

MICRO DIAPHRAGM GAS SAMPLING PUMPS WITH HIGH PERFORMANCE



NMS 010 L



NMS 020 L



NMS 020 B

Concept

The Micro Diaphragm Gas Sampling Pumps from KNF are based on a simple principal - an elastic diaphragm, fixed on its edge, moves up and down its central point by means of an eccentric. In this way the medium is transferred using automatic valves.

The new micro diaphragm pumps NMS 010 and NMS 020 offer improved pneumatic performance in conjunction with a smaller size. The new technology results in low pulsation and minimum noise emission.

Additional technical features include efficient valve and sealing systems, as well as a precision bolting system on the pump heads.

Features

Uncontaminated flow

No contamination of the media due to oil-free operation

Maintenance-free

Compact size

High pneumatic performance because of new oval diaphragm

Low aerodynamic loss by means of a new valve system

High level of gas tightness thanks to the closed diaphragm surface and special sealing system.

Low pulsation

Low noise

Long product life

Ready for assembly

Can operate in any installed position

Areas of use

KNF Micro Diaphragm Pumps NMS 010 and NMS 020 can be used frequently in the fields of analysis and medicine.

For instance as pumps for gas measurement, for example for sampling environmental conditions in the workplace or for exhaust gas and smoke analysis or built into machines for measuring blood pressure.

As they are DC driven, these micro diaphragm pumps are suited for use in portable and stand-alone equipment.

TECHNICAL DETAILS

Motors with other voltages or with speed control on request.

The pumps NMS 010 and NMS 020 meet the EU guideline 2004/108/EG.

PERFORMANCE DATA

Type	Delivery (l/min)	Vacuum (mbar absolute)	atm. Press.	Pressure (bar g)	Weight (g)
NMS 010 L (motor with iron-free rotor, long-life)	0.75	600		0.2	20.0
NMS 020 B (brushless dc motor, extremely durable)	1.6	500		0.5	29.0
NMS 020 L (motor with iron-free rotor, long-life)	1.8	500		0.2	32.0

NMS 010 L

NMS 020 L NMS 020 B

PERFORMANCE DATA

Type and Order No. ²⁾	DC motor (V)	Delivery at atm. press. (l/min) ¹⁾	Continuous running Max. pressure (mbar g)	Max. vacuum (mbar abs.)	Ultimate pressure (mbar g)	Ultimate vacuum (mbar abs.)
NMS 010 L	5	0,75	200	200	500	600

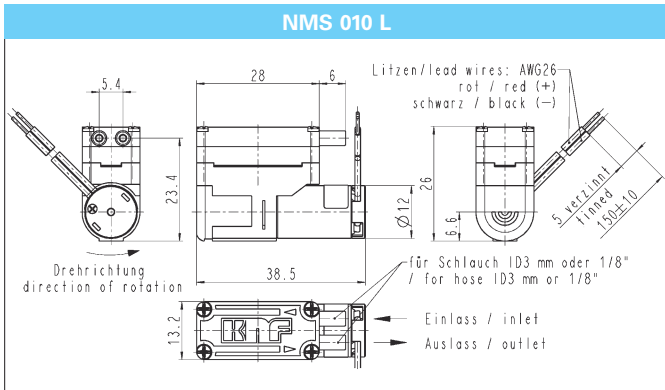
¹⁾ Liter at STP

MODEL CODES AND MATERIALS

Type and Order No. ²⁾	Pump head	Diaphragm	Valves
NMS 010 L	PPS	EPDM	EPDM

²⁾ See also „MODEL CODES FOR EASY ORDERING“

Dimensions in mm (All dimensional tolerances conform to DIN ISO 2768-1, Tolerance Class V)



PERFORMANCE DATA

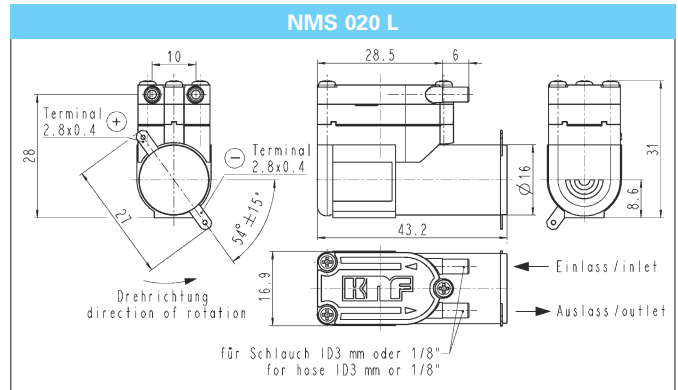
Type and Order No. ²⁾	DC motor (V)	Delivery at atm. press. (l/min) ¹⁾	Continuous running Max. pressure (mbar g)	Max. vacuum (mbar abs.)	Ultimate pressure (mbar g)	Ultimate vacuum (mbar abs.)
NMS 020 L	6	1,8	200	200	500	500
NMS 020 B	6	1,6	500	500	500	500

