

# NPK 012 SERIES

## SWING PISTON VACUUM PUMPS AND COMPRESSORS



NPK 012 DC-B-M PR/VA

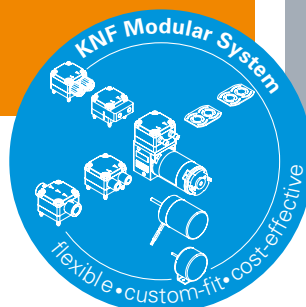
### ADVANTAGES

- High level of performance in a compact size and light-weight
- Brushless DC motor for custom-fit rotational speed control
- High pressure up to 5 bar rel./72.5 psig
- The pump can start against the entire pressure and vacuum range without discharging
- Robust design
- Excellent price/performance ratio

### POSSIBLE AREAS OF USE

- Diagnostics – transfer of liquids and gaseous samples for analysis
- Medical technology – e.g. indicated aspiration
- Vacuum technology – pick & place applications

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### PERFORMANCE DATA

Series model	NPK 012 DC-B-M PR	NPK 012 DC-B-M VA
Flow rate at atm. pressure (l/min)	8.3–12.0 ± 10 %	7.0–13.5 ± 10 %
Ultimate vacuum (mbar abs.)	220	140
Max. operating pressure (bar rel./psig)	2.5/36.3 5/72.5 intermittent	1/14.5
Permissible ambient temperature (°C)	+5 ... +40	
Permissible media temperature (°C)	+5 ... +60	
Weight (kg/lbs)	0.6/1.3	

### ELECTRICAL DATA

Voltage (V)	24	
Motor	Brushless DC motor, PWM-signal: 30...0 %	Brushless DC motor, PWM-signal: 50...0 %
Protection class motor	IP 20	
Frequency (Hz)	-	
Power P <sub>1</sub> (W)	43	
I <sub>max</sub> (A)	1.8	

