

# SPX FLOW Johnson Pump brand

INDUSTRIAL PUMP PRODUCT OVERVIEW



# Welcome to a World of Pumps

For more than 75 years SPX FLOW 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 FLOW 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 FLOW is therefore much more than a SPX FLOW Johnson Pump brand manufacturer – We are your solution provider!

Based in Charlotte, North Carolina, SPX
FLOW (NYSE: FLOW) is a multi-industry
manufacturing company with operations
in more than 35 markets worldwide. SPX
FLOW's innovative, world-class products and
highly-engineered solutions are helping to
meet the needs of a constantly developing
world and growing global population. You'll
find our innovative solutions in everything
from dairy plants and power plants to oil and
gas pipelines, and the power grid. SPX FLOW
is really everywhere you look.

We help our customers around the globe expand and enhance their food and beverage, power and energy and industrial production processes. For more information, please visit www.spxflow.com

### SPX FLOW 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 FLOW'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 FLOW 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
- SwitzerlandUnited Kingdom

Africa
Americas
Asia
Australia
India

Middle East

#### Distributors

 See our web page for a detailed list www.spxflow.com/johnson-pump

### 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 FLOW are keen listeners to the special requirements of our customers. With our wide range of SPX FLOW 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 FLOW you will have access to a variety of flow technologies; from valves and mixers to heat exchangers and entire systems.

Contact your local SPX FLOW 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 self-priming 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 FLOW 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.



PHARMACEUTICAL 1

FOOD & BEVERAGE

HORTICULTURE

Снемісац

**GENERAL INDUSTRY** 

**P**ETROCHEMICAL

BUILDING WATER SERVICES

Waste water treatment

PULP & PAPER

SHIPBUILDING

### Typical product applications















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. SPX FLOW Johnson Pump brand offers several series of centrifugal pumps, many of which comply with ISO, DIN and API standards.

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

- ATEX
- 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

1500 m<sup>3</sup>/h (6600GPM) Max. capacity Max. head 160 m (525 ft) 16 bar (232 psi) Max. pressure Max. temp 200°C (392°F) Max. speed 3600 rpm

Materials: cast iron, nodular cast iron, bronze

### COMBICHEM

heavy duty chemical pump according to ISO 5199 and EN 22858

800 m<sup>3</sup>/h (3520 GPM) Max. capacity Max. head 160 m (525 ft) 16 bar (232 psi) Max. pressure 200°C (392°F) Max. temp 3600 rpm Max. speed cast iron, nodular cast iron, Materials: 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 m<sup>3</sup>/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) Max. pressure 9 bar (131 psi) 95°C (203°F) Max. temp Max. speed 3600 rpm 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 Max. temp 300°C (572°F) Max. speed 3600 rpm cast iron, nodular cast iron, Materials: stainless steel, duplex, Alloy 20, Hastelloy C

#### **C**OMBI**M**AG**B**LOC

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

Max. capacity 280 m<sup>3</sup>/h (1230 GPM) Max. head 140 m (459 ft) 16 bar (232 psi) Max. pressure Max. temp 200°C (392°F) Max speed 3600 rpm Materials: cast iron, nodular cast iron, stainless steel, duplex, Alloy 20, Hastelloy C

#### Single stage, double entry, axially split casing pum



### Uniglide-e

developed using the latest 3D and FEA analysis software together with extensive consultation of major users, for high efficiency pumping.

Max. capacity 4,000 m<sup>3</sup>/hr (17,600 USgpm) Max. head 200 m (650 ft) Max. pressure 26 Bar 80 °C (180 °F) Max. temp Max. speed 1,800 rpm Materials: CI/SS, SS/SS, Duplex/Duplex, SD/SD

#### Thermal oil / hot water pumps



#### **COMBITHERM**

Max. speed

Materials:

specially developed for thermal oil (DIN 4754) and hot water applications (ratings and dimensions to EN 733)

400 m<sup>3</sup>/h (1761 GPM) Max. capacity Max. head 160 m (525 ft) Max. pressure 16 bar (232 psi) Max. temp Thermal oil 350°C (662°F) Hot water 190°C (374°F) 3600 rpm

nodular cast iron





#### COMBIPRO

heavy duty process pump according to API610, API682 and API685

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

#### Monobloc pumps





#### COMBIBLOC

compact close-coupled pump

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

#### **C**OMBI**D**IRT

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

### Multistage pumps

horizontal & vertical

Max. capacity

Max. pressure

Max. head

Max. temp

Max. speed Materials:



