

SEMISOM

FOR GREY WATER



Electric submersible pumps SEMISOM

for grey water



APPLICATION

Electric submersible pumps for installations in domestic, civil and industrial environments.

Suitable to convey waste water also containing suspended solids whose size is up to 20 mm.

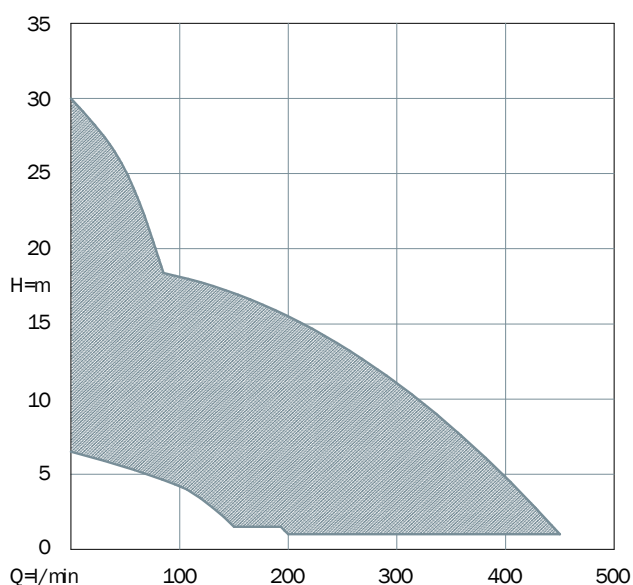
They are recommended to transfer water, to drain tanks or flooded areas and to pump grey water coming from domestic, civil and industrial installations.

Some models of this range are also available in 24V DC version.

CHARACTERISTICS

	Semisom	Seminox
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	2
Maximum number of starts per hour	40	30
Maximum temperature of the liquid pumped versions 1~230V - 3~400V (°C)	50	35
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. Seminnox with dry motor. Windings with phase insulators to protect the motor from power peaks, as a guarantee of a highly-trustworthy product.

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

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

Shafts machined on ball bearings and mechanical seals location

Double seal with interposed oil chamber


MATERIALS


	Semisom	Seminox
Handle, tie-rods and motor casing	Stainless steel AISI304	
Shaft	Stainless steel AISI420B	Stainless steel AISI303
Cover and Volute	Mechanical cast iron EN GJL-250	Stainless steel AISI304
Tie-rods	Stainless steel AISI304	
Impeller	Mechanical cast iron EN GJL-200 (Semisom 190-130 in tecnopolymer reinforced with fibre glass)	Stainless steel AISI304 (Seminnox 155 in tecnopolymer reinforced with fibre glass)
Mechanical seal	Silicon carbide and alumina	Graphite and alumina
Seal ring	Gomma NBR	
Elastomers	NBR rubber	
Cable	Neoprene H07RN8-F; 24V DC: Twin Batt	Neoprene H07RN-F

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PERFORMANCE DATA

Open impeller 	P2		1~230 V		3~400 V	24 V DC	Poles	Ø solid passage (mm)	Q	Flow										
	hp	kW	Max	µF	Max	Max				m³/h	0	1,8	6	9	12	15	18	21	24	27
			A		A	A					l/min	0	30	100	150	200	250	300	350	400
SEMINOX 155	0,33	0,25	1,9	8			2	10	H (m)	7,6	6,8	4,3	1,5							
SEMINOX 155 L	0,33	0,25	2,2	8			2	20		6,5	5,9	4,2	2,4							
SEMISOM 190	0,5	0,37	2,5	10	1,2	24	2	5		10,5	9,5	7	4	1						
SEMISOM 320	0,75	0,55	4,2	16	1,7	28	2	13		11,5	11	9	7,5	5,5	3	0,5				
SEMISOM 465	1,5	1,1	7,3	20	2,7		2	5		19		17,5	16,5	15,5	14	12	9,5	6,5	1	

