



Eurovacuum EVR Series

Roots Vacuum Pumps



Eurovacuum EVR Series

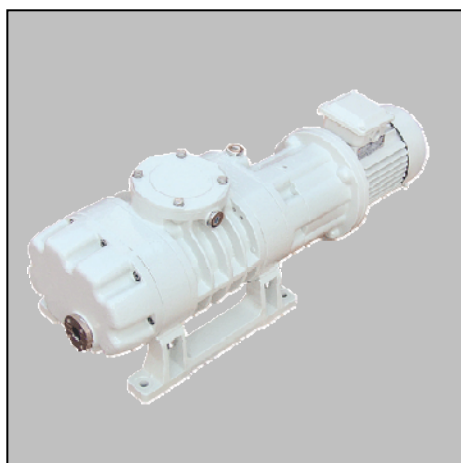
Roots Vacuum Pumps

Eurovacuum Company is offering its various products to meet industrial vacuum needs.

Eurovacuum Company is founded in 2006, with over 30 year experiences in the vacuum Industry its founders have been putting their best efforts continuously to produce high quality Roots Vacuum Pumps, with diverse range of capacity for use in the industry in diverse applications.

The figure-of-eight rotors are counter-rotating at a constant speed inside the pump housing for suction and exhaust of the gas. Two rotors are supported by two bearings and synchronized by a pair of gears, which ensure these two rotors in certain relative positions. They are near to another and to the housing without actual contacting, so lubrication is unnecessary in the working housing. The carefully balanced operating parts and high precision bevel wheels ensure the pump be operated stably and continuously under the condition of high-pressure difference. Dynamic seal part use our patent technology and high quality seals. The vibration of shaft and the shaft seals are controlled to less than 0,02mm against oil leaking. As an option a gravity valve can be installed between the suction and exhaust of the pump. The function of the gravity valve is as following, when the pressure difference between the suction and exhaust is over the weight of the valve, the valve opens automatically, which controls the pressure difference to a fixed value. This value is the allowable highest pressure difference to ensure a problem free working of the pump. The advantage is that the pump can be started at the same time as the pre-vacuum pump and will therefore have a higher pumping speed in the high pressure range. Because the roots pump has a free clearance inside and running without lubricant in the working housing there will be some back flow of gas, therefore these Roots pumps will need a pre-vacuum pump to reach the end-vacuum.

To eliminate the change of leakage over the rotating sealing, cause by wear, we have some special version Roots pumps who have a magnetic Force system.



**EVR without bypass valve
with magnetic Force**



**EVR with bypass valve
without magnetic Force**

Eurovacuum

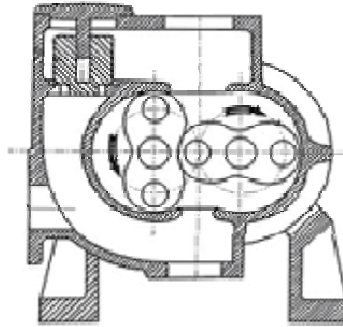
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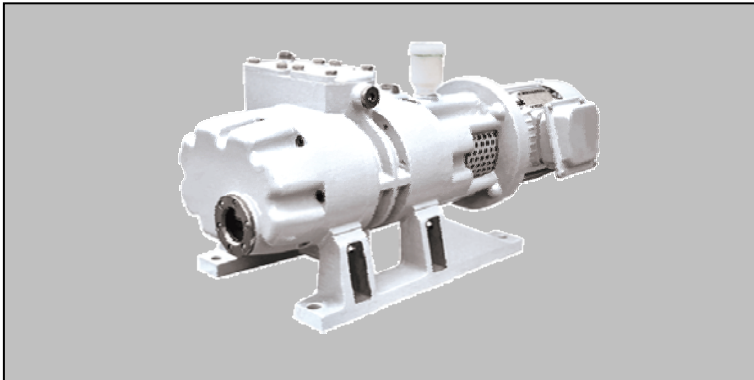


Eurovacuum EVR Series

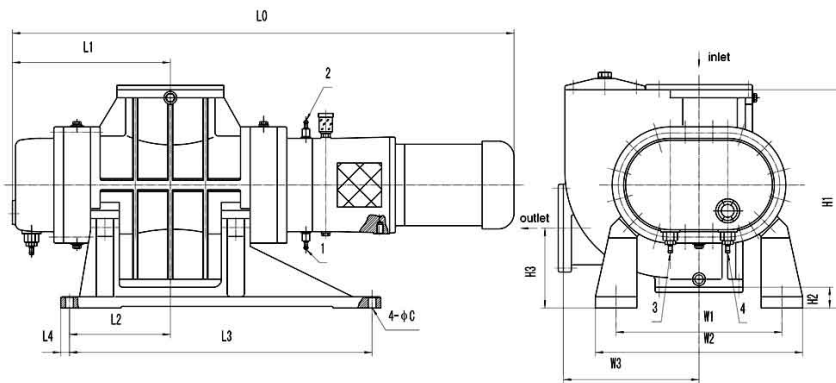
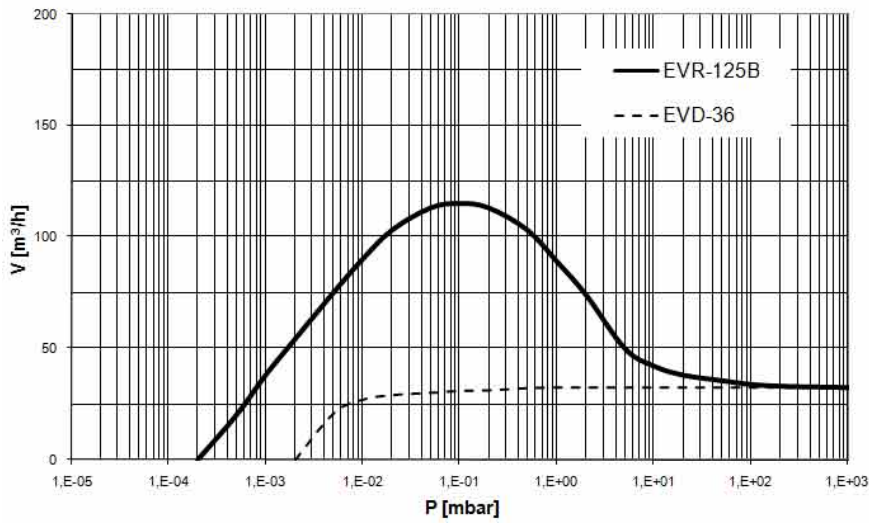
EVR series

