SEPARATION PROCESSES

ADEX CARTRIDGE WIRE WRAPPED OR SINTERED

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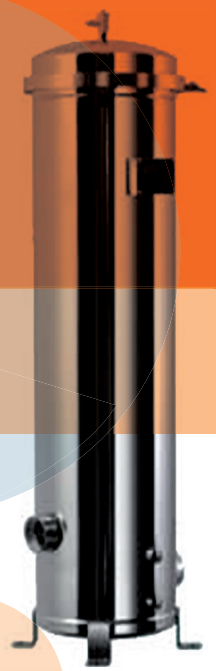
ADEX CARTRIDGE WIRE WRAPPED OR SINTERED

Material	polypropylene
Length	10 - 20 - 30 - 40 inches
Porosity	1 - 5 - 10 - 25 microns



ADEX CARTRIDGE FILTER HOUSING

Material

- STAINLESS STEEL AISI 304
- OPTIONAL STAINLESS STEEL AISI 316L

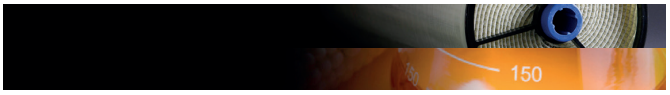
Max working pressure 100 Psi (7 bars)

Polished or shotblasted external surface

STANDARD SPECIFICATIONS

Model	A	B	C	D	E	F	In/Out	Drain
ADEX N3L1	120	220	600	Ø 170	Ø 216	230	1 " -1 1/2 "	1/4 " -1/2"
ADEX N3L2	120	220	850	Ø 170	Ø 216	230	1 " -1 1/2 "	1/4 " -1/2"
ADEX N3L3	120	220	1100	Ø 170	Ø 216	230	1 " -2 "	1/4 " -1/2"
ADEX N3L4	120	220	1350	Ø 170	Ø 216	230	1 " -2 "	1/4 " -1/2"
ADEX N5L1	120	220	610	Ø 200	Ø 248	260	1 " -1 1/2 "	1/4 " -1/2"
ADEX N5L2	120	220	860	Ø 200	Ø 248	260	1 " -1 1/2 "	1/4 " -1/2"
ADEX N5L3	120	220	1100	Ø 200	Ø 248	260	1 " -2 "	1/4 " -1/2"
ADEX N5L4	120	220	1360	Ø 200	Ø 248	260	1 " -2 "	1/4 " -1/2"
ADEX N7L1	120	220	620	Ø 250	Ø 310	310	1 1/2 " -2 "	1/2 "
ADEX N7L2	120	220	870	Ø 250	Ø 310	310	1 1/2 " -2 "	1/2 "
ADEX N7L3	120	220	1120	Ø 250	Ø 310	310	1 1/2 " -2 1/2 "	1/2 "
ADEX N7L4	120	220	1370	Ø 250	Ø 310	310	1 1/2 " -2 1/2 "	1/2 "

N= number of installed cartridges
L= cartridges length (x 10")



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SEPARATION PROCESSES

PRAIX REVERSE OSMOSIS MEMBRANES FOR BRACKISH WATER DEMINERALIZATION

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PRAIX REVERSE OSMOSIS MEMBRANES FOR BRACKISH WATER DEMINERALIZATION

The LP (low pressure) series of aromatic polyamide compound membrane element has the properties of low-pressure operation, high permeate flow and excellent desalination and are applicable to desalination of brackish water.
Besides, it is particularly applicable to fabrication of high-purity water for electrophoresis industry owing to its excellent performance in removing soluble salts, TOC, SiO2, etc.
Being suitable for desalting such water sources as surface water, underground water, tap water and municipal water, etc., LP series is also applicable to treatment of various industrial water such as industrial-purpose pure water, boiler water replenishment in power plant, and can be also applied to such brackish water applications as treatment of high-concentrated saline wastewater.

MODEL
PRAIX LP-4040
PRAIX LP-8040

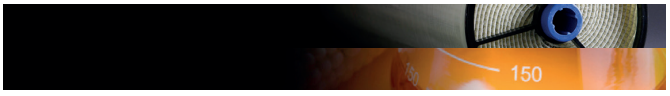
Ultra-low Pressure RO Membrane Element
The ULP series of ultra-low pressure aromatic polyamide compound membrane element can work under ultra low pressure to reach as high permeate flow and salt rejection as regular low-pressure membrane element can, and is applicable to desalination of surface water and underground water. It operates under approximately 2 thirds of the operating pressure of regular low-pressure composite membrane, and achieves a salt rejection rate of up to 99.5%, which can decrease the investment costs for such relevant facilities as pump, piping, and container, etc. and the operating cost for the RO system, thus increasing the economic efficiency.
Being suitable for the desalting treatment of those water sources with salt concentration lower than 2000 ppm, such as surface water, underground water, tap water and municipal water, etc., ULP series membrane elements are mainly applicable to numerous applications of various scales, such as pure water, boiler water replenishment, foodstuff processing, and pharmaceutical production, etc.

