SCANPUMP PROCESS PUMP BE

50 Hz

Applications

Scanpump process pump BE is the core product range for pulp and paper applications, e.g. - paper, tissue and board machines, chemical-, mechanical- and recycled fibre lines, chemical recovery as well as effluent treatment plant etc.

They are also very well suited for general industry and wastewater applications.

Design

The BE series includes 39 pump sizes and is built on a modular design, which offer high interchangeability, simplified service and a low number of spare parts. This means that low maintenance costs can be obtained.

Pump casing

Rugged BE pump construction creates longterm wear resistance. The generous wall thickness and the casing's smooth, pocket-free interior protect against erosion and corrosion.

Impeller

The impellers can handle almost any suspensions and a huge range of slurries. The pumps are available with semi-open impellers. A new hydraulic design for semi-open impellers features large free passages. The sturdy construction ensures high wear resistance, resists corrosion and reduces sensitivity to foreign objects.

When the BE pump is used as medium sized fan- or dilution pumps, ESDF impellers, special low pulsations impellers are used.

For some sizes vortex impellers can also be selected. These impellers have an improved vane design offering clogless and trouble-free operation.

A hexagonal shaft secures the impeller fixing, giving stable operation conditions and long MTBF (Mean Time Between Failure).

Wear disc

The wear disc is replaceable and can be easily adjusted from the pump casing's front. This makes it easy to maintain high efficiency over the entire lifetime of the pump and ensures shorter MTTR (Mean Time To Repair). The sealing of the pump casing has also been improved.

Shaft

The shafts are sturdy, with a deflection of less than 0.05 mm at the seal areas under normal running conditions. All shafts are protected by a replaceable sleeve in stainless steel or higher quality alloys.

Shaft seals

The alternatives include single and double mechanical seals, gland packing and dynamic seals, with a variety of material to suit every application.

Bearing assembly

The bearing assembly of a BE pump features a sturdy design that ensures long MTBF, long pump lifetime and low maintenance costs. Six different bearing sizes cover all pump in the series, and all bearings have angular contact ball bearings at the driven end.

Standard bearing assemblies are lubricated with grease, though oil is also an option. On oil-lubricated bearing assemblies, two inspection eyes are standard. This makes it easy to inspect the bearing assembly from both sides.

Your benefits

- **Large energy savings.** Improved hydraulic design creates greater efficiency in each individual pump minimising the average power consumption.
- **Total reliability.** Robust design, secure impeller fastening and sturdy bearing assembly ensure long pump lifetime. Better performance coverage for better runnability gives exceptional MTBF.
- **Simplified service.** Smart pump design with maintenance-reducing features. Modular construction with few parts to service and store.

Properties

Capacity
20-6500 m^3/h

Head
5-160m

Temperature
Max. 190°C
(with grease lubrication)

Pressure rating
PN6/PN10/PN16

Flanges
ISO 7005 PN10-PN16
(BS 4504-ANSI 150-
JIS 10K-16K)

Lubrication
Grease; oil as option

Specification
ISO 5199 "Technical spec. for centrifugal pumps class II"

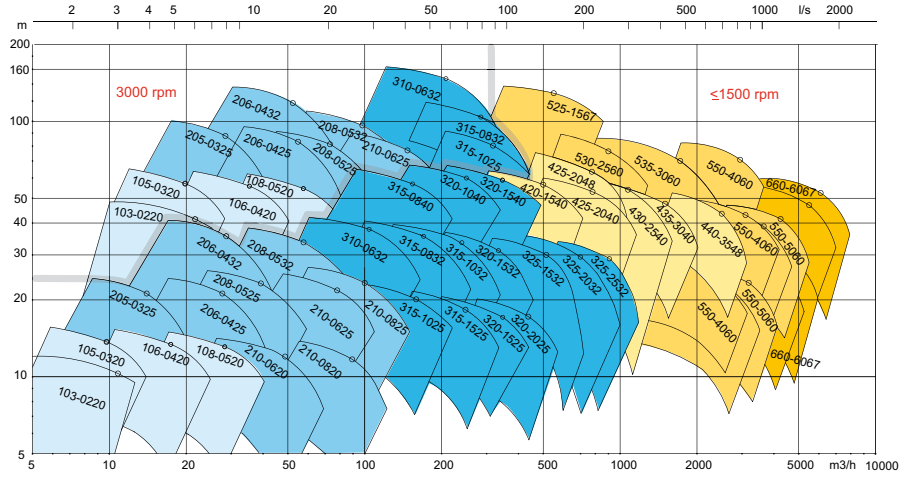
Dimension
For applicable sizes acc. to ISO 2858 except "g" dimension.

