



CNP Pumps



## Pumps for Desalination & reverse osmosis

### Multistage Horizontal Centrifugal Pump

#### Application

- Water Plant
- Mines
- Sea Water

#### Operating Data

Diameters of inlet and outlet: 40~300mm

Capacity:  $Q=3.75\sim1020\text{m}^3/\text{h}$

Head:  $H=19\sim1080\text{m}$



#### Material

**Casing:** Stainless Steel or Duplex S.S

**Impeller:** Duplex S.S      Stainless Steel

**Shaft:** Stainless Steel

### HP Series High Pressure Pump

HP (Horizontal High Pressure Pump) contains two types of pumps assembled to pump sets in serial or only one pump. Impellers are installed back to back so as to balance the big thrust force of the pump.



#### Major Applications :-

- Desalination with Membrane System.
- High Pressure Boiler feed.
- High pressure Cleaning.
- High Pressure RO Systems
- In Cement Industry and Steel Industry

#### Key Features :-

- Reliable, requires low maintenance
- Energy efficient, light weight and aesthetic structure



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## Pumps for Desalination & reverse osmosis

### CDMF+CMH High Pressure Pump Unit



#### OVERVIEW

Flow rate: 0.5~29m<sup>3</sup>/h

Head: 108~478m

Temp: -15°C~+120°C

Power: 2.57KW~37KW

Frequency: 50HZ

#### PERFORMANCE

Water treatment ultra-filtration system

RO systems

High pressure washing systems

Boosting systems

Water supply

#### Material

Stainless steel

### ER-energy recovery



ER-RP-60 Introduction to the operating conditions, structure, working principle and performance of energy recovery devices

#### 1、Operating Conditions

Media: Seawater

Media Temperature: 0-45° C

Ambient Temperature: Maximum +45° C

Maximum Operating Pressure: 6.9 MPa

Flow Rate: 50-80 m<sup>3</sup>/h

#### 2、Model meaning

ER—RP—60

Rated flow (m<sup>3</sup>/h)

Rotary pressure

Energy recovery device



## Pumps for Desalination & reverse osmosis

### CDM, CDMF High efficient Light Vertical Multistage Centrifugal Pump



#### TECHNICAL DATA

**Flow rate:** 0.5m<sup>3</sup>/h ~ 240m<sup>3</sup>/h

**Head:** 4m ~ 305m

**Temp:** -15°C ~ +120°C

**Power:** 0.37kW ~ 110kW

**Material:** Stainless steel

#### APPLICATIONS

Water treatment systems

HVAC systems

Industrial liquid transportation

Industrial boosting

Water supply systems

### CH Horizontal sea water lift pump

#### TECHNICAL DATA

**Flow rate :** 30–720m<sup>3</sup>/h

**Head :** 20.5–44m

**Temp :** ambient temperature

**Voltage :** 380V

**Material :** Duplex stainless steel/Super austenitic stainless steel

#### APPLICATIONS

R/O seawater desalination





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## Pumps for Desalination & reverse osmosis

### ZS Horizontal Single-stage Centrifugal Pump



#### TECHNICAL DATA

Flow rate:  $3\text{m}^3/\text{h} \sim 200\text{m}^3/\text{h}$

Head:  $8.8\text{m} \sim 73.7\text{m}$

Temp:  $-10^\circ\text{C} \sim +100^\circ\text{C}$

Voltage:  $220\text{V}/380\text{V}$

#### APPLICATIONS

Water treatment systems

Other pressure boosting systems

#### Material:

Stainless steel

### NISO,NIS,NISF End Suction Centrifugal Pump



#### TECHNICAL DATA

Flow rate:  $3 \sim 1200\text{m}^3/\text{h}$

Head:  $4 \sim 160\text{m}$

Temp:  $-15^\circ\text{C} \sim +110^\circ\text{C}$

Voltage:  $220\text{V}/380\text{V}$

Material: Stainless steel/Cast iron

Max. Working pressure: 16 bar

Max. Inlet pressure: 6 bar

Max. Power: 200kW

Inlet and outlet diameter: Inlet diameter: DN50~DN300

Outlet diameter: DN32~DN250

#### APPLICATIONS

Water treatment systems

HVAC systems





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## Pumps for Desalination & reverse osmosis

### CM Horizontal multistage centrifugal pump



#### TECHNICAL DATA

Flow:  $0.5\text{m}^3/\text{h} \sim 7\text{m}^3/\text{h}$

Head:  $7.5\text{m} \sim 56\text{m}$

Liquid temperature range:  $-15^\circ\text{C} \sim +105^\circ\text{C}$

Max. ambient temperature:  $40^\circ\text{C}$

Max. working pressure: 10bar

#### APPLICATIONS

HVAC

Cooling system

Industrial cleaning

Water treatment

Aquaculture

Fertilization and metering system

### SJ/PQ Multistage Deep-well Submersible Pump



#### TECHNICAL DATA

Flow rate:  $0.2 \sim 240\text{m}^3/\text{h}$

Head:  $4.5 \sim 380\text{m}$

Temp:  $+25^\circ\text{C}$

Voltage: 220V/380V

Material: Stainless steel

Note: PQ series are expert submersible fountain pump equipped with NEMA motor.

#### APPLICATIONS

Groundwater pumping

Water supply systems

Ground source heat pump systems

Groundwater lowering

Irrigation in horticulture & agriculture

Other industrial boosting systems



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## Pumps for Desalination & reverse osmosis

### CK Electromagnetic Diaphragm Metering Pump



#### TECHNICAL DATA

Max. flow: 17L/H

Max. discharge pressure: 10bar

Adjustment range: 0-100%

Steady-state accuracy:  $\pm 1\%$

Adjustment method: Manual /Automatic

Power supply: 220VAC/50HZ Single phase

Max.suction lift height : Up to 1.2m water column

#### APPLICATIONS

Civil and defense, Agriculture, Light industry, Electric power,  
Metallurgy, Shipbuilding,  
Oil, Chemical industry, Mining

### GW, GS Mechanical Diaphragm Metering Pump



#### TECHNICAL DATA

Max. flow: 53L / H

Max. discharge pressure: 10bar

Adjustment ratio: 10: 1

Steady state accuracy :  $\pm 2\%$

Suction lifting height : up to 1.5m water column

Max. ambient temperature: +40 °C

Max. Inlet pressure: 1bar

#### APPLICATIONS

Reverse osmosis (ultra-filtration)  
Industrial water  
wastewater  
pool water  
seawater desalination  
other water treatment processes

#### MATERIAL

PVC

PVDF