

**INTEROBIZ**

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### Construction

Self-priming swimming pool pumps with built-in strainer and motor insulated from pumped water.

The pump is made with high quality plastic materials, corrosion and sand erosion resistant.

With stainless steel diffuser.

### Applications

- For water circulation in swimming pool filtration systems.
- For clean or slightly dirty water with solids in suspension.

### Operating conditions

Water temperature up to 60 °C.

Ambient temperature up to 40 °C.

Maximum permissible pressure in the pump casing 2,5 bar.

Continuous duty.

### Motor

2-pole induction motor, 50 Hz (n = 2800 1/min).

**MPC:** three-phase 230/400 V ± 10%.

**MPCM:** single-phase 230 V ± 10%, with thermal protector.  
Capacitor inside the terminal box.

Insulation class F.

Protection IP X4.

Constructed in accordance with EN 60 335-2-41.

**Patents:** EP 0 460 597  
US 5 226 790

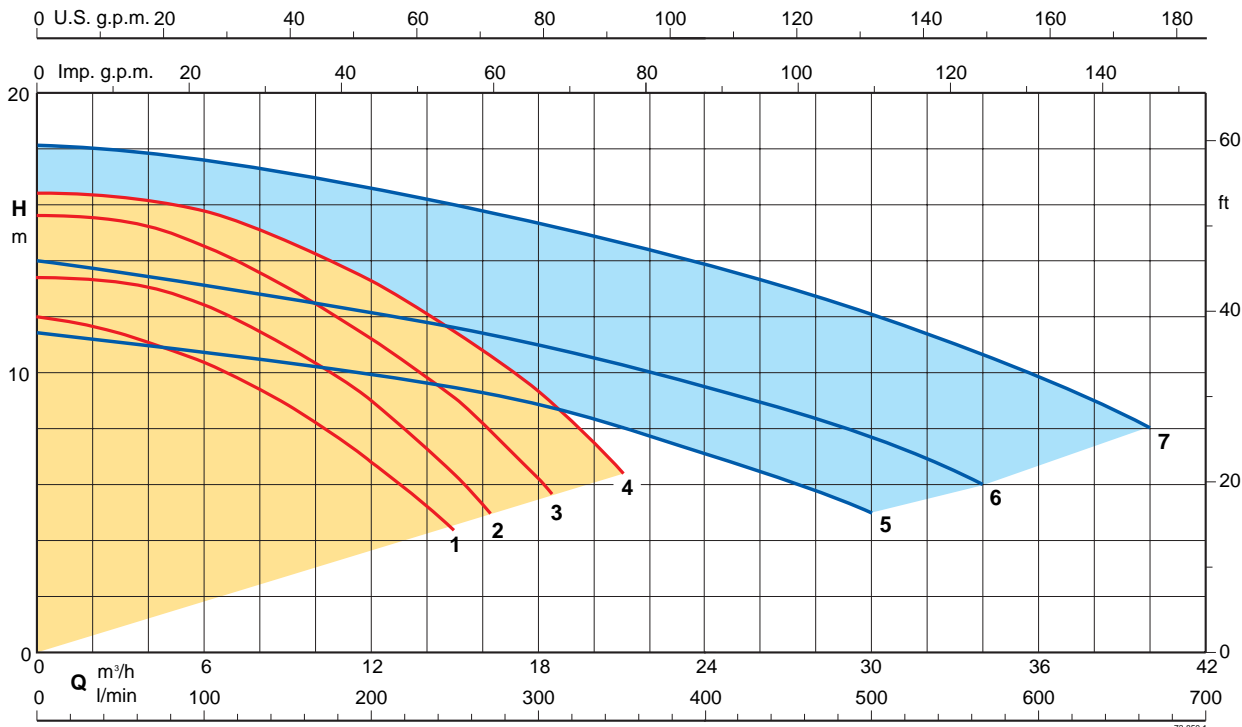
Certification marks for MPCM, up to 1,5 kW:



### Materiali

Component	Material
Pump casing	Glass reinforced
Diffuser cover	thermoplastic
Impeller	PPO-GF30, NORYL
Strainer cover	Transparent polycarbonate, LEXAN
Strainer basket	Polypropylene
Diffuser funnel and wear-ring	Cr-Ni-Mo steel AISI 316
Mechanical seal	Ceramic alumina, Carbon, FPM

### Coverage chart $n \approx 2800$ rpm



### Performance $n \approx 2800$ rpm

	3~ 230 V 400 V		1~ 230 V P <sub>1</sub>		P <sub>2</sub>		Q m <sup>3</sup> /h l/min	H								
	A	A	A	kW	kW	HP		0	3	6	9	12	15	18	21	
<b>MPC 1E</b>	2,8	1,6	<b>MPCM 1E</b>	3,3	0,73	0,37	0,5	11,9	11,4	10,3	8,9	6,8	4,2			
<b>MPC 2E</b>	3	1,7	<b>MPCM 2E</b>	4,5	1	0,55	0,75	13,4	13,3	12,4	10,9	9	6,3			
<b>MPC 3E</b>	3,7	2,2	<b>MPCM 3E</b>	5,4	1,2	0,75	1	15,6	15,5	14,5	13	11,2	9,1	6,2		
<b>MPC 4E</b>	5	2,9	<b>MPCM 4E</b>	7	1,6	1,1	1,5	16,4	16,2	15,8	14,7	13,3	11,4	9,3	6,4	

