

LIQUID RING VACUUM PUMPS

GMPT 520/400 – GMPT 520/530 – GMPT 520/600

PRESSURE RANGE : 100 - 1013 mbara / 2.95 – 30 inHg

SUCTION CAPACITY : 650 – 4070 m³/h / 380 – 2400 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 100 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.

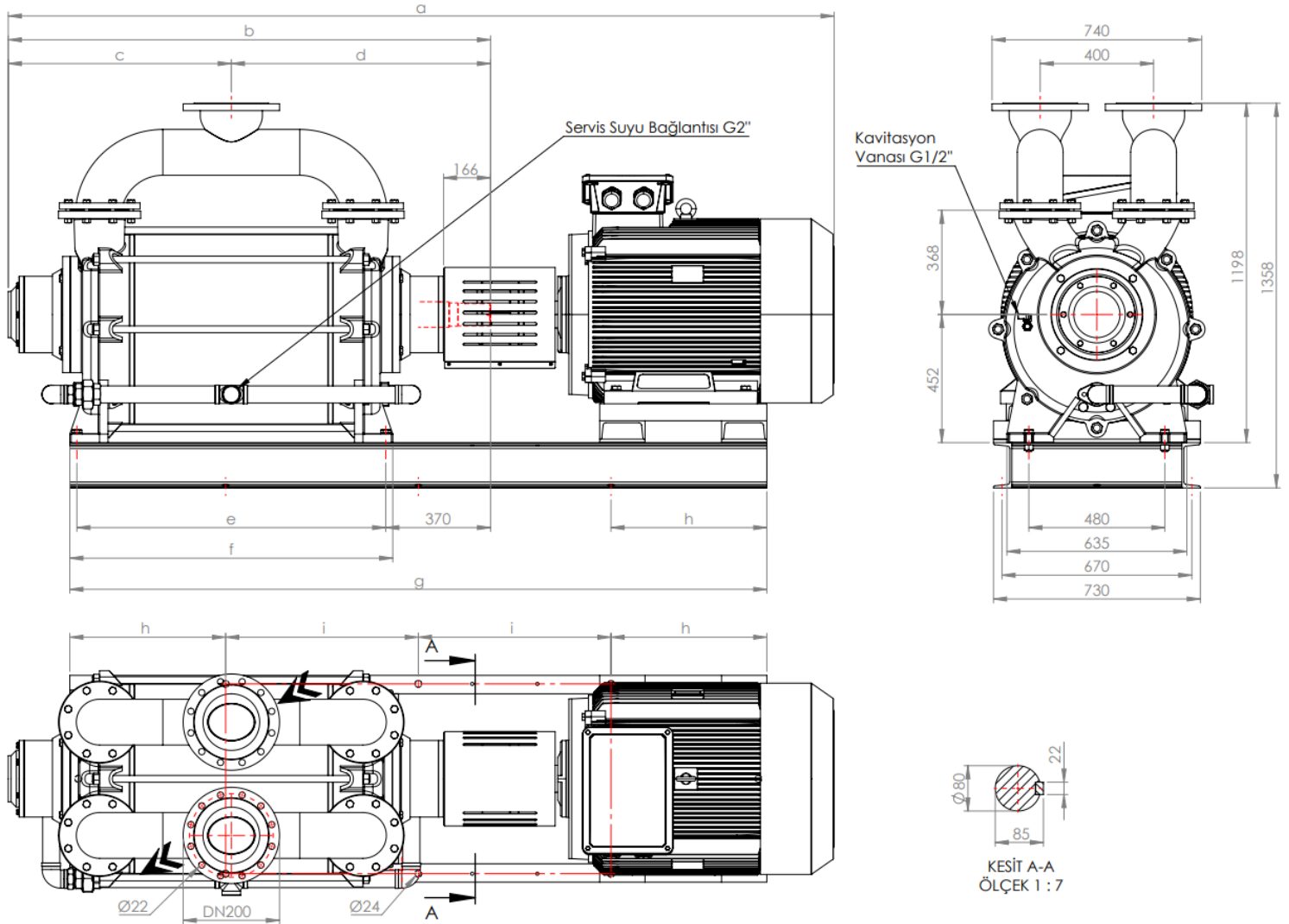
ADDITIONAL NOTE

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

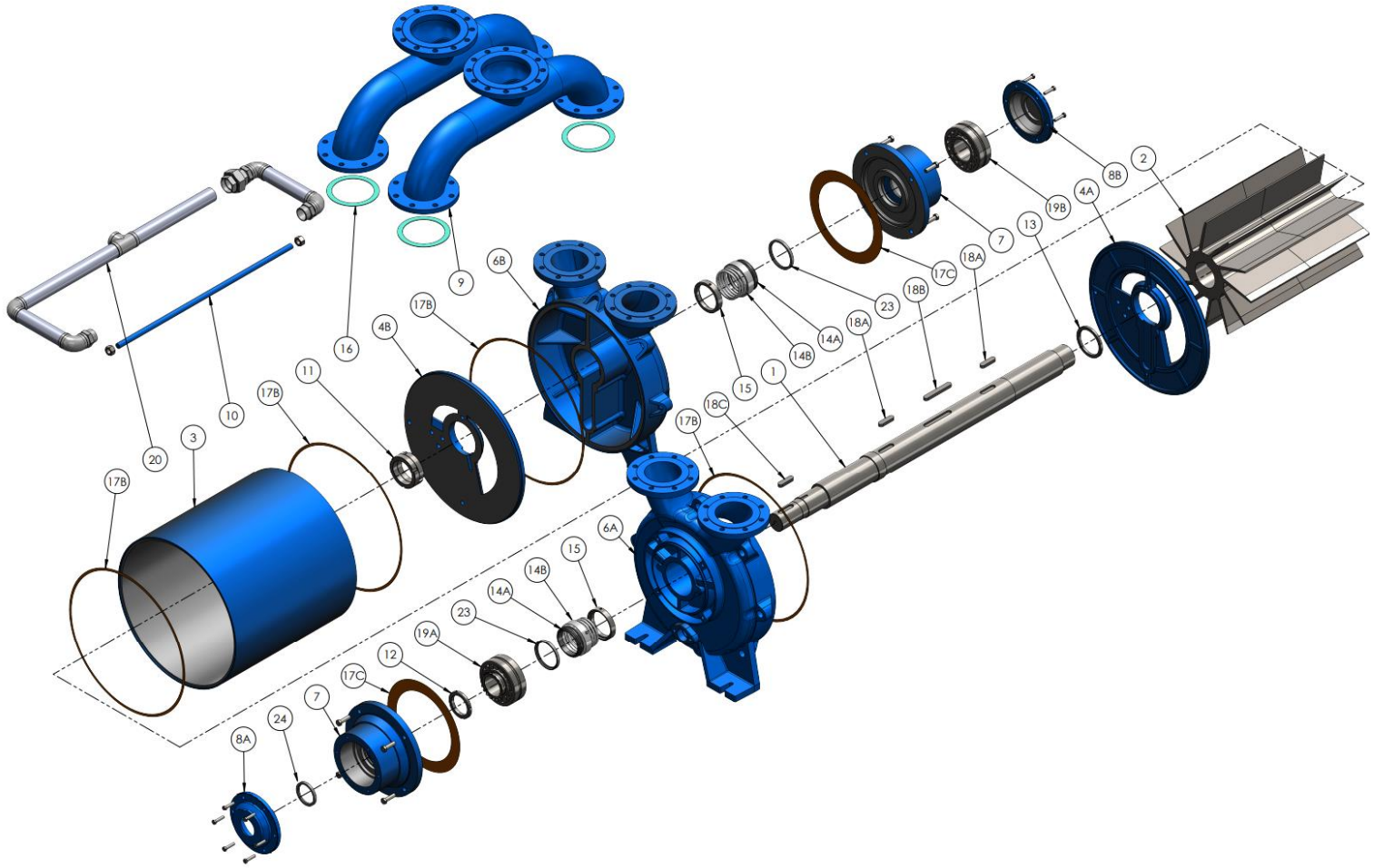


MODEL	50 Hz.	a	b	c	d	e	f	g	h	i	Weight (kg / lbs)	
		mm / inch									Bare Shaft	With Motor
GMPT 520/400		2645/104.1	1422/55.6	647/25.5	775/30.5	820/32.3	870/34.2	2190/86.2	500/19.7	595/23.4	1020/2249	1980/4365
GMPT 520/530		2775/109.2	1562/60.3	717/28.2	845/33.3	950/37.4	1000/39.4	2320/91.3	550/21.6	610/24	1100/2425	2220/4894
GMPT 520/600		2915/114.8	1702/67	787/31	915/36	1090/42.9	1140/44.9	2460/96.8	550/21.6	680/26.8	1210/2668	2475/5456

MODEL	60 Hz.	a	b	c	d	e	f	g	h	i	Weight (kg / lbs)	
		mm									Bare Shaft	With Motor
GMPT 520/400		2645/104.1	1422/55.6	647/25.5	775/30.5	820/32.3	870/34.2	2190/86.2	500/19.7	595/23.4	1020/2249	2030/4475
GMPT 520/530		2775/109.2	1562/60.3	717/28.2	845/33.3	950/37.4	1000/39.4	2320/91.3	550/21.6	610/24	1100/2425	2305/5082
GMPT 520/600		2915/114.8	1702/67	787/31	915/36	1090/42.9	1140/44.9	2460/96.8	550/21.6	680/26.8	1210/2668	2545/5610

