            | 11.3           |
| Max input current (A)                                   | 6.5                         | 10.2           | 11.6           | 13.6           | 16.0           |
| Breaker (A)   | 8.0                         | 13.0           | 15.0           | 16.5           | 20.0           |
| Power cord (mm <sup>2</sup> )                           | 3*1.5                       | 3*2.5          | 3*2.5          | 3*4.0          | 3*4.0          |
| Sound level at 1m dB(A)                                 | 46.5                        | 46.5           | 47.5           | 47.5           | 48.5           |
| Sound level at 10m dB(A)                                | 27.5                        | 27.5           | 29.5           | 29.5           | 30.5           |
| Advised water flow (m <sup>3</sup> /h)                  | 2.5-3.5                     | 4.0-6.0        | 4.0-6.0        | 5.0-7.0        | 6.0-8.0        |
| Water connection (mm)                                   | 50                          |                |                |                |                |
| Net dimension LxWxH (mm)                                | 891x370x665                 | 891x370x665    | 981x370x665    | 981x370x665    | 981x370x665    |
| Packing Size (mm)                                       | 936x385x695                 | 936x385x695    | 1026x385x695   | 1026x385x695   | 1026x385x695   |
| Loading quantity of 20ft/40HQ (Sets)                    | 102/216                     | 102/216        | 90/198         | 90/198         | 90/198         |

### Remarks:

- The above data will be subject to change without further notice, please refer to the nameplate on the unit.
- Advised pool volume applies to a private pool with an isothermal cover, from April to September.

# INVERTER MINI SWIMMING POOL HEAT PUMP IMN SERIES

MILLIAN inverter mini swimming pool heat pump IMN series is the best choice for various small above ground pools. You can easily enjoy a comfortable heated swimming pool in your backyard, even on not-so-beautiful summer days. Thanks to the inverter technology, it absorbs free heat from the environment and passes it into the water for reduced and controlled energy consumption.



### Features:

- Ideal for above-ground pools, spas and splash pools
- Operating air temperature 5 °C-43 °C
- Easy installation (quick connection)
- Simple and intuitive control panel
- Low noise operation
- Filled with environmentally friendly R32 gas
- Titanium heat exchanger
- 1.5m wire cable&plug with RCD protection
- Suitable for 32mm or 38mm water connections



### Application :



### Save 80% energy

COP is up to 13, over 80% free energy from the ambient air



### Just plug&play

Simple plug and play saves valuable installation time



### Technical Parameters

| Model  | LS03-IMN1-S4C6              | LS04-IMN1-S4C6 | LS05-IMN1-S4C6 |
|--|-----------------------------|----------------|----------------|
| Performance condition: Air: 27°C / Water: 27°C / Humidity: 80% |                             |                |                |
| Heating capacity (kW)  | 1.3-3.5                     | 1.5-4.5        | 2.0-5.6        |
| Heating capacity (BTU)   | 11740                       | 15360          | 18780          |
| COP  | 13.2-5.4                    | 13.1-5.2       | 13.1-6.0       |
| Average COP at 50% Speed                                       | 8.1                         | 8.6            | 9.5            |
| Performance condition: Air: 15°C / Water: 26°C / Humidity: 70% |                             |                |                |
| Heating capacity (kW)  | 0.9-2.4                     | 1.1-3.2        | 1.5-3.9        |
| Heating capacity (BTU)   | 8220                        | 10750          | 13450          |
| COP  | 7.6-4.1                     | 7.7-4.2        | 7.4-4.0        |
| Average COP at 50% Speed                                       | 5.7                         | 6.0            | 6.7            |
| Technical specifications                                       |                             |                |                |
| Advised pool volume (m <sup>3</sup> ) *                        | 0-15                        | 5-20           | 8-25           |
| Operating air temperature (°C)                                 | 5°C-43°C                    |                |                |
| Power supply   | 220-240V / 1Ph / 50Hz       |                |                |
| Heat exchanger   | Spiral titanium tube in PVC |                |                |
| Compressor   | Twin-rotary DC inverter     |                |                |
| Refrigerant  | R32                         |                |                |
| Casing   | Galvanized steel            |                |                |
| Rated input power (kW)   | 0.09-0.65                   | 0.12-0.87      | 0.15-0.93      |
| Input power at 50% Speed (kW)                                  | 0.2                         | 0.3            | 0.35           |
| Rated input current (A)  | 0.4-2.8                     | 0.5-3.8        | 0.6-4.1        |
| Maximum input current (A)                                      | 3.6                         | 5              | 5.4            |
| Power cord (mm <sup>2</sup> )                                  | 3x1.0                       |                |                |
| Fan speed (rpm)  | 850-900                     |                |                |
| Sound level at 1m dB(A)  | 48-52.5                     |                |                |
| Sound level by 50% speed 1m dB(A)                              | 50                          |                |                |
| Sound level at 10m dB(A)                                       | 21-32.5                     | 22-32.5        | 22-33.5        |
| Advised water flow (m <sup>3</sup> /h)                         | 1-2                         | 1-2.5          | 2-3.5          |
| Protection level   | IPX4                        |                |                |
| Water connection (mm)  | 32/38                       |                |                |
| Water pressure drop (kPa)                                      | 15                          |                |                |
| R32 Net weight (g)   | 320                         | 350            | 400            |
| Gross weight (kg)  | 26                          | 27             | 28             |
| Net weight (kg)  | 24                          | 25             | 26             |
| Net dimension LxWxH (mm)                                       | 440x330x486                 |                |                |
| Packing Size (mm)  | 520x350x490                 |                |                |
| Qty per 20' FT / 40'HQ (sets)                                  | 264/660                     |                |                |

### Remarks:

- The above data will be subject to change without further notice, please refer to the nameplate on the unit.
- Advised pool volume applies to a private pool with an isothermal cover, from April to September.

## NORMAL TEMPERATURE POOL HEAT PUMP

MILLIAN normal temperature commercial swimming pool heat pump is designed with titanium heat exchanger, can effectively resist the corrosion of chloride ion in pool water. This series heat pump is a reliable and energy-saving solution for pools in hotels, SPA, water parks, gyms, competition pool, etc.

### Features:

- Intelligent control for constant pool water temperature (max 40°C).
- Wide working air temperature range: -5°C to 43°C.
- Anti-corrosion titanium in PVC heat exchanger for durable use.
- Multiple protections for safe operation and long service life.
- The housing adopts high-quality galvanized sheet, with strong corrosion resistance.
- Powerful centralized control and remote control is available for convenient operation and maintenance.
- Automatic and forced defrosting function.



LAS70-KP - LAS105-KP



LAS21-KP



LAS35-KP - LAS52-KP



### Evaporator:

- With large surface for big air flow and good heat absorption.
- With great corrosion and heat resistance, COP is stable.



### Intelligent and high efficient control system:

- Automatic electric control system with a touch display, the operation and settings are more easy and convenient.
- The control panel adopts advanced SMT technology and ST micro-computer chip, with stable & reliable performance and powerful functions.



### Dual coil Titanium heat exchanger:

- Enlarges the heat exchanging surface that increases efficiency by providing an sufficient action area.
- Effectively resists the corrosion of chloride in water.



### International standard compressor:

- International famous brand compressor with precise energy stage settings ensures the working unit to achieve the desired energy saving effect.



### Electric expansion valve:

- Automatically adjust the refrigerant flow rate, ensuring the units operate with high efficiency in all weather conditions.



# Competition Pool Equipment

## Technical parameters

| Model                                 |                       | LAS21-KP       | LAS35-KP       | LAS42-KP       | LAS52-KP       | LAS70-KP       | LAS85-KP       | LAS105-KP      |
|---------------------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| A24/W26 condition                     | Heating capacity (kW) | 28.3           | 45.5           | 56.2           | 68.1           | 91.0           | 109.1          | 132.4          |
|                                       | COP                   | 6.63           | 6.66           | 6.72           | 6.77           | 6.66           | 6.69           | 6.73           |
| A20/W26 condition                     | Heating capacity (kW) | 25.0           | 40.2           | 49.6           | 60.2           | 80.4           | 96.4           | 117.1          |
|                                       | COP                   | 5.97           | 6.00           | 6.05           | 6.08           | 6.00           | 6.03           | 6.01           |
| A7/W26 condition                      | Heating capacity (kW) | 18.4           | 30.6           | 37.9           | 45.8           | 61.2           | 73.6           | 89.1           |
|                                       | COP                   | 4.50           | 4.57           | 4.62           | 4.63           | 4.57           | 4.60           | 4.57           |
| Cooling condition (35°C)              | Cooling capacity (kW) | 15.4           | 26.8           | 33.2           | 40.1           | 53.6           | 64.4           | 78.1           |
|                                       | EER                   | 3.44           | 3.45           | 3.49           | 3.50           | 3.45           | 3.47           | 3.46           |
| Power supply                          |                       | 380V/3N/50Hz   |                |                |                |                |                |                |
| Rated input power (kW)                |                       | 4.2            | 6.7            | 8.2            | 9.9            | 13.4           | 16.0           | 19.5           |
| Rated input current (A)               |                       | 7.5            | 12.0           | 14.3           | 17.7           | 23.9           | 28.6           | 34.8           |
| Maximum input power (kW)              |                       | 7.1            | 11.8           | 14.2           | 16.5           | 23.6           | 28.4           | 33.0           |
| Maximum input current (A)             |                       | 11.9           | 19.8           | 23.8           | 27.7           | 39.6           | 47.6           | 55.4           |
| Maximum outlet water temperature (°C) |                       | 40             |                |                |                |                |                |                |
| Grade of waterproof                   |                       | IPX4           |                |                |                |                |                |                |
| Anti-shock type                       |                       | I              |                |                |                |                |                |                |
| Operating air temperature (°C)        |                       | -5°C ~ 43°C    |                |                |                |                |                |                |
| Heat exchanger                        |                       | PVC+Titanium   |                |                |                |                |                |                |
| Maximum pressure (MPa)                |                       | 4.2            |                |                |                |                |                |                |
| Refrigerant                           |                       | R410A          |                |                |                |                |                |                |
| Noise Level dB(A)                     |                       | ≤65            | ≤68            | ≤68            | ≤68            | ≤70            | ≤70            | ≤70            |
| Water inlet/outlet size               |                       | DN40(Internal) | DN40(Internal) | DN40(Internal) | DN50(Internal) | DN50(Internal) | DN65(Internal) | DN65(Internal) |
| Circulating water flow rate (m³/h)    |                       | 6              | 10             | 12             | 15             | 20             | 25             | 30             |
| Water pressure drop (kPa)             |                       | 47             | 48             | 50             | 50             | 51             | 53             | 55             |
| Net weight (kg)                       |                       | 140            | 260            | 280            | 300            | 460            | 520            | 560            |
| Dimensions                            | Length (mm)           | 745            | 1425           | 1425           | 1425           | 2250           | 2250           | 2250           |
|                                       | Width (mm)            | 745            | 745            | 745            | 745            | 1035           | 1035           | 1035           |
|                                       | Height (mm)           | 1100           | 1100           | 1100           | 1100           | 1210           | 1210           | 1210           |

### Remarks :

- A24/W26 Standard heating condition: 24°C DB, 19°C WB, inlet water temperature 26°C;
- A20/W26 Standard heating condition: 20°C DB, 15°C WB, inlet water temperature 26°C;
- A7/W26 condition: 7°C DB, 6°C WB, inlet water temperature 26°C;
- Cooling condition: 35°C DB, 27°C WB, inlet water temperature 28°C;
- Due to the continuous improvement of products, the actual data will be subject to change without prior notice, please refer to the nameplate.



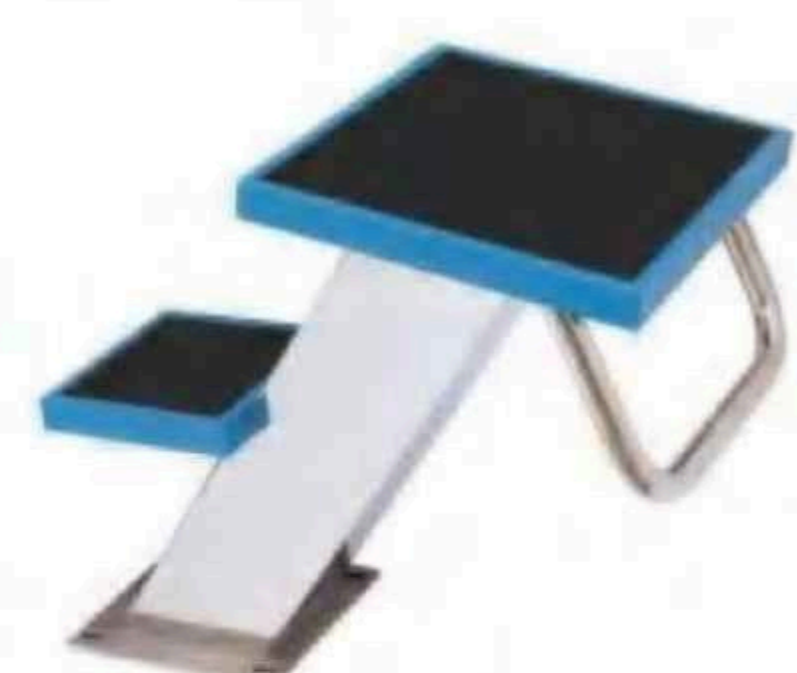
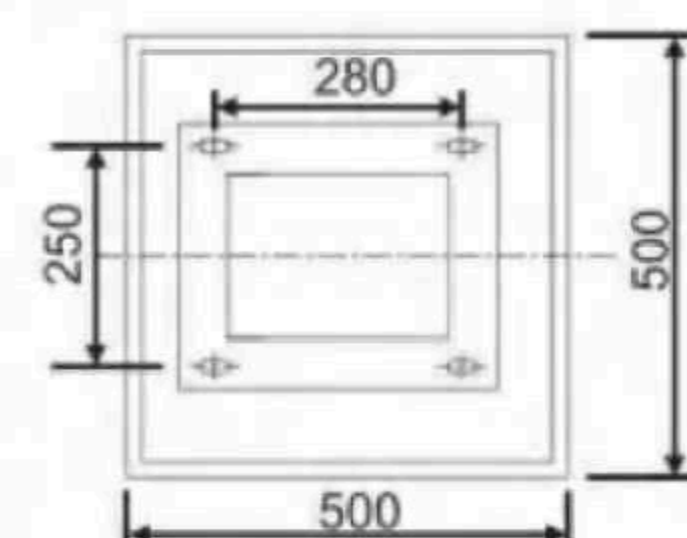
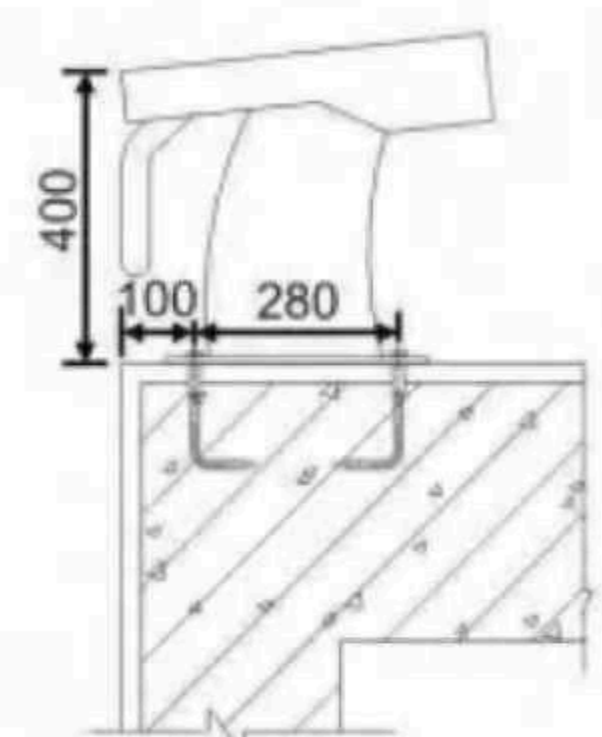
STARTING PLATFORMS

## STARTING PLATFORMS COMPETITION POOL EQUIPMENT

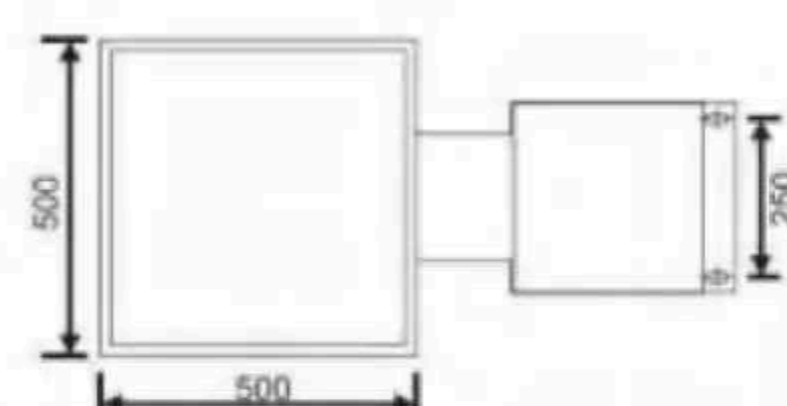
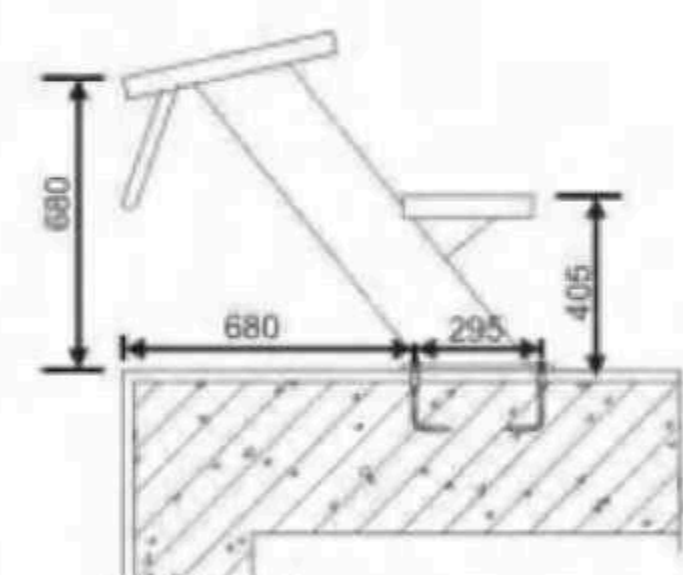
Universally acclaimed by coaches and competitive swimmers, this platform is graceful and functionally simplistic. The surface area is covered with non-slip material.



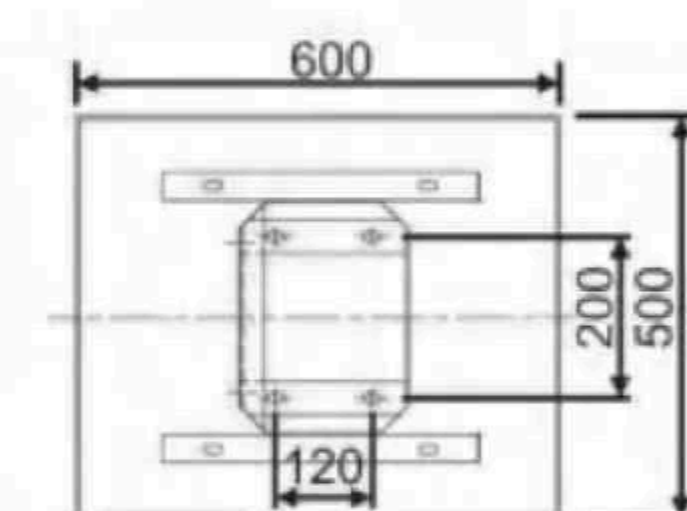
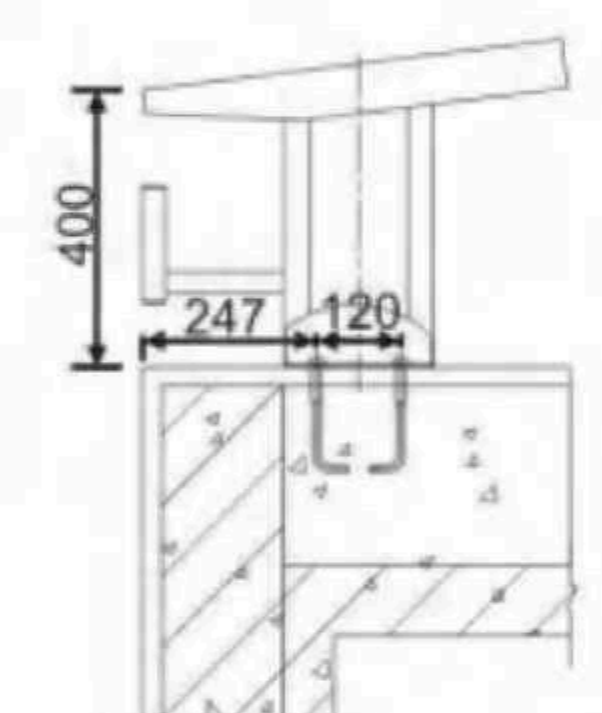
WL-ACF01 Standard Starting Platform



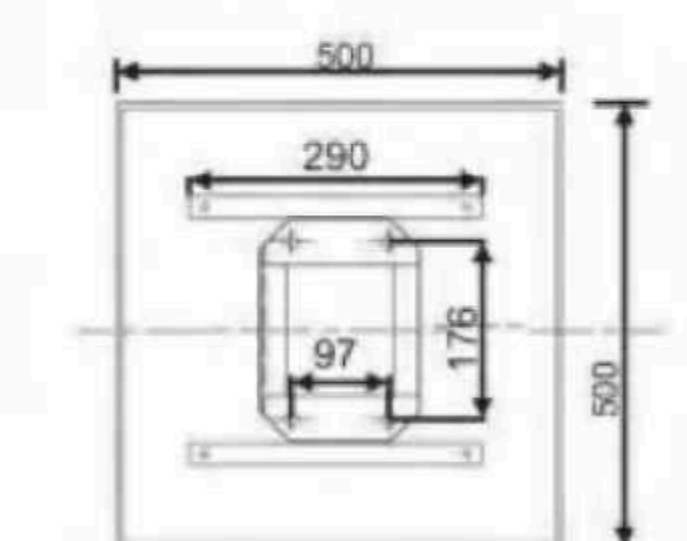
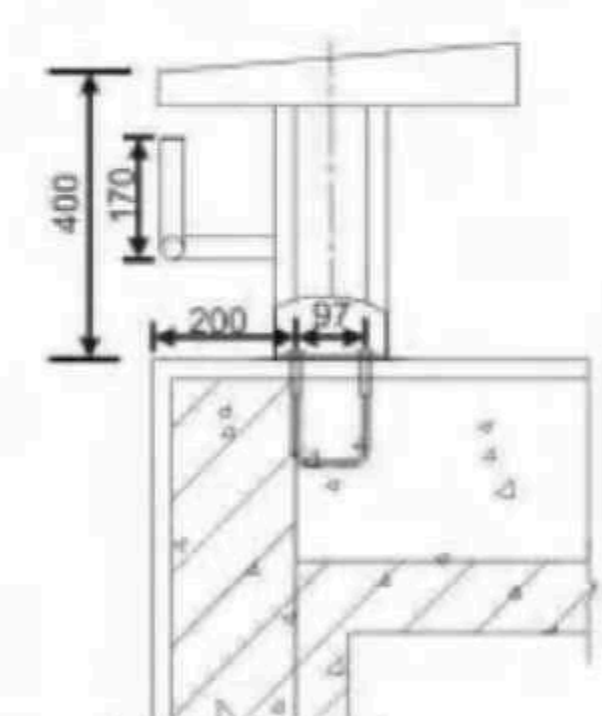
WL-ACF02 SS Two Steps Starting Platform



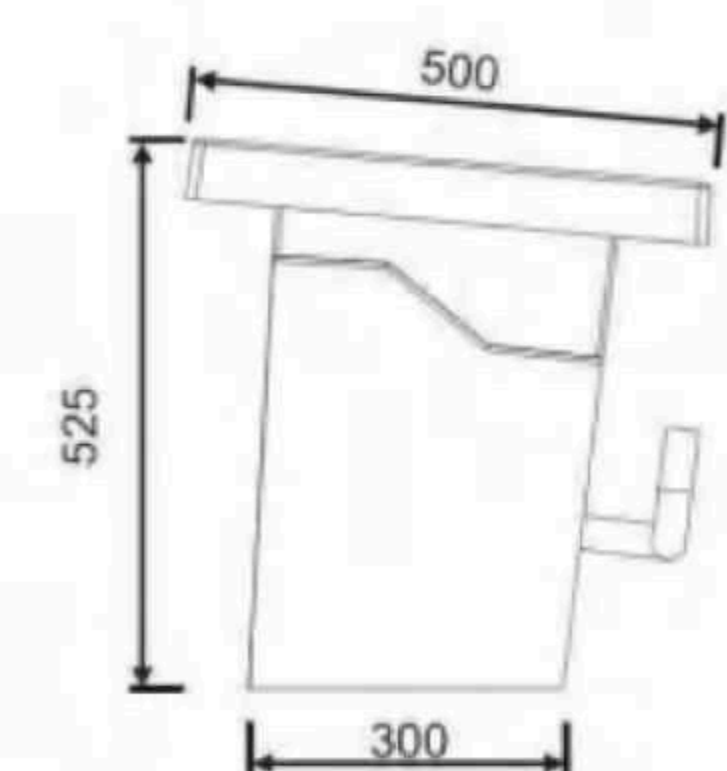
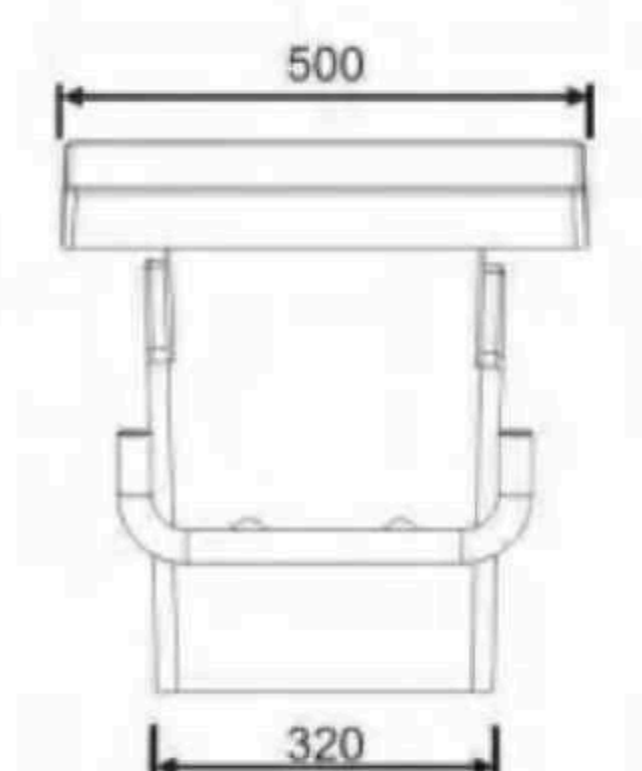
WL-BCF01 Standard Starting Platform



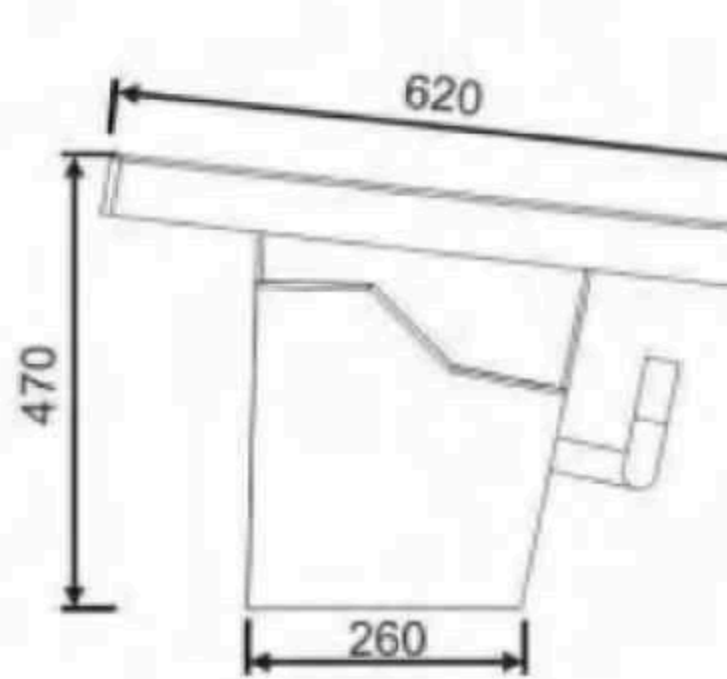
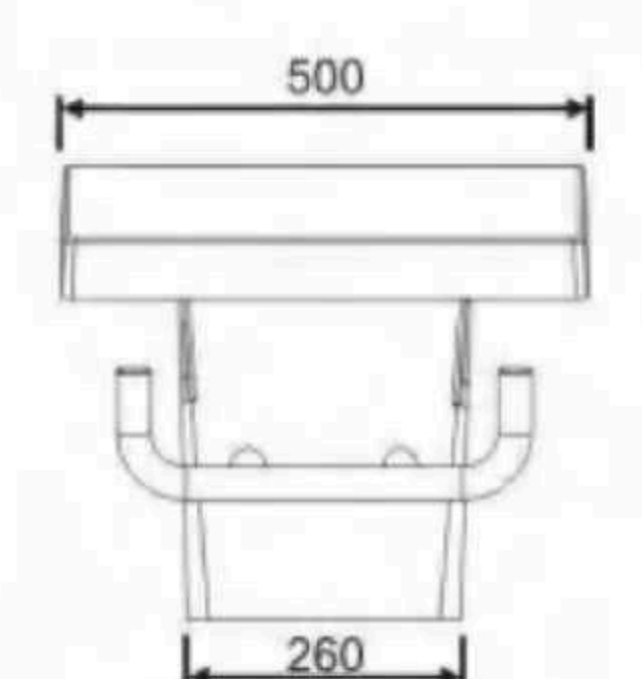
WL-BCF02 Standard Starting Platform



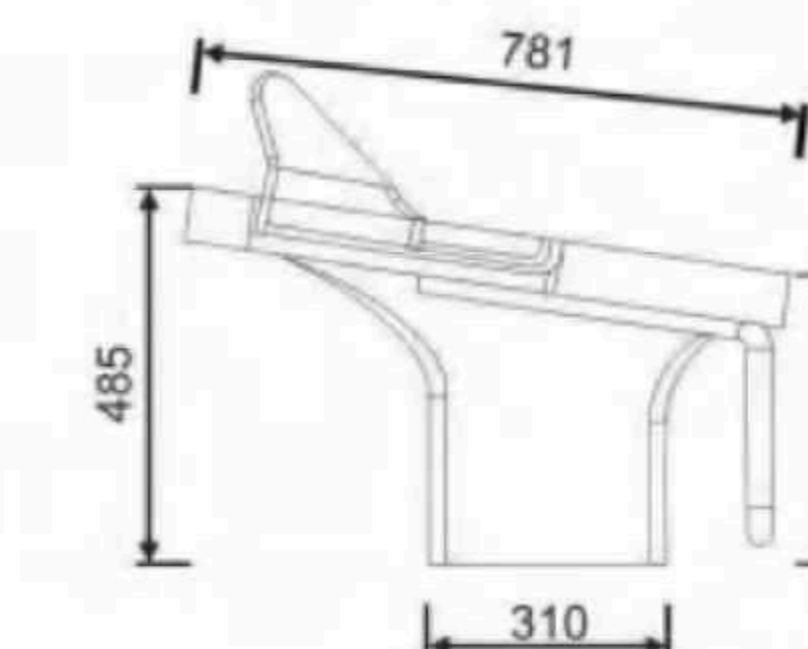
WL-ACF05 Standard Starting Platform



WL-ACF06 Standard Starting Platform



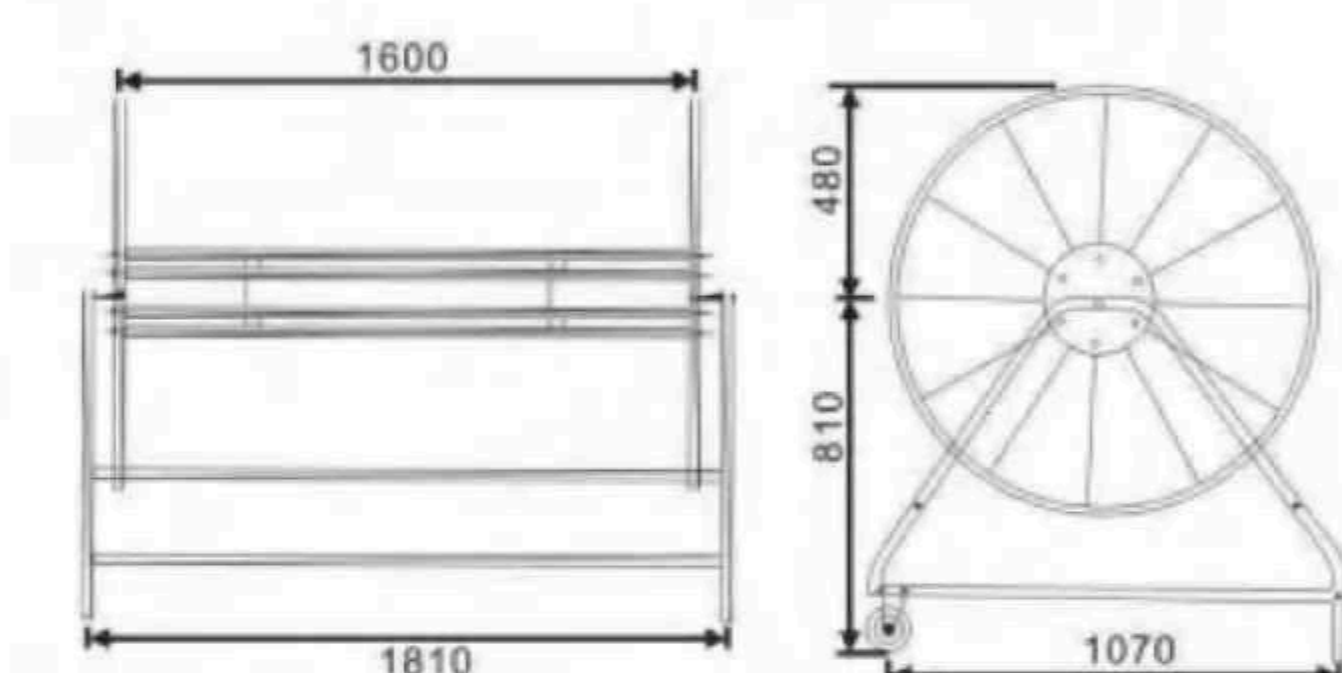
WL-ACF07 Standard Starting Platform



WL-AJX01

## STORAGE REEL COMPETITION POOL EQUIPMENT

Made of stainless steel, provided with a large diameter wheel for line collection, mounted on 2 wheels for moving around. It is very strong and durable. Holds one 50m or two 25m lanes. Maintenance free. It is ideal lane reel for commercial and institutional pools.



## RACING LANE LINE

Racing Lane's flow-through design controls water turbulence by allowing wave energy to be dispersed along the length of the lane, creating the optimum environment for the fastest swim times.

Each lane consists of a series of  $\phi$  120 or  $\phi$  150mm polyethylene disks and donuts strung on a stainless steel cable. Each of these disks is designed to rotate independently of the others, thereby allowing the wave energy to be absorbed and dispersed along the channel within the lane. Competitor lanes come completely assembled.

