

# LIQUID RING VACUUM PUMPS

Single Stage

GMVT 410/260 - GMVT 410/320 - GMVT 410/400

**Pressure Range : 33 - 1013 mbar**  
**Suction Capacity : 880 - 1700 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.

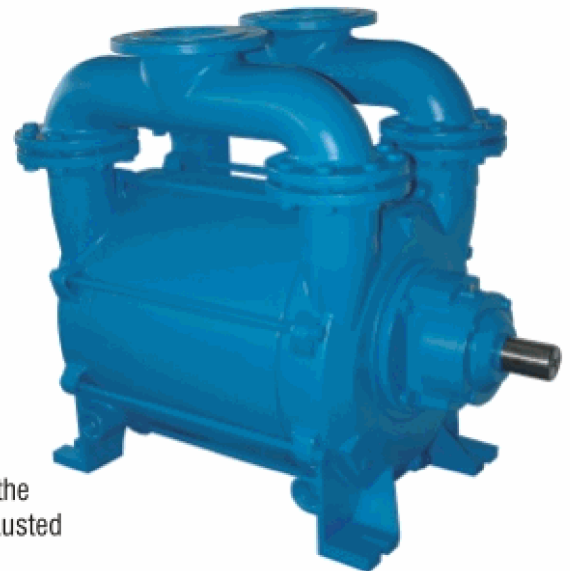
GÜCÜM Single Stage Liquid Ring Vacuum Pumps have the below features:

- \* 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.

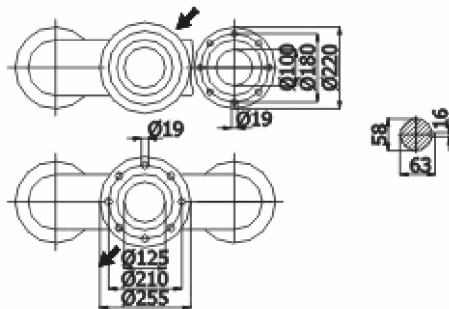
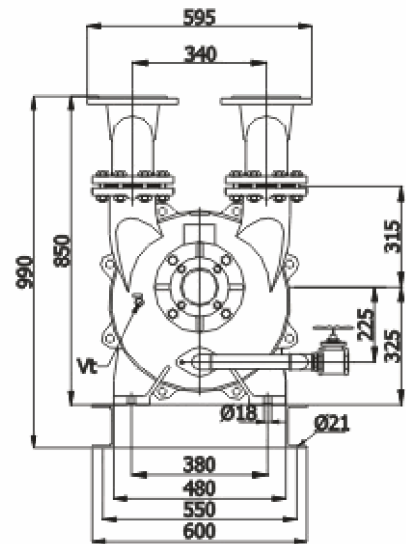
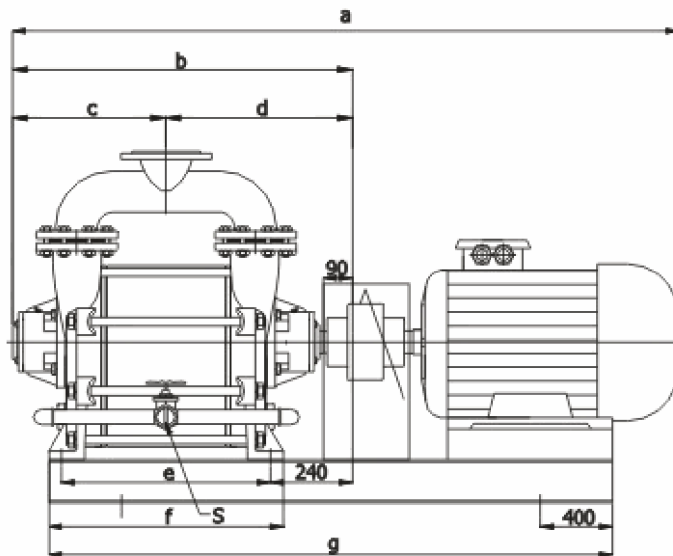
The direction of the rotation is clockwise, when looking from the motor on the pump.



## TECHNICAL PROPERTIES

Properties	Unit	GMVT 410/260	GMVT 410/320	GMVT 410/400
Motor Power	kW	30	37	45
Motor Speed	rpm	980		
Max. Service liquid flow	lt/min	85	90	100
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	78 ±3		
Max. Service liquid density	kg/m <sup>3</sup>	1200		
Max. Flow resistance of the heat exchanger	bar	0,2		

# OVERALL DIMENSIONS



S : Service Liquid Inlet G 1 1/2"  
Vt : Anti-cavitation Valve G 1/2"

