

D-LAB Diaphragm Vacuum Pump

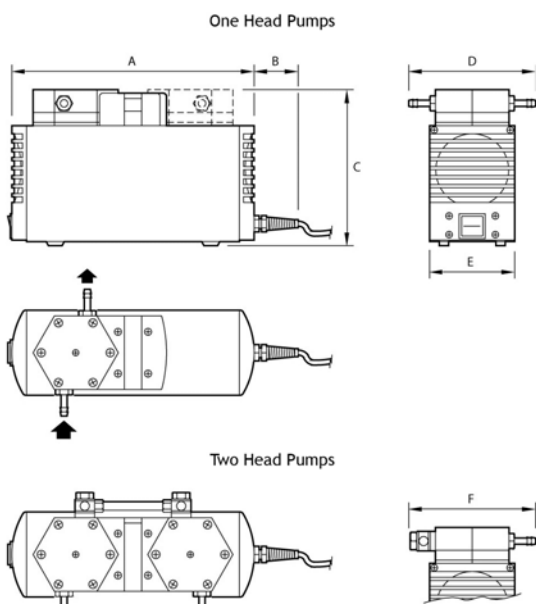


The D-LAB membrane pumps with their chemically resistant Teflon® heads, diaphragms and Kalrez® valves offer the chemical or pharmaceutical laboratory user a wide range of choice, either used as stand-alone pumps or as part of a sophisticated system. The one head, 100 mbar ultimate vacuum pumps are suitable for use with drying equipment or for replacing water-jet pumps, whilst the two head, 8 mbar ultimate vacuum pumps are suitable for rotary evaporation, gas transfer and a wide range of medium vacuum applications. 110V pumps are supplied with USA plug; 220-240V pumps are supplied with an IEC connector but mains cable with correct plug must be ordered separately.

Features & Benefits

- Teflon® heads and diaphragms
- One and two head versions
- 3 Sizes
- Compact, space-saving design
- Low noise

Dimensions



D-Lab	A	B	C	D	E	F
10-100	255	50	182	144	98	-
20-100	268	60	204	157	110	-
34-100	296	60	222	172	122	-
10-8	288	53	184	-	98	140
20-8	312	59	204	-	110	153
34-8	341	62	222	-	122	169