MODEL
PRAIX ULP-2540
PRAIX ULP-4040
PRAIX ULP-8040

HOUSING STANDARD SPECIFICATIONS

SERIES	SIDE PORT SERIES	END PORT SERIES	OPERATING PRESSURE		MATERIAL
			PSI	BAR	
2.5" series (1 elements)		2540E300-X W/B	300	20	PRFV
4" series (1 to 4 elements)		40E150-X W/B	150	10	PRFV
4" series (1 to 4 elements)		40E300-X W/B	300	20	PRFV
4" series (1 to 4 elements)		40E450-X W/B	450	30	PRFV
8" series (1 to 7 elements)	80S150-X W/B	80E150-X W/B	150	10	PRFV
8" series (1 to 7 elements)	80S300-X W/B	80E300-X W/B	300	20	PRFV
8" series (1 to 7 elements)	80S450-X W/B	80E450-X W/B	450	30	PRFV

Note: the glass-fiber reinforced pressure vessels with special structures and pressure grades can be customized for large numbers orders.



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ILHA. ULTRAFILTRATION MEMBRANES FOR DEGREASING REGENERATION

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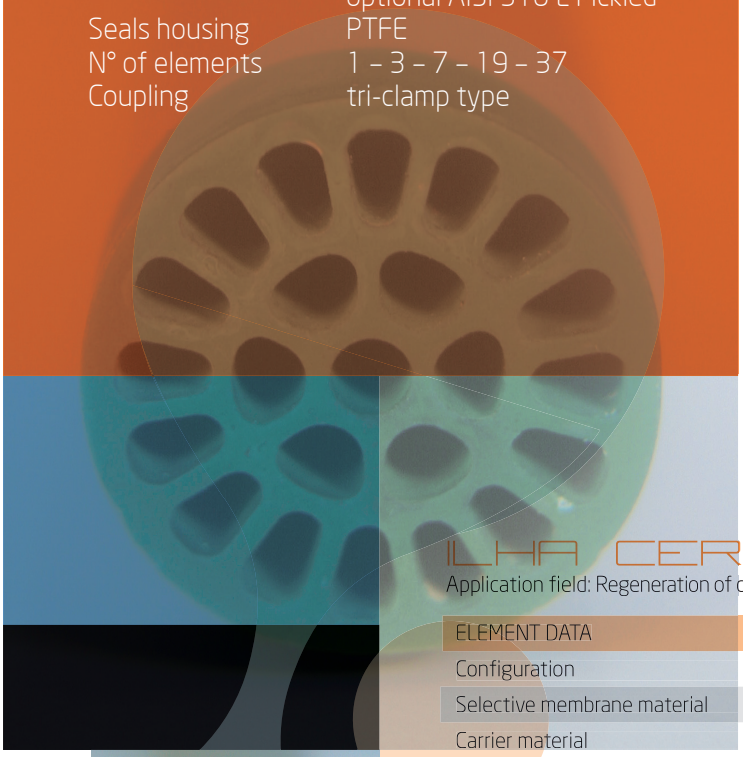
SEPARATION PROCESSES

ILHA CERAMIC MEMBRANES

HOUSING

Material	Stainless Seel AISI 304 Pickled optional AISI 316 L Pickled
Seals housing	PTFE
N° of elements	1 – 3 – 7 – 19 – 37
Coupling	tri-clamp type



These membrane elements are ideal for applications that involve extreme processes, such as high solids bulk presence high temperatures, strong alkaline or acidic solutions or aggressive solvents and where significant long-term durability is required.

The membrane has a tubular shape with several channels.
The surface in contact with the fluids has an active layer which determinate the porosity (cut off) of the filter.
The range of cut off is: from 300 kd up to 0,14 microns (fine ultrafiltration, ultrafiltration, microfiltration).

Features
Reliability
Ease to use
High flux (around 150 l/hm2 for alkaline solution at 80°C)
Proven long operational life
Wide chemical and pH (0-14) compatibility
Solvent resistant
Excellent thermal stability
Sanitizable and sterilizable
Element burst pressure > 50 bar
Ability to withstand high frequency backpulsing for mechanical cleaning
Reduction of industries environmental impact .