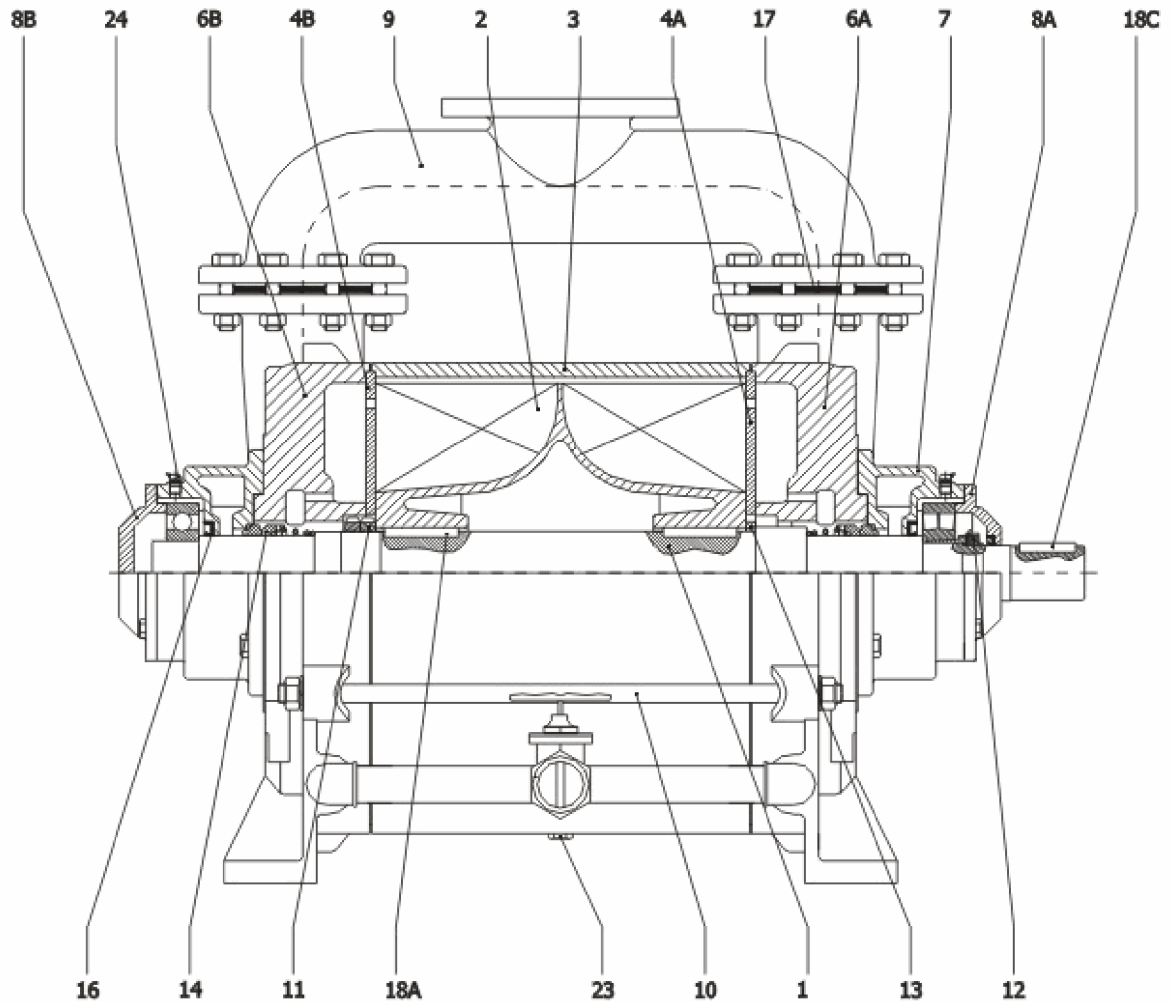
MODEL	a	b	c	d	e	f	g	Weight (bareshaft) kg	Weight (complete with motor) kg
GMVT 410/260	1770	910	410	500	520	590	1470	440	870
GMVT 410/320	1900	970	440	530	580	650	1590	480	1000
GMVT 410/400	2050	1050	480	570	660	730	1760	530	1200

## MATERIALS

Part Name	Standard Construction	Stainless Steel Construction
Suction&Discharge Casing	GG 25 Cast Iron	AISI 304-AISI 316 St. Steel
Plates	AISI 304 St. Steel	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

