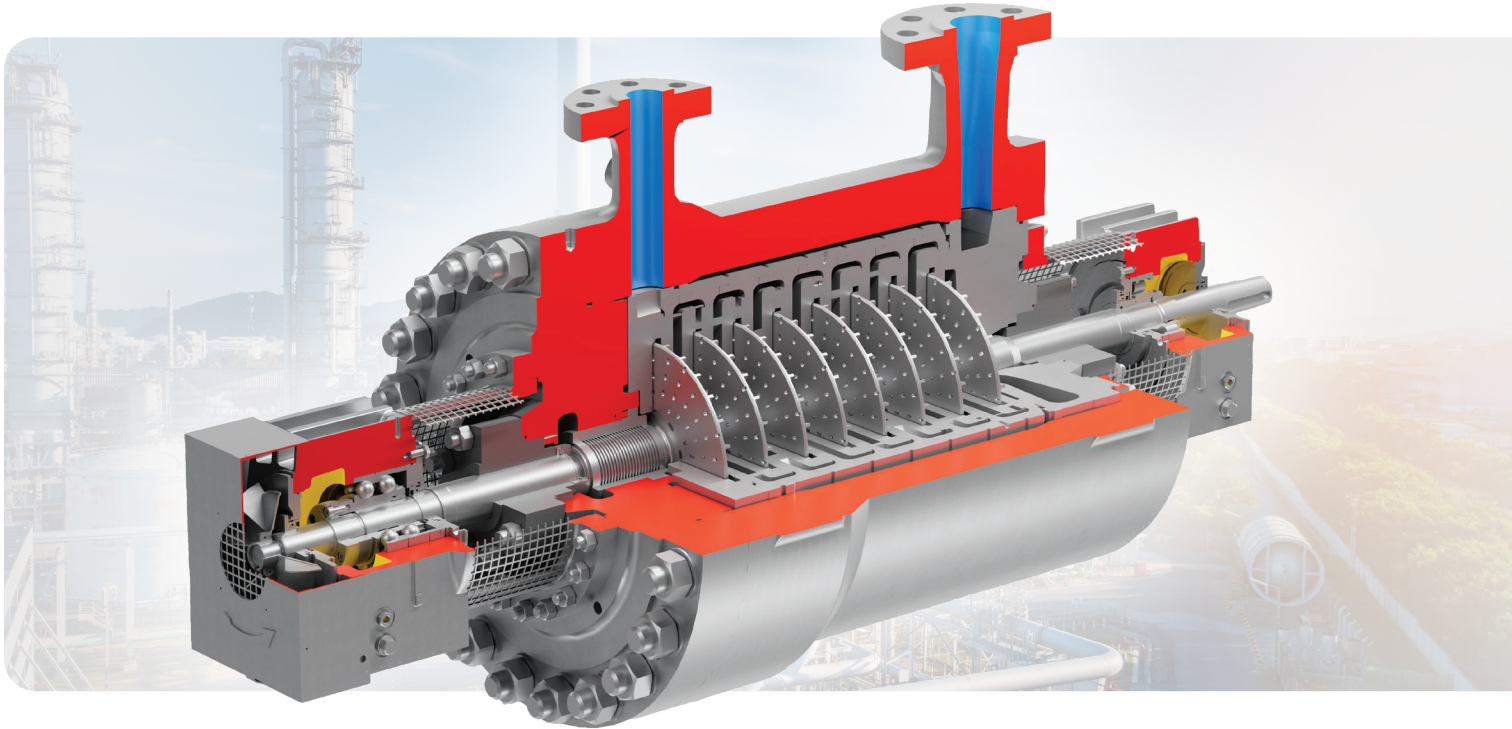




WXBB

Low-Flow, High-Head Barrel Pump for Refinery and Petrochemical Industries



Stable low-flow performance

An extension of the well-proven WXB pump product range, the Flowserve WXBB pump is an API 610-style, multistage double case design. Born out of the company's extensive experience in the nuclear power industry, the WXBB pump incorporates Barske-style impellers to produce stable low-flow performance. It is a reliable, direct drive solution for low-flow, high-head applications.

Features and benefits

Barske-style impeller provides a continuously rising performance curve with exceptional low-flow stability. Smooth, investment cast surface enables precise, repeatable hydraulic performance.

Diffuser-style inner case sub-assembly allows for balanced radial loads and produces a compact design.

