SDF Submersible borehole pumps for 4” wells

calpeda

The electropumps 4SDX series comply with the European Regulation no. 547/2012.

Materials

Components	Materials
External jacket Suction lantern Upper cover Delivery casing Strainer, Valve set	Cr-Ni steel AISI 304
O-ring valve	NBR
Shaft	Cr-Ni steel AISI 431
Coupling set	Cr-Ni steel AISI 304
Diffuser Stage casing	Cr-Ni steel AISI 304
Impeller	Cr-Ni steel AISI 304
Wear ring	NBR
Bearing bush	NBR
Cable guard, Screws	Cr-Ni-Mo steel AISI 316

Construction

Submersible borehole pumps in **chrome-nickel stainless steel** for 4” wells (DN 100 mm)

Impellers
Radial Impellers: 4SDX 10-18-30-45-80
Mixed Flow Impellers: 4SDX 120

Connection: screwed connection ISO 228.
Delivery casing with built-in non-return valve.

Applications

For clean water, non-aggressive.
For water supply.
For civil and industrial applications.
For fire fighting applications.
For irrigation.

Operating conditions

Liquid temperature: - up to 30 °C
Max. sand quantity in the water: 50 g/m3
Continuous duty.

Rewindable motor MXS series

2-pole induction motor, 50 Hz (n ≈ 2900 rpm).
Sized for connection to the pumps according to NEMA Standards.
Standard voltages:
- single-phase 230 V up to 2,2 kW for 4” motors.
- three-phase 230 V; 400 V, for 4” motors.

Insulation class F for 4” motors.
Motor suitable operation with frequency converter .
Protection IP 68.

