2019

PRODUCT CATALOGUE

BBC ELETTROPOMPE®

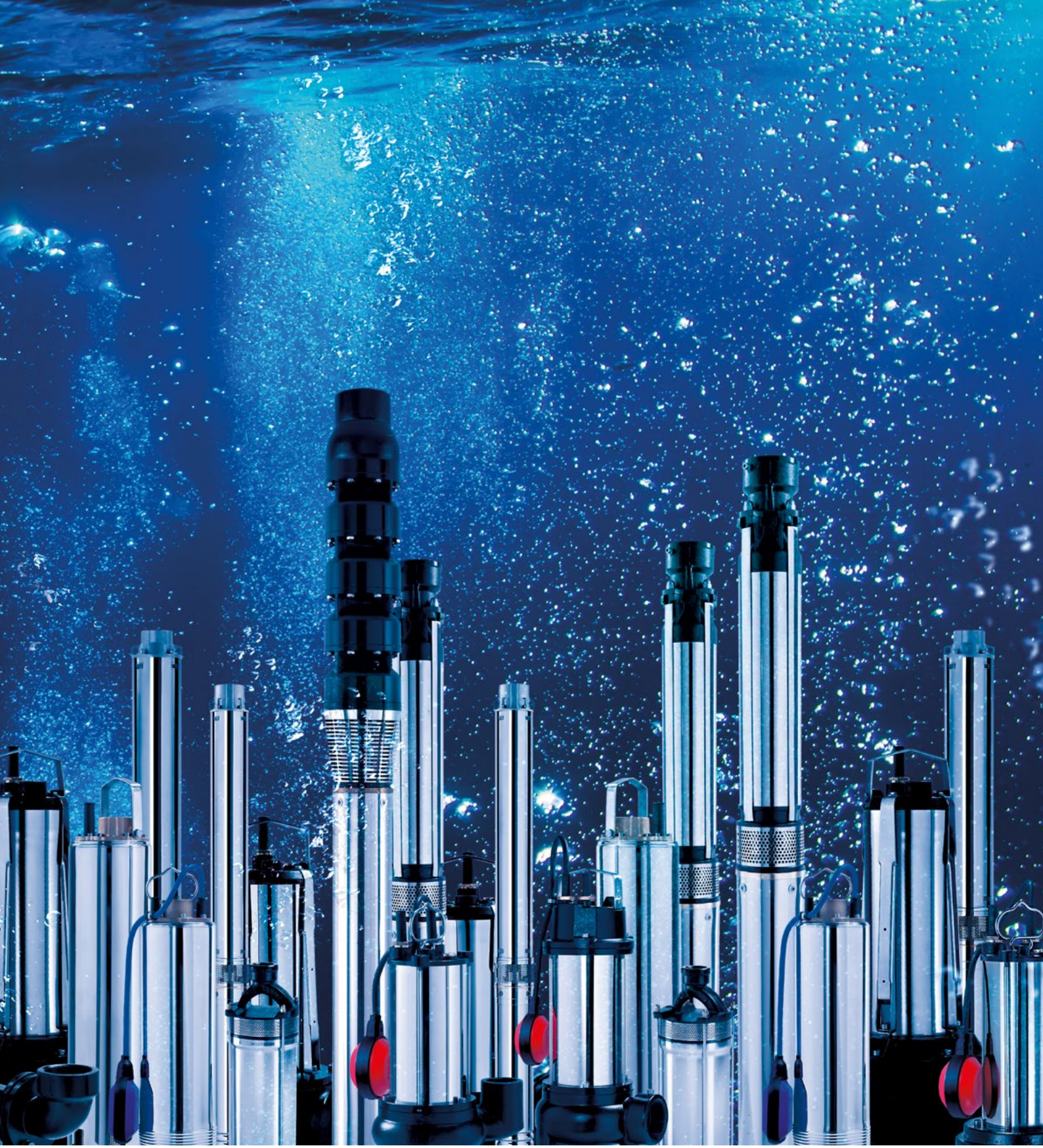
BBC underwater world

BBC ELETTROPOMPE®

Made in Italy

UNI EN ISO 9001:2015

1959 2019 60 YEARS OF QUALITY



The aim of the Company, founded in **1959**, is to design, manufacture and deal with efficient and reliable electric pumps that can stand even the most severe applications.
The experience achieved in this long period is daily exploited in the pursuit of materials, suppliers, new working and assembling methods so to preserve a high level of quality.

The balance between innovating and traditional principles together with the use of trustworthy components makes our products appreciated in the most different areas and markets.

An important achievement on the way both of growth and consolidation of our structure, has been, in 1997, the certification of our Quality System according to **UNI EN ISO 9001** standards. Consequently, a deliberate acceptance of these international criteria is intended as a natural evolution towards a continuous enhancement.

Clean water

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Electric submersible pumps TURBOSOM

for 6” boreholes

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Electric submersible pumps SR

for tanks and reservoirs

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Electric submersible pumps IDROSOM

for 4” boreholes

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Electric submersible pumps IDROSAND

for 6” boreholes

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External electric pumps CV

vertical multistage

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Automatic booster sets

Photovoltaic

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Photovoltaic pumping stations ECOSOM

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Photovoltaic pumping stations IDROSOLAR

Dirty water

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Electric submersible pumps SEMISOM

for grey water

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Electric submersible pumps SEMISOM GR

for sewage water with grinder

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Electric submersible pumps SEMISOM

for sewage water

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Electric submersible pumps SEMISOM /50 - /65

for sewage water

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Automatic lifting station SEMIBOX

for sewage water

Clean water

TURBOSOM 6”

Electric submersible peripheral pumps TURBOSOM
for 6" boreholes

APPLICATION

To pump clear water from boreholes

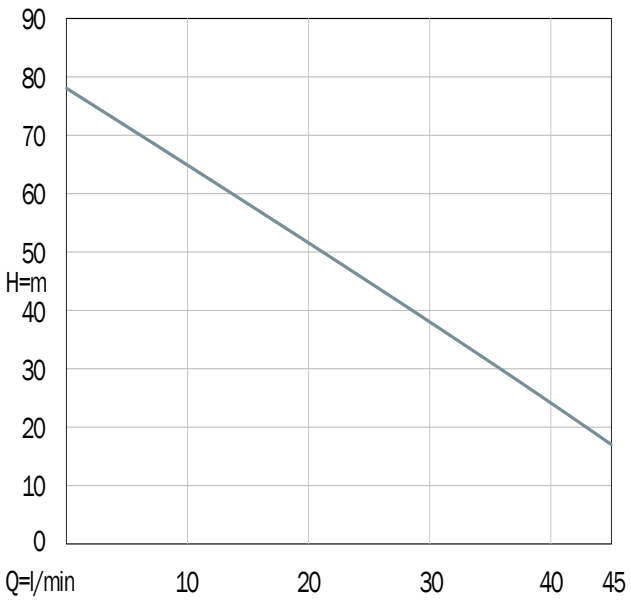
To pressurize civil plants

Irrigation

APPLICATION FEATURES

IP rating	IP68
Duty	Continuous S1
Max number of starts per hour	40
Max temperature of the liquid pumped (°C)	50
PH of the liquid pumped	6 - 10
Maximum sand content (g/m^3)	20
Suitable for inverter drive	Three-phase versions only
Suitable to operate horizontally	

APPLICATION RANGE



CONSTRUCTION

Single-stage pump with peripheral impeller

Coolant filled, asynchronous, rewindable electric AC motor with short circuit rotor. Insulation Class F

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

MATERIALS

Motor casing and tie-rods	Stainless Steel AISI304
Shaft	Stainless Steel AISI420B
Impeller, bolts and nuts	Brass OT58
Head, body and foot	Mechanical cast iron EN GJL-250
Seal rings	NBR rubber
Elastomers	NBR rubber
Cable	H07RN8-F Neoprene

Electric submersible peripheral pumps TURBOSOM
for 6" boreholes

PERFORMANCE DATA - 2 poles 60 Hz

Peripheral impeller	Code	Version		P2		A	µF	DNM	Q	Flow							Dimensions (mm)			Weight
				hp	kW				m^3/h	0	0,6	1,08	1,5	1,8	2,4	2,7	A	B	C	kg
									l/min	0	10	18	25	30	40	45				
TURBOSOM 77	TMZ077	230 V	1-phase	1,2	0,9	7,2	20	1"	H (m)	78	65	54	45	38	24	17	349	251	136	13,3
	TTZ077	400 V	3-phase			2,7														13,5

SUPPLIED WITH

10 meters power cable

Control box containing capacitor and unipolar thermal protector switch (single-phase version)

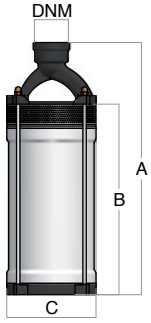
OPTIONS

20 meters power cable

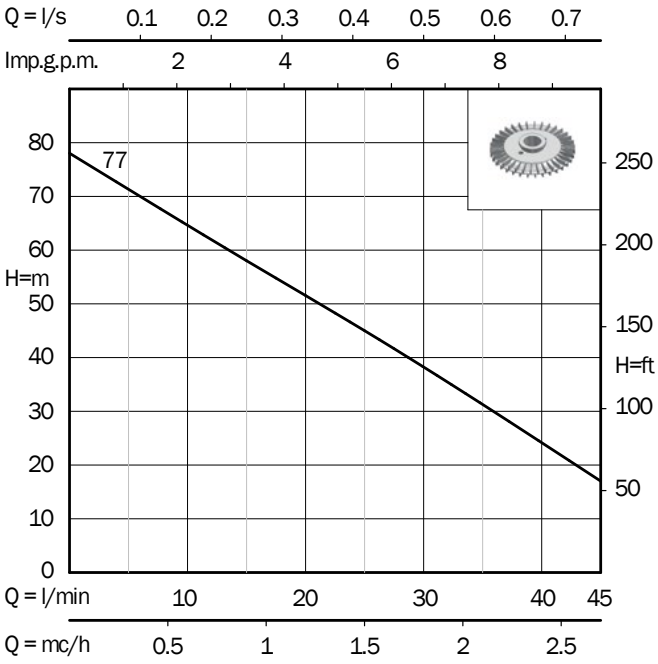
30 meters power cable

ACCESORIES

Code	Description	
020811..	Three-phase electromechanical direct starter QT MT	



PERFORMANCE CURVES - 2 poles 60 Hz



SR

Electric submersible pumps SR
for tanks and reservoirs

APPLICATION

To pump water from tanks, reservoirs and boreholes

To pressurize civil, agricultural, industrial and fire-fighting plants

Irrigation

CONSTRUCTION

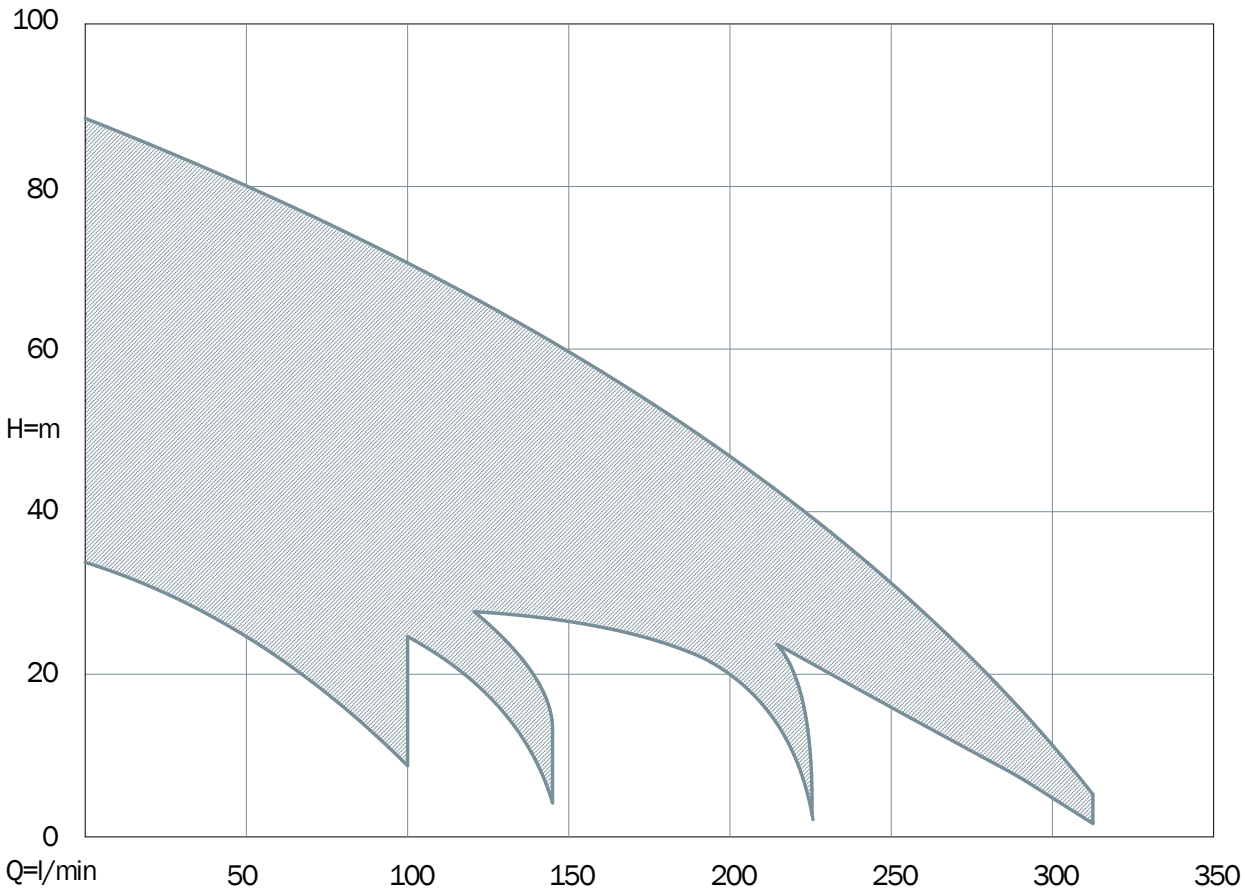
Series SR 100 - 140: AC asynchronous, rewindable electric dry motor with short circuit rotor with double mechanical seal and oil chamber in-between. Insulation Class F

Series SR 200 - 300: AC asynchronous, rewindable electric dry motor with short circuit rotor with double mechanical seal and oil chamber in-between. Insulation Class F; lubrication chamber for the ball bearing on the pump side

Series SR 80: 24V DC with permanent magnets motor. Insulation Class F

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

APPLICATION RANGE



Electric submersible pumps SR
for tanks and reservoirs

This important certification, released by an Agency accredited by the French Ministry of Health, attests that the electric pumps series SR -/100 /140 /200 /300 can be used to pump drinkable water.

APPLICATION FEATURES

	SR		
	/100	/140	/80
IP rating	IP68		
Duty	Continuous S1		Limited use S2 (60 minutes)
Minimum level of the liquid to be pumped (mm)	100		
Maximum immersion depth (m)	30		
Max number of starts per hour	40		
Max temperature of the liquid pumped (°C)	45		
PH of the liquid pumped	6 - 10		
Maximum sand content (g/m^3)	50		
Suitable for inverter drive	Three-phase versions only		
Not suitable to operate horizontally			

MATERIALS

	SR		
	/100	/140	/80
Discharge, motor cover and central body	Brass OT58		
External casing, handle, motor casing, bolts and nuts	Stainless Steel AISI304		
Shaft	Stainless Steel AISI420B		
Impellers and diffusers	Noryl® reinforced with fibre-glass certified for drinkable water and Stainless Steel AISI304 wear rings		
Foot	Stainless Steel AISI304		
Mechanical seal	Silicon carbide and allumina		
Elastomers	NBR rubber		
Cable	PVC ACS AD8 (for permanent immersion in drinking water)		Twin Batt

APPLICATION FEATURES

	SR	
	/200	/300
IP rating	IP68	
Duty	Continuous S1	
Minimum level of the liquid to be pumped (mm)	150	
Maximum immersion depth (m)	20	
Max number of starts per hour	40	
Max temperature of the liquid pumped (°C)	45	
PH of the liquid pumped	6 - 10	
Maximum sand content (g/m^3)	50	
Suitable for inverter drive	Three-phase versions only	
Not suitable to operate horizontally		

MATERIALS

	SR	
	/200	/300
Discharge, motor cover and central body	Brass OT58	
External casing, handle, motor casing, bolts and nuts	Stainless Steel AISI304	
Shaft	Stainless Steel AISI420B	
Impellers and diffusers	Noryl® reinforced with fibre-glass certified for drinkable water and Stainless Steel AISI304 wear rings	
Foot	ABS	
Mechanical Seal	Graphite and Alumina	
Elastomers	NBR rubber	
Cable	PVC ACS AD8 (for permanent immersion in drinking water)	

Electric submersible pumps SR
for tanks and reservoirs

PERFORMANCE DATA - 24 V DC

Radial Impeller	P2		24 V DC	DNM	Q	Flow									
					m³/h	0	0,36	0,6	1,2	1,8	2,4	3	3,6	4,2	4,8
	hp	kW	A		l/min	0	6	10	20	30	40	50	60	70	80
SERIES 80															
SR 4/80	0,75	0,55	28	1"¼	H (m)	40	38	37	34	30	26	21	17	11	7

PERFORMANCE DATA - 2 poles 60 Hz

Radial Impeller	P2		1~230 V		3~400 V	DNM	Q	Flow												
							m³/h	0	1,2	2,4	3	3,6	4,2	4,8	5,4	6	6,6	7,2	7,8	8,4
	hp	kW	A	µF	A		l/min	0	20	40	50	60	70	80	90	100	110	120	130	140
SERIES 100																				
SR 3/100	0,7	0,5	4,2	12,5		1"¼		35	33	30	28	25	22	18	14	9				
SR 4/100	0,9	0,65	4,9	12,5	1,9	1"¼		46	44	39	36	32	28	23	18	11				
SR 5/100	1,1	0,8	6,5	16	2,4	1"¼	H (m)	58	55	49	46	40	36	29	23	15				
SR 6/100	1,3	0,95	7,8	20	2,8	1"¼		69	64	58	54	49	42	35	26	17				
SR 7/100	1,6	1,2	8,9	25	3,2	1"¼		80	75	68	62	56	48	40	30	20				
SERIES 140																				
SR 4/140	1	0,75	5,9	12,5	2,2	1"¼		41	38	35	33	31	29	26	23	20	17	14	10	6
SR 5/140	1,3	0,95	7,4	16	2,6	1"¼	H (m)	51	48	44	41	38	35	32	29	25	21	17	13	8
SR 6/140	1,6	1,2	8,7	20	3,1	1"¼		62	57	52	49	46	42	38	34	30	25	20	15	10

PERFORMANCE DATA - 2 poles 60 Hz

Radial Impeller	P2		1~230 V		3~400 V	DNM	Q	Flow											
							m³/h	0	1,2	3,6	6	8,4	11,4	13,2	14,4	15,6	16,8	18	19,2
	hp	kW	A	µF	A		l/min	0	20	60	100	140	190	220	240	260	280	300	320
SERIES 200																			
SR 3/200	1,5	1,1	8	25	3,1	2"	H (m)	51	49	43	35	26	11	0,5					
SR 4/200	2	1,5	10,5	35	3,8	2"		68	65	57	47	35	15	1					
SR 5/200	3	2,2			5	2"		86	81	71	59	43	19	1,5					
SERIES 300																			
SR 2/300	1,5	1,1	7,1	25	2,8	2"	H (m)	36		33	30	26	19	16	13	10	7	4	1
SR 3/300	2	1,5	10,5	35	3,8	2"		53		49	44	38	28,5	24	20	15	11	6,5	1,5
SR 4/300	3	2,2			5,1	2"		71		64	58	51	38	32	26	20	15	8,5	2
SR 5/300	4	3			6,2	2"		89		81	74	64	48	40	33	25	18	11	2,5

Electric submersible pumps SR series 80
for tanks and reservoirs

PERFORMANCE DATA - 24 V DC

Radial Impeller	Code	Version		P2		P1	A	Flow		DNM	Dimensions (mm)			Weight
				hp	kW	kW		l/min	m		A	B	C	kg
SR 4/80	RF80/04/1	24 V	DC	0,75	0,55	0,67	28	6 - 30 - 80	38 - 30 - 7	1"¼	500	100	130	10,2

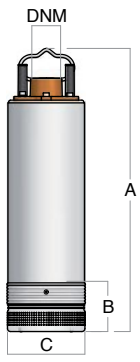
P1: Max. absorbed power - P2: Nominal power of the motor

SUPPLIED WITH

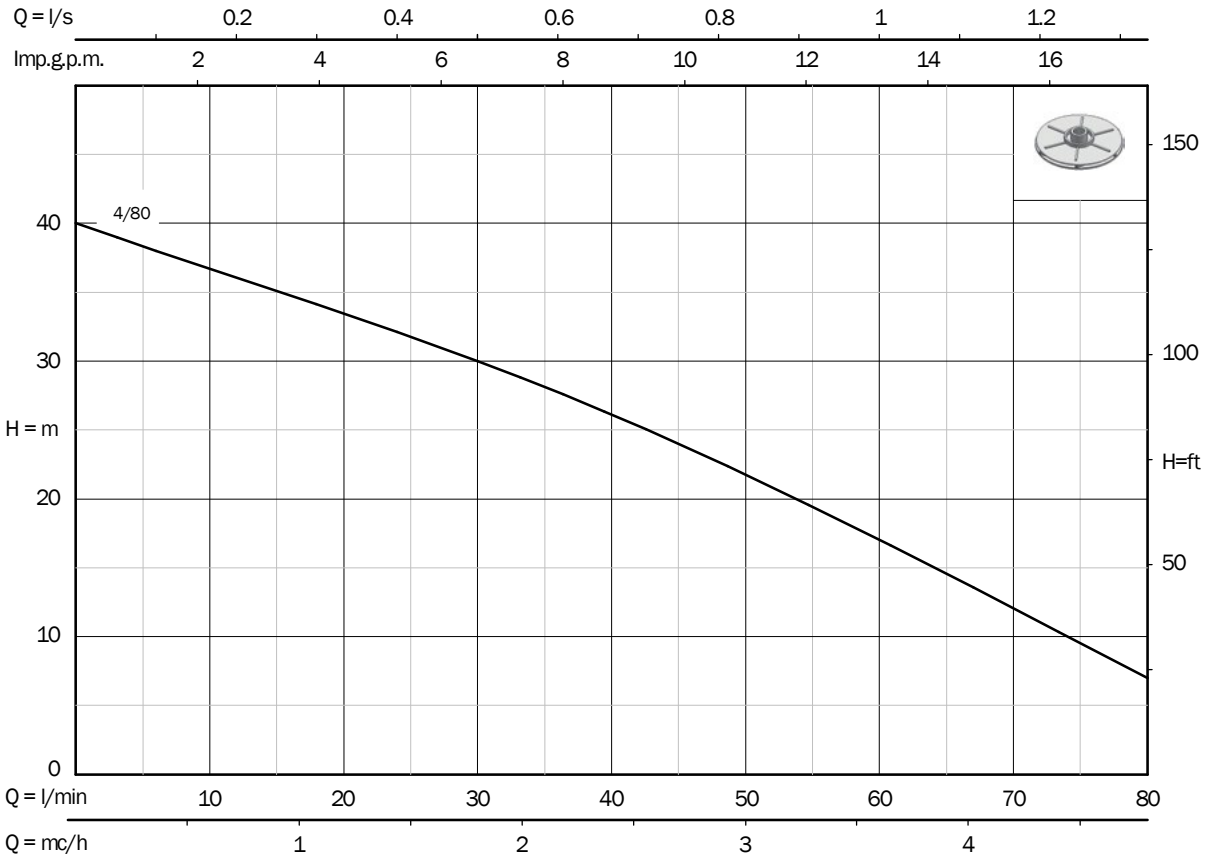
5 meters power cable	

ACCESSORIES

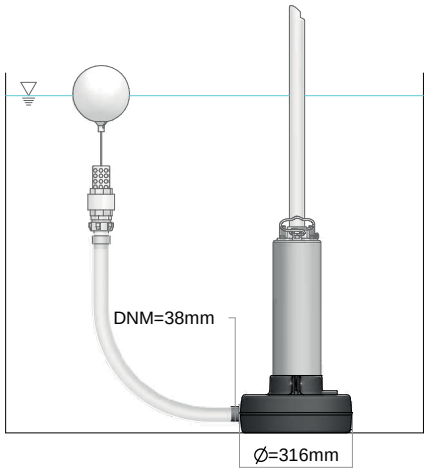
Code	Description	
03710036	Suction adaptor baseplate	
02076100	DC electromechanical, direct starter QDC	



PERFORMANCE CURVES - 24 V DC



Ilustration of how a suction adaptor baseplate can be installed



Electric submersible pumps SR series 100
for tanks and reservoirs

PERFORMANCE DATA - 2 poles 60 Hz

Radial Impeller	Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Weight
				hp	kW		l/min	m		A	B	C	kg
SR 3/100	RMZ100/03/2	230 V	1-phase	0,7	0,5	4,2	20 - 50 - 100	33 - 28 - 9	1"¼	437	100	130	11,3
	RMZ100/03+G/2	230 V	1-phase+float										11,5
SR 4/100	RMZ100/04/2	230 V	1-phase	0,9	0,65	4,9	20 - 50 - 100	44 - 36 - 11	1"¼	461	100	130	11,5
	RMZ100/04+G/2	230 V	1-phase+float										11,7
	RTZ100/04/1	400 V	3-phase			1,9							11,5
SR 5/100	RMZ100/05/2	230 V	1-phase	1,1	0,8	6,5	20 - 50 - 100	55 - 46 - 15	1"¼	500	100	130	12,8
	RMZ100/05+G/2	230 V	1-phase+float										13
	RTZ100/05/1	400 V	3-phase			2,4							12,8
SR 6/100	RMZ100/06/2	230 V	1-phase	1,3	0,95	7,8	20 - 50 - 100	64 - 54 - 17	1"¼	544	100	130	14,5
	RMZ100/06+G/2	230 V	1-phase+float										14,7
	RTZ100/06/1	400 V	3-phase			2,8							14,5
SR 7/100	RMZ100/07/2	230 V	1-phase	1,6	1,2	8,9	20 - 50 - 100	75 - 62 - 20	1"¼	588	100	130	16,5
	RMZ100/07+G/2	230 V	1-phase+float										16,7
	RTZ100/07/1	400 V	3-phase			3,2							16,5

SUPPLIED WITH

10 meters power cable

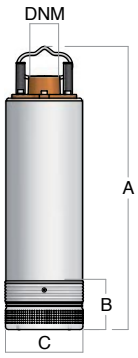
Capacitor (single-phase version)

Built-in thermal protection with manual reset (single-phase versions)

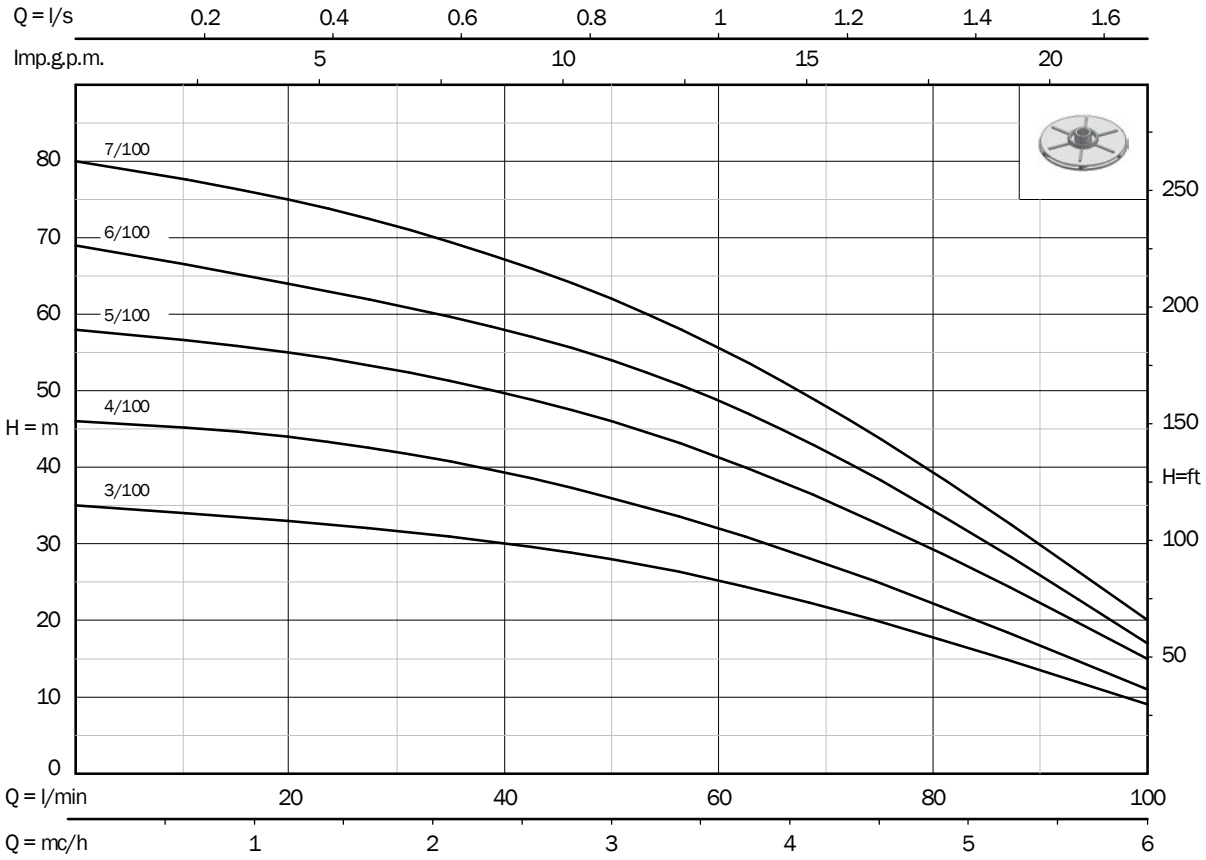
OPTIONS

20 meters power cable

30 meters power cable



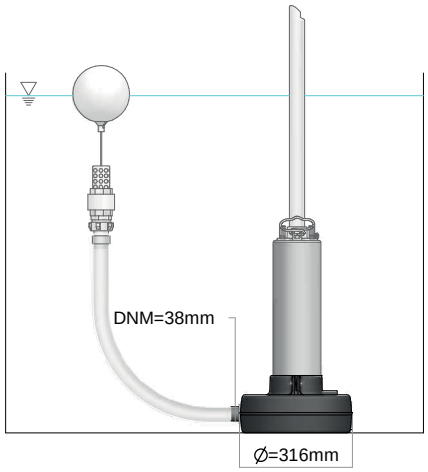
PERFORMANCE CURVES - 2 poles 60 Hz



ACCESSORIES

Code	Description	
03710036	Suction adaptor baseplate	
020700..	Single-phase direct starter QM IT with bipolar, illuminated thermal protector switch with facility to wire the capacitor	
020811..	Three-phase electromechanical direct starter QT MT	

Ilustration of how a suction adaptor baseplate can be installed



Electric submersible pumps SR series 140
for tanks and reservoirs

PERFORMANCE DATA - 2 poles 60 Hz

Radial Impeller	Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Weight
				hp	kW		l/min	m		A	B	C	kg
SR 4/140	RMZ140/04/2	230 V	1-phase	1	0,75	5,9	20 - 90 - 140	38 - 23 - 6	1"¼	461	100	130	11,6
	RMZ140/04+G/2	230 V	1-phase+float										11,8
	RTZ140/04/1	400 V	3-phase			2,2							11,6
SR 5/140	RMZ140/05/2	230 V	1-phase	1,3	0,95	7,4	20 - 90 - 140	48 - 29 - 8	1"¼	500	100	130	13,2
	RMZ140/05+G/2	230 V	1-phase+float										13,4
	RTZ140/05/1	400 V	3-phase			2,6							13,2
SR 6/140	RMZ140/06/2	230 V	1-phase	1,6	1,2	8,7	20 - 90 - 140	57 - 34 - 10	1"¼	544	100	130	14,6
	RMZ140/06+G/2	230 V	1-phase+float										14,8
	RTZ140/06/1	400 V	3-phase			3,1							14,6

SUPPLIED WITH

10 meters power cable

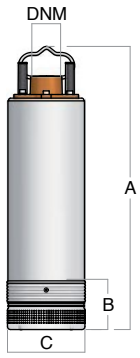
Capacitor (single-phase version)

Built-in thermal protection with manual reset (single-phase versions)

