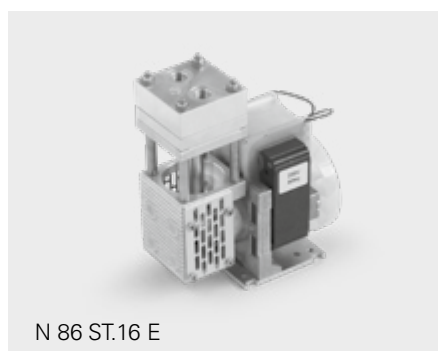


N 86.16 SERIES

TEMPERATURE-RESISTANT GAS SAMPLING PUMPS



N 86 ST.16 E

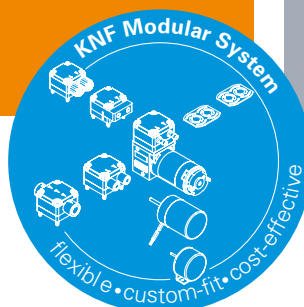
ADVANTAGES

- The temperature-resistant pump head is ideal for transferring hot process gases of up to 240 °C
- High chemical resistance
- Compact size

POSSIBLE AREAS OF USE

- Environmental monitoring – especially motor test benches in automobile industry
- Analytical technology
- Research

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 to get more information



| PERFORMANCE DATA | | |
|---|-------------------|-----------------|
| Series model | N 86 | |
| Material design | AT.16 E | ST.16 E |
| Pump head | Aluminum | Stainless steel |
| Diaphragm | PTFE | |
| Valves | PTFE | |
| Flow rate at atm. pressure (l/min) | 6.0 | |
| Ultimate vacuum (mbar abs.) | 290 | |
| Max. operating pressure (bar rel./psig) | 1.5/21.8 | |
| Permissible ambient temperature (°C) | +5 ... +40 | |
| Permissible media temperature (°C) | +5 ... +240 | |
| Weight (kg/lbs) | 1.3/2.9 | 1.5/3.3 |
| ELECTRICAL DATA | | |
| Voltage (V) | 230 | |
| Motor | Shaded pole motor | |
| Protection class motor | IP 00 | |
| Frequency (Hz) | 50 | |
| Power P ₁ (W) | 60.0 | |
| I _{max} (A) | 0.70 | |

