SPXFLOW®

CombiFlex

Vertical Centrifugal Pump



Johnson Pump®

Top performing, space-saving vertical centrifugal pumps

COMBIFLEX

The CombiFlex series' hydraulic field complies with EN 733. The space-saving design and the several positions of suction and pressure flange enable flexible mounting even in the smallest locations. Whether you require a workhorse for cramped quarters onboard ship or an easy-to-connect, versatile industrial pump, the CombiFlex series of vertical centrifugal pumps is your choice for pumping thin, clean or slightly contaminated liquids.

The CombiFlex's variable position suction and pressure connections together with its vertical build results in an economic space-saving installation. In addition to its impressive hydraulic range, the availability of several materials and shaft sealing options makes the CombiFlex a versatile pump with a large application area.

PUMP CHARACTERISTICS

- Vertical space saving design
- Several positions of suction and discharge flange (8 x 45°)
- Seals externally flushed by pumped medium
- Available in several materials
- High pump efficiency
- Heavy duty design
- Very rigid shaft design
- Top-Pull-Out principle
- Foot pads and latern pieces as profiled steel elements or tubular design with opening for suction bend top pull out
- Easy maintenance

	COMBIFLEX	COMBIFLEX BLOC	COMBIFLEX UNIVERSAL
MAX. CAPACITY	1500 m³/h	1500 m³/h	1500 m³/h
MAX HEAD	140 m	105 m	160 m
MAX WORKING PRESSURE	1000 kPa*	1000 kPa*	1600 kPa*
MAX. TEMPERATURE	110°C	120°C	200°C
MAX. SPEED	3600 RPM	3600 RPM	3600 RPM

* MAX WORKING PRESSURE DEPENDING ON MATERIALS

	STANDARD MATERIALS			
PUMP CASING	CAST IRON	NODULAR CAST IRON	BRONZE	STAINLESS STEEL
IMPELLER	CAST IRON/BRONZE/ ALUMINUM BRONZE/ STAINLESS STEEL		BRONZE/ ALUMINUM BRONZE	STAINLESS STEEL
SHAFT SLEEVE	BRONZE / STAINLESS STEEL			
SHAFT	STAINLESS STEEL			
SUCTION BEND	CAST IRON	CAST IRON	BRONZE	STAINLESS STEEL

CombiFlexBloc

availablity on request

CombiFlexBloc, offering an even shorter design with the impeller mounted directly on an extended motor shaft or a stub shaft.

BEARING

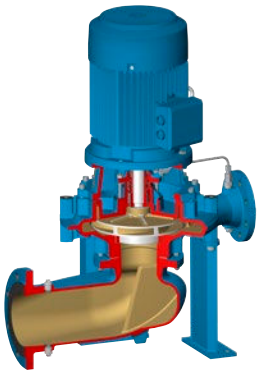
- pump shaft bearing provided by motor bearings

SHAFT SEALING

- stuffing box; with or without water-cooling
- unbalanced and balanced mechanical seals
- single and double cartridge seals

DESIGN

- mounted to a vertical flange motor by means of a lantern piece and stub shaft or a special electric motor with an extended shaft.
- compact build



CombiFlex

The standard **CombiFlex** comes in two versions; with a spacer coupling for utilizing the Top-Pull-Out principle, or a standard coupling for a shorter design (CombiFlexBloc). The CombiFlex is provided with a mechanical seal according to EN 12756 mounted on a bronze shaft sleeve.

BEARING

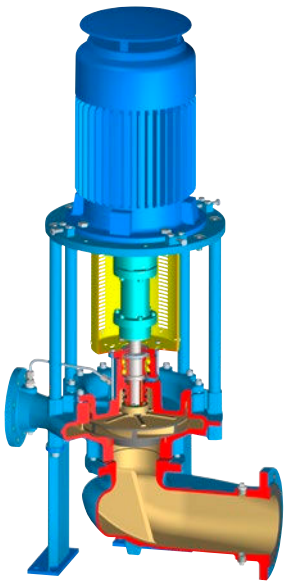
- 2 angular contact ball bearings in 'O'-arrangement
- proven arrangement for short shaft designs
- axially fixed with shaft nut and retaining ring
- reliable bearing fixation, easily replaceable
- grease lubricated
- re-greasing possible

SHAFT SEALING

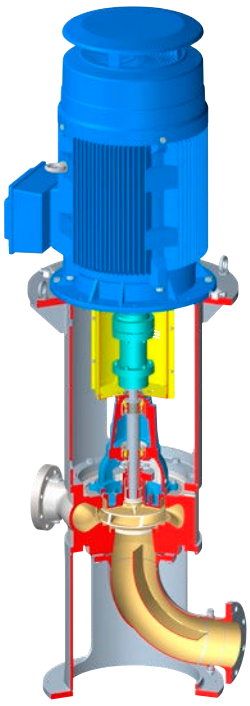
- mechanical seal according to EN 12756
- externally flushed by the pumped medium
- standardized seal specifications
- longer seal life

DESIGN

- versions with 'spacer' coupling
- versions with standard coupling
- spacer coupling enabling Top-Pull-Out principle
- cost-effective solution



CombiFlex



CombiFlex Universal

CombiFlex Universal

CombiFlex Universal, combining the vertical design and flexible suction & pressure flange positioning with a bearing bracket and an extended range of shaft sealing options. CombiFlex Universal pumps can also be offered in stainless steel alloys with flanges according to ISO 7005 PN 16, PN20 (150 lbs), PN25 and PN50 (300 lbs)