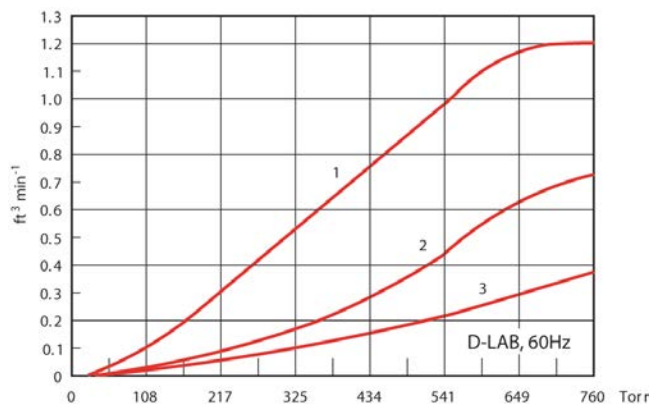
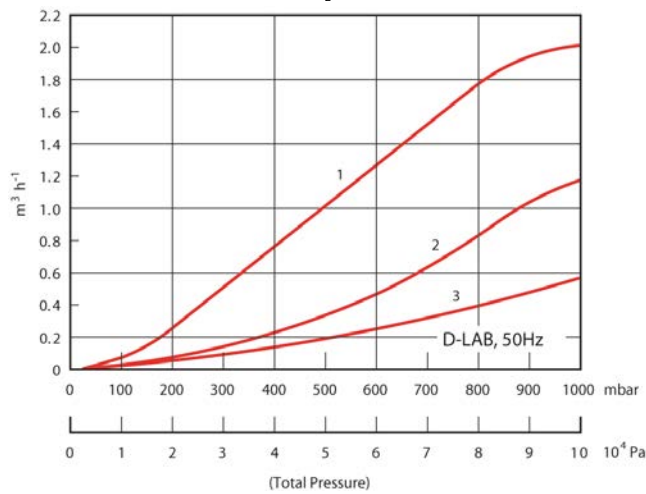
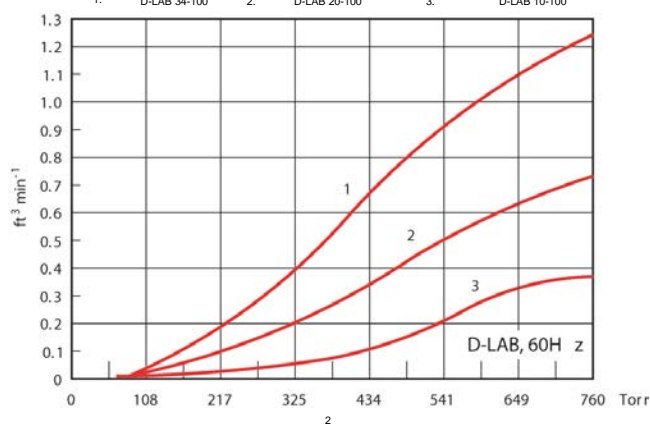
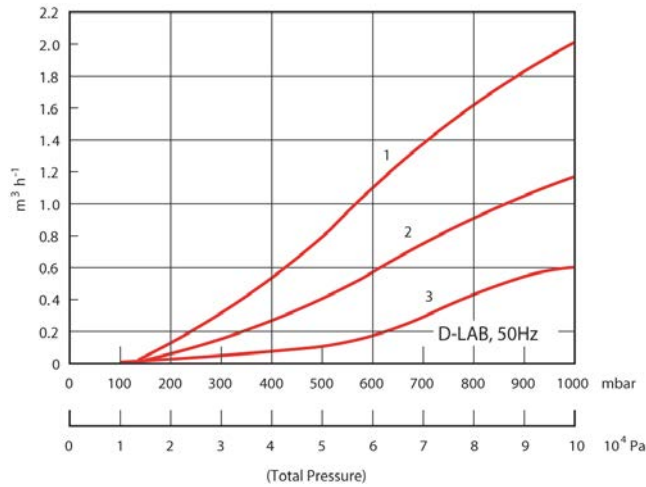
Applications

- Rotary evaporation
- Gel drying
- Vacuum desiccation
- Vacuum filtration
- Vacuum degassing

Technical Data

Pumping speed (air)	
10-100, 10-8	0.6 m ³ h ⁻¹ , 10 lmin ⁻¹
20-100, 20-8	1.2 m ³ h ⁻¹ , 20 lmin ⁻¹
34-100, 34-8	2 m ³ h ⁻¹ , 34 lmin ⁻¹
Ultimate vacuum	
10-100, 20-100, 34-100	100 mbar 50Hz, 75 mbar 60Hz
10-8, 20-8, 34-8	8 mbar 50Hz, 6 mbar 60Hz
Inlet and outlet connection	Riffled nozzle, suitable for 9 mm i.d. hose
Maximum inlet pressure	1 bar
Motor power and current	
10-100, 110V 60Hz	110 W 1.3 A
10-100, 220-240V 50Hz	100 W 0.6 A
20-100, 110V 60Hz	145 W 1.9 A
20-100, 220-240V 50Hz	130 W 0.9 A
34-100, 110V 60Hz	220 W 3.2 A
34-100, 220-240V 50Hz	180 W 1.4 A
10-8, 100V 60Hz	110 W 1.3 A
10-8, 220-240V 50Hz	90 W 0.6 A
20-8, 110V 60Hz	130 W 1.2 A
20-8, 220-240V 50Hz	120 W 0.9 A
34-8, 110V 60Hz	250 W 3.2 A
34-8, 220-240V 50Hz	200 W 1.5 A
Enclosure rating	IP44
Operating temperature	5 - 40 °C
Weight	
10-100	5.8kg / 12.8lbs
20-100	7.1kg / 15.6lbs
34-100	10.3kg / 22.7lbs
10-8	6.9kg / 15.2lbs
20-8	9.3kg / 20.5lbs
34-8	12.6kg / 27.7lbs

