

oerlikon
leybold vacuum

DIVAC

Diaphragm Vacuum Pumps

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Excerpt from the Oerlikon Leybold Vacuum Full Line Catalog

Product Section C04

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General

What this Series Offers

This range of vacuum pumps was developed especially for laboratory operations and as backing pumps for (wide range) turbomolecular pumps. It satisfies the highest expectations in terms of precision, reliability and ease of use.

The DIVAC line of vacuum pumps is the logical continuation of diaphragm pump technology which has proven its quality in decades of service.

Laboratory Pumps

Through the laboratory pumps and the three different pumping speeds available for the same base pressure and through the modular design, the optimum DIVAC L pump system ¹⁾ can be implemented in each case.

DIVAC L diaphragm pumps are suited for almost all requirements in the chemistry lab. They are basically corrosion and solvent resistant since their parts in contact with the pumped medium are made of PTFE (Teflon), FFPM (Kalrez) and PVDF (Solef).

The newly developed automatic drying system is used in all applications where very moist and wet gases need to be pumped over extended periods of time. Here the pumping speed remains constant and the service life of the pumps is not impaired by the liquid.

¹⁾ Comprising the DIVAC diaphragm pump and a DIVAC sub-assembly

Backing Pumps

The DIVAC T range of diaphragm pumps comprises backing pumps which are used in all applications requiring an especially low base pressure while having to maintain an oil-free vacuum.

The DIVAC T pumps have been specially developed as backing pumps for wide range high vacuum turbomolecular pumps. They meet the requirements for a dry vacuum and a long service life.

DIVAC T pumps may be used both free-standing and integrated in applications or certain devices, and for this reason they are used in the areas of mass spectrometry, analytical and in general applications.

The DIVAC TC pumps are capable of handling aggressive and corrosive gases as encountered in research or in connection with sputtering processes. The parts of the pump in contact with the medium are made of PTFE (Teflon), FFPM (Kalrez) and PVDF (Solef), and for this reason the pumps are highly resistant to the media mentioned.

Application Examples

Laboratory Pumps

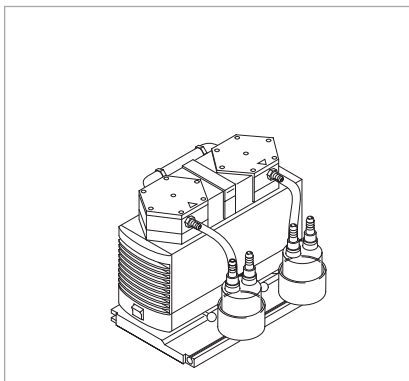
- Vacuum filtration
- Vacuum distillation
- Vacuum drying
- To extract and transfer gases
- On rotary evaporators
- Gel drying
- Steam sterilization

Backing Pumps

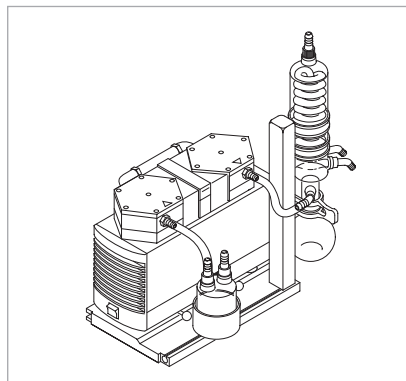
- Backing pump for wide range turbomolecular pumps
- Mass spectrometry
- Medicine technology
- Analytical technology
- General rough and medium vacuum applications

The customized diaphragm pump and the accessories recommended for your application in the chemical laboratory

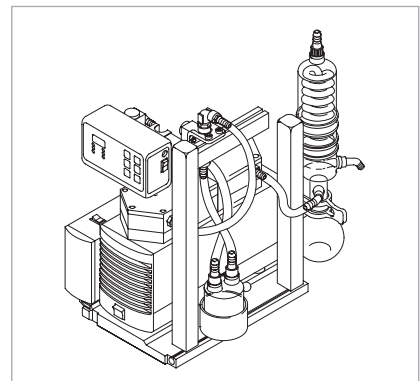
Modular diaphragm pump system	Evacuating small devices (e.g. desiccator)	Sublimation	Analysis preparation	Filtration	Distillation	Drying in the drying cabinet	Drying cabinets (2 cabinets with 1 pump)	Rotary evaporator	Steam sterilization
Application									
DIVAC 0.6	■	■	■	■	■				
DIVAC 1.2	■	■	■	■	■				
DIVAC 2.2	■	■	■	■	■				
DIVAC 0.6 L	■	■	■	■	■				
DIVAC 1.2L	■	■	■	■	■		■		
DIVAC 2.2 L	■	■	■	■	■	■	■		
DIVAC 1.2 L AD	■			■	■			■	■
DIVAC 2.2 L AD					■	■	■	■	■
Base plate	■	■	■	■	■	■	■	■	■
Separator (intake side)		■	■	■	■	■	■	■	
Separator (exhaust side)	■		■		■	■	■	■	■
High-performance condenser (including stand and holder)					■	■	■	■	
Vacuum controller							■		
Gas ballast unit						■	■		
Corresponds to the DIVAC system	-	-	-	SR 0.6 L	SH 0.6 L	SH 2.2 L	SH 2.2 L	SC 1.2 L	-



DIVAC system: SR 0.6 L, 1.2 L, 2.2 L



DIVAC system: SH 0.6 L, 1.2 L, 2.2 L



DIVAC system: SC 0.6 L, 1.2 L, 2.2 L

Modular Diaphragm Pump System for the Chemical Laboratory

Advantages to the User

- Low base vacuum of 8 mbar (100 mbar for single-head DIVAC pumps)
- All parts of the pump head in contact with the gas are resistant against aggressive media through the use of PTFE (Teflon), FFPM (Kalrez) and PVDF (Solef)
- Dry compressing, oil-free
- Very high water vapor tolerance
- Low maintenance costs and long service intervals through the use of high-quality components which are well-proven
- Simple maintenance by staff of the customer
- Low noise operation
- Portable, compact, small footprint
- Can be operated in any orientation
- Illuminated mains switch on the pump
- Overheat protection for the vacuum pump by means of a thermofuse
- Available in three pumping speed categories
- Modular system
 - can easily be adapted to special requirements
- Wide range of accessories like separator, condenser, base plate, vacuum controller

Features of the Modular Designed Laboratory Pump System

- All system components are combined to form assemblies which can be easily replaced or retrofitted
- Easy relocation since the entire assembly is mounted as a unit on a stable base plate for easy transportation
- Individual components with plug connectors for easy removal and mounting
- Compact design – small footprint
- For the SC configuration – with separator, high-performance condenser and controller – all electrical connections are arranged inside the control unit and made by way of plug connectors
- Trouble-free provisions for mounting additional laboratory equipment in grooved rails, on laboratory stands and crossbars in the assembly
- Simple replacement of diaphragms and valves on the vacuum pumps

Additional Benefits of the Automatic Drying System

- High vapor and condensate tolerance through the newly developed automatic drying system
- Maintaining of maximum pumping speed
- Longer durability of the structured diaphragm
- Individual adaptation of the drying cycle to different processes
- Vacuum chamber is not vented during the drying phase
- Overnight evacuations are possible through the automatic cycling system

Products

Diaphragm Vacuum Pumps for the Chemical Laboratory

Single-Stage Diaphragm Vacuum Pumps

DIVAC 0.6, 1.2, 2.2

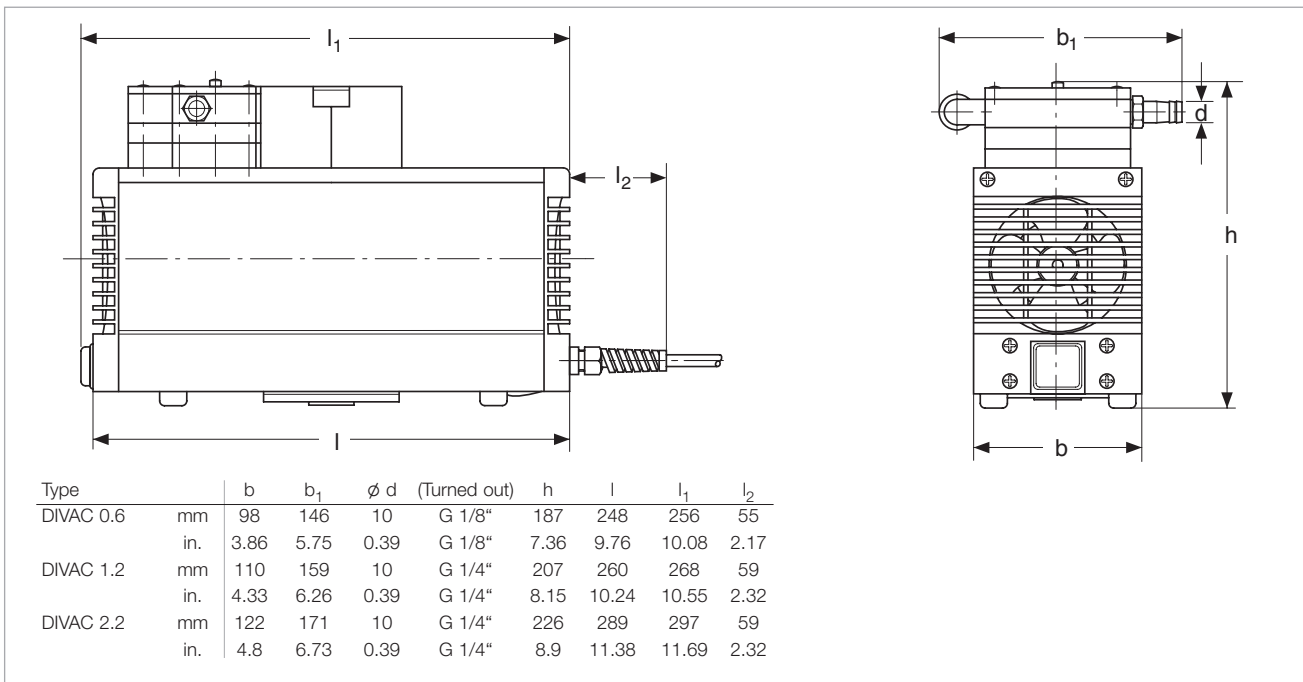


Typical Applications

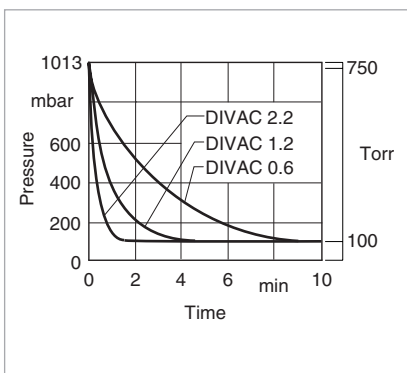
Vacuum generation for

- Rotary evaporators
- Drying chambers
- Filtration units
- Distillation configurations
- Gel dryers