Standard Colors - Red, White, Blue, Yellow, Green.



| Model     | Specification  |
|-----------|----------------|
| WL-BYD101 | $\phi$ 150x25m |
| WL-BYD102 | $\phi$ 150x50m |
| WL-BYD201 | $\phi$ 120x25m |
| WL-BYD202 | $\phi$ 120x50m |

**COPPER JETS**  
HYDROTHERAPY EQUIPMENT

**HYDROTHERAPY  
EQUIPMENT**



SPA BED



Round 3 Holes Jet  
Diameter :  $\Phi 50.8$  MM  
Rate : 15 M<sup>3</sup>/HR  
Model : WL-C001



Round 5 Holes Jet  
Diameter :  $\Phi 50.8$  MM  
Rate : 20 M<sup>3</sup>/HR  
Model : WL-C002



Round 6 Holes Jet  
Diameter :  $\Phi 50.8$  MM  
Rate : 20 M<sup>3</sup>/HR  
Model : WL-C003



Round Ring Jet  
Diameter :  $\Phi 50.8$  MM  
Rate : 22 M<sup>3</sup>/HR  
Model : WL-C004



Flat - Round 4 Holes  
Radiate Jet  
Diameter :  $\Phi 50.8$  MM  
Rate : 20 M<sup>3</sup>/HR  
Model : WL-C005



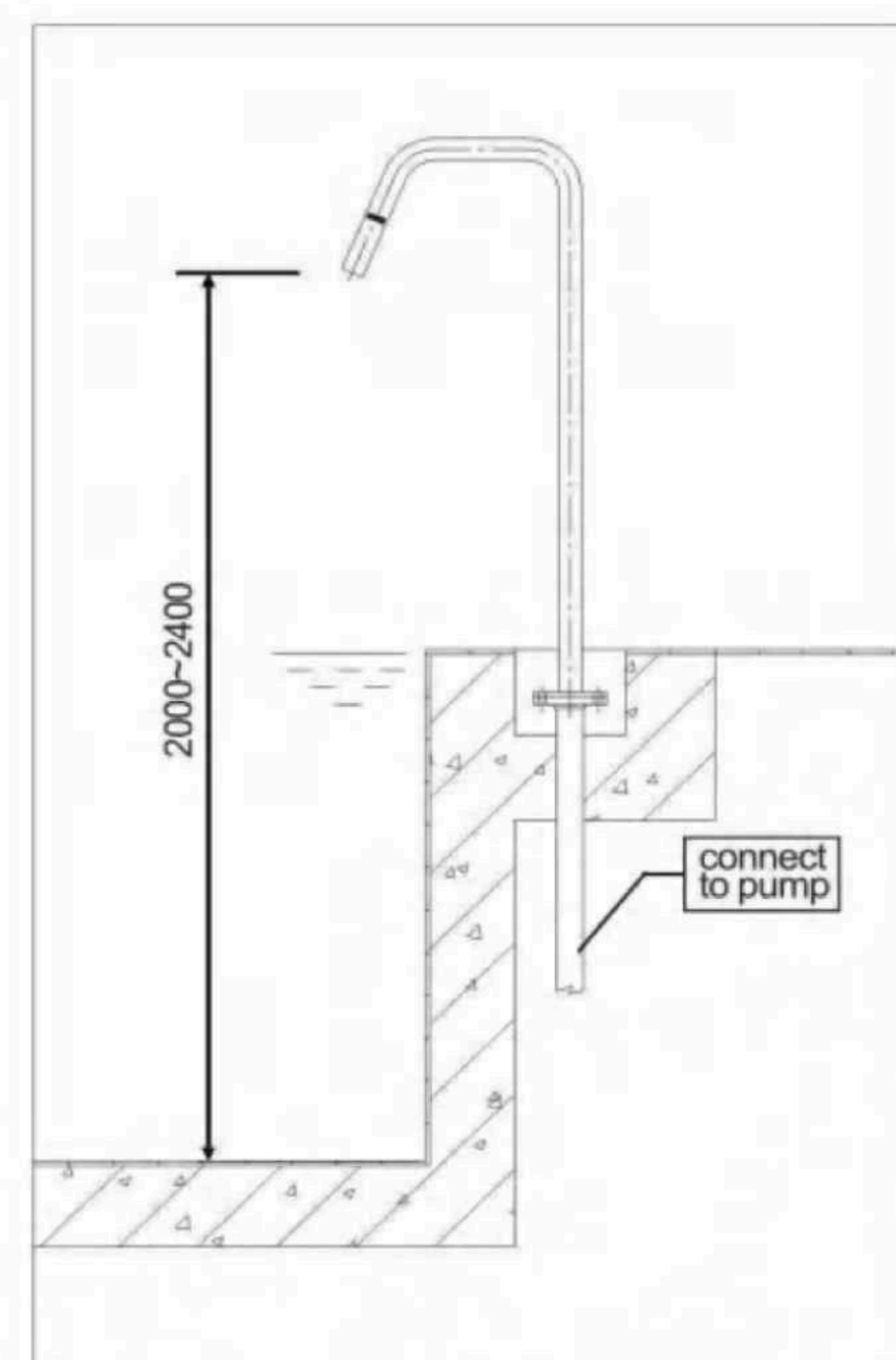
Flat - Round 4 Holes  
Sector Jet  
Diameter :  $\Phi 50.8$  MM  
Rate : 20 M<sup>3</sup>/HR  
Model : WL-C006



Flat - Round Radiate Jet  
Diameter :  $\Phi 50.8$  MM  
Rate : 20 M<sup>3</sup>/HR  
Model : WL-C007

COMPETITION POOL  
EQUIPMENT

## STAINLESS STEEL SUPPORT FOR JET HYDROTHERAPY EQUIPMENT



(Φ51mm O.Dx1.5mm Wall)

| Model  | Dia. | Height (mm) |
|--------|------|-------------|
| WT-S01 | Φ51  | 1430        |
| WT-S02 | Φ51  | 1630        |
| WT-S03 | Φ51  | 1830        |
| WT-S04 | Φ51  | 2030        |



WL-WQ101



WL-WQ201



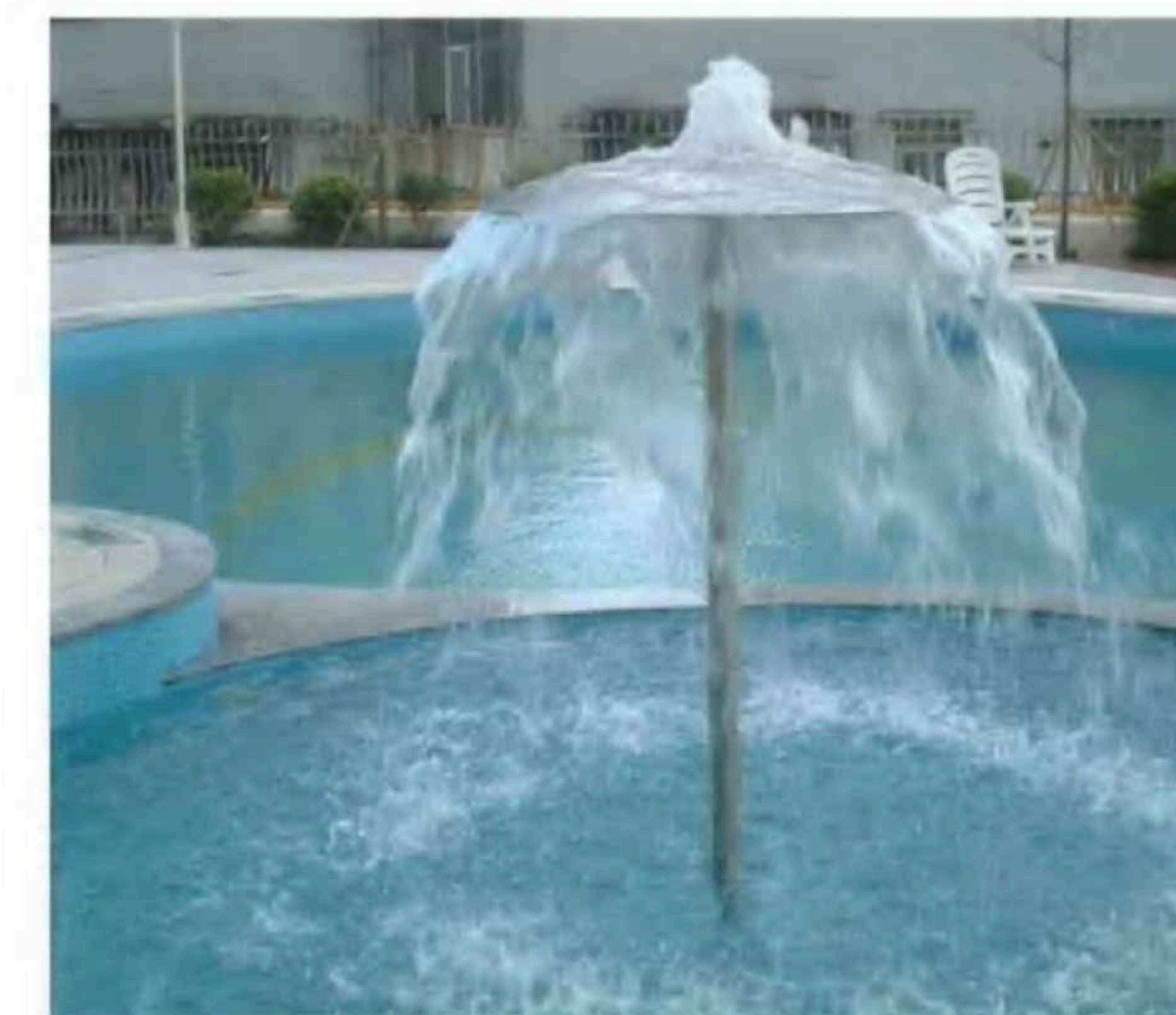
| Model    | Material        | Length(mm) | Width(mm) |
|----------|-----------------|------------|-----------|
| WL-WQ101 | Stainless steel | 980        | 220       |
| WL-WQ201 | Stainless steel | 2000       | 200       |

## UMBRELLA HYDROTHERAPY EQUIPMENT



MUSHROOM

| Name    | Model   | Material        | Diameter (mm) | Knighthead Height (mm) |
|---------|---------|-----------------|---------------|------------------------|
| Model I | WL-C401 | Stainless steel | 1200          | 2000                   |



UMBRELLA

| Name     | Model   | Material        | Diameter (mm) | Height (mm) |
|----------|---------|-----------------|---------------|-------------|
| Umbrella | WL-C501 | Stainless steel | 1200          | 2000        |



GOBLET

| Name   | Model   | Diameter (mm) | (H/Knighthead) (mm) |
|--------|---------|---------------|---------------------|
| Goblet | WL-C601 | 1400          | 2000                |



Model I

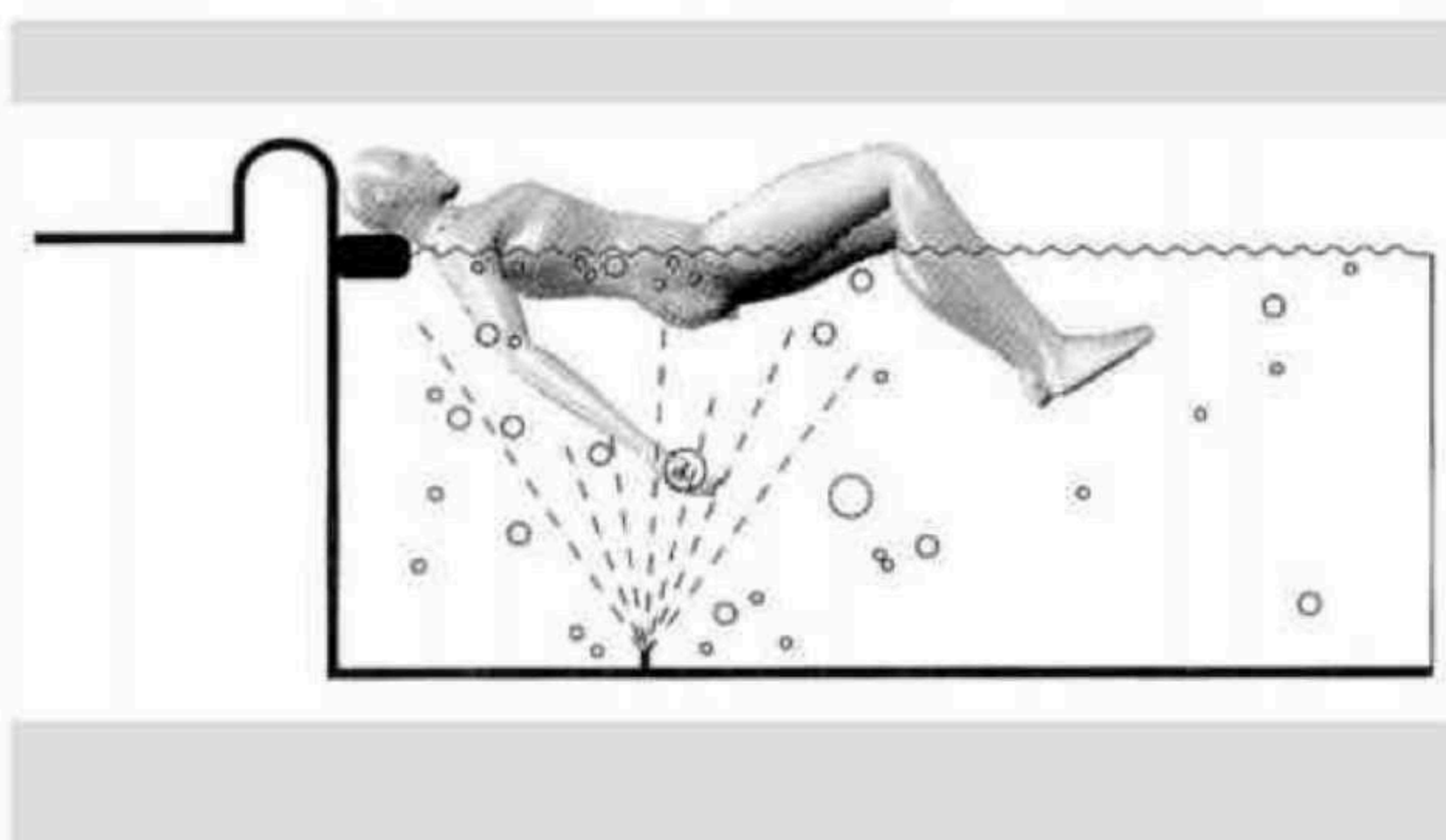


Model II

WATERFALL

| Name     | Model   | Material        | Width (mm) | Height (mm) |
|----------|---------|-----------------|------------|-------------|
| Model I  | WL-C301 | Stainless steel | 500        | 1100        |
| Model II | WL-C302 | Stainless steel | 500        | 900         |

## FLOAT HYDROTHERAPY EQUIPMENT



Float box

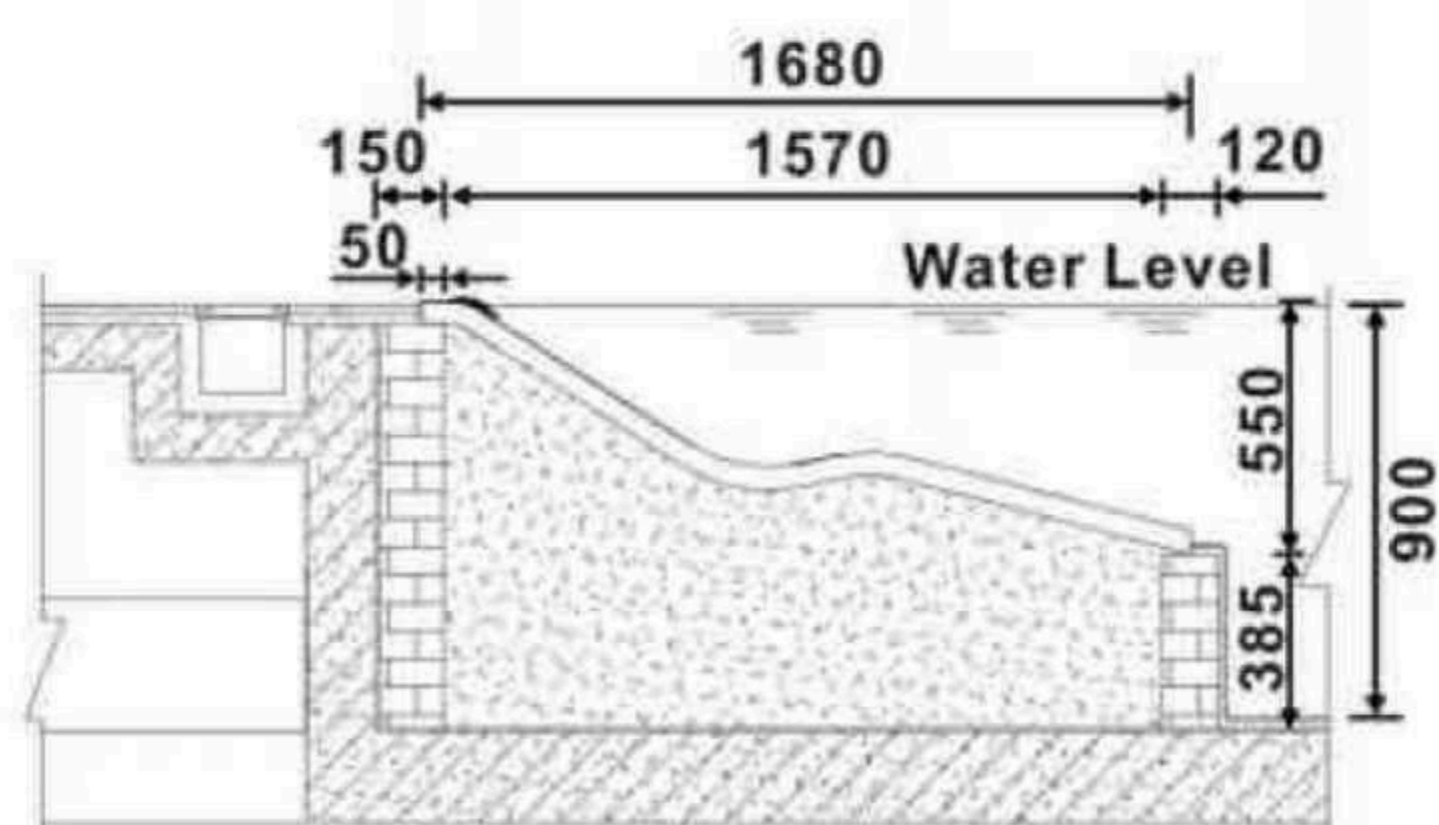
| Name      | Model   | Material        | length x width (mm) | Height (mm) |
|-----------|---------|-----------------|---------------------|-------------|
| Float box | WL-B301 | Stainless steel | 400x400             | 70          |



Air bubble box

| Name           | Model   | Material        | Diameter (mm) | Height (mm) |
|----------------|---------|-----------------|---------------|-------------|
| Air bubble box | WL-B201 | Stainless steel | 280           | 100         |
|                | WL-B202 | Stainless steel | 350           | 80          |

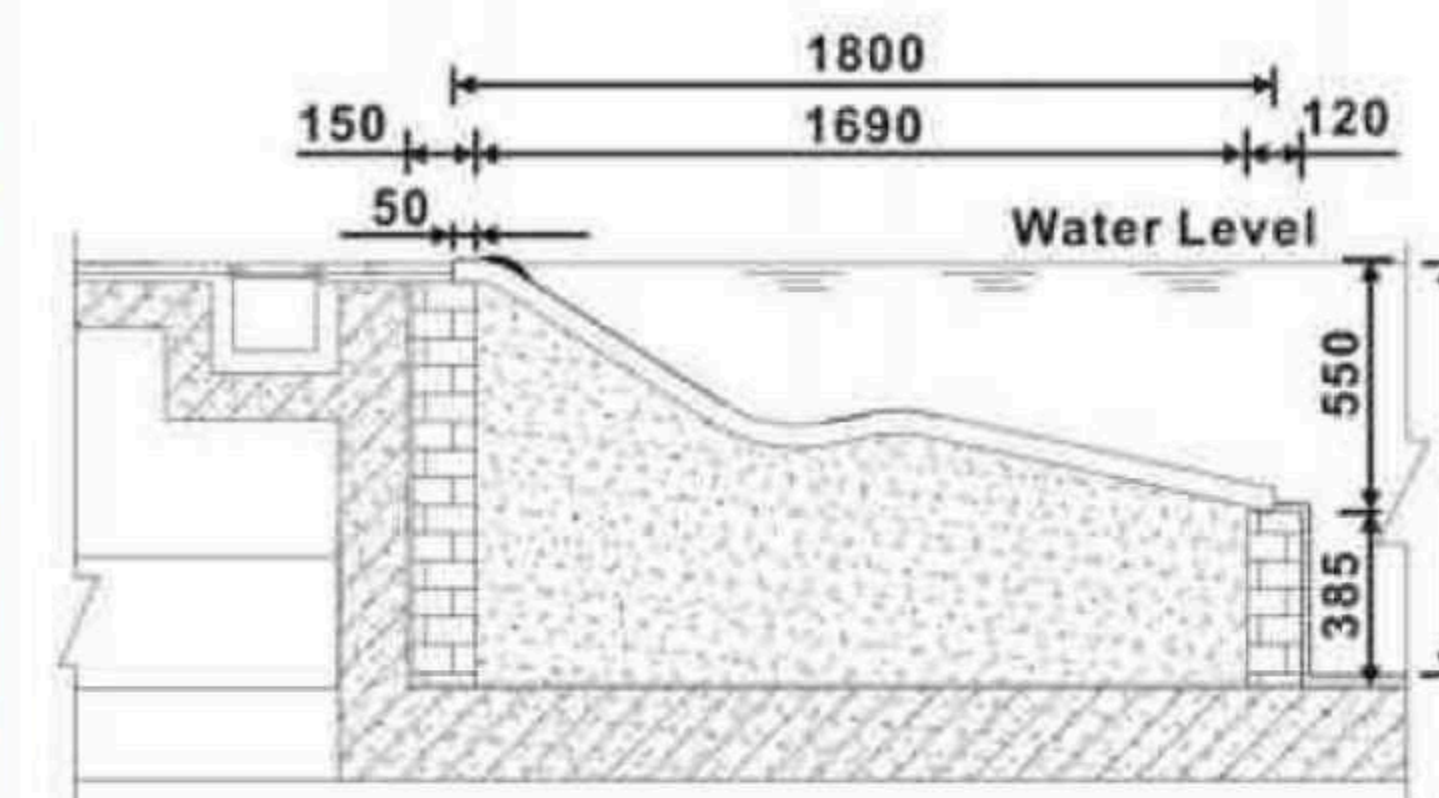
## SPA BED



WL-SC101

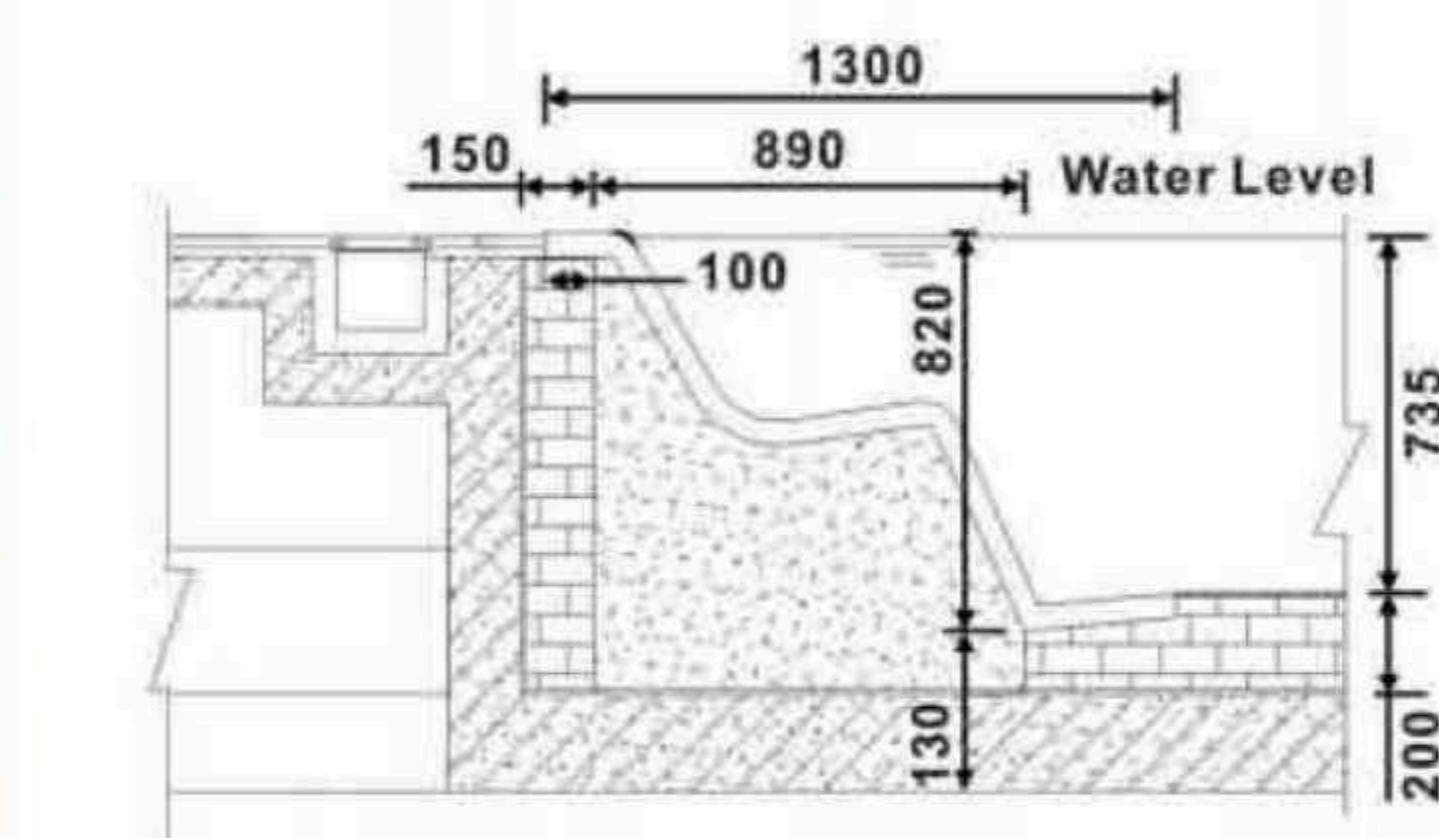
| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-SC101 | Acryl    | 1680       | 600       |

## SPA BED HYDROTHERAPY EQUIPMENT



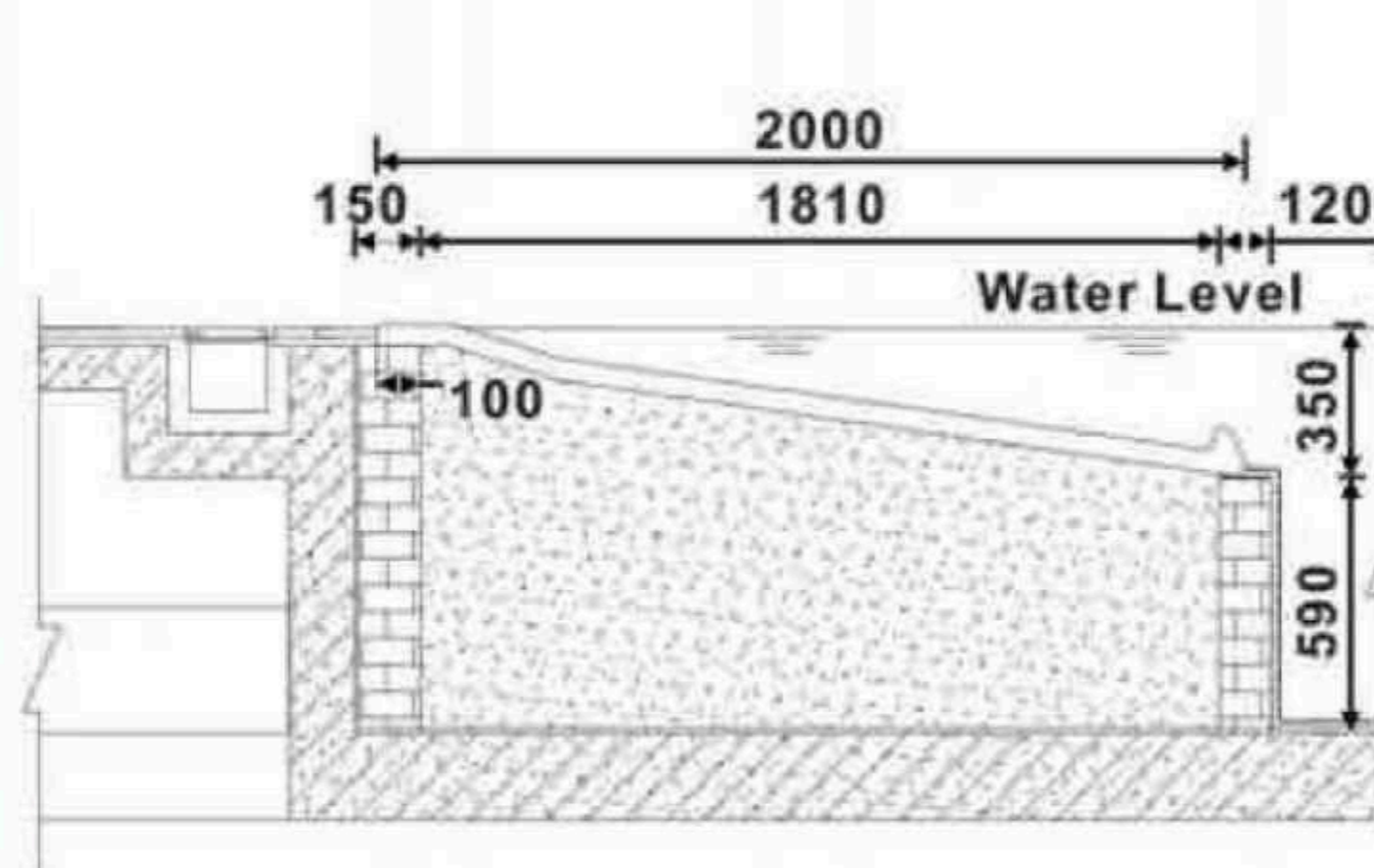
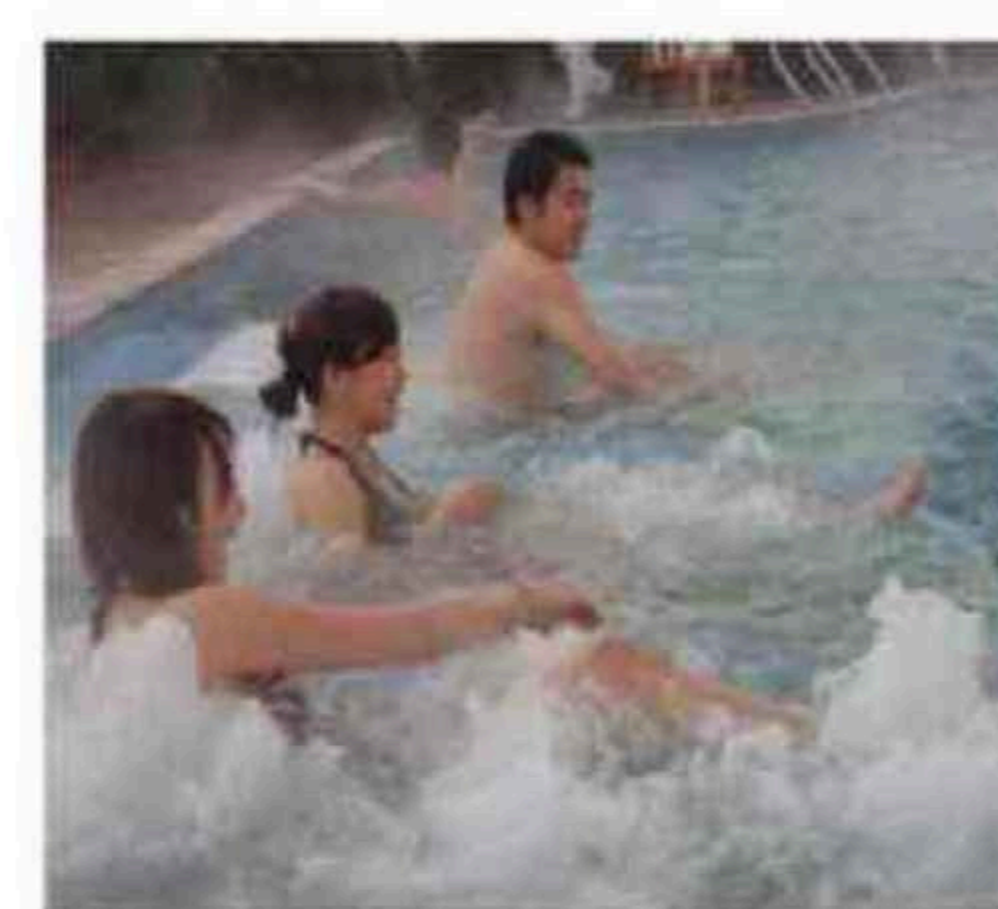
WL-SC201

| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-SC201 | Acryl    | 1800       | 750       |



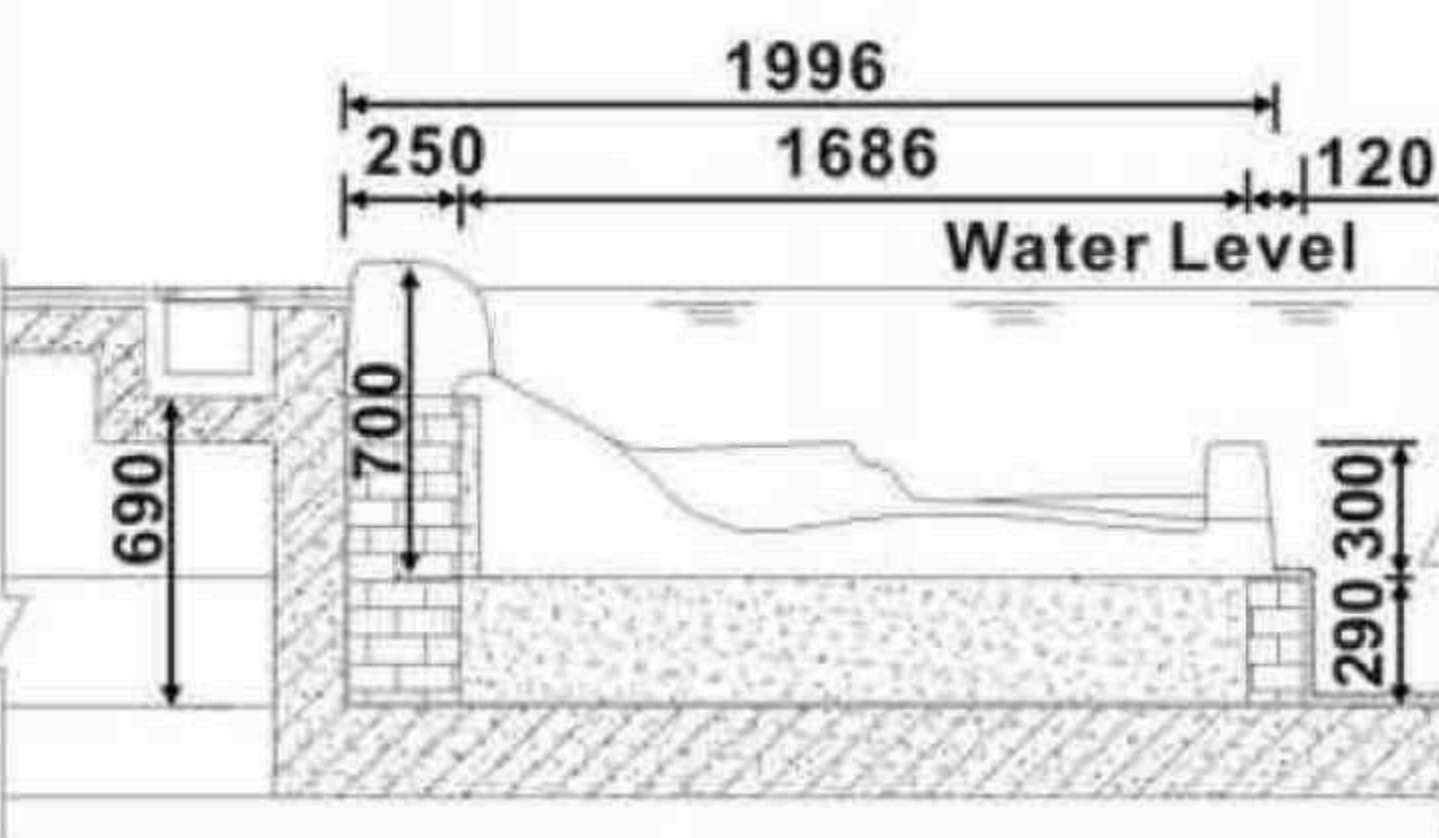
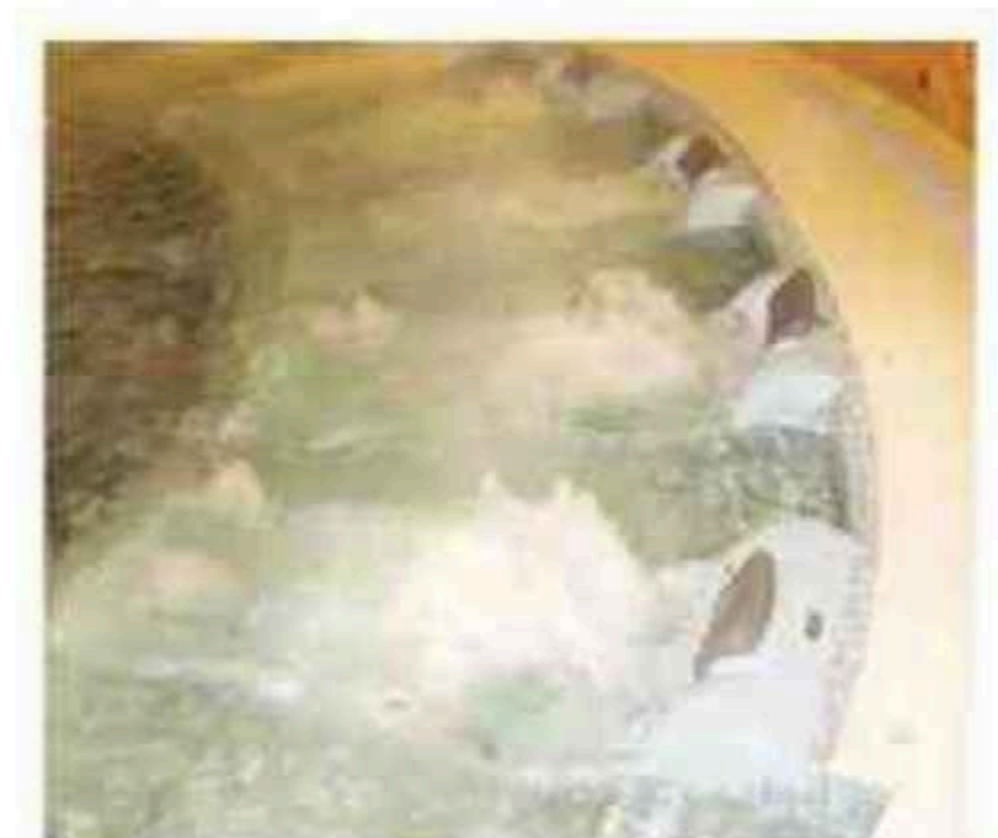
WL-SC301

| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-SC301 | Acryl    | 1300       | 700       |



WL-SC401

| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-SC401 | Acryl    | 2000       | 725       |



WL-SC501

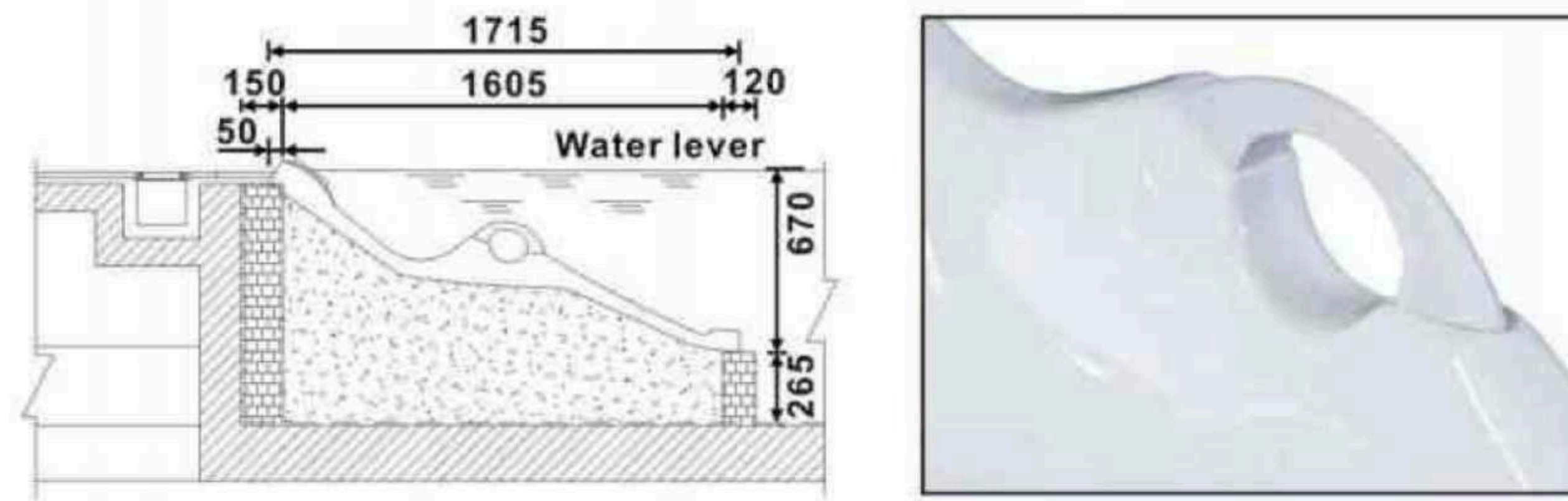
| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-SC501 | Acryl    | 1996       | 880       |

# Pool fittings & Cleaners

## SPA BED HYDROTHERAPY EQUIPMENT



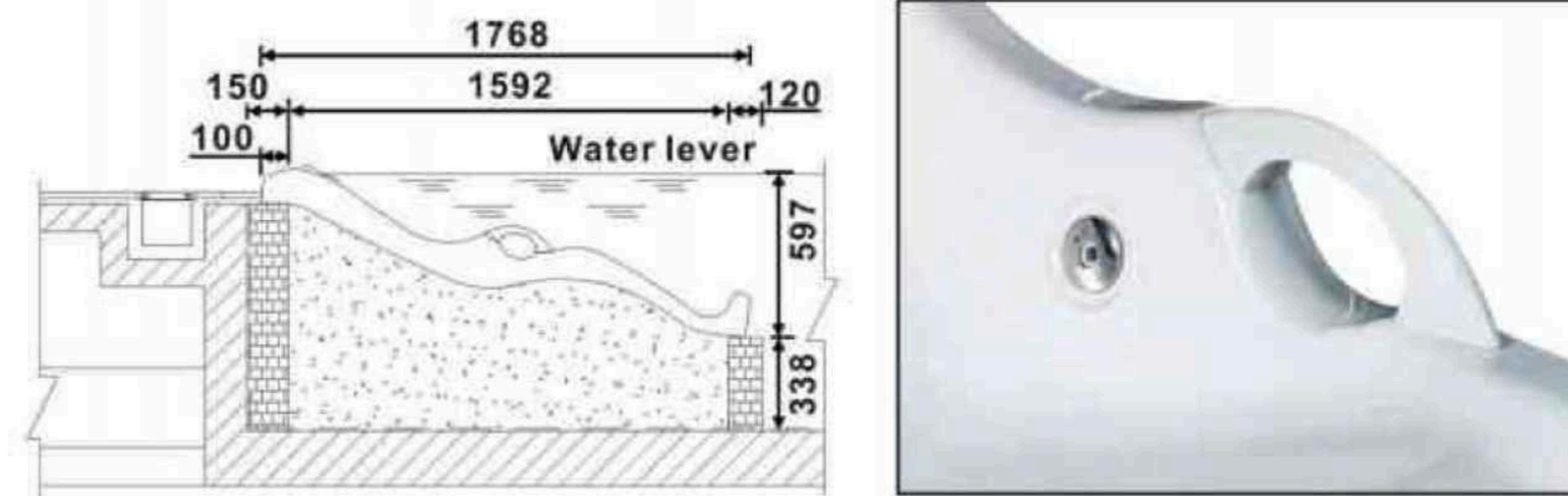
WL-SC601



| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-SC601 | Acryl    | 1770       | 710       |