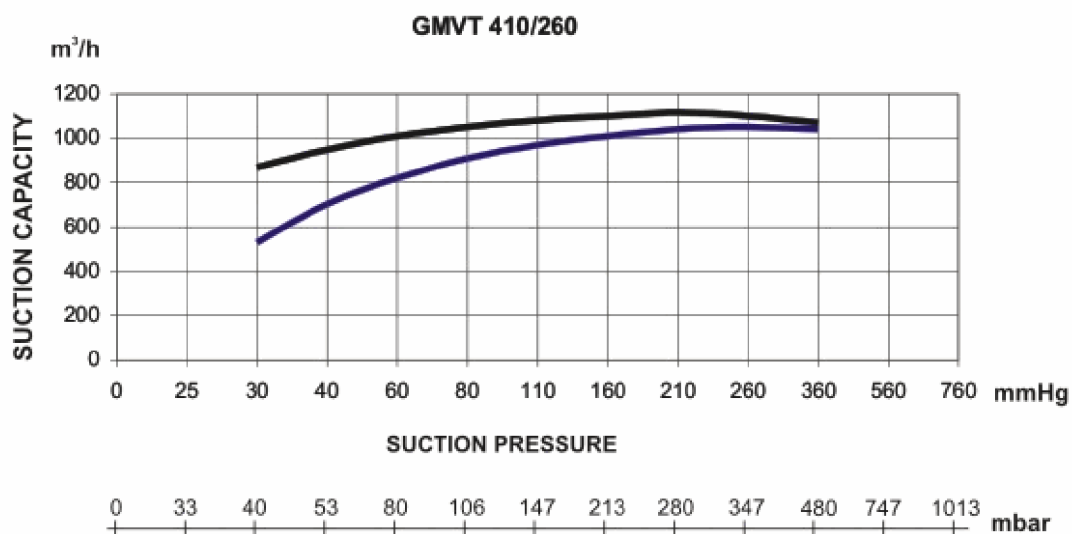
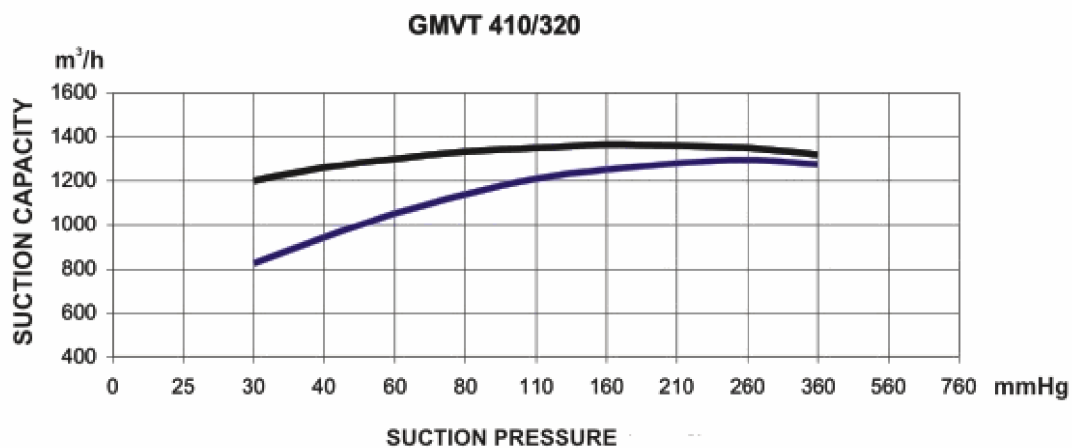
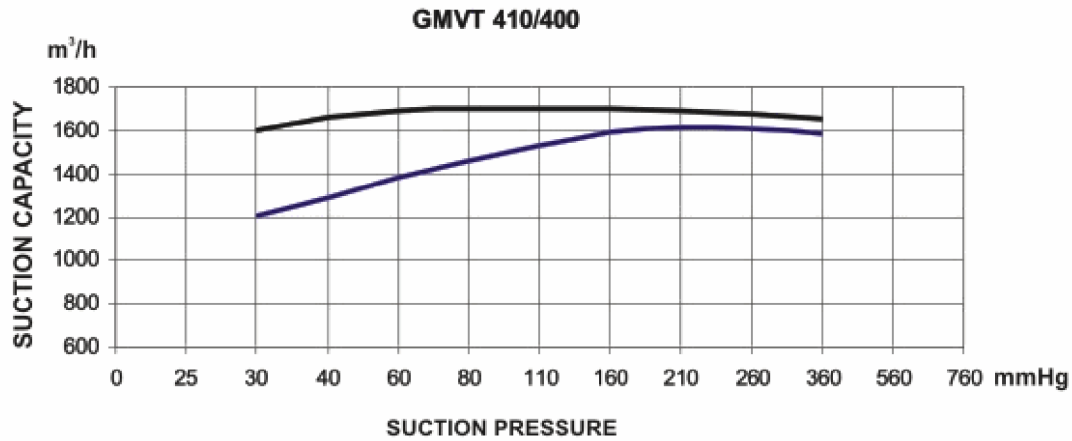
# SECTIONAL DRAWING AND PART LIST

GMVT 410/260 - GMVT 410/320 - GMVT 410/400



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	Back Bearing Cover	23	Plug
9	Brach Pipe	24	Grease-Nipple
10	Tie Rod		

# CHARACTERISTIC CURVES



20 °C water vapour saturated air
  20 °C dry air

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