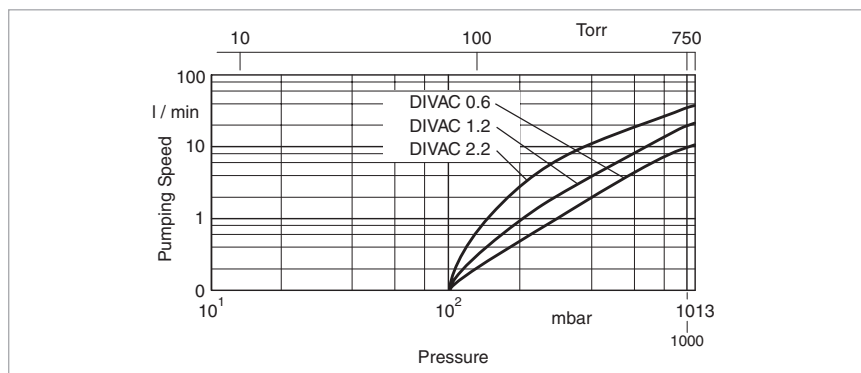
Single-stage diaphragm vacuum pumps DIVAC 0.6, 1.2, 2.2



Dimensional drawing for the DIVAC 0.6, 1.2 and 2.2



Curves of pump-down time of a 10 l vessel



Curves of pumping capacity

Technical Data

DIVAC

		0.6	1.2	2.2
Max. pumping speed (atm.)	m ³ x h ⁻¹ (cfm)	0.6 (0.4)	1.2 (0.7)	2.0 (1.2)
Ultimate pressure	mbar (Torr)	≤ 100 (≤ 75)	≤ 100 (≤ 75)	≤ 100 (≤ 75)
Max. exhaust back pressure (absolute)	mbar (Torr)	2000 (1500)	2000 (1500)	2000 (1500)
Pump heads		1	1	1
Connection				
Inlet (suction side)	DN	Hose nozzle ID 10	Hose nozzle ID 10	Hose nozzle ID 10
Exhaust (delivery side)	DN	Hose nozzle ID 10	Hose nozzle ID 10	Hose nozzle ID 10
Thread (suction and delivery side)	G	G 1/8"	G 1/4"	G 1/4"
Noise level acc. to DIN 45 635 Part 13, approx.	dB(A)	47	50	52
Permissible gas admission temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Permissible ambient temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Voltage / nominal frequency (1 ph. motor)				
Schuko plug	V / Hz	230 ± 10% / 50	230 ± 10% / 50	230 ± 10% / 50
NEMA plug	V / Hz	115 ± 10% / 60	115 ± 10% / 60	115 ± 10% / 60
NEMA plug	V / Hz	100 ± 10% / 50/60	100 ± 10% / 50/60	100 ± 10% / 50/60
Protective class	IP	44	44	44
Motor power ¹⁾	W	100	130	180
Current consumption ¹⁾	A	0.6	0.9	1.35
Motor speed				
50 Hz	min ⁻¹	1500	1500	1500
60 Hz	min ⁻¹	1800	1800	1800
Dimensions (W ¹⁾ x H ¹⁾ x D), approx.	mm (in.)	256 x 146 x 187 (10.08 x 5.75 x 7.36)	268 x 159 x 207 (10.55 x 6.3 x 8.15)	297 x 171 x 226 (11.69 x 6.73 x 8.9)
Weight, approx.	kg (lbs)	5.9 (13.02)	7.1 (15.57)	10.3 (22.74)
Material				
Pump head		PTFE (Teflon)	PTFE (Teflon)	PTFE (Teflon)
Structured diaphragm		PTFE coated	PTFE coated	PTFE coated
Valves		FFPM (Kalrez)	FFPM (Kalrez)	FFPM (Kalrez)
Nozzles		PVDF (Solef)	PVDF (Solef)	PVDF (Solef)

Ordering Information

DIVAC

	0.6	1.2	2.2
Diaphragm vacuum pump 230 V, 50 Hz, with 2.3 m (8 ft) power cord and Schuko plug	Part No. 127 60	Part No. 127 61	Part No. 127 62
Spare parts kit consisting of 1 diaphragm, 2 gasket rings, 2 valve disks	Part No. 127 63	Part No. 127 64	Part No. 127 65
Hose nozzles 1 exhaust port and 2 inlet ports	Part No. 200 650 25 (2x)	Part No. 200 650 26 (2x)	Part No. 200 650 26 (2x)

¹⁾ for 230 V / 50 Hz version

Dual-Stage Diaphragm Vacuum Pumps

DIVAC 0.6 L, 1.2 L, 2.2 L

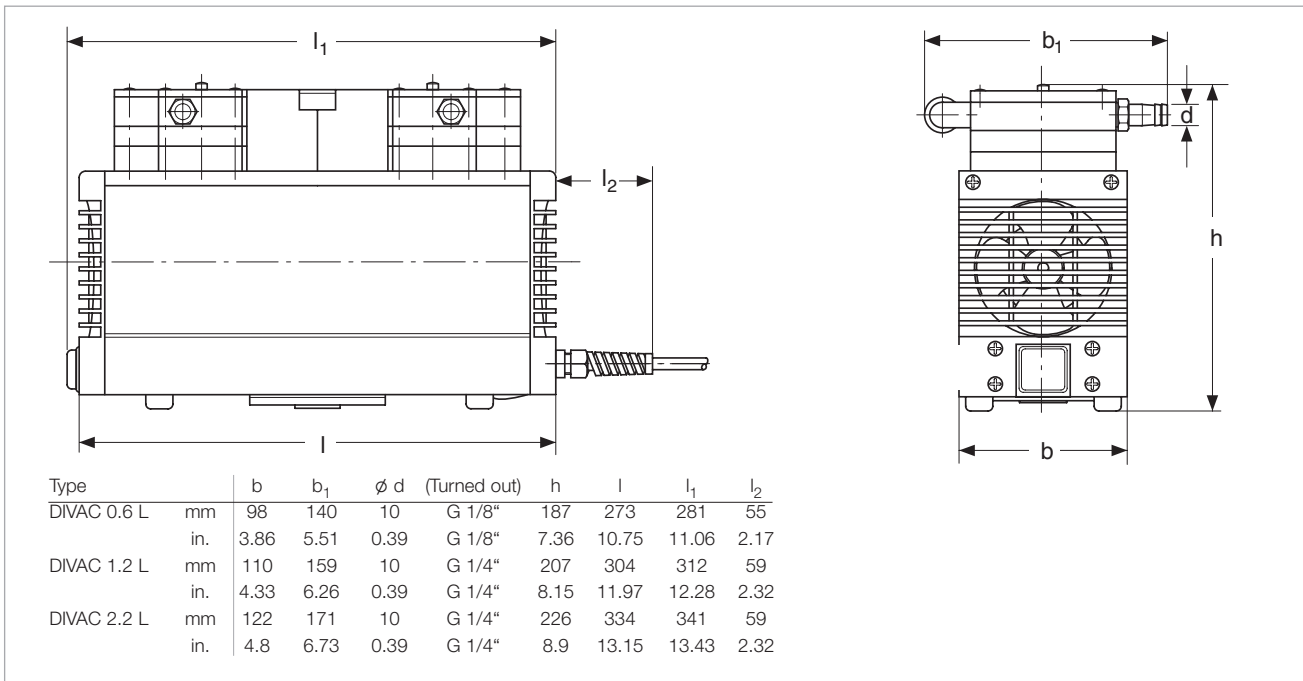


Typical Applications

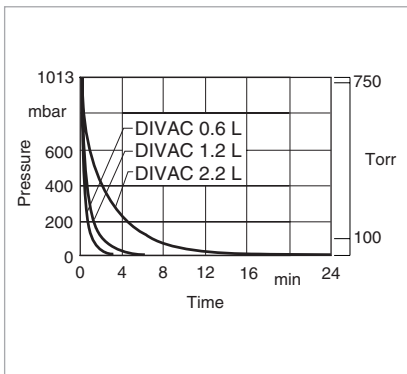
Vacuum generation for

- Rotary evaporators
- Drying chambers
- Filtration units
- Distillation configurations
- Gel dryers

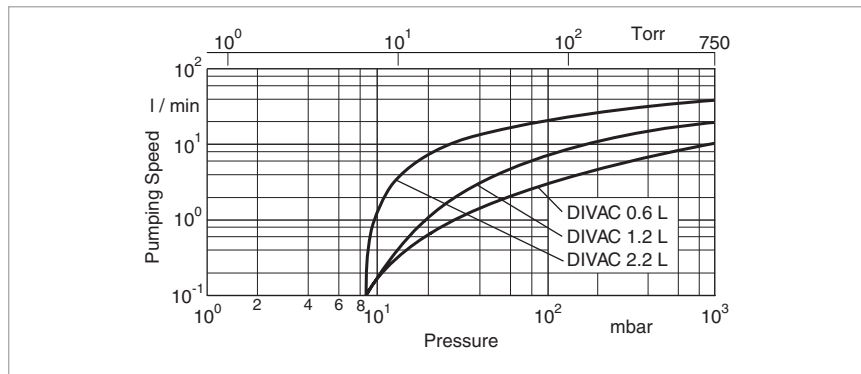
Dual-stage diaphragm vacuum pumps DIVAC 0.6 L, 1.2 L, 2.2 L