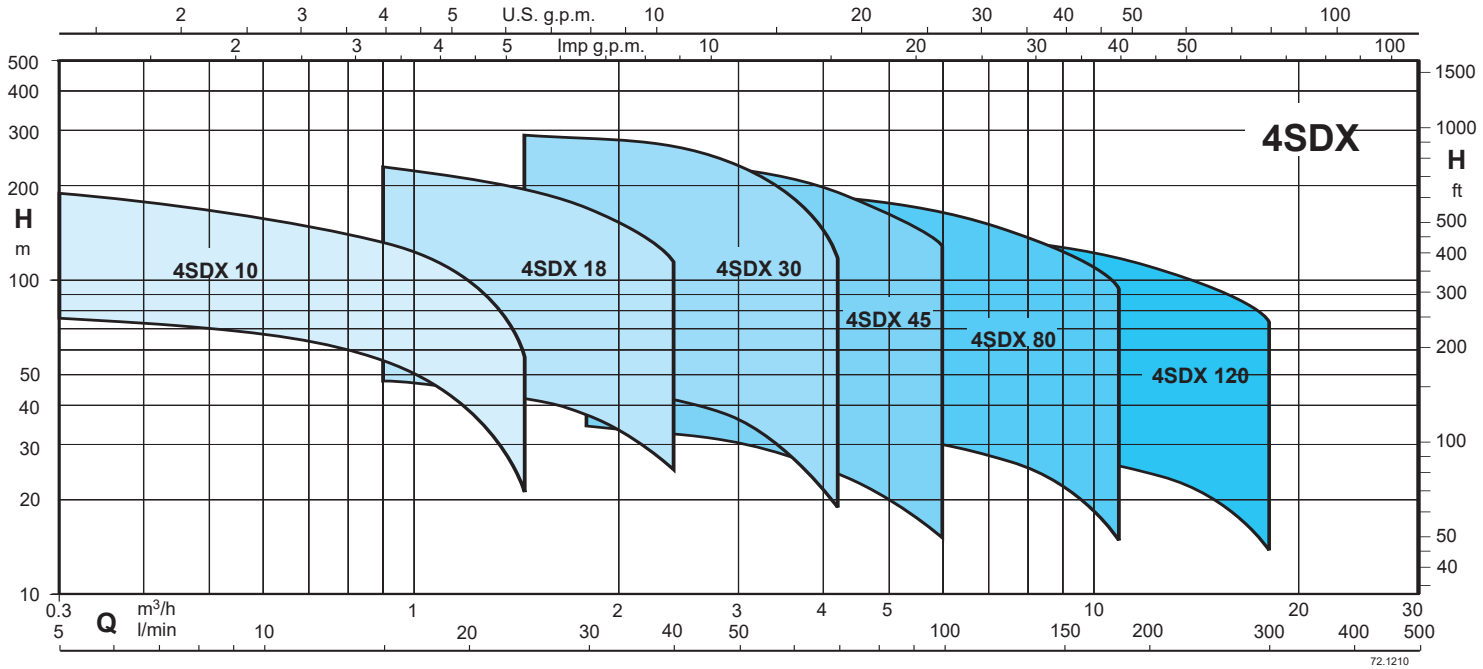
Special features on request

- Other voltages.
- 60 Hz frequency.
- Other temperatures.

Designation

4 SDF M 18/23

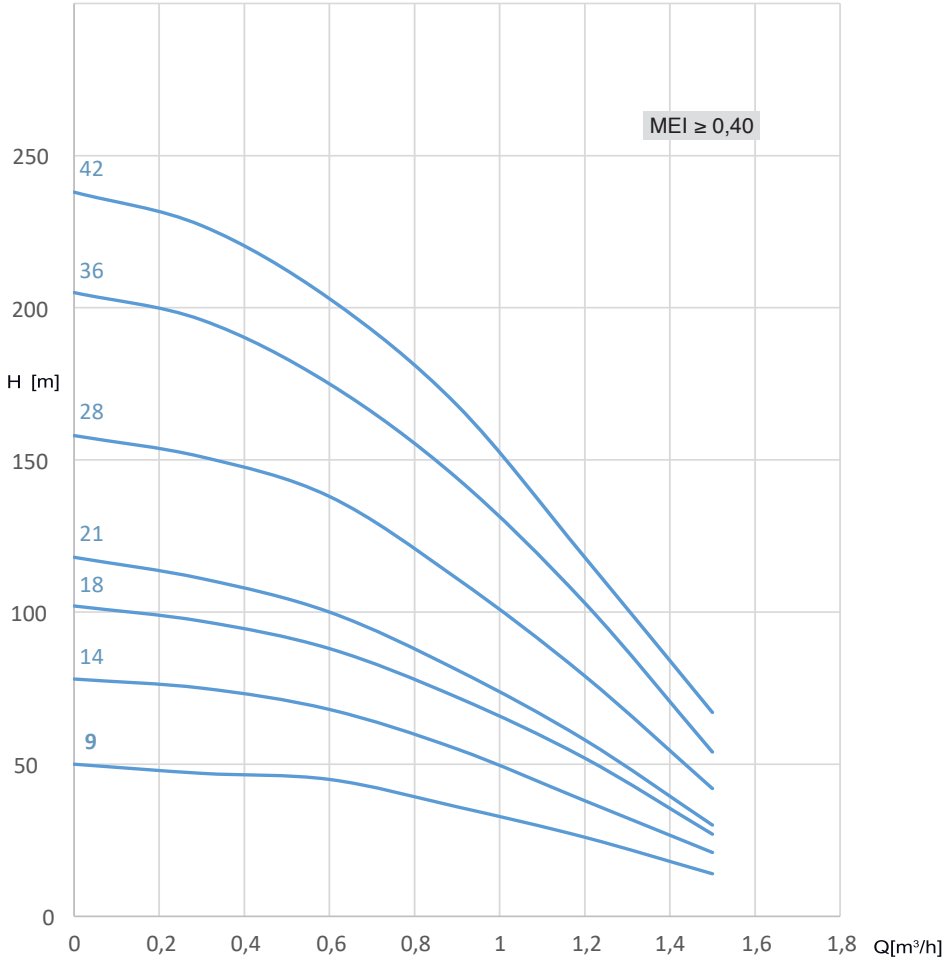
- Ø of the well in inches
- Series
- Single-phase motor (up to max. 2,2 kW)
- Stage identification
- Number of stages

