

LIQUID RING VACUUM PUMPS

GMVT 780/800 – GMVT 780/1100

PRESSURE RANGE	: 160 - 1013 mbara	/ 4.72 – 30 inHg
SUCTION CAPACITY	: 3300 – 11000 m³/h	/ 1950 – 6475 cfm

GÜCÜM single stage liquid ring vacuum pumps are used for pumping dry and wet gases, small quantities of liquid can be handled. They are used in the areas at which vacuum needed between the pressures 1013 to 33 mbar

Güçüm single stage liquid ring vacuum pumps have below features;

- Able to pump every kind of gases and vapors,
- Able to handle small quantities of liquid with gases,
- Oil-free, no need to lubrication,
- Pumped gas does not touch to oil,
- Minimum maintenance with high efficiency
- No metallic contact of the rotating parts,
- Works quiet and reduced vibration,
- Nearly everywhere used with suitable material choices.



APPLICATION

Pumps are used for the discharge of dry and humid gases (containing vapor) and a certain amount of water. It can be used in all areas where absolute pressure between 1013 and 33 mbar is required.

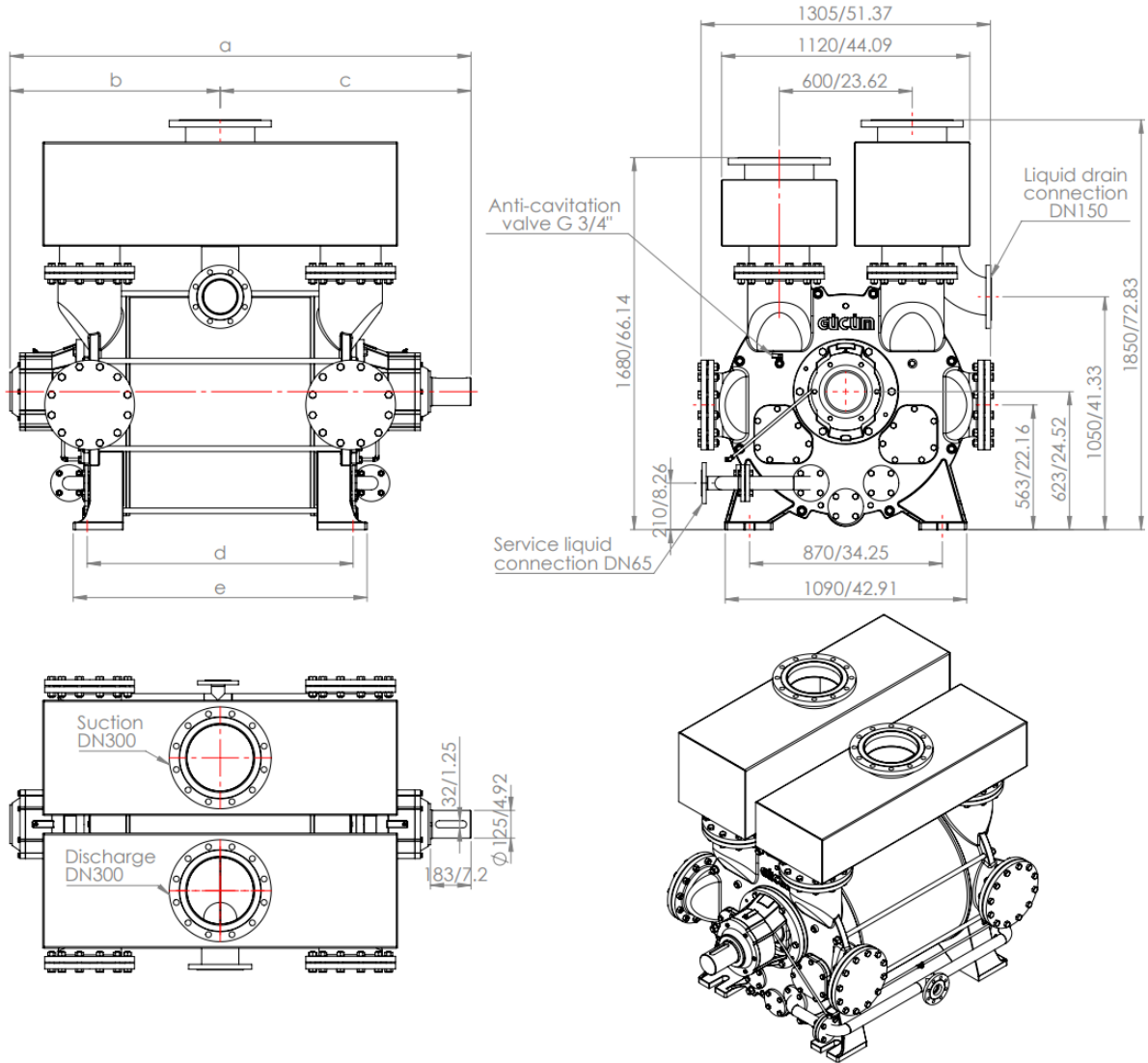
ADDITIONAL NOTE

During operation, the pump must be continuously supplied with liquid (usually water) to replenish the water from the exhaust line and to reduce the pump temperature. The water discharged from the pump is separated from the gas and is suitable for reuse.

The direction of shaft rotation is clockwise when viewed from the motor side.
The tightness is ensured by a standard mechanical seal.

TECHNICAL FEATURES		
Maximum allowable pressure differential	1.1	bar
Highest saturated air temperature	100	°C
Highest dry air temperature	200	°C
Highest service water temperature	70	°C
Highest service water viscosity	4	mm ² /sec
Noise level (at 80 mbar vacuum)	85 ±3	dB A
Highest density of service water	1200	kg/m ³
Highest heat exchanger flow resistance	0,2	bar

