

STANDARD LIQUID RING VACUUM PUMP PACKAGES

Edwards liquid ring vacuum pumps: a range of standard packages in a number of configurations, suitable for operation in once-through, partial or total recirculation mode. Pumps are also available in a selection of materials.



For partial or total recirculation systems the pump package components are included with stainless steel wetted parts as standard, irrespective of the materials of construction of the pump.

The SLRP packages are available for both single and two stage pumps with capacities from 70 m³/h to 700 m³/h (50 - 500 cfm) at vacuum levels down to 33 mbara (1" Hgabs).

For assistance with pump selection to meet process requirements please contact your local sales office.

Features and Benefits

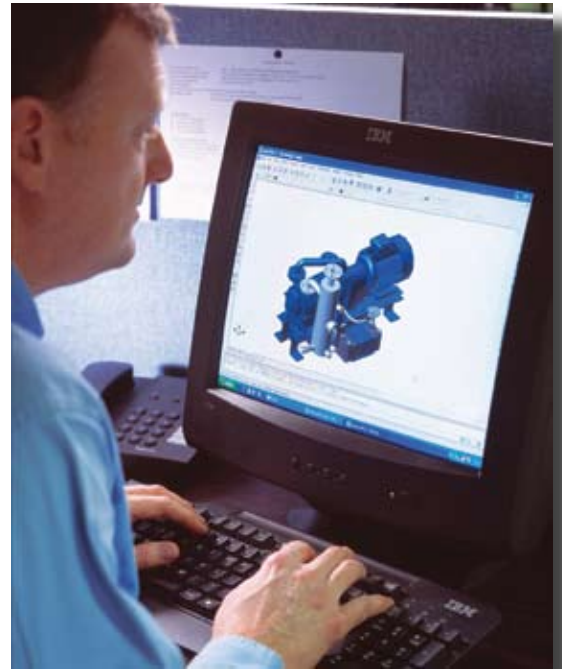
- **Standard package design**
 - 50 Hz DIN or 60 Hz ANSI available
 - Reduced lead time
 - General arrangement drawing instantly available
- **Modular design of 3 package types**
 - Once-through
 - Partial recirculation
 - Total recirculation
- **Optional materials of construction**
 - Cast iron
 - Stainless steel fitted
 - Stainless steel complete
 - Accessories stainless steel wetted parts as standard
- **Certified for hazardous area operation**
 - European ATEX Ex II 2Gc, IIB T3
 - USA Explosion proof Class 1 Division 1 Group C & D
- **Standard accessories**
 - Inlet non-return valve
 - Inlet isolating valve
 - Inlet vacuum gauge
 - Vacuum relief valve
 - Automatic seal water make up kit

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SLRP Configurator

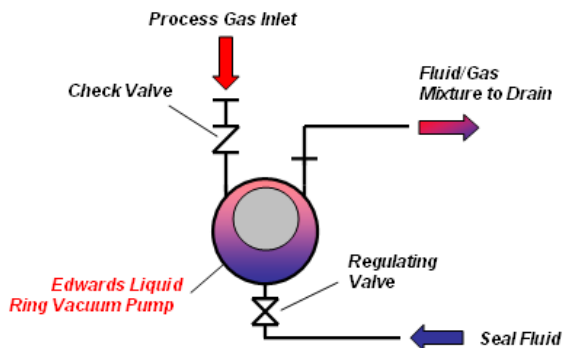
The SLRP system utilizes 3D AutoCAD design software to produce a tailored liquid ring pump package constructed from pre-engineered modules. The main benefits being the instant availability of a customized quotation and package general arrangement drawing and reduced lead times.

The system offers a selection of pump material options along with a choice from three standard operating configurations to suit the process conditions.