Dimensional drawing for the DIVAC 0.6 L, 1.2 L, 2.2 L



Curves of pump-down time of a 10 l vessel



Curves of pumping capacity

Technical Data

		DIVAC		
		0.6 L	1.2 L	2.2 L
Max. pumping speed (atm.)	m ³ x h ⁻¹ (cfm)	0.6 (0.4)	1.2 (0.7)	2.0 (1.2)
Ultimate pressure	mbar (Torr)	≤ 8 (≤ 6)	≤ 8 (≤ 6)	≤ 8 (≤ 6)
Max. exhaust back pressure (absolute)	mbar (Torr)	2000 (1500)	2000 (1500)	2000 (1500)
Pump heads		2	2	2
Connection				
Inlet (suction side)	DN	Hose nozzle ID 10	Hose nozzle ID 10	Hose nozzle ID 10
Exhaust (delivery side)	DN	Hose nozzle ID 10	Hose nozzle ID 10	Hose nozzle ID 10
Thread (suction and delivery side)	G	G 1/8"	G 1/4"	G 1/4"
Noise level acc. to DIN 45 635 Part 13, approx.	dB(A)	47	50	52
Permissible gas admission temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Permissible ambient temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Voltage / nominal frequency (1 ph. motor)				
Schuko plug	V / Hz	230 ± 10% / 50	230 ± 10% / 50	230 ± 10% / 50
NEMA plug	V / Hz	115 ± 10% / 60	115 ± 10% / 60	115 ± 10% / 60
NEMA plug	V / Hz	100 ± 10% / 50/60	100 ± 10% / 50/60	100 ± 10% / 50/60
Protective class	IP	44	44	44
Motor power ¹⁾	W	90	120	245
Current consumption ¹⁾	A	0.6	0.7	1.8
Motor speed				
50 Hz	min ⁻¹	1500	1500	1500
60 Hz	min ⁻¹	1800	1800	1800
Dimensions (W ¹⁾ x H ¹⁾ x D), approx.	mm (in.)	281 x 140 x 187 (11.06 x 5.51 x 7.36)	312 x 154 x 207 (12.28 x 6.06 x 8.15)	341 x 166 x 226 (13.43 x 6.54 x 8.9)
Weight, approx.	kg (lbs)	6.9 (15.2)	9.3 (20.5)	12.6 (27.8)
Material				
Pump head		PTFE (Teflon)	PTFE (Teflon)	PTFE (Teflon)
Structured diaphragm		PTFE coated	PTFE coated	PTFE coated
Valves		FFPM (Kalrez)	FFPM (Kalrez)	FFPM (Kalrez)
Nozzles		PVDF (Solef)	PVDF (Solef)	PVDF (Solef)

Ordering Information

		DIVAC		
		0.6 L	1.2 L	2.2 L
Diaphragm vacuum pump 230 V, 50 Hz, with 2.3 m (8 ft) power cord and Schuko plug		Part No. 135 00	Part No. 135 06	Part No. 135 12
Diaphragm vacuum pump 100 V, 50/60 Hz, with 2.3 m (8 ft) power cord and NEMA plug		Part No. 135 02	Part No. 135 08	Part No. 135 14
Diaphragm vacuum pump 115 V, 60 Hz, with 2.3 m (8 ft) power cord and NEMA plug		Part No. 135 03	Part No. 135 09	Part No. 135 15
Spare parts kit consisting of 2 diaphragms, 4 gasket rings, 4 valve plates		Part No. 135 23	Part No. 135 24	Part No. 135 25
Hose nozzle kit consisting of 2 hose nipples, piping		-	Part No. 200 650 06	Part No. 200 650 07

¹⁾ for 230 V / 50 Hz version

Dual-Stage Diaphragm Vacuum Pumps with Automatic Drying System

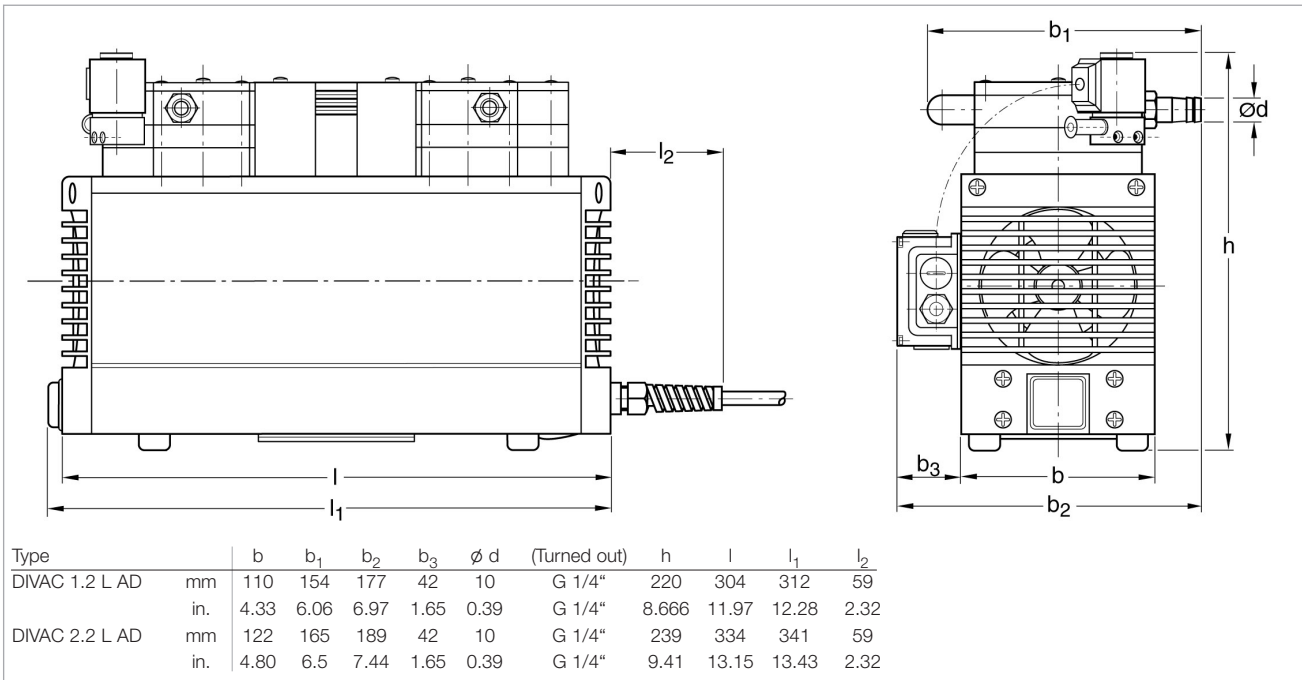
DIVAC 1.2 L AD, 2.2 L AD



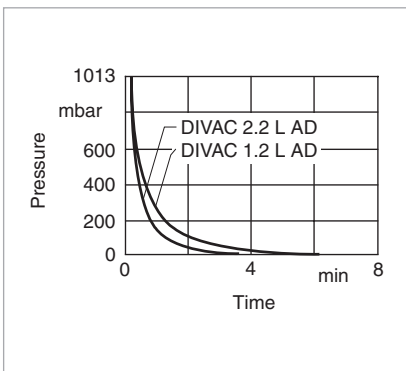
Dual-stage diaphragm vacuum pumps DIVAC 1.2 L AD, 2.2 L AD

The automatic drying system of this dual-stage diaphragm pump enables problem-free pumping of very damp and wet vapors.

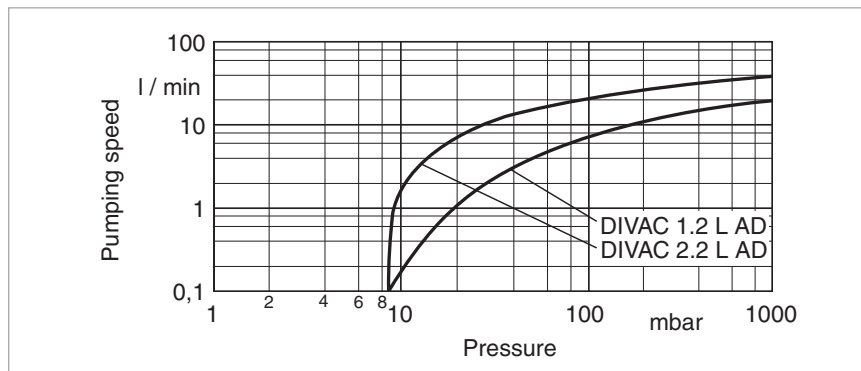
With the automatic function, resulting liquid is blown out of the pump head using individually adjustable parameters, restoring the maximum suction capacity. The vacuum in the recipient is maintained during drying.



