



Vakuumpumpen



-
- 1_Olgeschmierte drehschieber vakumpumpen ORV
 - 2_Rotary vane pumps RV
 - 3_Piston pumps VP
 - 4_Liquid ring pump LR



INCO®

www.in-eco.at

Air and Vacuum
Components

1_Olgeschmierte drehschieber vakumpumpen ORV

- > Ölgeschmierte drehschieber vakumpumpen ORV
ORV 08, ORV 10, ORV 16, ORV 20, ORV 25, ORV 40, ORV 63, ORV 100,
ORV 160, ORV 200, ORV 250, ORV 300, ORV 630



2_Rotary vane pumps RV

- > Rotary vane pumps RV 22, RV 26
- > Rotary vane pumps RV 33, RV 53, RV 63, RV 83
- > Combinated rotary vane pumps RVP 52, RVP 62, RVP 82



3_Piston pumps VP

Models of the standard pump

- > Models VP 25D, VP 40, VP 90S, VP 120S, VP 120P
- > Models VP 200P, VP 200S, VP 400P, VP 400S



Laboratory models

- > Models VP LABV 10, VP LABV 20, VP LABV 30
- > Models VP LABV 150P, VP LABV 250P, VP LABV 150S, VP LABV 250S

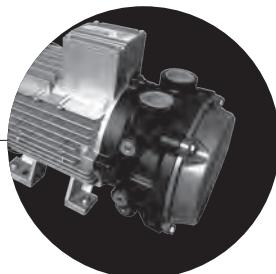
Vacuum systems

- > Models VPV



4_Liquid ring pump LR

- > Models LR 060-H06 / LR 061-H16
- > Models LRM 25, LRM 50, LRM 95, LRM 130,
LRM 255, LRM 325, LRM 455



1

Ölgeschmierte drehschieber vakuumpumpen ORV

—
1_ORV



1

Ölgeschmierte drehschieber vakuumpumpen ORV

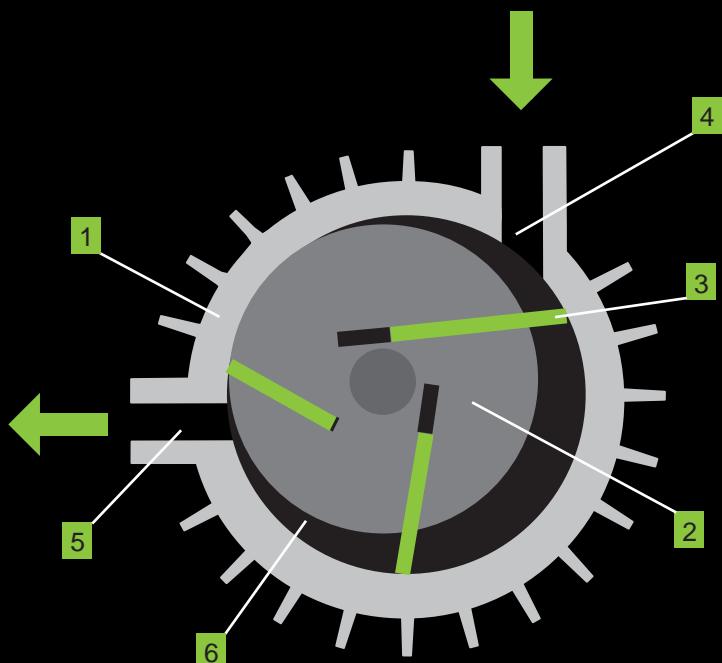
Principle:

The principle of operation of the Oil rotary vane vacuum pump is based on the rotating lamellas. Rotor (2) is situated excentric on the top in the cylindrical stator (1), so rotor is almost touching the stator. The lamellas (4) are pushed towards the wall of the stator by centrifugal force. Between two lamellas and stator it comes to the volume change of the compression chambers (7) by stator rotation, due to this fact the gas is sucked.

The oil in the pump serves as a lubricant for the internal parts and seals the fins against the stator, helping to achieve a higher vacuum.

Charakteristik:

- > kompakt und einfach zu installieren
- > wartungsfrei und verschleißfrei,
dank den optimalen
Umdrehungen der Spindel
- > niedriger Lärmpegel
und geringe Vibrationen
- > stiller und kalter Betrieb
- > umweltfreundlich
- > lange Lebensdauer der Flügelzellen
- > minimale Instandhaltung
- > ununterbrochener Betrieb
- > niedriger Lärmpegel und geringe
Vibrationen



1) Stator 2) Rotor 3) Carbon lamellas 4) Input 5) Output
6) Compression chamber

Anwendung:

- > Verpacken
- > Entgasung
- > Pressluftförderung
- > Austrocknung
- > Handhabung und Halten
- > Destillierung
- > Evakuierung
- > Formen, Stanzen und Laminierung
- > Abfallentsorgung
- > Beschichtung

1

Ölgeschmierte drehschieber vakuumpumpen ORV

Ölgeschmierte drehschieber vakumpumpen ORV

Typ	nominale Saugleistung (m³/h)	Enddruck ABS (mbar)	nominale Motorleistung (kW)	nominale Motorumdrehungen (min⁻¹)	Lärmpegel (ISO 2151) (dB)	Ölvolume (l)	Gewicht - za.. (kg)	Maßen (L x W x H) (mm)	Einlauf / Auslauf des Gases
Dreiphasig									
ORV 08	8	2	0,37	2800	60	0,25	11	330 x 165 x 152	G 3/8"
ORV 10	10	2	0,55	2800	69	0,30	18	340 x 210 x 205	G 1/2"
ORV 16	16	2	0,55	2800	69	0,30	18	340 x 210 x 205	G 1/2"
ORV 20	20	2	0,75	3000	66	0,45	20	338 x 232 x 220	G 3/4"
ORV 25	25	2	0,75	2800	64	0,50	20	405 x 253 x 210	G 3/4"
ORV 40	40	0,1	1,1	1500	65	1	38	640 x 285 x 262	G 1 1/4"
ORV 63	63	0,1	1,5	1500	67	2	55	635 x 406 x 289	G 1 1/4"
ORV 100	100	0,1	2,2	1500	67	2	73	736 x 406 x 289	G 1 1/4"
ORV 160	160	0,1	4,0	1500	70	5	140	854 x 492 x 411	G 2"
ORV 200	200	0,1	4,0	1500	72	5	140	854 x 492 x 411	G 2"
ORV 250	250	0,1	5,5	1500	72	6,50	190	1000 x 581 x 410	G 2"
ORV 300	300	0,1	7,5	1500	74	6,50	190	1075 x 565 x 421	G 2"
ORV 630	630	0,1	15	1000	77	15	700	1723 x 912 x 726	G 3"
Einphasig									
ORV 08-1	8	2	0,55	2800	60	0,25	11	330 x 165 x 152	G 3/8"
ORV 10-1	10	2	0,75	2800	69	0,30	18	340 x 210 x 205	G 1/2"
ORV 16-1	16	2	0,75	2800	69	0,30	18	340 x 210 x 205	G 1/2"
ORV 20-1	20	2	0,75	3000	66	0,45	20	338 x 232 x 220	G 3/4"
ORV 25-1	25	2	0,9	2800	64	0,5	25	405 x 253 x 210	G 3/4"

* 60 Hz Angaben, bitte, nachfragen.



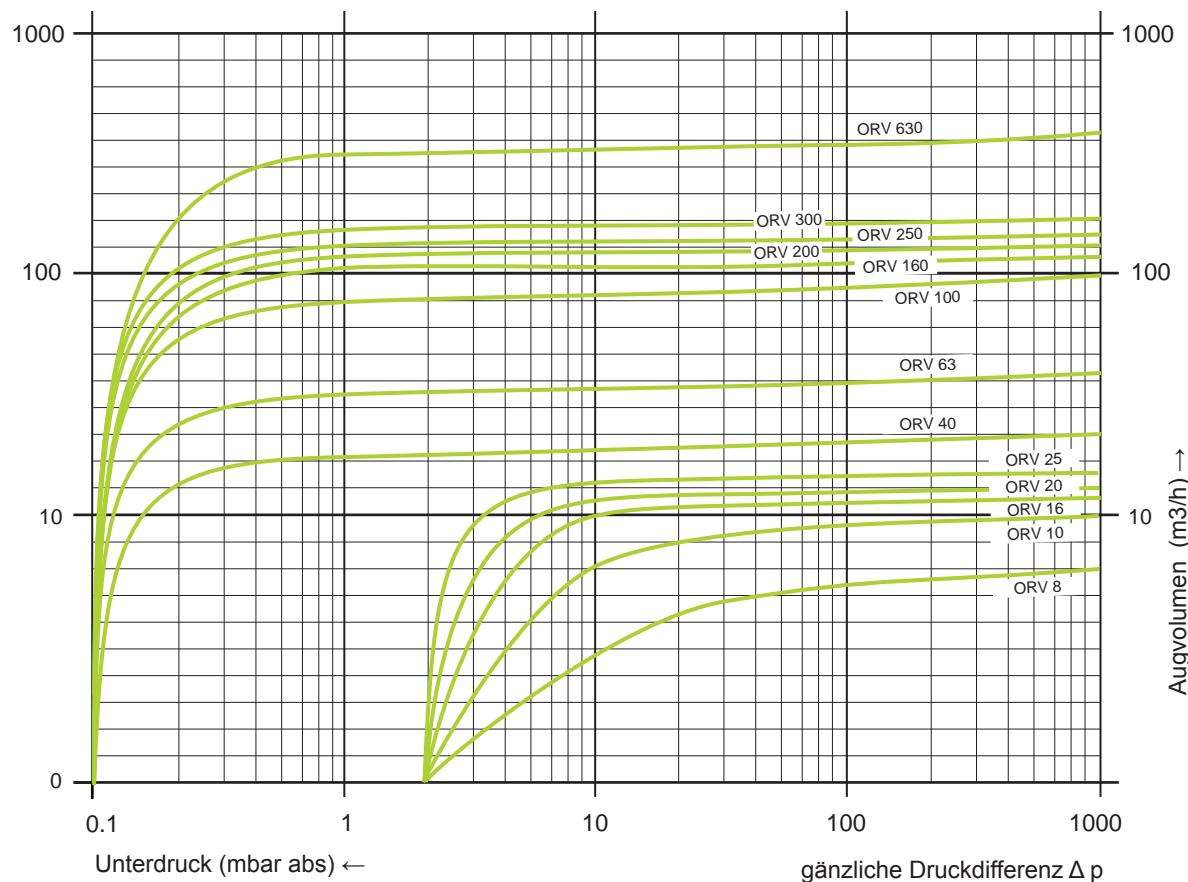
Die Vakuumpumpen ORV entsprechen der Maschinen-Richtlinie der Europäischen Gemeinschaft (CE).