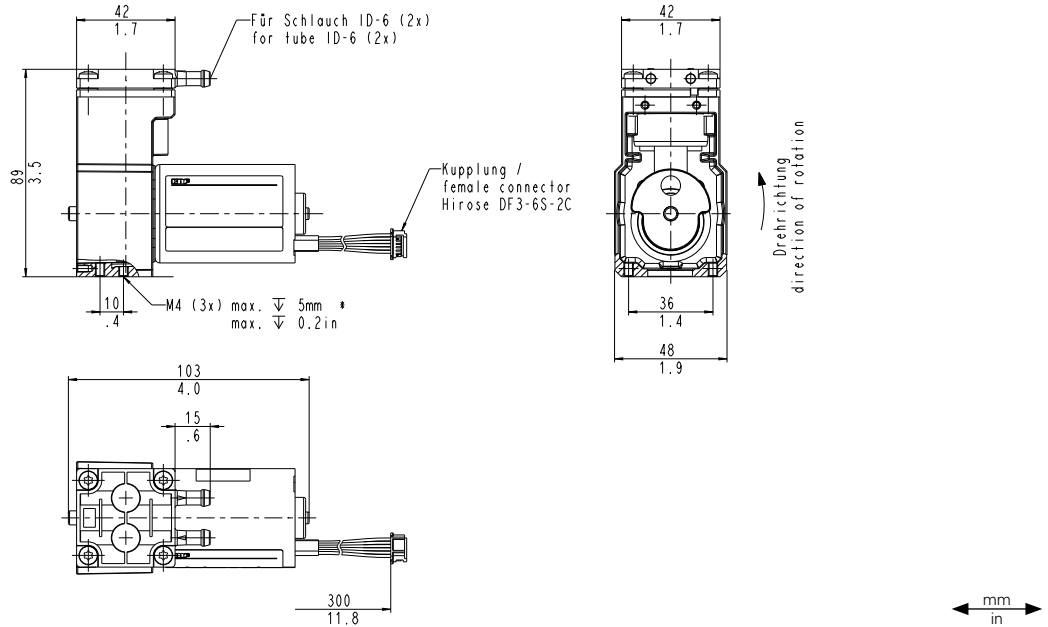
# NPK 012 DC-B-M PR

## PERFORMANCE DATA

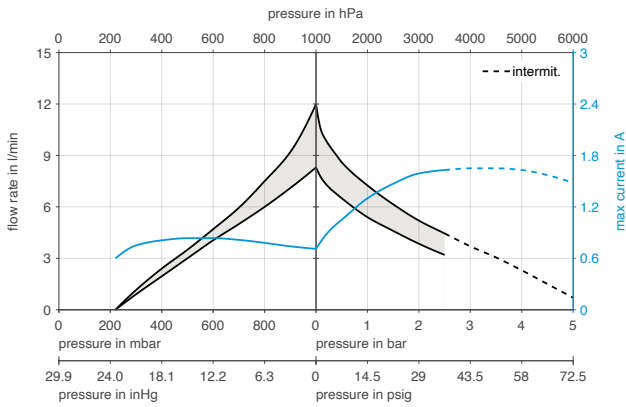
Series model	Flow rate at atm. pressure (l/min) <sup>1)</sup>	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
NPK 012 DC-B-M PR	8.3–12.0 ± 10 %	2.5/36.3	220

Flow rate determined at 20 °C, 1013 mbar abs.  
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

## NPK 012 DC-B-M PR

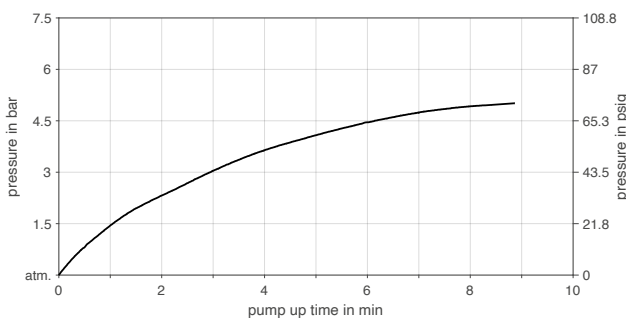


## NPK 012 DC-B-M PR

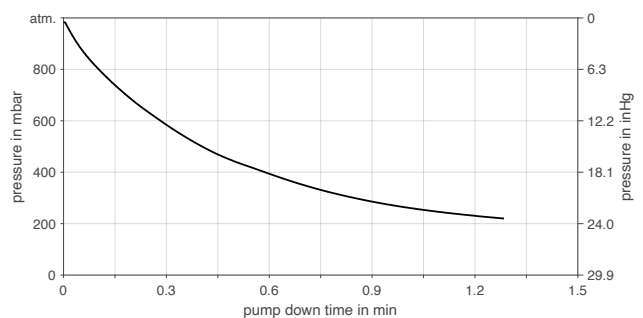


Flow rate determined at 20 °C, 1013 mbar abs.  
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

