

CHEMICAL PUMPS SINCE 1992



**GENERAL
CATALOGUE**

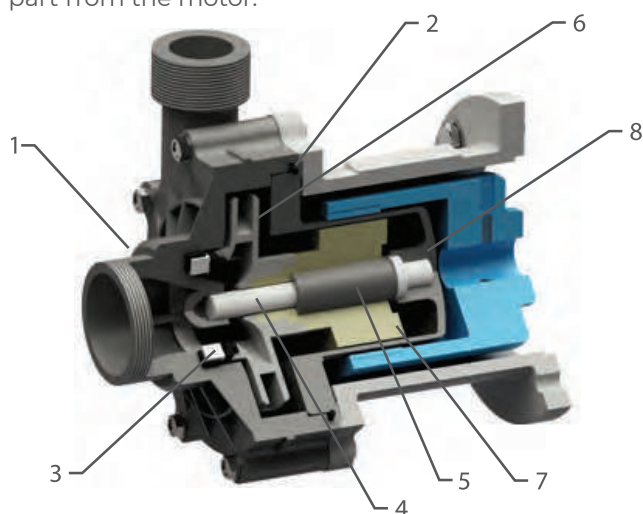
2025 | 2026

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 four different models of mag drive centrifugal pumps:

HTM PP/PVDF

- Thermoplastic pumps made of PP or PVDF.
- Capacity up to 130 m³/h.
- Head up to 48 mlc.
- Injection molded parts.

HTM SP PP/PVDF

- Self-priming pumps made of PP or PVDF.
- Capacity up to 25 m³/h.
- Head up to 22 mlc.

HCM PP/PVDF

- Thermoplastic pumps made of 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 of stainless steel AISI 316.
- 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	HTM SP	HCM	HTM SS 316
1 - PUMP HEAD	PP or PVDF	PP or PVDF	PP or PVDF	AISI 316
2 - O-RING	EPDM or VITON	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	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%	CERAMIC Al ₂ O ₃ 99,7%	HASTELLOY-C 276
5 - BEARINGS	PTFEC	PTFEC	PTFEC	PTFEC
6 - IMPELLER	PP or PVDF	PP or PVDF	PP or PVDF	AISI 316
7 - INTERNAL MAGNET	PP or PVDF + NdFeB	PP or PVDF + NdFeB	PP or PVDF + NdFeB	AISI 316 + SmCo
8 - REAR CASING	PP or PVDF	PP or PVDF	PP or PVDF	AISI 316

THERMOPLASTIC MAG-DRIVE CENTRIFUGAL PUMPS



MAIN FEATURES

Mag drive centrifugal pumps series **HTM PP/PVDF** are made of thermoplastic materials (**Polypropylene** and **PVDF**) and are suitable for highly 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: ceramic Al_2O_3 99,7 %; Bushing PTFEC.
- **Max flow:** 130 m³/h; **Max head** 48 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.
- Under head use.
- Suitable for continuous use.

ADVANTAGES

- Zero leakage and emissions.
- No mechanical seal.
- High torque magnetic coupling.
- Perfect solution for clean liquids.
- No motor/pump alignment.
- Long-term savings.
- Limited periodic maintenance.
- Safe and reliable.



