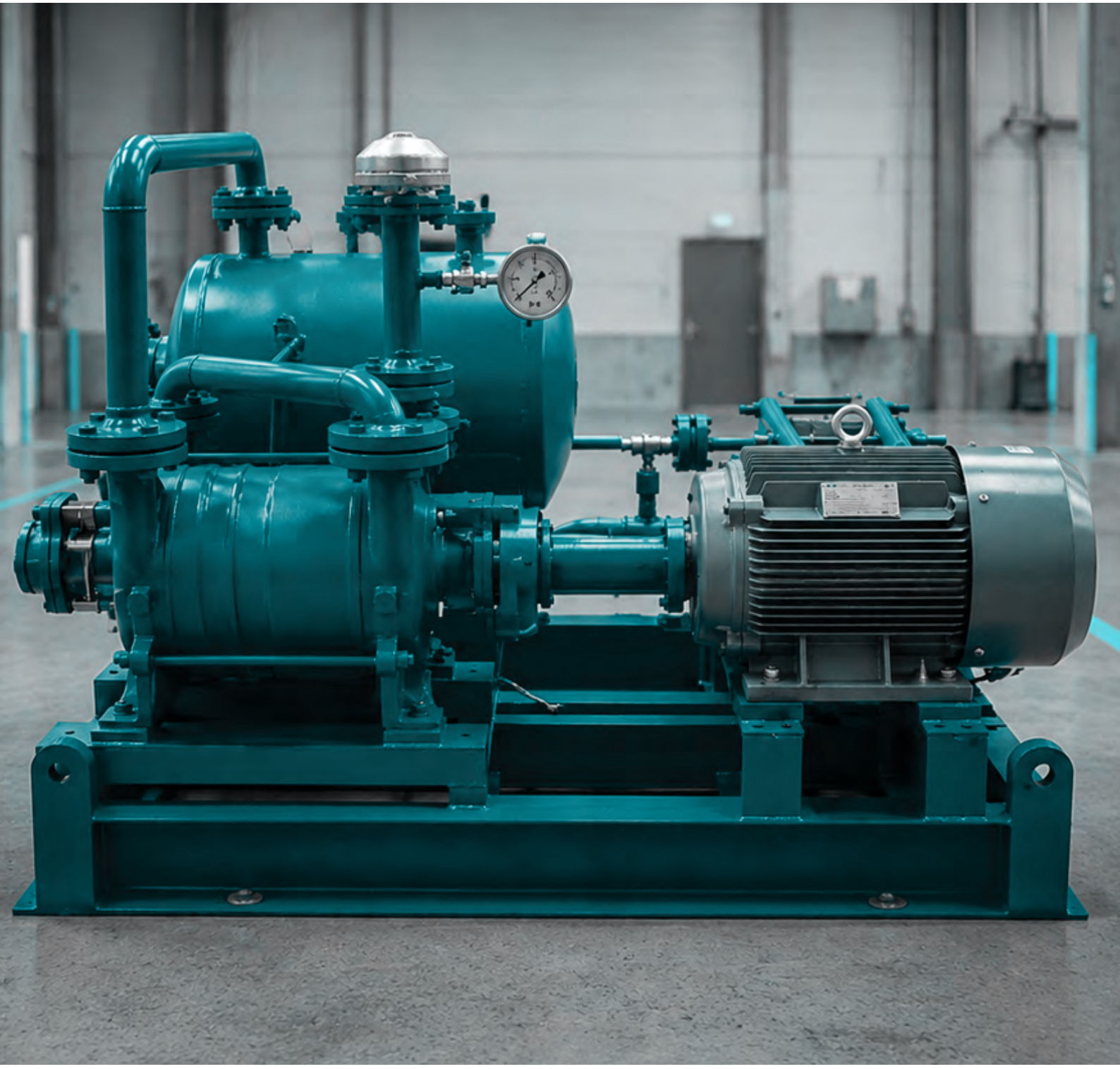
GLORINDA
Ideas Beyond Imagination

Glorinda Liquid Ring Vacuum Pumps



Advanced Liquid Ring Vacuum Technology

www.glorinda.com

Single-Stage Liquid Ring Vacuum Pumps

- Compact/ Direct-Coupled Vacuum Pumps
- Energy-Optimized Vacuum Pumps
- Heavy-Duty Vacuum Pumps

Compact/ Direct-Coupled Vacuum Pumps

Introduction

Glorinda Compact / Direct-Coupled Liquid Ring Vacuum Pumps are designed for suction of gas and vapor in industrial processes.

These pumps can reach a suction pressure of 33 mbar (abs.), equal to 97% vacuum. When the pump works near the limit vacuum for a long time, a cavitation protection pipe is used to protect the system.

When operating as a compressor, the maximum pressure is 0.26 MPa (abs.). This new energy-saving series is designed to replace conventional liquid ring vacuum pumps and reciprocating vacuum pumps, offering higher efficiency and stable performance.

Special models are also available for explosive gases and for use in flammable or hazardous environments.





Advantages

- Compact direct-coupled design for easy installation and saving space
- Cavitation protection port to reduce noise and protect the pump during high vacuum operation
- Stainless steel impeller with high strength for better corrosion resistance and long service life
- Optional stainless steel wetted parts for operation in harsh and demanding conditions
- Energy-efficient design suitable for modern industrial requirements

Applications

- **Vacuum systems** for industrial processes
- **Pulp and paper industry:** black liquor evaporation, vacuum dewatering, raw material degassing, white water systems, suction tanks, couch rolls, transfer rolls, and anti-wind boxes
- **Chemical industry:** methane gas recovery, petroleum recycling, gas collection, exhaust compression, vapor recovery, filtration and deaeration, polyester and PVC production
- **Power plants:** condenser exhaust, water box priming, flue gas desulfurization, fly ash conveying, geothermal gas removal, and vacuum pressure impregnation for transformers
- **Sugar industry:** wastewater filtration and CO_2 production

These solutions are engineered and supplied by Glorinda to meet reliable and efficient vacuum and compression needs across multiple industries.

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Technical Specification

Model	Max.Suction Capacity [m^3/h]	Inlet & Outlet	Feed Water Inlet	Motor Power [kW 50Hz]	Pump Speed [r/min]	Operating Liquid Flow Rate [L/min]	Noise [dB(A)]	Weight [kg]
GLRP-S1-C-V2-25	27	G1"	G3/8"	2P-0.81 kW	2840	2.5	62	31
GLRP-S1-C-V2-25-E	27	G1"	G3/8"	2P-1.1 kW	2840	2.5	62	37
GLRP-S1-C-V2-28	52	G1"	G3/8"	2P-1.45 kW	2840	2.5	65	36
GLRP-S1-C-V2-28-E	52	G1"	G3/8"	2P-1.5 kW	2840	2.5	65	41
GLRP-S1-C-V2-32	80	G1.5"	G3/8"	2P-2.35 kW	2860	3	66	56
GLRP-S1-C-V2-32-E	80	G1.5"	G3/8"	2P-3 kW	2860	3	66	66
GLRP-S1-C-V2-36	110	G1.5"	G3/8"	2P-3.85 kW	2880	4.7	72	60
GLRP-S1-C-V2-36-E	110	G1.5"	G3/8"	2P-4 kW	2880	4.7	72	75
GLRP-S1-C-V2-40	165	DN50	G1/2"	4P-4 kW	1440	7.2	63	105
GLRP-S1-C-V2-40-E	165	DN50	G1/2"	4P-4 kW	1440	6.7	63	150
GLRP-S1-C-V2-45	230	DN50	G1/2"	4P-5.5 kW	1440	8.8	68	126
GLRP-S1-C-V2-45-E	230	DN50	G1/2"	4P-5.5 kW	1440	10	68	200
GLRP-S1-C-V2-50	280	DN65	G3/4"	4P-7.5 kW	1440	11	69	149
GLRP-S1-C-V2-50-E	280	DN65	G3/4"	4P-7.5 kW	1440	12	69	230
GLRP-S1-C-V2-56	400	DN65	G3/4"	4P-11 kW	1460	16	73	195
GLRP-S1-C-V2-56-E	400	DN65	G3/4"	4P-11 kW	1460	17	73	280
GLRP-S1-C-V2-63	500	DN80	G3/4"	6P-15 kW	970	22	74	320
GLRP-S1-C-V2-63-E	500	DN80	G3/4"	6P-15 kW	970	23	74	400

Models with the **"-E"** suffix in their model code are equipped with motors certified to **explosion-proof class dIIBT4 / dIICT4.**

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Energy-Optimized Vacuum Pumps

Introduction

Glorinda Energy-Optimized Industrial Pumps are cone-type liquid ring vacuum pumps designed for high efficiency and stable operation. The pump uses a **conical suction and discharge port**, which gives a wider flow area and lower resistance compared to flat port designs. This structure allows energy savings of up to **18% when pumping air** and **28% when pumping saturated steam**. The impeller has high strength and good sealing, ensuring reliable performance in industrial use.