Open impeller 	P2		1~230 V		3~400 V	24 V DC	Poles	Ø solid passage (mm)	Q	Flow						
	hp	kW	Max	µF	Max	Max				m³/h	0	1,2	2,4	3,6	4,8	6
			A		A	A					l/min	0	20	40	60	80
SEMISOM 130	1,5	1,1	7,6	25	2,9		2	5	H (m)	30	29	26,5	23,5	19,5	15	

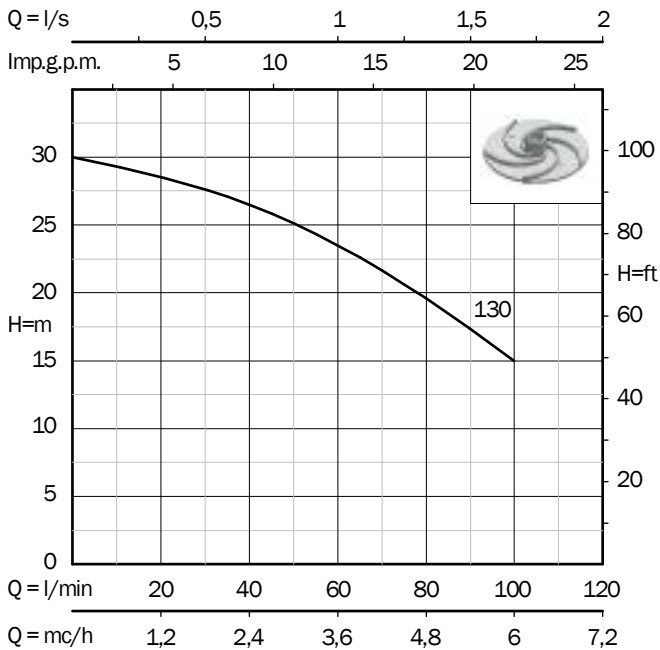
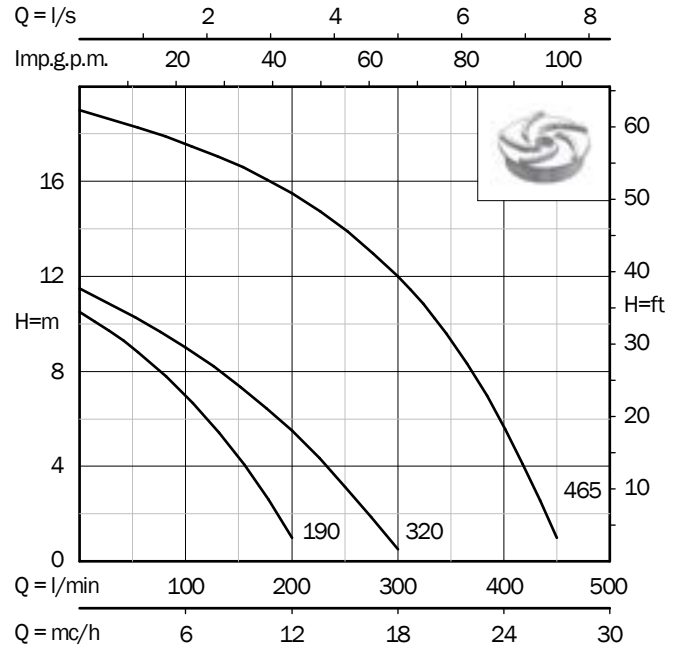
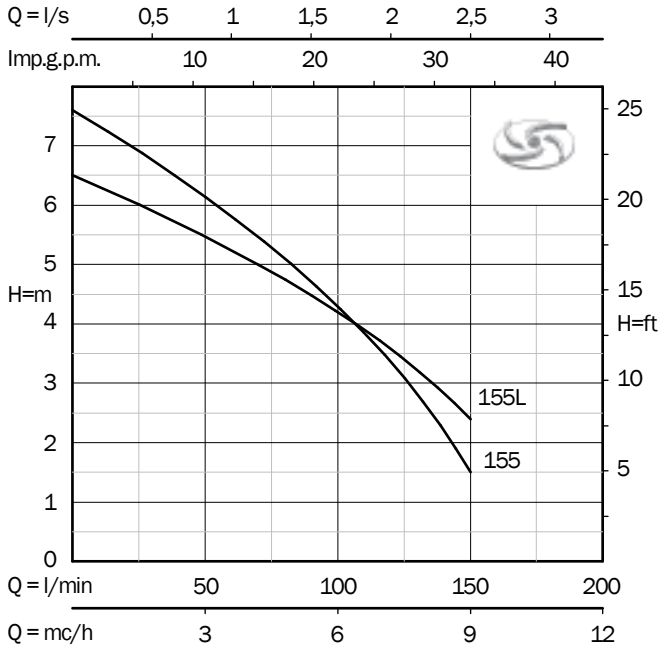
AVAILABLE VERSIONS

