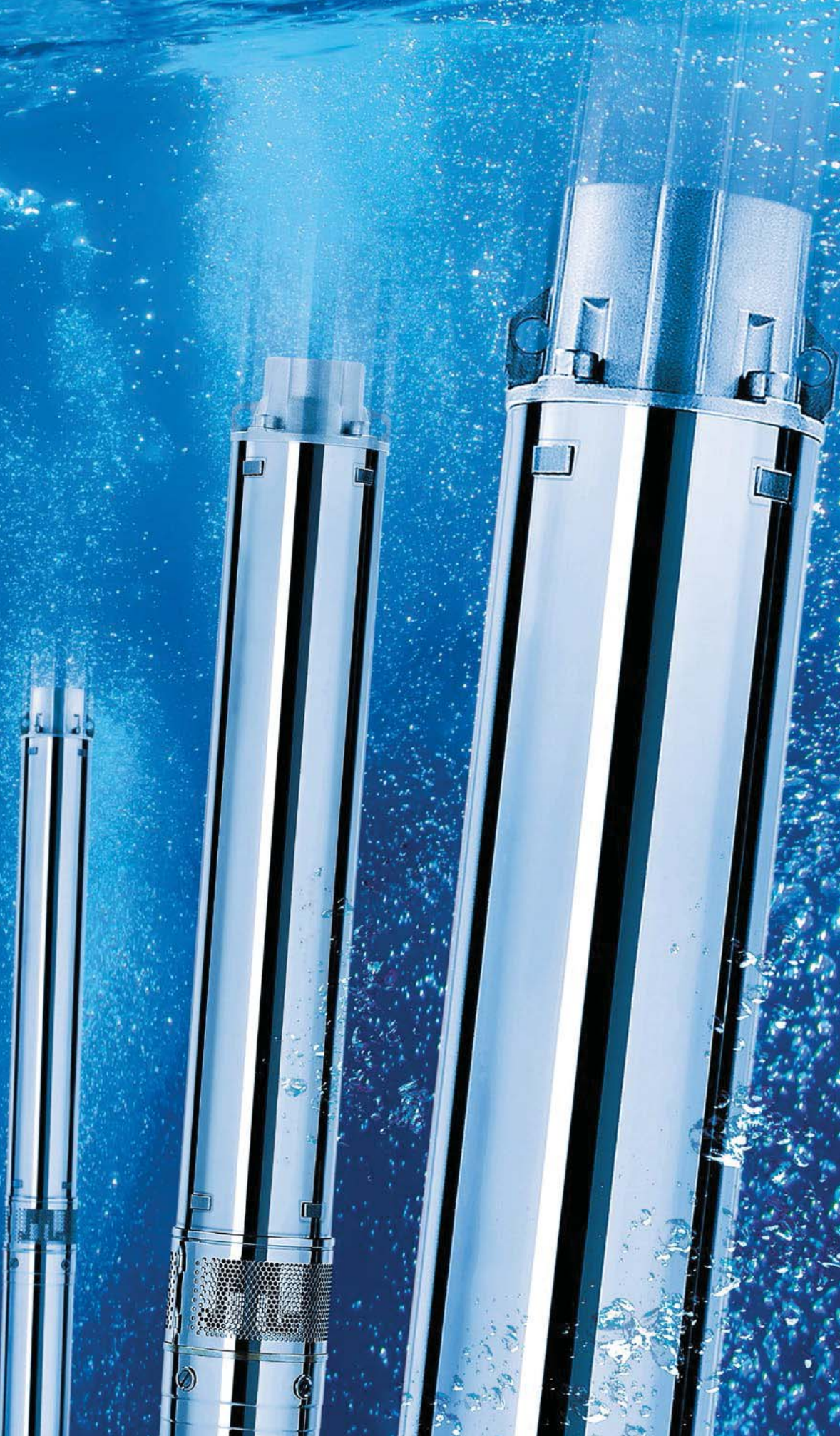


# IDROSOM 4"



# 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  $\geq 0,7$ )

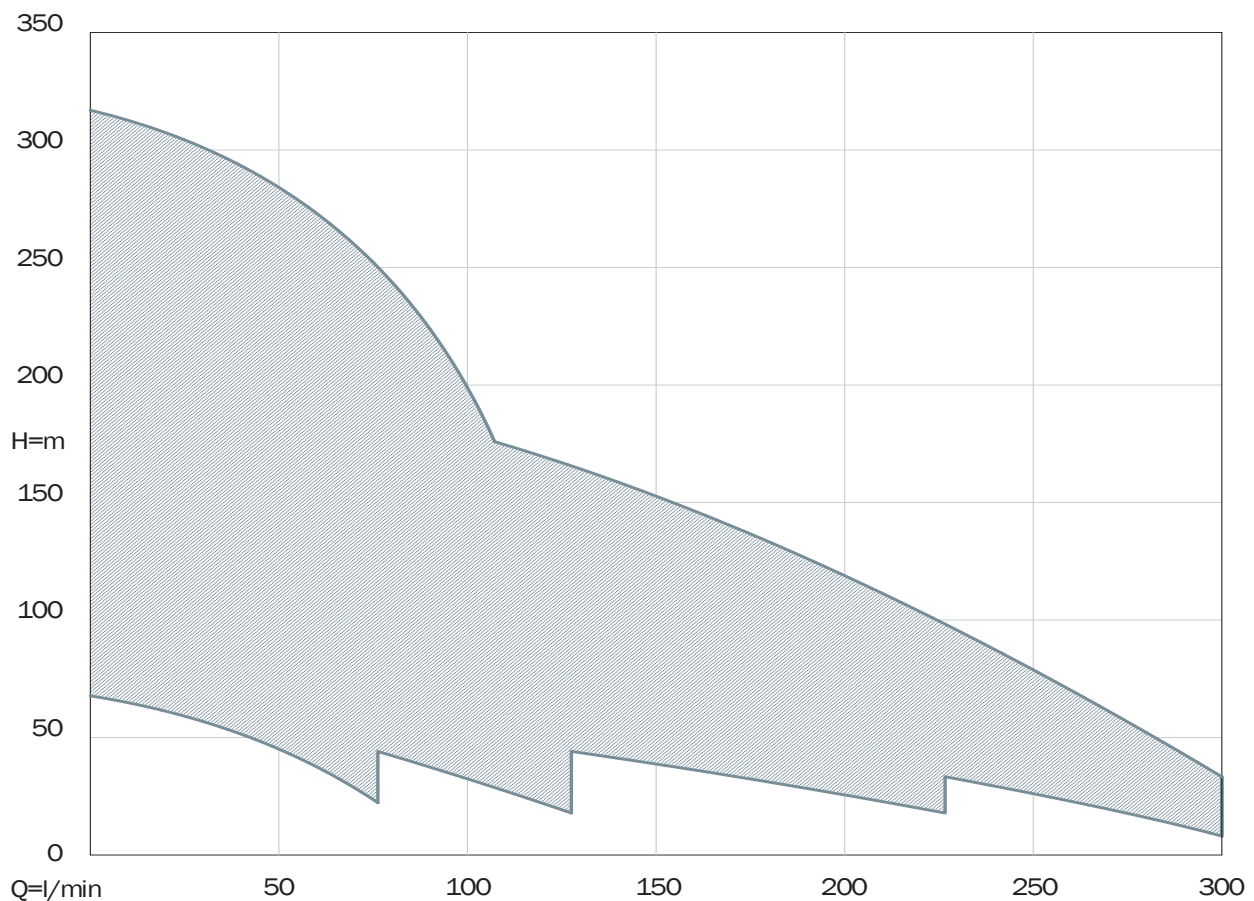
Coolant filled, asynchronous, rewindable electric AC motor with short circuit rotor. Insulation Class F

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 <sup>3</sup> )	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		m <sup>3</sup> /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	
<b>SERIES 60</b>																					
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									
<b>SERIES 100</b>																					
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						
<b>SERIES 180</b>																					
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		
<b>SERIES 250</b>																					
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	$\eta_N$	$I_N$	$I_A$	$M_A$	$\eta_N$	$\cos \phi$				
		V	$\mu F$	hp	kW	N	$\text{min}^{-1}$	A	A	Nm	$\eta_N$	$\cos \phi$	mm <sup>2</sup>	m	
<b>"S" SERIES COOLANT FILLED SUBMERSIBLE MOTORS - for 4" boreholes</b>															
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	
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
<b>"E" SERIES COOLANT FILLED SUBMERSIBLE MOTORS - for 4" boreholes</b>															
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				
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