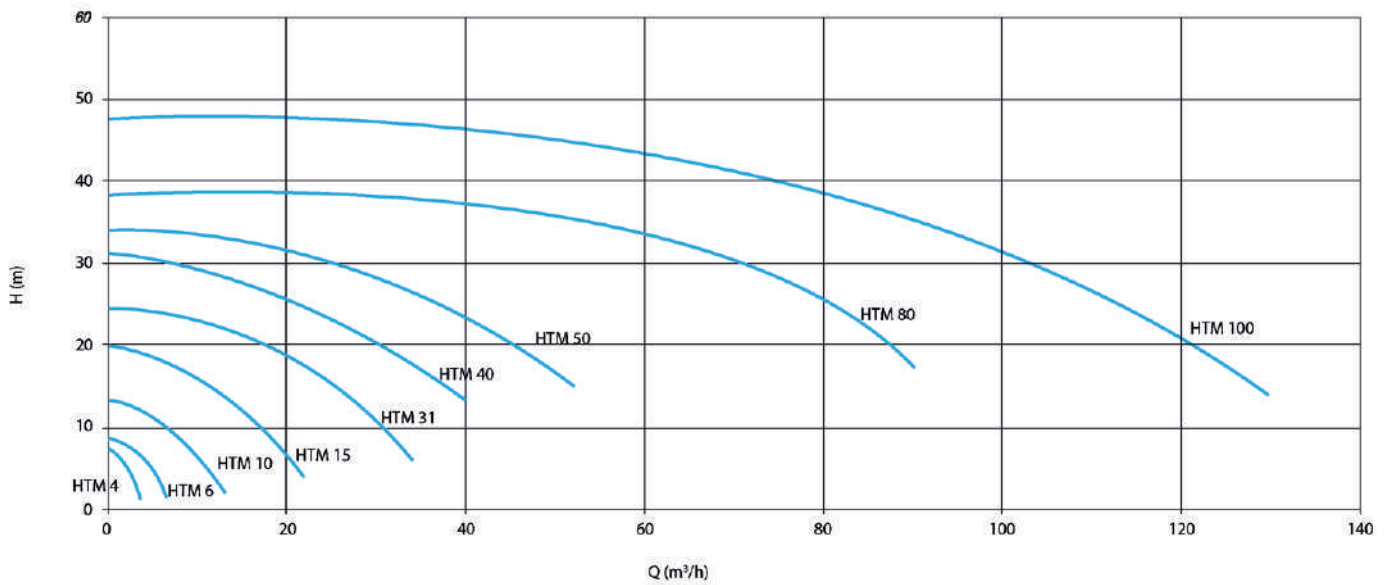
OPTIONAL

- Flanges available (DIN or ANSI).
- Dry-running protection.
- Baseplate.
- HTM pumps are available also for **NEMA motors** and with **NPT connections**.
- Available in **ATEX version** for zone 2 II 3G (mod. EM-C PP/PVDF).