Advantages

- Conical suction and discharge design for smooth flow and low resistance
- High energy efficiency with reduced power consumption
- No metal-to-metal contact between rotor and casing for long service life
- Water is used as a liquid piston and sealing medium for safe and stable operation
- Strong and rigid impeller design for continuous industrial duty





Applications

- Industrial vacuum systems with low energy demand
- Processes involving air evacuation or saturated steam handling
- Chemical, power, and process industries requiring stable vacuum performance
- Systems where reliable sealing and low wear are required

This pump series is engineered and supplied by Glorinda, offering an efficient and dependable solution for modern industrial vacuum applications.

Operating principle

As shown in Fig. 1, the rotor rotates inside the casing without metal contact, and it is surrounded by a liquid piston, usually water. The rotor is a conical part with a hollow center and several blades, forming chambers between the blades. When the rotor turns, water moves along the inner surface of the casing due to centrifugal force. Because the rotor is mounted eccentrically, the chambers are filled with water and then emptied once during each rotation. When water leaves a chamber, air is drawn in through the inlet port and replaces the water. After rotation, water enters the chamber again and pushes the air out through the discharge port. During this process, the water acts as both a liquid piston and a sealing liquid between the rotor and the cone.

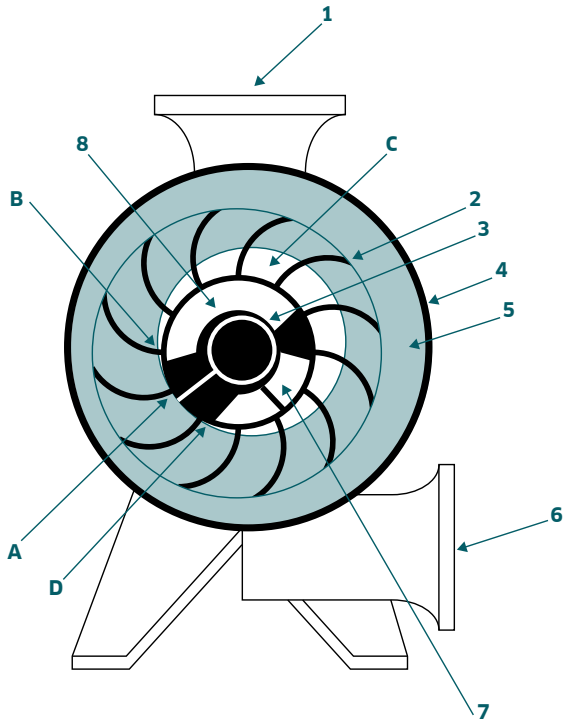


Fig. 1 Energy-Optimized vacuum pump operating principle

1. Pump suction port
2. Rotor
3. Conical port
4. Pump casing
5. Operating liquid
6. Pump discharge port
7. Outlet port
8. Inlet port

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Technical Specification

Model	Ultimate Vacuum		Speed	Max Capacity		Max Shaft Power		Motor Power		Intlet Diameter		Outlet Diameter		Water Supplying		Driving Mode
	hPa	in.Hg	r/min	m^3/h	cfm	kW	hp	kW	hp	mm	in.	mm	in.	m^3/h	gpm	
GLRP-S1-O-V1-140	440	13	800	860	506	7.5	10	11	15	100	4	80	3	2.1	9.2	Belt driving
			890	1050	618	12	16.1	15	20	100	4	80	3	2.6	11	Belt driving
			980	1180	695	14.5	19.4	18.5	25	100	4	80	3	2.8	12	Direct driving
			1050	1320	776	16.7	22.4	22	30	100	4	80	3	3.2	14	Belt driving
			1170	1440	847	20	26.8	30	40	100	4	80	3	3.5	15	Belt driving
GLRP-S1-O-V2-150	200	6	890	960	565	20	26.8	30	40	100	4	80	3	2.4	11	Belt driving
			980	1140	671	23	30.8	30	40	100	4	80	3	2.8	12	Direct driving
			1050	1250	735	26.5	35.5	37	50	100	4	80	3	3.0	13	Belt driving
			1170	1380	812	30.5	41	37	50	100	4	80	3	3.6	16	Belt driving
GLRP-S1-O-V3-160	80	2.4	890	840	494	22.1	29.6	30	40	100	4	80	3	2.8	12	Belt driving
			980	980	576	26	34.9	30	40	100	4	80	3	3.2	14	Direct driving
			1050	1120	689	30	40.2	37	50	100	4	80	3	3.5	15	Belt driving
			1170	1240	730	36.8	49.3	45	60	100	4	80	3	3.6	16	Belt driving
GLRP-S1-O-V1-240	440	13	630	1380	812	23	30.8	30	40	150	6	125	5	3.3	15	Belt driving
			690	1560	918	30	40.2	37	50	150	6	125	5	4.4	19	Belt driving
			770	1620	953	35	46.9	45	60	150	6	125	5	4.9	22	Belt driving
			820	1720	1012	43	57.7	55	75	150	6	125	5	5.2	23	Belt driving
			880	1920	1130	48	64.4	55	75	150	6	125	5	5.5	24	Belt driving
GLRP-S1-O-V2-250	200	6	690	1440	847	38	51	45	60	150	6	125	5	3.3	15	Belt driving
			770	1560	918	41.5	55.7	55	75	150	6	125	5	4.4	19	Belt driving
			820	1680	988	44	59	55	75	150	6	125	5	5.2	23	Belt driving
			880	1920	1130	47	63	55	75	150	6	125	5	5.5	24	Belt driving
GLRP-S1-O-V3-260	80	2.4	690	1320	776	35	46.9	45	60	150	6	125	5	4.4	19	Belt driving
			770	1440	847	42	56.3	55	75	150	6	125	5	5.2	23	Belt driving
			820	1560	918	49	65.7	55	75	150	6	125	5	5.5	24	Belt driving
			880	1740	1024	55	73.8	75	100	150	6	125	5	5.8	26	Belt driving

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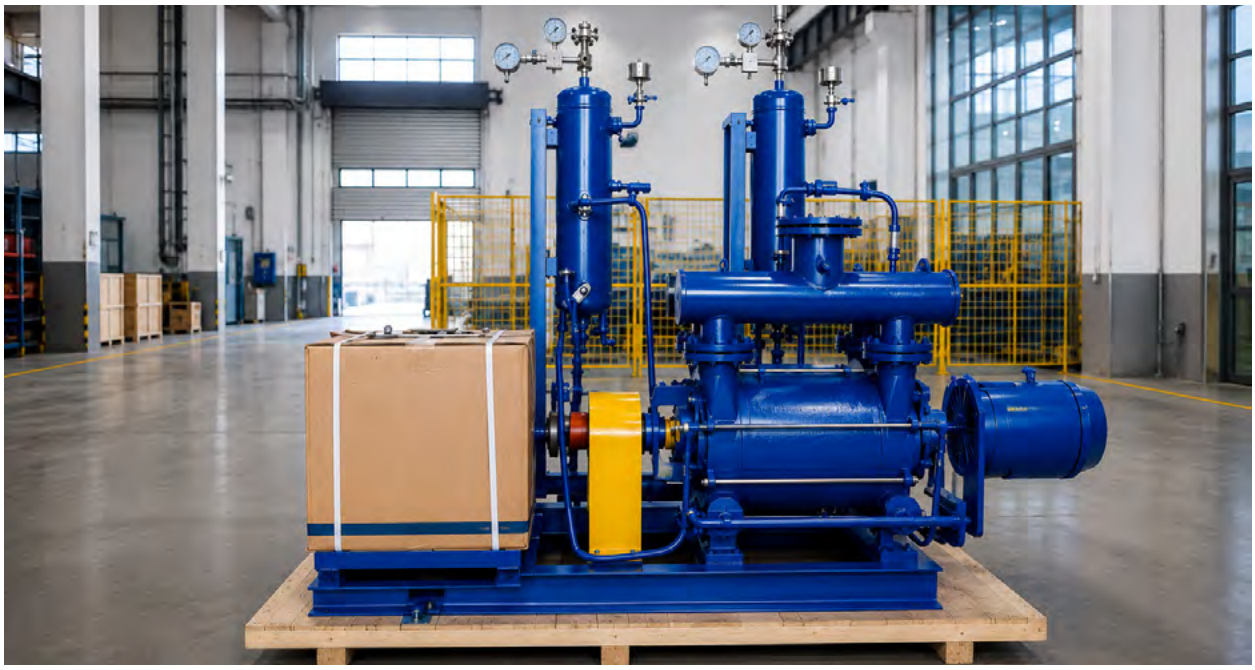
Technical Specification