	3~ 230 V 400 V		1~ 230 V P <sub>1</sub>		P <sub>2</sub>		Q m <sup>3</sup> /h l/min	H										
	A	A	A	kW	kW	HP		0	3	9	15	18	21	24	27	30	34	40
<b>MPC 5</b>	5	2,9	<b>MPCM 5</b>	7	1,6	1,1	1,5	11,5	11	10,5	9,5	9	8	7	6	5		
<b>MPC 6</b>	6,4	3,7	<b>MPCM 6</b>	9,2	2	1,5	2	14	13,5	12,5	11,5	11	10,5	9,5	8,5	7,5	6	
<b>MPC 7</b>	9,15	5,3	<b>MPCM 7</b>	14	3	2,2	3	18,2	18	17	16	15,5	14,5	14	13	12	10,5	8

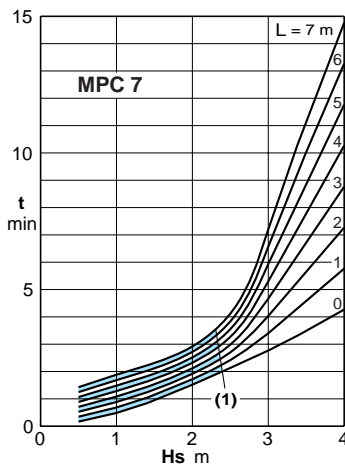
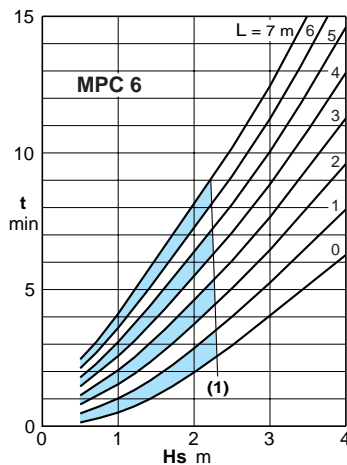
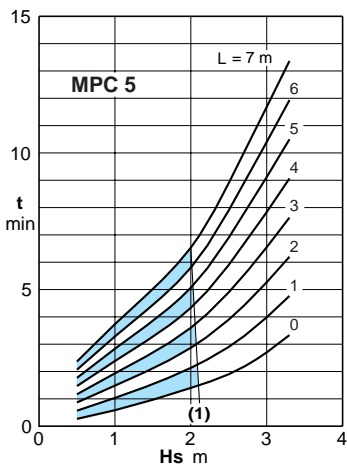
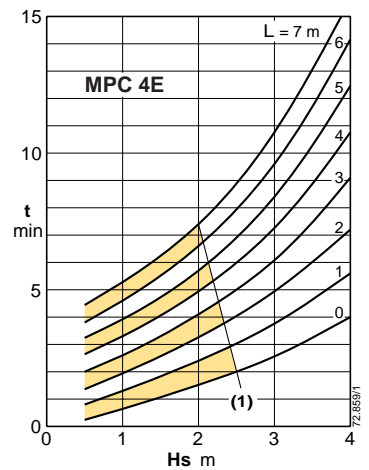
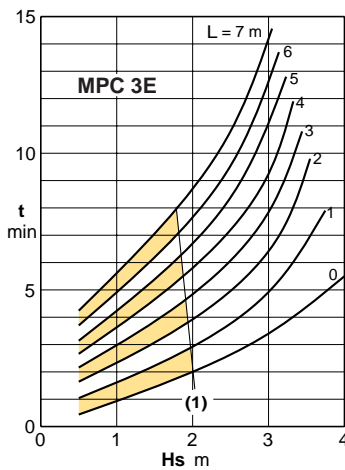
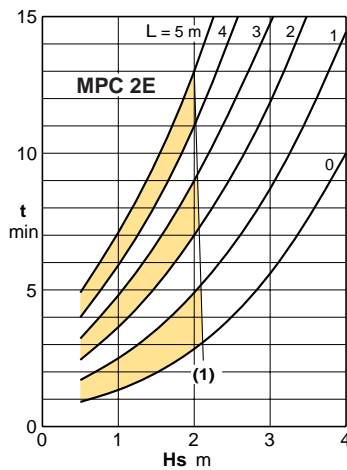
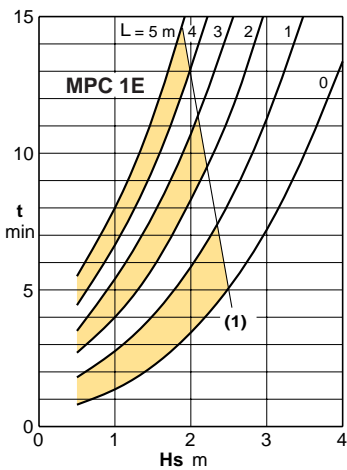
P<sub>1</sub> Max. power input.

P<sub>2</sub> Rated motor power output.

H Total head in m.

Tolerances according to ISO 9906, annex A.

### Self-Priming Capability with the pump located above the water level

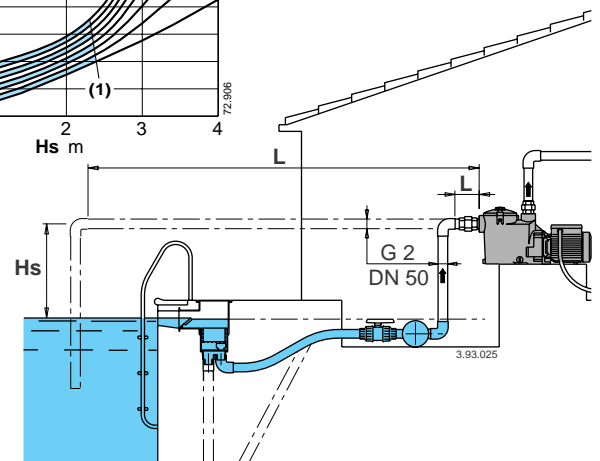


(1) Application limit for automatic self-priming at each start-up, without check valve.