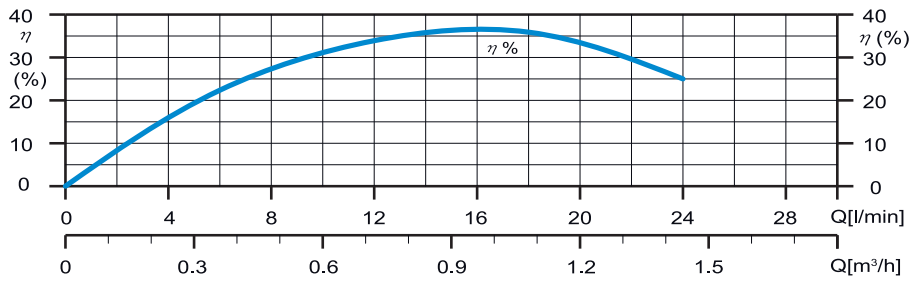


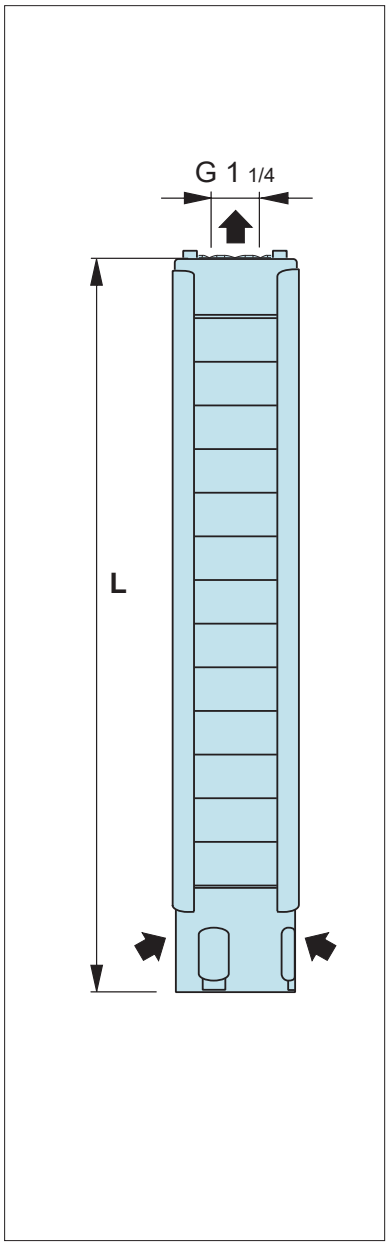
4SDX 10

4" SUBMERSIBLE BOREHOLE PUMPS

50 Hz - n ≈ 2900 rpm







TIPO TYPE	P_2		Q	n≈2900 1/min					
			m3/h	0	0,3	0,6	0,9	1,2	1,5
	kW	HP	l/min	0	5	10	15	20	25
4SDX 10-09	0,37	0,50	H [m]	50	47	45	36	26	14
4SDX 10-14	0,37	0,50		78	75	68	55	38	21
4SDX 10-18	0,55	0,75		102	97	88	72	52	27
4SDX 10-21	0,55	0,75		118	111	100	81	58	30
4SDX 10-28	0,75	1,00		158	151	138	111	79	42
4SDX 10-36	1,10	1,50		205	196	175	144	103	54
4SDX 10-42	1,10	1,50		238	227	203	168	118	67

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
356	2,9
461	3,7
545	4,4
608	5
755	6,2
946	9,9
1072	11,3

