

# HM-HMS-HMZ Series

Noiseless, high-efficiency, horizontal multistage centrifugal electric pumps.

Available in the HM-HMZ versions for domestic applications and in the HMS version (made entirely of AISI 316 steel) for industrial applications. The HMZ version is specific for critical suction applications.

## Specifications

Delivery: up to 7.2 m<sup>3</sup>/h  
Head: up to 60 m  
Power supply: three-phase and singlephase 50 and 60 Hz  
Power: 0.3 kW to 0.9 kW  
Maximum operating pressure: 8 bar  
Temperature of pumped liquid:  
-10°C to +60°C (HM-HMZ)  
-10°C to +110°C (HMS)  
Insulation class: F  
Protection: IP55

## Materials

Pump body: Stainless steel  
Impeller: Stainless steel (HMS)  
Technopolymer (HM-HMZ)  
Diffuser: Stainless steel  
Seal housing: Stainless steel  
Mechanical seal:  
Ceramic/Carbon/EPDM  
Fill and drain plugs:  
Nickel-plated brass (HM-HMZ)  
Stainless steel (HMS)  
Elastomers: EPDM

## Applications

Water distribution

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Rain water collection

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Industrial washing equipment

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Pressure boosting

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General industry

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Irrigation

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Water treatment

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Cooling and chilling



For a complete list of technical information, consult [www.lowara.com](http://www.lowara.com)

## Operating Characteristics

PUMP TYPE	RATED POWER		Q = DELIVERY										
			l/min	0	20	30	40	50	60	70	80	100	120
	kw	HP	m <sup>3</sup> /h	0	1,2	1,8	2,4	3	3,6	4,2	4,8	6	7,2
H = TOTAL HEAD IN COLUMN OF WATER (METRES)													
2HM3(T)	0,3	0,4	23,8	21,4	19,7	17,6	15,2	12,5	9,4				
2HM4(T)	0,45	0,6	35,4	32	29,5	26,5	23	19	14,5				
2HM5(T)	0,55	0,75	46,8	42,1	38,8	34,9	30,4	25,3	19,6				
2HM7(T)	0,75	1	58,5	53,2	49,5	44,9	39,5	33,2	25,8				
4HM4(T)	0,45	0,6	24,6			20,3	19,1	17,8	16,5	15	11,9	8,3	
4HM5(T)	0,55	0,75	35,4			28,9	27,2	25,4	23,6	21,6	17,2	12,1	
4HM7(T)	0,75	1	48,1			40,2	38,2	36	33,7	31,2	25,2	17,7	
4HM9(T)	0,9	1,2	60,7			51,2	48,6	45,9	42,9	39,7	32,4	23,6	

hm-2p50\_a\_th

## Electrical data

PUMP TYPE	MOTOR TYPE	INPUT POWER*	INPUT CURRENT* 220-240 V	CAPACITOR $\mu$ F / 450 V	PUMP TYPE	MOTOR TYPE	INPUT POWER*	INPUT CURRENT* 220-240 V	INPUT CURRENT* 380-415 V
2HM3	SM63HM/1035	0,51	2,34	10	2HM3T	SM63HM/303	0,47	1,80	1,04
2HM4	SM63HM/1045	0,66	2,92	14	2HM4T	SM63HM/304	0,67	2,56	1,48
2HM5	SM63HM/1055	0,85	3,72	16	2HM5T	SM63HM/305	0,87	2,94	1,70
2HM7	SM71HM/1075	1,13	5,09	20	2HM7T	SM80HM/307HE	1,10	3,39	1,96
4HM4	SM63HM/1045	0,62	2,77	14	4HM4T	SM63HM/304	0,62	2,51	1,45
4HM5	SM63HM/1055	0,86	3,76	16	4HM5T	SM63HM/305	0,88	2,96	1,71
4HM7	SM71HM/1095	1,29	5,74	25	4HM7T	SM80HM/311HE	1,20	3,77	2,18
4HM9	SM71HM/1095	1,45	6,49	25	4HM9T	SM80HM/311HE	1,38	4,20	2,43

\*Maximum value in specified range.