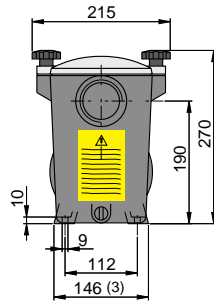
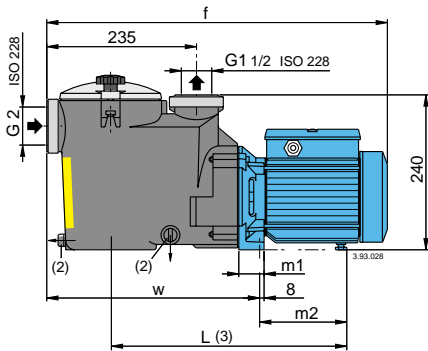
L (m) Horizontal length of suction pipe above the water level.

H<sub>s</sub> (m) Suction lift.

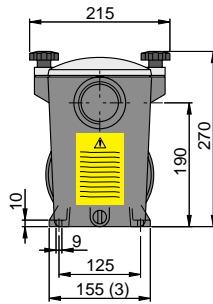
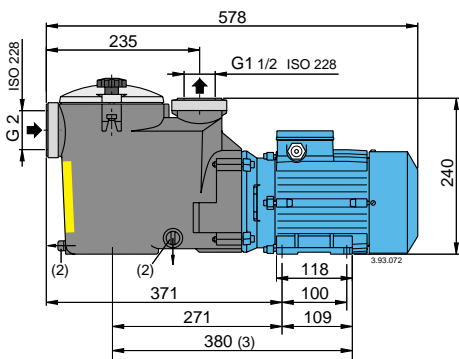
t (min) Self-priming time.



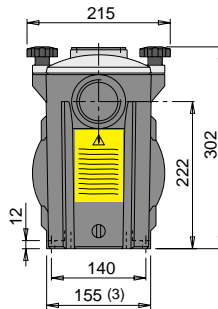
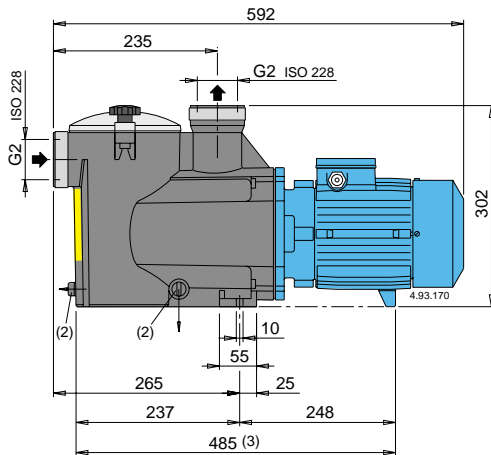
### Dimensions and weights



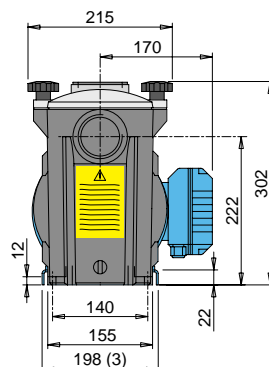
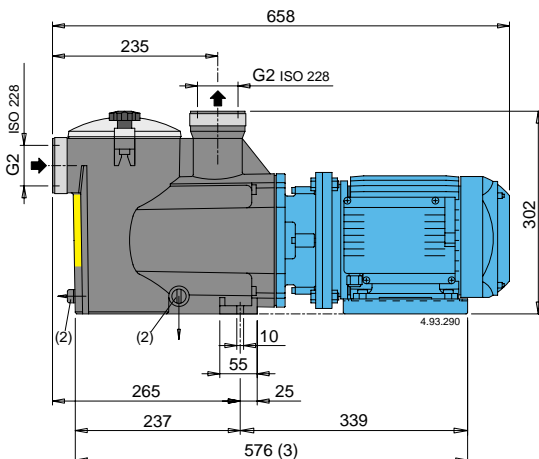
TYPE	mm					kg	
	f	L	m1	m2	w	MPC	MPCM
MPC 1E - MPCM 1E	498	348	34	122	326	8,9	9
MPC 2E - MPCM 2E	530	367	39	136	331	10,2	11,3
MPC 3E - MPCM 3E	530	367	39	136	331	11,2	12,2



