



US VACUUM

Liquid Ring Vacuum Pumps

LRV/FC SERIES 330-800 cfm Vacuum: 25 Torr (29" Hg)

US VACUUM LRV/FC pumps are single stage large capacity liquid ring vacuum pumps capable of producing a vacuum to 29" Hg . A continuous supply of service liquid, usually water, is required by the pump to carry away the heat of compression and to maintain the liquid ring as some of the service liquid is discharged with the gas through the pump discharge port.

Various materials of construction are available for the pump to meet almost all gas compositions. Standard construction is Cast iron casing W/ Ductile iron impeller or Cast iron casing w/ 304 stainless steel impeller. All 316 stainless steel is also available.

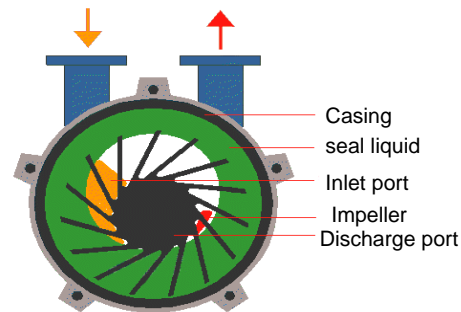
Pumps are provided with threaded connections for service liquid, pump draining and vacuum relief valve. Optional items include inlet check valve, vacuum relief valve, flow control, solenoid valve, vacuum and temperature gauges.

Various seal liquids may be used depending on the application. Call US Vacuum for assistance.

FEATURES

- Maintenance free
- Virtually vibration free
- Efficient Single Stage Design
- Almost all gases & vapors can be pumped
- The gases being pumped can be saturated with vapor
- Compression of the gases being pumped is nearly isothermal

