The Pumping Station for Vacuum Wastewater Systems
VX186-184Q / 22 kW
The Vogelsang VacUnit is a compact and reliable vacuum pumping station for grey and black water collection in vacuum sewerage systems.

Used as a centralized pumping station the VacUnit maintains the vacuum required for effluent transport within vacuum waste water collection systems.

Reliable Vogelsang VX-Pumps enable direct inline discharge of the waste water & air phase into the downstream waste water system. The multi-phase pumping concept of the VacUnit eliminates the need for additional vacuum collection tanks with separate vacuum and sewage pumps.

VacUnit DP versions are designed as double pumping systems. A duty/standby pump arrangement ensures reliable operation when one unit is out of service while a simultaneous operation of both pumps allows to overcome critical peak load situations.

VacUnits are provided as pre-fabricated & factory tested skid units incl. pipe work manifold with required valves, fittings and controls.

**Advantages**

- Integrated control with system visualization and touchscreen HMI
- Proven Vogelsang VX-Pumps creating vacuum and direct inline transport of waste water in one single operation
- High system availability through duty/standby pumping arrangement
- No need for bulky vacuum collection tanks & extra pumping equipment
- Simple & easy maintenance and inspection due to Quick-service design
- Compact design, low space requirement
- Low-noise & smooth system operation
- Closed & uncomplicated pump station design

**Options**

- Weatherproof, soundproof cabinet enclosure or containerized plant room for outdoor installation
- Electronic soft starters for a smooth power grid and drive start process
- Customised solutions for process data acquisition and remote monitoring
- Extension modules for additional plant equipment
- Heating & ventilation options to cater for ambient conditions

**Standard specifications**

<table>
<thead>
<tr>
<th>Pumping unit</th>
<th>VX186-184Q 22 kW</th>
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</thead>
<tbody>
<tr>
<td>No. of pumping units</td>
<td>2</td>
</tr>
<tr>
<td>Capacity up to</td>
<td>2x 160 m³/h</td>
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<tr>
<td>Vacuum range</td>
<td>0 to -0.60 bar (normal operation)</td>
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<tr>
<td>Differential pressure max.</td>
<td>3.0 bar</td>
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<tr>
<td>Power consumption [Single pump operation at Δp= 0.6 bar]</td>
<td>9.6 kW</td>
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</tbody>
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**Control**

Integrated PLC incl. control elements & indicators            7" touchscreen HMI-interface with system visualisation
Multilingual plain text process data & fault notification
Voltage: 3-400 V, 50 Hz
Cable grommet: max. Ø25 mm²

**Pipe system**

DP-pump connectors incl. ball type back flow preventer and isolation valves

**Connector inlet**

DN150 - axial restraint pipe coupling

**Connector outlet**

DN150 - axial restraint pipe coupling

**Common base plate**

Heavy duty mild steel galv. construction with pockets for fork lift handling

**Main dimensions**

LxWxH approx. 3000 x 1100 x 2000 mm

**Weight approx.**

2510 kg

**Ambient temperatures**

+5 to +40 °C

**Ambient conditions**

Indoor, moderate