Ölgeschmierte drehschieber vakumpumpen ORV

Leistungskurven / Überdruck

Arbeitskurven (50 Hz)

Die Arbeitskurven gelten für die Beförderung der Luft bei der Temperatur von 15°C, beim Saugen im Atmosphärendruck von 1013 mbar und der Abweichung von +/- 10%. Die gänzliche Druckdifferenz gilt für die Temperatur der angesaugten Luft und der Umgebungstemperatur von 25°C.



* 60 Hz Angaben, bitte, nachfragen.

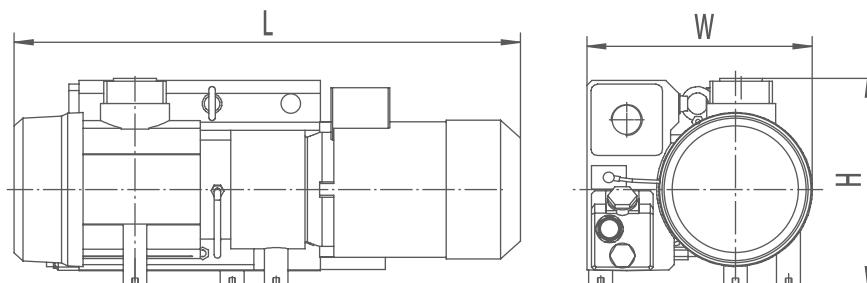


Die Vakumpumpen ORV entsprechen
der Maschinen-Richtlinie der
Europäischen Gemeinschaft (CE).

Ölgeschmierte drehschieber vakuumpumpen ORV

Maßen-Spezifikation

Model	L (mm)	W (mm)	H (mm)	Einlauf / Auslauf des Gases
ORV 08	330	165	152	G 3/8"
ORV 10	340	210	205	G 1/2"
ORV 16	340	210	205	G 1/2"
ORV 20	338	232	220	G 3/4"
ORV 25	405	253	210	G 3/4"
ORV 40	640	285	262	G 1 1/4"
ORV 63	635	406	289	G 1 1/4"
ORV 100	736	406	289	G 1 1/4"
ORV 160	854	492	411	G 2"
ORV 200	854	492	411	G 2"
ORV 250	1000	581	410	G 2"
ORV 300	1075	565	421	G 2"
ORV 630	1723	912	726	G 3"

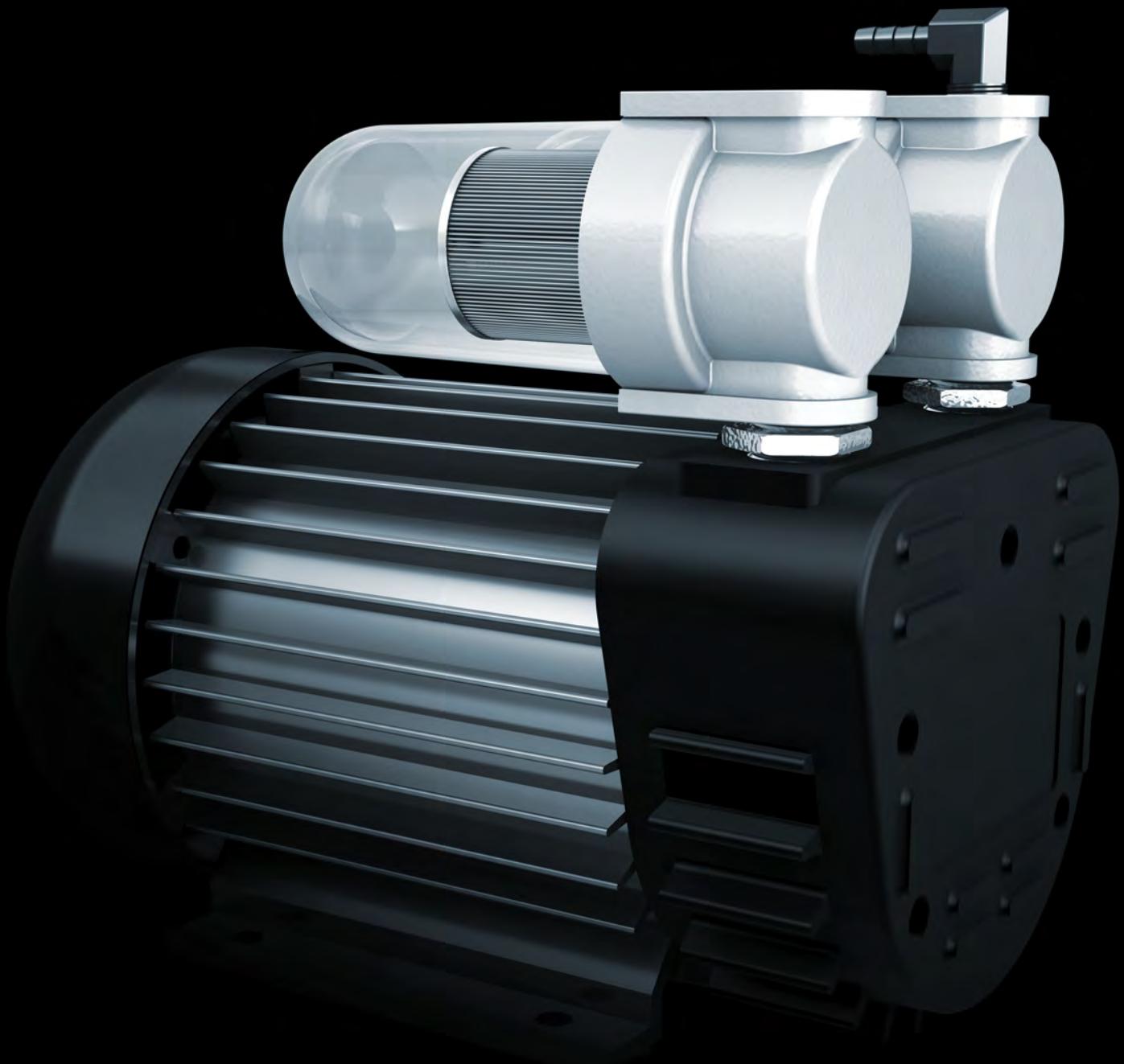


Die Vakuumpumpen ORV entsprechen
der Maschinen-Richtlinie der
Europäischen Gemeinschaft (CE).

2

Rotary vane pumps RV

—
2_RV



2

Rotary vane pumps RV

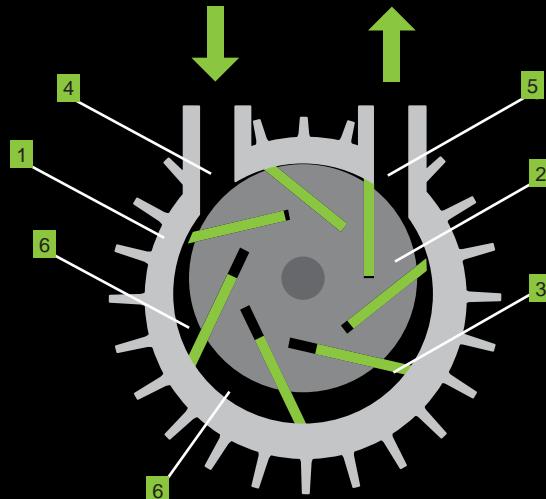
Rotary vane vacuum pumps (compressors) are suitable for use in the area of heavy vacuum and pressure. They can be used for the evacuation and transport of air or dry gases which are not toxic, aggressive or explosive. They represent the simplest and most suitable system wherever you need a precise source of vacuum without additions. They are applicable for sucking off in the small closed systems.

Principle:

The principle of operation of the rotary vane vacuum pump is based on the rotating lamellas. Rotor (2) is situated excentric on the top in the cylindrical stator (1), so rotor is almost touching the stator. The lamellas (4) are pushed towards the wall of the stator by centrifugal force. Between two lamellas and stator it comes to the volume change of the compression chambers (7) by stator rotation, due to this fact the gas is sucked.

Advantages:

- > oil-free operation
- > source of the vacuum without additions
- > compact and reliable construction
- > easy installation and maintenance
- > low weight and dimensions
- > continuous running without vibrations
- > economic operation



1) Stator 2) Rotor 3) Carbon lamellas 4) Input 5) Output
6) Compression chamber

Rotary vane pumps RV 22, RV 26

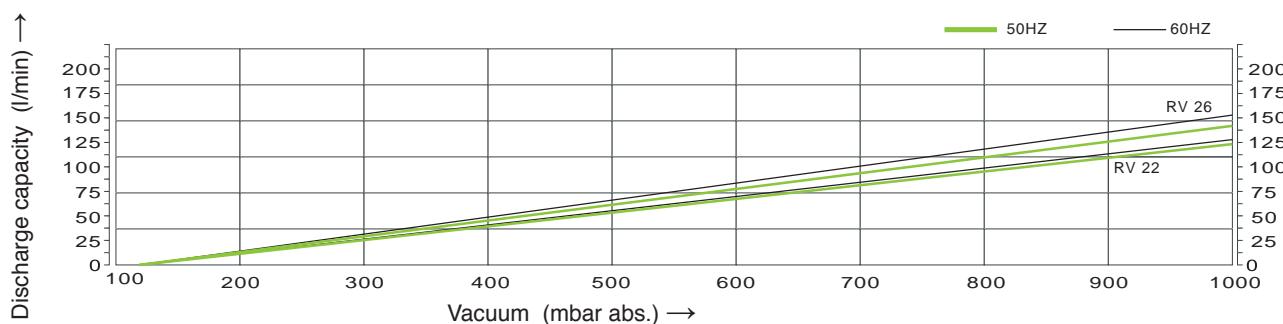


Type	Discharge capacity (L/min) 50/60Hz	Vacuum (mbar)	Motor (IP54), 50 Hz / 60Hz			Thermal protector	Noise level (dB)	Weight (kg)	Blower connec- tion (inner thread)			
			Power (kW) 50/60Hz	Voltage (V) 50/60Hz	Current (A) 50/60Hz							
Single-phase												
RV 22	120/135	850	0,31 / 0,38	230 / 110	1,6 / 1,8 (3,5)	áno	59 / 62	13	3/8			
RV 26	135/155	850	0,31 / 0,38	230 / 110	1,9 / 2,2 (3,8)	áno	59 / 62	14	3/8			

Performance curves / Vacuum

Operating curves

Performance curves are defined for the air transportation with the temperature 15°C set for the suction by the atmospheric pressure 1013 mbar with the permissible deviation +/-10%. Total pressure difference is valid for the temperature of the suction air and the ambient operating temperature 25°C.