VACUUM TO 29" Hg



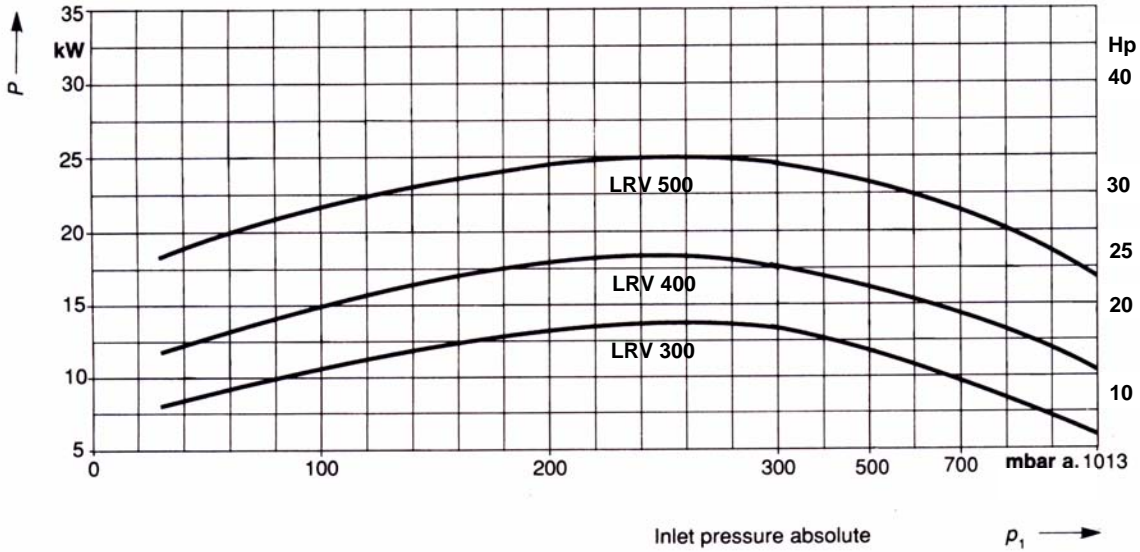
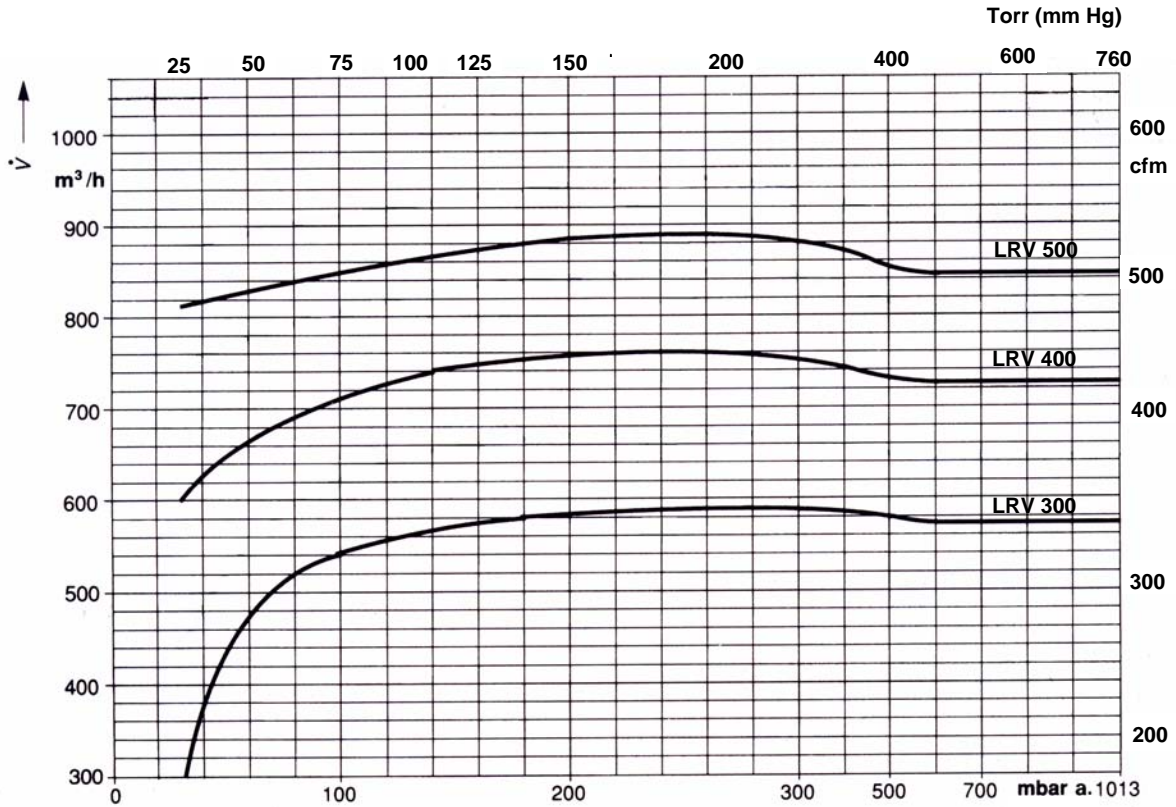
TECHNICAL DATA

PUMP TYPE		LRV300	LRV400	LRV500	LRV700	LRV800
Nominal Capacity (@ 25" Hg)	CFM	330	420	500	735	800
Speed	RPM	790	980	1170	1170	1300
Motor-Installed power	HP	25	30	40	60	75
Drive		BELT	BELT	DIRECT	DIRECT	BELT
Average service liquid flow *	GPM	7.5	9	11	14	15
Seal Fluid connection	Inches	1" NPT				
Inlet/Outlet connection	Inches	5" ANSI				
Maximum Vacuum	Torr	25 TORR (29" Hg)				
Weight (Pump & Motor)	Lbs	1870	2035	2100	2400	2550

- Seal fluid rate is based on partial water recirculation (50%).
- Partial water recovery is accomplished via special porting inside the vacuum pump

