

# LIQUID RING VACUUM PUMPS

Single Stage

GMPT 520/400 - GMPT 520/530 - GMPT 520/600

**Pressure Range : 106 - 1013 mbar**  
**Suction Capacity : 1600 - 3600 m<sup>3</sup>/h**



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.

GÜCÜM Single Stage Liquid Ring Vacuum Pumps have the below features:

- \* Able to pump every kind of gases and vapours,
- \* Able to handle small quantities of liquid with gases,
- \* Oil-free, no need to lubrication,
- \* Pumped gas do not touch the 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.

## Service Liquid

During pump working, service liquid must be supplied to replenish the liquid ring and to cool the pump (generally water is used). The exhausted liquid could be used again after separating the gas inside of it.

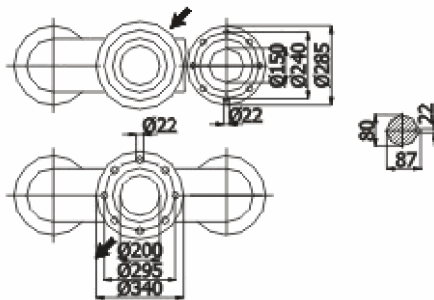
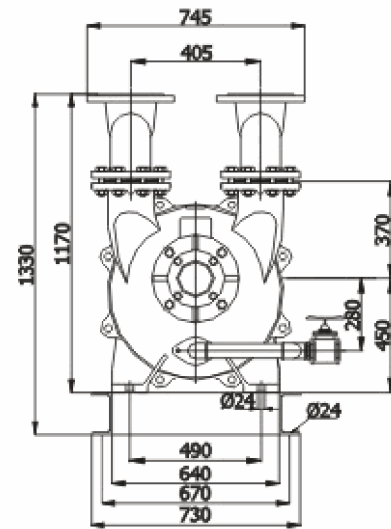
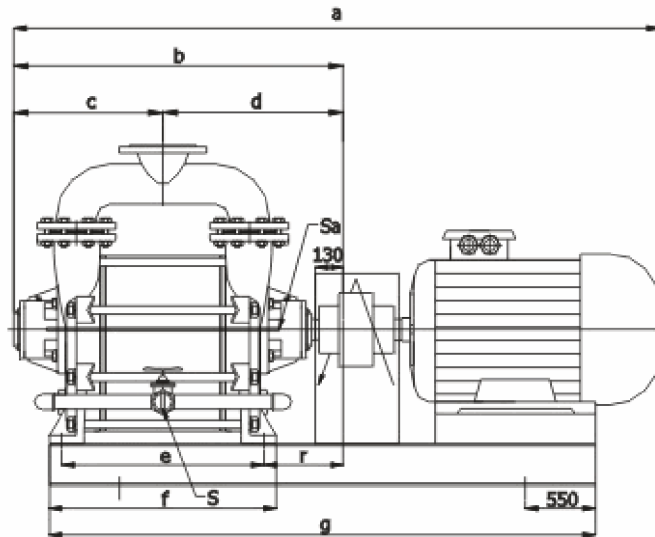
The direction of the rotation is clockwise, when looking from the motor on the pump.



## TECHNICAL PROPERTIES

Properties	Unit	GMPT 520/400	GMPT 520/530	GMPT 520/600
Motor Power	kW	55	75	90
Motor Speed	rpm	735		
Max. Service liquid flow	lt/min	150	170	210
Max. Admissible pressure difference	bar	1,1		
Max. Gas temperature	°C	100		
Max. Service liquid temperature	°C	70		
Max. Service liquid viscosity	mm <sup>2</sup> /s	4		
Sound pressure level (at 80 mbar suc. pressure)	dB A	85 ±3		
Max. Service liquid density	kg/m <sup>3</sup>	1200		
Max. Flow resistance of the heat exchanger	bar	0,2		

# OVERALL DIMENSIONS



( ' ): For Mechanical Seal Types  
 Sa : Water inlet for soft packing G 3/8"  
 S : Service Liquid Inlet G 2"

