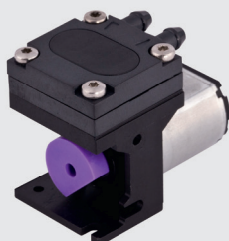
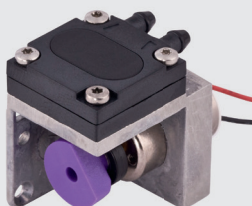


# UNMP 09 SERIES MICRO DIAPHRAGM GAS PUMPS



UNMP 09KPDC-S



UNMP 09KPDC-M



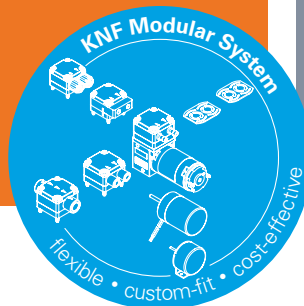
UNMP 09KPDC-L

## ADVANTAGES

- Customizing available
- Tested to customers specs
- High performance to size, efficiency and weight ratio
- Excellent reliability/durability
- Speed controllable
- Low sound level
- Long service life
- Uncontaminated transfer
- Maintenance-free
- High chemical resistance
- Can be installed in any position

## POSSIBLE AREAS OF USE

- Medical devices
- Analytical equipment
- Emission measurement
- Reprographic
- Degassing
- Safety/Security
- Portable devices



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to get more information

## PERFORMANCE DATA

| Series Model                                      | UNMP 09                                                                        |         |         |         |         |         |
|---------------------------------------------------|--------------------------------------------------------------------------------|---------|---------|---------|---------|---------|
| Material design                                   | KPDC-S                                                                         |         | KPDC-M  |         | KPDC-L  | KPDC-B  |
| Pump head                                         | PPS                                                                            |         |         |         |         |         |
| Diaphragm                                         | EPDM                                                                           |         |         |         |         |         |
| Valves                                            | EPDM                                                                           |         |         |         |         |         |
| Flow rate at atm. pressure (l/min)                | 0.65                                                                           | 0.75    | 0.85    | 0.8     | 0.9     | 0.75    |
| Ultimate vacuum (mbar abs.)                       | 550                                                                            | 550     | 500     | 500     | 500     | 500     |
| Ultimate pressure (bar g)                         | 0.4                                                                            | 0.4     | 0.6     | 0.6     | 0.6     | 0.65    |
| Permissible media and ambient temperature (°C/°F) | 5° C to 40° C / 41° F to 104° F (-20° C to 60° C / -4° F to 140° F on request) |         |         |         |         |         |
| Weight (g/oz)                                     | 23/0.81                                                                        | 23/0.81 | 23/0.81 | 23/0.81 | 28/0.99 | 25/0.88 |

## ELECTRICAL DATA

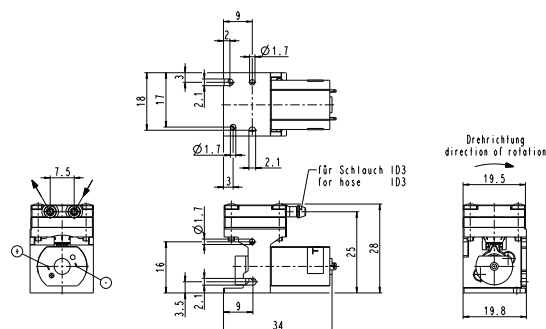
|                      |     |      |      |      |      |              |
|----------------------|-----|------|------|------|------|--------------|
| Voltage (V)          | 3.5 | 5    | 2.5  | 6    | 6    | 6            |
| Motor                | DC  |      | DC   |      | DC   | Brushless DC |
| I <sub>max</sub> (A) | 0.2 | 0.22 | 0.36 | 0.16 | 0.18 | 0.17         |

## UNMP 09KPDC-S

## PERFORMANCE DATA

| Series model       | Flow rate at atm. pressure (l/min) | Max. operating pressure (bar g) | Ultimate vacuum (mbar abs.) |
|--------------------|------------------------------------|---------------------------------|-----------------------------|
| UNMP 09KPDC-S 3.5V | 0.65                               | 0.4                             | 550                         |
| UNMP 09KPDC-S 5V   | 0.75                               | 0.4                             | 550                         |

