

SEMISOM /80



Electric submersible pumps SEMISOM /80

for sewage water



APPLICATION

Electric submersible pumps for installations in civil and industrial environments.

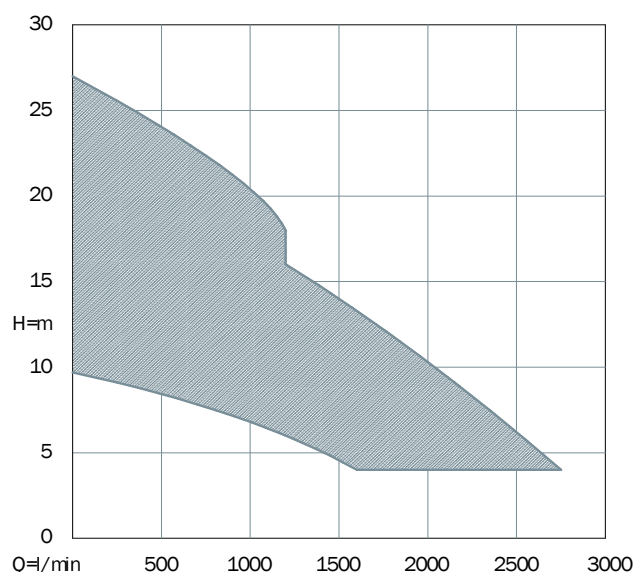
Suitable to convey dirty, waste and sewage water also containing suspended solids whose size is up to 74 mm.

They are recommended to transfer water, to drain tanks or flooded areas, to pump water coming from civil and industrial installations as well as the drainage of septic tanks. They can also be used to pump sewage keeping its biological process unchanged (4 pole version).

CHARACTERISTICS

IP rating	IP68
Duty	Continuous S1
Maximum immersion depth (m)	20
Maximum number of starts per hour	30
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	Yes

APPLICATION RANGE



CONSTRUCTION

Three-phase, asynchronous. Coolant-filled electric rewindable motor with short circuit rotor. Insulation class F. Winding with phase insulators to protect the motor from power peaks, as a guarantee of a highly reliable product.

Micro thermostat to protect the motor from overheating to be wired to the protection and control panel

Probe to detect water ingress in the oil chamber between the two mechanical seals to be wired to the protection/control panel

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

Shafts machined on ball bearings and mechanical seals location

Double seal with interposed oil chamber

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
Feet	Stainless Steel AISI304
Lower mechanical seal	Silicon carbide and alumina
Upper mechanical seal	Graphite and Alumina
Elastomers	NBR rubber
Cable	PBS8-F AD8