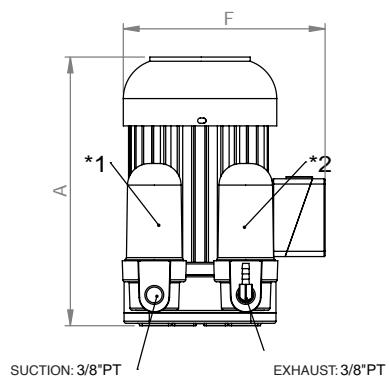
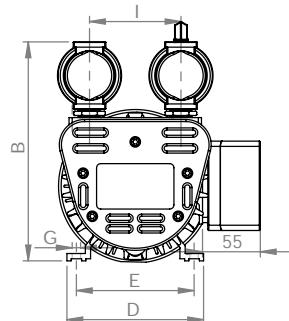
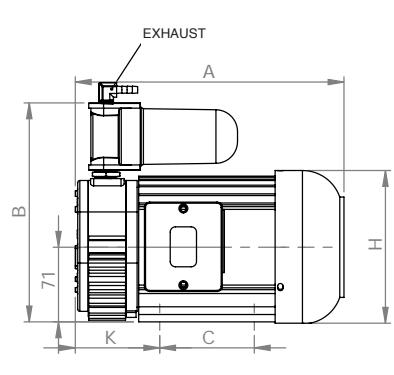


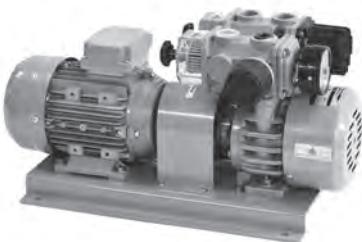
RV vacuum pumps conform to the European Community's Machinery Directive (CE).

Rotary vane pumps RV 22, RV 26

Dimensions

Type	A	B	C	D	E	F	G	H	J	K
RV 22	258	220	90	130	112	192	Ø8	Ø145	87	80
RV 26	260	220	90	130	112	192	Ø8	Ø145	87	82



Rotary vane pumps RV 33, RV 53, RV 63, RV 83

Type	Discharge capacity (L/min) 50/60Hz	Max. vacuum (mbar) 50/60Hz	Motor (IP54), 50 Hz / 60Hz			Noise level (dB)	Weight (kg)	Blower connection (inner thread)		
			Power (kW)	Voltage (V)	Current (A)					
Three-phase										
RV 33	235/280	840/866	0,30 / 0,37	200-240 Δ / 345-415 Y	1,5 Δ / 1 Y	65/70	21	3/4"		
RV 53	405/480	860/900	0,70 / 0,75	200-240 Δ / 345-415 Y	2,5 Δ / 1,7 Y	66/71	27	3/4"		
RV 63	575/685	860/900	1,35 / 1,50	200-240 Δ / 345-415 Y	4,6 Δ / 2,3 Y	67/73	36	3/4"		
RV 83	1130/1350	880/924	2 / 2,2	200-240 Δ / 345-415 Y	10,5Δ / 8 Y	72/76	80	1"		

Kombinované lamelové vývevy RVP 52, RVP 62, RVP 82

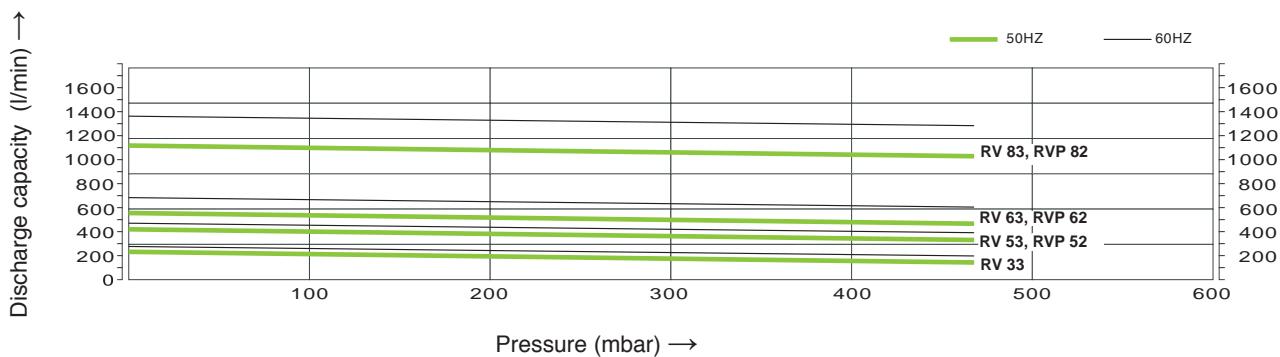
Type	Discharge capacity (L/min) 50/60Hz	Max. vacuum (mbar) 50/60Hz	Motor (IP54), 50 Hz / 60Hz			Noise level (dB)	Weight (kg)	Blower connection (inner thread)		
			Power (kW)	Voltage (V)	Current (A)					
Three-phase										
RVP 52	405/480	860/900	1,5	200-240 Δ / 345-415 Y	6 Δ / 3,3 Y	65/70	46,5	3/4"		
RVP 62	575/685	860/900	2,2	200-240 Δ / 345-415 Y	7,8 Δ / 4,8 Y	66/71	61	3/4"		
RVP 82	1130/1350	880/ 924	3,7	200-240 Δ / 345-415 Y	12 Δ / 9,2 Y	67/73	138	1"		

Rotary vane pumps RV 33, RV 53, RV 63, RV 83 / Combined RVP 52, RVP 62, RVP 82

Performance curves / Pressure

Operating curves

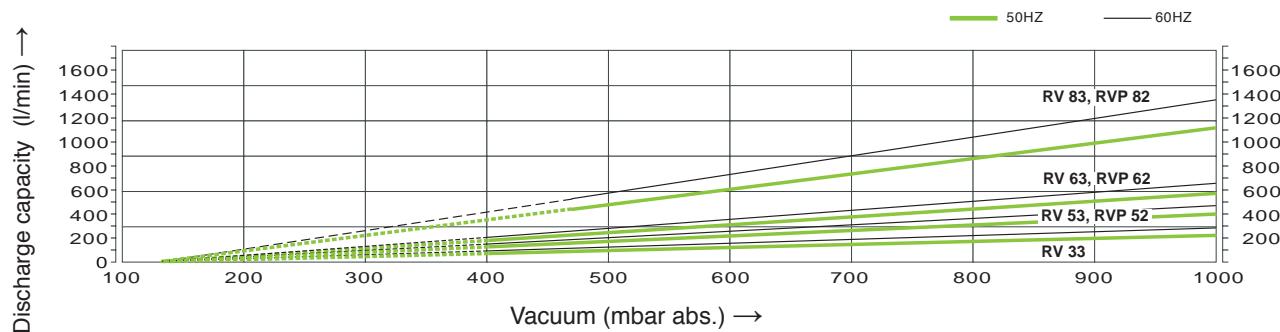
Performance curves are defined for the air transportation with the temperature 15°C set for the suction by the atmospheric pressure 1013 mbar with the permissible deviation +/-10%. Total pressure difference is valid for the temperature of the suction air and the ambient operating temperature 25°C.



Performance curves / Vacuum

Operating curves

Performance curves are defined for the air transportation with the temperature 15°C set for the suction by the atmospheric pressure 1013 mbar with the permissible deviation +/-10%. Total pressure difference is valid for the temperature of the suction air and the ambient operating temperature 25°C.

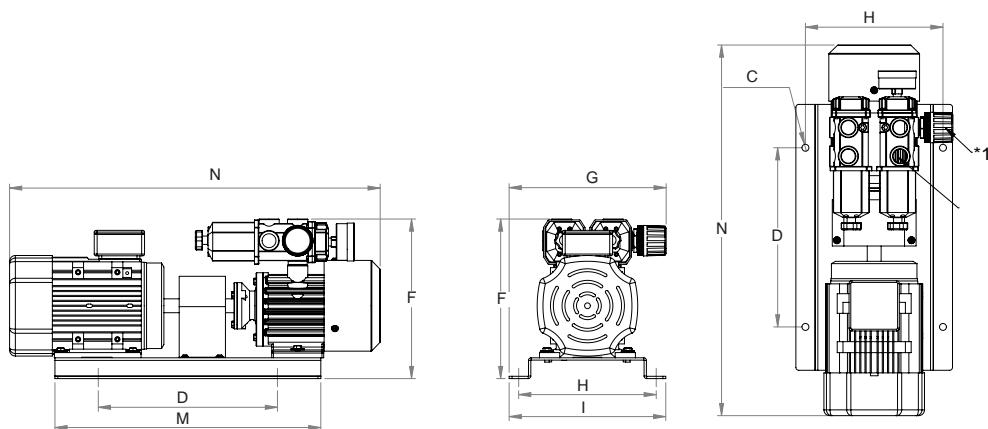


RV vacuum pumps conform to the
European Community's Machinery
Directive (CE).

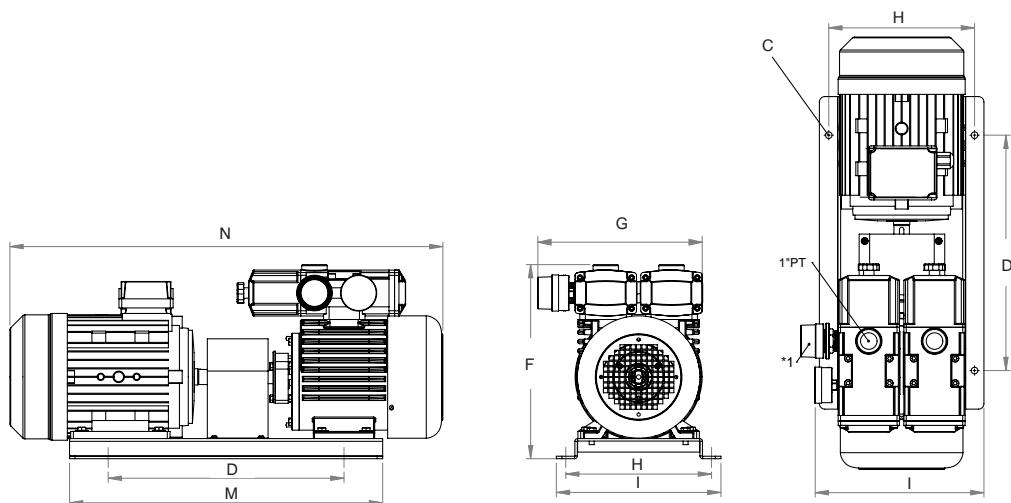
Rotary vane pumps RV 33, RV 53, RV 63, RV 83

