



GENERAL 2018/19

MAG-DRIVE TURBINE PUMPS

SEAL-LESS MAG DRIVE TURBINE PUMPS

In seal-less magnetic drive turbine 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 turbine 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 turbine pumps:

HTT

- Thermoplastic pumps made in PP or PVDF.
- Capacity up to 9 m3/h.
- Head up to 50 mlc.

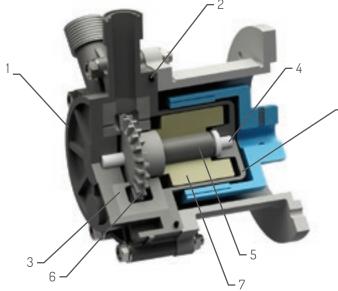
HTT-SP

- Thermoplastic pumps made in PP or PVDF.
- Capacity up to 7 m3/h.
- Head up to 25 mlc.

- Machined from a block.
- Self-priming up to 3 m.

HTA

- Metallic pumps made in stainless steel AISI316.
- Capacity up to 7 m3/h.
- Head up to: 80 mlc.



	MATERIALS IN CONTAG	CT WITH THE LIQUID											
PART NUMBER - DESCRIPTION		TURBINE PUMPS											
PART NUMBER - DESCRIPTION	HTT	HTT-SP	HTA										
1 – PUMP HEAD	PP OR PVDF	PP OR PVDF	AISI 316										
2 - 0-RING	EPDM OR VITON	EPDM OR VITON	EPDM OR VITON										
3 - FRONT AND REAR DISC	PP OR PVDF	PP OR PVDF	PTFEC										
4 – SHAFT + RING	CERAMIC Al ₂ 0 ₃ 99,7%	CERAMIC Al ₂ 0 ₃ 99,7%	HASTELLOY-C 276										
5 – BEARING	PTFEC	PTFEC	PTFEC										
6 – IMPELLER	PVDF	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										



8

25

IHTA

METALLIC MAG-DRIVE REGENERATIVE TURBINE PUMPS



STANDARD

- Static shaft in HC 276.
- Chemical resistant PTFE/Carbon sleeve bearings standard.
- High torque magnetic coupling.
- Direct starting motors.

OPTIONAL

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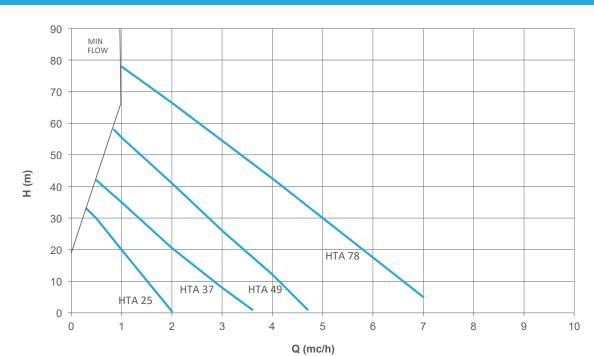
- ANSI 300 flanges available.
- Atex version (pump mod. EM-T).
- Explosion proof motor.
- Dry-running protection.
- Baseplate.

MAIN FEATURES

Mag drive regenerative turbine pumps series HTA are made of AISI 316 or, if requested, of other metallic materials (HASTELLOY or TITANIUM) and are suitable for solvents, hydrocarbons, dangerous and inflammable liquids. Thanks to the innovative mag drive system, pumps model HTA reduce the risks of leakage and emissions and maintenance costs. The transmission of the motion occurs through magnetic joints without any mechanical seal. This design guarantees the maximum hermetic safety and efficiency. The pumped liquid has to be clean and without solids in suspension.

Pumps series HTA are also available in ATEX version for zone 1 and 2 (pump model EM-T).

- High head / low flow capability minimizes by-pass requirements.
- Materials available: AISI 316;
- Materials in contact with the liquid: casing and impeller: stainless steel AISI 316; o-ring EPDM/VITON;
- bushing: PTFEC; shaft: Hastelloy C276.
- Max flow 7 m3/h; max head 80 mlc.
- Max Temperature: 160°C.
- Pressure Rating NP 25 at 20°C.
- Impeller design handles up to 20% entrained gas. Ideal for pumping liquefied gas.