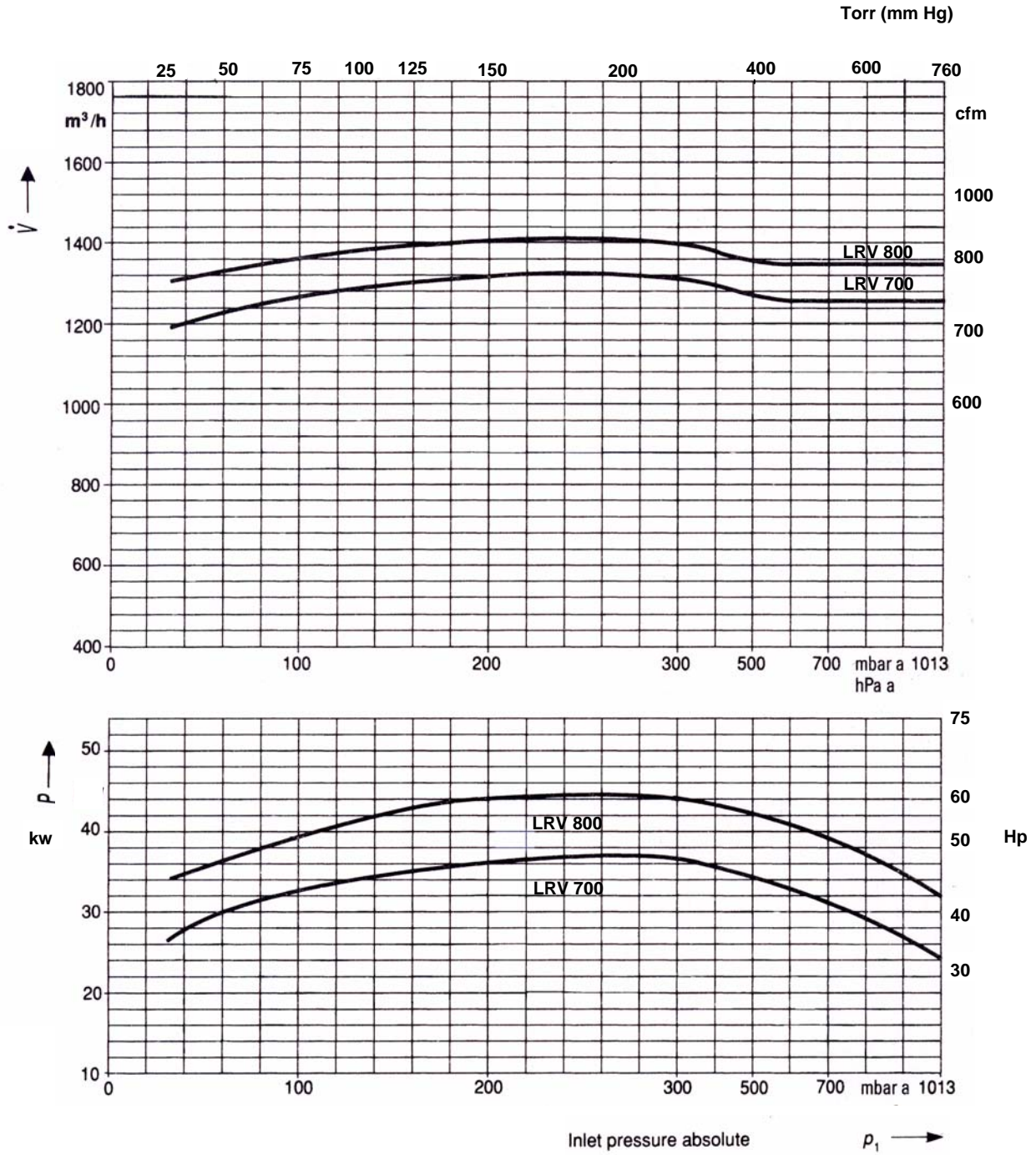
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PERFORMANCE CURVES