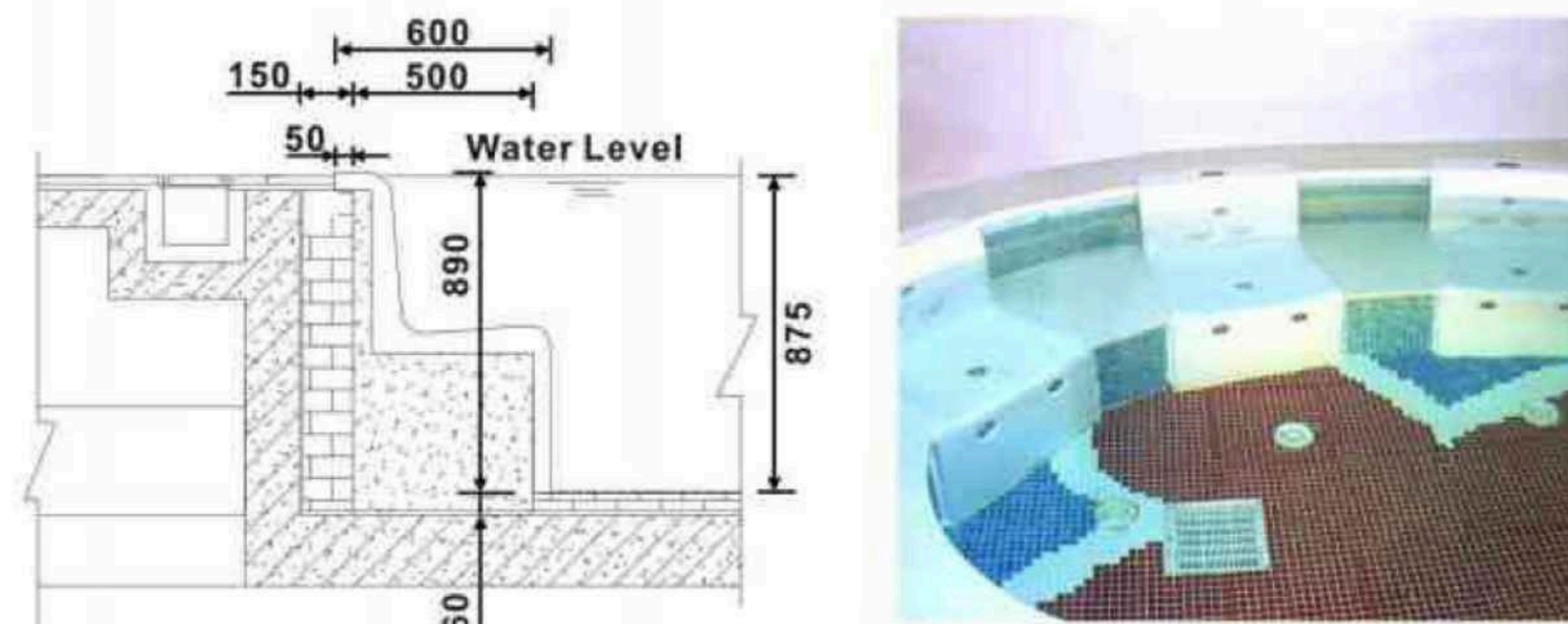
WL-SC701



| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-SC701 | Acryl    | 1800       | 750       |



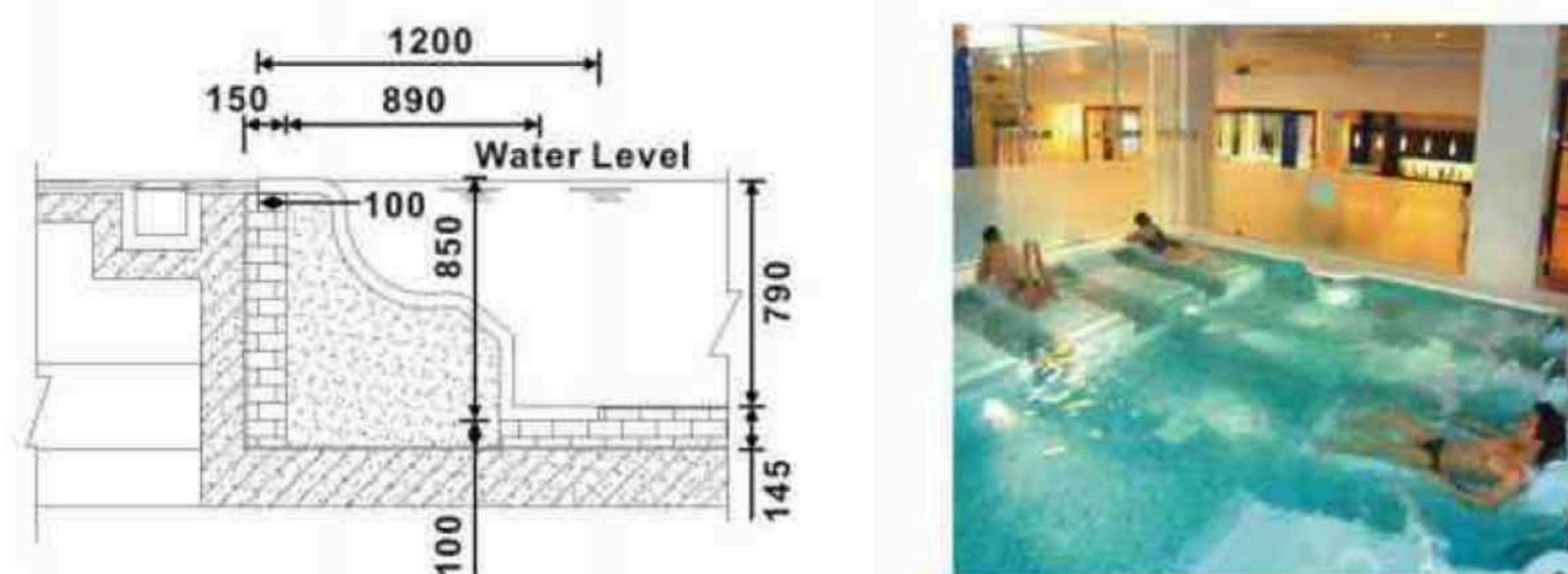
WL-ZY101



| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-ZY101 | Acryl    | 890        | 550       |



WL-ZY201



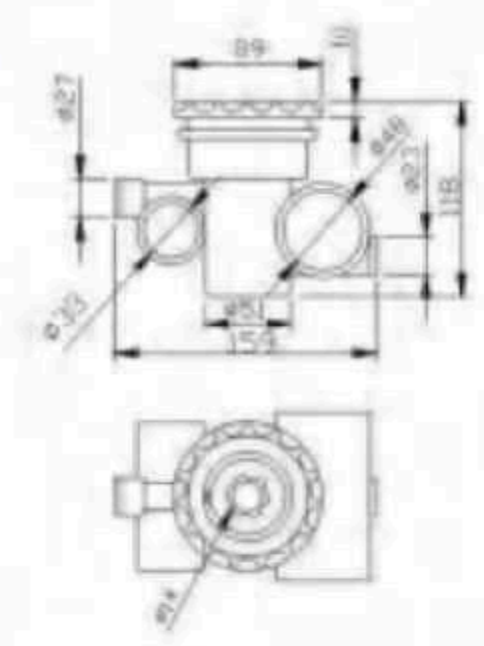
| Model    | Material | Length(mm) | Width(mm) |
|----------|----------|------------|-----------|
| WL-ZY201 | Acryl    | 850        | 750       |



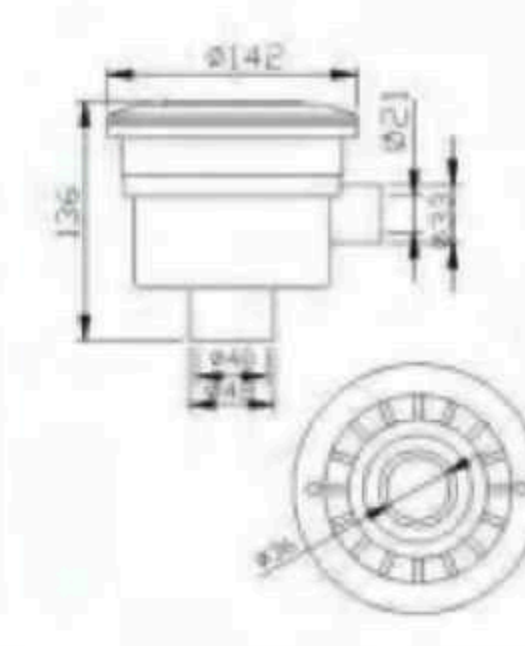
POOL FITTINGS

# POOL FITTINGS POOL FITTINGS & CLEANERS

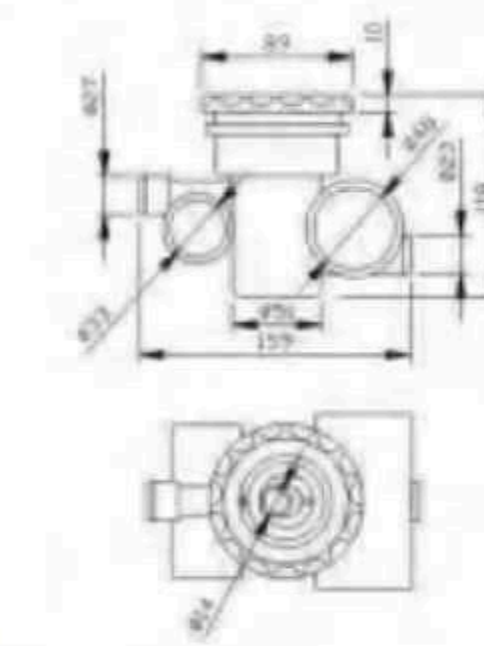
# POOL FITTINGS POOL FITTINGS & CLEANERS



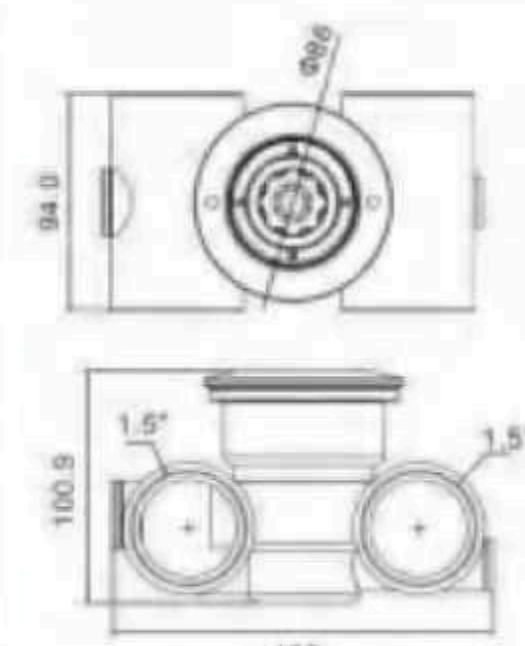
|          |          |
|----------|----------|
| Products | Jet      |
| Model    | WL-APH02 |
| Colour   | White    |
| Material | ABS      |



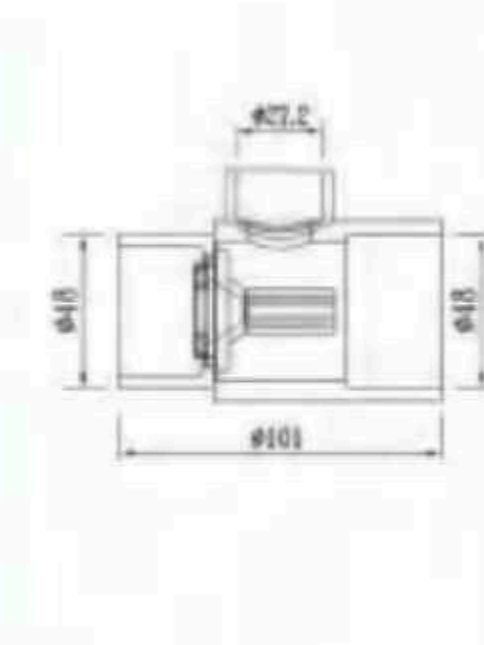
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|----------|----------|
| Products | Jet      |
| Model    | WL-APH03 |
| Colour   | White    |
| Material | ABS      |



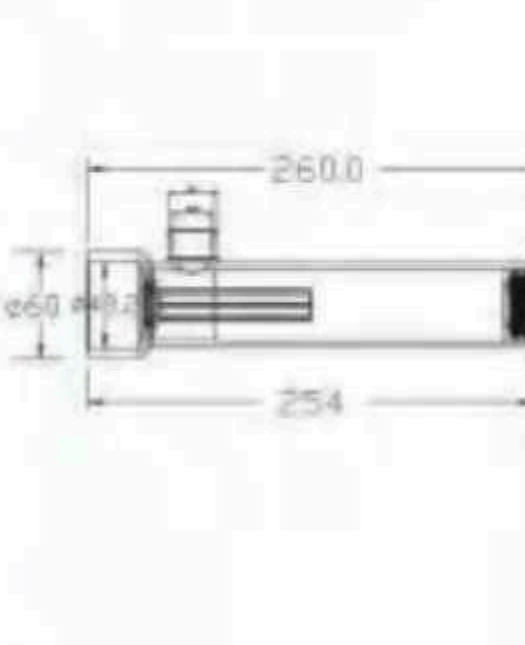
|          |          |
|----------|----------|
| Products | Jet      |
| Model    | WL-AXP01 |
| Colour   | White    |
| Material | ABS      |



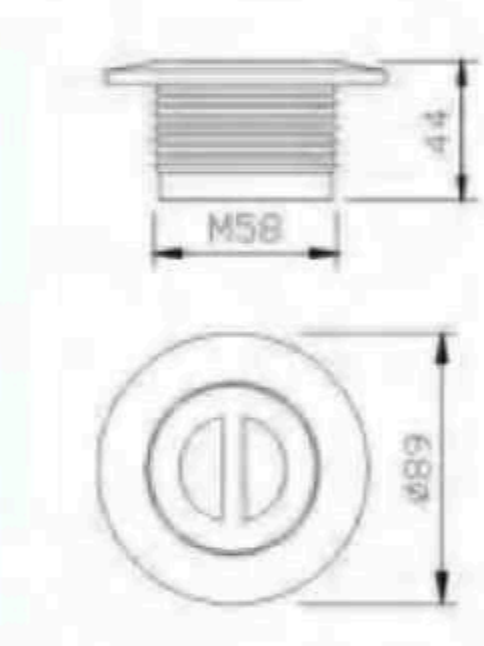
|          |          |
|----------|----------|
| Products | Jet      |
| Model    | WL-BPH02 |
| Colour   | White    |
| Material | ABS      |



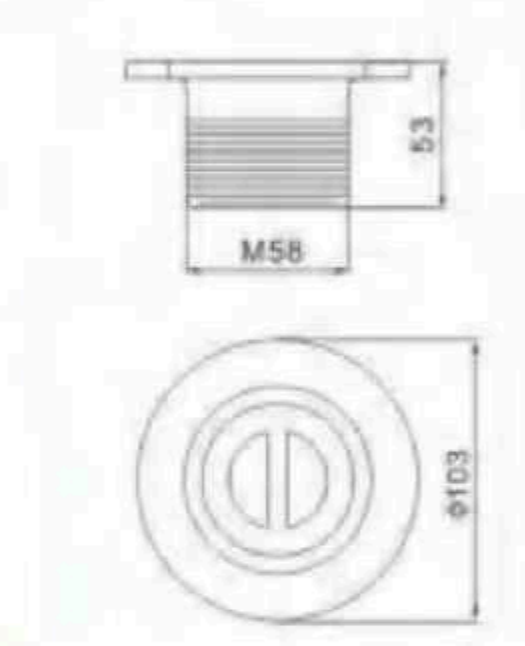
|          |          |
|----------|----------|
| Products | Jet      |
| Model    | WL-ASL01 |
| Colour   | White    |
| Material | ABS      |



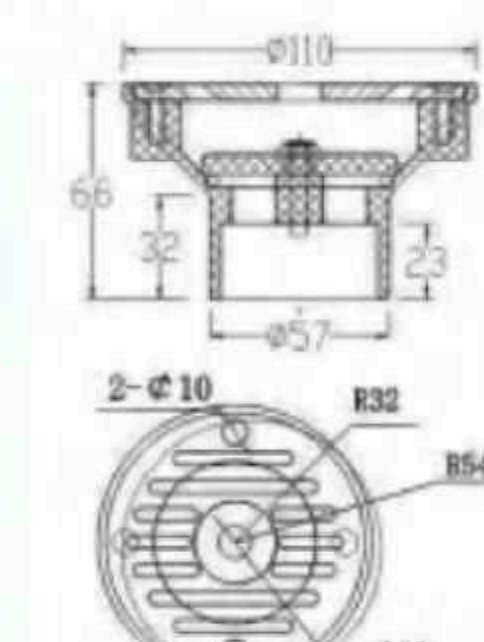
|          |          |
|----------|----------|
| Products | Jet      |
| Model    | WL-ASL02 |
| Colour   | White    |
| Material | ABS      |



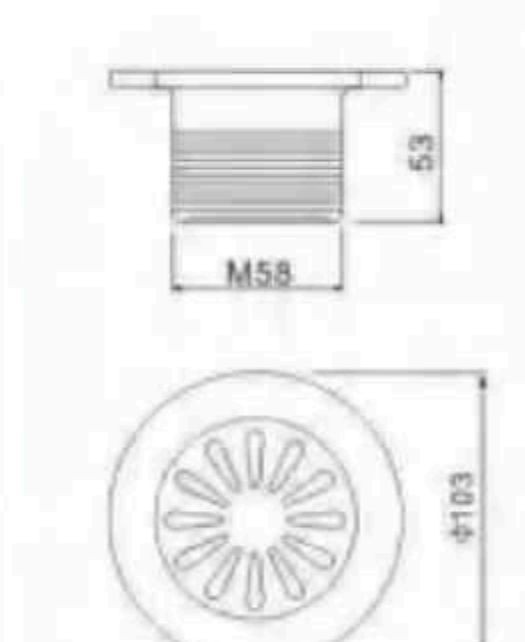
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|----------|--------------|
| Products | Suction Head |
| Model    | WL-ACW01     |
| Colour   | White        |
| Material | ABS          |



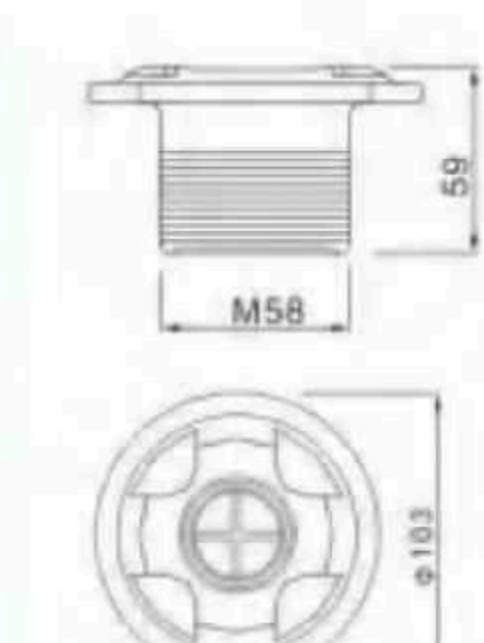
|          |              |
|----------|--------------|
| Products | Suction Head |
| Model    | WL-ACW02     |
| Colour   | White        |
| Material | ABS          |



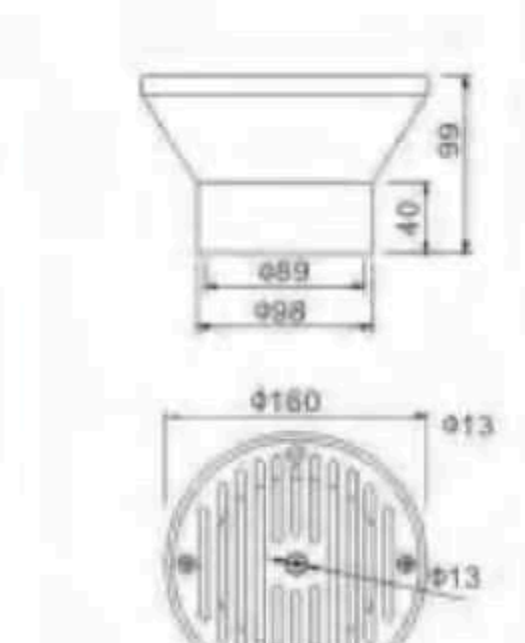
|          |                         |
|----------|-------------------------|
| Products | Adjustable Inlet (1.5") |
| Model    | WL-AJH01                |
| Colour   | White                   |
| Material | ABS                     |



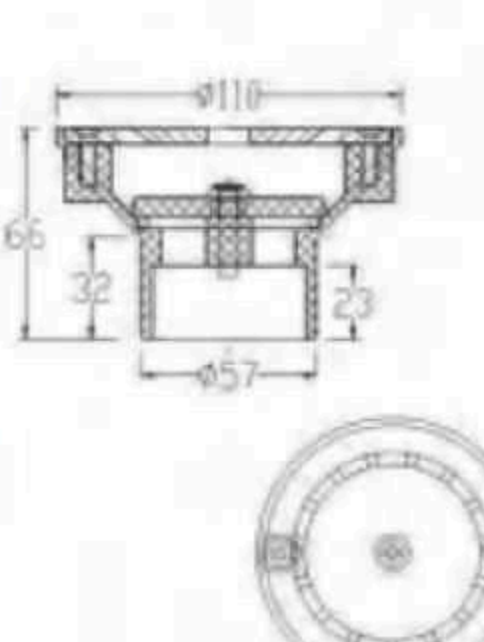
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|----------|------------------|
| Products | Adjustable Inlet |
| Model    | WL-AJH02         |
| Colour   | White            |
| Material | ABS              |



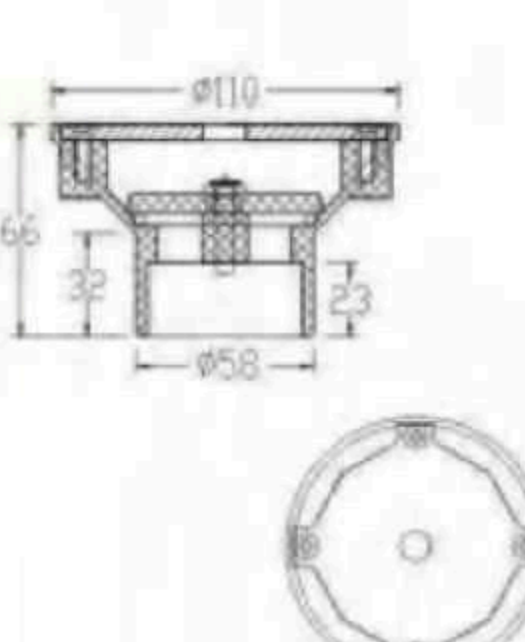
|          |                  |
|----------|------------------|
| Products | Adjustable Inlet |
| Model    | WL-AJH03         |
| Colour   | White            |
| Material | ABS              |



|          |                       |
|----------|-----------------------|
| Products | Adjustable Inlet (3") |
| Model    | WL-AJH31              |
| Colour   | White                 |
| Material | ABS                   |



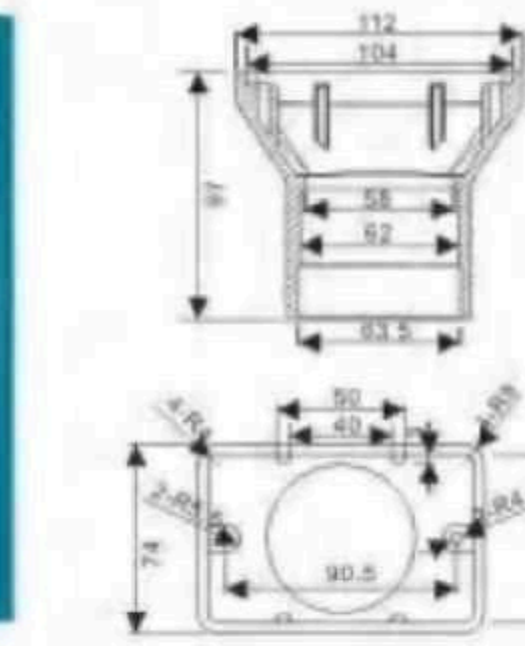
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|----------|------------------|
| Products | Adjustable Inlet |
| Model    | WL-AJH04         |
| Colour   | White            |
| Material | ABS              |



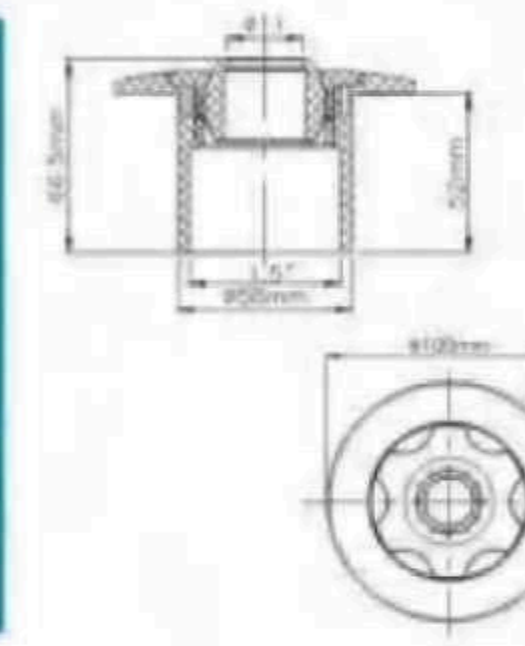
|          |                  |
|----------|------------------|
| Products | Adjustable Inlet |
| Model    | WL-AJH05         |
| Colour   | White            |
| Material | ABS              |



|          |                       |
|----------|-----------------------|
| Products | Adjustable Inlet (2") |
| Model    | WL-AJH21              |
| Colour   | White                 |
| Material | ABS                   |



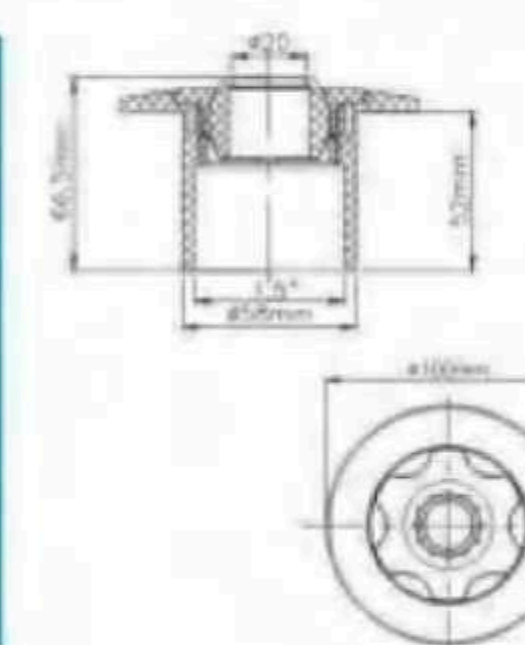
|          |              |
|----------|--------------|
| Products | Gutter Drain |
| Model    | WL-AYK01     |
| Colour   | White        |
| Material | ABS          |



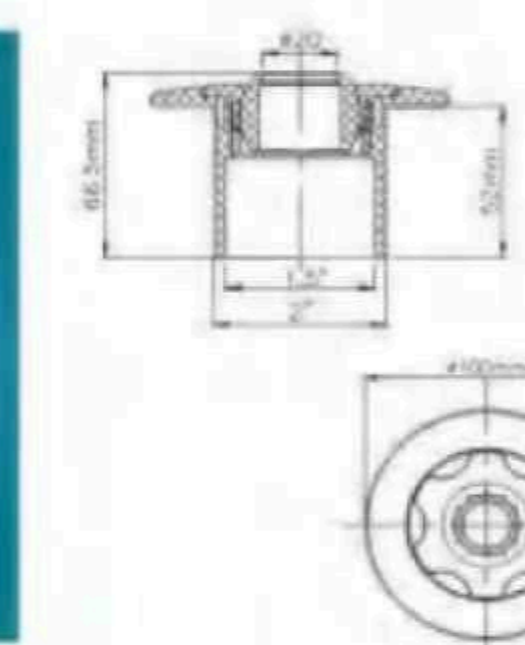
|          |                                 |
|----------|---------------------------------|
| Products | Eyeball Inlet For Concrete Pool |
| Model    | WL-EJH14C                       |
| Colour   | White                           |
| Material | ABS                             |



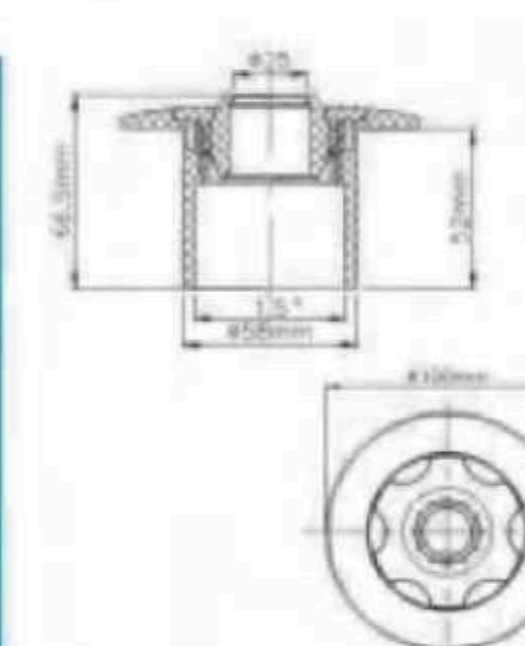
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|----------|---------------|
| Products | Eyeball Inlet |
| Model    | WL-EJH14V     |
| Colour   | White         |
| Material | ABS           |



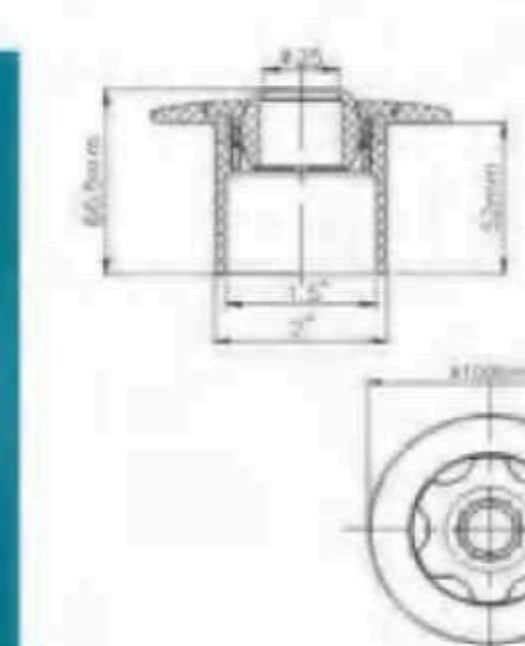
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|----------|---------------------------------|
| Products | Eyeball Inlet For Concrete Pool |
| Model    | WL-EJH20C                       |
| Colour   | White                           |
| Material | ABS                             |



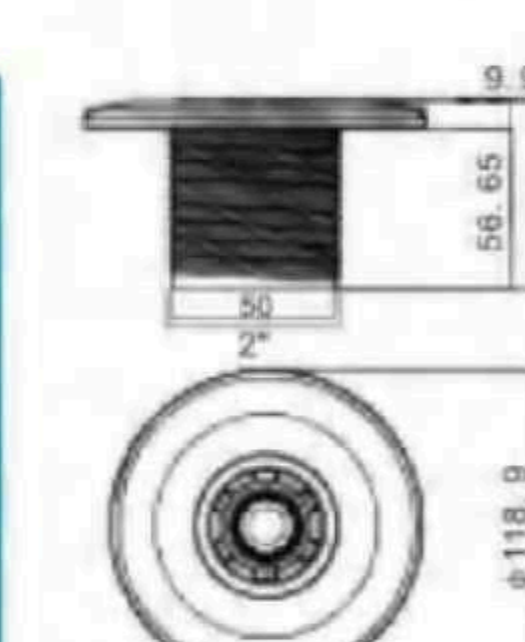
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|----------|---------------|
| Products | Eyeball Inlet |
| Model    | WL-EJH20V     |
| Colour   | White         |
| Material | ABS           |



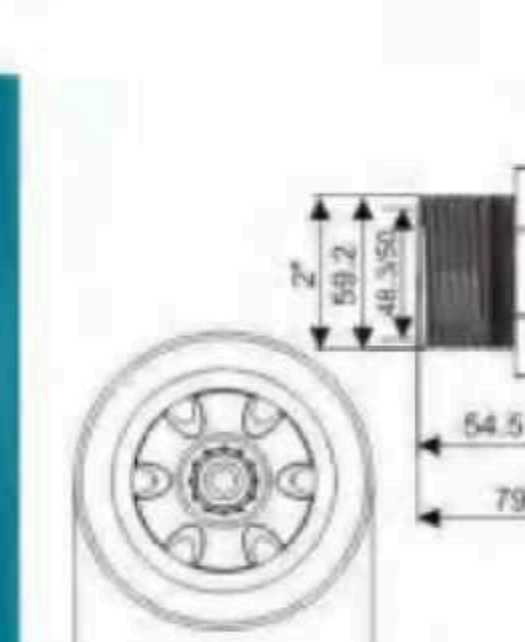
|          |                                 |
|----------|---------------------------------|
| Products | Eyeball Inlet For Concrete Pool |
| Model    | WL-EJH25C                       |
| Colour   | White                           |
| Material | ABS                             |



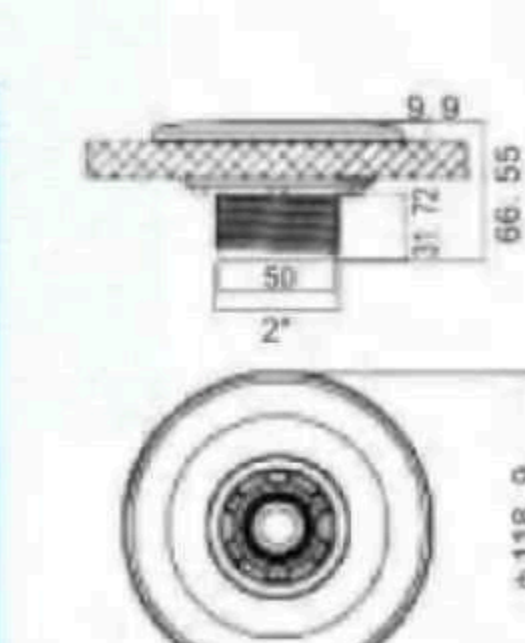
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|----------|---------------|
| Products | Eyeball Inlet |
| Model    | WL-EJH25V     |
| Colour   | White         |
| Material | ABS           |



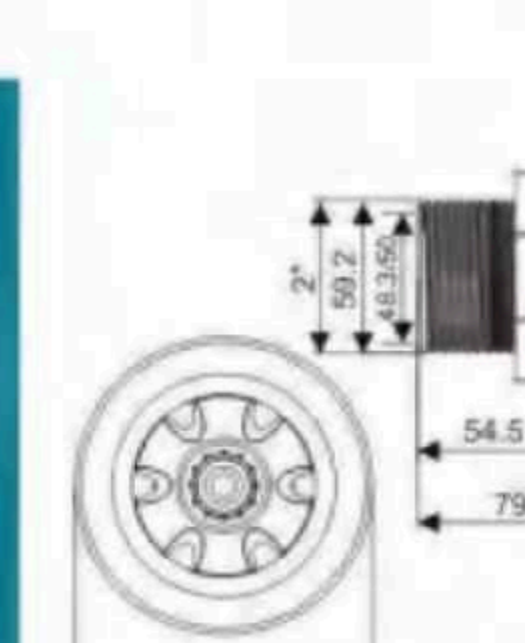
|          |                       |
|----------|-----------------------|
| Products | Multiflow Wall Inlets |
| Model    | PA00295C              |
| Colour   | White                 |
| Material | ABS                   |



|          |                       |
|----------|-----------------------|
| Products | Multiflow Wall Inlets |
| Model    | WL-PJH14V             |
| Colour   | White                 |
| Material | ABS                   |



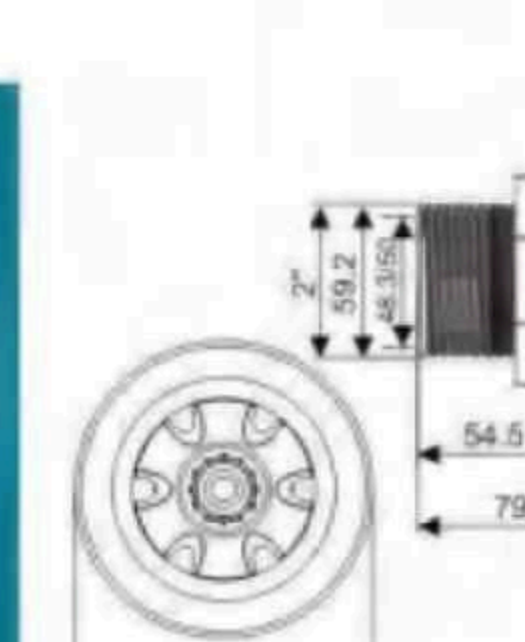
|          |                       |
|----------|-----------------------|
| Products | Multiflow Wall Inlets |
| Model    | PA00295V              |
| Colour   | White                 |
| Material | ABS                   |



|          |                       |
|----------|-----------------------|
| Products | Multiflow Wall Inlets |
| Model    | WL-PJH20V             |
| Colour   | White                 |
| Material | ABS                   |


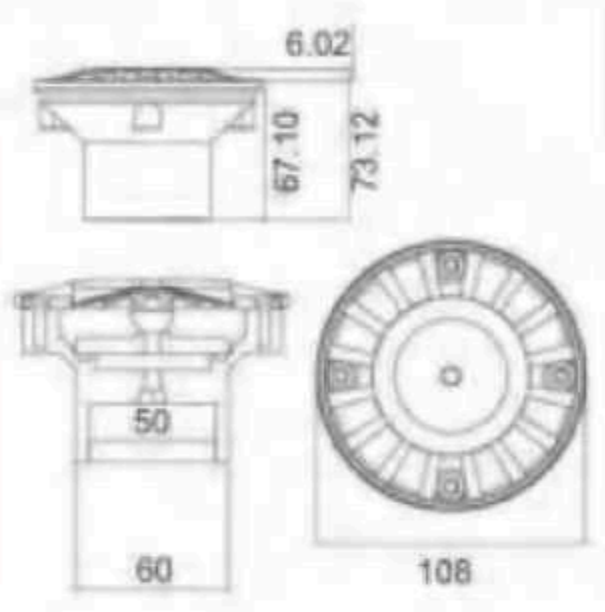


|          |                                      |
|----------|--------------------------------------|
| Products | Multiflow Wall Inlets for liner pool |
| Model    | PA00330                              |
| Colour   | White                                |
| Material | ABS                                  |