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TYPE EVR-125



Pumping speed curve



Dimensions	L0	L1	L2	L3	L4	H1	H2	H3	W1	W2	W3	4- ϕC
EVR-125	660	175	120	360	15	270	40	100	220	270	145	4- $\phi 14$

TYPE EVR-125

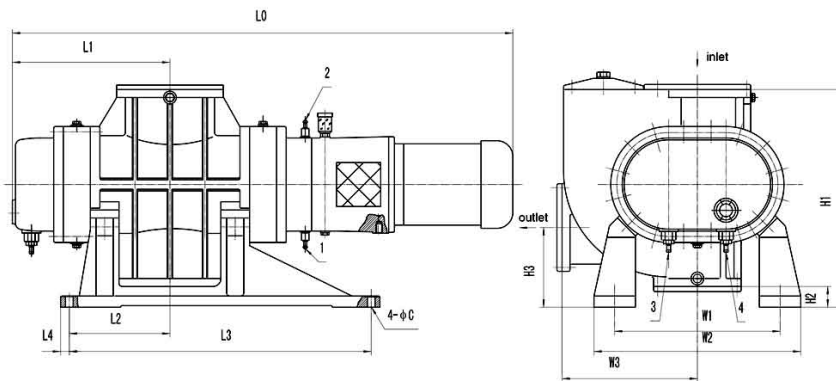
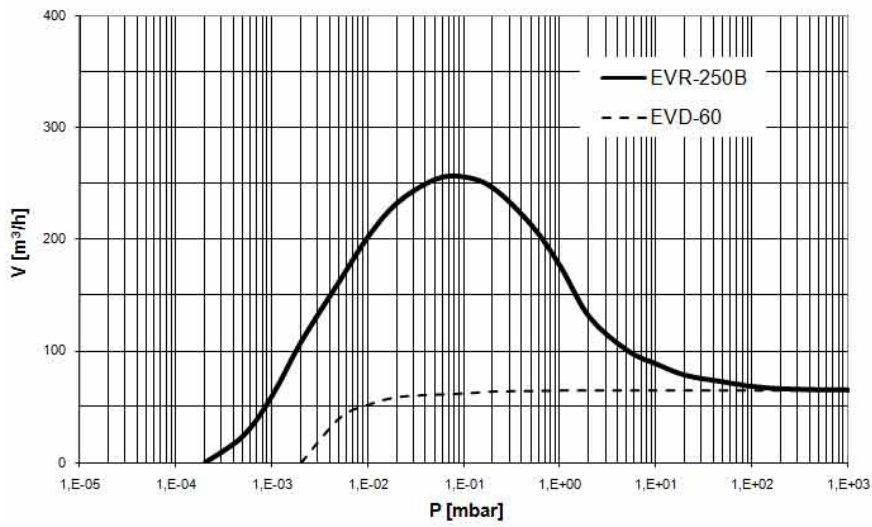
Technical Data		TYPE EVR-125	
		50 Hz	60 Hz
Nominal pumping speed	m ³ /h	108	127
Ultimate total pressure ¹	mbar	3 · 10 ⁻⁴	3 · 10 ⁻⁴
ΔP of relieve valve	mbar	50	50
Motor power	kW	0,75	0,75
Nominal speed	rpm	2825	3400
Type of protection	IP	55	55
Oil filling for gearbox	ltr	0,8	0,8
Weight	kg	70	70
Noise level	dB	68	68
Connection	Inlet	DIN	63
	Outlet	DIN	63

Ordering Information	TYPE EVR-125	
	50 Hz	60 Hz
EVR-125 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	660.001	660.001 660.003
EVR-125B with bypass 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	660.011	660.011 660.013
EVR-125M with magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	660.021	660.021 660.023
EVR-125BM with bypass & magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	660.031	660.031 660.033
Other Voltages/Frequencies	Upon request	
Filling of gearbox with special oil	Upon request	
Sealing set	660.901	
Maintenance kit	660.902	
Standard Oil filling 1 ltr	100.400	
Adapter set to ISO-K flanges		
Inlet DN 63 ISO-K	660.701	
Outlet DN 63 ISO-K	660.702	