Dimensions

Type	C	D	F	G	H	I	M	N
RV 33	12	353	265	255	197	223	400	480
RV 53	12	353	265	270	197	223	400	560
RV 63	12	310	283	270	238	271	460	650



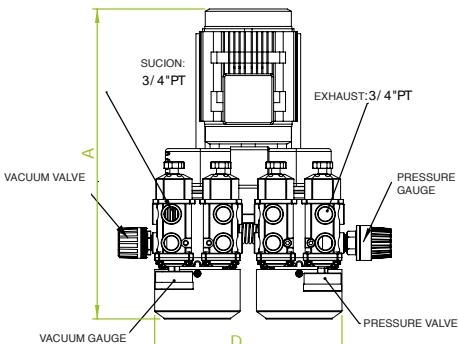
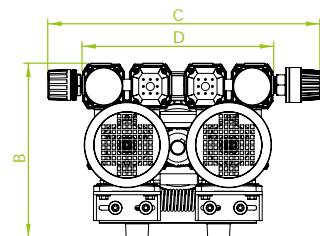
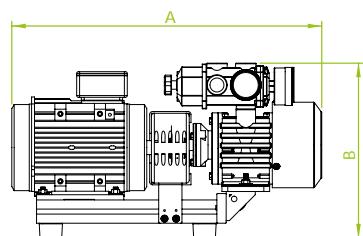
Type	C	D	F	G	H	I	M	N
RV 83	12	427	357	304	264	298	567	709



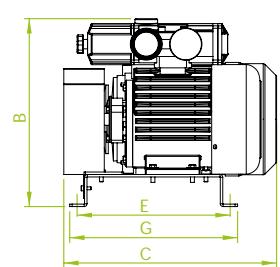
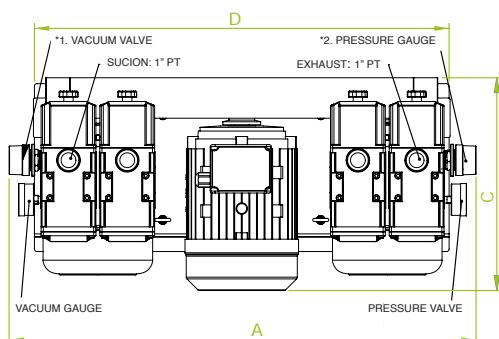
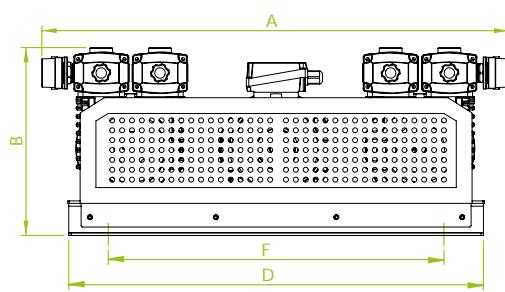
Combined rotary vane pumps RVP 52, RVP 62, RVP 82

Dimensions

Type	A	B	C	D
RVP 52	560	306	468	330
RVP 62	645	306	470	330



Type	A	B	C	D	E	F	G
RVP 82	950	400	500	840	310	680	340



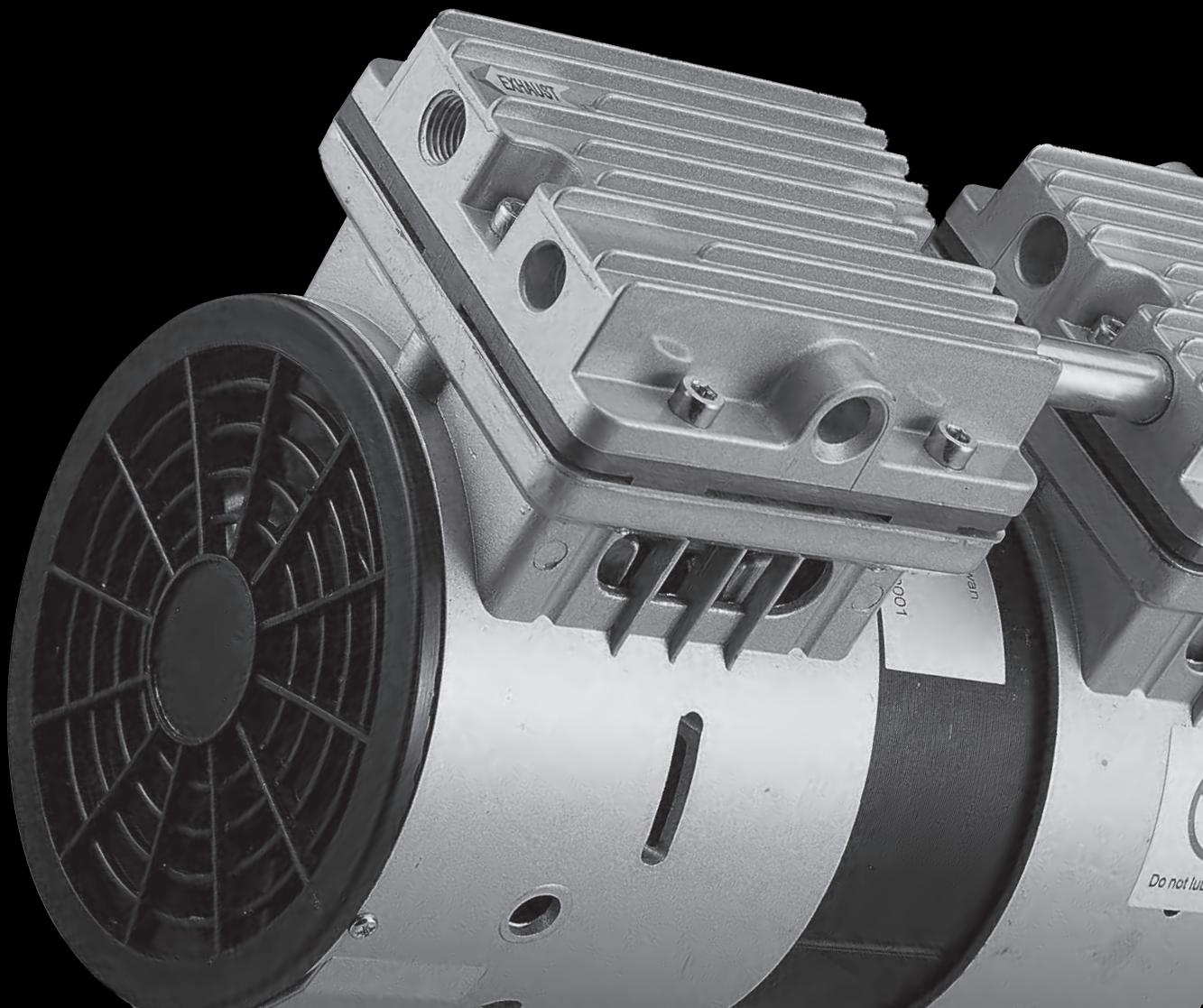
3

Piston pumps VP (Piston vacuum pump)

3.1_Models of the standard pump

3.2_Laboratory models

3.3_Vacuum systems



3

Piston pumps VP (Piston vacuum pump)

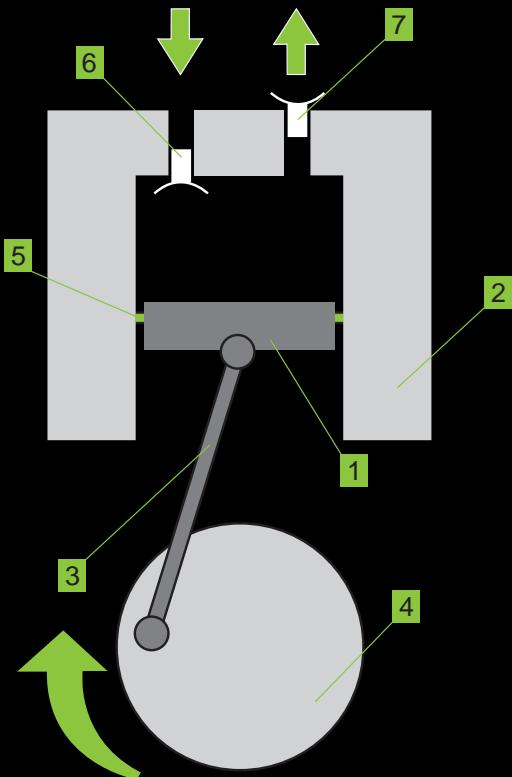
The best attributes of piston and membrane equipment are combined together into the piston vacuum pumps (compressors) - into one small and compact unit. Deeper vacuum can be reached by the series connection of the pistons (for double pistons version). The flow will be increased by parallel connection. Due to the fact that operation of the piston pumps is oil-free, these pumps are suitable for those applications where contamination of the medium by oil mist is undesirable.

Principle:

The basic principle of the piston pumps is based on linear reversible movement of the piston (1) in the cylinder (2). The piston is moving by piston rod (3), which is driven by the winch by force of cam mechanism (4) – conversion of rotary motion to linear. The piston is sealed towards the cylinder by the piston ring (5), which has high thermal conductivity and low friction without need to lubricate it. By movement of the piston in the cylinder downward the air is sucked through a one-way suction valve (6) into the compression chamber. By movement of the piston upwards, the air is pushed away by the one-way exhaust valve(7).