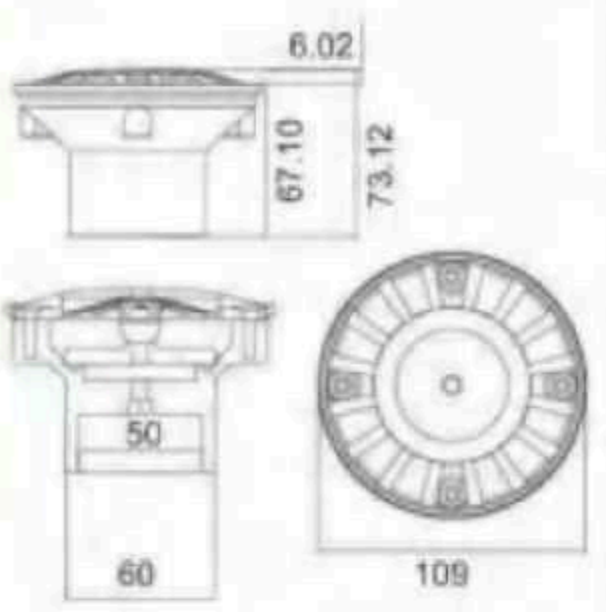


|          |                       |
|----------|-----------------------|
| Products | Multiflow Wall Inlets |
| Model    | WL-PJH25V             |
| Colour   | White                 |
| Material | ABS                   |


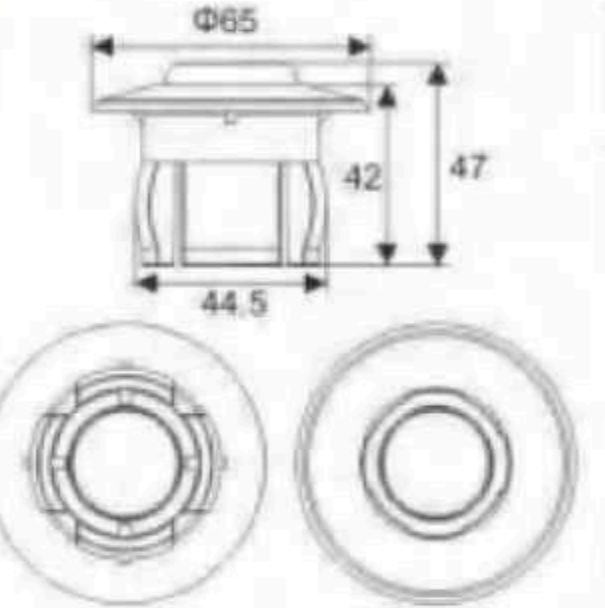
# POOL FITTINGS POOL FITTINGS & CLEANERS


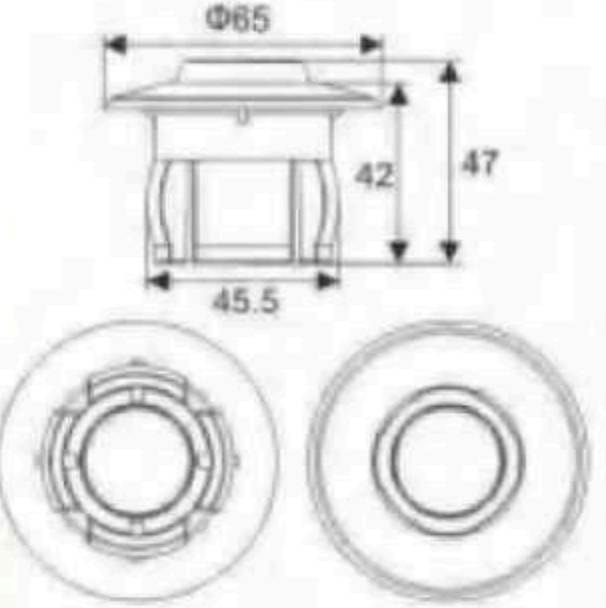
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|----------|-------------|
| Products | Floor Inlet |
| Model    | PADF2825C   |
| Colour   | White       |
| Material | ABS         |


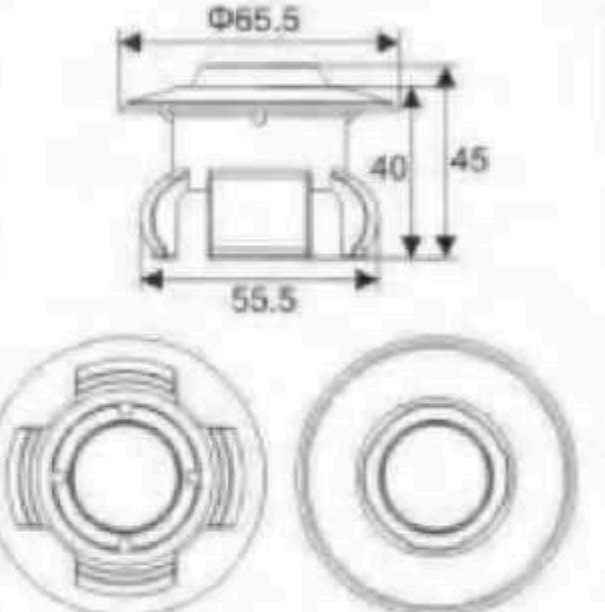
|          |             |
|----------|-------------|
| Products | Floor Inlet |
| Model    | PADF2825V   |
| Colour   | White       |
| Material | ABS         |


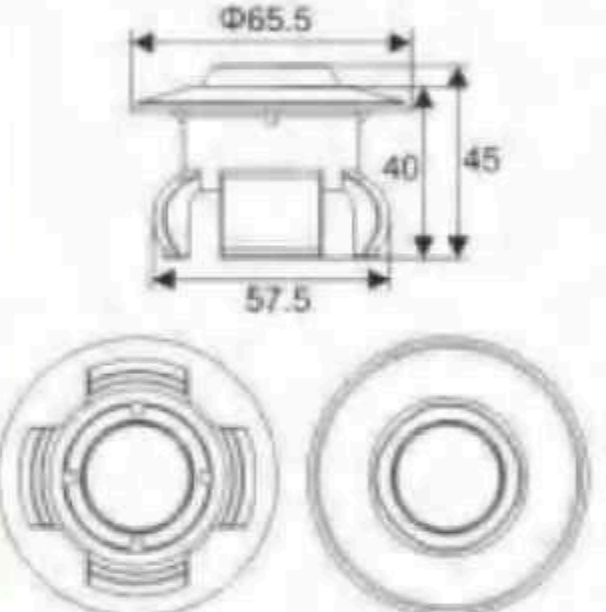
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|----------|-------------|
| Products | Eyeball Jet |
| Model    | ES25A       |
| Colour   | White       |
| Material | ABS         |


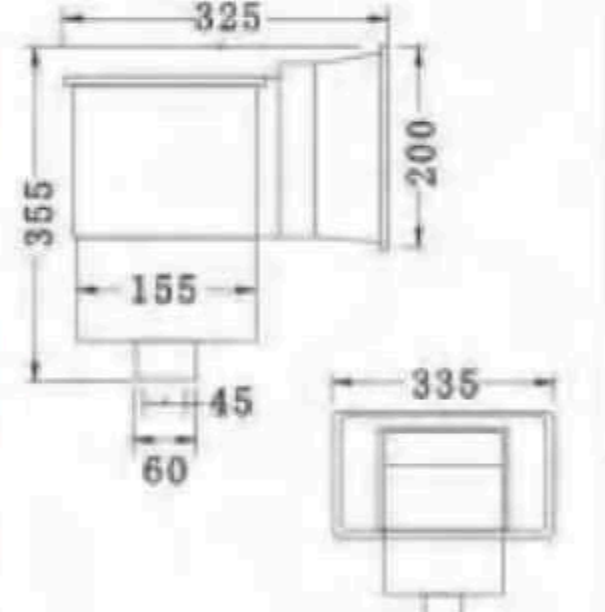
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|----------|-------------|
| Products | Eyeball Jet |
| Model    | ES25B       |
| Colour   | White       |
| Material | ABS         |


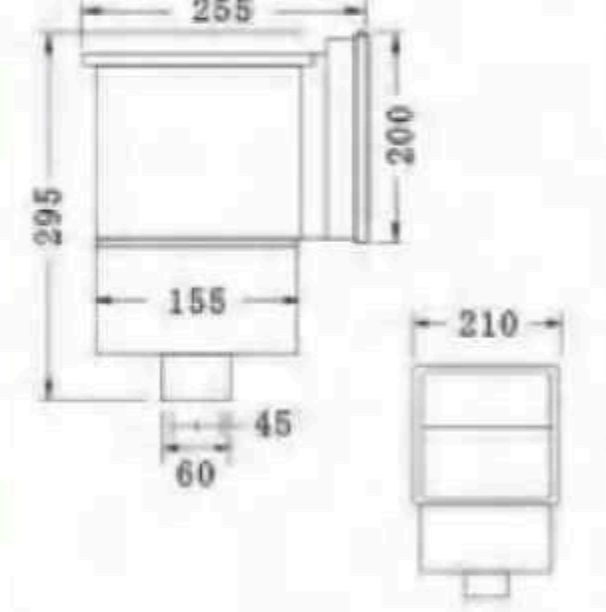
|          |             |
|----------|-------------|
| Products | Eyeball Jet |
| Model    | ES25C       |
| Colour   | White       |
| Material | ABS         |



|          |             |
|----------|-------------|
| Products | Eyeball Jet |
| Model    | ES25D       |
| Colour   | White       |
| Material | ABS         |


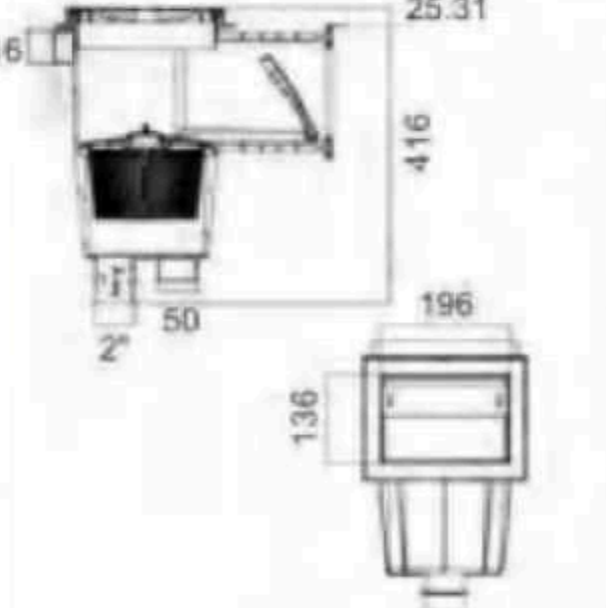
|          |                         |
|----------|-------------------------|
| Products | Wide Mouth Wall Skimmer |
| Model    | WL-APZ01                |
| Colour   | White                   |
| Material | ABS                     |


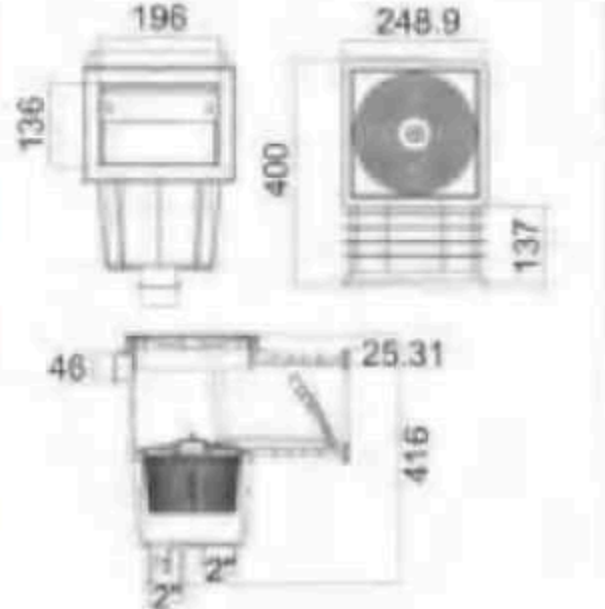
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|----------|-----------------------|
| Products | Standard Wall Skimmer |
| Model    | WL-APZ02              |
| Colour   | White                 |
| Material | ABS                   |


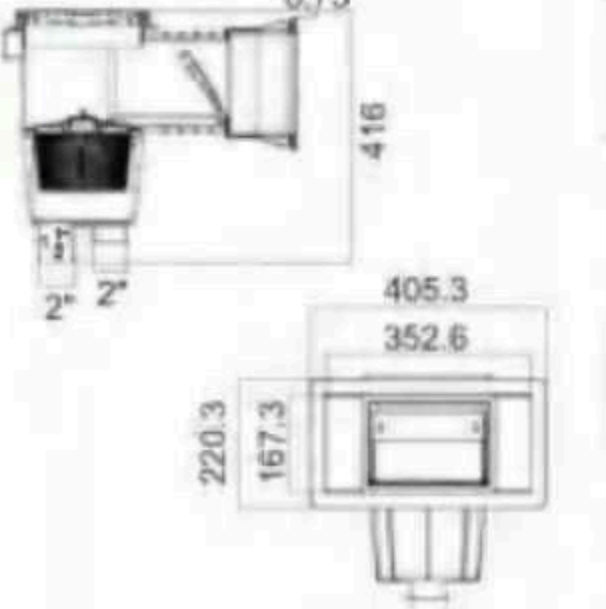
|          |                  |
|----------|------------------|
| Products | Standard Skimmer |
| Model    | PA00249C         |
| Colour   | White            |
| Material | ABS              |

|          |                  |
|----------|------------------|
| Products | Standard Skimmer |
| Model    | PA00249V         |
| Colour   | White            |
| Material | ABS              |


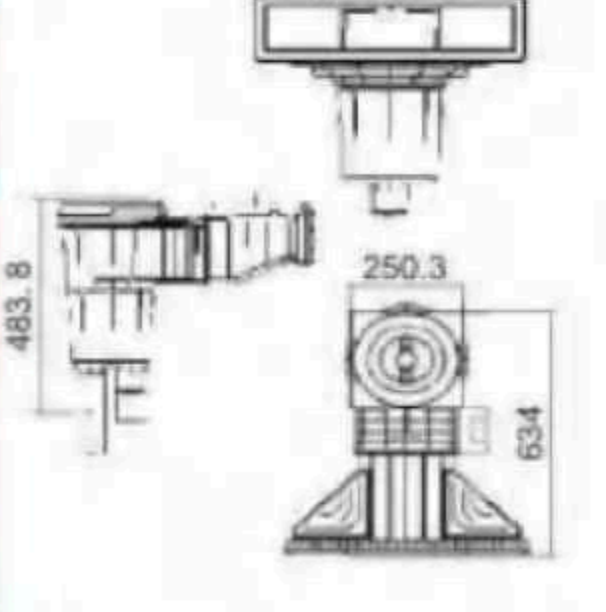



|          |                  |
|----------|------------------|
| Products | Standard Skimmer |
| Model    | PA00249.1V       |
| Colour   | White            |
| Material | ABS              |


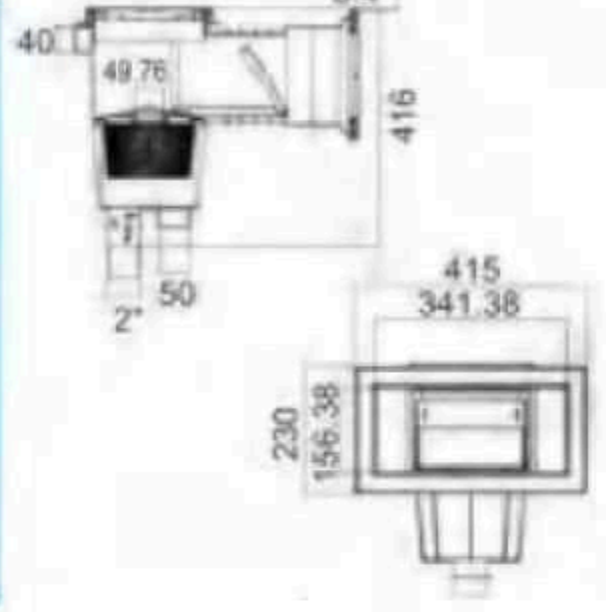



|          |                    |
|----------|--------------------|
| Products | Wide Mouth Skimmer |
| Model    | PA00250C           |
| Colour   | White              |
| Material | ABS                |


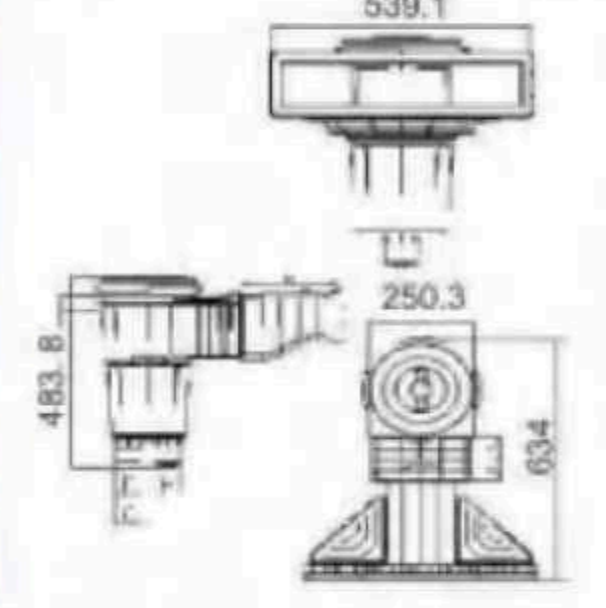
# POOL FITTINGS POOL FITTINGS & CLEANERS


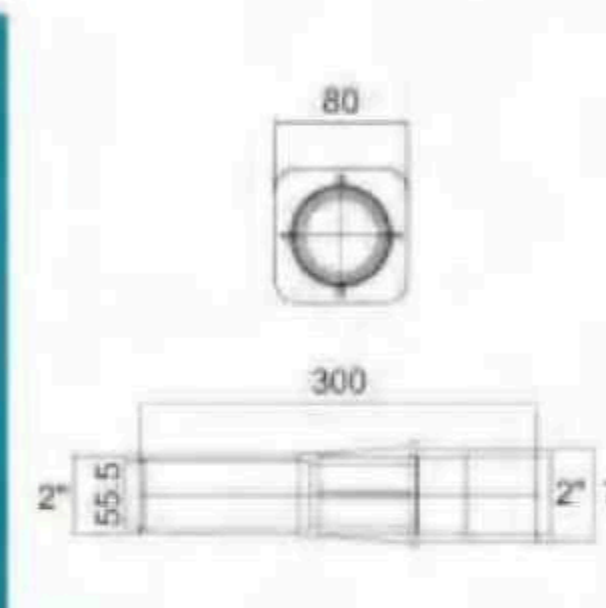
|          |                    |
|----------|--------------------|
| Products | Wide Mouth Skimmer |
| Model    | PA00252C           |
| Colour   | White              |
| Material | ABS                |

|          |                     |
|----------|---------------------|
| Products | Wide Mouth Skimmers |
| Model    | PA00250V            |
| Colour   | White               |
| Material | ABS                 |


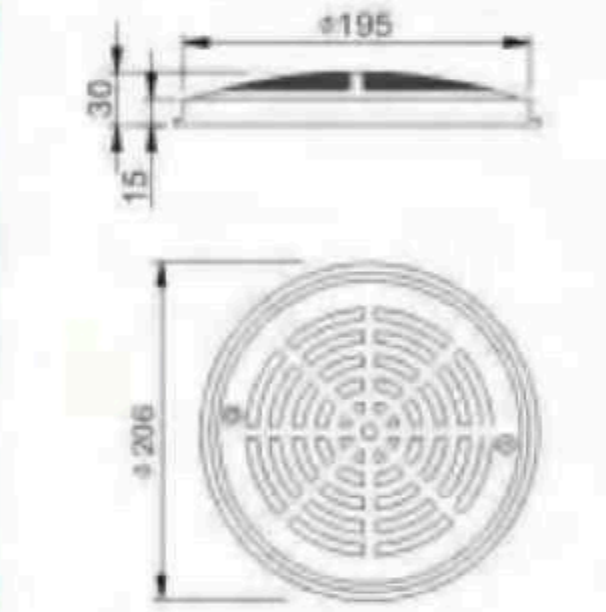
|          |                    |
|----------|--------------------|
| Products | Wide Mouth Skimmer |
| Model    | PA00252.1V         |
| Colour   | White              |
| Material | ABS                |

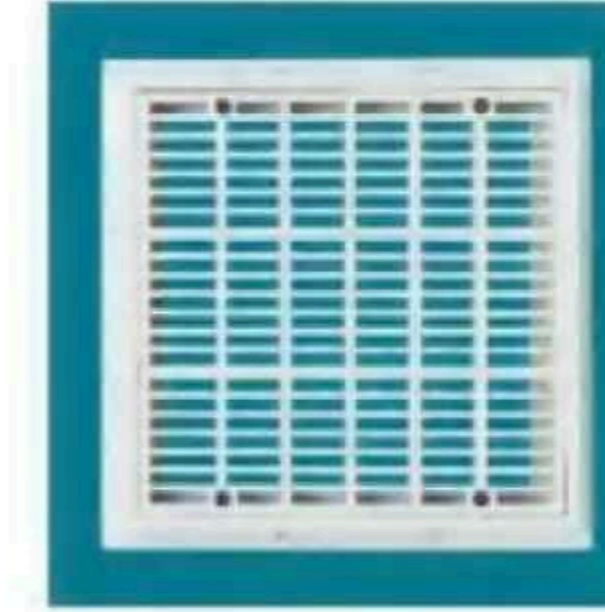
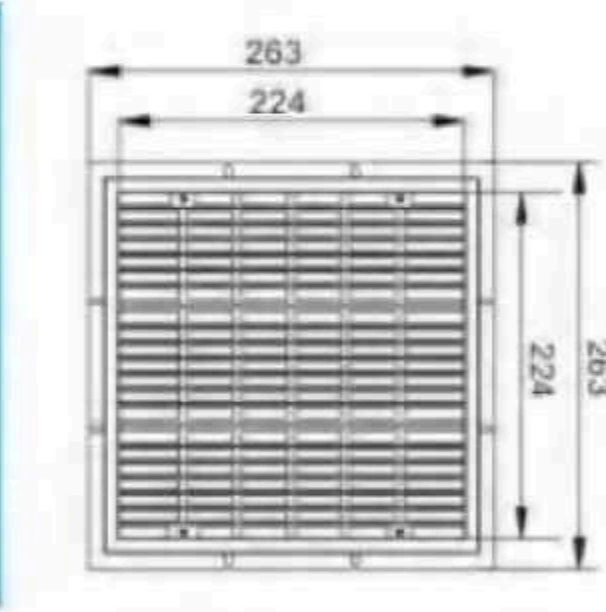
|          |              |
|----------|--------------|
| Products | Wall Conduit |
| Model    | PA00324      |
| Colour   | Gray         |
| Material | ABS          |

## MAIN DRAINS

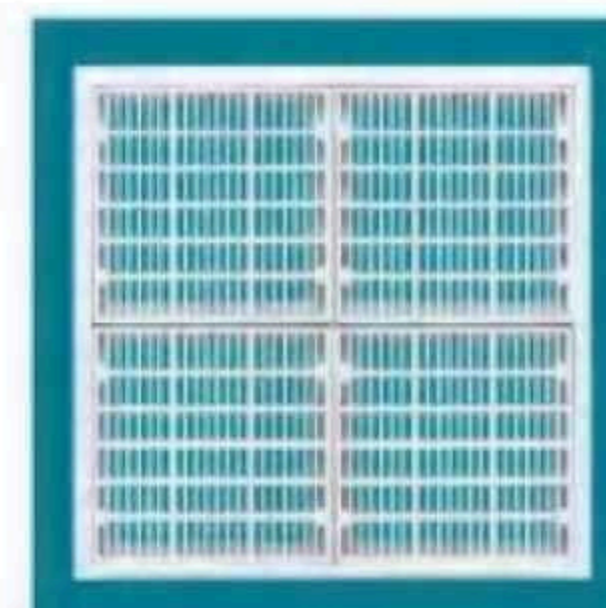
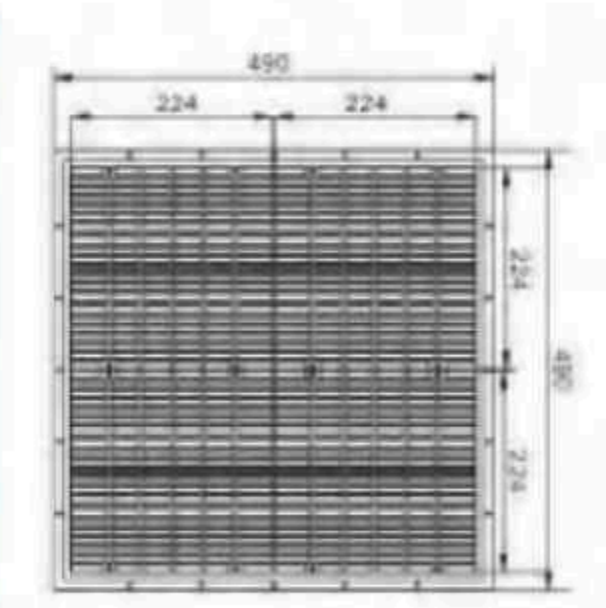
The main drains are available in a wide range of styles and sizes to satisfy any installation requirement of any concrete residential or commercial pools. These main drains are injection-molded of ABS, which resists chemical attack.

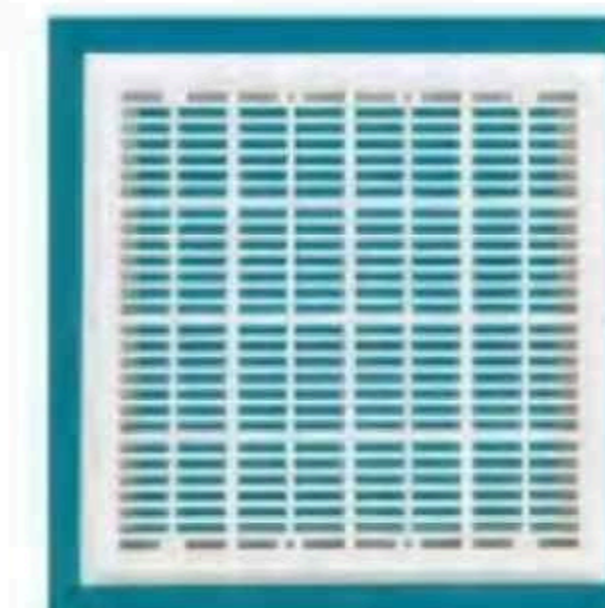
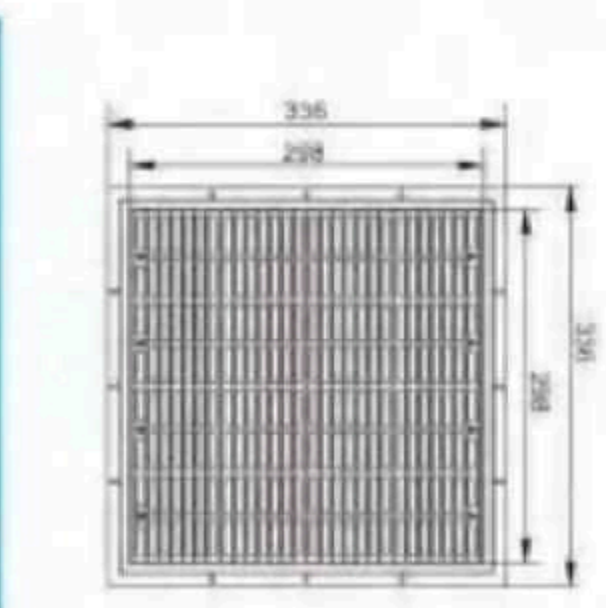
|          |                  |
|----------|------------------|
| Products | Round Main Drain |
| Model    | WL-ADP197        |
| Colour   | White            |
| Material | ABS              |


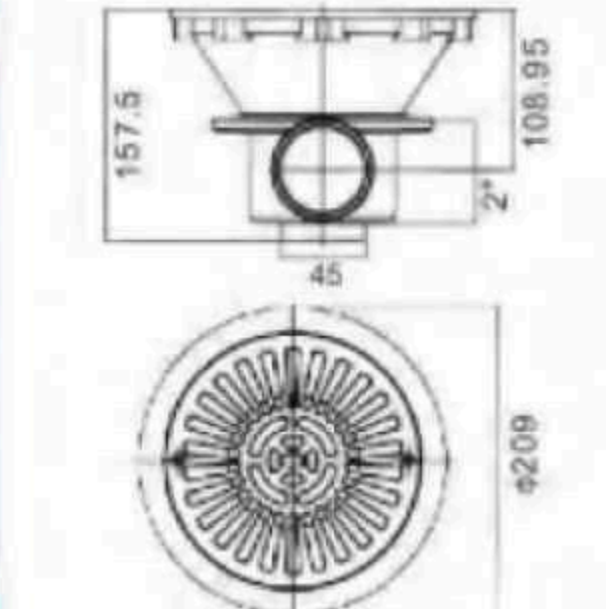
|           |           |
|-----------|-----------|
| Model     | WL-ADP263 |
| Size      | 263X263mm |
| Colour    | White     |
| Thickness | 35mm      |


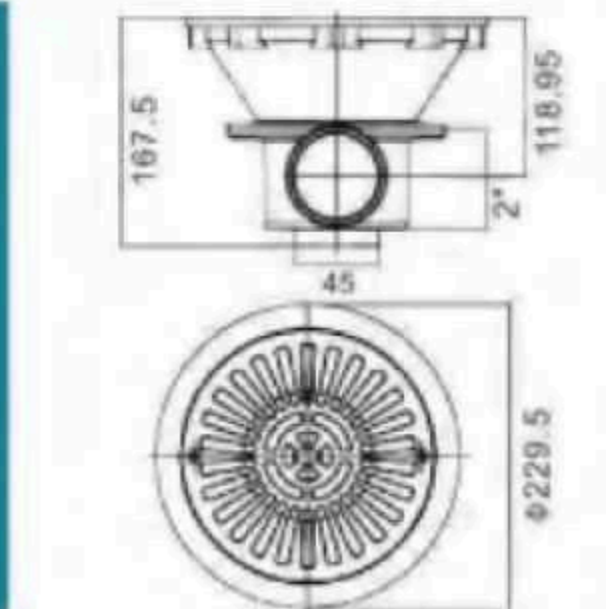
|           |           |
|-----------|-----------|
| Model     | WL-ADP490 |
| Size      | 490X490mm |
| Colour    | White     |
| Thickness | 66mm      |

|           |           |
|-----------|-----------|
| Model     | WL-ADP336 |
| Size      | 336X336mm |
| Colour    | White     |
| Thickness | 35mm      |

|          |           |
|----------|-----------|
| Products | Drains    |
| Model    | PADF1467C |
| Colour   | White     |
| Material | ABS       |

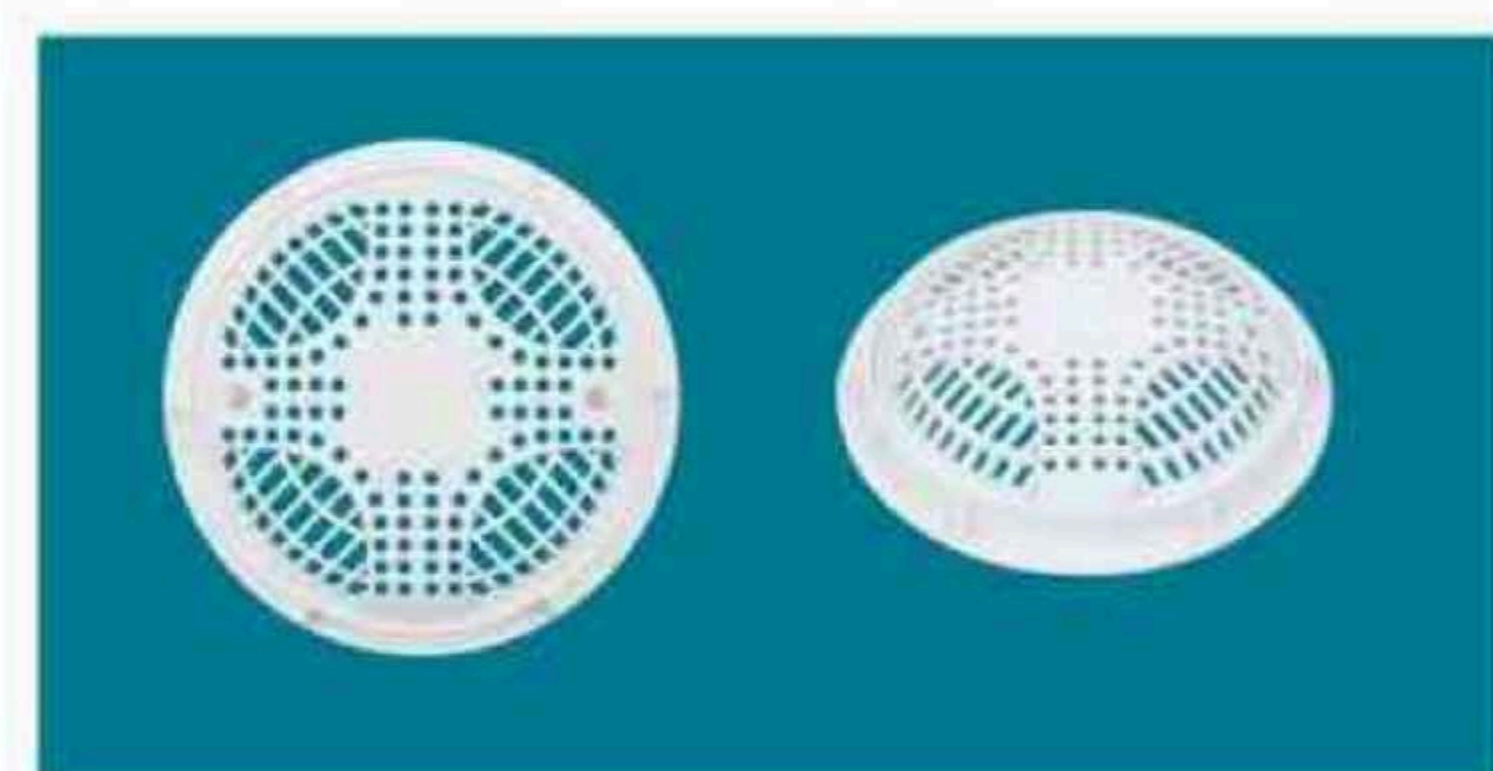
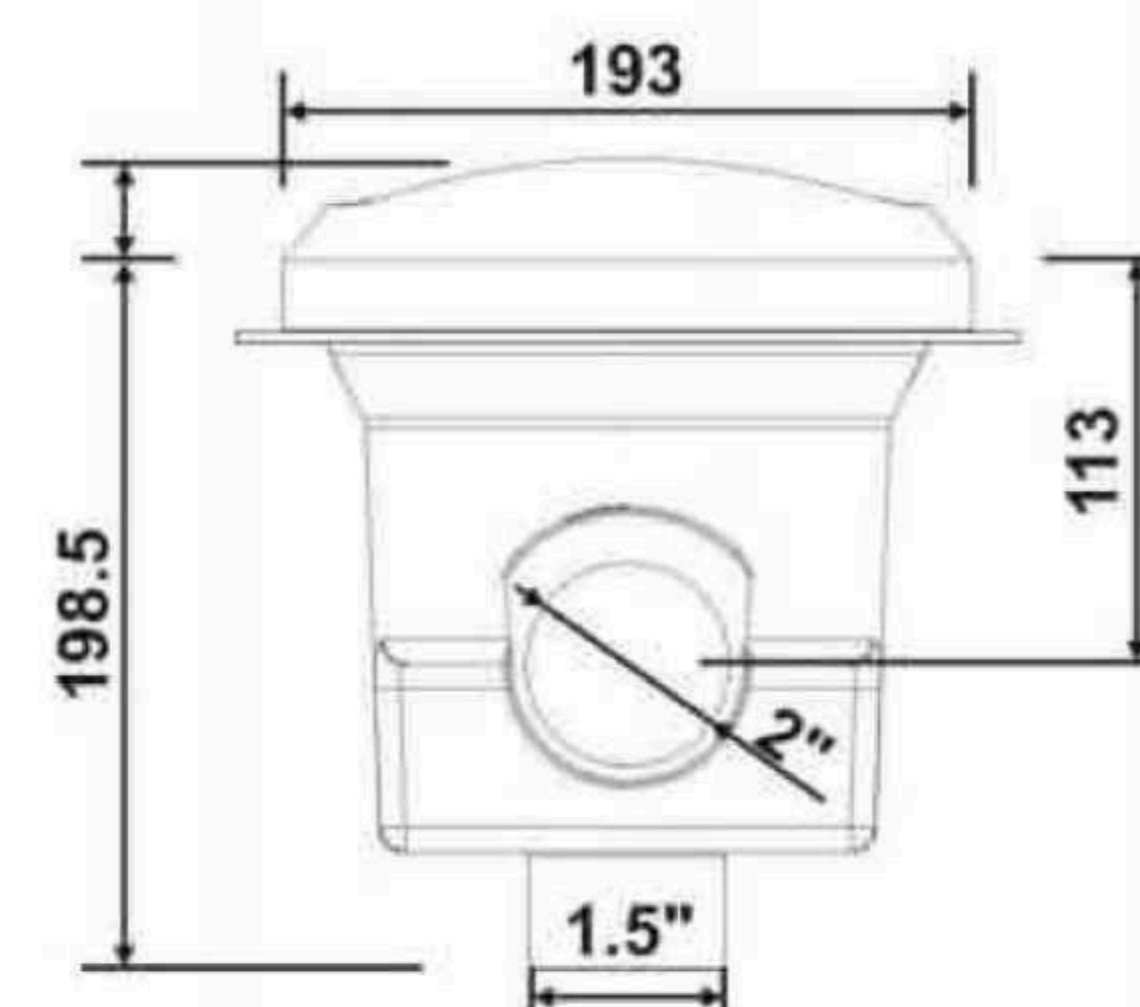
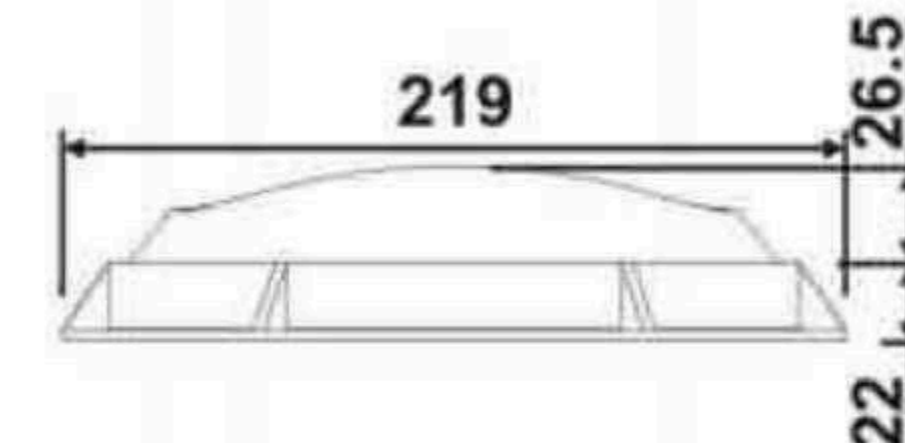
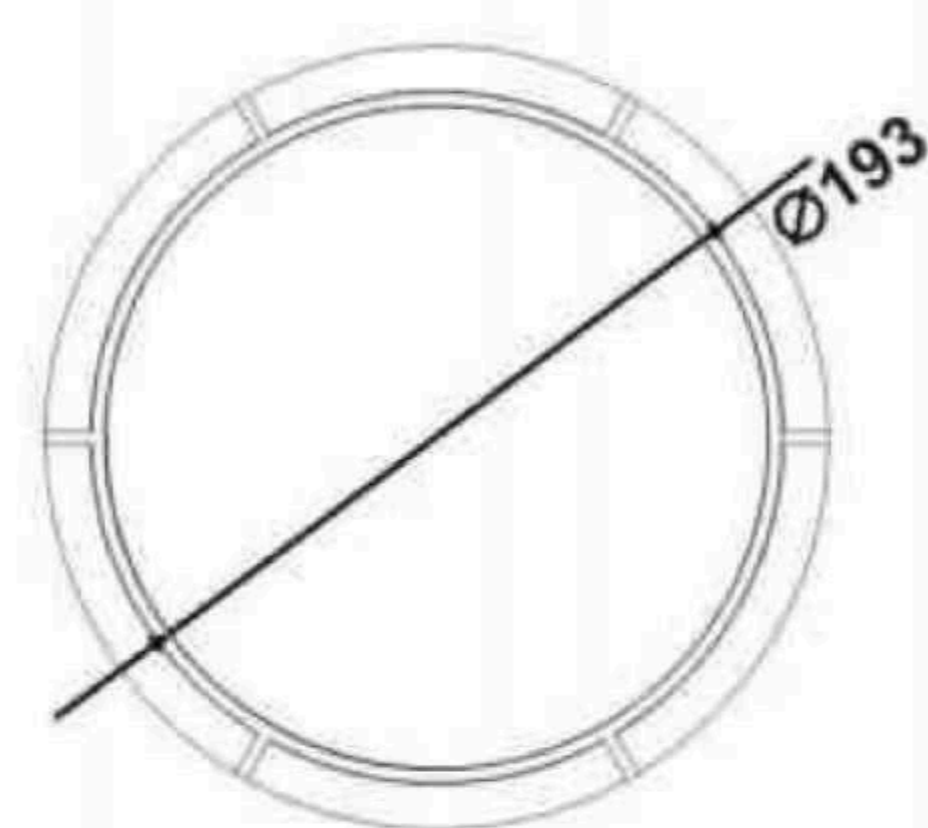



|          |           |
|----------|-----------|
| Products | Drains    |
| Model    | PADF1467V |
| Colour   | White     |
| Material | ABS       |

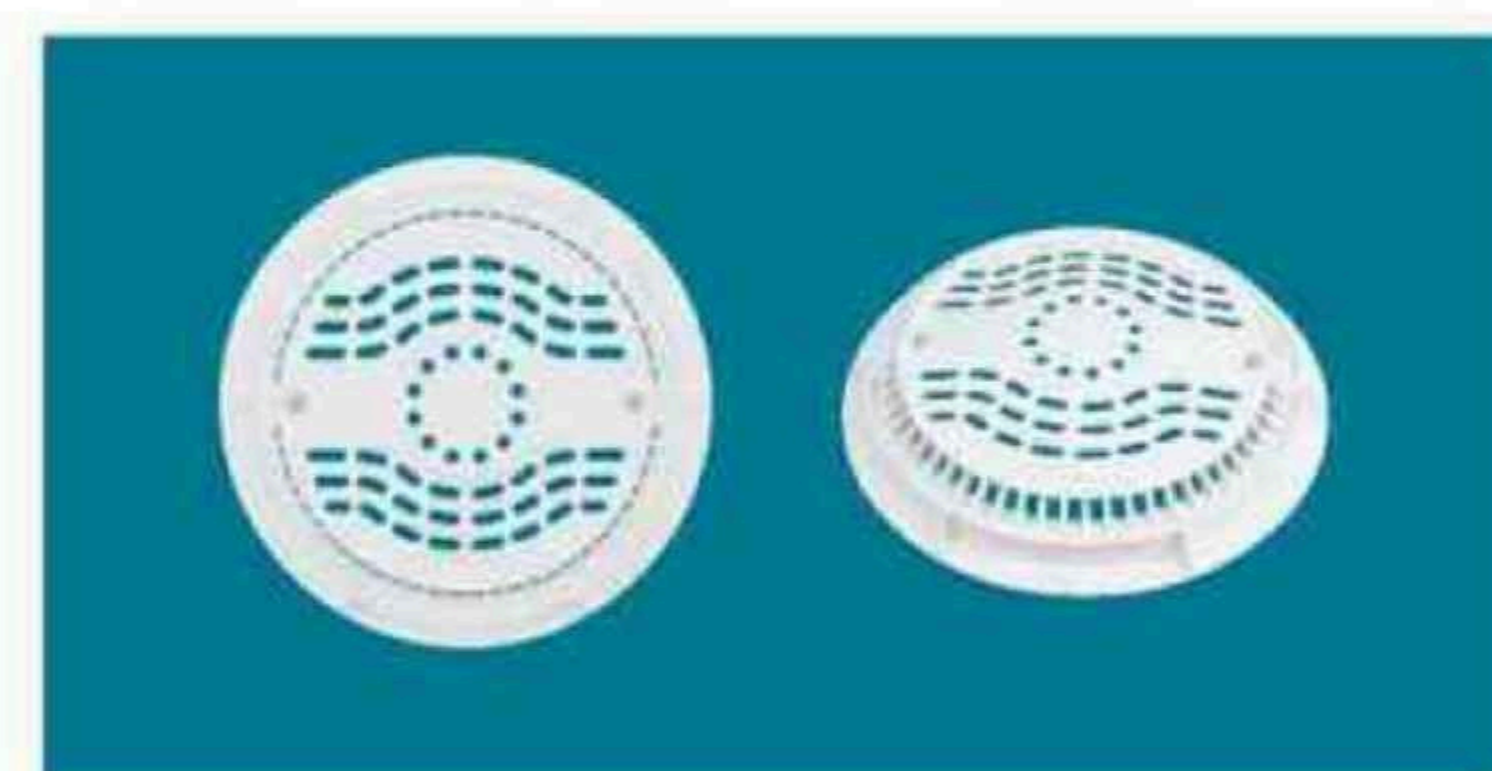
## ANTI-SUCTION MAIN DRAINS POOL FITTINGS & CLEANERS

### Features:

- Curved surface design, anti-suction.
- UV-resistant, corrosion resistant, not easy to fade, longer life time.
- Meets various flow rate requirements.