STANDARD

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

PERFORMANCE CURVES 50Hz - 2900 RPM - SIZES FROM HTM 4 TO HTM 100



HTM PP/PVDF TECHNICAL DATA

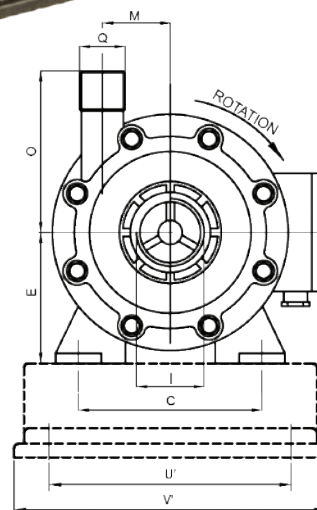
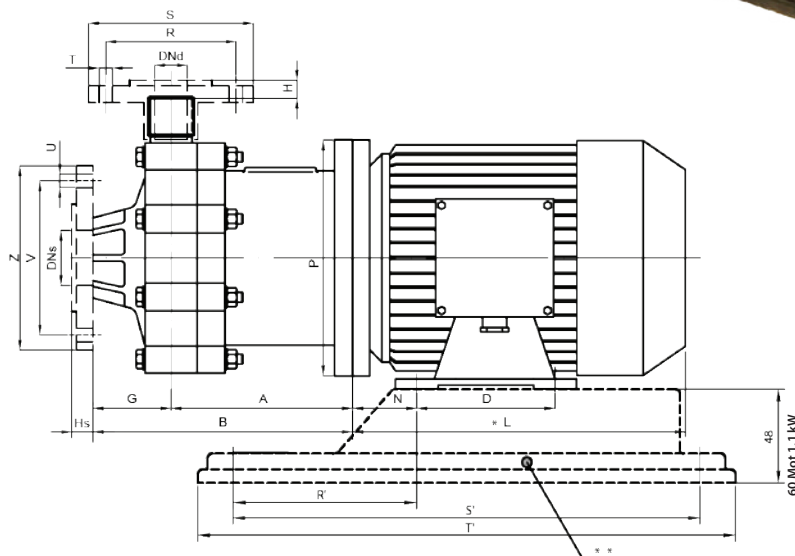
PUMP SIZE	MATERIAL	Q MAX		H MAX		SUCTION CONNECTION	DISCHARGE CONNECTION	PUMP WEIGHT (kg)		SUITABLE MOTOR POWER (kW) 2900 rpm	MOTOR FLANGE AND FRAME
		50Hz (m³/h)	60Hz (USGPM)	50Hz (m/c)	60Hz (ft)			PP	PVDF		
HTM 4	PP- PVDF	3.5	16	7	33	1" FEMALE	1/2" MALE	0.95	1.05	0.12	56 B - B3 / B5
HTM 6	PP- PVDF	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 1.1	71 2B - B3 / B5 80 B - B3 / B5
HTM 15	PP- PVDF	23	125	20	90	2" MALE	1" 1/2 MALE	5.8	6.6	1.1 1.5 2.2	80 B - B3 / B5 90 S - B3 / B5 90 L - B3 / B5
HTM 31	PP- PVDF	35	185	24	115	2" 1/2 MALE	2" MALE	8.0	8.9	2.2 3 4	90 L - B3 / B5 100 L - B3 / B5 112 M - B3 / B5
HTM 40	PP- PVDF	42	215	31	150	3" MALE	2" 1/2 MALE	19.7	21.3	3 4	100 L - B3/B5 112 M - B3/B5
HTM 50	PP- PVDF	43	220	33	160	3" MALE	2" 1/2 MALE	32.2	35	5.5 7.5 9.2	132 S2A - B5 132 S2B - B5 132 MA - B5
HTM 80	PP- PVDF	90	352	38	123	DN 80	DN 65	42	44	7.5 11 15 18.5	132 S2 - B5 160 M2A - B5 160 M2B - B5 160 L2 - B5
HTM 100	PP- PVDF	130	528	48	148	DN 100	DN 80	40	45	11 15 18.5 22	160 M2A - B5 160 M2B - B5 160 L2 - B5 180 M2 - B5

THERMOPLASTIC MAG-DRIVE CENTRIFUGAL PUMPS



HTM 4-6-10 PP/PVDF

- **Materials available:** PP / PVDF.
- **Max flow:** 13 m³/h.
- **Max head** 14 mlc.
- **Max temperature:** PP 70°C - PVDF 90°C.
- **Max viscosity:** 200 cSt.
- **System pressure:** NP 6 at 20°C.
- **Standard motor:** 2 Poles 3Phase 50/60 Hz B3 / B5.
- **Special motor upon request.**
- **Connections:** BSP (Flanges or NPT connections upon request).
- **ATEX version:** EM-C PP/PVDF II 3G ZONE 2.



DIMENSIONS - mm -

PUMP TYPE	MOTOR FLANGE B3 - B5	kW	A	B	C	D	E	Hs	G	H	I	*L	M	N	O	P	Q	BASEPLATE DIMENSIONS - mm -				
																		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	85	143	100	80	63	22	59	6	1" FEMALE	191	45	40	98	140	3/4" MALE	102	244	280	130	160
HTM 10	71 2B	0.55	112	180	112	90	71	34	70	5	1" 1/2 FEMALE	215	45	45	100	160	1" MALE	112	244	280	130	160
HTM 10	80 B	1.1	122	190	125	100	80	34	70	5	1" 1/2 FEMALE	232	45	50	100	200	1" MALE	120	302	350	157	205

