



HM, HMK, HMC, HMN

Horizontal Multistage
Centrifugal Pumps, 50Hz

Approvals

IEC		IECEE CB SCHEME		CB TEST CERTIFICATE		Ref. Certificate No. CH-5876	
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME							
Issued by:	Electrosuisse						
Product:	Horizontal and vertical multistage pump						
Applicant:	Swiss Pump Company AG	Mosweg 36 CH-3643 Gwall (Thun)	Switzerland				
Manufacturer:	Swiss Pump Company AG	Mosweg 36 CH-3643 Gwall (Thun)	Switzerland				
Factory:	Swiss Pump Company AG	Mosweg 36 CH-3643 Gwall (Thun)	Switzerland				
Rating and principal characteristics:	3 x 350 - 377/348 - 480V~, 50/60Hz; 220-230V~, 50/60Hz; 127-230-240V~, 60Hz; class I, IP55						
Trade mark (if any):	Swiss Pump Company AG (SPCO)						
Model/Type reference:	HM..., CH..., VM..., CD..., ND..., CC..., PD..., MB..., QB..., SMF..., CCP..., SCP..., see appendix type list in test report						
Additional information:	---						
Sample of product tested to be in conformity with IEC:	60335-1ed4:am1,am2 60335-2-41ed3:am1,am2		National differences: EU Group Differences; EU Special National Conditions; EU A-Deviations				
Test Report Ref. No.:	06-HQ-0218.01 + .02 + .03 + .05						
This CB Test Certificate is issued by the National Certification Body: Electrosuisse Luppenstrasse 1, CH-8320 Fehraltorf							
Signed by:		Erich Christl		2019-07-27		electrosuisse	
						page 1 of 1	



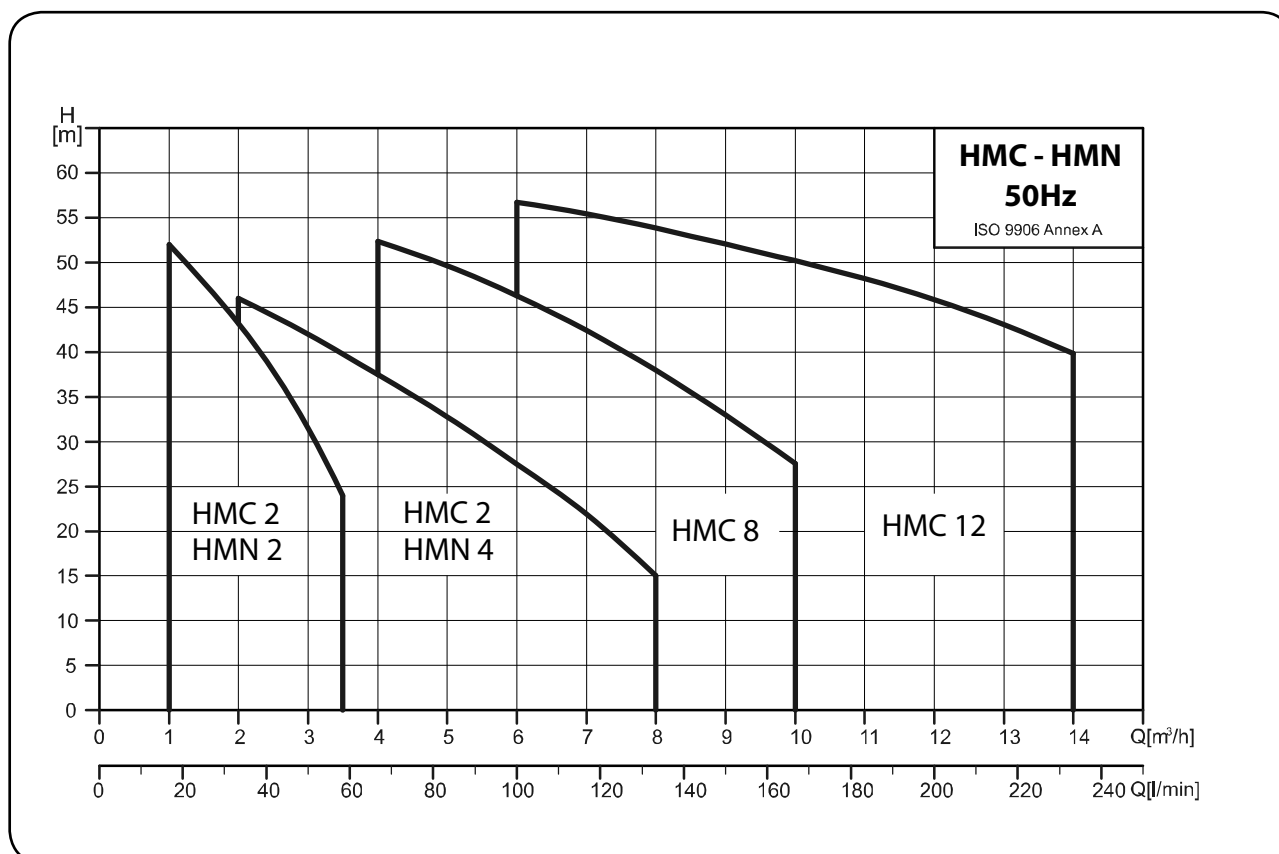
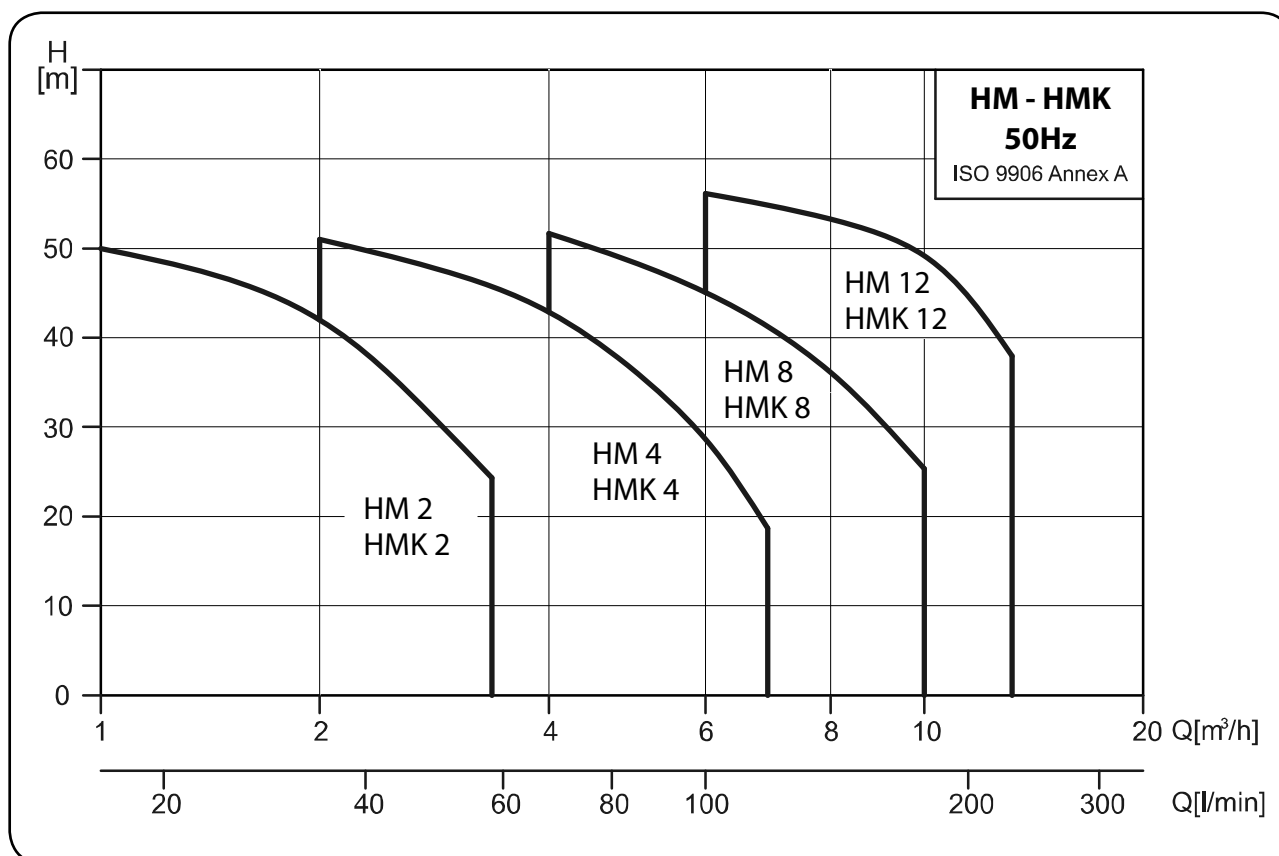
General Data

