

Low Pressure Element – LP Series

Production Introduction

The LP (low pressure) series of aromatic polyamide compound membrane element developed by Vontron Technology Co., Ltd. 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 electronic industry and electric power 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 mainly 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 and production of beverage-purpose water.

Specifications and Major Properties

| Model | Active Membrane Area ft ² (m ²) | Average Permeated Flow GPD(m ³ /d) | Stable Rejection Rate (%) | Minimum Rejection Rate (%) |
|-----------|--|---|---------------------------|----------------------------|
| LP21-8040 | 365(33.9) | 9600(36.3) | 99.5 | 99.3 |
| LP22-8040 | 400(37.0) | 10500(39.7) | 99.5 | 99.3 |
| LP21-4040 | 90(8.4) | 2400(9.1) | 99.5 | 99.3 |

Testing Conditions

Testing Pressure..... 225psi (1.55Mpa)
Testing Solution Temperature.....25°C
Testing Solution Concentration (NaCl)..... 2000ppm
pH Value of Testing Solution 7.5
Single Element Recovery.....15%

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Product Catalog

Catalog of Industrial Membrane Elements

| Type | Model | Stable Rejection(%) | Average Permeate GPD (m ³ /d) | Working Pressure & Application Fields | Testing Conditions | | |
|--------------------------------------|------------|---------------------|--|--|---------------------------|---|--------------|
| | | | | | Testing Pressure psi(MPa) | Testing Solution Concentration NaCl (ppm) | Recovery (%) |
| General-purpose Industrial Membranes | LP21-8040 | 99.5 | 9600 (36.3) | Working under low pressure. Applicable to regular or high content brackish water. | 225 (1.55) | 2000 | 15 |
| | LP22-8040 | 99.5 | 10500 (39.7) | | | | |
| | LP21-4040 | 99.5 | 2400 (9.1) | | | | |
| | XLP11-4040 | 98.0 | 2000 (7.6) | Working under extremely low pressure. Applicable to feedwater with low salinity that requires low rejection rate. | 100 (0.69) | 500 | 15 |
| | ULP21-8040 | 99.0 | 11000 (41.6) | Working under ultra low pressure. Applicable to feedwater with fairly low salinity. | 150 (1.03) | 1500 | 15 |
| | ULP12-8040 | 98.0 | 13200 (49.9) | | | | |
| | ULP22-8040 | 99.0 | 12100 (45.7) | | | | |
| | ULP32-8040 | 99.5 | 10500 (39.7) | | | | |
| | ULP11-4040 | 98.0 | 2700 (10.2) | | | | |
| | ULP21-4040 | 99.0 | 2400 (9.1) | | | | |
| | ULP31-4040 | 99.4 | 1900 (7.2) | | | | |
| | ULP11-4021 | 98.0 | 1000 (3.78) | Working under ultra low pressure. Applicable to commercial water purifier, and water purifying devices for hospital and laboratory. | 150 (1.03) | 1500 | 8 |
| | ULP21-4021 | 99.0 | 950 (3.6) | | | | |
| | ULP31-4021 | 99.4 | 850 (3.2) | | | | |
| ULP21-2521 | 99.0 | 300 (1.13) | | | | | |
| ULP21-2540 | 99.0 | 750 (2.84) | | | | 15 | |
| Seawater Desalination Membranes | SW21-8040 | 99.7 | 5000 (18.9) | Working under high pressure. Applicable to seawater or quasi seawater. | 800 (5.5) | 32800 | 8 |
| | SW22-8040 | 99.7 | 6000 (22.7) | | | | |
| | SW21-4040 | 99.5 | 1400 (5.3) | | | | |
| | SW11-2540 | 99.2 | 500 (1.89) | Working under high pressure. Applicable to small-sized system in military ship, marine ship, laboratory, etc. for desalination of seawater or high-content brackish water. | | | 4 |
| | SW11-4021 | 99.2 | 750 (2.8) | | | | |
| SW11-2521 | 99.2 | 200 (0.76) | | | | | |
| Fouling Resistant Membranes | FR11-8040 | 99.5 | 9600 (36.3) | Working under low pressure. Applicable to feedwater with small content of contaminants (organic substances, colloids). | 225 (1.55) | 2000 | 15 |
| | FR11-4040 | 99.5 | 2200 (8.3) | | | | |
| High Oxidation Resistant Membranes | HOR21-8040 | 99.2 | 9000 | Applicable to feedwater with oxidative substances or serious microbial contamination. | 225 (1.55) | 2000 | 15 |
| | HOR21-4040 | 99.2 | 2200 | | | | |