FB Non-Clogging End Suction
Single-Stage Centrifugal Pump

Applications
Sulzer process pump FB is a solids handling pump for all kinds 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>1-1500m³/h</td>
</tr>
<tr>
<td>Head</td>
<td>2-60 m</td>
</tr>
<tr>
<td>Temperature</td>
<td>Max. 190°C</td>
</tr>
<tr>
<td>Pressure rating</td>
<td>PN10/PN16</td>
</tr>
<tr>
<td>Flanges</td>
<td>ISO 7005 PN10/PN16</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Standard: Grease Optional: Oil</td>
</tr>
<tr>
<td>Specification</td>
<td>ISO 5199 “Technical specification for centrifugal pumps class II”.</td>
</tr>
</tbody>
</table>

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)

**Material**

<table>
<thead>
<tr>
<th>Material code</th>
<th>01</th>
<th>03</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump casing</td>
<td>Grey cast iron A48 CL 30 B</td>
<td>Grey cast iron A48 CL 30 B</td>
<td>Duplex steel A890 3A</td>
</tr>
<tr>
<td>Impeller</td>
<td>Grey cast iron A48 CL 30 B</td>
<td>Duplex steel A890 3A</td>
<td>Duplex steel A890 3A</td>
</tr>
<tr>
<td>Shaft</td>
<td>Duplex steel EN 1.4460</td>
<td>Duplex steel EN 1.4460</td>
<td>Duplex steel EN 1.4460</td>
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<tr>
<td>Shaft sleeve</td>
<td>Duplex steel EN 1.4460</td>
<td>Duplex steel EN 1.4460</td>
<td>Duplex steel EN 1.4460</td>
</tr>
</tbody>
</table>

**Sulzer material**

- **A48 CL 30B**: EN-GLJ-200
- **EN 1.4460**: 1.4460 (Wrought)
- **A890 3A**: SS2324 (Cast)

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This data sheet is a general presentation. It does not provide any warranty or guarantee of any kind. Please, contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.

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