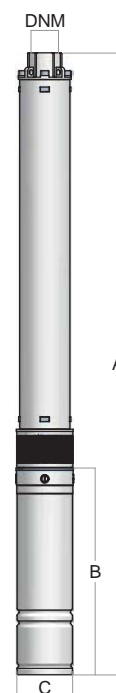
### ACCESSORIES

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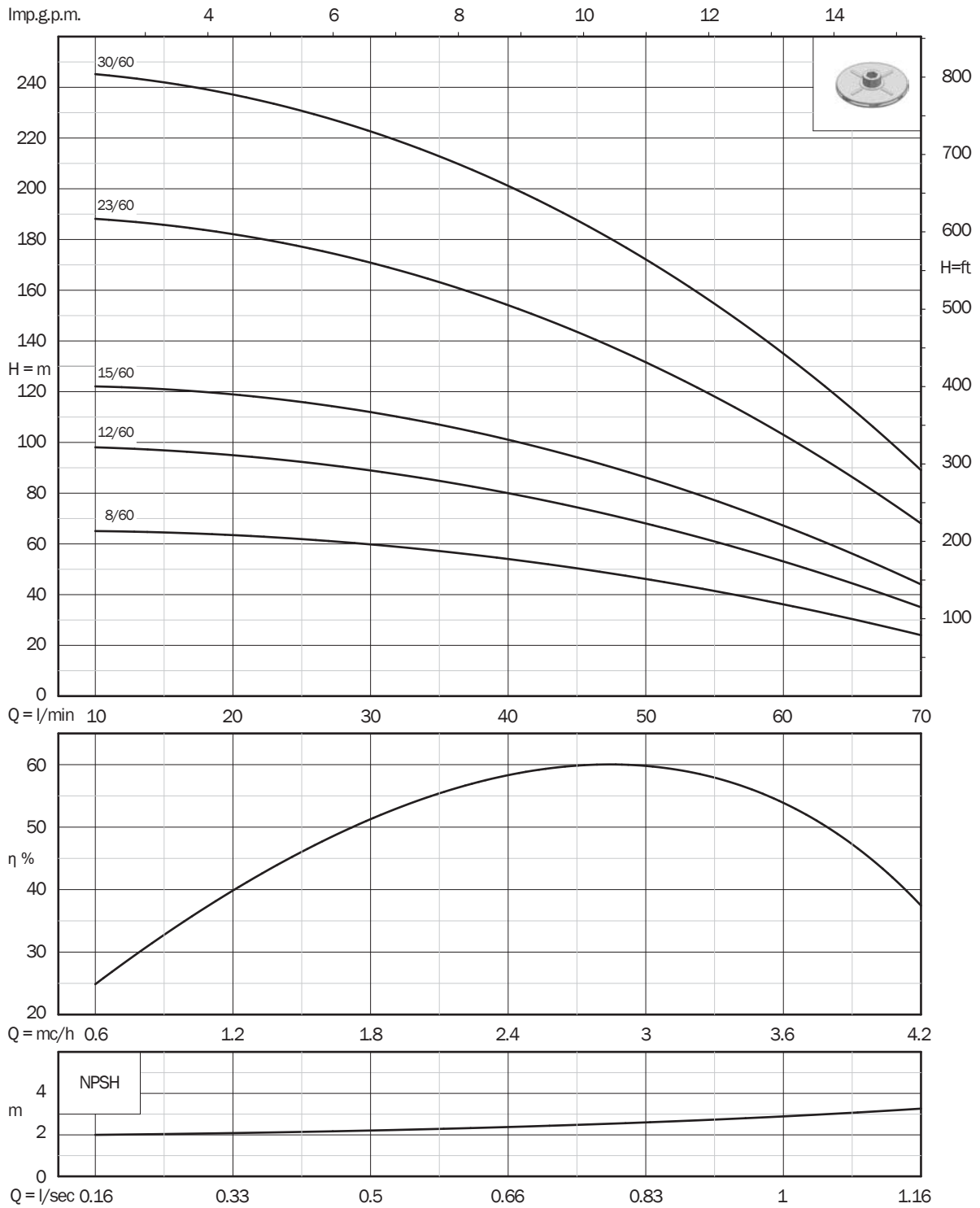
Description

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 m	Weight kg
		Code	Series			hp	kW		l/min	m		A	B	C		
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		2	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