**MPCM 4E** 17,5 kg  
**MPC 4E** 16,0 kg



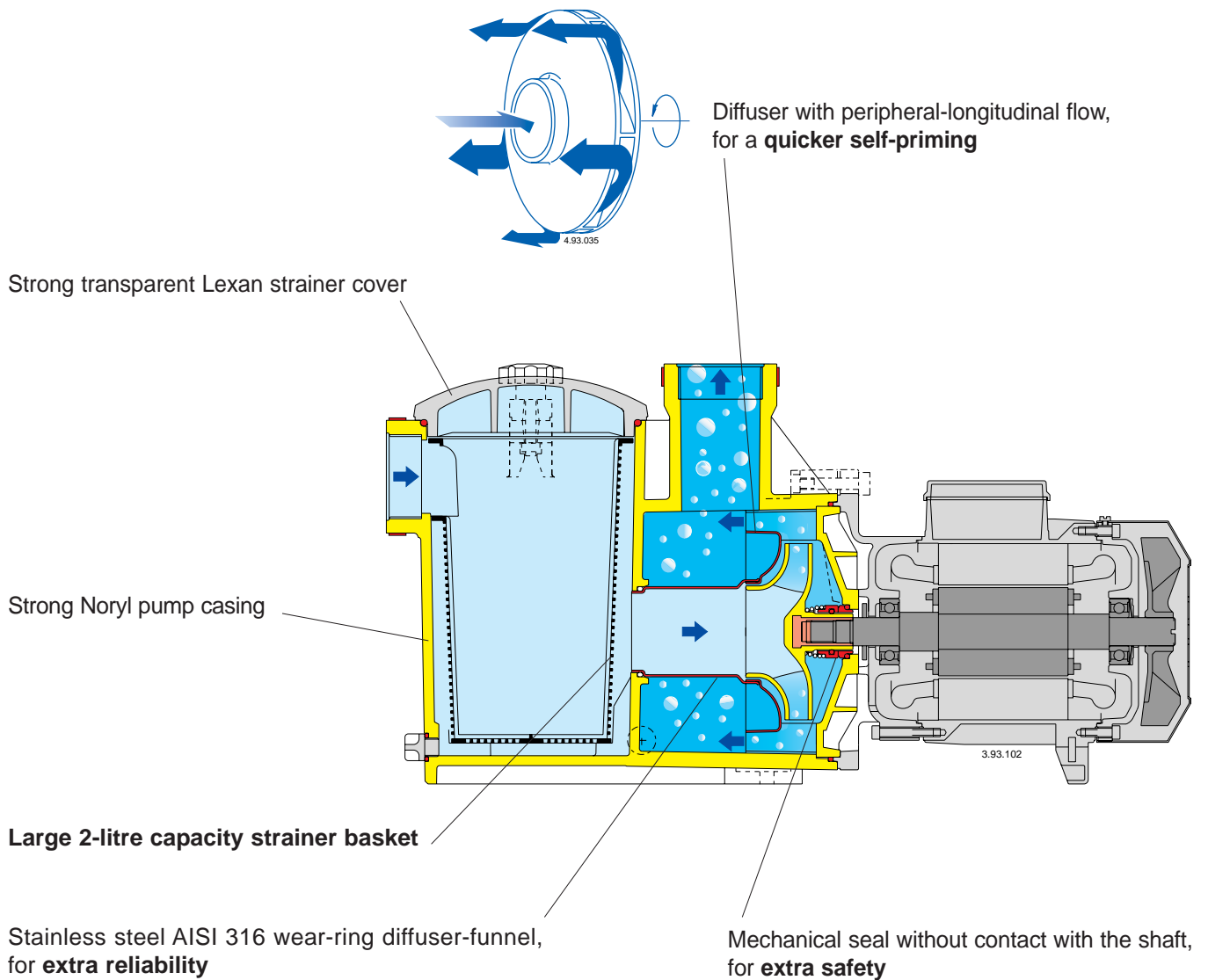
**MPCM 5** 18,9 kg  
**MPC 5** 17,4 kg  
**MPCM 6** 20,7 kg  
**MPC 6** 19,6 kg  
**MPC 7** 20,7 kg



**MPCM 7** 29,7 kg

(1) Net weight (2) Draining (3) Minimum base

### Features





### Construction

Close-coupled self-priming centrifugal pumps with built-in strainer.

### Applications

For water circulation in swimming pool filtration systems.  
For clean or slightly dirty water with solids in suspension.

### Operating conditions

Liquid temperature up to 60° C.  
Ambient temperature up to 40° C.  
Total suction lift up to 7 m.  
Maximum permissible working pressure up to 6 bar.  
Continuous duty.

### Motor

2-pole induction motor, 50 Hz (n = 2900 rpm).

**NMP:** three-phase 230/400 V ± 10% up to 3 kW;  
400/690 V ± 10% from 4 to 11 kW;

**NMPM:** single-phase 230 V ± 10%, with thermal protector.  
Insulation class F.  
Protection IP 54.  
Constructed in accordance with: IEC 60034.