OVERALL DIMENSIONS

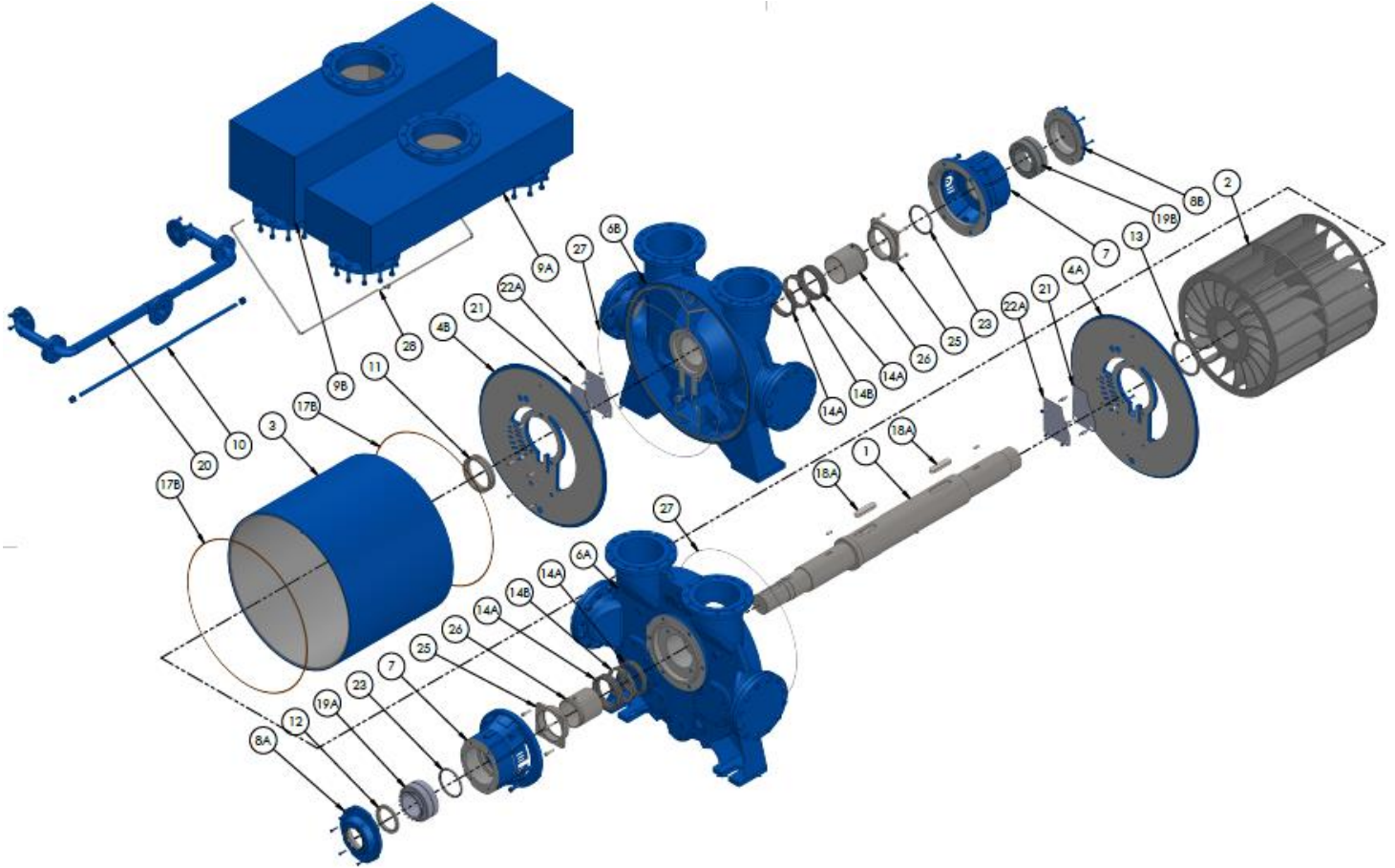


MODEL	a	b	c	d	e	Weight (kg / lbs)
	mm / inch					Bare Shaft
GMVT 780/800	2080 / 81.88	950 / 37.4	1130 / 44.48	1200 / 47.24	1325 / 52.16	3500 / 7715
GMVT 780/1100	2380 / 93.7	1100 / 43.3	1280 / 50.39	1500 / 59.05	1625 / 63.97	4200 / 9260

Motor Specifications												
