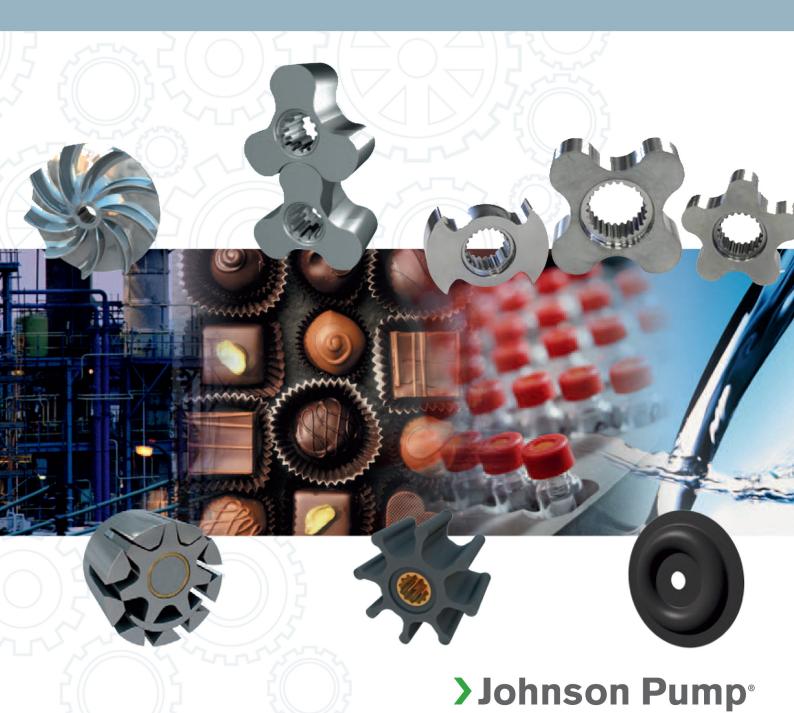




# Johnson Pump brand

INDUSTRIAL PUMP PRODUCT OVERVIEW



# Welcome to a World of Pumps

For more than 75 years Johnson Pump brand pumps have been developed, manufactured and marketed for industrial use. This experience and expertise, combined with our wide product range, makes us one of the most reliable pump producers world wide

At SPX we believe in 'life cycle economy'. Buying a pump is not just a one-off transaction - the pump has to keep running for a long time. Service and maintenance is therefore as important to us as it is to provide our customers with a suitable solution to each and every unique application. SPX is therefore much more than a Johnson Pump brand manufacturer -We are your solution provider!

Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global Fortune 500 multi-industry manufacturing leader with over \$5 billion in annual revenue, operations in more than 35 countries and over 15,000 employees. The company's highly-specialized, engineered products and technologies are concentrated in Flow Technology and energy infrastructure. Many of SPX's innovative solutions are playing a role in helping to meet rising global demand for electricity and processed foods and beverages, particularly in emerging markets. The company's products include food processing systems for the food and beverage industry, critical Flow components for oil and gas processing, power transformers for utility companies, and cooling systems for power plants. For more information, please visit www.spx.com

## Johnson Pump brand models

### **CENTRIFUGAL PUMPS**

- According to ISO, EN, API
- Multistage
- Magnetic Drive
- Self-priming

### POSITIVE DISPLACEMENT PUMPS

- Internal Gear pumps
- Rotary Lobe pumps
- Flexible Impeller pumps
- Diaphragm pumps

### QUALITY

SPX's research departments are busy experimenting with new raw materials, refining pumping principles and developing new products. The efforts of our R&D are put into production at our plants where we assure the quality of our work in accordance with ISO 9001.







### **WORLDWIDE DISTRIBUTION**

With our worldwide network of SPX affiliates and independent distributors we are working closely with you to provide the best solution for your liquid transport needs.

### Europe

- Belgium
- Denmark
- Finland
- France
- Germany
- Italy
- the Netherlands
- Norway
- Spain Sweden
- Switzerland
- United Kingdom



Africa Americas

Asia

Australia

India

Middle East

### Distributors

See our web page for a detailed list www.johnson-pump.com, www.spx.com

## It's all about Finding Solutions

Every customer's process is in some way unique; it's that something extra that places you ahead of all the rest. Your unique process may require a non-standard solution. We here at SPX are keen listeners to the special requirements of our customers. With our wide range of Johnson Pump brand standard product offerings to build on we can offer that little extra in the form of materials and design solutions to keep you ahead.