Advantages:

- > Not required operation liquid - oil-free operation
- > The pumps reach deep vacuum
- > Low noisiness
- > Compact construction
- > Low weight
- > Do not contaminate the transported gas
- > Easy installation
- > Low temperature at the pump head
- > Long life-time



3

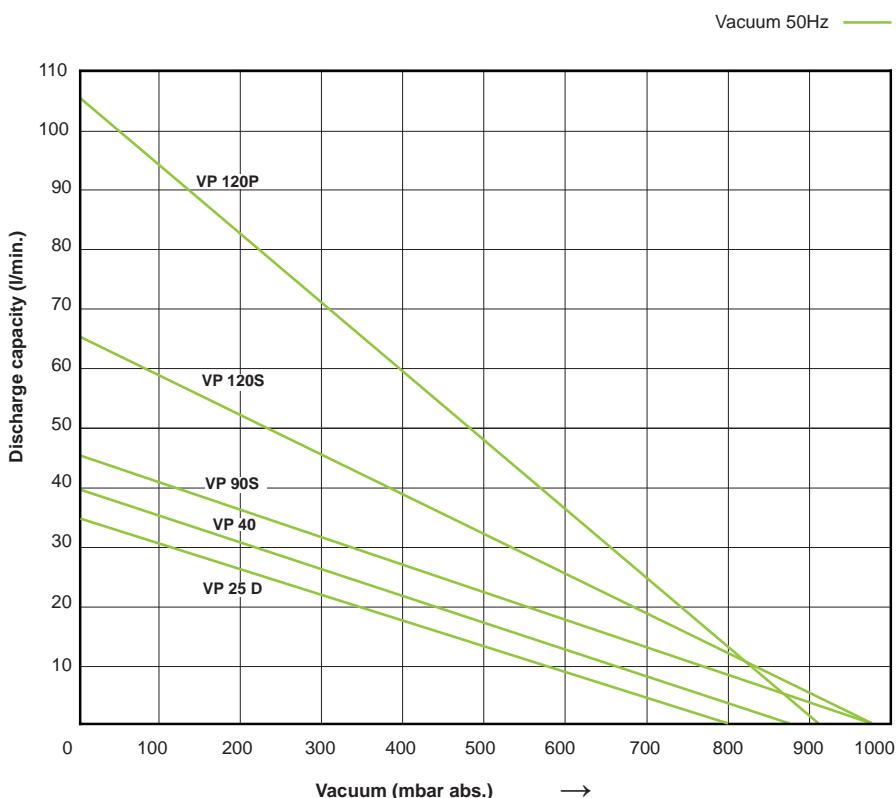
Piston pumps VP (Piston vacuum pump)

3.1

Models of the standard pump

Piston pumps VP

Models VP25D, VP 40, VP 90S, VP 120S, VP 120P



Model	VP 25D	VP 40	VP 90S	VP 120S	VP 120P
Input power	130W	180 W	250 W	300 W	300 W
Noise level	55 dB	58 dB	63 dB	66 dB	66 dB
Weight approx.	3,2 kg	5,2 kg	7,4 kg	7,4 kg	7,4 kg
Exhaust ø	inner thread 1/4"	inner thread 1/4"	inner thread 1/4"	inner thread 1/4"	inner thread 1/4"
Max. Vacuum Rate	800 mbar	880 mbar	987 mbar	987 mbar	907 mbar
Max. Volume Flow	34 L / min	40 L / min	45 L / min	65 L / min	105 L / min
Rated Voltage	230V / 50Hz	230V / 50Hz	230V / 50Hz	230 V / 50Hz	230 V / 50Hz
Thermal protector	135 ± 5% °C	135 ± 5% °C	135 ± 5% °C	135 ± 5% °C	135 ± 5% °C
Cover IP	IP 54	IP 54	IP 54	IP 54	IP 54
Product dimensions L x W x H	175 x 93 x 143 mm	190 x 105 x 165 mm	250 x 128 x 176 mm	250 x 128 x 176 mm	250 x 128 x 176 mm
Installation Dimension	114 x 70 mm (M6)	126 x 86,5 mm (M6)	203,5 x 89 mm (M6)	203,5 x 89 mm (M6)	203,5 x 89 mm (M6)

The single phase machines are designed with a +/- 10 % tolerance. Information presented is based on test results from nominal units. Specifications are subject to change without notice.



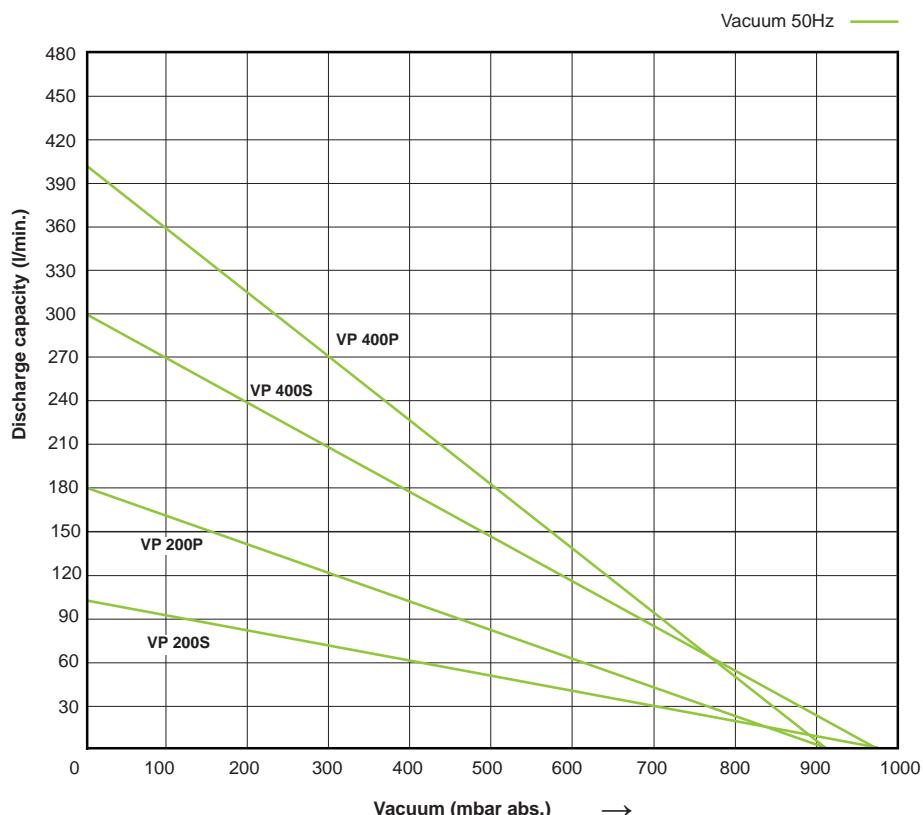
Piston pumps VP blowers/exhausters meet Directive 2002/95/EC of European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



VP piston vacuum pumps conform to the European Community's Machinery Directive (CE).

Piston pumps VP

Models VP 200P, VP 200S, VP 400P, VP 400S



Model	VP 200S	VP 200P	VP 400S	VP 400P
Input power	500 W	500 W	1 kW	1 kW
Noise level	66,5 dB	66 dB	66 dB	66 dB
Weight approx.	10,2 kg	9,2 kg	29 kg	29 kg
Exhaust ø	inner thread 1/4"	inner thread 1/4"	inner thread 1/2"	inner thread 1/2"
Max. Vacuum Rate	987 mbar	907 mbar	987 mbar	907 mbar
Max. Volume Flow	105 L / min	180 L / min	300 L / min	400 L / min
Rated Voltage	230V / 50Hz	230V / 50Hz	230 V / 50Hz	230 V / 50Hz
Thermal protector	145 ± 5% °C	145 ± 5% °C	145 ± 5% °C	145 ± 5% °C
Cover IP	IP 54	IP 54	IP 54	IP 54
Product dimesions L x W x H	270 x 135 x 202 mm	250 x 128 x 203 mm	450 x 350 x 280	450 x 350 x 280 mm
Installation Dimension	225 x 90 mm (M6)	203,5 x 89 mm (M6)	240 x 320 mm (M6)	240 x 320 (M6)

The single phase machines are designed with a +/- 10 % tolerance. Information presented is based on test results from nominal units. Specifications are subject to change without notice.



Piston pumps VP blowers/exhausters meet Directive 2002/95/EC of European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



VP piston vacuum pumps conform to the European Community's Machinery Directive (CE).

Accessories for piston pumps VP

manometer for vacuum, filter, valve

Type VFR-A-MPAAccessories for piston pumps VP
VP40, VP90S, VP120S**Type VFR-B-MPA**Accessories for piston pumps VP
VP120P, VP200S, VP200P

manometer for vacuum, filter, valve	Type	Product dimensions (mm)	Measuring range	Connection (inner thread)
	VFR-A-MPA	170 x 50 x 40	-1 až 0 MPa	G 1/4"
	VFR-B-MPA	200 x 55 x 55	-1 až 0 MPa	G 1/4"



Piston pumps VP blowers/exhausters meet Directive 2002/95/EC of European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



VP piston vacuum pumps conform to the European Community's Machinery Directive (CE).

3

Piston pumps VP (Piston vacuum pump)

3.2 Laboratory models

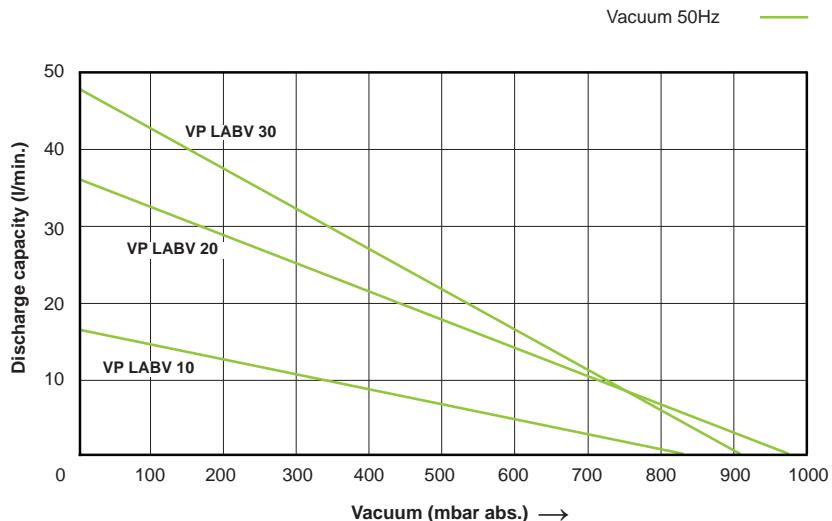
3

Piston pumps VP (Piston vacuum pump)

3.2 Laboratory models

Piston pumps VP

Models VP LABV 10, VP LABV 20, VP LABV 30

VP LABV 10**VP LABV 20****VP LABV 30**

Model	VP LABV 10	VP LABV 20	VP LABV 30
Input power	60 W	85 W	180 W
Noise level	≤ 58 dB	≤ 55 dB	≤ 65 dB
Weight approx.	5,5 kg	6,8 kg	8,5 kg
Exhaust ø	9 mm	9 mm	9 mm
Max. Vacuum Rate	826 mbar	987 mbar	907 mbar
Max. Volume Flow	16 L / min	36 L / min	48 L / min
Rated Voltage	230V / 50Hz	230V / 50Hz	230 V / 50Hz
Cover IP	IP 54	IP 54	IP 54
Product dimensions L x W x H (mm)	370 x 170 x 256	370 x 170 x 256	370 x 170 x 256

The single phase machines are designed with a +/- 10 % tolerance. Information presented is based on test results from nominal units. Specifications are subject to change without notice.



