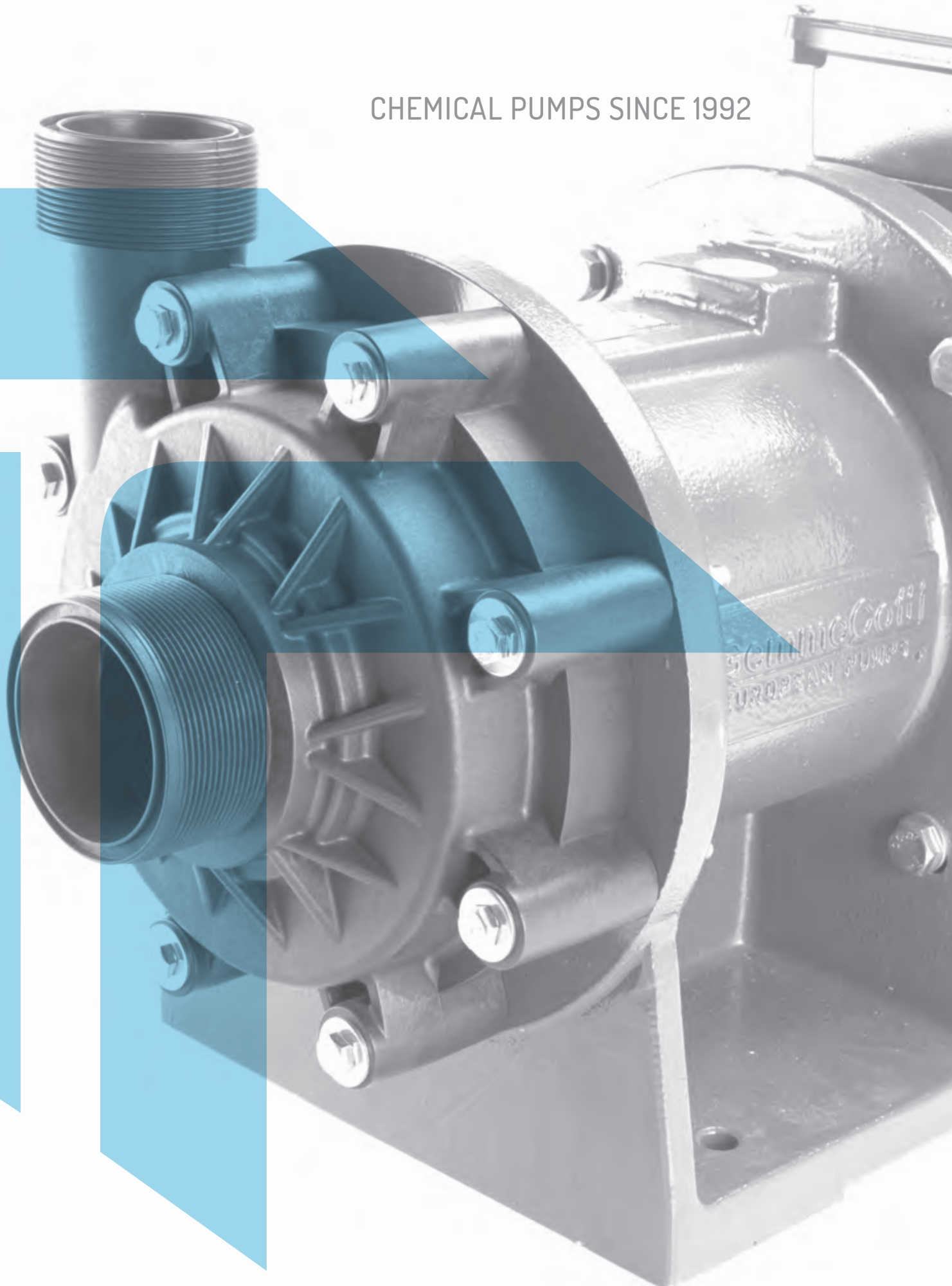


CHEMICAL PUMPS SINCE 1992



MAG-DRIVE CENTRIFUGAL PUMPS

SEAL-LESS MAG DRIVE CENTRIFUGAL PUMPS

In seal-less magnetic drive centrifugal 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 so the impeller spins and moves 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 three different models of mag drive centrifugal pumps:

HTM PP/PVDF

- Thermoplastic pumps made in PP or PVDF.
- Capacity up to 45 m³/h.
- Head up to 33 mlc.
- Injection molded parts.