From our sales, support and application personnel to R&D, we pride ourselves in working together with you on an affordable, working solution for your special needs. In addition to pumps, through SPX you will have access to a variety of flow technologies; from valves and mixers to heat exchangers and entire systems.

Contact your local Johnson Pump brand representative for an investment in your future today!

### **ABRASION RESISTANT COATINGS**

Lime slurries, paper fillers, dirty sump water and the like can unnecessarily wear out a pump. Coatings such as Wolfram or plasma nitriding on pump housing, rotors and impellers can greatly increase the service life of your pumps.



### **NOISE REDUCTION**

With a specially designed impeller we were able to reduce noise levels in tank farm applications where large numbers of our FreFlow selfpriming centrifugal pumps are in use.



### SAFE HANDLING OF HOT WATER

For a hospital hot water recirculation project we combined a modified pump casing with externally mounted heat exchanger on the mechanical seal to ensure reliable, safe operation.



### **ULTRA PURE WATER TREATMENT PLANT**

SPX collaborated with the plant owners on the design of pressure pumps to be used in reverse osmosis in an innovative enterprise where waste water is purified and used as steam injection for residual oil extraction from mature oil fields.



### **IMPROVED FLOW CHARACTERISTICS**

Development of new multilobe rotors for uniform flow of sausage meats and even less pulsation and resonance in the pipeworks when pumping thin liquids.



# Typical product applications

PHARMACEUTICAL



FOOD & BEVERAGE



HORTICULTURE



CHEMICAL





**PETROCHEMICAL** 



BUILDING WATER SERVICES



WASTE WATER TREATMENT

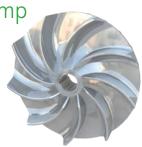


PULP & PAPER



SHIPBUILDING

Johnson Pump Centrifugal Pumps



Centrifugal Pumps are the most common and well-established pumps on the market. They come in many different models and can transfer fluids with high efficiency over a wide range of flows and pressures. Johnson Pump brand offers several series of centrifugal pumps, many of which comply with ISO, DIN and API standards.

Johnson Pump brand's Combi system is a modular programme of centrifugal pumps with a high degree of interchangeability of parts between the different pump constructions.

The modular design makes it possible to construct many design variants and it also provides a large degree of interchangeability of components between various pump types and even between the different pump families. This, together with the wide range of materials available, makes it easy to supply the correct design for each specific application; allowing customers to be served in an optimal way.

SPX supplies you with a full range of documentation for our pumps:

- ATEX
- ЗА
- EHEDG
- FDA, USP VI
- Material traceability & certification 2.1, 2.2 and 3.1
- QHP tests
- Vibration tests
- Noise level tests

### Standardized pumps







### **COMBINORM**

utility or general purpose pump according to EN 733

Max. capacity 1500 m<sup>3</sup>/h (6600GPM) 100 m (328 ft) Max. head 10 bar (145 psi) Max. pressure Max. temp 200°C (392°F) 3600 rpm Max. speed Materials: cast iron, nodular cast iron, bronze

### СомвіСнем

heavy duty chemical pump according to ISO 5199 and EN 22858

Max. capacity 800 m<sup>3</sup>/h (3520 GPM) Max. head 160 m (525 ft) Max. pressure 16 bar (232 psi) Max. temp 200°C (392°F) 3600 rpm Max. speed Materials: cast iron, nodular cast iron, bronze, stainless steel

### Self-priming pumps









### COMBIPRIME H & V

horizontal & vertical (variable position suction bend), hydraulics according to EN733

Max. capacity	500 m <sup>3</sup> /h (2200 GPM) [H]
	800 m³/h (3520 GPM) [V]
Max. head	100 m (328 ft)
Max. pressure	10 bar (145 psi)
Max. temp	80°C (176°F)
Max. speed	3600 rpm
Materials:	cast iron, bronze

