

LIQUID RING VACUUM PUMPS

Two Stage

GMP 155/040 - GMP 145/080 - GMP 185/080

Pressure Range : 33 - 1013 mbar
Suction Capacity : 20 - 108 m³/h



GÜCÜN Two 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.

GÜCÜN Two 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.

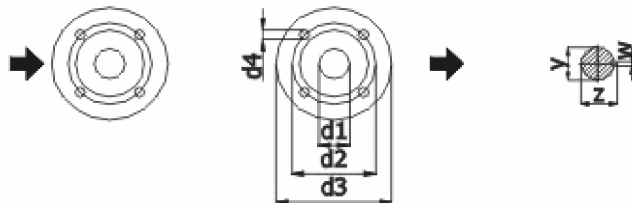
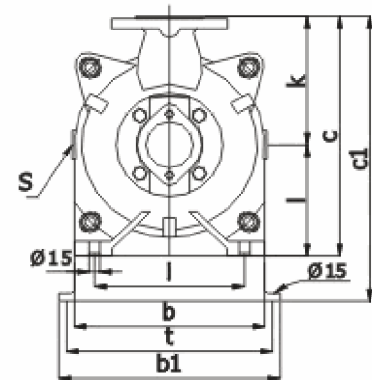
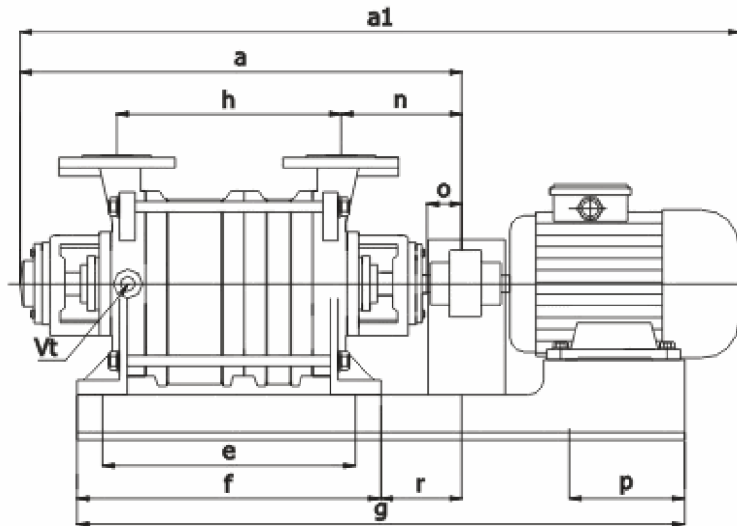
The direction of the rotation is clockwise, when looking from the motor on the pump.



TECHNICAL PROPERTIES

Properties	Unit	GMP 155/040	GMP 145/080	GMP 185/080
Motor Power	kW	2,2	3	4
Motor Speed	rpm	1450		
Max. Service liquid flow	lt/min	4	6	12
Max. Admissible pressure difference	bar	1,1		
Max. Gas temperature	°C	100		
Max. Service liquid temperature	°C	70		
Max. Service liquid viscosity	mm ² /s	4		
Sound pressure level (at 80 mbar suc. pressure)	dB A	67 ±3		
Max. Service liquid density	kg/m ³	1200		
Max. Flow resistance of the heat exchanger	bar	0,2		

OVERALL DIMENSIONS



('): For Mechanical Seal Types
 S : Service Liquid Inlet G 3/8"
 Vt : Anti-Cavitation Valve G 3/8"

MODEL	a	a'	a1	a1'	b	b1	c	c1	e	f	g	h	n	n'	p	Weight (bare shaft) kg	Weight (complete with motor) kg
GMP 155/040	590	490	980	910	215	320	285	340	260	290	790	180	215	165	130	47	85
GMP 145/080	725	635	1100	1000	220	320	278	330	380	420	905	320	220	175	110	57	105
GMP 185/080	690	600	1100	1000	250	350	325	370	375	400	900	295	220	175	105	68	125

