



SEMISOM

Electric submersible pumps SEMISOM for sewage water



Application

- To convey waste and sewage water from septic tanks;
- To drain rain water;
- To pump liquids containing solids and filaments;
- To pump sewage water even through pipes with reduced diameter (Semisom 125 GR with grinder).

Application features

- Maximum size of solids allowed **65 mm**;
- Maximum immersion depth **20 m**;
- Maximum number of starts per hour **40**;
- Maximum temperature of the liquid pumped:
50 °C in case of continuous duty **S1** series Semisom,
45 °C in case of intermittent duty **S2** 60 min series Semisom DC 24 V;
- Degree of protection **IP 68**;
- Insulation class **F**.

Construction

- Coolant filled, asynchronous rewindable motor with short circuit rotor;
- Twin seal with oil chamber;
- SEMISOM C:
- Internal capacitor and thermal protector put in a separate, easily-accessible, watertight chamber.
- SEMISOM M:
- Supplied with a control box containing pump capacitor and unipolar thermal protector switch.
- SEMISOM 650:
- The volute of the pump is already provided with quick connection for guide rail kit.

SEMISOM DC 24 V:

- 24 V DC with permanent magnets motor, with dry-brush rotor;
- Twin seal with oil chamber.

Accessories

- Guide rail kit.



Components

Electric pump	Semisom	Semisom GR
Tie rods, handle, motor casing, bolts and nuts	Stainless steel AISI304	Stainless steel AISI304
Shaft	Stainless steel AISI420B	Stainless steel AISI416B
Cover and pump body	Mechanical cast iron EN GJL-250	Mechanical cast iron EN GJL-250
Impeller	Mechanical cast iron EN GJL-200	Technopolymer reinforced with fibre-glass
Grinder		Forged Stainless steel AISI440C
Mechanical seal	Silicon carbide and alumina	Silicon carbide and alumina
Seal ring	NBR rubber	NBR rubber
Elastomers	NBR rubber	NBR rubber
Cable	Neoprene H07RN-F (Semisom C/T+G Neoprene H07RN8-F)	Neoprene H07RN-F

Electric submersible pumps SEMISOM

for sewage water with vertical discharge

Performance characteristics 2 poles 50 Hz

Single-Phase 230 V Three-Phase 400 V 50 Hz	Version *	Nominal		Max		450 V Cable		Solids DNM passage ø	Flow												
		HP	KW	A 1~	A 3~	µF	m		m³/h	0	1,8	6	9	12	15	18	21	24	27	30	36
											Total manometric head in meters										
Vortex Impeller																					
SEMISOM 265	C/M/T/T+G	0,75	0,55	4,2	1,7	16	5	1"½	40	8,5	8	6,5	5,5	4	3	1					
SEMISOM 390	C/M/T/T+G	1	0,75	5,5	2,3	16	5	2"	50	10	8,5	8	7	6	5	4	3	2	1		
SEMISOM 490	C/M/T/T+G	1,5	1,1	7,3	2,7	20	5	2"	50	11	9,5	9	8	7,5	6,5	5,5	5	4	3	1	
Double-Channel Impeller																					
SEMISOM 262	C/M/T/T+G	0,75	0,55	4,2	1,7	16	5	2"	32	10,5	10	9	8	7	6	4,5	3	1			
SEMISOM 635	C/M/T/T+G	1,5	1,1	7,3	2,7	20	5	2"	32	15	14,5	13,5	13	12	11	10	9	7,5	6,5	5	2

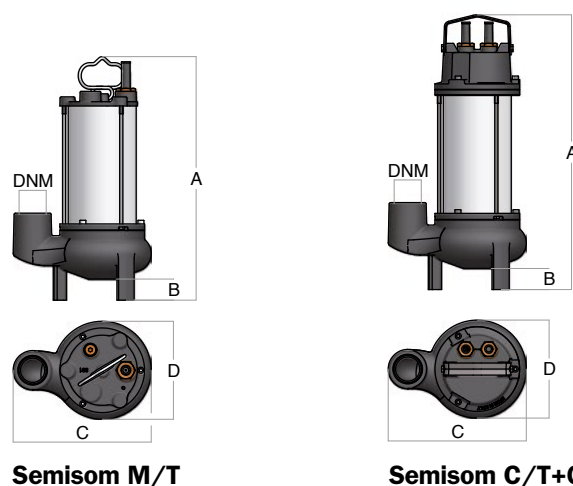
* C : Single-phase with internal capacitor and float switch