Model	Ultimate Vacuum		Speed	Max Capacity		Max Shaft Power		Motor Power		Inlet Diameter		Outlet Diameter		Water Supplying		Driving Mode
	hPa	in.Hg	r/min	m^3/h	cfm	kW	hp	kW	hp	mm	in.	mm	in.	m^3/h	gpm	
GLRP-S1-O-V1-340	440	13	450	2760	1624	49	65.7	55	75	200	8	150	6	7.9	35	Belt driving
			500	3060	1800	57	76.4	75	100	200	8	150	6	8.9	39	Belt driving
			550	3330	1960	65	87.2	75	100	200	8	150	6	10	44	Belt driving
			590	3570	2100	77	103.3	90	120	200	8	150	6	10.6	47	Belt driving
			640	3750	2207	96	128.7	110	150	200	8	150	6	10.8	48	Belt driving
GLRP-S1-O-V2-350	200	6	450	2760	1624	44	59	55	75	200	8	150	6	8.1	36	Belt driving
			500	2900	1700	52	69.7	75	100	200	8	150	6	9.2	41	Belt driving
			550	3080	1810	66	88.5	75	100	200	8	150	6	10.2	45	Belt driving
			590	3270	1924	77	103.3	90	120	200	8	150	6	10.8	48	Belt driving
			640	3440	2024	85	114	110	150	200	8	150	6	11.0	48	Belt driving
GLRP-S1-O-V3-360	80	2.4	450	2280	1340	55	73.8	75	100	200	8	150	6	8.2	36	Belt driving
			500	2550	1500	62	83.1	75	100	200	8	150	6	9.2	41	Belt driving
			550	2850	1677	70	93.9	90	120	200	8	150	6	10.5	46	Belt driving
			590	3240	1906	80	107.3	90	120	200	8	150	6	11.0	48	Belt driving
			640	3540	2083	99	132.8	110	150	200	8	150	6	11.2	49	Belt driving
GLRP-S1-O-V1-440	440	13	400	4440	2613	71	95.2	90	120	250	10	200	8	11.4	50	Belt driving
			450	4800	2825	92	123.4	110	150	250	10	200	8	11.7	52	Belt driving
			500	5130	3020	111	149	132	180	250	10	200	8	12.2	54	Belt driving
			530	5370	3160	130	174.3	160	215	250	10	200	8	13.0	57	Belt driving
GLRP-S1-O-V2-450	200	6	400	4110	2420	75	100.6	90	120	250	10	200	8	13.5	59	Belt driving
			450	4710	2772	92	123.4	110	150	250	10	200	8	14.2	63	Belt driving
			500	4920	2895	115	154.2	132	180	250	10	200	8	14.9	66	Belt driving
			530	5460	3213	123	165	160	215	250	10	200	8	15.5	68	Belt driving
GLRP-S1-O-V3-460	80	2.4	400	4200	2472	92	123.4	110	150	250	10	200	8	14.0	62	Belt driving
			450	4500	2648	102	136.8	132	180	250	10	200	8	14.6	64	Belt driving
			500	4740	2790	108	144.8	132	180	250	10	200	8	15.3	67	Belt driving
			530	4980	2930	115	154.2	132	180	250	10	200	8	16.0	70	Belt driving

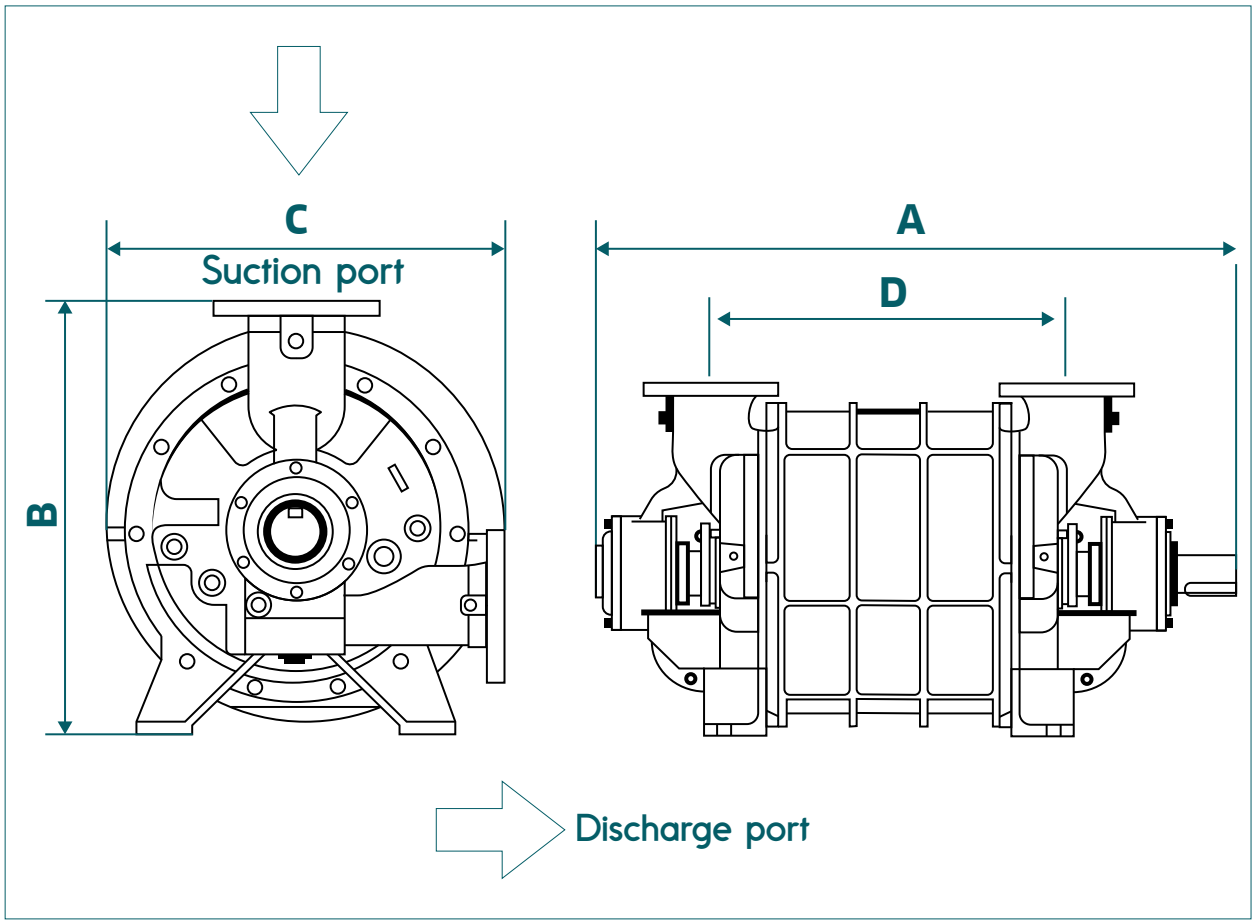
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Technical Specification