TYPE EVR-250



Pumping speed curve



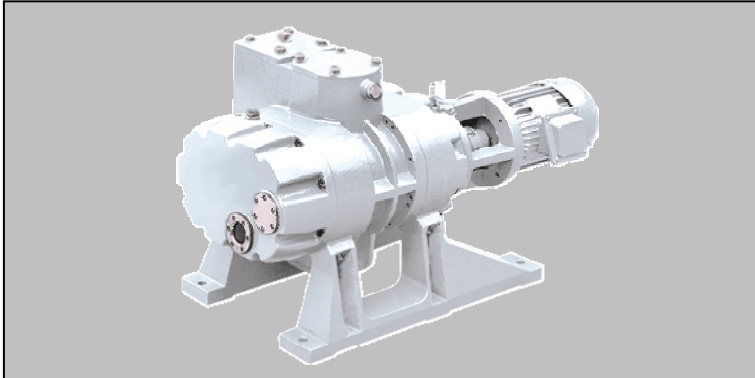
Dimensions	L0	L1	L2	L3	L4	H1	H2	H3	W1	W2	W3	4-φC
EVR-250	730	210	155	450	15	300	50	130	220	270	165	4-φ14

TYPE EVR-250

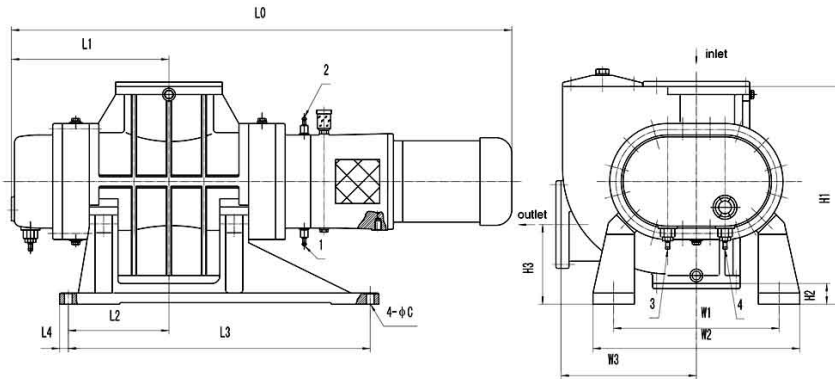
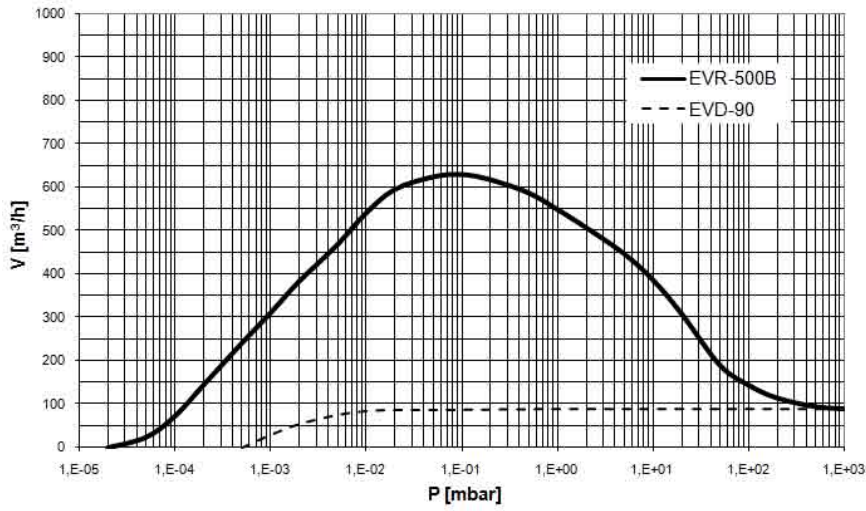
Technical Data		TYPE EVR-250	
		50 Hz	60 Hz
Nominal pumping speed	m ³ /h	250	300
Ultimate total pressure ¹	mbar	3 · 10 ⁻⁴	3 · 10 ⁻⁴
ΔP of relieve valve	mbar	50	50
Motor power	kW	1,1	1,1
Nominal speed	rpm	2825	3400
Type of protection	IP	55	55
Oil filling for gearbox	ltr	0,8	0,8
Weight	kg	85	85
Noise level	dB	69	69
Connection	Inlet	DIN 80/63	80/63
	Outlet	DIN 63	63

Ordering Information	TYPE EVR-250	
	50 Hz	60 Hz
EVR-250 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	661.001	661.001 661.003
EVR-250B with bypass 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	661.011	661.011 661.013
EVR-250M with magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	661.021	661.021 661.023
EVR-250BM with bypass & magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	661.031	661.031 661.033
Other Voltages/Frequencies	Upon request	
Filling of gearbox with special oil	Upon request	
Sealing set	661.901	
Maintenance kit	661.902	
Standard Oil filling 1 ltr	100.400	
Adapter set to ISO-K flanges		
Inlet DN 63 ISO-K	661.701	
Outlet DN 63 ISO-K	661.702	

