

INNOVATIVE
TECHNOLOGY
WORLDWIDE



Mini Vacuum Pump

TECHNICAL FEATURES:

- Uncontaminated flow
- Oil-free operation
- Compact size
- Maintenance-free
- High performance
- Gas tight
- Long product life
- Tolerates vapor and condensation
- Cool running motor
- Can be mounted in any position

Series UN811 Pumps with AC & DC Motors

CONCEPT

The mini-diaphragm vacuum 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 pumps are equipped with the patented stress-optimized structured diaphragm, resulting in a high pneumatic performance, a durable product and compact size. Multiport valves ensure that the pump easily tolerates vapor and liquid condensate.

With the KNF modular system, the parts used to transfer the gases can be made from materials with varying degrees of durability. The pumps are available with either AC, DC or BLDC motors.

APPLICATIONS

The mini-diaphragm vacuum pumps offer a high level of performance despite their small size, as well as an excellent price performance ratio. They are used primarily in the fields of analysis, medicine and production technology.

The pumps are used to transfer gases, pull samples (even liquids in a vacuum) and evacuating vessels.

The AC models are suited for use in instruments that are either permanent or portable. The BLDC models provide long life, low emi/rfi and optional speed control for integration into instrument controls.

PERFORMANCE DATA

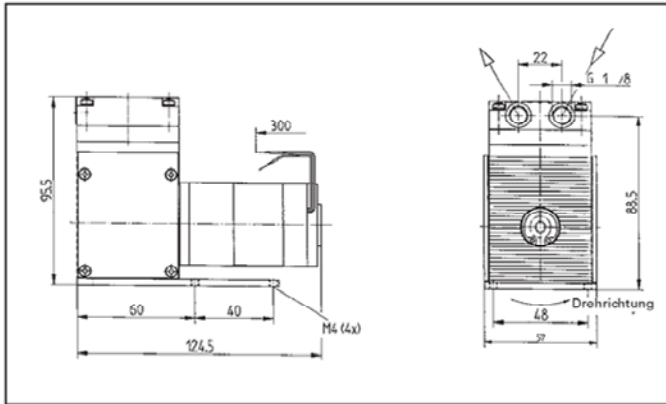
Type	Delivery (l/min)	Vacuum (mbar abs.)	atm. Press.	Pressure (bar g)	Weight (kg)
UN811KNDC	11	100		0.5	0.9
UN811KTDC	11	170		0.5	0.9
UN811KNI	11.5	100		0.5	1.3
UN811KTI	11.5	170		0.5	1.3

ACCESSORIES

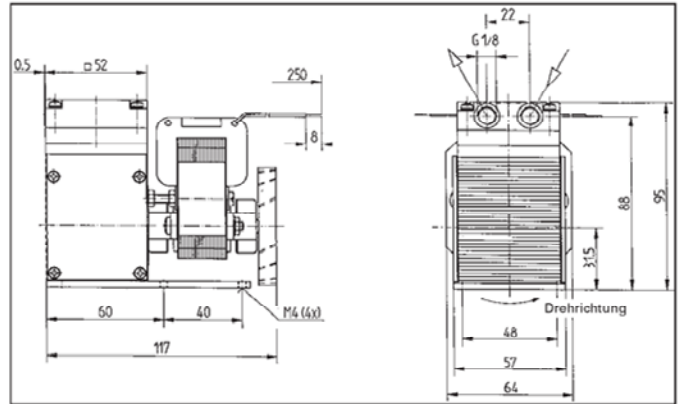
Description	Order No.	Details
Silencer / Filter	000346	G 1/8
Hose connector	000360	G 1/8 / PA
Hose connector	014052	G 1/8 / PVDF

UN811 KNDC UN811KTDC

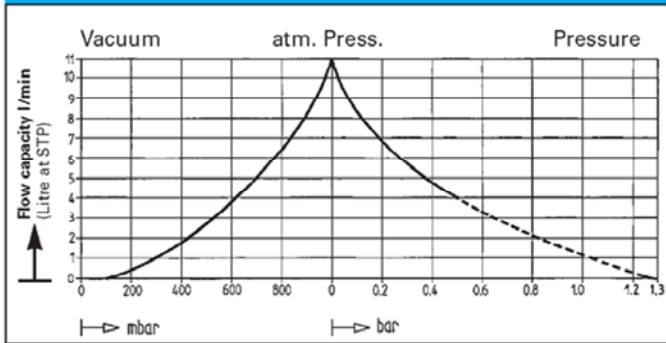
Dimensions in mm (All dimensional tolerances conform to DIN ISO 2768-1, Tolerance Class V)