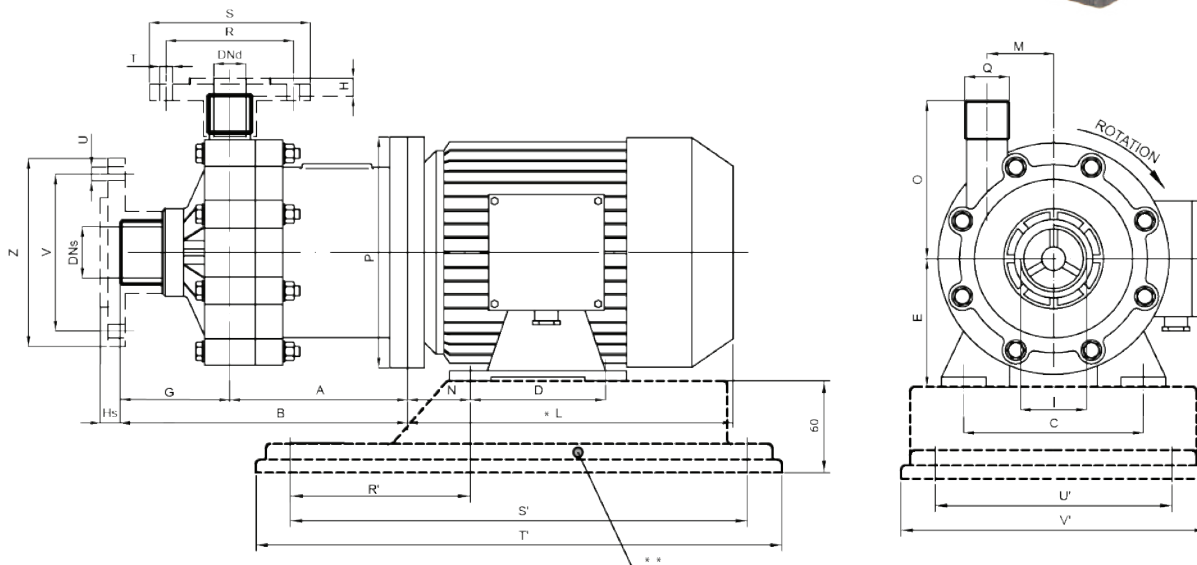
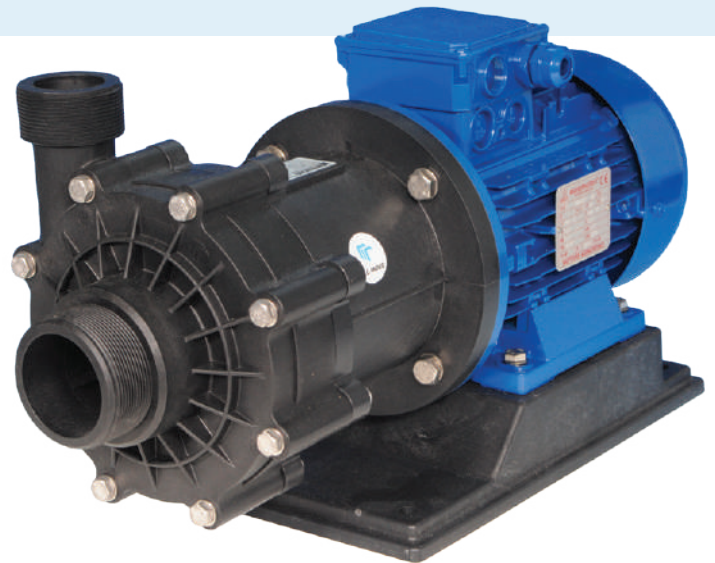
* Different according to the manufacturer. ** OPTIONAL UPON REQUEST: DIN or ANSI Flanges and Baseplates.
NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.
PUMPS AVAILABLE THREADED OR FLANGED.

FLANGES DIN PN 10 DIMENSIONS - mm -

PUMP TYPE	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

HTM 15-31-40 PP/PVDF

- **Materials available:** PP / PVDF.
- **Max flow:** 42 m³/h.
- **Max head** 31 mlc.
- **Max temperature:** PP 70°C - PVDF 90°C.
- **Max viscosity:** 200 cSt.
- **System pressure:** NP 6 at 20°C.
- **Standard motor:** 2 Poles 3Phase 50/60 Hz B3 / B5.
- **Special motor upon request.**
- **Connections:** BSP (Flanges or NPT connections upon request).
- **ATEX version:** EM-C PP/PVDF II 3G ZONE 2.



