



JOHNSON PUMP
AN SPX BRAND

FIP

Flexible Impeller Pumps



The FIP-range

Easy-to-maintain positive displacement pump with excellent self-priming ability

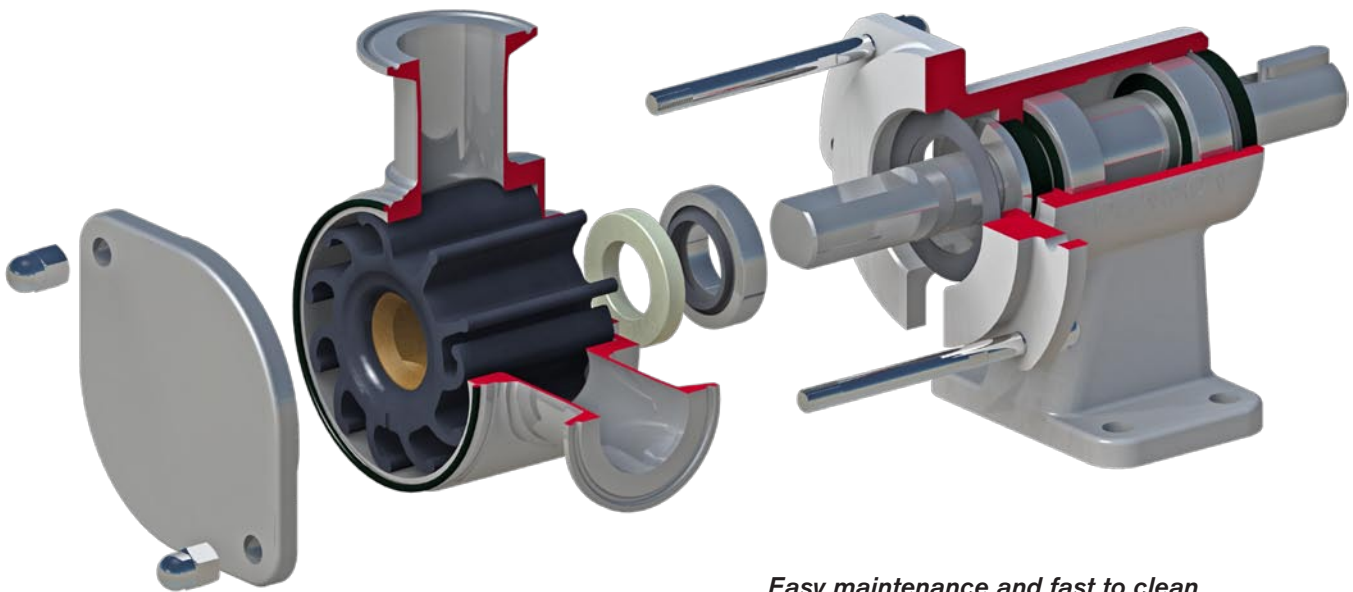
- Extremely gentle product handling
- Evacuates air and gas
- Fully reversible
- Easy to clean and maintain
- Compact design
- Close coupled or pedestal mount
- Can pump liquids with non-abrasive solids

Excellent self-priming capacity

FIP-pump creates a negative pressure, and does not require priming or filling if there is gas or air inside the liquid or system. A dry pump has a suction lift up to 5 meters within a few seconds.

Pulsation free and reversible flow

The FIP-pump gives a uniform flow without pulsation. By regulating the speed of the FIP, you can easily control the flow. The pump is fully reversible.



Compact design

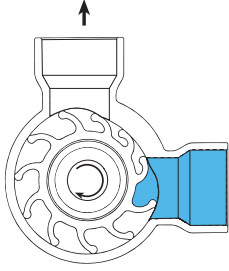
The FIP has minimal outer dimensions compared to its capacity, which simplifies space and installation requirements. The FIP product line is available close coupled to an IEC frame motor or pedestal mount for conventional in-line pump and drive arrangement.

Easy maintenance and fast to clean

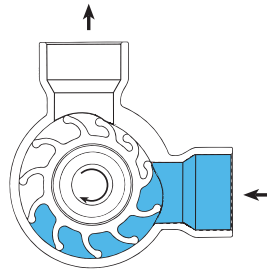
Unique 3 piece design reduces maintenance and cleaning time to a minimum. The pump cover is easily removed, providing full access to the impeller. Down-time is further reduced with no need to disconnect the pump from piping system.

Impellers available in Nitrile, EPDM, Neoprene, along with FDA approved food grade EPDM and Neoprene elastomers.

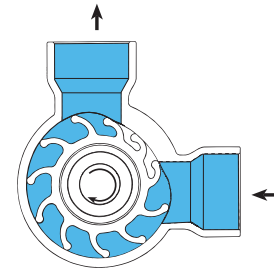
Operating principle



Due to the eccentric interior cross-section of the pump body, a partial vacuum is created as the volume increases between the flexible impeller wings at the inlet port. The resulting suction draws the liquid into the pump.



The rotating impeller carries the liquid from the inlet towards the outlet port. During this part of the cycle, the volume between the wings remains virtually constant. The distance between the wings allows non-abrasive solids to pass through the pump without damaging the particles or pump.



The liquid is discharged from the pump in a continuous, uniform flow when the wings bend, thus decreasing the volume between them, as they come into contact with the flattened part of the eccentric interior walls of the body.

Applications



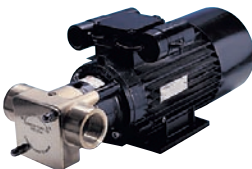
The FIP stainless steel Industrial version

316 stainless steel pump with BSP or NPT threads suitable for non hygienic applications like pet food slurry, brine injection, flocculants, detergents, sampling, sludge with air, water based glues/paints, glycols, glycerine, dyes. Available in either close coupled flange or conventional pedestal mount.

The FIP stainless steel Hygienic version

Polished 316 stainless steel with a variety of hygienic connections and different food or milk grade impellers according to FDA regulations. Available in either close coupled flange or conventional pedestal mount.

Typical applications include milk, cream, curd, yogurt, whey, condiments, gelatine, jams, dressing, canned foods, soft drinks, wine, beer, fruit juices, flavourings, edible oils, batter, brine injection and cosmetics.



The FIP Bronze version

Bronze pump with BSP threads for liquids such as saltwater, mineral oils, slurries, additives or abrasive products.

Capacity data based on water at 20°C – 1400 rpm