hm-2p50-en\_c\_te

## HMS SERIES

### Hydraulic performance table ~2850 rpm 50 Hz

PUMP TYPE	RATED POWER		Q = DELIVERY										
			l/min	0	20	30	40	50	60	70	80	100	120
	kw	HP	m <sup>3</sup> /h	0	1,2	1,8	2,4	3	3,6	4,2	4,8	6	7,2
H = TOTAL HEAD IN COLUMN OF WATER (METRES)													
2HMS3(T)	0,3	0,4	20,5	17,8	16,2	14,4	12,3	9,8	6,9				
2HMS4R(T)	0,45	0,6	30,2	26,7	24,3	21,4	18,1	14,4	10,3				
2HMS4(T)	0,45	0,6	41,1	35,6	32,4	28,7	24,6	19,8	14,4				
2HMS7(T)	0,75	1	51,2	45,6	41,7	37,1	31,7	25,4	18,2				
4HMS3(T)	0,3	0,4	19,1			15,3	14,4	13,5	12,6	11,6	9,3	6,6	
4HMS4(T)	0,45	0,6	27,8			22,8	21,5	20,1	18,6	17,0	13,5	9,5	
4HMS5(T)	0,55	0,75	37,2			30,6	28,9	27,0	25,1	23,0	18,2	12,7	
4HMS7(T)	0,75	1	46,7			38,9	36,8	34,6	32,2	29,6	23,7	16,7	

hms-2p50\_a\_th

## Electrical data

PUMP TYPE	MOTOR TYPE	INPUT POWER*	INPUT CURRENT* 220-240 V	CAPACITOR $\mu$ F / 450 V	PUMP TYPE	MOTOR TYPE	INPUT POWER*	INPUT CURRENT* 220-240 V	CORRENTE ASSORB.* 380-415 V
2HMS3	SM63HM/1035	0,47	2,25	10	2HMS3T	SM63HM/303	0,42	1,77	1,02
2HMS4R	SM63HM/1045	0,61	2,75	14	2HMS4RT	SM63HM/304	0,61	2,51	1,45
2HMS4	SM63HM/1055	0,73	3,28	16	2HMS4T	SM63HM/305	0,73	2,79	1,61
2HMS7	SM71HM/1075	1,00	4,61	20	2HMS7T	SM80HM/307HE	0,96	3,04	1,76
4HMS3	SM63HM/1035	0,51	2,35	10	4HMS3T	SM63HM/303	0,48	1,80	1,04
4HMS4	SM63HM/1045	0,68	2,99	14	4HMS4T	SM63HM/304	0,69	2,58	1,49
4HMS5	SM71HM/1055	0,81	3,54	16	4HMS5T	SM80HM/305	0,82	2,89	1,67
4HMS7	SM71HM/1075	1,13	5,08	20	4HMS7T	SM80HM/307HE	1,09	3,37	1,95

\*Maximum value in specified range.

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## HMZ SERIES

### Hydraulic performance table ~2850 rpm 50 Hz

PUMP TYPE	RATED POWER		Q = DELIVERY																				
			l/min		20		30		40		50		60		70		80		100		120		
			m <sup>3</sup> /h		0		1,2		1,8		2,4		3		3,6		4,2		4,8		6		7,2
kW		HP		H = TOTAL HEAD METRES COLUMN OF WATER																			
2HM3Z(T)	0,3	0,4	22,2	20	18,2	16,1	13,7	10,9	7,9														
2HM4Z(T)	0,45	0,6	34	30	27,3	24,2	20,7	16,7	12,2														
2HM5Z(T)	0,55	0,75	45,5	40	36,3	32,1	27,3	22,1	16,5														
2HM7Z(T)	0,75	1	57	50,8	46,2	40,8	34,6	27,8	20,5														
4HM4Z(T)	0,45	0,6	23,6			19,3	18,1	16,9	15,6	14,2	11,1	7,6											
4HM5Z(T)	0,55	0,75	35			28,6	26,9	25	23,1	21	16,6	11,5											
4HM7Z(T)	0,75	1	47,5			39,9	37,8	35,6	33,2	30,5	24,4	16,9											
4HM9Z(T)	0,9	1,2	58,4			48,3	45,6	42,8	39,8	36,5	29,1	20,3											

