

Threaded horizontal multistage centrifugal electric pumps

2HM - 4HM
2HMS - 4HMS
Series



MARKET SECTORS

INDUSTRIAL, CIVIL, AGRICULTURAL.

APPLICATIONS

- Circulation and transfer of water for domestic (HM and HMS) and industrial use.
- Small irrigation systems. The HMS series pump can handle water enriched with nutrients having moderate chemical aggressiveness, but free of suspended solids.
- Composition of pressure boosting surge tank units for various purposes.
- Circulation and transfer of liquids compatible with AISI 316L (DIN 1.4404) stainless steel for HMS version.



- Single-phase version with 220 V 50 Hz power supply, permanent capacitor and built-in, automatic reset overload protection. Three-phase version with 220-240/380-415 V 50 Hz, overload protection to be provided by user.
- **Power:**
2HM-4HM: up to 0.9 kW.
2HMS-4HMS: up to 0.75 kW.
- Class F insulation.
- IP55 protection.

SPECIFICATIONS

- **Delivery:**
2HM-4HM: up to 130 l/m (7.8 m³/h).
2HMS-4HMS: up to 120 l/m (7.2 m³/h).
- **Head:**
2HM-4HM: up to 60 mcw.
2HMS-4HMS: up to 50 mcw.
- Maximum operating pressure: 8 bar.
- Continuous duty.
- Max. temperature of pumped liquid: HM 60°C, HMS 110°C.
- Closed motor with external ventilation and finned casing made of aluminum alloy.

❑ LIQUID END MADE ENTIRELY OF STAINLESS STEEL FOR HMS

❑ VERY LOW NOISE LEVEL

❑ HIGH PERFORMANCE AND RELIABILITY

Lowara



MATERIALS

2HM - 4HM SERIES

PART	MATERIAL			
		UNI	ASTM - AISI	DIN
Pump body, seal holding disk, diffusers, covers and spacers	Stainless steel	x5CrNi	AISI 304	1.4301
Impellers	Thermoplastic material suitable for use with drinking water			
Shaft extension	Stainless steel	X5CrNi	AISI 316L	1.4404
Fill/drain plugs	Nickel-plated brass			
Mechanical seal	Carbon/Ceramic			
O-Rings	EPDM			

2HMS - 4HMS SERIES

PART	MATERIAL			
		UNI	ASTM - AISI	DIN
Pump body, seal holding disk, diffusers, covers and spacers	Stainless steel	x5CrNi	AISI 316L	1.4404
Impellers	Stainless steel	x5CrNi	AISI 316L	1.4404
Shaft extension	Stainless steel	X5CrNi	AISI 316L	1.4404
Fill/drain plugs	Stainless steel	X5CrNi	AISI 316L	1.4404
Mechanical seal	Carbon/Ceramic			
O-Rings	EPDM			

MECHANICAL SEAL

The characteristics of the standard configuration are shown in fig. 1 and table 1.

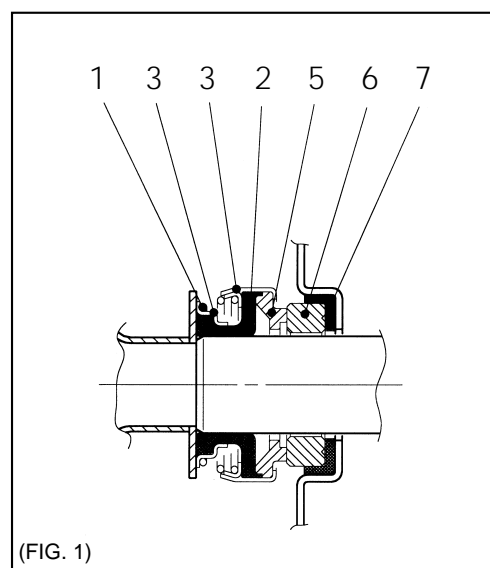
STANDARD MATERIALS (TAB. 1)