Model	Ultimate Vacuum		Speed	Max Capacity		Max Shaft Power		Motor Power		Inlet Diameter		Outlet Diameter		Water Supplying		Driving Mode
	hPa	in.Hg	r/min	m^3/h	cfm	kW	hp	kW	hp	mm	in.	mm	in.	m^3/h	gpm	
GLRP-S1-O-V1-540	440	13	300	5520	3249	72	96.6	90	120	300	12	250	10	7.8	34	Belt driving
			327	5940	3496	88	118	110	150	300	12	250	10	8.2	36	Belt driving
			360	6360	3743	105	140.8	132	180	300	12	250	10	10.5	46	Belt driving
			400	7200	4237	153	205.2	160	215	300	12	250	10	11.0	48	Belt driving
			450	8160	4802	166	222.6	185	250	300	12	250	10	11.2	49	Belt driving
GLRP-S1-O-V2-550	200	6	327	5400	3178	94	126	110	148	300	12	250	10	16.7	74	Belt driving
			360	6300	3708	110	147.5	132	177	300	12	250	10	18.5	81	Belt driving
			400	6900	4060	135	181	160	215	300	12	250	10	19.3	85	Belt driving
			450	7620	4485	157	210.5	185	248	300	12	250	10	20.5	90	Belt driving
GLRP-S1-O-V3-560	80	2.4	327	4920	2895	102	136.8	110	148	300	12	250	10	17.8	78	Belt driving
			360	5520	3249	130	174.3	160	215	300	12	250	10	19.1	84	Belt driving
			400	6420	3778	155	207.8	185	248	300	12	250	10	20.4	90	Belt driving
			450	7440	4379	179	240	200	268	300	12	250	10	22.0	97	Belt driving



Dimension of energy-optimized vacuum pumps



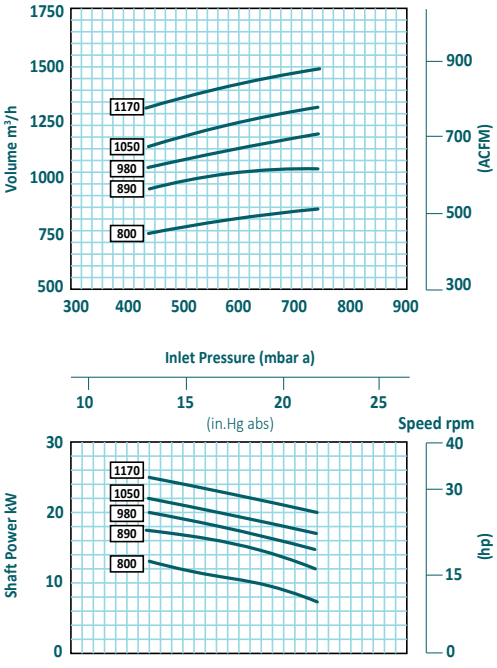
Model	Nominal Diameter		Size (mm)			
	Inlet	Outlet	A	B	C	D
GLRP-S1-O-500	300	250	1930	1245	1219	1321
GLRP-S1-O-400	250	200	1727	1118	1016	1041
GLRP-S1-O-300	200	150	1524	914	838	914
GLRP-S1-O-200	150	125	1219	660	610	686
GLRP-S1-O-100	100	80	1041	584	508	559

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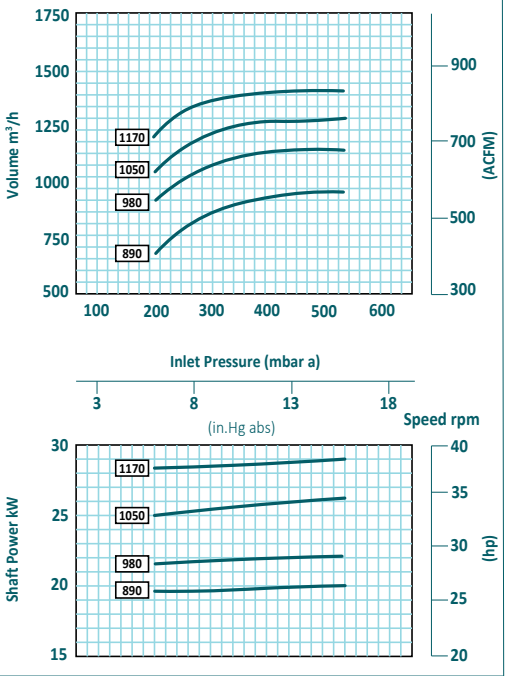
Glorinda Energy-Optimized

Vacuum Pumps Performance Curve

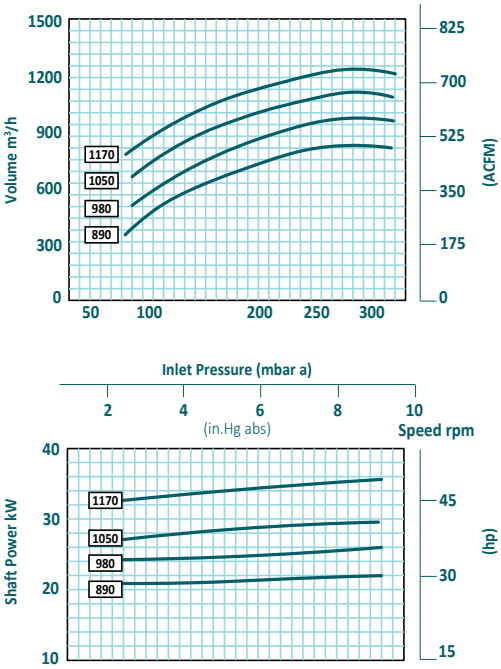
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Vacuum Pump Performance Curve



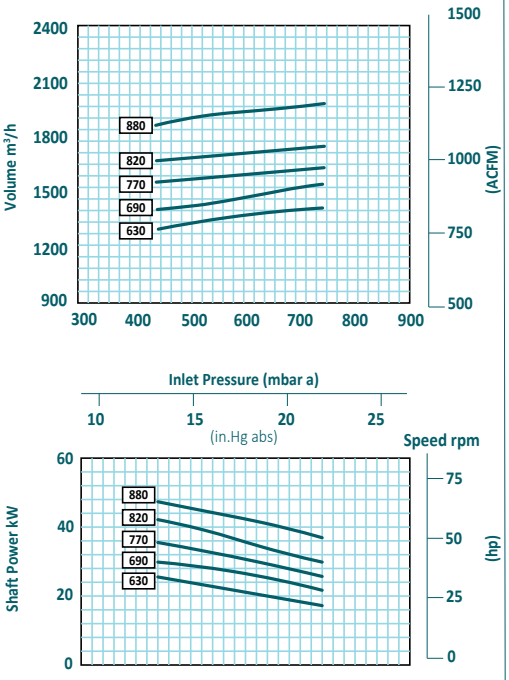
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Vacuum Pump Performance Curve



GLRP-S1-O-V1-16O
Vacuum Pump Performance Curve



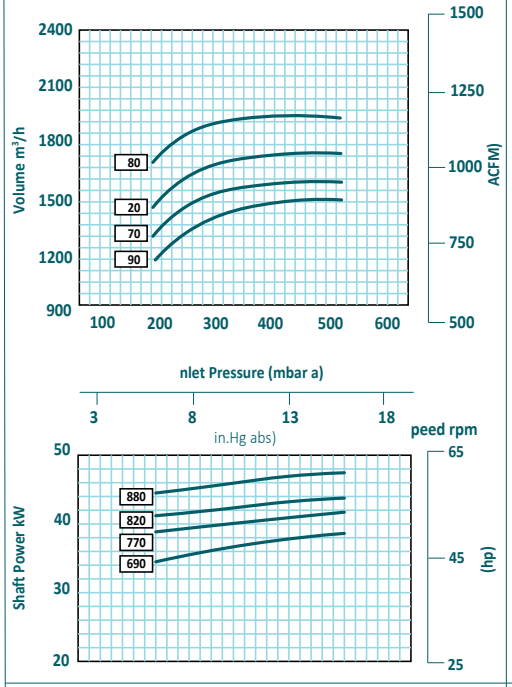
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Vacuum Pump Performance Curve