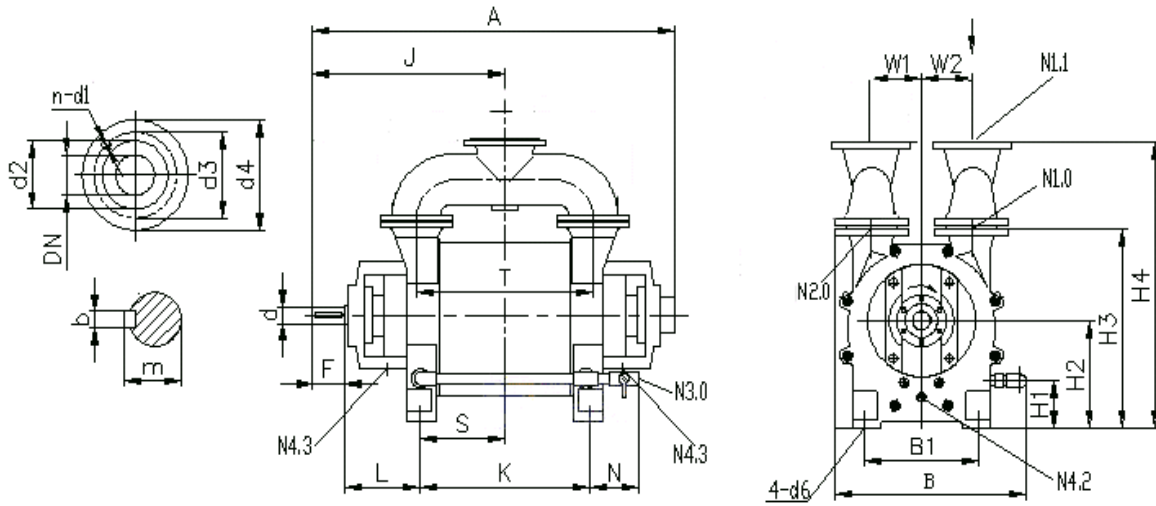
Performance curves based on 60 Deg F (15 Deg C)
Seal water temperature & sea level elevation

PERFORMANCE CURVES



Performance curves based on 60 Deg F (15 Deg C)
 Seal water temperature & sea level elevation

DIMENSIONS



BARE SHAFT UNITS

DIMENSIONS	A	B1	B	b	C	d	d6	E	F	H1	H2	H3	H4	H5	I
LRV 300	975	340	700	14	629	50	24	37	82	127	315	590	840	985	50
LRV 400	975	340	700	14	629	50	24	37	82	127	315	590	840	985	50
LRV 500	975	340	700	14	629	50	24	37	82	127	315	590	840	985	50
LRV 700	1095	340	700	14	629	50	24	37	82	127	315	590	840	985	50
LRV 800	1095	340	700	14	629	50	24	37	82	127	315	590	840	985	50

DIMENSIONS	J	K	L	m	N	S	T	W1	W2	N3.0	N4.0	N4.2	N4.3	DN
LRV 300	507	395	227	53.5	175	198	427	155	155	1"	3"	3/4"	3/4"	125
LRV 400	507	395	227	53.5	175	198	427	155	155	1"	3"	3/4"	3/4"	125
LRV 500	507	395	227	53.5	175	198	427	155	155	1"	3"	3/4"	3/4"	125
LRV 700	567	515	227	53.5	175	258	547	155	155	1"	3"	3/4"	3/4"	125
LRV 800	567	515	227	53.5	175	258	547	155	155	1"	3"	3/4"	3/4"	125