Performance range	page	4
Applications HM - HMK		5
Pump HM - HMK		5
Operating Conditions HM - HMK		5
Pipe Connections		5
Liquids to be pumped		5
Applications HMC - HMN		6
Pump HMC - HMN		6
Operating Conditions HMC - HMN		6
Pipe Connections		6
Definition of model		7
Electrical Motor		7
Section drawing HM - HMK		8
Material HM - HMK		8
Mechanical seal HM - HMK		8
Section drawing HMC - HMN		9
Material HMC - HMN		9
Mechanical seal HMC - HMN		9

Technical Data

HM - HMK 2	page	10
HM - HMK 4		11
HM - HMK 8		12
HM - HMK 12		13
HMC - HMN 2		14
HMC - HMN 4		15
HMC 8		16
HMC 12		17

Performance range



Applications HM - HMK

- Water supply and pressure boosting.
- Water treatment.
- Air-conditioning.
- Heating and cooling in industrial processes.
- Industrial washing and dish-washing machines.
- Softened water.
- Pressure boosting of process water.
- Fertilizer/ dosing systems.

Pump HM - HMK

A horizontal multistage centrifugal pump is made of stainless steel.
The pump is a non-self priming type and fitted with a mechanical shaft seal.

Operating conditions HM - HMK

Liquid temperature range: 0 °C ~ +110 °C .

Maximum ambient temperature: +50 °C .

Maximum operating pressure: 10 kg/cm².

Maximum inlet pressure is limited by maximum operating pressure.

Pipe connections

Connection	HM(K) 2	HM(K) 4	HM(K) 8	HM(K) 12
Suction Port	Rp 1	Rp 1 1/4	Rp 1 1/2	Rp 1 1/2
Discharge Port	Rp 1	Rp 1 1/4	Rp 1 1/2	Rp 1 1/2
Drain hole, Priming Hole	G 3/8	G 3/8	G 3/8	G 3/8

Liquids to be pumped

These pumps are designed for pumping freely flowing non-corrosive, non-explosive, and non-flammable liquids. The liquids to be pumped must also be free of solid matter, sands, fibers, and similar materials.

Most common non-highly corrosive watery liquids, oily liquids, hot and cold liquids can be pumped with these pumps.

The suitability of these pumps for pumping any particular liquid depends upon a number of factors, such as the pH value, contents of chemicals such as chlorides, oils, the temperature of the liquids, etc.

Please contact SPCO if there are any questions as to whether certain liquids are suitable for pumping with these pumps.

Applications HMC - HMN

- Domestic.
- Liquid transfer and circulation of liquids within light industry and farming.
- Pressure boosting.
- Air-conditioning systems.
- Cooling systems or cooling machine
- Specialized OEM equipment

Pump HMC - HMN

The HMC and HMN series are non-self priming, horizontal multistage centrifugal pumps. pump is coupled with motor at the same shaft and mounted on a base- plate. The friendly design makes the pump suitable for installation in the small domestic or industrial water supply systems. The pump is fitted with a mechanical seal and through (going pump) motor shaft.

HMC: The discharge and suction chamber are made of cast iron. The other parts of pump in contact with the liquid are made of stainless steel.

HMN: All parts of pump in contact with the liquid are made of stainless steel.
EPDM or viton O-rings are available as standard.

Operating conditions HMC - HMN

Liquid: Clean liquid without solid particles.

Liquid temperature range: 0°C ~ +90°C .

Maximum ambient temperature: +50°C .

The maximum operating pressure depends on the temperature of the pumped liquid.

Max. Operating Pressure	10 kg/cm ²	6 kg/cm ²
HMC(N) 2, HMC(N) 4	0°C to +40°C	+41°C to +90°C
HMC 8 , HMC 12	0°C to +55°C	+56°C to +90°C

Min.inlet pressure: According to the NPSH curve + a safety margin of 0.5m .

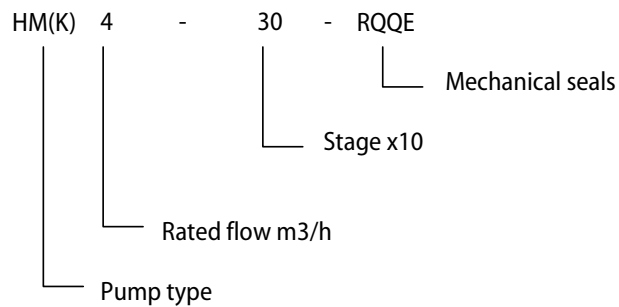
Max. inlet pressure: Limited by the max. operating pressure .

Pipe connections

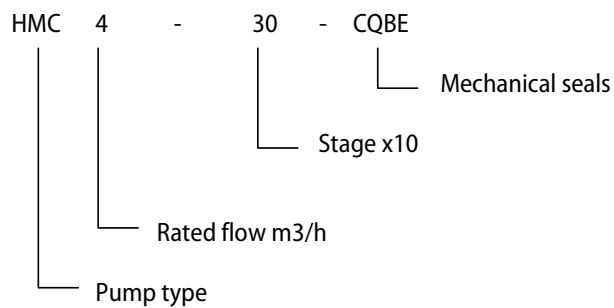
Connection	HMC(N) 2	HMC(N) 4	HMC 8	HMC 12
Suction Port	Rp 1	Rp 1 1/4	Rp 1 1/2	Rp 1 1/2
Discharge Port	Rp 1	Rp 1	Rp 1 1/4	Rp 1 1/2
Drain hole, Priming Hole	Rc 3/8	Rc 3/8	Rp 1/2	Rp 1/2

Definition of Model

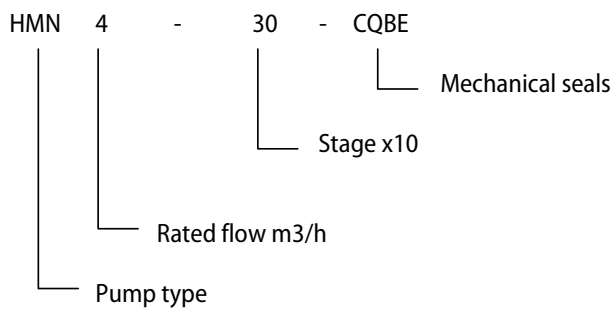
HM(K) Example



HMC Example



HMN Example



Electric Motor

The pump is fitted with a totally enclosed, fan-cooled, squirrel-cage motor.

