

H SERIES | HL Elements

Nanofiltration

Water Softening

The H-Series proprietary thin-film nanofiltration membrane elements are characterized by an approximate molecular weight cut-off of 150-300 daltons for uncharged organic molecules. Divalent and multivalent ion rejection is dependent upon feed concentration and composition.

HL Nanofiltration Elements are used for water softening, color removal, and reduction of THM potential. They feature a fiberglass outer wrap and standard feed spacers.

ELEMENT SPECIFICATIONS

MODEL	FLOW GPD (m ³ /d)	REJECTION AVE.	ACTIVE AREA FT ² (m ²)
HL2540FF	780 (3.0)	98.0%	27 (2.5)
HL2540TF	780 (3.0)	98.0%	27 (2.5)
HL4040FF	2,400 (9.1)	98.0%	89 (8.2)
HL4040TF	2,400 (9.1)	98.0%	89 (8.2)
HL8040F	10,100 (38.2)	98.0%	350 (32.5)
HL8040F-400	11,500 (43.5)	98.0%	400 (37.2)
HL8040N	10,100 (38.2)	97.5%	350 (32.5)

Specification is based on a 2,000 mg/L MgSO₄ solution at 100 psi (690 kPa) operating pressure, 77°F (25°C), pH 7.5 and 15% recovery. Individual flux may vary +25%/-15%. Average salt rejection after a minimum of 24 hours of continuous operation.

OPERATING AND DESIGN PARAMETERS

THIN-FILM MEMBRANE (TFM™)

TYPICAL OPERATING PRESSURE	TYPICAL OPERATING PROCESS FLUX	MAXIMUM PRESSURE	MAXIMUM TEMPERATURE	RECOMMENDED pH	CHLORINE TOLERANCE
70-300 psig (483-2,069 kPa)	12-20 GFD (20-35 LMH)	600 psig (4,137 kPa) TAPE 450 psig (3,103 kPa)	122°F (50°C)	Operating pH Range: 3.0-9.0	<0.1 ppm

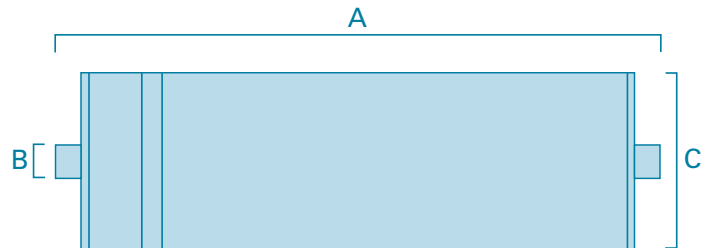
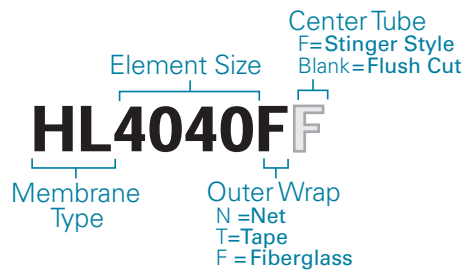
Feed NTU: <1, Feed SDI: <5



MAXIMUM PRESSURE DROP	ELEMENTS PER PRESSURE VESSEL					
	1	2	3	4	5	6
ΔP - psig (kPa)	10 (69)	20 (138)	30 (207)	38 (262)	45 (310)	50 (345)

ELEMENT DIMENSIONS AND WEIGHT

MODEL NUMBER LEGEND



MODEL	DIMENSIONS INCHES(MM)			DRY BOXED
	A	B	C*	WEIGHT LBS (KG)
HL2540FF	40.00 (1016)	0.750 (19)	2.40 (61)	5 (2.3)
HL2540TF	40.00 (1016)	0.750 (19)	2.40 (61)	5 (2.3)
HL4040FF	40.00 (1016)	0.750 (19)	3.88 (99)	12 (5.5)
HL4040TF	40.00 (1016)	0.750 (19)	3.88 (99)	12 (5.5)
HL8040F	40.00 (1016)	1.125 (29)	7.88 (200)	32 (14.5)
HL8040F-400	40.00 (1016)	1.125 (29)	7.88 (200)	32 (14.5)
HL8040N	40.00 (1016)	1.125 (29)	7.88 (200)	32 (14.5)

* The element diameter (dimension C) is designed for optimum performance in GE pressure vessels. Other pressure vessel dimension and tolerance may result in excessive bypass and loss of capacity.