WL-JDP200AL



WL-JDP200BL



WL-JDP200AH



WL-JDP200BH

| Model       | Specification | Outlet             | Cover Dia. (mm) | Height | Material | Max Flow Rate (m <sup>3</sup> /h) |
|-------------|---------------|--------------------|-----------------|--------|----------|-----------------------------------|
| WL-JDP200AL | cover + frame |                    | 193             | 22     | ABS      | 33.5                              |
| WL-JDP200AH | cover+ body   | side 2 bottom 1.5" | 193             | 198.5  | ABS      | 33.5                              |
| WL-JDP200BL | cover + frame |                    | 193             | 22     | ABS      | 33.5                              |
| WL-JDP200BH | cover+ body   | side 2 bottom 1.5" | 193             | 198.5  | ABS      | 33.5                              |

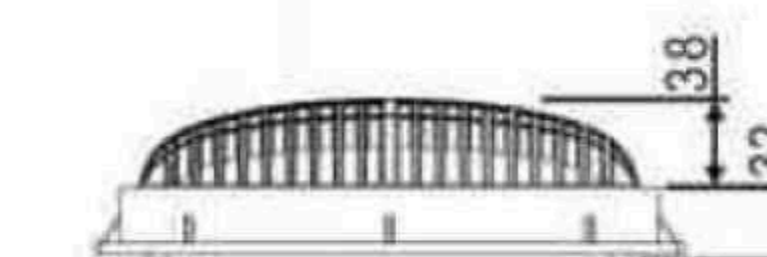
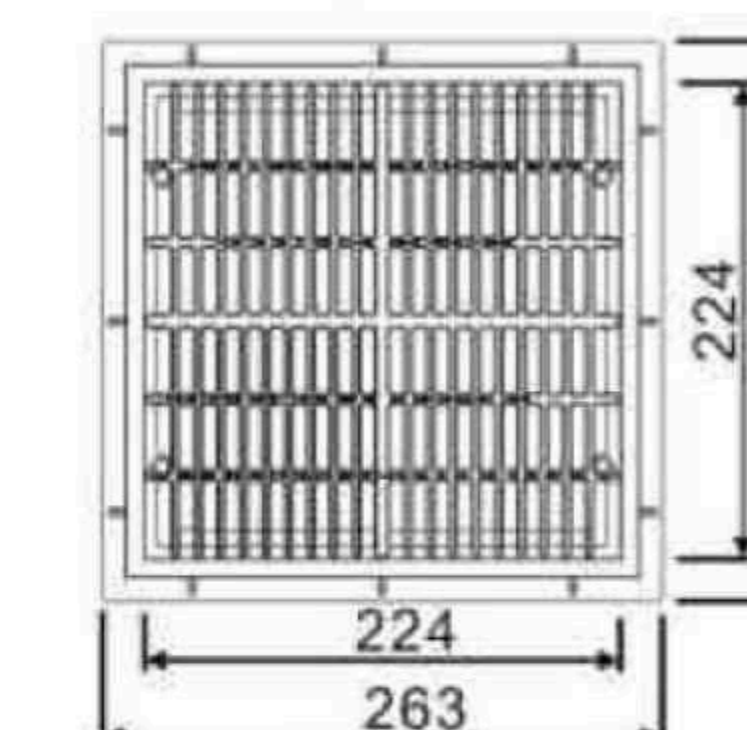
## ANTI-SUCTION MAIN DRAINS POOL FITTINGS & CLEANERS

### Features:

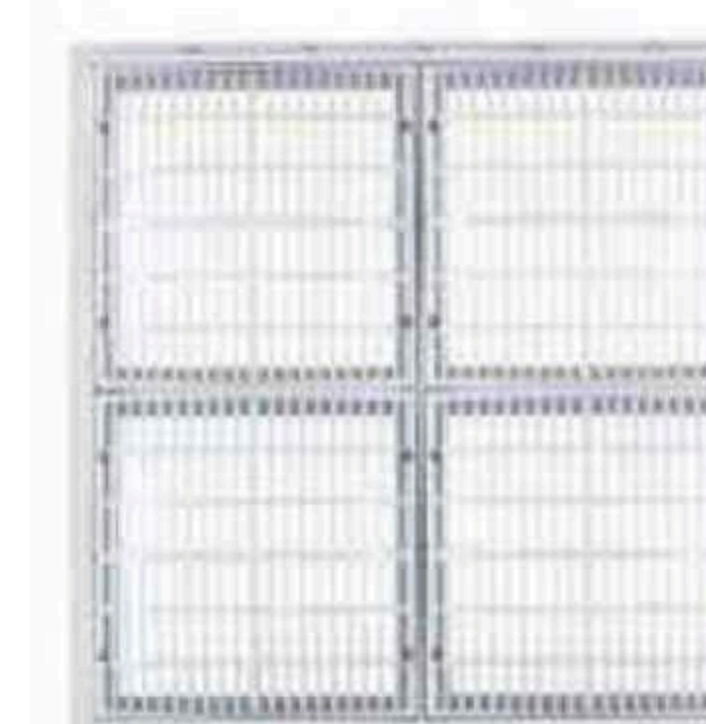
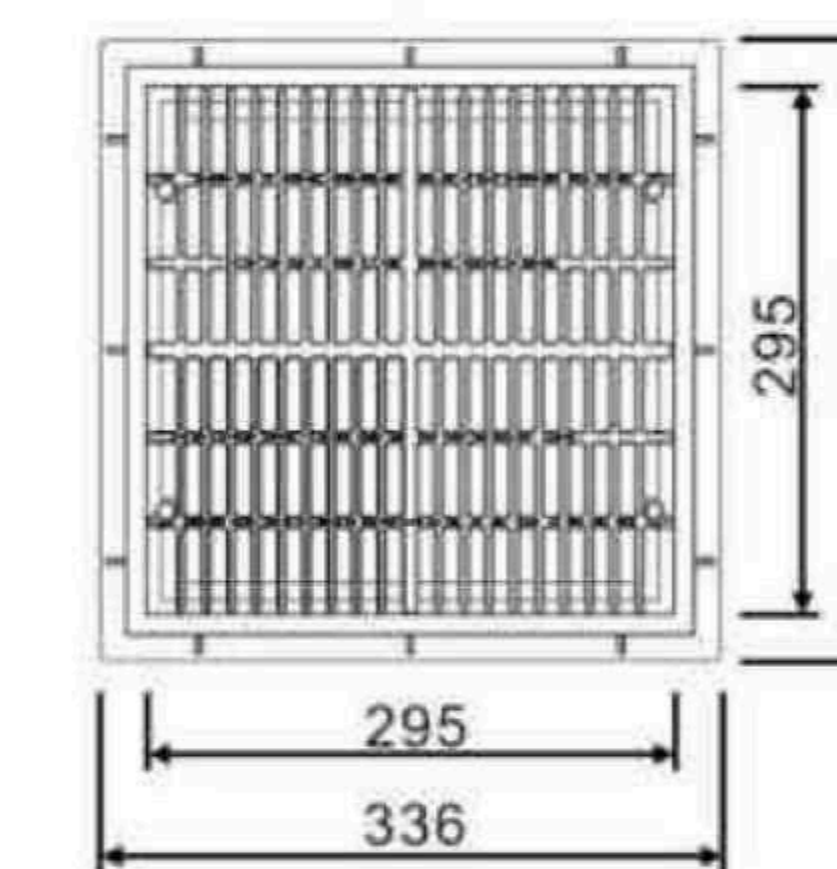
- Curved surface design, anti-suction.
- Manufactured from UV- resistant engineered polymers.
- Used in new construction or to retrofit into existing Laswim frames.
- Meets various flow rate requirements.



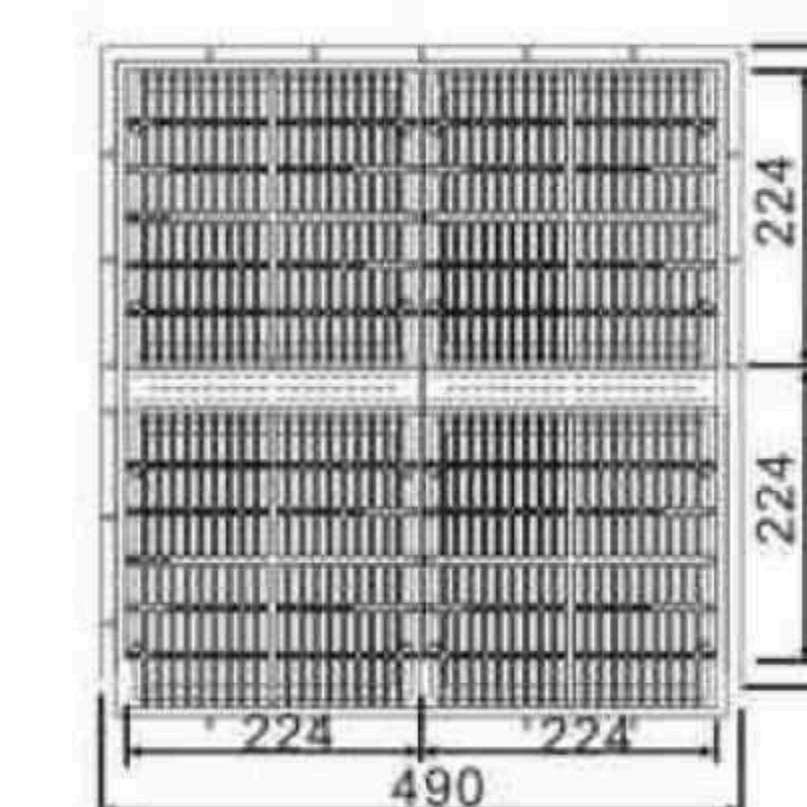
WL-FDP9"



WL-FDP12"



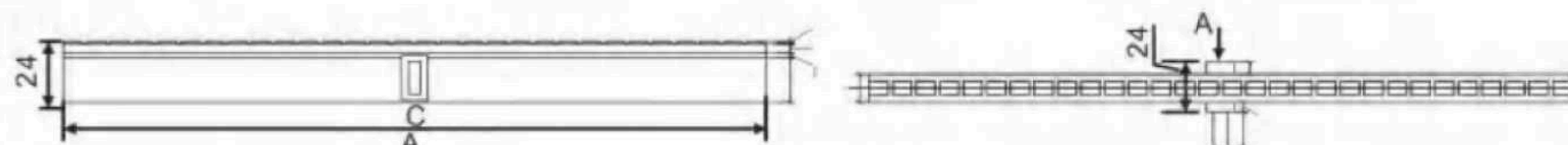
WL-FDP18"



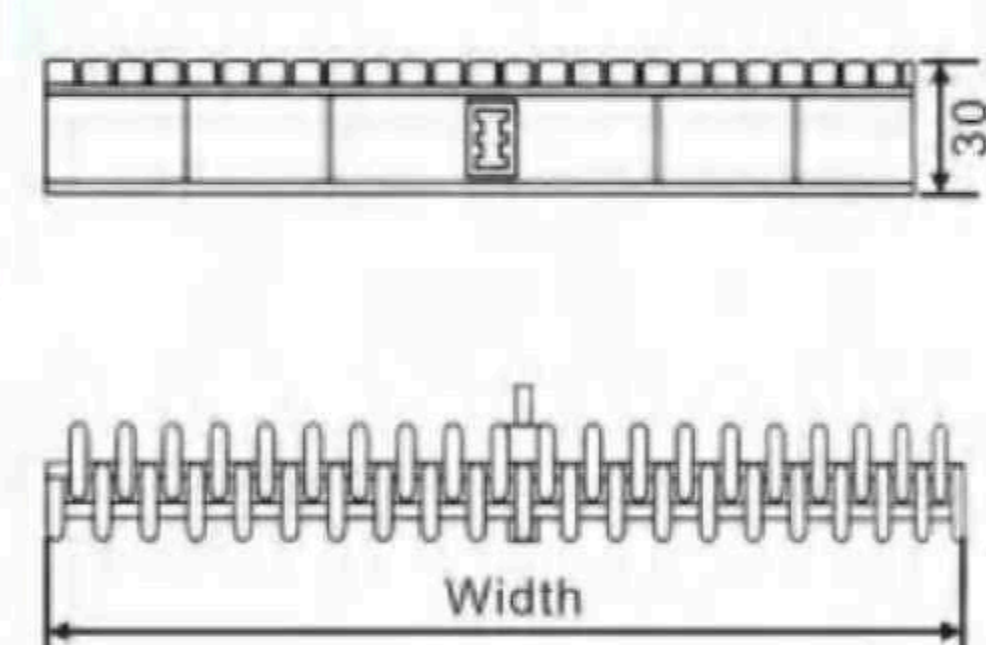
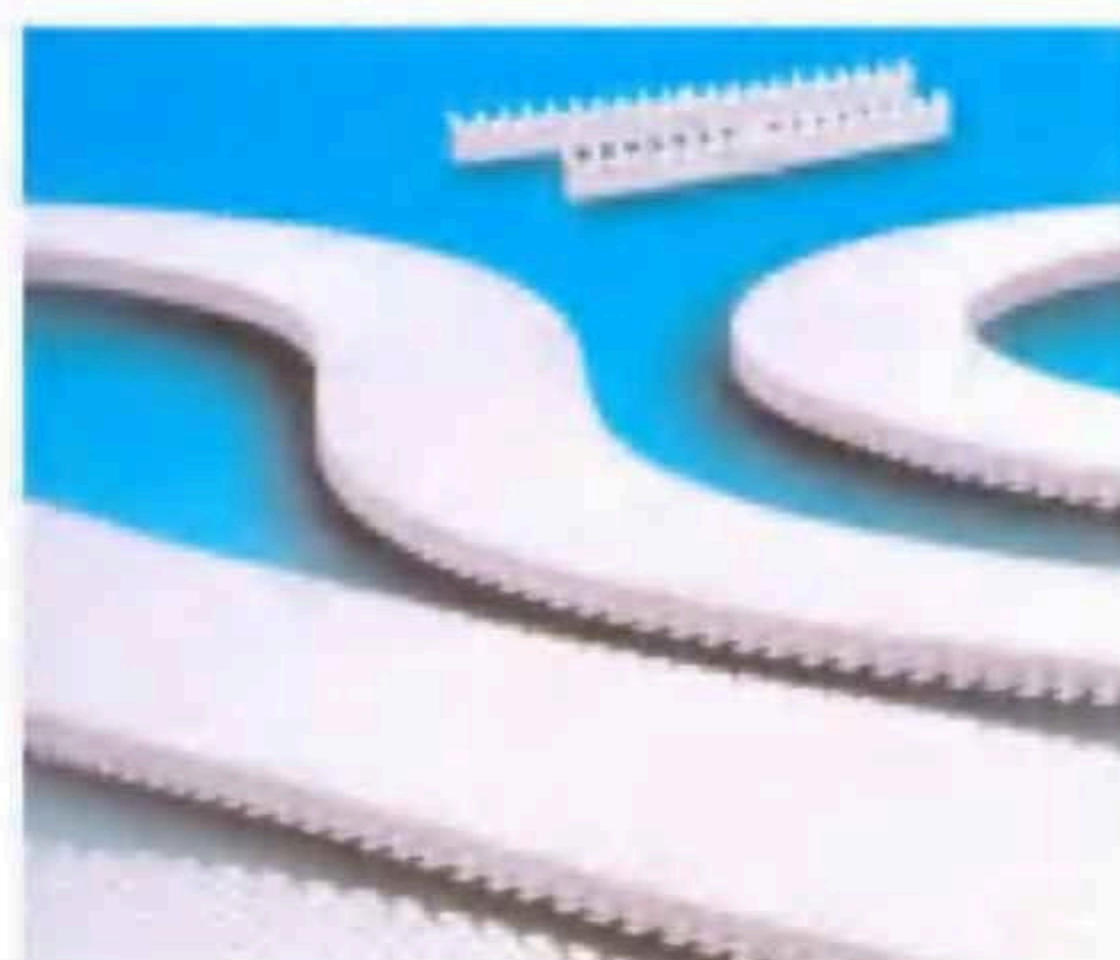
| Model     | Size (inch/ mm)            | Thickness (mm) | Material | Design Flow (m <sup>3</sup> /h) |
|-----------|----------------------------|----------------|----------|---------------------------------|
| WL-FDP9"  | 9" x 9"<br>263mm x 263mm   | 70             | ABS      | 23                              |
| WL-FDP12" | 12" x 12"<br>336mm x 336mm | 78             | ABS      | 88                              |
| WL-FDP18" | 18" x 18"<br>490mm x 490mm | 100            | ABS      | 93                              |

## GUTTER GRATINGS POOL FITTINGS & CLEANERS

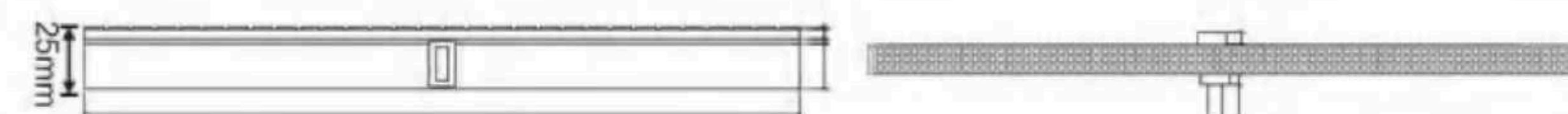
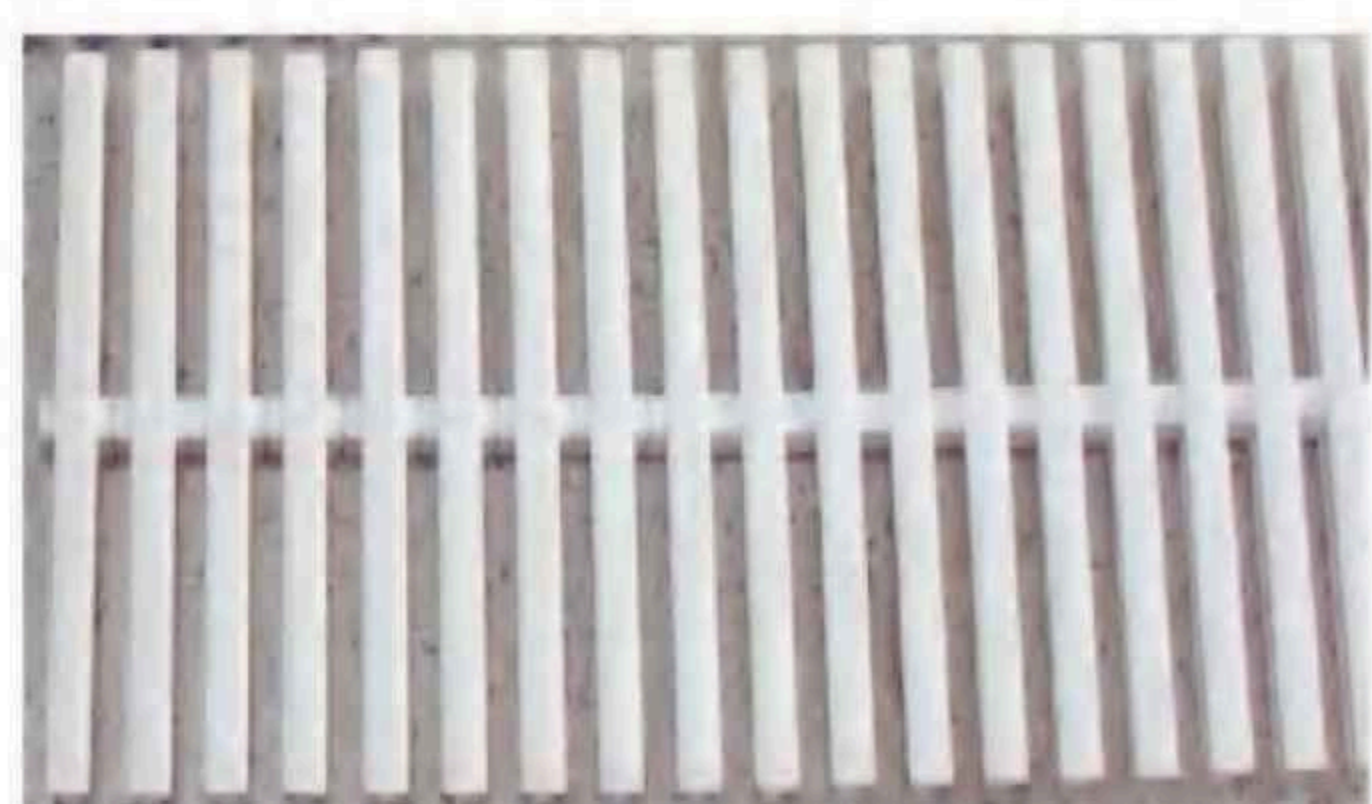
Gutter grating is molded in white UV resistant ABS. Top of grating features an anti-slip finish and it is composed of individual units connecting along a central spine. This design allows for easier installation without the need for cutting also allowing the grating to curve as necessary.



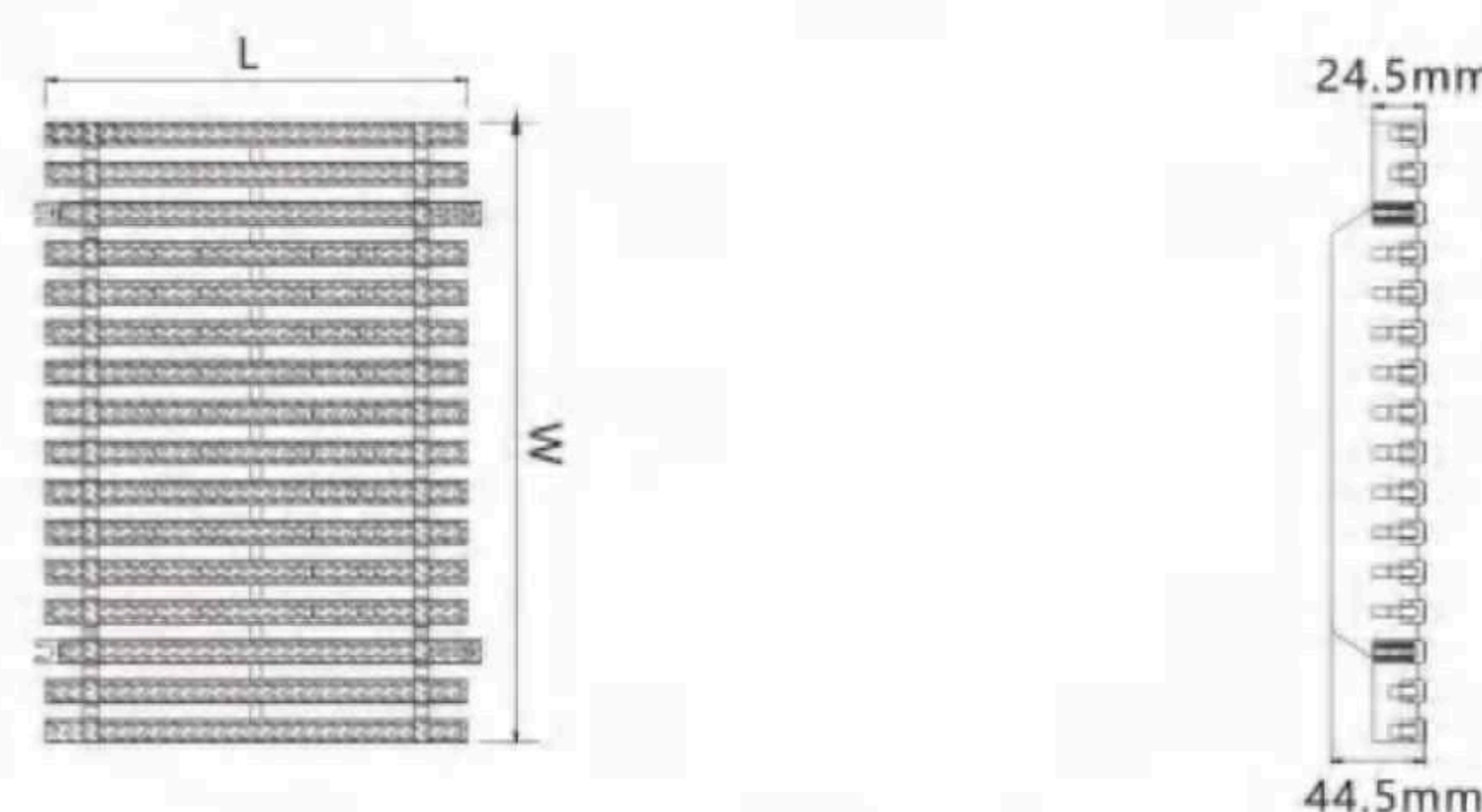
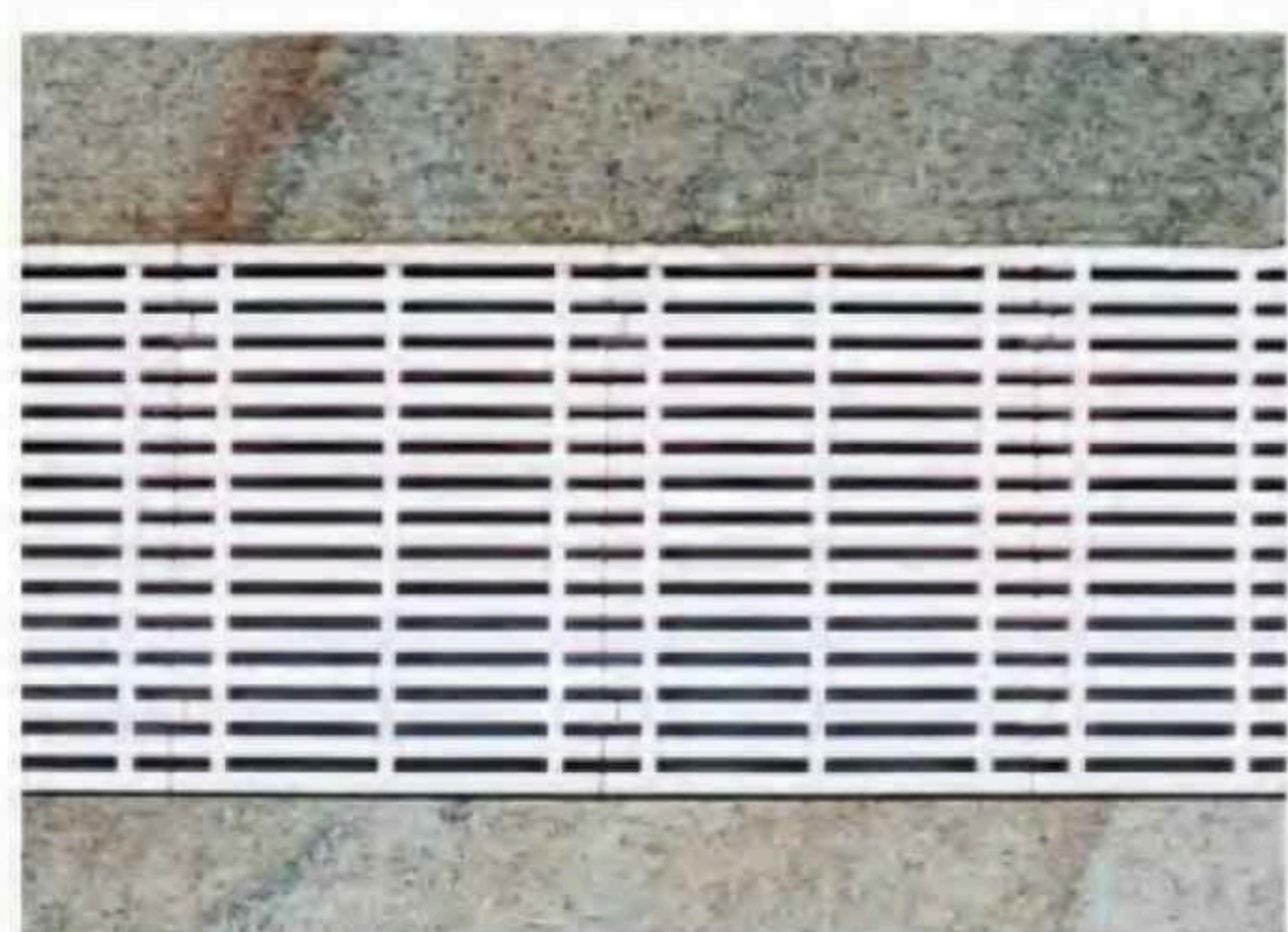
| Model     | Width of Gutter D(mm) | Width of Panel C(mm) |
|-----------|-----------------------|----------------------|
| WL-AQM180 | 180                   | 178                  |
| WL-AQM200 | 200                   | 198                  |
| WL-AQM250 | 250                   | 248                  |
| WL-AQM300 | 300                   | 298                  |



| Model     | Width of Gutter D(mm) | Material |
|-----------|-----------------------|----------|
| WL-BQM180 | 180                   | ABS      |
| WL-BQM250 | 250                   | ABS      |
| WL-BQM300 | 300                   | ABS      |



