

BA End Suction Single-Stage Centrifugal Pump

SULZER

Applications

Sulzer process pumps, series BA, have an extensive range of applications and a rugged design that is particularly suited to tough duties, such as paper stock with a consistency of up to 6-8%, chemical slurries and effluents. High efficiencies also make them ideal for clean liquids.

Special versions are available for pumping slurries containing large amounts of air or large particles.

For abrasive media and corrosive liquids, we can assist you in selecting the most suitable material, based on tests in our research laboratories.

Design

Smooth internal contours and the elimination of cavities at the periphery of the casing cover have virtually eliminated the risks of localized wear occurring. Generous wall thicknesses give high resistance to corrosion and erosion.

The casing cover gasket is confined, eliminating the possibility of blowing out due to the internal pressure.

The suction is protected by a replaceable wear disc.

Pump casing

The pump casing has a rugged construction with a generous wall thickness. This combined with a smooth contour design gives good protection against erosion and corrosion.

The larger pumps have a double volute casing reducing radial forces and shaft deflection.

Impellers

All BA pumps have high efficiencies with semi-open impellers that have large free passages.

For low pulsation applications, special FAN pump impellers are available.

Lantern

The heavy duty lantern with easy maintenance access connects the pump casing to the bearing assembly. The casing cover is attached to the lantern with screws to facilitate the dismantling and assembly of the rotor unit.

Shaft seals

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

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



Bearing Assembly

The bearing assemblies are the base of our modular system.

The bearings must withstand large axial thrust and radial loads simultaneously. All bearing assemblies have angular contact ball bearings at the driven end.

The bearing life, exceed 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.

Standard lubrication by grease with the option of oil.

Wear disc

The pump inlet is protected by a replaceable wear disc. The wear disc is adjustable to retain the high efficiency. The wear discs of the two larger bearing assemblies are adjusted at the front of the pump casing. All wear discs are sealed by O-rings.

On the smaller pumps the wear disc forms part of the pump suction.

Properties

Flow	20-6500m ³ /h
Head	5-120 m
Temperature	Max. 190°C (with grease lubrication)
Pressure rating	PN6/PN10/PN16
Flanges	ISO 7005, PN10 or PN16 (BS 4504) or ANSI
Lubrication	Standard: Grease. Option: Oil.
Specification	ISO 5199 "Technical specification for centrifugal pumps class II".

Your benefits

- ☐ Good Efficiencies
- ☐ Reliable
- ☐ Modular Design
- ☐ High Wear Resistance
- ☐ Simplified Maintenance

Type designations

BA 250/250-32

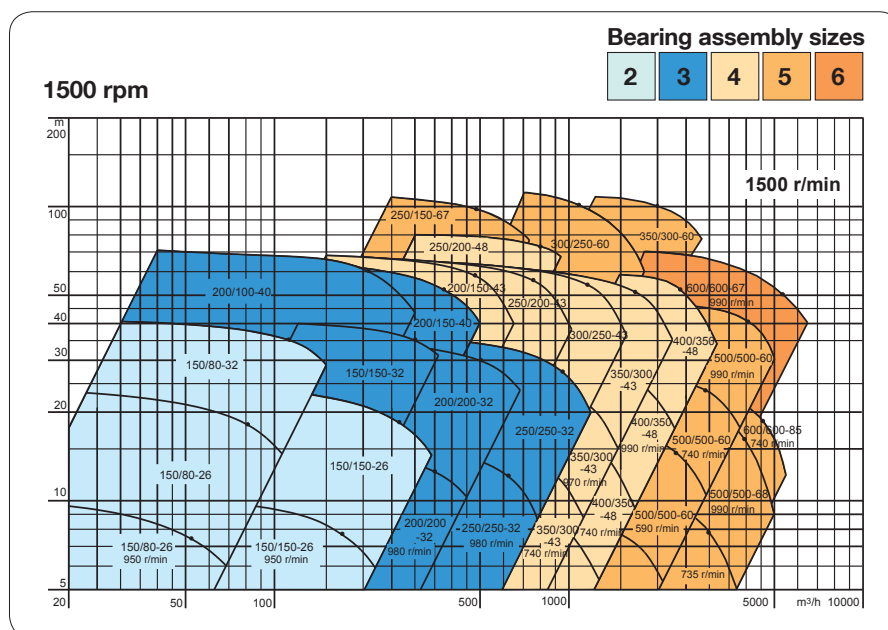
BA Pump series

250 Inlet dia (mm)

250 Outlet dia (mm)

-32 Impeller dia (cm)

Performance curves



Material

Code	Standard material comb.			Material comb.						
	03	05	24	08	09	21	25	26	27	32
Pump casing Pump cover	Grey cast iron A48 CL 30B	Grey cast iron A48 CL 30B	Duplex steel A890 3A	Ductile iron A395 60-40-18	Ductile iron A395 60-40-18	Stainl. steel S2399	Duplex steel A890 1B	Aus stainl. steel ASTM A743 CF-8M	Aus stainl. steel ASTM A743 CN-7M	Nickel alloy A494 CW-12MW
Wear disc	Grey cast iron A48 CL 30B	Duplex steel A890 3A	Duplex steel A890 3A	Grey cast iron A48 CL 30B	Duplex steel A890 3A	Stainl. steel S2399	Duplex steel A890 1B	Aus stainl. steel ASTM A743 CF-8M	Aus stainl. steel ASTM A743 CN-7M	Nickel alloy A494 CW-12MW
Impeller	Duplex steel A890 3A	Duplex steel A890 3A	Duplex steel A890 3A	Duplex steel A890 3A	Duplex steel A890 3A	Stainl. steel S2399	Duplex steel A890 1B	Aus stainl. steel ASTM A743 CF-8M	Aus stainl. steel ASTM A743 CN-7M	Nickel alloy A494 CW-12MW
Shaft sleeve	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Aus stainl. steel EN 1.4539	Duplex steel EN 1.4460	Aus stainl. steel EN 1.4539	Nickel alloy Hastelloy C 276
Shaft	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel A890 1B	Duplex steel EN 1.4460	Duplex steel EN 1.4460	Duplex steel EN 1.4460

Sulzer material	Scanpump material
A48 CL 30 B	EN-GLJ-200
A395 60-40-18	EN-GJS-400-18
EN 1.4057	1.4057
EN 1.4460	1.4460 (Wrought)
A890 3A	SS2324 (Cast)
ASTM A743 CF-8M	1.4408
A890 1B	1.4517
EN 1.4539	1.4539
ASTM A743 CN-7M	1.4527
A494 CW-12MV	W2.4537 (Cast)
Hastelloy C 276	W2.4819 (Wrought)

www.sulzer.com

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