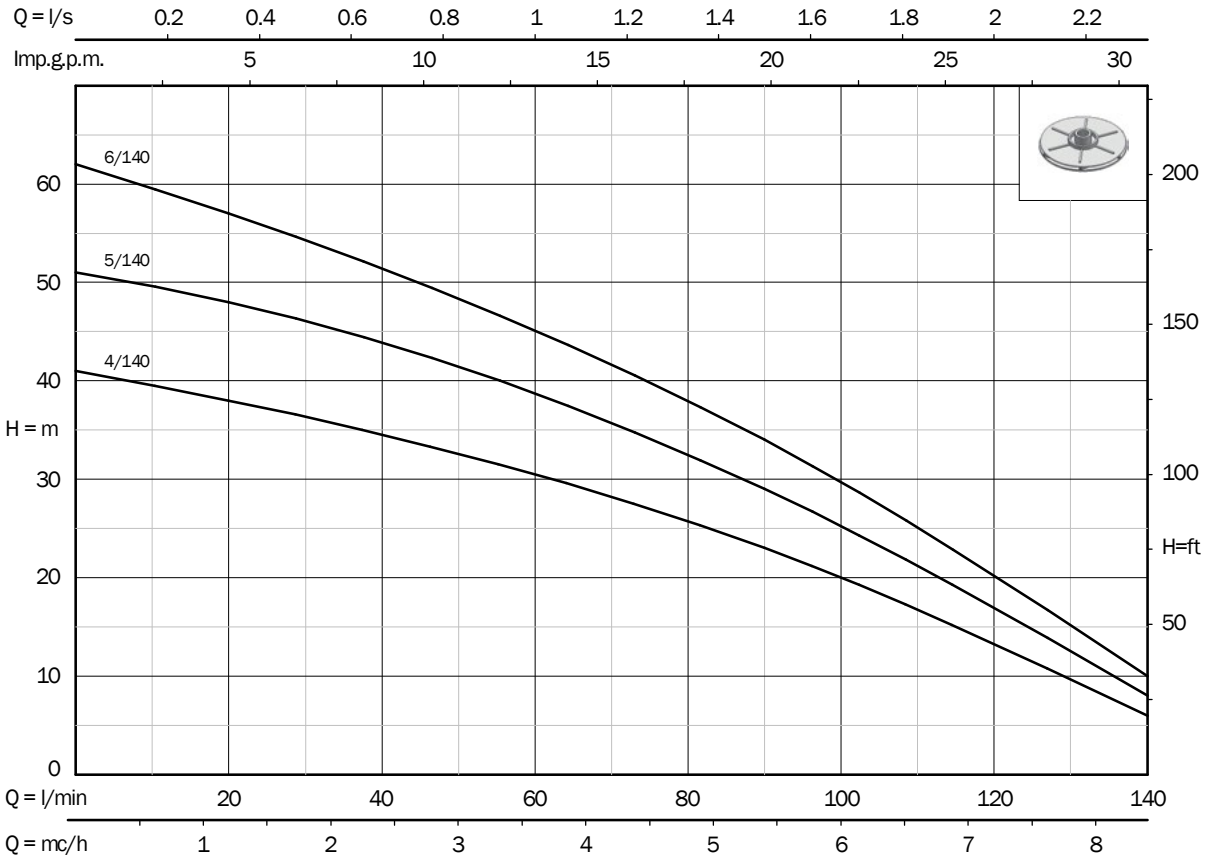
OPTIONS

20 meters power cable

30 meters power cable



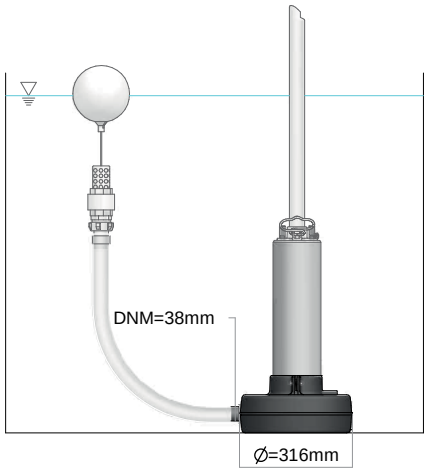
PERFORMANCE CURVES - 2 poles 60 Hz



ACCESSORIES

Code	Description	
03710036	Suction adaptor baseplate	
020700..	Single-phase direct starter QM IT with bipolar, illuminated thermal protector switch with facility to wire the capacitor	
020811..	Three-phase electromechanical direct starter QT MT	

Ilustration of how a suction adaptor baseplate can be installed



Electric submersible pumps SR series 200
for tanks and reservoirs

PERFORMANCE DATA - 2 poles 60 Hz

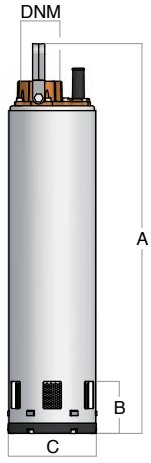
Radial Impeller	Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Weight
				hp	kW		l/min	m		A	B	C	kg
SR 3/200	RMZ200/03	230 V	1-phase	1,5	1,1	8	20 - 140 - 220	49 - 26 - 0,5	2"	639	150	145	21,2
	RTZ200/03	400 V	3-phase			3,1							20,4
SR 4/200	RMZ200/04	230 V	1-phase	2	1,5	10,5	20 - 140 - 220	65 - 35 - 1	2"	700	150	145	24
	RTZ200/04	400 V	3-phase			3,8				675			20,8
SR 5/200	RTZ200/05	400 V	3-phase	3	2,2	5	20 - 140 - 220	81 - 43 - 1,5	2"	736	150	145	23,7

SUPPLIED WITH

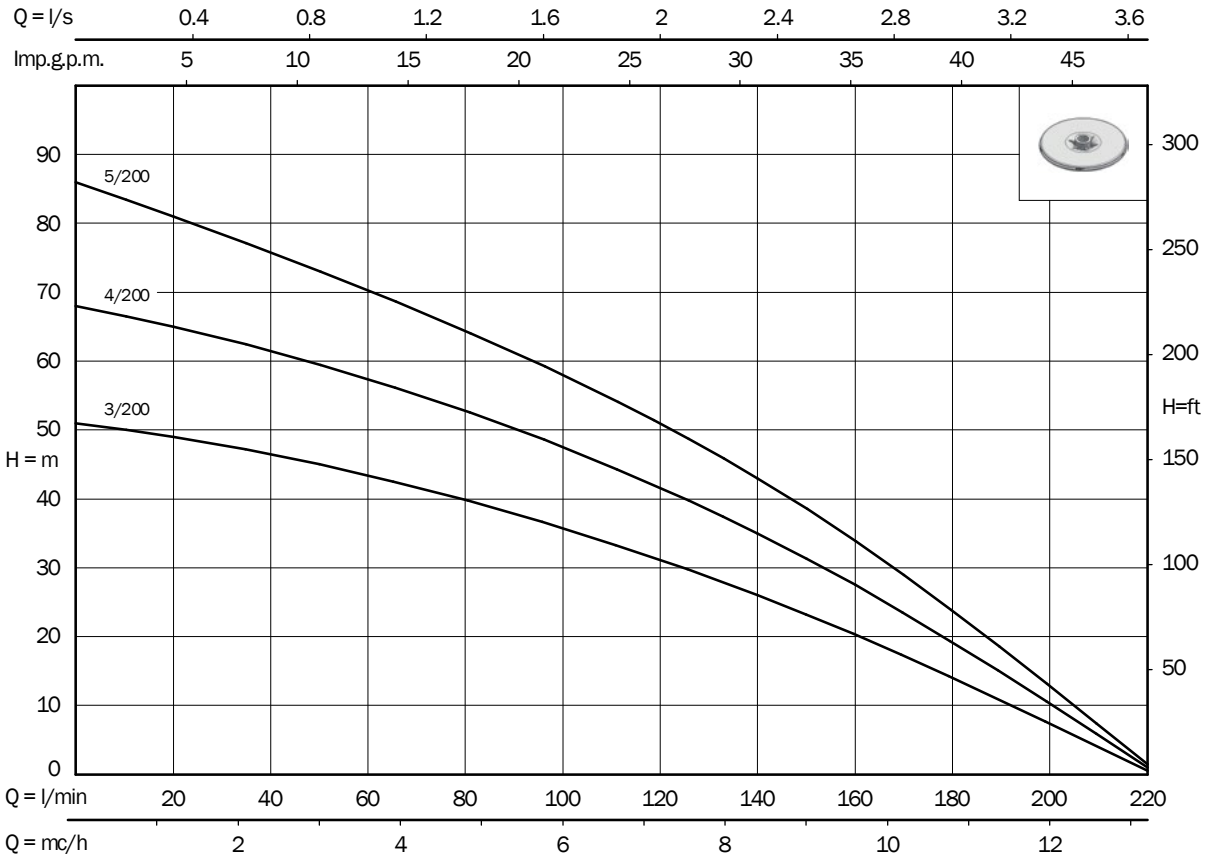
10 meters power cable	
Capacitor (single-phase versions)	

ACCESSORIES

Code	Description	
020700..	Single-phase direct starter QM IT with bipolar, illuminated thermal protector switch with facility to wire the capacitor	
020811..	Three-phase electromechanical direct starter QT MT	



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps SR series 300
for tanks and reservoirs

PERFORMANCE DATA - 2 poles 60 Hz

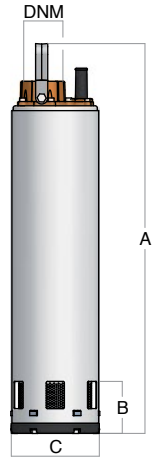
Radial Impeller	Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Weight
				hp	kW		l/min	m		A	B	C	kg
SR 2/300	RMZ300/02	230 V	1-phase	1,5	1,1	7,1	60 - 220 - 320	33 - 16 - 1	2"	603	150	145	20
	RTZ300/02	400 V	3-phase			2,8							19,8
SR 3/300	RMZ300/03	230 V	1-phase	2	1,5	10,5	60 - 220 - 320	49 - 24 - 1,5	2"	664	150	145	23,3
	RTZ300/03	400 V	3-phase			3,8				639			20,3
SR 4/300	RTZ300/04	400 V	3-phase	3	2,2	5,1	60 - 220 - 320	64 - 32 - 2	2"	700	150	145	23,5
SR 5/300	RTZ300/05	400 V	3-phase	4	3	6,2	60 - 220 - 320	81 - 40 - 2,5	2"	776	150	145	27

SUPPLIED WITH

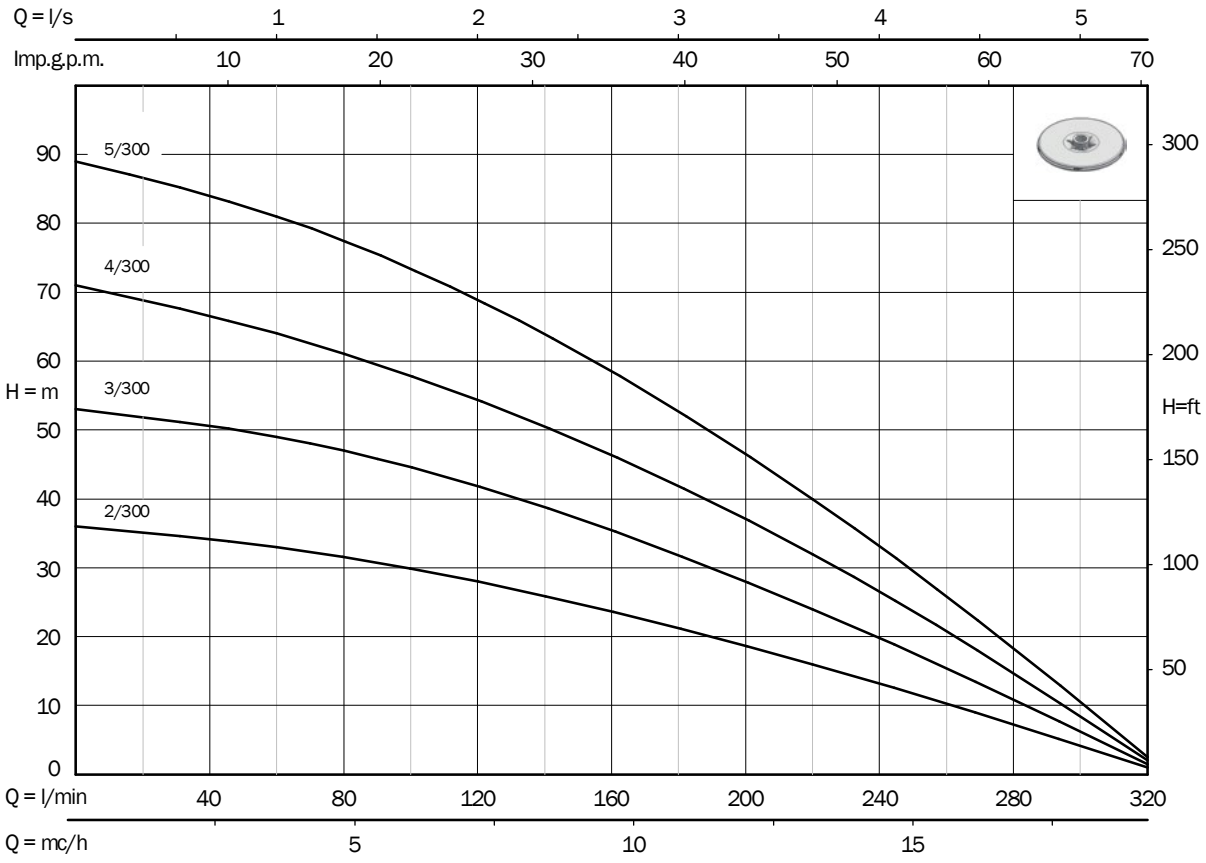
10 meters power cable	
Capacitor (single-phase versions)	

ACCESSORIES

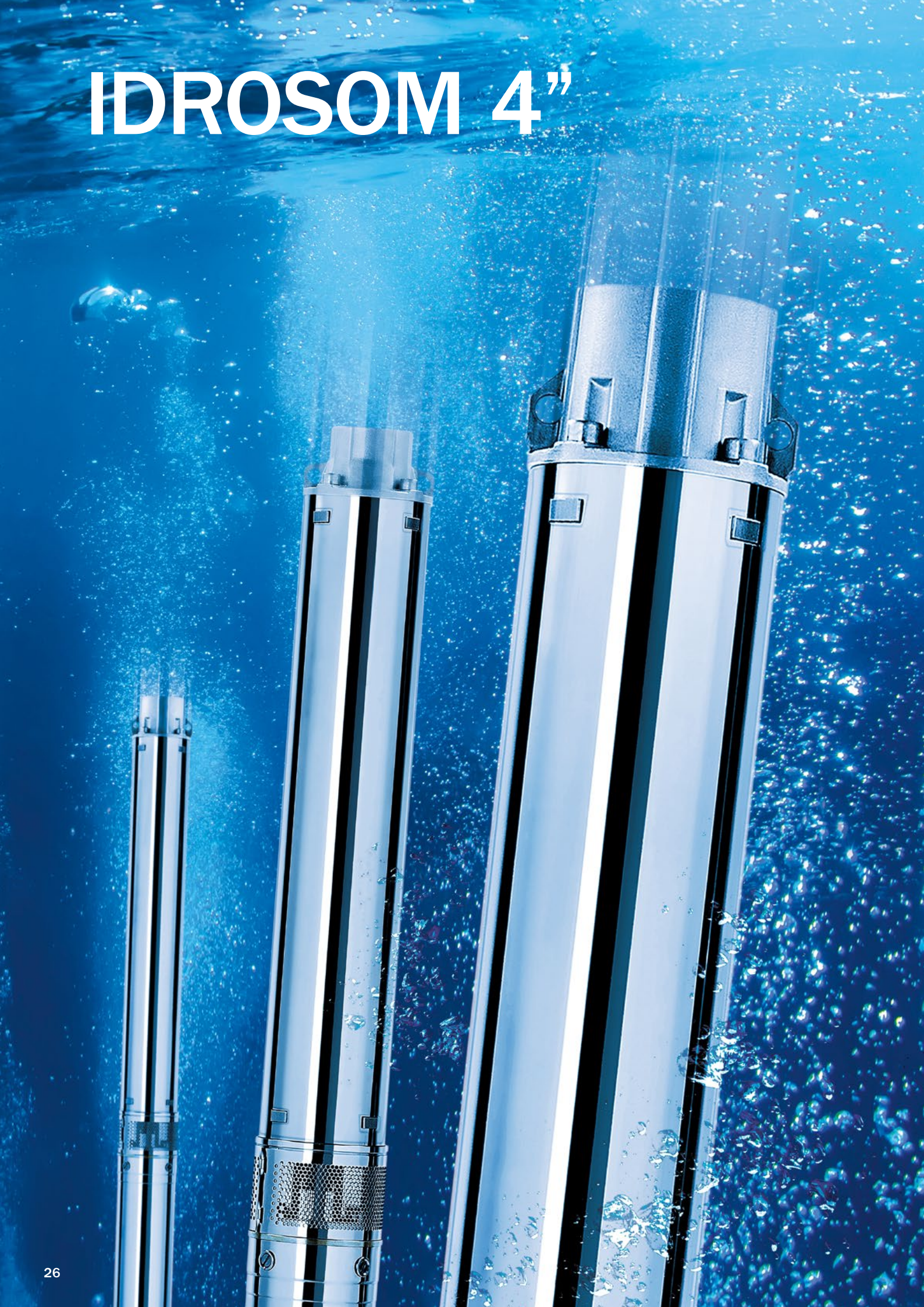
Code	Description	
020700..	Single-phase direct starter QM IT with bipolar, illuminated thermal protector switch with facility to wire the capacitor	
020811..	Three-phase electromechanical direct starter QT MT	



PERFORMANCE CURVES - 2 poles 60 Hz



IDROSOM 4”



Electric submersible pumps IDROSOM
for 4" boreholes

APPLICATION

To pump water from boreholes

To pressurize civil, agricultural, industrial and fire-fighting plants

Irrigation

CONSTRUCTION

Eco-friendly design for water pumps. The submersible pumps Idrosom /60 and /100 successfully comply with the parameters of efficiency approved by the European commission on best technology available on the market (MEI Index ≥ 0,7)

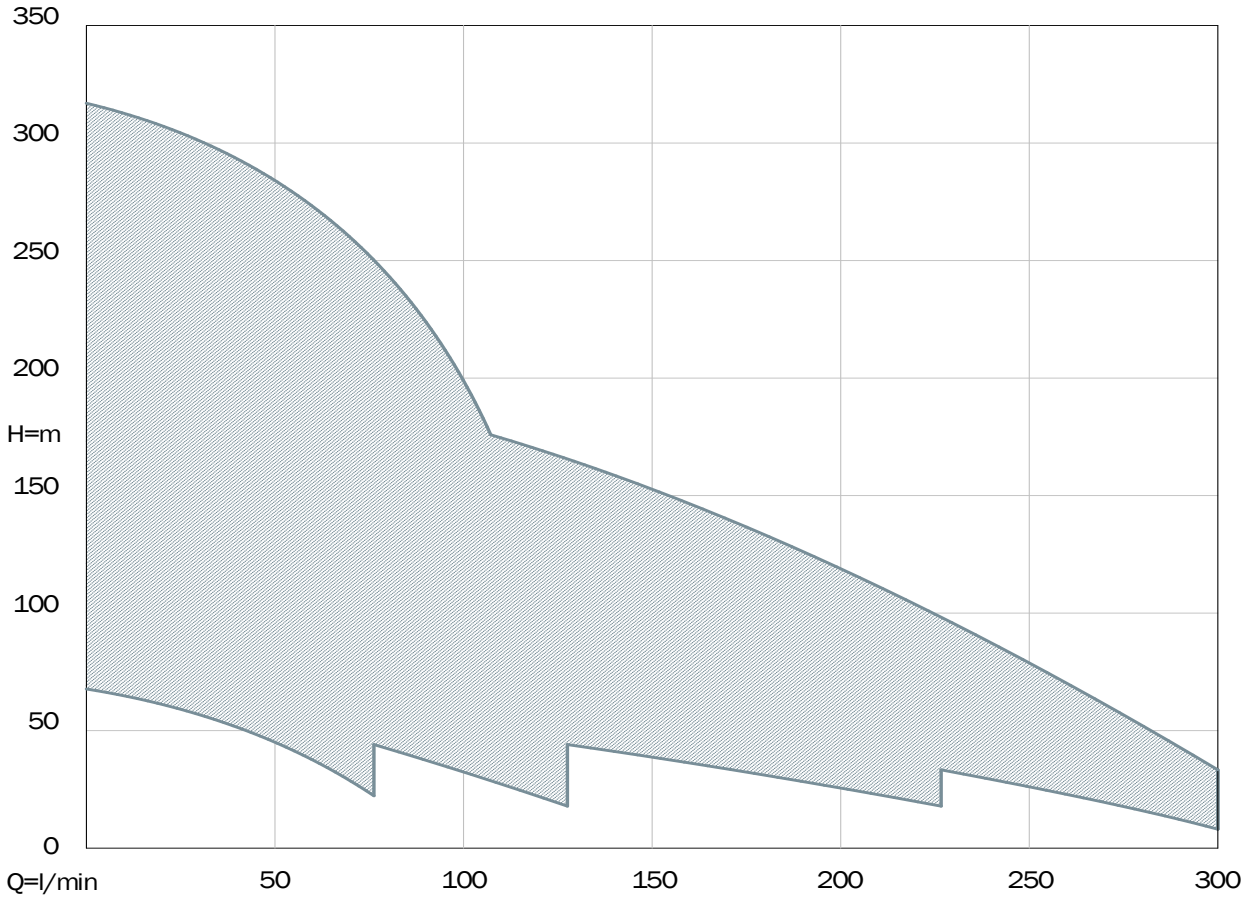
Coolant filled, asynchronous, rewindable electric AC motor with short circuit rotor. Insulation Class F

Resin-insulated cable kit to prevent penetration of water inside the motor ("S" series motors)

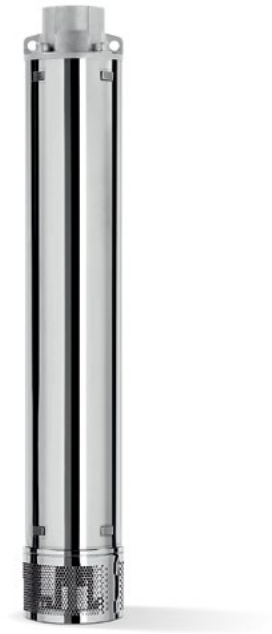
Shafts machined on ball bearings and mechanical seals location

Both shaft and coupling meet NEMA standards

APPLICATION RANGE



Electric submersible pumps IDROSOM
for 4" boreholes



APPLICATION FEATURES - PUMP END

	IDROSOM			
	/60	/100	/180	/250
Minimum depth of the liquid to be pumped (m)	0,8			
Maximum temperature of the water to be pumped (°C)	60			
PH of the liquid pumped	6 - 10			
Maximum sand content (g/m^3)	150			
Suitable to operate horizontally (included)	23/60	18/100	17/180	12/250

MATERIALS - PUMP END

	IDROSOM
Head and suction body	Stainless Steel AISI304
Casing, bolts and nuts	Stainless Steel AISI304
Shaft	Stainless Steel AISI304
Coupling	Stainless Steel AISI316
Impellers and diffusers	Noryl® reinforced with fibre-glass, certified for drinking water
Top bearing	Rubber with rotating element in Stainless Steel AISI316

APPLICATION FEATURES - MOTOR

	MOTOR	
	4" S series	4" E series
IP rating	IP68	
Duty	Continuous S1	
Maximum immersion depth (m)	150	
Maximum number of starts per hour	30	
Maximum temperature of the water pumped (°C)	35	
PH of the liquid pumped	6 - 10	
Suitable for inverter drive	Three-phase versions only	
Suitable to operate horizontally (Included)	5,5 hp	

MATERIALS - MOTOR

	MOTOR	
	4" S series	4" E series
Casing	Stainless steel AISI304	
Shaft terminal	Stainless steel AISI303	Stainless steel AISI304
Upper body	Brass OT58	Nickel plated cast iron, with protection Stainless steel AISI304
Elastomers	NBR Rubber	
Mechanical seal	Graphite and alumina	
Cable	PVC ACS AD8 (for permanent immersion in drinking water)	ACS Cross-linked rubber

Electric submersible pumps IDROSOM

for 4" boreholes

PERFORMANCE DATA - PUMP ENDS - 2 poles 60 Hz

Radial impeller	P2		DNM	Q	Flow														
	hp	kW		m³/h	0	0,6	1,2	1,8	2,4	3	3,6	4,2	5,4	6	7,2	9	10,8	13,5	14,4	18
				l/min	0	10	20	30	40	50	60	70	90	100	120	150	180	225	240	300
SERIES 60																				
IDROSOM 8/60	1	0,75	1"½	H (m)	67	65	63	60	54	46	36	24								
IDROSOM 12/60	1,5	1,1	1"½		101	98	95	90	80	68	53	35								
IDROSOM 15/60	2	1,5	1"½		126	122	119	113	101	86	67	44								
IDROSOM 23/60	3	2,2	1"½		193	188	182	173	154	131	102	68								
IDROSOM 30/60	4	3	1"½		251	245	238	225	201	171	134	89								
SERIES 100																				
IDROSOM 7/100	1,5	1,1	1"½	H (m)	62		61	60	59	57	55	51	41	34	18					
IDROSOM 9/100	2	1,5	1"½		80		78	77	76	74	71	65	52	43	23					
IDROSOM 14/100	3	2,2	1"½		124		120	119	118	115	111	102	81	67	36					
IDROSOM 18/100	4	3	1"½		160		155	153	151	148	142	131	104	86	47					
IDROSOM 27/100	5,5	4	1"½		240		232	230	227	221	213	196	157	130	70					
IDROSOM 36/100	7,5	5,5	1"½		320		310	306	302	295	284	261	209	173	94					
SERIES 180																				
IDROSOM 6/180	2	1,5	2"	H (m)	53							47	44	43	40	34	26	13		
IDROSOM 9/180	3	2,2	2"		80							69	66	64	59	51	39	20		
IDROSOM 12/180	4	3	2"		107							93	87	85	78	67	51	25		
IDROSOM 17/180	5,5	4	2"		152							132	125	123	113	96	74	39		
IDROSOM 24/180	7,5	5,5	2"		212							184	172	170	158	134	104	53		
SERIES 250																				
IDROSOM 6/250	3	2,2	2"	H (m)	57							52	49	48	47	44	38	30	26	11
IDROSOM 8/250	4	3	2"		76							69	66	65	63	58	51	40	35	12
IDROSOM 12/250	5,5	4	2"		114							103	99	97	94	88	77	59	51	18
IDROSOM 17/250	7,5	5,5	2"		160							143	138	136	131	122	107	82	72	20
IDROSOM 22/250	10	7,5	2"		207							185	177	175	170	158	139	104	92	25

Motor and pump end can be supplied coupled exclusively with "S" series motors

PERFORMANCE DATA - MOTORS - 2 poles 60 Hz

	Code	Voltage	Number of phases	Capac.	P2		Axial load	Rotation	Nominal current	Start current	Start Torque	Efficiency %	Power factor	Size of cable	Length of cable
							F	n_N	I_N	I_A	M_A				
		V		µF	hp	kW	N	min^{-1}	A	A	Nm	η_N	cos ø	mm^2	m
"S" SERIES COOLANT FILLED SUBMERSIBLE MOTORS - for 4" boreholes															
4M10	M4M10	230	1	20	1	0,75	2000	3376	6	16,2	1,2	62	0,99	4 x 1	2
4T10	M4T10	400	3					3334	2,3	9,2	7,6	67	0,81		
4M15	M4M15	230	1	25	1,5	1,1	2000	3334	8	22,9	1,9	67	0,99	4 x 1	2
4T15	M4T15	400	3					3332	2,9	12,5	9	69	0,82		
4M20	M4M20	230	1	35	2	1,5	2000	3374	11	33	2,3	68	0,99	4 x 1,5	2
4T20	M4T20	400	3					3386	3,8	16	12,7	71	0,84	4 x 1	
4M30	M4M30/2	230	1	50	3	2,2	2000	3400	14	48	3,4	70	0,98	4 x 1,5	2
4T30	M4T30	400	3				2000	3299	5,4	27	16,7	73	0,84	4 x 1	
4T40	M4T40	400	3		4	3	5000	3365	7	30,1	21,8	73	0,82	4 x 1	2
4T55	M4T55	400	3		5,5	4	5000	3433	9,4	47	29	78	0,86	4 x 1,5	2
4T75	M4T75	400	3		7,5	5,5	5000	3415	12	60	33,8	79	0,88	4 x 1,5	4
4T100	M4T100	400	3		10	7,5	5000	3435	16	83,2	47,3	82	0,87	4 x 1,5	4
"E" SERIES COOLANT FILLED SUBMERSIBLE MOTORS - for 4" boreholes															
4M10	MYEZ4M10	220	1	35	1	0,75	2000	3435	6,1	22,6	1,6	58	0,95	4 x 1,5	1,7
4T10	MYEZ4T10	380	3					3460	2,7	16,5	7,7	67	0,72		
4M15	MYEZ4M15	220	1	40	1,5	1,1	2000	3455	8,3	32	1,9	64	0,98	4 x 1,5	1,7
4T15	MYEZ4T15	380	3					3440	3,9	21,5	11,8	68	0,68		
4M20	MYEZ4M20	220	1	60	2	1,5	2000	3445	10,8	41	2,4	67	0,95	4 x 1,5	1,7
4T20	MYEZ4T20	380	3					3445	4,5	24,5	15,8	71	0,75		

Electric submersible pumps IDROSOM series 60
for 4" boreholes

PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Pump Code	Motor		Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
		Code	Series			hp	kW		l/min	m		A	B	C	m	kg
IDROSOM 8/60	P60/08	M4M10	S	230 V	1-phase	1	0,75	6	10 - 40 - 70	65 - 54 - 24	1"½	776	376	95	2	13,3
		MYEZ4M10	E	220 V				6,1				756	356		1,7	11,9
		M4T10	S	400 V	3-phase			2,3				746	346		2	12,1
		MYEZ4T10	E	380 V				2,7				756	356		1,7	11,9
IDROSOM 12/60	P60/12	M4M15	S	230 V	1-phase	1,5	1,1	8	10 - 40 - 70	98 - 80 - 35	1"½	897	406	95	2	15,2
		MYEZ4M15	E	220 V				8,3				877	386		1,7	14,3
		M4T15	S	400 V	3-phase			2,9				867	376		2	13,9
		MYEZ4T15	E	380 V				3,9				862	371		1,7	13,4
IDROSOM 15/60	P60/15	M4M20	S	230 V	1-phase	2	1,5	11	10 - 40 - 70	122 - 101 - 44	1"½	1015	456	95	2	17,8
		MYEZ4M20	E	220 V				10,8				995	436		1,7	16,1
		M4T20	S	400 V	3-phase			3,8				965	406		2	15,6
		MYEZ4T20	E	380 V				4,5				945	386		1,7	14,7
IDROSOM 23/60	P60/23	M4M30/2	S	230 V	1-phase	3	2,2	14	10 - 40 - 70	188 - 154 - 68	1"½	1245	506	95	2	20,7
		M4T30	S	400 V	3-phase			5,4				1270	531			19
IDROSOM 30/60	P60/30	M4T40	S	400 V	3-phase	4	3	7	10 - 40 - 70	245 - 201 - 89	1"½	1471	531	95	2	23

Motor and pump end can be supplied coupled exclusively with "S" series motors

SUPPLIED WITH

Capacitor
(for single-phase versions, "S" series)

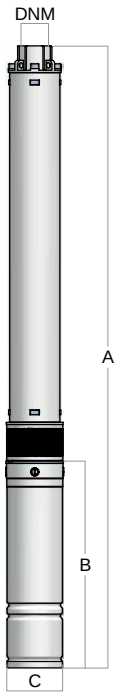
OPTIONS

10 meters cable
20 meters cable
30 meters cable

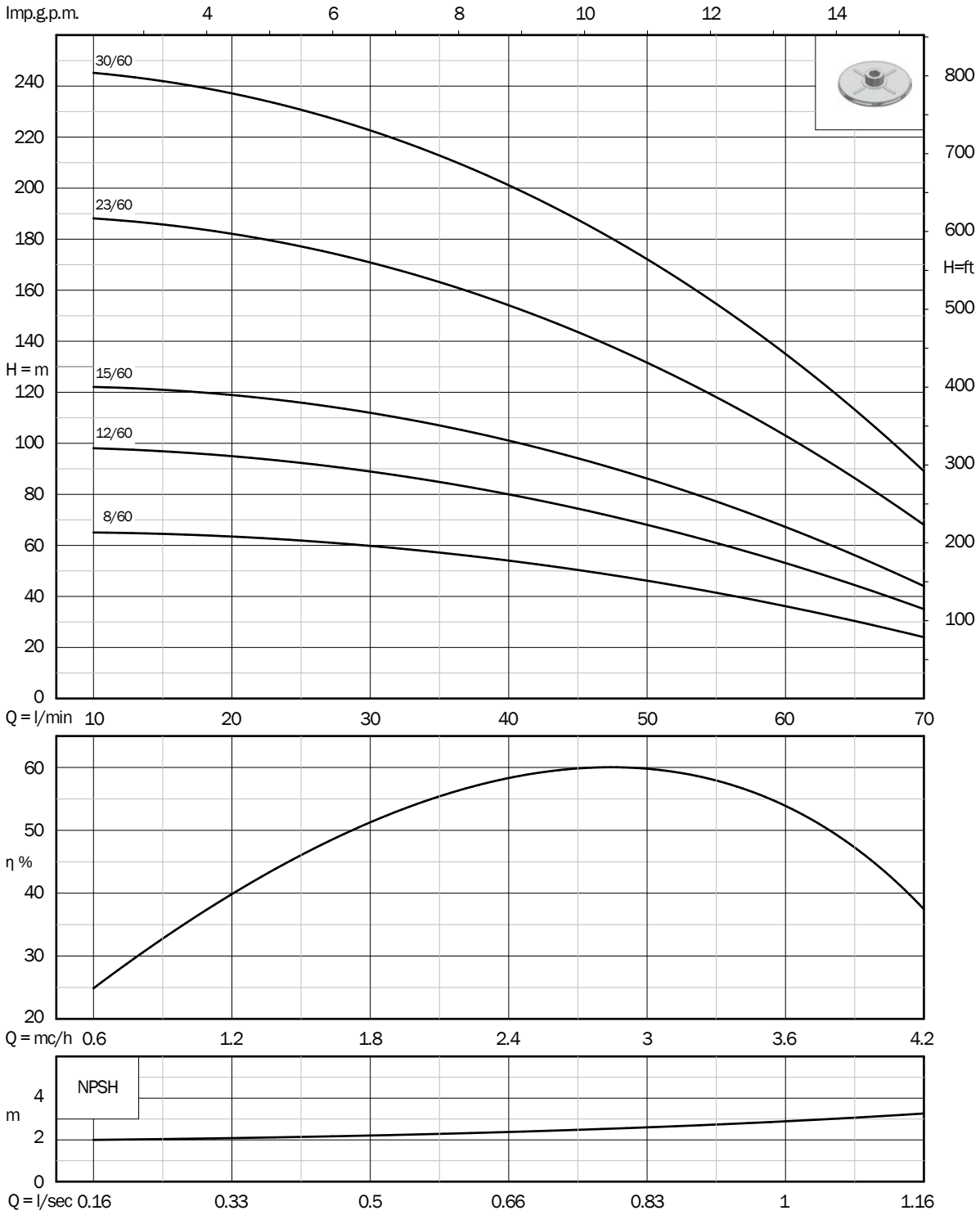
Available up to 1.1 kW single-phase and three-phase up to 3 kW

ACCESSORIES

Code	Description	
05405031	Non-return threaded valve 1"½ GAS	



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps IDROSOM series 100
for 4" boreholes

PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Pump Code	Motor		Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
		Code	Series			hp	kW		l/min	m		A	B	C	m	kg
IDROSOM 7/100	P100/07	M4M15	S	230 V	1-phase	1,5	1,1	8	20 - 70 - 120	61 - 51 - 18	1"½	808	406	95	2	14,5
		MYEZ4M15	E	220 V				8,3				788	386		1,7	13,6
		M4T15	S	400 V	3-phase			2,9				778	376		2	13,2
		MYEZ4T15	E	380 V				3,9				773	371		1,7	12,7
IDROSOM 9/100	P100/09	M4M20	S	230 V	1-phase	2	1,5	11	20 - 70 - 120	78 - 65 - 23	1"½	910	456	95	2	17
		MYEZ4M20	E	220 V				10,8				890	436		1,7	15,3
		M4T20	S	400 V	3-phase			3,8				860	406		2	14,8
		MYEZ4T20	E	380 V				4,5				840	386		1,7	13,9
IDROSOM 14/100	P100/14	M4M30/2	S	230 V	1-phase	3	2,2	14	20 - 70 - 120	120 - 102 - 36	1"½	1090	506	95	2	19,6
		M4T30	S	400 V	3-phase			5,4				1040	456			17,9
IDROSOM 18/100	P100/18	M4T40	S	400 V	3-phase	4	3	7	20 - 70 - 120	155 - 131 - 47	1"½	1219	531	95	2	21,2
IDROSOM 27/100	P100/27	M4T55	S	400 V	3-phase	5,5	4	9,4	20 - 70 - 120	232 - 196 - 70	1"½	1551	587	95	2	26,4
IDROSOM 36/100	P100/36	M4T75	S	400 V	3-phase	7,5	5,5	12	20 - 70 - 120	310 - 261 - 94	1"½	1875	677	95	4	33

Motor and pump end can be supplied coupled exclusively with "S" series motors

SUPPLIED WITH

Capacitor
(for single-phase versions, "S" series)

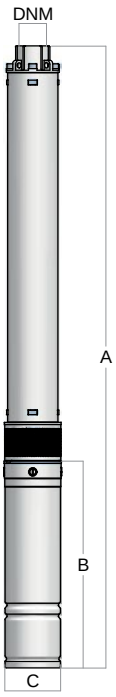
OPTIONS

10 meters cable
20 meters cable
30 meters cable

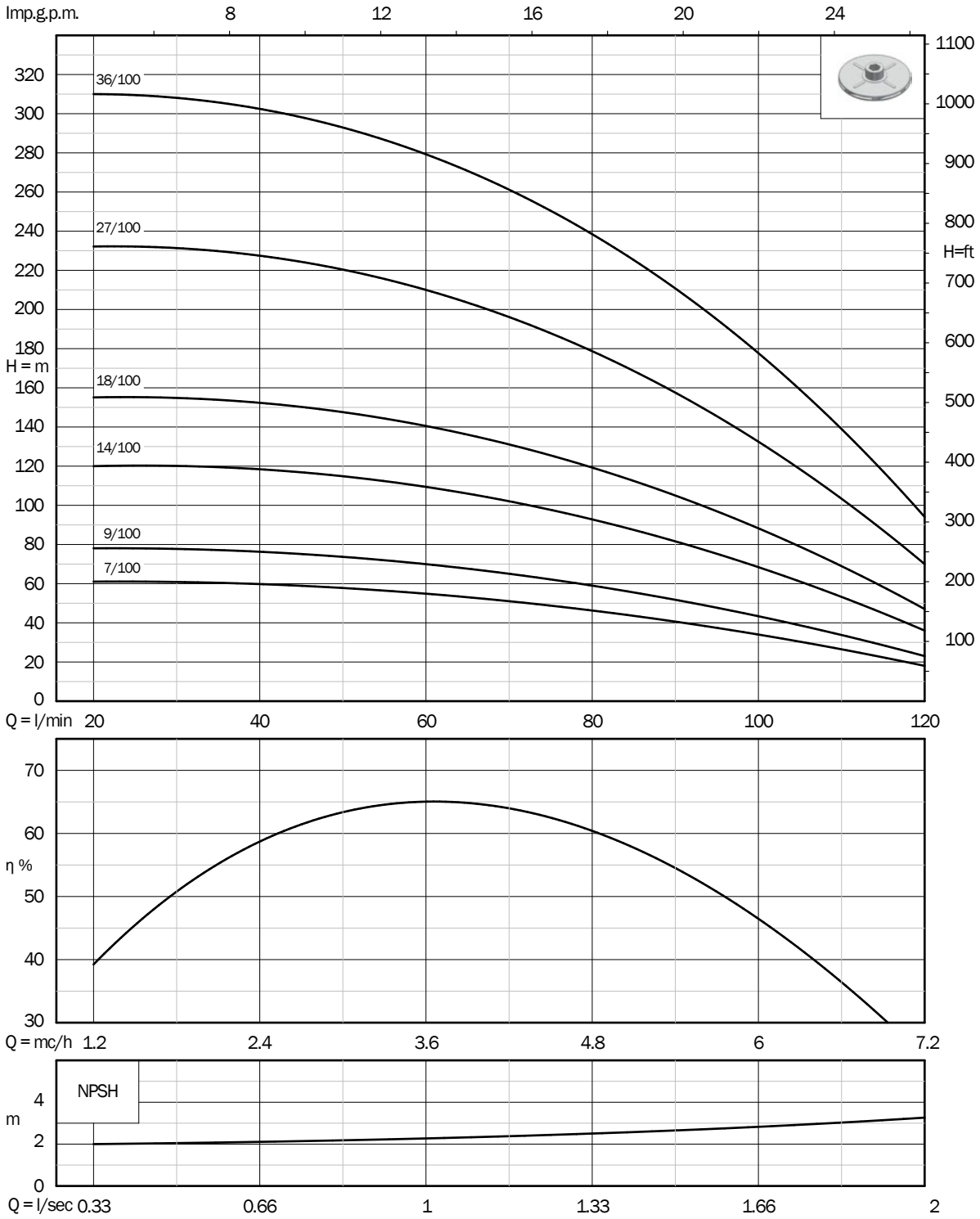
Available up to 1.1 kW single-phase and three-phase up to 3 kW

ACCESSORIES

Code	Description
05405031	Non-return threaded valve 1"½ GAS



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps IDROSOM series 180
for 4" boreholes

PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Pump Code	Motor		Versione		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
		Code	Series			hp	kW		l/min	m		A	B	C	m	kg
IDROSOM 06/180	P180/06/1	M4M20	S	230 V	1-phase	2	1,5	11	70 - 150 - 225	47 - 34 - 13	2"	897	456	95	2	16,9
		MYEZ4M20	E	220 V				10,8				877	436		1,7	15,2
		M4T20	S	400 V	3-phase			3,8				847	406		2	14,7
		MYEZ4T20	E	380 V				4,5				827	386		1,7	13,8
IDROSOM 9/180	P180/09/1	M4M30/2	S	230 V	1-phase	3	2,2	14	70 - 150 - 225	69 - 51 - 20	2"	1051	506	95	2	19,3
		M4T30	S	400 V	3-phase			5,4				1001	456			17,6
IDROSOM 12/180	P180/12/1	M4T40	S	400 V	3-phase	4	3	7	70 - 150 - 225	93 - 67 - 25	2"	1179	531	95	2	20,9
IDROSOM 17/180	P180/17/1	M4T55	S	400 V	3-phase	5,5	4	9,4	70 - 150 - 225	132 - 96 - 39	2"	1451	587	95	2	25,7
IDROSOM 24/180	P180/24/1	M4T75	S	400 V	3-phase	7,5	5,5	12	70 - 150 - 225	184 - 134 - 53	2"	1783	677	95	4	32,2

Motor and pump end can be supplied coupled exclusively with "S" series motors

SUPPLIED WITH

Capacitor
(for single-phase versions, "S" series)

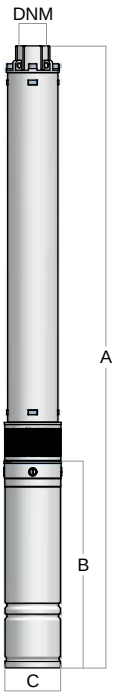
OPTIONS

10 meters cable
20 meters cable
30 meters cable

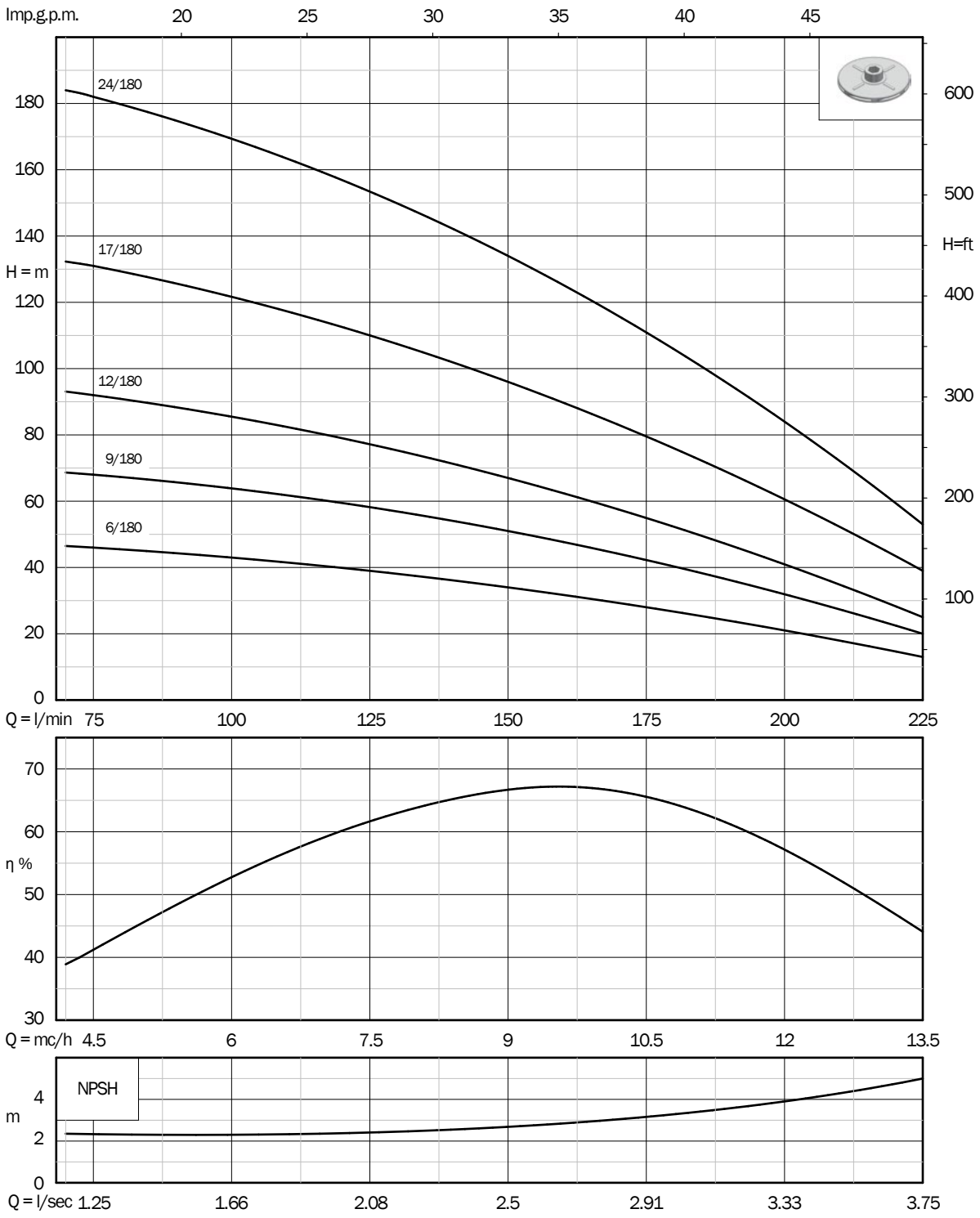
Available up to 1.1 kW single-phase and three-phase up to 3 kW

ACCESSORIES

Code	Description
05405035	Non-return threaded valve 2" GAS



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps IDROSOM series 250
for 4" boreholes

PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Pump Code	Motor		Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
		Code	Series			hp	kW		l/min	m		A	B	C	m	kg
IDROSOM 6/250	P250/06	M4M30/2	S	230 V	1-phase	3	2,2	14	70 - 180 - 300	52 - 38 - 11	2"	976	506	95	2	18,8
		M4T30	S	400 V	3-phase			5,4				926	456			17,1
IDROSOM 8/250	P250/08	M4T40	S	400 V	3-phase	4	3	7	70 - 180 - 300	69 - 51 - 12	2"	1080	531	95	2	20,3
IDROSOM 12/250	P250/12	M4T55	S	400 V	3-phase	5,5	4	9,4	70 - 180 - 300	103 - 77 - 18	2"	1294	587	95	2	24,6
IDROSOM 17/250	P250/17	M4T75	S	400 V	3-phase	7,5	5,5	12	70 - 180 - 300	143 - 107 - 20	2"	1625	677	95	4	31,3
IDROSOM 22/250	P250/22	M4T100	S	400 V	3-phase	10	7,5	16	70 - 180 - 300	185 - 139 - 25	2"	1902	757	95	4	35,7

Motor and pump end can be supplied coupled exclusively with "S" series motors

SUPPLIED WITH

Capacitor
(for single-phase versions, "S" series)

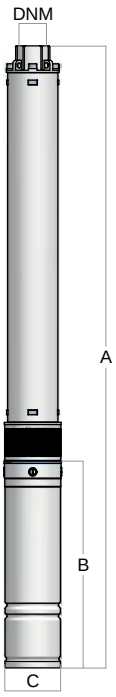
OPTIONS

10 meters cable
20 meters cable
30 meters cable

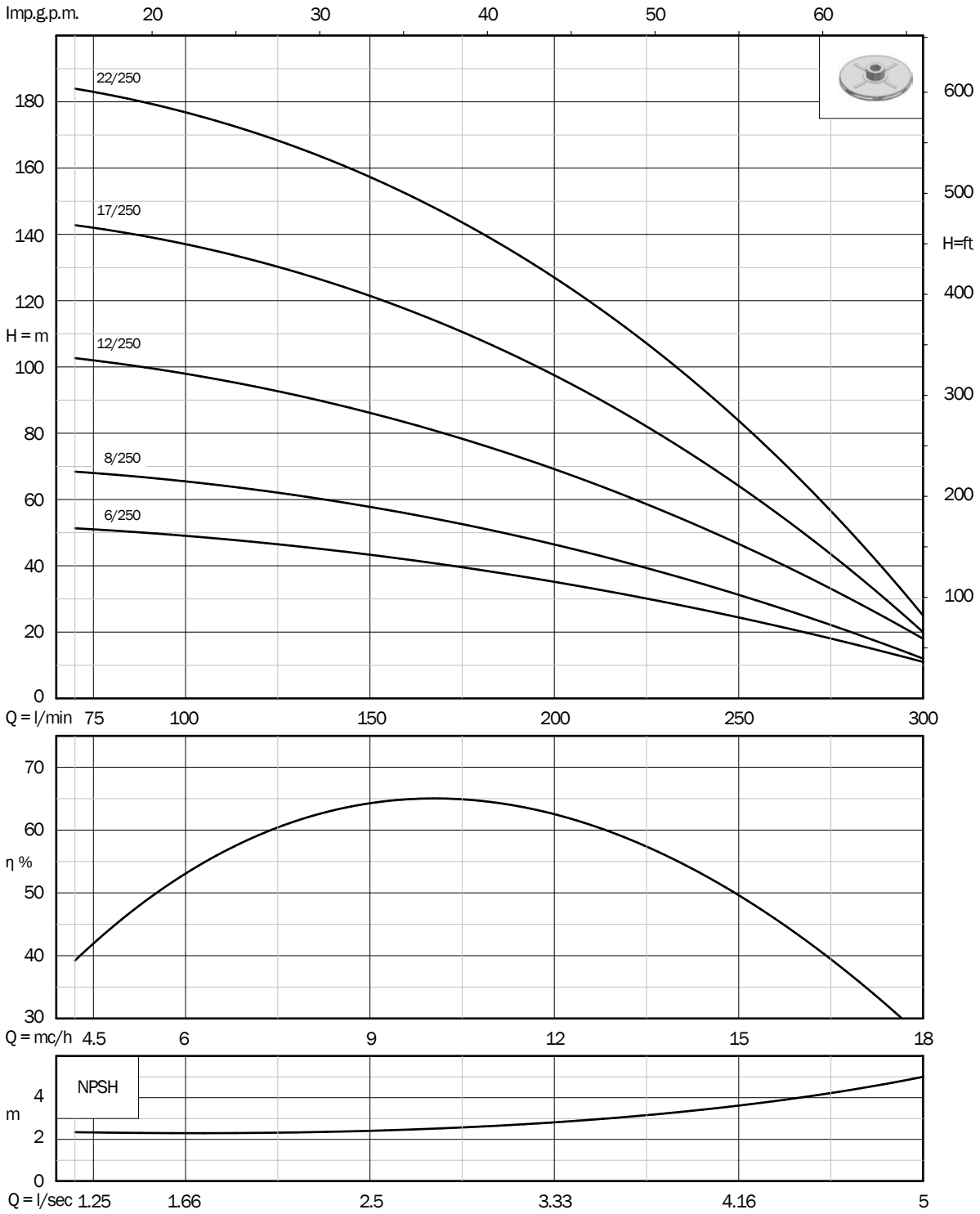
Available up to 1.1 kW single-phase and three-phase up to 3 kW

ACCESSORIES

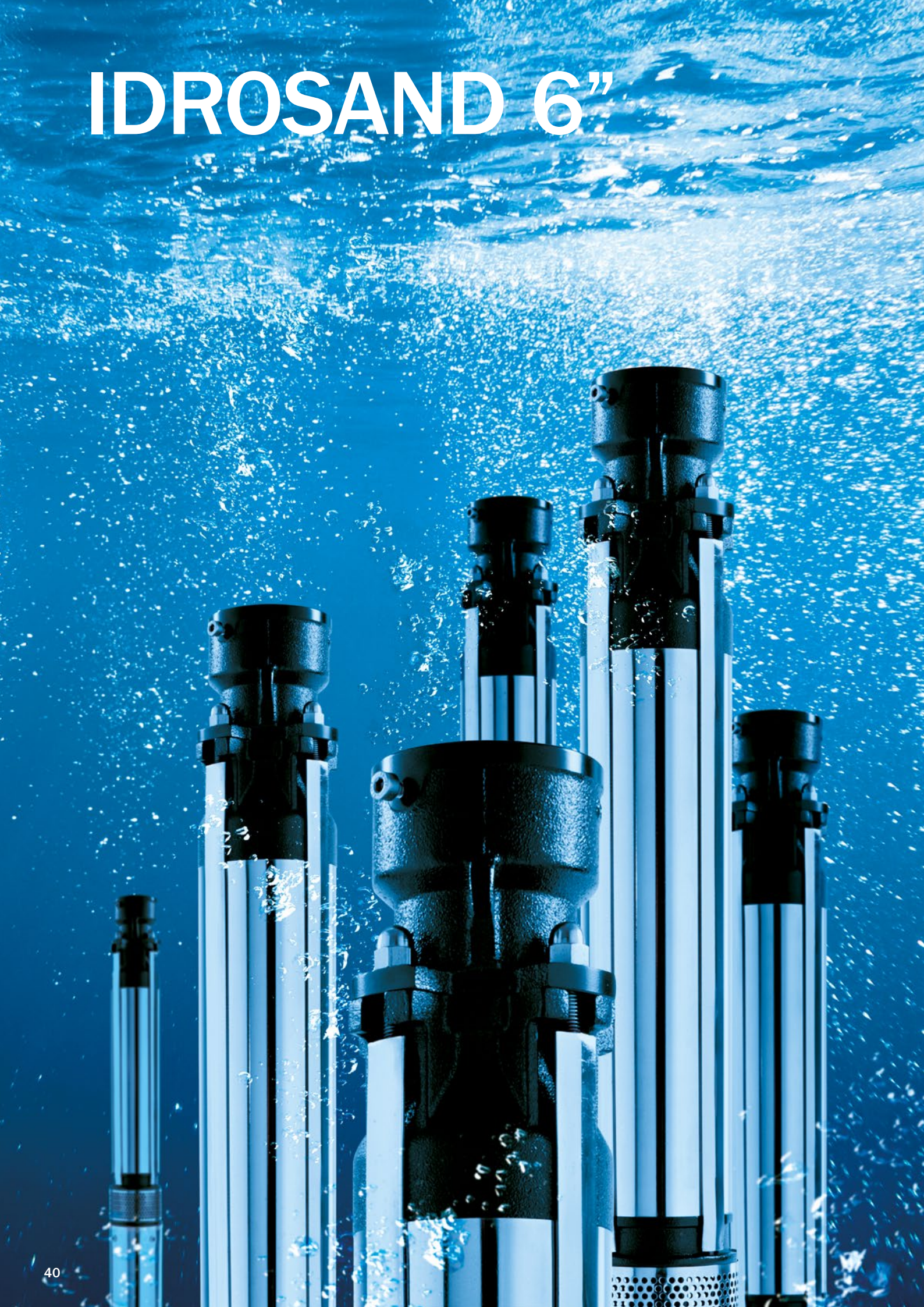
Code	Description
05405035	Non-return threaded valve 2" GAS



PERFORMANCE CURVES - 2 poles 60 Hz



IDROSAND 6”



Electric submersible pumps IDROSAND
for 6" boreholes

APPLICATION

To pump water from boreholes

To pressurize civil, agricultural, industrial and fire-fighting plants

Irrigation

CONSTRUCTION

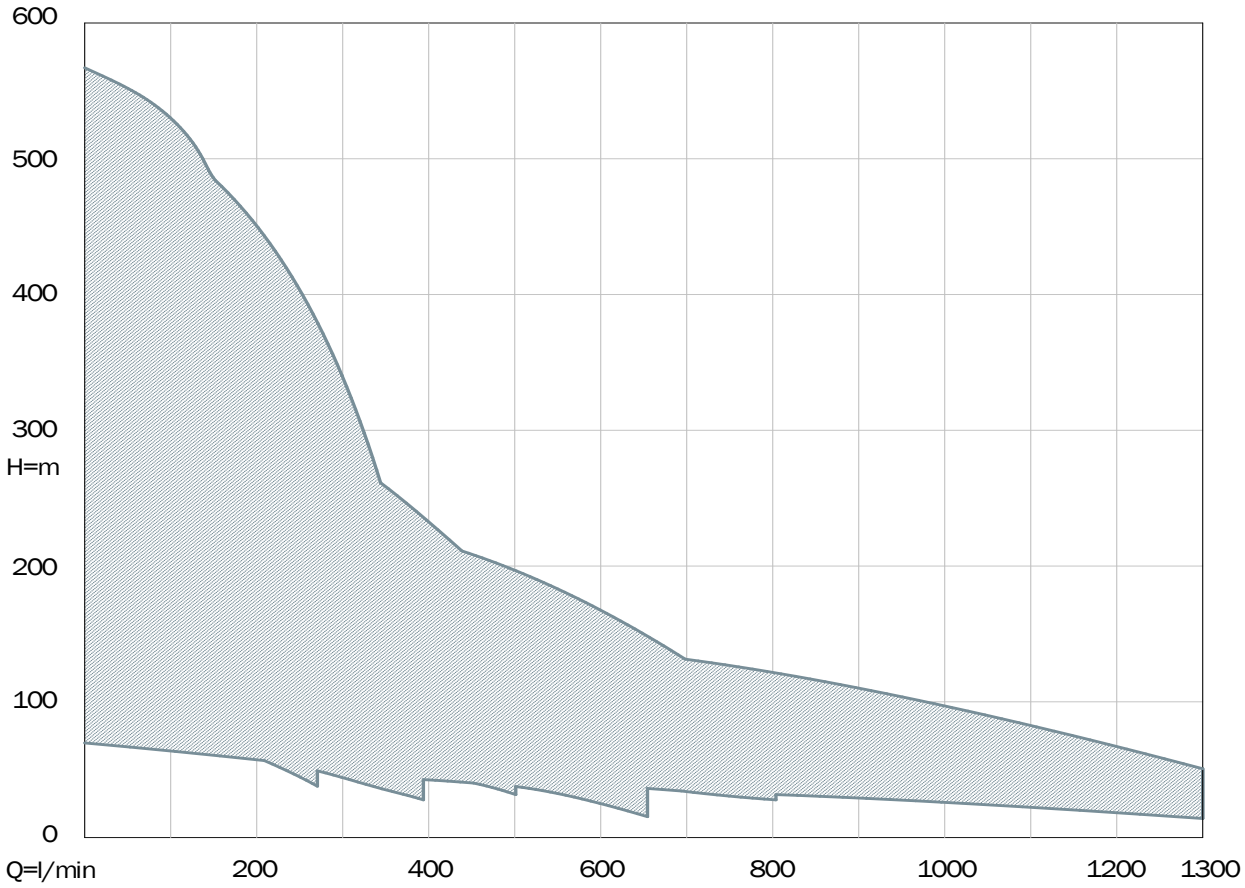
Pumps designed to operate in the most arduous conditions, offering reliability even in applications with high sand content (IDROSAND+ up to 450 g/m^3)

Coolant filled, asynchronous, rewindable electric AC motor with short circuit rotor. Insulation Class F. (4" motors).
Water filled, asynchronous, rewindable electric AC motor with short circuit rotor. Insulation Class Y. (6" motors).

Shafts machined on support bushes and mechanical seals location

Both shaft and coupling meet NEMA standards

APPLICATION RANGE



Electric submersible pumps IDROSAND
for 6" boreholes

The electric pumps **IDROSAND** are designed to operate in the most arduous conditions, offering reliability even in applications with high sand content (**IDROSAND+** up to 450 g/m³).

APPLICATION FEATURES - PUMP END

	IDROSAND			IDROSAND+		
	/230	/330	/530	/400	/700	/900
Minimum depth of the liquid to be pumped (m)	0,8					
Maximum temperature of the water to be pumped (°C)	60					
PH of the liquid pumped	6 - 10					
Maximum sand content (g/m³)	200			300		450
Suitable to operate horizontally (included)	24/230	23/330	17/530	15/400	13/700	8/900

MATERIALS - PUMP END

	IDROSAND			IDROSAND+		
	/230	/330	/530	/400	/700	/900
Head and suction body	Mechanical cast iron EN GJL-200					
Casing / Diffuser body	Stainless steel AISI304			Mechanical cast iron EN GJL-200	Stainless steel AISI304	
Tie-rods	Stainless steel AISI304			Steel	Stainless steel AISI304	
Shaft	Stainless steel AISI420B					
Coupling	Stainless steel AISI416B					
Impellers and diffusers	Noryl® reinforced with fibre-glass, certified for drinking water and AISI 304 stainless steel wear rings					
Diffuser bush				Anti-sand rubber		
Top bush	Desmopan® with rotating element in chromium-plated brass					
Check valve	Stainless steel AISI304					

APPLICATION FEATURES - MOTOR

	MOTOR	
	4" S series	6"
IP rating	IP68	
Duty	Continuous S1	
Maximum immersion depth (m)	150	200
Maximum number of starts per hour	30	20
Maximimum temperature of the water pumped (°C)	35	30
PH of the liquid pumped	6 - 10	
Suitable for inverter drive	All	
Suitable to operate horizontally (Included)	5,5 hp	All

MATERIALS - MOTOR

	MOTOR	
	4" S series	6"
Casing	Stainless Steel AISI304	
Shaft Terminal	Stainless Steel AISI303	Stainless Steel AISI420B
Upper body	Brass OT58	Mechanical cast iron with electrophoresis paint EN GJL-250 or brass OT58
Elastomers	NBR rubber	
Mechanical seal	Graphite and alumina	
Foot		ABS
Cable	PVC ACS AD8 (for permanent immersion in drinking water)	

Electric submersible pumps IDROSAND

for 6" boreholes

PERFORMANCE DATA - PUMP ENDS - 2 poles 60 Hz

Radial impeller	P2		DNM	Q	Flow														
				m³/h	0	5,4	7,2	9	12	15	16,2	18	21	23,4	27	30	33	36	39
	hp	kW		l/min	0	90	120	150	200	250	270	300	350	390	450	500	550	600	650
SERIES 230																			
IDROSAND 6/230	4	3	2"		82	77	74	67	53	39	30								
IDROSAND 8/230	5,5	4	2"		112	106	101	91	71	52	39								
IDROSAND 9/230	5,5	4	2"		124	117	112	100	78	57	44								
IDROSAND 11/230	7,5	5,5	2"		152	144	137	122	94	69	54								
IDROSAND 14/230	10	7,5	2"	**H**	190	177	168	150	112	81	64								
IDROSAND 17/230	12,5	9,2	2"	**(m)**	239	225	215	194	147	108	85								
IDROSAND 20/230	12,5	9,2	2"		282	267	256	231	174	128	100								
IDROSAND 24/230	20	15	2"		337	317	303	274	211	155	120								
IDROSAND 28/230	20	15	2"		393	374	360	328	252	184	140								
IDROSAND 34/230	25	18,5	2"		481	454	435	396	304	219	166								
SERIES 330																			
IDROSAND 4/330	4	3	2"		58			51	47	41	39	35	27	20					
IDROSAND 5/330	5,5	4	2"		73			65	59	53	51	46	34	25					
IDROSAND 6/330	5,5	4	2"		87			73	67	61	59	53	39	30					
IDROSAND 7/330	7,5	5,5	2"		100			87	80	72	69	62	46	35					
IDROSAND 9/330	10	7,5	2"		130			112	102	91	87	77	56	43					
IDROSAND 10/330	10	7,5	2"		146			125	114	100	95	85	62	48					
IDROSAND 12/330	12,5	9,2	2"	**H**	174			153	138	120	102	100	71	55					
IDROSAND 14/330	12,5	9,2	2"	**(m)**	200			168	153	135	126	113	82	65					
IDROSAND 16/330	20	15	2"		230			203	183	162	152	137	100	76					
IDROSAND 19/330	20	15	2"		274			243	218	197	185	164	116	88					
IDROSAND 23/330	25	18,5	2"		336			300	272	242	230	205	147	111					
IDROSAND 28/330	25	18,5	2"		397			353	321	285	270	238	175	138					
IDROSAND 32/330	40	30	2"		469			430	392	351	330	295	215	166					
SERIES 400																			
IDROSAND+ 4/400	7,5	5,5	3"		74			66	61	59	56	54	48	42	33	24			
IDROSAND+ 5/400	10	7,5	3"		94			81	76	74	70	68	61	55	44	34			
IDROSAND+ 6/400	10	7,5	3"		110			95	91	90	85	82	74	67	55	44			
IDROSAND+ 7/400	12,5	9,2	3"		133			117	110	104	102	96	87	78	65	53			
IDROSAND+ 8/400	20	15	3"	**H**	151			133	127	121	117	112	102	94	78	64			
IDROSAND+ 10/400	25	18,5	3"	**(m)**	187			167	159	147	144	136	123	111	94	78			
IDROSAND+ 12/400	25	18,5	3"		219			200	190	181	175	168	153	140	116	94			
IDROSAND+ 15/400	30	22	3"		285			250	240	233	225	217	198	180	152	124			
IDROSAND+ 20/400	40	30	3"		366			334	318	295	290	275	253	231	196	161			
SERIES 530																			
IDROSAND 4/530	7,5	5,5	3"		58			54	53	52	51	50	47	44	37	30	23	16	8
IDROSAND 6/530	10	7,5	3"		87			81	79	76	75	72	68	64	57	49	40	30	18
IDROSAND 8/530	12,5	9,2	3"		115			108	104	99	97	95	90	84	75	65	53	39	25
IDROSAND 11/530	20	15	3"	**H**	156			148	144	138	136	132	124	116	101	87	70	50	31
IDROSAND 14/530	25	18,5	3"	**(m)**	200			189	182	174	171	166	157	147	128	109	89	65	39
IDROSAND 17/530	30	22	3"		237			229	216	202	198	191	179	170	153	134	111	82	49
IDROSAND 22/530	40	30	3"		315			297	285	271	266	259	244	230	199	170	136	99	60

Electric pumps supplied with 4" 'S' series motors up to 7,5 kW

PERFORMANCE DATA - PUMP ENDS - 2 poles 60 Hz

Semi-axial impeller	P2		DNM	Q	Flow											
				m³/h	0	18	21	24	30	39	42	48	54	60	69	78
	hp	kW		l/min	0	300	350	400	500	650	700	800	900	1000	1150	1300
SERIES 700																
IDROSAND+ 3/700	10	7,5	3"	H (m)	60	50	48	46	41	31	27	17				
IDROSAND+ 5/700	12,5	9,2	3"		101	83	80	77	69	51	44	28				
IDROSAND+ 6/700	20	15	3"		121	100	96	93	82	62	53	34				
IDROSAND+ 8/700	25	18,5	3"		161	133	129	123	110	82	71	45				
IDROSAND+ 10/700	25	18,5	3"		201	166	161	154	137	103	88	56				
IDROSAND+ 13/700	40	30	3"		262	216	209	201	178	133	115	73				
IDROSAND+ 16/700	50	37	3"		322	266	257	247	219	164	141	90				
SERIES 900																
IDROSAND+ 2/900	10	7,5	3"	H (m)	41			35	32	29	27	25	21	18	12	5
IDROSAND+ 3/900	15	11	3"		59			52	50	45	43	39	34	29	20	9
IDROSAND+ 4/900	20	15	3"		79			73	70	64	61	56	49	42	29	14
IDROSAND+ 5/900	25	18,5	3"		100			92	89	81	78	71	63	54	39	21
IDROSAND+ 6/900	25	18,5	3"		120			109	105	96	92	84	75	65	48	30
IDROSAND+ 8/900	40	30	3"		162			150	143	130	125	115	103	90	68	42
IDROSAND+ 10/900	50	37	3"		202			187	179	162	156	144	129	112	85	52