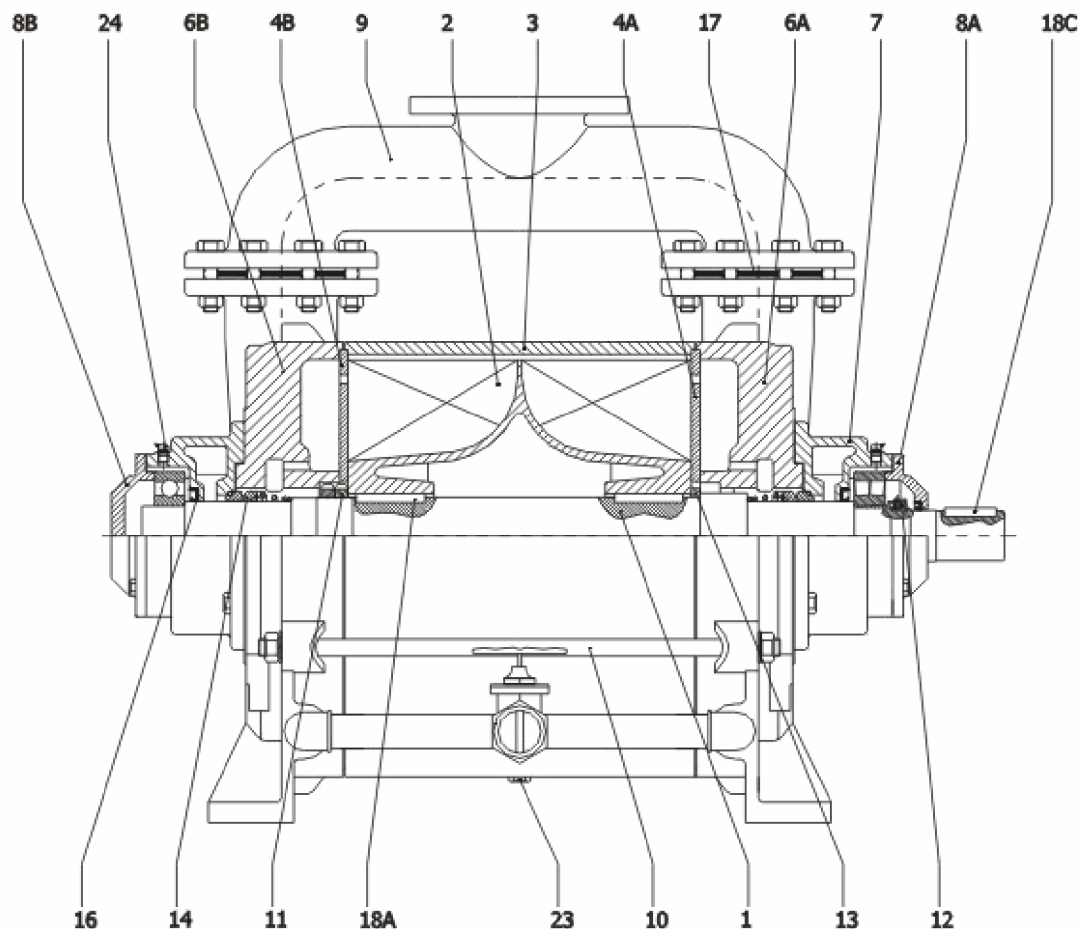
MODEL	a	a'	b	b'	c	c'	d	d'	e	f	g	g'	r	r'	Weight (bare shaft)	Weight (complete with motor)
															kg	kg
GMPT 520/400	2680	2510	1600	1430	735	650	865	780	810	880	2175	2090			1020	1980
GMPT 520/530	2860	2690	1730	1560	800	715	930	845	940	1010	2355	2270	480	375	1100	2220
GMPT 520/600	3020	2850	1890	1720	880	795	1010	925	1100	1170	2515	2430			1210	2475

## MATERIALS

Part Name	Standard Construction	Stainless Steel Construction
Suction&Discharge Casing	GG 25 Cast Iron	AISI 304-AISI 316 St. Steel
Plates	GGG 40 Sph. Cast Iron	AISI 304-AISI 316 St. Steel
Body	St 37 Steel	AISI 304-AISI 316 St. Steel
Shaft	AISI 420 Stainless Steel	AISI 304-AISI 316 St. Steel
Impeller	GS 52 Steel Casting	AISI 304-AISI 316 St. Steel
Mechanical Seal	Si. Carbide/ Carbon/Viton	Cr Ni Mo Steel/Carbon/Viton

