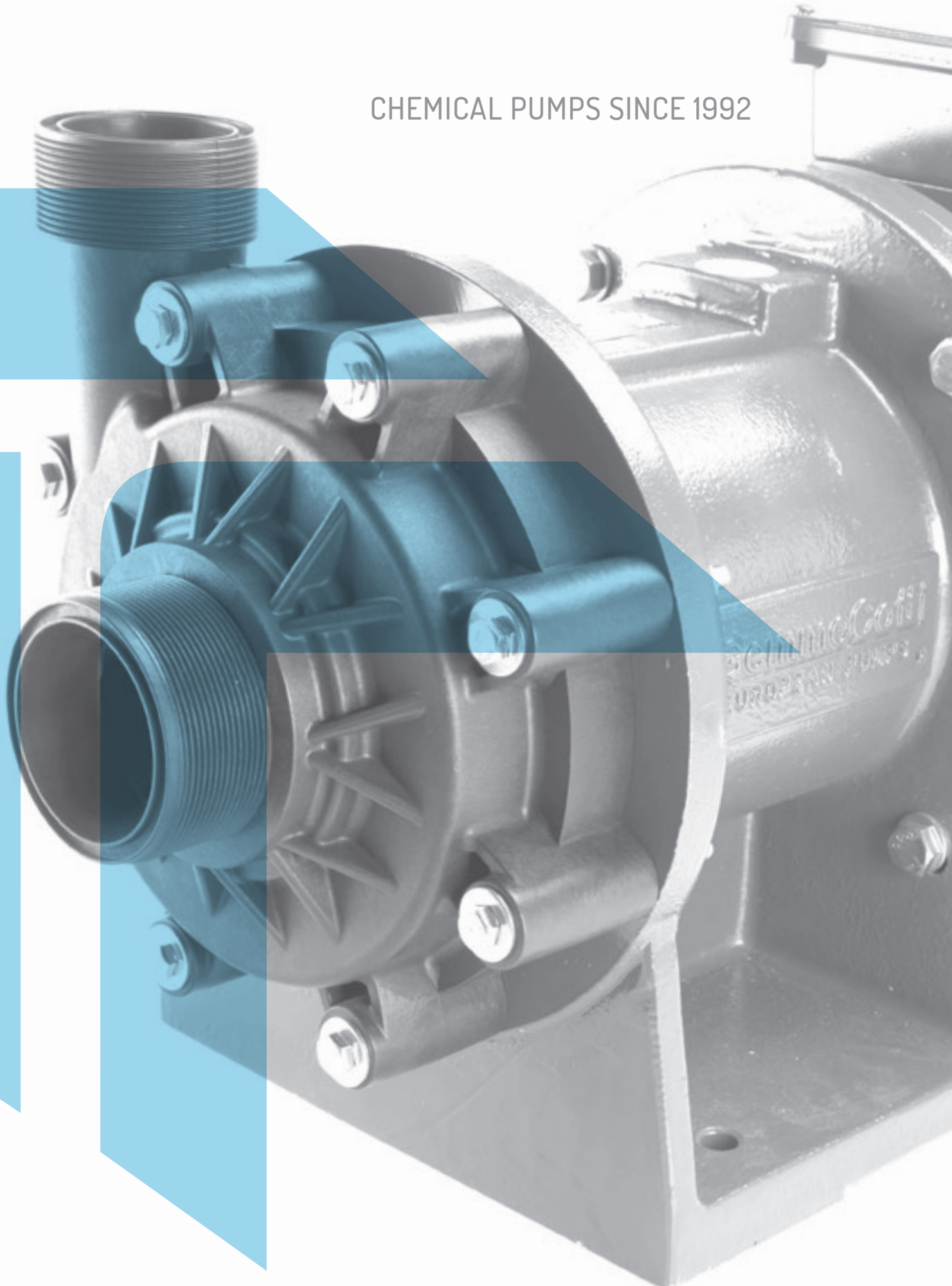


CHEMICAL PUMPS SINCE 1992



# MECHANICAL SEAL CENTRIFUGAL PUMPS

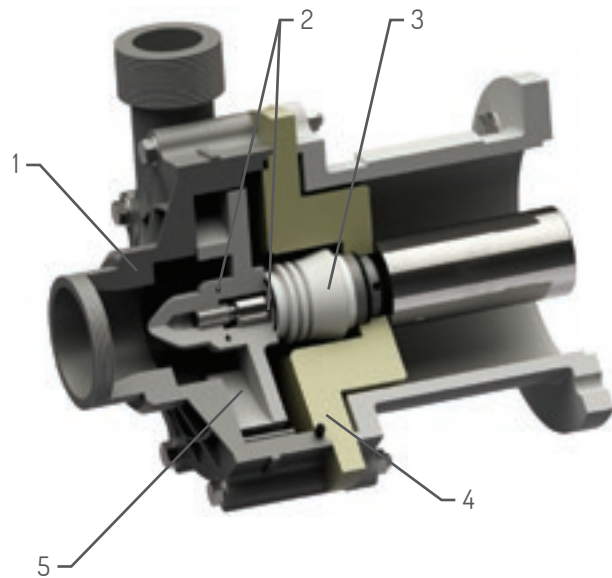
## MECHANICAL SEAL CENTRIFUGAL PUMPS

Mechanical seal centrifugal pumps are the right solution for applications involving solids in the liquid because their design with open impeller allows to pump dirty liquids and fluids with high viscosity. The seal in mechanical seal pumps is composed by a static ring and a rotating ring placed on the pump shaft which is directly coupled to the motor shaft. The two surfaces sliding together need to be lubricated and the seal lubricant is the liquid itself that is being pumped.

GemmeCotti can supply the following model of mechanical seal pump:

### HCO

- Thermoplastic pumps made in PP or PVDF.
- Capacity up to 58 m<sup>3</sup>/h.
- Head up to 38 m.c.
- Two different kind of mechanical seal available:  
lip seal for model HCO 95-10, internal PTFE bellow mechanical seal for all the other pump sizes.



MATERIALS IN CONTACT WITH THE LIQUID	
PART NUMBER - DESCRIPTION	MECHANICAL SEAL PUMPS
	HCO
1 - PUMP HEAD	PP OR PVDF
2 - O-RING	EPDM - VITON
3- MECHANICAL SEAL	PTFE + Al <sub>2</sub> O <sub>3</sub>
4- COVER	PP OR PVDF
5- IMPELLER + IMPELLER NUT	PP OR PVDF

## MECHANICAL SEAL CENTRIFUGAL PUMPS



### STANDARD

- Gas threaded in and out connections.
- Direct starting motor.