Electric pumps supplied with 4" 'S' series motors up to 7,5 kW

PERFORMANCE DATA - MOTORS - 2 poles 60 Hz

	Code	Voltage	Number of phases	P2		Axial load	Rotation	Nominal current	Start current	Start Torque	Efficiency %	Power factor	Size of cable	Length of cable
						F	n_N	I_N	I_A	M_A				
		V		hp	kW	N	min^{-1}	A	A	Nm	η_N	cos ø	mm^2	m
WATER FILLED SUBMERSIBLE MOTORS for 6" boreholes														
6TA125	M6TA125/2	400	3	12,5	9,2	8000	3410	20	84	450	80	0,83	4 x 4	3
6TA15	M6TA15GH/2	400	3	15	11	8000	3420	22,7	98	440	85	0,83	4 x 4	3
6TA20	M6TA20/2	400	3	20	15	18000	3460	29,5	118	504	85	0,86	4 x 4	3
6TA25	M6TA25/2	400	3	25	18,5	18000	3450	37,7	113	720	84	0,86	4 x 6	3
6TA30	M6TA30/2	400	3	30	22	18000	3480	44	127	900	86	0,85	4 x 6	3
6TA35	M6TA35/2	400	3	35	26	18000	3480	51	193	1000	88	0,82	4 x 6	3
6TA40	M6TA40/2	400	3	40	30	18000	3450	58,5	193	1000	87	0,86	4 x 6	3
6TA50	M6TA50/2	400	3	50	37	18000	3490	74	244	1220	89	0,88	4 x 6	3

Electric submersible pumps IDROSAND series 230
for 6" boreholes

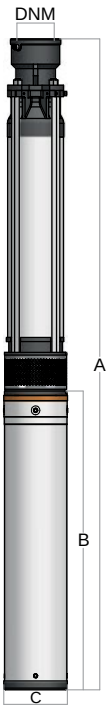
PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Pump Code	Motor Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
					hp	kW		l/min	m		A	B	C	m	kg
IDROSAND 6/230	P230/06	M4T40	400 V	3-phase	4	3	7	90 - 150 - 270	77 - 67 - 30	2"	1217	531	146	2	33,6
IDROSAND 8/230	P230/08	M4T55	400 V	3-phase	5,5	4	9,4	90 - 150 - 270	106 - 91 - 39	2"	1345	587	146	2	38,3
IDROSAND 9/230	P230/09	M4T55	400 V	3-phase	5,5	4	9,4	90 - 150 - 270	117 - 100 - 44	2"	1381	587	146	3	38,9
IDROSAND 11/230	P230/11	M4T75	400 V	3-phase	7,5	5,5	12	90 - 150 - 270	144 - 122 - 54	2"	1538	672	146	3	61,5
IDROSAND 14/230	P230/14	M4T100	400 V	3-phase	10	7,5	16	90 - 150 - 270	177 - 150 - 64	2"	1671	697	146	3	66
IDROSAND 17/230	P230/17	M6TA125/2	400 V	3-phase	12,5	9,2	20	90 - 150 - 270	225 - 194 - 85	2"	1804	722	146	3	71,3
IDROSAND 20/230	P230/20	M6TA125/2	400 V	3-phase	12,5	9,2	20	90 - 150 - 270	267 - 231 - 100	2"	1912	722	146	3	73
IDROSAND 24/230	P230/24	M6TA20/2	400 V	3-phase	20	15	29,5	90 - 150 - 270	317 - 274 - 120	2"	2191	857	146	3	91,8
IDROSAND 28/230	P230/28	M6TA20/2	400 V	3-phase	20	15	29,5	90 - 150 - 270	374 - 328 - 140	2"	2335	857	146	3	94,4
IDROSAND 34/230	P230/34	M6TA25/2	400 V	3-phase	25	18,5	37,7	90 - 150 - 270	454 - 396 - 166	2"	2663	897	146	3	103,4

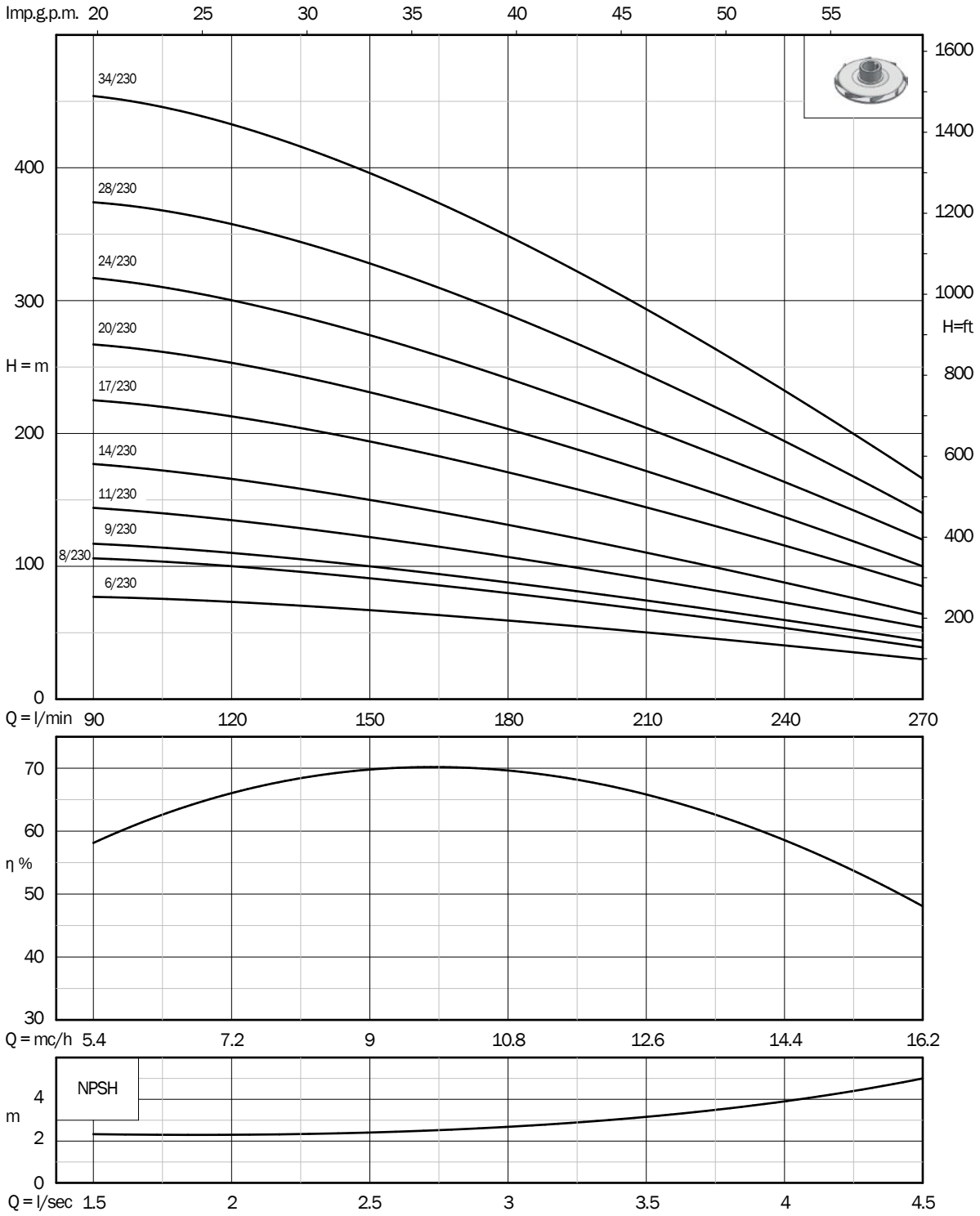
Electric pumps supplied with 4" 'S' series motors up to 7,5 kW

OPTIONS FOR 6" MOTORS

Version for star-delta motors 400/690 V
Version with brass motor body



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps IDROSAND series 330
for 6" boreholes

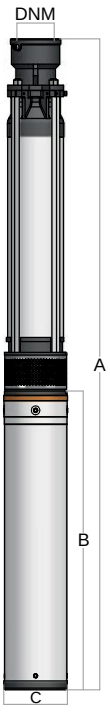
PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Pump Code	Motor Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
					hp	kW		l/min	m		A	B	C	m	kg
IDROSAND 4/330	P330/04	M4T40	400 V	3-phase	4	3	7	150 - 270 - 390	51 - 39 - 20	2"	1145	531	146	2	31,6
IDROSAND 5/330	P330/05	M4T55	400 V	3-phase	5,5	4	9,4	150 - 270 - 390	65 - 51 - 25	2"	1237	587	146	2	35,7
IDROSAND 6/330	P330/06	M4T55	400 V	3-phase	5,5	4	9,4	150 - 270 - 390	73 - 59 - 30	2"	1273	587	146	2	36,3
IDROSAND 7/330	P330/07	M4T75	400 V	3-phase	7,5	5,5	12	150 - 270 - 390	87 - 69 - 35	2"	1394	672	146	3	58,6
IDROSAND 9/330	P330/09	M4T100	400 V	3-phase	10	7,5	16	150 - 270 - 390	112 - 87 - 43	2"	1491	697	146	3	62,9
IDROSAND 10/330	P330/10	M4T100	400 V	3-phase	10	7,5	16	150 - 270 - 390	125 - 95 - 48	2"	1527	697	146	3	63,3
IDROSAND 12/330	P330/12	M6TA125/2	400 V	3-phase	12,5	9,2	20	150 - 270 - 390	153 - 102 - 55	2"	1624	722	146	3	67,3
IDROSAND 14/330	P330/14	M6TA125/2	400 V	3-phase	12,5	9,2	20	150 - 270 - 390	168 - 126 - 65	2"	1696	722	146	3	68,4
IDROSAND 16/330	P330/16	M6TA20/2	400 V	3-phase	20	15	29,5	150 - 270 - 390	203 - 152 - 76	2"	1903	857	146	3	85,7
IDROSAND 19/330	P330/19	M6TA20/2	400 V	3-phase	20	15	29,5	150 - 270 - 390	243 - 185 - 88	2"	2011	857	146	3	87
IDROSAND 23/330	P330/23	M6TA25/2	400 V	3-phase	25	18,5	37,7	150 - 270 - 390	300 - 230 - 111	2"	2195	897	146	3	95,7
IDROSAND 28/330	P330/28	M6TA25/2	400 V	3-phase	25	18,5	37,7	150 - 270 - 390	353 - 270 - 138	2"	2375	897	146	3	97,8
IDROSAND 32/330	P330/32	M6TA40/2	400 V	3-phase	40	30	58,5	150 - 270 - 390	430 - 330 - 166	2"	2821	1127	146	3	125,9

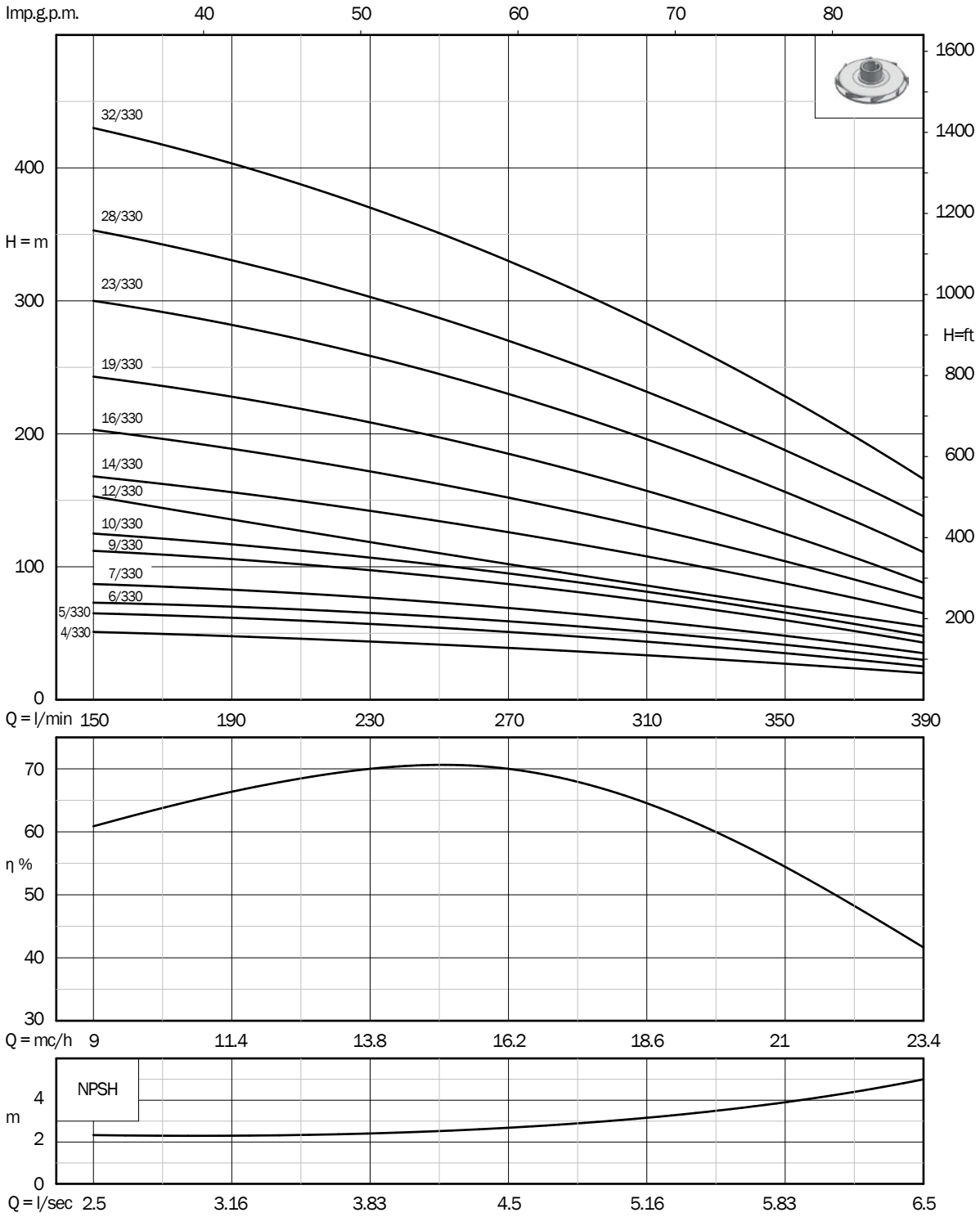
Electric pumps supplied with 4" 'S' series motors up to 7,5 kW

OPTIONS FOR 6" MOTORS

Version for star-delta motors 400/690 V
Version with brass motor body



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps IDROSAND+ series 400
for 6" boreholes

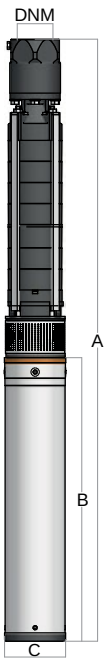
PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Pump Code	Motor Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
					hp	kW		l/min	m		A	B	C	m	kg
IDROSAND+ 4/400	P400/04	M4T75	400 V	3-phase	7,5	5,5	12	150 - 350 - 500	66 - 48 - 24	3"	1277	672	146	3	61,7
IDROSAND+ 5/400	P400/05	M4T100	400 V	3-phase	10	7,5	16	150 - 350 - 500	81 - 61 - 34	3"	1352	697	146	3	66,5
IDROSAND+ 6/400	P400/06	M4T100	400 V	3-phase	10	7,5	16	150 - 350 - 500	95 - 74 - 44	3"	1402	697	146	3	67,9
IDROSAND+ 7/400	P400/07	M6TA125/2	400 V	3-phase	12,5	9,2	20	150 - 350 - 500	117 - 87 - 53	3"	1477	722	146	3	71,8
IDROSAND+ 8/400	P400/08	M6TA20/2	400 V	3-phase	20	15	29,5	150 - 350 - 500	133 - 102 - 64	3"	1662	857	146	3	89,5
IDROSAND+ 10/400	P400/10	M6TA25/2	400 V	3-phase	25	18,5	37,7	150 - 350 - 500	167 - 123 - 78	3"	1802	897	146	3	96,8
IDROSAND+ 12/400	P400/12	M6TA25/2	400 V	3-phase	25	18,5	37,7	150 - 350 - 500	200 - 153 - 94	3"	1902	897	146	3	100,2
IDROSAND+ 15/400	P400/15	M6TA30/2	400 V	3-phase	30	22	44	150 - 350 - 500	250 - 198 - 124	3"	2152	997	146	3	115,6
IDROSAND+ 20/400	P400/20	M6TA40/2	400 V	3-phase	40	30	58,5	150 - 350 - 500	334 - 253 - 161	3"	2532	1127	146	3	140,3

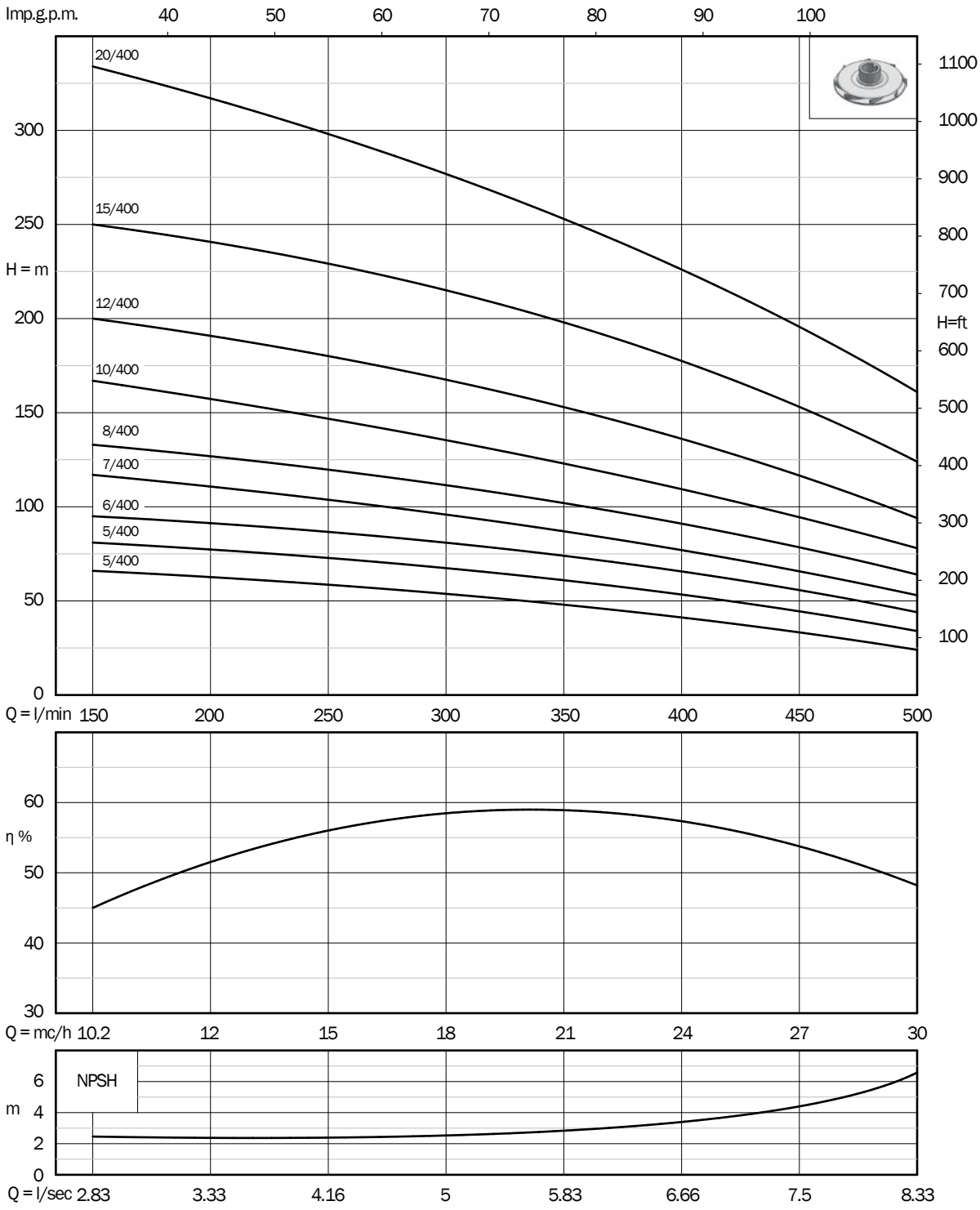
Electric pumps supplied with 4" 'S' series motors up to 7,5 kW

OPTIONS FOR 6" MOTORS

Version for star-delta motors 400/690 V
Version with brass motor body



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps IDROSAND series 530
for 6" boreholes

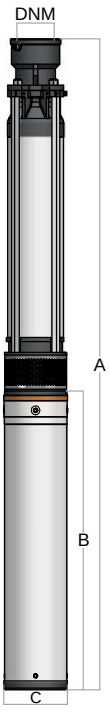
PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Pump Code	Motor Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
					hp	kW		l/min	m		A	B	C	m	kg
IDROSAND 4/530	P530/04	M4T75	400 V	3-phase	7,5	5,5	12	150 - 500 - 650	54 - 30 - 8	3"	1361	672	146	3	58,4
IDROSAND 6/530	P530/06	M4T100	400 V	3-phase	10	7,5	16	150 - 500 - 650	81 - 49 - 18	3"	1486	697	146	3	62,6
IDROSAND 8/530	P530/08	M6TA125/2	400 V	3-phase	12,5	9,2	20	150 - 500 - 650	108 - 65 - 25	3"	1629	722	146	3	66,5
IDROSAND 11/530	P530/11	M6TA20/2	400 V	3-phase	20	15	29,5	150 - 500 - 650	148 - 87 - 31	3"	1896	857	146	3	84,9
IDROSAND 14/530	P530/14	M6TA25/2	400 V	3-phase	25	18,5	37,7	150 - 500 - 650	189 - 109 - 39	3"	2086	897	146	3	91,5
IDROSAND 17/530	P530/17	M6TA30/2	400 V	3-phase	30	22	44	150 - 500 - 650	229 - 134 - 49	3"	2336	997	146	3	104,7
IDROSAND 22/530	P530/22	M6TA40/2	400 V	3-phase	40	30	58,5	150 - 500 - 650	297 - 170 - 60	3"	2716	1127	146	3	123,3

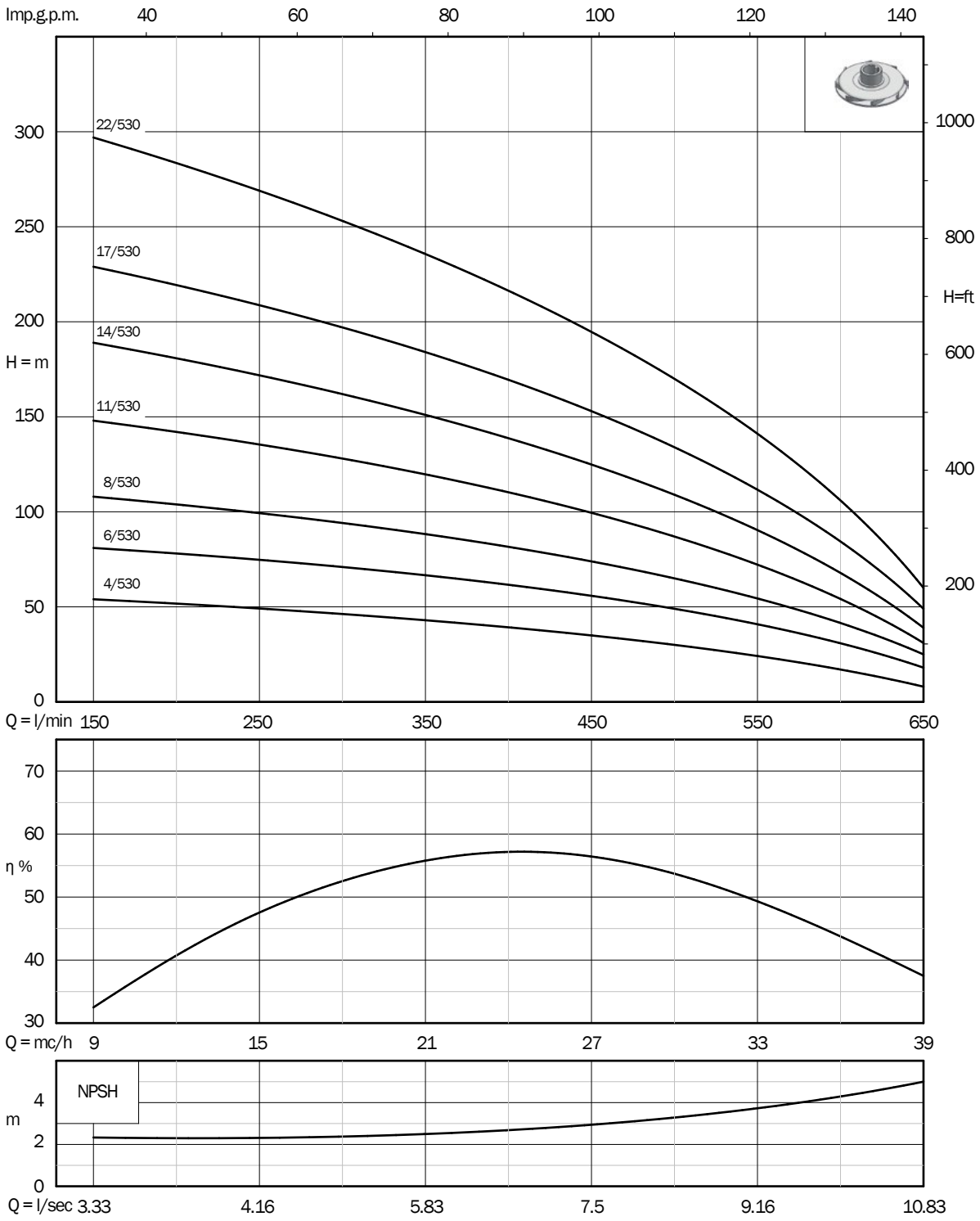
Electric pumps supplied with 4" 'S' series motors up to 7,5 kW

OPTIONS FOR 6" MOTORS

Version for star-delta motors 400/690 V
Version with brass motor body



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps IDROSAND+ series 700
for 6" boreholes

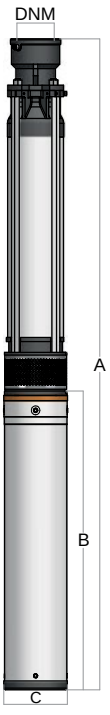
PERFORMANCE DATA - 2 poles 60 Hz

Semi-axial impeller	Pump Code	Motor Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
					hp	kW		l/min	m		A	B	C	m	kg
IDROSAND+ 3/700	P700/03	M4T100	400 V	3-phase	10	7,5	16	300 - 500 - 800	50 - 41 - 17	3"	1422	697	146	3	62,2
IDROSAND+ 5/700	P700/05	M6TA125/2	400 V	3-phase	12,5	9,2	20	300 - 500 - 800	83 - 69 - 28	3"	1603	722	146	3	67,1
IDROSAND+ 6/700	P700/06	M6TA20/2	400 V	3-phase	20	15	29,5	300 - 500 - 800	100 - 82 - 34	3"	1816	857	146	3	84,2
IDROSAND+ 8/700	P700/08	M6TA25/2	400 V	3-phase	25	18,5	37,7	300 - 500 - 800	133 - 110 - 45	3"	2012	897	146	3	90,9
IDROSAND+ 10/700	P700/10	M6TA25/2	400 V	3-phase	25	18,5	37,7	300 - 500 - 800	166 - 137 - 56	3"	2168	897	146	3	93,3
IDROSAND+ 13/700	P700/13	M6TA40/2	400 V	3-phase	40	30	58,5	300 - 500 - 800	216 - 178 - 73	3"	2632	1127	146	3	122,8
IDROSAND+ 16/700	P700/16	M6TA50/2	400 V	Trifase	50	37	74	300 - 500 - 800	266 - 219 - 90	3"	3006	1267	146	3	141,3

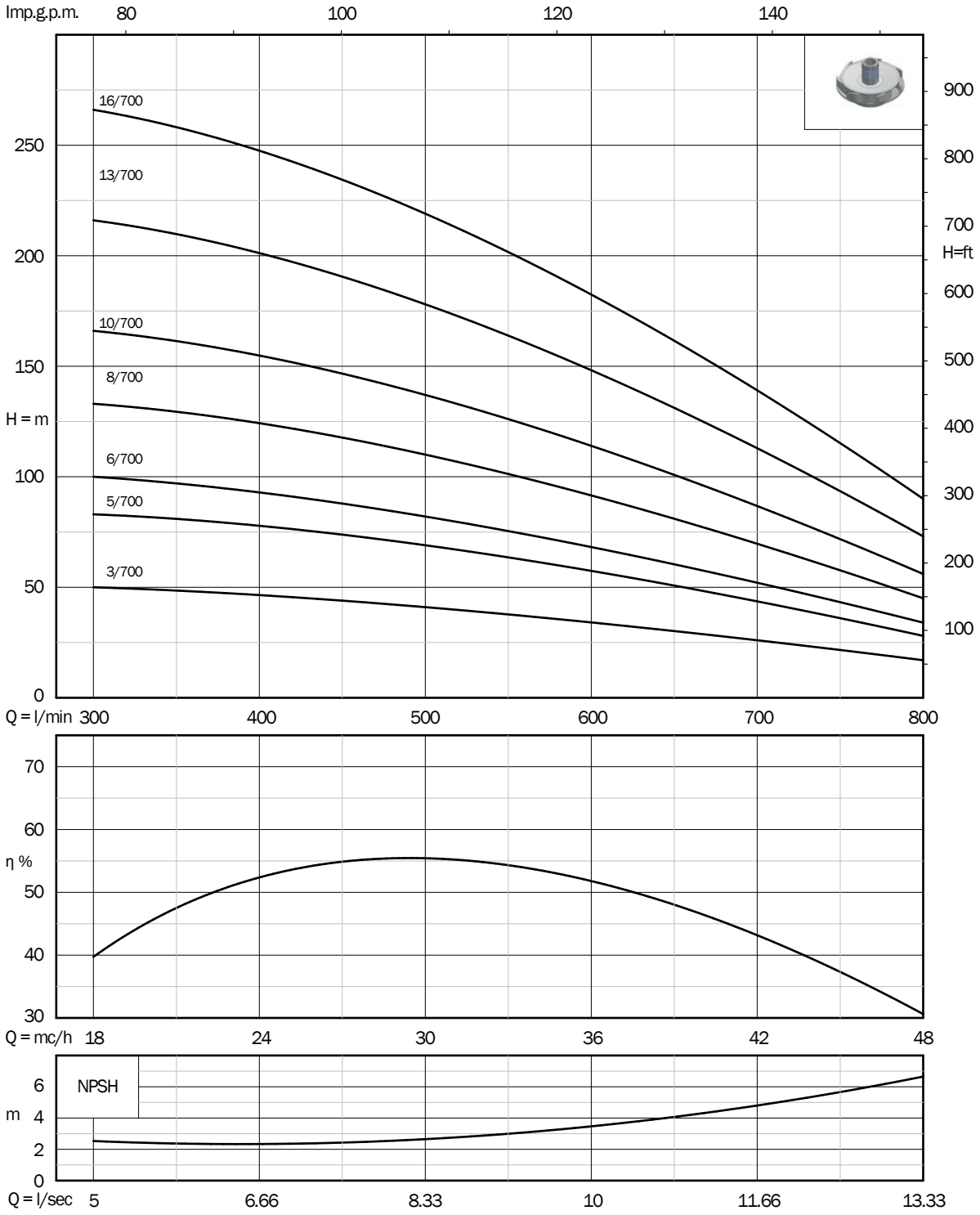
Electric pumps supplied with 4" 'S' series motors up to 7,5 kW

OPTIONS FOR 6" MOTORS

Version for star-delta motors 400/690 V
Version with brass motor body



PERFORMANCE CURVES - 2 poles 60 Hz



Electric submersible pumps IDROSAND+ series 900
for 6" boreholes

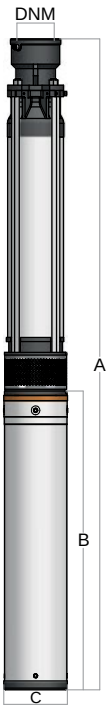
PERFORMANCE DATA - 2 poles 60 Hz

Semi-axial impeller	Pump Code	Motor Code	Version		P2		A	Flow		DNM	Dimensions (mm)			Cable	Weight
					hp	kW		l/min	m		A	B	C	m	kg
IDROSAND+ 2/900	P900/02	M4T100	400 V	3-phase	10	7,5	16	400 - 800 - 1300	35 - 25 - 5	3"	1408	697	146	3	61,3
IDROSAND+ 3/900	P900/03	M6TA15GH/2	400 V	3-phase	15	11	22,7	400 - 800 - 1300	52 - 39 - 9	3"	1636	817	146	3	77,2
IDROSAND+ 4/900	P900/04	M6TA20/2	400 V	3-phase	20	15	29,5	400 - 800 - 1300	73 - 56 - 14	3"	1784	857	146	3	83,4
IDROSAND+ 5/900	P900/05	M6TA25/2	400 V	3-phase	25	18,5	37,7	400 - 800 - 1300	92 - 71 - 21	3"	1932	897	146	3	89,4
IDROSAND+ 6/900	P900/06	M6TA25/2	400 V	3-phase	25	18,5	37,7	400 - 800 - 1300	109 - 84 - 30	3"	2040	897	146	3	91,1
IDROSAND+ 8/900	P900/08	M6TA40/2	400 V	3-phase	40	30	58,5	400 - 800 - 1300	150 - 115 - 42	3"	2486	1127	146	3	120,4
IDROSAND+ 10/900	P900/10	M6TA50/2	400 V	Trifase	50	37	74	400 - 800 - 1300	187 - 144 - 52	3"	2842	1267	146	3	139,1

