

SEMISOM GR



Electric submersible pumps SEMISOM GR

for sewage water with grinder



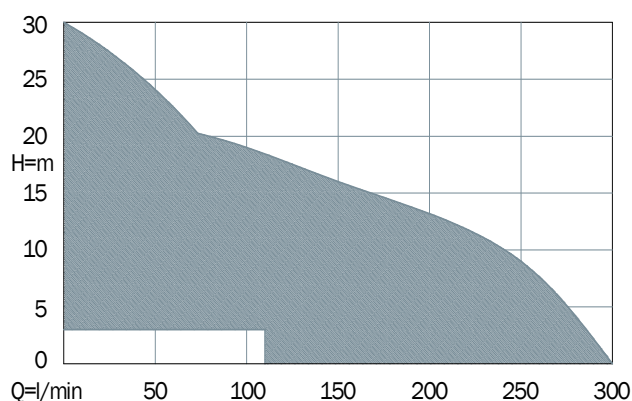
APPLICATION

They are supplied with a grinder whose blades in forged and tempered stainless steel allow to chop the solids and filaments in the waste or sewage water and thus to expel them even through relatively small pipeworks or when high head is required. They are recommended to pump waste water coming from domestic, civil and industrial installations as well as the drainage of septic tanks.

CHARACTERISTICS

IP rating	IP68
Duty	Continuous S1
Maximum immersion depth (m)	20
Maximum number of starts per hour	40
Maximum temperature of the liquid pumped (°C)	50
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

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

Semisom 125 GR: double seal with interposed oil chamber

Semisom 300 GR: back-to back double mechanical seal with oil chamber in-between protected by V-Ring seal

Semisom 300 GR: double row ball bearing on the pump side

Grinder in tempered stainless steel as a guarantee of high resistance

MATERIALS

	Semisom 125 GR	Semisom 300 GR
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	Mechanical cast iron EN GJL-250
Grinder	Tempered Stainless steel AISI440C	
Mechanical seal	Silicon carbide and alumina	Silicon carbide and graphite / Silicon carbide
Seal ring	NBR rubber	
Elastomers	NBR rubber	
Cable	Neoprene H07RN8-F	

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Technical documentation available by clicking on the product code

PERFORMANCE DATA 2 poles 50 Hz

	Code	Version		P2		Max	μF	DNM (GAS)	Q	Flow							Dimensions (mm)				Weight	
				hp	kW	A			m³/h	0	1,2	2,4	3,6	4,8	6	6,6	A	B	C	D	kg	
																						l/min
SEMISOM 125 GR (no stands)	SM125	230 V	1-phase	1,6	1,18	9,2	35	1"½	H (m)	30	27,5	25,5	22,5	19	14	3	416	29	240	190	22	
	SM125+G	230 V	1-phase+float			2,9															396	22,2
	ST125	400 V	3-phase																			21,2
SEMISOM 125 GR (with stands)	SM125P	230 V	1-phase	1,6	1,18	9,2	35	1"½	H (m)	30	27,5	25,5	22,5	19	14	3	441	54	240	190	22,1	
	SM125+GP	230 V	1-phase+float			2,9															421	22,3
	ST125P	400 V	3-phase																			21,3

	Code	Version		P2		Max	μF	DNM (GAS)	Q	Flow							Dimensions (mm)				Weight	
				hp	kW	A			m³/h	0	3	6	9	12	15	18	A	B	C	D	kg	
																						l/min
SEMISOM 300 GR (with stands)	SM300P	230 V	1-phase	1,6	1,18	9,2	35	1"½	H (m)	22,5	21	19	16	13	9	0	461	46	264	195	24,4	
	SM300+GP	230 V	1-phase+float			2,9															441	24,6
	ST300P	400 V	3-phase																			22,6

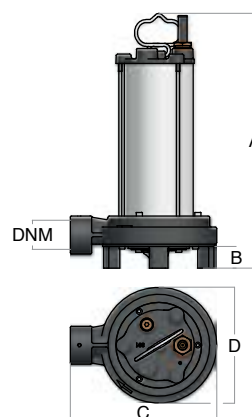


SUPPLIED WITH

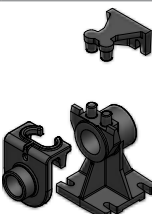
10 meters power cable



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 G1"½ m/f (to connect to the lifting station Semibox)	
02008200	Start-run capacitor 50 μF	
04105042	Guide rail kit male threaded inlet G1"½ -female threaded discharge G2" (¾" guide poles are not included)	