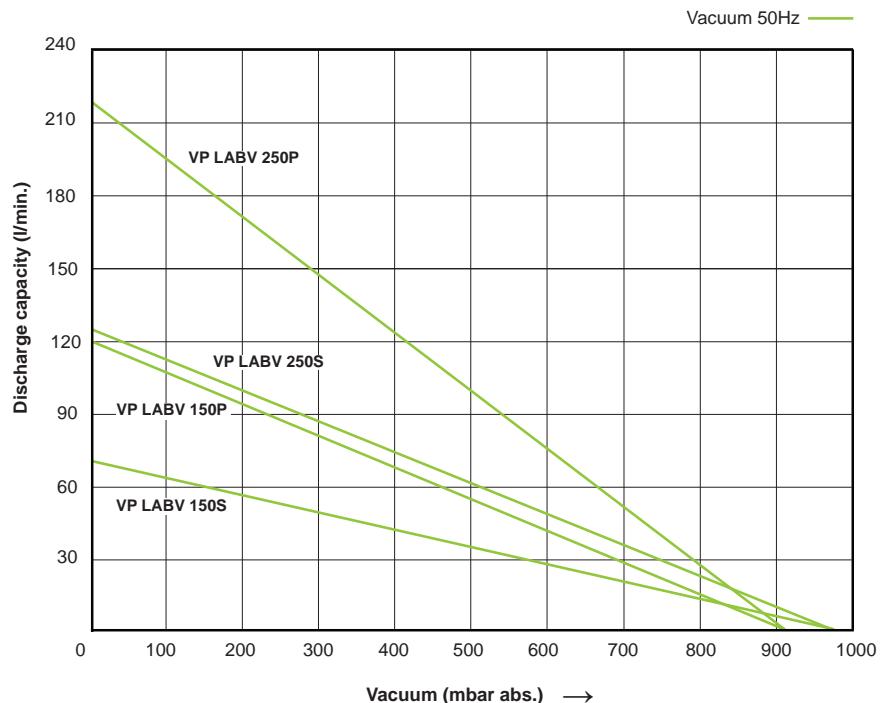
Piston pumps VP blowers/exhausters meet Directive 2002/95/EC of European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



VP piston vacuum pumps conform to the European Community's Machinery Directive (CE).

Piston pumps VP

Models VP LABV 150P, VP LABV 250P, VP LABV 150S, VP LABV 250S



Model	VP LABV 150P	VP LABV 250P	VP LABV 150S	VP LABV 250S
Input power	300 W	560 W	300 W	560 W
Noise level	≤ 66 dB	≤ 66 dB	≤ 66 dB	≤ 67 dB
Weight approx.	11,5 kg	13 kg	11,5 kg	13 kg
Exhaust ø	9 mm	9 mm	9 mm	9 mm
Max. Vacuum Rate	906 mbar	906 mbar	986 mbar	986 mbar
Max. Volume Flow	120 L / min	220 L / min	75 L / min	125 L / min
Rated Voltage	230V / 50Hz	230V / 50Hz	230 V / 50Hz	230 V / 50Hz
Cover IP	IP 54	IP 54	IP 54	IP 54
Product dimensions L x W x H (mm)	340 x 187,4 x 305			

The single phase machines are designed with a +/- 10 % tolerance. Information presented is based on test results from nominal units. Specifications are subject to change without notice.



Piston pumps VP blowers/exhausters meet Directive 2002/95/EC of European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



VP piston vacuum pumps conform to the European Community's Machinery Directive (CE).

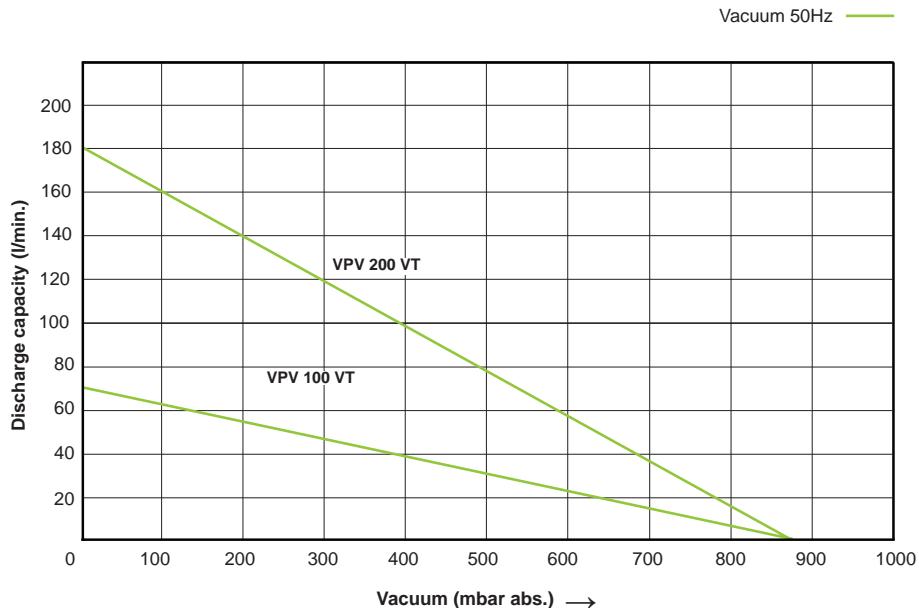
3

Piston pumps VP (Piston vacuum pump)

3.3 Vacuum systems

Vacuum systems VPV

Models VPV 100VT, VPV 200VT



Model	VPV 100VT	VPV 200VT
Input power	250 W	500 W
Noise level	63 dB	63 dB
Weight approx.	19,7 kg	21,5 kg
Exhaust ø	3/8"	3/8"
Max. Vacuum Rate	866 mbar	866 mbar
Max. Volume Flow	75 L / min	180 L / min
Rated Voltage	30 L	30 L
Thermal protector	230V / 50Hz	230V / 50Hz
Cover IP	135 ± 5% °C	135 ± 5% °C
Product dimensions L x W x H	IP 54	IP 54
Installation Dimension	700 x 300 x 550 mm	700 x 300 x 550 mm

The single phase machines are designed with a +/- 10 % tolerance. Information presented is based on test results from nominal units. Specifications are subject to change without notice.



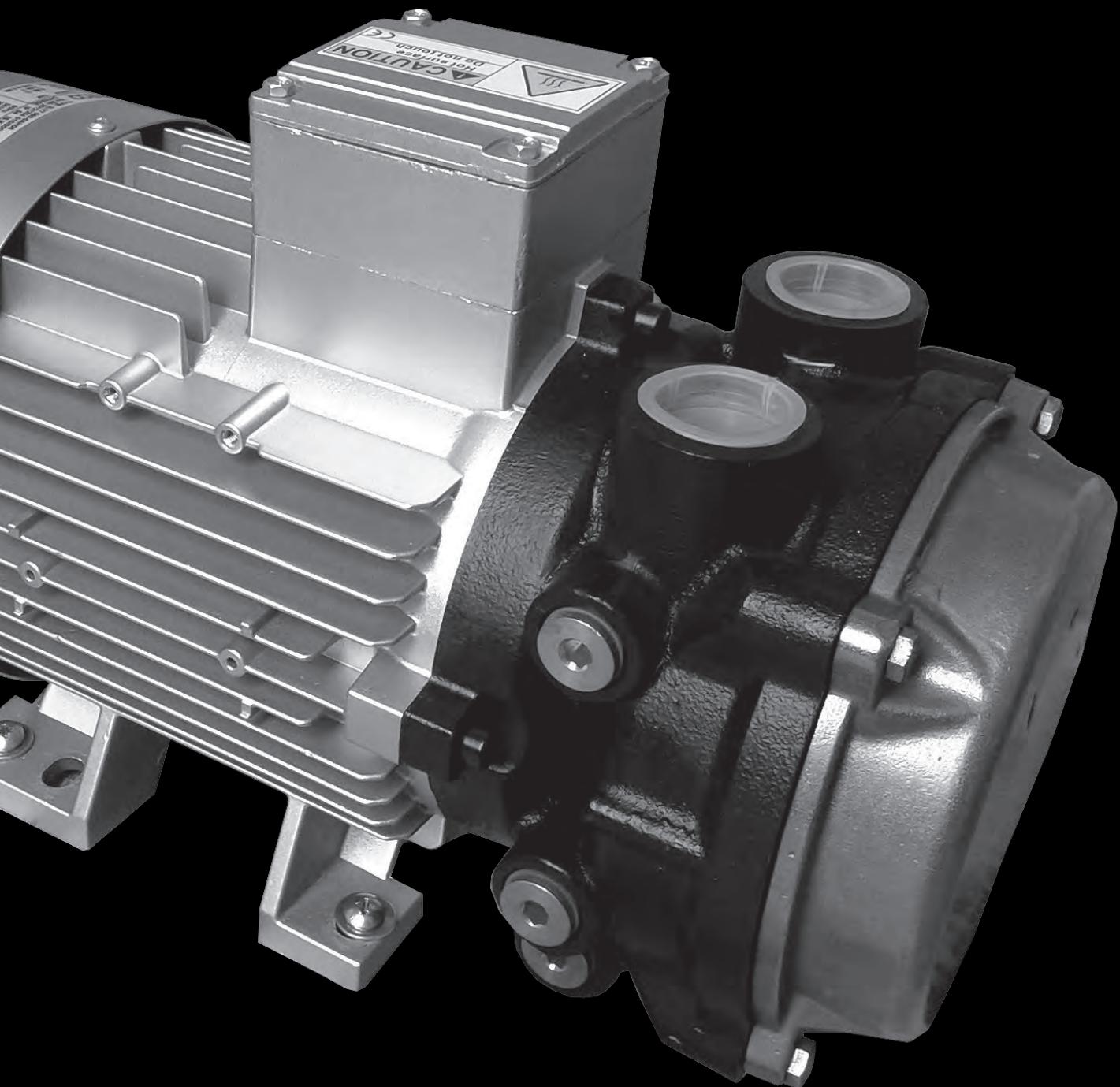
Piston pumps VP blowers/exhausters meet Directive 2002/95/EC of Europe-an Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



VP piston vacuum pumps conform to the European Community's Machinery Directive (CE).