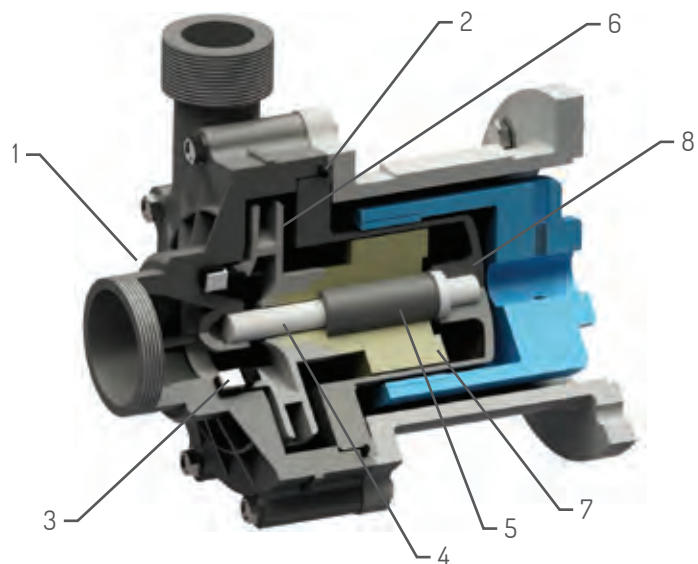
HCM

- Thermoplastic pumps made in PP or PVDF.
- Capacity up to 130 m³/h.

- Head up to 48 mlc.
- Pump head machined from a block.

HTM SS 316

- Metallic pumps made in stainless steel AISI316.
- Capacity up to 32 m³/h.
- Head up to: 24 mlc.



MATERIALS IN CONTACT WITH THE LIQUID

| PART NUMBER - DESCRIPTION | CENTRIFUGAL PUMPS | | |
|---------------------------|--|--|-----------------|
| | HTM PP/PVDF | HCM | HTM SS 316 |
| 1 - PUMP HEAD | PP OR PVDF | PP OR PVDF | AISI 316 |
| 2 - O-RING | EPDM OR VITON | EPDM OR VITON | EPDM OR VITON |
| 3 - CASING THRUST BUSH | CERAMIC Al ₂ O ₃ + EPDM OR VITON | CERAMIC Al ₂ O ₃ + EPDM OR VITON | PTFEC |
| 4 - SHAFT | CERAMIC Al ₂ O ₃ 99,7% | CERAMIC Al ₂ O ₃ 99,7% | HASTELLOY-C 276 |
| 5 - BEARINGS | PTFEC | PTFEC | PTFEC |
| 6 - IMPELLER | PP OR PVDF | PP OR PVDF | AISI 316 |
| 7 - INTERNAL MAGNET | PP OR PVDF + NdFeB | PP OR PVDF + NdFeB | AISI 316 + SmCo |
| 8 - REAR CASING | PP OR PVDF | PP OR PVDF | AISI 316 |

THERMOPLASTIC MAG-DRIVE CENTRIFUGAL PUMPS



STANDARD:

- Gas threaded In and Out connections.
- Direct starting motor.

OPTIONAL:

- Flanges available.
- Dry-running protection.
- Baseplate.
- Silicon carbide sleeve bearing.
- HTM pumps are available also for NEMA motors and with NPT connections.