Rated speed: 2850 rpm (50Hz)

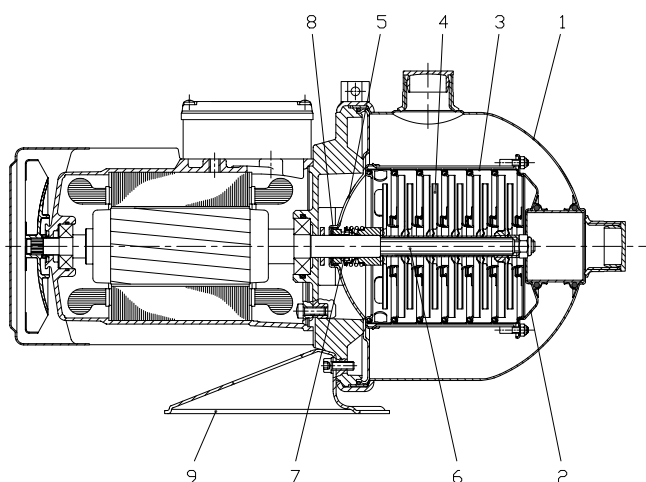
Enclosure class: IP 54

Insulation class: F

Standard voltage: 1 x 220 ~ 240 V, 50Hz

3 x 220 ~ 240 V/380 ~ 415 V, 50Hz

Section drawing HM - HMK



Material HM - HMK

No.	Description	Materials	
		HM	HMK
1	Pump casing	SS304	SS316
2	Suction inter-connector	SS304	SS316
3	Chamber	SS304	SS316
4	Impeller	SS304	SS316
5	Cover plate	SS304	SS316
6	Shaft	SS431	SS316
7	Mechanical seal	Silicon carbide / Carbon	Silicon carbide / Sic
8	O-ring	EPDM or Viton	EPDM or Viton
9	Base plate	Steel	Steel

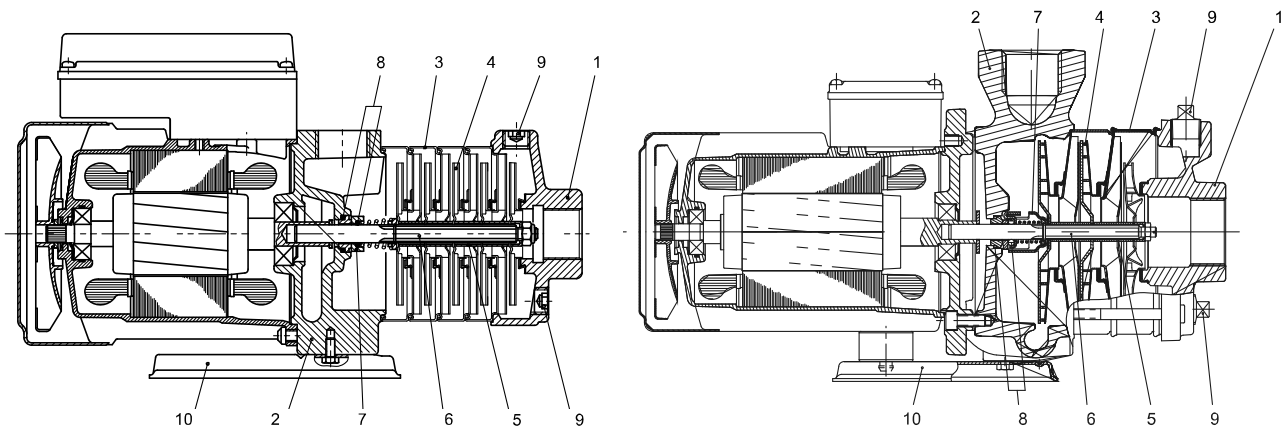
Mechanical seal HM - HMK

List of Materials	
Q : Silicon carbide	E : EPDM
B : Carbon	V : Viton
R : Seal Type	

Mechanical Seals	HM	HMK
RQQ	Optional	•
RQB	•	Optional
O-ring		
E	•	•
V	Optional	Optional

• Standard.

Section drawing HMC - HMN



Material HMC - HMN

No.	Description	Materials	
		HMC	HMN
1	Suction chamber	Cast iron	SS304
2	Pump head	Cast iron	SS304
3	Intermediate chamber	SS304	SS304
4	Impeller	SS304	SS304
5	Spacing pipe	SS304	SS304
6	Shaft	SS431	SS431
7	Mechanical seal	Silicon carbide / Carbon	Silicon carbide / Carbon
8	O-ring	EPDM or Viton	EPDM or Viton
9	Drain and priming plug	Steel	SS304
10	Base plate	Steel	SS304

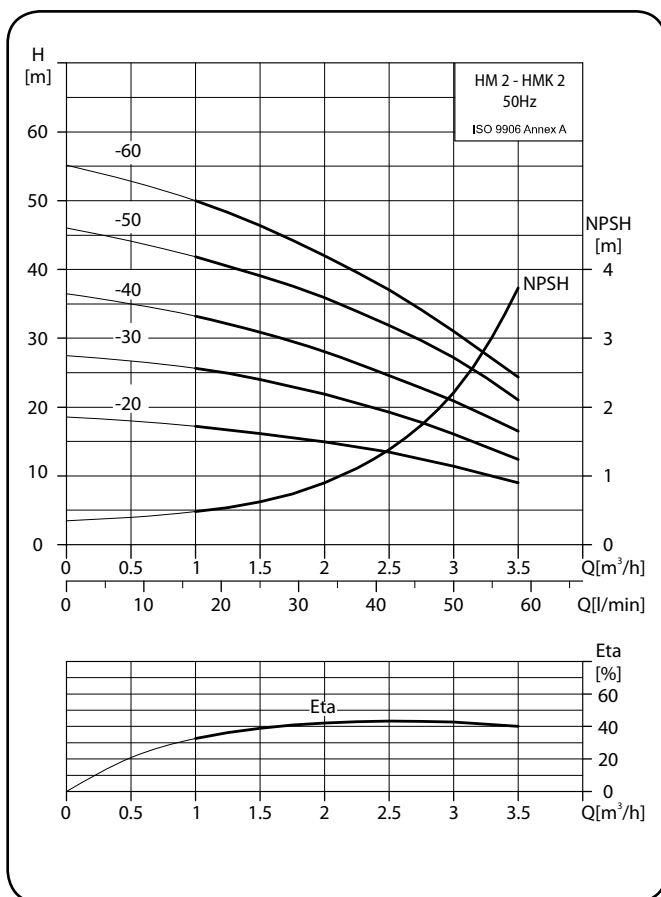
Mechanical seal HMC - HMN

List of Materials	
Q : Silicon carbide	E : EPDM
U : Tungsten carb	V : Viton
B : Carbon	C : Seal Type
A : Seal Type	

Mechanical Seals	HMC(N) 2, 4	HMC 8, 12
CQB	•	•
CQQ	Optional	Optional
AUU	Optional	Optional
O-ring		
E	•	•
V	Optional	Optional

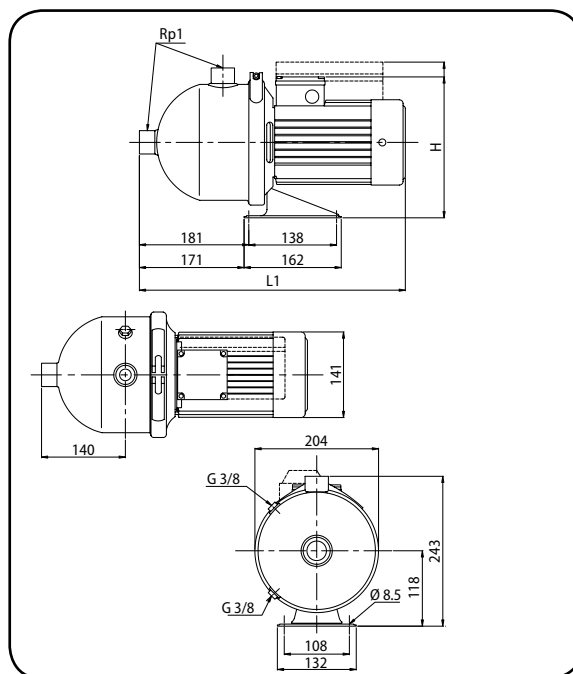
• Standard.