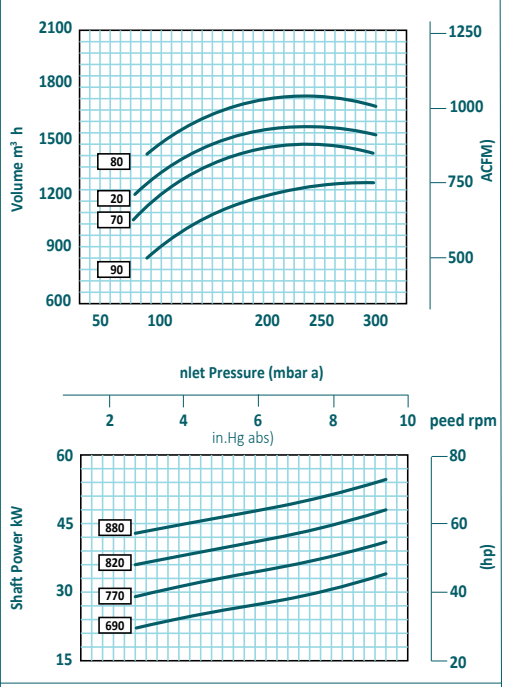
Glorinda Energy-Optimized

Vacuum Pumps Performance Curve

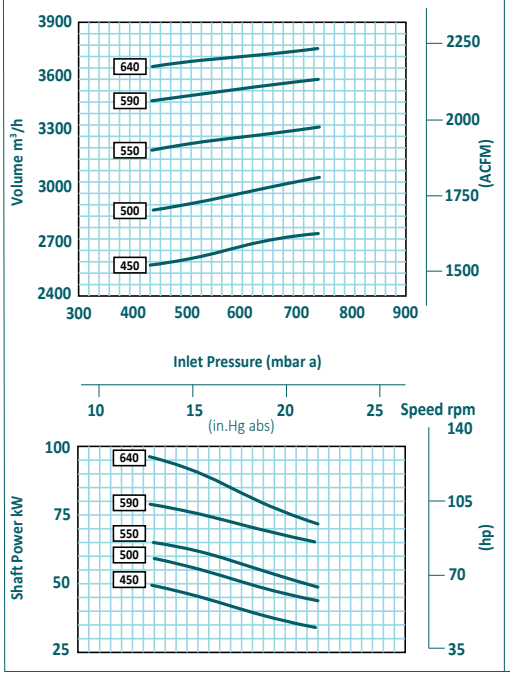
LRP-S1-O-V2-250
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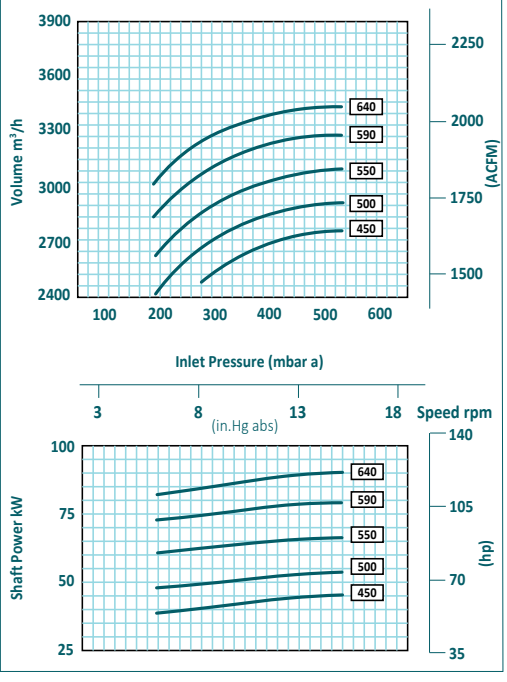
LRP-S1-O-V3-260
acuum Pump Performance Curve



GLRP-S1-O-V1-340
Vacuum Pump Performance Curve



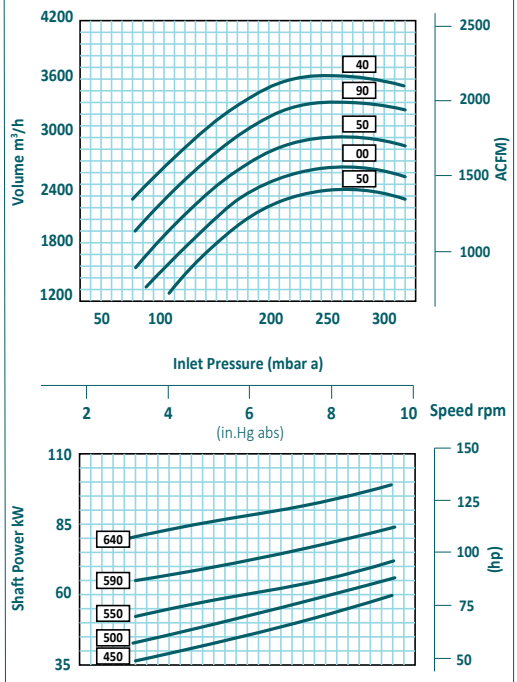
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Vacuum Pump Performance Curve



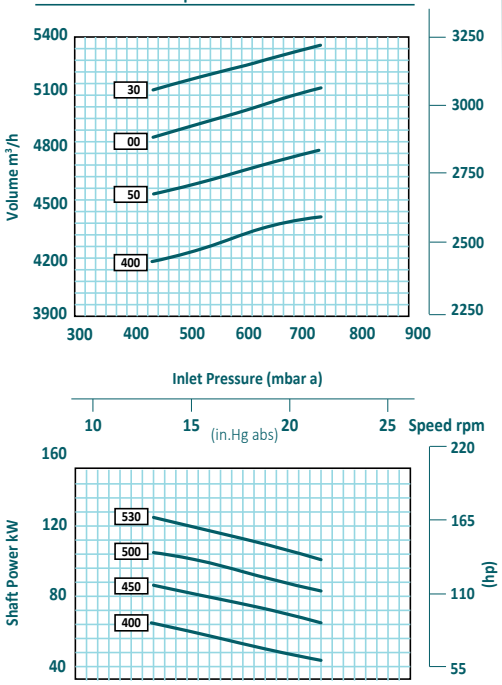
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Glorinda Energy-Optimized
Vacuum Pump Performance Curve

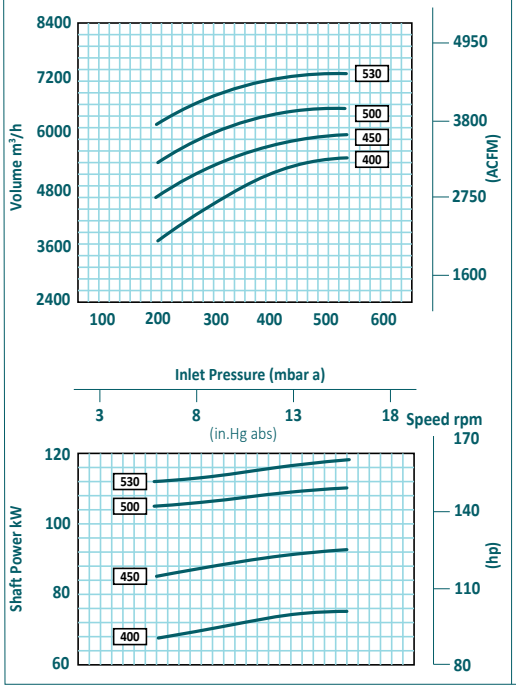
GLRP-S1-O-V1-360
Vacuum Pump Performance Curve



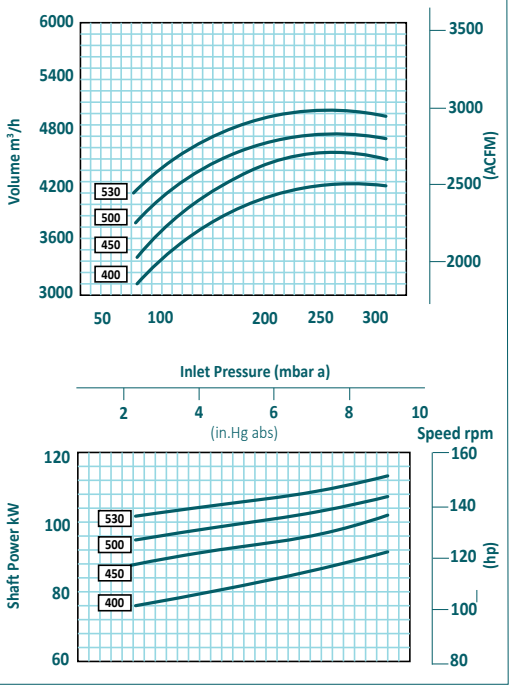
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Vacuum Pump Performance Curve