### OPTIONAL

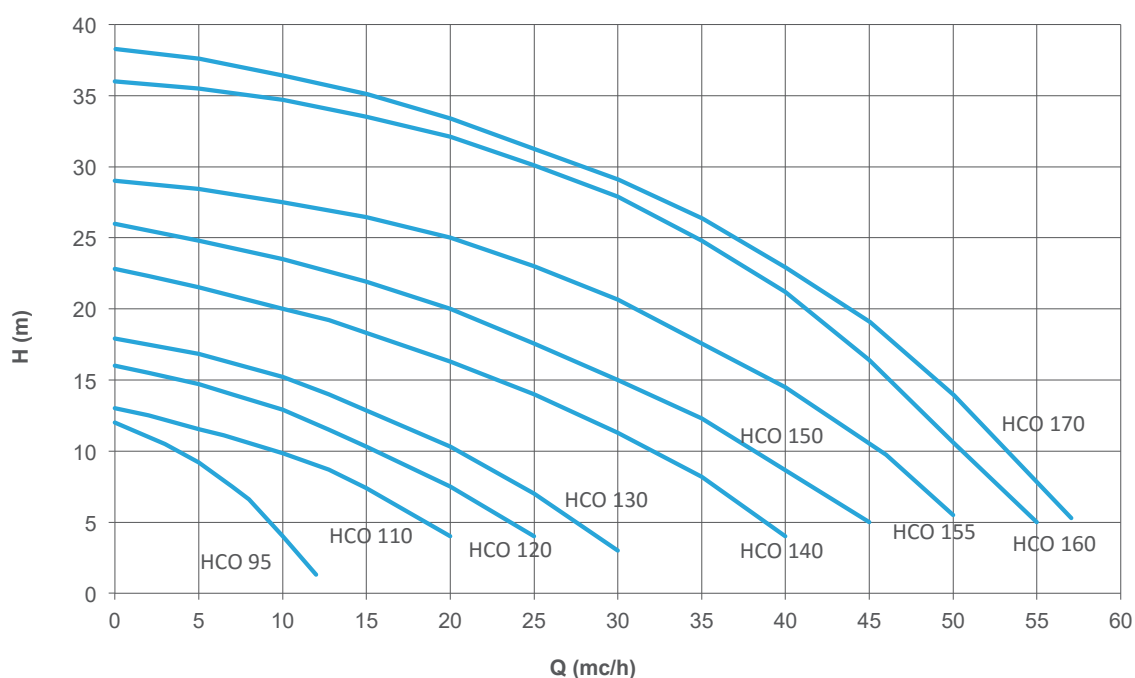
- Flanges available.
- Dry-running protection.
- Baseplate.

### MAIN FEATURES

Centrifugal pumps series HCO with mechanical seal are made of thermoplastic materials (Polypropylene and PVDF) and are suitable for high corrosive liquids containing solids in suspension. The seal of pumps HCO size 95-10 is guaranteed by a special elastomeric lip seal, while all the other pump sizes (from size 110 to 170) are equipped with an internal PTFE bellows mechanical seal (sic/ceramic), which is manufactured by GemmeCotti.

- Materials available: PP / PVDF.
- Flow up to 60 m<sup>3</sup>/h; Head up to 38 m.
- Temperature: PP: max 70° C - PVDF: max 90° C.
- Max viscosity: 200 cSt.
- Pressure rating: NP 6 at 20° C.
- Lip seal for pumps size 95-10; internal PTFE bellows mechanical seal for all the other sizes.
- Suitable for high corrosive liquids containing solids in suspension.