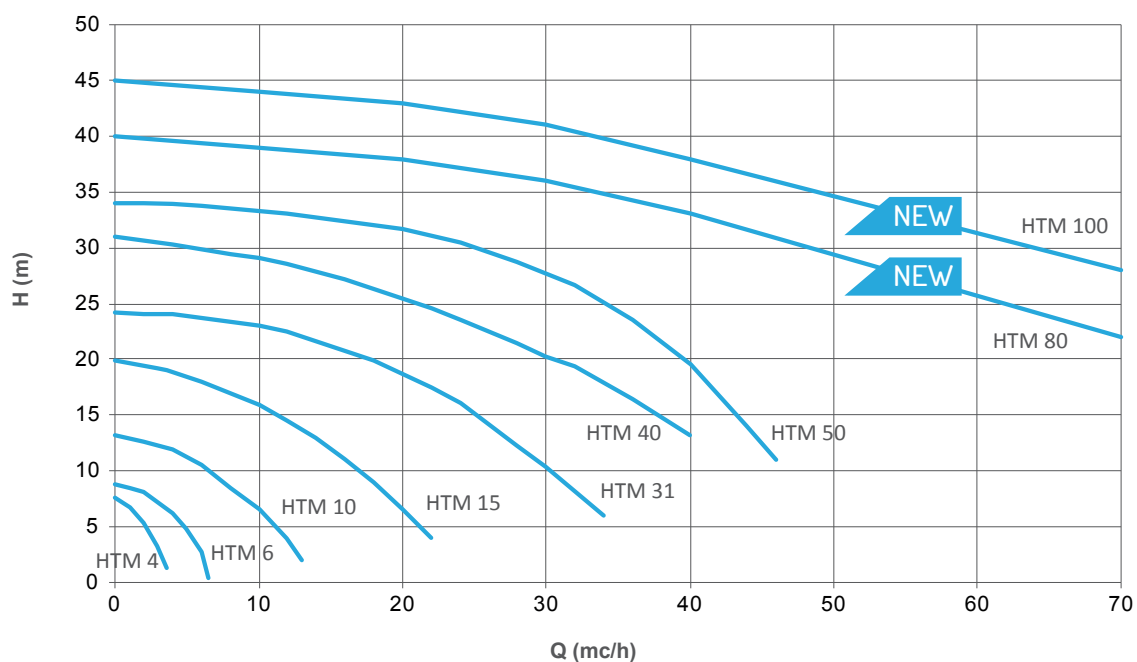
MAIN FEATURES

Mag drive centrifugal pumps series HTM PP/PVDF are made of thermoplastic materials (Polypropylene and PVDF) and are suitable for high corrosive liquids. Thanks to the innovative mag drive system, pumps model HTM PP/PVDF reduce the risks of leakage and emissions and the maintenance costs.

The transmission of the motion occurs through magnetic joints without any mechanical seal and this design guarantees the maximum safety and efficiency. The pumped liquid has to be clean and without solids in suspension.

- Materials available: PP / PVDF.
- Materials in contact with the liquid; casing and impeller: PP/PVDF; o-ring: EPDM (standard for PP pumps); VITON (standard for PVDF pumps); static shaft: Al203 99,7 %; Bushing PTFEC.
- Max flow: 45 m³/h; Max head 33 mlc.
- Temperature: PP: max 70°C – PVDF: max 90°C.
- Max viscosity: 200 cSt.
- Pressure rating: NP 6 at 20°C.
- High torque magnetic coupling NdFeB standard.
- Suitable for high corrosive liquids.