TYPE EVR-500



Pumping speed curve



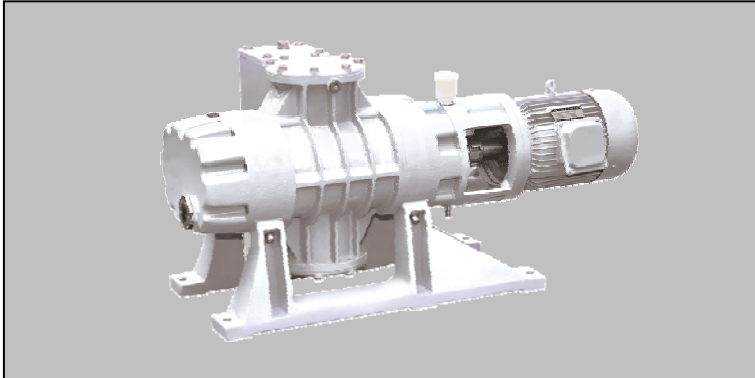
Dimensions	L0	L1	L2	L3	L4	H1	H2	H3	W1	W2	W3	4- ϕ C
EVR-500	910	260	195	580	20	475	90	195	320	408	245	4- ϕ 18

TYPE EVR-500

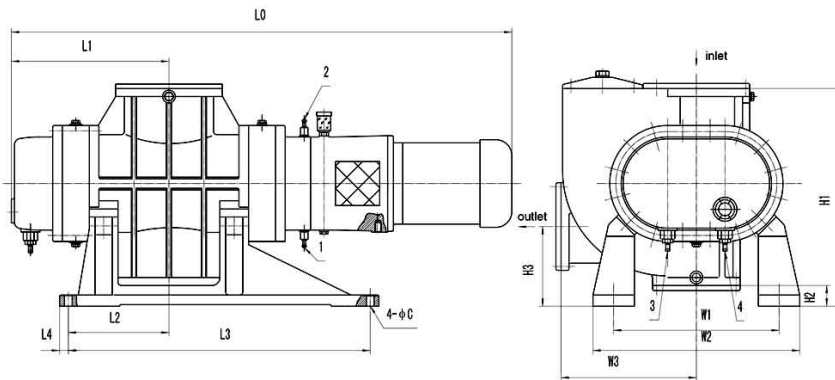
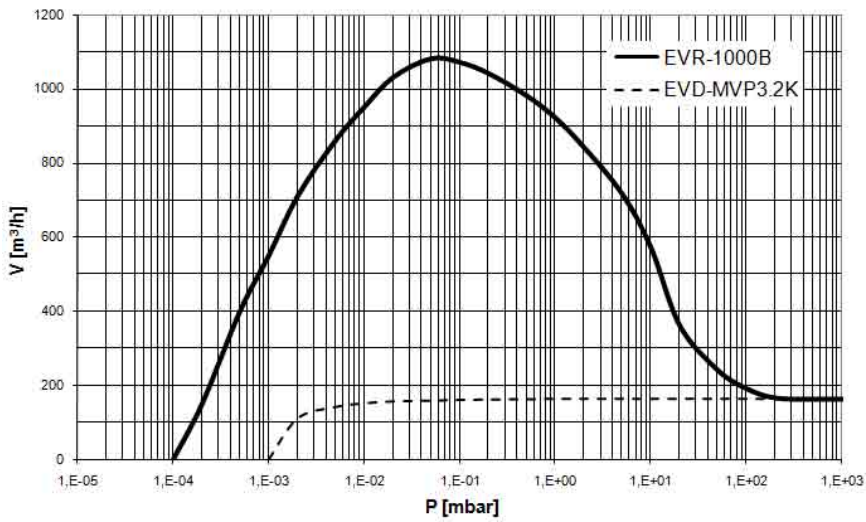
Technical Data		TYPE EVR-500	
		50 Hz	60 Hz
Nominal pumping speed	m ³ /h	540	650
Ultimate total pressure ¹	mbar	3 · 10 ⁻⁴	3 · 10 ⁻⁴
ΔP of relieve valve	mbar	48	48
Motor power	kW	2,2	2,2
Nominal speed	rpm	2840	3400
Type of protection	IP	55	55
Oil filling for gearbox	ltr	2,8	2,8
Weight	kg	220	220
Noise level	dB	72	72
Connection	Inlet	DIN	100
	Outlet	DIN	100

Ordering Information	TYPE EVR-500	
	50 Hz	60 Hz
EVR-500 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	662.001	662.001 662.003
EVR-500B with bypass 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	662.011	662.011 662.013
EVR-500M with magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	662.021	662.021 662.023
EVR-500BM with bypass & magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	662.031	662.031 662.033
Other Voltages/Frequencies	Upon request	
Filling of gearbox with special oil	Upon request	
Sealing set	662.901	
Maintenance kit	662.902	
Standard Oil filling 5 ltr	100.402	
Adapter set to ISO-K flanges		
Inlet DN 100 ISO-K	662.701	
Outlet DN 100 ISO-K	662.702	