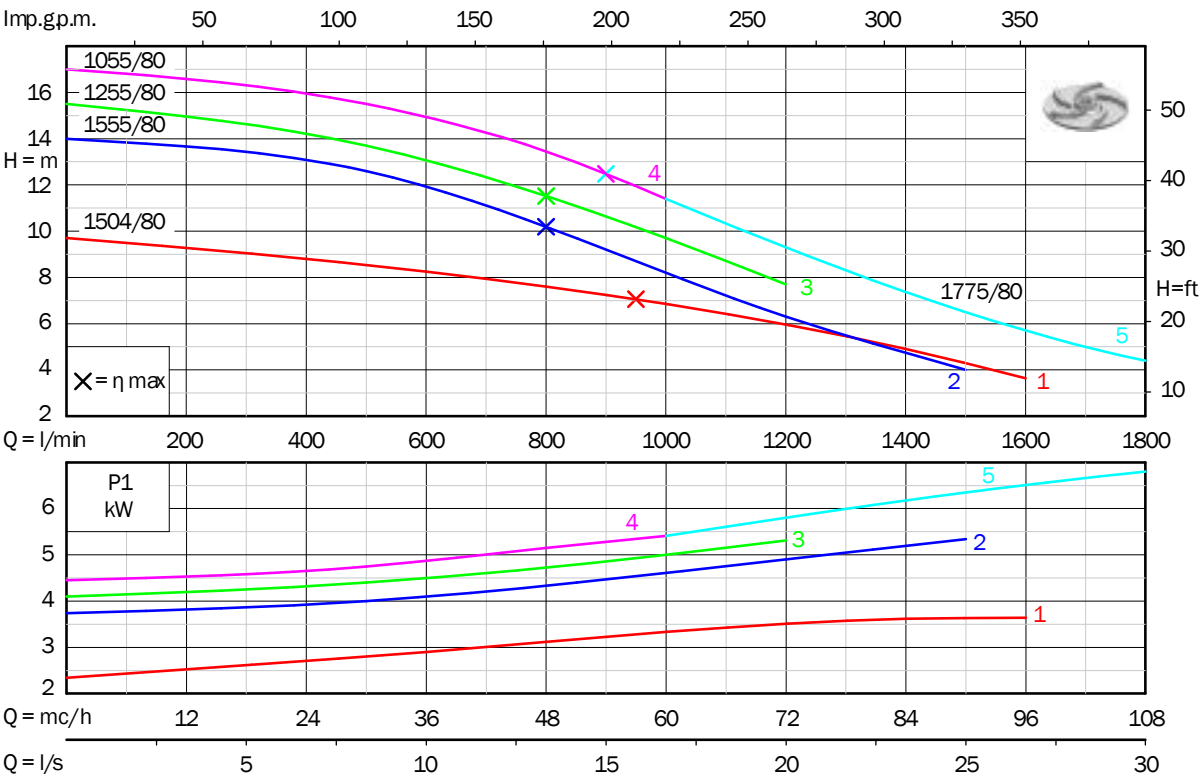
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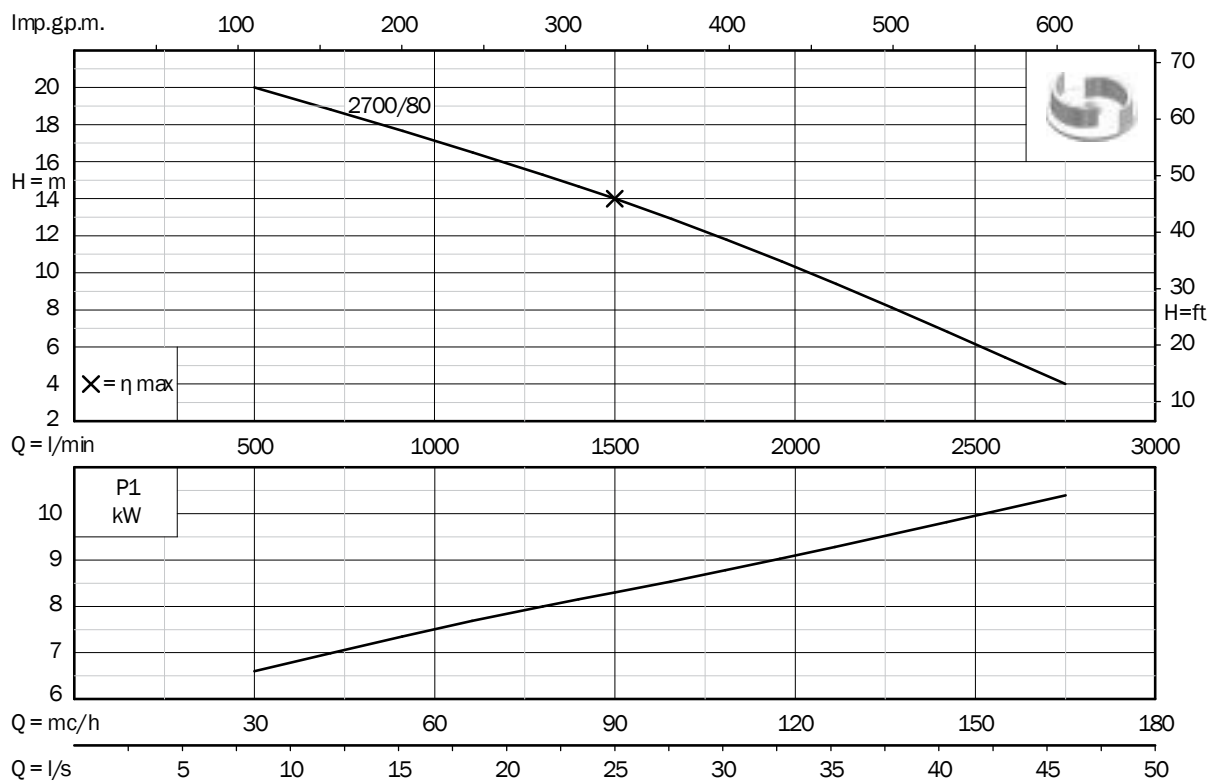
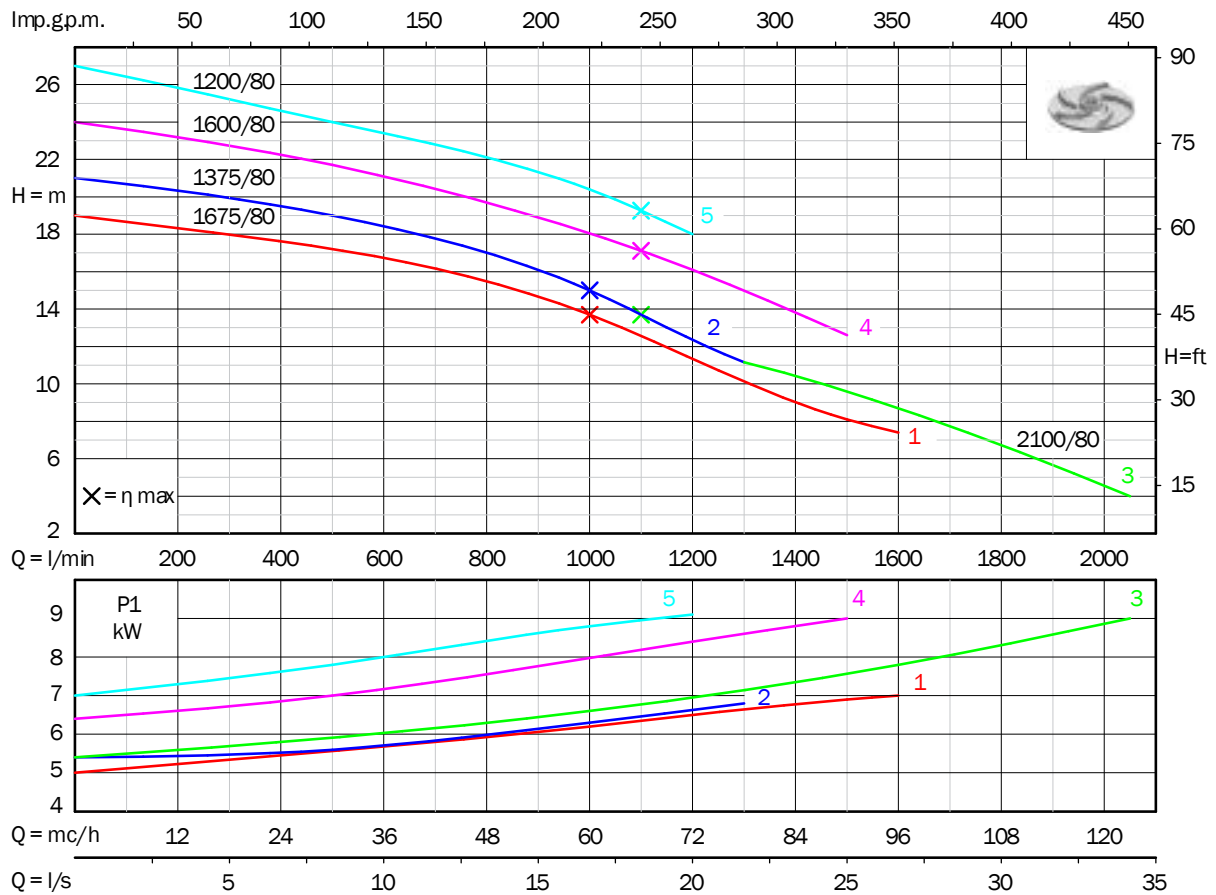
PERFORMANCE DATA