hmz-2p50-en\_b\_th

## Electrical data

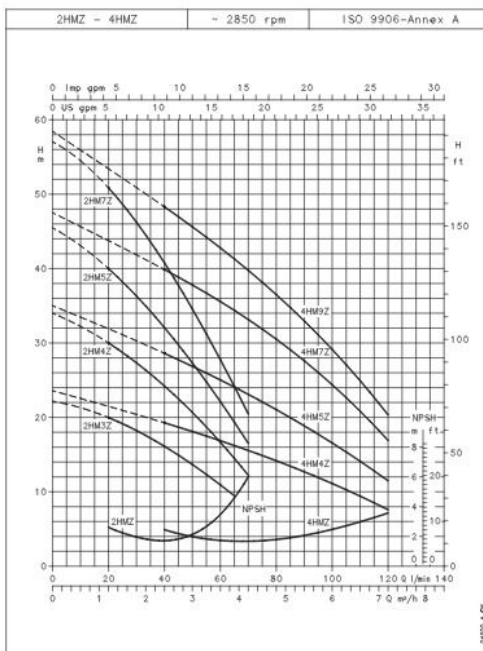
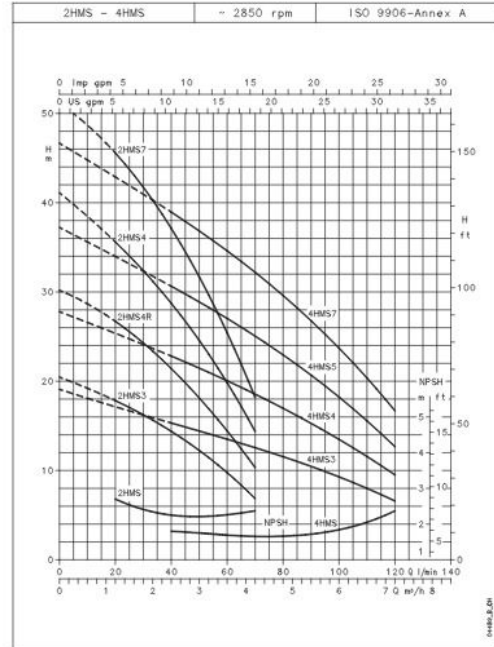
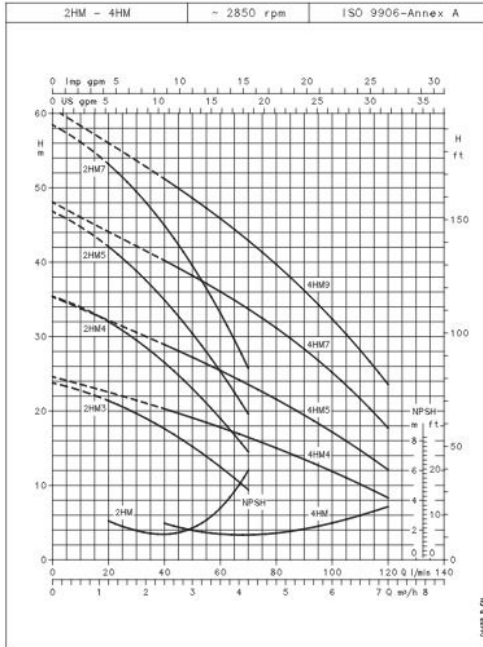
PUMP TYPE	MOTOR TYPE	INPUT			CAPACITOR	PUMP TYPE	MOTOR TYPE	INPUT		
		POWER*	CURRENT*					POWER*	CURRENT*	
			220-240 V	380-415 V					220-240 V	380-415 V
1 ~		kW	A	μF / 450 V	3 ~		kW	A	A	
2HM3Z	SM63HM/1035	0,51	2,34	10	2HM3ZT	SM63HM/303	0,47	1,80	1,04	
2HM4Z	SM63HM/1045	0,66	2,92	14	2HM4ZT	SM63HM/304	0,67	2,56	1,48	
2HM5Z	SM63HM/1055	0,85	3,72	16	2HM5ZT	SM63HM/305	0,87	2,94	1,70	
2HM7Z	SM71HM/1075	1,13	5,09	20	2HM7ZT	SM80HM/307HE	1,10	3,39	1,96	
4HM4Z	SM63HM/1045	0,62	2,77	14	4HM4ZT	SM63HM/304	0,62	2,51	1,45	
4HM5Z	SM63HM/1055	0,86	3,76	16	4HM5ZT	SM63HM/305	0,88	2,96	1,71	
4HM7Z	SM71HM/1095	1,29	5,74	25	4HM7ZT	SM80HM/311HE	1,20	3,77	2,18	
4HM9Z	SM71HM/1095	1,45	6,49	25	4HM9ZT	SM80HM/311HE	1,38	4,20	2,43	

\*Maximum value in specified range.

