

## N 036 SERIES | TEMPERATURE-RESISTANT AND HEATED GAS SAMPLING PUMPS



## ADVANTAGES

- Temperature-resistant (.16) or electrically heated with thermostatic temperature control (.11) for transferring hot process gases of up to 240 °C
- High chemical resistance
- Homogeneous temperature distribution throughout the entire pump head

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 No condensation in the pump head

### POSSIBLE AREAS OF USE

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

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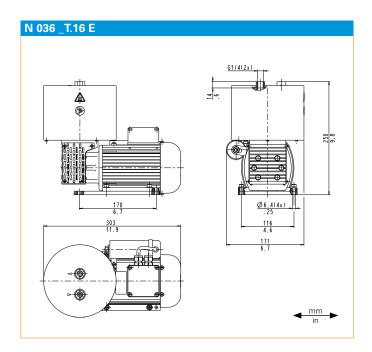
| PERFORMANCE DATA                        |                 |                 |           |
|---|-----------------|-----------------|-----------|
| Series model                            | N 036           |                 |           |
| Material design                         | AT.16 E         | ST.16 E         | ST.11 E   |
| Pump head                               | Aluminum        | Stainless steel |           |
| Diaphragm                               | PTFE            |                 |           |
| Valves                                  | PTFE            |                 |           |
| Flow rate at atm. pressure (I/min)      | 30.0            |                 |           |
| Ultimate vacuum (mbar abs.)             | 200             |                 |           |
| 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)                         | 10.0/22.0       | 12.0/26.4       | 11.9/26.2 |
| ELECTRICAL DATA                         |                 |                 |           |
| Voltage (V)                             | 230             |                 |           |
| Motor                                   | Capacitor motor |                 |           |
| Protection class motor                  | IP 54           |                 |           |
| Frequency (Hz)                          | 50              |                 |           |
| Power P <sub>1</sub> (W)                | 170             |                 |           |
| I <sub>max</sub> (A)                    | 1.00            |                 |           |

# N 036 AT.16 E | ST.16 E

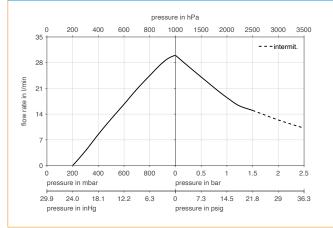
| PERFORMANCE DATA |  |   |                                   |
|------------------|--|---|-----------------------------------|
| Series model     | Flow rate at<br>atm. pressure<br>(I/min) <sup>1)</sup> | Max. operat-<br>ing pressure<br>(bar rel./psig) | Ultimate<br>vacuum<br>(mbar abs.) |
| N 036 AT.16 E    | 30.0   | 1.5/21.8  | 200                               |
| N 036 ST.16 E    | 30.0   | 1.5/21.8  | 200                               |

<sup>1)</sup>Flow rate determined at 20 °C, 1013 mbar abs.

(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)



#### N 036 \_T.16 E



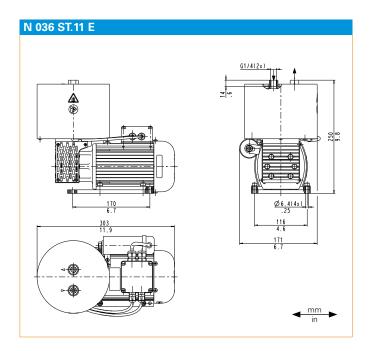
## N 036 ST.11 E

| PERFORMANCE DATA |  |   |                                   |
|------------------|--|---|-----------------------------------|
| Series model     | Flow rate at<br>atm. pressure<br>(I/min) <sup>1)</sup> | Max. operat-<br>ing pressure<br>(bar rel./psig) | Ultimate<br>vacuum<br>(mbar abs.) |
| N 036 ST.11 E    | 30.0   | 1.5/21.8  | 200                               |

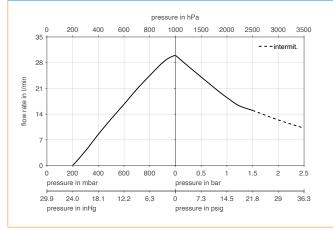
 $^{\mbox{\tiny 1)}}Flow$  rate determined at 20 °C, 1013 mbar abs.

(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

# HEATING: N 036 ST.11 E Protection class IP 20 Voltage/Frequencies (V/Hz) 230/50 Power P1 (W) 400 Imax (A) 1.90 Heating temperature (°C) 240



#### N 036 ST.11 E



| OPTIONS                    |              |  |  |
|----------------------------|--------------|--|--|
| Description                | Illustration | Details  |  |
| Rotated pump housing       |              | The pump housing may be rotated by 180° at the factory.<br>condensate will drain from the pump head, which improve<br>function of the pump when operating with high condensat<br>concentrations.   |  |
| Customized head connectors | VS.          | The height of the remote pump head can be adapted to the customer's system according to the project. NPT1/8 fittings and various other fittings are optional.  |  |
| Flanged version            |              | This configuration has been designed for installation on a<br>heated analyzer cabinet. The pump is mounted by a flange on<br>the outside of the cabinet housing. The pump head then<br>protrudes into the hot area. The area between the pump head<br>and the compressor housing can be insulated. |  |
| Adjustable motor           | RPM          | The pump can be equipped with a 3-phase motor for frequency converter operation, allowing for the dynamic adjustment of pumping capacity to the customer's system.   |  |
| Heated variant (.17)       | 240°C        | The pump head is pre-heated to ca. 240 °C using a heating cartridge and a thermostat.  |  |
| Ex-proof pumps             | Ex           | Pumps for explosion-proof areas are available with the following certificates on request: IECEx, NEC Ex, KOSHA, PESO, NEPSI, JIS.  |  |

| Description               | Illustration | Part No |
|---------------------------|--------------|---------|
| Wrench for retainer plate | •            | 018812  |
|                           | **           |         |

| Description           | Illustration | Part No. | Details  |
|-----------------------|--------------|----------|--|
| Spare parts kit N 036 |              | 032493   | Spare parts kit consists of:<br>1x diaphragm (3-fold), 2x valve plate,<br>2x O-rings, 48x disk spring.<br>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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