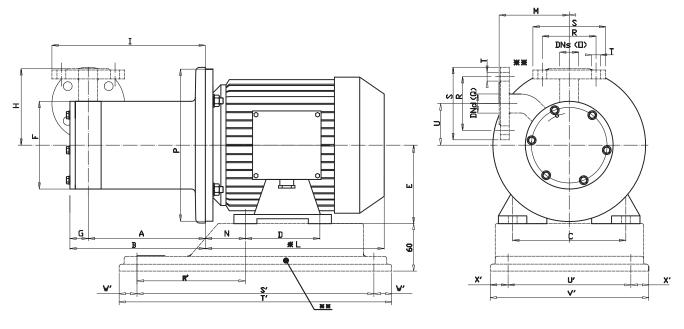


PERFORMANCE CURVES 50HZ - 2900 RPM

HTA TECHNICAL DATA

PUMP	MATERIAL	0 M	IAX	НM	1AX	SUCTION	DISCHARGE	PUMP WEIGHT	SUITABLE MOTOR	MOTOR FLANGE	
SIZE		50HZ (M3/H)	60HZ (USGPM)	50HZ (MLC) 60HZ (FT)		CONNECTION	CONNECTION	(KG)	P0WER (KW) - 2900 rpm	AND FRAME	
HTA 25	AISI316	2	10	32	140	3/4" FEMALE	3/4" FEMALE	10.3	1,1	80 - B3/B5	
HTM 37	AISI316			3/4" FEMALE	3/4" FEMALE	10.3	1,1	80 - B3/B5			
ПIM 37	AISISIO	3.5	5 19 43 180 3/4" FEMALE 3/4" FEM	3/4 FEMALE	10.5	2,2	90 - B3/B5				
HTA 49	AISI316	4.7	25	58	235	1" FEMALE	1" FEMALE	18.7	2,2	90 - B5	
TTA 45	AISISIO	4.7	23	30	200	I FEMALE	I FEMALE	10.7	3	100 - B5	
HTA 78	AISI316 7		36	76	320	1" FEMALE	1" FEMALE	19	3	100 - B5	
TTA 70	AISI316	/	7 36 76 320 I FEMALE I FEMAL		ITEMALE	19	4	112 - B5			

HTA 25-37 SS / EM-T 25-37 SS (ATEX VERSION) DIMENSIONS



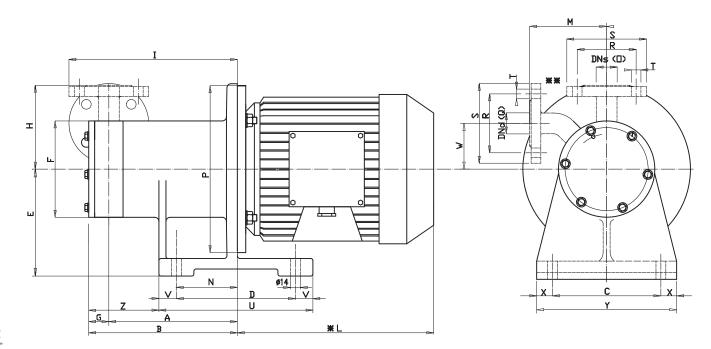
PUMP TYPE		FLAM	IGES DI	MENSI	DNS – m	nm –
	R	S	T	DNs	DNd	
HTA 25-37	75	105	14	20	20	DN20 PN40

PUMP	MOTOR B	3 - B5		DIMENSIONS - mm -												BASEPLATE DIMENSIONS - mm -									
TYPE	SIZE	KW	А	В	С	D	Е	F	G	Н	1	*L	М	Ν	0	Р	Q	U	R'	S'	Τ'	U'	V'	W'	X
HTA 25	80	1.1	167	192	125	100	80	123	25	100	218	232	98	50	3/4" G. FEMALE	200	3/4" G. FEMALE	61	120	302	350	157	205	24	24
	80	1.1	167	192	125	100	80	10.0	123 25	100	220	232		50	3/4" G. FEMALE 2	200	3/4" G. FEMALE	61	120	202	250	157	205	0/	24
HTA 37	90	2.2	177	202	140	125	90	123			230	280	98	56		200	FEMALE		132	302	350	157	205	24	24

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



HTA 49-78 SS / EM-T 49-78 SS (ATEX VERSION) DIMENSIONS



PUMP		FLAN	IGES DI	MENSI	DNS – n	nm –
TYPE	R	S	T	DNs	DNd	
HTA 49-78	85	115	14	25	25	DN25 PN40

PUMP	мото	R B5		DIMENSIONS - mm -																			
TYPE	SIZE	KW	Α	В	С	D	E	F	G	Н	1	*L	М	Ν	0	Р	Q	U	V	W	Х	Y	Z
HTA 49	90	2.2	185	215	155	170	150	139	30	121	253	280	111	109	10.	200	1" G.	000	05	00.5	00.5	000	91
ПТА 49	100	3	205	235	155	170				IZI	263	316	111	119	FEMALE	250	FEMALE	220	23	02.3	22.3	200	91
HTA 78	100	3	205	235	155	170	150	158	30	133	263	316	133	119	1" G. FEMALE	250	1" G. FEMALE	220	25	85.5	22.5	200	91
HIA 78	112	4	205	235	135	170	150				203	324											31

* Different according to the motor supplier. ** 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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