

# SEMISOM GR



# Electric submersible pumps SEMISOM GR

## for sewage water with grinder



### APPLICATION

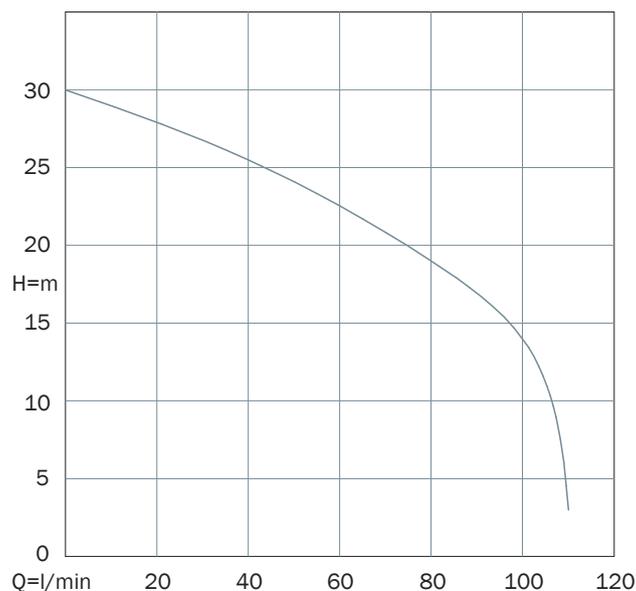
To convey waste and sewage water from septic tanks

To pump liquids containing solids and filaments, even through relative small bore pipework

### CHARACTERISTICS

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

### APPLICATION RANGE



### CONSTRUCTION

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.

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

Grinder in forged and tempered stainless steel as a guarantee of high resistance

### 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	Tecopolymer reinforced with fibre-glass
Grinder	Forged and tempered Stainless steel AISI440C
Mechanical seal	Silicon carbide and alumina
Seal ring	NBR rubber
Elastomers	NBR rubber
Cable	Neoprene H07RN8-F

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## PERFORMANCE DATA 2 poles 60 Hz

Grinder 	Code	Version		P2		Max	µF	DNM	Q m <sup>3</sup> /h l/min	Flow						Dimensions (mm)				Weight kg	
				hp	kW	A				0	1,2	2,4	3,6	4,8	6	6,6	A	B	C		D
										0	20	40	60	80	100	110					
<b>SEMISOM 125 GR (no stands)</b>	SMZ125	230 V	1-phase	1,6	1,18	9,2	25	1"½	H (m)	30	27,5	25,5	22,5	19	14	3	416	29	240	190	22
	SMZ125+G	230 V	1-phase+float			2,9															22,2
	STZ125	400 V	3-phase			2,9															21,2
<b>SEMISOM 125 GR (with stands)</b>	SMZ125P	230 V	1-phase	1,6	1,18	9,2	25	1"½	H (m)	30	27,5	25,5	22,5	19	14	3	441	54	240	190	22,1
	SMZ125+GP	230 V	1-phase+float			2,9															22,3
	STZ125P	400 V	3-phase			2,9															21,3

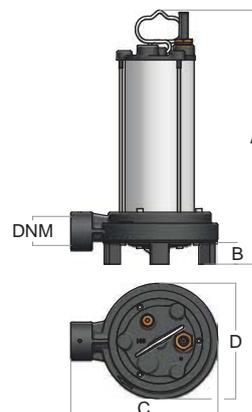


### SUPPLIED WITH

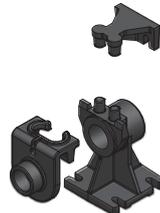
10 meters power cable



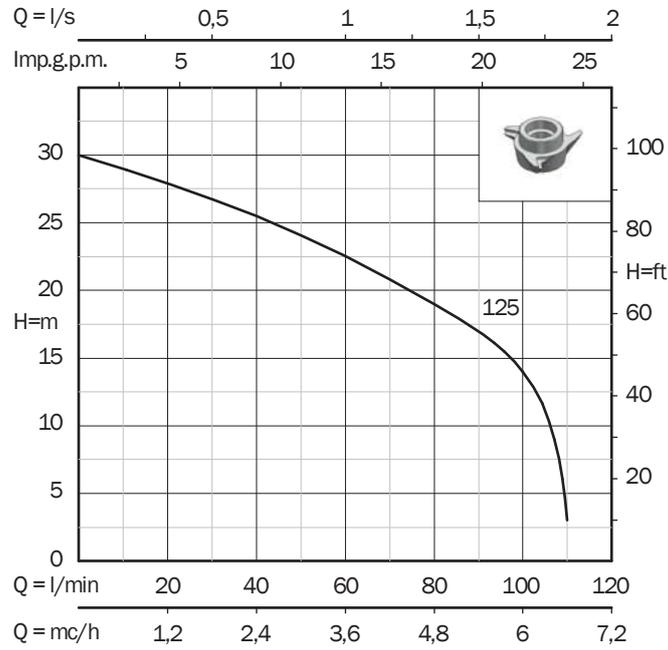
Junction box containing starting capacitor, unipolar thermal protector switch and facility to connect an extra 50 µF start-run capacitor (single-phase versions)



## ACCESSORIES

Code	Description	
02410016	90° zinc-plated elbow 1"½ M/F (to connect to the lifting station Semibox)	
02008200	Start-run capacitor 50 µF	
04105042	Guide rail kit DNM 1"½ (¾" guide poles not included)	

**PERFORMANCE CURVES - 2 poles 60 Hz**



**ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT**