## NPK 012 DC-B-M PR | PUMP UP TIME FOR 5 LITER VESSEL



## NPK 012 DC-B-M PR | PUMP DOWN TIME FOR 5 LITER VESSEL



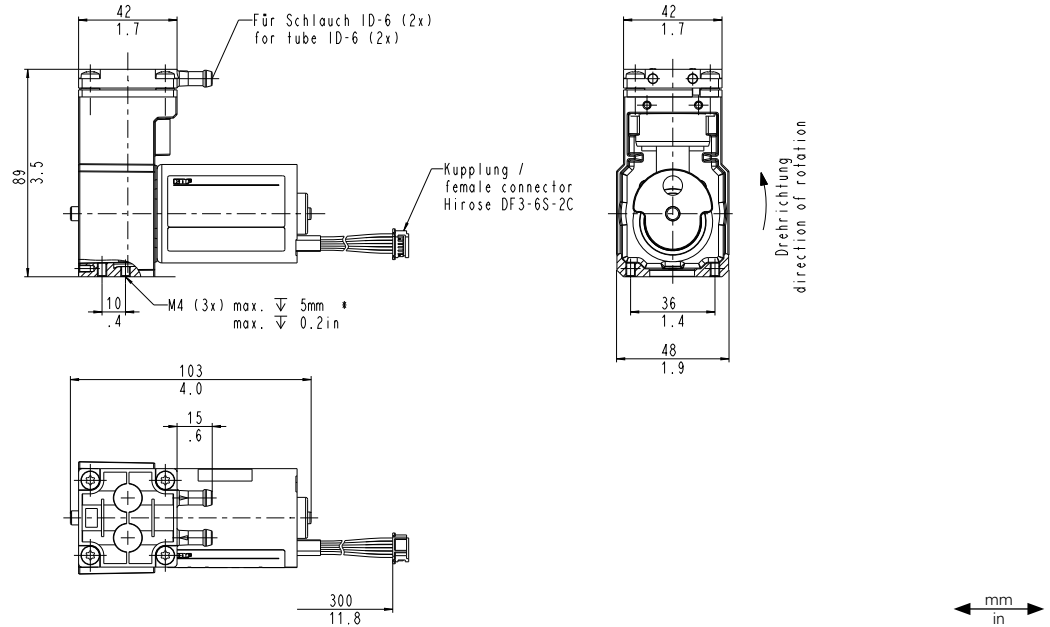
# NPK 012 DC-B-M VA

## PERFORMANCE DATA

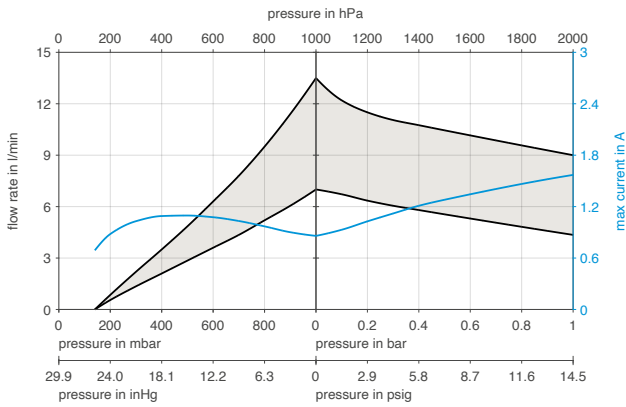
Series model	Flow rate at atm. pressure (l/min) <sup>1)</sup>	Max. operating pressure (bar rel./psig)	Ultimate vacuum (mbar abs.)
NPK 012 DC-B-M VA	7.0-13.5 ± 10 %	1.0/14.5	140

Flow rate determined at 20 °C, 1013 mbar abs.  
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

## NPK 012 DC-B-M VA

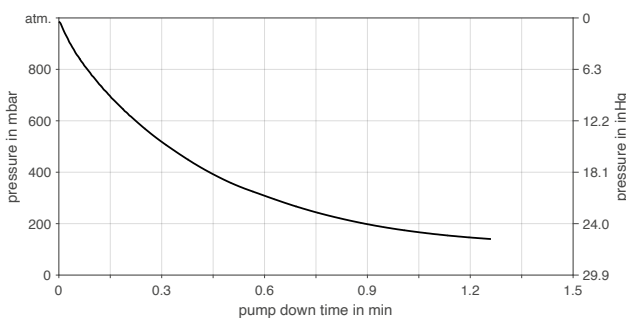


## NPK 012 DC-B-M VA


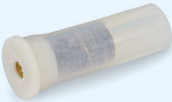

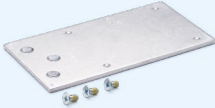


Flow rate determined at 20 °C, 1013 mbar abs.  
(Pressure 0 to 1013 mbar abs. in accordance with ISO 21360-1/2)

## NPK 012 DC-B-M VA | PUMP DOWN TIME FOR 5 LITER VESSEL



## ACCESSORIES

Description	Illustration	Part No.
Inlet filter		319074
Silencer		058987
Housing cover set		325019
Base plate set		325020

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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