### FREFLOW

horizontal, handles gas and particle content

Max. capacity 350 m<sup>3</sup>/h (1540 GPM) Max. head 80 m (262 ft) 9 bar (131 psi) Max. pressure Max. temp 95°C (203°F) 3600 rpm Max. speed Materials: cast iron, bronze, stainless steel

### **Magnetic Drive pumps**











### СомвіМас

heavy duty seal-less pump according to ISO 5199 and EN 22858

550 m<sup>3</sup>/h (2420 GPM) Max. capacity Max. head 160 m (525 ft) 16 bar (232 psi) Max. pressure 300°C (572°F) Max. temp Max. speed 3600 rpm Materials: cast iron, nodular cast iron, stainless steel, duplex, Alloy 20, Hastelloy C

### СомвіМасВьос

heavy duty seal-less close-coupled pump according to ISO 5199 and EN 22858 280 m<sup>3</sup>/h (1230 GPM) Max. capacity Max. head 140 m (459 ft) 16 bar (232 psi) Max. pressure 200°C (392°F) Max. temp 3600 rpm Max. speed Materials: cast iron, nodular cast iron,

### Thermal oil / hot water pumps



stainless steel, duplex, Alloy 20, Hastelloy C

### **COMBITHERM**

specially developed for thermal oil (DIN 4754) and hot water applications (ratings and dimensions to EN733)

Max. capacity 400 m<sup>3</sup>/h (1761 GPM) Max. head 160 m (525 ft) Max. pressure 16 bar (232 psi) Thermal oil 350°C (662°F) Max. temp Hot water 190°C (374°F)

Max. speed 3600 rpm nodular cast iron Materials:

JP 000 GB Version: 02/2014 Issued: 07/2014





### СомвіРко

heavy duty process pump according to API610, API682 and API685

Max. capacity 350 m<sup>3</sup>/h (1540 GPM) 160 m (525 ft) Max. head 35 bar (508 psi) Max. pressure Max. temp 350°C (662°F) 3600 rpm Max. speed Materials: carbon steel, 13% Cr-steel, stainless steel (316)

### Monobloc pumps





### СомвіВьос

compact close-coupled pump

850 m<sup>3</sup>/h (3740 GPM) Max. capacity Max. head 105 m (344 ft) Max. pressure 10 bar (145 psi) Max. temp 120°C (248°F) Max. speed 3600 rpm Materials: cast iron, bronze, stainless steel





### Сомві

Vortex-type pumps

horizontal or vertical pump utilizing vortex principle, handles particles and gaseous content 420 m<sup>3</sup>/h (1850 GPM) Max. capacity Max. head 40 m (130 ft) 10 bar (145 psi) Max. pressure 80°C (176°F) Max. temp Max. speed 1800 rpm Max. free passage 100 mm (3.94") Materials: cast iron, nodular cast iron, stainless steel, super duplex

### Multistage pumps

MCH & MCV

Max. capacity

Max. pressure

Max. head

Max. temp

Max. speed

Materials:

**COMBILINE** 

shaft motor

Max. head

Max. temp

Max. speed

Materials:

Max. capacity

Max. pressure

horizontal & vertical



### **KGE**

horizontal, handels gas and particle content Max. capacity Max. head Max. pressure Max. temp Max. speed





100 m<sup>3</sup>/h (440 GPM)

150°C (302°F) [MCH]

120°C (248°F) [MCV]

340 m (1120 ft)

40 bar (580 psi)

3600 rpm

cast iron, bronze

# **MCHZ**

horizontal, self-priming

Max. capacity 100 m<sup>3</sup>/h (440 GPM) Max. head 340 m (1120 ft) 40 bar (580 psi) Max. pressure Max. temp 120°C (248°F) Max. speed 3600 rpm Materials: cast iron

100 m<sup>3</sup>/h (440 GPM) 60 m (197 ft) 8 bar (116 psi) 95°C (203°F) 3600 rpm Materials: cast iron



### MDR

Close-coupled seal-less pump

30 m<sup>3</sup>/h (130 GPM) Max. capacity Max. head 24 m (78 ft) Max. pressure 3 bar (43 psi) Max. temp 100°C (212°F) Max. speed 2800 rpm PP, PVDF Materials:





close-coupled circulation pump on extended



### **COMBILINEBLOC**

close-coupled circulation pump on stub shaft

to IEC motor Max. capacity 450 m<sup>3</sup>/h (1980 GPM) Max. head Max. pressure