DIMENSIONS - mm -

PUMP TYPE	MOTOR FLANGE B3 - B5	KW	A	B	C	D	E	G	Hs	H	I	*L	M	N	O	P	Q	BASEPLATE DIMENSIONS - mm -				
																		R	S	T	U	V
HTM 15	80 B	1.1	151	231	125	100	80	80	14	13	2" MALE	232	66	50	135	200	1" 1/2 MALE	120	302	350	157	205
HTM 15	90 S	1.5	161	241	140	100	90	80	14	13	2" MALE	256	66	56	135	200	1" 1/2 MALE	132	302	350	157	205
HTM 15	90 L	2.2	161	241	140	125	90	80	14	13	2" MALE	280	66	56	135	200	1" 1/2 MALE	132	302	350	157	205
HTM 31	90 L	2.2	183	274	140	125	90	91	14	13	2" 1/2 MALE	280	66	56	140	200	2" MALE	132	302	350	157	205
HTM 31	100 L	3	203	294	160	140	100	91	14	13	2" 1/2 MALE	315	66	63	140	250	2" MALE	140	352	400	202	250
HTM 31	112 M	4	203	294	190	140	112	91	14	13	2" 1/2 MALE	325	66	70	140	250	2" MALE	156	352	400	202	250
HTM 40	100 L	3	228	320	160	140	100	92	10	10	3" MALE	315	82.5	63	170	250	2" 1/2 MALE	140	352	400	202	250
HTM 40	112 M	4	228	320	190	140	112	92	10	10	3" MALE	325	82.5	70	170	250	2" 1/2 MALE	156	352	400	202	250

FLANGES DIN PN 10 DIMENSIONS - mm -

PUMP TYPE	R	S	T	U	V	Z	DNs	DNd
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

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

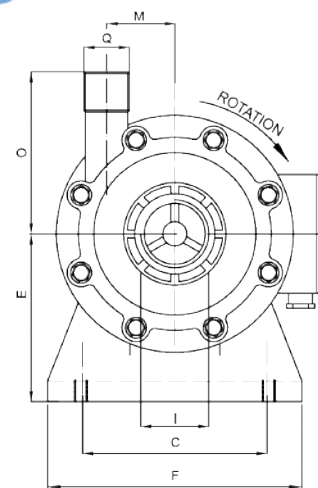
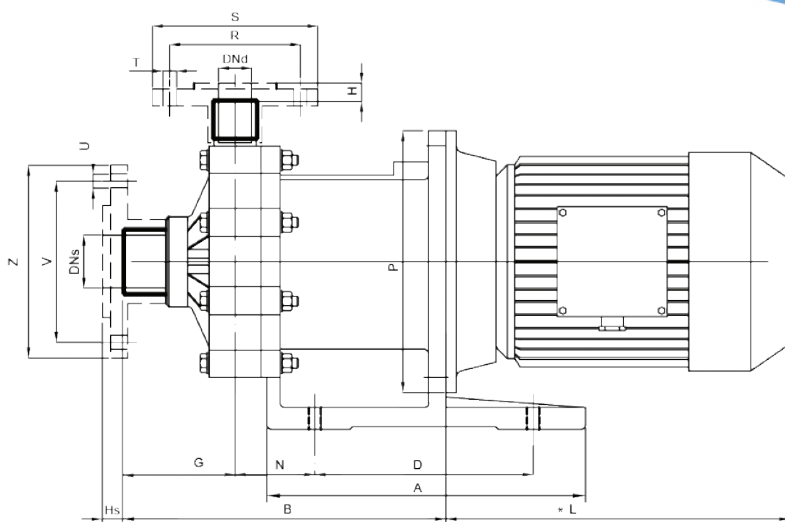
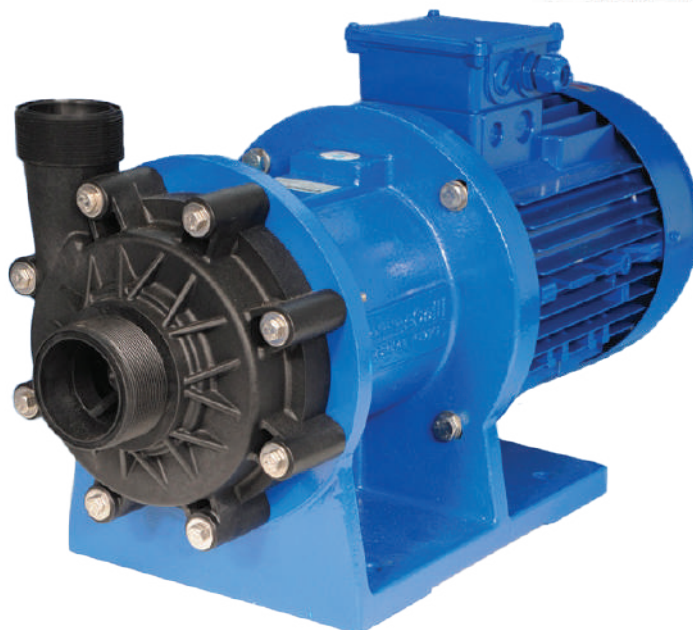
NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.
PUMPS AVAILABLE THREADED OR FLANGED.