Open impeller 	Vertical discharge 	Horizontal discharge 	Single-phase	Single-phase + Float switch	Single-phase + float and Internal capacitor	Three-phase	Three-phase + float	24 V
	SERIES							
SEMISOM 155	•				VA			
SEMISOM 155 L	•				VA			
SEMISOM 190	•		VS	VS	VA	VS		VS
SEMISOM 320	•		VS	VS	VA	VS	VA	VS
SEMISOM 465	•		VS	VS	VA	VS	VA	

Open impeller 	Vertical discharge 	Horizontal discharge 	Single-phase	Single-phase + Float switch	Single-phase + float and Internal capacitor	Three-phase	Three-phase + float	24 V
	SERIES							
SEMISOM 130		•	HS	HS		HS		

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

PERFORMANCE CURVES - 2 poles 50 Hz




Electric submersible pumps SEMISOM series VA

for grey water, vertical discharge automatic



PERFORMANCE DATA 2 poles 50 Hz

Open impeller 	Code	Version		P2		Max A	Flow		Ø solid passage (mm)	DNM (GAS)	Dimensions (mm)			Weight kg
				hp	kW		l/min	m			A	B	C	
SEMINOX 155 VA	SM155+G	230 V	1-phase+float	0,33	0,25	1,9	30 - 100	6,8 - 4,3	10	1"¼	273	20	167	4,6
SEMINOX 155L VA	SM155L+G	230 V	1-phase+float	0,33	0,25	2,2	30 - 100	5,9 - 4,2	20	1"¼	304	45	167	5

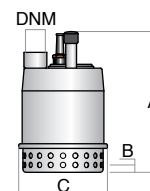


SUPPLIED WITH


5 meters power cable and Schuko plug



Capacitor and built-in thermal protector



PERFORMANCE DATA 2 poles 50 Hz

Open impeller 	Code	Version		P2		Max A	Flow		Ø solid passage (mm)	DNM (GAS)	Dimensions (mm)				Weight kg
				hp	kW		l/min	m			A	B	C	D	
SEMISOM 190 VA	SM190+G/3	230 V	1-phase+float	0,5	0,37	2,5	30 - 150 - 200	9,5 - 4 - 1	5	1"¼	393	50	225	164	12,8
SEMISOM 320 VA	SM320+G/3	230 V	1-phase+float	0,75	0,55	4,2	30 - 200 - 300	11 - 5,5 - 0,5	13	1"¼	418	50	225	164	14,9
	ST320+G/2	400 V	3-phase+float			1,7									16,7
SEMISOM 465 VA	SM465+G/3	230 V	1-phase+float	1,5	1,1	7,3	100 - 300 - 450	17,5 - 12 - 1	5	2"	484	60	250	172	21,8
	ST465+G/2	400 V	3-phase+float			2,7									23,6



SUPPLIED WITH

Power cable:

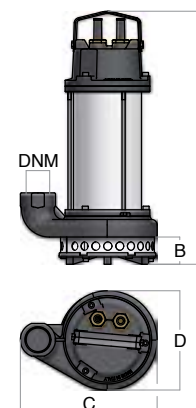
- 5 meters for single-phase versions
- 10 meters for three-phase versions



Capacitor and thermal protector put in a separate, easy-accessible, water tight chamber (single-phase versions)