POS.	COMPONENT	MATERIAL
1	Spring	AISI 316* stainless steel
2	Shaft gasket	EPDM
3	Armature	AISI 316* stainless steel
4	Impeller gasket	EPDM
5	Impeller seal ring	Ceramic
6	Fixed ring	Carbon
7	Fixed gasket	EPDM

* AISI 304 for HM

ALTERNATIVE MATERIALS (TAB. 2) (on request)

POS.	MATERIAL
2-4-7	FPM
5-6	Tungsten Carbide (Widia) - Special Carbon
	Tungsten Carbide (Widia) - Silicon Carbide
	Tungsten Carbide (Widia) - Tungsten Carbide (Widia)
	Silicon Carbide - Silicon Carbide



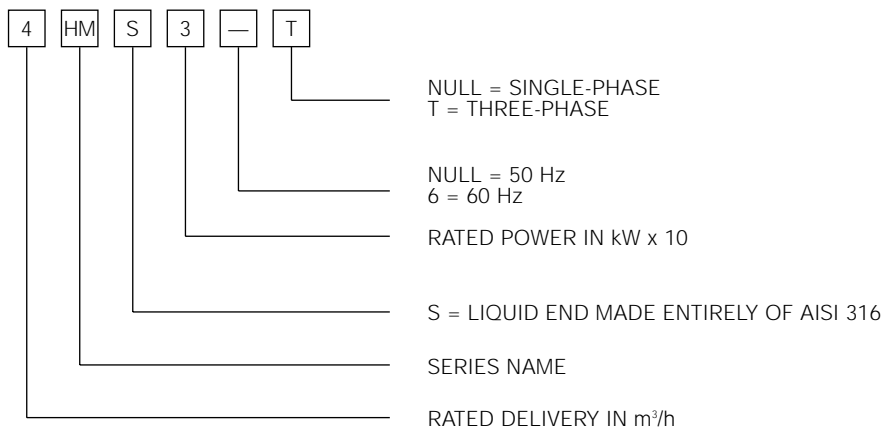
ELECTRICAL DATA (50 Hz, 2850 rpm)

