

HM-HMS SERIES

HORIZONTAL MULTISTAGE CENTRIFUGAL PUMPS

Modern-design noiseless high-efficiency pumps, available in the HM version for domestic applications and in the HMS version for industrial applications (made entirely of AISI 316 stainless steel).

HM APPLICATIONS

(AISI 304 + Technopolymer)

- Clean water circulation for domestic use.
- Pressure boosting units for single- or double-family dwelling water supply.
- Irrigation systems.
- Washing.

HMS APPLICATIONS (AISI 316)

- Industrial washing systems.
- Cooling and heating circuits.
- Handling of special liquids (demineralized or softened water, washing solutions, oils, etc.).
- Irrigation systems handling water containing nutritive and/or chemically aggressive substances.

SPECIFICATIONS

- **Delivery:** up to **120 l/min (7,2 m³/h)**.
- **Head:** up to **60 m**.
- **Continuous duty.**
- **Max. temperature of pumped liquid:**
-10°C to 60°C for HM
-10°C to 110°C for HMS.
- **Maximum operating pressure: 8 bar.**
- Enclosed motor with external ventilation and **aluminium alloy finned casing.**
- Versions:
Single-phase 220-240 V 50 Hz, built-in automatic reset overload protection.
Three-phase 220-240/380-415 V 50 Hz, overload protection to be provided by user.
- **Class F Insulation.**
- Power up to 0.9 kW.
- **IP 44 protection for HM, IP 55 for HMS.**



TABLE OF MATERIALS

HM SERIES

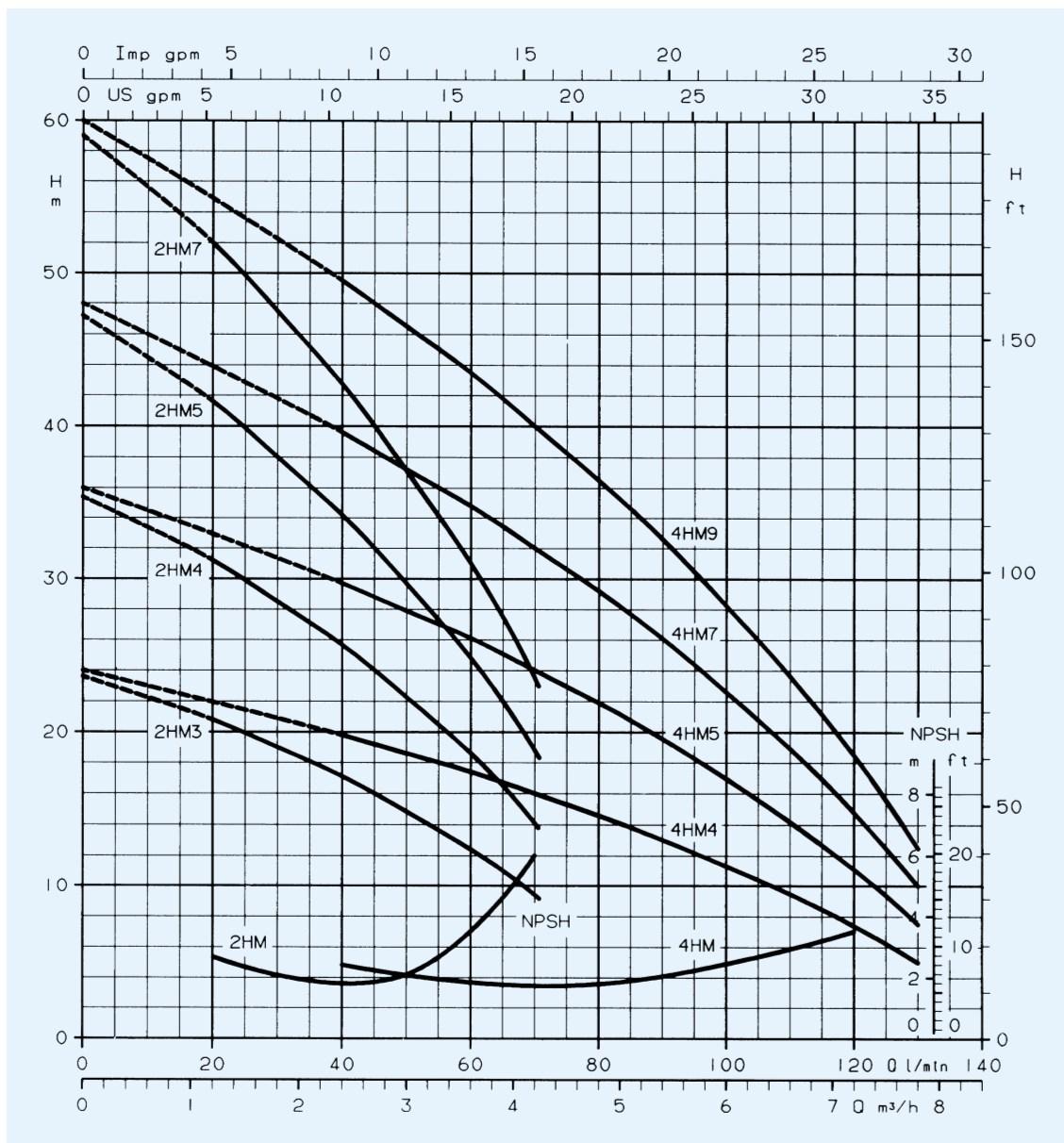
PART	MATERIAL
Pump body, Seal-housing, Diffusers, Covers, Spacers	STAINLESS STEEL (AISI 304 – DIN 1.4301)
Impellers	TECHNOPOLYMER SUITED FOR HANDLING FOOD PRODUCTS
Shaft extension	STAINLESS STEEL (AISI 316 – DIN 1.4571)
Fill and drain plugs	NICKEL-PLATED BRASS
Mechanical seal	CARBON/CERAMIC
O-ring seals	EPDM