Type designations

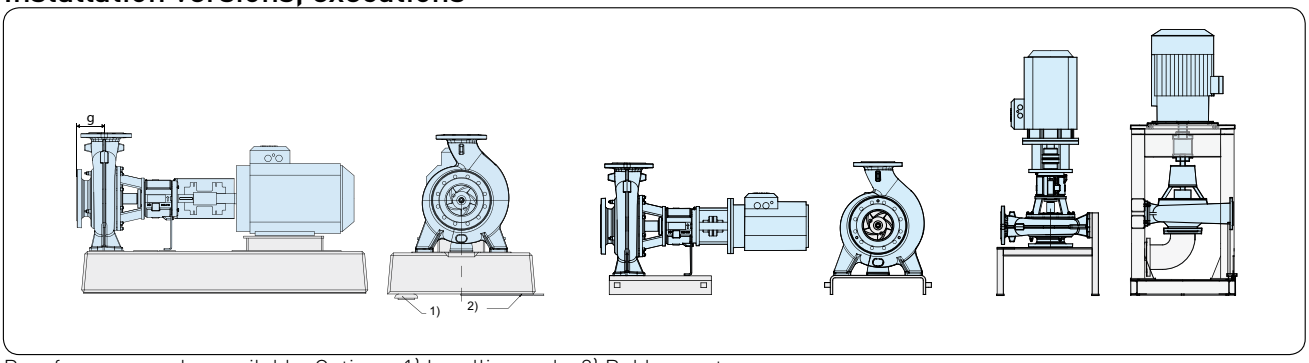
BE 315-1025	
BE	Pump series
3	Bearing assembly size
15	Suction size (cm), DN_1
10	Discharge size (cm), DN_2
25	Impeller size (cm)

Performance curves

Bearing assembly sizes: **1** **2** **3** **4** **5** **6**



Installation versions, executions



Baseframes are also available. Options; 1) Levelling pads, 2) Rubber mat

Materials

Code	03**)	05**)	24**)	08	09	21	23	25	26	27	32
Pump casing	Cast iron	Cast iron	SS 2324*)	Nodular iron	Nodular iron	SS 2399	SS 2324*)	SS 1.4517*)	SS 1.4408	SS 1.4527	Nickel***) S6371
Wear disc	Cast iron	SS 2324*)	SS 2324*)	Cast iron	SS 2324*)	SS 2399	SS 2399	SS 1.4517*)	SS 1.4408	SS 1.4527	Nickel***) S6371
Impeller	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2399	SS 2399	SS 1.4517*)	SS 1.4408	SS 1.4527	Nickel***) S6371
Shaft	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)
Shaft sleeve	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 2324*)	SS 1.4539	SS 2324*)	SS 1.4539	Nickel***) S6371

*) Duplex stainless steel. **) Standard material combinations. ***) Nickel alloy.

scanpump

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ABS CLEAN LIQUID PUMP NL

50 Hz

Applications

NL pumps are designed to endure the constant demand of general-purpose applications involving clear or turbid liquids and water treatment positions. These pumps are also suitable for explosive atmospheres. The NL can even handle liquids with temperatures of up to 170°C. The NL range offer reliable performance for many crucial applications within industry, water and wastewater and building services.

Design

This versatile pump is available in a range of 50 sizes with 5 different bearing assemblies. Horizontal, single-stage centrifugal pumps with connections and main dimensions according to DIN 24255 / EN 733 plus 19 additional sizes.

The range includes horizontal centrifugal pumps with discharge diameters from DN32 to DN300.

The variety of materials and shaft seal options permits pumping of many liquids under different operating conditions.

High reliability

The NL pumps are of robust design and offer prolonged MTBF (Mean Time Between Failure) thanks to oversized ball bearings and a reduced shaft deflection which complies with ISO 5199. The bearing assembly is rigid in its design. The bearings are available with grease or oil lubrication.

Modular design

The modular system ensures high interchangeability of major parts, which results in reduced spares inventory, easier dismantling and assembly. All this minimises down-time.

The design of the pump also allows the rotor unit to be withdrawn without disturbing the pipe work. Using a spacer type coupling, permits back-pull out of the rotor assembly from the pump casing without moving the motor.

High efficiencies

NL pumps benefit from the latest technology and have very high efficiencies - with peak efficiencies over 89%. The unique hydraulic design improves flow rates and also helps to reduce the power consumption. The impellers are of closed design and offer unique hydraulics with higher flow rates and better efficiencies.

Many options

The NL-pumps are available in a variety of shaft seals with different options. These seal arrangements are gland packing or single DIN type mechanical seal with or without quench and external flushing. This permits pumping of a wide range of liquids.