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# HM-HMS-HMZ SERIES

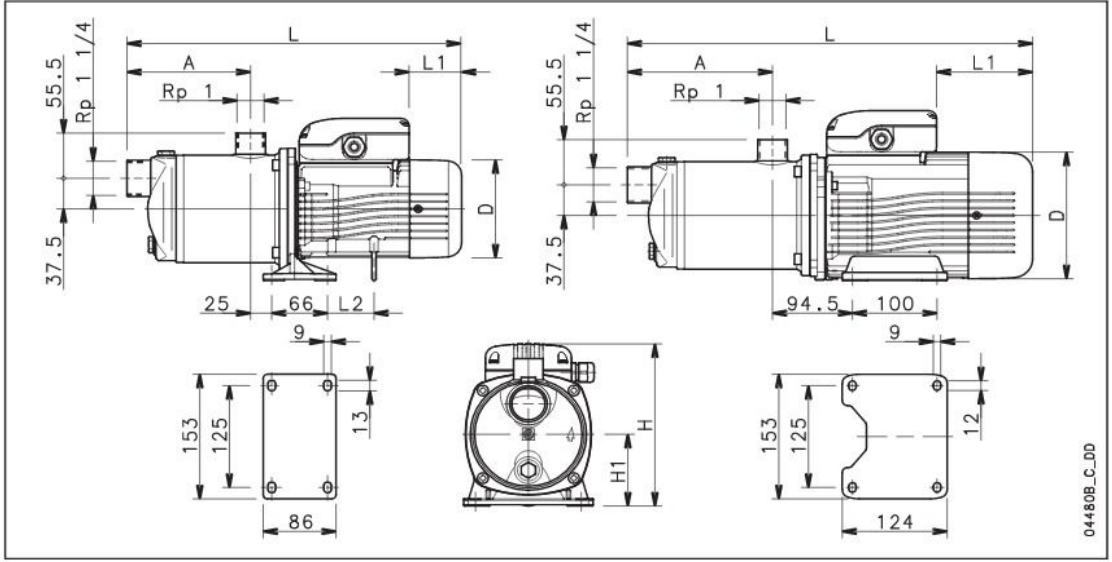
## Operating characteristics at 50 Hz



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

# HM-HMS-HMZ SERIES

## Dimensions and weights



POMP TYPE	DIMENSIONS (mm)								WEIGHT kg
	NUMBER OF STAGES	A	D	L	L1	L2	H	H1	
2HM3 - 2HM3Z	2	96	120	345	62	56	199	88	6,8
2HM4 - 2HM4Z	3	121	120	370	62	56	199	88	7,7
2HM5 - 2HM5Z	4	146	120	395	62	56	199	88	8,5
2HM7 - 2HM7Z	5	171	140	434	76	56	209	88	12
4HM4 - 4HM4Z	2	96	120	345	62	56	199	88	7,3
4HM5 - 4HM5Z	3	121	120	370	62	56	199	88	8,1
4HM7 - 4HM7Z	4	146	140	409	31	56	218	88	11,6
4HM9 - 4HM9Z	5	171	140	434	31	56	218	88	11,4
2HM3T - 2HM3TZ	2	96	120	345	62	56	199	88	6,6
2HM4T - 2HM4TZ	3	121	120	370	62	56	199	88	7,6
2HM5T - 2HM5TZ	4	146	120	395	62	56	199	88	8,3
2HM7T - 2HM7TZ	5	171	155	480	114	-	209	80	15
4HM4T - 4HM4TZ	2	96	120	345	62	56	199	88	7,2
4HM5T - 4HM5TZ	3	121	120	370	62	56	199	88	8
4HM7T - 4HM7TZ	4	146	155	455	114	-	209	80	14,5
4HM9T - 4HM9TZ	5	171	155	480	114	-	209	80	15
2HMS3	2	96	120	345	62	56	199	88	7
2HMS4R	3	121	120	370	62	56	199	88	7,6
2HMS4	4	146	120	395	62	56	199	88	8
2HMS7	5	171	140	434	76	56	209	88	12
4HMS3	2	96	120	345	62	56	199	88	7
4HMS4	3	121	120	370	62	56	199	88	7,8
4HMS5	4	146	120	395	62	56	199	88	8,7
4HMS7	5	171	140	434	76	56	209	88	10
2HMS3T	2	96	120	345	62	56	199	88	7
2HMS4RT	3	121	120	370	62	56	199	88	7,6
2HMS4T	4	146	120	395	62	56	199	88	8,2
2HMS7T	5	171	155	480	114	-	209	80	13
4HMS3T	2	96	120	345	62	56	199	88	6,8
4HMS4T	3	121	120	370	62	56	199	88	7,7
4HMS5T	4	146	120	395	62	56	199	88	8,5
4HMS7T	5	171	155	480	114	-	209	80	13,5

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