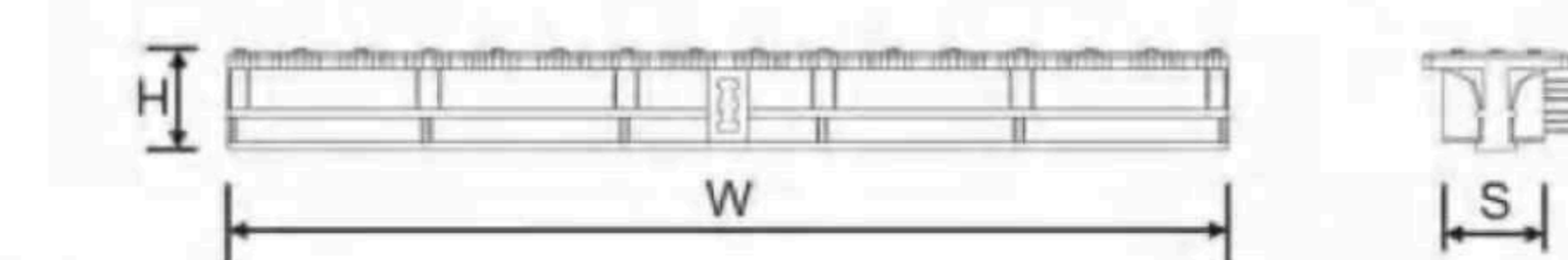
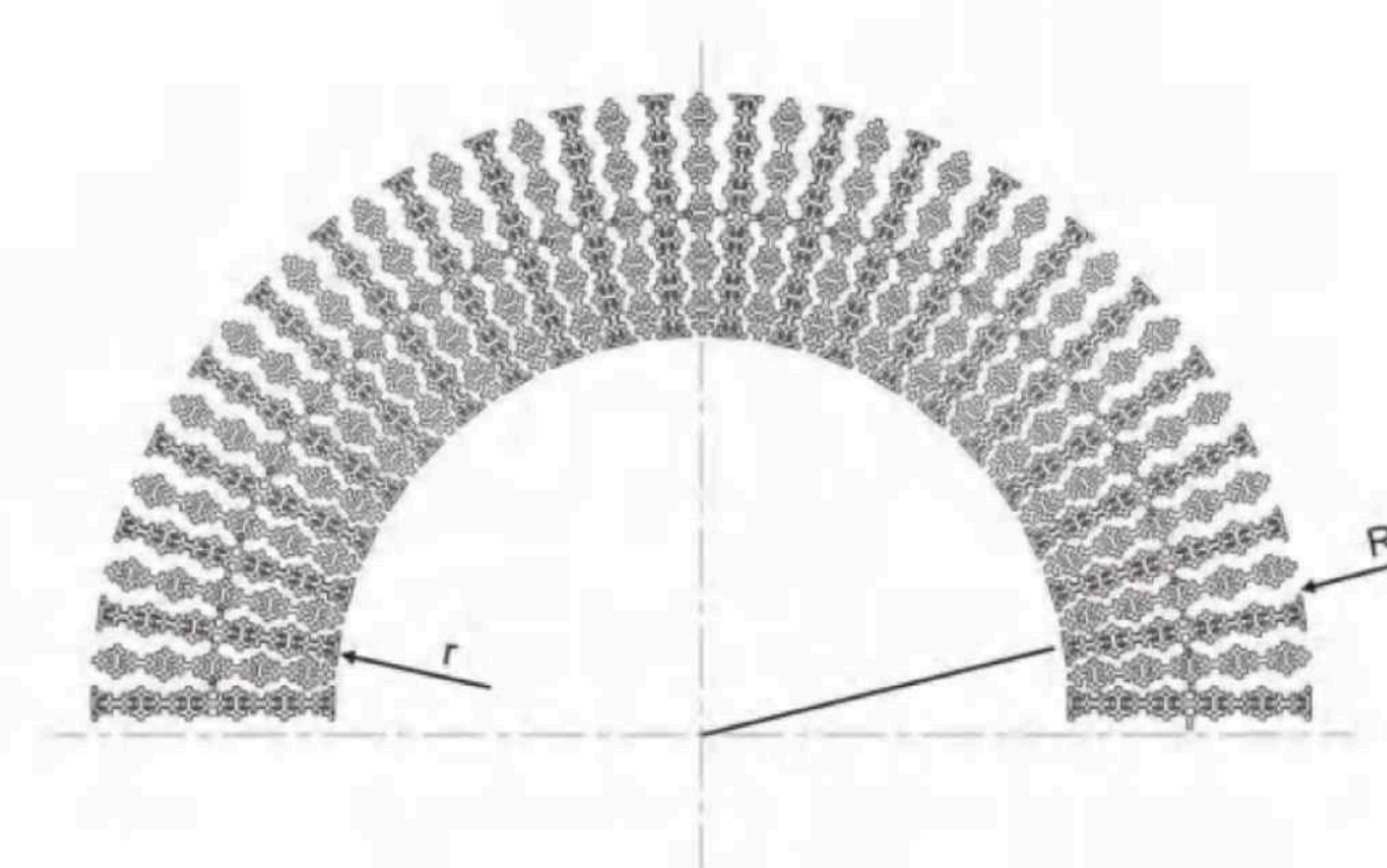
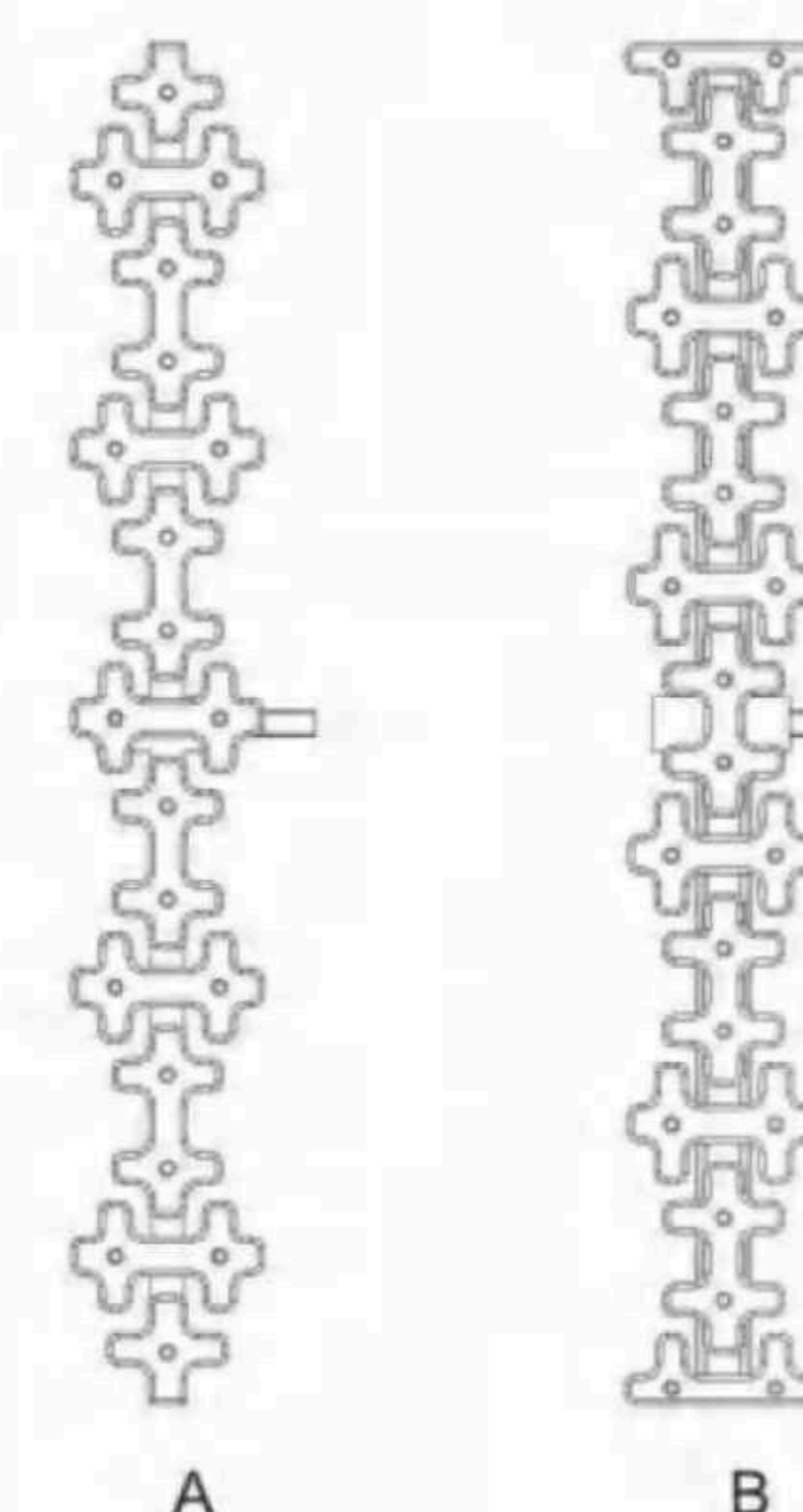
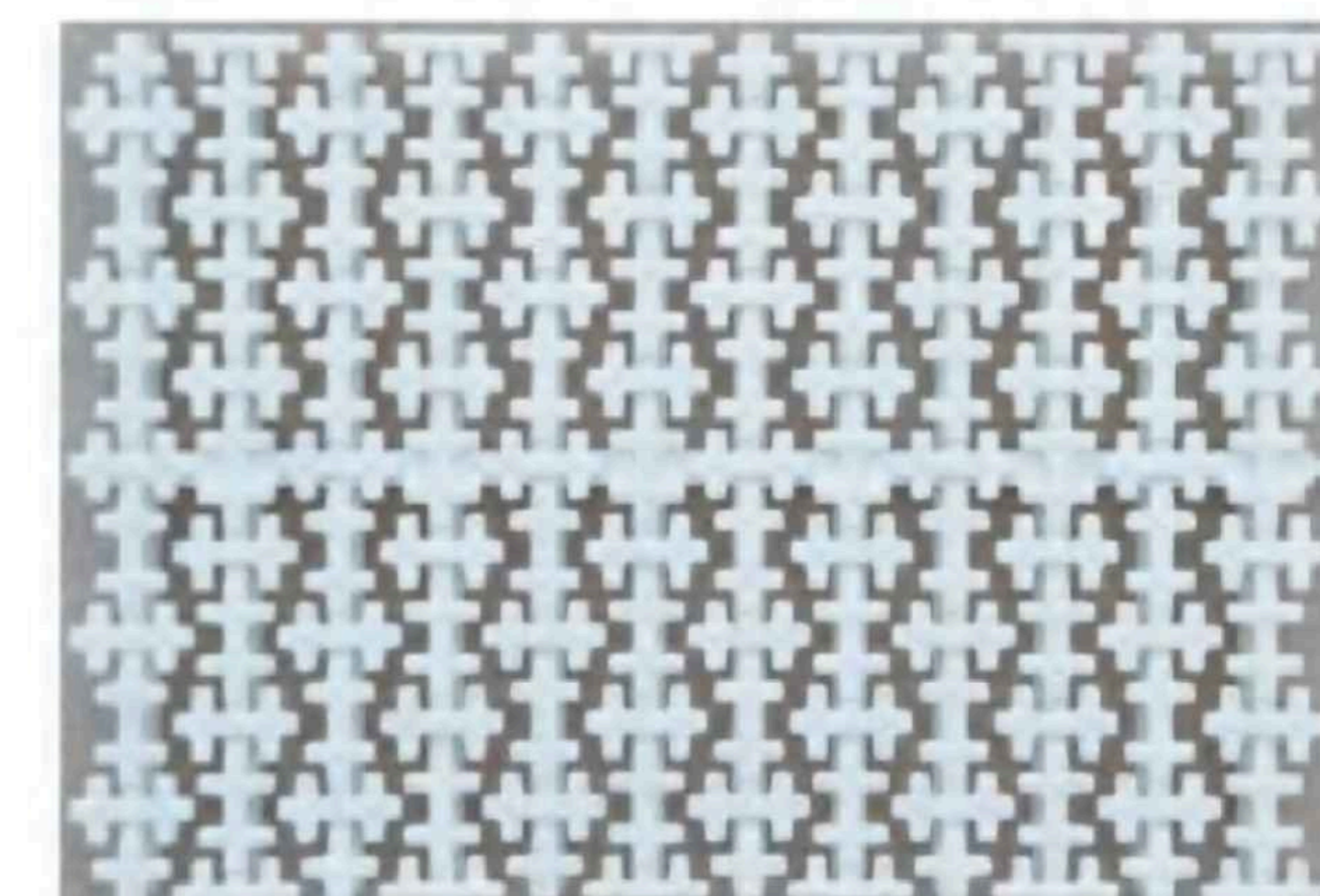
| Model     | Height×Width(mm) | Material |
|-----------|------------------|----------|
| WL-CQM180 | 25×180           | ABS      |
| WL-CQM250 | 25×250           | ABS      |
| WL-CQM300 | 25×300           | ABS      |



| Model     | Width×Length(mm) | Material |
|-----------|------------------|----------|
| WL-DQM300 | 300×200          | ABS      |
| WL-DQM350 | 350×250          | ABS      |
| WL-DQM375 | 375×250          | ABS      |

### Features:

- Comply with the standard of EN-13451 and CJJ122-2008.
- Anti-slip, safe, super strong, durable.
- UV-resistant, not easy to fade or break, longer using life.
- To be easy to install and flexible to meet a variety of different swimming pool specifications.
- Composed of Part A and Part B as below drawing, Length is adjustable.
- Can make an arc with minimum radius of 625mm.



| Model     | W(mm) | S(mm) | H(mm) | R(mm) | r(mm) |
|-----------|-------|-------|-------|-------|-------|
| WL-HQM250 | 250   | 29    | 25    | 625   | 375   |

## SAFETY CHECK VALVE POOL FITTINGS & CLEANERS



WL-DZF50A/B

Safety check valve is an essential accessory for circulating pumps. Its main function is to avoid damaging the impeller when pump stops working.

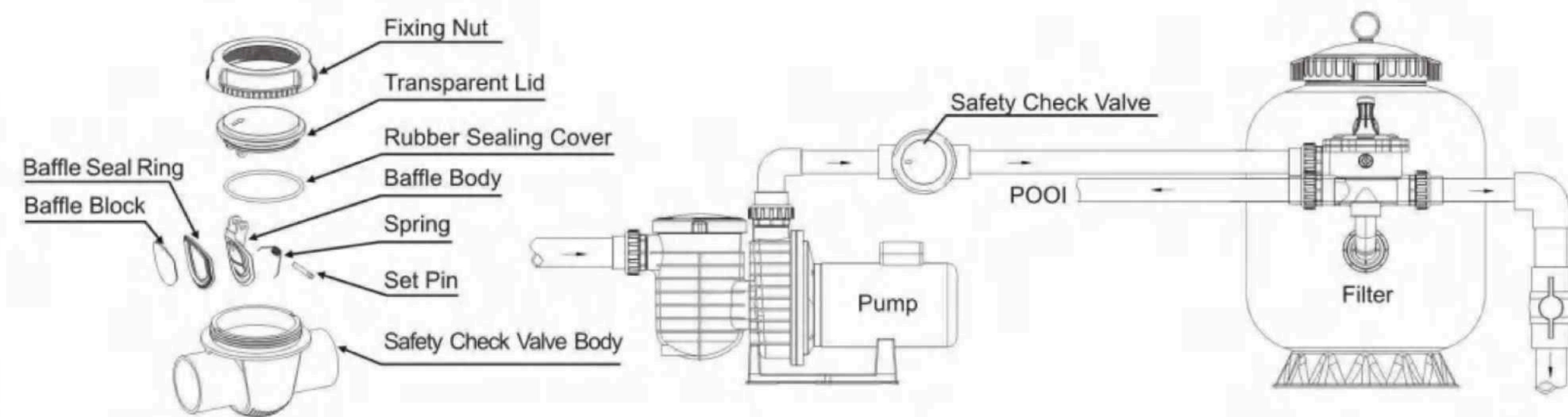
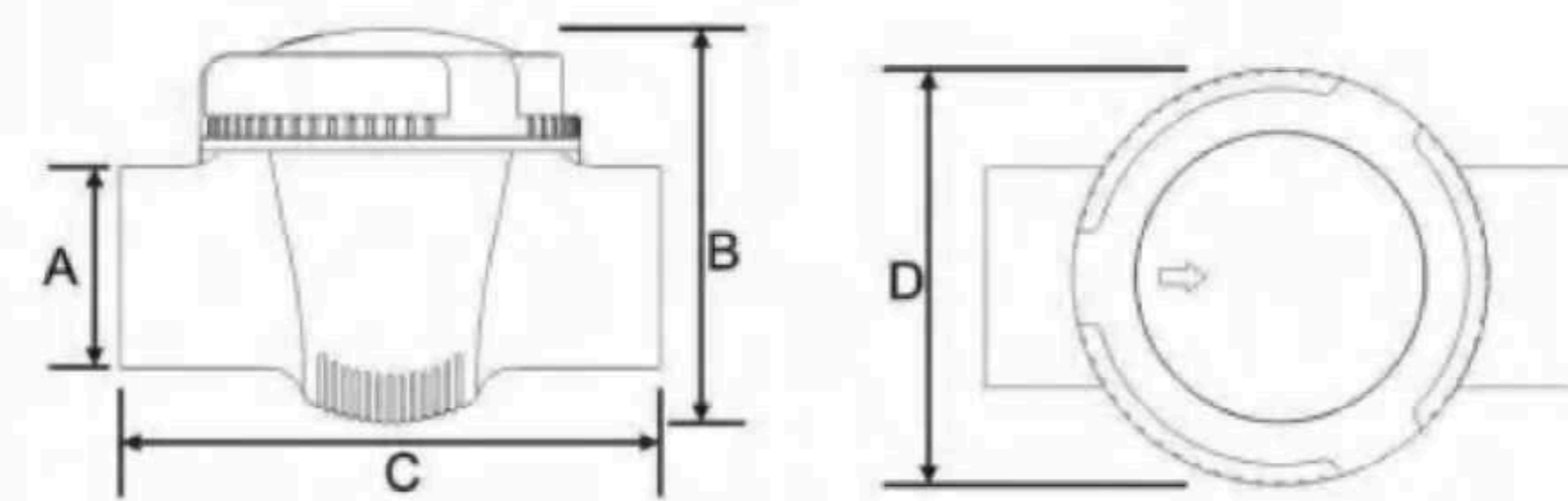
MILLIAN safety check valve is specially designed for swimming pool and spa and it relies on the flow of the liquid itself to turn on and turn off the seal baffle automatically, then form the directional flow of the liquid. It ensures the directional flow of water from swimming pool and spa and prevents water from backflow.

**Features:**

- Transparent lid, convenient to watch flow direction of water.
- Seal baffle and stainless steel spring with numerous tests ensure high performance and reliable quality.
- Being made of high quality engineering plastics, our Safety check valve is in high temperature resistance and corrosion resistance, which can adapt to acidic or alkaline fluid in temperature 5-50°C.
- Safety check valve in metric or imperial is optional, facilitating the installation.

DZF series Safety Check Valve has two models: model A and model B, model A :2" model B :Φ63mm

| Model   | A   | B   | C   | D    |
|---------|-----|-----|-----|------|
| DZF50-A | Φ2" | 139 | 190 | Φ134 |
| DZF50-B | Φ63 | 139 | 190 | Φ134 |

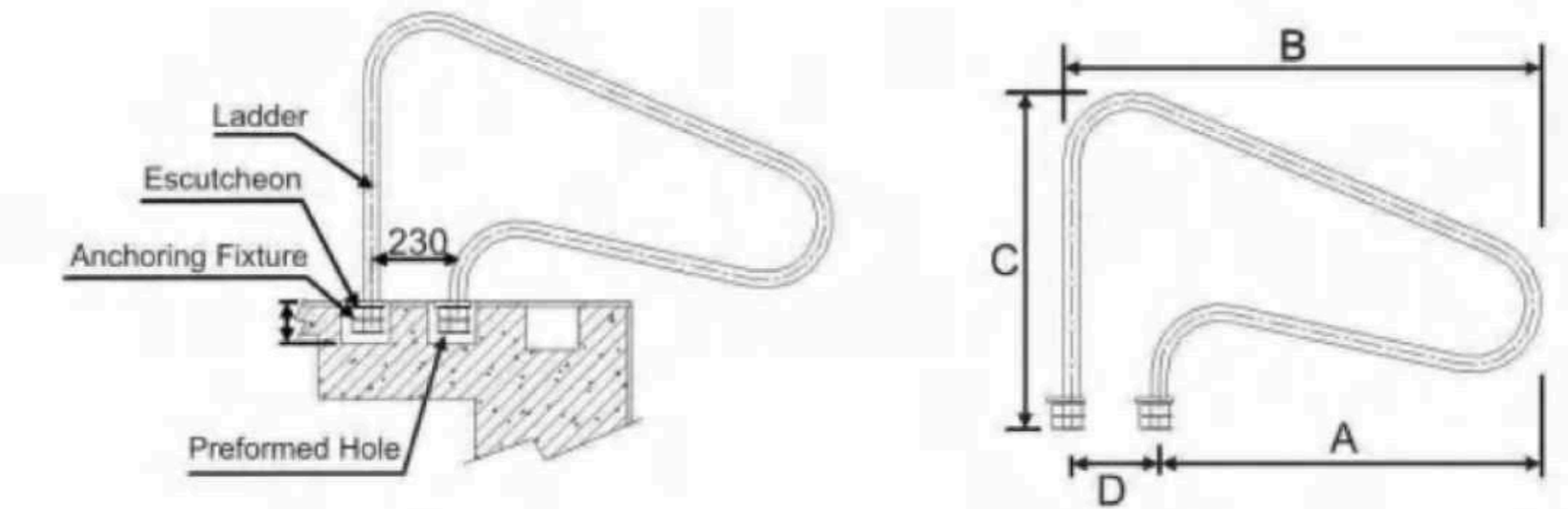


WL-DZF Series Exploded Drawing And Installation Diagram

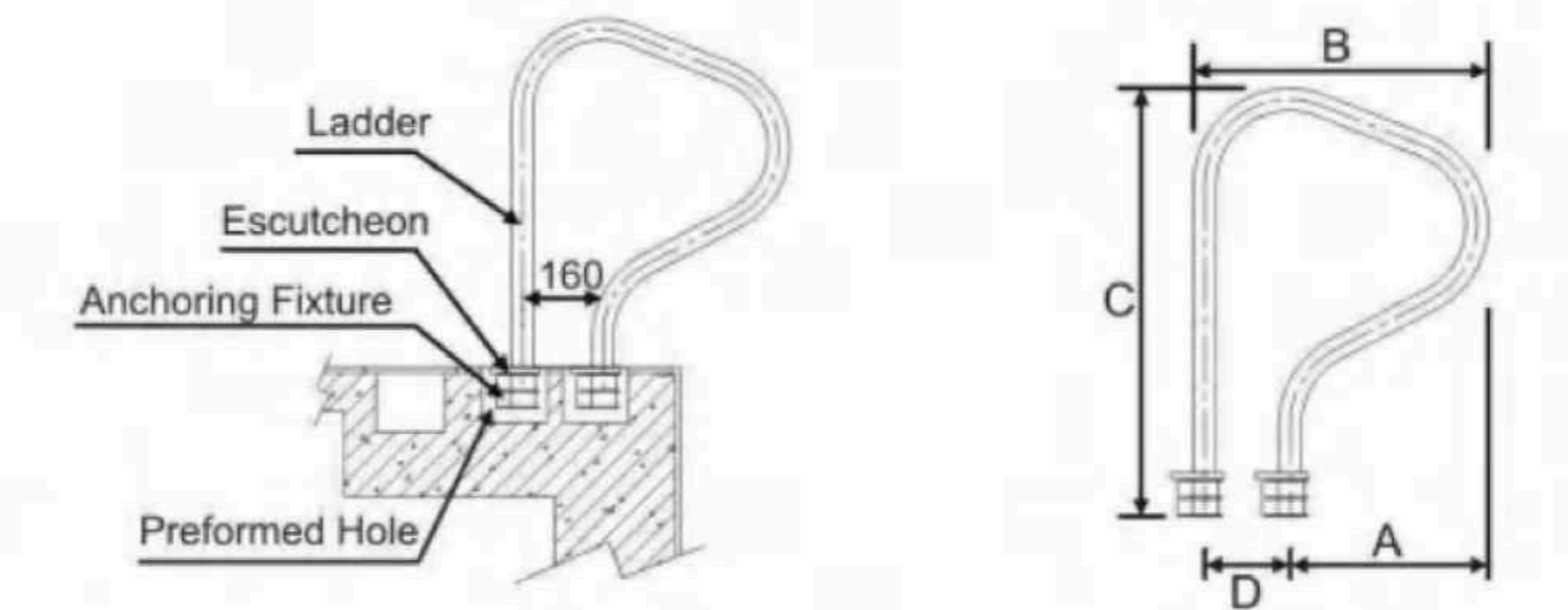
## LADDERS POOL FITTINGS & CLEANERS

### 1. Grab Rails and Anchor Sockets

Closed rail design and constructed with polished Stainless Steel and Anchor Socket.

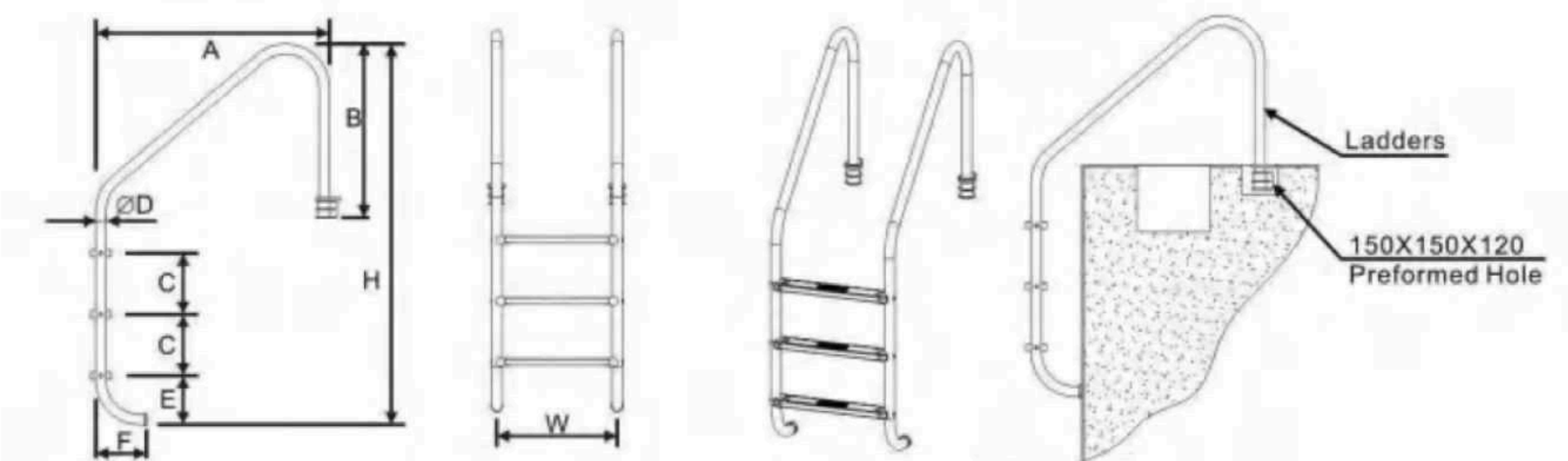


| Model  | A (mm) | B (mm) | C (mm) | D (mm) | Specification |
|--------|--------|--------|--------|--------|---------------|
| WL-SRG | 1000   | 1250   | 880    | 230    | Φ42           |



| Model  | A (mm) | B (mm) | C (mm) | D (mm) | Specification |
|--------|--------|--------|--------|--------|---------------|
| WL-SRB | 375    | 555    | 805    | 160    | Φ42           |

### 2. Ladder For Overflow Pool



| Model     | A (mm) | B (mm) | C (mm) | ∅D (mm) | E (mm) | F (mm) | H (mm) | W (mm) |
|-----------|--------|--------|--------|---------|--------|--------|--------|--------|
| WL-KFT202 | 957    | 710    | 250    | 42      | 200    | 208    | 1306   | 500    |
| WL-KFT203 | 957    | 710    | 250    | 42      | 200    | 208    | 1556   | 500    |
| WL-KFT204 | 957    | 710    | 250    | 42      | 200    | 208    | 1806   | 500    |
| WL-KFT205 | 957    | 710    | 250    | 42      | 200    | 208    | 2056   | 500    |

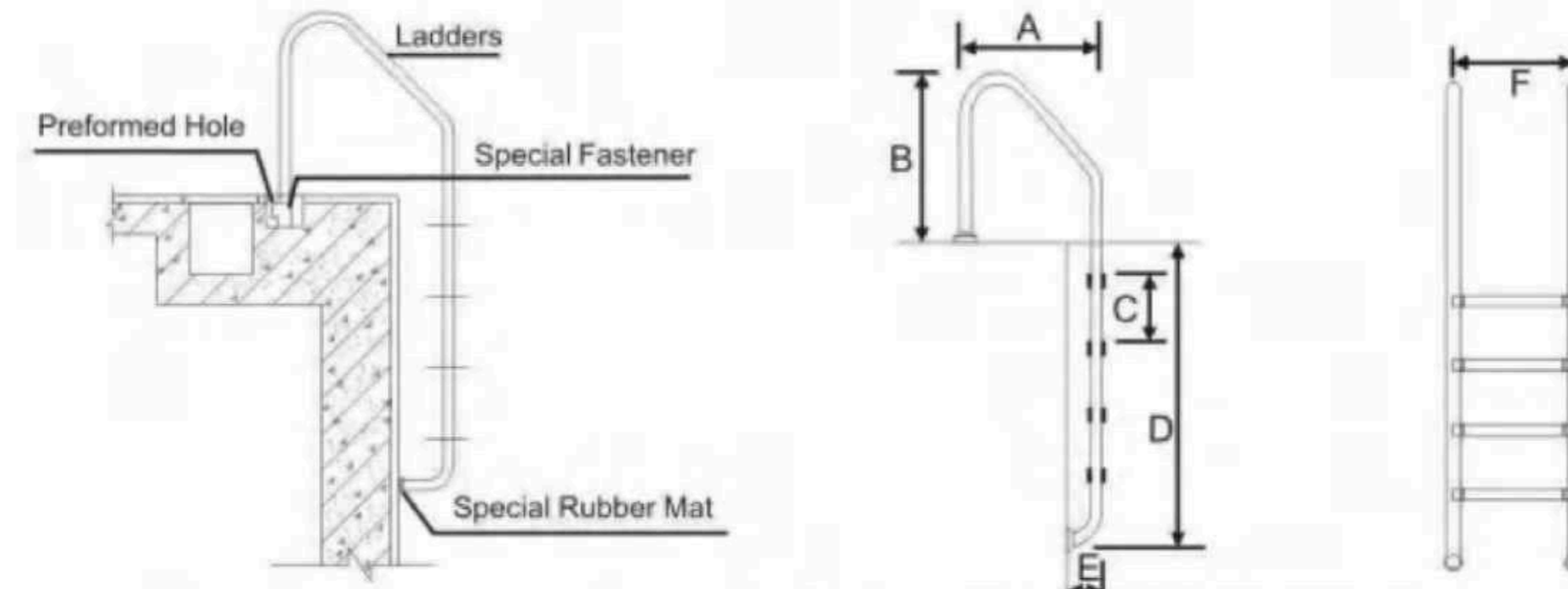
## LADDERS POOL FITTINGS & CLEANERS

3. Ladders for embedded pools. Handrails in hand polished stainless steel pipe. Steps in stainless steel and anti-slip. Complete with anchoring fixtures and earth connection. Easy installation (with diameter 42mm).

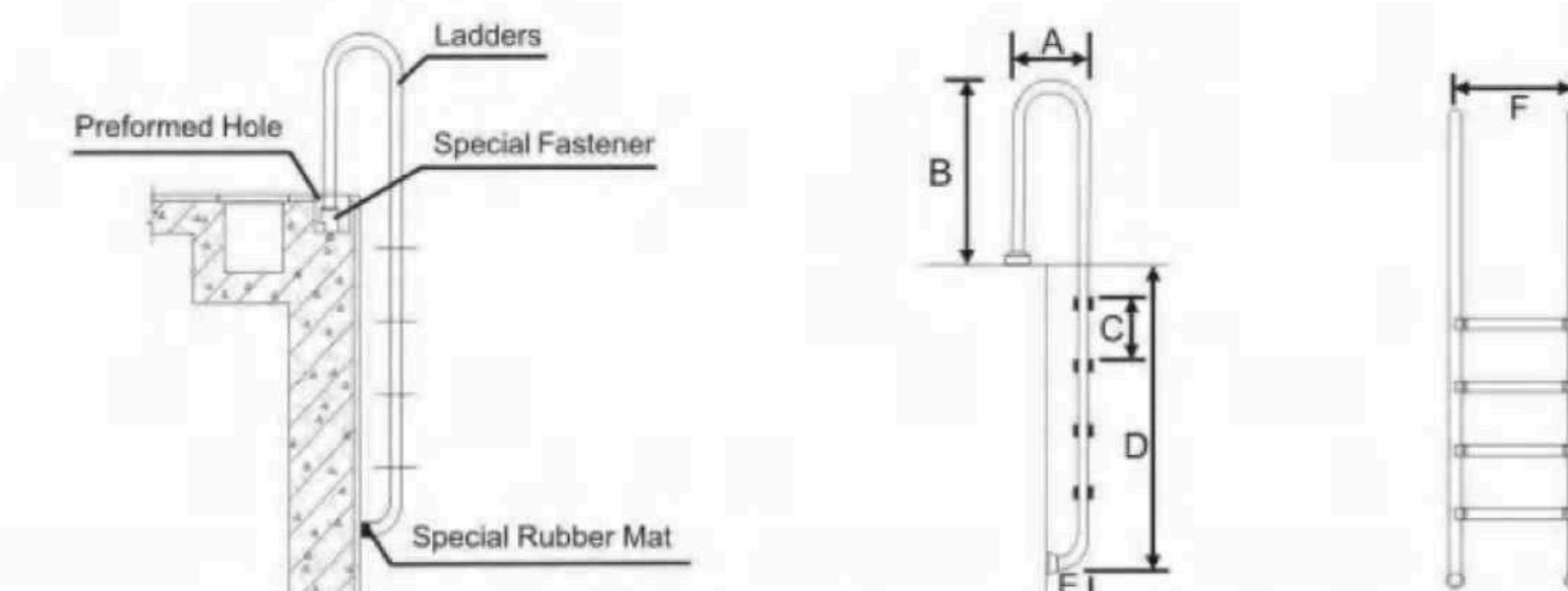


Anti-Slip Steps

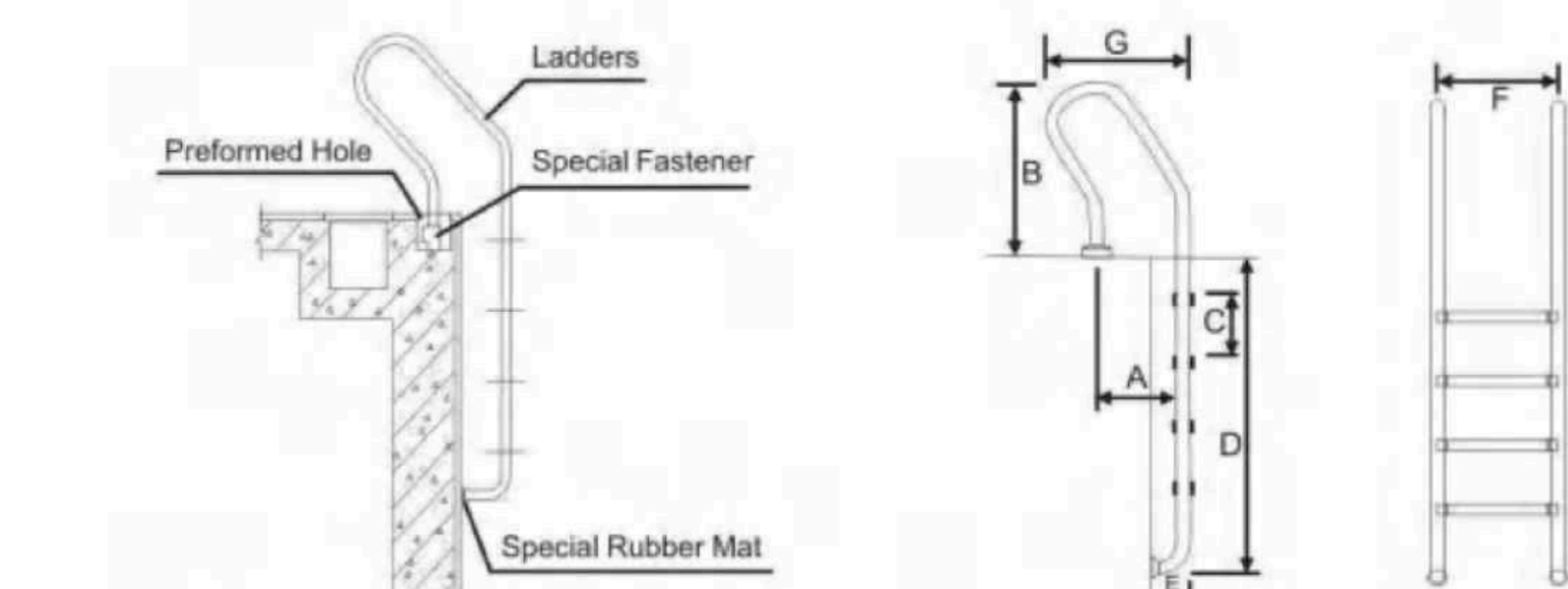
Anti-Slip Steps



| Model    | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | Specification |
|----------|-------|-------|-------|-------|-------|-------|---------------|
| WL-SL202 | 592   | 700   | 250   | 600   | 180   | 500   | Ø42           |
| WL-SL203 | 592   | 700   | 250   | 850   | 180   | 500   |               |
| WL-SL204 | 592   | 700   | 250   | 1100  | 180   | 500   |               |
| WL-SL205 | 592   | 700   | 250   | 1350  | 180   | 500   |               |



| Model    | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | Specification |
|----------|-------|-------|-------|-------|-------|-------|---------------|
| WL-MC202 | 314   | 700   | 250   | 600   | 180   | 500   | Ø42           |
| WL-MC203 | 314   | 700   | 250   | 850   | 180   | 500   |               |
| WL-MC204 | 314   | 700   | 250   | 1100  | 180   | 500   |               |
| WL-MC205 | 314   | 700   | 250   | 1350  | 180   | 500   |               |



| Model    | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | F(mm) | G(mm) | Specification |
|----------|-------|-------|-------|-------|-------|-------|-------|---------------|
| WL-SF202 | 280   | 700   | 250   | 600   | 180   | 500   | 592   | Ø42           |
| WL-SF203 | 280   | 700   | 250   | 850   | 180   | 500   | 592   |               |
| WL-SF204 | 280   | 700   | 250   | 1100  | 180   | 500   | 592   |               |
| WL-SF205 | 280   | 700   | 250   | 1350  | 180   | 500   | 592   |               |

## POOL FITTINGS & CLEANERS

### VACUUM HEADS. & JET VACS.

|  |   |   |  |  |
|--|---|---|--|--|
| <br>Model: 1002<br>Economy liner Vac Head                                 | <br>Model: 1005<br>Deluxe large vac. Head cast iron weighted w/ side brush | <br>Model: 1001<br>Deluxe liner Vac. Head with bumper/cast iron weighted | <br>Model: 1003<br>Triangular liner vac head w/ swivel                        | <br>Model: 1004<br>Deluxe triangular transparent cast iron weighted vac head          |
| <br>Model: 1007<br>Flexible vacuum head for in-ground pool                | <br>Model: 1008<br>Flexible vacuum head w/ side brush for in-ground pool   | <br>Model: 1010<br>Flexible Vac head with Pressure release and EZ-Clip   | <br>Model: 1011<br>Vac head with 4 wheels, Alu body plastic handle(34.5x13cm) | <br>Model: 1012<br>Deluxe large Vac head 4 wheels, Alu body plastic handle(44.5x13cm) |
| <br>Model: 1101<br>Economy jet vacuum w/brush for small above ground pool | <br>Model: 1103<br>Jet vac kit w/ 5 section pole of 48"/120cm    | <br>Model: 1105<br>Deluxe large Jet vac with brush for spa & splasher    | <br>Model: 1104<br>Jet vac kit w/3 section pole of 52"/135cm        |  |

### BRUSHES.





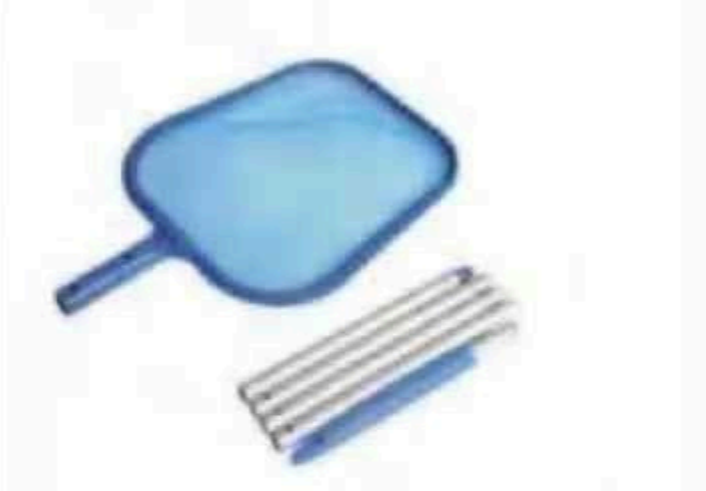


|  |   |   |  |  |
|--|---|---|--|--|
| <br>Model: 1404<br>10"/26cm Hi-grade Stainless steel algae brush | <br>Model: 1405<br>18"/45cm Deluxe wall brush with aluminum back | <br>Model: 1403<br>18"/45cm Deluxe stainless steel algae brush w/ Alu back | <br>Model: 1401<br>18"/45cm standard curved polybristle wall brush | <br>Model: 1402<br>10"/26cm polybristle wall brush |
| <br>Model: 1409<br>Scrubber pad brush   | <br>Model: 1410<br>Finger brush  | <br>Model: 1408<br>Flexible brush w/ Alu handle EZ-clip and extra bristle  | <br>Model: 1407<br>Water line scrub pad with detergent tank and EZ-clip   |  |

### CHEMICAL DISPENSERS & TEST KITS.

|   |  |   |  |  |
|---|--|---|--|--|
| <br>Model: 1503<br>Chemical dispenser for 3" tablets | <br>Model: 1501<br>Deluxe large chemical dispenser for 3" tablets | <br>Model: 1505<br>Chemical dispenser for 1 1/2" tablets | <br>Model: 1907<br>Basic PH & CL test kit | <br>Model: 1908<br>Test kit refill bottle (20 C.C.) |
|---|--|---|--|--|

# POOL FITTINGS & CLEANERS

## LEAF SKIMMERS.

|   |   |   |   |  |
|---|---|---|---|--|
| <br><b>Model: 1301</b><br>Standard leaf skimmer  | <br><b>Model: 1302</b><br>Heavy duty Plastic leaf skimmer w/ long wearing mesh                         | <br><b>Model: 1303</b><br>Aluminum leaf skimmer (blue anodized handle)                                 | <br><b>Model: 1305</b><br>Professional heavy duty aluminum leaf skimmer                                 | <br><b>Model: 1306</b><br>Leaf skimmer with aluminum frame and plastic handle |
| <br><b>Model: 1201</b><br>Economy deep bag skimmer   | <br><b>Model: 1202</b><br>Economy deep bag skimmer with aluminum handle                                | <br><b>Model: 1203</b><br>Aluminum frame deep rake (Blue anodized handle)                              | <br><b>Model: 1204</b><br>Heavy duty plastic leaf rake with long wearing mesh                           | <br><b>Model: 1205</b><br>Professional heavy duty deep rake w/aluminum frame  |
| <br><b>Model: 1307</b><br>Leaf skimmer w/aluminum pole of 48"-122cm in 5 section | <br><b>Model: 1310</b><br>Leaf skimmer w/ 60"- 150cm aluminum pole | <br><b>Model: 1309</b><br>Leaf skimmer w/ 48"- 122cm aluminum pole | <br><b>Model: 1308</b><br>Leaf skimmer with 3X14"-35cm telescopic pole |  |