HM-HMS SERIES

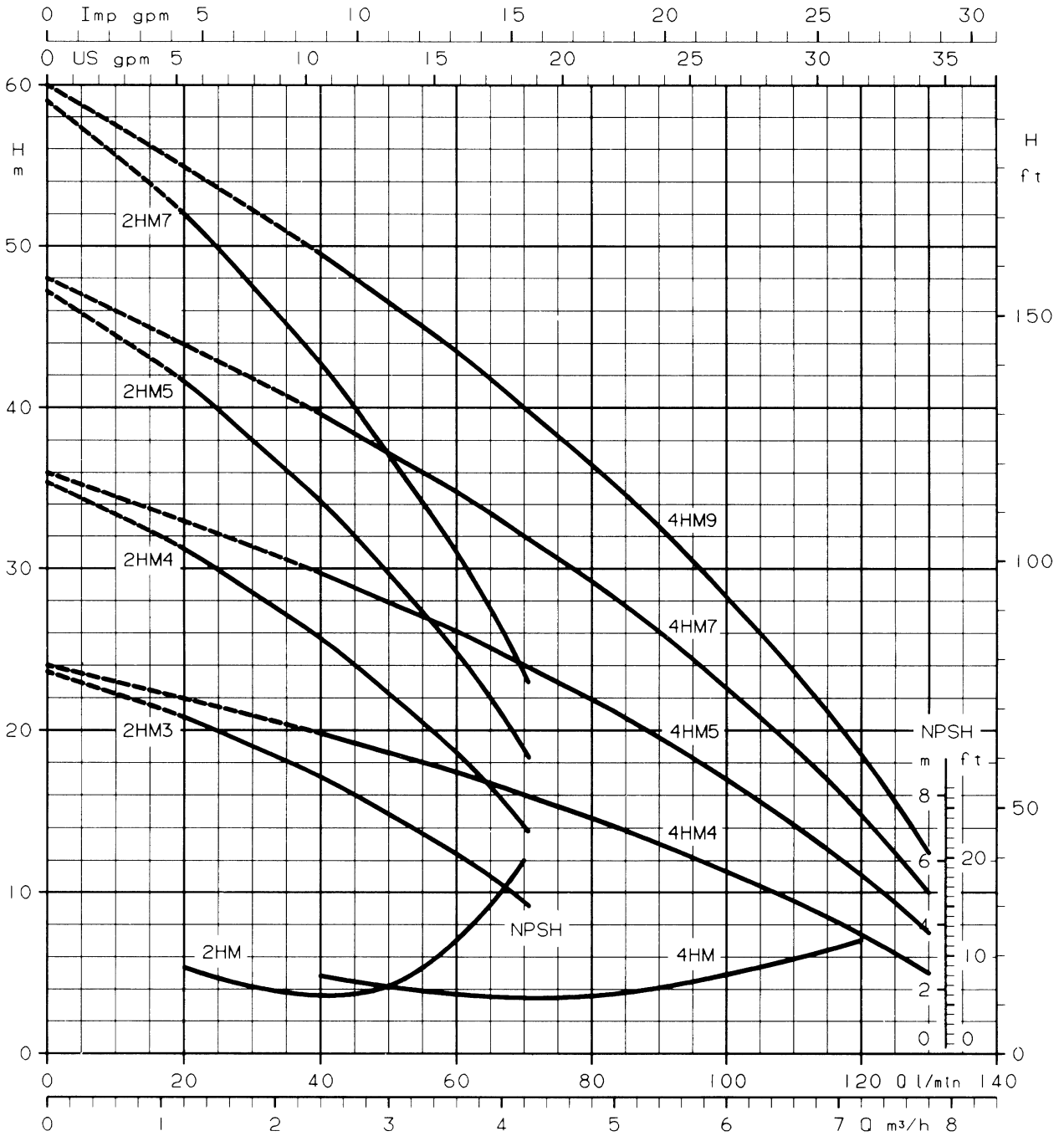
PUMP TYPE		NUMBER OF STAGES	POWER		CAPACITOR		RATED CURRENT			MOTOR SIZE
SINGLE-PHASE 220 V 50 Hz	THREE-PHASE 220-240V 380-415 V 50 Hz		kW	HP	μF	V	SINGLE-PHASE 220 V 50 Hz	THREE-PHASE		
								220-240 V 50 Hz	380-415 V 50 Hz	
2HM3	2HM3T	2	0,3	0,4	10	450	2,1	1,75	1,01	63
2HM4	2HM4T	3	0,45	0,6	12,5	450	2,9	2,46	1,42	63
2HM5	2HM5T	4	0,55	0,75	16	450	3,6	2,91	1,68	63
2HM7	2HM7T	5	0,75	1	22	450	5	3,5	2	71
4HM4	4HM4T	2	0,45	0,6	12,5	450	2,7	2,42	1,40	63
4HM5	4HM5T	3	0,55	0,75	16	450	3,8	2,98	1,72	63
4HM7	4HM7T	4	0,75	1	22	450	5	3,5	2	71
4HM9	4HM9T	5	0,9	1,2	22	450	5,7	4,2	2,4	71
2HMS3	2HMS3T	2	0,3	0,4	10	450	1,9	1,3	0,75	63
2HMS4R	2HMS4RT	3	0,45	0,6	12,5	450	2,7	1,9	1,1	63
2HMS4	2HMS4T	4	0,45	0,6	12,5	450	3,2	2,1	1,2	63
2HMS7	2HMS7T	5	0,75	1	22	450	4,6	3,3	1,9	71
4HMS3	4HMS3T	2	0,3	0,4	10	450	1,9	1,4	0,82	63
4HMS4	4HMS4T	3	0,45	0,6	12,5	450	2,7	2	1,15	63
4HMS5	4HMS5T	4	0,55	0,75	16	450	3,2	2,8	1,6	63
4HMS7	4HMS7T	5	0,75	1	22	450	5	3,5	2	71

