

APP high-pressure pumps with ceramics: Robust energy efficiency

for demanding membrane technologies







Longer service intervals



Lower OPEX, **more** uptime





Field-proven reliability



Unmatched energy-efficient for membranebased industrial wastewater treatment

Studies show that zero liquid discharge's overall energy consumption can be reduced by up to 75% by adding reverse osmosis pre-treatment to traditional thermal processes.

The new Danfoss APP pump with ceramics is particularly well-suited for such treatments. Its unparalleled efficiency rates of up to 92% reduce OPEX and emissions significantly compared to other high-pressure pump technologies.

Moreover, this efficiency remains the same regardless of varying pressure rates up to 120 bar/1,740 psi.

With wetted parts reinforced with ceramics and other advanced materials, the pump's reduced particle sensitivity makes it even more robust while building on the APP's long field-proven history of simple maintenance and long service intervals.

	APP D 30 / 1200 with ceramics	APP D 38 / 1500 with ceramics
Pressure range: Max outlet pressure	83 barg / 1,200 psig	83 barg / 1,200 psig
Inlet pressure, cont.	2 – 5 barg / 29 – 72.5 psig	3 – 5 barg / 43.5 – 72.5 psig
Flow range	18.1 – 30 m²/h 79.7 – 132.1 gpm	18.1 – 38 m²/h 79.7 – 173 gmp
Speed	700 – 1,200 rpm	700 – 1,500 rpm

Process water Waste water Waste water Process water Recovery of chemicals Membrane processes/technologies Concentrate Ultrafitration/ nanofiltration OR Reverse osmosis Reverse osmosis Permeate Permeate Permeate Permeate Permeate

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