M : Single-phase with external capacitor with or without float switch

T : Three-phase without float switch

T+G : Three-phase with float switch

Type		Dimensions mm				Weight Kg
		A	B	C	D	
Semisom 265	C/T+G	454	50	230	162	16,5
Semisom 390	C/T+G	502	65	235	162	17,7
Semisom 490	C/T+G	527	65	235	162	19,5
Semisom 262	C/T+G	450	60	250	172	19,1
Semisom 635	C/T+G	484	60	250	172	21,3
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Semisom 265	M/T	400	50	230	162	13,6
Semisom 390	M/T	450	65	235	162	15,7
Semisom 490	M/T	474	65	235	162	16,5
Semisom 262	M/T	400	60	250	172	16,7
Semisom 635	M/T	440	60	250	172	19,3

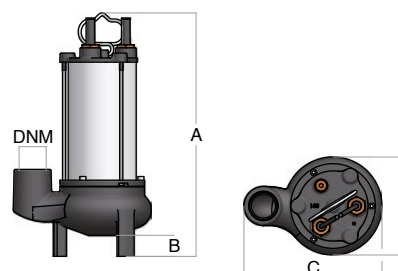


Electric submersible pumps SEMISOM DC

Performance characteristics 2800 rpm

Direct Current 24 V	Nominal		Max A	Cable		Solids DNM passage ø	Flow													
	HP	KW		m	DNM		m³/h	0	1,8	6	9	12	15	18	21	24				
							Total manometric head in meters													
Vortex Impeller																				
SEMISOM 265 DC		0,75	0,55	28	5	1"½	40	8,5	8	6,5	5,5	4	3	1						
Double-Channel Impeller																				
SEMISOM 262 DC		0,75	0,55	28	5	2"	32	10,5	10	9	8	7	6	4,5	3	1				

Type		Dimensions mm				Weight Kg
		A	B	C	D	
Semisom 265 DC		440	50	230	162	13,0
Semisom 262 DC		440	60	250	172	15,3



Electric submersible pumps SEMISOM

for sewage water with horizontal discharge



Performance characteristics 2 poles 50 Hz

Single-Phase 230 V Three-Phase 400 V 50 Hz	Version *	Nominal		Max		450 V Cable		Solids passage ø	m³/h l/min	Flow												
		HP	KW	A 1~	A 3~	µF	m			DNM	0	1,8	6	9	12	15	18	21	24	27	30	36
											Total manometric head in meters											
Vortex Impeller																						
SEMISOM 290 O	C/M/T	0,75	0,55	4,2	1,7	16	10	2"	50	8,5	7	6,5	5,5	4,5	3,5	2,5	1					
SEMISOM 390 O	C/M/T	1	0,75	5,5	2,3	16	10	2"	50	10	8,5	8	7	6	5	4	3	2	1			
SEMISOM 490 O	C/M/T	1,5	1,1	7,3	2,7	20	10	2"	50	11	9,5	9	8	7,5	6,5	5,5	5	4	3	1		
SEMISOM 590 O	M/T	2	1,5	10,5	4,1	31,5	10	2"	50	14,5	13	12,5	11,5	11	10	9	8	7,5	6,5	5		
Double-Channel Impeller																						
SEMISOM 635 O	C/M/T	1,5	1,1	7,3	2,7	20	5	2"	32	15	14,5	13,5	13	12	11	10	9	7,5	6,5	5	2	