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

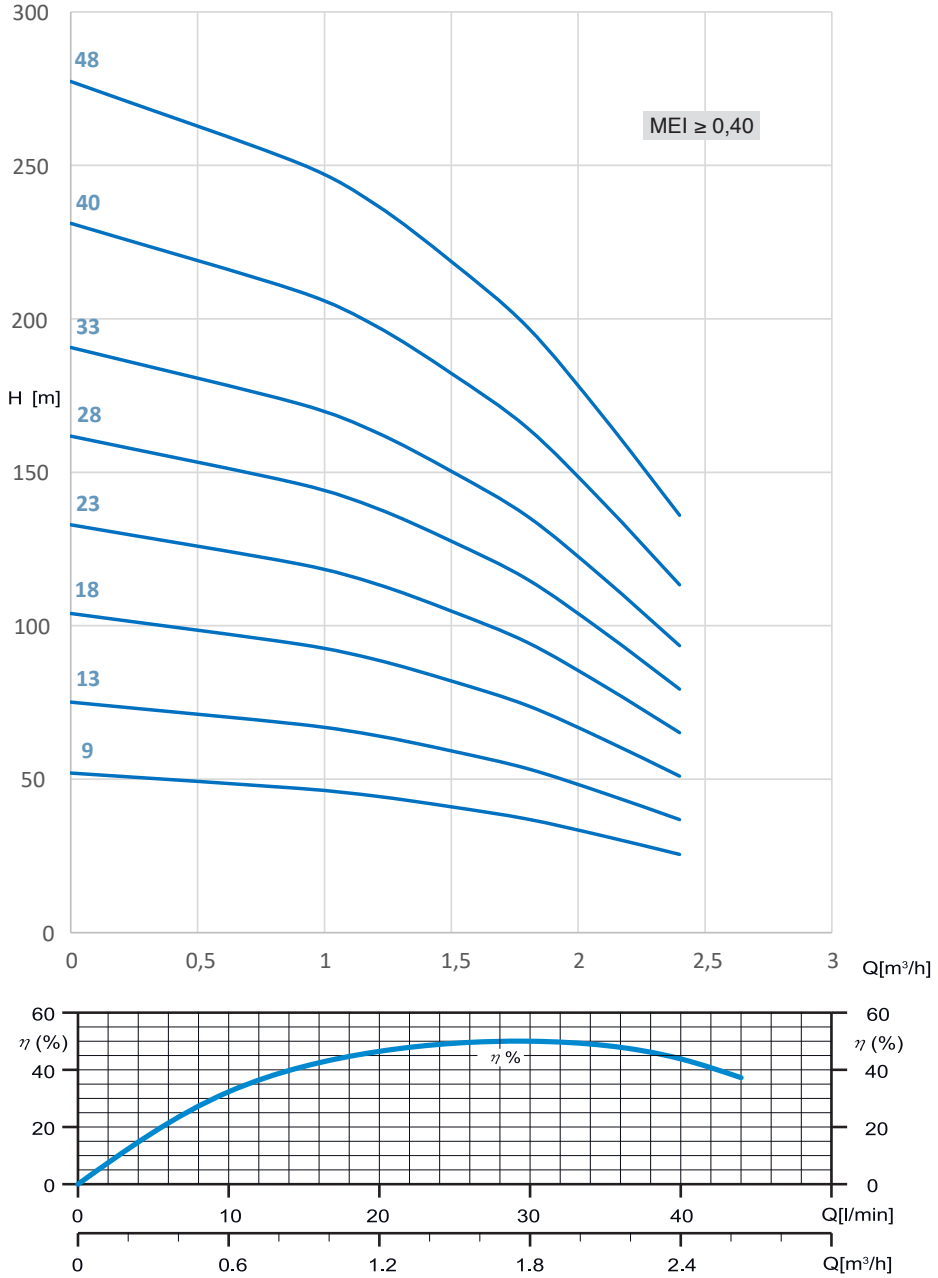
Tolleranze secondo ISO 9906, allegato A.
Tolerances according to ISO 9906, annex A.
Tolérances selon ISO 9906, annexe A.
Tolerancias según ISO 9906, anexo A.