ILHA CERAMIC MEMBRANES

Application field: Regeneration of degreasing solutions silicates and hydrofluoric acid free

ELEMENT DATA	
Configuration	Cylindrical
Selective membrane material	Ceramic
Carrier material	Ceramic
Temperature tolerance	Up to 800°C

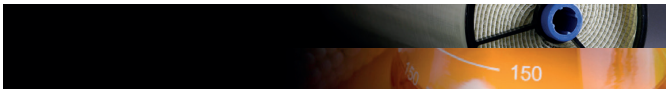
APPLICATION DATA	
Operating pressure	Max 10 bar TMP; recommended below 3 bar TMP
Maximum operating temperature	140°C
Maximum chlorine concentration	Unlimited
pH tolerance	0 - 14
Clearing	Chlorine, acid, caustic, solvents, oxidizers
Maximum negative TMP	5 bar

SPECIFICATION SHEET

Model	Lenght	N° channel	Ø channel	Membrane area	Porosity
			(mm)	(m2)	(microns)
ILHA CM1	1200	23	2,5	0,35	0,14 µm (MF)
ILHA CM2	1200	23	2,5	0,35	300 kd (UF)

ACCESSORIES

Conical seal in EPDM, Chloroprene, Viton.



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ARES. ULTRAFILTRATION MEMBRANES FOR DEGREASING REGENERATION

NITEROI ENVITECH
SEPARATION PROCESSES

ARES SILICON CARBIDE MEMBRANES

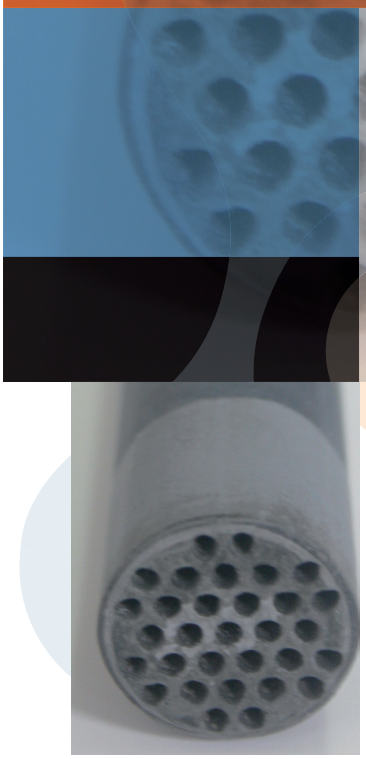
HOUSING

Material	Stainless Seel AISI 304 Pickled optional AISI 316 L Pickled
Seals housing	PTFE
N° of elements	1 – 3 – 7 – 19 – 37
Coupling	tri-clamp type

These membrane elements are ideal for applications that involve extreme processes, such as high solids bulk presence high temperatures, strong alkaline or acidic solutions or aggressive solvents and where significant long-term durability is required.

The membrane has a tubular shape with several channels.
The surface in contact with the fluids has an active layer which determinate the porosity (cut off) of the filter.
The range of cut off is: from 300 kd up to 0,14 microns (fine ultrafiltration, ultrafiltration, microfiltration).

Features
Reliability
Ease to use
High flux (around 150 l/hm2 for alkaline solution at 80°C)
Proven long operational life
Wide chemical and pH (0-14) compatibility
Solvent resistant
Excellent thermal stability
Sanitizable and sterilizable
Element burst pressure > 50 bar
Ability to withstand high frequency backpulsing for mechanical cleaning
Reduction of industries environmental impact .



ARES SILICON CARBIDE MEMBRANES

Application field:
Regeneration of degreasing acid solutions containing hydrofluoric acid.
Regeneration of degreasing alkaline solutions containing silicates to clean with hydrofluoric acid.

ELEMENT DATA	
Configuration	Cylindrical with round channels
Selective membrane material	Silicon carbide
Carrier material	Silicon carbide
Temperature tolerance	Up to 800°C

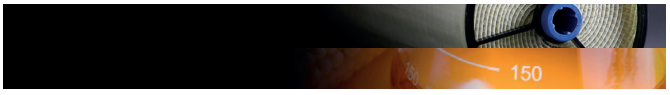
APPLICATION DATA	
Operating pressure	Max 10 bar TMP; recommended below 3 bar TMP
Maximum operating temperature	Determinated by system components
Maximum chlorine concentration	Unlimited
pH tolerance	0 - 14
Clearing	Chlorine, acid, caustic, solvents, oxidizers
Maximum negative TMP	3 bar

SPECIFICATION SHEET

Model	Element dim.	N° channel	Ø channel	Membrane area	Porosity
	a (mm) x b (mm)		(mm)	(m2)	(microns)
ARES SCM1	25+/-1x1178+/-1	31	3	0,34	0,04
ARES SCM2	25+/-1x1178+/-1	31	3	0,34	0,10

ACCESSORIES

Conical seal in EPDM, Chloroprene, Viton.



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