GLRP-S1-O-V2-450
Vacuum Pump Performance Curve



GLRP-S1-O-V3-460
Vacuum Pump Performance Curve

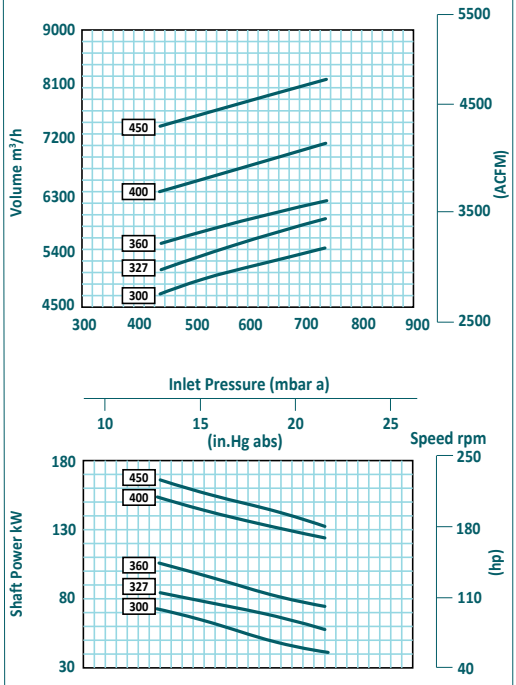


Glorinda Energy-Optimized

Vacuum Pump Performance Curve

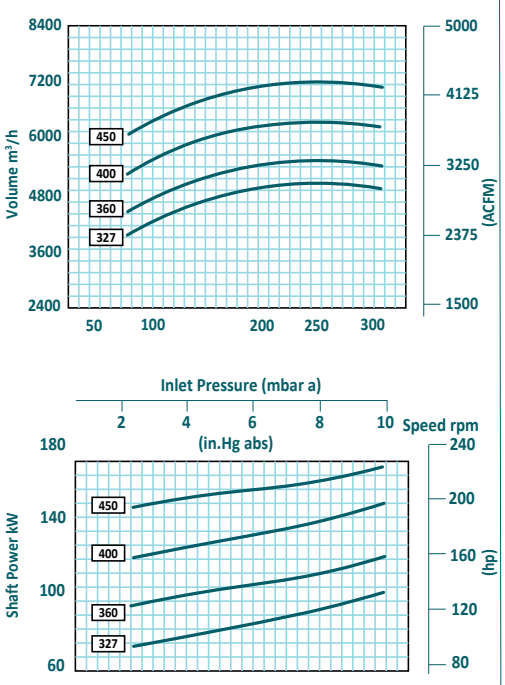
GLRP-S1-O-V1-540

Vacuum Pump Performance Curve



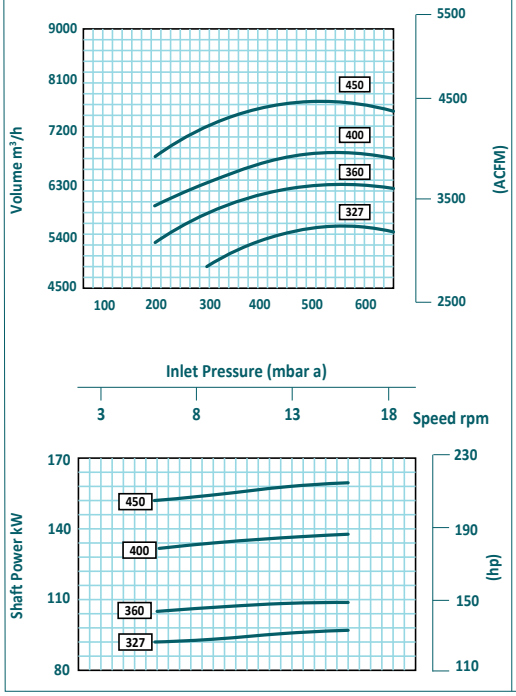
GLRP-S1-O-V3-560

Vacuum Pump Performance Curve



GLRP-S1-O-V2-550

Vacuum Pump Performance Curve



1.Performance curves are based on operation with atmospheric air at 20°C (68°F) and approximately 50% relative humidity, with cooling water at 15°C (60°F) and a discharge pressure of 1013 mbarA (29.92 inHg).

2.Data tolerance is ±10%.

3.Operating conditions other than those stated above may result in variations in capacity and power consumption. Please contact Glorinda for further technical details.

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Proposal for Model Selection

Suction capacity depends on several factors, so the model should be selected based on the normal vacuum ranges. Special ranges can also be provided if required.

Conical Inlet

The last number in the model code indicates the cone type: V1 for low vacuum, V2 for medium vacuum, and V3 for high vacuum. The performance curves in this brochure show the ideal operating range. As power increases, the suction capacity decreases.

Double-Stage Pump

Glorinda optimized vacuum pumps can reach a vacuum level of up to 30 mbar. For higher vacuum requirements, a series connection of this pump and an air ejector can be used, which is widely used in specialized applications. If the required vacuum level is higher than the maximum value shown on the performance curve, the optimal solution will be provided based on project needs.

Speed

The performance curve shows the maximum speed and the pump performance at different speeds. Many engineers prefer low-speed operation to improve stability and extend service life. This method reduces suction capacity and energy consumption but provides operational flexibility. If future capacity increases are required, the motor can be replaced without changing the entire pump.

Different drive systems, such as motor direct drive, V-belt, or gearbox, result in different performance curves. To avoid confusion, suction capacity and power are shown only at rated speed. For detailed data at other speeds, please consult the manufacturer.

Temperature

Performance curves are based on an operating liquid temperature of 15.6 °C. Lower liquid temperature improves pump performance. When saturated vapor is used as the inlet gas, condensation may occur in the operating liquid, which can further increase pump capacity.

Material

The optimized pump design creates a rotating liquid zone that provides natural corrosion protection, reducing the need for special materials in many applications. Standard designs use a ductile iron rotor on a steel shaft, with a cast iron cone and casing. Small pumps may use bronze rotors, and small components are often made of bronze.

For corrosion resistance, pumps can be supplied in different materials, including acid-resistant bronze, full bronze for models up to GLRP-S1-O-300, and bronze or stainless-steel options for larger models. Materials such as SS304, SS316, SS316L, or composite stainless steel and cast-iron designs are also available.

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Heavy-Duty Vacuum Pumps



Introduction

Glorinda heavy-duty series liquid ring vacuum pumps are single-stage, single-function pumps designed for stable and reliable operation in tough industrial conditions.

They have a simple structure that allows easy maintenance, high efficiency, and energy saving. These pumps are suitable for applications with large water discharge and changing load conditions.



They are mainly used to handle clean gases without solid particles and to create vacuum or pressure in closed systems. By selecting suitable materials, the pumps can also handle corrosive gases or use corrosive liquids as the operating fluid.

Advantages

- Simple and strong design for heavy-duty and continuous operation
- High efficiency with low energy consumption
- Available in different materials to suit various process needs
- Standard packed gland sealing, with mechanical seals as an option
- Able to handle liquid carry-over and soft solids without internal damage
- Can operate with different sealing liquids
- High-quality drive systems for both pulley-driven and coupling-driven types
- SUS 304 shaft sleeves to reduce shaft wear and extend service life
- Safety protection guards made of SUS 304
- International standard surface treatment, including sandblasting and painting

Applications

Glorinda heavy-duty Series pumps include **H1, H2, and H3 models**, each designed for specific industrial needs.

- **H1**

Used for clean and non-corrosive gases to create vacuum or pressure in closed systems. Suitable for harsh working conditions with large water flow and load changes. With material changes, it can also handle corrosive gases or liquids.

- **H2**

Designed for stable and energy-saving operation in demanding environments. It uses special PTFE valve plates to reduce over-compression and lower power use. The pump can handle large amounts of condensable vapor and has a long service life due to low operating speed and strong internal design. It is equipped with a gas-water separator and inspection window for easy system connection and maintenance.

- **H3**

An upgraded model with 6–8% higher efficiency compared to earlier pumps. It features a lined pump body, flexible inlet and outlet connections, and a large inspection port. The suction capacity ranges from 2,000 to 32,300 m^3/h, making it suitable for strict industrial environments.

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Applications

- **Paper industry:** vacuum dewatering, pulp processing, and gas removal
- **Chemical industry:** tail gas recovery, gas compression, vapor handling, and PSA systems
- **Petrochemical industry:** flare gas recovery, vacuum distillation, and process gas handling
- **Power plants:** condenser vacuum systems and auxiliary vacuum services
- **Mining and mineral processing:** vacuum transportation and material handling
- **Fertilizer industry:** process vacuum and gas recovery systems
- **PVC and polyester production:** VCM recovery, gas circulation, and process vacuum
- **Pharmaceutical and light industry:** filtration, drying, and vacuum processes
- **Special applications:** compression of flammable, toxic, and corrosive gases

All heavy-duty Series pumps are engineered and supplied by **Glorinda**, providing dependable and energy-efficient solutions for demanding industrial vacuum and compression applications.