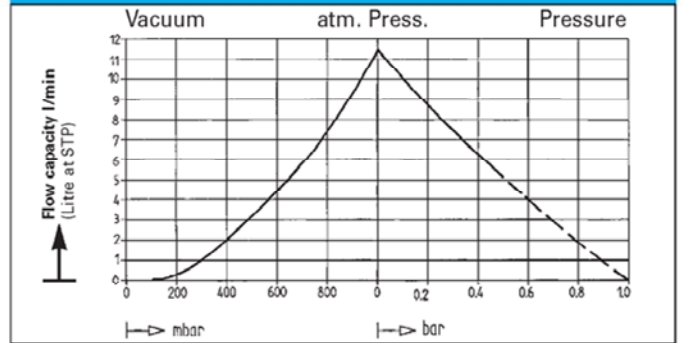
UN811KNI UN811KTI



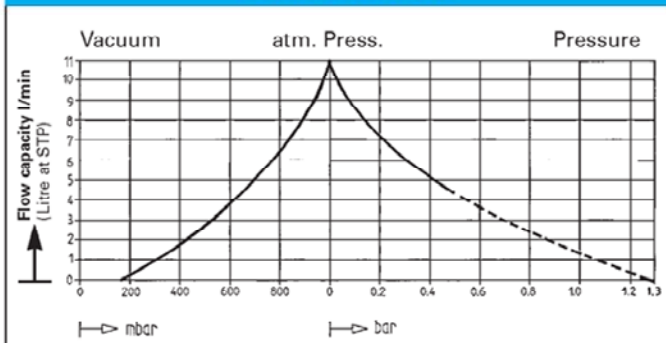
UN811KNDC



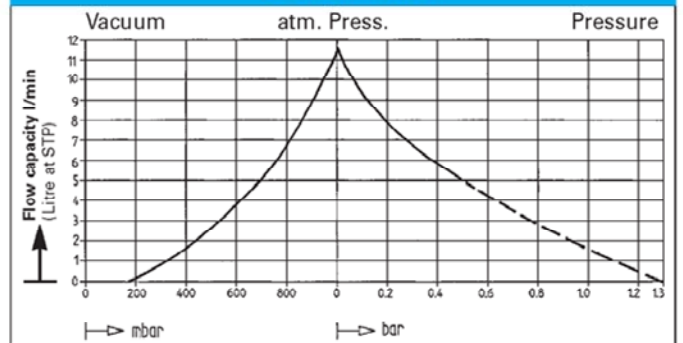
UN811KNI



UN811KTDC



UN811KTI



----- for short periods only

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PERFORMANCE DATA

Type and Order No.	Delivery at atm. pressure (l/min) ¹⁾	Max. operating pressure (bar g) ²⁾	Ultimate vacuum (mbar abs.)
UN811 KNDC	11	0.5	100
UN811 KTDC	11	0.5	170

¹⁾ Litre at STP ²⁾ Continuous running

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MOTOR DATA

DC motor	6V	12V	24V
Operating current (A)	1.95	0.95	0.5

Motors with other voltages, frequencies and protection on request.

MOTOR DATA

Protection class	IP 00		
Voltage/Frequencies (V/Hz)	115/60		
Power P ₁ (W)	60		
Operating current (A)	1.2		

MODEL CODES AND MATERIALS

Type and Order No. ²⁾	Pump head	Diaphragm	Valves
UN811 KNDC	Ryton ⁴⁾	EPDM	CR
Chemically resistant version			
UN811 KTDC	Ryton ⁴⁾	PTFE coated	FFPM

⁴⁾ Phillips Petroleum registered trade mark

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UN811 KTI	Ryton ⁴⁾	PTFE coated	FFPM