

Flow Equipment

ZPP double suction axially split single-stage centrifugal pump



Main industries and applications

ZPP double suction axially split single-stage centrifugal pumps are used for demanding high-capacity industrial applications to ensure process reliability, high efficiency, and low operating costs.

The range comprises over 20 sizes with different impeller designs. This flexibility ensures that energy consumption is minimized throughout the complete operating range of a pump.

ZPP pump series is designed for demanding industrial applications to pump:

- Clean and slightly contaminated liquids
- Viscous liquids
- Low-consistency fibrous slurries
- Liquids in applications with low pressure pulsations















Features and benefits

Sulzer ZPP double suction pumps offer high reliability and durability. A robust design ensures trusted experience in all industrial segments. Specific design features provide the low-pulsating pressure on critical applications like paper machine head box, allowing us to maximize the value for customers.

Maximum performance

- Wide range of hydraulics with different pump sizes and impeller options
- Material selection of ductile iron and duplex stainless steel for different application needs
- Pressure pulsation check and fine tuning when requested
- Polished internal surfaces for most demanding fiber applications

High reliability and durability

- High reliability due to heavy-duty bearing unit, oil or grease lubricated
- Replaceable casing wear rings designed for trouble-free operation in fiber applications
- Rigid shaft ensures trouble-free running

Optimized design reduces lifecycle costs

1 Double entry impeller

- Double suction impeller, with split, staggered and skewed vanes give high efficiency and low Net Positive Suction Head (NPSH) values
- Low pulsation impellers are available, designed to meet the stringent performance requirements of paper machine head box applications
- Impeller installed on the shaft by shrink fit without keyway, which is easy to assemble, disassembled hydraulically

2 Axially split casing

- Heavy-duty axially split casing
- Inspection, maintenance and removal of the rotating unit is possible without disturbing the piping or motor
- Single volute for lower head and double volute for higher head applications
- Low radial loads on bearings and low shaft deflection providing extended seal and bearing life

3 Casing wear rings

- Replaceable casing wear rings protect the casing from wear and assure smooth flow to the impeller improving efficiency
- Maintaining correct clearance is easy
- Wear ring locked in lower casing to prevent rotation

4 Heavy-duty shaft

- For high corrosion and wear resistance plus high strength
- Reduced shaft deflection for extended seal and bearing life
- Duplex stainless steel shaft

5 Versatile shaft sealing Stuffing box

- External or internal sealing liquid
- Split stuffing box gland and lantern ring with withdrawal grooves for easy service

Mechanical seal

- Different mechanical seals available
- Seals fit into the same chamber as packings providing easier change to another type of sealing

6 Bearing unit

- Long lifetime with high thrust spherical roller bearings, identical on both sides
- Grease or oil lubrication
- Effective bearing protection by non-contact wearfree labyrinth seals and deflector
- No adjustments needed making assembly quicker

7 Installation options

- Single and dual drive alternatives
- Right or left handed single drive allows the most compact installation



Specifications

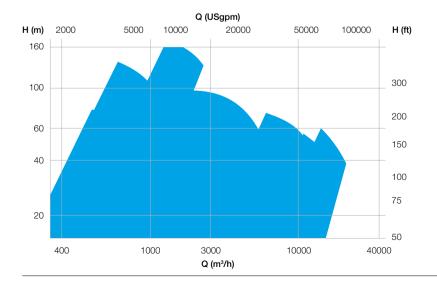
Materials

Main part	Duplex stainless steel design	Ductile iron design
Volute casing	SS ASTM A890 Gr.3A	CI ASTM A395 60-40-18
Impeller	SS ASTM A890 Gr.3A	SS ASTM A 890 Gr.3A
Shaft	EN 1.4460	EN 1.4460
Casing wear ring	SS ASTM A890 Gr.3A	SS ASTM A890 Gr.3A
Shaft sleeve	EN 1.4460	EN 1.4460

Operating data

	50 Hz	60 Hz
Pump sizes	250 to 900 mm	10 to 35 in.
Capacities	up to 25'000 m³/h	up to 110'000 USgpm
Heads	up to 160 m	up to 525 ft.
Pressures	up to 20 bar	up to 290 psi
Temperatures	120°C	250°F

Performance range



We keep your processes flowing

Wherever fluids are treated, pumped, or mixed, we deliver highly innovative and reliable solutions for the most demanding applications.

Our offer

The Flow Equipment division specializes in pumping solutions specifically engineered for the processes of our customers. We provide pumps, agitators, compressors, grinders, screens and filters developed through intensive research and development in fluid dynamics and advanced materials. We are a market leader in pumping solutions for water, oil and gas, power, chemicals and most industrial segments.

Pumps

As one of the world's leading pump manufacturers, Sulzer provides a wide range of products for engineered, configured, and standard pumping solutions as well as essential auxiliary equipment.

We are renowned for our state-of-the-art products, performance reliability and efficient solutions.

Agitators and dynamic mixers

Sulzer mixing and agitation technology offers a wide range of products for industrial applications. Side-mounted horizontal and top-mounted vertical agitators, dynamic chemical mixers, and tower and tank flow management products guarantee effective mixing and agitating processes.

Compressors and aeration

Sulzer's state of the art offering for municipal and industrial wastewater treatment includes turbocompressors, aeration systems and mechanical aerators. Our application and process know-how combined with our unique product portfolio give us the means to provide customers with reliable and efficient solutions.

Submersible mixers

Sulzer's energy efficient submersible mixers are suitable for a wide range of applications in industry and municipal treatment plants. They provide the right solution to match mixing tasks for agitating, blending, mixing, dissolving and suspension of solids in industry and municipal treatment plants.

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