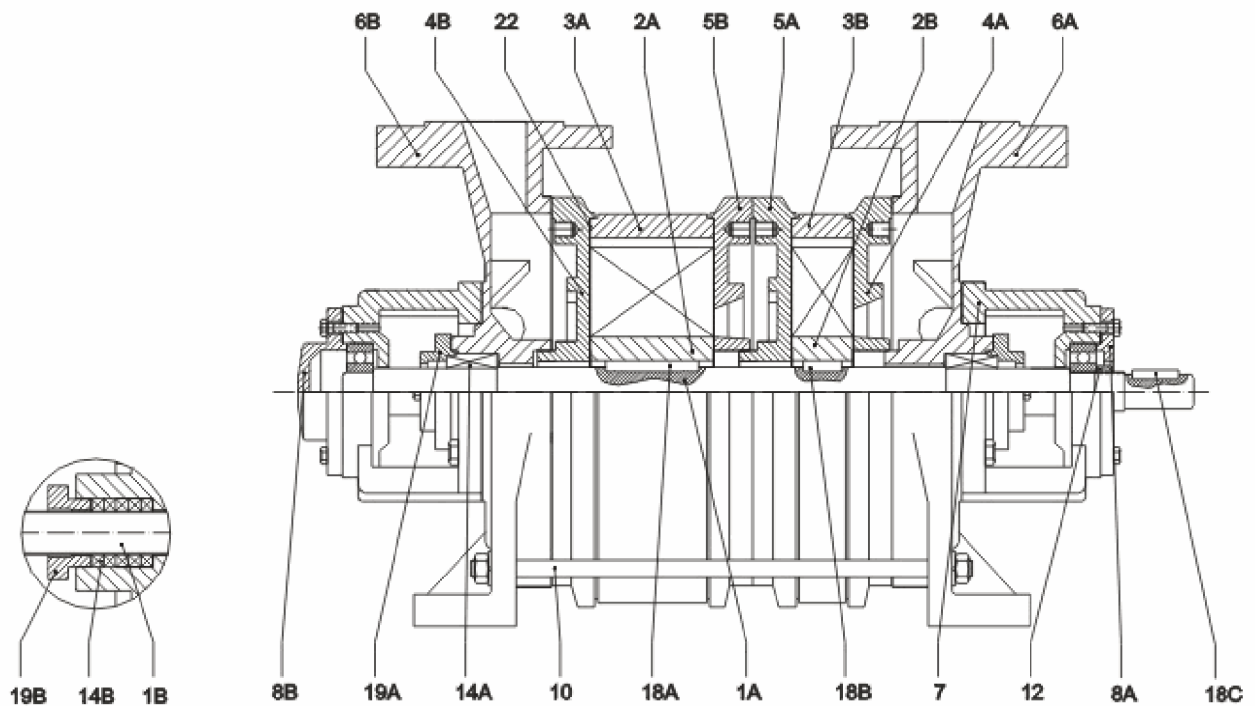
MODEL	d1	d2	d3	d4	i	k	l	t	o	r	r'	y	y'	z	z'	w	w'
GMP 155/040	32	100	125	13	160	155	130	275	50	170	120	24	18	28	21	8	6
GMP 145/080	32	100	130	13	170	145	133	280	50	180	135	24	18	28	21	8	6
GMP 185/080	40	110	150	15	200	175	150	310	60	160	135	24	22	28	26	8	8

MATERIALS

Part Name	Standard Construction	Stainless 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	GGG 40 Sph. Cast Iron	AISI 304-AISI 316 St. Steel
Shaft	AISI 420 Stainless Steel	AISI 304-AISI 316 St. Steel
Impellers	G Cu Sn 9 Bronze	AISI 304-AISI 316 St. Steel
Mechanical Seal	Si. Carbide/ Carbon/Viton	Cr Ni Mo Steel/Carbon/Viton