4

Liquid ring pump LR, LRM



4

Liquid ring pump

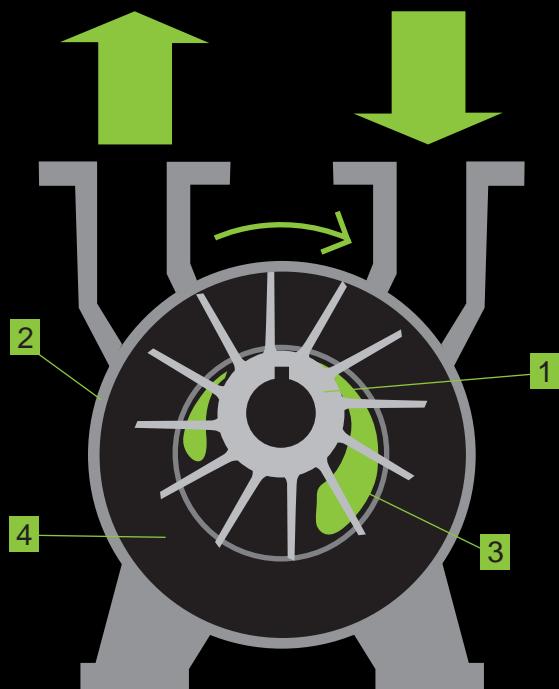
Liquid ring vacuum pumps LR are designed primarily for exhaustion of vapors and gases in various industries such as food and chemical industry. They are also used for evaporation, drying and packaging of the goods. Their big advantage is the fact they can evacuate gases with particles of liquid (vapor) as well as medium with a slight mechanical contamination (without abrasive effect).

Principle:

Rotor with fixed blades (1) is rotating in the stator (2), in which is situated eccentrically. Water ring is created from the service liquid (3) by the centrifugal force. The vacuum is formed and the pressure is changed in the compression chambers (4) between the blades and water ring. During the operation, the pump has to be supplied by adequate quantity of service liquid to achieve desired performance. Service liquid is also very useful for cooling of the liquid ring vacuum pump and for receiving possible contamination of sucked gas.

Advantages:

- > Oil-free operation
- > They are suitable for suction of gases and vapors
- > They can reach relatively deep vacuum
- > They are able to work simultaneously with the gas and liquid
- > Anti cavitation protection is ensured by installation of anti-cavitation valve
- > Safe operation with minimal maintenance
- > Smooth running without vibration
- > Economic operation



4

Liquid ring pump (Liquid ring vacuum pumps)

4.1

Liquid ring pump LR

Liquid ring pump LR



Type	Frequency (Hz)	Discharge capacity (m³/hod)	Vacuum (mbar)	Motor (IP55)			Noise level (dB)	Weight (kg)
				Power (kW)	Voltage (V)	Current (A)		
Three-phase								
LR 060-H06	50	28	967	0,75	200-240 Δ / 345-415 Y	4,6 Δ/ 2,5 Y	62	17
	60	32	967	1,1	200-275 Δ / 345-480 Y	5,2 Δ/ 3,1 Y	67	
LR 061-H16	50	48	967	1,5	200-240 Δ / 345-415 Y	7,5 Δ/ 4,3 Y	65	22
	60	53	967	2,2	200-275 Δ / 345-480 Y	9,2 Δ/ 4,6 Y	69	

Type	Max. oper. liquid qty. (l/min)	Recommended type flowmeter	Measuring range of flowmeter (l/min)
Single-phase			
LR 060-H06	3,33	R-1/R	0,5 - 5
LR 061-H16	3,83	R-1/R	0,5 - 5



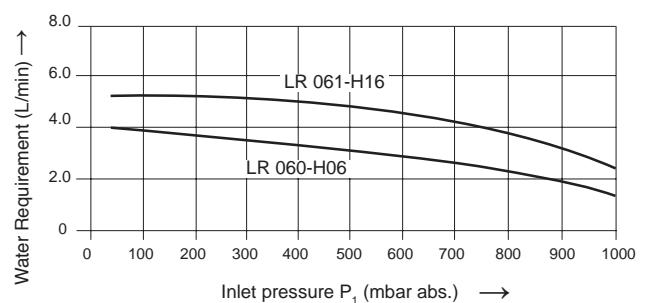
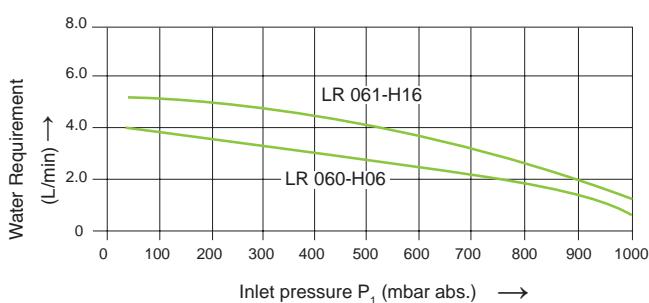
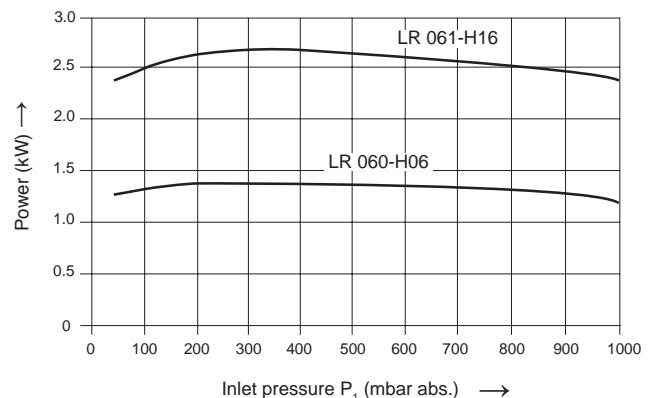
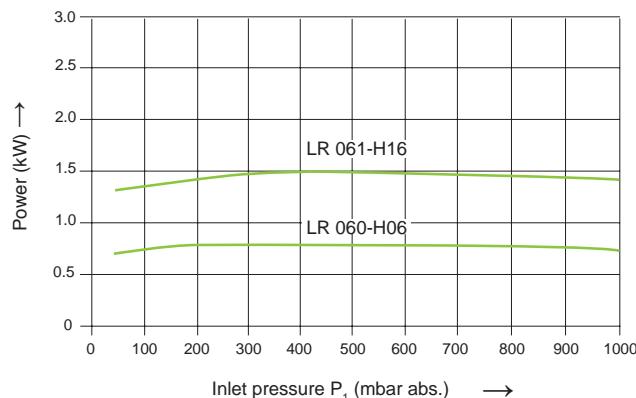
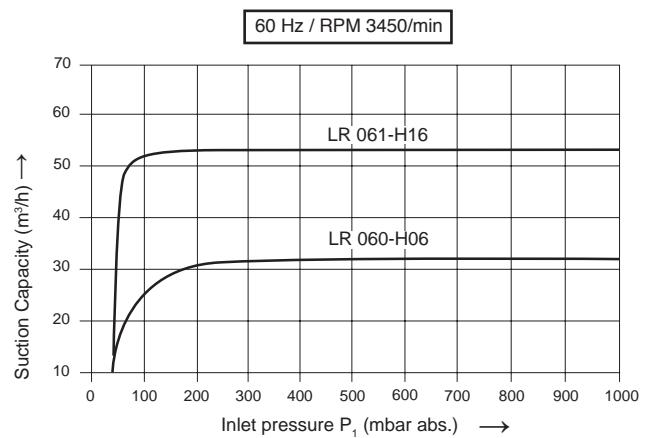
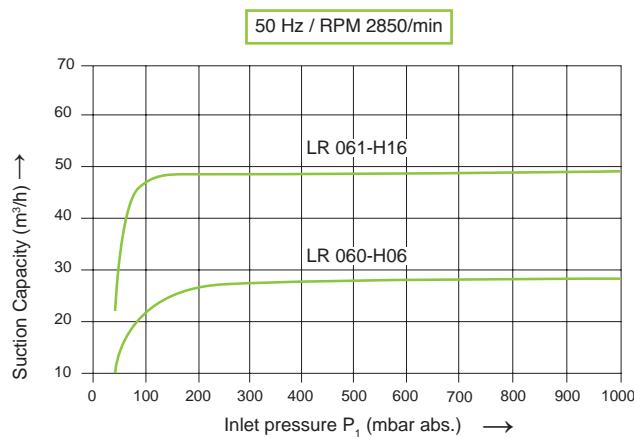
Flowmeter R-1/R

Liquid ring pump LR

Performance table

Suction capacity and power consumption depending on inlet pressure

The Characteristics are applicable for compression of 20 °C(68 F) dry air from inlet pressure to atmospheric pressure(30 inch Hg a) for nominal speed and drive with three phase motors. Ring liquid is water at 15 °C(59 F) . The tolerance of suction capacity is -10% and of the power consumption +10%. With different operating conditions performance characteristics change (e.g.differing gas operating liquid conditions,conveying of additional liquids and/or pumping of gas-steam mixtures).

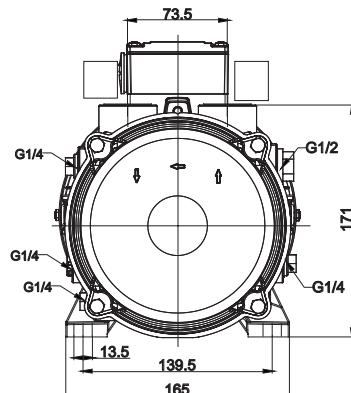
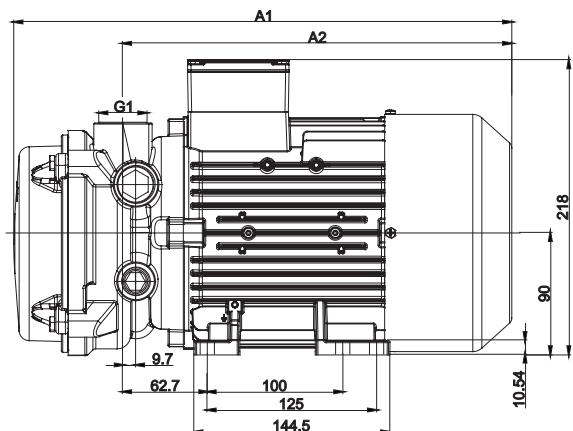


Liquid ring pump conform to the
European Community's Machinery
Directive (CE).

Liquid ring pump LR

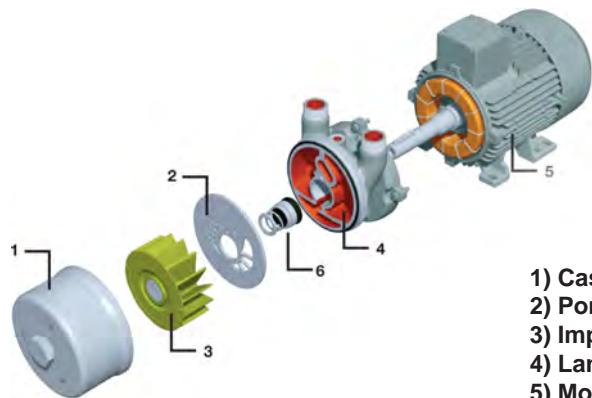
Dimensions

LR 060-H06 / LR 061-H16



Type	A1 (mm)	A2 (mm)
LR 060-H06	368,4	287,9
LR 061-H16	386,7	287,9

Spare part list LR 060 - H06 / LR 061 - H16



- 1) Casing
- 2) Port plate
- 3) Impeller
- 4) Lantern
- 5) Motor
- 6) Mechanical seal

Material:

- Stainless steel
- Stainless steel
- Bronze
- Cast iron with teflon coating
- IE1 motor
- Pot lead



Liquid ring pump conform to the
European Community's Machinery
Directive (CE).