HMS SERIES

PART	MATERIAL
Pump body, Seal-housing, Diffusers, Covers, Spacers	STAINLESS STEEL (AISI 316 – DIN 1.4571)
Impellers, Shaft extension, Fill and drain plugs	STAINLESS STEEL (AISI 316 – DIN 1.4571)
Mechanical seal	CARBON/CERAMIC
O-ring seals	EPDM

HM SERIES

OPERATING CHARACTERISTICS AT 2850 rpm 50 Hz

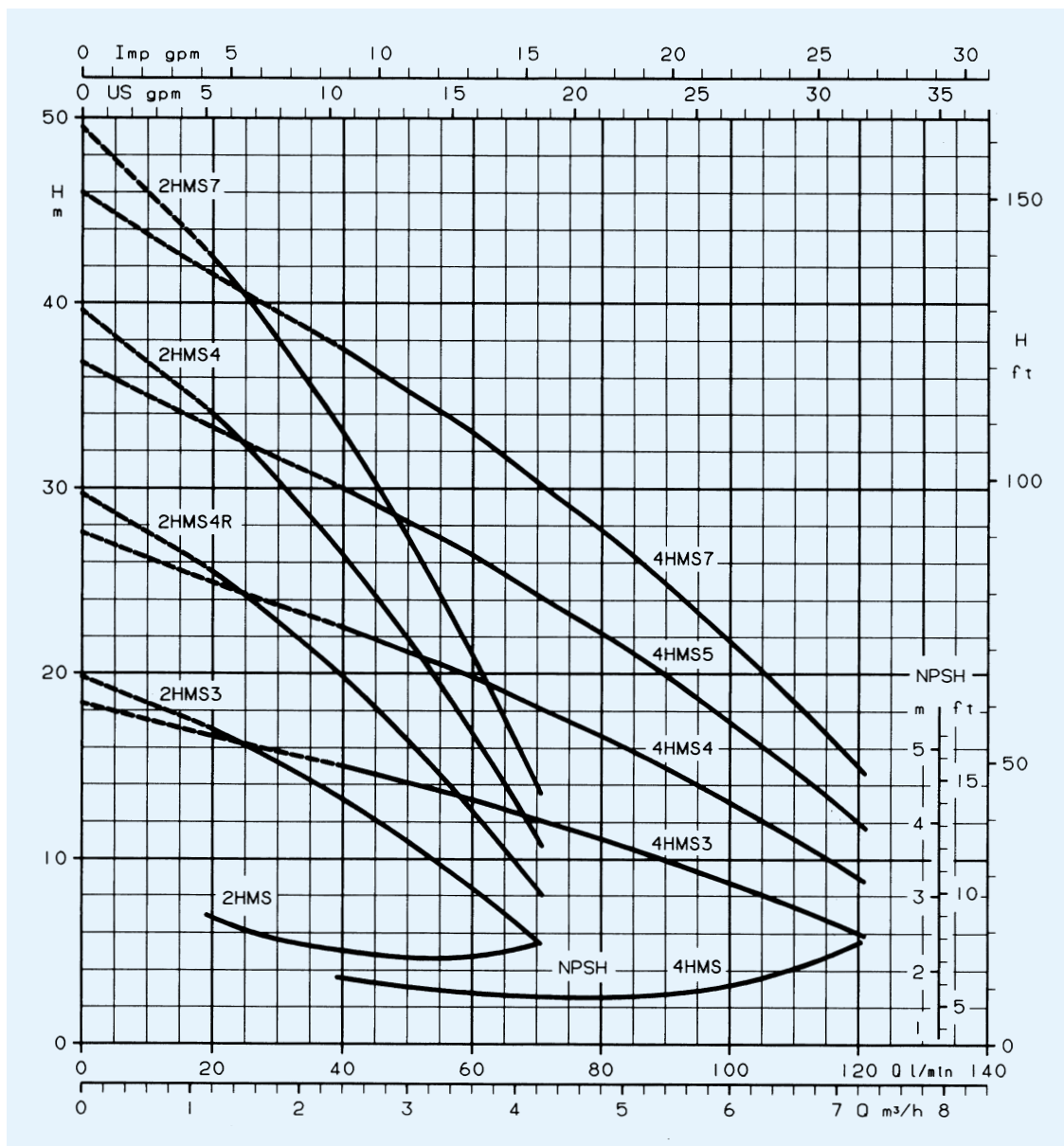


PUMP TYPE		NUMBER OF STAGES	kW	HP	CAPACITOR		INPUT CURRENT			Q = DELIVERY											
SINGLE- PHASE 220 V 50 Hz	THREE-PHASE 220-240/ 380-415 V 50 Hz				μF	V	SINGLE- PHASE 220- 240 V	THREE-PHASE 220- 240 V	380- 415 V	l/min	0	10	20	30	40	50	60	70	80	100	120
										m³/h	0	0,6	1,2	1,8	2,4	3	3,6	4,2	4,8	6	7,2