Performance Curves



Ordering Information

Product Description

Product Description	Order No.
D-LAB 10-100, 110V, 60Hz, 1-ph	A48015941
D-LAB 10-100, 220-240, 50Hz, 1-ph	A48015960
D-LAB 10-8, 110 V 1-phase 60 Hz	A48016941
D-LAB 10-8, 220-240~ 50Hz, 1-ph	A48016960
D-LAB 20-100, 110V 60Hz, 1-ph	A48017941
D-LAB 20-100, 220-240~ 50Hz, 1-ph	A48017960
D-Lab 20-8, 110 V 1-phase 60 Hz	A48018941
D-Lab 20-8, 220-240V 50Hz, 1-ph	A48018960
D-LAB 34-100, diaphragm pump, 110~ 60Hz, 1-ph	A48021941
D-LAB 34-100, 220-240~ 50Hz, 1-ph	A48021960
D-LAB 34-8, diaphragm pump, 110V 60Hz, 1-ph	A48022941
D-LAB 34-8, diaphragm pump, 220-240 V 1-phase 50 Hz	A48022960

Accessories & Spares

Accessories & Spares	Order No.
D-Lab Base Plate 10+20-X	A48015134
D-Lab Separator	A48015136
Condenser For D-Lab Pumps	A48015137
Gas Ballast For D-Lab Pumps 10-100,10-8	A48015135
D-Lab Controller 100/110V	A48015139
Service kit for D-LAB 10-100	A48015815

XDD1 Diaphragm Vacuum Pump



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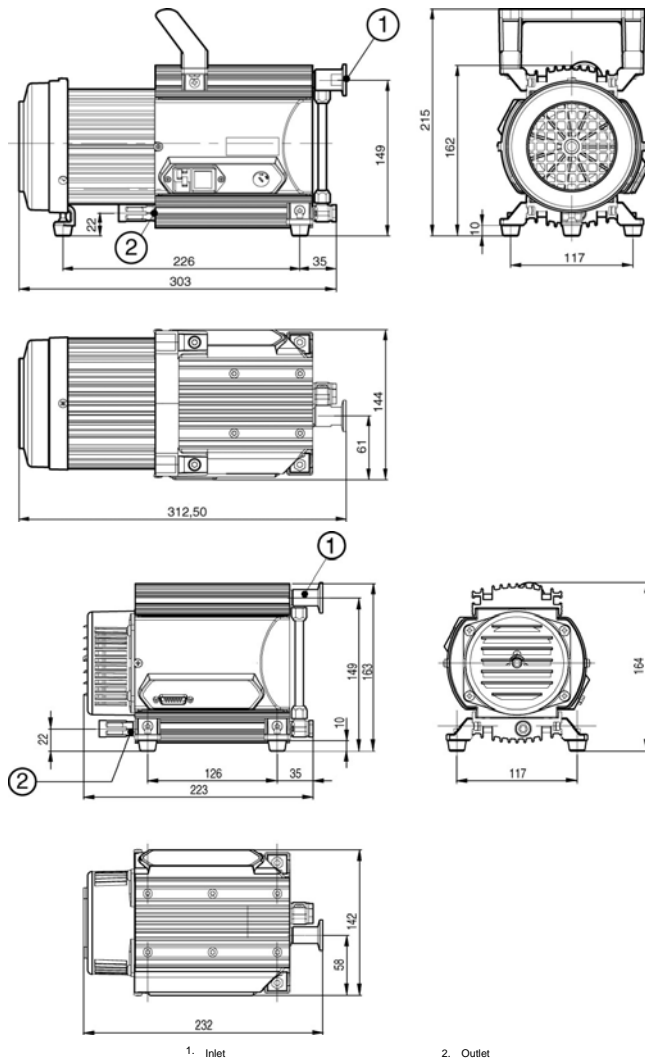
The Edwards XDD1 diaphragm pumps are used for backing small compound turbomolecular pumps in clean, high vacuum applications. They comply with EN61010, EN1012, CSA/UL and are designed to be free standing bench top units.

