

### **Diaphragm Pumps for Air, Gases and Vapors**



N860.3FTP shown above with PowerDry® option. LABOPORT® Series N860.3FTP, N860.1.2FTP Vacuum Pump

The chemically-resistant series N860.3FTP diaphragm pump is KNF's largest laboratory twin-head unit. There is a wide range of applications for this pump in the lab. It is used especially whenever clean vacuum is required.

Examples include vacuum-drying of vacuum oven chambers for drying or heat-treating substances and components or larger rotary evaporators, vessels, filters and textiles. Due to its high resistance to aggressive media, this pump can be used with most all solvents.

The heart of these very compact pumps are KNF structured diaphragms (PTFE-coated). These patented diaphragms were stress-optimized using the Finite Elements method. As a result, we were able to make the pumps smaller while increasing the service life of the diaphragm.

**Optional .40 PowerDry® system** allows condensate to be blown out of the pump heads at high speed during evacuation. The vacuum in the vessel is not disturbed.

The drying cycle can be adjusted to the requirements of the individual process using three variables. After drying, the pump reaches a better vacuum and is able to evacuate significantly faster compared with pumps without a drying system.

# LABOPORT<sup>®</sup> Diaphragm Vacuum Pumps

#### **Technical features:**

- 100% oil-free transfer and evacuation
- Highly compatible with vapors and condensation
- Chemically-resistant
- Therefore suitable for highly aggressive or corrosive gases and vapors
- Maintenance-free
- Environmentally friendly
- Gastight, leakage rate approx. 6 x 10<sup>-3</sup> mbar x l/s, not tested in serial production.

#### Material in contact with the pumped media

Type/Order No.	Pump head	Diaphragm	Valves
N860.3FTP	PTFE	PTFE-coated	FFPM
N860.1.2FTP	PTFE	PTFE-coated	FFPM

Technical data:	N860.3FTP	N860.1.2FTP
Delivery (I/min) <sup>1</sup>	60	110
Ultimate vacuum (Torr)	1.5	75
Operating pressure (psi)	15	15
Connectors for tube (in.)	ID 1/	2"
Permissible gas and		
ambient temperature	+5	+40 °C
Voltage/Frequencies	115\	//60Hz
Motor protection	IP 54	4
Power	270	W
Operating current	1.9 A	Ą
Weight	33 lb	S.
Dimensions		
LxHxW (mm)	331/	278.5/291
With thermal switch and pow	ver fuse	

230VAC/50Hz motor available on request.

1) at atm. pressure



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### **Dimensions and performance characteristics**

N860.3FTP

**Performance characteristics** 

N860.1.2FTP





#### Dimensions (mm) N860.3FTP, N860.1.2FTP



N860.3 (0207)

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