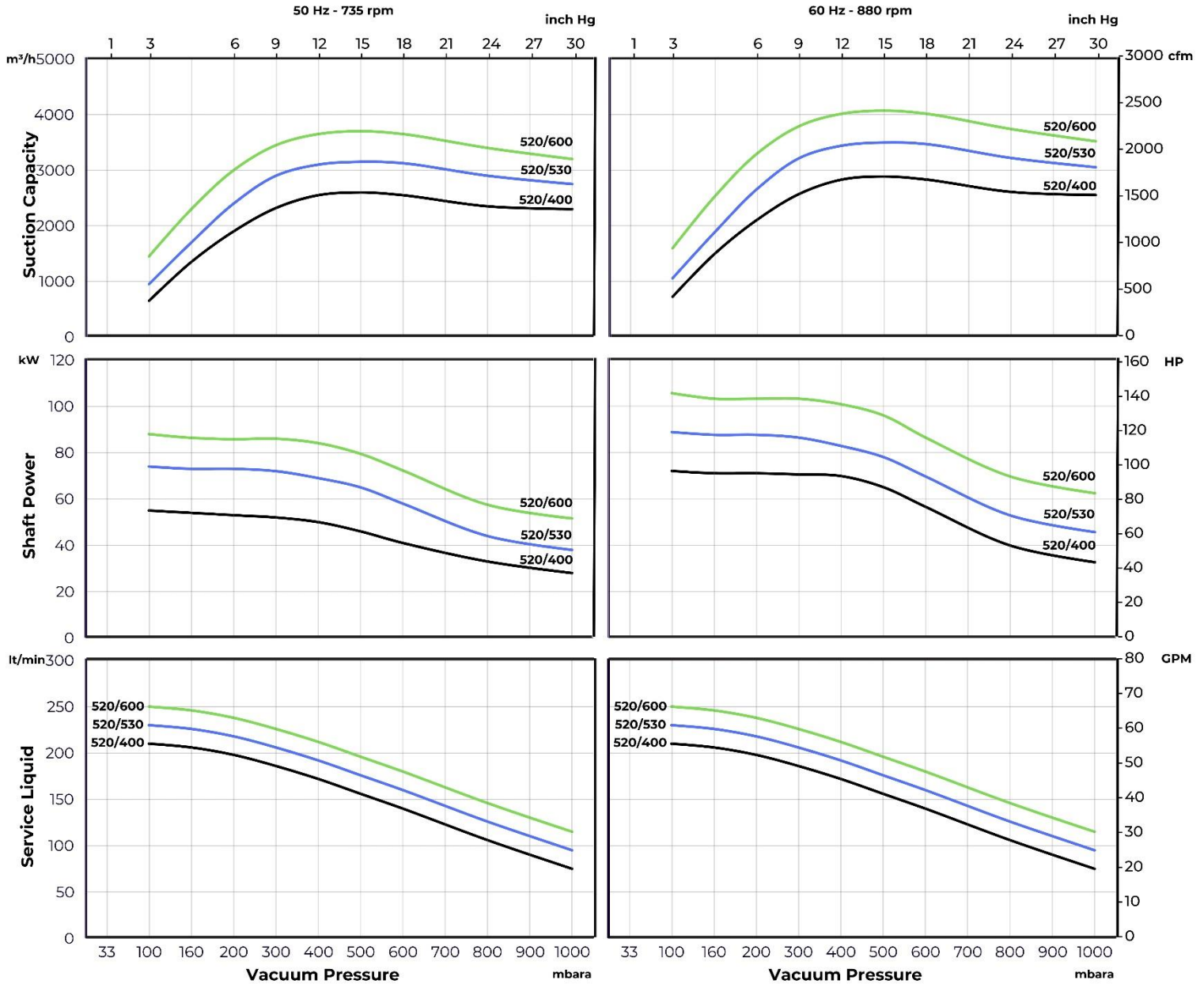
Motor Specifications								
50 Hz			60 Hz			50 Hz		
Model			Frame Size – Flange Type			rpm		
GMPT 520/400			315S – B3			735		
GMPT 520/530			315M – B3			735		
GMPT 520/600			315M – B3			735		

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
9. Manifold				✓	✓		✓	2
10. Tie Rod				✓	✓		✓	8
11. Impeller Nut			✓	✓	✓			2
12. Bearing Nut			✓					1
13. Impeller Spacer			✓	✓	✓			1
14A. Mechanical Seal – Stable	MS3-Ø110-R / L G13 / AISI316 – Carbon – Viton							2
14B. Mechanical Seal – Rotary					✓			2
16. Klingrite Cover	Klingrite							4
17A. Casing Gasket	Paper							2
17B. Cover Gasket	Paper							2
17C. Bearing Carrier Gasket	Paper							2
18A. Impeller Key				✓	✓		✓	2
18B. Impeller Key – Middle				✓	✓		✓	1
18C. Coupling Key				✓	✓		✓	1
19A. Front Bearing	22319 E/C3							1
19B. Rear Bearing	22319-EK/C3							1
20. Service Liquid Connection				✓	✓		✓	1 set
23. 110x30X12 HMS5 V Oil Seal	Rubber							2
24. 82X105X13 HMS5 V Oil Seal	Rubber							1

CHARACTERISTIC CURVES



Suction Capacity		
Model	50 Hz	60 Hz
GMPT 520/400	650 – 2600 m³/h / 380 – 1530 cfm	720 – 2890 m³/h / 420 – 1700 cfm
GMPT 520/530	950 – 3150 m³/h / 560 – 1855 cfm	1055 – 3500 m³/h / 620 – 2060 cfm
GMPT 520/600	1450 – 3700 m³/h / 850 – 2170 cfm	1600 – 4070 m³/h / 940 – 2400 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.