

➤ Radially-split, multistage, ring section pumps

MBN medium pressure stage casing pump

Features and benefits

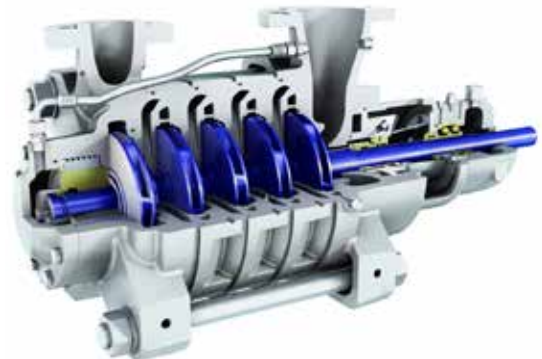
- Simple construction to minimize dimensions and reduce investment and maintenance costs
- High quality investment cast impellers and diffusers for better efficiency
- Fast and easy impeller mounting
- Bearing unit can be serviced without disassembling the pumps
- Wide range of materials including duplex stainless-steel grades

Key characteristics

Capacities	up to 700 m ³ /h / 3'080 USgpm
Heads	up to 900 m / 2'950 ft.
Pressures	up to 100 bar / 1'450 psi
Temperatures	up to 180°C / 355°F

Applications

- Feedwater pump
- Desalination
- Auxiliary services
- District heating



MBN-RO multistage stage casing pump

Features and benefits

- Top of its class efficiency to ensure lowest specific power consumption per produced cubic meter of water in desalination applications
- Different hydraulics can be fitted in the same pump frame allowing flexibility, modularity, and future retrofitting
- All parts typically subject to maintenance (both drive end (DE) and non-drive end (NDE) bearings, balancing disk, mechanical seal) are accessible and can be replaced on site, without removal of suction and discharge piping

Key characteristics

Capacities	up to 1'100 m ³ /h / 4'800 USgpm
Heads	up to 900 m / 2'950 ft.
Pressures	up to 100 bar / 1'450 psi
Temperatures	up to 90°C / 194°F

Applications

- High pressure membrane feed in seawater reverse osmosis (SWRO)
- Clean water pumping stations
- Any other high pressure application with clean liquids and low temperature



MC high pressure stage casing pump

Features and benefits

- Modular hydraulics for high efficiency in a wide range of operating conditions
- Large branch sizes for optimized inlet flow, low noise level and higher allowable forces and moments
- Unaffected by rapid temperature variations
- Easy access for cleaning to the seal cooling chambers
- Stiff shaft design for critical speeds above the maximum operating speed
- Low pressure version with dedicated large sizes for condensate extraction service

Key characteristics

Capacities	up to 1'700 m ³ /h / 8'500 USgpm
Heads	up to 1'750 m / 5'500 ft.
Pressures	up to 180 bar / 2'610 psi
Temperatures	up to 180°C / 355°F

Applications

- Feedwater pump
- Fuel injection and NOx abatement
- Condensate extraction



MD high pressure stage casing pump

Features and benefits

- Modular hydraulics for high efficiency in a wide range of operating conditions
- Centerline mounted with large branch sizes for optimized inlet flow, low noise level and higher allowable forces and moments
- Unaffected by rapid temperature variations
- Stiff shaft design for critical speeds above the maximum operating speed
- Multiple screws mechanical tensioners are used on large sizes to allow simpler tightening and loosening

Key characteristics

Capacities	up to 1'200 m ³ /h / 5'300 USgpm
Heads	up to 2'800 m / 9'200 ft.
Pressures	up to 350 bar / 5'080 psi
Temperatures	up to 210°C / 410°F (higher temperatures upon request)

Applications

- Feedwater pump



ME high pressure stage casing pump

Features and benefits

- Optimized labyrinth design for high efficiency and good rotordynamic behavior
- Shaft forged with low lift-to-drag (L/D) ratio for stable operation without critical speed problems and reduced vibration levels
- Radial grooves providing increased radial stiffness, reduced effect on rotor tilting and good rotordynamic behavior
- Swirl break at balancing piston to maintain rotor stability even when internal clearances are worn
- Optimized shaft sealing design with jacket cooling and mechanical seal: pre-warming not required

Key characteristics

Capacities	up to 1'750 m ³ /h / 7'700 USgpm
Heads	up to 4'000 m / 13'120 ft.
Pressures	up to 430 bar / 6'240 psi
Temperatures	up to 220°C / 430°F

Applications

- Boiler feedwater



VMS vertical multistage pump

Features and benefits

- Unique hydraulic design gives an efficiency of up to 80%
- Low NPSHr for vibration-free operation and extended life span
- Durable solution with high quality materials
- Suitable for drinking water with ACS, WRAS and NSF certification

Key characteristics

Capacities	up to 162 m ³ /h / 850 USgpm
Heads	up to 400 m / 1'350 ft.
Pressures	up to 40 bar / 580 psi
Temperatures	from -20°C to 140°C / -4°F to 284°F

Applications

- Municipal water supply and distribution
- Domestic water supply
- Cooling water transport
- Hot water applications
- Fire fighting