Dimensional drawing for the DIVAC 1.2 L AD und 2.2 L AD



Curves of pump-down time of a 10 l vessel



Curves of pumping capacity

Technical Data

DIVAC

		1.2 L AD	2.2 L AD
Max. pumping speed (atm.)	m ³ x h ⁻¹ (cfm)	1.2 (0.7)	2.0 (1.2)
Ultimate pressure	mbar (Torr)	≤ 10 (≤ 7.5)	≤ 10 (≤ 7.5)
Max. exhaust back pressure (absolute)	mbar (Torr)	2000 (1500)	2000 (1500)
Pump heads		2	2
Connection			
Inlet (suction side)	DN	Hose nozzle ID 10	Hose nozzle ID 10
Exhaust (delivery side)	DN	Hose nozzle ID 10	Hose nozzle ID 10
Thread (suction and delivery side)	G	G 1/4"	G 1/4"
Noise level acc. to DIN 45 635 Part 13, approx.	dB(A)	50	52
Permissible gas admission temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Permissible ambient temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Voltage / nominal frequency (1 ph. motor)			
Schuko plug	V / Hz	230 ± 10% / 50	230 ± 10% / 50
NEMA plug	V / Hz	115 ± 10% / 60	115 ± 10% / 60
NEMA plug	V / Hz	100 ± 10% / 50/60	100 ± 10% / 50/60
Protective class	IP	44	44
Motor power ¹⁾	W	120	245
Current consumption ¹⁾	A	0.7	1.8
Motor speed			
50 Hz	min ⁻¹	150	1500
60 Hz	min ⁻¹	1800	1800
Dimensions (W ¹⁾ x H ¹⁾ x D), approx.	mm (in.)	312 x 177 x 220 (12.28 x 6.97 x 8.66)	341 x 189 x 239 (13.43 x 7.44 x 9.41)
Weight, approx.	kg (lbs)	9.6 (21.2)	12.9 (28.48)
Material			
Pump head		PTFE (Teflon)	PTFE (Teflon)
Structured diaphragm		PTFE coated	PTFE coated
Valves		FFPM (Kalrez)	FFPM (Kalrez)
Nozzles		PVDF (Solef)	PVDF (Solef)

Ordering Information

DIVAC

	1.2 L AD	2.2 L AD
Diaphragm vacuum pump 230 V, 50 Hz, with 2.3 m (8 ft) power cord and Schuko plug	Part No. 500 750	Part No. 500 755
Diaphragm vacuum pump 115 V, 60 Hz, with 2.3 m (8 ft) power cord and NEMA plug	Part No. 500 752	Part No. 500 757
Spare parts kit consisting of 2 diaphragms, 4 gasket rings, 4 valve plates	Part No. 135 24	Part No. 135 25
Hose nozzle kit consisting of 2 hose nipples, piping	Part No. 200 650 06	Part No. 200 650 07
Accessories		
Separating vessel on the delivery side	Part No. 135 20	Part No. 135 20
Neoprene hose, ID 10 mm	Part No. 200 650 02	Part No. 200 650 02
Base panel	Part No. 135 18	Part No. 135 19

¹⁾ for 230 V / 50 Hz version

Modular Laboratory Pump Concept



DIVAC system SC 1.2 L (consisting of DIVAC module SC and DIVAC pump 1.2 L)

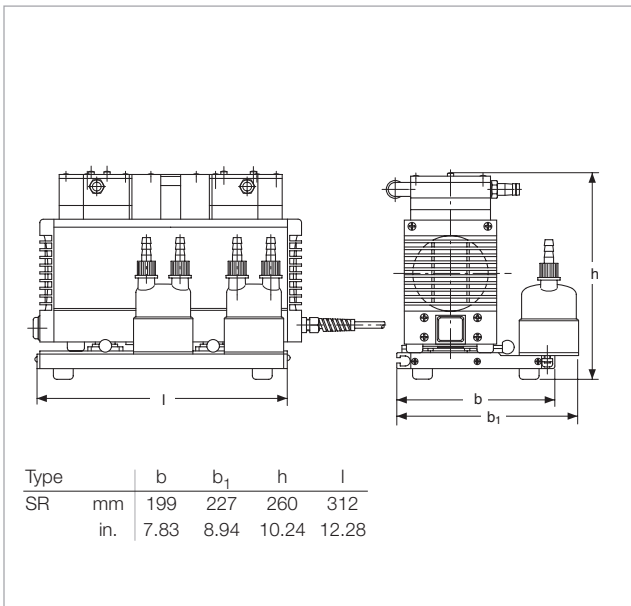
Advantages to the User

- Modular
 - Quiet-running
 - Compact
 - Environmentally friendly
 - Resistant to chemicals
 - Good ultimate vacuum
 - Reliable
 - Versions for different supply voltages are available
- 1** DIVAC 0.6 L, 1.2 L, 2.2 L
 - 2** Base plate
 - 3** Separator intake side
 - 4** Separator exhaust side (only included with module SR)
 - 5** High-performance condenser
 - 6** Vacuum controller NC 800
 - 7** Gas ballast unit (optional)
 - 8** Control unit

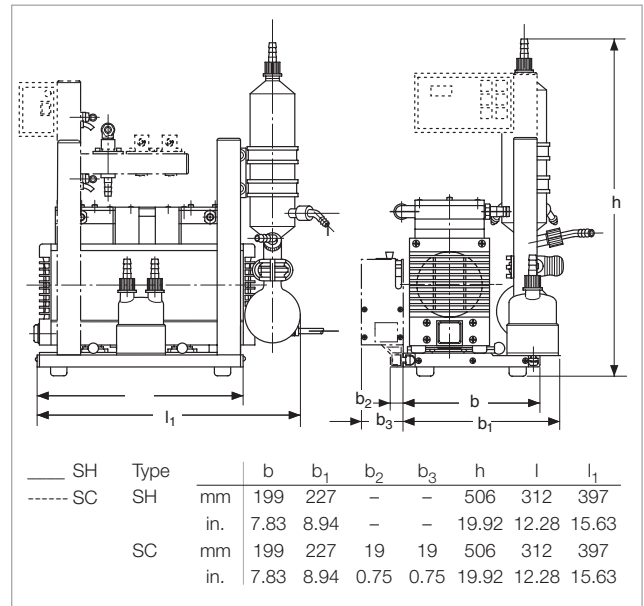
Electrical Data

DIVAC SC System

		100 V	115 V	230 V
Power drawn				
Vacuum controller NC 800	W	14	14	14
Fuses (2 each, slow-blow)	A	6.3	6.3	3.15
Control unit fuses (2 each, slow-blow)	A	6.3	6.3	3.15



Dimensional drawing for the DIVAC SR system



Dimensional drawing for the DIVAC SH and SC systems

Components for the modular DIVAC system

Ordering Information

DIVAC

	0.6 L	1.2 L	2.2 L
Base plate for system mounting	Part No. 135 18	Part No. 135 18	Part No. 135 19
Separator (intake or exhaust side)	Part No. 135 20	Part No. 135 20	Part No. 135 20
High-performance condenser	Part No. 135 21	Part No. 135 21	Part No. 135 21
Gas ballast valve	Part No. 135 26	Part No. 135 27	Part No. 135 27
Vacuum controller 90 - 260 V, 50/60 Hz	Part No. 500 760	Part No. 500 760	Part No. 500 760
Neoprene hose, ID 10 mm (0.39 in.)	Part No. 200 65 002	Part No. 200 65 002	Part No. 200 65 002

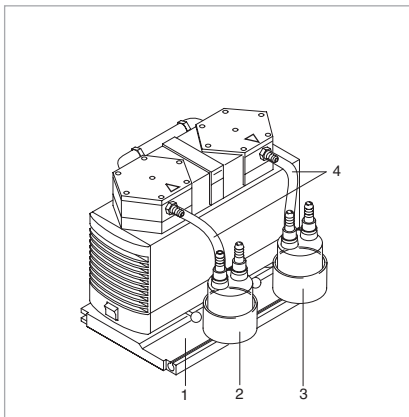
Assemble your own pump system, selecting from the variety of modules available

Additional Ordering Information

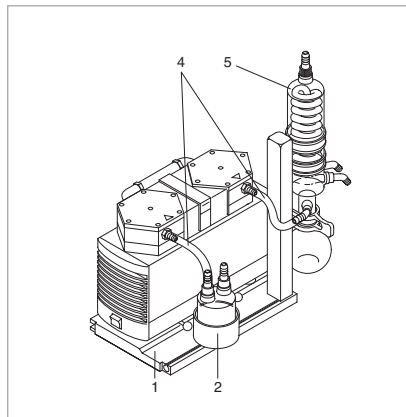
When placing your order please also indicate the catalog number for the required pump (see section “Modular Laboratory Pump Concept”)

Example: The DIVAC SH 0.6 L system comprises the DIVAC SH module (Part No. 135 50) and the DIVAC 0.6 L pump (Part No. 135 00)

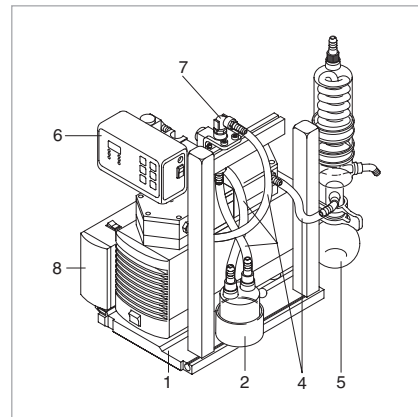
Module Item	Comprises	European version 230 V, 50 Hz Euro plug	USA/Japan version 115 V, 60 Hz 100 V, 50/60 Hz USA/Japan plug
SR	1 Base plate and system mount	Part No. 135 40	Part No. 135 40
	2 Separator, intake side		
	3 Separator, exhaust side		
	4 Hose connectors		
SH	1 Base plate and system mount	Part No. 135 50	Part No. 135 50
	2 Separator, intake side		
	4 Hose connectors		
	5 High-performance condenser		
SC	1 Base plate and system mount	Part No. 135 60	upon request
	2 Separator, intake side		
	4 Hose connectors		
	5 High-performance condenser		
	6 Vacuum controller		
	7 Pump relief valve		
	8 Control unit (incl. cable)		