Vortex Impeller 	P2		3~400 V	Poles	ø solid passage (mm)	Q	Flow														
	hp	kW	Max A			m³/h	0	15	30	45	60	72	78	90	96	108	123	135	150	165	
						l/min	0	250	500	750	1000	1200	1300	1500	1600	1800	2050	2250	2500	2750	
SEMISOM 1504/80	3,5	2,6	8,2	4	74	H (m)	9,7	9	8,6	7,8	6,8	5,8	5,4	4,4	3,9						
SEMISOM 1555/80	5,5	4	9,2	2	74		14	13,5	12,6	11,1	8,2	6,3	5,5	4							
SEMISOM 1255/80	5,5	4	9,1	2	74		15,5	14,6	13,7	12,4	9,7	7,7									
SEMISOM 1055/80	5,5	4	9,2	2	74		17	16,4	15,5	14,1	11,4										
SEMISOM 1775/80	7,5	5,5	11,9	2	74		17	16,4	15,5	14,1	11,4	9,1	8,1	6,5	5,7	4,4					
SEMISOM 1675/80	7,5	5,5	12	2	74		19	18,2	17,2	16	13,7	11,1	9,9	8,1	7,4						
SEMISOM 1375/80	7,5	5,5	11,9	2	74		21	20	18,5	17,2	15	12,7	11,6								
SEMISOM 2100/80	10	7,5	16,2	2	74		21	20	18,5	17,2	15	12,7	11,6	9,6	8,7	6,7	4				
SEMISOM 1600/80	10	7,5	16,2	2	74		24	23	21,7	20,3	18,3	16,1	14,9	12,6							
SEMISOM 1200/80	10	7,5	16,4	2	74		27	25,4	23,8	22,4	20,4	18									
Channel impeller 	P2		3~400 V	Poles	solid passage (mm)	Q	Flow														
	hp	kW	Max A			m³/h	0	15	30	45	60	72	78	90	96	108	123	135	150	165	
						l/min	0	250	500	750	1000	1200	1300	1500	1600	1800	2050	2250	2500	2750	
SEMISOM 2700/80	11	8	18	2	45x62	H (m)			20	18,5	17	15,8	15,3	14	13,4	12,1	10,4	8,7	6,5	4	