TYPE EVR-1000



Pumping speed curve



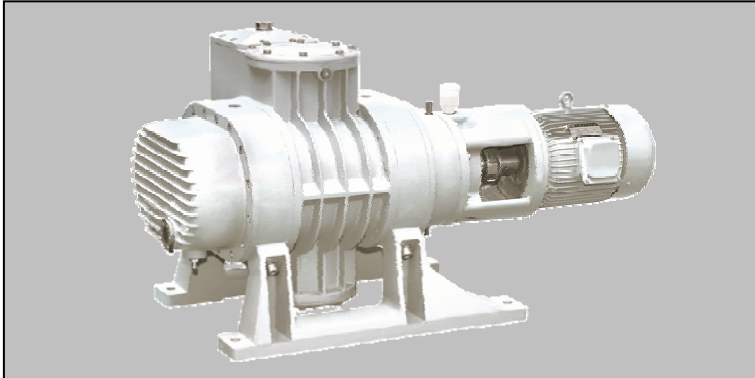
Dimensions	L0	L1	L2	L3	L4	H1	H2	H3	W1	W2	W3	4-φC
EVR-1000	1100	325	275	740	20	525	90	215	320	408	285	4-φ18

TYPE EVR-1000

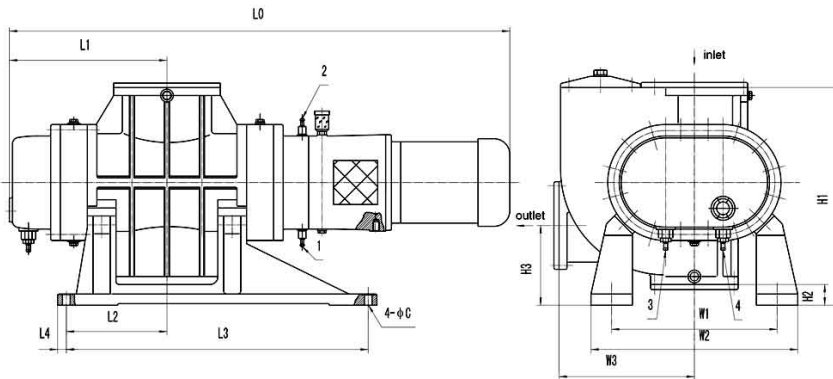
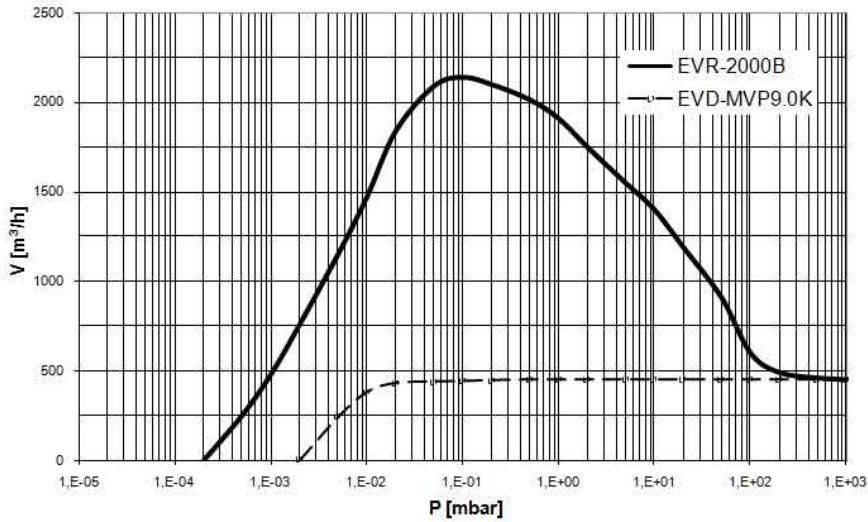
Technical Data		TYPE EVR-1000	
		50 Hz	60 Hz
Nominal pumping speed	m ³ /h	1080	1300
Ultimate total pressure ¹	mbar	3 · 10 ⁻⁴	3 · 10 ⁻⁴
ΔP of relieve valve	mbar	58	58
Motor power	kW	4	4
Nominal speed	rpm	2890	3470
Type of protection	IP	55	55
Oil filling for gearbox	ltr	2,8	2,8
Weight	kg	310	310
Noise level	dB	74	74
Connection	Inlet	DIN	160
	Outlet	DIN	160

Ordering Information	TYPE EVR-1000	
	50 Hz	60 Hz
EVR-1000 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	663.001	663.001 663.003
EVR-1000B with bypass 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	663.011	663.011 663.013
EVR-1000M with magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	663.021	663.021 663.023
EVR-1000BM with bypass & magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	663.031	663.031 663.033
Other Voltages/Frequencies	Upon request	
Filling of gearbox with special oil	Upon request	
Sealing set	663.901	
Maintenance kit	663.902	
Standard Oil filling 5 ltr	100.402	
Adapter set to ISO-K flanges		
Inlet DN 160 ISO-K	663.701	
Outlet DN 160 ISO-K	663.702	

TYPE EVR-2000



Pumping speed curve



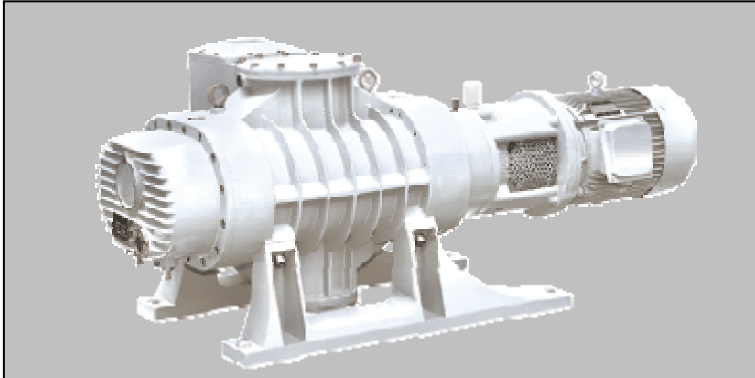
Dimensions	L0	L1	L2	L3	L4	H1	H2	H3	W1	W2	W3	4-φC
EVR-2000	1350	375	277,5	760	27,5	673	70	235	480	596	375	4-φ24