## UNMP 09KPDC-S



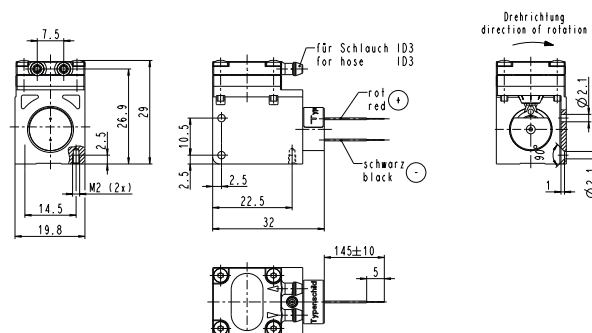
Dimensions in mm

## UNMP 09KPDC-M

## PERFORMANCE DATA

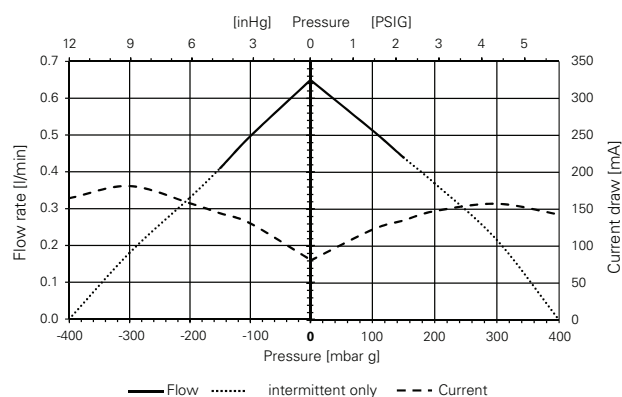
| Series model       | Flow rate at atm. pressure (l/min) | Max. operating pressure (bar g) | Ultimate vacuum (mbar abs.) |
|--------------------|------------------------------------|---------------------------------|-----------------------------|
| UNMP 09KPDC-M 2.5V | 0.85                               | 0.6                             | 500                         |
| UNMP 09KPDC-M 6V   | 0.8                                | 0.6                             | 500                         |