## HOSE






| Model    | Description                     |
|----------|---------------------------------|
| WL-BXG01 | Extruded PE. $\phi$ 1 1/2" -7M  |
| WL-BXG02 | Extruded PE. $\phi$ 1 1/2" -9M  |
| WL-BXG04 | Extruded PE. $\phi$ 1 1/2" -13M |
| WL-BXG05 | Extruded PE. $\phi$ 1 1/2" -15M |
| WL-BXG06 | Extruded PE. $\phi$ 1 1/2" -30M |
| WL-BXG07 | Extruded PE. $\phi$ 1 1/2" -50M |

| Model | Description                               |
|-------|---|
| 3203  | Vacuumhose $\phi$ 1/4", 1m persection-36m |
| 3803  | Vacuumhose $\phi$ 1/2", 1m persection-36m |
| 3204  | Vacuumhose $\phi$ 1/4", 1m persection-50m |
| 3804  | Vacuumhose $\phi$ 1/2", 1m persection-50m |



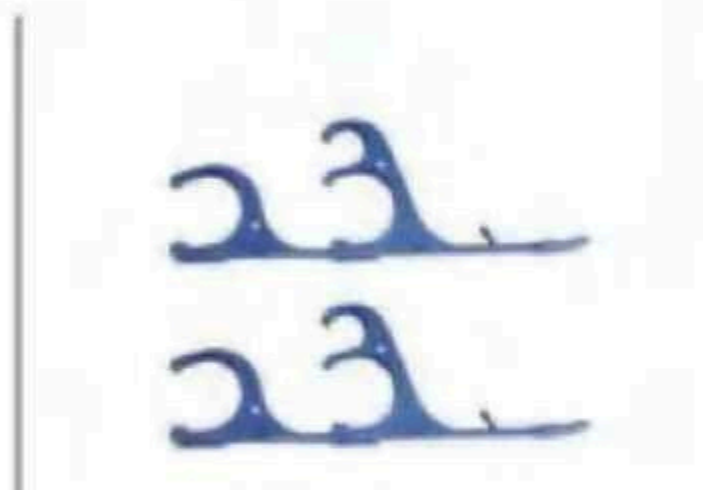










| Model | Description                        |
|-------|------------------------------------|
| 3206  | Spiralwound EVA. $\phi$ 11/4" -6M  |
| 3209  | Spiralwound EVA. $\phi$ 11/4" -9M  |
| 3212  | Spiralwound EVA. $\phi$ 11/4" -12M |
| 3809  | Spiralwound EVA. $\phi$ 11/2" -9M  |
| 3811  | Spiralwound EVA. $\phi$ 11/2" -11M |
| 3813  | Spiralwound EVA. $\phi$ 11/2" -13M |
| 3815  | Spiralwound EVA. $\phi$ 11/2" -15M |

| Model | Description                      |
|-------|----------------------------------|
| 2212  | 2X120 cm Ribbed pole-0.8mm thick |
| 2224A | 2X240 cm Ribbed pole-0.8mm thick |
| 2312  | 3X120 cm Ribbed pole-0.8mm thick |
| 2330A | 3X300 cm Ribbed pole-0.8mm thick |
| 2224B | 2X240 cm Ribbed pole-1.1mm thick |
| 2230  | 2X300 cm Ribbed pole-1.1mm thick |
| 2330B | 3X300 cm Ribbed pole-1.1mm thick |

## THERMOMETERS.

|   |  |  |  |   |
|---|--|--|--|---|
| <br><b>Model: 2908</b><br>Swivel Cuff for vacuum hose(1pc)                   | <br><b>Model: 1601</b><br>Economy thermometer         | <br><b>Model: 1602</b><br>Large thermometer                       | <br><b>Model: 1603</b><br>Jim Buoy thermometer                              | <br><b>Model: 1605</b><br>Deluxe round thermometer |
| <br><b>Model: 1604</b><br>Deluxe floating thermometer with string attachment | <br><b>Model: 1607</b><br>Jumbo easy read thermometer | <br><b>Model: 1610</b><br>Floating animal thermometer in 4 styles | <br><b>Model: 1611</b><br>Floating cool pool animal thermometer in 3 styles |   |

## FOUNTAINS & SPARE PARTS

|   |  |  |   |   |
|---|--|--|---|---|
| <br><b>Model: 1708</b><br>Waterfall fountain                      | <br><b>Model: 1709</b><br>Flower waterfall fountain                | <br><b>Model: 1725</b><br>Plastic pole hanger (2pcs) w/screws                | <br><b>Model: 2902</b><br>Quick snap butterfly clips (4PCS)                             | <br><b>Model: 2021</b><br>Complete return inlet   |
| <br><b>Model: 2901</b><br>Standard vacuum head handle            | <br><b>Model: 2904</b><br>Replacement bag for Jet Vac head        | <br><b>Model: 3861</b><br>Hose Reel-carries vacuum hose up to 13m in length | <br><b>Model: 1809</b><br>Automatic pool cleaner 10pcs*100 cm/pchse included(standard) | <br><b>Model: 1811</b><br>Automatic pool cleaner 10pcs*100 cm/pchse included(standard) |
| <br><b>Model: 2903</b><br>Long lock pin for vacuum handle (4PCS) | <br><b>Model: 2905</b><br>NPT tie-in for American standard (2PCS) | <br><b>Model: 2906</b><br>BSPT tie-in for European standard (2PCS)          |   |   |

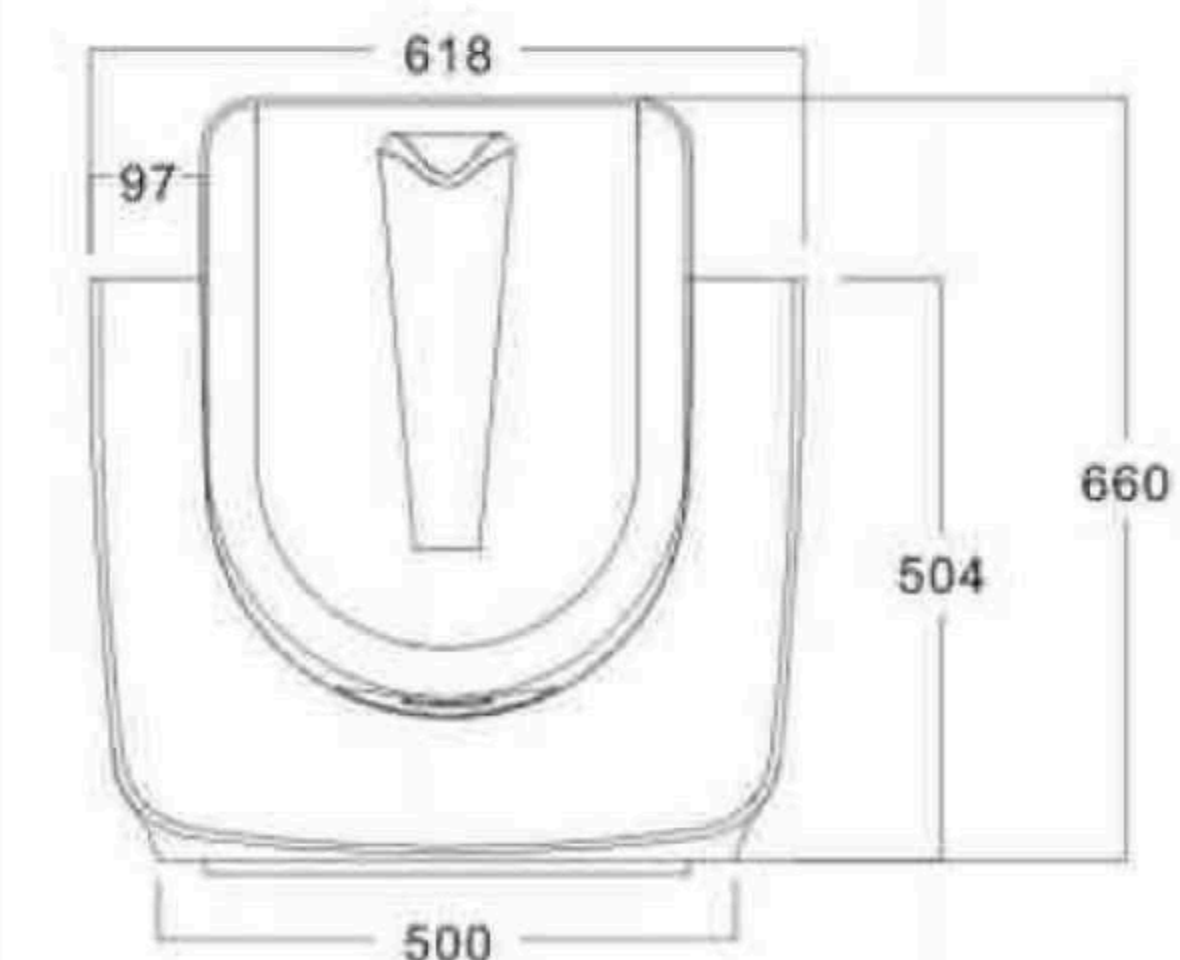
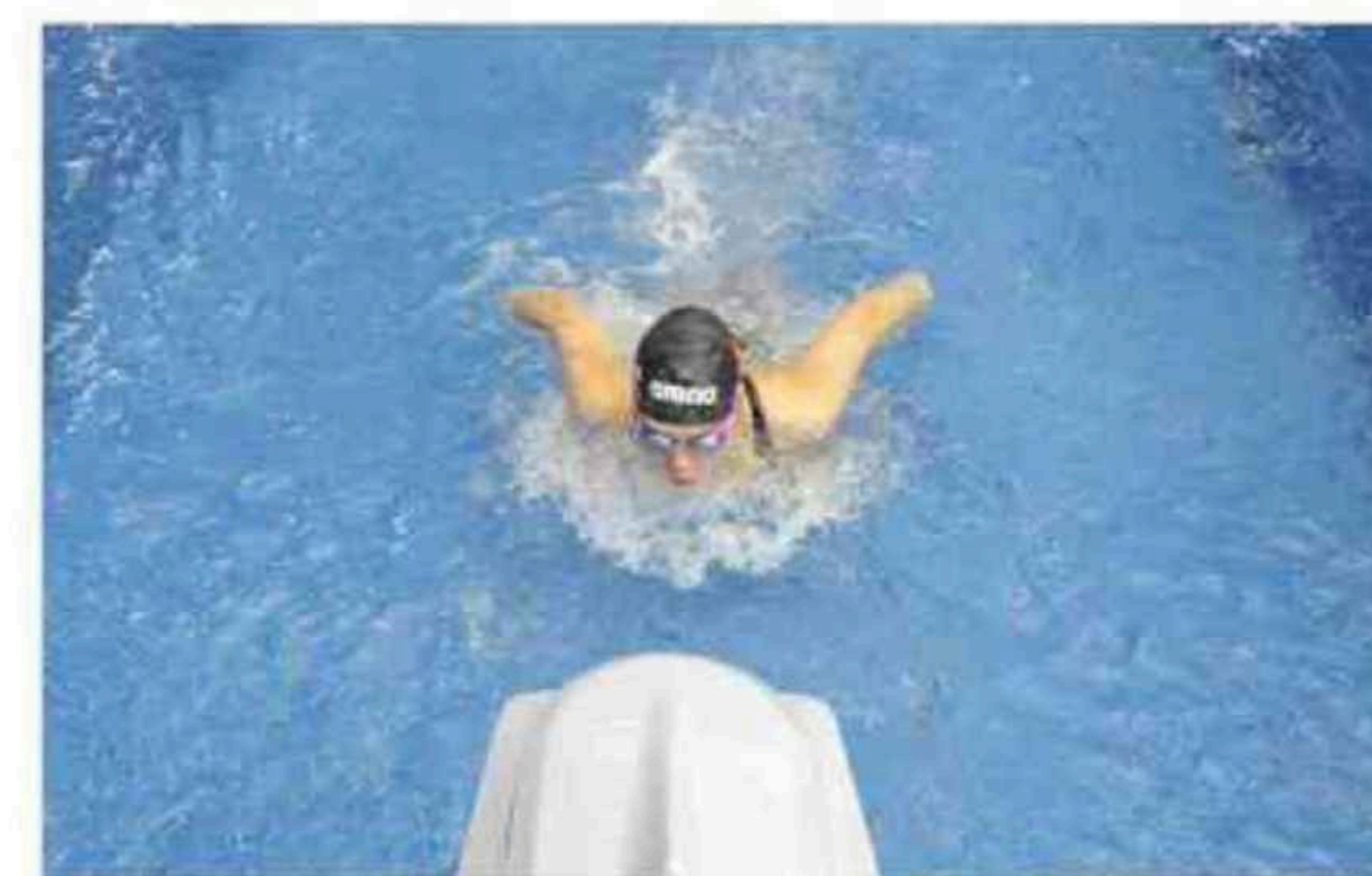
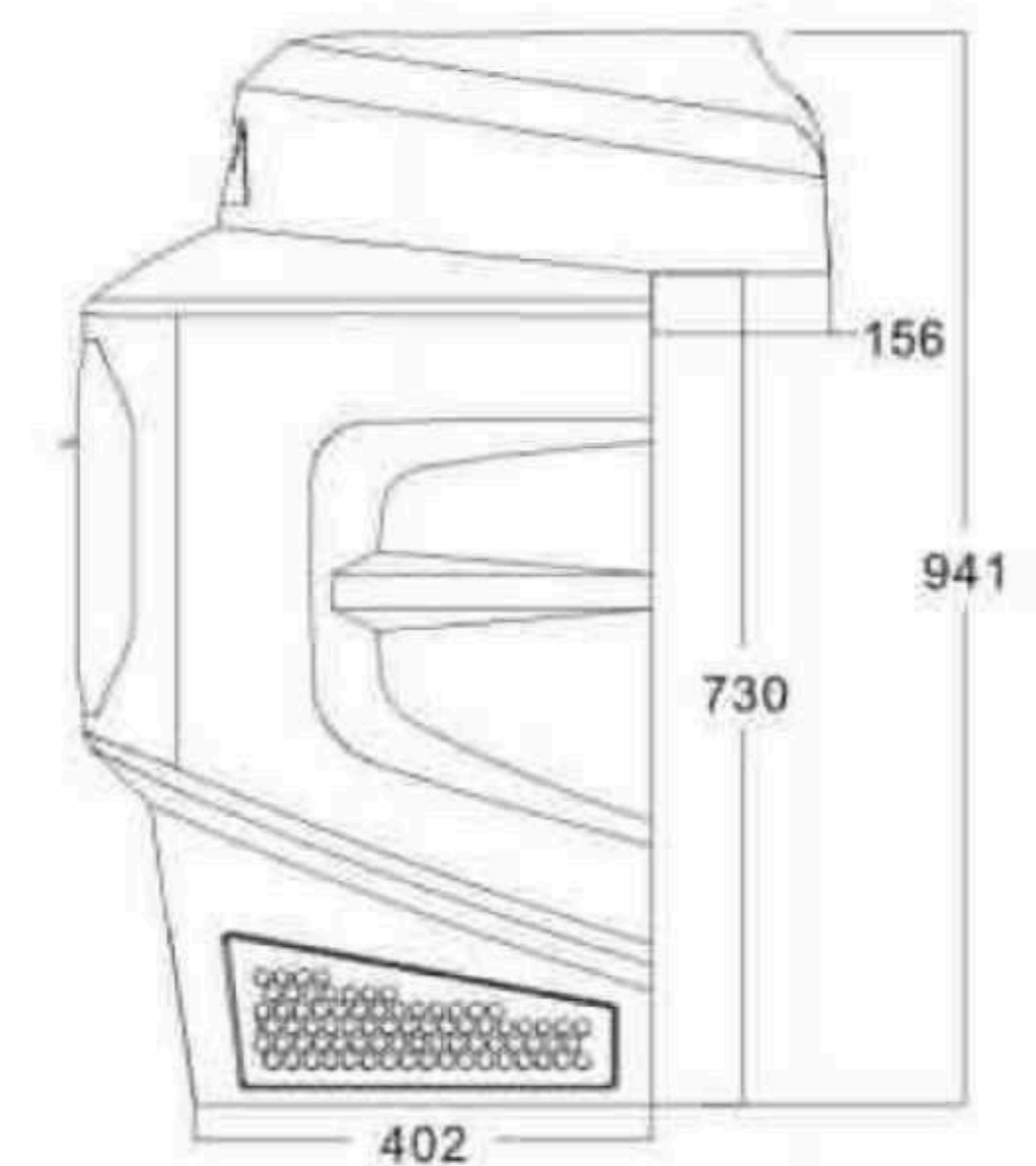
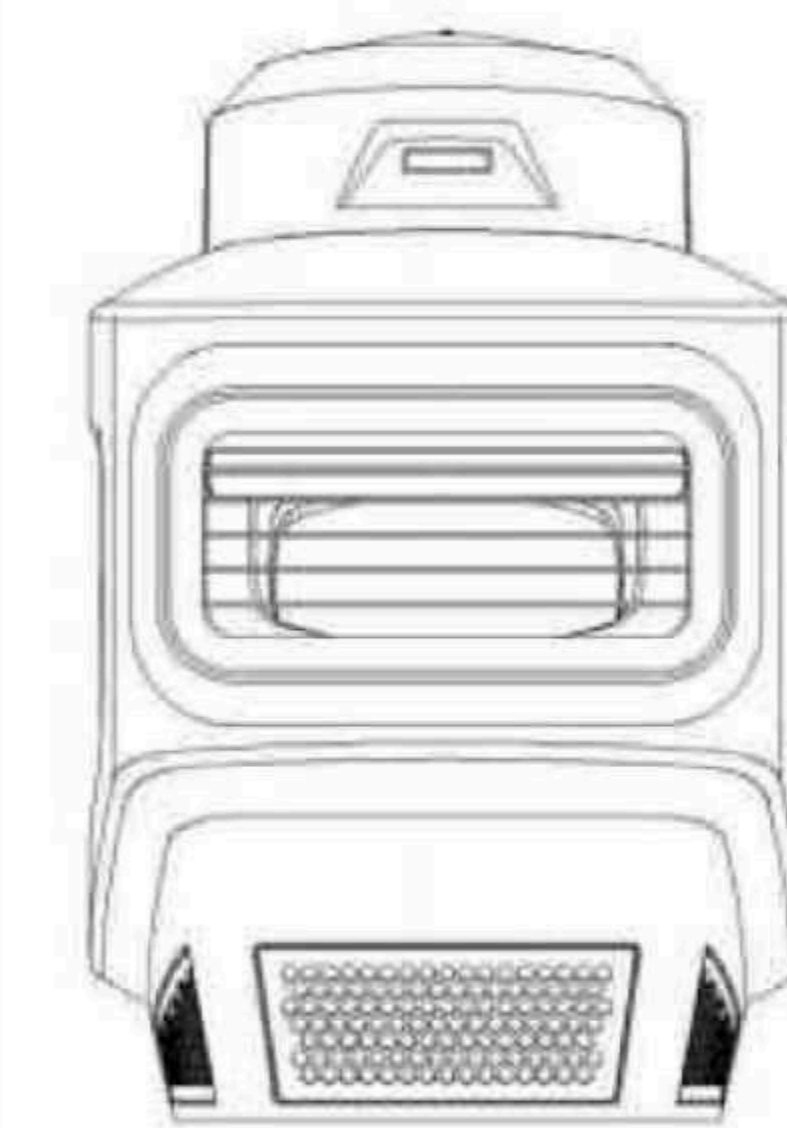
| Model | Description   | Model | Description  |
|-------|---|-------|--|
| 1717  | Above ground pool cover reel W/ABS frame for $\phi$ 3-14" & 1-1/2" tubes(not include AL pole) | 1718  | Above ground pool Solar Reel System(not include AL pole) |
| 2321  | Pole for 8341, 3*2.1m (hexagonal)   | 2321  | Pole for 8342, 3X2.1M                                    |
| 2327  | Pole for 8341, 3*2.7m (hexagonal)   | 2324  | Pole for 8342, 3X2.44M                                   |
| 2335  | Pole for 8341, 3*3.55m (hexagonal)  |       |  |

# SWIM CURRENT MACHINE & FILTRATION UNITS

Adopting a number of high-tech technologies in pool water treatment and spa projects, MILLIAN swim current machine is integrated the advanced and practical water environment equipment, making the construction of private swimming pools easier and faster, and making swimming and fitness experience more professional and perfect.

**Main features:**

- Unlimited swimming
- 99-speed shift mode
- Laminar flow technology
- Waterproof remote control
- DC36V safe voltage
- Wall mounted installation
- Fashion, smart , compact
- High quality acrylic shell



WL-MPU12

| Model | Power supply (V) | Working voltage (V) | Input power (kW) | Rated power (kW) | Laminar outlet (mm) | Max flow (m <sup>3</sup> /h) | Max speed (m/min) | Dimension (mm) |
|-------|------------------|---------------------|------------------|------------------|---------------------|------------------------------|-------------------|----------------|
| MPU12 | 220V             | DC36                | 2                | 1.2              | 460×215             | 719                          | 150               | 660×618×941    |

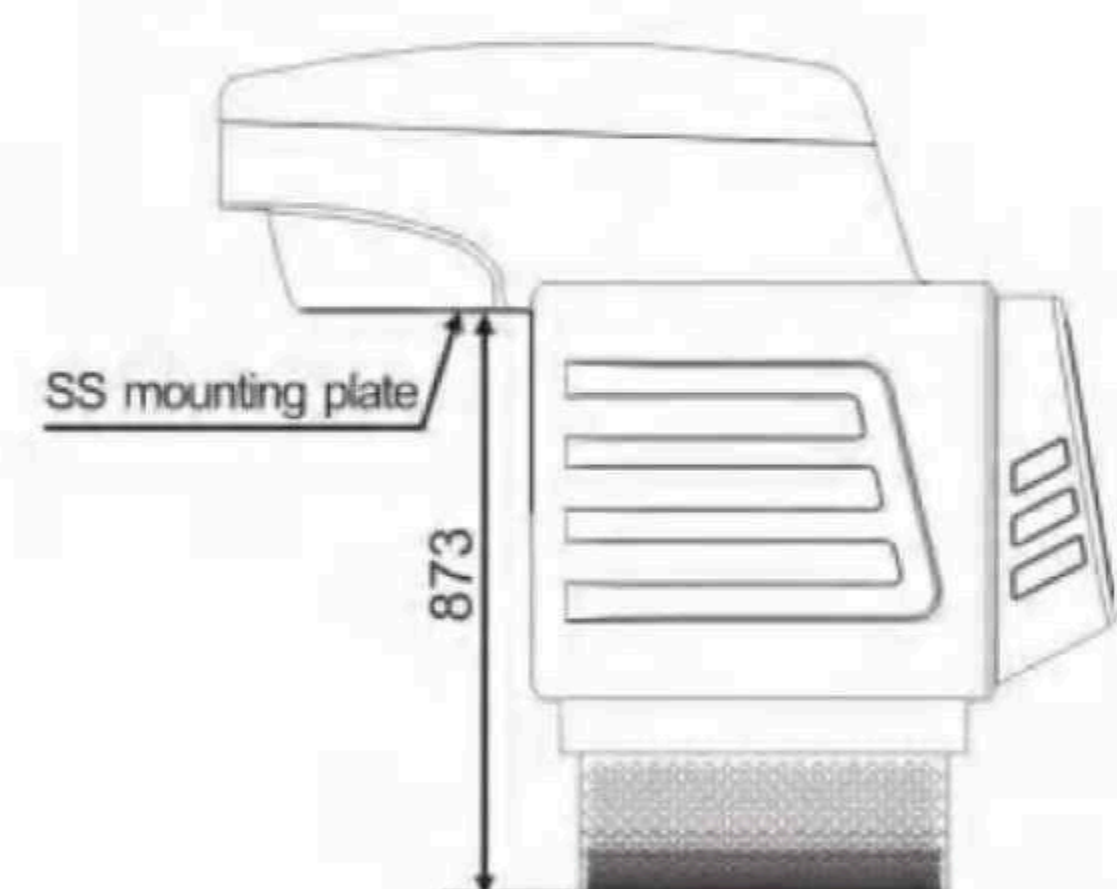
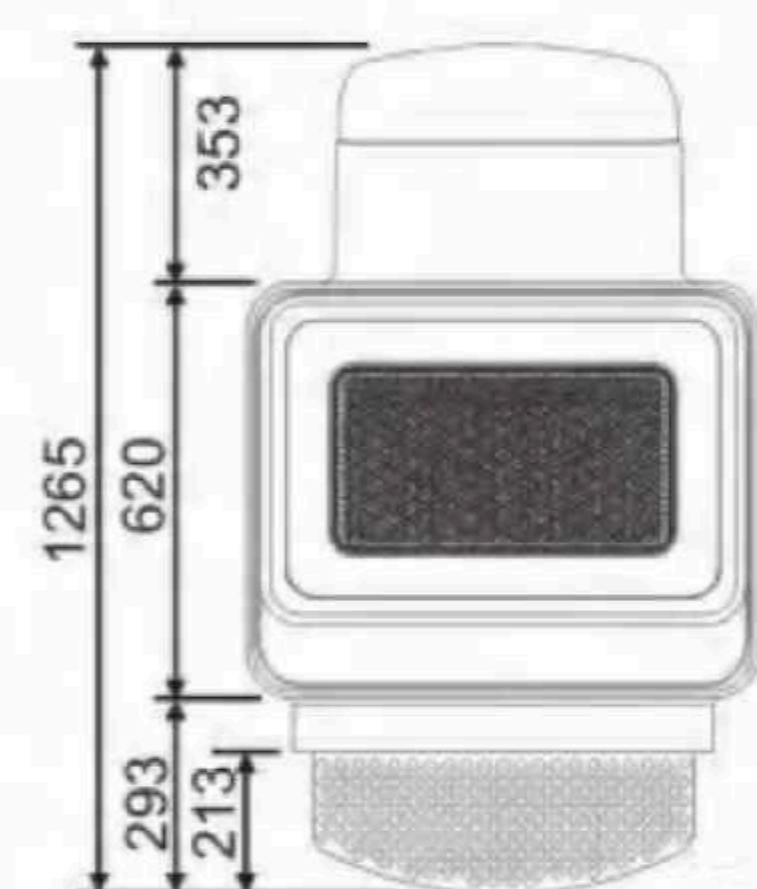
## WL-RPU WALL MOUNTED UNLIMITED SWIMMING MACHINE

Having accumulated many years of advanced technology and practical experience in the field of pool industry, to improve the swimmers' swimming experience and life quality, MILLIAN creatively has developed wall mounted unlimited swimming machine which is suitable for different sizes of pools.

Infinite variable speeds could be adjusted according to swimmers' demand by controller or WeChat applet.

### Main features:

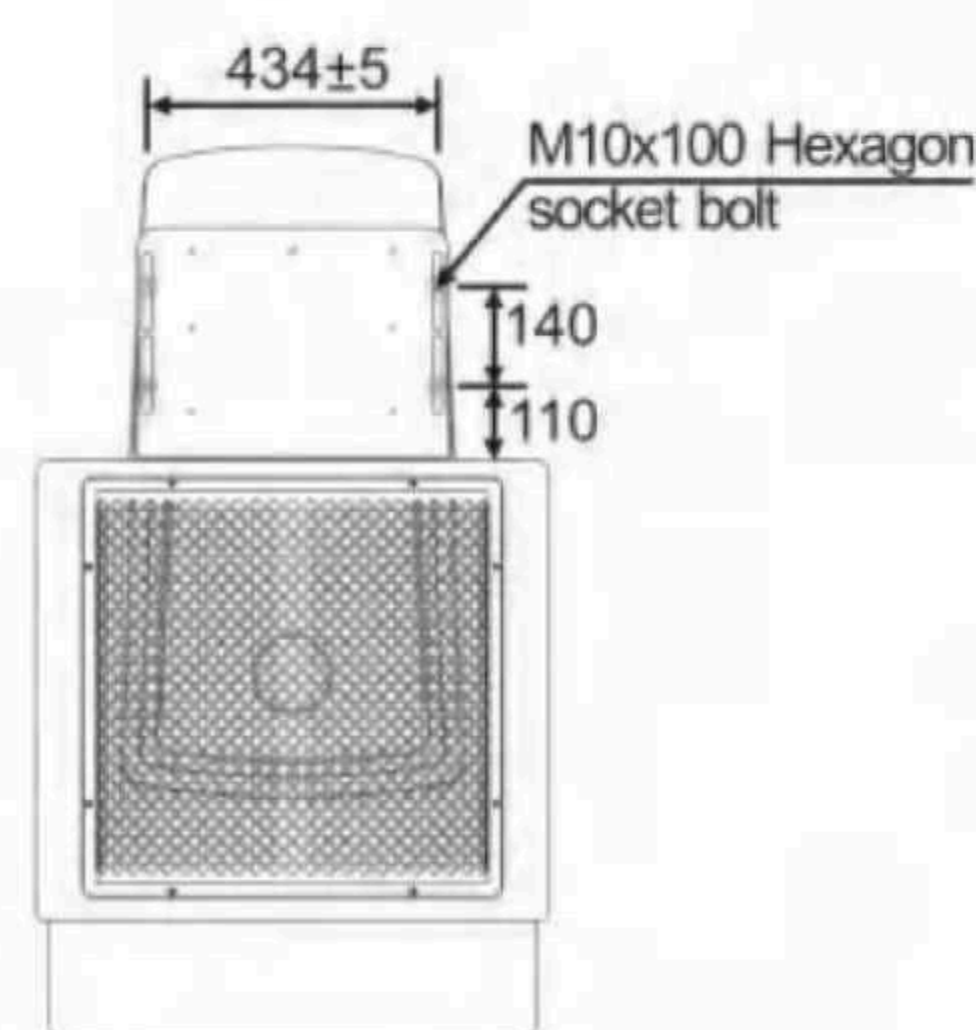
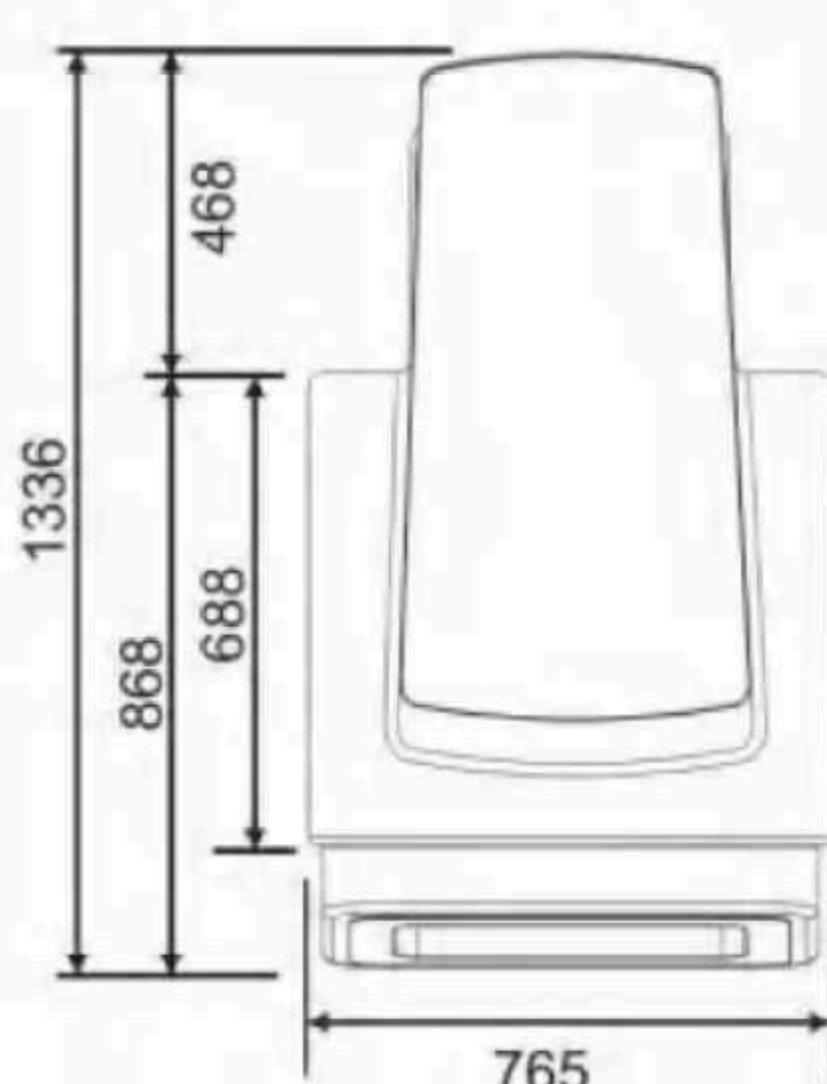
- Easy to install. Just hung on pool wall with 4pcs fixed screws.
- Safety performance. Work with low-voltage as DC36V.
- Operate with low noise, no vibration.
- Can be installed in the pool with a depth of 0.9m.
- Innovative and fashionable design, pretty and compact.
- Manufactured by environmental, UV-resistance, corrosion resistant materials.
- Suitable for reconstructive old pools or new pools in different sizes.



Standard



Optional



| Model | Power supply (V) | Working voltage (V) | Input power (kW) | Rated power (kW) | Laminar outlet (mm) | Max flow (m <sup>3</sup> /h) | Max speed (m/min) | Dimension (mm)    |
|-------|------------------|---------------------|------------------|------------------|---------------------|------------------------------|-------------------|-------------------|
| RPU20 | 220V             | DC36                | 3.0              | 2.0              | 500 x 280           | 1000                         | 186               | 1336 x 765 x 1265 |
| RPU25 | 220V             | DC36                | 4.0              | 2.5              | 500 x 280           | 1300                         | 240               | 1336 x 765 x 1265 |

## WL-AYT25Y WALL-HUNG FILTRATION UNIT

The housing is made of high quality acryl, the unit is easy to install and contains all the equipment for filtration, circulation, disinfection, drainage and lighting in one compact unit. It is also equipped with a multifunctional jet which not only makes the pool water circulate, but also has functions for swimming training, massage and fun in the water.

### Installation:

- Clear away any debris from the installation area, and make a datum mark before installation.
- Place the unit in a proper position according to the installation detail drawing. Adjust the unit with a level to make sure the tolerance is less than 2mm. Use the filler pieces to pack the unit level, fix the packing pieces, then fill in the vacant area with grout.
- Connect drainpipe and cable pipe as shown in the installation detail drawing. The control box must be damp-proofed. Electrical installation and testing must be done by a licensed or certified electrician.
- Fill in the joint between the unit and pool wall with grout when installing, and seal it with sealant.
- After installation, fill with sand around the unit board. Spread stones on the side of pool to match the pool structure, record the installation notes.



WL-AYT25Y



Pool Light



Swim Jet



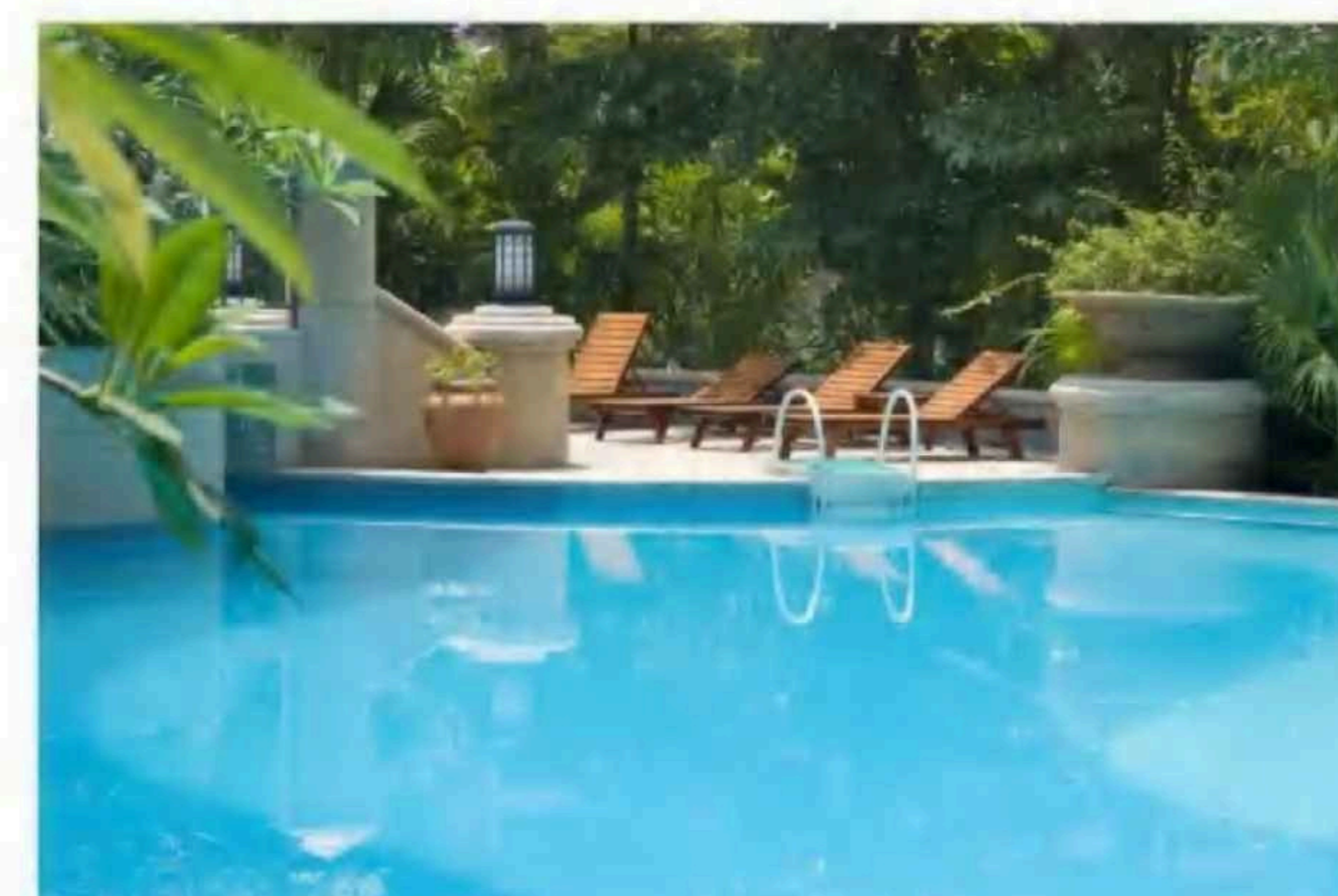
Filter Bag



Filter basket



Electronic control system (Optional)



| Pump(HP) | Voltage(V) | Flow Rate           | Filter Precision | Filter Area         | Noises | Outline Size    |
|----------|------------|---------------------|------------------|---------------------|--------|-----------------|
| 2.0HP    | 220V       | 25m <sup>3</sup> /h | ≤5μ              | 0.297m <sup>2</sup> | ≤40dB  | 1120×684×1080mm |

## PM-GL25Y WALL-HUNG FILTRATION UNIT

The housing is made of high quality acrylic, the unit is easy to install and contains all the equipment for filtration, circulation, disinfection, drainage and lighting in one compact unit. It is also equipped with a multifunctional jet which not only makes the pool water circulate, but also has functions for swimming training, massage and fun in the water.

