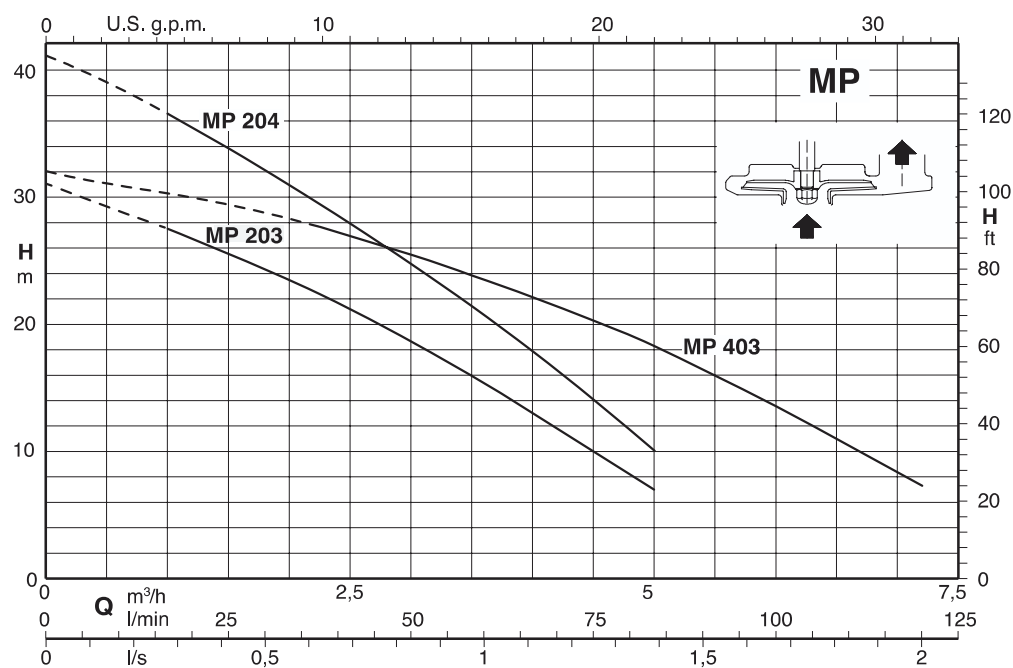


Coverage chart $n \approx 2900$ rpm

Multi-stage submersible pumps
for clean water



Construction

Multi-stage centrifugal submersible pumps with pump jacket in chrome-nickel stainless steel, with vertical delivery port.
 Motor cooled by the pumped water passing between the motor jacket and the external jacket.
 Double shaft seal with oil chamber.

Applications

For clean water containing solids up to 2 mm grain size.
 Draining flooded rooms or tanks.
 Water extraction from ponds, flowing streams, or pits for rainwater collection.
 For outdoor use a power supply cable of not less than 10 m should be used in accordance with: EN 60 335-2-41.

Operating conditions

Liquid temperature up to 35° C.
 Maximum immersion depth: 5 m.
 Minimum water level with float 100 mm.
 Continuous duty.

Motor

2-pole induction motor, 50 Hz ($n \approx 2900$ rpm).
MP: three-phase 230 V $\pm$ 10%;
 400 V $\pm$ 10%.
MPM: single-phase 230 V $\pm$ 10%;
 with float switch and thermal protector.
 Incorporated capacitor
 Insulation class F.
 Protection IP X8 (for continuous immersion).
 Double impregnation humidity-proof dry winding.
 Constructed in accordance with: EN 60034-1; EN 60335-1, EN 60335-2-41.

Special features on request

Other voltages.
 Frequency 60 Hz (as per 60 Hz data sheet).
 Other mechanical seal.
 Cable length 10 m.
 Vertical magnetic float switch.
 Motor suitable for operation with frequency converter.

Designation

Example: MP 203/A
 MP = Series
 2 = Rated capacity in m³/h
 03 = Number of impellers
 /A = It refers to a revision

Materials

Components	Materials
Pump casing	PPO-GF20 (Noryl)
Stage casing	PPO-GF20 (Noryl)
Impeller	PPO-GF20 (Noryl)
motor jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Pump jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Filter	Polypropylene
Handle	Polypropylene
Shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Mechanical seal	Ceramic / Carbon / NBR
Seal lubrication oil	Oil for food/pharmaceutical machinery

Coverage chart n ≈ 2900 rpm
Three-phase

				Q = Flow										
				m³/h	0	1	1,5	2	2,5	3	3,5	4	4,5	5
Model	400V	P2		l/min		16,66	25	33,33	41,66	50	58,33	66,66	75	83,33
	A	kW	HP	H (m) = Total head										
MP 203/A	1,45	0,37	0,5		31	27,5	25,5	23,5	21,2	18,6	16	13	10	7
MP 204	1.6	0.45	0.6		41.1	36.5	33.8	30.9	27.9	24.7	21.4	17.9	14.1	10.1