# SECTIONAL DRAWING AND PART LIST

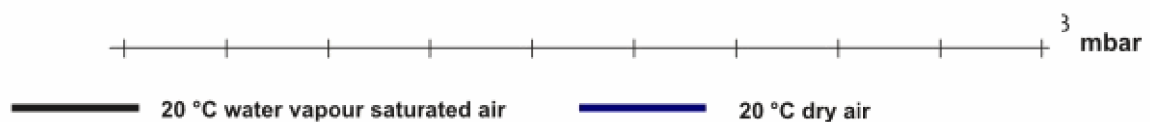
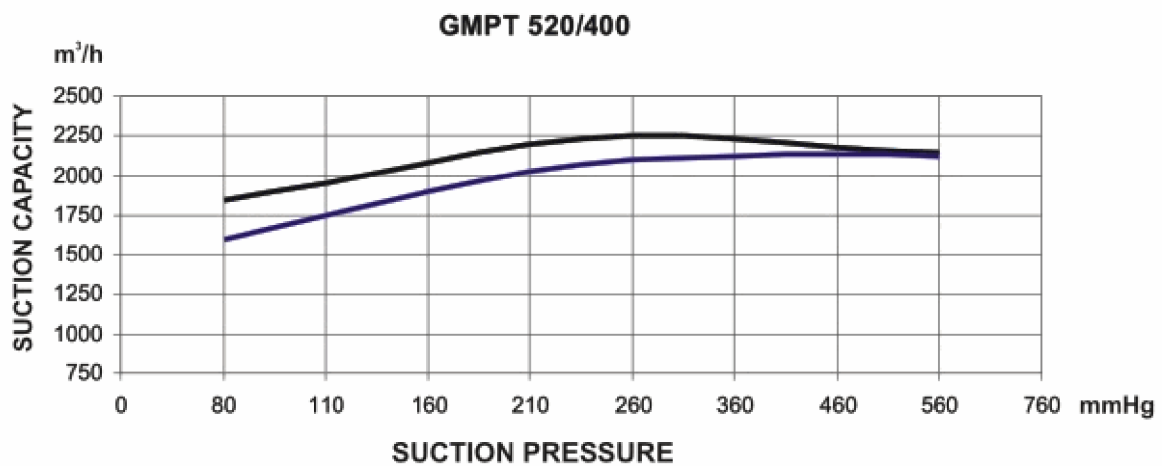
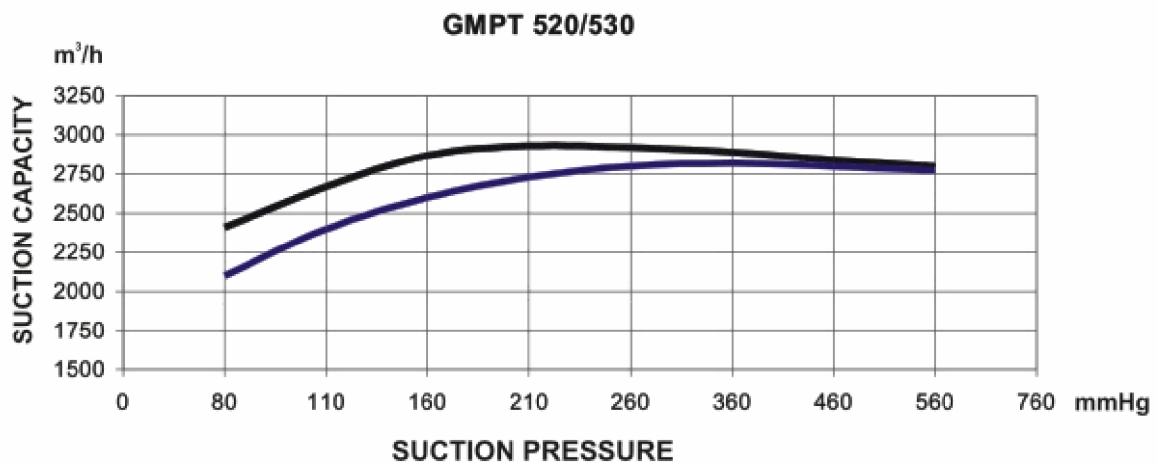
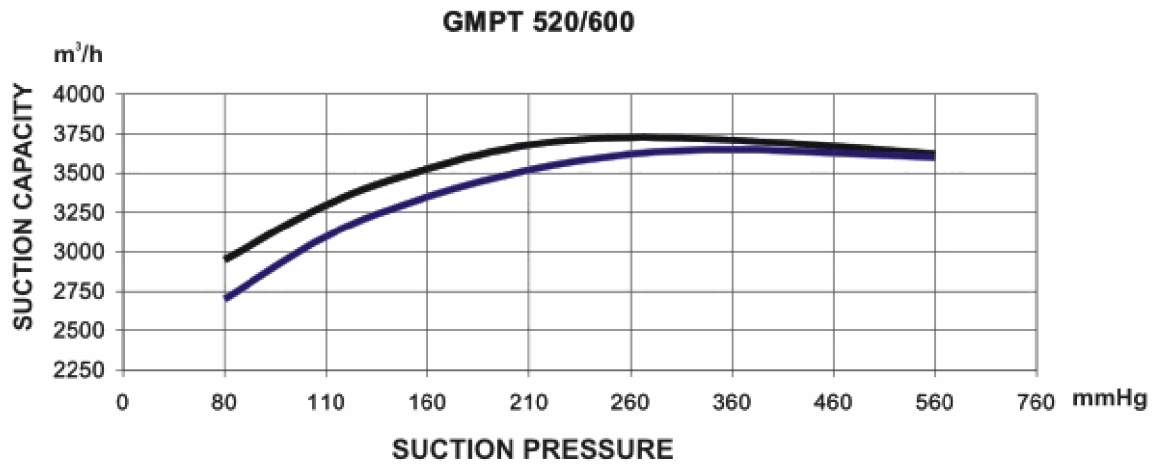
GMPT 520/400 - GMPT 520/530 - GMPT 520/600



No	Part Name	No	Part Name
1	Shaft	11	Impeller Nut
2	Impeller	12	Bearing Nut
3	Casing	13	Impeller Spacer
4A	Suction Plate	14	Mechanical Seal
4B	Discharge Plate	16	O-ring
6A	Front Casing	17	Gasket
6B	Back Casing	18 A	Impeller Key
7	Bearing Carrier	18 C	Coupling Key
8A	Bearing Cover	22	Paper Gasket
8B	Bearing & Cover	23	Plug
9	Brach Pipe	24	Grease-Nipple
10	Tie Rod		



# CHARACTERISTIC CURVES



The capacities shown at the graph are for 760 mmHg atmosphere pressure and service liquid temperature 15 °C . Tolerance of the curves are 10% .