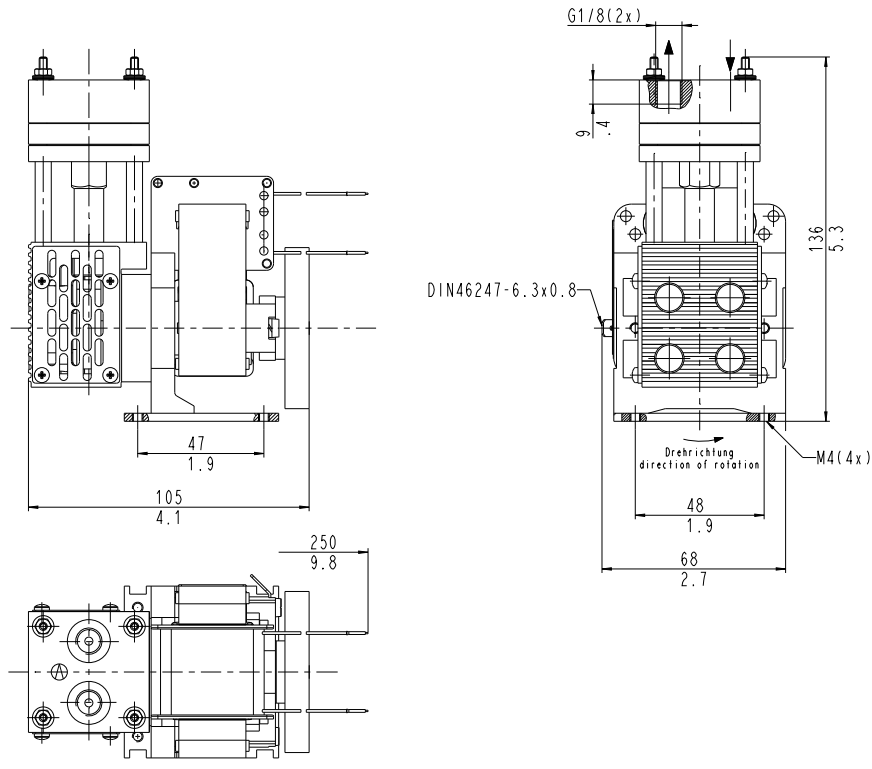
N 86 AT.16 E | N 86 ST.16 E

PERFORMANCE DATA

| Series model | Flow rate at atm. pressure (l/min) ¹⁾ | Max. operating pressure (bar rel./psig) | Ultimate vacuum (mbar abs.) |
|--------------|--|---|-----------------------------|
| N 86 AT.16 E | 6.0 | 1.5/21.8 | 290 |
| N 86 ST.16 E | 6.0 | 1.5/21.8 | 290 |

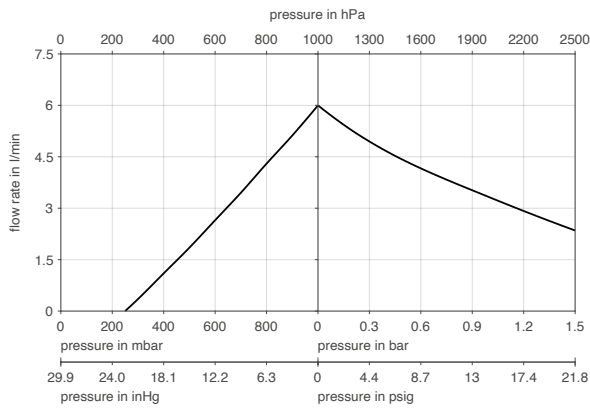
¹⁾ Liter at STP

N 86 AT.16 E | N 86 ST.16 E

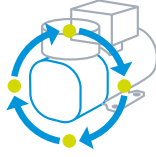




mm
in



N 86 _T.16 E



OPTIONS

| Description | Illustration | Details |
|----------------------------|--|--|
| Rotated pump housing |  | The pump housing may be rotated by 180° at the factory. Any condensate will drain from the pump head, which improves the function of the pump when operating with high condensate concentrations. |
| Customized head connectors | | The height of the remote pump head can be adapted to the customer's system according to the project. NPT1/8" threaded connections and various fittings are optional. |
| Flanged version | | This configuration has been designed for installation on a heated analyzer cabinet. The pump is mounted by a flange on the outside of the cabinet housing. The pump head then protrudes into the hot area. The area between the pump head and the compressor housing can be insulated. |
| Brushless DC motor |  | Controllable, brushless DC motors are available as an option. They can be used for the dynamic adjustment of pumping capacity to the customer's system and for the custom-fit calibration of the pumping capacity. |
| Heated variant (.11) |  | The pump head is pre-heated to ca. 240 °C using a heating cartridge and a thermostat. |

ACCESSORIES

| Description | Illustration | Part No. |
|---------------------------|--|----------|
| Wrench for retainer plate |  | 018812 |
| Holding tool |  | 055662 |

SPARE PARTS

| Description | Illustration | Part No. | Details |
|-------------------------------|---|----------|---|
| Spare parts kit N 86 AT/ST.16 |  | 032522 | Spare parts kit consists of: 1x diaphragm (2-fold), 1x valve plate, 1x O-ring. This set is required to maintain the pump. |

The performance values for the series models shown on this data sheet were determined under test conditions. The actual performance values may differ and depend in particular on the usage conditions and therefore on the specific application, on the parameters of the components involved in the user's system and on any technical modifications carried out which deviate from the standard configuration or the as delivered condition.

If individual designs have been created for specific customers on the basis of series models, other technical performance data may apply. Before operation begins, the relevant operating instructions and/or assembly or installation instructions should be read and the safety information contained in these instructions should be noted. KNF reserves the right to make changes to the product and the associated documentation without prior notice to the customer.



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