

HORIZONTAL MULTISTAGE CENTRIFUGAL HIGH PRESSURE API 610 BB4 CHEMICAL PUMPS

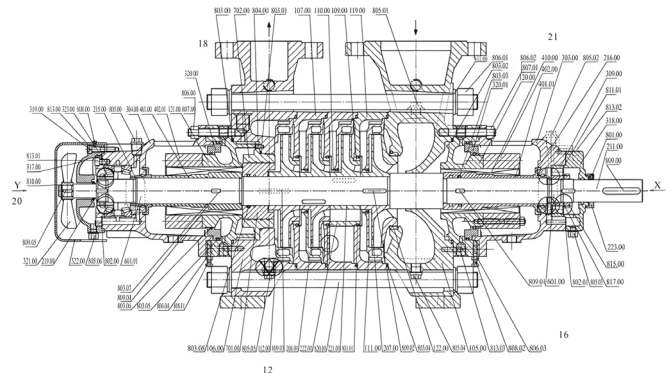
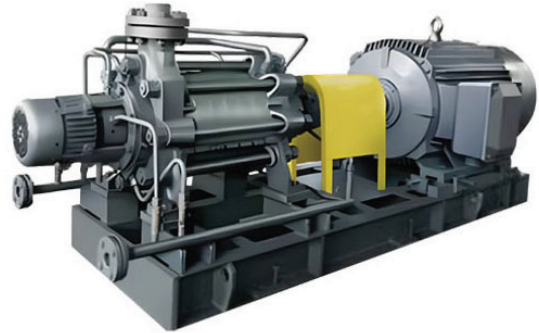
MC Series API 610 BB4 adalah pompa sentrifugal multistage horizontal dengan desain between bearing (BB4) sesuai standar API 610 untuk aplikasi industri berat seperti: kimia, petrokimia, pembangkit listrik, dan proses tekanan tinggi.

Karakteristik utama:

- Multistage (banyak impeller) → menghasilkan tekanan sangat tinggi
- Between bearing (BB4) → shaft ditopang di dua sisi (lebih stabil)
- Radially split casing (sectional) → memudahkan maintenance
- High pressure duty → cocok untuk boiler feed & chemical process
- API 610 compliant → standar industri oil & gas

Prinsip kerja:

Fluida masuk ke impeller tahap pertama, kemudian secara bertahap dinaikkan tekanannya di setiap stage hingga mencapai tekanan tinggi di discharge.



Technical Specifications

General Specifications

Pump Type : Horizontal Multistage Centrifugal
Standard : API 610 BB4
Installation : Horizontal
Casing Type : Radially Split (Ring Section)
Weight Range : 200 ~ 30.000Kg

Hydraulic Performance Range

Flow Rate (Q) : 5 ~ 600 m³/h
Head (H) : 50 ~ 1200 m
Efficiency : Up to 85%
NPSH Required : 2 ~ 6 m
Power Range : up to 2500 kW

Operating Conditions

Temperature Range : -80°C to +180°C
Pressure : up to 15 MPa
Fluid Type: Clean / Slightly Corrosive / Chemical
Viscosity : ≤ 150 cSt

Mechanical Design

Shaft : Alloy Steel
Impeller : Closed Type
Bearing : Anti-friction / Journal Bearing
Seal Type : Mechanical Seal (API Plan)
Coupling : Flexible Coupling

Material of Construction

Casing : Carbon Steel / SS316 / Duplex
Impeller : SS316 / Duplex
Shaft : 4140 / 17-4PH
Seal : Carbon / Silicon Carbide

Nozzle Configuration

Suction : Axial
Discharge : Radial (Top)

Rotation & Mounting

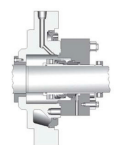
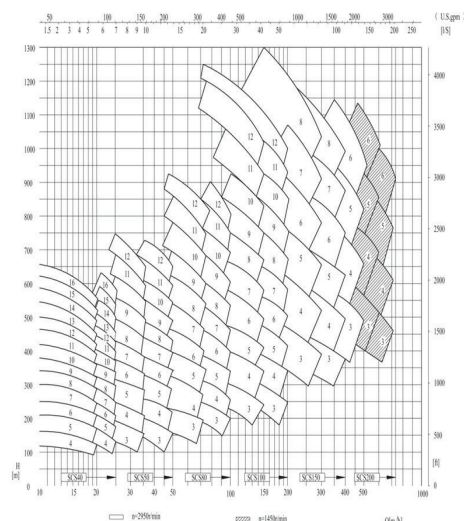
Rotation : Clockwise (from coupling)
Mounting : Baseplate

Accessories (Optional)

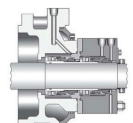
- API Seal System (Plan 11 / 53 / 54)
- Cooling system
- Instrumentation (Pressure gauge, Temp sensor)
- Vibration monitoring

105.00	Inlet section	208.00	Secondary impeller	318.00	Bearing gland	601.00	Constant level oiler	807.00	Stud
106.00	Outlet section	211.00	Shaft	319.00	Bearing pressure ring	601.01	Constant level oiler	808.00	Bolt
107.00	Middle section	215.00	Front baffle plate	320.00	Cooling chamber cover	701.00	Balance drum	809.00	Key
109.00	Middle wear ring	216.00	After baffle plate	320.01	Cooling chamber cover	702.00	Balance drum cover	810.00	The circlip
110.00	Wear ring of diffuser	219.00	V-ring	321.00	Fan	801.00	Fastening screw	811.00	Gasket
111.00	Guide vane	221.00	Bushing	322.00	Fan cover	801.01	Fastening screw	811.01	Gasket
112.00	The last guide	222.00	Set	323.00	Bearing	802.00	Scaling gasket	813.00	Screw
119.00	Head middle section	223.00	Oil retaining ring	401.00	Shaft sleeve	802.01	Scaling gasket	815.00	Round nut
120.00	Scaling housing of outlet	303.00	Bearing housing (drive end)	401.01	Shaft sleeve	803.00	O-ring	817.00	Stop washer
121.00	Scaling housing of outlet	304.00	Bearing housing (non-drive end)	402.00	Machine seal gland	804.00	Pin	820.00	Poles
122.00	Suction section ring	309.00	Bearing	402.01	Machine seal gland	805.00	Plug		
207.00	Head impeller	317.00	Bearing gland	410.00	Mechanical seal	806.00	Nut		

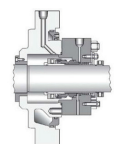
Data Grafik



Single mechanical seal



Tandem type double mec. seal



Sharp quenching packing system