Properties

Capacity	Max. 1800 m^3/h
Head	Max. 140 m
Speed	Max. 3600 rpm
Temperature	Max. 170°C depending on the shaft seal-sealing and material execution.
Pressure rating	Material design 1B, 4B PN16. 0B, 0C, 0E PN16 / 10[1] / 14[2].
Shaft sealing	Mechanical seal or stuffing box
Flange connections	Material design 1B, 4B, DIN 2501 PN16. 0B, 0C, 0E DIN 2501, PN16/10[3] (ANSI 150 on request)
Technical specifications	Dimensions acc. to DIN 24255/EN733 plus additional 19 sizes.
Testing	ISO 9906 Grade 2

1) From 80-400 to 300-500 except 150-500, 2) 150-500, 3) 150-200, 150-250, 200-250.

Your benefits

- **Durable design extends pump life.** Extended pump life thanks to oversized ball bearings, reduced shaft deflection and ISO 5199. This offers prolonged MTBF.
- **Latest technology reduces power consumption.** High efficiency technology (peak efficiency over 89%) and unique hydraulic design improves higher flow rates.
- **Modular design minimises downtime and MTTR**. Reduced spare parts inventory and easy dismantling and assembly minimises MTTR (Mean Time To Repair).
- **Many options enhances performance**. The variety of materials and shaft seal options ensure optimal operating conditions for every application.

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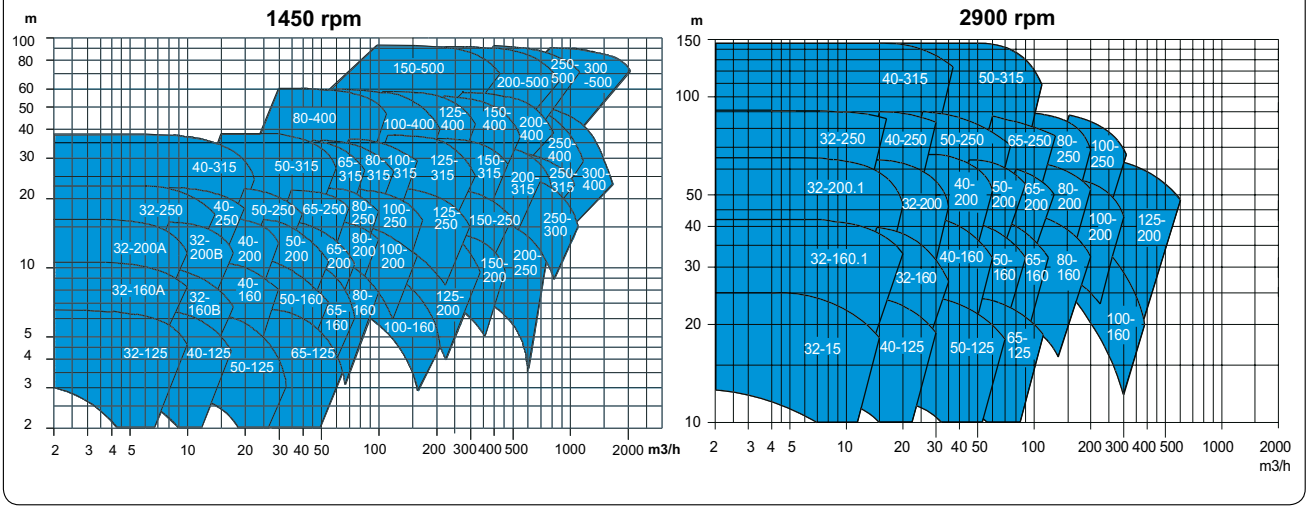
Type designations

NL 125-250 A C 041 OB 2	
NL	Pump series
125	Discharge dia. (mm)
250	Impeller dia. (mm)
A	Hydraulic: A/B/D
C	Bearings: B, C, S, T or 2
041	Shaft sealing: 041, 052, BJ3, BJS...
OB	Material: 0B, 0C, 0E, 1B, 4B
2	Casing gasket: 2, 4

Installations

The NL pumps are also available in a compact close-coupled design, which saves space and make them easy to install.

Performance curves



Materials

Code	0B	0C	0E	1B	4B
Volute casing	Cast iron	Cast iron	Cast iron	Nodular iron	Stainless 316
Casing cover	Cast iron	Cast iron	Cast iron	Nodular iron	Stainless 316
Shaft/shaft sleeve	Stainless	Stainless	Stainless	Stainless	Stainless 316
Impeller	Cast iron	Bronze	Stainless 316	Cast iron	Stainless 316