

Multi-stage submersible pumps

-  Clean water
(Maximum sand content 150 g/m³)
-  Domestic use
-  Civil use
-  Agricultural use



PERFORMANCE RANGE

- Flow rate up to **180 l/min** (10.8 m³/h)
- Head up to **95 m**

APPLICATION LIMITS

- Maximum liquid temperature **+40 °C**
- Maximum sand content **150 g/m³**
- **20 m** maximum immersion depth (with a sufficiently long power cable)
- Vertical and horizontal installation
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

- **10 m** long power cable
- Float switch for single-phase versions

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3



PATENTS - TRADE MARKS - MODELS

- Patent n. EP14755156.8
- Patent n. IT0001428923
- Patent n. EP2419642.2

CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY



INSTALLATION AND USE

A new concept range of submersible multi-stage pumps designed guarantee even greater reliability, thanks to patented innovative technical solutions which prevent blockage of the pumps even after prolonged periods of inactivity.

Because of their high efficiency and reliability they are suitable for use with clean water in domestic, civil and agricultural applications such as the distribution of water in combination with pressure tanks, for the irrigation of gardens and orchards and for pressure boosting, etc.

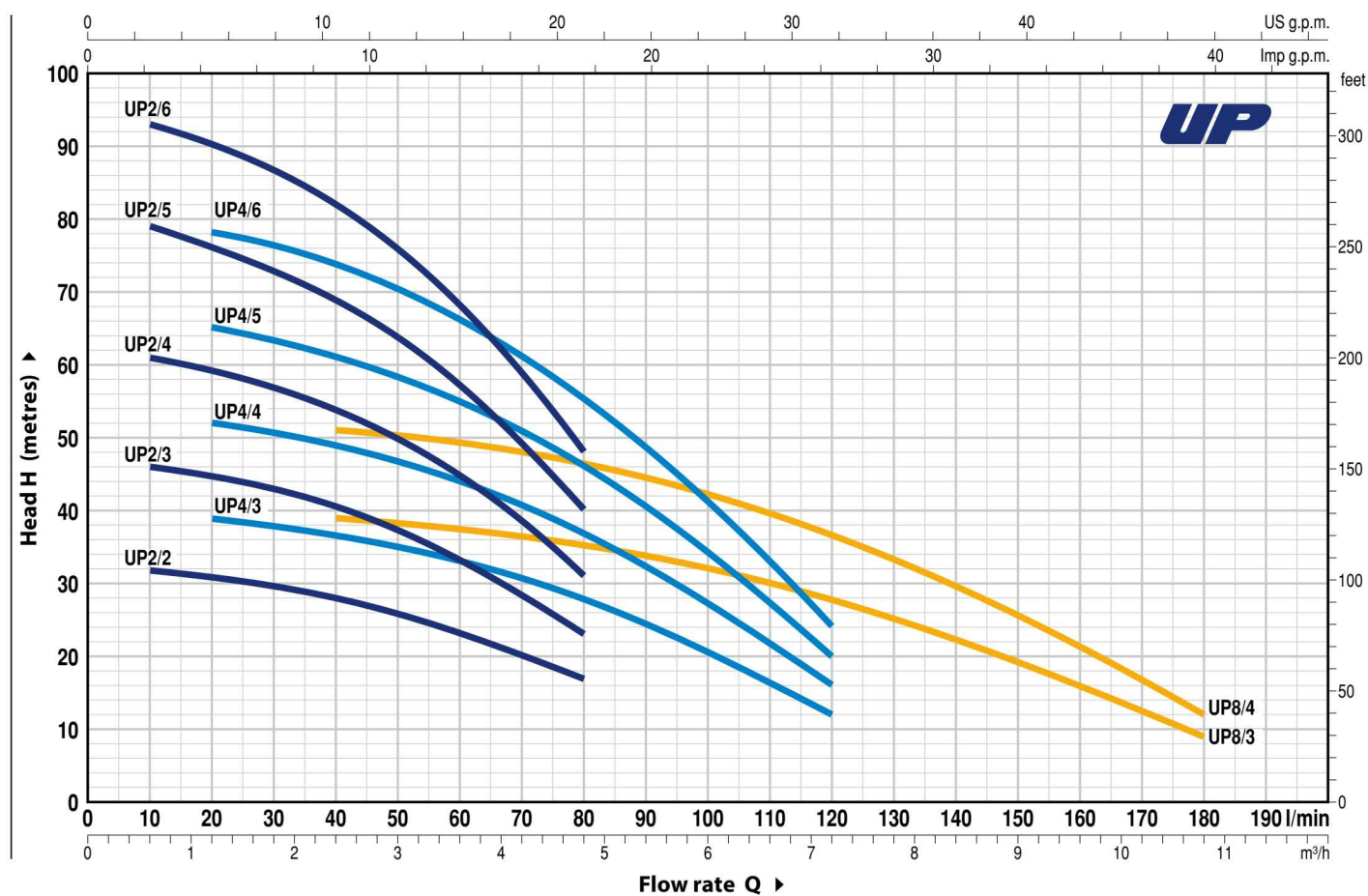
OPTIONS AVAILABLE ON REQUEST

- Pumps without float switch
- Pumps fitted with power cables of other lengths
- Other voltages or 60 Hz frequency
- **Support kit for horizontal operation**



CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min⁻¹



MODEL		POWER (P ₂)		Q ^{m³/h} l/min	0	0.6	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8
Single-phase	Three-phase	kW	HP		0	10	20	40	60	80	100	120	140	160	180
UPm 2/2-GE	UP 2/2	0.37	0.5	H metres	33	32	31	28	23.5	17					
UPm 2/3-GE	UP 2/3	0.55	0.75		48	46	44.5	40.5	33.5	23					
UPm 2/4-GE	UP 2/4	0.75	1		63	61	59	54	45	31					
UPm 2/5-GE	UP 2/5	1.1	1.5		81	79	75.5	68.5	57.5	40					
UPm 2/6-GE	UP 2/6	1.5	2		95	93	90	82	68.5	48					
UPm 4/3-GE	UP 4/3	0.55	0.75		40	–	39	37	33	28	20.5	12			
UPm 4/4-GE	UP 4/4	0.75	1		53	–	52	49	44	37	27.5	16			
UPm 4/5-GE	UP 4/5	1.1	1.5		67	–	65	61.5	55	46.5	34	20			
UPm 4/6-GE	UP 4/6	1.5	2		80	–	78	74	66	56	41	24			
UPm 8/3-GE	UP 8/3	1.1	1.5		40	–	–	39	37.5	35.2	32	27.8	22.2	16	9
UPm 8/4-GE	UP 8/4	1.5	2		52	–	–	51	49.2	46.5	42	36.5	29.5	21.2	12

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

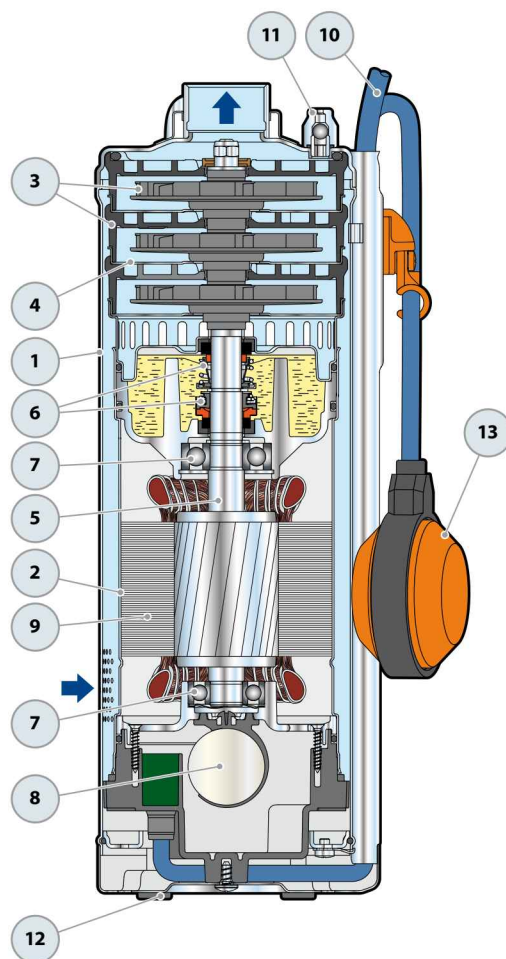
➡ Single-phase pumps without float switch on request

POS. COMPONENT

CONSTRUCTION CHARACTERISTICS

1	EXTERNAL SLEEVE	Stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1				
2	MOTOR SLEEVE	Stainless steel AISI 304				
3	IMPELLERS AND DIFFUSERS	Noryl FE1520PW				
4	DIAPHRAGMS	Stainless steel AISI 304				
5	MOTOR SHAFT	Stainless steel AISI 431				
6	TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER					
	Seal	Shaft	Position	Materials		
	Model	Diameter		Stationary ring	Rotational ring	Elastomer
	STA-17	Ø 17 mm	Motor side	Ceramic	Graphite	NBR
	ST1-16	Ø 16 mm	Pump side	Silicon carbide	Graphite	NBR
7	BEARINGS	6303 2RS - C3 / 6203 ZZ - C3E				
8	CAPACITOR					
	Pump	Capacitance				
	Single-phase	(230 V or 240 V)	(110 V)			
	UPm 2/2-GE					
	UPm 2/3-GE	16 µF - 500 VL	30 µF - 250 VL			
	UPm 4/3-GE					
	UPm 2/4-GE	20 µF - 450 VL	-			
	UPm 4/4-GE					
	UPm 2/5-GE					
	UPm 4/5-GE	25 µF - 450 VL	-			
	UPm 8/3-GE					
	UPm 2/6-GE					
	UPm 4/6-GE	35 µF - 450 VL	-			
	UPm 8/4-GE					
9	ELECTRIC MOTOR					
	UPm: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.					
	UP: three-phase 400 V - 50 Hz.					
	- Insulation: class F					
	- Protection: IP X8					
10	POWER CABLE					
	➡ DRINCABLE® type approved for use in drinking water by "WRAS" in compliance with BS 6920, approval n. 7513 Standard length 10 metres					
11	AUTOMATIC VENT VALVE					
12	ANTI-VIBRATION SUPPORTS					
13	FLOAT SWITCH					
	(only for single-phase versions)					

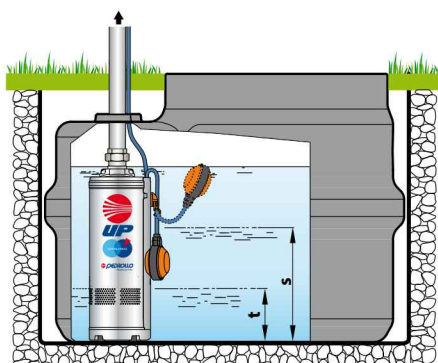
The diagram is a vertical cross-section of a pump assembly. At the top, a blue arrow points upwards from a vent valve (11). Below this is the impeller/diffuser section (3) with diaphragms (4). The motor shaft (5) passes through two mechanical seals (6) separated by an oil chamber. The motor (9) is shown with its winding and capacitor (8). The motor sleeve (2) and external sleeve (1) are at the top. The pump body (10) is on the right, connected to a float switch (13) via a cable. Anti-vibration supports (12) are at the base. The diagram is color-coded: blue for water passages, yellow for oil chamber, and red for motor components.