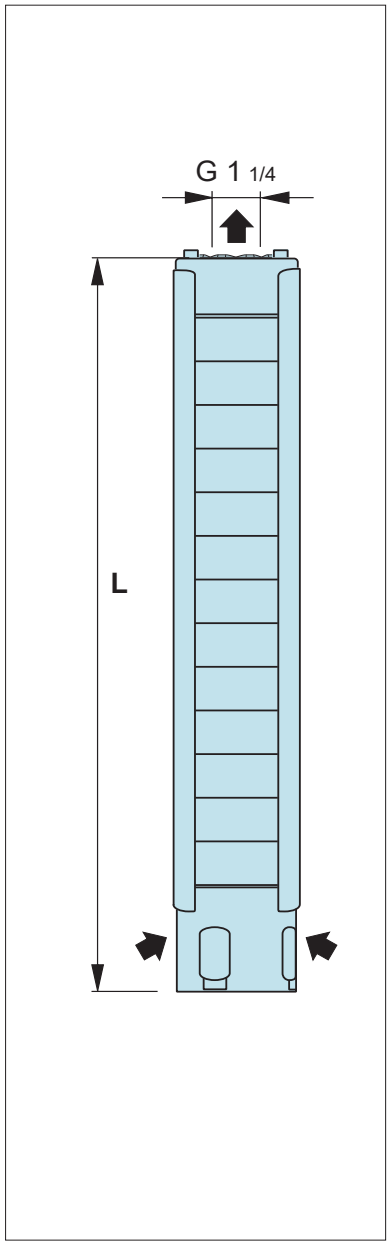
Con riserva di modifiche
Changes reserved
Sous réserves de modifications
Con reserva de modificaciones

4SDX 18 4” SUBMERSIBLE BOREHOLE PUMPS

calpeda

50 Hz - n ≈ 2900 rpm





TIPO TYPE	P_2		Q	n≈2900 1/min						
			m3/h	0	0,9	1,2	1,5	1,8	2,1	2,4
	kW	HP	l/min	0	15	20	25	30	35	40
4SDX 18-09	0,37	0,50		52	48	45	42	38	33	27
4SDX 18-13	0,55	0,75		76	68	64	59	53	46	37
4SDX 18-18	0,75	1,00		104	94	89	82	74	63	51
4SDX 18-23	1,10	1,50	**H**	136	124	117	109	98	85	69
4SDX 18-28	1,50	2,00	[m]	166	153	144	134	121	105	85
4SDX 18-33	1,50	2,00		196	182	172	159	143	124	101
4SDX 18-40	2,20	3,00		235	217	205	190	170	147	119
4SDX 18-48	2,20	3,00		280	261	246	227	205	178	144

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
356	3
440	3,8
545	4,7
650	5,7
755	6,6
883	9,7
1030	11,5
1198	13,5