Type	330 rpm		390 rpm		440 rpm		490 rpm		530 rpm		570 rpm	
	kW	HP	kW	HP	kW	HP	kW	HP	kW	HP	kW	HP
GMVT 780/800	90	125	110	150	132	176	160	215	185	250	200	268
GMVT 780/1100	132	176	160	215	185	250	200	268	220	300	250	335

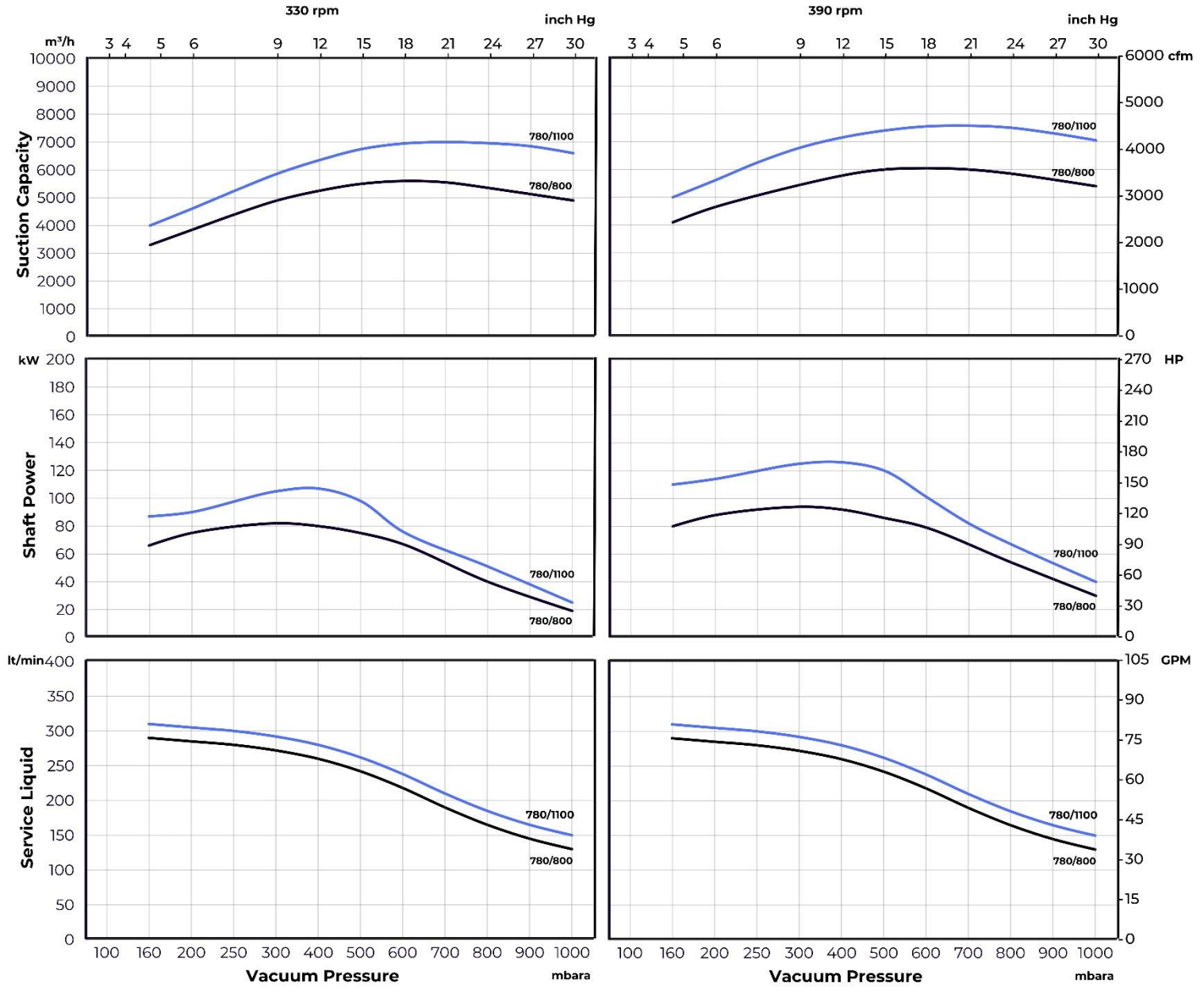
*Please contact Gücüm Pompa for details regarding the dimensions and weight of the motor-coupled pumps.

