membranium®
RM Nanotech

nanoRO

Reverse osmosis membrane elements for sea water desalination
KM Series

Product Description

Membrane material	Composite polyamide
Membrane type	ORM45K
Design	Spiral wound

Specification

Model	Flow*		Rejection	Area		Spacer	
	l/hr	GPD	normal**/ minimal***	m2	ft2	mm	mil
KM 4040-C	330	2100	99,75/99,4	8,0	86	0,71	28

* *Test conditions: test solution of NaCl 32 g/l, P=5,5 MPa, T=25 °C, pH=7,5. Recovery -8%*

* *Flow of each single element in a batch may vary for +/-20%*

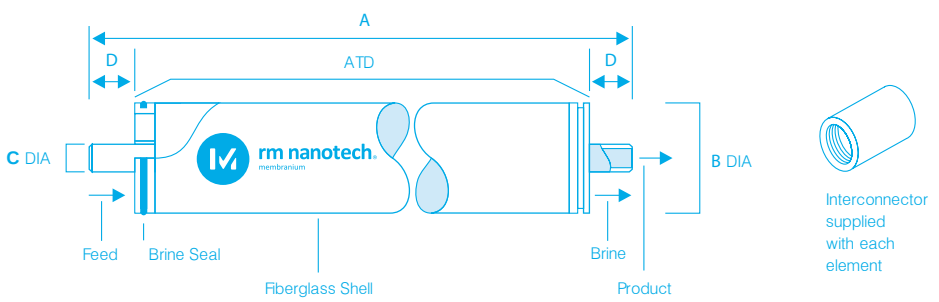
** *Nominal rejection is reached after 48 hours of continuous operation on test solution*

*** *Minimal rejection of a new element after 20 minutes' test on test solution.*

Operating conditions

Recommended operation pressure, MPa			4,5-6,5
Maximum operation pressure, MPa			7
Maximum pressure drop, MPa			0,1
Operation temperature, °C [1)]			4-45
pH at continuous operation at T<35°C			2-11
pH at continuous operation at T<45°C			3-10.5
Chemical cleaning, temperature, °C	T<45	T<35	T<25
CIP pH (short time operation)	2-11	1-11,5	1-12
Free chlorine content, mg/l max			0,1
Maximum feed flow, m3/hr			3,6
Concentrate/permeate ratio on each element, min			10:1
SDI (15 minutes test), max			5
Turbidity, NTU max			1

1) *During continuous work with pH over 10 the temperature must not exceed 35°C*



Model	A mm	B mm	B' (ATD) mm	C mm	D mm	Weight kg
KM 4040-C	1016	101,6	100,3	19,1	26,7	4,5