

CHEMICAL PUMPS SINCE 1992

# MAG-DRIVE ROTARY VANE PUMPS

## SEAL-LESS MAG DRIVE VANE PUMPS

In seal-less magnetic drive vane pumps, the external magnet is directly connected to the motor shaft and it transmits the torque to the internal magnet. The magnetic field created produces a rotation without physical contact between the parts and the rotor spins. The vanes inside the rotor slide in and out of their seat and they move the fluid. The rear casing is placed between the two magnet joints and it hermetically closes the hydraulic part from the motor.

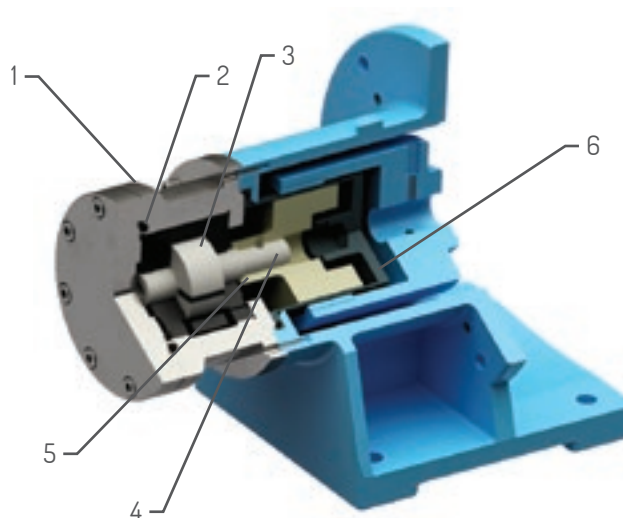
GemmeCotti can supply two different models of volumetric pumps:

### HPP/HPF

- Thermoplastic pumps made in PP or PVDF.
- Capacity up to 1000 l/h.
- Pressure up to 5 bar.

### HTP

- Metallic pumps made in stainless steel AISI316.
- Capacity up to 2100 l/h.
- Pressure up to: 13 bar.
- Dry self-priming.



33

MATERIALS IN CONTACT WITH THE LIQUID		
PART NUMBER - DESCRIPTION	VANE PUMPS	
	HPP/HPF	HTP
1 - PUMP BODY+ COVER	PP OR PVDF	AISI 316
2- O-RING	EPDM OR VITON	EPDM OR VITON
3- FLANGES STATOR VANES + PINS	PVDF + GRAPHITE	GRAPHITE
4- ROTOR SHAFT	PVDF	AISI 316
5- INTERNAL MAGNET	PP OR PVDF + NdFeB	AISI 316 + SmCo
6- REAR CASING	PP OR PVDF	AISI 316

## THERMOPLASTIC MAG-DRIVE ROTARY VANE PUMPS



### SYSTEM PRESSURE

8 bar.

### STANDARD

- High torque magnetic coupling.
- Direct starting motor.

### OPTIONAL

- Flanges available.
- Dry-running protection.
- Baseplate.

### MAIN FEATURES

Mag drive rotary vane pumps series HPP-HPF are made of thermoplastic materials (PP/PVDF) and are suitable for corrosive liquids, alkalis, toxic, noxious and carcinogenic fluids.

Thanks to the innovative mag drive system, pumps model HPP-HPF reduce the risks of leakage and the maintenance costs. HPP-HPF pumps are useful for low flow and high head applications such as Pilot Plants and Sampling.

### MATERIALS AVAILABLE

- PP, PVDF.
- Materials in contact with the liquid: casing, end cover, internal magnet and rear casing: PP/PVDF; o-ring: EPDM (standard for PP pumps); VITON (standard for PVDF pumps).
- Graphite Stator.
- Rotor shaft: PVDF.