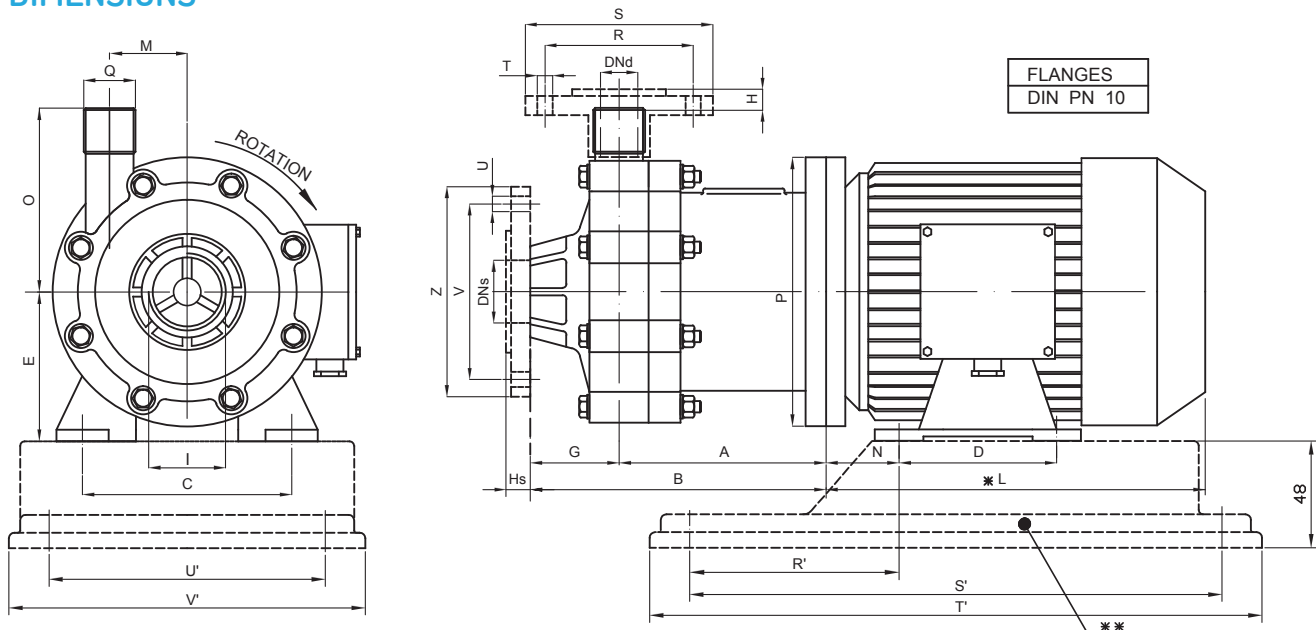
PERFORMANCE CURVES 50HZ - 2900 RPM



HTM PP/PVDF TECHNICAL DATA

| PUMP SIZE | MATERIAL | Q MAX | | H MAX | | SUCTION CONNECTION | DISCHARGE CONNECTION | PUMP WEIGHT (KG) | | SUITABLE MOTOR POWER (KW) 2900 rpm / FLANGE AND FRAME |
|-----------|----------|-------------|--------------|------------|-----------|--------------------|----------------------|------------------|------|--|
| | | 50HZ (M3/H) | 60HZ (USGPM) | 50HZ (MLC) | 60HZ (FT) | | | PP | PVDF | |
| HTM 4 | PP- PVDF | 3,5 | 16 | 7 | 33 | 1" FEMALE | 1/2" MALE | 0.9 | 1 | 0,12 / 56 B - B3/B5 |
| HTM 6 | PP- PVDF | 6,5 | 30 | 8,5 | 42 | 1" FEMALE | 3/4" MALE | 1.6 | 1.8 | 0,25 / 63 B - B3/B5 |
| HTM 10 | PP- PVDF | 13 | 68 | 14 | 58 | 1 1/2" FEMALE | 1" MALE | 2.6 | 2.9 | 0,55 / 71 2B - B3/B5 • 1,1 / 80 B - B3/B5 |
| HTM 15 | PP- PVDF | 23 | 125 | 20 | 90 | 2" MALE | 1 1/2" MALE | 5.8 | 6.6 | 1,1 / 80 B - B3/B5 • 1,5 / 90 S - B3/B5 |
| HTM 31 | PP- PVDF | 35 | 185 | 24 | 115 | 2 1/2" MALE | 2" MALE | 8.0 | 8.9 | 2,2 / 90 L - B3/B5 • 3 / 100 L - B3/B5 • 4 / 112 M - B3/B5 |
| HTM 40 | PP- PVDF | 42 | 215 | 31 | 150 | 3" MALE | 2 1/2" MALE | 19.7 | 21.3 | 3 / 100 L - B3/B5 • 4 / 112 M - B3/B5 |
| HTM 50 | PP- PVDF | 43 | 220 | 33 | 160 | 3" MALE | 2 1/2" MALE | 32.2 | 35 | 5,5 / 132 S2A - B5 • 7,5 / 132 S2B - B5 |

