

## UN 012 SERIES | TEMPERATURE-RESISTANT AND HEATED GAS SAMPLING PUMPS



## **ADVANTAGES**

- Temperature-resistant (.16) or electrically heated with thermostatic temperature control (.11) for gases up to 240 °C / 460 °F
- High chemical resistance
- Available with or without insulation cover assembly

- Enclosure mounting options
- Homogeneous temperature distribution throughout the entire pump head
- Prevents condensation in the pump head
- HazLoc versions available

POSSIBLE AREAS OF USE

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

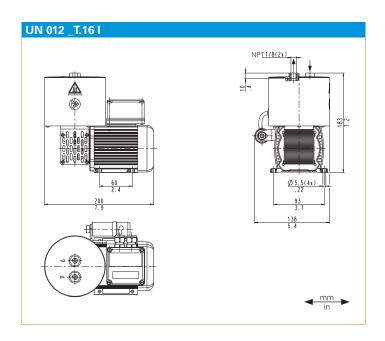
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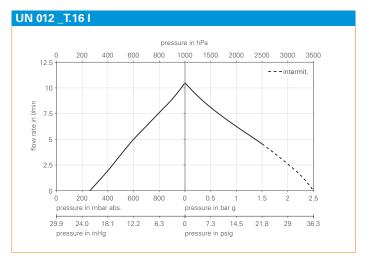
| Series model                            | UN 012                           |                     |         |  |
|---|----------------------------------|---------------------|---------|--|
| Material design                         | AT.16 I                          | ST.16 I             | ST.11 I |  |
| Pump head                               | Aluminum                         | 316 Stainless steel |         |  |
| Diaphragm                               | PTFE                             |                     |         |  |
| Valves                                  | PTFE                             |                     |         |  |
| Flow rate at atm. pressure (I/min)      | 10.5                             |                     |         |  |
| Ultimate vacuum (mbar abs./inHg)        | 240/22.8                         |                     |         |  |
| Max. operating pressure (bar g/psig)    | 1.5/21.8                         |                     |         |  |
| Permissible ambient temperature (°C/°F) | 5° C to 40° C / 41° F to 104° F  |                     |         |  |
| Permissible media temperature (°C/°F)   | 5° C to 240° C / 41° F to 460° F |                     |         |  |
| Weight (kg/lbs)                         | 3.4/7.5                          | 4.0/8.8             |         |  |
| ELECTRICAL DATA                         |                                  |                     |         |  |
| Voltage (V)                             | 115                              |                     |         |  |
| Motor                                   | Capacitor motor                  |                     |         |  |
| Motor protection class                  | IP 54                            |                     |         |  |
| Frequency (Hz)                          | 60                               |                     |         |  |
| Power P <sub>1</sub> (W)                | 240                              |                     |         |  |
| I <sub>max</sub> (A)                    | 2.09                             |                     |         |  |

## UN 012 AT.16 | ST.16 |

| PERFORMANCE DATA |   |                                      |                                     |
|------------------|---|--------------------------------------|-------------------------------------|
| Series model     | Flow rate at atm. pressure (I/min) <sup>1</sup> | Max. operating pressure (bar g/psig) | Ultimate vacuum<br>(mbar abs./inHg) |
| UN 012 AT.16 I   | 10.5  | 1.5/21.8                             | 240/22.8                            |
| UN 012 ST.16 I   | 10.5  | 1.5/21.8                             | 240/22.8                            |

<sup>&</sup>lt;sup>1)</sup> Flow rate determined at 20°C/68°F, 1013 mbar abs.



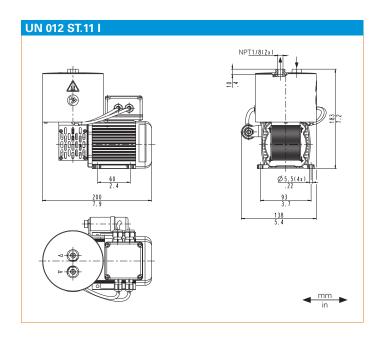


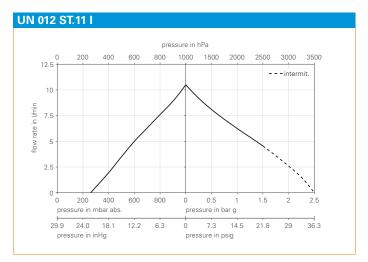
## UN 012 ST.11 I

| PERFORMANCE DATA |                                     |                                      |                                     |
|------------------|-------------------------------------|--------------------------------------|-------------------------------------|
| Series model     | Flow rate at atm. pressure (I/min)¹ | Max. operating pressure (bar g/psig) | Ultimate vacuum<br>(mbar abs./inHg) |
| UN 012 ST.11 I   | 10.5                                | 1.5/21.8                             | 240/22.8                            |

 $<sup>^{1)}</sup>$  Flow rate determined at 20°C/68°F, 1013 mbar abs.

| HEATING: UN 012 ST.11 I     |         |
|-----------------------------|---------|
| Protection class            | IP 20   |
| Voltage/Frequencies (V/Hz)  | 115/60  |
| Power P <sub>1</sub> (W)    | 140     |
| I <sub>max</sub> (A)        | 1.2     |
| Heating temperature (°C/°F) | 240/460 |





| <b>OPTIONS</b> |              |          |         |
|----------------|--------------|----------|---------|
| Description    | Illustration | Part No. | Details |
|                |              |          |         |
|                |              |          |         |
|                |              |          |         |

| ACCESSORIES               |              |          |         |  |
|---------------------------|--------------|----------|---------|--|
| Description               | Illustration | Part No. | Details |  |
| Wrench for retainer plate |              | 018812   |         |  |

| Description                                      | Illustration | Part No. | Details   |
|--|--------------|----------|---|
| Valve plate                                      |              | 049733   | requires 2 qty                                    |
| Wave diaphragm                                   |              | 049734   | requires 1 qty                                    |
| O-ring   |              | 055675   | requires 2 qty                                    |
| Full repair kit (valve plate, diaphragm, O-ring) |              | 203987   | contains all necessary spare parts in one package |
| Disc spring                                      |              | 056019   | optional for replacement only (original qty = 28) |

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.