Performance curves



HM 2 - HMK 2

Installation sketch



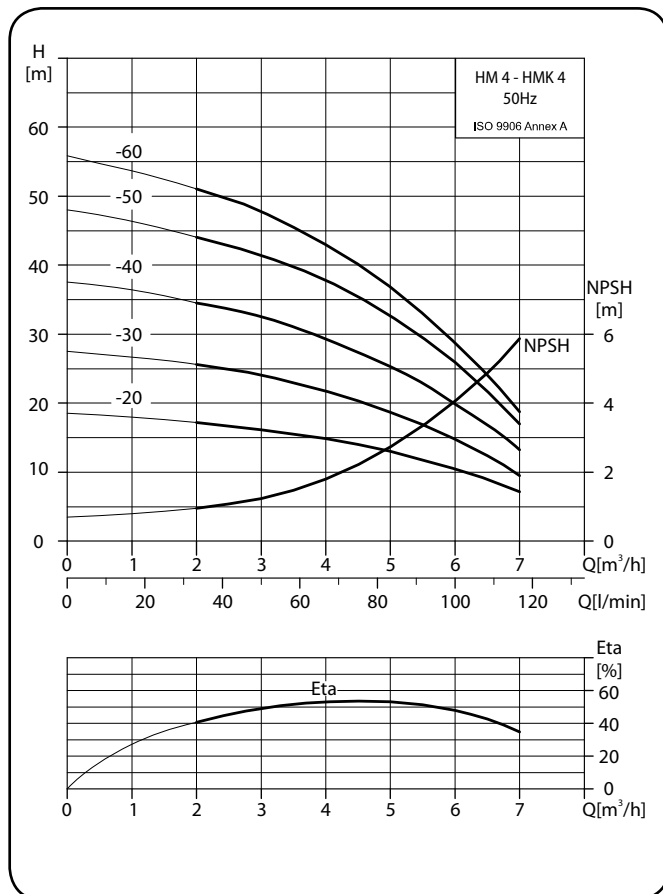
Dimensions and weights

Model	Dimension [mm]				Weight [kg]
	1-Phase		3-Phase		
	L1	H	L1	H	
HM 2-20 / HMK 2-20	403	255	403	233	9.6
HM 2-30 / HMK 2-30	403	255	403	233	9.9
HM 2-40 / HMK 2-40	403	255	403	233	10.1
HM 2-50 / HMK 2-50	403	255	403	233	10.8
HM 2-60 / HMK 2-60	403	255	403	233	11.0

Electrical data, 2850 min⁻¹

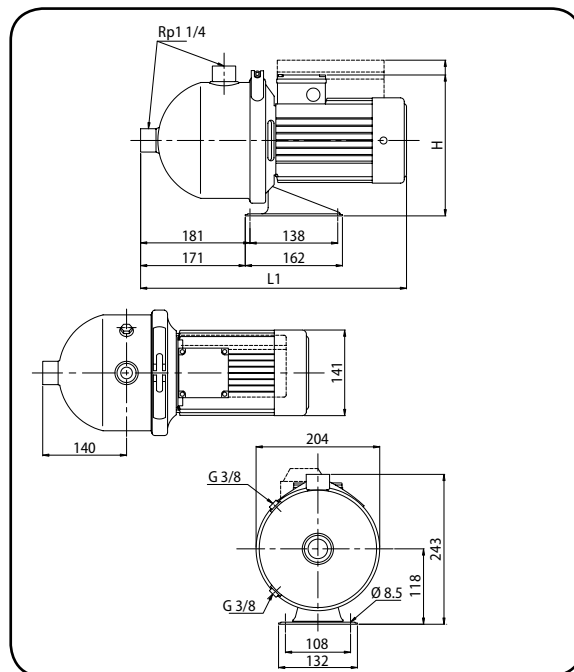
Pump type	1Φ 220-240V			3Φ Δ220-240V / Y 380-415V		
	I 1/1 [A]	P 1 [W]	P 2 [W]	I 1/1 [A]	P 1 [W]	P 2 [W]
HM/HMK 2-20	1.7 - 1.9	360	280	2.0 - 2.7 / 1.2 - 1.6	370	290
HM/HMK 2-30	2.3 - 2.2	470	365	2.4 - 2.8 / 1.4 - 1.6	550	430
HM/HMK 2-40	2.7 - 2.6	580	455	2.4 - 2.7 / 1.4 - 1.6	650	505
HM/HMK 2-50	3.2 - 3.3	720	550	2.7 - 3.0 / 1.6 - 1.8	810	620
HM/HMK 2-60	3.8 - 3.6	830	635	2.9 - 3.3 / 1.7 - 1.9	910	690

Performance curves



HM 4 - HMK 4

Installation sketch



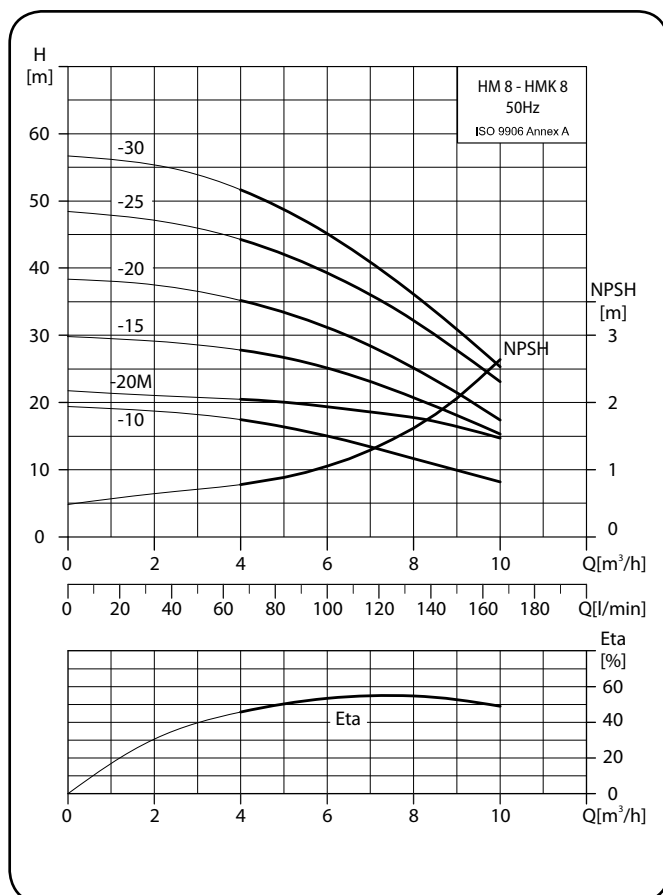
Dimensions and weights

Model	Dimension [mm]				Weight [kg]
	1-Phase		3-Phase		
	L1	H	L1	H	
HM 4-20 / HMK 4-20	403	255	403	233	9.6
HM 4-30 / HMK 4-30	403	255	403	233	9.9
HM 4-40 / HMK 4-40	403	255	403	233	10.6
HM 4-50 / HMK 4-50	441	255	441	233	12.1
HM 4-60 / HMK 4-60	441	255	441	233	12.3