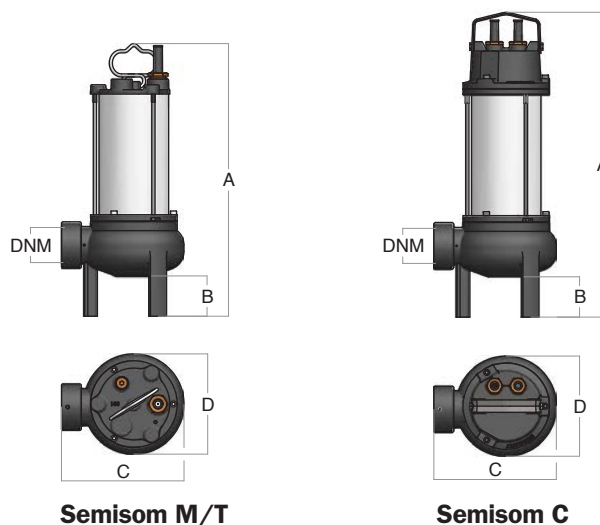
Guide rail kit is available, on request

* C : Single-phase with internal capacitor and float switch

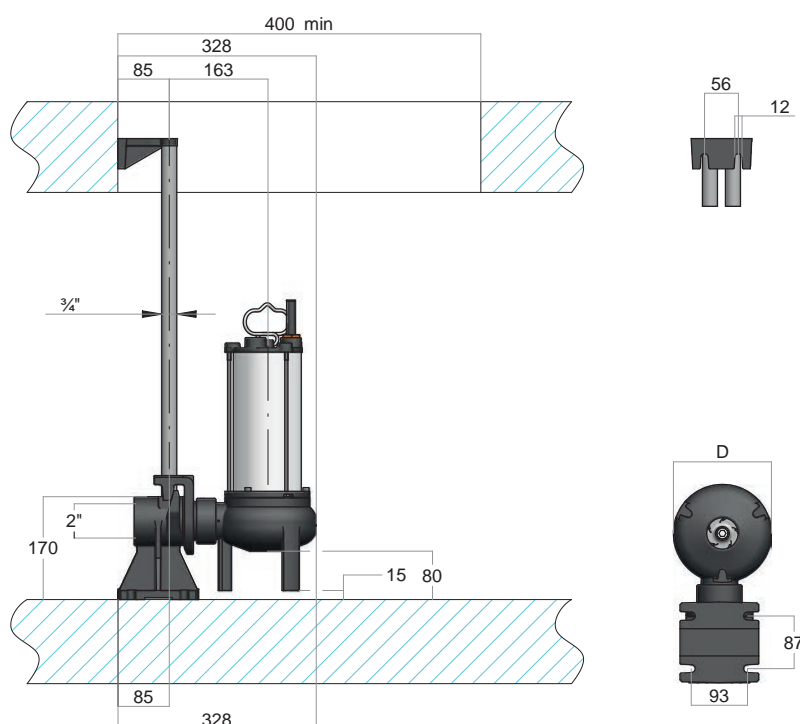
M : Single-phase with external capacitor with or without float switch

T : Three-phase without float switch

Type	Dimensions mm				Weight Kg
	A	B	C	D	
Semisom 290 O C	492	65	198	162	16,5
Semisom 390 O C	502	65	198	162	17,5
Semisom 490 O C	526	65	198	162	18,8
Semisom 635 O C	484	60	220	172	22,0
Semisom 290 O M/T	440	65	198	162	14,4
Semisom 390 O M/T	450	65	198	162	15,7
Semisom 490 O M/T	474	65	198	162	16,5
Semisom 590 O M/T	496	65	198	162	18,2
Semisom 635 O M/T	440	60	220	172	20,1