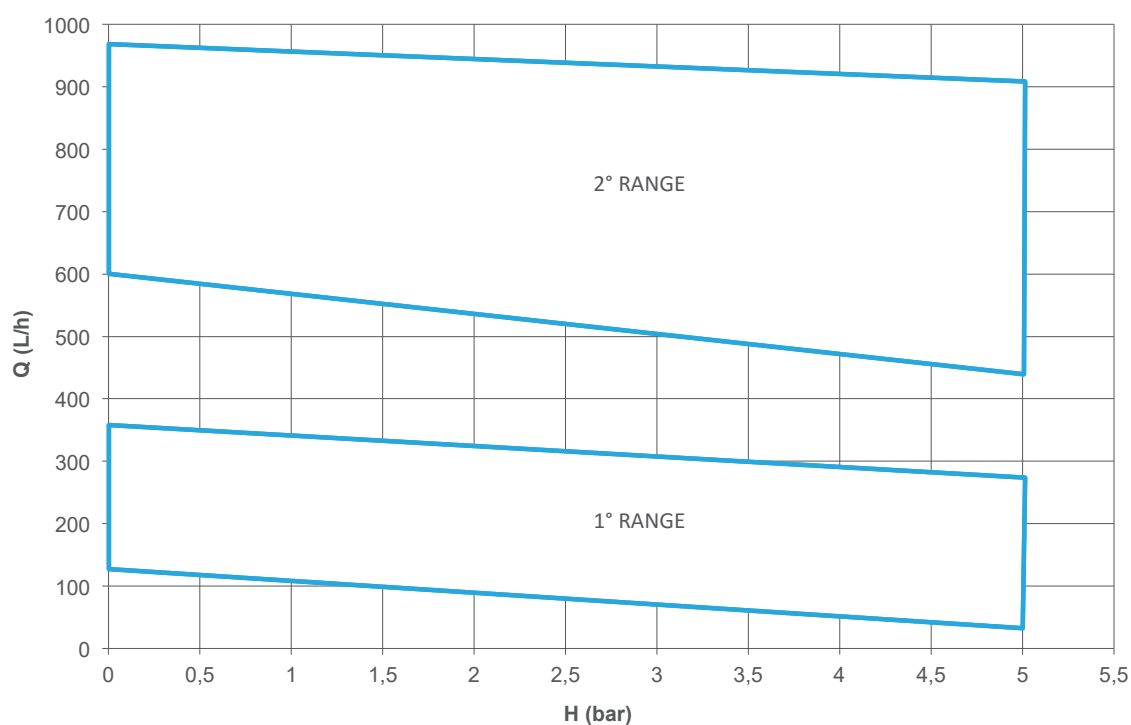
### PERFORMANCES

Max flow 1000 l/h. Max pressure 5 bar.

### TEMPERATURE

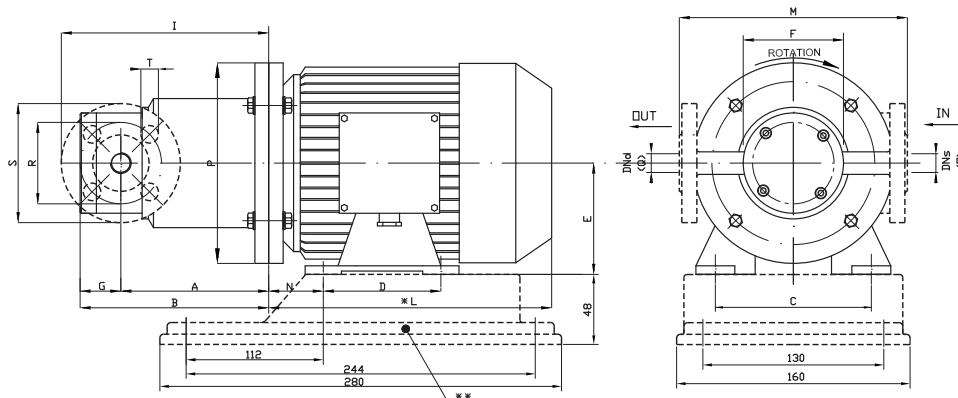
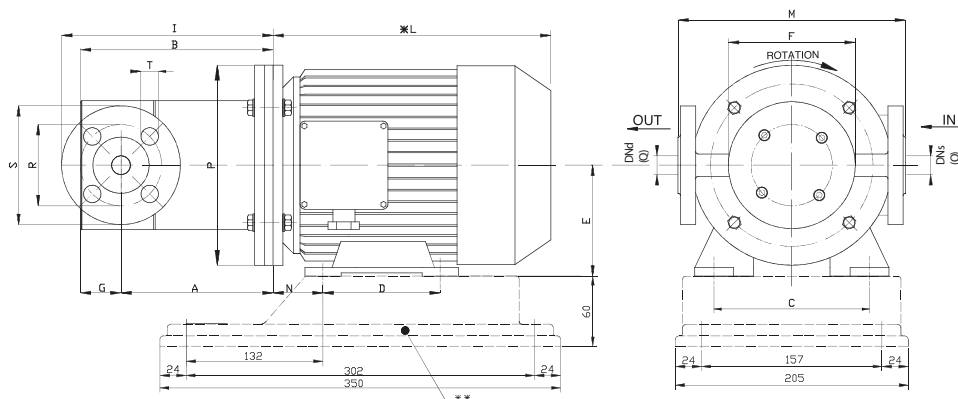
PP: max 70°C - PVDF: max 90°C.