EXPLODED VIEW AND PART LIST



PART LIST	Cast Iron	Nodular Cast Iron	AISI 420	AISI 304	AISI 316	Bronze	St-37	Qty.
1.Shaft			✓	✓	✓			1
2. Impeller				✓	✓			1
3. Cover				✓	✓		✓	1
4A. Suction Plate				✓	✓			1
4B. Discharge Plate				✓	✓			1
6A. Suction Casing	✓			✓	✓			1
6B. Discharge Casing	✓			✓	✓			1
7.Bearing Carrier	✓			✓	✓			2
8A. Bearing Cover	✓			✓	✓			1
8B. Bearing End Cover	✓			✓	✓			1
9A. Suction Manifold				✓	✓		✓	1
9B. Discharge Manifold				✓	✓		✓	1
10. Tie Rod				✓	✓		✓	8
11. Impeller Nut			✓	✓	✓			2
12. Bearing Nut			✓	✓	✓			1
13. Impeller Washer				✓	✓			1
14A. Soft Packing				PTFE				10
14B. Packing Ring				✓	✓	✓		2
17B. Casing Gasket				Paper				2
18A. Impeller Key				✓	✓		✓	2
18C. Coupling Key				✓	✓		✓	1
19A. Front Bearing				SKF 24128 CCK/C3 W33				1
19B. Rear Bearing				SKF 24128_CC_W33				1
20. Service Liquid Connection				✓	✓		✓	1 set
21. Valve				PTFE				2
22A. Front Valve Cover				✓	✓			1
22B. Rear Valve Cover				✓	✓			1
23. Radial Shaft Seal				SKF_155X180X15_HMSA10_V				2
25. Packing Cover	✓			✓	✓			2
26. Shaft Sleeve				✓	✓			2
27. O-ring				NITRYL-NBR				2
28. Seal Cooling Line				✓	✓		✓	1 set