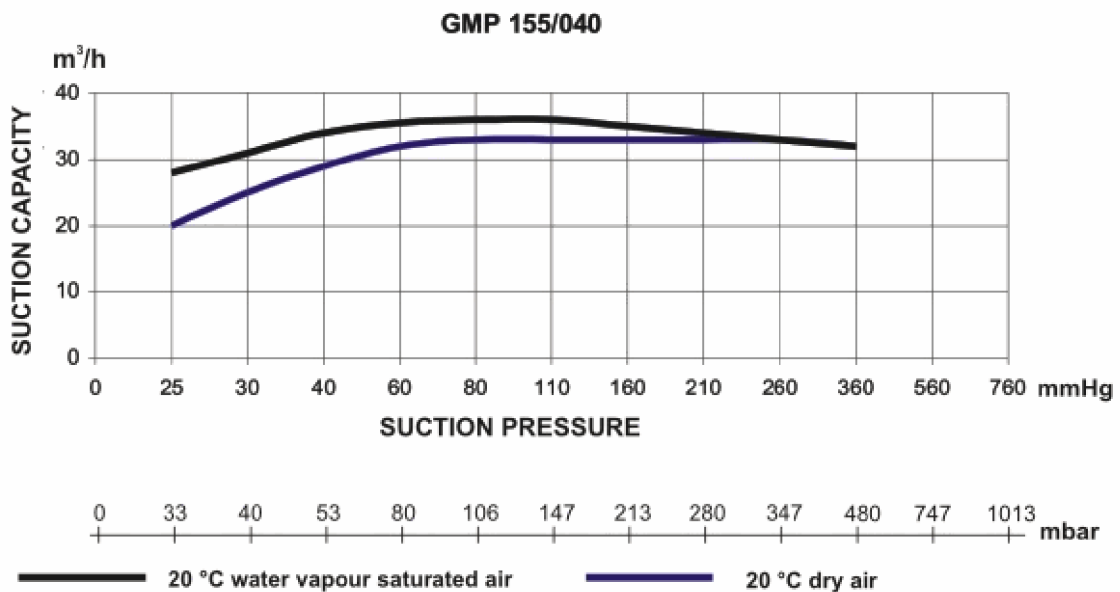
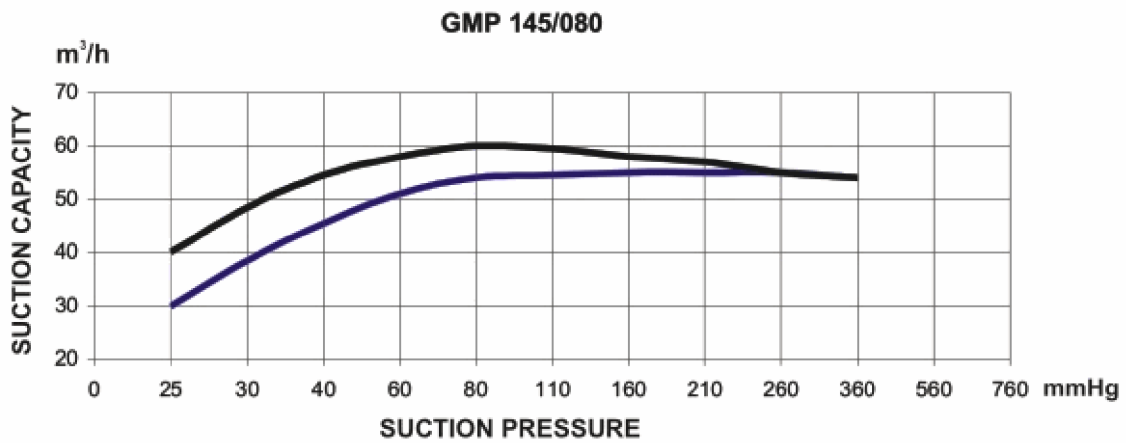
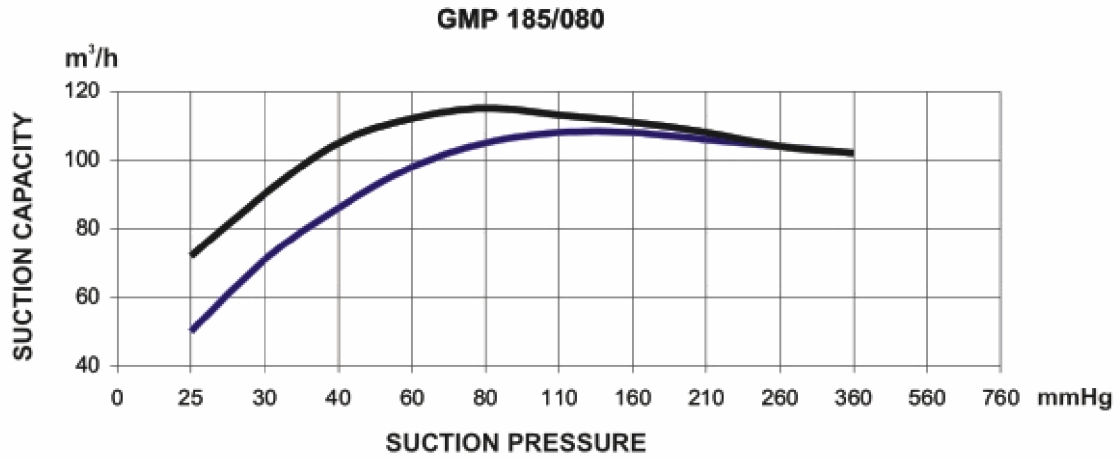
SECTIONAL DRAWING AND PART LIST

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No	Part Name	No	Part Name
1A	Shaft (Mechanical Seal)	8A	Bearing Cover
1B	Shaft (Soft Packing)	8B	Bearing End Cover
2A	First Impeller	10	Tie Rod
2B	Second Impeller	12	Bearing Nut
3A	First Casing	14 A	Mechanical Seal
3B	Second Casing	14 B	Soft Packing
4A	Suction Plate	18 A	First Impeller Key
4B	Discharge Plate	18 B	Second Impeller Key
5A	First Intermediate Plate	18 C	Coupling Key
5B	Second Intermediate Plate	19 A	Mec. Seal Cover
6A	Suction Casing	19 B	Gland
6B	Discharge Casing	22	Paper Gasket
7	Bearing Carrier		

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% .