

SJT-API

vertically suspended
API 610 type VS1/VS2



Main industries and applications

Sulzer SJT-API VS1/VS2 pumps are specified when lineshaft pumps are required for sump or tank installation.

Typical applications include:

- Water circulation pumps
- Seawater lift pumps
- Stormwater pumps



Features and benefits

1 First stage impeller

- Low Net Positive Suction Head Required (NPSHR) allows use of a shorter pump

2 Series impellers

- High efficiency
- Optional thrust balanced impellers for reduced thrust load

3 Column bearings

- Mounted in a reversible bearing spider that may be flipped to run a new bearing on a different shaft surface

4 Discharge heads

- Cast or fabricated for various nozzle, thrust bearing and seal configurations

5 Shaft sealing

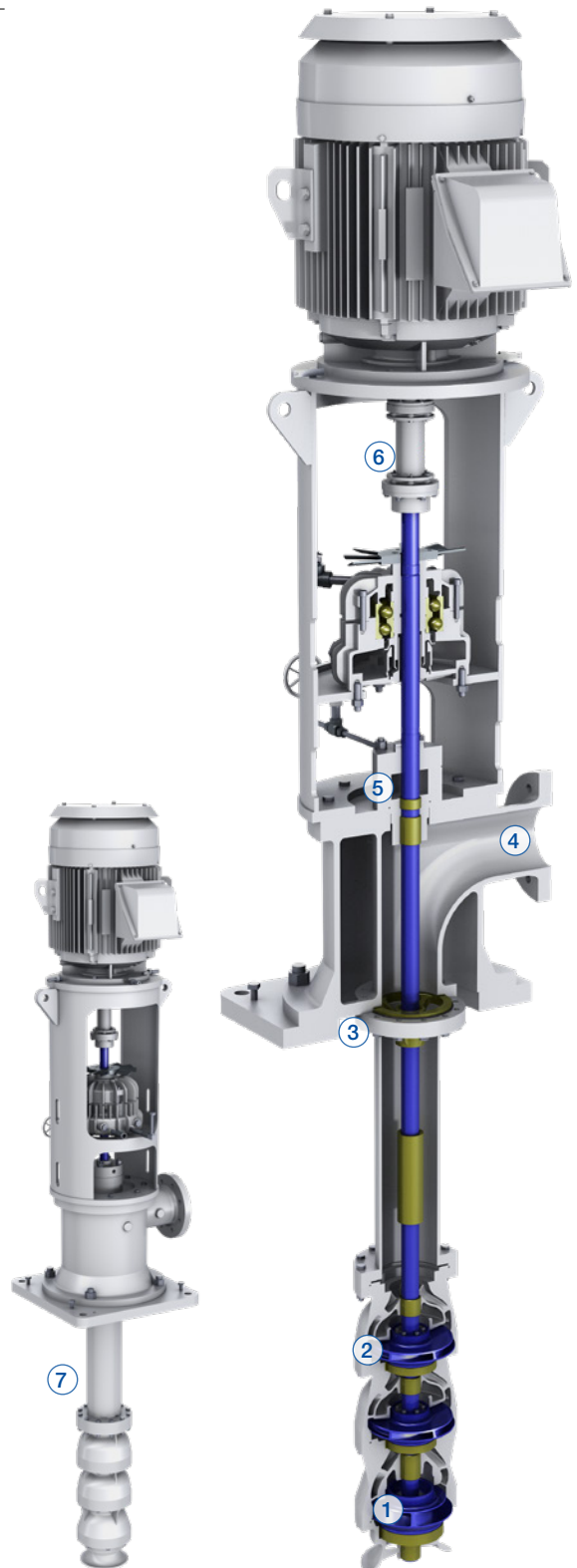
- Accommodates ISO 21049 (API 682) cartridge type mechanical seals

6 Rigid adjustable spacer coupling

- Simple mechanical seal maintenance and rotor lift adjustment

7 Construction

- VS1 for sump or tank



Optional features and benefits

Driver stand

- Discharge head and driver stand checked for natural frequency coincidence

Thrust bearing

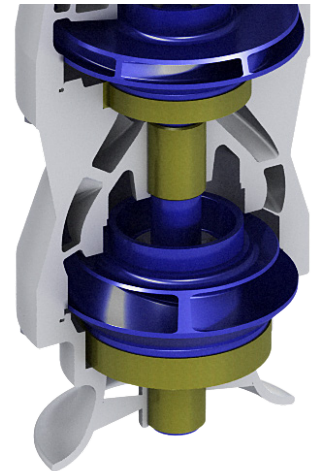
- Bearings are designed to meet ISO 13709 (API 610) requirements to avoid overheating
- Optional fan, water or pumpage cooled thrust bearing with CS bearing housing and high or extra high thrust bearings

Double suction impeller for low Net Positive Suction Head (NPSH)

- Provides nominal 30 % reduction in NPSH required with $N_{ss} \leq 11,000$
- Impeller mounted between bearings



First stage impeller available as single or double suction



Specifications

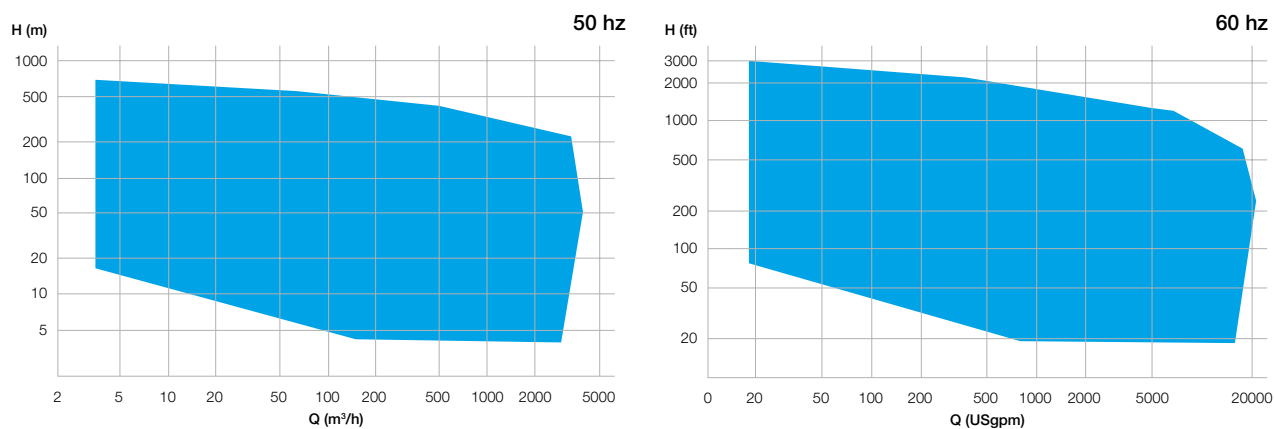
Material options

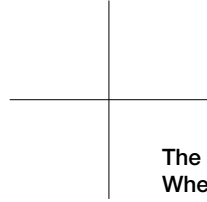
ISO 13709 (API 610) material codes: S-5, S-6, S-8, A-8, D-1, D-2

Operating data

	50 Hz	60 Hz
Discharge size	up to 600 mm	up to 24 in.
Capacities	up to 5'000 m ³ /h	up to 22'000 USgpm
Heads	up to 900 m	up to 3'000 ft.
Pressures	up to 78 bar	up to 1'130 psi
Temperatures	up to +205°C	up to +400°F
Speeds	up to 3'600 rpm	up to 3'600 rpm

Performance range





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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.

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