

API610 BB2 Radially Split Petrochemical Process Pump

This API610 BB2 process pump is a horizontal, radially split, between-bearing centrifugal pump with one or two stages. Designed to API 610 standards, it offers good hydraulic performance, high efficiency, and anti-cavitation capabilities.



ADDITIONAL IMAGES



Product Overview

API610 BB2 Radially Split Process Pump

The BR series is a horizontal, radially split, between-bearing centrifugal pump designed for high-pressure and high-temperature petrochemical processes. Engineered strictly to API 610 standards, it features a robust one or two-stage design with double suction impellers to ensure hydraulic balance and high efficiency. This series is optimized for reliability in demanding environments, offering comprehensive monitoring provisions for temperature, vibration, and pressure.

Operating Parameters

Max Design Pressure

- Single stage: 5.0 MPa
- 2 to 3 stages: 11.0 MPa

Flow Range

3000 m³/h

Discharge Head Range

600 m

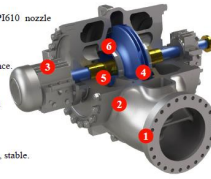
Temperature Range

-40 to 450°C

Design & Construction

Features and Benefits

- 1 Flanges**
ANSI, ASME, DIN, EN standard available. API610 nozzle loads.
- 2 Casing**
Radially split, double volute design, easy maintenance.
- 3 Bearing Box**
Heavy duty bearing box, oil ring cooling, water coil cooling, fan cooling available.
- 4 Impeller**
Optimized double suction impeller. High efficiency, stable.
- 5 Shaft**
Rigid shaft. Impeller and shaft assembly dynamic balanced to ISO1940-1.
- 6 Wearing Ring**
Renewable casing and impeller wearing rings. Rings are secured by tack welds and screw.



Detailed view of the pump's internal components including the double volute casing, heavy-duty bearing box, and optimized impeller.

Core Features

- Radially split, double volute casing for radial force balance
- Heavy-duty large diameter shaft to minimize deflection
- Renewable casing and impeller wearing rings secured by tack welds
- Back-to-back thrust bearing arrangement
- Integral cast bearing chamber with remote monitoring provisions

Standards Compliance

API 610, BB2 Type, API 682 (Sealing), ISO 1940-1 (Balance)

Application Fields

Target Industries

Crude Oil Transfer • Oil Refining • Petrochemical • Coal Chemical • Natural Gas Processing • Power Plants • Nuclear Power • Offshore Drilling

Technical Configuration

Sealing Configurations

- Cartridge Mechanical Seal
- Single End Mechanical Seal
- Double Ends Mechanical Seal
- Tandem Mechanical Seal
- Packing Gland

Bearing Cooling Methods

Fan Cooled, Water Coils, Oil Ring Cooling

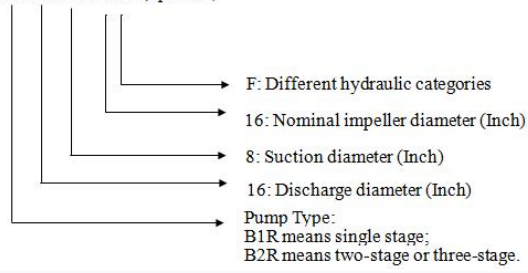
Material Specifications

API 610 Material Classifications

Part	S-5	S-6	C-6	A-8	D-1
Body/Cover	Carbon Steel	Carbon Steel	12% Chrome Steel	316 AUS	Duplex

Model Identification

BR 16 X 8 X 16 F (optional)



Explanation of the pump model coding system, including impeller and nozzle diameters.

Model Designation Example

16 in

Impeller Dia.

8 in

Suction Dia.

16 in

Discharge Dia.