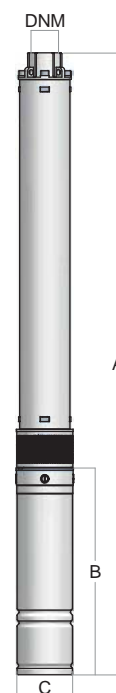
### ACCESSORIES

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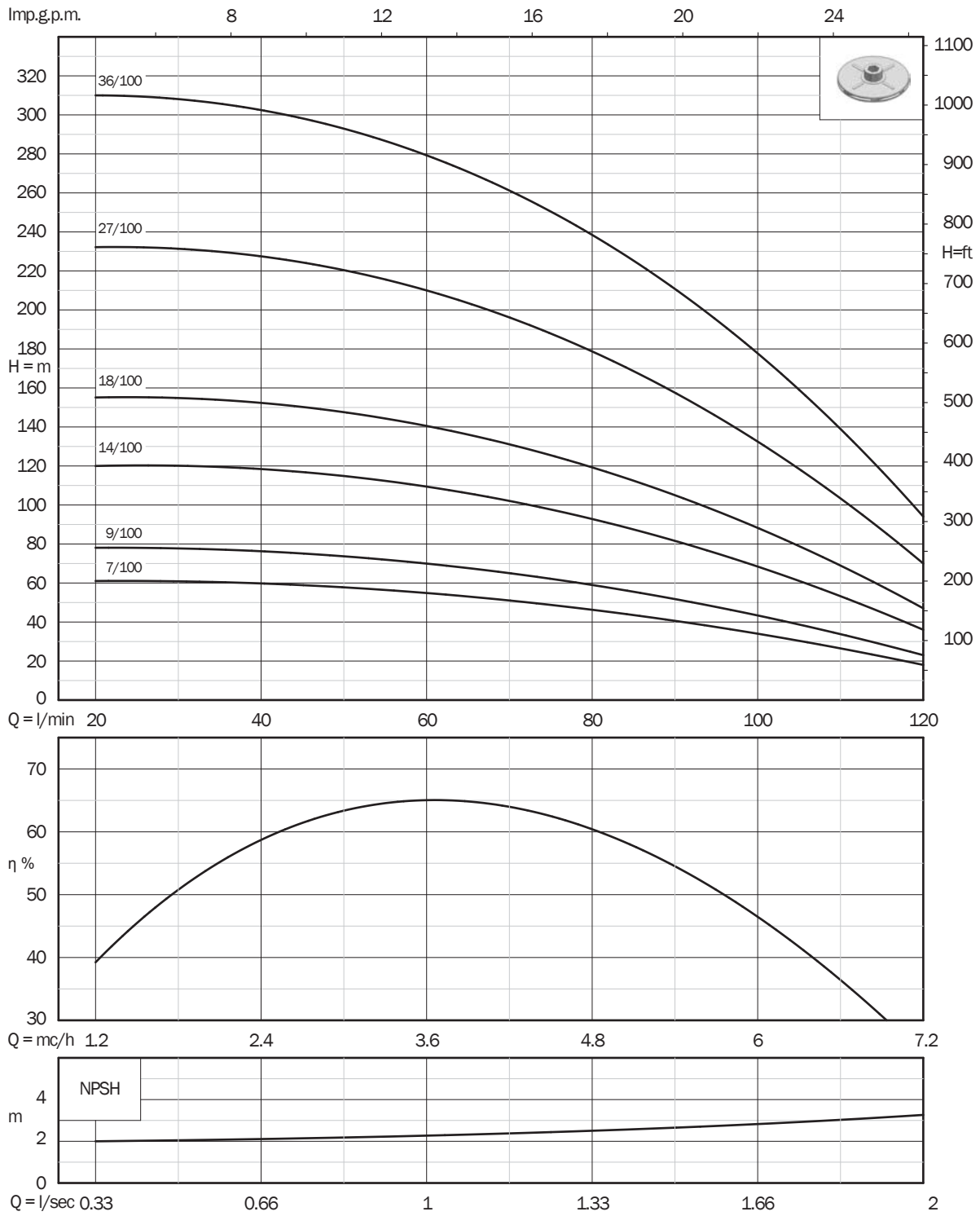
Description

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 m	Weight kg		
		Code	Series	hp	kW	l/min	m		A	B		C						
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