Technical Specifications for H1 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	Max. Capacity [m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H1-V2-112	1450	Direct	4.2	4P-5.5	168	3.4	33
	1300	V-belt	3.5	4P-5.5	152	2.5	
	1750	V-belt	5.8	4P-5.7	202	2.8	
GLRP-S1-H1-V2-125	1450	Direct	6.0	4P-7.5	246	4.1	33
	1750	V-belt	8.0	4P-11	290	4.8	
GLRP-S1-H1-V2-140	1450	Direct	8.2	4P-11	340	5.7	33
	1750	V-belt	11.1	4P-15	412	6.9	
GLRP-S1-H1-V2-160	1450	Direct	10.8	4P-15	390	6.5	33
	1625	V-belt	13.2	4P-18.5	440	7.3	
	1750	V-belt	14.8	4P-22	465	7.8	
GLRP-S1-H1-V2-180	1450	Direct	12.5	4P-15	450	7.5	33
	1625	V-belt	15.0	4P-18.5	510	8.5	
	1750	V-belt	17.2	4P-22	535	8.9	
GLRP-S1-H1-V2-200	1450	Direct	16.3	4P-18.5	600	10.0	33
	1100	V-belt	10.6	4P-15	445	7.4	
	1300	V-belt	13.4	4P-18.5	535	8.9	
	1620	V-belt	19.6	4P-22	648	10.8	
	1750	V-belt	22.3	4P-30	700	11.7	
GLRP-S1-H1-V2-224	980	Direct	18.2	6P-22	750	12.5	33
	790	V-belt	13.4	4P-18.5	590	9.8	
	880	V-belt	16.3	4P-18.5	670	11.2	
	1100	V-belt	23.8	4P-30	860	14.3	
	1170	V-belt	25.7	4P-30	888	14.8	
	1300	V-belt	30	4P-37	950	15.8	

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Technical Specifications for H1 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	Max. Capacity [m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H1-V2-250	980	Direct	29.5	6P-37	1080	18	33
	790	V-belt	21.2	4P-30	870	14.5	
	880	V-belt	24.8	4P-30	980	16.3	
	1100	V-belt	34	4P-45	1210	20.2	
	1170	V-belt	38	4P-45	1320	22.0	
	1300	V-belt	42	4P-55	1390	23.2	
GLRP-S1-H1-V2-280	980	Direct	31.8	6P-37	1230	20.5	33
	790	V-belt	22.5	6P-30	996	16.5	
	880	V-belt	26.7	4P-37	1098	18.3	
	1100	V-belt	41.6	4P-55	1452	24.2	
GLRP-S1-H1-V2-315	740	Direct	38	8P-45	1700	28.3	33
	565	V-belt	23.7	4P-30	1200	20.0	
	660	V-belt	31.8	4P-37	1500	25.0	
	820	V-belt	45	4P-55	1770	29.5	
	885	V-belt	54	4P-75	2000	33.3	
	938	V-belt	60	4P-75	2100	35.0	
GLRP-S1-H1-V2-355	740	Direct	50.8	8P-75	2340	39	33
	565	V-belt	37.2	4P-45	1690	28.2	
	660	V-belt	45	4P-55	2100	35	
	792	V-belt	60	4P-75	2560	42.7	
	820	V-belt	68	4P-75	2640	44	
	880	V-belt	75.1	4P-90	2780	46.3	
	940	V-belt	88	4P-110	3050	50.8	

Technical Specifications for H1 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	Max. Capacity [m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H1-V2-400	740	Direct	98	8P-110	3840	64	33
	590	Direct	65.5	10P-75	3200	53.3	
	466	V-belt	48	4P-55	2520	42	
	530	V-belt	58	4P-75	2820	47	
	583	V-belt	64	4P-75	3100	51.7	
	660	V-belt	79.8	4P-90	3550	59.2	
GLRP-S1-H1-V2-450	740	Direct	108	8P-132	4520	75.3	33
	590	Direct	70	10P-90	3750	62.5	
	490	V-belt	55	4P-75	3150	52.5	
	530	V-belt	61	4P-75	3380	56.4	
	583	V-belt	68	4P-90	3700	61.2	
	660	V-belt	90	4P-110	4090	68.1	
GLRP-S1-H1-V2-500	590	Direct	121	10P-160	5300	88.3	33
	390	V-belt	63	4P-75	3580	59.7	
	425	V-belt	72	4P-90	3700	61.7	
	464	V-belt	85	4P-110	4100	68.3	
	530	V-belt	95	4P-110	4620	77.0	
	560	V-belt	110	4P-132	5000	83.3	
	620	V-belt	133	4P-160	5500	91.7	
	660	V-belt	152	4P-185	5850	97.5	

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Technical Specifications for H1 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	Max. Capacity [m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H1-V2-530	590	Direct	136	10P-160	5700	95	33
	390	V-belt	75	4P-90	4180	69.7	
	430	V-belt	86	4P-110	4260	71	
	464	V-belt	90	4P-110	4850	80.8	
	523	V-belt	113	4P-132	5230	87.1	
	660	V-belt	167	4P-185	6510	108	
GLRP-S1-H1-V2-560	330	V-belt	98	4P-132	4860	81	33
	372	V-belt	110	4P-132	5400	90	
	420	V-belt	131	4P-160	6470	107.8	
	472	V-belt	160	4P-200	7380	123.0	
	530	V-belt	213	4P-250	8100	135.0	
GLRP-S1-H1-V2-600	330	V-belt	100	4P-132	6000	100.0	33
	372	V-belt	118	4P-160	6700	111.7	
	420	V-belt	140	4P-185	7500	125.0	
	472	V-belt	170	4P-200	8350	139.2	
	530	V-belt	206	4P-250	9450	157.5	
GLRP-S1-H1-V2-630	266	V-belt	126	6P-132	6780	113	33
	298	V-belt	143	6P-160	7680	128	
	330	Gearbox	167	4P-185	8310	138.5	
	372	Gearbox	190	4P-220	9294	154.9	
	420	Gearbox	240	4P-280	10458	174.3	
	472	Gearbox	303	4P-355	11652	194.2	

Technical Specifications for H1 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	Max. Capacity [m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H1-V2-670	266	V-belt	130	6P-160	7700	128.3	160
	298	Gearbox	150	4P-185	8800	146.7	
	330	Gearbox	172	4P-220	9750	162.5	
	372	Gearbox	205	4P-250	10750	179.2	
	420	Gearbox	250	4P-280	11820	197	
GLRP-S1-H1-V2-710	236	Gearbox	180	6P-220	9720	162	33
	266	Gearbox	210	4P-250	10980	183	
	298	Gearbox	242	4P-280	12300	205	
	330	Gearbox	280	4P-315	13800	230	
	372	Gearbox	360	4P-400	15480	258	
	398	Gearbox	420	4P-450	16380	273	
GLRP-S1-H1-V2-750	236	Gearbox	188	6P-220	11500	191.7	160
	266	Gearbox	220	4P-280	13000	216.7	
	298	Gearbox	262	4P-315	14900	248.3	
	330	Gearbox	310	4P-355	15700	261.7	
	372	Gearbox	380	4P-450	17250	287.5	
	398	Gearbox	428	4P-500	18250	304.2	
GLRP-S1-H1-V2-800	210	Gearbox	266	6P-315	14460	241	33
	236	Gearbox	313	6P-400	16260	271	
	266	Gearbox	358	6P-450	18420	307	
	298	Gearbox	440	6P-500	20700	345	
	330	Gearbox	545	6P-630	22800	380	
GLRP-S1-H1-V2-850	210	Gearbox	385	6P-400	17500	291.7	160
	236	Gearbox	335	6P-450	19700	328.3	
	266	Gearbox	405	4P-500	21700	361.7	
	298	Gearbox	490	4P-630	23800	396.7	
	330	Gearbox	590	4P-710	26000	433.3	

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Technical Specifications for H2/3 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	Max. Capacity [m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H2/3-V2-25	450	Gearbox	46	4P-55	2300	38.3	160
	490	Gearbox	55	4P-75	2550	42.5	
	560	Gearbox	63	4P-75	2950	49.2	
	630	Gearbox	74	4P-90	3310	55.2	
	690	Gearbox	85	4P-110	3620	60.3	
	740	Gearbox	95	4P-110	3890	64.8	
	810	Gearbox	112	4P-132	4290	71.5	
GLRP-S1-H2/3-V2-28	450	Gearbox	65	4P-75	3330	55.5	160
	490	Gearbox	73	4P-90	3660	61	
	560	Gearbox	87	4P-110	4180	69.7	
	630	Gearbox	102	4P-132	4640	77.3	
	690	Gearbox	117	4P-132	4990	83.2	
	740	Gearbox	132	4P-160	5250	87.5	
	810	Gearbox	155	4P-185	5580	93	
GLRP-S1-H2/3-V2-32	300	V-belt/ Gearbox	64.8	6P-75	4200	70	160
	330	V-belt/ Gearbox	75	6P-90	4650	77	
	350	V-belt/ Gearbox	86.5	4P-110	4680	81	
	390	V-belt/ Gearbox	99	4P-110	5460	91	
	430	V-belt/ Gearbox	117	4P-132	6000	100	
	498	V-belt/ Gearbox	135	4P-160	6900	115	
	530	V-belt/ Gearbox	148	4P-185	7440	124	
	570	V-belt/ Gearbox	167	4P-200	8000	133	