HTM 4-6-10 PP/PVDF DIMENSIONS

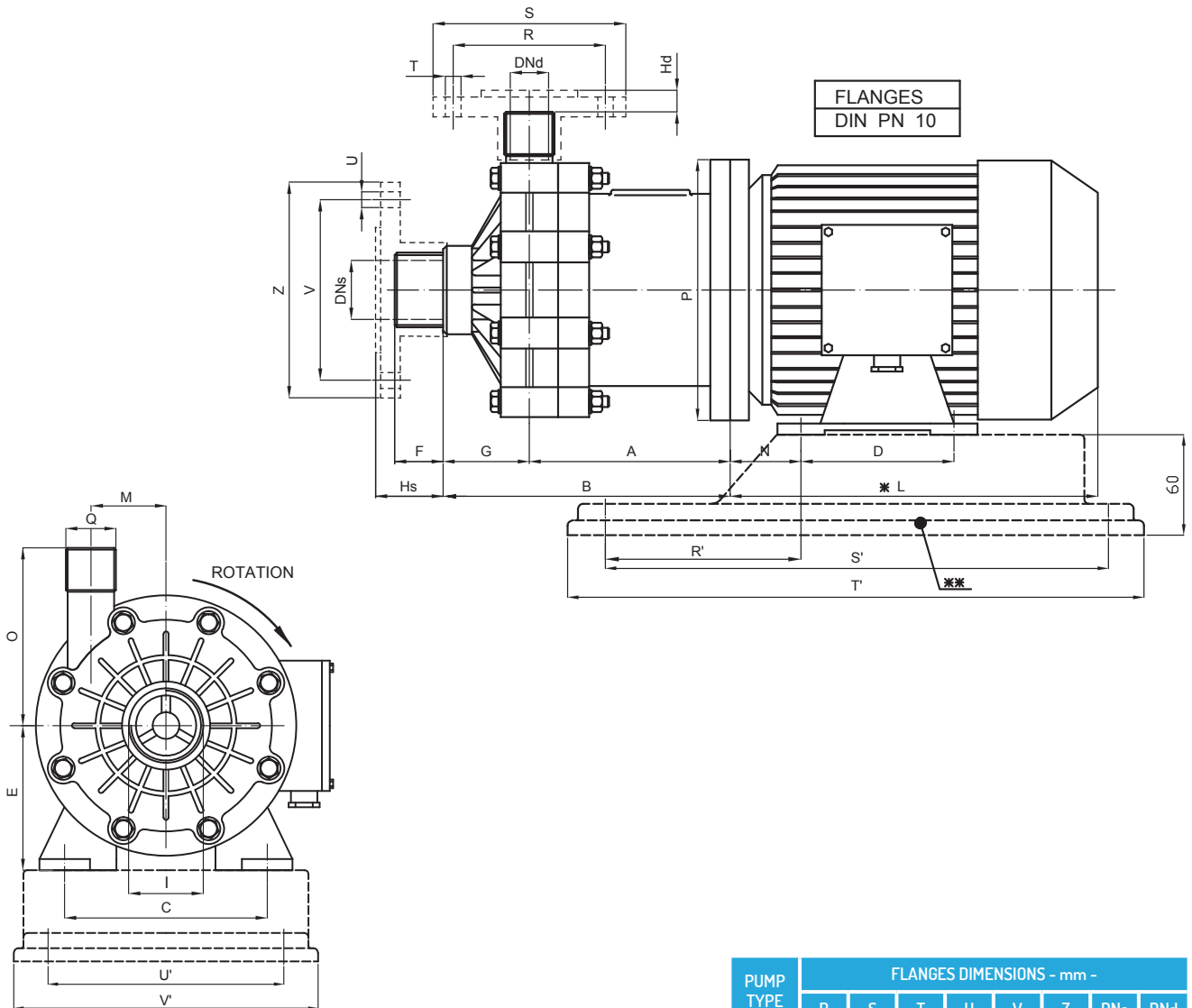


| PUMP TYPE | FLANGES DIMENSIONS - mm - | | | | | | | |
|-----------|---------------------------|-----|----|----|-----|-----|-----|-----|
| | R | S | T | U | V | Z | DNs | DNd |
| HTM 4 | - | - | - | - | - | - | - | - |
| HTM 6 | 75 | 105 | 14 | 14 | 85 | 115 | 25 | 20 |
| HTM 10 | 85 | 115 | 14 | 18 | 110 | 150 | 40 | 25 |

| PUMP TYPE | MOTOR FLANGE B3 - B5 | KW | DIMENSIONS - mm - | | | | | | | | | | | | | BASEPLATE DIMENSIONS - mm - | | | | | | |
|-----------|----------------------|------|-------------------|-----|-----|-----|----|----|----|---|---------------|-----|----|----|-----|-----------------------------|-----------|-----|-----|-----|-----|-----|
| | | | A | B | C | D | E | Hs | G | H | I | L* | M | N | O | P | Q | R' | S' | T' | U' | V' |
| HTM 4 | 56 B | 0.12 | 76 | 115 | 90 | 71 | 56 | - | 39 | - | 1" FEMALE | 176 | 34 | 36 | 80 | 120 | 1/2" MALE | 94 | 244 | 280 | 130 | 160 |
| HTM 6 | 63 B | 0.25 | 84 | 143 | 100 | 80 | 63 | 18 | 59 | 6 | 1" FEMALE | 191 | 45 | 40 | 98 | 140 | 3/4" MALE | 102 | 244 | 280 | 130 | 160 |
| HTM 10 | 71 2B | 0.55 | 110 | 180 | 112 | 90 | 71 | 20 | 70 | 9 | 1 1/2" FEMALE | 215 | 45 | 45 | 100 | 160 | 1" MALE | 112 | 244 | 280 | 130 | 160 |
| HTM 10 | 80B | 1.1 | 122 | 190 | 125 | 100 | 71 | 20 | 70 | 9 | 1 1/2" FEMALE | 232 | 45 | 50 | 100 | 200 | 1" MALE | - | - | - | - | - |

* Different according to the manufacturer. ** OPTIONAL UPON REQUEST: Baseplate - Flanges.
 NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.
 PUMPS AVAILABLE THREADED OR FLANGED.