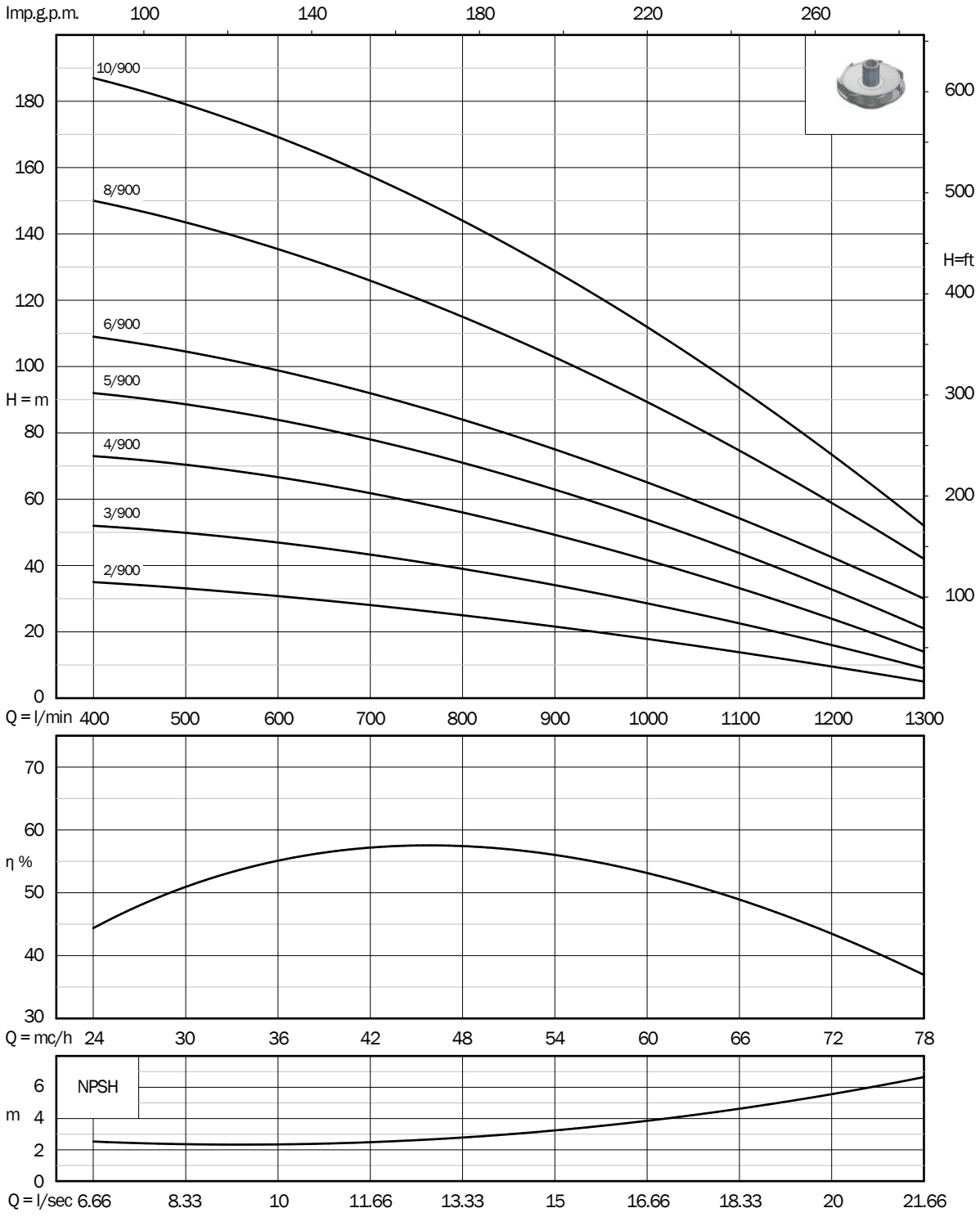
Electric pumps supplied with 4" 'S' series motors up to 7,5 kW

OPTIONS FOR 6" MOTORS

Version for star-delta motors 400/690 V
Version with brass motor body



PERFORMANCE CURVES - 2 poles 60 Hz



CV

External electric pumps CV
vertical multistage

APPLICATION

To pump water from reservoirs or tanks

To pressurize civil, agricultural and industrial plants

Irrigation

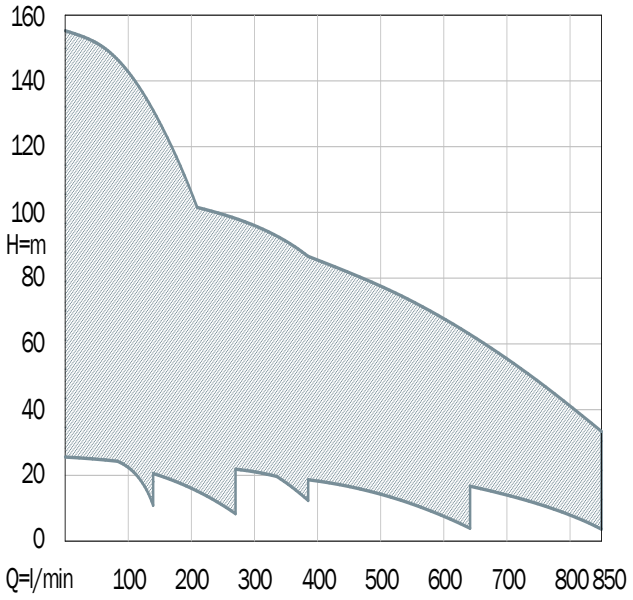
To feed boilers

To convey water for heating, cooling and conditioning plants

CHARACTERISTICS

IP rating	IP54
Duty	Continuous S1
Maximum number of starts per hour	20
Maximum temperature of the liquid pumped (°C)	80
PH of the liquid pumped	6 - 10
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

400 V Motors in efficiency class IE3

External ventilation

MATERIALS

Suction body and discharge	Mechanical Cast iron EN GJL-200
Pump casing, tie rods, bolts and nuts	Stainless Steel AISI304
Shaft	Stainless Steel AISI420B
Impellers and diffusers	Noryl® reinforced with fibre-glass, certified for drinking water and AISI304 stainless steel wear rings
Coupling	Mechanical Cast iron EN GJL-200
Guide ball bearing	Self-lubricating bronze
Mechanical seal	Graphite and Alumina
Diffuser bush	Anti fiction rubber (series 700)

External electric pumps CV
vertical multistage

PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	P2		1~230 V		3~400 V	DNA	Q	Flow													
							m³/h	0	2,4	4,2	5,4	6	7,2	8,4	9	10,2	11,4	13,8	16,2	18	21,6	23,4
	hp	kW	A	µF	A	DNM	l/min	0	40	70	90	100	120	140	150	170	190	230	270	300	360	390
SERIES 110																						
CV 3/110	1	0,75	4,9	25	1,8	1"½	H (m)	38	35	31	27	25	20	13								
CV 4/110	1,5	1,1	7,4	25	2,9	1"½		51	47	41	36	33	26	18								
CV 6/110	2	1,5			3,3	1"½		76	71	62	54	49	39	26								
CV 9/110	3	2,2			4,85	1"½		114	106	93	81	74	59	39								
CV 12/110	4	3			6	1"½		153	142	124	108	98	78	53								
SERIES 230																						
CV 2/230	1,5	1,1	7,4	25	2,9	1"½	H (m)	28				26	25	23	22	21	19	15	10			
CV 3/230	2	1,5			3,3	1"½		42				39	37	35	34	31	29	23	15			
CV 4/230	3	2,2			4,85	1"½		55				52	50	47	45	42	38	30	20			
CV 6/230	4	3			6	1"½		82				77	74	69	67	62	57	46	30			
CV 8/230	5,5	4			8,4	1"½		112				105	101	94	91	84	78	62	39			
CV 11/230	7,5	5,5			10,1	1"½		152				144	137	126	122	114	104	81	54			
SERIES 330																						
CV 3/330	3	2,2			4,85	1"½	H (m)	43							38	37	36	33	30	27	20	15
CV 4/330	4	3			6	1"½		58							51	50	48	44	39	35	26	20
CV 5/330	5,5	4			8,4	1"½		73							65	62	60	56	51	46	33	25
CV 7/330	7,5	5,5			10,1	1"½		100							87	84	82	76	69	62	45	35

PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	P2		3~400 V	DNA	DNM	Q	Flow												
						m³/h	0	9	15	18	21	24	27	30	33	36	39	42	48
	hp	kW	A			l/min	0	150	250	300	350	400	450	500	550	600	650	700	800
SERIES 530																			
CV 2/530	4	3	6	2"½	2"	H (m)	29	27	26	24	23	21	19	16	13	9	5		
CV 3/530	5,5	4	8,4	2"½	2"		44	41	38	37	35	32	28	24	19	14	8		
CV 4/530	7,5	5,5	10,1	2"½	2"		58	54	52	50	47	42	37	30	23	16	8		
CV 6/530	10	7,5	14,3	2"½	2"		87	81	76	72	68	63	57	49	40	30	18		
CV 7/530	12,5	9,2	17,7	2"½	2"		102	95	90	85	81	74	66	55	44	32	18		

Semi-axial impeller	P2		3~400 V	DNA	DNM	Q	Flow												
						m³/h	0	9	15	18	21	24	27	30	33	36	39	42	48
	hp	kW	A			l/min	0	150	250	300	350	400	450	500	550	600	650	700	800
SERIES 700																			
CV 2/700	5,5	4	8,4	2"½	2"	H (m)	40			33	32	31	29	27	26	23	21	18	11
CV 3/700	7,5	5,5	10,1	2"½	2"		60			50	48	46	44	41	38	35	31	27	17
CV 4/700	10	7,5	14,3	2"½	2"		80			66	64	62	59	55	51	46	41	35	22
CV 5/700	12,5	9,2	17,7	2"½	2"		101			83	80	77	74	69	64	58	51	44	28

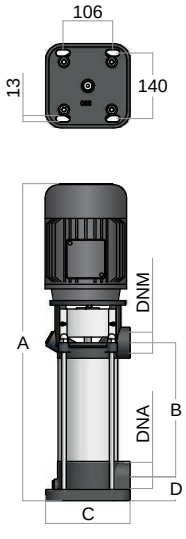
External electric pumps CV series 110
vertical multistage

PERFORMANCE DATA - 2 poles 60 Hz

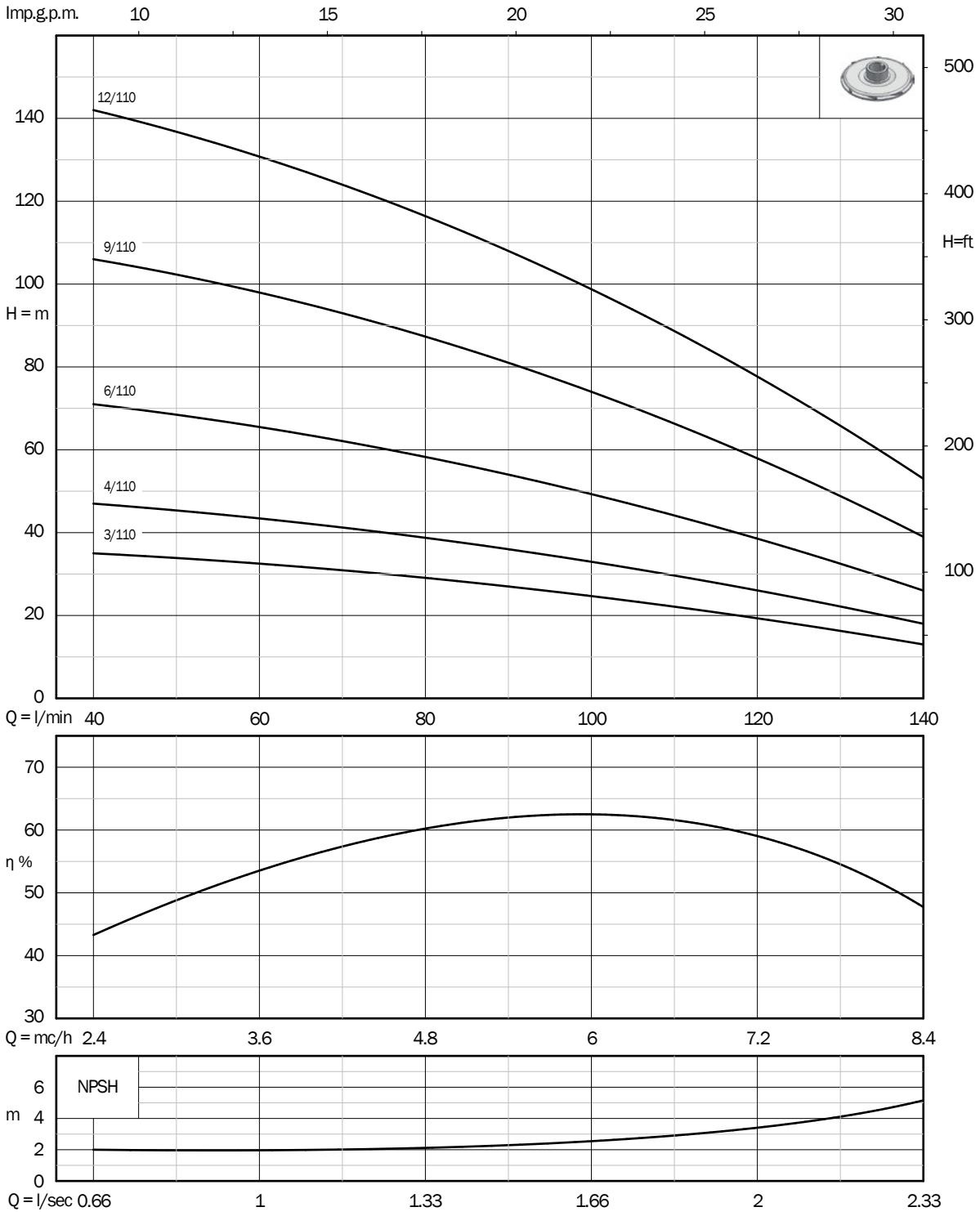
Radial impeller	Code	Version		P2		A	Flow		DNA	Dimensions (mm)				Weight
				hp	kW		l/min	m	DNM	A	B	C	D	kg
CV 3/110	EMZ110/03	230 V	1-phase	1	0,75	4,9	40 - 90 - 140	35 - 27 - 13	1"½	662	286	180	51	20
	ETZ110/03/2	400 V	3-phase			1,8				667				22,2
CV 4/110	EMZ110/04	230 V	1-phase	1,5	1,1	7,4	40 - 90 - 140	47 - 36 - 18	1"½	662	286	180	51	21,5
	ETZ110/04/2	400 V	3-phase			2,9				667				22,2
CV 6/110	ETZ110/06/2	400 V	3-phase	2	1,5	3,3	40 - 90 - 140	71 - 54 - 26	1"½	667	286	180	51	22,2
CV 9/110	ETZ110/09/2	400 V	3-phase	3	2,2	4,85	40 - 90 - 140	106 - 81 - 39	1"½	804	376	180	51	31,2
CV 12/110	ETZ110/12/2	400 V	3-phase	4	3	6	40 - 90 - 140	142 - 108 - 53	1"½	928	466	180	51	40,4

SUPPLIED WITH

Capacitor (single-phase versions)



PERFORMANCE CURVES - 2 poles 60 Hz



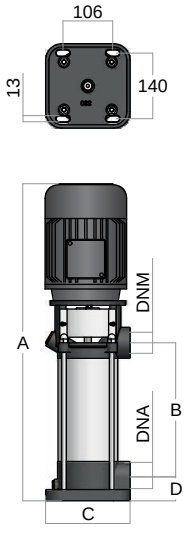
External electric pumps CV series 230
vertical multistage

PERFORMANCE DATA - 2 poles 60 Hz

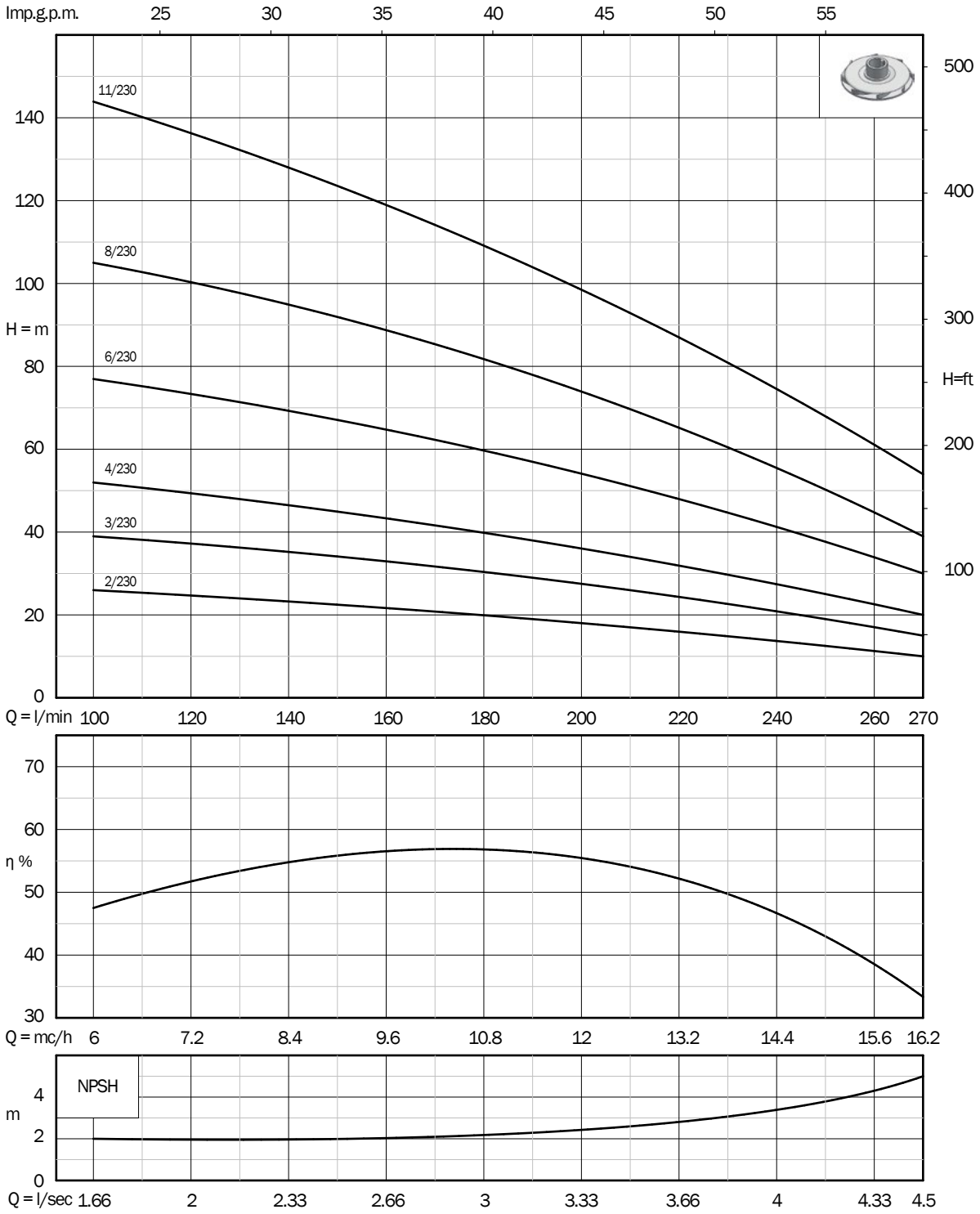
Radial impeller	Code	Version		P2		A	Flow		DNA	Dimensions (mm)				Weight
				hp	kW		l/min	m	DNM	A	B	C	D	kg
CV 2/230	EMZ230/02	230 V	1-phase	1,5	1,1	7,4	100 - 190 - 270	26 - 19 - 10	1"½	662	286	180	51	23,4
	ETZ230/02/2	400 V	3-phase			2,9				667				24,1
CV 3/230	ETZ230/03/2	400 V	3-phase	2	1,5	3,3	100 - 190 - 270	39 - 29 - 15	1"½	667	286	180	51	24,1
CV 4/230	ETZ230/04/2	400 V	3-phase	3	2,2	4,85	100 - 190 - 270	52 - 38 - 20	1"½	714	286	180	51	29,5
CV 6/230	ETZ230/06/2	400 V	3-phase	4	3	6	100 - 190 - 270	77 - 57 - 30	1"½	784	322	180	51	37,9
CV 8/230	ETZ230/08/2	400 V	3-phase	5,5	4	8,4	100 - 190 - 270	105 - 78 - 39	1"½	858	394	180	51	37,8
CV 11/230	ETZ230/11/2	400 V	3-phase	7,5	5,5	10,1	100 - 190 - 270	144 - 104 - 54	1"½	975	502	180	51	51,5

SUPPLIED WITH

Capacitor (single-phase versions)



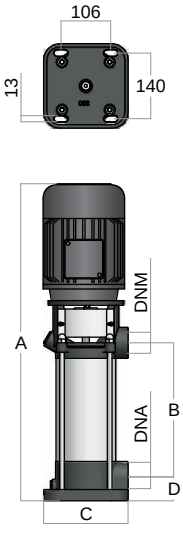
PERFORMANCE CURVES - 2 poles 60 Hz



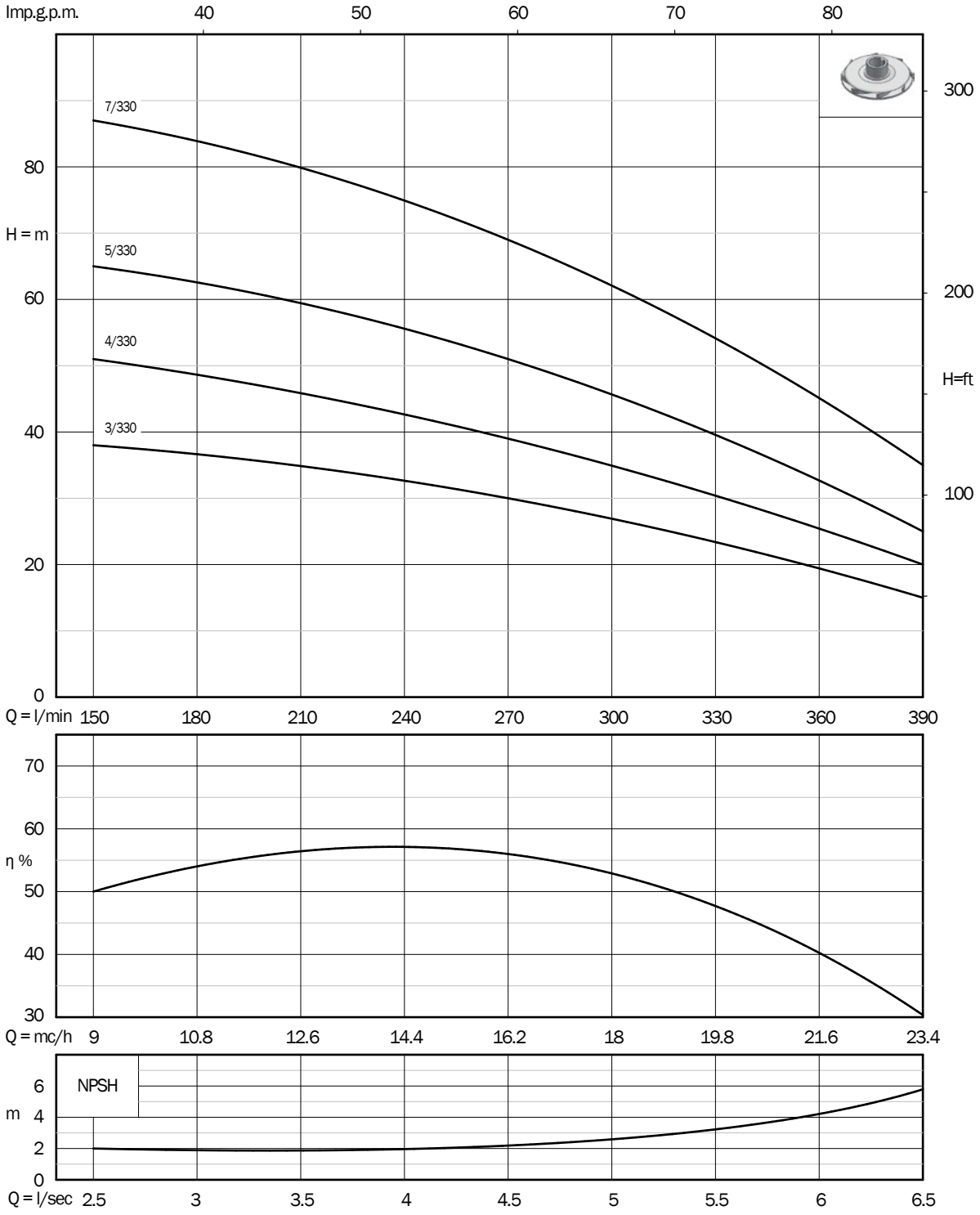
External electric pumps CV series 330
vertical multistage

PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Code	Version		P2		A	Flow		DNA	Dimensions (mm)				Weight
				hp	kW		l/min	m	DNM	A	B	C	D	kg
CV 3/330	ETZ330/03/2	400 V	3-phase	3	2,2	4,85	150 - 270 - 390	38 - 30 - 15	1"½	714	286	180	51	30,3
CV 4/330	ETZ330/04/2	400 V	3-phase	4	3	6	150 - 270 - 390	51 - 39 - 20	1"½	748	286	180	51	36,4
CV 5/330	ETZ330/05/2	400 V	3-phase	5,5	4	8,4	150 - 270 - 390	65 - 51 - 25	1"½	750	286	180	51	36,4
CV 7/330	ETZ330/07/2	400 V	3-phase	7,5	5,5	10,1	150 - 270 - 390	87 - 69 - 35	1"½	831	358	180	51	48,8



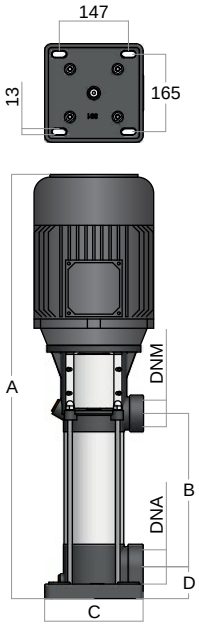
PERFORMANCE CURVES - 2 poles 60 Hz



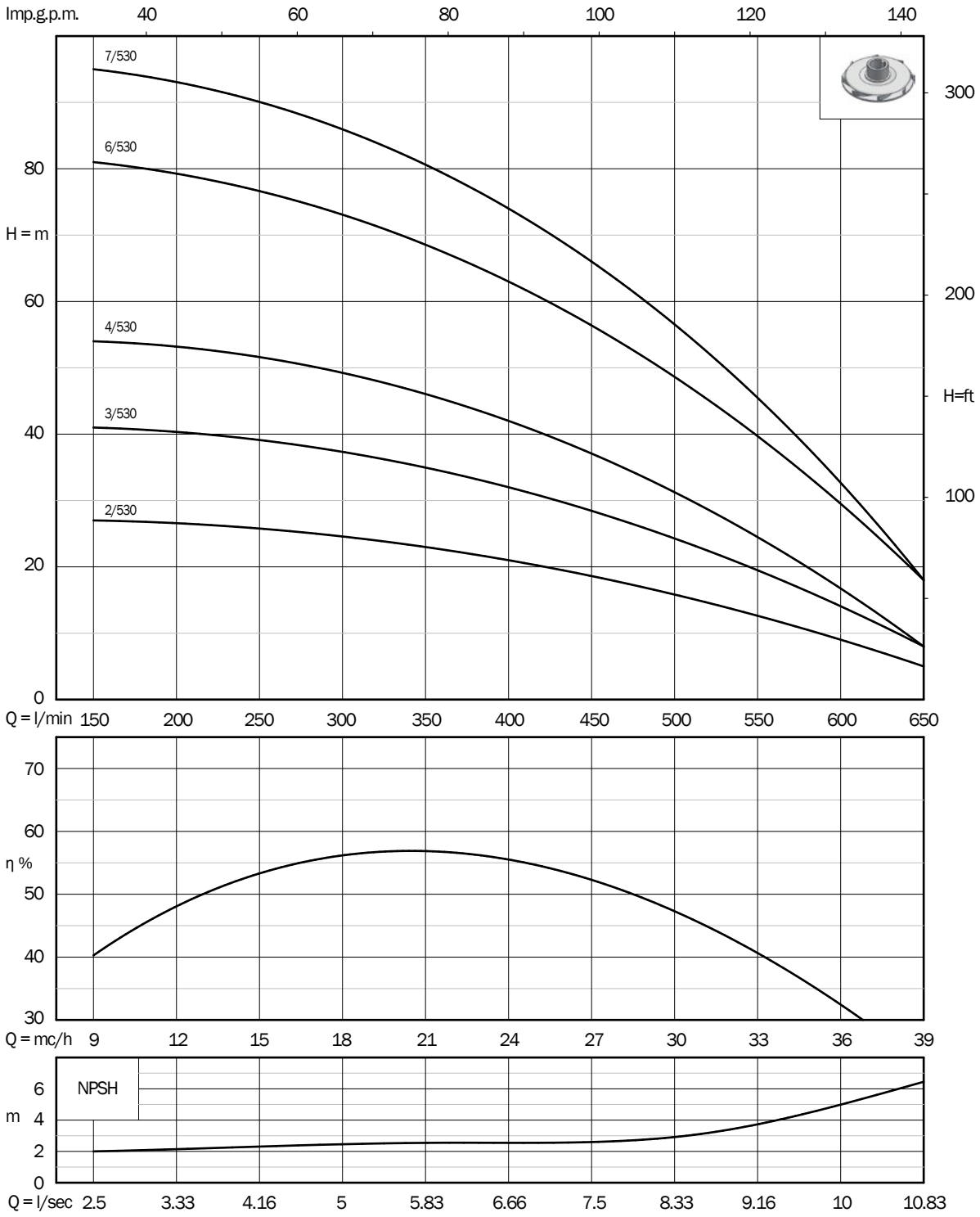
External electric pumps CV series 530
vertical multistage

PERFORMANCE DATA - 2 poles 60 Hz

Radial impeller	Code	Version		P2		A	Flow		DNA	DNM	Dimensions (mm)				Weight
				hp	kW		l/min	m			A	B	C	D	kg
CV 2/530	ETZ530/02/2	400 V	3-phase	4	3	6	150 - 400 - 650	27 - 21 - 5	2"½	2"	789	327	200	68	42,4
CV 3/530	ETZ530/03/2	400 V	3-phase	5,5	4	8,4	150 - 400 - 650	41 - 32 - 8	2"½	2"	791	327	200	68	42,4
CV 4/530	ETZ530/04/2	400 V	3-phase	7,5	5,5	10,1	150 - 400 - 650	54 - 42 - 8	2"½	2"	800	327	200	68	53,7
CV 6/530	ETZ530/06/2	400 V	3-phase	10	7,5	14,3	150 - 400 - 650	81 - 63 - 18	2"½	2"	1027	427	200	68	66,2
CV 7/530	ETZ530/07/2	400 V	3-phase	12,5	9,2	17,7	150 - 400 - 650	95 - 74 - 18	2"½	2"	1165	527	200	68	70



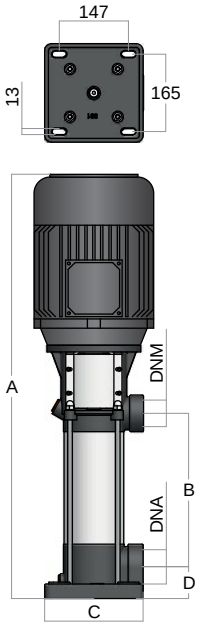
PERFORMANCE CURVES - 2 poles 60 Hz



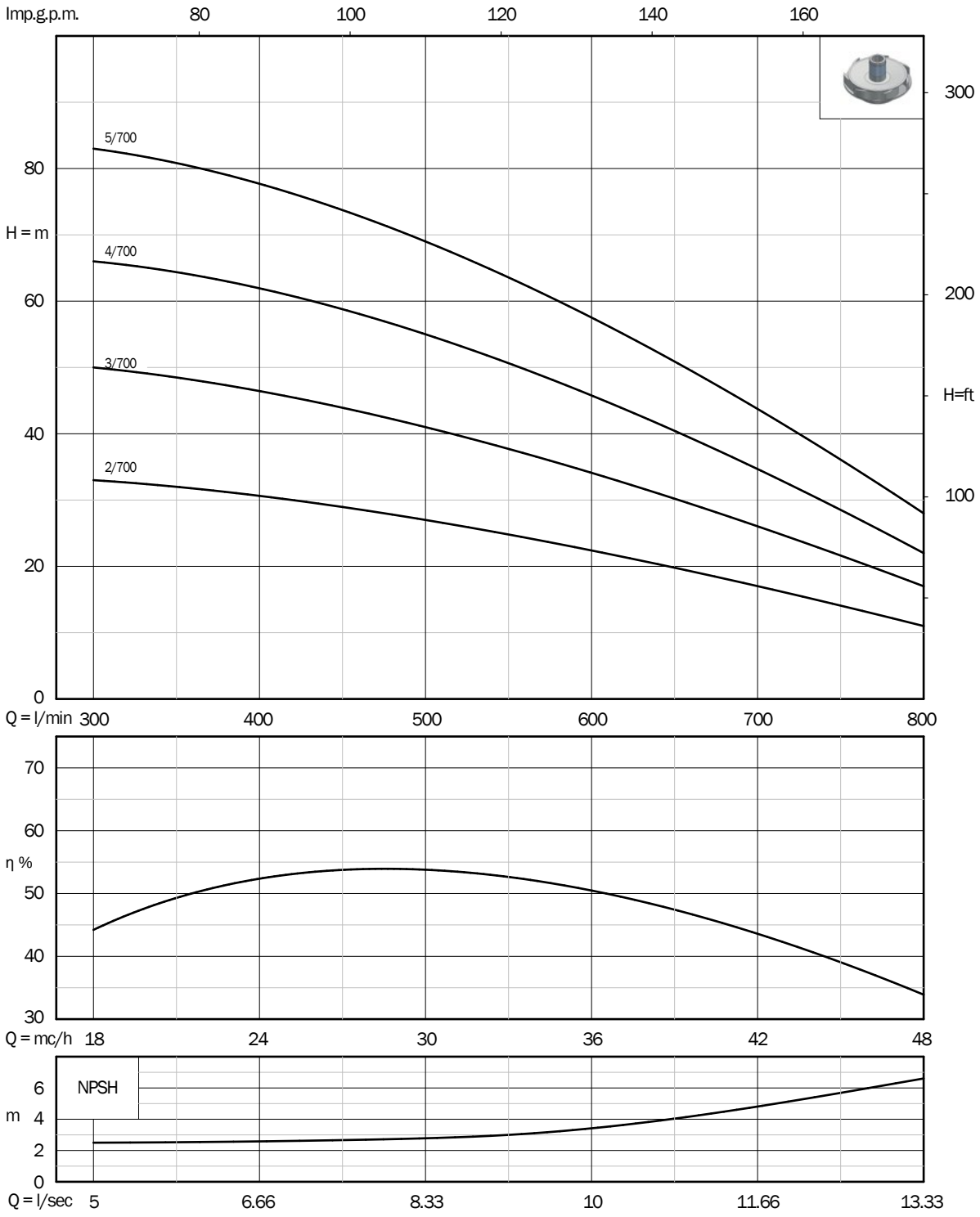
External electric pumps CV series 700
vertical multistage