Guide rail kit



Electric submersible pumps SEMISOM 650 with quick connection for sewage water

Performance characteristics 2 poles 50 Hz

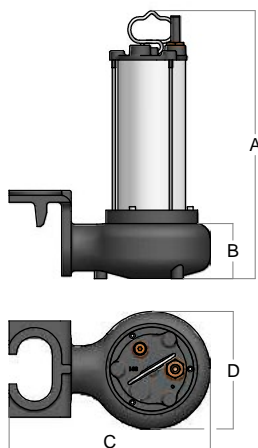
Single-Phase 230 V Three-Phase 400 V 50 Hz	Version *	Nominal		Max		450 V Cable		Solids passage ø	Flow											
		HP	KW	A 1~	A 3~	µF	m		DNM	m³/h	0	1,8	6	9	12	15	18	21	24	27
									Total manometric head in meters											
Vortex Impeller																				
SEMISOM 650	M/T	2	1,5	12	4,6	31,5	10	2"½	65	9	8	7,5	7	6,5	6	5,5	5	4,5	4	3

To be installed only with guide rail kit

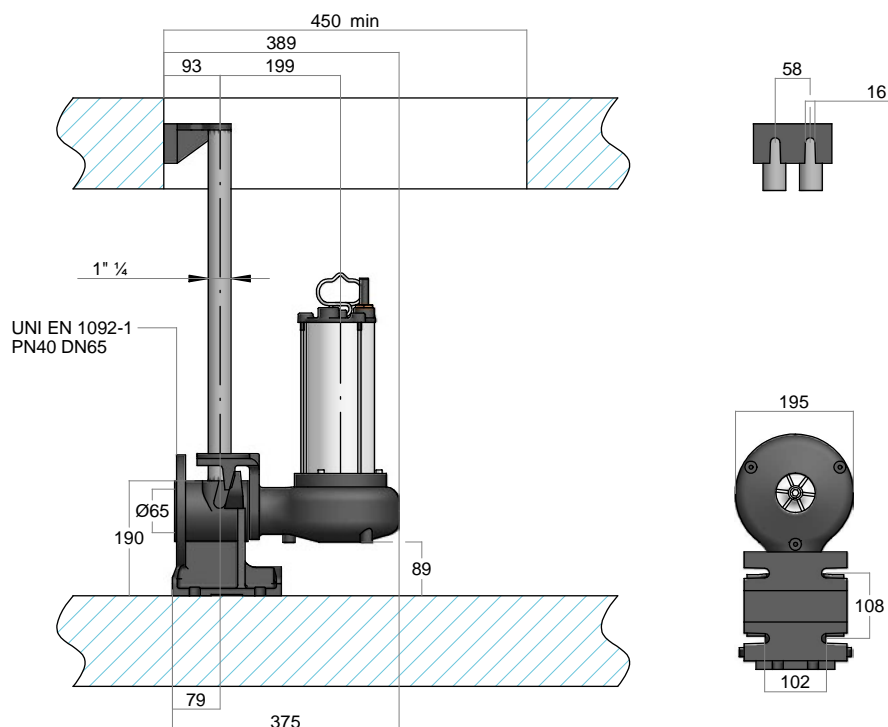
* M : Single-phase with external capacitor with or without float switch

T : Three-phase

Type	Dimensions mm	Weight Kg	
			A
Semisom 650 M	445 91 334 195	23,0	
Semisom 650 T	445 91 334 195	22,7	