## PERFORMANCE CURVES 50HZ - 1450 RPM



## HPP/HPF TECHNICAL DATA

PUMP SIZE	MATERIAL	Q MAX		H MAX		SUCTION CONNECTION	DISCHARGE CONNECTION	PUMP WEIGHT (KG)		SUITABLE MOTOR POWER (KW) - 1450 rpm	MOTOR FLANGE AND FRAME
		50HZ (l/h)	60HZ (usgpm)	50HZ (bar)	60HZ (PSI)			PP	PVDF		
HPP/HPF 100 1'R	PP- PVDF	120	0.66	5	72	3/8" FEMALE	3/8" FEMALE	2.9	3.2	0,37	71 - B3/B5
HPP/HPF 200 1'R	PP- PVDF	200	1.1	5	72	3/8" FEMALE	3/8" FEMALE	2.9	3.2	0,37	71 - B3/B5
HPP/HPF 300 1'R	PP- PVDF	290	1.5	5	72	3/8" FEMALE	3/8" FEMALE	2.9	3.2	0,37	71 - B3/B5
HPP/HPF 400 1'R	PP- PVDF	360	1.85	5	72	3/8" FEMALE	3/8" FEMALE	2.9	3.2	0,37	71 - B3/B5
HPP/HPF 600 2'R	PP- PVDF	600	2.5	5	72	1/2" FEMALE	1/2" FEMALE	7	7.5	1,5	90 - B3/B5
HPP/HPF 800 2'R	PP- PVDF	800	3	5	72	1/2" FEMALE	1/2" FEMALE	7	7.5	1,5	90 - B3/B5
HPP/HPF 1000 2'R	PP- PVDF	990	3.5	5	72	1/2" FEMALE	1/2" FEMALE	7	7.5	1,5	90 - B3/B5

HPP-HPF 1° RANGE  
DIMENSIONSHPP-HPF 2° RANGE  
DIMENSIONS

PUMP TYPE	FLANGES DIMENSIONS - mm - DN 15 PN 16				
	R	S	T	DNs	DNd
HPP-HPF 1° RANGE	65	95	14	15	15

PUMP TYPE	FLANGES DIMENSIONS - mm - DN 20 PN 16				
	R	S	T	DNs	DNd
HPP-HPF 2° RANGE	75	105	14	20	20

PUMP TYPE	MOTOR FLANGE B3 - B5	KW	DIMENSIONS - mm -												
			A	B	C	D	E	F	G	I	*L	M	N	O	P
HPP-HPF 1° RANGE	71-4B	0,37	128	164	112	90	71	90	36	175	215	182	45	3/8"G.	160
HPP-HPF 2° RANGE	90-52	1,5	169	213	140	100	90	127	44	222	255	218	56	1/2"G.	200

\* Different according to the manufacturer.

\*\* OPTIONAL UPON REQUEST: Baseplate - Flanges.

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