4

Liquid ring pump (Liquid ring vacuum pumps)

4.2

Liquid ring pump LRM

Liquid ring pump LRM

Type	Frequ- ency (Hz)	RPM	Dis- charge capacity (m³/hod)	Vacuum (mbar)	Motor (IP55)			Noise level (dB)	Hmot- nost' (kg)
					Power (kW)	Voltage (V)	Current (A)		
Three-phase									
LRM 25	50	2850	25	967	0,75	200-240 Δ / 345-415 Y	1,76 Y	68	18
LRM 50	50	2850	45	967	1,5	200-240 Δ / 345-415 Y	3,13 Y	68	23
LRM 95	50	1450	75	967	2,2	200-240 Δ / 345-415 Y	4,83 Y	65	56
LRM 130	50	1450	120	967	4,0	200-240 Δ / 345-415 Y	8,15 Δ	65	73
LRM 255	50	1450	180	967	5,5	200-240 Δ / 345-415 Y	11,0 Δ	65	100
LRM 325	50	1450	300	967	7,5	200-240 Δ / 345-415 Y	15,0 Δ	72	132
LRM 455	50	1450	400	967	11,0	200-240 Δ / 345-415 Y	21,2 Δ	72	205

Type	Max. qty. of liquid in continuous operation (l/h)	Max. qty. of liq- uid in discontinu- ous operation (l/h)	Recommen- ded type flowmeter	Measuring range of flowmeter (l/h)
Three-phase				
LRM 25	500	600	R-2/R	80 - 800
LRM 50	600	720	R-2/R	80 - 800
LRM 95	1700	2000	R/3	200 - 3000
LRM 130	1800	2200	R/3	200 - 3000
LRM 255	3000	3600	R/3	200 - 3000
LRM 325	3200	3900	R/3	200 - 3000
LRM 455	3800	4600	R/4	500 - 6000



Flowmeter R-2/R

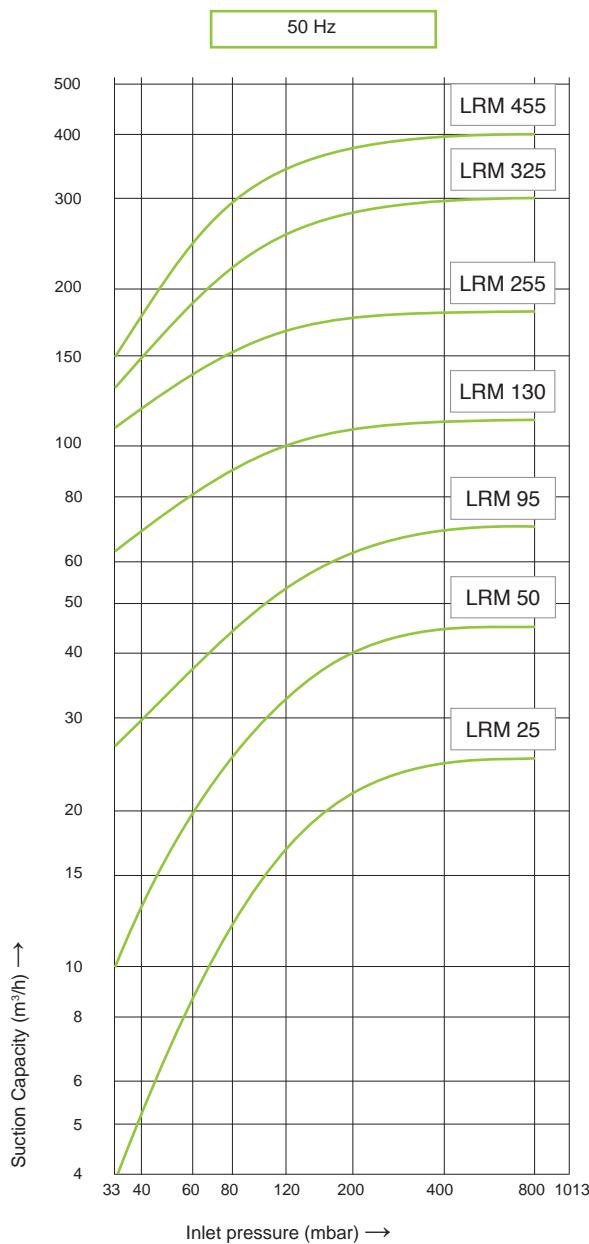
Flowmeter R/3, R/4

Liquid ring pump LRM

Performance table

Suction capacity and power consumption depending on inlet pressure

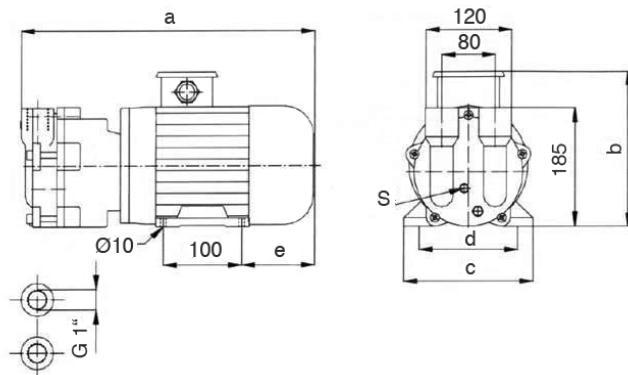
The Characteristics are applicable for compression of 20 °C(68 F) dry air from inlet pressure to atmospheric pressure(30 inch Hg a) for nominal speed and drive with three phase motors. Ring liquid is water at 15 °C(59 F) . The tolerance of suction capacity is -10% and of the power consumption +10%. With different operating conditions performance characteristics change (e.g.differing gas opera-ting liquid conditions,conveying of additional liquids and/or pumping of gas-steam mixtures).



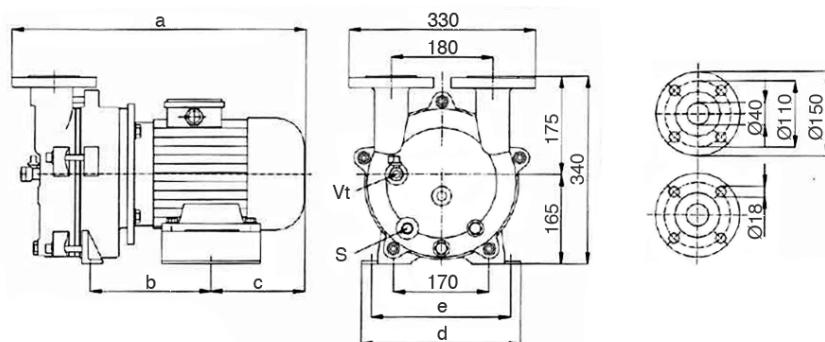
Liquid ring pump conform to the
European Community's Machinery
Directive (CE).

Liquid ring pump LRM

Dimensions

LRM 25 / LRM 50

Type	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	S	Weight (kg)
LRM 25	365	200	160	125	88	G 1/4"	18
LRM 50	405	215	180	140	102	G 1/4"	23

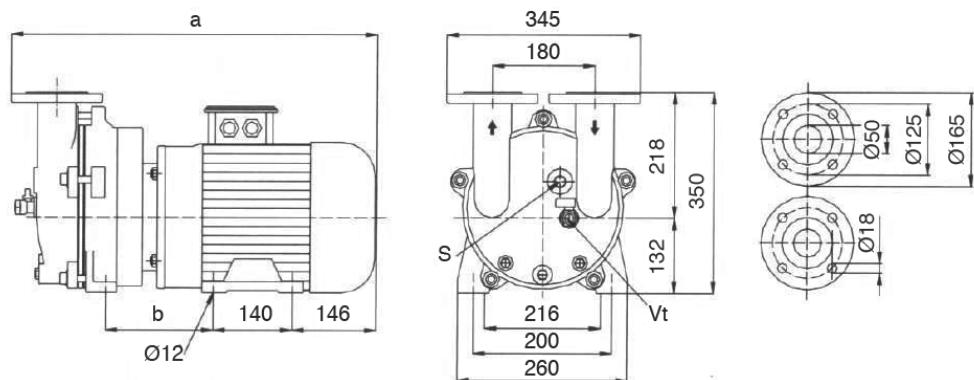
LRM 95 / LRM 130

Type	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	S	Vt	Hmotnosť (kg)
LRM 95	520	165	185	285	255	G 1/2"	G 1/4"	55
LRM 130	405	215	180	140	102	G 1/2"	G 1/4"	23

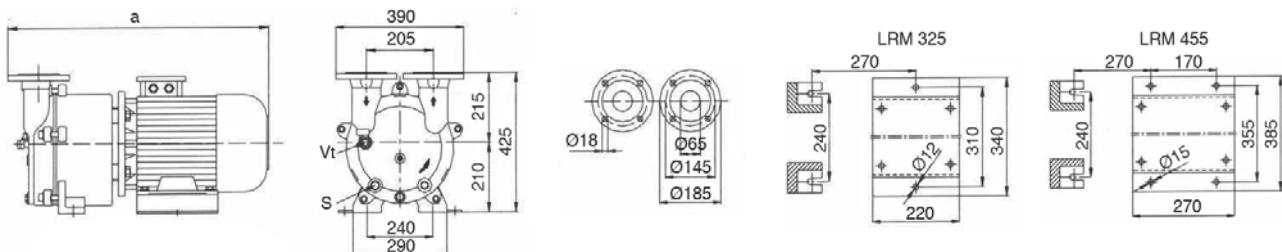
Liquid ring pump conform to the
European Community's Machinery
Directive (CE).

Liquid ring pump LRM

Dimensions

LRM 255

Type	a (mm)	b (mm)	S	Vt	Weight (kg)
LRM 255	680	215	G 1/2"	G 1/4"	98

LRM 325 / LRM 455

Type	a (mm)	S	Vt	Weight (kg)
LRM 325	720	G 3/4"	G 1/2"	132
LRM 455	840	G 3/4"	G 1/2"	193

Liquid ring pump conform to the
European Community's Machinery
Directive (CE).

INECO®

IN-ECO, spol. s r.o.
Radlinského 13
034 01 Ružomberok
Slovak Republic
T +421 44 4304662
E info@in-eco.eu
www.in-eco.eu

1.6.2022