ProMinent®

Reverse Osmosis System Dulcosmose® BW

Brackish water is transformed into drinking water



Permeate output 2,000 - 50,000 l/h

A reverse osmosis system of type of BW has PVC pipework on the low-pressure side. The system has high-grade stainless steel (type DIN 1.4571) on the high-pressure side. Stainless steel pipes are welded under shielding gas and a forming gas atmosphere and subsequently passivated in a pickling bath. The integrated semi-automatic cleaning system with permeate and/or raw water flushing ensures

exceptionally long membrane service lives, as scaling and fouling effects are minimised. The system is very adaptable to specific customer requirements. Pipework material, other types of membrane for enhanced salt retention, integration of measuring and control technology and metering technology to visualisation of the entire process with peripheral components via a PLC.

Your benefits

- Efficient operation with low pressure membranes with maximum output and salt retention rates of up to over 99 %
- Reduced maintenance and service costs as well as long membrane service lives, thanks to integrated cleaning concepts and flushing options
- Service-friendly construction of systems on a corrosionresistant powder-coated steel or stainless steel frame
- Simple and safe to operate: Central control of the entire system by microprocessor controller or industrial PLC with touch panel and process visualisation.
- Application-optimised design taking into account economic aspects, such as the durability of the membranes, energy efficiency and process automation
- One-stop shop: no interface problems, smooth running with short times between definition of the task to joint commissioning and on-site system supervision with our global subsidiaries

Field of application

Decentralised, public or private supply of potable water.

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Technical Data

The product range Dulcosmose® BW was designed for the following values in feed water:

Salt content max. $5,000 \text{ mg/l}^*$ pH range $3.0 \dots 10.0$

Silt density index max.3Free chlorine max.0.1 mg/lTotal Fe, Mn max.0.2 mg/l

Total hardness max. water must be chemically stabilised

 Bacteria count max.
 100 KBE/ml

 Turbidity max.
 0.5 NTU

 COD max.
 5 mg/l**

 Deviating salt contents have a corresponding influence on the performance data.

Systems with 8" membranes, system salt retention 95-99%

Plant	Permeate capacity at 25 °C water temperature	Number of 4" and 8" membranes	Connected load	Dimensions H x W x D
	l/h	No.	kW	mm
PRO 0200BW	2,000	9	4.0	1,800 x 3,500 x 750
PRO 0300BW	3,000	3	5.5	1,800 x 4,000 x 1,000
PRO 0400BW	4,000	4	5.5	1,800 x 3,000 x 1,000
PRO 0500BW	5,000	5	5.5	1,800 x 4,000 x 1,000
PRO 0600BW	6,000	6	7.5	1,800 x 4,000 x 1,000
PRO 0700BW	7,000	7	7.5	1,800 x 4,000 x 1,000
PRO 0800BW	8,000	8	15.0	1,800 x 4,000 x 1,000
PRO 0900BW	9,000	9	15.0	1,800 x 4,000 x 1,000
PRO 1000BW	10,000	10	15.0	1,800 x 4,000 x 1,000
PRO 1100BW	11,000	11	15.0	1,800 x 4,000 x 1,000
PRO 1200BW	12,000	12	15.0	1,800 x 5,000 x 1,000
PRO 1300BW	13,000	13	15.0	1,800 x 6,000 x 1,000
PRO 1400BW	14,000	14	15.0	1,800 x 5,000 x 1,000
PRO 1500BW	15,000	15	18.5	1,800 x 5,000 x 1,000
PRO 2000BW	20,000	21	18.5	1,800 x 6,000 x 1,200
PRO 2500BW	25,000	26	30.0	1,800 x 6,000 x 1,200*
PRO 3000BW	30,000	29	30.0	1,800 x 6,000 x 1,200*
PRO 4000BW	40,000	42	45.0	1,800 x 7,000 x 1,200*
PRO 5000BW	50,000	51	60.0	1,800 x 7,000 x 1,200*

Separate cleaning tank

On request, these plants can also be supplied with different membrane types for other salt rejection, and with measuring and control equipment (conductivity, ORP, pH measurement) and metering equipment (in pre-treatment and post-treatment).

^{**} As O₂