## UNMP 09KPDC-M

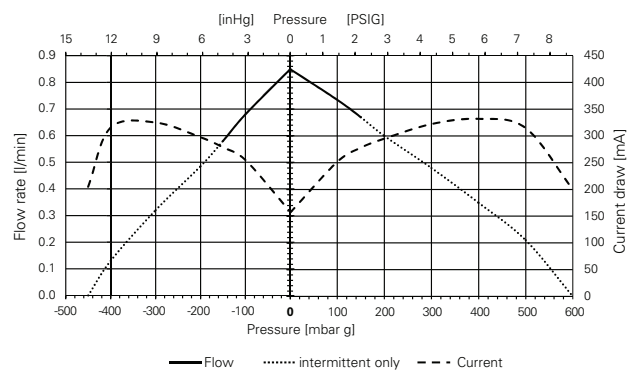


Dimensions in mm

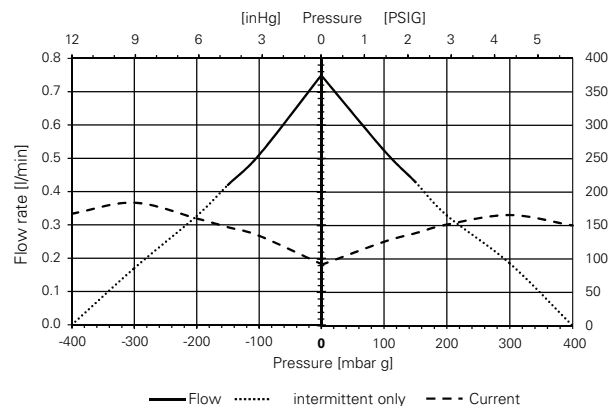
### UNMP 09KPDC-S 3.5V FLOW CURVE



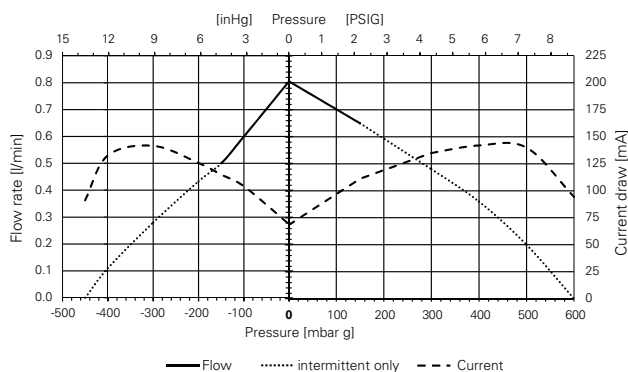
## UNMP 09KPDC-M 2.5V FLOW CURVE



### UNMP 09KPDC-S 5V FLOW CURVE



### UNMP 09KPDC-M 6V FLOW CURVE

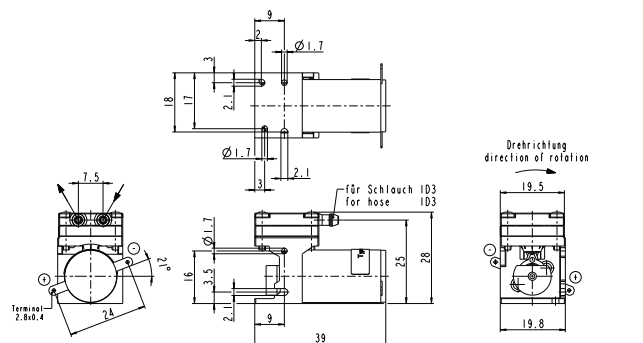


## UNMP 09KPDC-L

## PERFORMANCE DATA

| Series model     | Flow rate at atm. pressure (l/min) | Max. operating pressure (bar g) | Ultimate vacuum (mbar abs.) |
|------------------|------------------------------------|---------------------------------|-----------------------------|
| UNMP 09KPDC-L 6V | 0.9                                | 0.6                             | 500                         |

## UNMP 09KPDC-L



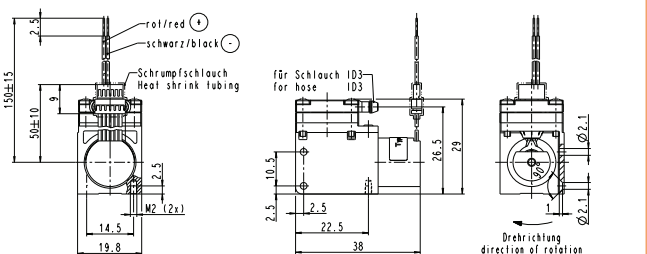
Dimensions in mm

## UNMP 09KPDC-B

## PERFORMANCE DATA

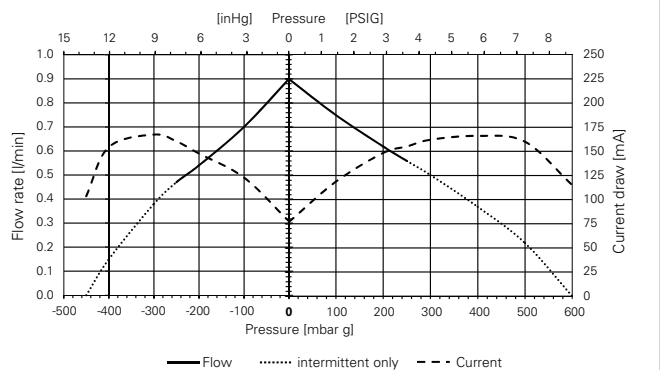
| Series model     | Flow rate at atm. pressure (l/min) | Max. operating pressure (bar g) | Ultimate vacuum (mbar abs.) |
|------------------|------------------------------------|---------------------------------|-----------------------------|
| UNMP 09KPDC-B 6V | 0.75                               | 0.65                            | 500                         |

## UNMP 09KPC-B

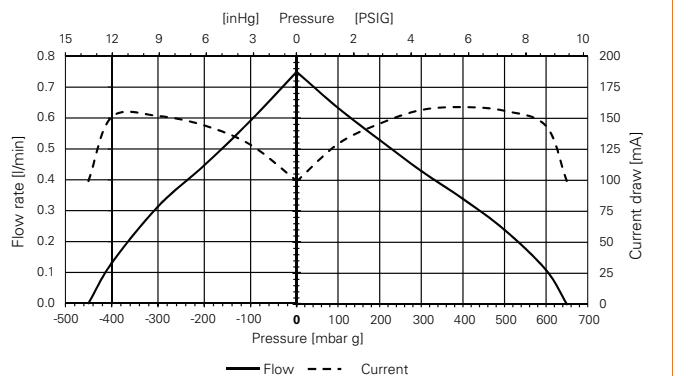


Dimensions in mm

## UNMP 09KPDC-L 6V FLOW CURVE



## UNMP 09KPDC-B 6V FLOW CURVE



## OPTIONS

| Description | Illustration                                                                      | Part No.   | Details                               |
|-------------|-----------------------------------------------------------------------------------|------------|---------------------------------------|
| Motors      |  | On request | Other motors and voltages on request. |
| Eccentric   |  | On request | Different eccentricities on request.  |

## ACCESSORIES

| Description | Illustration | Part No. | Details |
|-------------|--------------|----------|---------|
|             |              |          |         |
|             |              |          |         |

## SPARE PARTS

| Description | Illustration | Part No. | Details |
|-------------|--------------|----------|---------|
|             |              |          |         |
|             |              |          |         |

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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