

SEMISOM



Electric submersible pumps SEMISOM for sewage water



APPLICATION

To expel rain water, convey waste and sewage water from septic tanks

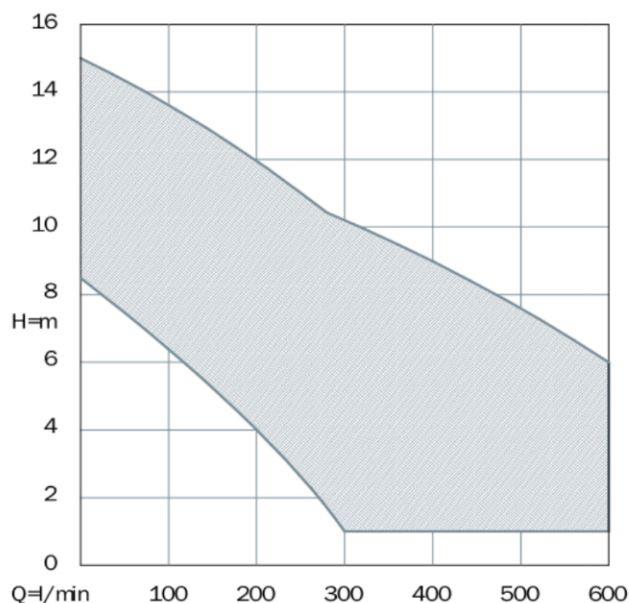
To pump liquids containing solids (vortex or double channel impeller) and filaments (double channel impeller)

To pump sewage keeping its biological process unchanged (Semisom 504 4 poles)

CHARACTERISTICS

IP rating	IP68
Duty (versions 1~230V - 3~400V)	Continuous S1
Duty (versions 24V DC)	Limited use S2 (60 minutes)
Maximum immersion depth (m)	20
Maximum number of starts per hour	40
Maximum temperature of the liquid pumped versions 1~230V - 3~400V (°C)	50
Maximum temperature of the liquid pumped versions 24V DC (°C)	35
PH of the liquid pumped	6 - 10
Density of the liquid pumped (kg/dm ³)	<1,1
Suitable for inverter drive	Three-phase versions only

APPLICATION RANGE



CONSTRUCTION

1~230V - 3~400V versions: coolant filled, asynchronous, rewindable electric AC motor with short circuit rotor. Insulation Class F. Windings with phase insulators to protect the motor from power peaks, as a guarantee of a highly-trustworthy product.

24V DC versions: with permanent magnets dry electric DC motor. Insulation Class F

Resin-insulated cable kit to prevent penetration of water inside the motor

Shafts machined on ball bearings and mechanical seals location

Double mechanical seal with oil-chamber in-between


MATERIALS


Tie rods, handle, motor casing, bolts and nuts	Stainless Steel AISI304
Shaft	Stainless Steel AISI420B
Cover and volute	Mechanical cast iron EN GJL-250
Impeller	Mechanical cast iron EN GJL-200
Mechanical seal	Silicon carbide and alumina
Packing Ring	NBR rubber
Elastomers	NBR rubber
Cable	Neoprene H07RN8-F; 24V DC: Twin Batt

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PERFORMANCE DATA

Vortex Impeller	P2		1~230 V		3~400 V	24 V DC	Poles	DNM	Solid Passage ø	Q		Flow										
	hp	kW	Max	µF	Max	Max				m³/h	l/min	0	6	9	12	15	18	21	24	27	30	36
			A		A	A						0	100	150	200	250	300	350	400	450	500	600
																						
SEMISOM 265	0,75	0,55	4,2	16	1,7	28	2	1"½	40	H (m)	8,5	6,5	5,5	4	3	1						
SEMISOM 290	0,75	0,55	4,2	16	1,7		2	2"	50		8,5	7	6,5	5,5	4,5	3,5	2,5	1				
SEMISOM 390	1	0,75	5,5	16	2,3		2	2"	50		10	8,5	8	7	6	5	4	3	2	1		
NEW SEMISOM 504	1	0,75	6,1	20	2,5		4	2"	50		6,2	6	5,7	5,4	5,1	4,8	4,5	4,2	3,8	3		
SEMISOM 490	1,5	1,1	7,3	20	2,7		2	2"	50		11	9,5	9	8	7,5	6,5	5,5	5	4	3	1	
SEMISOM 590	2	1,5	10,5	31,5	4,1		2	2"	50		14,5	13	12,5	11,5	11	10	9	8	7,5	6,5	5	
SEMISOM 650	2	1,5	12	31,5	4,6		2	2"½	65		9	8	7,5	7	6,5	6	5,5	5	4,5	4	3	
NEW SEMISOM 650 H	2	1,5	12	31,5	4,6		2	2"½	65		12,8	12	11,6	11,1	10,7	10,2	9,5	8,8	8,1	7,5	6	

Channel impeller	P2		1~230 V		3~400 V	24 V DC	Poles	DNM	Solid Passage ø	Q		Flow										
	hp	kW	Max	µF	Max	Max				m³/h	l/min	0	6	9	12	15	18	21	24	27	30	36
			A		A	A						0	100	150	200	250	300	350	400	450	500	600
																						
SEMISOM 262	0,75	0,55	4,2	16	1,7	28	2	2"	32	H (m)	10,5	9	8	7	6	4,5	3	1				
SEMISOM 635	1,5	1,1	7,3	20	2,7		2	2"	32		15	13,5	13	12	11	10	9	7,5	6,5	5	2	

AVAILABLE VERSIONS

Vortex Impeller	Vertical discharge	Horizontal discharge	Rail	Single-phase	Single-phase + Float switch	Single-phase + float. and Internal capacitor	Three-phase	Three-phase + float	24 V	SERIES										
										VS	VS	VA	VS	VA	VS					
																				
SEMISOM 265	•			VS	VS	VA	VS	VA	VS											
SEMISOM 290		•		HS	HS	HA	HS													
SEMISOM 390	•			VS	VS	VA	VS	VA												
NEW SEMISOM 504		•		HS	HS		HS													
SEMISOM 490	•			VS	VS	VA	VS	VA												
SEMISOM 590		•		HS	HS	HA	HS													
SEMISOM 650			•	RS	RS		RS													
NEW SEMISOM 650 H			•	RS	RS		RS													

Channel impeller	Vertical discharge	Horizontal discharge	Rail	Single-phase	Single-phase + Float switch	Single-phase + float. and Internal capacitor	Three-phase	Three-phase + float	24 V	SERIES										
										VS	VS	VA	VS	VA	VS					
																				
SEMISOM 262	•			VS	VS	VA	VS	VA	VS											
SEMISOM 635	•			VS	VS	VA	VS	VA												
		•		HS	HS	HA	HS													

V = Vertical discharge; H = Horizontal discharge; R = Rail
S = Standard version; A = Automatic version

PERFORMANCE CURVES

