

CHEMICAL PUMPS SINCE 1992



**GENERAL
CATALOGUE**

2025 | 2026

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.

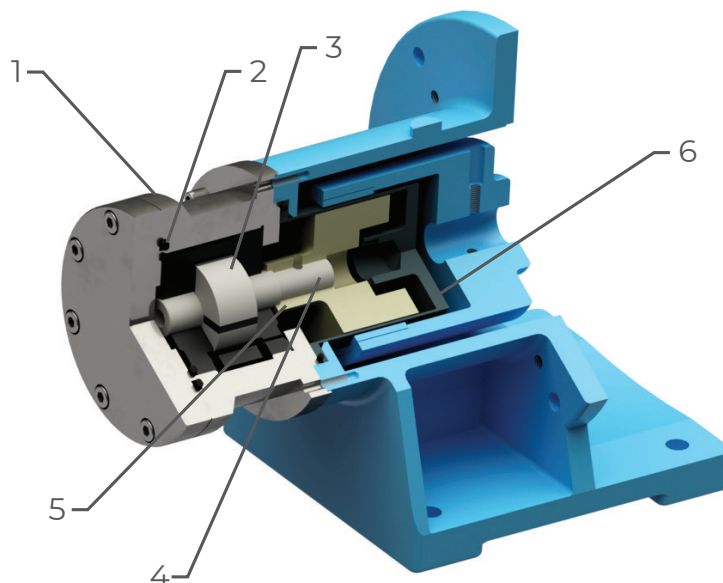
GemmeCotti supplies two different models of volumetric pumps:

HPP/HPF PP/PVDF

- Thermoplastic pumps made of PP or PVDF.
- Capacity up to 980 L/h.
- Pressure up to 5 bar.

HTP AISI 316

- Metallic pumps made of stainless steel AISI 316.
- Capacity up to 2100 L/h.
- Pressure up to 13 bar.
- Dry self-priming.



PART NUMBER - DESCRIPTION	MATERIALS IN CONTACT WITH THE LIQUID	
	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



STANDARD

- High torque magnetic coupling.
- Direct starting motors.

OPTIONAL

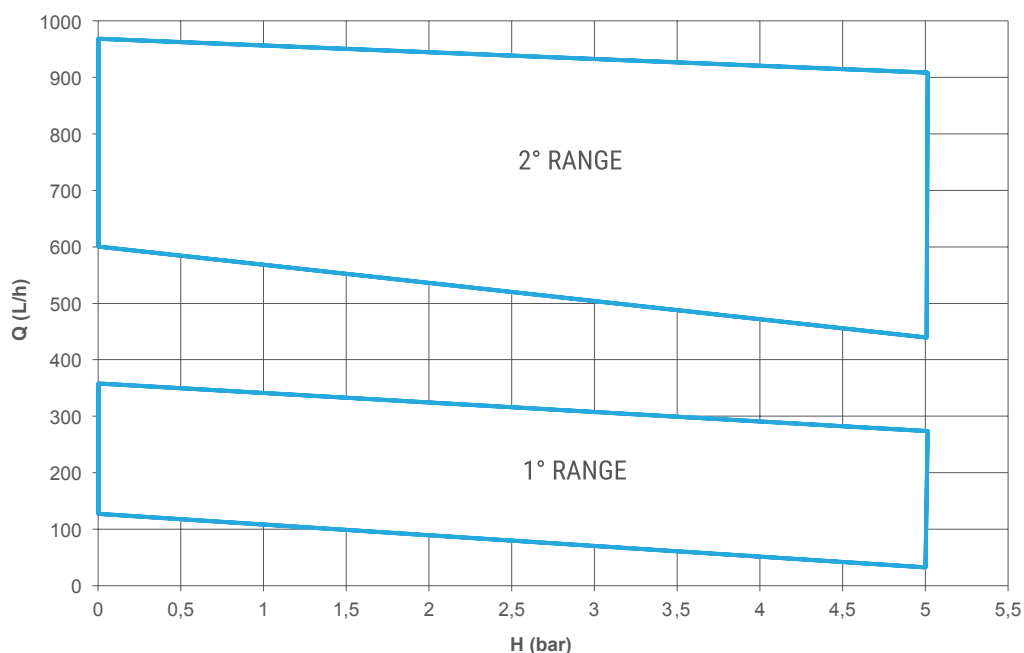
- Flanges available (DIN or ANSI).
- Dry-running protection device.
- Baseplate.
- Available in ATEX version for zone 2 II 3G (pump mod. EM-P PP/PVDF).