#### KGE

horizontal, handels gas and particle content







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 120°C (248°F) Max. temp Max. speed 3600 rpm Materials: cast iron

100 m<sup>3</sup>/h (440 GPM) Max. capacity 60 m (197 ft) Max. head 8 bar (116 psi) Max. pressure 95°C (203°F) Max. temp 3600 rpm Max. speed 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) 3 bar (43 psi) Max. pressure Max. temp 100°C (212°F) Max. speed 2800 rpm Materials: PP, PVDF







### **COMBILINEBLOC**

close-coupled circulation pump on stub shaft to IEC motor

Max. capacity 450 m<sup>3</sup>/h (1980 GPM) Max. head 100 m (328 ft) 10 bar (145 psi) Max. pressure Max. temp 120°C (248°F) Max. speed 3600 rpm Materials: cast iron, bronze

#### **C**OMBI**L**INE

close-coupled circulation pump on extended shaft motor

500 m<sup>3</sup>/h (2200 GPM) Max. capacity Max. head 35 m (115 ft) 10 bar (145 psi) Max. pressure Max. temp 140°C (284°F) Max. speed 1800 rpm Materials: cast iron





#### COMBIFLEX, -UNIVERSAL, -BLOC

variable position suction bend, hydraulics according to EN733

1500 m<sup>3</sup>/h (6600 GPM) Max. capacity 160 m (525 ft) Max. head 25 bar (363 psi) Max. pressure 200°C (392°F) Max. temp Max. speed 3600 rpm Materials: cast iron, nodular cast iron, bronze, stainless steel

#### Submersible pumps





Materials:

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) Max. pressure 16 bar (232 psi) [35 bar (508 psi) API610] 160°C (320°F) Max. temp Max. speed 3600 rpm

> cast iron, nodular cast iron, bronze, stainless steel, carbon steel, 13% Cr-steel



#### **C**OMBI**W**ELL

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

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

#### F-19 12/24 V DC

self-priming extra heavy duty bronze pumps

Max. capacity
Max. pressure
Max. temp
Materials:

Max. temp

Definition (14.5 GPM)

1.2 bar (17.4 psi)

55 °C (130 °F)

Materials:

PTMT (thermoplastic polyester)

or bronze

Internal Gear pumps, self-priming





## **TopGear TG L** for low viscosity liquids

Max. capacity 8 m³/h (35 GPM)
Max. pressure 25 bar (3635 psi)
Max. temp 250 °C (480 °F)
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 cost-effective 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  $10\,\mu m$  are also available

#### TopLobePlus

hygienic tri-lobe rotors

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

#### **TOPLOBE**

hygienic tri-lobe rotors

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

#### **TopWing**

high hygienic bi-wing & multilobe rotors

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

#### Air Operated Double Diaphragm pumps



## **OPTIFLO**

self-priming multipurpose pump with central

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

#### FIP & FB

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

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

stainless steel

#### **TOPAIR**

self-priming multipurpose pump with peripheral

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

steel, PTFE, PVDF, PVC



#### TOPGEAR TG G

for general purpose heavy duty

130\* m<sup>3</sup>/h (570 GPM) Max. capacity Max. pressure 16 bar (230 psi) Max. temp 300°C (570°F) 80000 mPas/cP Max. viscosity Materials: cast iron \* Max. 260 m<sup>3</sup>/h (1145 GPM) with SRT on request



#### TOPGEAR TG H

for high demanding heavy duty

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

#### TOPGEAR MAG

seal-less, with magnetic drive

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







#### **TOPFILTER TFOV**

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

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



#### **TOPFILTER TFOW**

Dual filter

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

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

## **SPXFLOW**

#### CENTRIFUGAL PUMPS

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FLEXIBLE IMPELLER PUMPS, ROTARY

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#### COMPONENTS, CENTRIFUGAL PUMPS,

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www.spxflow.com/johnson-pump/where-to-buy

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Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing.

Please contact your local sales representative for product availability in your region. For more information visit www.spxflow.com.

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