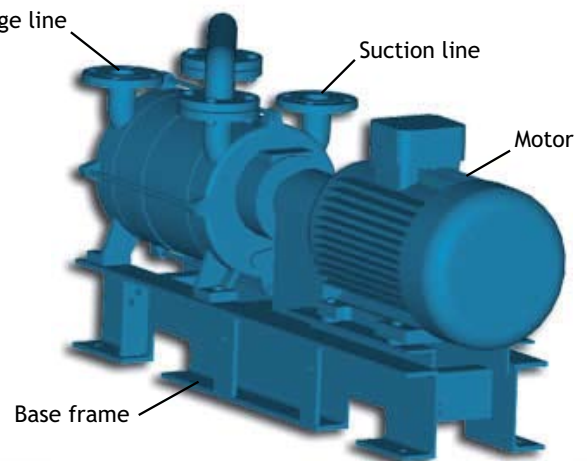


Once-Through

Basic configuration comprising a pump, its electric motor and drive and a base frame. It is used where an ample supply of seal liquid, which can be subsequently discharged to drain, is available. The liquid/gas mixture is discharged to drain through the discharge line.

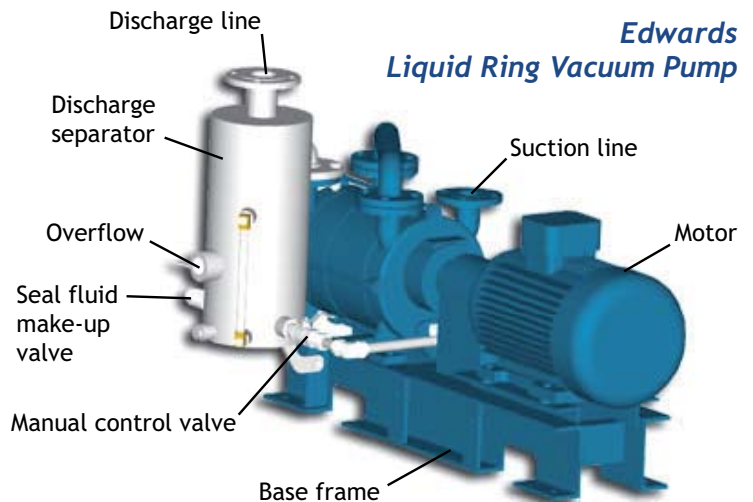
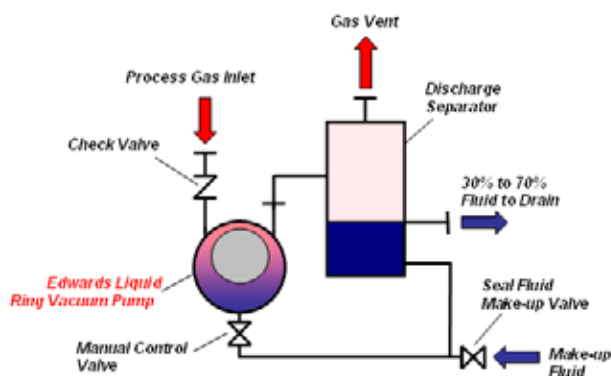


*Edwards
Liquid Ring Vacuum Pump*



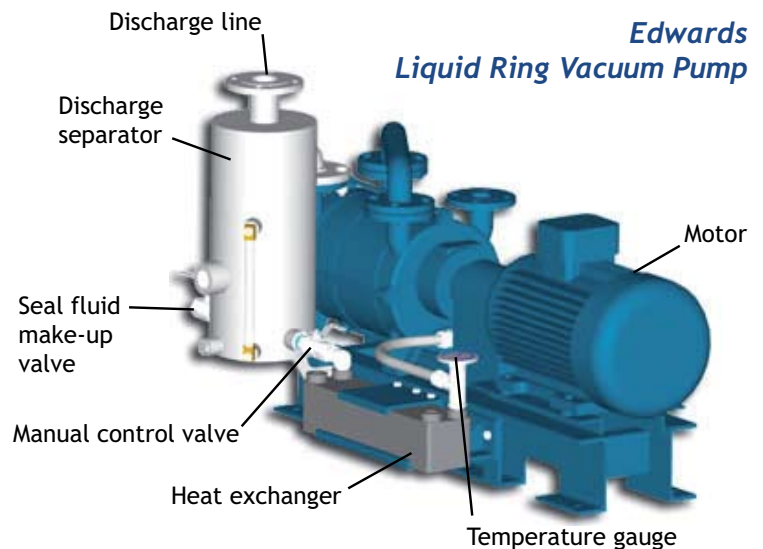
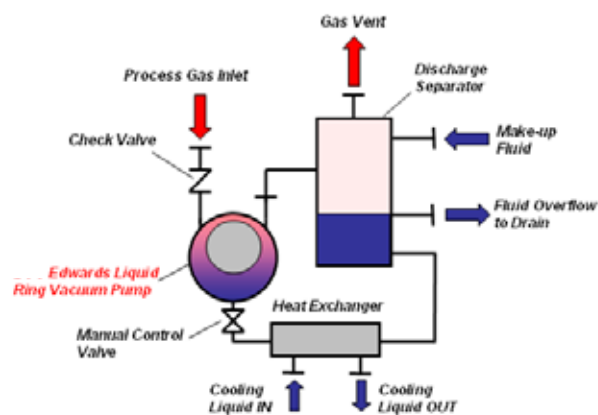
Partial Recirculation