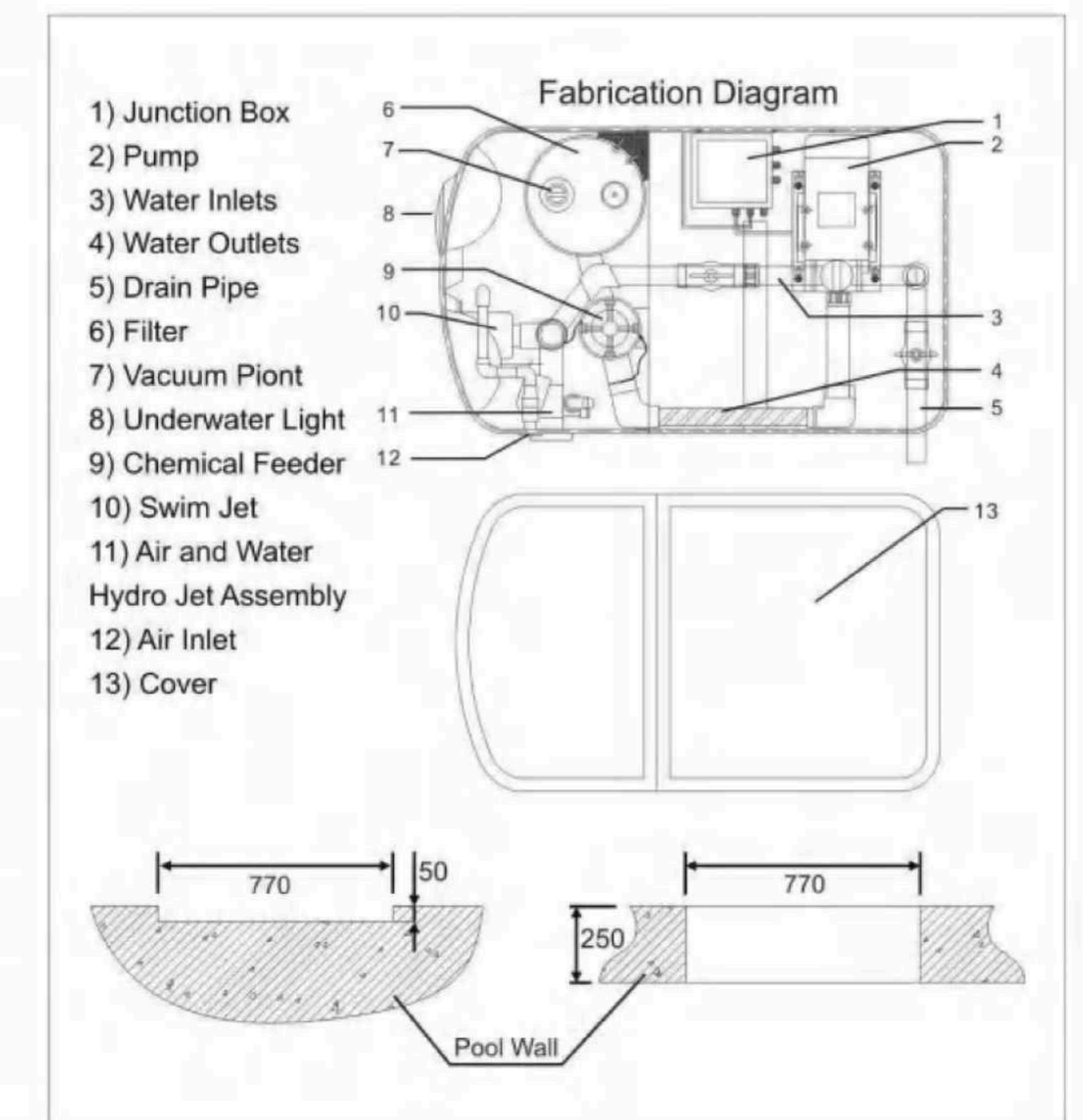
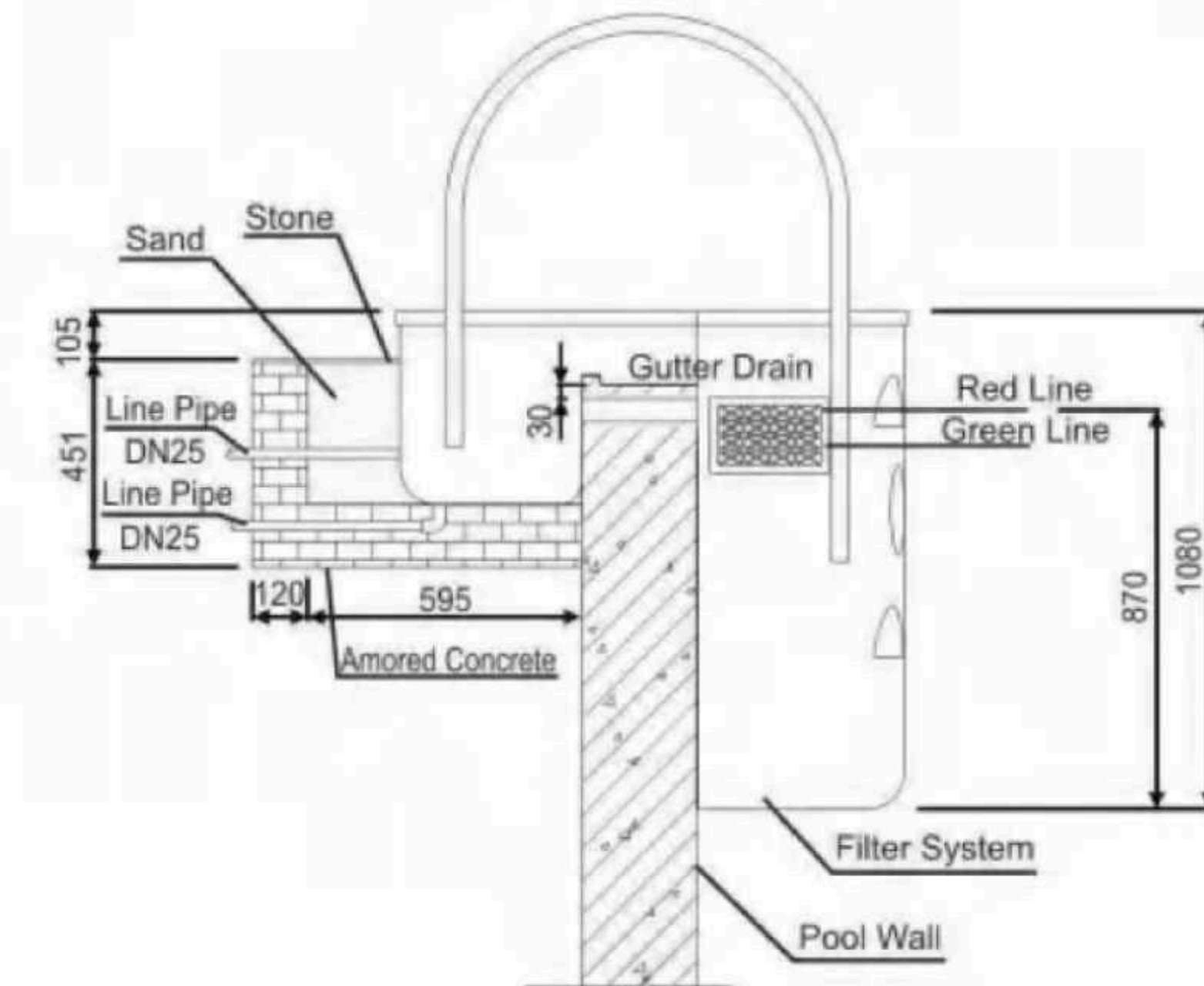
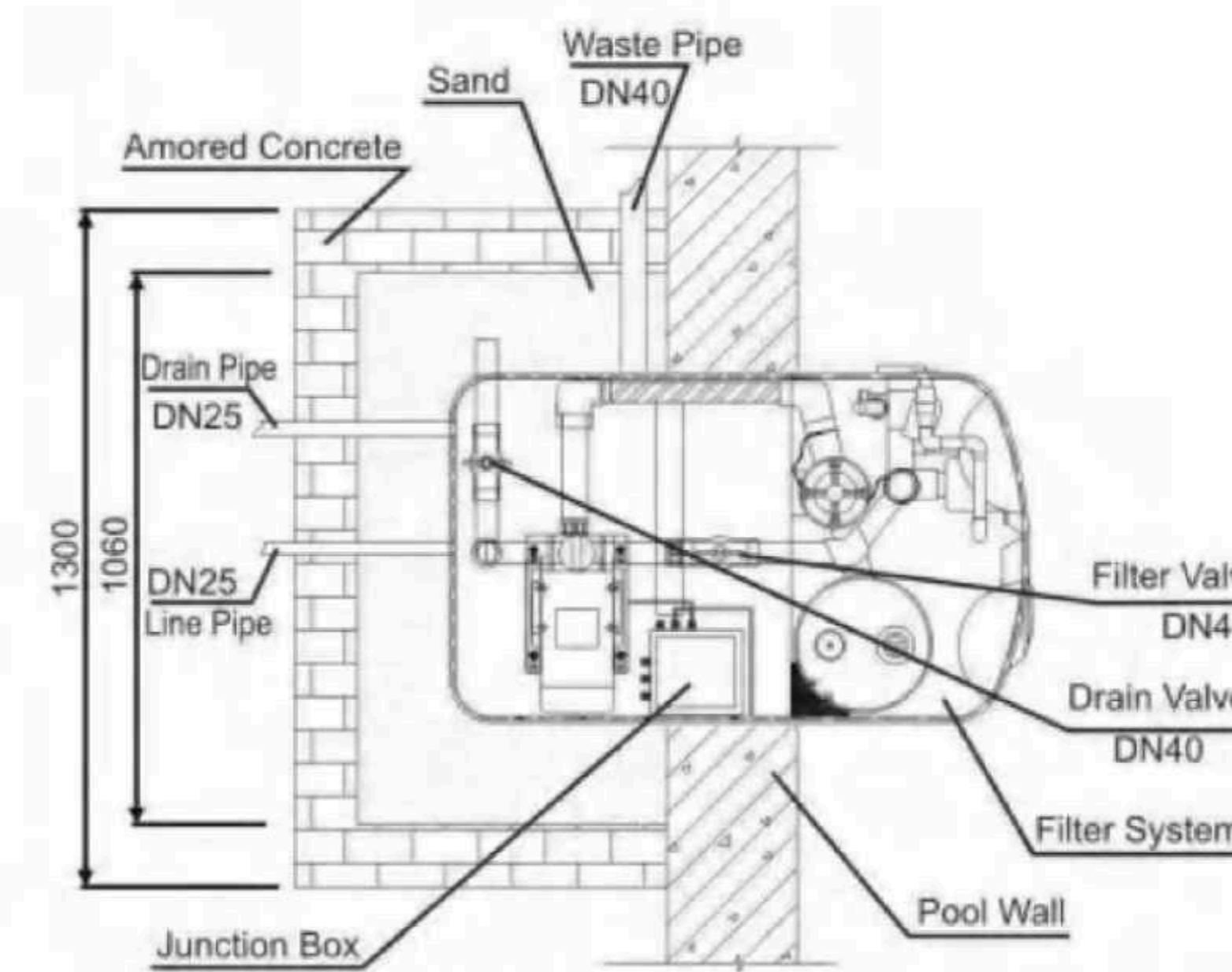
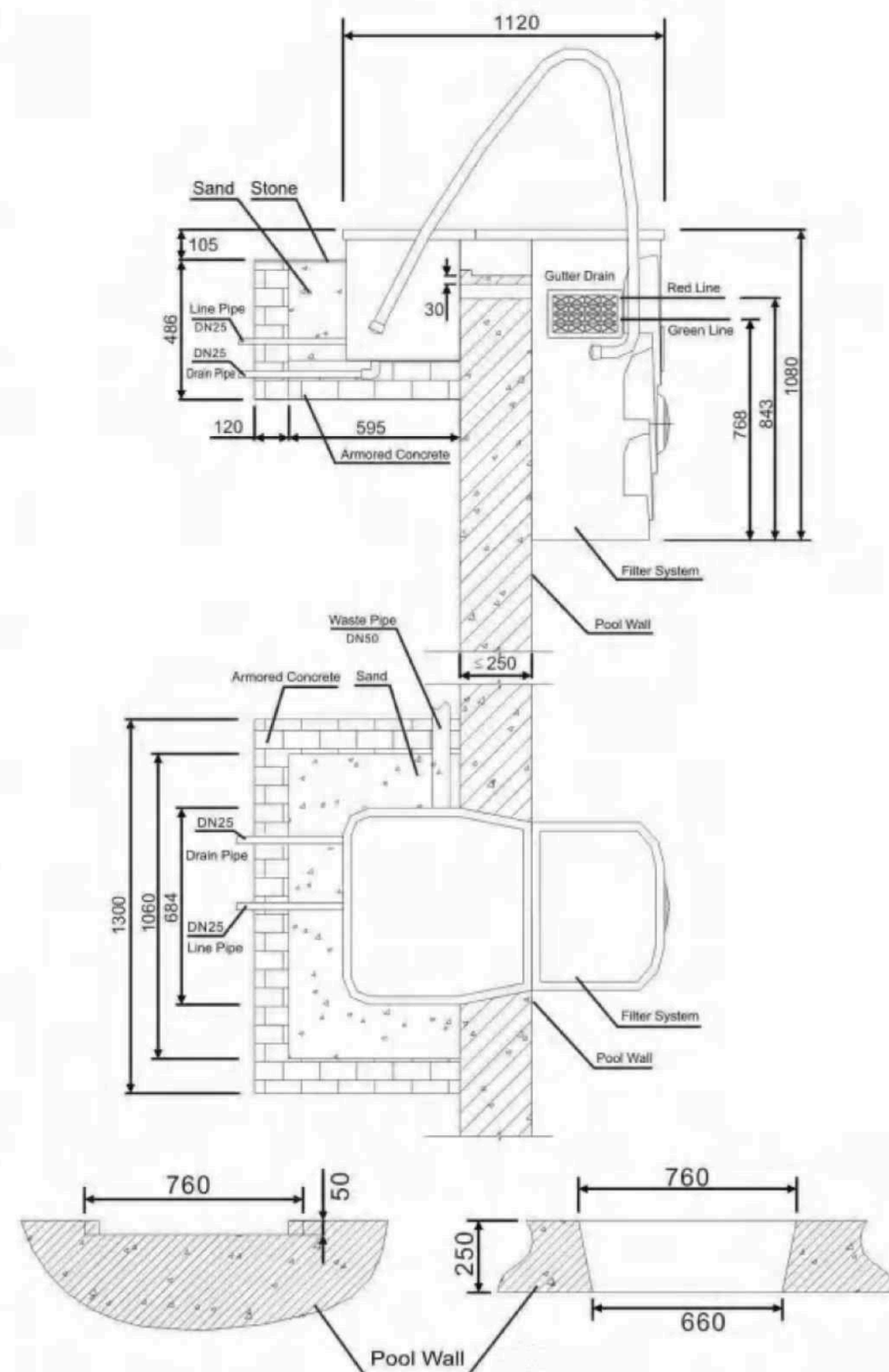


PM-GL25Y

### Installation process

- 
- 1) Cover
  - 2) Drain Pipe
  - 3) Water Inlets
  - 4) Ozone Generator (optional)
  - 5) Water Outlets
  - 6) Junction Box
  - 7) Pump
  - 8) Stainless Steel Armrest
  - 9) Vacuum System
  - 10) Vacuum Point
  - 11) Inlet
  - 12) Filter
  - 13) Underwater Light
  - 14) Swim Jet
  - 15) Air and Water Hydro Jet Assembly
  - 16) Housing

Fabrication Diagram



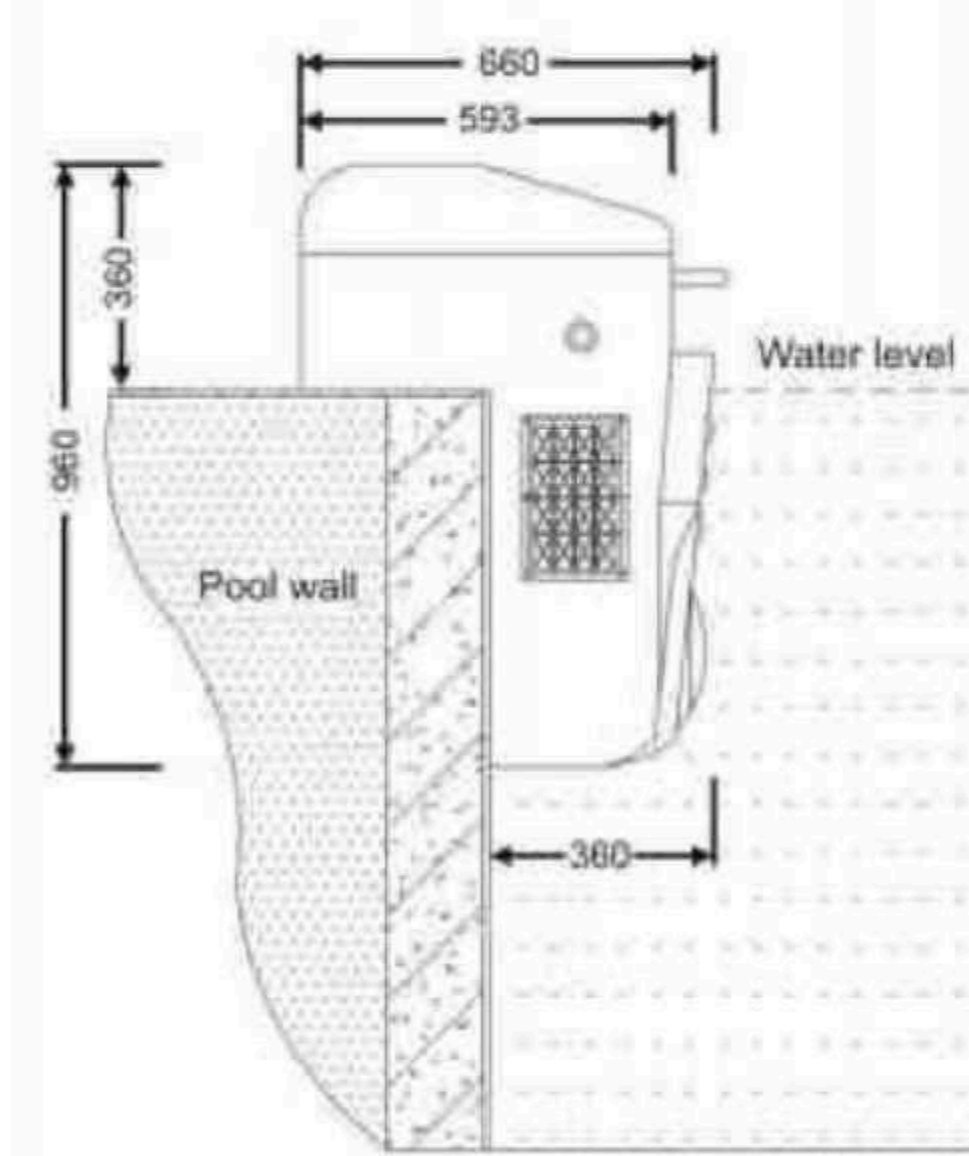
| Pump(HP) | Flow Rate           | Filter Precision | Filter Area         | Noises | Outline Size    |
|----------|---------------------|------------------|---------------------|--------|-----------------|
| 2.0HP    | 22m <sup>3</sup> /h | ≤5μ              | 0.297m <sup>2</sup> | ≤50dB  | 1725×1112×684mm |

## WL-GYT10Y WALL-HUNG FILTRATION UNIT

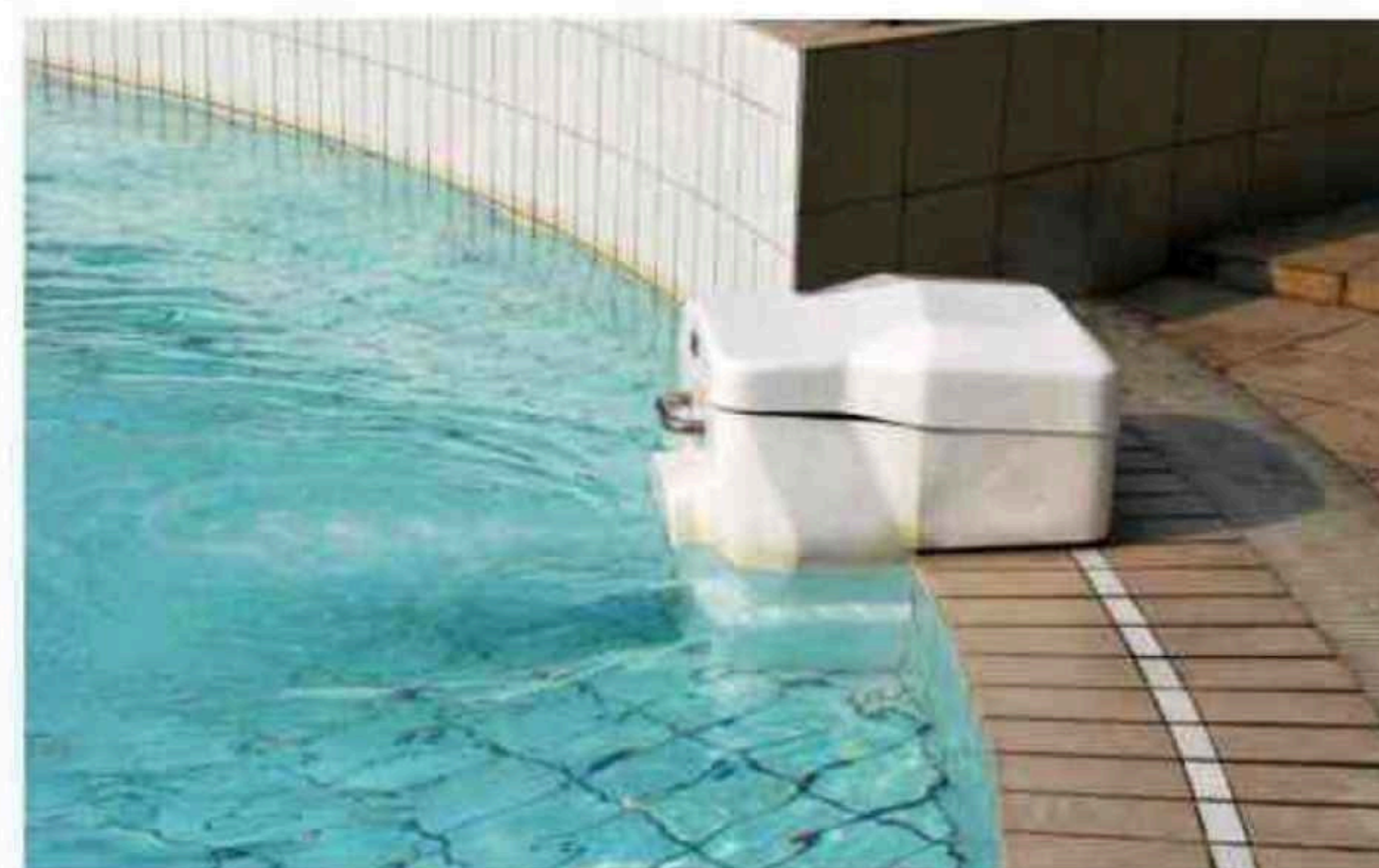
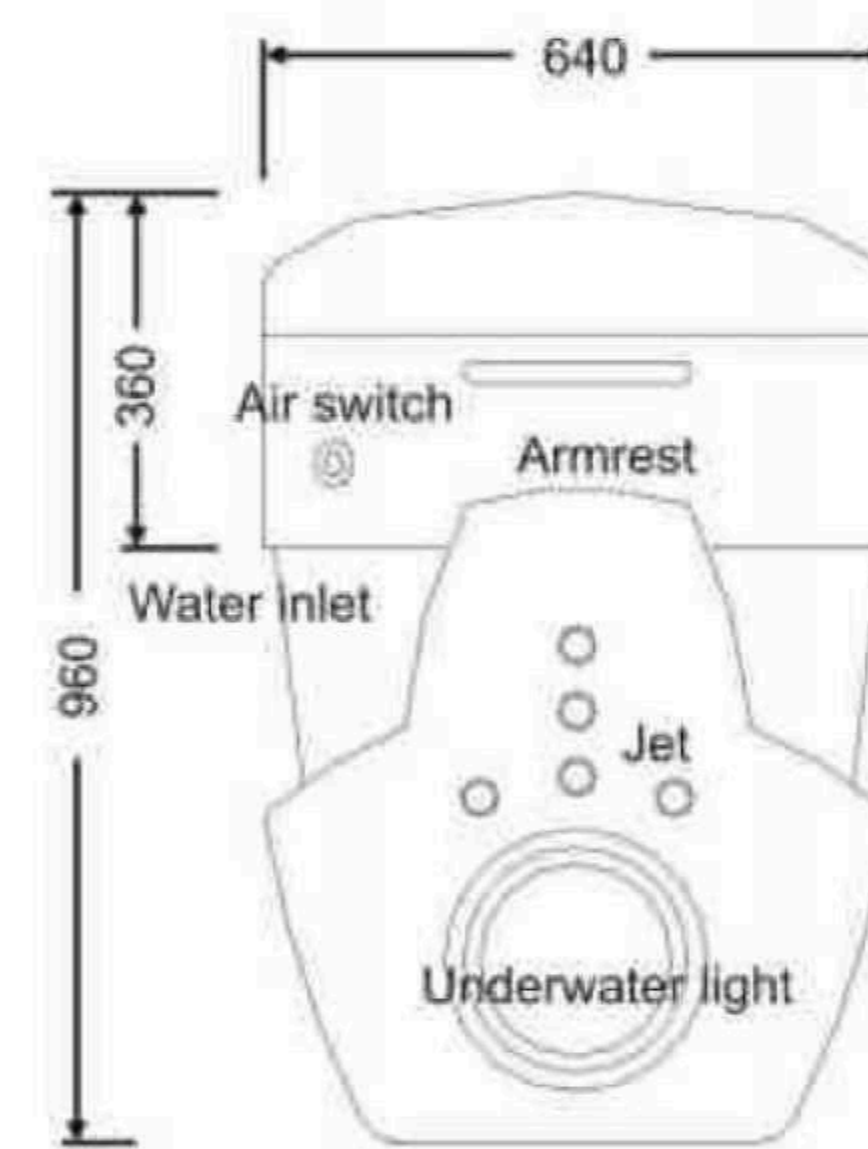
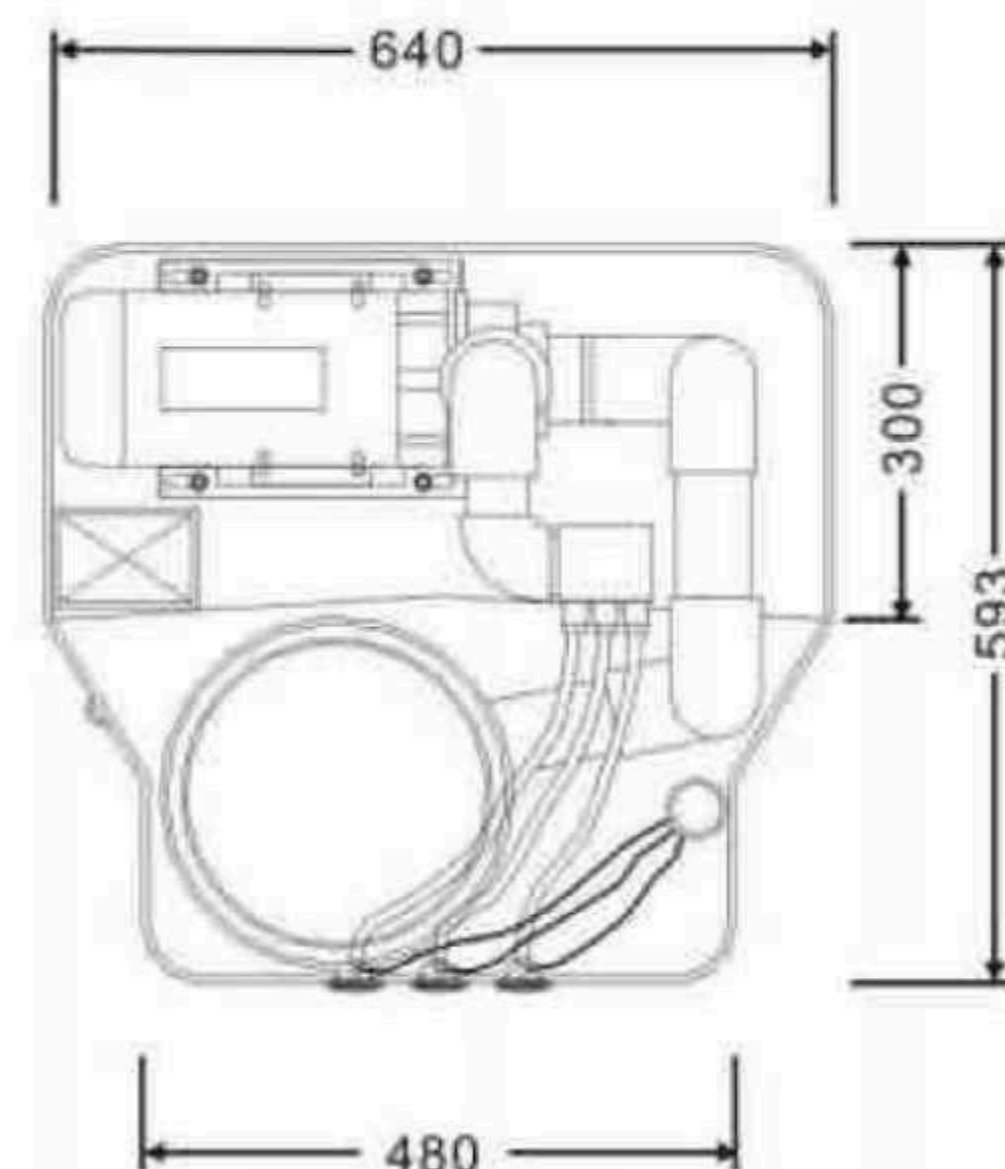
The housing is made of high quality acryl, the unit is easy for installation and assembles all the equipment of filtration, circulation, drainage and lighting in one compact unit. It is also equipped with multifunctional jet which not only makes the pool water circulate, but also has functions of swimming training, massage and fun in water. Extra fit for children pools.



WL-GYT10Y



Installation figure



| Pump(HP) | Voltage(V) | Flow Rate              | Filter Precision | Filter Area        | Noises | Outline Size  |
|----------|------------|------------------------|------------------|--------------------|--------|---------------|
| 1.2HP    | 220V       | 10~13m <sup>3</sup> /h | ≤5μ              | 0.26m <sup>2</sup> | ≤40dB  | 640x660x960mm |

## WL-GMT/ WL-MMT/ WL-DMT FILTRATION UNITS

Filtration unit is one of the best choices for swimming pool. It is in good appearance, easy to operate and long-time use. Different models could be chosen according to different size of swimming pools and actual demand.



WL-GMT /MMT/DMT

### WL-DMT

- Easy to operate, no need the equipment room and special maintenance.
- Adopts high precious of sand filter.
- With good performance pump.
- More economical because of simple disinfecting equipment-chemical feeder.

### WL-DMT parameter

| Model     | Horsepower (HP) | Voltage (V) | Flow Rate (m <sup>3</sup> /h) | Filter area (m <sup>2</sup> ) | Pool volume (m <sup>3</sup> ) | Outline size (mm) |
|-----------|-----------------|-------------|-------------------------------|-------------------------------|-------------------------------|-------------------|
| WL-DMT-8  | 0.75            | 220~240     | 8                             | 0.16                          | ≤64                           | 1320×1340×985     |
| WL-DMT-12 | 1               |             | 12                            | 0.23                          | ≤92                           |                   |
| WL-DMT-16 | 1.5             |             | 16                            | 0.32                          | ≤128                          |                   |
| WL-DMT-20 | 2.0             |             | 20                            | 0.4                           | ≤160                          | 1550×1560×1135    |
| WL-DMT-25 |                 |             | 25                            | 0.5                           | ≤200                          |                   |

### WL-DMT Specification

| Model     | Main parts   |
|-----------|--|
| WL-DMT-8  | BCG450 sand filter + 0.75HP pump + chemical feeder |
| WL-DMT-12 | BCG500 sand filter + 1HP pump + chemical feeder    |
| WL-DMT-16 | BCG650 sand filter + 1.5HP pump + chemical feeder  |
| WL-DMT-20 | BCG700 sand filter + 2HP pump + chemical feeder    |
| WL-DMT-25 | BCG800 sand filter + 2HP pump + chemical feeder    |

## WL-GMT/ WL-MMT/ WL-DMT FILTRATION UNITS



### WL-MMT

- The progressive filtration unit adopts professional sand filter, high efficiency pump and salt-chlorine generator, 3HP massage pump and submersible pump.
- 3HP massage pump makes the filtration unit more powerful.
- Equipped with submersible pump, avoiding the security risk that caused by accumulated water in tank.
- Equipped with salt-chlorine generator, the most effective and high-tech equipments.

WL-GMT /MMT/DMT

### WL-MMT parameter

| Model     | Horsepower (HP) | Voltage (V) | Flow Rate (m <sup>3</sup> /h) | Filter area (m <sup>2</sup> ) | Pool volume (m <sup>3</sup> ) | Outline size (mm) |
|-----------|-----------------|-------------|-------------------------------|-------------------------------|-------------------------------|-------------------|
| WL-MMT-8  | 0.75            | 220~240     | 8                             | 0.16                          | ≤64                           | 1320×1340×985     |
| WL-MMT-12 | 1               |             | 12                            | 0.23                          | ≤92                           |                   |
| WL-MMT-16 | 1.5             |             | 16                            | 0.32                          | ≤128                          |                   |
| WL-MMT-20 | 2.0             |             | 20                            | 0.4                           | ≤160                          | 1550×1560×1135    |
| WL-MMT-25 |                 |             | 25                            | 0.5                           | ≤200                          |                   |

### WL-MMT Specification

| Model     | Main parts  |
|-----------|---|
| WL-MMT-8  | BCG450 sand filter + HLLF075M circulation pump + HLLF300M Massage pump + submersible pump + EC8 salt chlorinator  |
| WL-MMT-12 | BCG500 sand filter + HLLF100M circulation pump + HLLF300M Massage pump + submersible pump + EC12 salt chlorinator |
| WL-MMT-16 | BCG650 sand filter + HLLF150M circulation pump+ HLLF300M Massage pump + submersible pump + EC16 salt chlorinator  |
| WL-MMT-20 | BBCG700 sand filter + HLLF200M circulation pump+ HLLF300M Massage pump + submersible pump + SQ30 salt-chlorinator |
| WL-MMT-25 | BCG800 sand filter + HLLF200M circulation pump+ HLLF300M Massage pump + submersible pump + SQ40 salt chlorinator  |

### WL-GMT

- Adopts MILLIAN pump with high performance and low noise.
- With submersible pump to avoid the hazardous of flood in filtration box.
- Adopts high-tech disinfecting equipment, such as salt chlorine generator and UVsterilizer.
- Could be used for swimming pool, hot spring and SPA in different sizes and various shapes.

### WL-GMT parameter

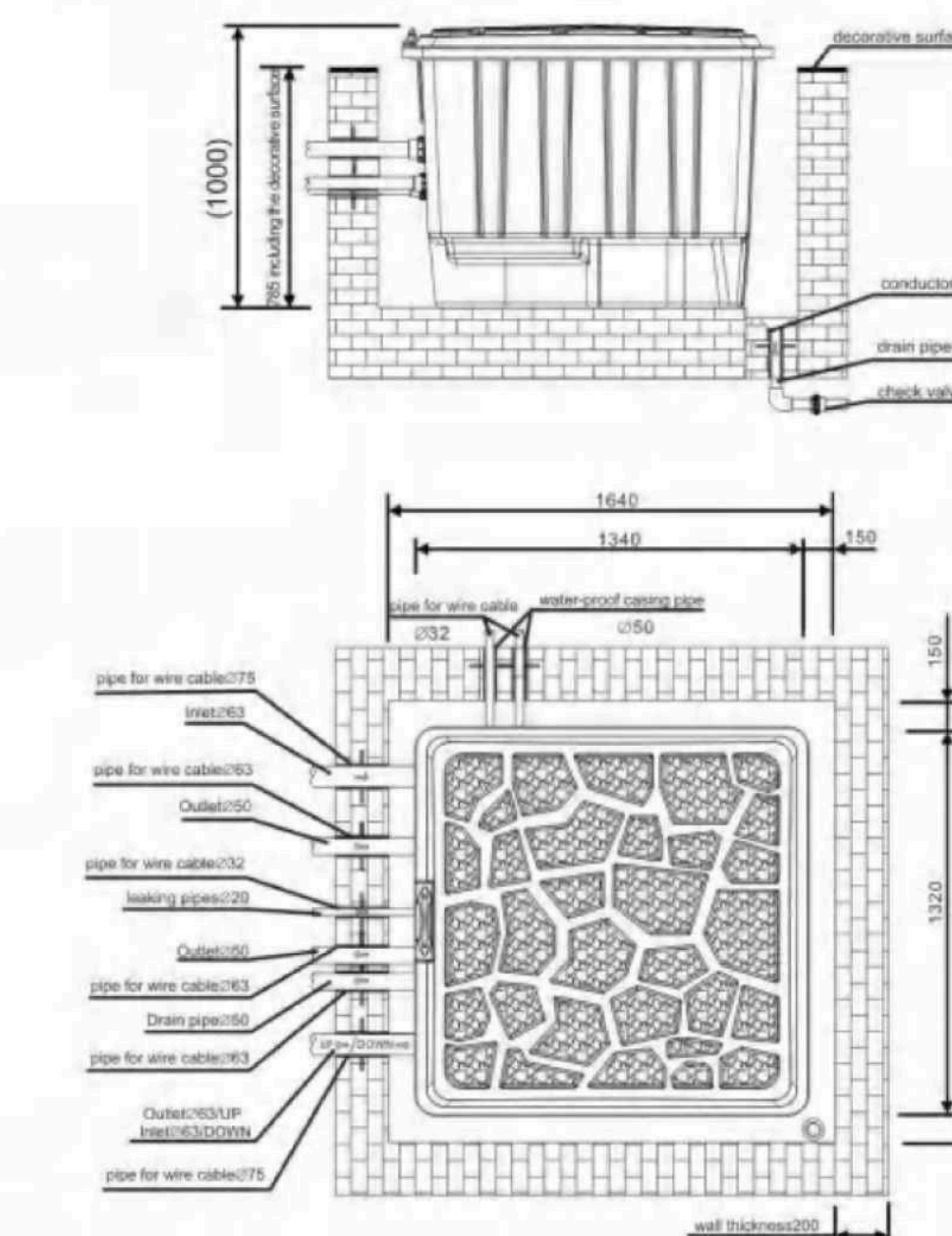
| Model     | Horsepower (HP) | Voltage (V) | Flow Rate (m <sup>3</sup> /h) | Filter area (m <sup>2</sup> ) | Pool volume (m <sup>3</sup> ) | Outline size (mm) |
|-----------|-----------------|-------------|-------------------------------|-------------------------------|-------------------------------|-------------------|
| WL-GMT-8  | 1.5             | 220~240     | 8                             | 0.16                          | ≤64                           | 1320×1340×985     |
| WL-GMT-12 |                 |             | 12                            | 0.23                          | ≤92                           |                   |
| WL-GMT-16 |                 |             | 16                            | 0.32                          | ≤128                          |                   |
| WL-GMT-20 | 2.0             |             | 20                            | 0.4                           | ≤160                          | 1550×1560×1135    |
| WL-GMT-25 |                 |             | 25                            | 0.5                           | ≤200                          |                   |

### WL-GMT Specification

| Model     | Main parts   |
|-----------|--|
| WL-GMT-8  | BCG450 sand filter+0.75HP Circulation pump+ 3HP massage pump+ EC8 salt chlorinator + 28W UV Sterilizer+ submersible pump |
| WL-GMT-12 | BCG500 sand filter+1.0HP Circulation pump+ 3HP massage pump+ EC12 salt chlorinator + 28W UV Sterilizer+ submersible pump |
| WL-GMT-16 | BCG650 sand filter+1.5HP Circulation pump+ 3HP massage pump+ EC16 salt chlorinator + 28W UV Sterilizer+ submersible pump |
| WL-GMT-20 | BCG700 sand filter+2HP Circulation pump+ 3HP massage pump+ SQ30 salt chlorinator + 28W UV Sterilizer+ submersible pump   |
| WL-GMT-25 | BCG800 sand filter+2HP Circulation pump+ 3HP massage pump+ SQ40 salt chlorinator + 28W UV Sterilizer+ submersible pump   |

Remark: Please refer to the relevant page of this information for details and performance of the product in the above table.

#### 1、WL-GMT-8/12/16 INSTALLATION DIAGRAM



#### 2、WL-GMT-20/25 INSTALLATION DIAGRAM