PERFORMANCE CURVES

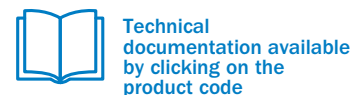


PERFORMANCE CURVES



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PERFORMANCE DATA - 2 poles 50 Hz

Vortex Impeller	Code	Version		P2		P1	Max	Flow		Ø solid passage (mm)	Ø outlet (mm)	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	
	SEMISOM 1555/80	ST/80/1555	400 V 3-phase	5,5	4	5,34	9,2	250 - 800 - 1500	13,5 - 10,6 - 4	74	80	703	78	383	295	65,5
	SEMISOM 1255/80	ST/80/1255	400 V 3-phase	5,5	4	5,31	9,1	250 - 600 - 1200	14,6 - 13,2 - 7,7	74	80	703	78	383	295	65,5
	SEMISOM 1055/80	ST/80/1055	400 V 3-phase	5,5	4	5,41	9,2	250 - 500 - 1000	16,4 - 15,5 - 11,4	74	80	703	78	383	295	65,5
	SEMISOM 1775/80	ST/80/1775	400 V 3-phase	7,5	5,5	6,8	11,9	250 - 1200 - 1800	16,4 - 9,1 - 4,4	74	80	733	78	383	295	69
	SEMISOM 1675/80	ST/80/1675	400 V 3-phase	7,5	5,5	7	12	250 - 1000 - 1600	18,2 - 13,7 - 7,4	74	80	733	78	383	295	69
	SEMISOM 1375/80	ST/80/1375	400 V 3-phase	7,5	5,5	6,8	11,9	250 - 800 - 1300	20 - 16,8 - 11,6	74	80	733	78	383	295	69
	SEMISOM 2100/80	ST/80/2100	400 V 3-phase	10	7,5	9	16,2	250 - 1300 - 2050	20 - 11,6 - 4	74	80	758	78	383	295	71
	SEMISOM 1600/80	ST/80/1600	400 V 3-phase	10	7,5	9	16,2	250 - 1000 - 1500	23 - 18,3 - 12,6	74	80	758	78	383	295	71
	SEMISOM 1200/80	ST/80/1200	400 V 3-phase	10	7,5	9,1	16,4	250 - 800 - 1200	25,4 - 22 - 18	74	80	758	78	383	295	71

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

PERFORMANCE DATA - 4 poles 50 Hz

Vortex Impeller	Code	Version		P2		P1	Max	Flow		Ø solid passage (mm)	Ø outlet (mm)	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	
	SEMISOM 1504/80	ST/80/1504	400 V 3-phase	3,5	2,6	3,64	8,2	200 - 1000 - 1600	9,3 - 6,8 - 3,9	74	80	758	78	383	295	71

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

PERFORMANCE DATA - 2 poles 50 Hz

Channel impeller	Code	Version		P2		P1	Max	Flow		solid passage (mm)	Ø outlet (mm)	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	
	SEMISOM 2700/80	ST/80/2700	400 V 3-phase	11	8	10,4	18	500 - 1500 - 2750	20 - 14 - 4	45x62	80	758	78	383	295	71

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



SUPPLIED WITH

10 meters power cable



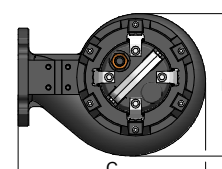
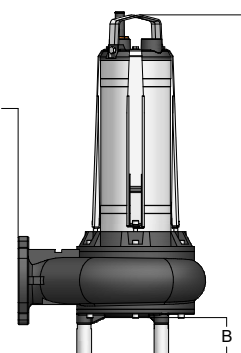
Micro thermostat to protect the motor from overheating to be wired to the protection and control panel (type QT-MT - AM-AT)



Humidity probe to be wired to the protection and control panel (type ATS - AT2S)



UNI EN 1092-1
DN80 PN10



ACCESSORIES

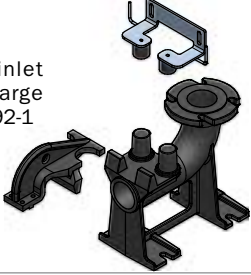
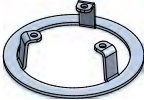
Code	Description
04105053	Guide rail kit inlet Ø80mm - discharge flange UNI EN 1092-1 DN80 PN16 (2" guide poles not included) 
Code	Description
04105054	Pump stand + screws 
Code	Description
04105049	Threaded flange inlet flange UNI EN 1092-1 DN80 PN10 - female threaded discharge G3" + screws and rubber packing 

ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT