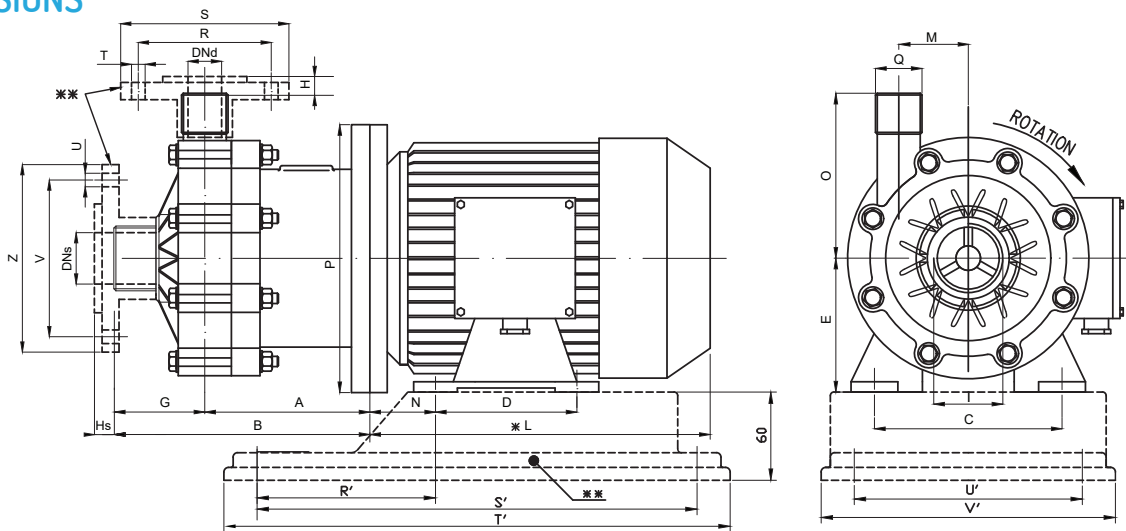
## PERFORMANCE CURVES 50HZ - 2900 RPM



### HCO 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 (mle)	60HZ (FT)			PP	PVDF		
HCO 95-10	PP- PVDF	12	52	12	47	1 1/2" FEMALE	1" MALE	10	12	0,55	71 - B3/B5
HCO 110	PP- PVDF	20	88	13	59	2 1/2" MALE	2" MALE	10	12	1,1	80 B - B3/B5
HCO 120	PP- PVDF	25	100	16	75	2 1/2" MALE	2" MALE	10	12	1,5	90 S - B3/B5
HCO 130	PP- PVDF	30	158	18	90	2 1/2" MALE	2" MALE	10	12	2,2	90 L - B3/B5
HCO 140	PP- PVDF	40	212	22	104	2 1/2" MALE	2" MALE	11	13	3	100 L - B3/B5
HCO 150	PP- PVDF	45	242	26	124	3" MALE	2 1/2" MALE	11	13	5,5	132 S - B3/B5
HCO 155	PP- PVDF	50	265	29	140	3" MALE	2 1/2" MALE	11	13	5,5	132 S - B3/B5
HCO 160	PP- PVDF	55	290	36	170	3" MALE	2 1/2" MALE	11	13	7,5	132 M - B3/B5
HCO 170	PP- PVDF	58	300	38	175	3" MALE	2 1/2" MALE	11	13	7,5	132 M - B3/B5

### HCO 95/10 - 110 - 120 - 130 - 140 - 150 - 155 - 160 - 170 PP/PVDF DIMENSIONS



PUMP TYPE	FLANGES DIMENSIONS - mm -							
	R	S	T	U	V	Z	DN <sub>s</sub>	DN <sub>d</sub>
HCO 95-10	85	115	14	18	110	150	40	25
HCO 110 - 120 - 130 - 140	125	168	18	18	145	188	65	50
HCO 150 - 155 - 160 - 170	145	188	18	18	160	203	80	65

PUMP TYPE	BASEPLATE DIMENSIONS - mm -				
	R'	S'	T'	U'	V'
HCO 95-10	112	244	280	130	160
HCO 110 - 120 - 130	120	302	350	157	205
HCO 140	140	352	400	202	250

PUMP TYPE	MOTOR FLANGE B3 - B5	Kw	DIMENSIONS - mm -														
			A	B	C	D	E	G	H <sub>s</sub>	H	I	- L	M	N	O	P	Q
HCO 95-10	71 B	0,55	110	180	112	90	71	70	20	9	1 1/2" FEMALE	215	45	45	100	160	1" MALE
HCO 110	80 B	1,1	209	290	125	100	80	91	10	13	2 1/2" MALE	232	66	50	140	200	2" MALE
HCO 120	90 S	1,5	209	290	140	100	90	91	10	13	2 1/2" MALE	255	66	56	140	200	2" MALE
HCO 130	90 L	2,2	209	290	140	125	90	91	10	13	2 1/2" MALE	280	66	56	140	200	2" MALE
HCO 140	100	3	219	310	160	140	100	91	10	13	2 1/2" MALE	315	66	63	140	250	2" MALE
HCO 150 - HCO 155	132 S	5,5	184	275	216	140	132	91	10	10	3" MALE	380	82,5	89	170	300	2 1/2" MALE
HCO 160 - HCO 170	132 M	7,5	184	275	216	178	132	91	10	10	3" MALE	420	82,5	89	170	300	2 1/2" MALE

OPTIONAL UPON REQUEST: Baseplate (except pumps model from HCO 150 -155- 160- 170) - Flanges.  
 NOTE: DIRECTION OF ROTATION IS COUNTER CLOCKWISE AS SEEN WHEN FACING THE MOTOR.  
 PUMPS AVAILABLE THREADED OR FLANGED.



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