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ATLANTIC RO

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HYDRANAUTICS MEMBRANES

Part Number	Size (inches) Diam. x Length	Flow Rate GPD	Nominal Rejection	Test Pressure	Quantity pricing (each)			
					1-5	6-11	12-24	25+
CPA2-4040	4.0 x 40	2,250	99.5%	225	\$198	194	188	184
CPA2 °	8.0 x 40	10,000	99.7%	225	498	486	473	461
CPA2-400 °	8.0 x 40	~10,000	~99.4%	225	504	491	479	466
CPA3 °	8.0 x 40	11,000	99.7%	225	534	521	507	494
CPA3-LD	8.0 x 40	11,000	99.7%	225	534	521	507	494
CPA4 °	8.0 x 40	6,000	99.7%	225	570	556	542	527
CPA5-LD	8.0 x 40	11,000	99.7%	225	564	550	536	522
ESPA1-4040	4.0 x 40	2,600	99.3%	150	\$204	199	194	189
ESPA2-4040	4.0 x 40	1,900	99.6%	150	204	199	194	189
ESPA3-4040	4.0 x 40	3,000	98.5%	150	212	207	202	196
ESPA4-4040	4.0 x 40	2,500	99.2%	100	252	245	239	234
ESPA1-7	8.0 x 40	12,000	99.3%	150	532	519	505	496
ESPA2 -7	8.0 x 40	9,000	99.6%	150	532	519	505	496
ESPA2 -LD	8.0 x 40	10,000	99.6%	150	532	519	505	496
ESPA2 max	8.0 x 40	12,000	99.6%	150	582	567	553	538
ESPA3-7	8.0 x 40	14,000	98.5%	150	570	556	542	527
ESPA4-7	8.0 x 40	12,000	99.2%	100	600	585	570	555
ESPA B	8.0 x 40	8,600	99.2%	100	666	649	633	616
ESPA B max	8.0 x 40	8,600	99.2%	100	702	684	667	649

Part Number	Size (inches) Diam. x Length	Flow Rate GPD	Nominal Rejection	Test Pressure	Quantity pricing (each)			
					1-5	6-11	12-24	25+
SWC5-4040	4.0 x 40	1,900	99.7%	800	294	287	279	272
SWC3 +	8.0 x 40	7,000	99.8%	800	684	669	655	640
SWC4 +	8.0 x 40	6,500	99.8%	800	661	647	633	618
SWC4B	8.0 x 40	6,500	99.8%	800	684	669	655	640
SWC4B max	8.0 x 40	7,200	99.8%	800	719	703	688	672
SWC4 max	8.0 x 40	7,200	99.8%	800	696	681	666	650
SWC5	8.0 x 40	9,000	99.8%	800	650	636	622	607
SWC5-LD	8.0 x 40	9,000	99.8%	800	650	636	622	607
SWC5 max	8.0 x 40	9,900	99.8%	800	684	669	655	640
SWC6	8.0 x 40	12,000	99.8%	800	667	653	638	624
SWC6 max	8.0 x 40	13,200	99.8%	800	702	686	671	656
ESNA1-LF4040	4x 40	1,750	89.0%	75	305	297	290	282
ESNA1-LF2-4040	4x 40	1,870	87.0%	75	305	297	290	282
ESNA1-LF	8.0 x 40	8,200	91.0%	75	702	684	667	649
ESNA1-LF2	8.0 x 40	10,500	86.0%	75	702	684	667	649

LFC3-7	8.0 x 40	9,500	99.7%	225	662	648	634	619
LFC3-LD	8.0 x 40	11,000	99.7%	225	650	636	622	607
HYDRACoRe50	8.0 x 40	8,200	50.0%	75	1060	1052	1018	975
SanRO HS-4	4.0 x 40	2,200	99.7%	225	420	411	402	392
SanRO HS2-4	4.0 x 40	3,000	99.6%	225	437	428	418	408
SanRO HS-8	8.0 x 40	8,800	99.7%	225	966	945	924	903
SanRO HS2-8	8.0 x 40	14,000	99.6%	225	1041	1018	996	973

CPA (composite Polyamide)

- for Brackish water
- high flows at low pressure
- typical applications: desalting of well waters for municipal drinking water supplies, reducing TDS prior to ion-exchange, producing boiler make-up water for power plants;
- the CPA4 has been used to treat blow-down from power plants

ESNA (Energy Saving Nanofiltration)

- high flow at low feed pressure
- effectively rejects hardness, iron, color and tri-halomethane (THM) precursors from low TDS water
- ideal for removal of organics, bacteria, or viruses
- ESNA1 is a nanofilter which achieves 80% NaCl rejection
- good on feedwater with high iron and hardness

ESPA (Energy Saving Polyamide)

- useful where energy is expensive or where cold water and/or high TDS require high pressure
- high flows at low pressure
- typical applications: municipal drinking water plants, bottling operations, and light industrial uses
- ESPA1 is best on water with TDS from 1000 to 2000 ppm
- ESPA2 is best on brackish water (TDS >2000 ppm) - useful for nitrate removal or prior to ion exchange
- ESPA3 is best on water with TDS <1000 ppm
- ESPA4 is best for low pressure applications

Hydranautics' newer ESPA-B membranes provide 8,600 gallons per day (32.6 m³/d) of flow at 99.2% nominal salt rejection and 96% boron rejection, the new ESPA-B (B for Boron Rejection) is the highest boron rejecting, low pressure element in the industry.

LFC (Low Fouling Composite polyamide)

- flow and operating pressure is comparable to CPA2 elements
- LFC1 has neutral charge; rejection is comparable to ESPA1 element- applications include treatment of municipal wastewater, boiler blow-down, and high fouling surface waters.
- LFC3 has cationic (positive) charge; rejection varies with type and concentration of feed solute - flux can be restored after cleaning.

LD (Low Differential Pressure for High Flow/Low Fouling, easy to clean) 1 Jan 10