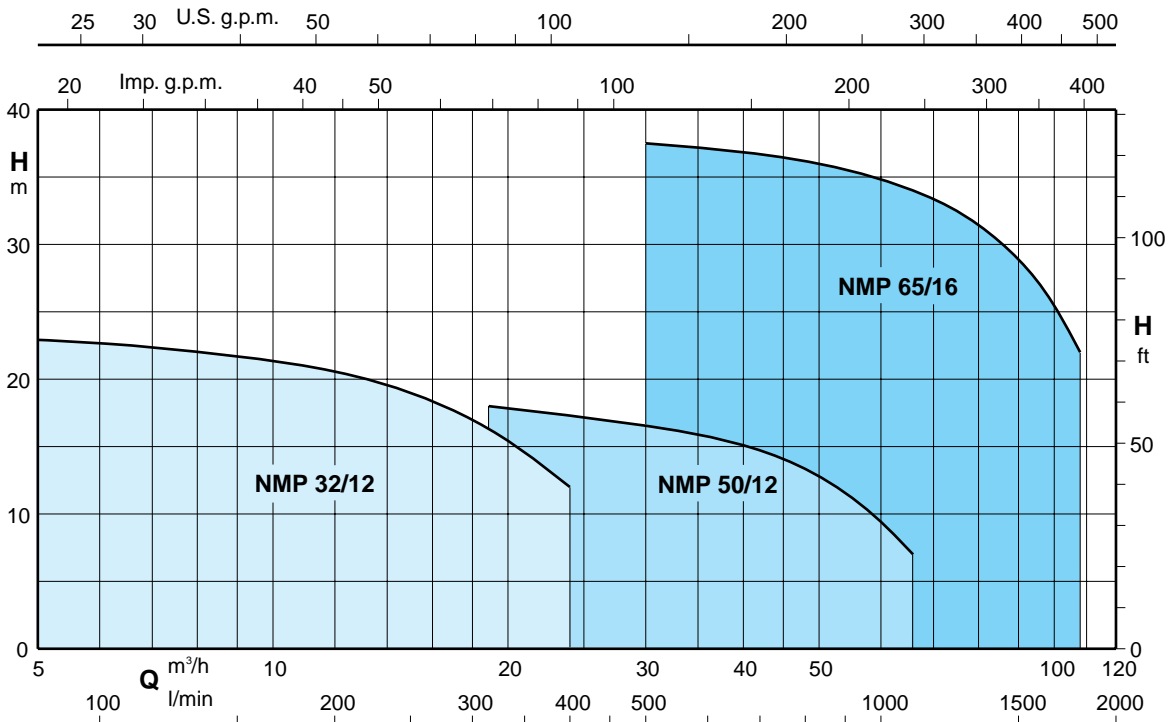
### Materials

Components	NMP	B-NMP
Pump casing	Cast iron	Bronze
Lantern bracket	GJL 200 EN 1561	G-Cu Sn 10 EN 1982
Impeller	Cast iron	Bronze
	GJL 200 EN 1561	G-Cu Sn 10 EN 1982
	Brass P- Cu Zn 40 Pb 2 UNI 5705 for NMP 32/12	
Shaft	Chrome-nickel steel	Cr-Ni-Mo steel
	1.4305 EN 10088 (AISI 303)	1.4401 EN 10088 (AISI 316)
Strainer cover	Cast iron	Bronze
	GJL 200 EN 1561	G-Cu Sn 10 EN 1982
Strainer	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)	
Mechanical seal	Carbon - Ceramic - FPM	

### Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55.
- Special mechanical seal
- Higher liquid or ambient temperatures.

### Coverage chart $n \approx 2900$ rpm



### Performance $n \approx 2900$ rpm

3 ~	230V 400V		1 ~	230V P <sub>1</sub>		P <sub>2</sub>		Q m <sup>3</sup> /h l/min	H m																	
	A	A		A	kW	kW	HP		6,6	9,6	10,8	12	13,2	15	18,9	21	24	30	42	48	54	60	66	75	84	96
B-NMP 32/12FE	4	2,3	B-NMPM 32/12FE	4,5	0,8	0,55	0,75	110	160	180	200	220	250	315	350	400	500	700	800	900	1000	1100	1250	1400	1600	1800
B-NMP 32/12DE	4	2,3						B-NMPM 32/12DE	5,8	1,3	0,75	1	13	12	11	10,5	10	9								
B-NMP 32/12AE	5	2,9	B-NMPM 32/12AE	7,4	1,85	1,1	1,5	12	11	10	9,5	9	8													
B-NMP 32/12SE	7,5	4,3						B-NMPM 32/12SE	9,2	2	1,5	2	18	17	16	15,5	15	14								
B-NMP 50/12HE	5	2,9	B-NMPM 50/12HE	7,4	1,85	1,1	1,5	17	16	15	14,5	14	13													
B-NMP 50/12GE	7,5	4,3						B-NMPM 50/12GE	9,2	2	1,5	2	22	21	20,5	20	19,5	18,5								
B-NMP 50/12FE	9,15	5,3	B-NMPM 50/12FE	9,2	2	2,2	3	21,5	20,5	19,5	19	18,5	17,5													
B-NMP 50/12DE	11,5	6,6						B-NMPM 50/12DE	9,2	2	2,2	3	22,5	21,5	21	20,5	20	19	16*	15*	12*					
B-NMP 65/16FE		9,6	B-NMPM 65/16FE			4	5,5																			
B-NMP 65/16EE		12						B-NMPM 65/16EE			5,5	7,5														
B-NMP 65/16DE		16	B-NMPM 65/16DE			7,5	10																			
B-NMP 65/16CE		20						B-NMPM 65/16CE			9,2	12,5														
B-NMP 65/16AE		24	B-NMPM 65/16AE			11	15																			

P<sub>1</sub> Maximum power input.

B-NMP = Bronze construction.

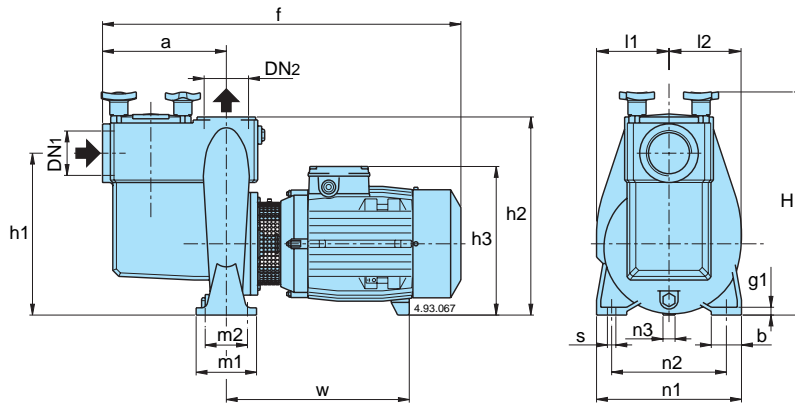
\* Maximum suction lift 2-3 m.