100 m (328 ft) 10 bar (145 psi) Max. temp 120°C (248°F) Max. speed 3600 rpm Materials: cast iron, bronze

### Vertical pumps



### COMBIFLEX, -UNIVERSAL, -BLOC

variable position suction bend, hydraulics according to EN733

1500 m<sup>3</sup>/h (6600 GPM) Max. capacity Max. head 140 m (459 ft) 10 bar (145 psi) Max. pressure Max. temp 200°C (392°F) Max. speed 3600 rpm Materials: cast iron, bronze

### Submersible pumps



500 m<sup>3</sup>/h (2200 GPM)

35 m (115 ft)

1800 rpm

cast iron

10 bar (145 psi)

140°C (284°F)

### СомыЅимр

vertical pump with dry motor EN 733, EN 22858 and API 610

1500 m<sup>3</sup>/h (6600 GPM) Max. capacity Max. head 160 m (525 ft) 16 bar (232 psi) Max. pressure [35 bar (508 psi) API610]

160°C (320°F) Max. temp Max. speed 3600 rpm Materials: cast iron, nodular cast iron, bronze,

stainless steel, carbon steel, 13% Cr-steel



### **C**OMBIWELL

vertical pump with dry motor for paint/solvent degreasing spray units

Max. capacity 300 m<sup>3</sup>/h (1320 GPM) Max. head 45 m (148 ft) 10 bar (145 psi) Max. pressure Max. temp 80°C (176°F) 3000 rpm Max. speed Materials: cast iron, stainless steel

# Johnson Pump

# Positive Displacement

# Pumps

Rotary Lobe Pumps are easy to clean and have gentle product-handling characteristics. They contain few cavities, which reduces the risk of bacterial growth and makes them particularly suitable for the tranport of sensitive fluids - from glue to whole strawberries.

**Impeller Pumps** have good suction characteristics and the ability to pump solid particles. Impeller pumps have a wide range of applications in all types of industries.

Air Operated Double Diaphragm Pumps are used in all types of industries for transporting a wide variety of liquids. Clean or polluted, thin or viscous, abrasive or aggressive.

Internal Gear Pumps can be used in all types of manufacturing applications for the transportation of both thin and thick materials, from chocolate to diesel fuel.

SPX supplies you with a full range of documentation depending on need and local regulations:

- ATEX
- 3A
- EHEDG
- FDA, USP VI
- Material traceability & certification 2.1, 2.2 and 3.1
- QHP tests
- Vibration tests
- Noise level tests

### Flexible Impeller pumps



F-19 12/24V DC

self-priming extra heavy duty bronze pumps

55ℓ/min (14.5 GPM) Max. capacity Max. pressure 1.2 bar (17.4 psi) 55°C (130°F) Max. temp PTMT (thermoplastic polyester) Materials:

or bronze

### Internal Gear pumps, self-priming







TOPGEAR TG L for low viscosity liquids

Max. capacity 8 m<sup>3</sup>/h (35 GPM) Max. pressure 30 bar (435 psi) 250°C (480°F) Max. temp Max. viscosity 60000 mPas/cP Materials: nodular cast iron

# Protect your valuable process equipment from debris damage

A filter with appropriate strainer upstream from your equipment can effectively protect your investments from potentially damaging solids. Downstream a filter can ensure product homogeny and recover valuable solids. TopFilter is our range of single and dual filters for costeffective protection of pipeline equipment, liquid cleaning or salvaging valuable solids.

Single filters for applications where the flow can be temporarily shut down for cleaning of the filter basket.

Dual filters for applications requiring uninterrupted flow with minimal loss of pressure. The flow is diverted to a second basket while the first basket is cleaned.