PERFORMANCE CURVES - 2 poles 50 Hz

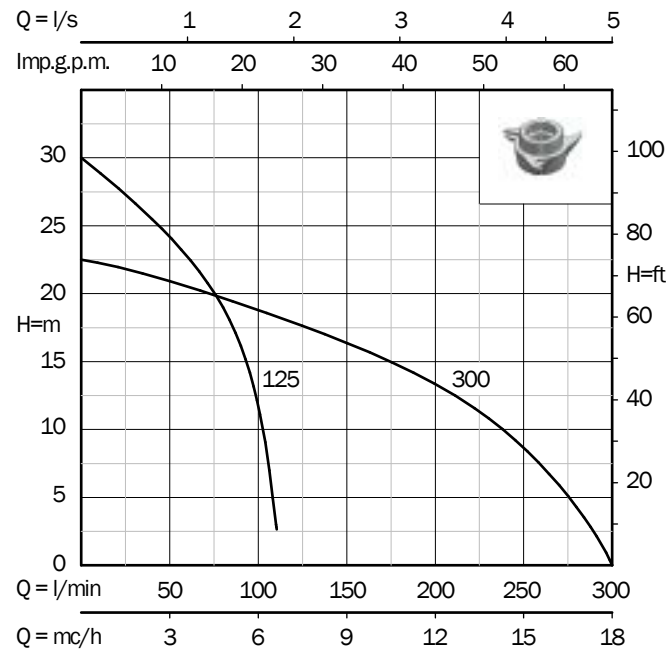
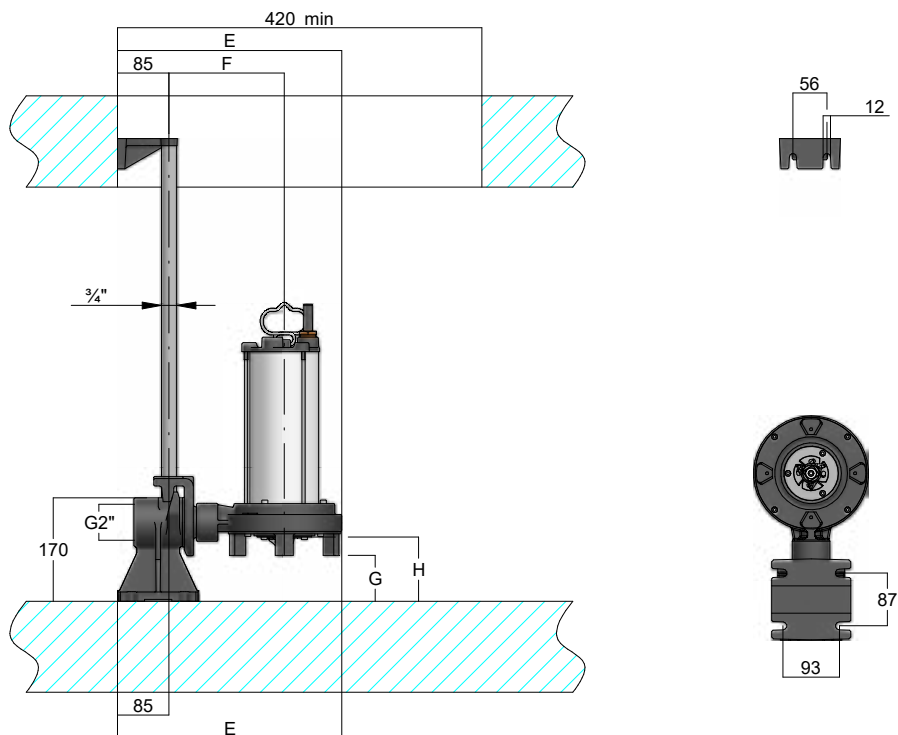


ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



To be installed on	Dimensions (mm)			
	E	F	G	H
SEMISOM 125 GR (no stands)	370	190	76	105
SEMISOM 300 GR (with stands)	394	214	51	97