FB Non-Clogging End Suction Single-Stage Centrifugal Pump

SULZER

Applications

Sulzer process pump FB is a solids handling pump for all kind of liquids containing abrasives, large and long contaminants. Typical applications are severely contaminated waste paper, sewage, effluent and paper mill rejects.

Design

The FB pumps are built on a modular design meaning pumps within the same bearing assembly have many parts in common.

Pump casing

The spacious pump casing, the wide openings in the channel impellers and the even larger passages of the vortex impellers ensure a clogless pump.

Many applications are highly erosive. The pump casings have smooth internal contours and generous wall thickness to allow for a long service life.

The pump casings and impellers are designed to give maximum free passage area.

Impeller

The FB pumps are equipped with channel or vortex impellers. All impellers have back vanes to prevent clogging behind the impeller.

Series FB exhibit very high efficiencies for vortex pumps, due to the special impeller vane design. With channel impellers even higher efficiencies are achieved.

The channel impellers have maximum channel area and can transport large solids. The high efficiency makes a FB pump with a channel impeller suitable also for clean liquids.

The special advantage of the vortex impeller is its ability to handle large and long solids. The vortex impeller can also be installed recessed, to get an even larger passage.

Bearing assembly

The rigid bearing assembly of thorough design ensures a bearing life exceeding 50 000 hours. The sturdy shaft has maximum deflection of 0.05 mm, at the shaft seal, thereby providing the best possible working conditions for the shaft seal.





Shaft seals

The Sulzer PSI cartridge for single mechanical seals is the best solution for most applications. Our pump seal integration provides perfect conditions for the seal.

The modular design also allows any other seal solution, such as single, double or gland packing.

Easy to service

The back-pull out design permits rotor removal without disturbing the connecting pipe work or drive motor. A quick way of changing shaft seals is to replace the seal cartridge with another cartridge from the stock, without even removing the casing cover. The shaft seal is then replaced or reconditioned and the cartridge is stocked. The modular design means quick and easy service, making down-times short.

Properties

Flow	1-1500m ³ /h
Head	2-60 m
Temperature	Max. 190°C
Pressure rating	PN10/PN16
Flanges	ISO 7005 PN10/PN16
Lubrication	Standard: Grease Optional: Oil
Specification	ISO 5199 "Technical specification for centrifugal pumps class II".

Your benefits

- □ Rigid, reliable and wear resistant
- □ Clogless. Large free passage area
- Designed according to international standard
- □ Low maintenance costs
- □ High efficiency giving high energy savings

Type designations

FB 80/80-26

FB	Pump series
80	Inlet dia. (mm)
80	Outlet dia. (mm)
-26	Impeller dia. (cm)

Performance curves



Material

Material code	01	03	24
Pump casing	Grey cast iron A48 CL 30 B	Grey cast iron A48 CL 30 B	Duplex steel A890 3A
Impeller	Grey cast iron A48 CL 30 B	Duplex steel A890 3A	Duplex steel A890 3A
Shaft	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460
Shaft sleeve	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460

Sulzer material	Scanpump material
A48 CL 30B	EN-GLJ-200
EN 1.4460	1.4460 (Wrought)
A890 3A	SS2324 (Cast)

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