SR module



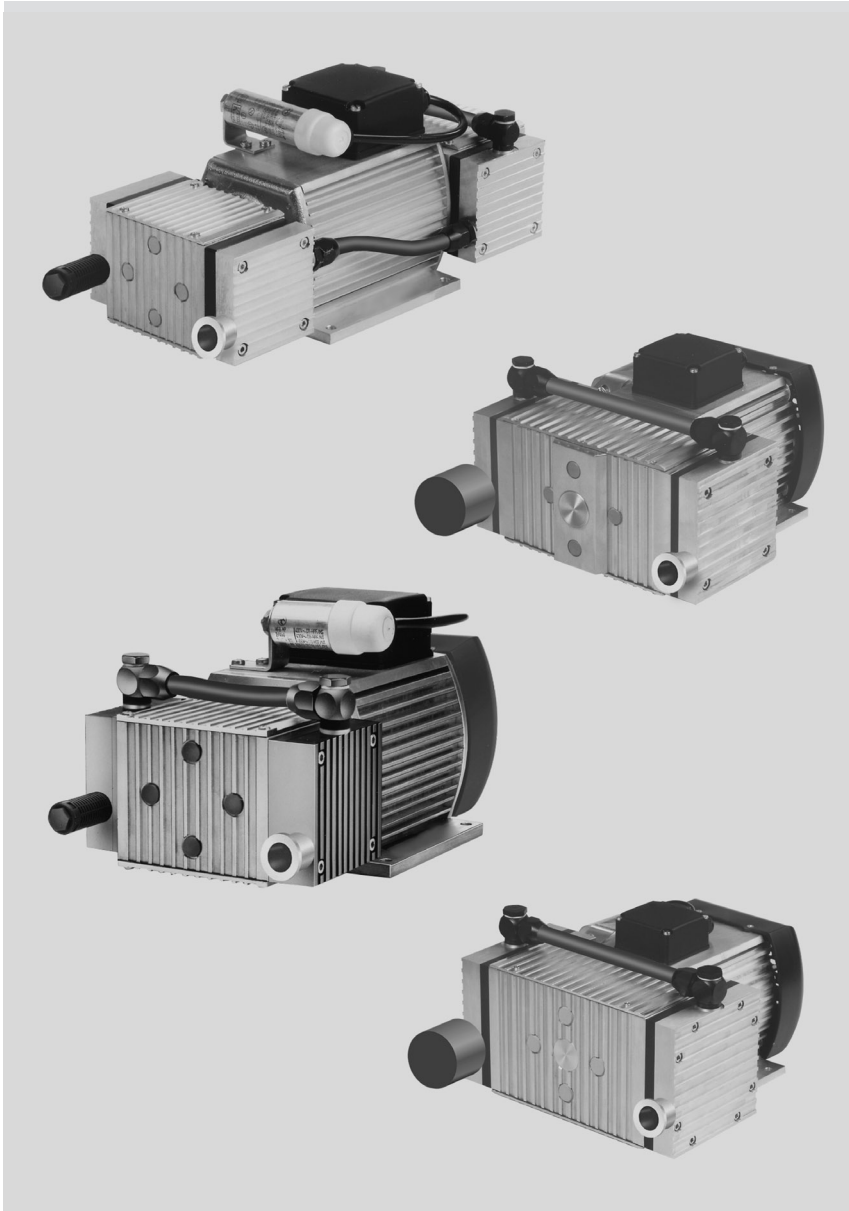
SH module



SC module

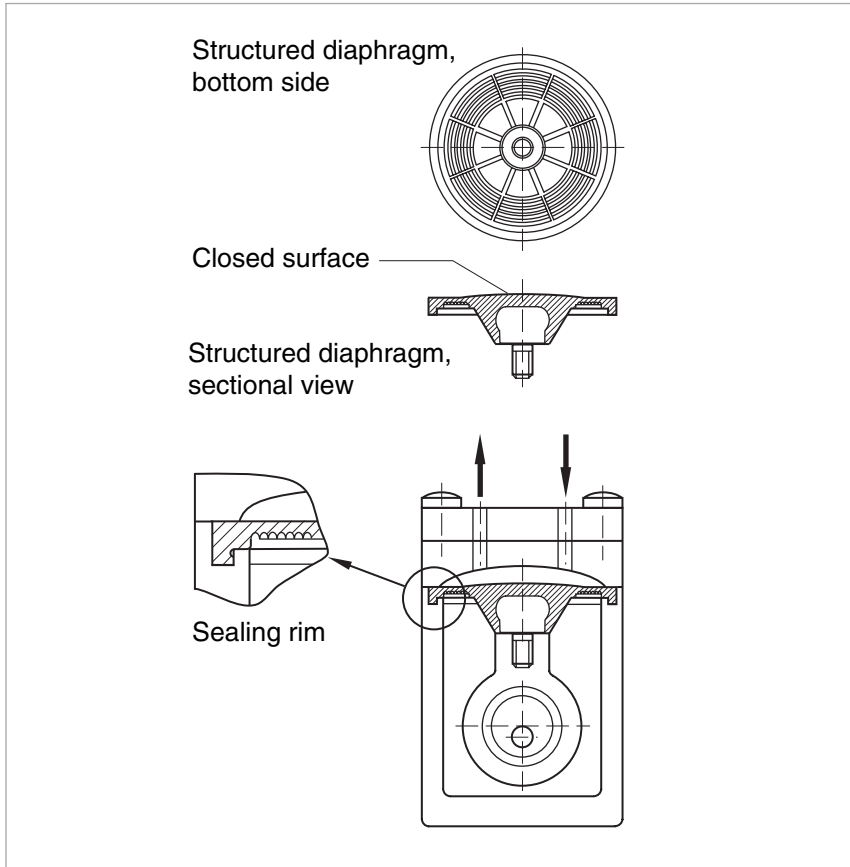
Note: The SR to SC sub-assemblies do not include the pump!

Dry Compressing Backing Pumps for Turbomolecular Pumps DIVAC 0.8 T to 4.8 VT



Vacuum pumps for pure pumping and evacuation of air and gases owing to oil-free operation.

The requirements regarding technology are ever increasing. In the area of vacuum technology the demand for a dry vacuum, i.e. a vacuum which is free of oil and thus free of hydrocarbons, is increasing more and more. We are able to meet this requirement through our dry compressing backing pumps for turbo-molecular pumps. These are ideally suited for all applications in the rough and medium vacuum range where clean media need to be pumped. But also for corrosive media we have solutions for you.



Diaphragm pump with structured diaphragm

The structured diaphragm with its sealed surface provides the basis for a long service life and a low base pressure.

Advantages to the User

- Dry compressing, free of oil and hydro-carbons
- Matched to the turbomolecular pumps from Oerlikon Leybold Vacuum (TW 70 to TW 1600)
- Low ultimate pressure
- KF flange at the intake port
- Fully equipped with cable, switch (ON/OFF) and plug
- Better performance and smaller size through the use of structured diaphragms
- Low vibration levels through dynamic mass balancing (in VT pumps)
- Lower maintenance costs and long maintenance intervals through the use of high-quality and well-proven components
- Simple maintenance by staff of the customer
- Favourable price-to-performance ratio
- Uniform appearance
- Can be operated in any position

Typical Applications

- Backing pump for wide pressure range turbomolecular pumps
- Mass spectrometers
- Medical equipment
- Analyzers
- For laboratory applications also with corrosive media (DIVAC 3.6 TC only)
- General use for rough and fine vacuum applications

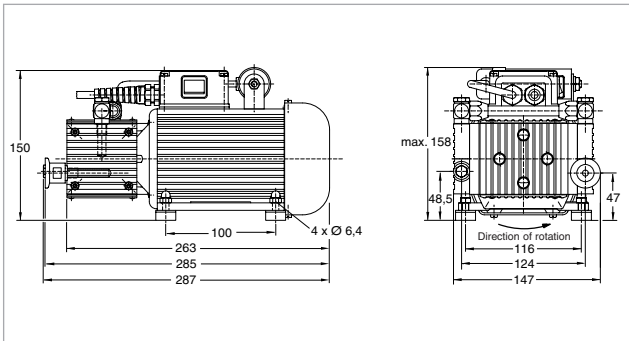
DIVAC 0.8 T and 0.8 LT



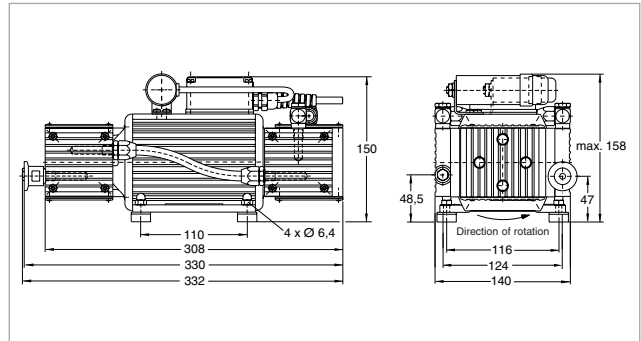
DIVAC 0.8 T



DIVAC 0.8 LT

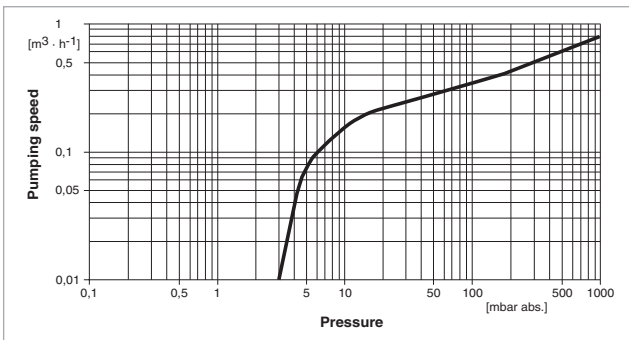


Dimensional drawing for the DIVAC 0.8 T

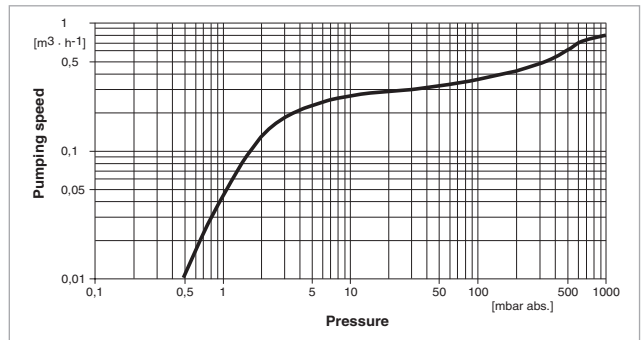


Dimensional drawing for the DIVAC 0.8 LT

Dimensional drawings are also available by way of .DXF files (sales.vacuum@oerlikon.com)