The a.c. voltage motor can be used on worldwide supplies ranging from 100 to 115 V, and 200 to 230 V. The d.c. voltage motor runs on 24 V via a 15 pin DIN connector. By selecting the appropriate mode the pump speed can be controlled by the user to provide variable pumping speed. This version is suited to the customer who is building their own a system. Pumps are not supplied with connection cables. A suitable cable should be ordered with the pump.

Features & Benefits

- Dry pumping, oil free turbomolecular backing pump with no oil disposal issues
- Compact and lightweight with a small footprint
- Worldwide a.c. voltage or 24 V d.c.
- On/off switch
- EN 60320 connector on AC pumps

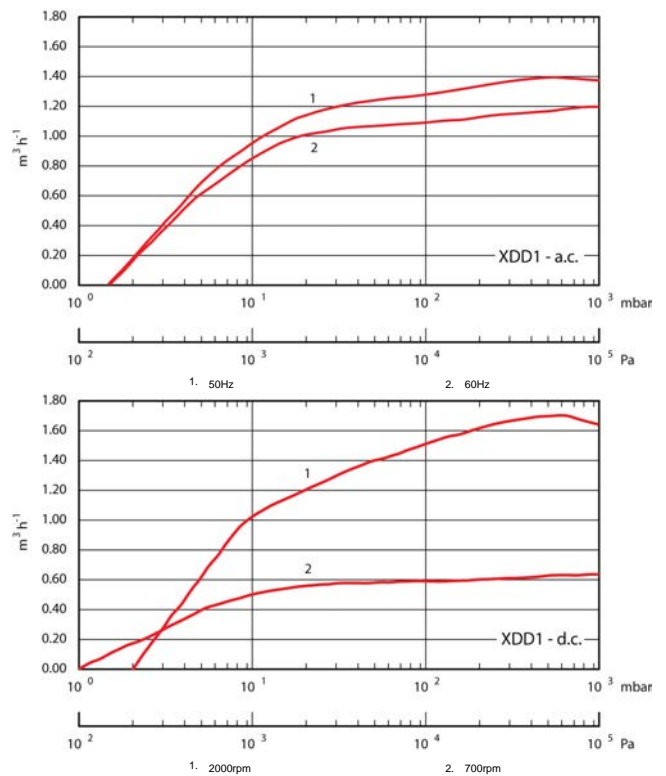
Dimensions



Applications

- RGA
- Mass spectrometers
- Cryostat and Dewar evacuation
- Ion pump evacuation
- Surface science

Performance Curves



Technical Data

Pumping Speed	
a.c.	1.2 m ³ h ⁻¹ 50Hz, 1.5 m ³ h ⁻¹ 60Hz
d.c.	0.6 m ³ h ⁻¹ 600 rpm, 1.6 m ³ h ⁻¹ 2200rpm
Ultimate vacuum (typical)	<2 mbar
Ambient temperature limit	10 to 40 °C
Inlet connection	NW16 The pump is fitted with a silencer which can be removed and an exhaust line connected with a 1/8 inch BSP fitting
Exhaust connection	
Max allowed inlet pressure	1 bara
Power connector	IEC EN60320 C13
Motor power	
a.c.	80 W
d.c.	64 W
Weight	
a.c.	6.5 kg
d.c.	4.1 kg

Ordering Information

Product Description	Order No.
XDD1 Diaphragm Pump 100-115V/200-230V 50/60 Hz	A74602983
XDD1 Diaphragm Pump 24 V d.c.	A74602991
Accessories & Spares	Order No.
2m electrical supply cable for 1-ph pumps, UK plug 3A	A50516000
2m electrical supply cable for 1-ph pumps, no plug	A50508000
2m electrical supply cable for 1-ph pumps, North America/Japan plug	A50507000
2m electrical supply cable for 1-ph pumps, North European plug	A50506000
XDD1 diaphragm service kit	A74601800