										H = TOTAL HEAD METERS COLUMN OF WATER											
2HM3	2HM3T	2	0,3	0,4	10	450	2,1	1,75	1,01	23,5	22	21	19	17	15	12,5	9,5				
2HM4	2HM4T	3	0,45	0,6	12,5	450	2,9	2,46	1,42	35,5	33,5	31	28,5	25,5	22	18,5	14				
2HM5	2HM5T	4	0,55	0,75	16	450	3,6	2,91	1,68	47	44,5	41,5	38	34	29,5	25	19				
2HM7	2HM7T	5	0,75	1	22	450	5	3,5	2	59	55,5	52	47,5	43	37	31	23,5				
4HM4	4HM4T	2	0,45	0,6	12,5	450	2,7	2,42	1,40	24			21	20	19	17,5	16	14,5	11,5	7,5	
4HM5	4HM5T	3	0,55	0,75	16	450	3,8	2,98	1,72	36			31,5	29,5	28	26	24	22	17	11	
4HM7	4HM7T	4	0,75	1	22	450	5	3,5	2	48			42	39,5	37	35	32	29	22,5	15	
4HM9	4HM9T	5	0,9	1,2	22	450	5,7	4,2	2,4	60			52	49,5	46,5	43,5	40	36,5	28	18,5	