HTM 15-31-40 PP/PVDF DIMENSIONS



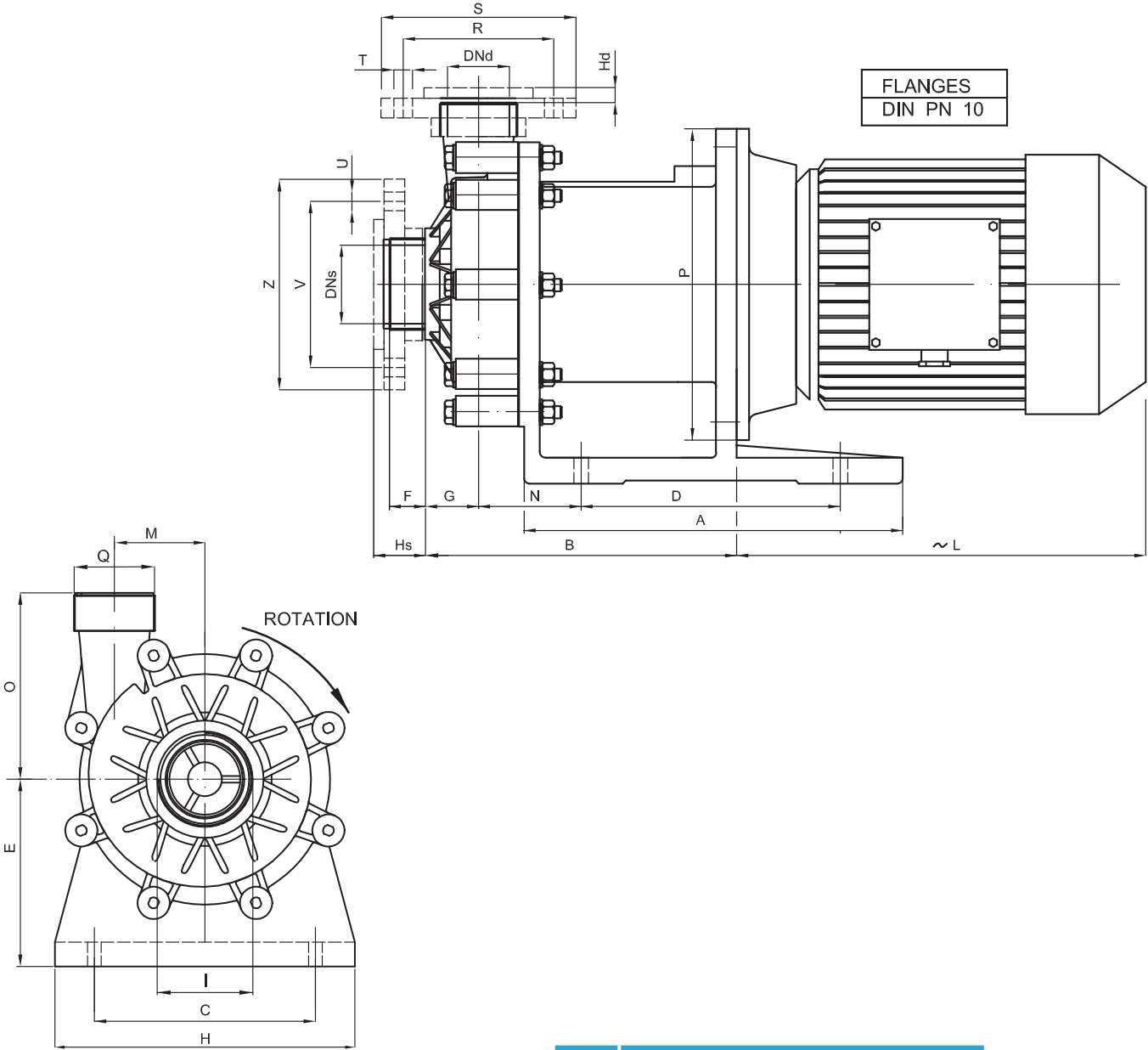
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| PUMP TYPE | FLANGES DIMENSIONS - mm - | | | | | | | |
|-----------|---------------------------|-----|----|----|-----|-----|-----------------|-----------------|
| | R | S | T | U | V | Z | DN _s | DN _d |
| HTM 15 | 110 | 153 | 18 | 18 | 125 | 168 | 50 | 40 |
| HTM 31 | 125 | 168 | 18 | 18 | 145 | 188 | 65 | 50 |
| HTM 40 | 145 | 188 | 18 | 18 | 160 | 203 | 80 | 65 |

