



WaterQuest Solutions

JANUS POWER CENTRE AXIAL PISTON PUMP (APP) WITH INTEGRATED ENERGY RECOVERY

SIMPLICITY

Simply add filtered sea water 10µm abs. and connect to a membrane. Your system is complete offering lowest energy input possible.



CONNECT THE POWER CENTER WITH 4 FLEXIBLE HOSES

Water Inlet from filtered source

Pump output direct to the membrane Victaulic connection

Membrane brine Victaulic connection to the ERD

ERD to drain

+ 2 case lubrication flow flexible hose to drain



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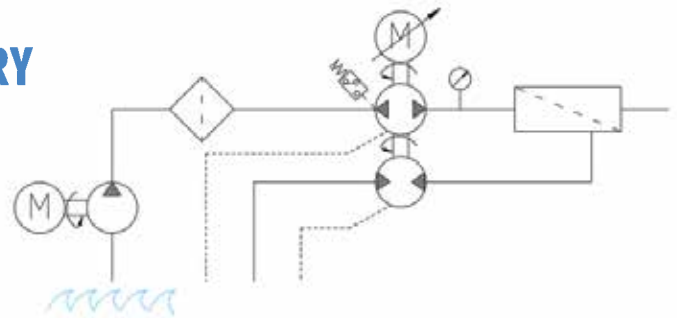
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SIMPLIFY BY DESIGN

WITH PUMP INTEGRATED ENERGY RECOVERY

Eliminates the need for:

- Pressure exchanger
- High pressure booster pump and electric motor
- Additional inverter drive
- High pressure check valves
- High pressure bypass valve and flow control valve
- High pressure fittings and joints
- Expensive instrumentation for system set up
- Expensive frames and mountings
- Expensive pipe work and assembly costs
- Pulsation damper (9 piston design)
- High pressure pipe work. Only 4 flexible hoses to connect no additional fittings
- Long system build time, pipe fitting/welding. Operational in hours not days



HIGHEST EFFICIENCY FROM THE SIMPLEST DESIGN

Make all of the cost savings above then operate the system at a “Best in Class” energy consumption; as low as 2kW /m³ of permeate produced, with no hidden operating costs for additional equipment and drives.



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COMPACT DESIGN

Smallest footprint of all RO solutions on the market. Minimise total system footprint and save on transport, site and installation space for your system.

ON SITE SERVICE

On site service can be conducted in a matter of hours delivering an “As new” performance and life expectancy.

Service parts are readily available.

No special tooling required to conduct a full service.

ALL DUPLEX

All wetted components are produced from precision machined 2205 wrought bar material. No castings



BUILT IN SAFETY

The pumps are fitted with a pressure switch to prevent operation when inadequate supply pressure results. ERD has a back pressure valve fitted in the return port:

No additional fittings

No manual setting for the brine return pressure

SELECTION SOFTWARE

Use our manufacturers software to help select the most efficient and cost effective assembly for your system requirements at www.waterhydraulics.co.uk

Also see our Axial piston pumps brochure for 9 sizes of desalination pumps up to 1000m³/day



FM 87247



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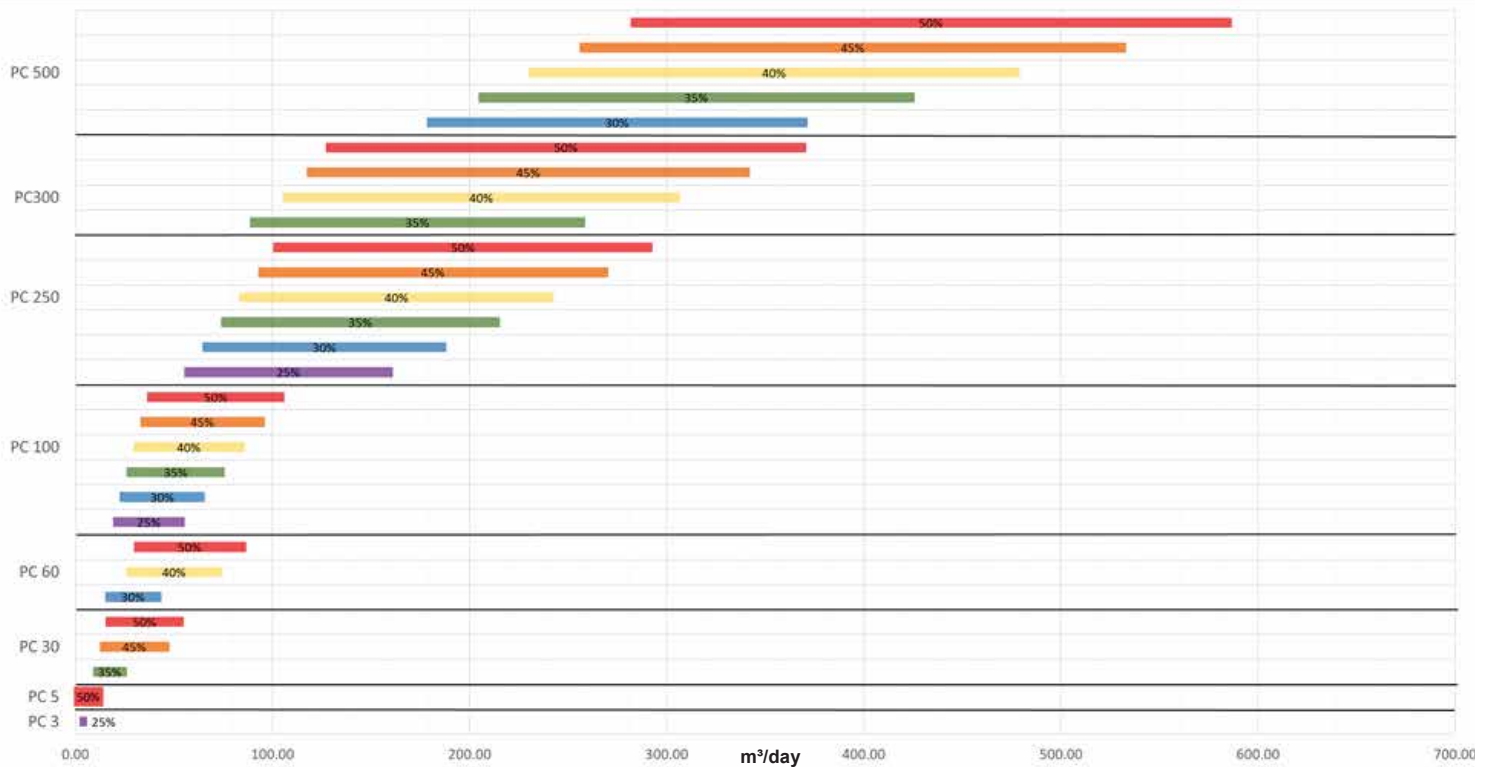
Eight frame sizes of Janus power center are now available. From 1000m³/day to 3m³/day from a single motor/pump assembly.