PERFORMANCE DATA - 2 poles 60 Hz

Semi-axial impeller	Code	Version		P2		A	Flow		DNA	DNM	Dimensions (mm)				Weight
				hp	kW		l/min	m			A	B	C	D	kg
CV 2/700	ETZ700/02/2	400 V	3-phase	5,5	4	8,4	300 - 500 - 800	33 - 27 - 11	2"½	2"	897	361	200	68	43,5
CV 3/700	ETZ700/03/2	400 V	3-phase	7,5	5,5	10,1	300 - 500 - 800	50 - 41 - 17	2"½	2"	906	361	200	68	54,8
CV 4/700	ETZ700/04/2	400 V	3-phase	10	7,5	14,3	300 - 500 - 800	66 - 55 - 22	2"½	2"	1117	517	200	68	66,6
CV 5/700	ETZ700/05/2	400 V	3-phase	12,5	9,2	17,7	300 - 500 - 800	83 - 69 - 28	2"½	2"	1155	517	200	68	70



PERFORMANCE CURVES - 2 poles 60 Hz



G-CV
GI-CV

Automatic booster sets

APPLICATION

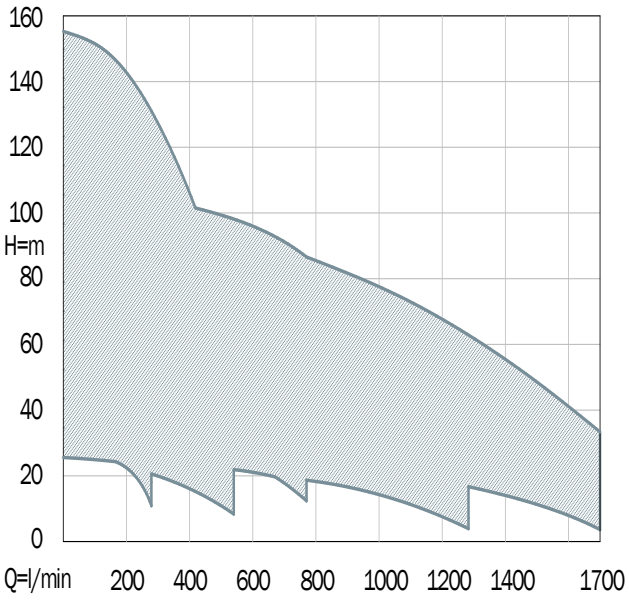
To pressurize civil, agricultural and industrial plants

Irrigation

CHARACTERISTICS

IP rating	IP54
Duty	Continuous S1
Ambient temperature (°C)	-5/+40
Maximum number of starts per hour	20
Maximum temperature of the liquid pumped (°C)	80
PH of the liquid pumped	6 - 10
To be installed in a sheltered place	

APPLICATION RANGE



MATERIALS

Suction body and discharge	Mechanical cast iron EN GJL-200
Pump casing, tie rods, bolt and nuts	Stainless steel AISI304
Shaft	Stainless steel AISI420B
Impellers and diffusers	Noryl® reinforced with fibre-glass, certified for drinking water and AISI304 stainless steel wear rings
Coupling	Mechanical cast iron EN GJL-200
Guide ball bearing	Self-lubricating bronze
Mechanical seal	Graphite and alumina
Diffuser bush	Anti-friction rubber (series 700)
Inlet manifold	Zinc-plated steel
Discharge manifold	Zinc-plated steel
Base and frame	Zinc-plated steel

Automatic booster sets G-CV

CHARACTERISTICS

P2		Q	H
hp	kW	l/min	m
from 1 to 45	from 0,75 to 33	from 30 to 2100	from 7 to 148

MAIN COMPONENTS

Two electric pumps CV (three on request)

N° 2 pressure switches installed on the discharge manifold to start and stop the pumps automatically (alternating - duty-assist)

Inlet manifold with non-return check valves, ball valves and facilities for air feeders

Discharge manifold connected to the electric pumps via ball valves

Pressure gauge

The whole set is assembled on one frame

Plastic control panel containing:

- opening interlocked
- hand - off - auto selector switches, one each electric pump
- electronic card that allows level control, overload protection and alternating duty - assist run of the electric pumps
- 24 V transformer 230-400
- 24 V contactors
- set of fuses for motor protection
- fuses on auxiliary circuit

Automatic booster sets GI-CV with inverter

CHARACTERISTICS

P2		Q	H
hp	kW	l/min	m
from 1 to 45	from 0,75 to 33	from 30 to 2100	from 7 to 148

MAIN COMPONENTS

Two electric pumps CV (three on request)

N° 2 pressure trasducers 4÷20 mA installed on the discharge manifold that allow the alternating duty - assist run of the electric pumps (alternating duty: equally distributed according to the actual run-time; assist: according to the request of water)

Inlet manifold with non-return check valves, ball valves and facilities for air feeders

Discharge manifold connected to the electric pumps via ball valves

Pressure gauge

The whole set is assembled on one frame

N° 2 inverters (on the top of the electric pumps) with the following characteristics:

- alarm and protection against dry running
- alarm for low and and maximum pressure
- N.O or N.C, adjustable digital outputs (motor run, alarm, pump control)
- analog inputs 4÷20 mA

Dirty water

SEMISOM

Electric submersible pumps SEMISOM
for grey water

APPLICATION

To expel rainwater and liquids coming from electric household appliances

To drain tanks, cellars and garages

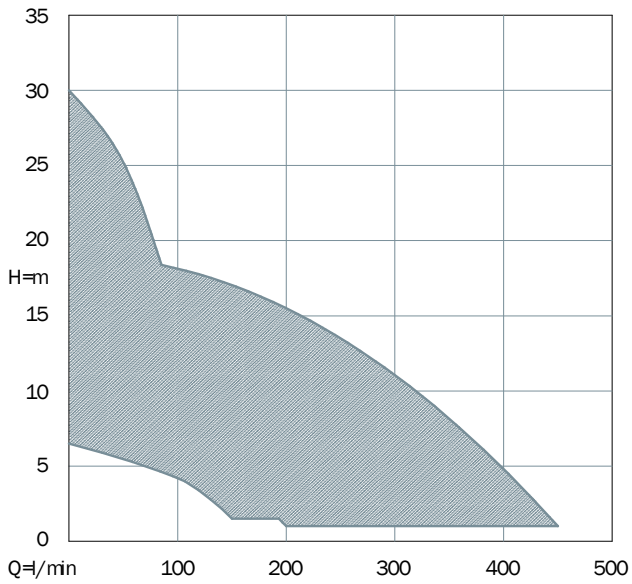
To transfer water from pools and fountains

Irrigation

CHARACTERISTICS

	Semisom
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
Maximum number of starts per hour	40
Maximum temperature of the liquid pumped versions 1~230V - 3~400V (°C)	50
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. Seminox 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 mechanical seal with oil-chamber in-between

MATERIALS

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

Electric submersible pumps SEMISOM
for grey water

PERFORMANCE DATA

Open impeller	P2		1~230 V		3~400 V	24 V DC	Poles	DNM	Solid passage ø	Q	Flow									
			Max		Max	Max				m³/h	0	1,8	6	9	12	15	18	21	24	27
	hp	kW	A	µF	A	A				l/min	0	30	100	150	200	250	300	350	400	450
SEMISOM 190	0,5	0,37	2,45	8		24	2	1"¼	5	H (m)	10,5	9,5	7	4	1					
SEMISOM 320	0,75	0,55	4	12,5	1,7	28	2	1"¼	13		14	13	11,5	10	7,5	5	3			
SEMISOM 465	1,5	1,1	6	20	2,7		2	2"	5		19	18	16	15	13,5	12	10	7,5	5,5	1

Open impeller	P2		1~230 V		3~400 V	24 V DC	Poles	DNM	Solid passage ø	Q	Flow					
			Max		Max	Max				m³/h	0	1,2	2,4	3,6	4,8	6
	hp	kW	A	µF	A	A				l/min	0	20	40	60	80	100
SEMISOM 130	1,5	1,1	7,6	20	2,9		2	1"½	5	H (m)	30	29	26,5	23,5	19,5	15

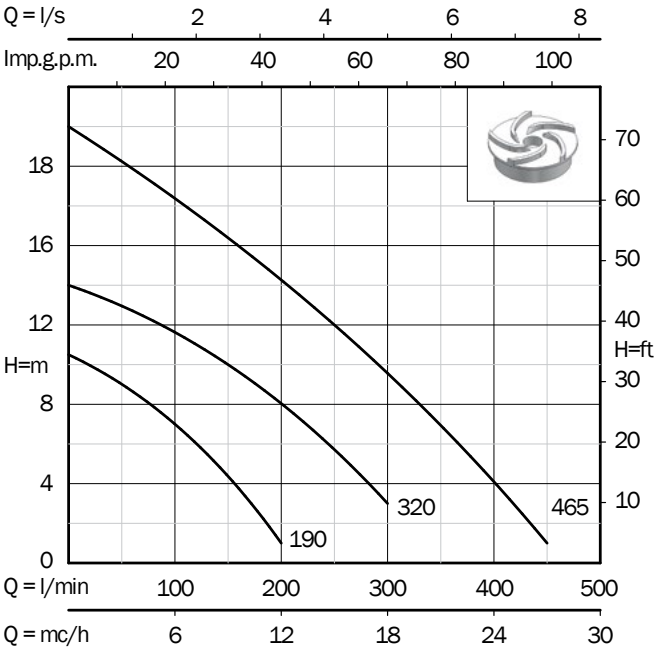
AVAILABLE VERSIONS

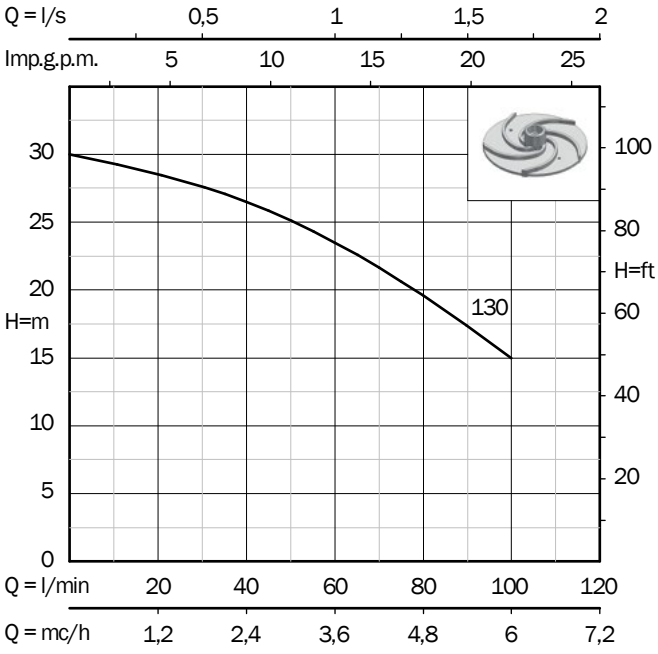
Open impeller	Vertical discharge	Horizontal discharge	Single-phase	Single-phase + Float switch	Single-phase + float and Internal capacitor	Three-phase	Three-phase + float	24 V
			SERIES					
SEMISOM 190	●		VS	VS	VA	VS		VS
SEMISOM 320	●		VS	VS	VA	VS	VA	VS
SEMISOM 465	●		VS	VS	VA	VS	VA	

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





Electric submersible pumps SEMISOM series VA

for grey water, vertical discharge

PERFORMANCE DATA 2 poles 60 Hz

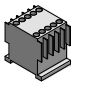
Open impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 190 VA	SMZ190+G/3	230 V	1-phase+float	0,5	0,37	2,45	30 - 150 - 200	9,5 - 4 - 1	5	1"¼	393	50	225	164	12,8
SEMISOM 320 VA	SMZ320+G/3	230 V	1-phase+float	0,75	0,55	4	30 - 200 - 300	13 - 7,5 - 3	13	1"¼	418	50	225	164	14,9
	STZ320+G/2	400 V	3-phase+float			1,7									16,7
SEMISOM 465 VA	SMZ465+G/3	230 V	1-phase+float	1,5	1,1	6	100 - 300 - 450	16 - 10 - 1	5	2"	484	60	250	172	21,8
	STZ465+G/2	400 V	3-phase+float			2,7									23,6

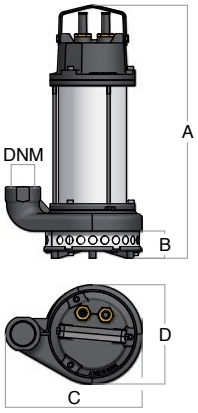
SUPPLIED WITH

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 chamber (three-phase versions)





Electric submersible pumps SEMISOM series VS

for grey water, vertical discharge

PERFORMANCE DATA 2 poles 60 Hz

Open impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 190 VS	SMZ190	230 V	1-phase	0,5	0,37	2,45	30 - 150 - 200	9,5 - 4 - 1	5	1"¼	335	50	225	164	10,8
	SMZ190+G	230 V	1-phase+float												11
SEMISOM 320 VS	SMZ320	230 V	1-phase	0,75	0,55	4	30 - 200 - 300	13 - 7,5 - 3	13	1"¼	360	50	225	164	13
	SMZ320+G	230 V	1-phase+float												13,2
	STZ320	400 V	3-phase			1,7									13
SEMISOM 465 VS	SMZ465	230 V	1-phase	1,5	1,1	6	100 - 300 - 450	16 - 10 - 1	5	2"	440	60	250	172	19,5
	SMZ465+G	230 V	1-phase+float												19,7
	STZ465	400 V	3-phase			2,7									19,5

PERFORMANCE DATA - 24 V DC

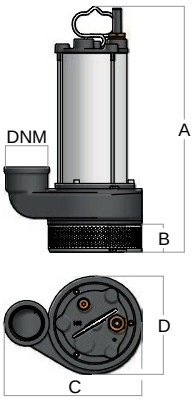
Open impeller	Code	Version		P2		P1	Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 190 VS	SF190	24 V	DC	0,5	0,37	0,58	24	30 - 150 - 200	9,5 - 4 - 1	5	1"¼	385	50	225	164	10,2
SEMISOM 320 VS	SF320	24 V	DC	0,75	0,55	0,67	28	30 - 200 - 300	11 - 5,5 - 0,5	13	1"¼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

Electric submersible pumps SEMISOM series HS

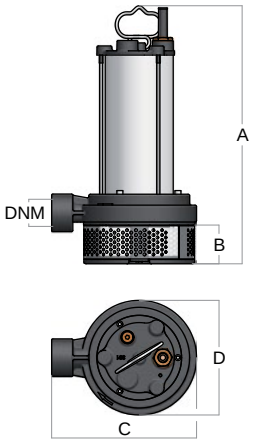
for grey water, horizontal discharge

PERFORMANCE DATA 2 poles 60 Hz

Open impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 130 HS	SMZ130	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
	SMZ130+G	230 V	1-phase+float												22,4
	STZ130	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

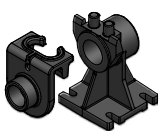
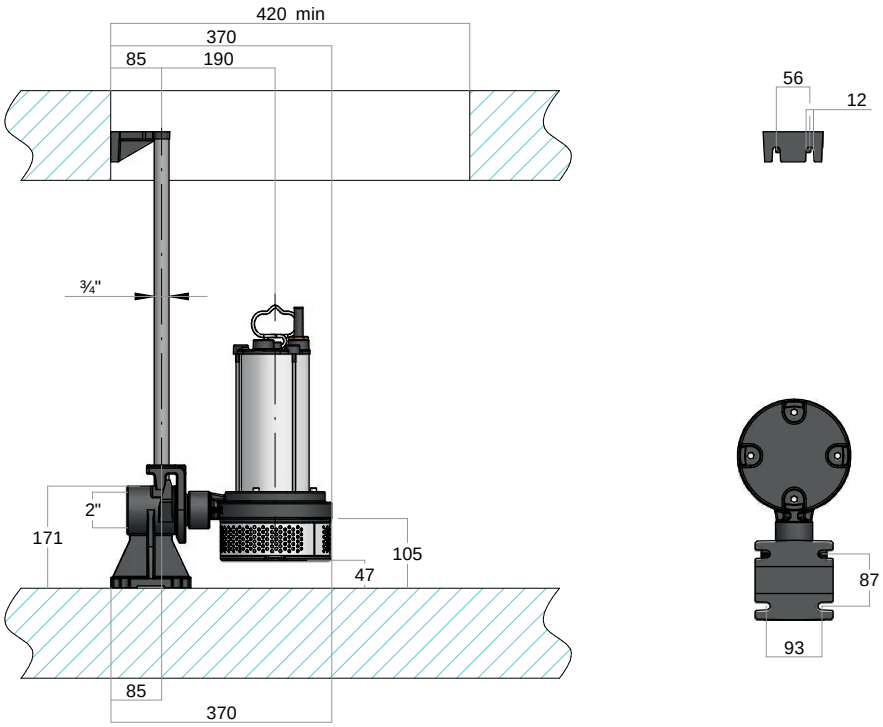
Code	Description	
04105042	Guide rail kit DNM 1"½ (¾" guide poles are not included)	

ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



SEMISOM

Electric submersible pumps SEMISOM
for sewage water

APPLICATION

To expel rain water, convey waste and sewage water from septic tanks

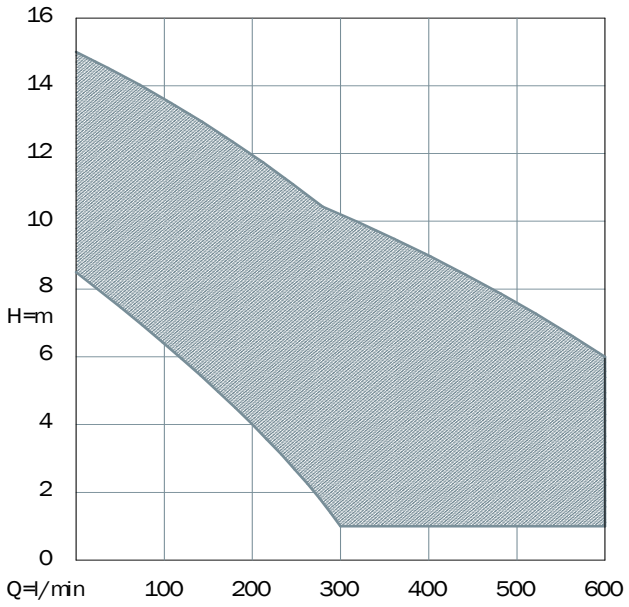
To pump liquids containing solids (vortex or double channel impeller) and filaments (double channel impeller)

To pump sewage keeping its biological process unchanged (Semisom 504 4 poles)

CHARACTERISTICS

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

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

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

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
Mechanical seal	Silicon carbide and alumina
Packing Ring	NBR rubber
Elastomers	NBR rubber
Cable	Neoprene H07RN8-F; 24V DC: Twin Batt

Electric submersible pumps SEMISOM
for sewage water

PERFORMANCE DATA

Vortex Impeller	P2		1~230 V		3~400 V	24 V DC	Poles	DNM	Solid Passage ø	Q	Flow										
	hp	kW	Max A	µF	Max A	Max A				m³/h	0	6	9	12	15	18	21	24	27	30	36
										l/min	0	100	150	200	250	300	350	400	450	500	600
SEMISOM 265	0,75	0,55	4,2	12,5	1,7	28	2	1"½	40	H (m)	8,2	6	5	4	2,7	1,5					
SEMISOM 290	0,75	0,55	4,2	12,5	1,7		2	2"	50		8,5	7	6,5	5,5	4,5	3,5	2,5	1			
SEMISOM 390	1	0,75	5,5	16	2,3		2	2"	50		10	8,5	8	7	6	5	4	3	2	1	
NEW SEMISOM 504	1	0,75	5,6	16	2,3		4	2"	50		6,2	6	5,8	5,7	5,3	4,9	4,6	4,2	3,7	3,1	
SEMISOM 490	1,5	1,1	7,3	20	2,7		2	2"	50		11	9,5	9	8	7,5	6,5	5,5	5	4	3	1
SEMISOM 590	2	1,5	10,5	31,5	4,1		2	2"	50		14,5	13	12,5	11,5	11	10	9	8	7,5	6,5	5
SEMISOM 650	2	1,5	10,2	25	3,8		2	2"½	65		9	8	7,5	7	6,5	6	5,5	4,9	4,4	3,8	2,7
NEW SEMISOM 650 H	2	1,5	12,2	25	4,4		2	2"½	65		12,7	11,6	11	10,5	10	9,4	8,8	8,1	7,4	6,8	6

Channel impeller	P2		1~230 V		3~400 V	24 V DC	Poles	DNM	Solid Passage ø	Q	Flow										
	hp	kW	Max A	µF	Max A	Max A				m³/h	0	6	9	12	15	18	21	24	27	30	36
										l/min	0	100	150	200	250	300	350	400	450	500	600
SEMISOM 262	0,75	0,55	4	12,5	1,7	28	2	2"	32	H (m)	13	11	10	9	7,5	6,5	5	4	3		
SEMISOM 635	1,5	1,1	6	20	2,7		2	2"	32		16,5	14,5	13,5	12,5	11,5	10,5	9	8	6,5	5,5	1,5

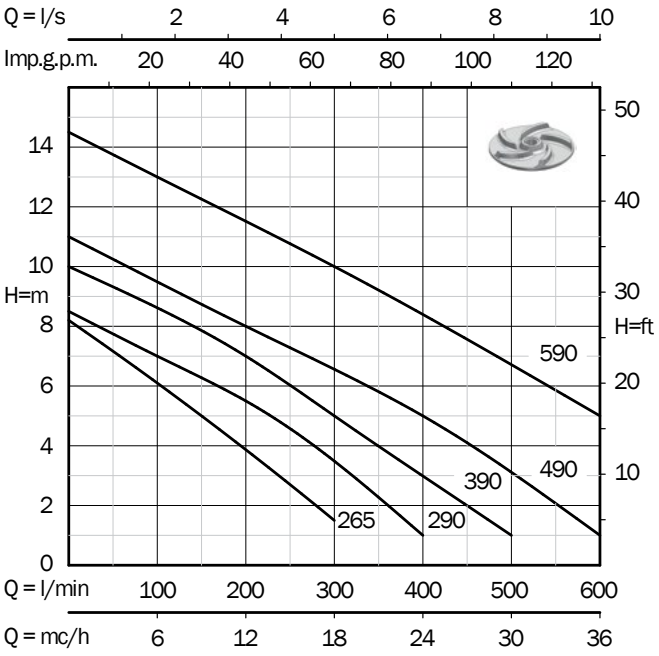
AVAILABLE VERSIONS

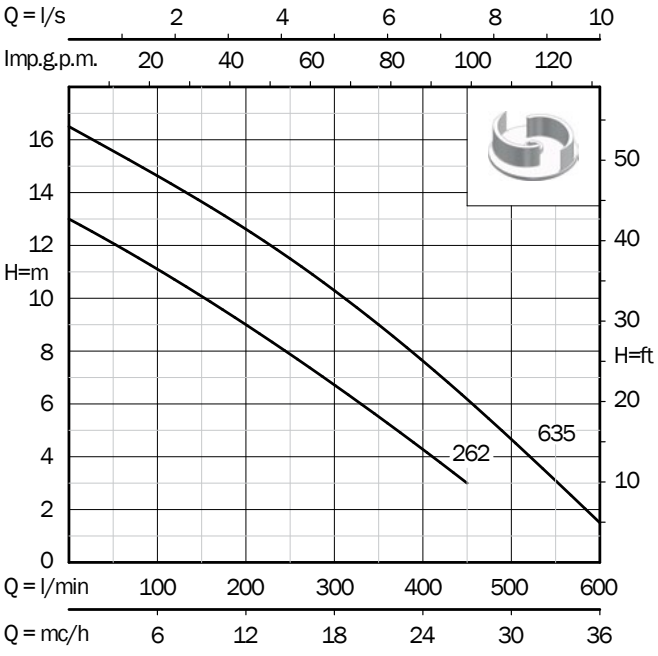
Vortex Impeller	Vertical discharge	Horizontal discharge	Rail	Single-phase	Single-phase + Float switch	Single-phase + float. and Internal capacitor	Three-phase	Three-phase + float	24 V
				SERIES					
SEMISOM 265	●			VS	VS	VA	VS	VA	VS
SEMISOM 290		●		HS	HS	HA	HS		
SEMISOM 390	●			VS	VS	VA	VS	VA	
		●		HS	HS	HA	HS		
NEW SEMISOM 504		●		HS	HS		HS		
SEMISOM 490	●			VS	VS	VA	VS	VA	
		●		HS	HS	HA	HS		
SEMISOM 590		●		HS	HS		HS		
SEMISOM 650			●	RS	RS		RS		
NEW SEMISOM 650 H			●	RS	RS		RS		

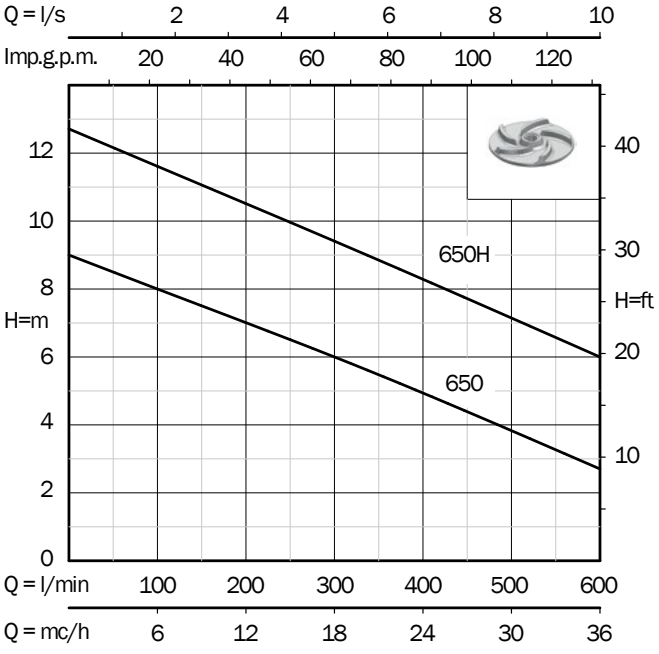
Channel impeller	Vertical discharge	Horizontal discharge	Rail	Single-phase	Single-phase + Float switch	Single-phase + float. and Internal capacitor	Three-phase	Three-phase + float	24 V
				SERIES					
SEMISOM 262	●			VS	VS	VA	VS	VA	VS
SEMISOM 635	●			VS	VS	VA	VS	VA	
		●		HS	HS	HA	HS		

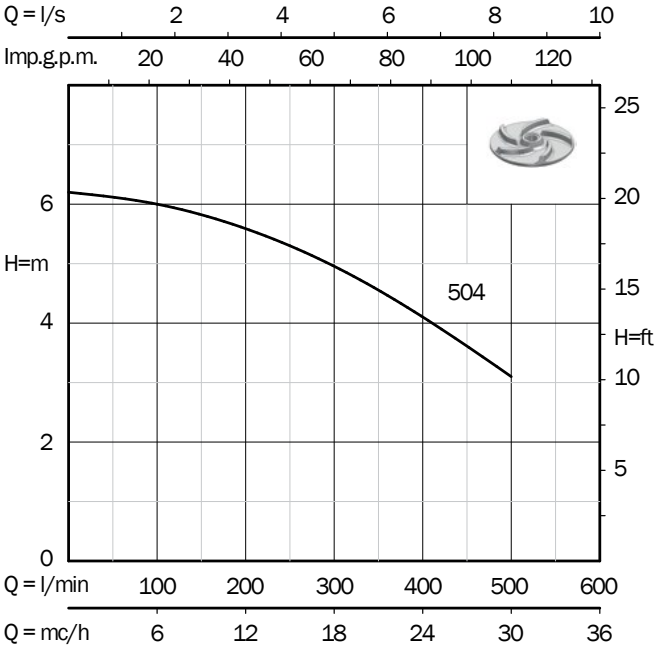
V = Vertical discharge; H = Horizontal discharge; R = Rail
S = Standard version; A = Automatic version

PERFORMANCE CURVES









Electric submersible pumps SEMISOM series VA

for sewage water, vertical discharge

PERFORMANCE DATA 2 poles 60 Hz

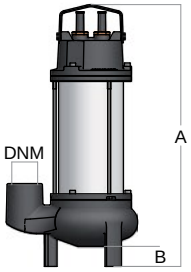
Vortex Impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 265 VA	SMZ265+GGH/3	230 V	1-phase+float	0,75	0,55	4,2	30 - 150 - 300	7,5 - 5 - 1,5	40	1"½	454	50	230	162	16,5
	STZ265+GGH/2	400 V	3-phase+float			1,7									18,3
SEMISOM 390 VA	SMZ390+G/3	230 V	1-phase+float	1	0,75	5,5	100 - 250 - 500	8,5 - 6 - 1	50	2"	502	65	235	162	17,7
	STZ390+G/2	400 V	3-phase+float			2,3									19,5
SEMISOM 490 VA	SMZ490+G/3	230 V	1-phase+float	1,5	1,1	7,3	100 - 250 - 600	9,5 - 7,5 - 1	50	2"	527	65	235	162	19,5
	STZ490+G/2	400 V	3-phase+float			2,7									21,3

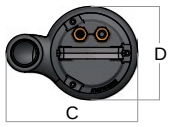
SUPPLIED WITH

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 chamber (three-phase versions)





PERFORMANCE DATA 2 poles 60 Hz

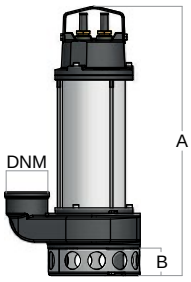
Channel impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 262 VA	SMZ262+G/3	230 V	1-phase+float	0,75	0,55	4	30 - 200 - 450	12 - 9 - 3	32	2"	450	60	250	172	19,1
	STZ262+G/2	400 V	3-phase+float			1,7									20,9
SEMISOM 635 VA	SMZ635+G/3	230 V	1-phase+float	1,5	1,1	6	30 - 350 - 600	16 - 9 - 1,5	32	2"	484	60	250	172	21,3
	STZ635+G/2	400 V	3-phase+float			2,7									23,1

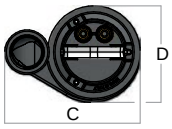
SUPPLIED WITH

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 chamber (three-phase versions)





Electric submersible pumps SEMISOM series VS

for sewage water, vertical discharge

PERFORMANCE DATA 2 poles 60 Hz

Vortex Impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 265 VS	SMZ265GH	230 V	1-phase	0,75	0,55	4,2	30 - 150 - 300	7,5 - 5 - 1,5	40	1"½	400	50	230	162	14
	SMZ265+GGH	230 V	1-phase+float												14,2
	STZ265GH	400 V	3-phase			1,7									14
SEMISOM 390 VS	SMZ390	230 V	1-phase	1	0,75	5,5	100 - 250 - 500	8,5 - 6 - 1	50	2"	450	65	235	162	15,7
	SMZ390+G	230 V	1-phase+float												15,9
	STZ390	400 V	3-phase			2,3									15,7
SEMISOM 490 VS	SMZ490	230 V	1-phase	1,5	1,1	7,3	100 - 250 - 600	9,5 - 7,5 - 1	50	2"	474	65	235	162	16,5
	SMZ490+G	230 V	1-phase+float												16,7
	STZ490	400 V	3-phase			2,7									16,5

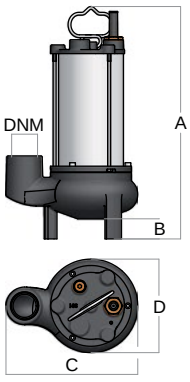
PERFORMANCE DATA - 24 V DC

Vortex Impeller	Code	Version		P2		P1	Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 265 VS	SF265	24 V	DC	0,75	0,55	0,67	28	30 - 150 - 300	8 - 5,5 - 1	40	1"½	400	50	230	162	13

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 DC versions)	

PERFORMANCE DATA 2 poles 60 Hz

Channel impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 262 VS	SMZ262	230 V	1-phase	0,75	0,55	4	30 - 200 - 450	12 - 9 - 3	32	2"	400	60	250	172	16,7
	SMZ262+G	230 V	1-phase+float												16,9
	STZ262	400 V	3-phase			1,7									16,7
SEMISOM 635 VS	SMZ635	230 V	1-phase	1,5	1,1	6	30 - 350 - 600	16 - 9 - 1,5	32	2"	440	60	250	172	19,3
	SMZ635+G	230 V	1-phase+float												19,5
	STZ635	400 V	3-phase			2,7									19,3

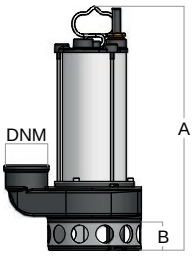
PERFORMANCE DATA - 24 V DC

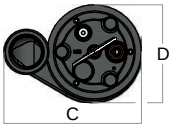
Channel impeller	Code	Version		P2		P1	Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 262 VS	SF262	24 V	DC	0,75	0,55	0,67	28	30 - 200 - 400	10 - 7 - 1	32	2"	400	60	250	172	15,3

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 DC versions)	

Electric submersible pumps SEMISOM series HA

for sewage water, horizontal discharge

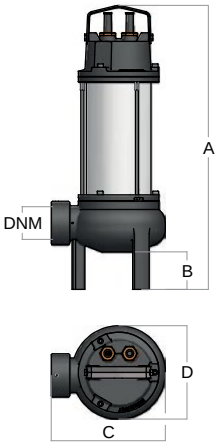
PERFORMANCE DATA 2 poles 60 Hz

Vortex Impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 290 HA	SMZ290+GO/3	230 V	1-phase+float	0,75	0,55	4,2	100 - 200 - 400	7 - 5,5 - 1	50	2"	492	65	198	162	16,4
SEMISOM 390 HA	SMZ390+GO/3	230 V	1-phase+float	1	0,75	5,5	100 - 250 - 500	8,5 - 6 - 1	50	2"	502	65	198	162	17,5
SEMISOM 490 HA	SMZ490+GO/3	230 V	1-phase+float	1,5	1,1	7,3	100 - 250 - 600	9,5 - 7,5 - 1	50	2"	526	65	198	162	18,8

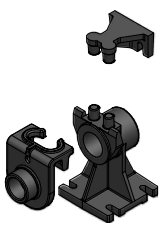
SUPPLIED WITH

10 meters power cable

Capacitor and thermal protector put in a separate, easy-accessible, water tight chamber