Technical Specifications for H2/3 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	[m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H2/3-V2-36	300	V-belt/ Gearbox	100	6P-110	5850	97.5	160
	350	V-belt/ Gearbox	109	4P-132	6300	105	
	390	V-belt/ Gearbox	133	4P-160	7650	127	
	449	V-belt/ Gearbox	157	4P-185	8550	142	
	490	V-belt/ Gearbox	180	4P-200	9200	154	
	530	V-belt/ Gearbox	200	4P-220	10100	168	
	570	V-belt/ Gearbox	225	4P-250	10600	177	
GLRP-S1-H2/3-V2-40	236	V-belt/ Gearbox	128	6P-160	7500	125	160
	266	V-belt/ Gearbox	140	6P-160	8500	142	
	300	V-belt/ Gearbox	173	6P-200	10000	167	
	336	V-belt/ Gearbox	235	4P-250	11400	190	
	366	V-belt/ Gearbox	261	4P-280	12500	208	
	420	V-belt/ Gearbox	278	4P-315	13700	228	
GLRP-S1-H2/3-V2-45	236	V-belt/ Gearbox	168	6P-185	9000	150	160
	266	V-belt/ Gearbox	175	6P-200	10560	176	
	336	V-belt/ Gearbox	260	4P-280	13800	230	
	366	V-belt/ Gearbox	285	4P-315	15000	250	
	421	V-belt/ Gearbox	331	4P-400	16800	280	
	468	V-belt/ Gearbox	416	4P-500	18450	307	
GLRP-S1-H2/3-V2-50	236	Gearbox	204	6P-250	11820	197	160
	265	Gearbox	243	6P-280	14200	236	
	295	Gearbox	285	4P-315	15900	265	
	340	Gearbox	365	4P-400	17400	290	
	370	Gearbox	386	4P-450	19400	323	

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Technical Specifications for H2/3 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	[m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H2/3-V2-56	200	Gearbox	195	6P-250	13200	220	160
	230	Gearbox	260	6P-315	15180	253	
	266	Gearbox	300	6P-355	17300	288.3	
	297	Gearbox	348	4P-400	19300	322	
	330	Gearbox	395	4P-450	21300	355	
	372	Gearbox	490	4P-560	24000	400	
GLRP-S1-H2/3-V2-63	180	Gearbox	250	6P-315	14500	242	160
	210	Gearbox	285	6P-315	18000	300	
	270	Gearbox	415	6P-450	22800	380	
	300	Gearbox	465	4P-560	25800	430	
	330	Gearbox	545	4P-630	27720	462	
	370	Gearbox	670	4P-800	30960	516	
GLRP-S1-H2/3-V2-71	190	Gearbox	338	6P-400	20100	335	160
	210	Gearbox	395	6P-450	23760	396	
	240	Gearbox	475	6P-650	27000	450	
	270	Gearbox	550	6P-630	30000	500	
	300	Gearbox	642	4P-710	33600	560	
GLRP-S1-H2/3-V2-80	190	Gearbox	507	560	30000	500	160
	210	Gearbox	585	630	32280	538	
	240	Gearbox	710	800	36600	610	
	270	Gearbox	849	900	40800	680	
	300	Gearbox	796	10000	44800	748	

Technical Specifications for H2/3 model:

Model	Speed [r/min]	Driving Mode	Max. Shaft Power [kW]	Motor Power [kW]	Max. Capacity [m^3/h]	Max. Capacity [m^3/min]	Ultimate Vacuum [mbar]
GLRP-S1-H2/3-V2-90	170	Gearbox	570	630	39000	650	160
	195	Gearbox	730	800	46800	780	
	210	Gearbox	815	900	49800	830	
	230	Gearbox	925	1000	52800	880	
	245	Gearbox	1035	1120	55800	930	
GLRP-S1-H2/3-V2-100	155	Gearbox	730	800	48000	800	160
	165	Gearbox	840	900	51300	855	
	175	Gearbox	900	1000	54000	900	
	190	Gearbox	995	1120	59400	990	
	200	Gearbox	1146	1250	62400	1040	







Two-Stage Liquid Ring Vacuum Pumps

Introduction

Glorinda DLV Series Two-Stage Liquid Ring Vacuum Pumps are designed based on the 2SK pump and advanced German double-stage design standards. These pumps use two compression stages, which allow stable suction at high vacuum levels and stable performance over a wide suction range.

Compared to single-stage pumps, the DLV series offers 35–40% higher efficiency in high vacuum while using less energy, making it a reliable and energy-saving solution for industrial vacuum systems.

Advantages

- Wide suction pressure range from **25 mbar to 1013 mbar (abs.)**
- Lower energy consumption, about **15–20% less** than traditional two-stage pumps
- Stable suction speed in high vacuum conditions
- Various models available to meet different process needs
- Multiple material options, including carbon steel, stainless steel, duplex steel, and titanium
- Flexible supply scope, from pump head only to complete closed-cycle systems
- Available with single or double mechanical seals and different flushing methods
- High-quality casting, reliable components, and long service life

Applications

- **Food industry:** vacuum drying, evaporation, and concentration
- **Pharmaceutical industry:** filtration, drying, and degassing processes
- **Chemical industry:** distillation, evaporation, and vacuum concentration
- **Power plants:** vacuum systems and auxiliary processes
- **Paper industry:** vacuum dewatering and process vacuum
- **Textile industry:** vacuum drying and treatment processes
- **Metallurgy:** degassing and vacuum processing

The DLV Series is engineered and supplied by **Glorinda**, providing efficient, stable, and energy-saving solutions for high-vacuum industrial applications.

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Technical Specification:

Model	Motor Speed	Motor Power		Max. Suction Capacity		Ultimate Vacuum		Inlet & Outlet Port
		kW	hp	m^3/h	CFM	mbar	Inch Hg	mm
GLRP-S2-H-V3-250/280	1450	3.0	4	110	65	33	1.0	DN40
	1750	4.0	5.5	132	80	33	1.0	
GLRP-S2-H-V3-315	1450	4.0	5.4	145	85	33	1.0	DN40
	1750	5.5	7.4	174	102	33	1.0	
GLRP-S2-H-V3-355	1450	5.5	7.4	186	109	33	1.0	DN40
	1750	7.5	10.1	223	131	33	1.0	
GLRP-S2-H-V3-400	1450	7.5	10.1	283	167	33	1.0	DN50
	1750	11.0	14.8	314	185	33	1.0	
GLRP-S2-H-V3-450	1450	11.0	14.8	342	201	33	1.0	DN50
	1750	15.0	20.1	411	242	33	1.0	
GLRP-S2-H-V3-500	1450	15.0	20.1	425	250	33	1.0	DN50
	1750	18.5	24.8	475	280	33	1.0	

Model	Motor Speed	Motor Power		Max. Suction Capacity		Ultimate Vacuum		Inlet & Outlet Port
		kW	hp	m^3/h	CFM	mbar	Inch Hg	mm
GLRP-S2-H-V3-560	1450	18.5	24.8	501	294	33	1.0	DN65
	1750	22	29.7	590	347	33	1.0	
GLRP-S2-H-V3-630	1450	22	29.7	616	362	33	1.0	DN65
	1750	30	40.5	739	434	33	1.0	
GLRP-S2-H-V3-710	975	30	40.5	862	507	33	1.0	DN100
	1175	37	50	1032	607	33	1.0	
GLRP-S2-H-V3-800	975	37	50	1252	736	33	1.0	DN100
	1175	45	60	1407	828	33	1.0	
GLRP-S2-H-V3-900	975	45	60	1589	935	33	1.0	DN100
	1175	75	101	1717	1010	33	1.0	

GLORINDA
Ideas Beyond Imagination

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