Recovery setting is not required on installation, % is set at the design stage and exact performance delivered to the system designers specification.

Simply increase the speed to set system pressure, producing the contracted delivery at the guaranteed performance. Flow is proportional to the shaft speed, removing the need for flow instrumentation



PRODUCT PER DAY % RECOVERY



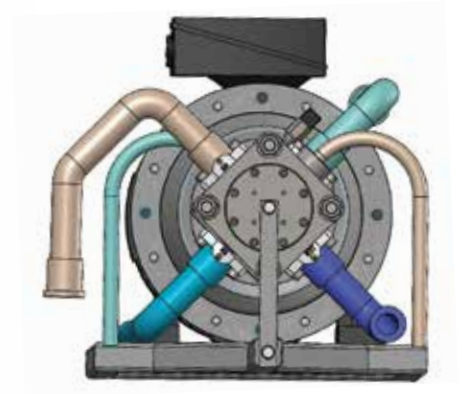
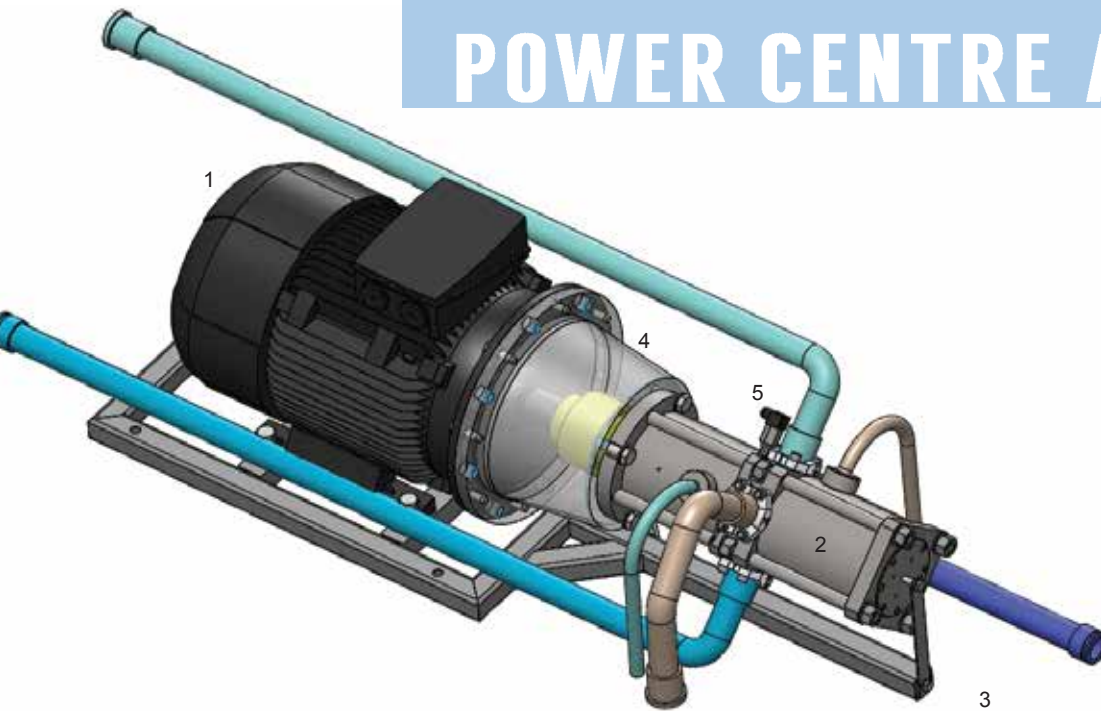


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POWER CENTRE ASSEMBLY



-  Low Pressure Filtered Sea Water
-  High Pressure Sea Water
-  High Pressure Brine solution
-  Low Pressure Brine (to drain)

Item Number	Description	Quantity
1	Electric Motor Inverter driven	1
2	Power Centre	1
3	Mounting Frame	1
4	Bellhousing & Flexible Gear Coupling	1
5	Inlet Protection Pressure Switch	1