

# UNISOL NFDK Nanofiltration Elements

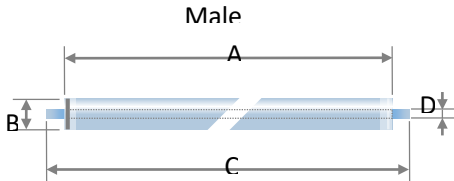
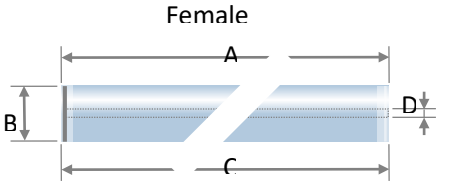
## Spiral Wound Element FG NFDK Series

**Description** FG NFDK series membrane elements has high rejection of divalent while allowing the majority of monovalent ions to pass through the membrane. With MWCO in the range of 200-300 Daltons, it is a piperazine-based membrane used to demineralize, Seawater Pretreatment, Heavy Metals Removal and concentrate organic solutes.

<b>Specification</b>	Membrane	NFDK			
	Material	Polypiperazine			
	Out Wrap	FRP			
	Permeate Flow <sup>(1) (2) (3)</sup>	Spacer	34mil (A)	31mil (B)	46mil (C)
	GPD (m <sup>3</sup> /d)		2540 / 4040 / 8040	/ / 7510 (28.5)	560 (2.1) / 1,900 (7.2) / 8,100 (30.7)
	MgSO <sub>4</sub> Rejection <sup>(1) (3) (4)</sup>	≥ 98%			

<b>Limits</b>	Max Operating Pressure	40 bar (580psi)		
	Max Pressure Drop	1 bar (14.5 psi) for individual element		
	Max Operating Temperature	50 °C (122 °F)		
	Cleaning pH Range	2 – 11		
	Chlorine Concentration	< 0,1 ppm		

<b>Area</b> ft <sup>2</sup> (m <sup>2</sup> )	Spacer thickness	FG NFDK 2540	FG NFDK 4040	FG NFDK 8040
	34 mil parallel (A)	/	/	323 (30)
	31 mil diamond (B)	24 (2.2)	85 (7.9)	351 (32.6)
	46 mil diamond (C)	19 (1.8)	68 (6.3)	269 (25)

<b>Dimensions</b>			Male			Female
						
	Size		2540 Male	4040-M Male	4040-F Female	8040 Female
	A	mm (inch)	965 (38)	965 (38)	1016 (40)	1016 (40)
	∅B	mm (inch)	62 (2.4)	99.4 (3.9)	99.4 (3.9)	200.5 (7.9)
	C	mm (inch)	1016 (40)	1016 (40)	1016 (40)	1016 (40)
	∅D	mm (inch)	19 (0.75)	19 (0.75)	16 (0.63)	28.8 (1.13)

<sup>(1)</sup> Test condition: 2000ppm MgSO<sub>4</sub> solution, 110psi (7.6bar), 77 °F (25 °C), pH 6.5-7.0;

<sup>(2)</sup> Permeate flow for individual elements may vary ± 20%

<sup>(3)</sup> For the purpose of improvement, specifications may be updated periodically

<sup>(4)</sup> Stabilized salt rejection is generally achieved within 24 – 48 hours of continuous use, depending upon feed water characteristics and operating conditions.

UNISOL reserves the right to change specifications without prior notification, please refer to the latest version on UNISOL website.