THERMOPLASTIC MAG-DRIVE CENTRIFUGAL PUMPS



HTM 50 PP/PVDF

- **Materials available:** PP / PVDF.
- **Max flow:** 43 m³/h.
- **Max head** 33 mlc.
- **Max temperature:** PP 70°C - PVDF 90°C.
- **Max viscosity:** 200 cSt.
- **System pressure:** NP 6 at 20°C.
- **Standard motor:** 2 Poles 3Phase 50/60 Hz B5.
- **Special motor upon request.**
- **Connections:** BSP (Flanges or NPT connections upon request).
- **ATEX version:** EM-C PP/PVDF II 3G ZONE 2.



DIMENSIONS - mm -

PUMP TYPE	MOTOR FLANGE B5	kW	A	B	C	D	E	F	G	H	Hs	I	*L	M	N	O	P	Q
HTM 50	132 S2A	5.5	365	339	216	250	192	274	92	10	10	3" MALE	383	82.5	98	170	300	2" 1/2 MALE
HTM 50	132 S2B	7.5	365	339	216	250	192	274	92	10	10	3" MALE	421	82.5	98	170	300	2" 1/2 MALE
HTM 50	132 MA	9.2	365	339	216	250	192	274	92	10	10	3" MALE	475	82.5	98	170	300	2" 1/2 MALE