Dimensions subject to change without notice

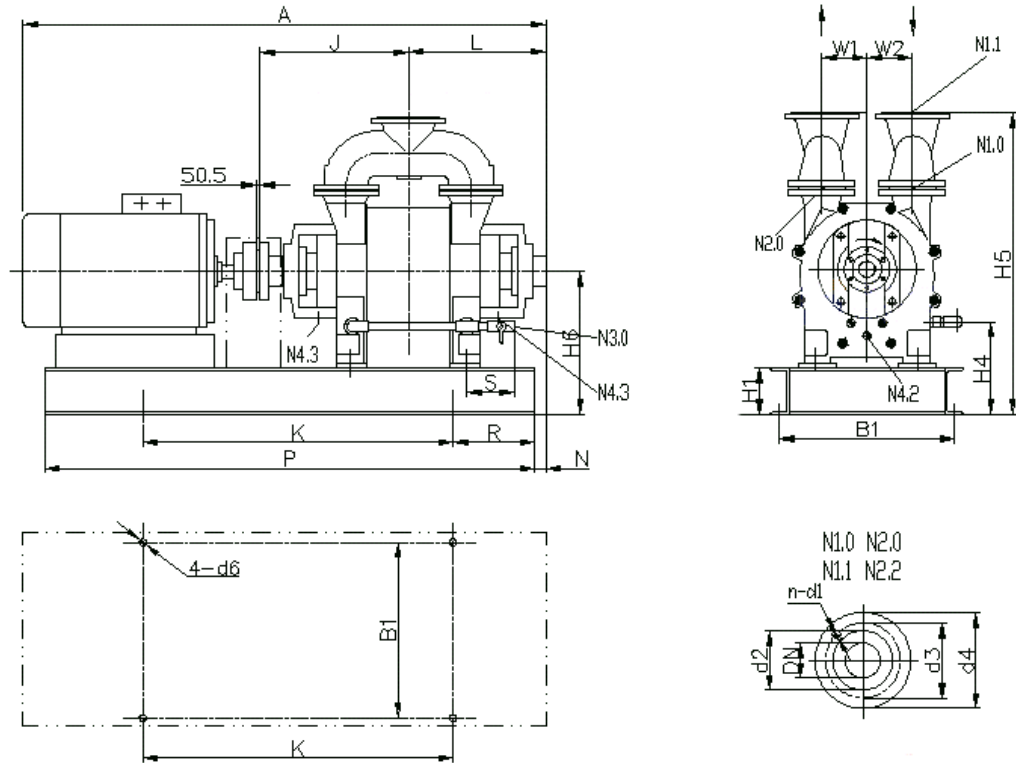
Dimensions in mm except where noted
25.4 mm = 1"

US VACUUM PUMPS LLC

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DIMENSIONS



DIRECT DRIVE SYSTEMS

DIMENSIONS	A	B1	d6	E	H2	H3	H4	H5	H6	J	K	L	N	P
LRV 300	1785	600	27	37	804	1160	302	1015	490	507	1060	469	36	1625
LRV 400	1785	600	27	37	804	1160	302	1015	490	507	1060	469	36	1625
LRV 500	1785	600	27	37	804	1160	302	1015	490	507	1060	469	36	1625
LRV 700	2035	600	27	37	804	1160	302	1015	490	567	1060	529	206	1625
LRV 800	2035	600	27	37	804	1160	302	1015	490	567	1060	529	206	1625

DIMENSIONS	R	S	W1	W2	N3.0	N4.0	N4.2	N4.3	DN	d1	d2	d3	d4	n
LRV 300	280	175	155	155	1"	3"	3/4"	3/4"	125	18	158	180	220	8
LRV 400	280	175	155	155	1"	3"	3/4"	3/4"	125	18	158	180	220	8
LRV 500	280	175	155	155	1"	3"	3/4"	3/4"	125	18	158	180	220	8
LRV 700	280	175	155	155	1"	3"	3/4"	3/4"	125	18	188	210	250	8
LRV 800	280	175	155	155	1"	3"	3/4"	3/4"	125	18	188	210	250	8

