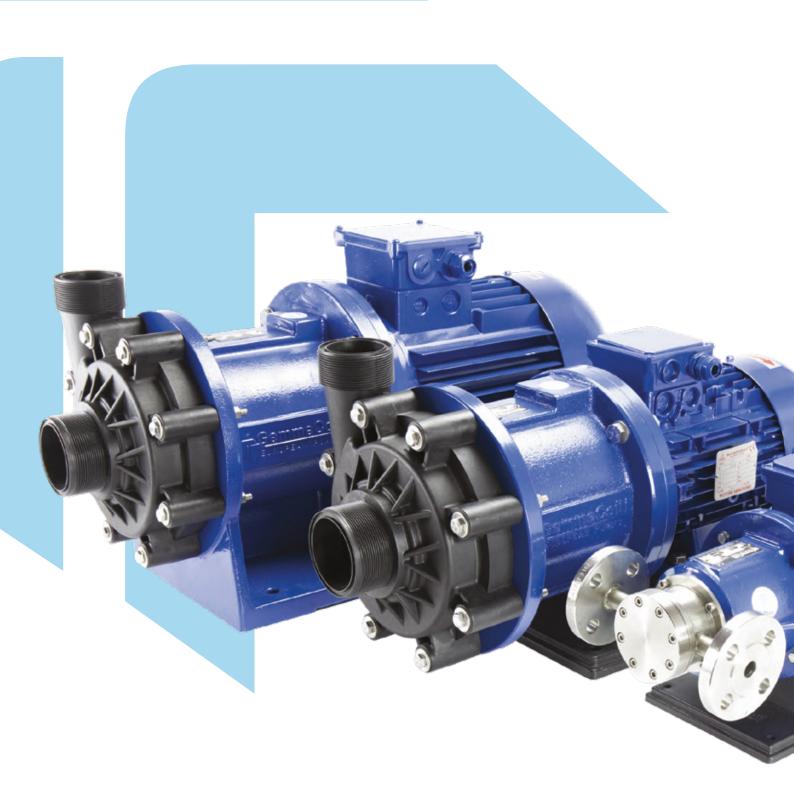
CHEMICAL PUMPS SINCE 1992





GENERAL 2022/23

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.

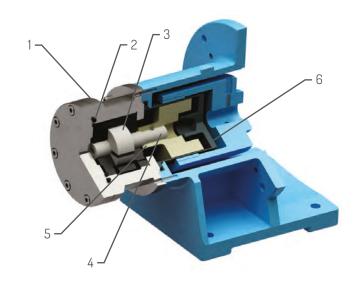
GemmeCotti supplies two different models of volumetric pumps:

HPP/HPF

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

HTP

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



| MATERIALS IN CONTACT WITH THE LIQUID | | | | | | | | | | | |
|--------------------------------------|--------------------|-----------------|--|--|--|--|--|--|--|--|--|
| PART NUMBER - DESCRIPTION | VANE | PUMPS | | | | | | | | | |
| PART NUMBER - DESCRIPTION | HPP/HPF | НТР | | | | | | | | | |
| 1 – PUMP BODY+ COVER | PP OR PVDF | AISI 316 | | | | | | | | | |
| 2- 0-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

5 bar.

STANDARD

- · High torque magnetic coupling.
- Direct starting motor.

OPTIONAL

- Flanges available (DIN or ANSI).
- Dry-running protection device.
- Baseplate.
- Available in ATEX version for zone 2 II3G (pump mod. EM-P PP/PVDF).

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.

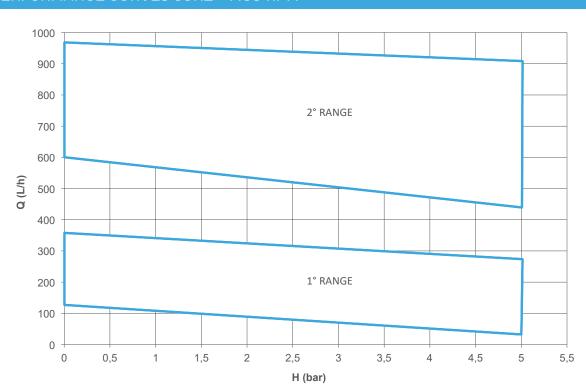
PERFORMANCES

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

TEMPERATURE

PP: max 70°C - PVDF: max 90°C.

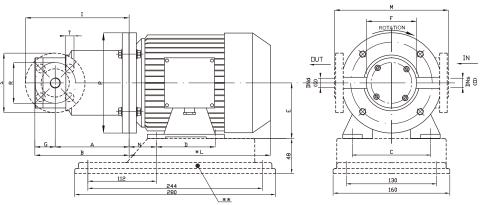
PERFORMANCE CURVES 50HZ - 1450 RPM



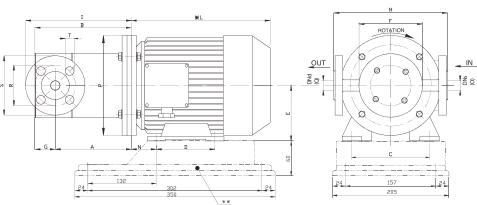
HPP/HPF TECHNICAL DATA

| PUMP | I MATERIAL | Q MAX | | H MAX S | | SUCTION DISCHARGE PU | | PUMP WEIGHT (KG) | | SUITABLE MOTOR | MOTOR FLANGE | |
|------------------|------------|------------|--------------|------------|------------|----------------------|-------------|------------------|------|-----------------------|--------------|--|
| SIZE | MATERIAL | 50HZ (I/h) | 60HZ (usgpm) | 50HZ (bar) | 60HZ (PSI) | CONNECTION | CONNECTION | PP | PVDF | P0WER (KW) - 1450 rpm | AND FRAME | |
| 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 DIMENSIONS



HPP-HPF 2° RANGE DIMENSIONS



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

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

| PUMP TYPE | MOTOR FLANGE | KW | | | | | | [| IMENS | SIONS - | mm - | | | | | |
|------------------|-----------------|------|-----|-----|-----|-----|----|-----|-------|---------|------|-----|----|--------|-----|--------|
| | B3 - B5 | I KW | Α | В | С | D | Ε | F | G | 1 | *L | М | N | 0 | Р | Q |
| HPP-HPF 1° RANGE | 71-4B | 0,37 | 128 | 164 | 112 | 90 | 71 | 90 | 36 | 175 | 215 | 182 | 45 | 3/8"G. | 160 | 3/8"G. |
| HPP-HPF 2° RANGE | 90-S2 | 1,5 | 169 | 213 | 140 | 100 | 90 | 127 | 44 | 222 | 255 | 218 | 56 | 1/2"G. | 200 | 1/2"G. |

 $[\]ensuremath{^{\star}}$ Different according to the manufacturer.

^{**} OPTIONAL UPON REQUEST: Baseplate - Flanges.



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