



High-pressure pumps for mobile and containerized seawater RO applications

Dedicated seawater RO pump expertise from a world leader

Danfoss RO Solutions is a division of the Danfoss Group. We and our customers benefit from our close connection to a world leader in development and production of a wide range of mechanical and electronic products and controls. We draw on the extensive Danfoss R&D resources and quality systems, as well as the Group's worldwide manufacturing, distribution and service networks.

We work hard for our growing group of OEM and consulting engineer customers, beginning with extensive pre-sale consultation to determine the right solution for a wide range of seawater RO challenges – and continuing through delivery and uncompromising after-sales support.

The Danfoss Axial Piston Principle (APP) pump is specifically developed for small and medium-sized seawater RO applications, setting new standards for high-pressure pumps with output from 0.6 to 30 m³/h (2.6 to 135 gpm).

Our dedicated high-pressure pumps build on decades of development experience to provide exceptional efficiency and reliability in seawater RO applications. Small in size and unsurpassed in engineering quality, the Danfoss range of APP pumps are at the heart of more than

15,000 seawater RO systems throughout the world.

Climate change, natural disasters and humanitarian relief projects often mean that clean drinking water can suddenly become a precious commodity that saves lives. Danfoss pumps are particularly well-suited for small and large-scale mobile applications due to the compact design which is the smallest in the RO market, as well as the extremely high efficiency.



Danfoss APP pump advantages

- Extremely low energy consumption, with up to 97% efficiency
- Whisper quiet: Danfoss high-pressure pumps are among the most silent in the industry
- Ultra-low maintenance reduces service costs



High-pressure pumps from Danfoss RO Solutions: the right choice wherever fresh water matters

Danfoss RO Solutions' pumps keep fresh water flowing around the world – wherever they are needed.

Our compact footprint and extreme reliability put Danfoss high-pressure pumps at the heart of mobile and containerized seawater RO applications that can be moved into critical areas at short notice. A partial list of references includes:

- US Army
- US Navy
- US Marines
- Danish Army
- Canadian Army
- British Navy
- Turkish Navy
- Malaysian Navy
- Russian Navy

Danfoss NCAGE number and Nato Stock numbers (NSN) – Ncage number is R5418

APP = High Pressure Water Axial Piston Pump for seawater		
APP 0.6	180B3001	NSN: 2930-22-613-1921
APP 1.0	180B3002	NSN: 4320-22-613-2115
APP 1.5	180B3001	NSN: 4320-22-615-1993
APP 1.8	180B3003	NSN: 4320-22-615-1994
APP 2.2	180B3004	NSN: 4320-22-613-4294
APP 2.5	180B3000	NSN: 4320-22-615-1995
APP 5.1	180B3005	NSN: 4320-22-615-1996
APP 6.5	180B3006	NSN: 4320-22-613-4293
APP 7.2	180B3007	NSN: 4320-22-615-1997
APP 8.2	180B3008	NSN: 4320-22-613-4288
APP10.2	180B3010	NSN: 4320-22-615-1998
APP21	180B3051	NSN: 4320-22-615-1999
APP24	180B3054	NSN: 4320-22-615-2000

Extensive range of high-pressure pumps for seawater RO applications

- Compact design & light in weight
- Flexible: "Out of the box" design is possible
- Worldwide service and technical support
- Positive replacement pump, constant flow regardless of pressure

Reliable performance

- Wide pressure range – 20-80 bar (290-1160 psi)
- Rugged stainless steel construction: all Duplex or Super Duplex
- Self-lubricating: no oil lubrication necessary, ever

Cost efficient with low total costs of ownership

- Market-leading efficiency: up to 97 %
- Ultra-low energy consumption
- Minimal pressure pulsation down to 1.5%, no dampers required
- 8,000 hours maintenance-free operation

Danfoss APP pumps are available in a wide range of sizes, from 0.6 to 30 m³/h (2.6 to 135 gpm), and are thus ideal for all small and medium-sized seawater RO applications.

All pump parts are made of non-corrosive materials, e.g. Duplex and Super-Duplex stainless steel and carbon-reinforced PEEK.

For more information on our high-pressure pumps and other products (including valves, frequency converters, soft starters, high and low-pressure hoses, connections, filters, coupling kits, electrical motors etc.), please visit www.ro-solutions.com or contact us in Denmark or at one of our regional sales offices.