The liquid/gas mixture is separated in the discharge separator. The recovered service liquid is then mixed with fresh seal fluid to maintain a constant temperature to the pump. The excess liquid, equivalent to the make-up supply, goes to drain. The minimum amount of fresh make-up fluid is used to ensure cavitation free operation at the required suction pressure.



Total Recirculation

Total recirculation is used where a closed loop system is preferable, when the seal fluid is in short supply or when contamination may be a problem. To enable total recirculation of the seal liquid, the recovered liquid must be cooled prior to re-use. In this case a plate type heat exchanger is utilized between the discharge separator and the pump.



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Pump size and specifications

	Pump Model	Speed		Motor		Capacity		Inlet/Outlet connection size	
		50 Hz RPM	60 Hz RPM	50 Hz kW	60 Hz hp	50 Hz m ³ /h	60 Hz cfm	50 Hz mm	60 Hz inches
Size 1	LR1L90	1450	1750	2.2	5	69	59	40	1.5
	LR1L125	1450	1750	3	7.5	111	70	40	1.5
	LR1L150	1450	1750	4	7.5	142	94	40	1.5
	LR2S100	1450	1750	3	7.5	91	59	40	1.5
	LR2S150	1450	1750	4	10	128	88	40	1.5
	LR2S200	1450	1750	5.5	10	170	118	40	1.5
Size 2	LR1L250	1450	1750	5.5	10	69	129	65	2.5
	LR1L320	1450	1750	7.5	15	111	194	65	2.5
	LR1L450	1450	1750	11	20	142	258	65	2.5
	LR2S275	1450	1750	7.5	15	244	162	50	2
	LR2S350	1450	1750	11	20	340	235	50	2
	LR2S425	1450	1750	15	25	368	265	50	2
Size 3	LR1S600	1450	1750	15	30	540	367	100	4
	LR1S800	1450	1750	22	40	790	529	100	4
	LR2S600	1450	1750	18.5	40	596	383	80	3
	LR2S750	1450	1750	30	50	640	640	80	3

Accessories

- Inlet non-return valve
- Inlet isolating valve
- Inlet vacuum gauge
- Vacuum relief valve
- Automatic seal water make-up kit
- Custom built and hybrid vacuum pump systems available

Materials of construction

		Standard	Stainless Steel	Stainless Steel
Pump	Casing	Cast Iron	CF8M	Cast Iron
	Impeller	Bronze	CF8M	CF8M
	Port plates	Cast Iron	CF8M	Cast Iron
	Body	Cast Iron	CF8M	Cast Iron
	Shaft	420S27	420S38	420S39
	Mechanical seal	Carbon/Silicon Carbide/Viton	Carbon/Silicon Carbide/Viton	Carbon/Silicon Carbide/Viton
	Components	Discharge separator	Stainless Steel	Stainless Steel
Piping		Stainless Steel	Stainless Steel	Stainless Steel
Fittings & Valves		Stainless Steel	Stainless Steel	Stainless Steel
Heat exchanger		Stainless Steel	Stainless Steel	Stainless Steel

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