

PUMPS AND ACCESSORIES

Customized Impeller Pumps

Impeller pumps can be built in different sizes and specifications:

- From 3/8" (9.375 mm) to 2.5" (62.5 mm).
- Pressures up to 4 bar.
- Bronze, stainless steel or brass.
- Lip seal and mechanical seal arrangements.
- Heavy-duty versions.

PF 260

260 ltr. pump with hose connection.



PF 120

120 ltr. pump with hose connection.



PF 40

40 ltr. pump with hose connection.



PF 40

40 ltr. pump with hose connection.



PF 40

40 ltr. pump with threaded connection.

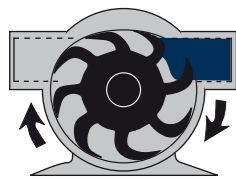


Standard Range Impeller Pumps

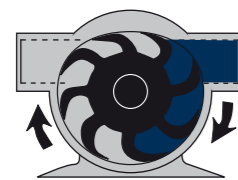


Our range of standard pedestal mounted pumps. Flexible mounting options are available, with reversible flow direction by rotating the pump 180 degrees. Customised mounting and drive options are available on request. Standard pumps are available from 35 ltr/min up to 240 ltr/min.

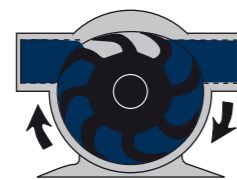
How the impeller pump works



1. Flexible impeller blades create a near-total vacuum drawing liquid into the pump.



2. Each impeller blade carries liquid from the inlet to the outlet.



3. When the impeller blades contact the cam they bend, pressing liquid out of the pump.

Impeller Pumps

Impeller pumps have a wide working range:

Pressure range

- For continuous operation up to 2.5 bar.
- Special high-pressure applications up to 4.5 bar.

Temperature range

- From 6°C to 85°C

Operating speed

- Up to 4000 rpm, > 4000 rpm on request for custom pumps.

Impellers are available as standard in NBR (natural rubber) and Nitrile. Special materials such as EPDM and Viton are available on request.

Impeller

- Impellers in Neoprene and Nitrile.
- Other materials on request.
- Impellers with different numbers of blades.
- Impeller for high pressure on request.



Pump Assembly

Pumps are assembled to order in our production facility in Scotland.



Quality and Testing

High standards of reliability and durability are essential whether on land or at sea. With this in mind, we test all our products extensively to ensure they perform as required. We use only top quality components from approved suppliers to obtain the best performance and ensure a long service life is provided as standard.

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About us

Marine Flow design, develop and manufacture products that meet our customers' needs. We recognize that high standards of reliability and durability are essential in this market. Flexible impeller pumps provide an efficient solution to nearly all raw water pumping needs. This kind of technology was founded in 1940 and has not changed significantly since then.

We are the first company in the world which has improved this technology and we hold two patents for this new range of products. Our innovative new design improves pump flow rate dramatically and allows flexible impeller pumps to be developed in the range from 600 L/Min up to around 2,000 L/Min.

Purchase and thru-life costs are lower than other solutions available to pump these capacities of raw water and servicing is quicker and easier.

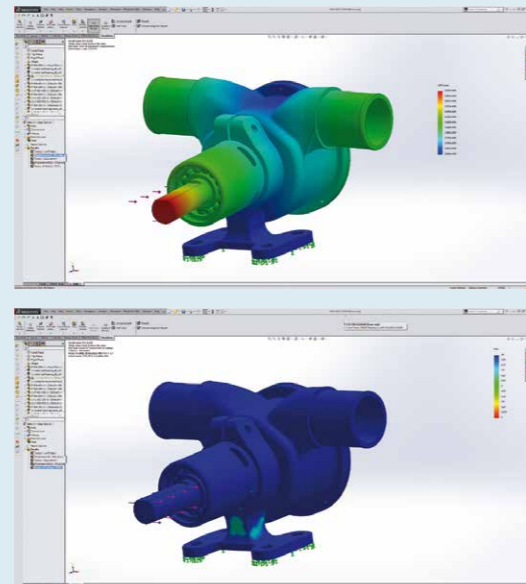
Marine Flow started operations in 2011, and today has now well over 20,000 pumps operating in the Marine market. All products are developed, engineered and produced in Scotland.

From engineering to finished product

Our in house design team create our products from initial requirements capture and prototype design, through to product manufacturing, testing and quality control.

We use state of the art 3D modeling and simulation to verify our products will exceed expectations.

Marine Flow can manufacture to suit your application, no matter what size, shape or material.



Facts on MF Pumps

- Unique design.
- Mechanical seals as standard.
- Pump bodies made in one piece, cam is integrated, no screw, no bore hole, less parts, fewer leaks.
- Improved flexible impeller lifespan as a consequence of better design.
- Customized covers with imprinted customer Logo, part and spare-part numbers etc.
- Seals and bearings in automotive quality (20.000 hours+ Lifespan).
- Flexible Impellers made in Europe.
- Wetted parts are in stainless steel and marine bronze.
- Continuous performance testing up to 15.000 hours.
- We use O-ring seals.
- Rapid prototyping.