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.

MAIN FEATURES

- **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.
- **Max flow:** 980 L/h; **Max pressure** 5 bar.
- **Temperature:** PP: max 70°C - PVDF: max 90°C.
- **System pressure:** NP 5 bar at 20°C.

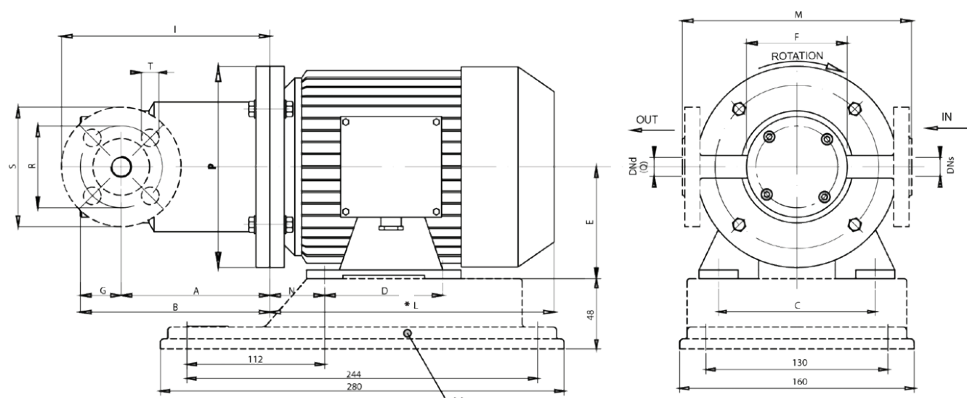
PERFORMANCE CURVES 50Hz - 1450 RPM



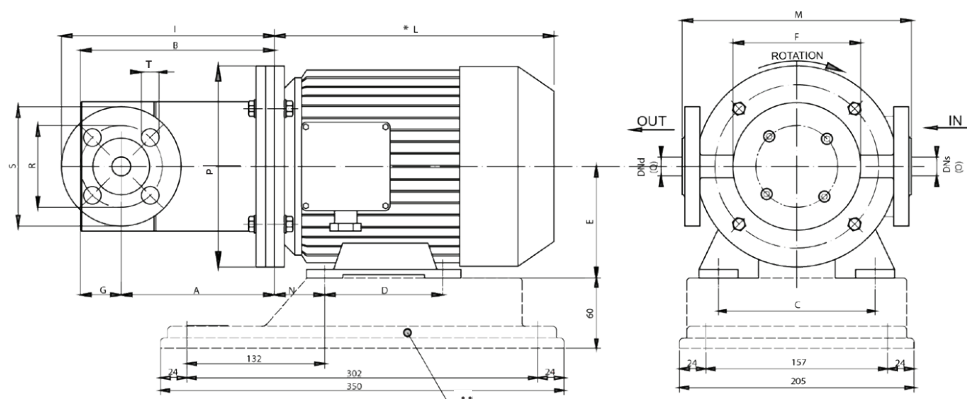
HPP/HPF TECHNICAL DATA

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	1.8	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	980	3.5	5	72	1/2" FEMALE	1/2" FEMALE	7	7.5	1.5	90 - B3 / B5

HPP-HPF 1° RANGE



HPP-HPF 2° RANGE



DIMENSIONS - mm -

PUMP TYPE	MOTOR FLANGE B3 - B5	kW	DIMENSIONS - mm -														FLANGES DIMENSIONS - mm -				
			A	B	C	D	E	F	G	I	*L	M	N	O	P	Q	R	S	T	DNs	DNd
HPP-HPF 1° RANGE	714B	0.37	128	164	112	90	71	90	36	176	215	182	45	3/8" FEMALE	160	3/8" FEMALE	65	95	14	15	15
HPP-HPF 2° RANGE	90S2	1.1 / 1.5	179	223	140	100	90	127	44	232	255	218	56	1/2" FEMALE	200	1/2" FEMALE	75	105	14	20	20

* Different according to the manufacturer. ** OPTIONAL UPON REQUEST: DIN or ANSI Flanges and Baseplates.



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