TYPE EVR-2000

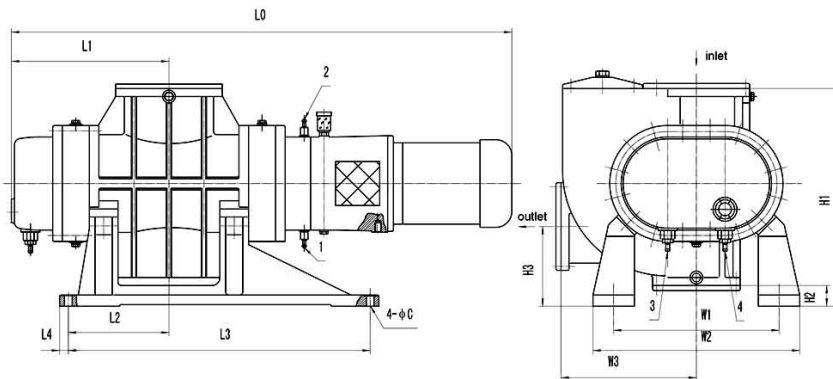
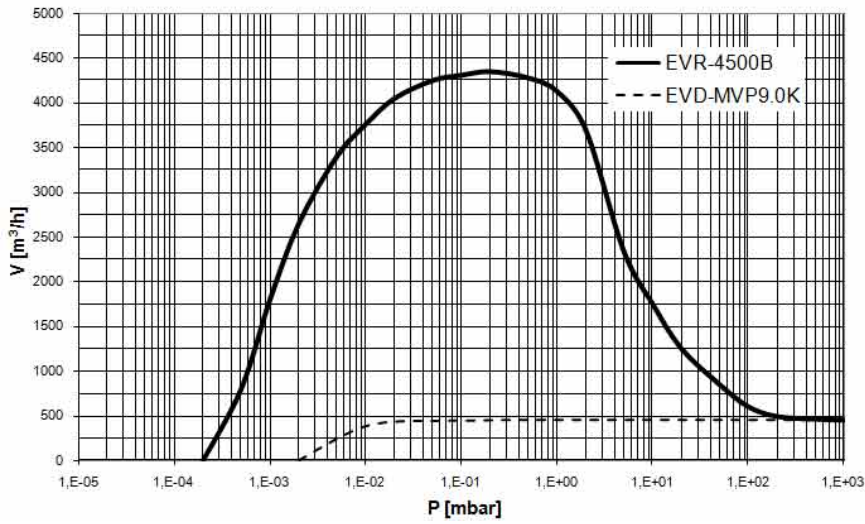
Technical Data		TYPE EVR-2000	
		50 Hz	60 Hz
Nominal pumping speed	m ³ /h	2160	2590
Ultimate total pressure ¹	mbar	3 · 10 ⁻⁴	3 · 10 ⁻⁴
ΔP of relieve valve	mbar	32	32
Motor power	kW	7,5	7,5
Nominal speed	rpm	2900	3480
Type of protection	IP	55	55
Oil filling for gearbox	ltr	7,5	7,5
Weight	kg	790	790
Noise level	dB	76	76
Connection	Inlet	DIN	200
	Outlet	DIN	200

Ordering Information	TYPE EVR-2000	
	50 Hz	60 Hz
EVR-2000 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	664.001	664.001 664.003
EVR-2000B with bypass 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	664.011	664.011 664.013
EVR-2000M with magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	664.021	664.021 664.023
EVR-2000BM with bypass & magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	664.031	664.031 664.033
Other Voltages/Frequencies	Upon request	
Filling of gearbox with special oil	Upon request	
Sealing set	664.901	
Maintenance kit	664.902	
Standard Oil filling 7,5 ltr	100.401&100.402	
Adapter set to ISO-K flanges		
Inlet DN 200 ISO-K	661.701	
Outlet DN 200 ISO-K	661.702	

TYPE EVR-4500



Pumping speed curve



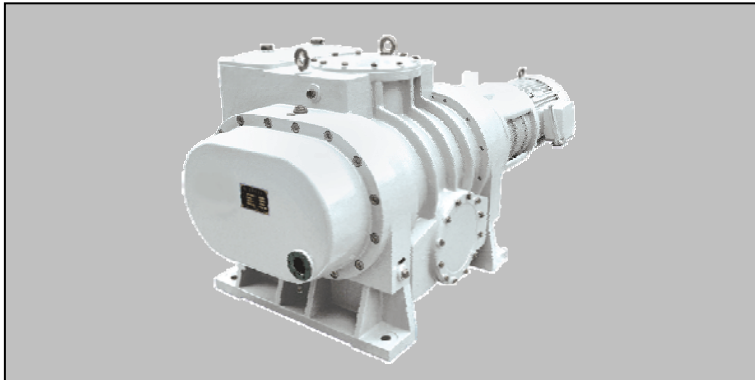
Dimensions	L0	L1	L2	L3	L4	H1	H2	H3	W1	W2	W3	4-φC
EVR-4500	1700	500	316	948	26	675	65	250	520	650	430	4-φ24

