BWT PERMAQ® Pro 2700 – large-volume RO unit

BWT PERMAQ® Pro 2700 covers a permeate flow range between 6 and 20 m³/h for industrial applications.

High permeate quality for car wash, boiler water, steam production and district heating, autoclave, evaporators and all technical water installations where the reduction of the TDS content in the water is very important.

A state-of-the-art PLC controller with an LCD TOUCHPANEL HMI with graphic display allows an easy read-out of important measurements and statuses of the RO. An optional BUS communication enables the integration into BMS systems and remote access for service.

Its smart-design rack construction provides an easy access to all components and finds almost always sufficient space for installation due to the small footprint.

Options

1: Antiscaling unit, 2: TT, PT, log option,
3: Analogue input LT and extra QIS (needs Option 2),
4: GSM option (2 way),

5: Freq. controller for HP pump (3 versions **),
6: Array recovery system (4 versions **),
7: CIP system (2 versions ** depending on RO model)

Technical features and special characteristics

- Industrial large volume RO unit
- PLC controller with TOUCHPANEL as standard
- Manufactured with high-quality components
- Short delivery time, Simple and easy installation
- Automatic cut-out switch protects the unit when sensing low inlet pressure
- RO pump with soft start
- Optional frequency controlled RO pump allows reduction of energy consumption.
- Highest efficiency up to 85% with optional array recovery system
- Silent operation
- CE conformity

For You and Planet Blue.
### Technical data: BWT PERMAQ® Pro 2700

<table>
<thead>
<tr>
<th>BWT PERMAQ® Pro</th>
<th>2710</th>
<th>2720</th>
<th>2730</th>
<th>2740</th>
<th>2750</th>
<th>2760</th>
<th>2780</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal capacity *)</td>
<td>m³/h</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Salt retention rate</td>
<td>%</td>
<td></td>
<td>&gt; 98.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permeate output WCF (max.)</td>
<td>%</td>
<td></td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed water pressure (min./max.)</td>
<td>bar</td>
<td></td>
<td>3.0 / 7.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient- / feed water temp. (min./max.)</td>
<td>°C</td>
<td></td>
<td>5 - 35 / 5 - 30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iron and manganese (Fe+Mn)</td>
<td>mg/l</td>
<td></td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical connection</td>
<td>V/Hz</td>
<td></td>
<td>400/50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric power consumption</td>
<td>kW</td>
<td></td>
<td>11</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection class</td>
<td>IP</td>
<td></td>
<td>66</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed water, concentrate, permeate connection</td>
<td>DN</td>
<td></td>
<td>50/50/50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions: Width (W)</td>
<td>mm</td>
<td></td>
<td>3'800</td>
<td>4'800</td>
<td>3'800</td>
<td>3'800</td>
<td>4'800</td>
</tr>
<tr>
<td>Dimensions: Depth, height (D, H)</td>
<td>mm</td>
<td></td>
<td>1'015 x 1'800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating weight, approx.</td>
<td>kg</td>
<td></td>
<td>460</td>
<td>470</td>
<td>500</td>
<td>510</td>
<td>535</td>
</tr>
</tbody>
</table>

*) Feed water in drinking water quality of: 15°C, TDS ≤ 500mg/l, SDI ≤ 3.0%/min, oxidants ≤ 0.05mg/l

### Installation conditions

Observe all applicable installation regulations, general guidelines, general hygiene requirements and technical specifications.

Reverse osmosis units may not be installed in water supply systems which provide water for fire extinguishing purposes.

The pipe network must be flushed before the unit is installed.

Depending on the composition of the feed water, pre-treatment is required (e.g. filtration, dechlorination, softening).

The silt density index must be less than 3%/min (SDI < 3%/min).

Corrosion-resistant material must be used for piping in the permeate area (e.g. plastic or stainless steel).

The reverse osmosis unit must be connected upstream of a dosing station if the water is treated using silicate or film-forming substances.

When installing the unit, select a location where the unit can easily be connected to the water supply network. A connection to the sewage system (at least DN 50), a floor drain and a separate power supply (see technical specifications) must be located in the immediate vicinity.

If no floor drain exists, a separate safety device (e.g. a hydrostop) must be used.

Please observe

The installation site must be frost-proof and kept free of chemicals, paints, solvents and fumes; in addition, the ambient temperature should not be too high.

A minimum operating pressure is required for optimal functioning of the unit (see technical specifications). Besides, the water pressure should not exceed the maximum permissible pressure. If the water mains pressure is higher, a pressure reducer must be installed upstream of the unit.