ACCESSORIES

Code	Description
04105043	Guide rail kit DNM 2" (¾" guide poles are not included) 

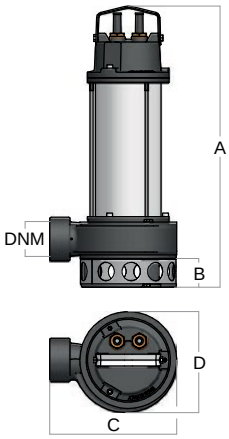
PERFORMANCE DATA 2 poles 60 Hz

Channel impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 635 HA	SMZ635+GO/3	230 V	1-phase+float	1,5	1,1	6	30 - 350 - 600	16 - 9 - 1,5	32	2"	484	60	220	172	22

SUPPLIED WITH

10 meters power cable

Capacitor and thermal protector put in a separate, easy-accessible, water tight chamber



ACCESSORIES

Code	Description
04105043	Guide rail kit DNM 2" (¾" guide poles are not included)

Electric submersible pumps SEMISOM series HS

for sewage water, horizontal discharge

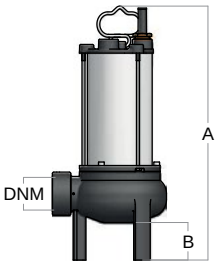
PERFORMANCE DATA 2 poles 60 Hz

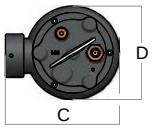
Vortex Impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 290 HS	SMZ2900	230 V	1-phase	0,75	0,55	4,2	100 - 200 - 400	7 - 5,5 - 1	50	2"	440	65	198	162	14,4
	SMZ290+G0	230 V	1-phase+float												14,6
	STZ2900	400 V	3-phase			1,7									14,4
SEMISOM 390 HS	SMZ3900	230 V	1-phase	1	0,75	5,5	100 - 250 - 500	8,5 - 6 - 1	50	2"	450	65	198	162	15,7
	SMZ390+G0	230 V	1-phase+float												15,9
	STZ3900	400 V	3-phase			2,3									15,7
SEMISOM 490 HS	SMZ4900	230 V	1-phase	1,5	1,1	7,3	100 - 250 - 600	9,5 - 7,5 - 1	50	2"	474	65	198	162	16,5
	SMZ490+G0	230 V	1-phase+float												16,7
	STZ4900	400 V	3-phase			2,7									16,5
SEMISOM 590 HS	SMZ5900	230 V	1-phase	2	1,5	10,5	100 - 300 - 600	13 - 10 - 5	50	2"	496	65	198	162	18,2
	SMZ590+G0	230 V	1-phase+float												18,4
	STZ5900	400 V	3-phase			4,1									18,2

SUPPLIED WITH

10 meters power cable

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





ACCESSORIES

Code	Description	
04105043	Guide rail kit DNM 2" (¾" guide poles are not included)	

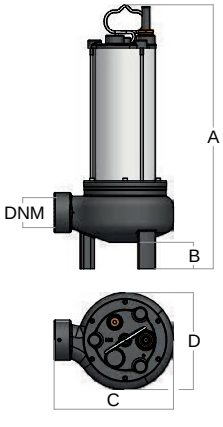
PERFORMANCE DATA 4 poles 60 Hz

Vortex Impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
NEW SEMISOM 504 HS	SMZ5040	230 V	1-phase	1	0,75	5,6	100 - 250 - 500	6 - 5,3 - 3,1	50	2"	498	50	225	171	20,2
	SMZ504+G0	230 V	1-phase+float												20,4
	STZ5040	400 V	3-phase			2,3									20,2

SUPPLIED WITH

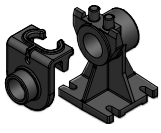
10 meters power cable

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



ACCESSORIES

Code	Description
04105043	Guide rail kit DNM 2" (¾" guide poles are not included)



Electric submersible pumps SEMISOM series HS

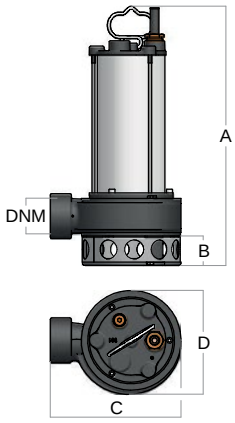
for sewage water, horizontal discharge

PERFORMANCE DATA 2 poles 60 Hz

Channel impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 635 HS	SMZ6350	230 V	1-phase	1,5	1,1	6	30 - 350 - 600	16 - 9 - 1,5	32	2"	440	60	220	172	20,1
	SMZ635+GO	230 V	1-phase+float												20,3
	STZ6350	400 V	3-phase			2,7									20,1

SUPPLIED WITH

10 meters power cable	
Control box containing capacitor and amperometric protection (single-phase versions)	



ACCESSORIES

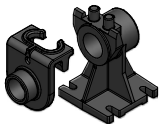
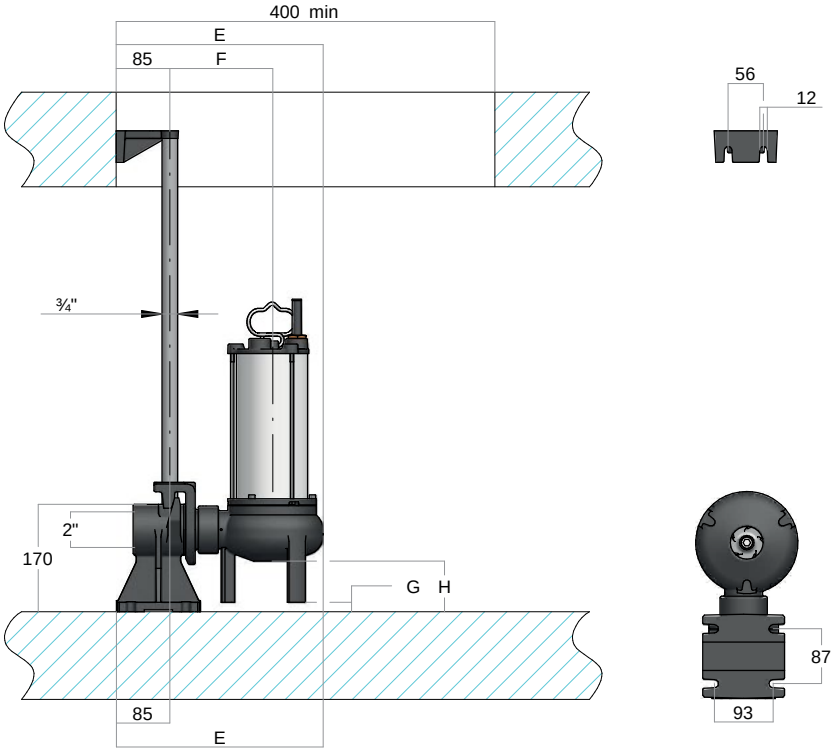
Code	Description	
04105043	Guide rail kit DNM 2" (¾" guide poles are not included)	

ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



To be installed on	Dimensions (mm)			
	E	F	G	H
SEMISOM HS - HA	328	163	15	80
SEMISOM 635 HS - HA	348	180	47	97

Electric submersible pumps SEMISOM series RS
for sewage water with rail

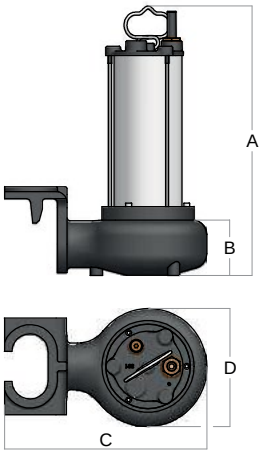
PERFORMANCE DATA 2 poles 60 Hz

Vortex Impeller	Code	Version		P2		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 650 RS	SMZ650	230 V	1-phase	2	1,5	10,2	100 - 300 - 600	8 - 6 - 2,7	65	2"1/2	445	91	334	195	23
	SMZ650+G	230 V	1-phase+float												23,3
	STZ650	400 V	3-phase			3,8									23
NEW SEMISOM 650H RS	SMZ650H	230 V	1-phase	2	1,5	12,2	100 - 300 - 600	11,6 - 9,4 - 6	65	2"1/2	450	91	334	195	23
	SMZ650H+G	230 V	1-phase+float												23,3
	STZ650H	400 V	3-phase			4,4									23

It can be installed only with guide rail kit

SUPPLIED WITH

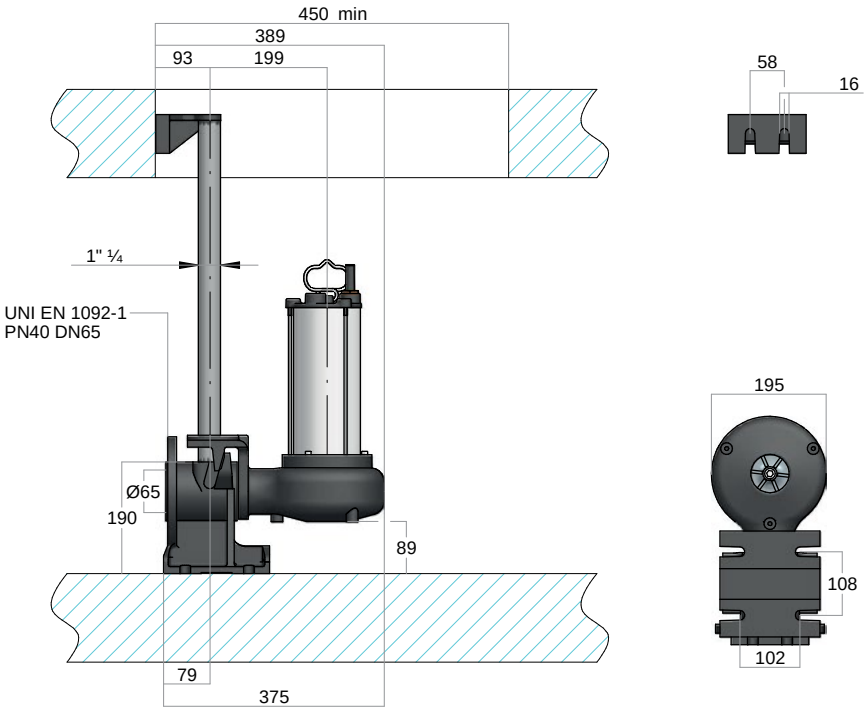
10 meters power cable	
Control box containing capacitor and amperometric protection (single-phase versions)	



ACCESSORIES

Code	Description	
04105044	Guide rail kit Semisom 650 (1"¼ guide poles not included)	

ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



Automatic lifting station SEMIBOX
for sewage water

APPLICATION

Suitable to collect and convey waste and sewage water

Advisable if the main sewer line is at a higher level than the collecting wet well

The lifting tank can be installed inside garages, basements or underground

AVAILABLE WITH THE FOLLOWNG ELECTRIC PUMPS

Type	Construction	Characteristics / materials	Performance
Semisom 125 GR	see page 105	see page 105	see page 106
Semisom 265 VS	see page 87	see page 87	see page 92
Semisom 265 VA	see page 87	see page 87	see page 90
Semisom 390 VS	see page 87	see page 87	see page 92
Semisom 390 VA	see page 87	see page 87	see page 90

CHARACTERISTICS

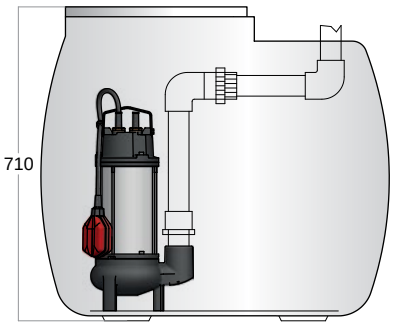
Tank in high-density, corrosion-resistant polyethylene for either surface of underground installation. It is supplied with all necesssary gaskets to fit inlet and outlet pipes as well as the ventilation hole.

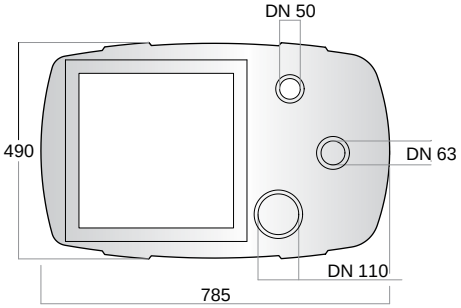
The discharge pipe has simple realease fittings to disconnect the electric pump, easily

The hermetically-sealed lid can be removed for inspecting the plant

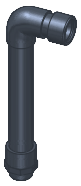
Electric pump and tank can be coupled using a Ø 50 mm or Ø 63 mm pipe

Code	Description
06510026	Automatic lifting station SEMIBOX 200 litres



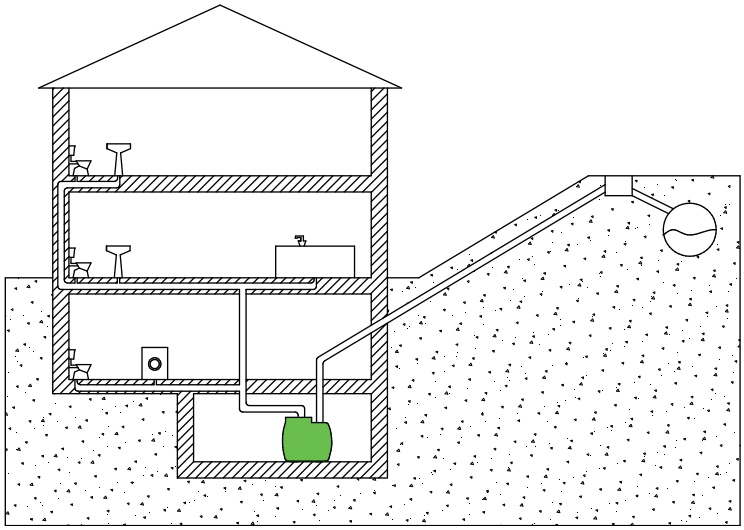


ACCESSORIES

Code	Description	
06520005	Connection kit electric pump/tank DN 50/1"½	
06520010	Connection kit electric pump/tank DN 63/2"	

For electric pumps SEMISOM with vertical discharge

EXAMPLE OF INSTALLATION



SEMISOM GR

Electric submersible pumps SEMISOM GR
for sewage water with grinder

APPLICATION

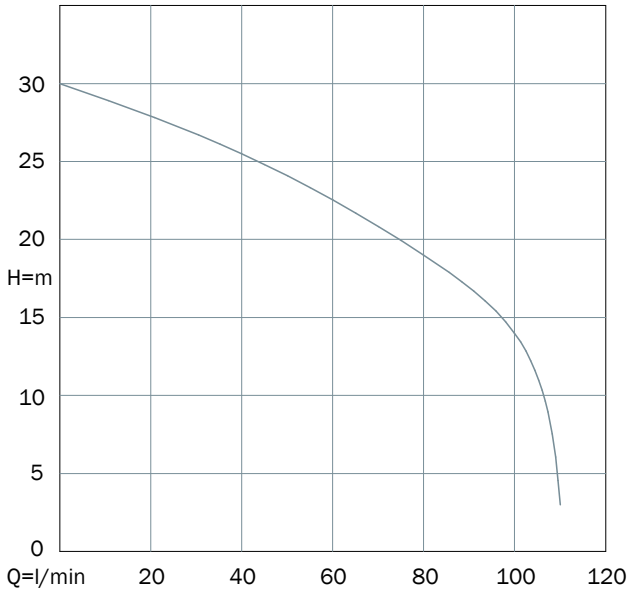
To convey waste and sewage water from septic tanks

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^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

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	Tecnopolymer 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

Electric submersible pumps SEMISOM GR

for sewage water with grinder

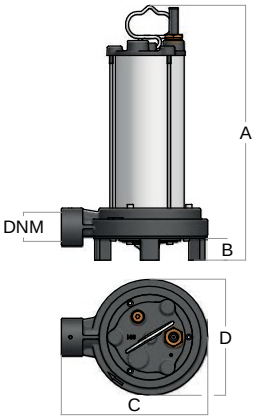
PERFORMANCE DATA 2 poles 60 Hz

Grinder	Code	Version		P2		Max	μF	DNM	Q	Flow							Dimensions (mm)				Weight
				hp	kW	A			m^3/h	0	1,2	2,4	3,6	4,8	6	6,6	A	B	C	D	kg
									l/min	0	20	40	60	80	100	110					
SEMISOM 125 GR (no stands)	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																		22,2
	STZ125	400 V	3-phase			2,9											396				21,2
SEMISOM 125 GR (with stands)	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																		22,3
	STZ125P	400 V	3-phase			2,9											421				21,3

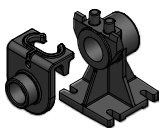
SUPPLIED WITH

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

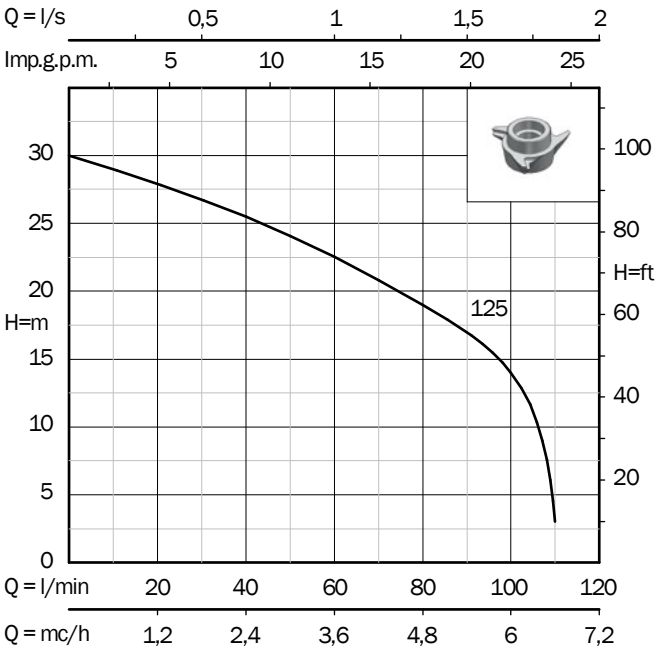
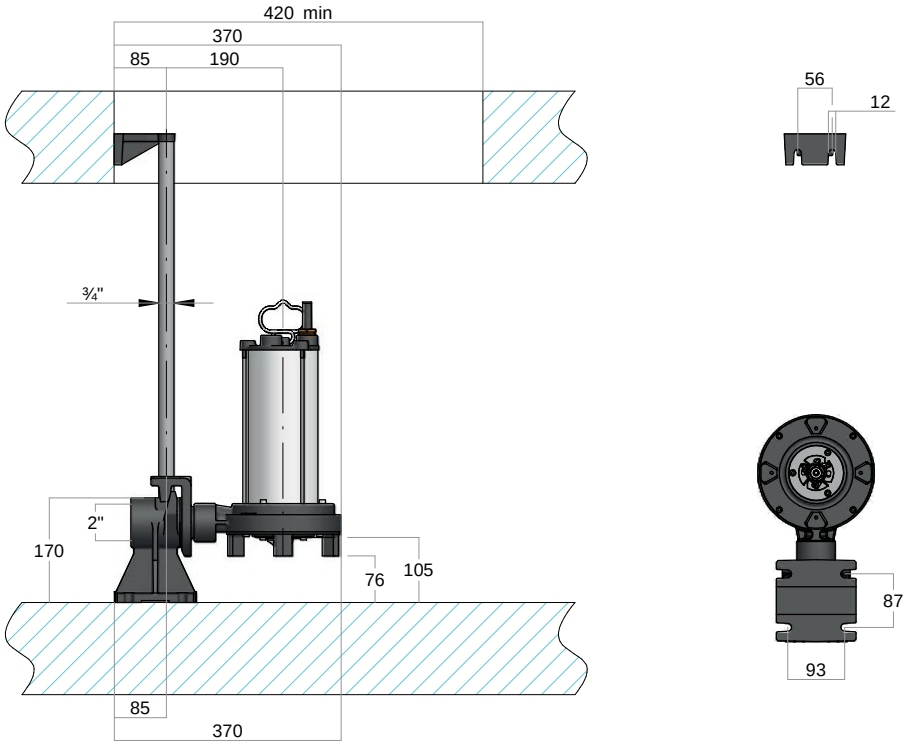


ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



SEMISOM /50 - /65

Electric submersible pumps SEMISOM /50 - /65
for sewage water

APPLICATION

To expel rainwater, to convey waste and sewage water from sewage tanks

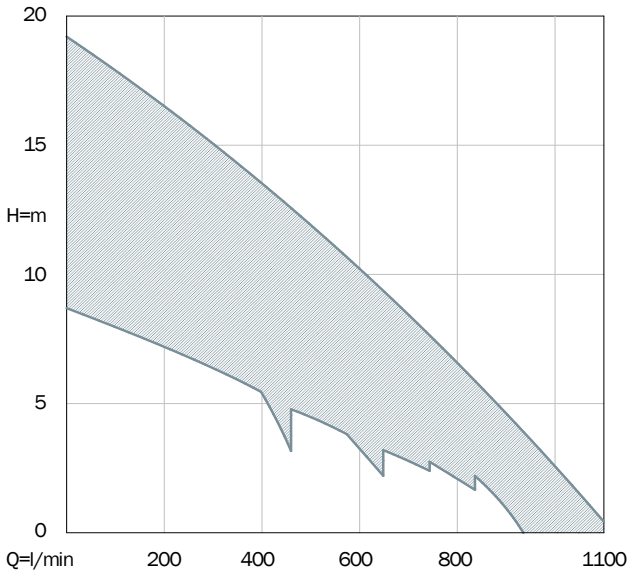
To pump liquids containing solids (Vortex or Double-channel impeller) and filaments (Double-channel impeller)

To pump sewage keeping its biological process unchanged (Semisom 754/65 4 poles)

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	Only three-phase versions

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

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
Mechanical seal	Silicon carbide and alumina
Seal ring	NBR rubber
Elastomers	NBR rubber
Cable	Neoprene H07RN8-F

Electric submersible pumps SEMISOM /50 - /65

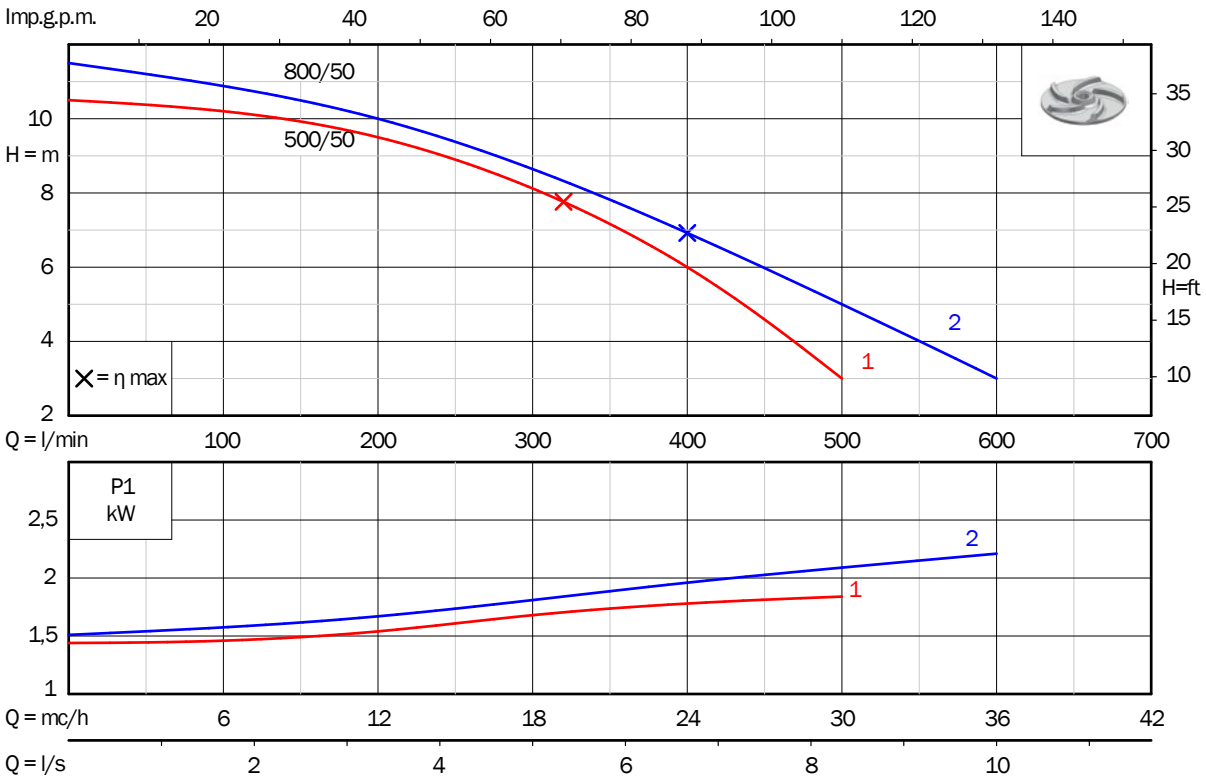
for sewage water

PERFORMANCE DATA

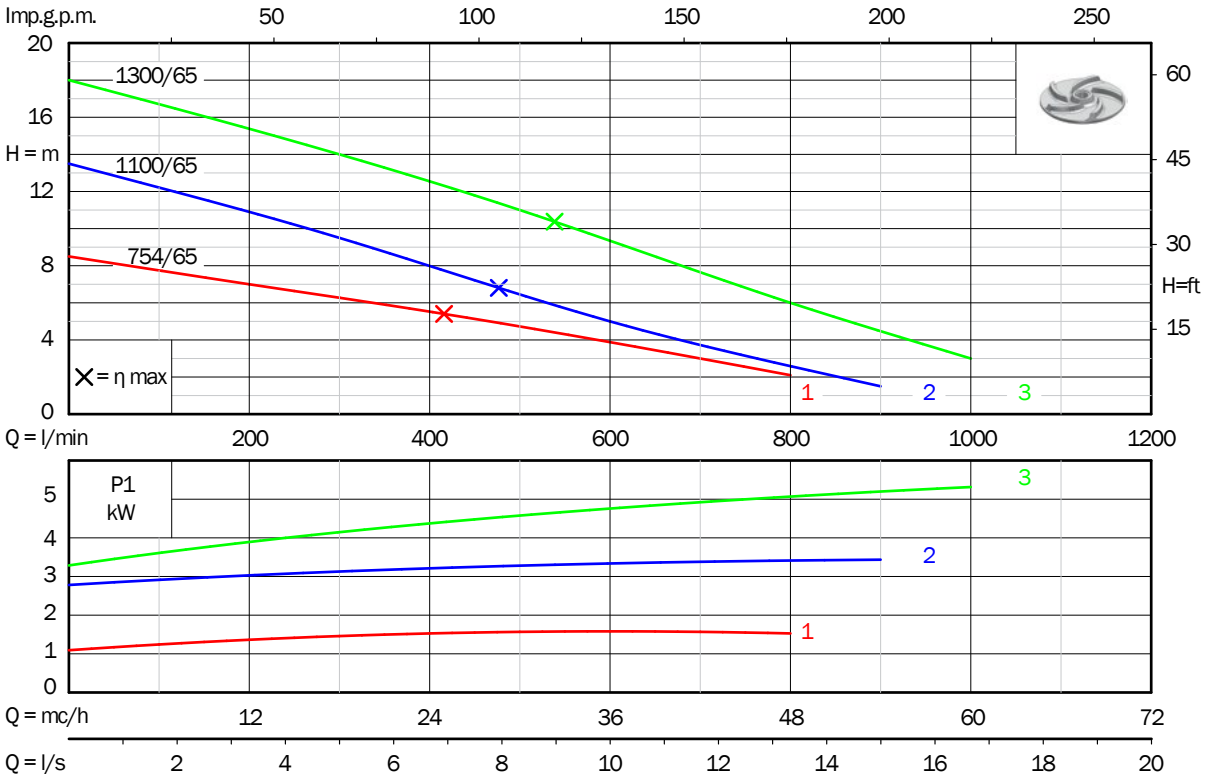
Vortex Impeller	P2		1~230 V		3~400 V	Poles	DNM	Solid Passage ø	Q	Flow											
	hp	kW	Max A	µF	Max A				m³/h	0	6	12	18	24	30	36	42	48	54	60	66
									l/min	0	100	200	300	400	500	600	700	800	900	1000	1100
SEMISOM 500/50	1,5	1,1	8,9	31,5	3,3	2	2"	50	H (m)	10,5	10	9,5	8	6	3						
SEMISOM 800/50	2	1,5	10,4	40	4	2	2"½	50		11,5	11	10	9	7,5	5	3					
SEMISOM 1100/65	3	2,2			6	2	3"	65		13,5	12,5	11	9,5	8	7	5	4	2,5	1,5		
SEMISOM 1300/65	4,5	3,4			8,1	2	3"	65		18	16,5	15,5	14	12,5	11	9	7	6	4	3	
SEMISOM 754/65	1,6	1,2	7,7	25	3,3	4	3"	65		8,5	7,8	7	6,2	5,5	4,6	3,8	3	2,1			

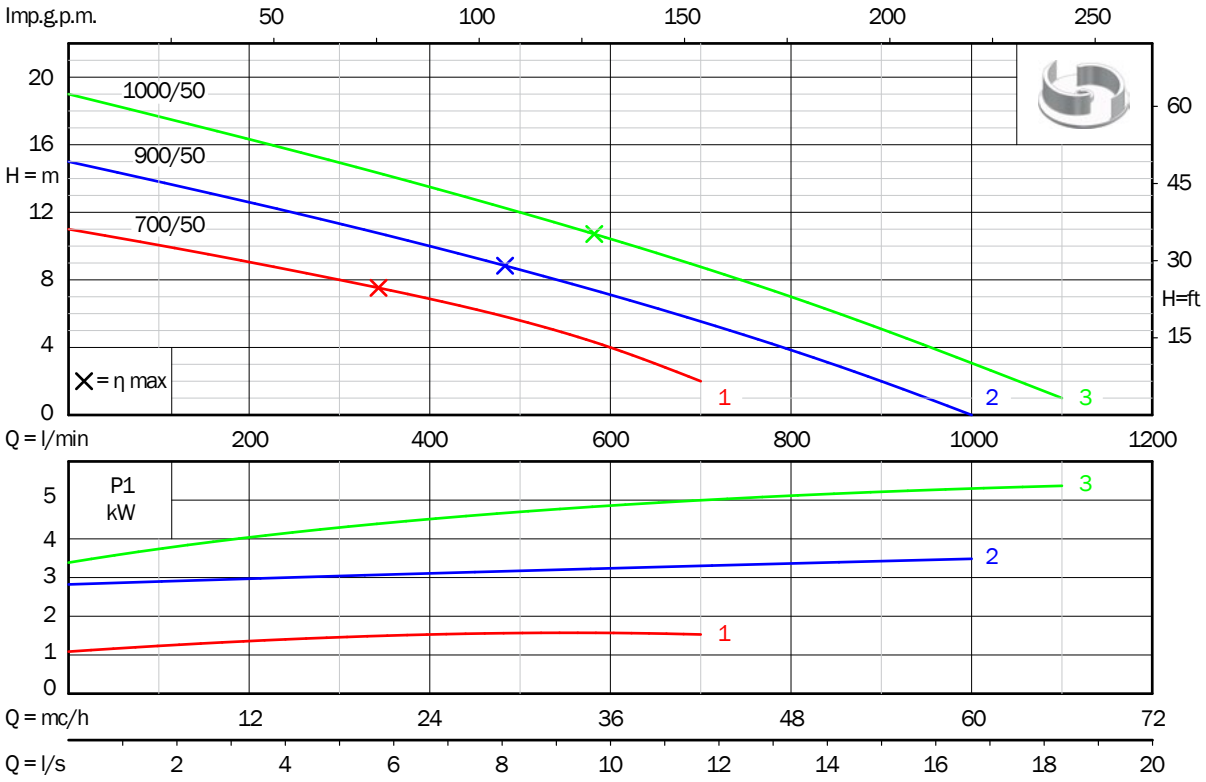
Channel impeller	P2		1~230 V		3~400 V	Poles	DNM	Solid Passage ø	Q	Flow											
	hp	kW	Max A	µF	Max A				m³/h	0	6	12	18	24	30	36	42	48	54	60	66
									l/min	0	100	200	300	400	500	600	700	800	900	1000	1100
SEMISOM 700/50	1,5	1,1	8,8	35	3,3	2	2"	50	H (m)	11	10	9	8	7	5,5	4	2				
SEMISOM 900/50	2	1,5	11,2	40	4	2	2"½	50		15	14	13	11,5	10	8,5	7	5,5	3,5	2	0	
SEMISOM 1000/50	3	2,2			5,9	2	2"½	50		19	17,5	16,5	15	13,5	12	10,5	8,5	7	5	3	1

PERFORMANCE CURVES



PERFORMANCE CURVES





Electric submersible pumps SEMISOM /50
for sewage water

PERFORMANCE DATA 2 poles 60 Hz

Vortex Impeller	Code	Version		P2		P1	Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 500/50	SMZ/50/500/1	230 V	1-phase	1,5	1,1	1,84	8,9	100 - 300 - 500	10 - 8 - 3	50	2"	518	70	354	254	32
	SMZ/50/500+G/1	230 V	1-phase+float													32,3
	STZ/50/500/1	400 V	3-phase			1,63	3,3					508				30,5
SEMISOM 800/50	SMZ/50/800/1	230 V	1-phase	2	1,5	2,21	10,4	100 - 300 - 600	11 - 9 - 3	50	2"½	543	70	362	254	34,5
	SMZ/50/800+G/1	230 V	1-phase+float													34,8
	STZ/50/800/1	400 V	3-phase			2,07	4					508				31

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

PERFORMANCE DATA 2 poles 60 Hz

Channel impeller	Code	Version		P2		P1	Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 700/50	SMZ/50/700/1	230 V	1-phase	1,5	1,1	2,05	8,8	100 - 400 - 700	10 - 7 - 2	50	2"	518	70	354	254	32,5
	SMZ/50/700+G/1	230 V	1-phase+float													32,8
	STZ/50/700/1	400 V	3-phase			1,93	3,3					508				31
SEMISOM 900/50	SMZ/50/900/1	230 V	1-phase	2	1,5	2,6	11,2	100 - 500 - 1000	14 - 8,5 - 0	50	2"½	543	70	362	254	35
	SMZ/50/900+G/1	230 V	1-phase+float													35,3
	STZ/50/900/1	400 V	3-phase			2,39	4					508				31
SEMISOM 1000/50	STZ/50/1000/1	400 V	3-phase	3	2,2	3,33	5,9	100 - 500 - 1100	17,5 - 12 - 1	50	2"½	543	70	362	254	35