ELECTRIC PUMP IDENTIFICATION CODE

The HM-HMS series models are coded as shown in the following diagram:



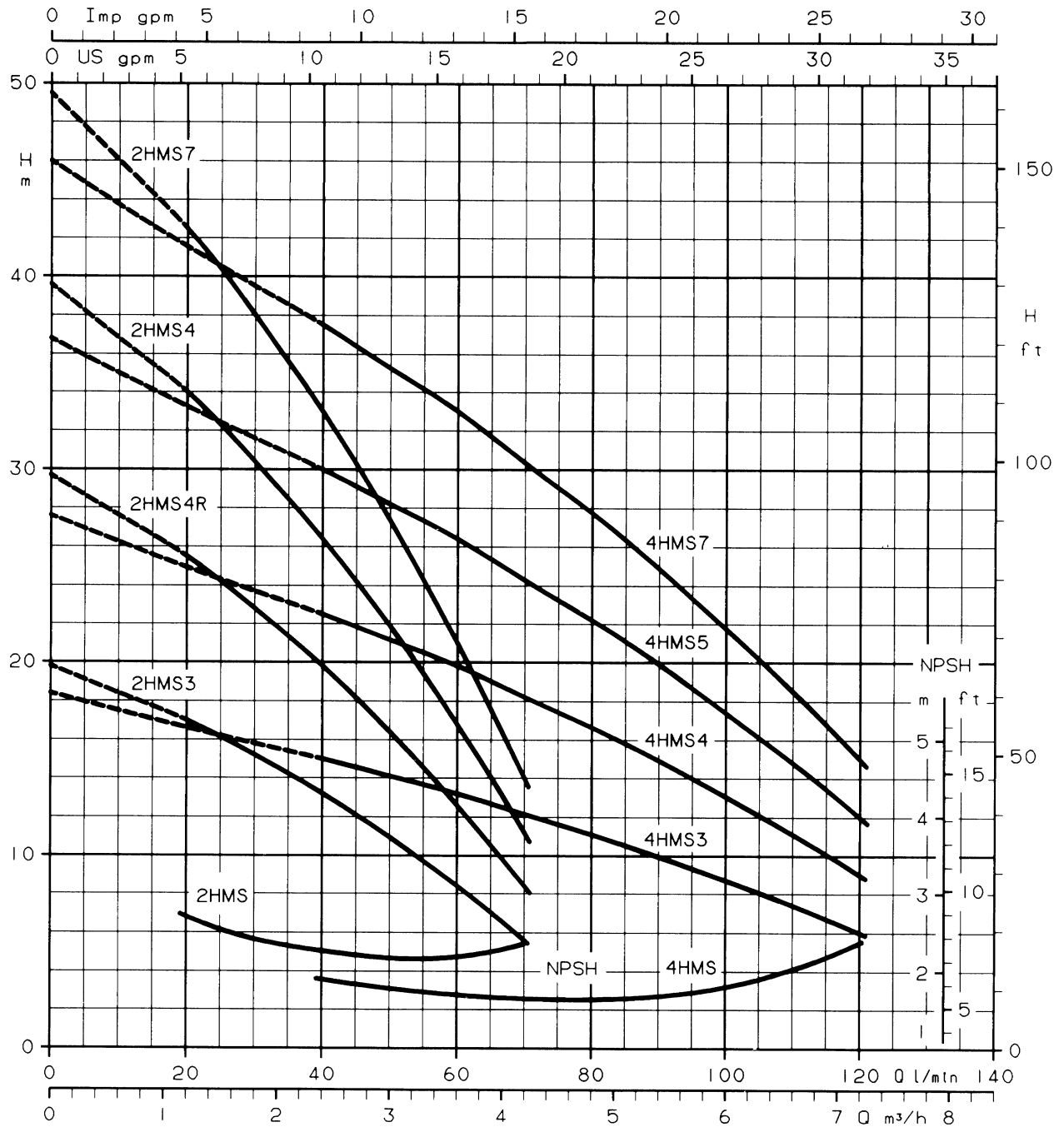
HYDRAULIC PERFORMANCE CURVES, 2HM - 4HM SERIES, 50 Hz, 2 POLES (2850 rpm)



Guaranteed performances in compliance with ISO 2548 for class C standard pumps.