Electrical data, 2850 min⁻¹

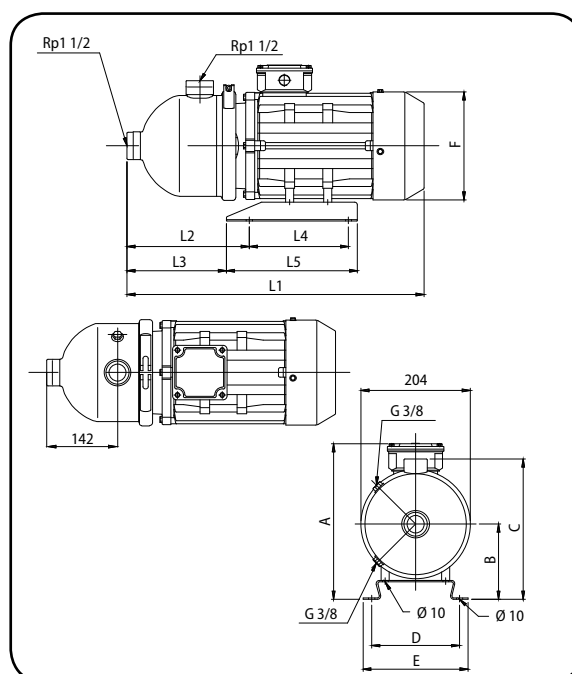
Pump type	1Φ 220-240V			3Φ Δ220-240V / Y 380-415V		
	I 1/1 [A]	P 1 [W]	P 2 [W]	I 1/1 [A]	P 1 [W]	P 2 [W]
HM/HMK 4-20	2.7 - 2.6	580	450	2.5 - 2.9 / 1.5 - 1.7	660	515
HM/HMK 4-30	3.9 - 3.7	820	635	2.8 - 3.0 / 1.6 - 1.7	850	650
HM/HMK 4-40	4.6 - 4.4	1000	765	3.3 - 3.5 / 1.9 - 2.0	1060	810
HM/HMK 4-50	5.8 - 5.5	1240	1005	4.2 - 4.5 / 2.4 - 2.6	1310	1060
HM/HMK 4-60	7.1 - 6.9	1510	1210	5.2 - 5.6 / 3.0 - 3.3	1550	1230

Performance curves



HM 8 - HMK 8

Installation sketch



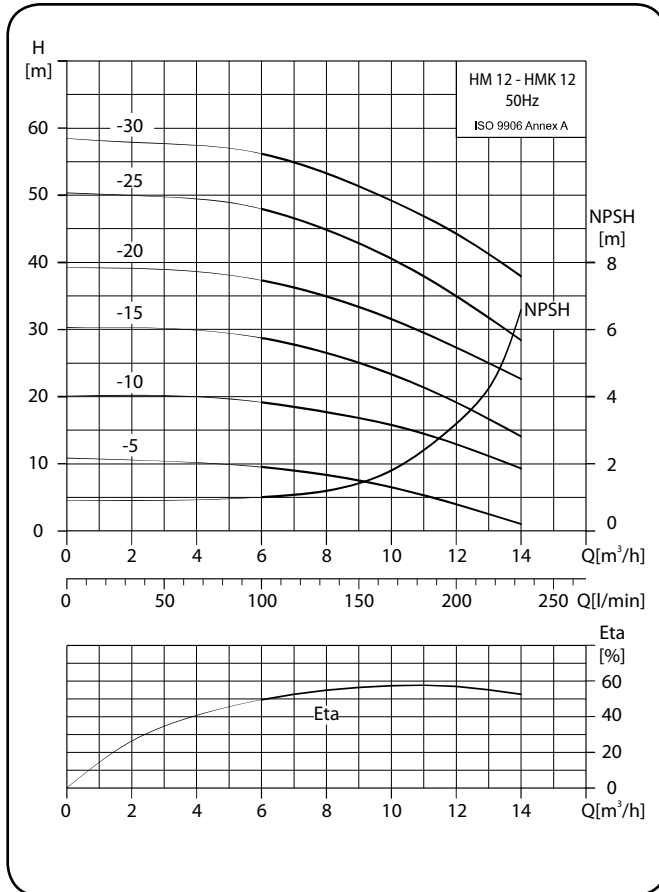
Dimensions and weights

Model	Dimension [mm]													Weight [kg]	
	L1		L2	L3	L4	L5	A		B	C	D	E	F		
	1Ø	3Ø					1Ø	3Ø							
HM / HMK 8-10	403	403	181	171	138	162	255	233	118	243	108	132	141	10.2	10
HM / HMK 8-15	441	441	181	171	138	162	255	233	118	243	108	132	141	12.3	12.1
HM / HMK 8-20M	--	441	181	171	138	162	--	233	118	243	108	132	141	--	12
HM / HMK 8-20	441	441	181	171	138	162	255	233	118	243	108	132	141	13.5	13.3
HM / HMK 8-25	514	--	200	180	195	235	267	--	121	245	158	178	177	23.1	--
	--	441	181	171	138	162	--	233	118	243	108	132	141	--	13.9
HM / HMK 8-30	514	493	200	180	195	235	267	261	121	245	158	178	177	23.1	22.2

Electrical data, 2850 min⁻¹

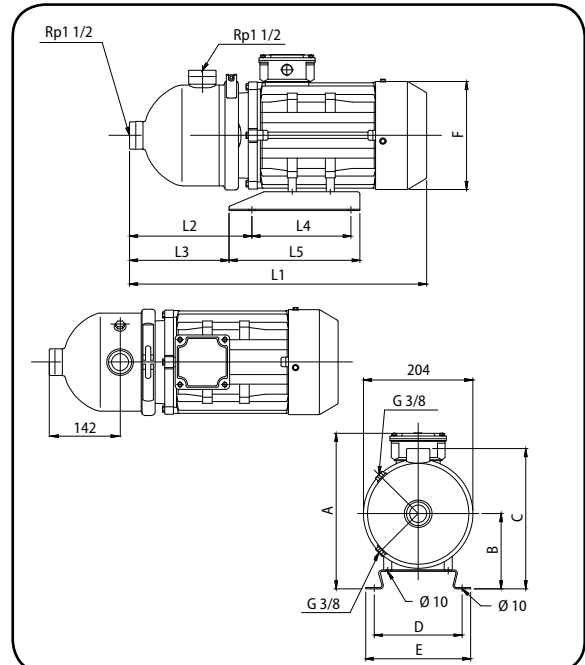
Pump type	1Ø 220-240V			3Ø Δ220-240V / Y 380-415V		
	I 1/1 [A]	P 1 [W]	P 2 [W]	I 1/1 [A]	P 1 [W]	P 2 [W]
HM/HMK 8-10	3.3 - 3.1	760	580	2.7 - 3.1 / 1.6 - 1.8	810	620
HM/HMK 8-20M	—	—	—	4.2 - 4.5 / 2.4 - 2.6	1120	910
HM/HMK 8-15	5.3 - 5.1	1150	930	3.9 - 4.4 / 2.3 - 2.6	1190	965
HM/HMK 8-20	6.8 - 6.6	1420	1130	5.0 - 5.5 / 2.9 - 3.2	1450	1150
HM/HMK 8-25	8.1 - 7.9	1880	1560	5.8 - 6.5 / 3.4 - 3.8	1840	1460
HM/HMK 8-30	9.1 - 9.0	2100	1750	6.4 - 6.9 / 3.7 - 4.0	2050	1710