TYPE EVR-4500

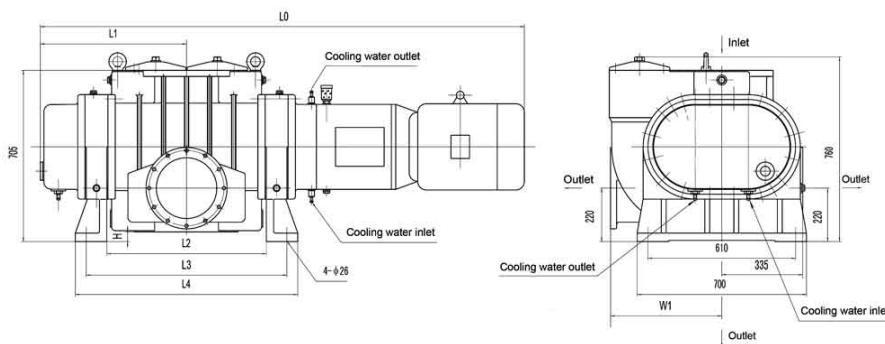
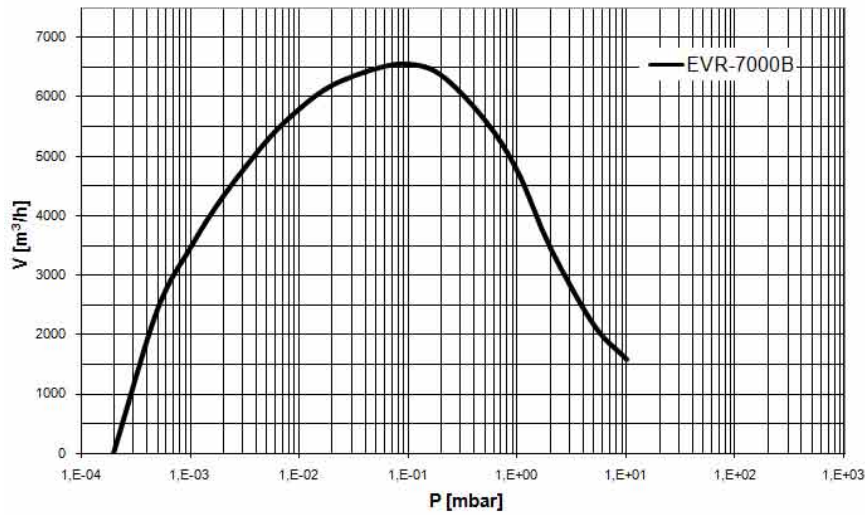
Technical Data		TYPE EVR-4500	
		50 Hz	60 Hz
Nominal pumping speed	m ³ /h	4320	5200
Ultimate total pressure ¹	mbar	3 · 10 ⁻⁴	3 · 10 ⁻⁴
ΔP of relieve valve	mbar	44	44
Motor power	kW	11	11
Nominal speed	rpm	2900	3480
Type of protection	IP	55	55
Oil filling for gearbox	ltr	7,5	7,5
Weight	kg	950	950
Noise level	dB	78	78
Connection	Inlet	DN 250	250
	Outlet	DN 200	200

Ordering Information	TYPE EVR-4500	
	50 Hz	60 Hz
EVR-4500 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	665.001	665.001 665.003
EVR-4500B with bypass 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	665.011	665.011 665.013
EVR-4500M with magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	665.021	665.021 665.023
EVR-4500BM with bypass & magnetic drive 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	665.031	665.031 665.033
Other Voltages/Frequencies	Upon request	
Filling of gearbox with special oil	Upon request	
Sealing set	665.901	
Maintenance kit	665.902	
Standard Oil filling	100.401&100.402	
Adapter set to ISO-K flanges		
Inlet DN 250 ISO-K	665.701	
Outlet DN 160 ISO-K	665.702	

TYPE EVR-7000



Pumping speed curve



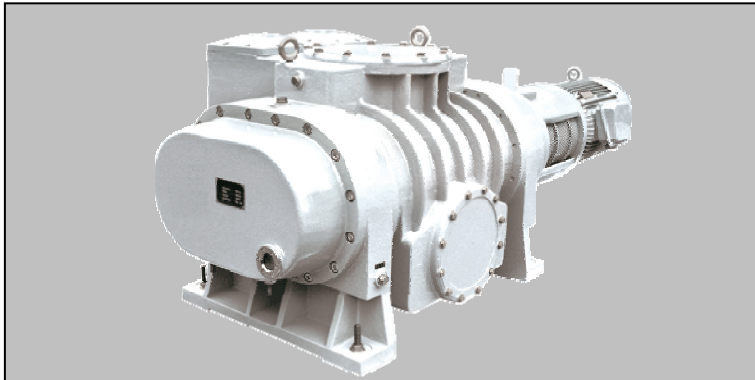
Dimensions	L0	L1	L2	L3	L4	H	W1	4-φC
EVR-7000	1840	520	490	660	750	70	420	4-φ26