Single-phase

							Q = Flow										
							m³/h	0	1	1,5	2	2,5	3	3,5	4	4,5	5
Model	230V	Capacitor		P2		P1	l/min										
	A	Vc	uf	kW	HP	kW		16,6	25	33,3	41,6	50	58,3	66,6	75	83,3	
							H (m) = Total head										
	3,5	450	12,5	0,37	0,5	0,63		31	27,5	25,5	23,5	21,2	18,6	16	13	10	7
MPM 204	4.5	450	16	0.45	0.6	0.95		41.1	36.5	33.8	30.9	27.9	24.7	21.4	17.9	14.1	10.1

Three-phase

Model				Q = Flow									
				m³/h	0	2,25	3	3,5	4	4,5	5	6	7,2
				l/min		37,5	50	58,33	66,66	75	83,33	100	120
				H (m) = Total head									
MP 403	1,6	0,45	0,6		32	27,6	25,5	23,8	22,1	20,3	18,3	13,5	7,3

Single-phase

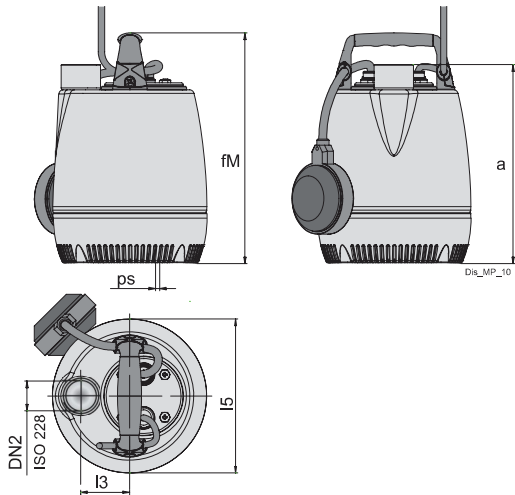
							Q = Flow										
							m³/h	0	2,25	3	3,5	4	4,5	5	6	7,2	
Model	230V	Capacitor		P2		P1	l/min		37,5	50	58,3	66,6	75	83,3	100	120	
	A	Vc	uf	kW	HP	kW	H (m) = Total head										
MPM 403	4,5	450	16	0,45	0,6	0,95			32	27,6	25,5	23,8	22,1	20,3	18,3	13,5	7,3

P1: Maximum power input.

P2: Rated motor power output.

Head and power values valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$. Total head in m

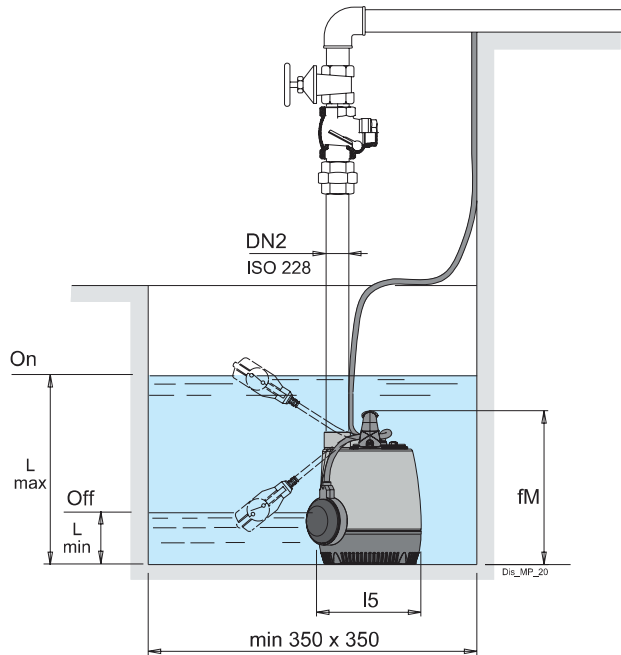
Dimensions and weights



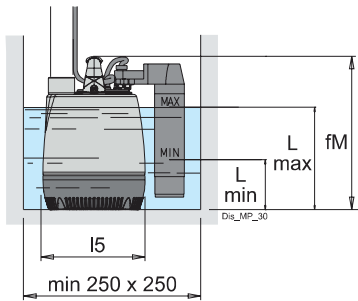
TYPE	DN2	mm					kg
		a	fM	I5	I5	ps	Weight
MP 203/A	G 1 1/4	346.5	382.5	56	176	2	7
MP 204	G 1 1/4	346.5	382.5	56	176	2	7.9
MP 403	G 1 1/4	346.5	382.5	56	176	2	8

TYPE	DN2	mm							kg
		a	fM	I5	I5	Lmax	Lmin	ps	Weight
MPM 203/A	G 1 1/4	346.5	382.5	56	176	428	218	2	7.5
MPM 204	G 1 1/4	346.5	382.5	56	176	428	218	2	8
MPM 403	G 1 1/4	346.5	382.5	56	176	428	218	2	8

Examples of installations



Installation examples with vertical magnetic float switch



TYPE	mm		Kg
	Lmax	Lmin	Weight
MPM 203/A GF	308	210	7
MPM 204 GF	308	210	7.9
MPM 403 GF	308	210	8.2