Barrel casing is centerline mounted to permit symmetrical thermal expansion without loss of alignment. Cast barrel is standard.

Nozzles are engineered to meet the API 610 loads as standard. Standard orientation is top suction, top discharge.

ASME B16.5 raised face flanges are standard. Other flange standards are optionally available.

API 682-compliant seal chambers accommodate numerous types of mechanical seals. Cartridge-type mechanical seals are standard to minimize downtime associated with seal maintenance.

Generous shaft diameter results in low shaft deflection, thereby increasing bearing and mechanical seal life.

Radial bearings are anti-friction rolling element type, and thrust bearings are back-to-back angular contact type.

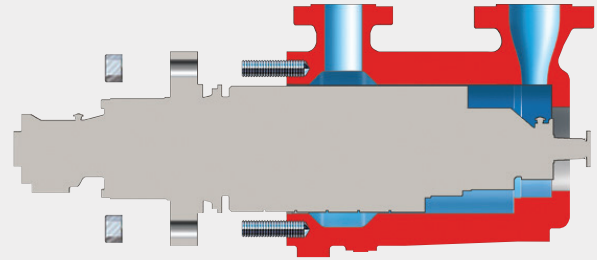
Oil bath lubrication is standard. Connections for oil mist lubrication are optionally available.

*Barske-style
impeller*



Additional performance and operating advantages

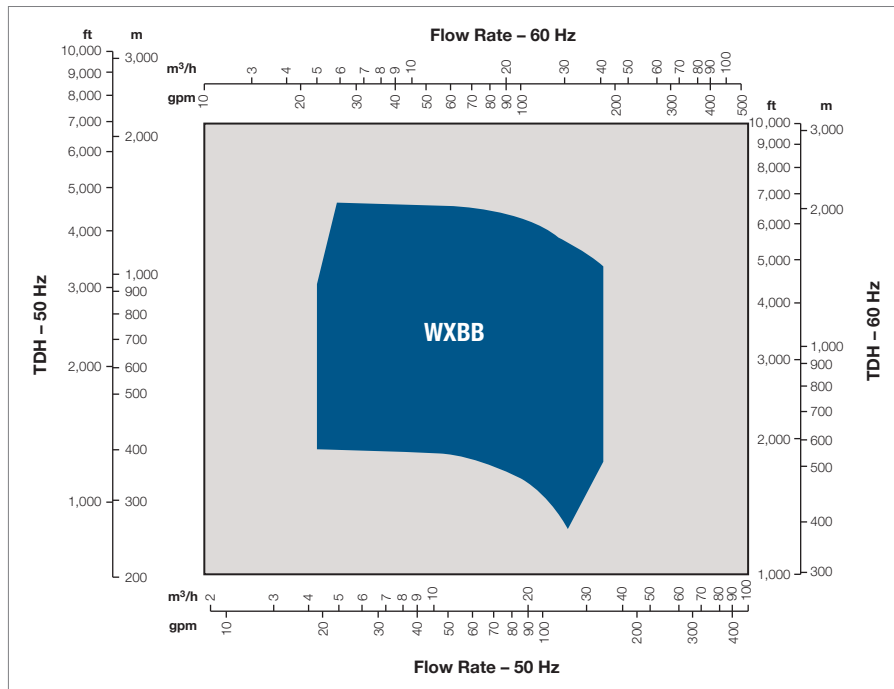
- Direct drive operation at 2-pole running speed eliminates the need for V-belts or gearboxes.
- API compliant vibration levels result in high reliability and extended mean time between planned maintenance.
- No ancillary lube oil filtration or cooling means lower operating costs.
- Conventional horizontal mounting with cartridge design inner assembly simplifies maintenance and reduces downtime.
- Easily accessible cartridge seals minimize maintenance time.
- Available in API S5, S6, S8, C6, A8, D1, D2 and NACE materials



Standard back pullout cartridge-style construction

The standard inner case subassembly of the WXBB pump includes the rotor, diffusers, discharge head, suction head, seals and bearing assemblies. This cartridge-style design simplifies maintenance by allowing quick replacement of the entire subassembly. Major assembly, disassembly, and mechanical seal and rotor setting can be performed in the shop, rather than in the field.

Range chart



Operating parameters

- Flows from 4.5 to 35 m³/h (20 to 154 gpm)
- Heads to 1,560 m (5,116 ft)
- Pressures to 200 bar (2,900 psi)
- Temperatures to 200°C (392°F)
- Speeds to 3,600 rpm