SAMPLE GAS PUMP
N87 TTE IP54

DESCRIPTION/FUNCTION
N87TTE is a reliable diaphragm pump specifically designed for highly aggressive and corrosive gases. It is equipped with an particularly resistant and gas-tight PVDF-pump-head and a Teflon-coated membrane. Special valves ensure a high tolerance to vapor and condensate.

The core of the pump is an elastic membrane which is moved up and down in its center by an eccentric. In this way the gas is forced through automatic valves. The patented membrane was optimized using the finite element method. The results are an extremely long lifetime of the membrane and a high pneumatic performance of the pump.

The pump operates absolutely oil-free. This ensures an uncontaminated transport, evacuation or compression of gases. In its IP54 enclosure, the N87TTE is optimally protected also against dust and dirt. The pump is ready for installation and can operate in any position.

AREAS OF USE
N87TTE is used frequently in the fields of chemistry industry and environmental technology for sampling gases out of the ambient environment or for exhaust gas and smoke analysis (CEMS - Continuous Emission Monitoring Systems). This pump ensures an easy installation into devices and equipment as well as an adaption to a variety of processes.

The N87TTE is optimal suitable for external installation and well protected against ambient influences.

FEATURES
- Uncontaminated flow
- For highly aggressive and corrosive gases
- Wear-resistant, maintenance-free
- Optimized PTFE-membrane
- Enclosed IP54-housing
- Voltage 230V 50Hz
- Easy mounting and integration
- Can operate in any installed position
Sample Gas Analyzers | Sample Gas Conditioners | Peristaltic Pumps | Pre-Separators | Moisture Sensors
Refrigeration Gas Dryers | Refrigeration Air Dryers | Compressed Air Filters | Compressed Air Separators

DIMENSIONS

![Diagram showing the dimensions of the pump.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Gas flow rate</td>
<td>5.5 Ni/min</td>
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<tr>
<td>Media temperature maximum</td>
<td>40 °C</td>
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<tr>
<td>Pump start/operation</td>
<td>atmospheric pressure</td>
</tr>
<tr>
<td>Ultimate vacuum</td>
<td>200 mbar</td>
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<tr>
<td>Max. operation overpressure</td>
<td>1.5 bar</td>
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<tr>
<td>Material of gas contacting parts</td>
<td>PVDF (pump-head), PTFE (membrane), FFPM (valves)</td>
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<tr>
<td>Housing</td>
<td>IP54-housing</td>
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<tr>
<td>Dimensions</td>
<td>196 x 116 x 120 mm</td>
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<tr>
<td>Weight</td>
<td>3.1 kg</td>
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<tr>
<td>Voltage</td>
<td>230V 50Hz, with thermal switch and power fuse</td>
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</table>

HINTS ON INSTALLATION AND OPERATION

- Components connected to the pump must be designed to withstand the pneumatic performance of the pump. The performance data refer to operation at atmospheric pressure. When starting or working against pressure or vacuum pay special attention to the technical data of the pump.
- Before operating, please carefully check the chemical resistance of the media contacting parts.
- For a precise dosage of the gas flow rate we recommend a flowmeter with fine adjustment needle valve. It must be installed on the suction side in order to avoid an exceeding of the maximum permissible operation pressure.
- The pump can operate in any installed position. Ensure that sufficient cooling air is supplied.

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