CHARACTERISTIC CURVES

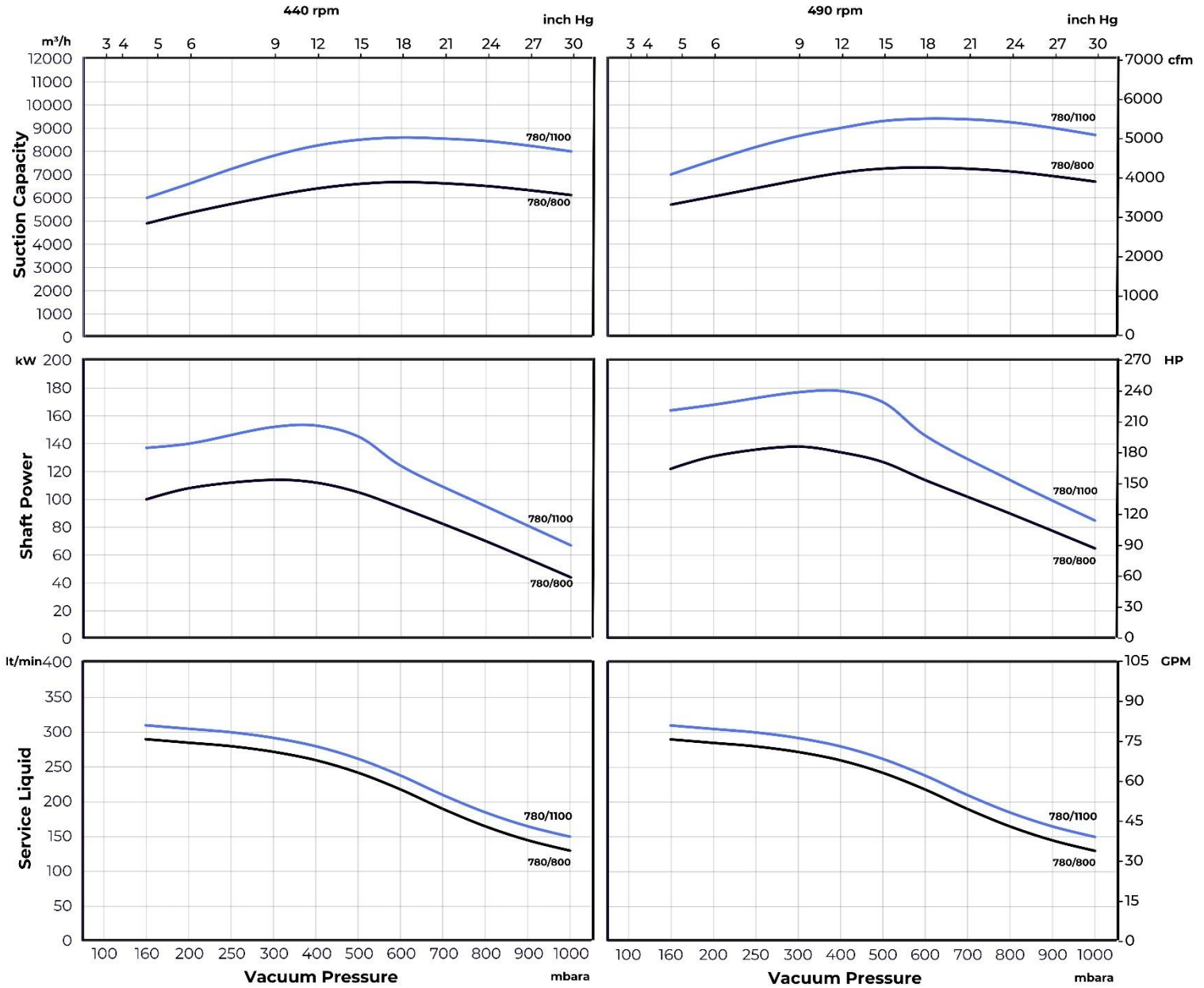


Suction Capacity		
Type	330 rpm	390 rpm
GVMT 780/800	3300 – 5600 m³/h / 1940 – 3300 cfm	4100 – 6050 m³/h / 2415 – 3560 cfm
GMVT 780/1100	4000 – 7000 m³/h / 2355 – 4120 cfm	5000 – 7575 m³/h / 2940 – 4460 cfm

The above characteristic curves have been prepared in accordance with ISO 21360 standards. The curves are valid for the vacuum of 15°C service water and 20°C dry air supplied to the liquid ring vacuum pump at atmospheric pressure (760 mmHg / 1013 mbar). The values in the chart have a tolerance of $\pm 10\%$.

Characteristic curves vary under different operating conditions.