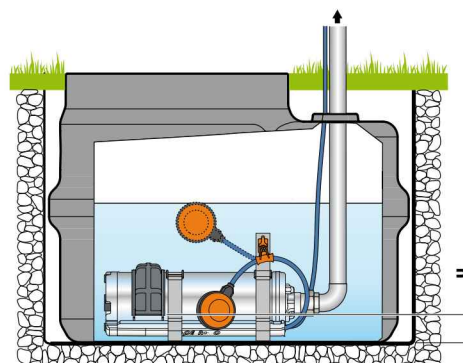
DIMENSIONS AND WEIGHT



Vertical installation



Horizontal installation



MODEL		PORT DN	N. STAGES	DIMENSIONS mm		kg	
Single-phase	Three-phase			Ø	h	1~	3~
UPm 2/2-GE	UP 2/2	1 1/4"	2	150	398	12.8	12.5
UPm 2/3-GE	UP 2/3		3		425	13.1	13.1
UPm 2/4-GE	UP 2/4		4		482	14.8	13.7
UPm 2/5-GE	UP 2/5		5		509	16.4	15.1
UPm 2/6-GE	UP 2/6		6		556	18.0	16.6
UPm 4/3-GE	UP 4/3		3		425	12.9	12.9
UPm 4/4-GE	UP 4/4		4		482	14.6	13.5
UPm 4/5-GE	UP 4/5		5		509	16.2	15.3
UPm 4/6-GE	UP 4/6		6		556	18.1	16.9
UPm 8/3-GE	UP 8/3		3		455	15.2	13.8
UPm 8/4-GE	UP 8/4		4		502	17.0	15.5

MODEL	LEVELS mm		
	s	t	u
UP 2/2 UP 2/3 UP 4/3	320	135	55
UP 2/4 UP 2/5 UP 4/4 UP 4/5 UP 8/3	350		
UP 2/6 UP 4/6 UP 8/4	370		

s = Minimum restarting level
t = Emptying level
u = Minimum operational level

ABSORPTION

MODEL	VOLTAGE		
	230 V	240 V	110 V
UPm 2/2-GE	4.4 A	4.2 A	8.8 A
UPm 2/3-GE	5.4 A	5.2 A	10.8 A
UPm 2/4-GE	6.2 A	6.0 A	—
UPm 2/5-GE	7.6 A	7.3 A	—
UPm 2/6-GE	8.8 A	8.5 A	—
UPm 4/3-GE	5.0 A	4.8 A	10.0 A
UPm 4/4-GE	6.2 A	5.9 A	—
UPm 4/5-GE	7.2 A	6.9 A	—
UPm 4/6-GE	8.7 A	8.4 A	—
UPm 8/3-GE	6.8 A	6.5 A	—
UPm 8/4-GE	8.5 A	8.4 A	—

MODEL	VOLTAGE			
	230 V	400 V	240 V	415 V
UP 2/2	2.8 A	1.6 A	2.7 A	1.5 A
UP 2/3	3.3 A	1.9 A	3.2 A	1.8 A
UP 2/4	4.0 A	2.3 A	3.9 A	2.2 A
UP 2/5	5.0 A	2.9 A	4.9 A	2.8 A
UP 2/6	5.7 A	3.3 A	5.5 A	3.2 A
UP 4/3	3.2 A	1.8 A	3.1 A	1.7 A
UP 4/4	3.8 A	2.2 A	3.7 A	2.1 A
UP 4/5	4.9 A	2.8 A	4.7 A	2.7 A
UP 4/6	5.6 A	3.2 A	5.4 A	3.1 A
UP 8/3	5.0 A	2.9 A	4.9 A	2.8 A
UP 8/4	5.7 A	3.3 A	5.5 A	3.2 A

PALLETIZATION

MODEL		GROUPAGE/CONTAINER n. pumps
Single-phase	Three-phase	
UPm 2/2-GE	UP 2/2	30
UPm 2/3-GE	UP 2/3	30
UPm 2/4-GE	UP 2/4	30
UPm 2/5-GE	UP 2/5	25
UPm 2/6-GE	UP 2/6	25

MODEL		GROUPAGE/CONTAINER n. pumps
Single-phase	Three-phase	
UPm 4/3-GE	UP 4/3	30
UPm 4/4-GE	UP 4/4	30
UPm 4/5-GE	UP 4/5	25
UPm 4/6-GE	UP 4/6	25
UPm 8/3-GE	UP 8/3	30
UPm 8/4-GE	UP 8/4	30