P<sub>2</sub> Rated motor power output.

**H** Total head in m.

Tolerances according to ISO 9906, annex A.

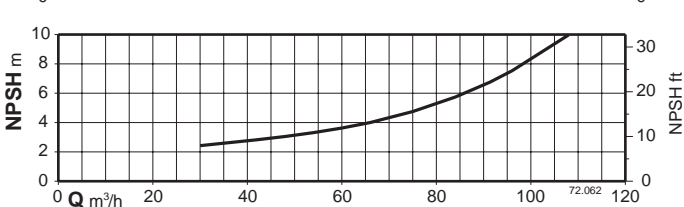
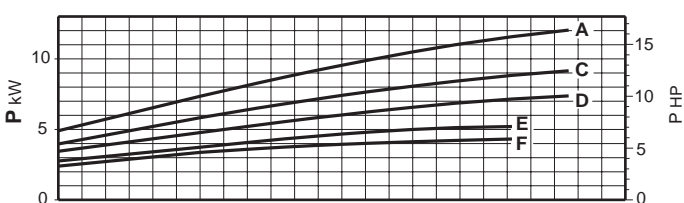
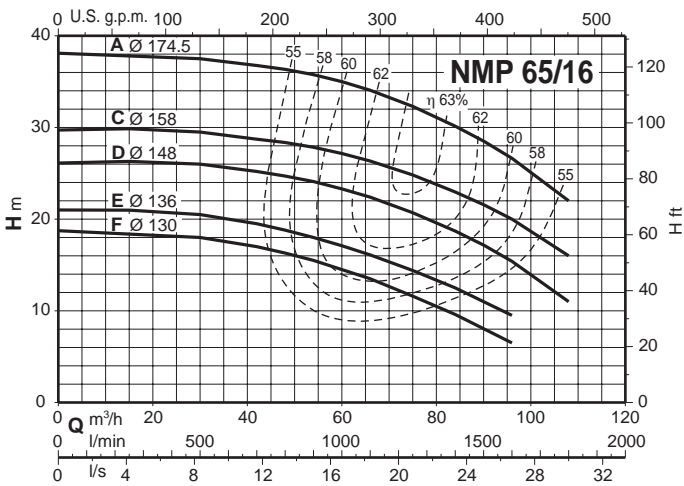
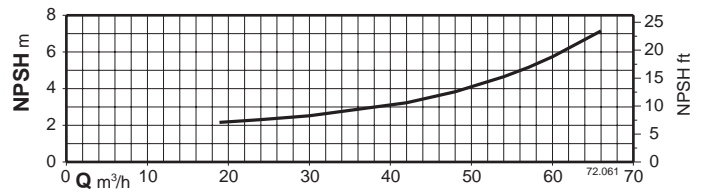
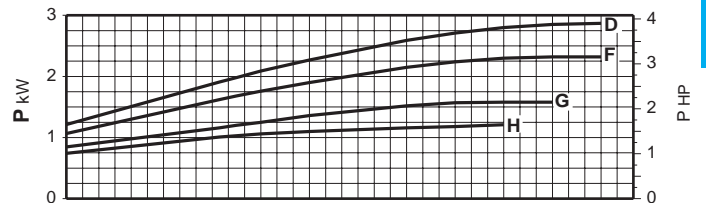
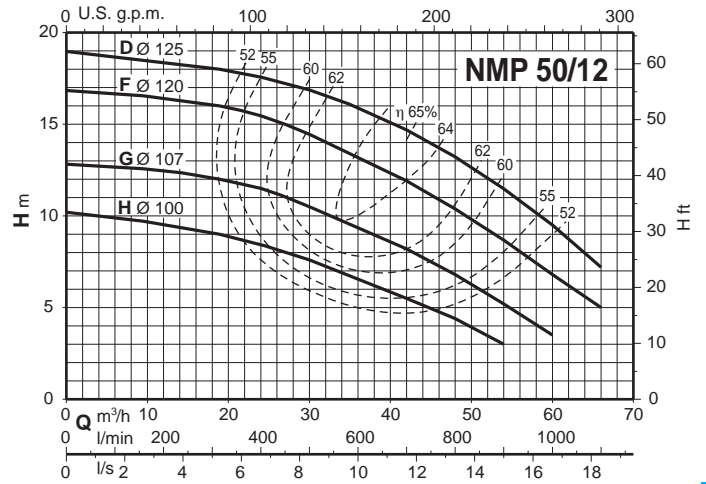
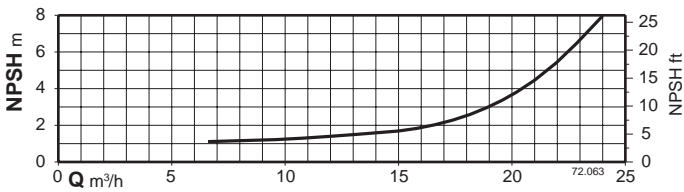
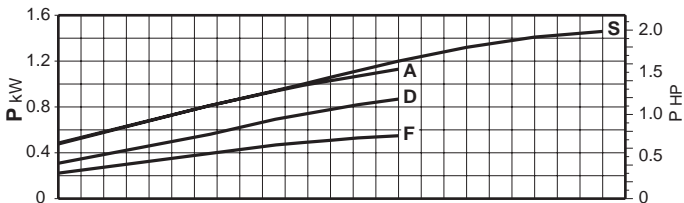
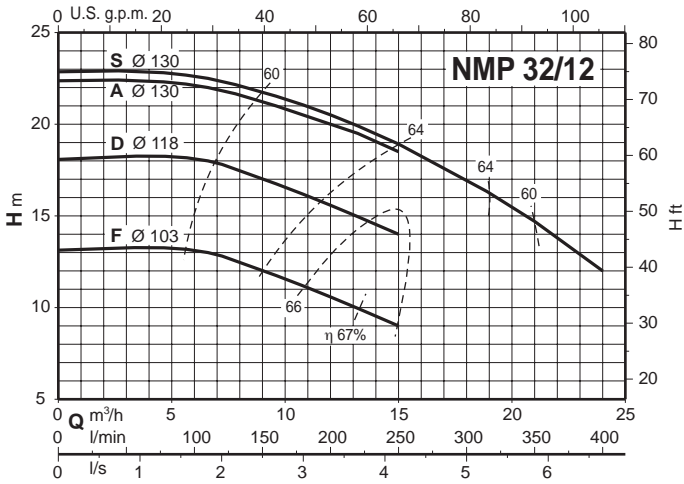
### Dimensions and weights