Mini-contactor put in a separate, easy-accessible water tight chamber (three-phase versions)




Electric submersible pumps SEMISOM series VS


for grey water, vertical discharge



PERFORMANCE DATA 2 poles 50 Hz

Open impeller 	Code	Version		P2		Max A	Flow		Ø solid passage (mm)	DNM (GAS)	Dimensions (mm)				Weight kg
				hp	kW		l/min	m			A	B	C	D	
SEMISOM 190 VS	SM190	230 V	1-phase	0,5	0,37	2,5	30 - 150 - 200	9,5 - 4 - 1	5	1"¼	335	50	225	164	10,8
	SM190+G	230 V	1-phase+float												11
	ST190	400 V	3-phase												1,2
SEMISOM 320 VS	SM320	230 V	1-phase	0,75	0,55	4,2	30 - 200 - 300	11 - 5,5 - 0,5	13	1"¼	360	50	225	164	13
	SM320+G	230 V	1-phase+float												13,2
	ST320	400 V	3-phase												1,7
SEMISOM 465 VS	SM465	230 V	1-phase	1,5	1,1	7,3	100 - 300 - 450	17,5 - 12 - 1	5	2"	440	60	250	172	19,5
	SM465+G	230 V	1-phase+float												19,7
	ST465	400 V	3-phase												2,7

PERFORMANCE DATA - 24 V Direct current

Open impeller 	Code	Version		P2		P1 kW	Max A	Flow		Ø solid passage (mm)	DNM (GAS)	Dimensions (mm)				Weight kg
				hp	kW			l/min	m			A	B	C	D	
SEMISOM 190 VS	SF190	24 V	DC	0,5	0,37	0,58	24	30 - 150 - 200	9,5 - 4 - 1	5	1"¼	385	50	225	164	10,2
SEMISOM 320 VS	SF320	24 V	DC	0,75	0,55	0,67	28	30 - 200 - 300	11 - 5,5 - 0,5	13	1"¼	400	50	225	164	11,6

P1: Max. absorbed power - P2: Nominal power of the motor

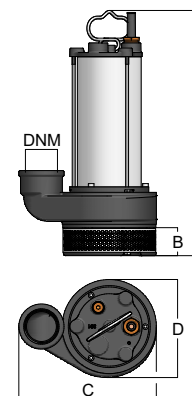


SUPPLIED WITH

5 meters power cable



Control box containing capacitor and amperometric protection (single-phase versions)



ACCESSORIES

Code	Description
02076100	QDC electromechanical direct starter (24 V Direct current versions)




Electric submersible pumps SEMISOM series HS

for grey water, horizontal discharge

 Technical documentation available by clicking on the product code

PERFORMANCE DATA 2 poles 50 Hz

Open impeller 	Code	Version		P2		Max A	Flow		Ø solid passage (mm)	DNM (GAS)	Dimensions (mm)				Weight kg
				hp	kW		l/min	m			A	B	C	D	
SEMISOM 130 HS	SM130	230 V	1-phase	1,5	1,1	7,6	20 - 60 - 100	29 - 23,5 - 15	5	1"½	426	69	240	190	22,2
	SM130+G	230 V	1-phase+float												22,4
	ST130	400 V	3-phase	2,9	22,2										

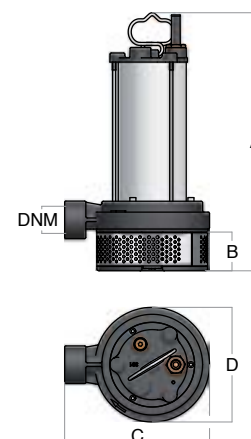


SUPPLIED WITH

10 meters power cable



Control box containing capacitor and amperometric protection (single-phase versions)



ACCESSORIES

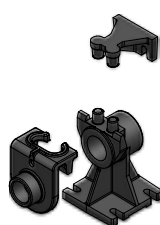
Code	Description
04105042	<p>Guide rail kit male threaded inlet G1"½ -female threaded discharge G2" (¾" guide poles are not included)</p> 

ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT