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

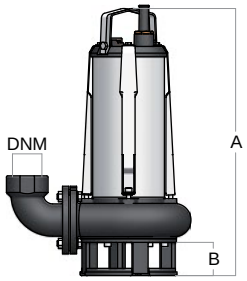
SUPPLIED WITH

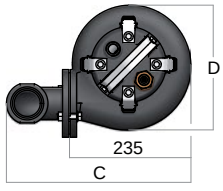
10 meters power cable

Control box containing capacitor and illuminated thermal protector switch (single-phase versions)

OPTIONS

Version with thermic probe so to protect the motor from overheating (to be wired to protection/control panel type QT-MT - AM-AT)





ACCESSORIES

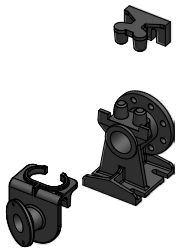
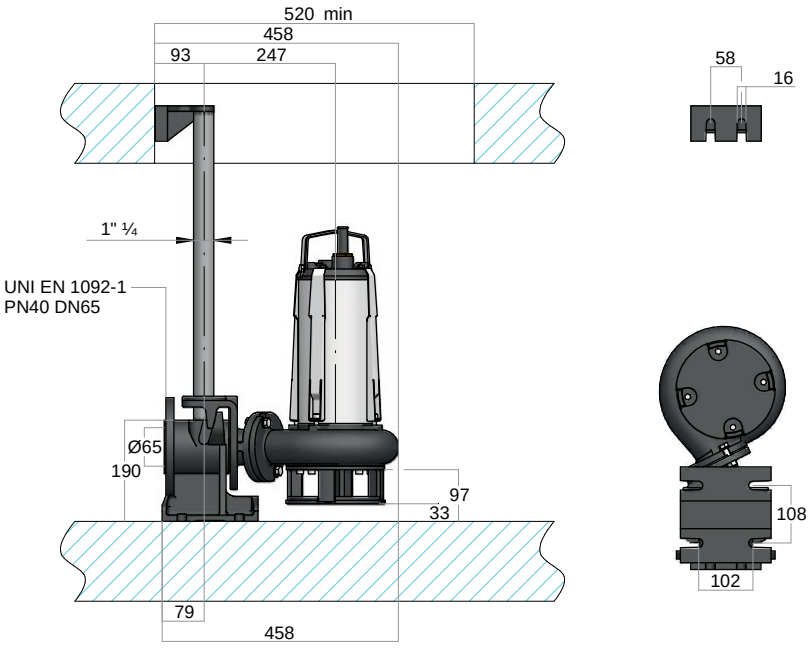
Code	Description	
04105046	Guide rail kit /50 (1"¼ guide poles not included)	

ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



Electric submersible pumps SEMISOM /65

for sewage water

PERFORMANCE DATA 2 poles 60 Hz

Vortex Impeller	Code	Version		P2		P1	Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 1100/65	STZ/65/1100/1	400 V	3-phase	3	2,2	3,37	6	100 - 500 - 900	12,5 - 7 - 1,5	65	3"	584	65	417	222	40
SEMISOM 1300/65	STZ/65/1300/1	400 V	3-phase	4,5	3,4	5,1	8,1	100 - 600 - 1000	16,5 - 9 - 3	65	3"	609	65	417	222	42,5

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

PERFORMANCE DATA 4 poles 60 Hz

Vortex Impeller	Code	Version		P2		P1	Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A	l/min	m			A	B	C	D	kg
SEMISOM 754/65	SMZ/65/754/1	230 V	1-phase	1,6	1,2	1,55	7,7	100 - 400 - 800	7,8 - 5,5 - 2,1	65	3"	569	65	417	222	38,5
	SMZ/65/754+G/1	230 V	1-phase+float													38,8
	STZ/65/754/1	400 V	3-phase			1,45	3,3									38,5

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

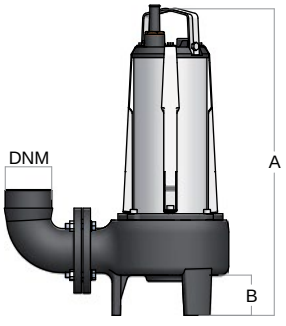
SUPPLIED WITH

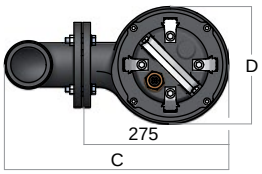
10 meters power cable

Control box containing capacitor and illuminated thermal protector switch (single-phase versions)

OPTIONS

Version with thermic probe so to protect the motor from overheating (to be wired to protection/control panel type QT-MT - AM-AT)





ACCESSORIES

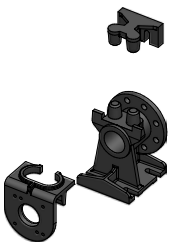
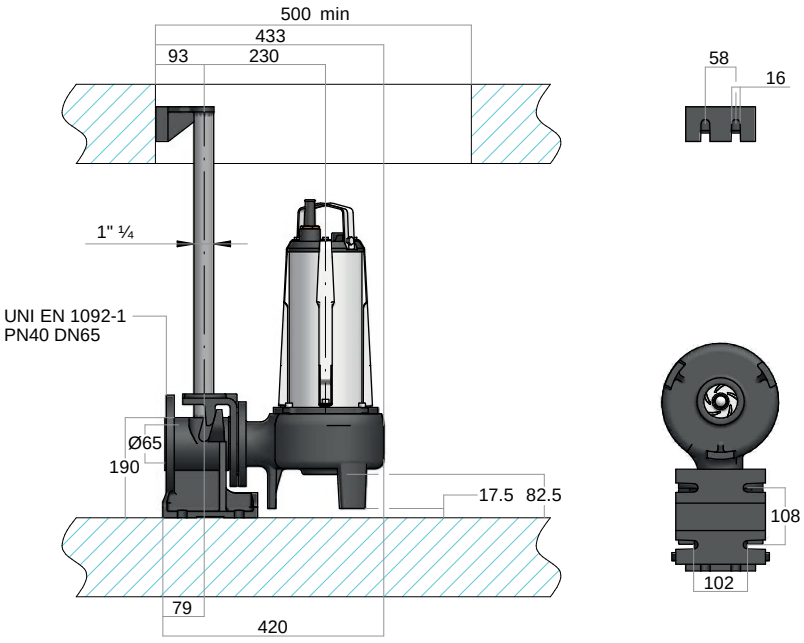
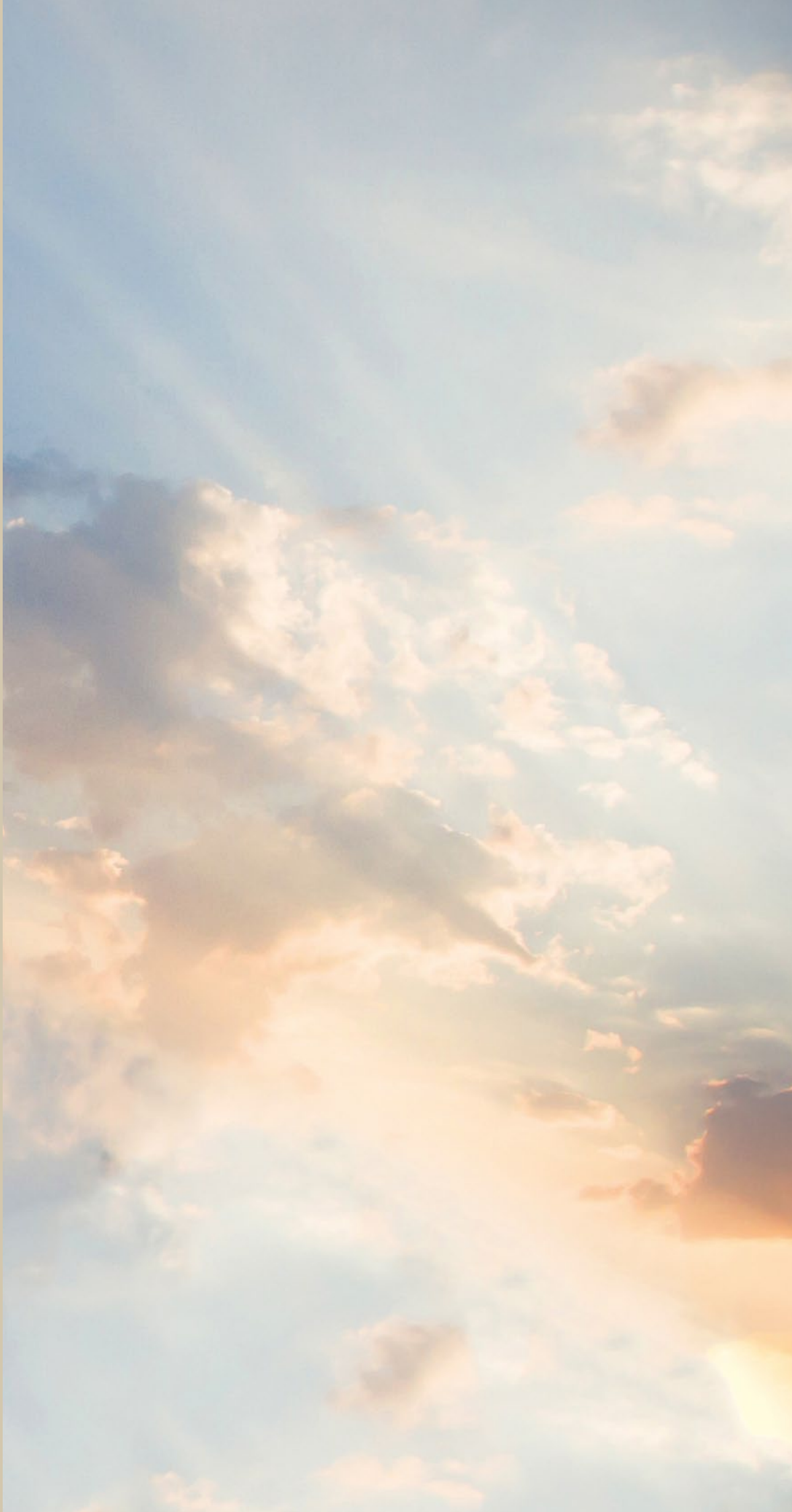
Code	Description	
04105052	Guide rail kit /65 (1"¼ guide poles not included)	

ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



Photovoltaic



ECOSOM

ECOSOM solar pumping stations

INTRODUCTION

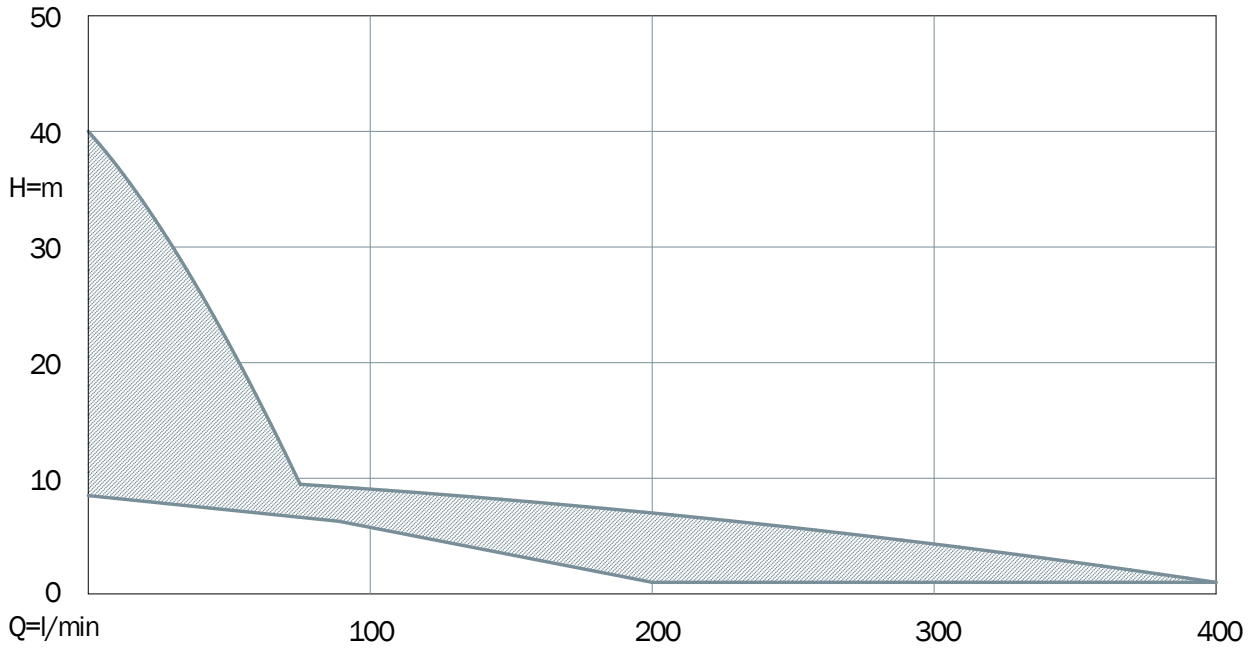
ECOSOM solar stations are easy-to-install pumping units that can be used wherever there is good solar radiation.
The solar panels supplied with both ECOSOM “E ” and “I” solar stations recharge the batteries thus to provide energy even when no solar light is available.
ECOSOM “L ” solar stations can run exclusively with solar light since they use, direcly, the energy coming from the solar panels.
ECOSOM solar stations can be combined with electric pumps type SR (for clean water) or SEMISOM (for grey or sewage water), all equipped with 24V DC permanent magnets motors.

APPLICATION

ECOSOM E - ECOSOM I		
ECOSOM 4/80	**ECOSOM 190 - 320**	**ECOSOM 262 - 265**
To pump water from tanks, reservoirs and boreholes	To expel rain water and waste water coming from electric household appliances	To pump water from tanks, reservoirs even in case of solids
To pressurize civil and industrial plants	To drain tanks, cellars and garages	To expel rain water, waste and sewage water from septic tanks
Irrigation	To transfer water from pools and fountains	To transfer water from pools and fountains
	Irrigation	Surface irrigation

ECOSOM L		
ECOSOM 4/80	**ECOSOM 190 - 320**	**ECOSOM 262 - 265**
To pump water from tanks, reservoirs and boreholes	To pump water from tanks and reservoirs	To pump water from tanks, reservoirs even in case of solids
Irrigation	To transfer water from pools and fountains	To transfer water from pools and fountains
	Irrigation	Irrigation

APPLICATION RANGE



ECOSOM solar pumping stations

PERFORMANCE DATA ECOSOM for clean water

Type	Code			Available electric pumps						Q	Flow									
				Type	P2		P1	Max	Life of the batteries *	m^3/h	0	0,36	0,6	1,2	1,8	2,4	3	3,6	4,2	4,8
	Version E	Version I	Version L		hp	kW	kW	A	min	l/min	0	6	10	20	30	40	50	60	70	80
ECOSOM 4/80	DE80/04E	DE80/04I	DE80/04L	SR 4/80 24 V DC	0,75	0,55	0,67	28	120	H (m)	40	38	37	34	30	26	21	17	11	7

* only for "E" and "I" versions

PERFORMANCE DATA ECOSOM for sewage water

Type	Code			Available electric pumps						Q	Flow								
				Type	P2		P1	Max	Life of the batteries *	m^3/h	0	1,8	6	9	12	15	18	21	24
	Version E	Version I	Version L		hp	kW	kW	A	min	l/min	0	30	100	150	200	250	300	350	400
ECOSOM 190	DE190E	DE190I	DE190L	SEMISOM 190 24 V DC	0,5	0,37	0,58	24	160	H (m)	10,5	9,5	7	4	1				
ECOSOM 320	DE320E	DE320I	DE320L	SEMISOM 320 24 V DC	0,75	0,55	0,67	28	120		11,5	11	9	7,5	5,5	3	0,5		
ECOSOM 265	DE265E	DE265I	DE265L	SEMISOM 265 24 V DC	0,75	0,55	0,67	28	120		8,5	8	6,5	5,5	4	3	1		
ECOSOM 262	DE262E	DE262I	DE262L	SEMISOM 262 24 V DC	0,75	0,55	0,67	28	120		10,5	10	9	8	7	6	4,5	3	1

* only for "E" and "I" versions

AVAILABLE ELECTRIC PUMPS

Type	Code	Construction	Application / materials	Characteristics
SR 24 V DC	RF80/04/1	see page 11	see page 12	see page 16
SEMISOM 190 24 V DC	SF190	see page 79	see page 79	see page 83
SEMISOM 320 24 V DC	SF320	see page 79	see page 79	see page 83
SEMISOM 262 24 V DC	SF262	see page 87	see page 87	see page 93
SEMISOM 265 24 V DC	SF265	see page 87	see page 87	see page 92

ECOSOM E with fibreglass cabinet for external installations

CONTROL PANEL

Characteristics
IP rating IP44
Ambient temperature -5/+40 °C
Suitable for external installation
Possibility of installing it to the base of the fixing frame
Easy-to-inspect battery location
Facility to wire float switches for dry running protection
Facility to wire pressure switch, stop and run float switch, etc.

Main components
Fibreglass cabinet
Hand - off - auto selector switch
30 A unipolar thermal protector switch
80 A power relay
Indicator light for: run - pump cut-out - low battery cut-out
20 A automatic charge controller to provide the correct power to the batteries
Fuse holder with fuses on both main and auxiliary circuit

SOLAR MODULES

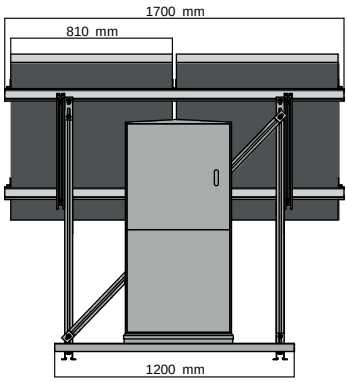
2 x 180 Wp (+/- 3%) monocrystalline silicon solar cells supplied with fixing bars and frame

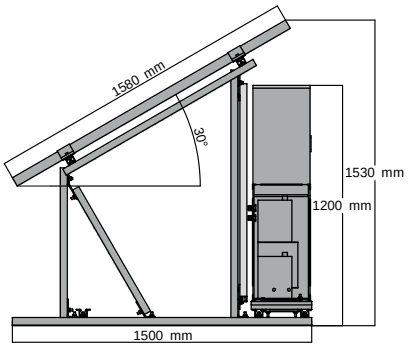
ELECTRIC WIRING

The pumping station is supplied with: all cables (pre-wired) for the electric connection of the solar modules, the control panel and the batteries

ACCESSORIES

Code	Description
07210005	FRAME: designed for open-space, land installations with an angle of incidence at 30°. The installation is easy and quick and doesn't require particular tools. All components are in aluminium or stainless steel and their high resistance gives them a long life.
02086005	BATTERY 12 V 100 Ah: 100 Ah 12 V AGM Long-Life, monobloc, stationary Maintenance-free; 120 minutes life with no light (160 minutes for ECOSOM 190); 8 hours to charge them totally, with pump in stand-by.





ECOSOM solar pumping stations

ECOSOM I with plastic panel

CONTROL PANEL

Characteristics
IP rating IP55
Ambient temperature -5/+40 °C
Suitable to be installed in sheltered places, away from solar beams
Facility to wire float switches for dry running protection
Facility to wire pressure switch, stop and run float switch, etc.

Main components
Plastic panel: 300 x 400 x 120 mm
Hand - off - auto selector switch
30 A unipolar thermal protector switch
80 A power relay
Indicator light for: run - pump cut-out - low battery cut-out
20 A automatic charge controller to provide the correct power to the batteries
Fuse holder with fuses on both main and auxiliary circuit

SOLAR MODULES

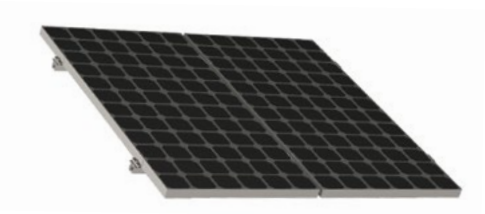
2 x 180 Wp (+/- 3%) monocrystalline silicon solar cells supplied with fixing bars and frame

ELECTRIC WIRING

The pumping station is supplied with: all cables (pre-wired) for the electric connection of the solar modules, the control panel and the batteries

ACCESSORIES

Code	Description
07210005	FRAME: designed for open-space, land installations with an angle of incidence at 30°. The installation is easy and quick and doesn't require particular tools. All components are in aluminium or stainless steel and their high resistance gives them a long life.
02086005	BATTERY 12 V 100 Ah: 100 Ah 12 V AGM Long-Life, monobloc, stationary Maintenance-free; 120 minutes life with no light (160 minutes for ECOSOM 190); 8 hours to charge them totally, with pump in stand-by.



ECOSOM L with plastic panel and without batteries

CONTROL PANEL
Characteristics
IP rating IP65
Ambient temperature -5/+40 °C
Suitable to be installed in sheltered places, away from solar beams
Facility for automatic device (ex: level control)
Main components
Plastic panel: 220 x 300 x 120 mm
Hand - off - auto selector switch
Unipolar thermal protector switch to protect the electric pump from overload
Indicator light for pump running

SUGGESTED SOLAR MODULES (NOT included)
Open circuit voltage (Voc) < 40 V
Maximum power voltage (Vmp) > 29 V
Required power to run the station: P1 of the electric pump + 30% (Max. 1000 Wp)

IDROSOLAR

Photovoltaic pumping stations IDROSOLAR

INTRODUCTION

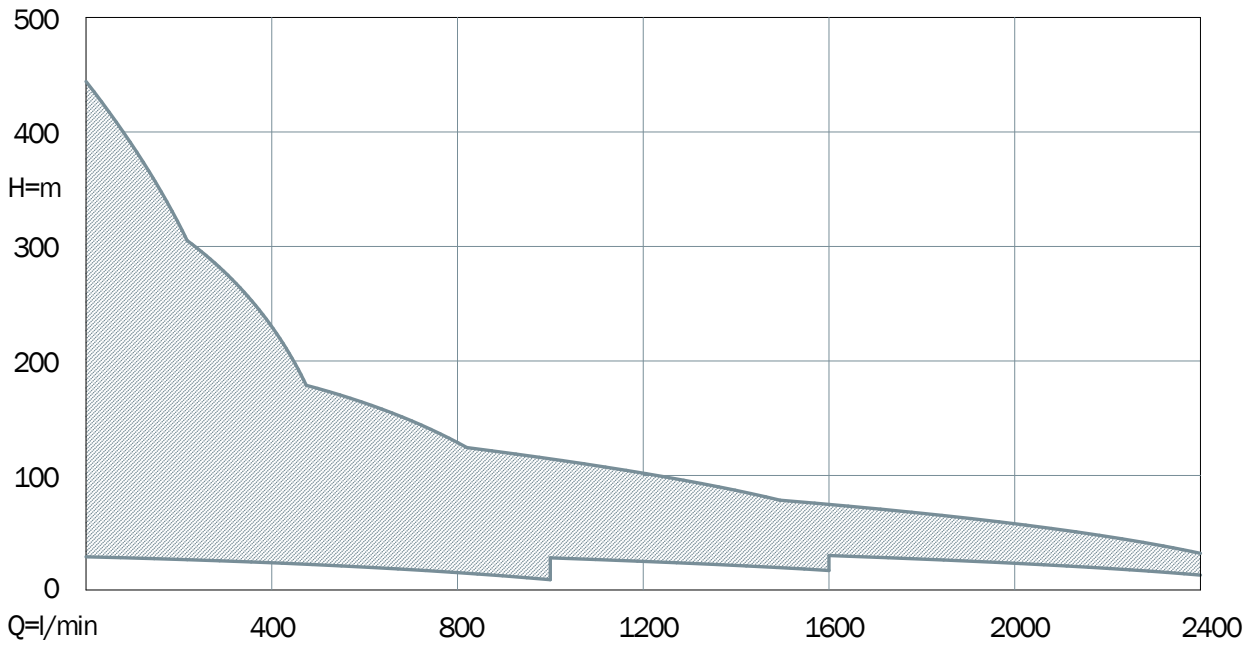
The solar stations IDROSOLAR allow pumping water from a well with complete autonomy and can be easily installed anywhere there is a good solar radiation. Using the sunlight, they can produce the energy required to run the electric pump.
The number of revolutions of the pump is continuously adapted to available radiation, thus maximizing the flow of the water pumped. (MPPT function: Maximum Power Point Tracking).
When radiation levels increase so do the revolutions of the pump and, consequently, the flow rises.
When the radiation decreases, (clouds passing by or different times of the day) the revolutions of the pump get lower and thus its flow. However, the system continues to supply water until the radiation falls below the minimum necessary operation point.
In addition, the system is completely protected against overvoltage, over current and lack of water.

APPLICATION

To pump water from boreholes

Irrigation

APPLICATION RANGE



Photovoltaic pumping stations IDROSOLAR

PERFORMANCE CHARACTERISTICS

Type	MOTOR		PUMP END				SUGGESTED SOLAR MODULES*		
	P2		H		Q		Number of strings	Mudules each string	Total number of modules
			from	to	from	to			
	hp	kW	m		l/min				
IDROSOLAR 1200	1	0,75	13	90	10	175	1	5	5
IDROSOLAR 1800	1,8	1,35	13	122	10	225	1	7	7
IDROSOLAR 2800	2,8	2	11	188	10	300	1	11	11
IDROSOLAR 3600	3,6	2,7	12	245	10	350	1	14	14
IDROSOLAR 5500	5,5	4	9	295	20	1000	1	20	20
IDROSOLAR 7500	7,5	5,5	13	223	75	1000	2	13	26
IDROSOLAR 10000	10	7,5	17	250	75	1600	2	19	38
IDROSOLAR 12500	12,5	9,2	23	307	90	1000	3	18	54
IDROSOLAR 15000	15	11	13	361	90	2400	3	19	57
IDROSOLAR 20000	20	15	34	323	150	1600	4	18	72
IDROSOLAR 25000	25	18,5	19	383	150	2400	4	21	84
IDROSOLAR 30000	30	22	26	290	200	2400	5	20	100
IDROSOLAR 40000	40	30	32	190	400	2400	6	21	126

* The above calculations have been made considering solar panels with the following specifications

- Open circuit voltage (Voc) < 40,5 V
- Maximum power voltage (Vmp) > 30,8 V
- Maximum power current (Imp) < 10 A
- Maximum power rating (Pmax) ≥ 280 Wp

PUMP TYPE COMBINATIONS

Type	Construction	Application/materials
Electric submersible pumps IDROSOM for 4" boreholes	see page 27	see page 28 - 29
Electric submersible pumps IDROSAND for 6" boreholes	see page 41	see page 42 - 43
Electric submersible pumps for 8" boreholes	/	/

IDROSOLAR

Characteristics
IP rating IP54
Ambient temperature -5/+40 °C
Suitable for external applications
Solar Inverter with MPPT and protection against overvoltage, over current and lack of water
Facility for remote control to run and stop the pump
Dimensions: 434 x 504 x 210 mm
Main components
Fibreglass cabinet
Opening interlocked
Display to set and check the electric pump
Surge protector for photovoltaic systems
Protective fuses
Hand - off - auto selector switch
Led indicator lamps for run and alarm

IDROSOLAR L

Characteristics
IP rating IP65
Ambient temperature -5/+40 °C
Suitable to be installed in sheltered places, away from solar beams
Solar Inverter with MPPT and protection against overvoltage, over current and lack of water
Facility for remote control to run and stop the pump
Dimensions: 300 x 400 x 190 mm
Main components
Inverter case in powder coated, die-cast aluminium
Connection box in plastic
Steel-sheet fixing plate
Display to set and check the electric pump
Button to start and stop the electric pump
Terminal board for wiring the solar panels
Fuses to protect the inverter

Pressure lost chart

Pressure loss in pipes for 100m run

			Internal diameter of the pipe															
Flow			gas	3/4"	1"	1" 1/4	1" 5/8	2"	2" 1/2	3" 1/8	4"	5"	6"	7"	8"	10"	12"	16"
l/sec	l/min	m³/h	mm	20	25	32	40	50	65	80	100	125	150	175	200	250	300	400
			Pressure loss in meters of column of water															
0,16	**10**	**0,6**		2,6	1	0,28	0,09											
0,25	**15**	**0,9**		6,5	2,15	0,6	0,18											
0,33	**20**	**1,2**		10	3,5	1	0,3	0,11										
0,41	**25**	**1,5**		15	5,5	1,6	0,5	0,16										
0,5	**30**	**1,8**		22	8	2,2	0,65	0,23										
0,66	**40**	**2,4**		40	13	4	1,2	0,4	0,1									
0,83	**50**	**3**		60	21	6	1,8	0,6	0,16									
1	**60**	**3,6**		75	28	8	2,4	0,85	0,22									
1,16	**70**	**4,2**			40	11,5	3,2	1,15	0,3	0,11								
1,33	**80**	**4,8**			54	14,5	4,5	1,5	0,4	0,14								
1,5	**90**	**5,4**			65	18	5,3	1,8	0,48	0,16								
1,66	**100**	**6**			77	22	6,5	2,2	0,52	0,2								
2	**120**	**7,2**				30	9	3	0,8	0,3								
2,33	**140**	**8,4**				42	12	4,2	1,1	0,38	0,13							
2,66	**160**	**9,6**				53	16	5,3	1,4	0,5	0,17							
3	**180**	**10,8**				65	20	6,5	1,7	0,6	0,21							
3,33	**200**	**12**				78	24	8	2,1	0,72	0,26							
3,66	**220**	**13,2**				90	26,5	9	2,4	0,84	0,3	0,1						
4	**240**	**14,4**					33	11,3	3	1,1	0,37	0,12						
4,33	**260**	**15,6**					40	13,5	3,5	1,22	0,43	0,14						
4,66	**280**	**16,8**					45	15	4	1,4	0,48	0,16						
5	**300**	**18**					51	17	4,5	1,6	0,51	0,18						
5,83	**350**	**21**					68	24	6	2,1	0,75	0,24						
6,66	**400**	**24**					87	29	7,8	2,65	0,95	0,31	0,12					
7,5	**450**	**27**						38	9,6	3,3	1,18	0,38	0,15					
8,33	**500**	**30**						45	11,8	4,2	1,4	0,47	0,18					
9,16	**550**	**33**						55	14	5	1,7	0,51	0,21	0,1				
10	**600**	**36**						64	16,5	5,5	2	0,65	0,25	0,12				
11,6	**700**	**42**						87	23	8	2,8	0,9	0,32	0,16				
13,3	**800**	**48**							30	10,5	3,5	1,18	0,44	0,21	0,11			
16,6	**1000**	**60**							44	15	5,3	1,8	0,65	0,31	0,16			
20	**1200**	**72**							62	22	7,5	2,5	0,95	0,45	0,22			
23,3	**1400**	**84**							81	28,5	10	3,25	1,25	0,6	0,3	0,1		
26,6	**1600**	**96**								37,5	13	4,3	1,6	0,78	0,38	0,13		
30	**1800**	**108**								46	16	5,3	2	0,95	0,47	0,16		
33,3	**2000**	**120**								56,5	19,5	6,5	2,4	1,15	0,58	0,19		
36,6	**2200**	**132**								65	23	7,7	2,9	1,38	0,7	0,23		
40	**2400**	**144**								75	27	9	3,3	1,6	0,81	0,27	0,11	
43,3	**2600**	**156**									32	10,7	4	1,9	0,98	0,32	0,13	
46,6	**2800**	**168**									37	12	4,5	2,2	1,1	0,37	0,15	
50	**3000**	**180**									42	14	5,25	2,45	1,22	0,42	0,17	
58,3	**3500**	**210**									56	18	6,8	3,25	1,65	0,55	0,22	
66,6	**4000**	**240**									73	24	8,8	4,25	2,15	0,7	0,29	
75	**4500**	**270**										30	11	5,4	2,7	0,9	0,37	
83,3	**5000**	**300**										37	14	6,6	3,3	1,1	0,45	0,11

Notes

Pressure loss shoud be multiplied by:

- **0,65** for PVC pipes;
- **0,8** for new steel pipes;
- **1,25** for slightly rusty steel pipes;
- **1,7** for encrusted pipes.

Cable selections

Single-phase 230 V 60 Hz

Cable section in mm²											
Motor nominal power											
hp	kW	4x1	4x1,5	4x2,5	4x4	4x6	4x10	4x16	4x25	4x35	4x50
Maximum cable length in meters											
0,5	**0,37**	60	90	140	230	340					
0,75	**0,55**	40	70	110	190	280	470				
1	**0,75**	35	55	85	135	200	335	525			
1,2	**0,9**	30	50	80	120	180	300	470			
1,5	**1,1**	25	40	60	100	150	250	395			
2	**1,5**		35	50	80	120	190	300	470		
3	**2,2**			30	50	70	120	190	300	405	

Three-phase 400 V 60 Hz

Cable section in mm²											
Motor nominal power											
hp	kW	4x1	4x1,5	4x2,5	4x4	4x6	4x10	4x16	4x25	4x35	4x50
Maximum cable length in meters											
0,5	**0,37**	220	340	550							
0,75	**0,55**	200	300	480	770						
1	**0,75**	150	230	370	600						
1,2	**0,9**	130	210	330	530						
1,5	**1,1**	100	180	290	470						
2	**1,5**	80	140	220	360	540					
3	**2,2**	60	100	160	260	390	650				
4	**3**	45	75	120	200	300	500				
5,5	**4**		55	90	150	220	370	590			
7,5	**5,5**		40	70	115	170	285	450			
10	**7,5**			60	90	140	230	360	560		
12,5	**9,2**				75	115	190	300	470		
15	**11**				60	90	155	245	380	520	
20	**15**					60	110	170	260	360	480
25	**18**						90	140	220	300	395
30	**22**						75	120	185	250	320
35	**26**							105	160	215	285
40	**30**							90	145	200	260
50	**37**								110	155	200
60	**45**									130	170
75	**55**										140

Note

Voltage drop:

- **3 %**

Maximum ambient temperature:

- **30 °C**

Concept and Art Direction -
Digital post production -
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Technical features, dimensions and all
other data in this catalogue are not binding.
The manufacturer reserves the right to make any
necessary modifications without prior notice.

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