Performance curves



HM 12 - HMK 12

Installation sketch



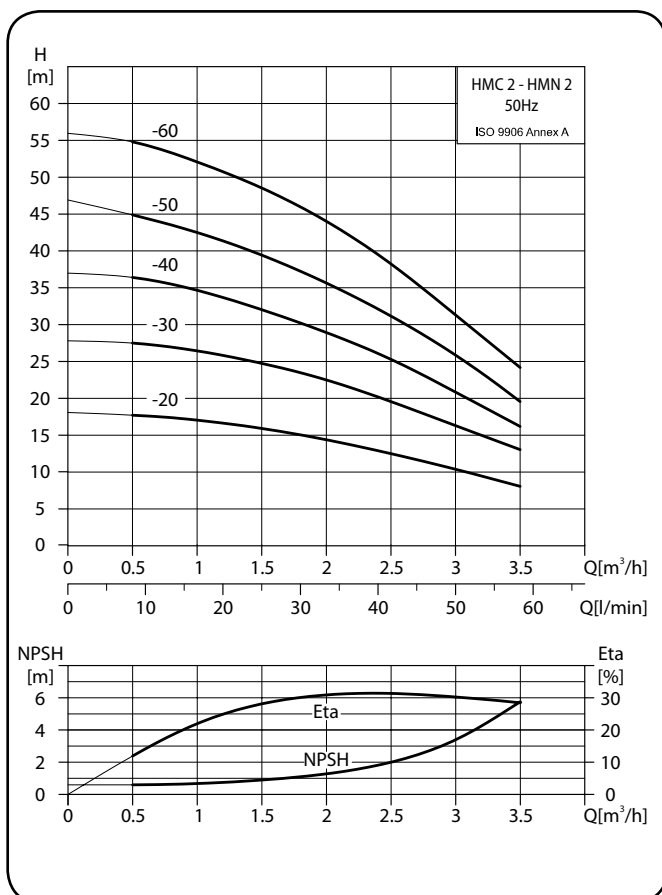
Dimensions and weights

Model	Dimension [mm]													Weight [kg]	
	L1		L2	L3	L4	L5	A		B	C	D	E	F		
	1Ø	3Ø					1Ø	3Ø							
HM / HMK 12-05	--	403	181	171	138	162	--	233	118	243	108	132	141	--	9.41
HM / HMK 12-10	441	441	181	171	138	162	255	233	118	243	108	132	141	11.7	11.5
HM / HMK 12-15	441	441	181	171	138	162	255	233	118	243	108	132	141	13.4	13.2
HM / HMK 12-20	514	493	200	180	195	235	267	261	121	245	158	178	177	22.5	21.5
HM / HMK 12-25	514	493	200	180	195	235	267	261	121	245	158	178	177	25.7	24.4
HM / HMK 12-30	--	539	230	198	195	245	--	284	133	259	174	198	197	--	30.2

Electrical data, 2850 min⁻¹

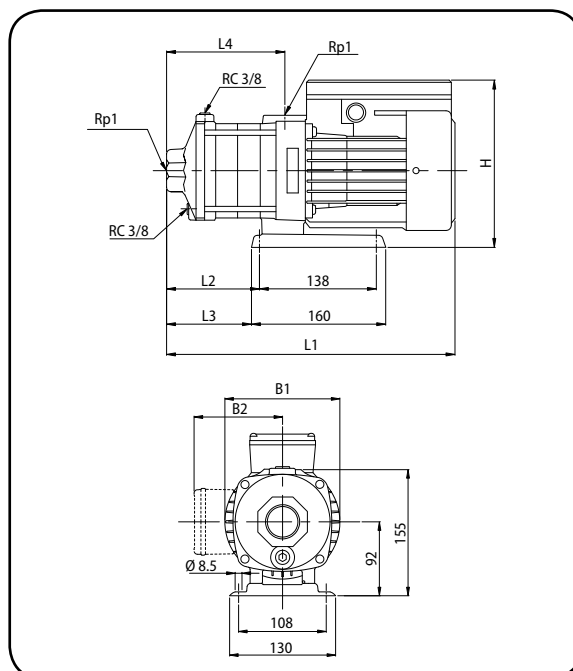
Pump type	1Ø 220-240V			3Ø Δ220-240V / Y 380-415V		
	I 1/1 [A]	P 1 [W]	P 2 [W]	I 1/1 [A]	P 1 [W]	P 2 [W]
HM/HMK 12-05	—	—	—	2.4 - 2.8 / 1.4 - 1.6	550	425
HM/HMK 12-10	5.3 - 5.1	1170	945	3.6 - 3.8 / 2.1 - 2.2	1190	965
HM/HMK 12-15	7.6 - 7.5	1650	1310	5.5 - 6.0 / 3.2 - 3.5	1690	1345
HM/HMK 12-20	10.6 - 10.4	2310	1925	7.0 - 7.4 / 4.0 - 4.3	2350	1960
HM/HMK 12-25	13.1 - 12.7	2980	2510	9.0 - 9.3 / 5.2 - 5.4	2880	2420
HM/HMK 12-30	—	—	—	11.7 - 12.1 / 6.8 - 7.0	3610	3110

Performance curves



HMC 2 - HMN 2

Installation sketch



Dimensions and weights

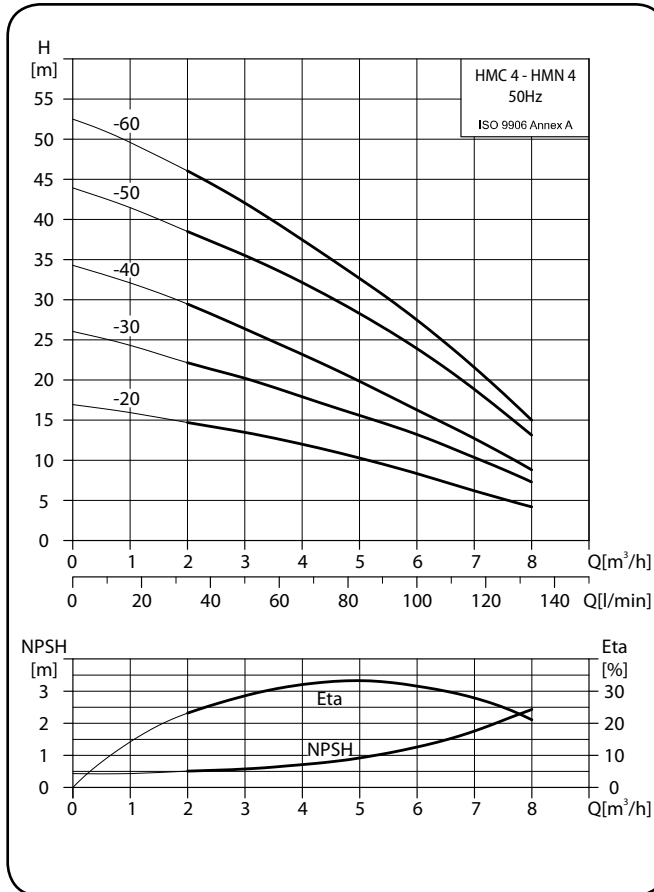
Model	Dimension [mm]								Weight [kg]		
	L1	L2	L3	L4	B1	B2		H			
						1-phase	3-phase	1-phase	3-phase	1-phase	3-phase
HMC 2-20	309	75	63	101	141	127	115	228	207	10.3	10.0
HMC 2-30	327	93	81	119	141	127	115	228	207	10.5	10.3
HMC 2-40	345	111	99	137	141	127	115	228	207	10.8	10.5
HMC 2-50	363	129	117	155	141	127	115	228	207	11.6	11.2
HMC 2-60	381	147	135	173	141	127	115	228	207	11.8	11.5