Multiple basket filters are of a space saving construction, providing a large filter area with low pressure drops in a compact, easy to service unit

Mesh sizes 20-300 mesh, pleated elements giving filtration down to 10 μm are also available

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### Rotary Lobe pumps



**TOPLOBEPLUS** 

hygienic tri-lobe rotors

124 m<sup>3</sup>/h (547 GPM) Max. capacity Max. pressure 10 bar (145 psi) Max. temp 100°C (212°F) Max. viscosity 100000 mPas/cP Materials: stainless steel (316L)



### TOPLOBE

hygienic tri-lobe rotors

125 m<sup>3</sup>/h (550 GPM) Max. capacity Max. pressure 22 bar (319 psi) 70°C (158°F) Max. temp Max. viscosity 100000 mPas/cP Materials: stainless steel (316L), duplex



high hygienic bi-wing & multilobe rotors

156 m<sup>3</sup>/h (687 GPM) Max. capacity 15 bar (218 psi) Max. pressure 150°C (300°F) Max. temp 80000 mPas/cP Max. viscosity Materials: stainless steel (316L), duplex

### Air Operated Double Diaphragm pumps



### FIP & FB

self-priming pumps, industry/hygienic stainless steel and bronze versions

37.5 m<sup>3</sup>/h (165 GPM) Max. capacity 4 bar (58 psi) Max. pressure Max. temp 55°C (130°F) Materials:

bronze, stainless steel, polished stainless steel



### **TOPAIR**

self-priming multipurpose pump with peripheral flow

48 m<sup>3</sup>/h (211 GPM) Max. capacity Max. pressure 7 bar (102 psi) 120°C (248°F) Max. temp Max. viscosity 10000 mPas/cP PP, aluminium, cast iron, stainless Materials:



### **O**PTI**F**LO

self-priming multipurpose pump with central flow

Max. capacity 8 m<sup>3/</sup>h (36 GPM) Max. pressure 7 bar (102 psi) 85°C (185°F) Max. temp 6000 mPas/cP Max. viscosity Materials: PP, aluminium, stainless steel

steel, PTFE, PVDF, PVC



### TOPGEAR TG G

for general purpose heavy duty

Max. capacity 250 m<sup>3</sup>/h (1100 GPM) Max. pressure 16 bar (230 psi) Max. temp 300°C (570°F) Max. viscosity 80000 mPas/cP Materials: cast iron



### TOPGEAR TG H

for high demanding heavy duty

Max. capacity 130 m<sup>3</sup>/h (570 GPM) Max. pressure 16 bar (230 psi) 300°C (570°F) Max. temp 80000 mPas/cP Max. viscosity Materials: stainless steel, cast steel, ductile



### TOPGEAR MAG

seal-less, with magnetic drive

Max. capacity 80 m<sup>3</sup>/h (350 GPM) Max. pressure 16 bar (230 psi) 250°C (480°F) Max. temp Max. viscosity 10000 mPas/cP

Materials: cast iron, stainless steel

### TopFilter - Filters and strainers



### TOPFILTER TFOV

Single filter 20-150 mm (3/4"-6") Pipe sizes Max. pressure 50 bar (725 psi) Connections

Threaded: BSP, NPT BS10, BS4504, ANSI, DIN Flange: 200°C (392°F) Max. temp Materials: cast iron, cast steel, gunmetal, stainless steel



### TOPFILTER TFOVM

Single, multibasket filter

200-250 mm (8"-10") Pipe sizes Max. pressure 13.8 bar (200 psi) Connections

Threaded: BSP, NPT BS10, BS4504, ANSI, DIN Flange: 200°C (392°F) Max. temp Materials: cast iron, cast steel, gunmetal, stainless steel



### TOPFILTER TFOW

Dual filter Pipe sizes 20-200 mm (3/4"-8") Max. pressure 50 bar (725 psi) Connections

Threaded: BSP, NPT BS10, BS4504, ANSI, DIN Flange: 200°C (392°F) Max. temp Materials: cast iron, cast steel, gunmetal, stainless steel

# Johnson Pump brand





THE INDUSTRIAL TOTAL SOLUTIONS PROVIDER



### KHOBAR HEAD OFFICE.

P. O. BOX 2531, AL-KHOBAR 31952 KSA

TEL. NO.: +966 13 847 7615 FAX NO.: +966 13 847 7612



### **RIYADH OFFICE:.**

PO BOX 58588, RIYADH 11515 KSA TEL. NO. : +966 11 214 5454 EXT. 107 FAX NO. : +966 11 227 8226 EXT. 102



### JEDDAH OFFICE.

TEL.: +966 12 616 9981 EXT. 113 FAX: +966 12 691 2761