¹⁾ Liter at STP

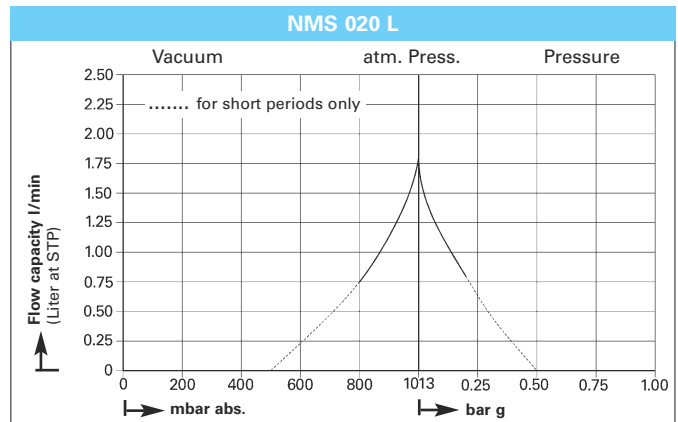
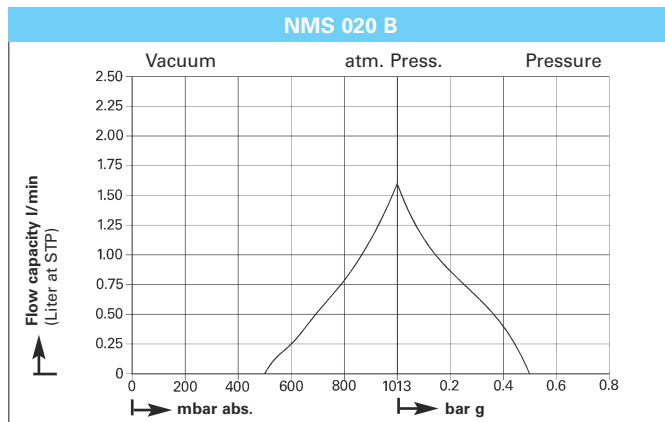
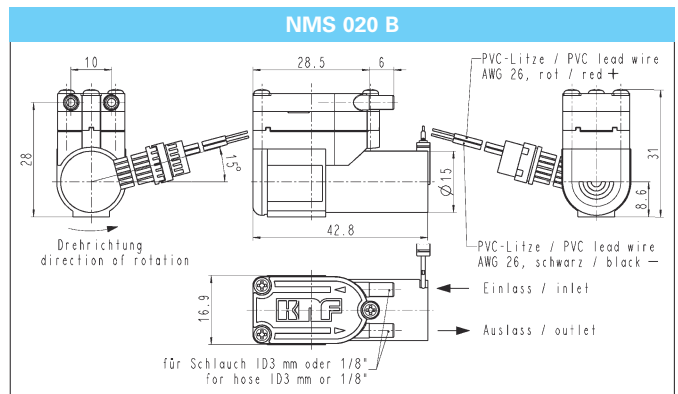
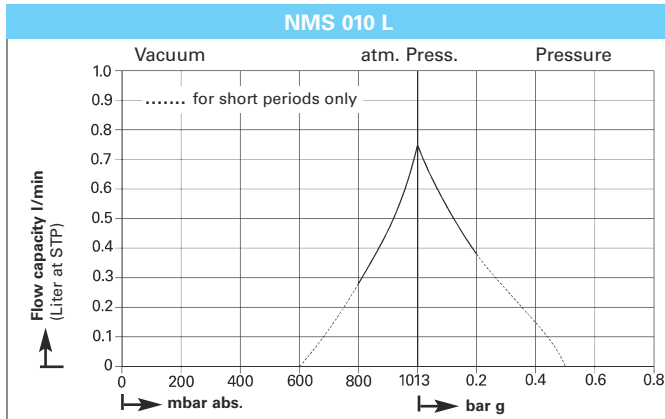
MODEL CODES AND MATERIALS

Type and Order No. ²⁾	Pump head	Diaphragm	Valves
NMS 020 L / NMS 020 B	PPS	EPDM	EPDM

B = brushless dc motor (Caution! Incorrect lead connection will damage motor electronics!)



Performance characteristics



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