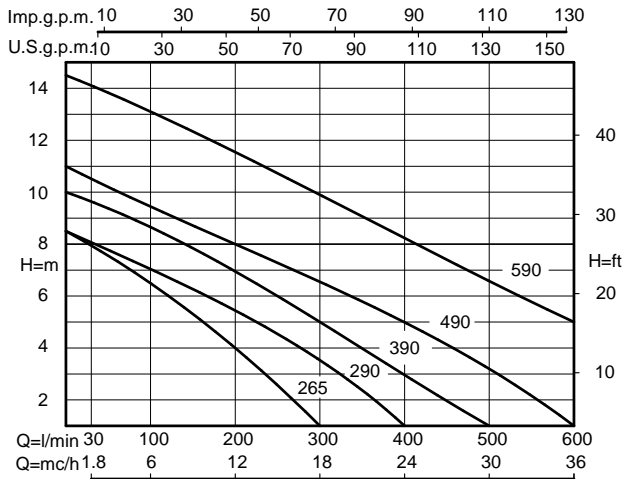


Guide rail kit

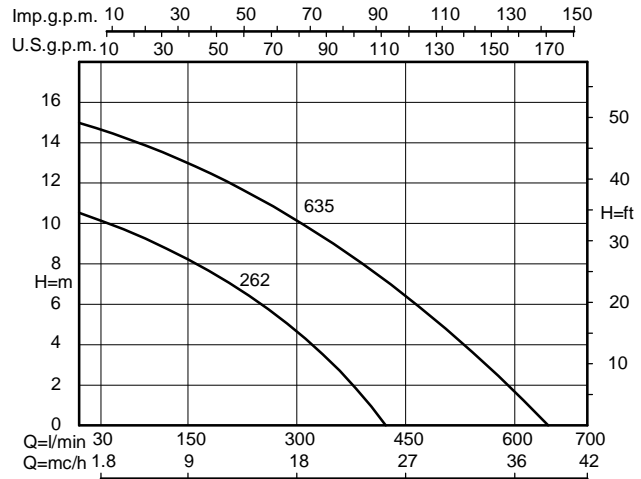


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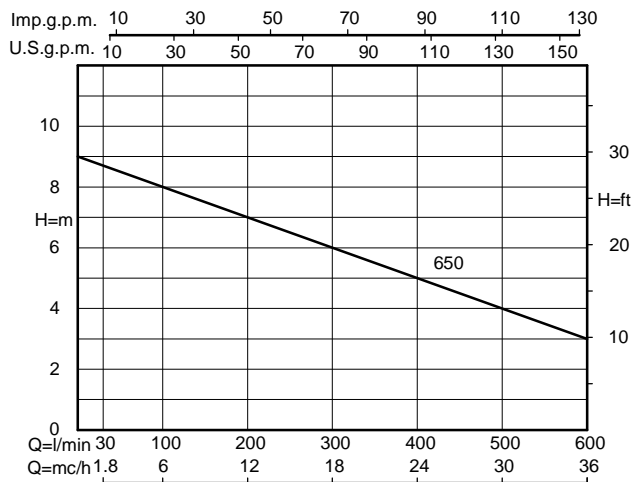
Semisom 265 - 290 - 390 - 490 - 590



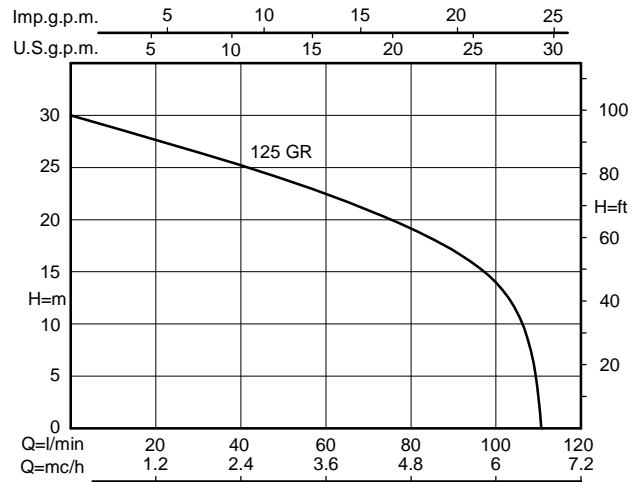
Semisom 262 - 635



Semisom 650



Semisom 125 GR



Automatic pumping station SEMIBOX for sewage water

Application

- Suitable to collect and convey waste and sewage water;
- Advisable when the sewers are higher than the collecting system;
- The collecting tanks can be installed inside garages, basements or underground.

Application features

- Maximum capacity **200 litres**.

Control

- By means of a float switch supplied with the electric pump.

Construction

- Tank in corrosion-resistant, high-density polyethylene for either surface or underground installation;
- Supplied with the necessary gaskets for both inlet and outlet pipes and ventilation hole;
- Discharge pipe has simple release fittings to disconnect the pump;
- The hermetically sealed lid can be removed for inspecting the plant;
- The electric pump and tank can be coupled using either $\varnothing 50$ mm or $\varnothing 63$ mm dia. pipe;
- Facility for one electric submersible Semisom pump (not included).