Model	Dimension [mm]								Weight [kg]		
	L1	L2	L3	L4	B1	B2		H			
						1-phase	3-phase	1-phase	3-phase	1-phase	3-phase
HMN 2-20	309	75	63	101	141	127	115	228	207	9.1	8.8
HMN 2-30	327	93	81	119	141	127	115	228	207	9.4	9.1
HMN 2-40	345	111	99	137	141	127	115	228	207	9.6	9.4
HMN 2-50	363	129	117	155	141	127	115	228	207	10.4	10.1
HMN 2-60	381	147	135	173	141	127	115	228	207	10.7	10.3

Electrical data, 2850 min⁻¹

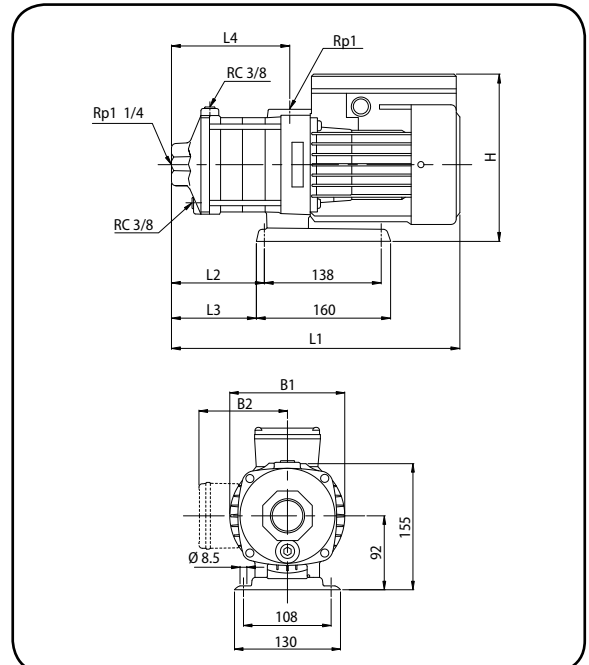
Pump type	1Φ 220-240V			3Φ Δ220-240V / Y 380-415V		
	I 1/1 [A]	P 1 [W]	P 2 [W]	I 1/1 [A]	P 1 [W]	P 2 [W]
HMC/HMN 2-20	1.7 - 2.0	380	295	2.2 - 2.6 / 1.3 - 1.5	430	330
HMC/HMN 2-30	2.1 - 2.2	470	360	2.2 - 2.5 / 1.3 - 1.45	530	410
HMC/HMN 2-40	2.7 - 2.8	620	480	2.4 - 2.8 / 1.4 - 1.6	660	510
HMC/HMN 2-50	3.2 - 3.1	720	550	2.5 - 2.9 / 1.45 - 1.7	770	585
HMC/HMN 2-60	3.7 - 3.6	830	630	2.9 - 3.3 / 1.7 - 1.9	860	655

Performance curves



HMC 4 - HMN 4

Installation sketch



Dimensions and weights

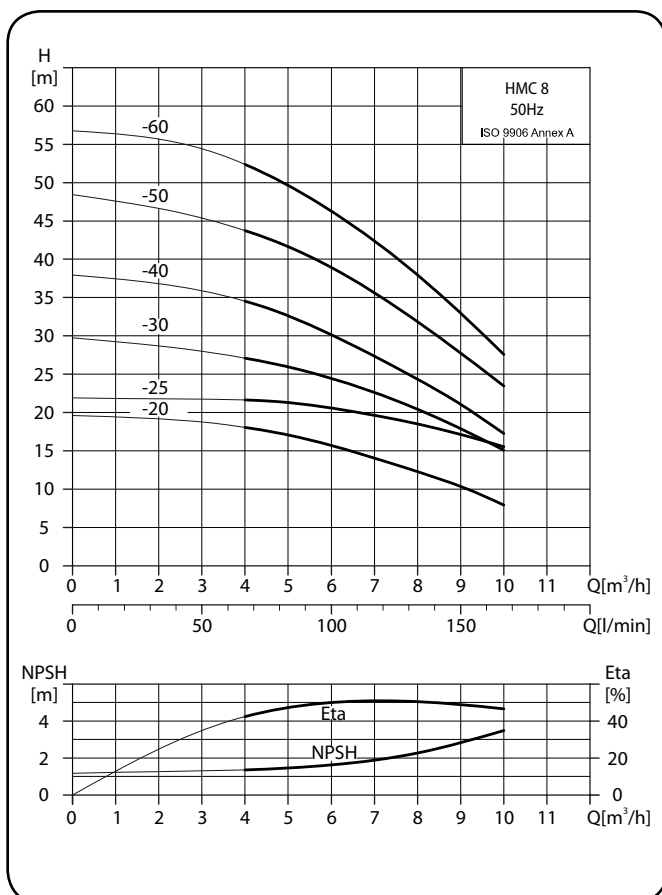
Model	Dimension [mm]								Weight [kg]		
	L1	L2	L3	L4	B1	B2		H			
						1-phase	3-phase	1-phase	3-phase	1-phase	3-phase
HMC 4-20	318	84	72	110	141	127	115	228	207	10.4	10.1
HMC 4-30	344	111	99	137	141	127	115	228	207	10.8	10.5
HMC 4-40	372	138	126	164	141	127	115	228	207	11.6	11.2
HMC 4-50	438	165	153	191	141	127	115	228	207	13.4	13.1
HMC 4-60	465	192	180	218	141	127	115	228	207	14.8	14.5

Model	Dimension [mm]								Weight [kg]		
	L1	L2	L3	L4	B1	B2		H			
						1-phase	3-phase	1-phase	3-phase	1-phase	3-phase
HMN 4-20	318	84	72	110	141	127	115	228	207	9.2	9.0
HMN 4-30	344	111	99	137	141	127	115	228	207	9.6	9.3
HMN 4-40	372	138	126	164	141	127	115	228	207	10.4	10.1
HMN 4-50	438	165	153	191	141	127	115	228	207	11.3	12.0
HMN 4-60	465	192	180	218	141	127	115	228	207	13.6	13.4

Electrical data, 2850 min⁻¹

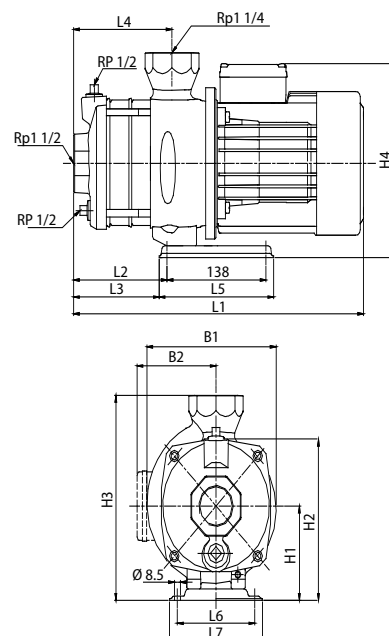
Pump type	1Φ 220-240V			3Φ Δ220-240V / Y 380-415V		
	I 1/1 [A]	P 1 [W]	P 2 [W]	I 1/1 [A]	P 1 [W]	P 2 [W]
HMC/HMN 4-20	2.6 - 2.5	560	430	2.4 - 2.9 / 1.4 - 1.7	610	465
HMC/HMN 4-30	3.6 - 3.5	770	595	2.5 - 2.9 / 1.5 - 1.7	790	604
HMC/HMN 4-40	4.4 - 4.1	960	735	3.1 - 3.3 / 1.8 - 1.9	1010	770
HMC/HMN 4-50	5.3 - 5.0	1160	940	4.2 - 4.5 / 2.4 - 2.6	1240	990
HMC/HMN 4-60	6.7 - 6.4	1430	1135	5.1 - 5.5 / 2.9 - 3.2	1460	1180

