



Extra low pressure reverse osmosis  
membrane elements  
for brackish water desalination  
KCH Series

## Product Description

Membrane material: Composite polyamide  
Membrane type: ORM33K  
Design: Spiral wound  
Features: Fiberglass shell (-C) or shrink film-wrapped (-F)

## Specification

Model	Flow*		Rejection	Area		Spacer	
	l/hr	GPD		m2	ft2	mm	mil
KCH 4040-C	410	2600	99,1/98,3 normal** / minimal***	8.6	93	0,66	26
KCH 4040-C-DRY	410	2600	99,1/98,0	8.6	93	0,66	26
KCH 4040-F	410	2600	99,1/98,3	8.6	93	0,66	26
KCH 4040-F-DRY	410	2600	99,1/98,0	8.6	93	0,66	26

## Operating conditions

Recommended operation pressure, MPa: 0,6-0,9  
Maximum operation pressure, MPa: 4,1/2,1  
Glass fiber/tape overwrap: 0,1  
Maximum pressure drop, MPa: 4-45  
Operation temperature, °C <sup>1)</sup>: 2-11  
pH at continuous operation at T<35°C: 3-10,5  
pH at continuous operation at T<45°C: T<45 T<35 T<25  
Chemical cleaning, temperature, °C: 2-11 1-11.5 1-12  
CIP pH (short time operation): 0,1  
Free chlorine content, mg/l max: 3,6  
Maximum feed flow, m3/hr: 5:1  
Concentrate/permeate ratio on each element, min: 5  
SDI (15 minutes test), max: 1  
Turbidity, NTU max: 1

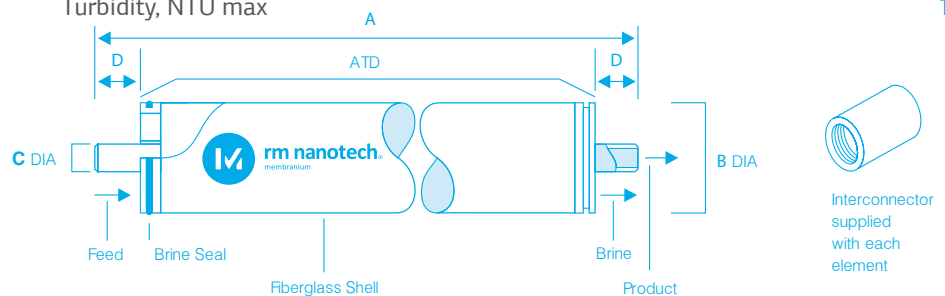
\*  
Test conditions:  
test solution of NaCl  
500 mg/l, P=0.7 MPa,  
T=25°C, pH=7,5.  
Recovery -15%t

\*  
Flow of each single  
element in a batch may  
vary for +/-15%

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

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

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
KCH 4040-C	1016	101,6	100,3	19,1	26,7	4,5
KCH 4040-C-DRY	1016	101,6	100,3	19,1	26,7	4
KCH 4040-F	1016	101,6	100,3	19,1	26,7	3,6
KCH 4040-F-DRY	1016	101,6	100,3	19,1	26,7	3,1