BEARING

- ridgid bearing bracket construction
- minimum bearing movement
- roller bearing and a double-row angular contact ball bearing
- extended MTBF
- axially fixed with shaft nut and retaing ring
- reliable bearing fixation, easily replaceable
- grease lubricated
- re-greasing possible

SHAFT SEALING

- stuffing box; with or without water-cooling
- unbalanced and balanced mechanical seals
- mechanical seal acc. to EN 12756
- single and double cartridge seals
- externally flushed by the pumped medium
- standardized seal specifications
- longer seal life

DESIGN

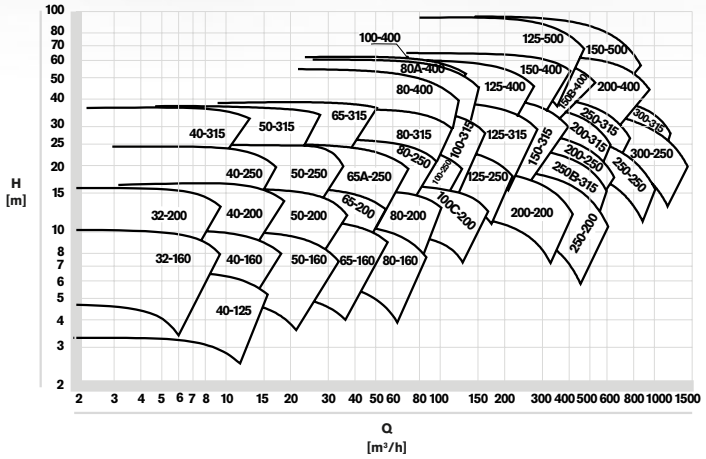
- 'spacer' coupling
- spacer coupling enabling Top-Pull-Out principle
- cost-effective solution
- available as well in stainless steel alloys
- flanges according to ISO 7005 PN 16, PN 20 (150 lbs), PN 25
- foot support and latern piece in tubular design

CombiFlex

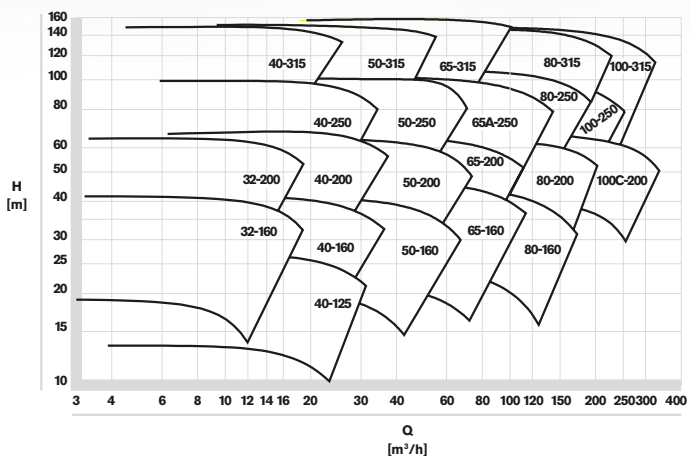
Vertical Centrifugal Pump

Performance Overview

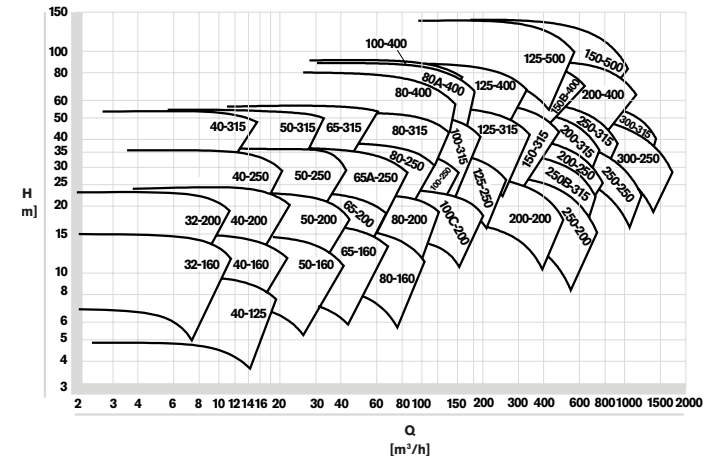
n_{nom} = 1500 rpm



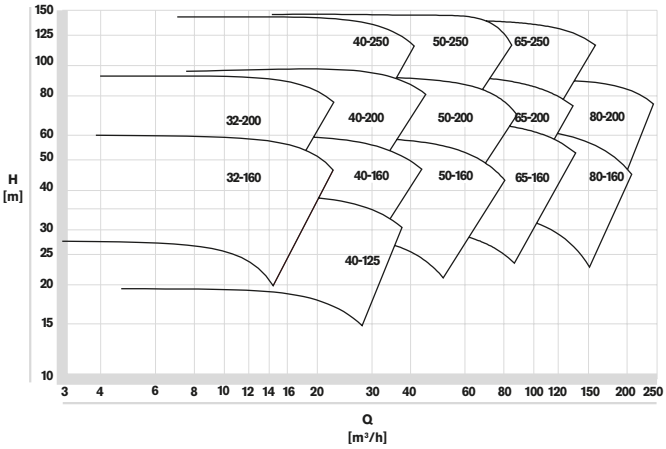
n_{nom} = 3000 rpm



n_{nom} = 1800 rpm



n_{nom} = 3600 rpm



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