Performance curves



HMC 8

Installation sketch



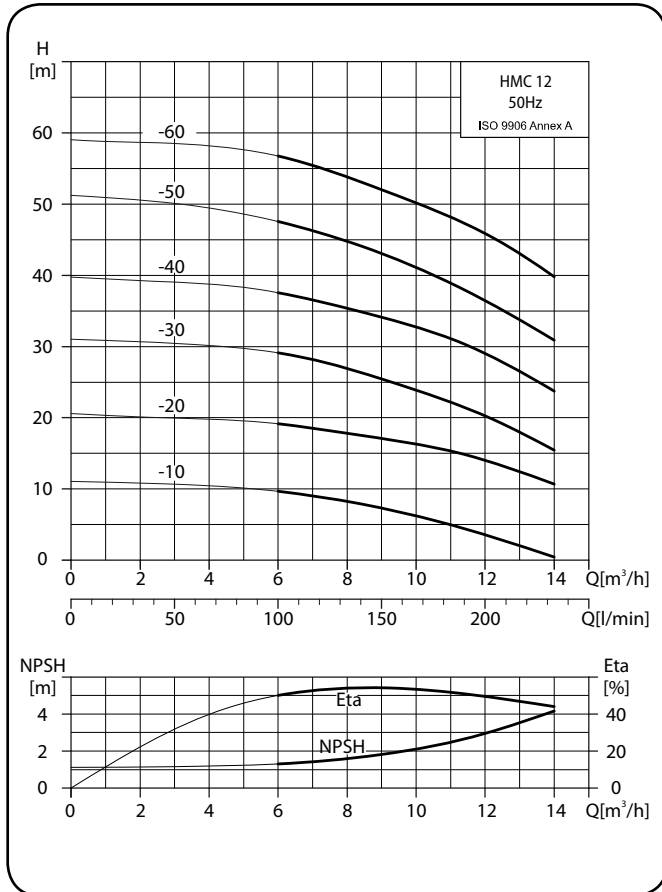
Dimensions and weights

Model	Dimension [mm]																Weight [kg]		
	L1		L2	L3	L4	L5	L6	L7	B1		B2		H1	H2	H3	H4			
	1Ø	3Ø							1Ø	3Ø	1Ø	3Ø				1Ø	3Ø	1Ø	3Ø
HMC 8-20	320	320	54	41	77	160	108	130	181	181	135	114	110	187	239	245	224	17.2	17.0
HMC 8-25	--	390	84	71	107	160	108	130	--	181	--	114	110	187	239	--	224	--	19.1
HMC 8-30	390	390	84	71	107	160	108	130	181	181	135	114	110	187	239	245	224	19.5	19.2
HMC 8-40	390	390	84	71	107	160	108	130	181	181	135	114	110	187	239	245	224	20.7	20.5
HMC 8-50	480	420	162	111	137	160	108	130	185	181	152	114	110	187	239	262	224	28.5	21.4
HMC 8-60	480	480	162	111	137	240	126	160	185	185	152	139	110	187	239	262	249	28.7	27.6

Electrical data, 2850 min⁻¹

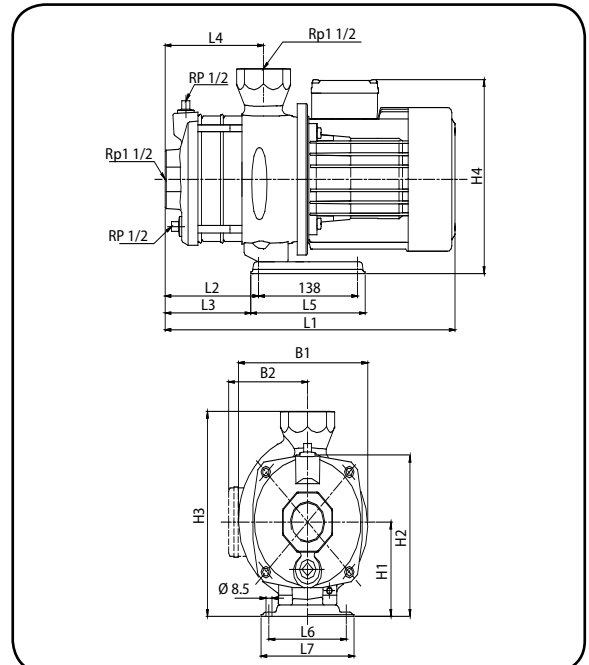
Pump type	1Ø 220-240V			3Ø Δ220-240V / Y 380-415V		
	I 1/1 [A]	P 1 [W]	P 2 [W]	I 1/1 [A]	P 1 [W]	P 2 [W]
HMC 8-20	3.3 - 3.2	760	595	2.9 - 3.3 / 1.7 - 1.9	810	620
HMC 8-25	—	—	—	3.5 - 3.8 / 2.0 - 2.2	1060	860
HMC 8-30	5.2 - 5.0	1130	910	4.3 - 4.8 / 2.5 - 2.8	1260	1020
HMC 8-40	6.3 - 6.1	1390	1105	5.7 - 6.3 / 3.3 - 3.7	1520	1205
HMC 8-50	8.2 - 8.1	1940	1610	5.7 - 6.3 / 3.4 - 3.7	1860	1475
HMC 8-60	9.0 - 8.8	2090	1740	6.5 - 7.0 / 3.8 - 4.1	2110	1755

Performance curves



HMC 12

Installation sketch



Dimensions and weights

Model	Dimension [mm]																Weight [kg]		
	L1		L2	L3	L4	L5	L6	L7	B1		B2		H1	H2	H3	H4			
	1Ø	3Ø							1Ø	3Ø	1Ø	3Ø				1Ø	3Ø		
HMC 12-10	--	320	54	41	77	160	108	130	--	181	--	114	110	187	239	--	224	--	17.9
HMC 12-20	360	360	54	41	77	160	108	130	181	181	135	114	110	187	239	245	224	18.4	18.2
HMC 12-30	390	390	84	71	107	160	108	130	181	181	135	114	110	187	239	245	224	20.6	20.4
HMC 12-40	450	450	132	81	107	240	126	160	185	185	152	139	110	187	239	262	249	27.7	26.7
HMC 12-50	480	480	162	111	137	240	126	160	185	185	152	139	110	187	239	262	249	29.8	29.9
HMC 12-60	--	501	162	111	137	240	126	160	--	196	--	150	122	199	251	--	272	--	35.2

Electrical data, 2850 min⁻¹

Pump type	1Ø 220-240V			3Ø Δ220-240V / Y 380-415V		
	I 1/1 [A]	P 1 [W]	P 2 [W]	I 1/1 [A]	P 1 [W]	P 2 [W]
HMC 12-10	—	—	—	2.8 - 3.1 / 1.6 - 1.8	590	455
HMC 12-20	5.3 - 5.1	1160	935	3.8 - 4.0 / 2.2 - 2.3	1170	950
HMC 12-30	7.8 - 7.4	1680	1330	5.7 - 6.5 / 3.3 - 3.8	1690	1365
HMC 12-40	11.0 - 10.6	2400	1995	7.3 - 7.6 / 4.2 - 4.4	2350	1960
HMC 12-50	12.7 - 12.2	2910	2440	8.8 - 9.0 / 5.1 - 5.2	2820	2375
HMC 12-60	—	—	—	10.6 - 11.4 / 6.1 - 6.6	3320	2860





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