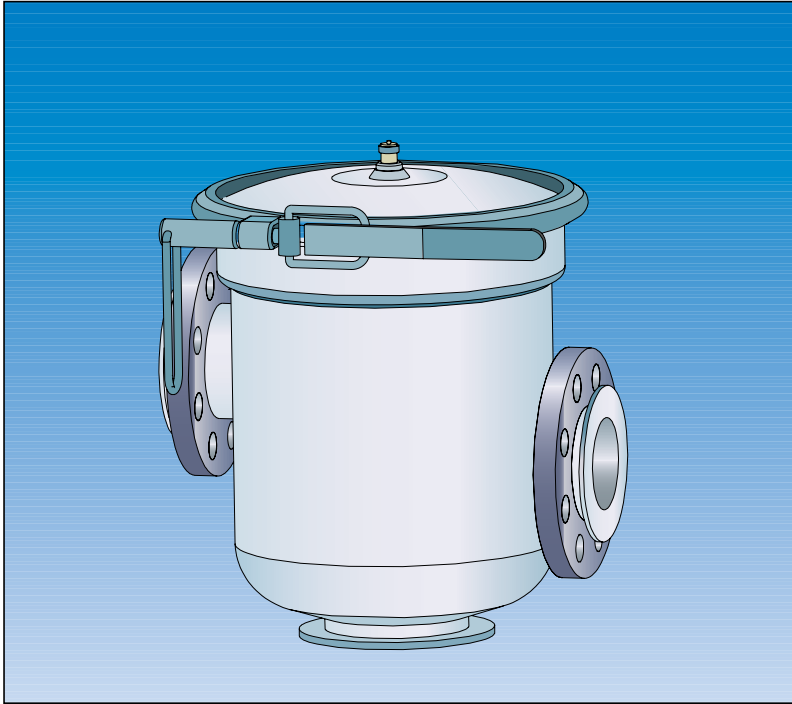


TYPE	DN <sub>1</sub>	DN <sub>2</sub>	mm																	
			ISO 228	a	f	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	H	m <sub>1</sub>	m <sub>2</sub>	n <sub>1</sub>	n <sub>2</sub>	n <sub>3</sub>	b	s	l	l <sub>1</sub>	l <sub>2</sub>	w
B-NMP 32/12AE-DE-FE B-NMP 32/12SE	G 2	G 2	195	510	230	280	210	320	100	70	190	140	30	50	14	-	106	99	220	12
B-NMP 50/12FE-GE-HE B-NMP 50/12DE	G 2 1/2	G 2 1/2	205	540 602	262	322	222 240	360	100	70	240	190	37 20	50	14	-	120	117	234 298	12
B-NMP 65/16FE B-NMP 65/16DE-EE B-NMP 65/16AE-CE	G 3	G 3	320	717 748 858	360	440	288 320 345	470	125	95	280	212	60 49 43	65	14	-	165	164	319 408	15

TYPE	NMP kg	B-NMP kg
B-NMP 32/12FE	30	32
B-NMP 32/12DE	30	32
B-NMP 32/12AE	31	33
B-NMP 32/12SE	33	35
B-NMP 50/12HE	37	39
B-NMP 50/12GE	38,5	40
B-NMP 50/12FE	38,5	41,5
B-NMP 50/12DE	47,5	51,5
B-NMP 65/16FE	78,5	89
B-NMP 65/16EE	91	101
B-NMP 65/16DE	97	107
B-NMP 65/16CE	121	130
B-NMP 65/16AE	127	137

### Characteristic curves $n \approx 2900$ rpm





### Construction

Pre-filters with removable basket, constructed in stainless steel. Loose ring flange connections. Clamp type closing with lever and double adjustment clamp. Inner basket with  $\varnothing 6$  mm holes.

### Applications

For water circulation pump in filtration plants in swimming pools. To prevent foreign bodies from entering the pump and the plant.