EC-Pumps



PC20-LC

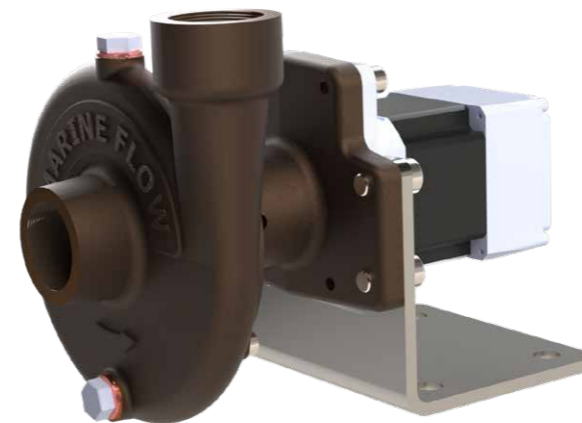
Single Head Centrifugal Pump ~20 L/min.

- Designed for Glycol Circulation.
- Bronze & stainless-steel wetted parts with mechanical seals.
- Brushless Motor with External Controller 24V DC.
- Ideal for integrated applications where there is space to mount an external controller.

PC20-E

Double Headed Centrifugal Pump ~20 L/min/head.

- Double Glycol Circulation Pump.
- Bronze and Stainless-steel wetted parts with mechanical seals.
- Brushless Motor with Integrated K4 Controller.
- Ideal for mobile applications.



PC30-E

Centrifugal Pump ~30 L/min.

- Designed for cooling water supply / circulation.
- Bronze & Stainless-steel wetted parts with mechanical seals.
- Brushless motor with Integrated K4 Controller.
- Ideal for mobile applications.

PF20-E

Flexible Impeller Pump ~25 L/min.

- Designed for Raw cooling water supply, with self-priming ability.
- Bronze & Stainless-steel wetted parts with mechanical seals.
- Brushless motor with Integrated K4 Controller.
- Ideal for mobile applications where lift / self-priming is required.

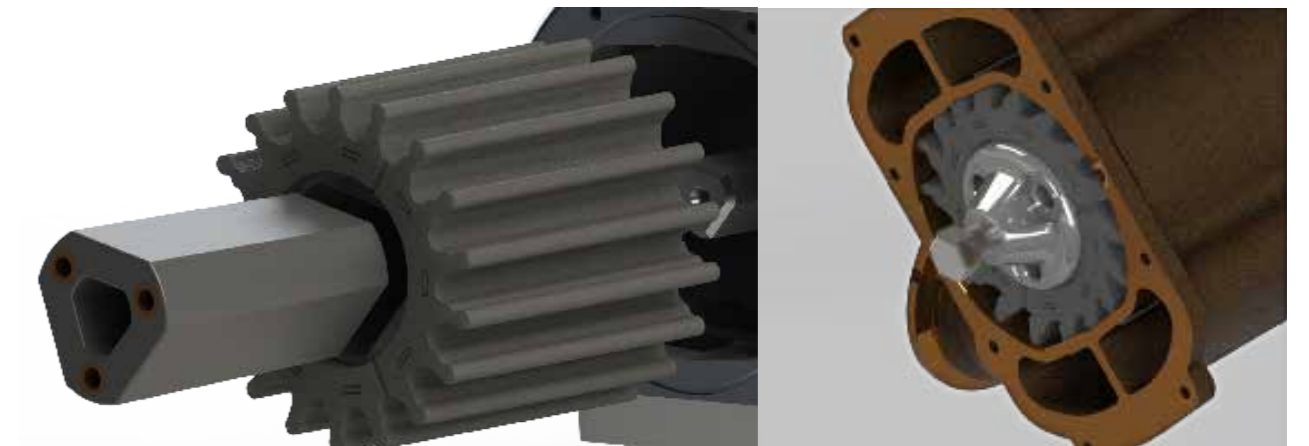
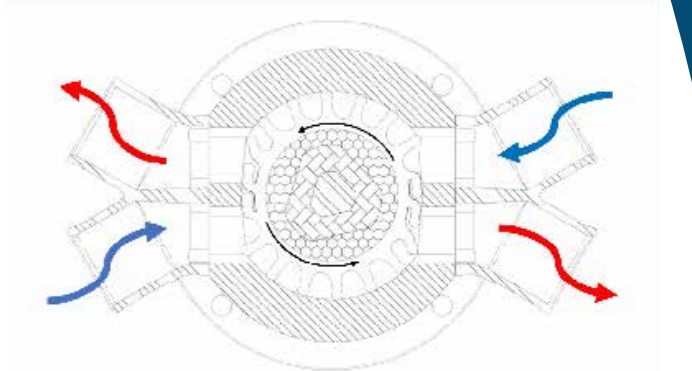
Twin Cam Pump

Unique Impeller Design

- Impeller diameter and blade length and pitch optimised for best pressure / volume characteristics.
- Patented Removable Inner Hub, greatly simplifies fitting and removal of the impeller in service. Simple removal and fitting tools to make the task easy.
- Patented double sealing lip, optimises the number of working (pumping) impeller blades.



- Dual Inlet / Dual outlet; Single Inlet / Dual Outlet; Dual inlet / Single outlet.
- Easy Impeller servicing with removable drive hub to facilitate twist in of the impeller whilst the shaft is locked to the drive system.
- Max Outlet pressure > 4 Bar.



Impeller Removal Tool

Patented Twin-cam Symmetrical design allows much larger flexible impeller pumps to be realised, realising the following benefits:

- The pressure load is balanced across the impeller, and does not act on the shaft and bearings.
- For a given size of impeller twice the volume of water can be pumped.
- Pumped volumes from 600 litres to 2000+ litres per. minute.
- Pump drive speed up-to 2,000 RPM.