These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

HMS SERIES

OPERATING CHARACTERISTICS AT 2850 rpm 50 Hz

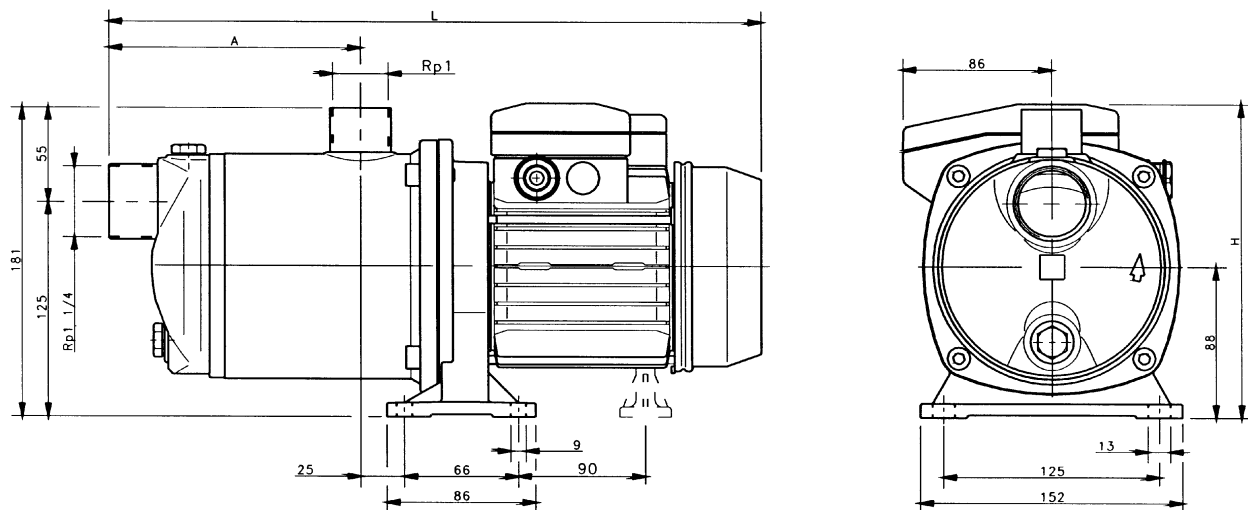


HM-HMS

PUMP TYPE		NUMBER OF STAGES	kW	HP	CAPACITOR		INPUT CURRENT			Q = DELIVERY											
SINGLE-PHASE 220 V 50 Hz	THREE-PHASE 220-240/ 380-415 V 50 Hz				μF	V	SINGLE-PHASE 220-240 V	THREE-PHASE 220-240 V	380-415 V	l/min	0	10	20	30	40	50	60	70	80	100	120
										m³/h	0	0,6	1,2	1,8	2,4	3	3,6	4,2	4,8	6	7,2
										H = TOTAL HEAD METERS COLUMN OF WATER											
2HMS3	2HMS3T	2	0,3	0,4	10	450	1,95	1,71	0,99	20	18,5	17	15	13	11	8,5	5,5				
2HMS4R	2HMS4RT	3	0,45	0,6	12,5	450	2,64	2,41	1,39	29,5	27,5	25,5	23	20	16,5	12,5	8,5				
2HMS4	2HMS4T	4	0,45	0,6	12,5	450	3,2	2,53	1,46	39,5	37	34	30,5	26,5	22	17	11				
2HMS7	2HMS7T	5	0,75	1	22	450	4,6	3,3	1,9	49,5	46	42,5	38	33	27,5	21	14				
4HMS3	4HMS3T	2	0,3	0,4	10	450	2,12	1,77	1,02	18,5			16	15	14	13	12	11	9	6	
4HMS4	4HMS4T	3	0,45	0,6	12,5	450	3	2,49	1,44	27,5			24	22,5	21	20	18	16,5	13	9	
4HMS5	4HMS5T	4	0,55	0,75	16	450	3,48	2,88	1,66	37			31,5	30	28	26,5	24,5	22	17,5	12	
4HMS7	4HMS7T	5	0,75	1	22	450	5	3,5	2	46			39,5	37,5	35	33	30,5	28	22	15	

These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

DIMENSIONS AND WEIGHTS, HM, HMS SERIES



HM-HMS

PUMP TYPE			DIMENSIONS IN mm			WEIGHT
			A	L	H	kg
HM	2HM3	2HM3T	96	328	184	7
	2HM4	2HM4T	121	353	184	7,6
	2HM5	2HM5T	146	378	184	8,3
	2HM7	2HM7T	171	436	192	9,6
	4HM4	4HM4T	96	328	184	7,3
	4HM5	4HM5T	121	353	184	8
	4HM7	4HM7T	146	411	192	9,7
	4HM9	4HM9T	171	436	192	10
HMS	2HMS3	2HMS3T	96	328	184	7
	2HMS4R	2HMS4RT	121	353	184	7,6
	2HMS4	2HMS4T	146	378	184	8
	2HMS7	2HMS7T	171	436	192	9,6
	4HMS3	4HMS3T	96	328	184	7
	4HMS4	4HMS4T	121	353	184	7,6
	4HMS5	4HMS5T	146	378	184	8,5
	4HMS7	4HMS7T	171	436	192	9,8