Pumping speed curve of the DIVAC 0.8 T



Pumping speed curve of the DIVAC 0.8 LT

Technical Data

DIVAC

		0.8 T	0.8 LT
Max. pumping speed (atm.)	m ³ /h (cfm)	0.77 (0.45)	0.77 (0.45)
Ultimate pressure (absolute)	mbar (Torr)	≤ 3 (≤ 2.25)	≤ 0.5 (≤ 0.38)
Max. exhaust back pressure (absolute)	mbar (Torr)	2000 (1500)	2000 (1500)
Pump heads		2	4
Connection			
Inlet (suction side)	DN	16 KF	16 KF
Exhaust (delivery side)	DN	Silencer	Silencer
Thread (suction and delivery side)	G	G 1/8"	G 1/8"
Noise level acc. to DIN 45 635 Part 13, approx.	dB(A)	49	53
Permissible gas admission temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Permissible ambient temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Voltage / nominal frequency (1 ph. motor)			
Schuko plug	V / Hz	198-264 / 50/60	230 / 50 ± 10%
NEMA plug	V / Hz	90-127 / 50/60	115 / 60 ± 10%
Protective class	IP	44	44
Motor power	W	50	80
Current consumption	A	0.4	0.5
Nominal speed, approx. (50/60 Hz)	min ⁻¹	1500/1800	1500/1800
Dimensions (W x H x D), approx.	mm (in.)	285 x 150 x 150 (11.22 x 5.9 x 5.9)	332 x 150 x 150 (13.07 x 5.9 x 5.9)
Weight, approx.	kg (lbs)	5.9 (13.02)	7.5 (16.56)
Material			
Diaphragm		Neoprene	Neoprene
Valves		EPDM	EPDM
Pump head		Aluminum	Aluminum

Ordering Information

DIVAC

	0.8 T	0.8 LT
Diaphragm vacuum backing pumps for turbomolecular pumps including 1 m long mains cord, country-specific plug, silencer, rubber feet, as well as ON/OFF switch	Part No. 127 80 Part No. 127 81 - -	- - Part No. 127 83 Part No. 127 84
Spare parts kit consisting of 2 diaphragms, 4 valves, 4 valve gaskets, 4 piping gaskets	Part No. 127 95	Part No. 127 95 (2x)
Exhaust silencer	Part No. 127 98	Part No. 127 98

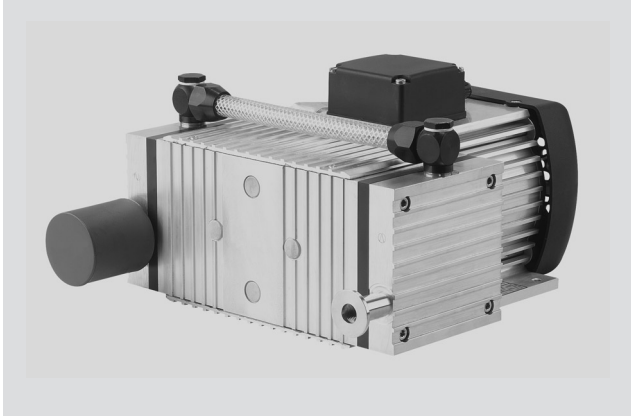
T = For use in connection with Turbomolecular pumps

L = Very low ultimate pressure (Low pressure)

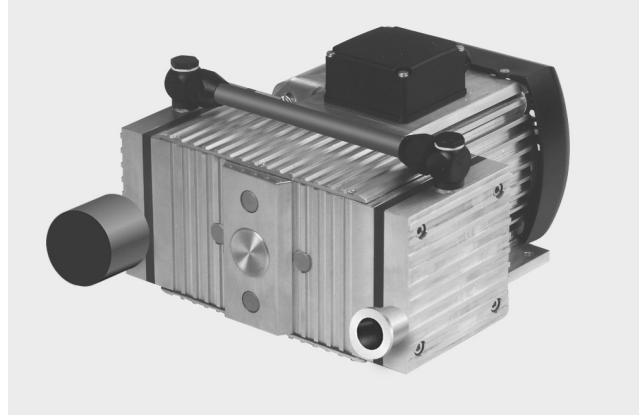
V = Low vibration levels (Vibration less)

C = Chemical (Corrosive)

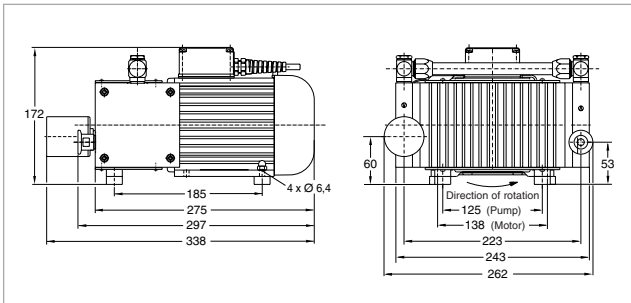
DIVAC 2.5 T and 2.5 VT



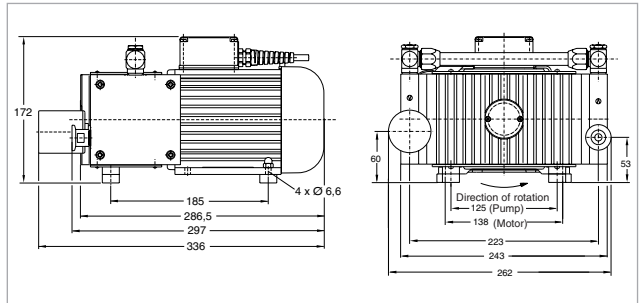
DIVAC 2.5 T



DIVAC 2.5 VT

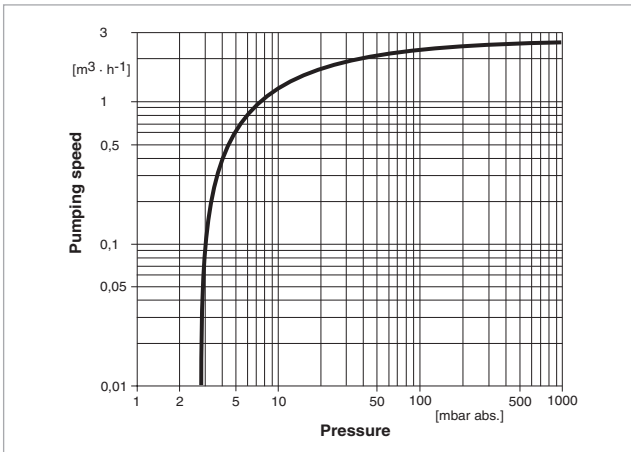


Dimensional drawing for the DIVAC 2.5 T

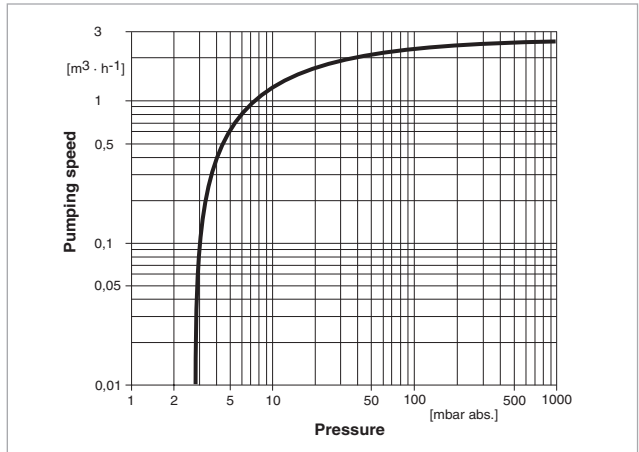


Dimensional drawing for the DIVAC 2.5 VT

Dimensional drawings are also available by way of .DXF files (sales.vacuum@oerlikon.com)



Pumping speed curve of the DIVAC 2.5 T



Pumping speed curve of the DIVAC 2.5 VT

Technical Data

DIVAC

		2.5 T	2.5 VT
Max. pumping speed (atm.)	m ³ /h (cfm)	2.57 (1.51)	2.57 (1.51)
Ultimate pressure (absolute)	mbar (Torr)	≤ 3 (≤ 2.25)	≤ 3 (≤ 2.25)
Max. exhaust back pressure (absolute)	mbar (Torr)	2000 (1500)	2000 (1500)
Pump heads		2	2
Connection			
Inlet (suction side)	DN	16 KF	16 KF
Exhaust (delivery side)	DN	Silencer	Silencer
Thread (suction and delivery side)	G	G 1/4"	G 1/4"
Noise level acc. to DIN 45 635 Part 13, approx.	dB(A)	49	53
Permissible gas admission temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Permissible ambient temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Voltage / nominal frequency (1 ph. motor)			
Schuko plug	V / Hz	230 / 50 ± 10%	230 / 50 ± 10%
NEMA plug	V / Hz	115 / 60 ± 10%	115 / 60 ± 10%
Protective class	IP	54	54
Motor power	W	300	300
Current consumption	A	1.4	1.4
Nominal speed, approx. (50/60 Hz)	min ⁻¹	1500/1800	1500/1800
Dimensions (W x H x D), approx.	mm (in.)	336 x 262 x 172 (13.23 x 10.31 x 6.77)	336 x 262 x 172 (13.23 x 10.31 x 6.77)
Weight, approx.	kg (lbs)	12.9 (28.48)	13.1 (28.92)
Material			
Diaphragm		EPDM	EPDM
Valves		Neoprene	Neoprene
Pump head		Aluminum	Aluminum

