

## GRUNDFOS BMEX BOOSTER

# BMEX Booster Seawater

## ► BMEX Booster system

The new Grundfos BMEX pump system is a unique design dedicated for seawater and brackish water desalination.

The innovative system is capable of delivering 660,430 gallons per day with a maximum energy consumption of only .0114 kWh/gallon.

The unique BMEX system features components made of super stainless steel, polymer and ceramic, which make it extremely resistant to its operating environment.

The Grundfos BMEX system offers state-of-the-art technologies that make the system extremely efficient and highly dependable regardless of the application. These systems are built to last — an excellent choice when you need a reliable and compact solution.



## Features and benefits

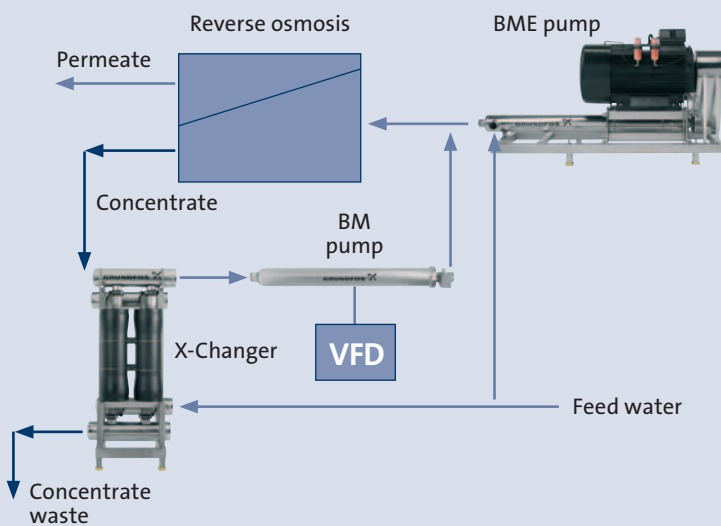
- **Corrosion resistance**  
All parts that come in contact with the pumped liquid are made from stainless steel, polymer and ceramic, ensuring resistance to corrosive and low-viscosity fluids, e.g. seawater and brackish water.
- **High quality products**  
The BMEX system offers years of trouble free operation at a low cost of operation with limited maintenance effort.
- **Compact design**  
The BMEX system has a very small foot print giving system builders a free hand to design more compact systems.

## BMEX system

- The BMEX system consists of a BME pump creating the flow through the membranes as well as the design pressure.

The X-Changer converts the energy from the concentrate  $Q \times H$  of the membranes into the feed stream to the membrane.

The pressure loss in the X-Changer is equalized by the BM pump and VFD frequency converter holding the desired pressure for the RO process.



L-BMEX-SL-1 6/06 (US)  
Subject to alterations

### BMEX 5: Permeate 132,000 gallons/day

Feed water 264 gpm (60 m<sup>3</sup>/h)  
Feed pressure 43.5 to 72.5 psi (3-5 Bar)  
Recovery from membrane: 35%

**BME**  
Head 1015 psi (70 bar)  
Capacity 92.5 gpm (21m<sup>3</sup>/h)

**BM & VFD**  
Head 58 to 72.5 psi (4-5 bar)  
Capacity 172 gpm (39m<sup>3</sup>/h)

**2 units × 140**  
Capacity 172 gpm (39m<sup>3</sup>/h)

### BMEX 10: Permeate 164,000 gallons/day

Feed water 52.3 gpm (119 m<sup>3</sup>/h)  
Feed pressure 43.5 to 72.5 psi (3-5 Bar)  
Recovery from membrane: 35%

**BME**  
Head 1015 psi (70 bar )  
Capacity 185 psi (42m<sup>3</sup>/h)

**BM & VFD**  
Head 58 to 72.5 psi (4-5 bar)  
Capacity 340 gpm (77m<sup>3</sup>/h)

**2 units × 180**  
Capacity 340 gpm (77m<sup>3</sup>/h)

### BMEX 15: Permeate 396,000 gallons/day

Feed water 788 gpm (179 m<sup>3</sup>/h)  
Feed pressure 43.5 to 72.5 psi (3-5 Bar)  
Recovery from membrane: 35%

**BME**  
Head 1015 psi (70 bar)  
Capacity 277 psi (63m<sup>3</sup>/h)

**BM & VFD**  
Head 58 to 72.5 psi (4-5 bar)  
Capacity 511 psi (116m<sup>3</sup>/h)

**2 units × 180**  
Capacity 511 psi (116m<sup>3</sup>/h)

### BMEX 20: Permeate 528,300 gallons/day

Feed water 1048 gpm (238 m<sup>3</sup>/h)  
Feed pressure 43.5 to 72.5 psi (3-5 Bar)  
Recovery from membrane: 35%

**BME**  
Head 1015 psi (70 bar)  
Capacity 365 gpm (83m<sup>3</sup>/h)

**BM & VFD**  
Head 58 to 72.5 psi (4-5 bar)  
Capacity 682 gpm (155m<sup>3</sup>/h)

**4 units × 220**  
Capacity 682 gpm (155m<sup>3</sup>/h)

*Other systems on request, please contact Grundfos.*