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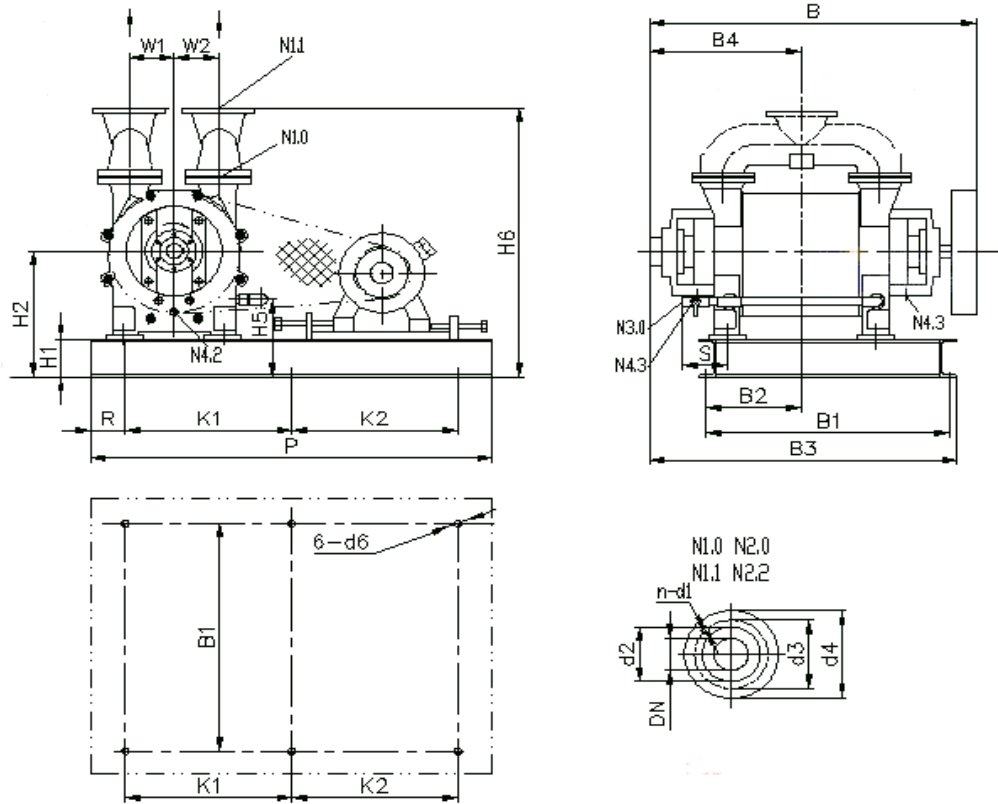
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DIMENSIONS



BELT DRIVE SYSTEMS

DIMENSIONS	B1	B2	B3	B4	B	d6	E	H2	H3	H4	H5	H6	K1	K2
LRV 300	730	273	951	469	1030	27	37	470	784	1140	282	995	580	580
LRV 400	730	273	951	469	1030	27	37	470	784	1140	282	995	580	580
LRV 500	730	273	951	469	1030	27	37	470	784	1140	282	995	580	580
LRV 700	850	333	1071	529	1140	27	37	470	784	1140	282	995	580	580
LRV 800	850	333	1071	529	1140	27	37	470	784	1140	282	995	580	580

DIMENSIONS	P	R	S	W1	W2	N3.0	N4.0	N4.2	N4.3	DN	d1	d2	d3	d4
LRV 300	1400	120	180	155	155	1"	3"	3/4"	3/4"	125	18	158	180	220
LRV 400	1400	120	180	155	155	1"	3"	3/4"	3/4"	125	18	158	180	220
LRV 500	1400	120	180	155	155	1"	3"	3/4"	3/4"	125	18	158	180	220
LRV 700	1400	120	180	155	155	1"	3"	3/4"	3/4"	125	18	158	210	250
LRV 800	1400	120	180	155	155	1"	3"	3/4"	3/4"	125	18	158	210	250

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