Ordering Information

DIVAC

	2.5 T	2.5 VT
Diaphragm vacuum backing pumps for turbomolecular pumps including 1 m long mains cord, country-specific plug, silencer, rubber feet, as well as ON/OFF switch 230 V / 50 Hz ± 10% 115 V / 60 Hz ± 10%	Part No. 127 86 Part No. 127 87	Part No. 127 89 Part No. 127 90
Spare parts kit consisting of 2 diaphragms, 4 valves, 4 valve gaskets, 4 piping gaskets	Part No. 127 96	Part No. 127 96
Exhaust silencer	Part No. 127 99	Part No. 127 99

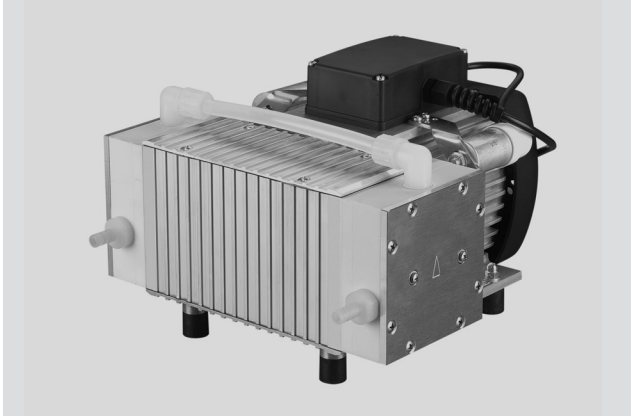
T = For use in connection with Turbomolecular pumps

L = Very low ultimate pressure (Low pressure)

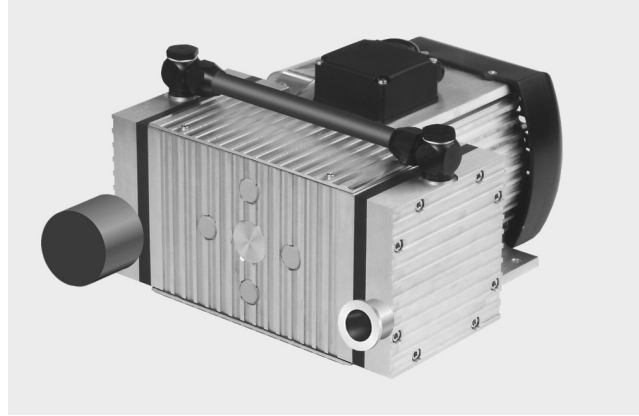
V = Low vibration levels (Vibration less)

C = Chemical (Corrosive)

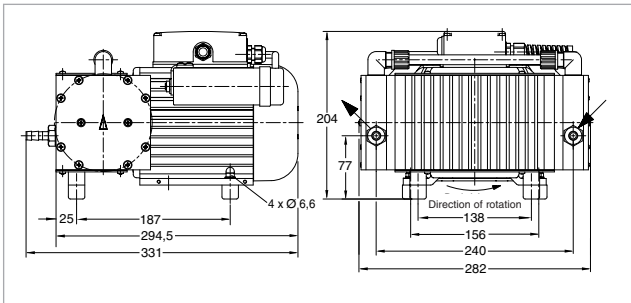
DIVAC 3.6 TC and 4.8 VT



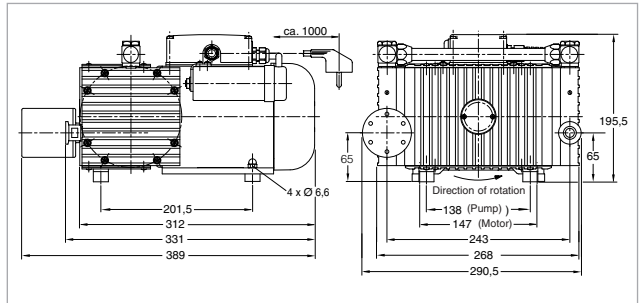
DIVAC 3.6 TC



DIVAC 4.8 VT

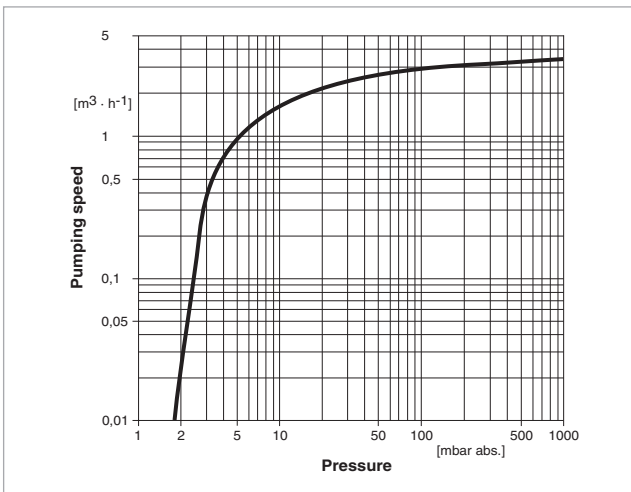


Dimensional drawing for the DIVAC 3.6 TC

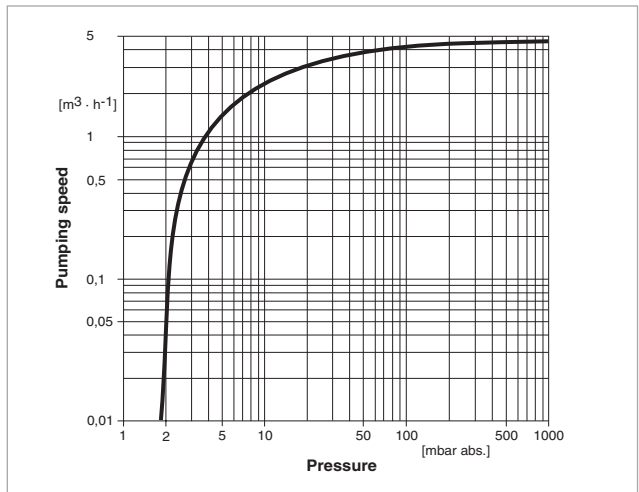


Dimensional drawing for the DIVAC 4.8 VT

Dimensional drawings are also available by way of .DXF files (sales.vacuum@oerlikon.com)



Pumping speed curve of the DIVAC 3.6 TC



Pumping speed curve of the DIVAC 4.8 VT

Technical Data

DIVAC

		3.6 TC	4.8 VT
Max. pumping speed (atm.)	m ³ /h (cfm)	3.6 (2.12)	4.8 (2.83)
Ultimate pressure (absolute)	mbar (Torr)	≤ 2 (≤ 1.5)	≤ 2 (≤ 1.5)
Max. exhaust back pressure (absolute)	mbar (Torr)	2000 (1500)	2000 (1500)
Pump heads		2	2
Connection			
Inlet (suction side)	DN	Hose nozzle DN 10 + 1m long chemical hose	16 KF
Exhaust (delivery side)	DN	Hose nozzle DN 10	Silencer
Thread (suction and delivery side)	G	G 3/8"	G 3/8"
Noise level acc. to DIN 45 635 Part 13, approx.	dB(A)	50	55
Permissible gas admission temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Permissible ambient temperature, max.	°C (°F)	+5 to +40 (+41 to +104)	+5 to +40 (+41 to +104)
Voltage / nominal frequency (1 ph. motor)			
Schuko plug	V / Hz	230 / 50 ± 10%	230 / 50 ± 10%
NEMA plug	V / Hz	115 / 60 ± 10%	115 / 60 ± 10%
Protective class	IP	54	54
Motor power	W	220	350
Current consumption	A	1.6	2.6
Nominal speed, approx. (50/60 Hz)	min ⁻¹	1500/1800	1500/1800
Dimensions (W x H x D), approx.	mm (in.)	329 x 277 x 205 (12.95 x 10.91 x 8.07)	324 x 273 x 220 (12.76 x 10.75 x 8.66)
Weight, approx.	kg (lbs)	14.3 (31.57)	18.0 (39.74)
Material			
Diaphragm		PTFE (Teflon)	EPDM
Valves		PTFE coated	Viton
Pump head		FFPM (Kalrez)	Aluminum

Ordering Information

DIVAC

	3.6 TC	4.8 VT
Diaphragm vacuum backing pumps for turbomolecular pumps including 1 m long mains cord, country-specific plug, silencer ¹⁾ , rubber feet, as well as ON/OFF switch 230 V / 50 Hz ± 10% 115 V / 60 Hz ± 10%	Part No. 500 210 -	Part No. 127 92 Part No. 127 93
Spare parts kit consisting of 2 diaphragms, 4 valves, 4 valve gaskets, 4 piping gaskets ²⁾	Part No. 500 215	Part No. 127 97
Exhaust silencer	-	Part No. 127 94

¹⁾ For the DIVAC 3.6 TC hose nozzle instead of silencer

²⁾ Not required for DIVAC 3.6 TC

T = For use in connection with Turbomolecular pumps

L = Very low ultimate pressure (Low pressure)

V = Low vibration levels (Vibration less)

C = Chemical (Corrosive)

Sales and Service

Germany

Oerlikon
Leybold Vacuum GmbH
Bonner Strasse 498
D-50968 Cologne
Phone: +49-(0)221-347 1234
Fax: +49-(0)221-347 1245
sales.vacuum@oerlikon.com
www.oerlikon.com

Oerlikon
Leybold Vacuum GmbH
Sales Area North/Northeast
Branch Office Berlin
Buschkrugallee 33
1. Obergeschoss
D-12359 Berlin
Phone: +49-(0)30-435 609 0
Fax: +49-(0)30-435 609 10
sales.vacuum.bn@oerlikon.com