| PUMP TYPE | MOTOR FLANGE B3 - B5 | KW | DIMENSIONS - mm - | | | | | | | | | | | | | | BASEPLATE DIMENSIONS - mm - | | | | | | |
|-----------|----------------------|-----|-------------------|-----|-----|-----|-----|----|----|----------------|----------------|-------------|-----|------|----|-----|-----------------------------|-------------|-----|-----|-----|-----|-----|
| | | | A | B | C | D | E | F | G | H _s | H _d | I | L* | M | N | O | P | Q | R' | S' | T' | U' | V' |
| HTM 15 | 80 B | 1,1 | 150 | 230 | 125 | 100 | 80 | 28 | 52 | 42 | 13 | 2" MALE | 232 | 66 | 50 | 135 | 200 | 1-1/2" MALE | 120 | 302 | 350 | 157 | 205 |
| HTM 15 | 90 S | 1,5 | 160 | 240 | 140 | 100 | 90 | 28 | 52 | 42 | 13 | 2" MALE | 256 | 66 | 56 | 135 | 200 | 1-1/2" MALE | 132 | 302 | 350 | 157 | 205 |
| HTM 31 | 90 L | 2,2 | 184 | 245 | 140 | 125 | 90 | 30 | 61 | 44 | 13 | 2 1/2" MALE | 280 | 66 | 56 | 140 | 200 | 2" MALE | 132 | 302 | 350 | 157 | 205 |
| HTM 31 | 100 L | 3 | 203 | 264 | 160 | 140 | 100 | 30 | 61 | 44 | 13 | 2 1/2" MALE | 315 | 66 | 63 | 140 | 250 | 2" MALE | 140 | 352 | 400 | 202 | 250 |
| HTM 31 | 112 M | 4 | 203 | 264 | 190 | 140 | 112 | 30 | 61 | 44 | 13 | 2 1/2" MALE | 325 | 66 | 70 | 140 | 250 | 2" MALE | 140 | 352 | 400 | 202 | 250 |
| HTM 40 | 100 L | 3 | 228 | 280 | 160 | 140 | 100 | 40 | 52 | 50 | 10 | 3" MALE | 315 | 82,5 | 63 | 170 | 250 | 2 1/2" MALE | 140 | 352 | 400 | 202 | 250 |
| HTM 40 | 112 M | 4 | 228 | 280 | 190 | 140 | 112 | 40 | 52 | 50 | 10 | 3" MALE | 325 | 82,5 | 70 | 170 | 250 | 2 1/2" MALE | 156 | 352 | 400 | 202 | 250 |

* Different according to the manufacturer. ** OPTIONAL UPON REQUEST: Baseplate - Flanges.
NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.
PUMPS AVAILABLE THREADED OR FLANGED.

HTM 50 PP/PVDF DIMENSIONS



| PUMP TYPE | FLANGES DIMENSIONS - mm - | | | | | | | |
|-----------|---------------------------|-----|----|----|-----|-----|-----|-----|
| | R | S | T | U | V | Z | DNs | DNd |
| HTM 50 | 145 | 188 | 18 | 18 | 160 | 203 | 80 | 65 |

| PUMP TYPE | MOTOR FLANGE B3 - B5 | KW | DIMENSIONS - mm - | | | | | | | | | | | | | | | | |
|-----------|----------------------|-----|-------------------|-----|-----|-----|-----|----|----|-----|----|----|---------|-----|------|----|-----|-----|-------------|
| | | | A | B | C | D | E | F | G | H | Hs | Hd | I | -L | M | N | O | P | Q |
| HTM 50 | 132 S2A | 5.5 | 365 | 300 | 216 | 250 | 192 | 40 | 52 | 274 | 50 | 10 | 3" MALE | 383 | 82.5 | 98 | 170 | 300 | 2" 1/2 MALE |
| HTM 50 | 132 S2B | 7.5 | 365 | 300 | 216 | 250 | 192 | 40 | 52 | 274 | 50 | 10 | 3" MALE | 421 | 82.5 | 98 | 170 | 300 | 2" 1/2 MALE |

OPTIONAL UPON REQUEST: Flanges.
NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.
PUMPS AVAILABLE THREADED OR FLANGED.



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