CHARACTERISTIC CURVES

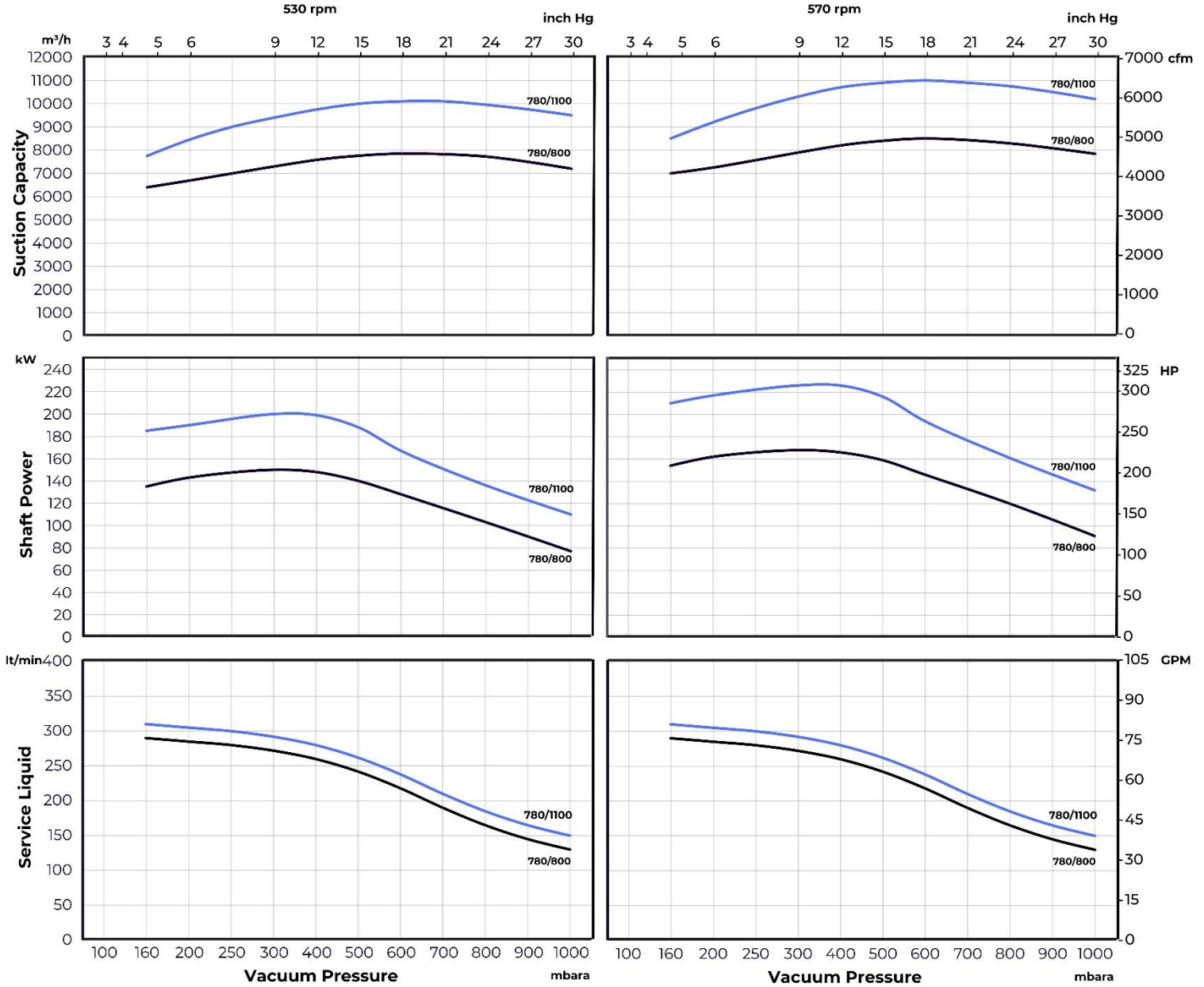


Suction Capacity		
Type	440 rpm	490 rpm
GMVT 780/800	4900 – 6700 m³/h / 2885 – 3940 cfm	5700 – 7300 m³/h / 3350 – 4300 cfm
GMVT 780/1100	6000 – 8600 m³/h / 3530 – 5060 cfm	7000 – 9400 m³/h / 4120 – 5530 cfm

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Characteristic curves vary under different operating conditions.

CHARACTERISTIC CURVES



Suction Capacity		
Type	530 rpm	570 rpm
GMVT 780/800	6400 – 7850 m³/h / 3765 – 4620 cfm	7000 – 8500 m³/h / 4120 – 5000 cfm
GMVT 780/1100	7750 – 10100 m³/h / 4560 – 5945 cfm	8500 – 11000 m³/h / 5000 – 6475 cfm

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Characteristic curves vary under different operating conditions.