Oerlikon
Leybold Vacuum GmbH
Sales Area South/Southwest
Branch Office Munich
Sendlinger Strasse 7
D-80331 Munich
Phone: +49-(0)89-357 33 9-10
Fax: +49-(0)89-357 33 9-33
sales.vacuum.mn@oerlikon.com
service.vacuum.mn@oerlikon.com

Oerlikon
Leybold Vacuum GmbH
Sales Area West & Benelux
Branch Office Cologne
Bonner Strasse 498
D-50968 Cologne
Phone: +49-(0)221-347 1270
Fax: +49-(0)221-347 1291
sales.vacuum.kn@oerlikon.com

Oerlikon
Leybold Vacuum GmbH
Service Competence Center
Emil-Hoffmann-Strasse 43
D-50996 Cologne-Suerth
Phone: +49-(0)221-347 1439
Fax: +49-(0)221-347 1945
service.vacuum.kn@oerlikon.com

Oerlikon
Leybold Vacuum GmbH
Mobil Customer Service
Emil-Hoffmann-Strasse 43
D-50996 Cologne-Suerth
Phone: +49-(0)221-347 1765
Fax: +49-(0)221-347 1944
service.vacuum.kn@oerlikon.com

Oerlikon
Leybold Vacuum GmbH,
Dresden
Zur Wetterwarte 50, Haus 304
D-01109 Dresden
Service:
Phone: +49-(0)351-88 55 00
Fax: +49-(0)351-88 55 041
info.vacuum.dr@oerlikon.com

Oerlikon
Leybold Vacuum USA Inc.
5700 Mellon Road
USA-Export, PA 15632
Phone: +1-724-327-5700
Fax: +1-724-325-3577
info.vacuum.ex@oerlikon.com

Europe

Belgium
Oerlikon
Leybold Vacuum Nederland B.V.
Belgisch bijkantoor
Leuvensesteenweg 542-9A
B-1930 Zaventem
Sales:
Phone: +32-2-711 00 83
Fax: +32-2-720 83 38
sales.vacuum.zv@oerlikon.com

France
Oerlikon
Leybold Vacuum France S.A.
7, Avenue du Québec
Z.A. Courtaboef 1 - B.P. 42
F-91942 Courtaboeuf Cedex
Sales and Service:
Phone: +33-1-69 82 48 00
Fax: +33-1-69 07 57 38
sales.vacuum.or@oerlikon.com

Oerlikon
Leybold Vacuum France S.A.
Valence Factory
640, Rue A. Bergès - B.P. 107
F-26501 Bourg-lès-Valence Cedex
Phone: +33-4-75 82 33 00
Fax: +33-4-75 82 92 69
info.vacuum.vc@oerlikon.com

Great Britain
Oerlikon
Leybold Vacuum UK Ltd.
Unit 2
Silverglade Business Park
Leatherhead Road
UK-Chessington, Surrey KT9 2QL
Sales:
Phone: +44-13-7273 7300
Fax: +44-13-7273 7301
sales.vacuum.ln@oerlikon.com

Italy
Oerlikon
Leybold Vacuum Italia S.p.A.
8, Via Trasimeno
I-20128 Milano
Sales:
Phone: +39-02-27 22 31
Fax: +39-02-27 20 96 41
sales.vacuum.mi@oerlikon.com

Oerlikon
Leybold Vacuum Italia S.p.A.
Field Service Base
Z.I. Le Capanne
I-05021 Acquasparta (TR)
Phone: +39-0744-93 03 93
Fax: +39-0744-94 42 87
service.vacuum.mi@oerlikon.com

Netherlands
Oerlikon
Leybold Vacuum Nederland B.V.
Proostwetering 24N
NL-3543 AE Utrecht
Sales and Service:
Phone: +31-(30) 242 6330
Fax: +31-(30) 242 6331
sales.vacuum.ut@oerlikon.com
service.vacuum.ut@oerlikon.com

Spain
Oerlikon
Leybold Vacuum Spain, S.A.
C/. Huelva, 7
E-08940 Cornellà de Llobregat
(Barcelona)
Sales:
Phone: +34-93-666 46 16
Fax: +34-93-666 43 70
sales.vacuum.ba@oerlikon.com

Sweden
Oerlikon
Leybold Vacuum Scandinavia AB
Box 9084
SE-40092 Göteborg
Sales and Service:
Phone: +46-31-68 84 70
Fax: +46-31-68 39 39
info.vacuum.gt@oerlikon.com

Switzerland
Oerlikon
Leybold Vacuum Schweiz AG
Leutschenbachstrasse 55
CH-8050 Zürich
Sales:
Phone: +41-044-308 40 50
Fax: +41-044-302 43 73
sales.vacuum.zh@oerlikon.com

America

USA
Oerlikon
Leybold Vacuum USA Inc.
5700 Mellon Road
USA-Export, PA 15632
Phone: +1-724-327-5700
Fax: +1-724-325-3577
info.vacuum.ex@oerlikon.com

Oerlikon
Leybold Vacuum GmbH
Bonner Strasse 498
D-50968 Cologne
Phone: +49-(0)221-347 0
Fax: +49-(0)221-347 1250
info.vacuum.ex@oerlikon.com

Asia

P.R. China
Oerlikon
Leybold Vacuum (Tianjin)
International Trade Co. Ltd.
Beichen Economic
Development Area (BEDA),
Shanghai Road
Tianjin 300400
China
Sales and Service:
Phone: +86-22-2697 0808
Fax: +86-22-2697 4061
Fax: +86-22-2697 2017
sales.vacuum.tj@oerlikon.com
service.vacuum.tj@oerlikon.com

Oerlikon
Leybold Vacuum
(Tianjin) Co. Ltd.
Beichen Economic
Development Area (BEDA),
Shanghai Road
Tianjin 300400
China
Sales and Service:
Phone: +86-22-2697 0808
Fax: +86-22-2697 4061
Fax: +86-22-2697 2017
info.vacuum.tj@oerlikon.com
service.vacuum.tj@oerlikon.com

Oerlikon
Leybold Vacuum (Tianjin)
International Trade Co. Ltd.
Shanghai Branch:
Add: No.33
76 Futedong San Rd.
Waigaoqiao FTZ
Shanghai 200131
China
Sales and Service:
Phone: +86-21-5064-4666
Fax: +86-21-5064-4668
info.vacuum.sh@oerlikon.com
service.vacuum.tj@oerlikon.com

Oerlikon
Leybold Vacuum (Tianjin)
International Trade Co. Ltd.
Guangzhou Office and
Service Center
1st F, Main Building
Science City Plaza,
No.111 Science Revenue,
Guangzhou Science City
(GZSC) 510663, Guangzhou,
China
Sales:
Phone: +86-20-8723-7873
Phone: +86-20-8723-7597
Fax: +86-20-8723-7875
info.vacuum.gz@oerlikon.com
service.vacuum.tj@oerlikon.com

Oerlikon
Leybold Vacuum (Tianjin)
International Trade Co. Ltd.
Beijing Branch:
1-908, Beijing Landmark Towers
8 North Dongsanhuan Road
Chaoyang District
Beijing 100004
China
Sales:
Phone: +86-10-6590-7622
Fax: +86-10-6590-7607
sales.vacuum.bj@oerlikon.com

India
Oerlikon
Leybold Vacuum India Pvt Ltd.
EL-22, J Block
MIDC Bhosari
Pune 411026
India
Sales and Service:
Phone: +91-20-3061 60000
Fax: +91-20-2712 1571
sales.vacuum.pu@oerlikon.com
service.vacuum.pu@oerlikon.com

Japan
Oerlikon
Leybold Vacuum
Japan Co., Ltd.
Headquarter
23-3, Shin-Yokohama
3-chome
Tobu A.K. Bldg. 4th Floor
Kohoku-ku
Yokohama-shi 222-0033
Sales:
Phone: +81-45-471-3330
Fax: +81-45-471-3323
info.vacuum.yh@oerlikon.com
sales.vacuum.yh@oerlikon.com

Oerlikon
Leybold Vacuum
Japan Co., Ltd.
Osaka Sales Office
5-13, Kawagishi-machi
Suita-chi
Osaka 564-0037
Phone: +81-6-6393-5211
Fax: +81-6-6393-5215
info.vacuum.os@oerlikon.com
sales.vacuum.os@oerlikon.com

Oerlikon
Leybold Vacuum
Japan Co., Ltd.
Tsukuba Technical Service Center
Kogyo Danchi
21, Kasuminosato,
Ami-machi, Inashiki-gun
Ibaraki-ken, 300-0315
Service:
Phone: +81-298 89 2841
Fax: +81-298 89 2838
info.vacuum.iik@oerlikon.com
sales.vacuum.iik@oerlikon.com

Korea
Oerlikon
Leybold Vacuum Korea Ltd.
3F, Jellzone 2 Tower, 159-4
Jeongja-Dong, Bundang-Gu
Sungnam-Si, Gyeonggi-Do
Korea 463-384
Sales:
Phone: +82-31 785 1367
Fax: +82-31 785 1359

623-7, Upsung-Dong
Cheonan-Si
Chungcheongnam-Do
Korea 330-290
Service:
Phone: +82-41 589 3035
Fax: +82-41 588 0166

Singapore
Oerlikon
Leybold Vacuum
Singapore Pte Ltd.
No.1, International Business Park
B1-20B, The Synergy
Singapore 609917

Sales and Service:
Phone: +65-6303 7000
Fax: +65-67730 039
sales.vacuum.sg@oerlikon.com
service.vacuum.sg@oerlikon.com

Taiwan
Oerlikon
Leybold Vacuum Taiwan Ltd.
No 416-1, Sec. 3
Chung-Hsin Rd., Chu-Tung
Hsin-Chu, Taiwan, R.O.C.
Sales and Service:
Phone: +886-3-500 1688
Fax: +886-3-583 3999
sales.vacuum.hc@oerlikon.com
service.vacuum.hc@oerlikon.com

oerlikon
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www.oerlikon.com