PUMP TYPE		Q = DELIVERY											
SINGLE-PHASE 220 V 50 Hz	THREE-PHASE 220-240 V 380-415 V 50 Hz	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	23,5	22	21	19	17	15	12,5	9,5				
2HM4	2HM4T	35,5	33,5	31	28,5	25,5	22	18,5	14				
2HM5	2HM5T	47	44,5	41,5	38	34	29,5	25	19				
2HM7	2HM7T	59	55,5	52	47,5	43	37	31	23,5				
4HM4	4HM4T	24			21	20	19	17,5	16	14,5	11,5	7,5	
4HM5	4HM5T	36			31,5	29,5	28	26	24	22	17	11	
4HM7	4HM7T	48			42	39,5	37	35	32	29	22,5	15	
4 HM9	4HM9T	60			52	49,5	46,5	43,5	40	36,5	28	18,5	

HYDRAULIC PERFORMANCE CURVES, 2HMS - 4HMS SERIES, 50 Hz, 2 POLES (2850 rpm)

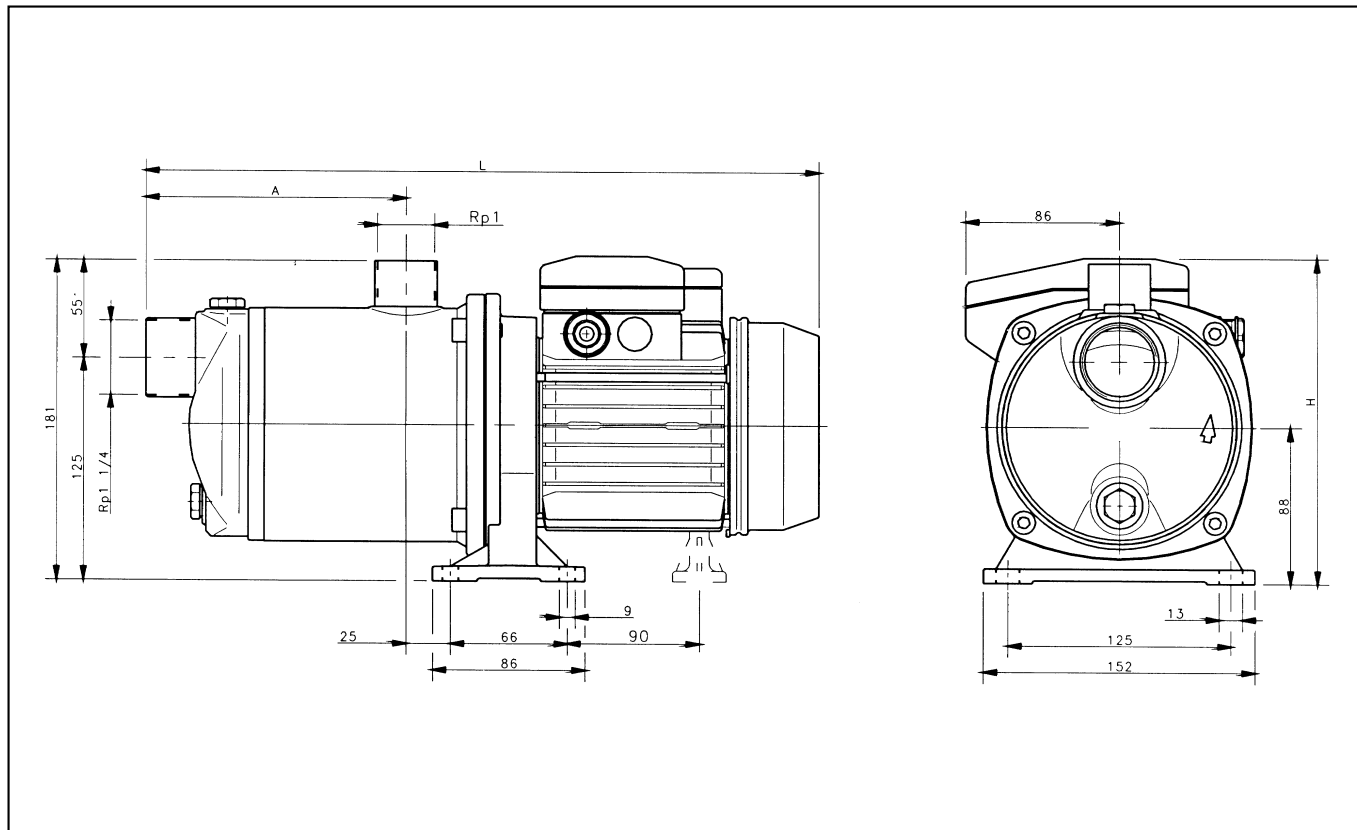


Guaranteed performances in compliance with ISO 2548 for class C standard pumps.

PUMP TYPE		Q = DELIVERY											
SINGLE-PHASE 220 V 50 Hz	THREE-PHASE 220-240 V 380-415 V 50 Hz	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	20	18,5	17	15	13	11	8,5	5,5				
2HMS4R	2HMS4RT	29,5	27,5	25,5	23	20	16,5	12,5	8,5				
2HMS4	2HMS4T	39,5	37	34	30,5	26,5	22	17	11				
2HMS7	2HMS7T	49,5	46	42,5	38	33	27,5	21	14				
2HMS3	4HMS3T	18,5			16	15	14	13	12	11	9	6	
2HMS4	4HMS4T	27,5			24	22,5	21	20	18	16,5	13	9	
2HMS5	4HMS5T	37			31,5	30	28	26,5	24,5	22	17,5	12	
2HMS7	4HMS7T	46			39,5	37,5	35	33	30,5	28	22	15	