TYPE EVR-7000

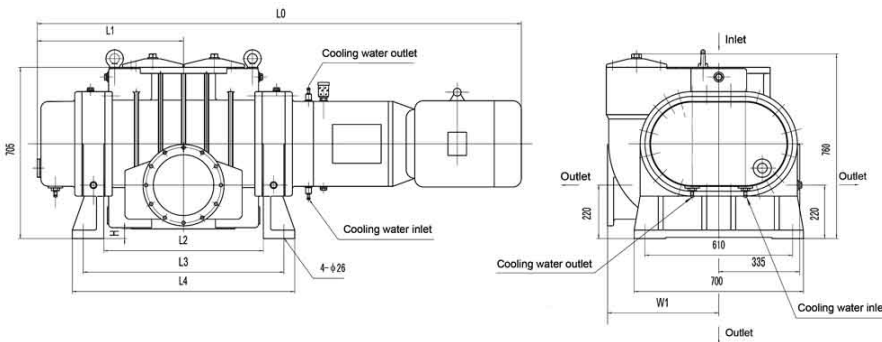
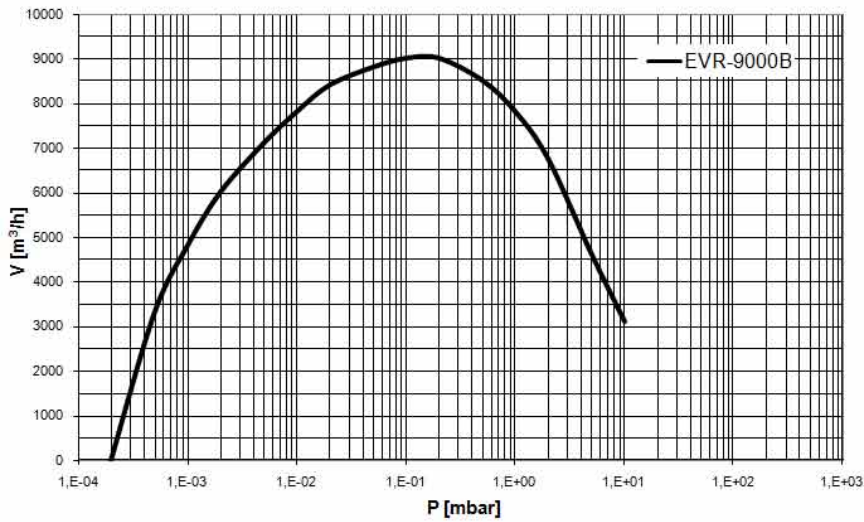
Technical Data		TYPE EVR-7000	
		50 Hz	60 Hz
Nominal pumping speed	m ³ /h	6480	7780
Ultimate total pressure ¹	mbar	3 · 10 ⁻⁴	3 · 10 ⁻⁴
ΔP of relieve valve	mbar	32	32
Motor power	kW	15	15
Nominal speed	rpm	2930	3500
Type of protection	IP	55	55
Oil filling for gearbox	ltr	10,5	10,5
Weight	kg	1200	1200
Noise level	dB	79	79
Connection	Inlet	DIN 250	250
	Outlet	DIN 250/200	250/200

Ordering Information	TYPE EVR-7000	
	50 Hz	60 Hz
EVR-7000 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	666.001	666.001 666.003
EVR-7000B with bypass 400V, 50/60Hz (IEC) 400V, 60Hz (NEMA)	666.011	666.011 666.013
Other Voltages/Frequencies	Upon request	
Filling of gearbox with special oil	Upon request	
Sealing set	666.901	
Maintenance kit	666.902	
Standard Oil filling 10 ltr	2x100.402	
Adapter set to ISO-K flanges		
Inlet DN 250 ISO-K	666.701	
Outlet DN 250 ISO-K	666.702	

TYPE EVR-9000



Pumping speed curve



Dimensions	L0	L1	L2	L3	L4	H	W1	4-φC
EVR-9000	2000	605	660	830	920	40	460	4-φ26

TYPE EVR-9000

Technical Data		TYPE EVR-9000	
		50 Hz	60 Hz
Nominal pumping speed	m ³ /h	9000	10800
Ultimate total pressure ¹	mbar	3 · 10 ⁻⁴	3 · 10 ⁻⁴
ΔP of relieve valve	mbar	44	44
Motor power	kW	18,5	18,5
Nominal speed	rpm	2930	3500
Type of protection	IP	55	55
Oil filling for gearbox	ltr	10,5	10,5
Weight	kg	1500	1500
Noise level	dB	80	80
Connection	Inlet	DIN	320
	Outlet	DIN	320/250

Ordering Information	TYPE EVR-9000	
	50 Hz	60 Hz
EVR-9000 400V, 50Hz (IEC) 400V, 60Hz (NEMA)	667.001	667.001 667.003
EVR-9000B with bypass 400V, 50Hz (IEC) 400V, 60Hz (NEMA)	667.011	667.011 667.013
Other Voltages/Frequencies	Upon request	
Filling of gearbox with special oil	Upon request	
Sealing set	667.901	
Maintenance kit	667.902	
Standard Oil filling 10 ltr	2x100.402	
Adapter set to ISO-K flanges		
Inlet DN 320 ISO-K	667.701	
Outlet DN 320 ISO-K	667.702	