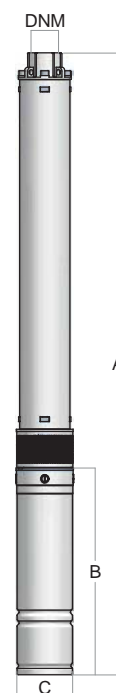
### ACCESSORIES

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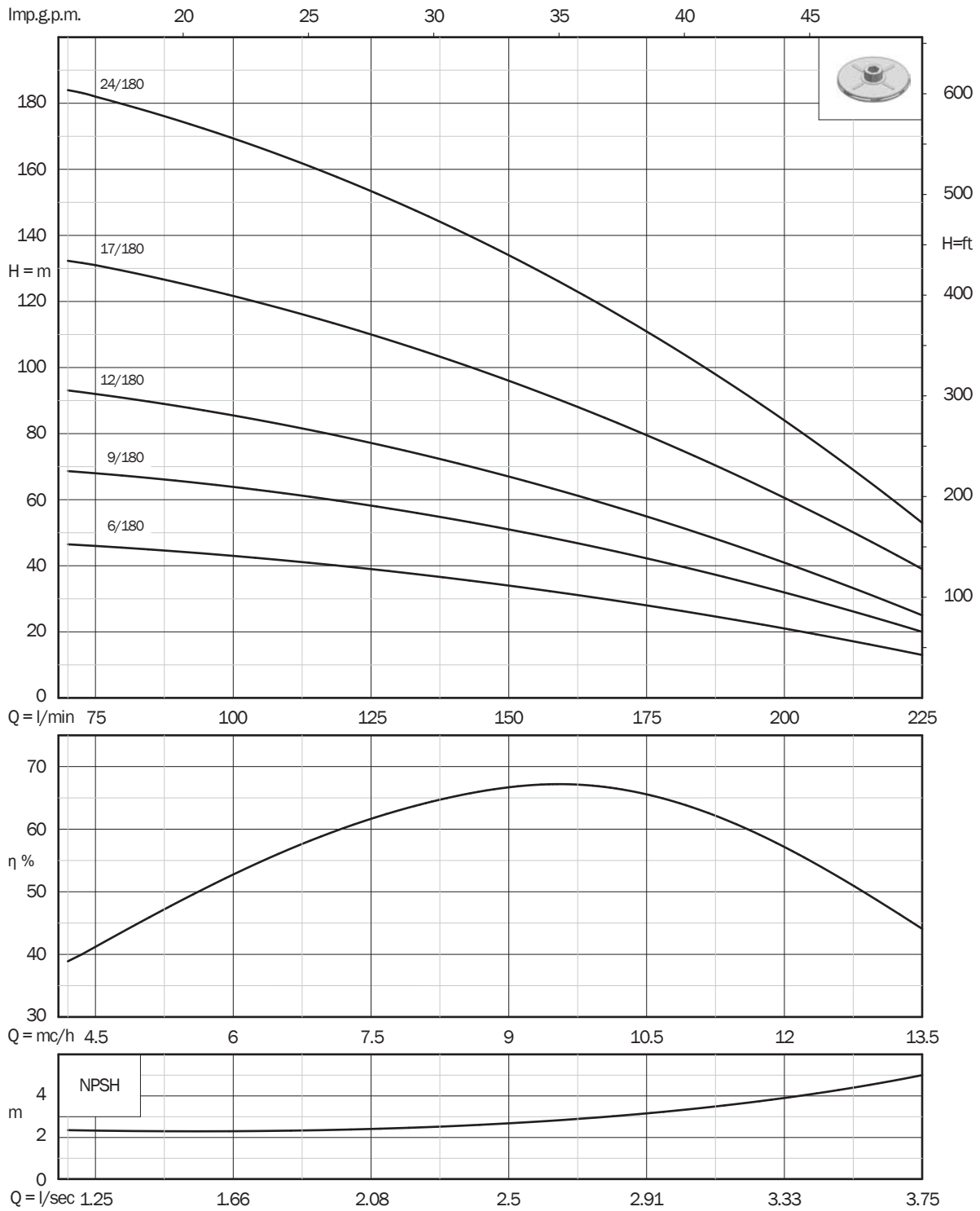
Description

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 m	Weight kg
		Code	Series			hp	kW		l/min	m		A	B	C		
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
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

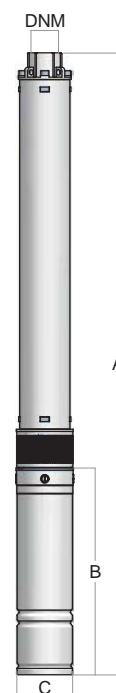
### ACCESSORIES

Code

Description

05405035

Non-return threaded valve 2" GAS



**PERFORMANCE CURVES - 2 poles 60 Hz**