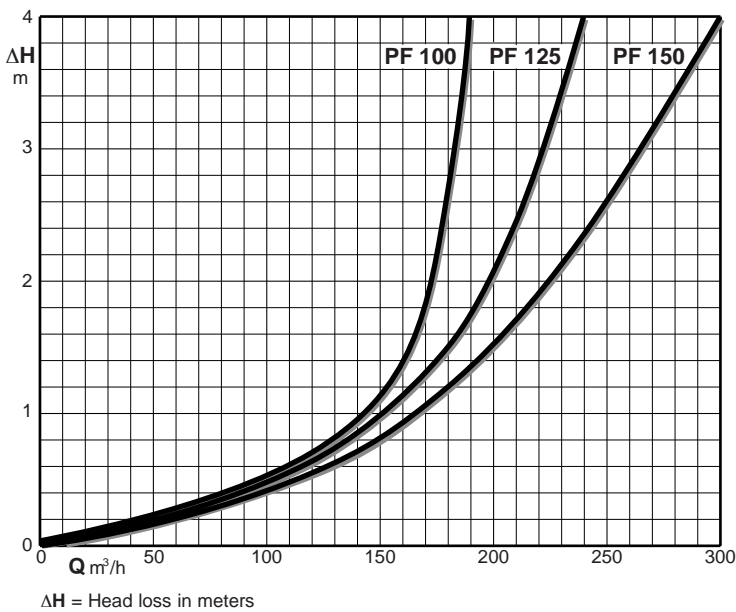
### Operating conditions

Max working pressure: 3 bar.  
 Max flow: 180 m<sup>3</sup>/h for PF 100.  
 240 m<sup>3</sup>/h for PF 125.  
 300 m<sup>3</sup>/h for PF 150.

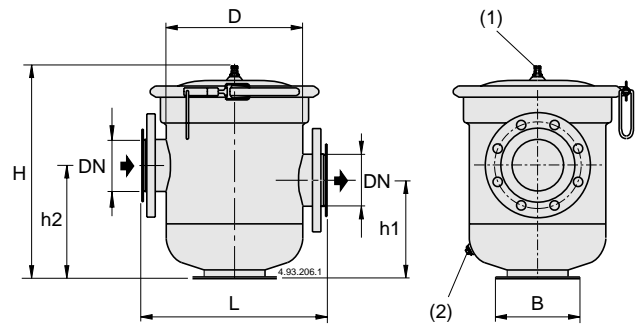
### Materials

Components	Materials
Pre-filter body PF 100-304 PF 125-304 PF 150-304	Stainless steel AISI 304
Pre-filter body PF 100-316 PF 125-316 PF 150-316	Stainless steel AISI 316
Strainer basket	Stainless steel AISI 316

### Diagram of head loss



### Dimensions and weights



Flanges UNI 6089 PN 10

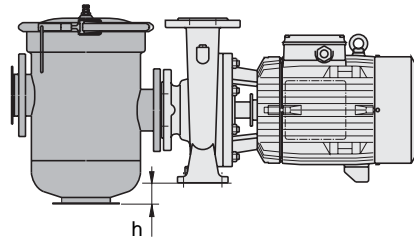
Type	mm							kg
	DN	H	h1	h2	L	D	B	
PF 100	100	530	247	287	440	292	185	17,5
PF 125	125							17,7
PF 150	150	550	260	300	500	350	210	23,3

1 Relief valve

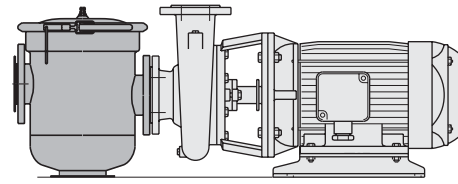
2 Draining plug

### Recommended pumps and pre-filters

Pump	Pre-filter type	h mm
NM 80/16EE NM 80/16CE-DE NM 80/16BE	<b>PF 100</b>	67
NM4 100/20BE-CE NM4 100/20AE	<b>PF 125</b>	47
NM4 100/25BE NM4 100/25AE	<b>PF 125</b>	22
NM4 125/25DE-EE NM4 125/25CE NM4 125/250AE-BE	<b>PF 150</b>	10 10 -



NM 80/16BE-CE-DE-EE  
NM4 100/20AE-BE-CE  
NM4 100/25AE-BE  
NM4 125/25CE-DE-EE

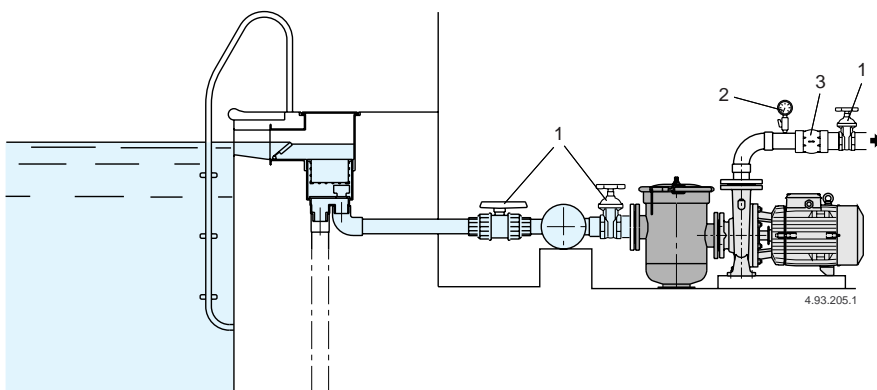


NM4 125/250AE-BE

4.93.181

### Examples of installations

#### Operation with positive suction head



1 Gate valve    2 Pressure gauge    3 Check valve    4 Foot valve

#### Operation with suction lift