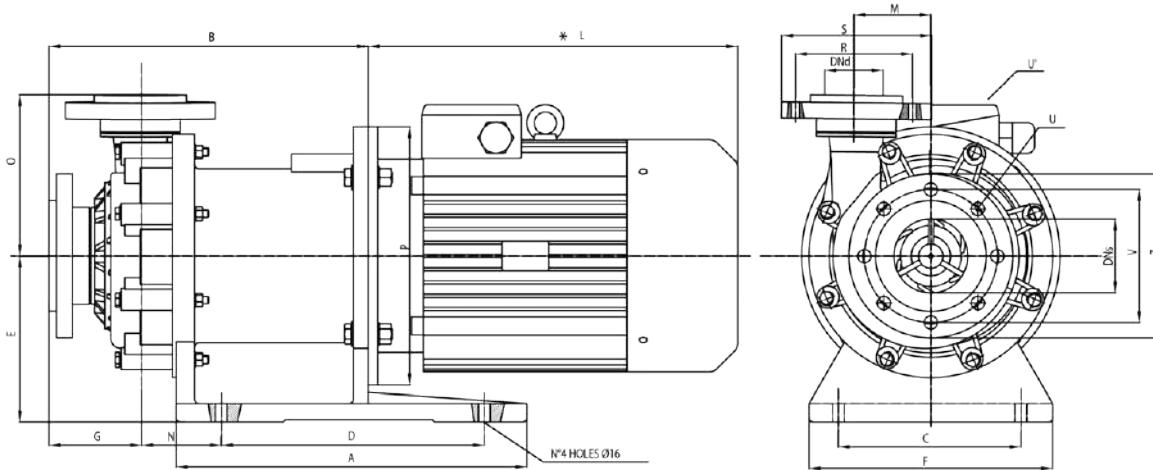
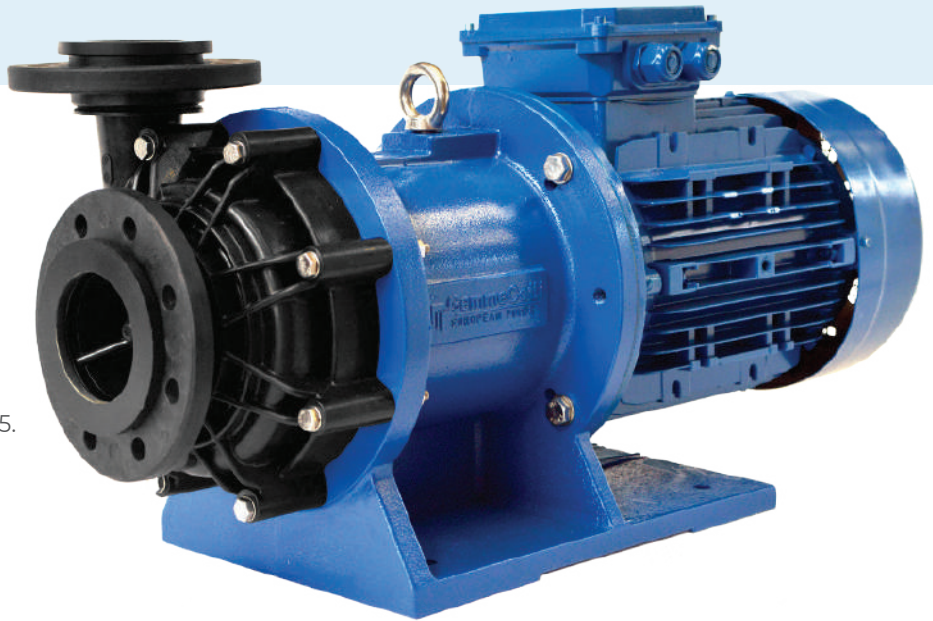
* Different according to the manufacturer * OPTIONAL UPON REQUEST: DIN or ANSI Flanges.
NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.
PUMPS AVAILABLE THREADED OR FLANGED.

FLANGES DIN PN 10 DIMENSIONS - mm -

PUMP TYPE	R	S	T	U	V	Z	DNs	DNd
HTM 50	145	188	18	18	160	203	80	65

HTM 80-100 PP/PVDF

- **Materials available:** PP / PVDF.
- **Max flow:** 130 m³/h.
- **Max head** 48 mlc.
- **Max temperature:** PP 70°C - PVDF 90°C.
- **Max viscosity:** 200 cSt.
- **System pressure:** NP 6 at 20°C.
- **Standard motor:** 2 Poles 3Phase 50/60 Hz B5.
- **Special motor upon request.**
- **Connections:** DIN or ANSI Flanges.
- **ATEX version:** EM-C PP/PVDF II 3G ZONE 2.



DIMENSIONS - mm -

PUMP TYPE	MOTOR FLANGE B5	kW	A	B	C	D	E	F	G	*L	M	N	O	P
HTM 80	132S2	7.5	475	433	250	360	225	330	126	421	103	104	215	300
HTM 80	160M2A	11	475	433	250	360	225	330	126	510	103	104	215	350
HTM 80	160M2B	15	475	433	250	360	225	330	126	510	103	104	215	350
HTM 80	160L2	18.5	475	433	250	360	225	330	126	554	103	104	215	350
HTM 100	160M2A	11	475	435	250	360	225	330	124	510	103	104	217	350
HTM 100	160M2B	15	475	435	250	360	225	330	124	510	103	104	217	350
HTM 100	160L2	18.5	475	435	250	360	225	330	124	554	103	104	217	350
HTM 100	180M2	22	475	435	250	360	225	330	124	595	103	104	217	350

FLANGES DIN PN 10 DIMENSIONS - mm -

PUMP TYPE	R	S	U	U'	V	Z	DNs	DNd
HTM 80	145	188	n° 8 holes ø 18	n° 4 holes ø 18	160	200	80	65
HTM 100	160	200	n° 8 holes ø 18	n° 8 holes ø 18	180	220	100	80

* Different according to the manufacturer * HTM 80-100: standard pumps supplied DIN Flanges.
NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.



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