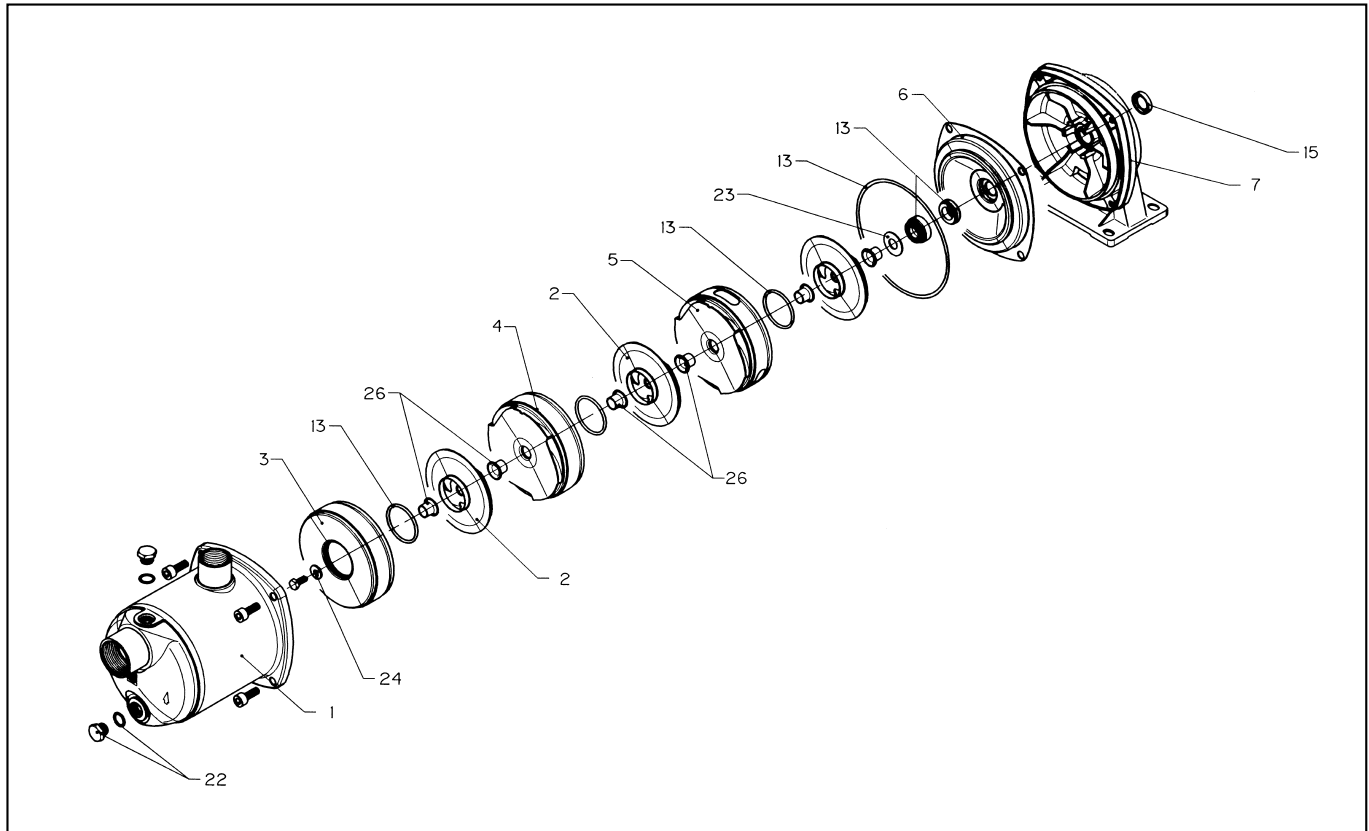
DIMENSIONS AND WEIGHTS

HM - HMS SERIES



PUMP TYPE		DIMENSIONS					WEIGHT
SINGLE-PHASE 220 V 50 Hz	THREE-PHASE 220-240 V 380-415 V 50 Hz	DNA	DNM	A	L	H	kg
2HM(S)3	2HM(S)3T	Rp 1 1/4"	Rp 1"	96	328	184	7
2HMS4R	2HMS4RT	Rp 1 1/4"	Rp 1"	121	353	184	8
2HM(S)4	2HM(S)4T	Rp 1 1/4"	Rp 1"	146	378	184	8
2HM(S)7	2HM(S)7T	Rp 1 1/4"	Rp 1"	171	436	192	10
4HM(S)3	4HM(S)3T	Rp 1 1/4"	Rp 1"	96	328	184	7
4HM(S)4	4HM(S)4T	Rp 1 1/4"	Rp 1"	121	353	184	8
4HM(S)5	4HM(S)5T	Rp 1 1/4"	Rp 1"	146	378	184	9
4HM(S)7	4HM(S)7T	Rp 1 1/4"	Rp 1"	171	436	192	10

LIST OF MAIN COMPONENTS
HM - HMS SERIES



REF. N.	DESCRIPTION	
1	Pump body	
* 2	Impeller	
3	Initial stage case	
4	Diffuser	
5	Final diffuser	
6	Seal holding disk	
7	Motor/pump support	
* 13	Mechanical seal + O-ring kit	
* 14	Fan-side bearing	
* 15	Fan-side O-ring	
*15A	Spray guard	
20	Terminal cover seal	
22	Fill/drain plug	"O" Ring
23	Seal shoulder washer	
24	Impeller lock washer	
26	26 Impeller spacer	

* Recommended spare parts