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

Tolleranze secondo ISO 9906, allegato A.
Tolerances according to ISO 9906, annex A.
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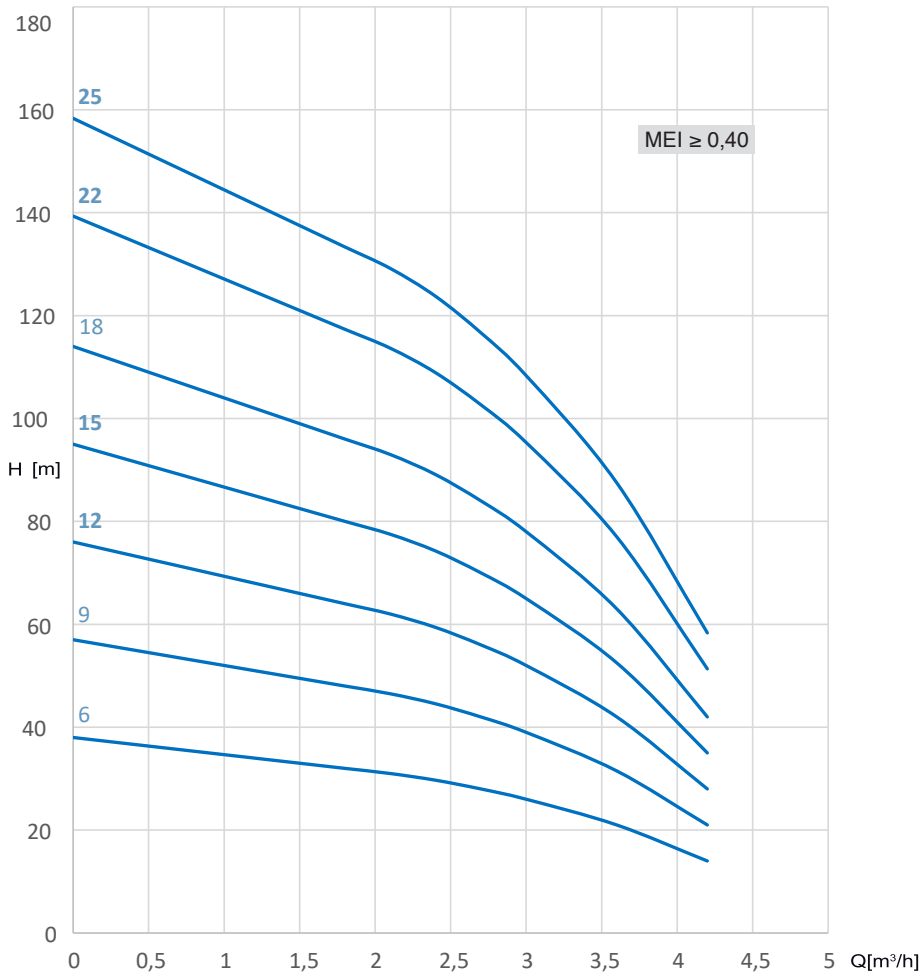
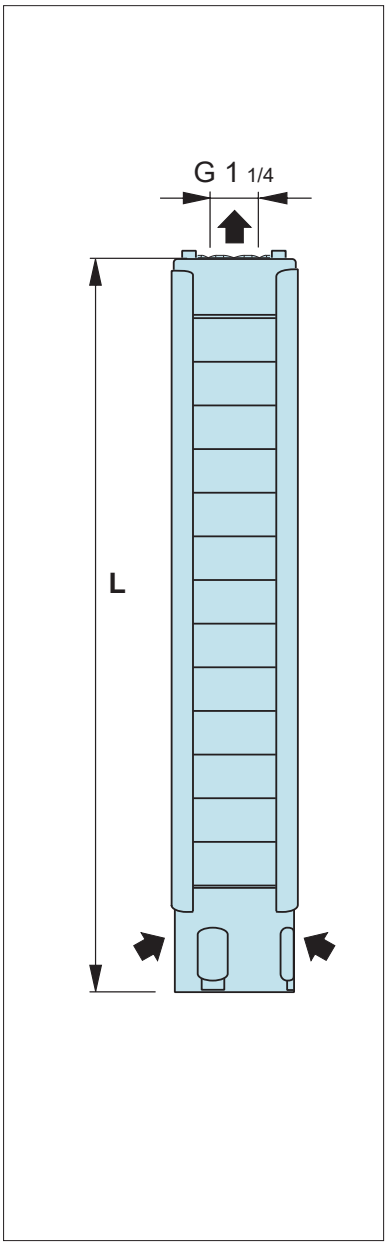
4SDX 30 4" SUBMERSIBLE BOREHOLE PUMPS

calpeda

50 Hz - n ≈ 2900 rpm





TIPO TYPE	P_2		Q	n≈2900 1/min								
			m3/h	0	1,5	1,8	2,1	2,4	2,7	3	3,6	4,2
	kW	HP	l/min	0	25	30	35	40	45	50	60	70
4SDX 30-6	0,37	0,50	H [m]	38	33	32	31	30	28	26	21	14
4SDX 30-9	0,55	0,75		57	49	47	46	43	41	38	30	19
4SDX 30-12	0,75	1,00		77	66	64	62	58	56	52	42	28
4SDX 30-15	1,10	1,50		97	85	83	80	77	74	69	57	40
4SDX 30-18	1,10	1,50		116	101	97	94	90	85	80	67	45
4SDX 30-22	1,50	2,00		142	123	120	115	110	105	98	80	54
4SDX 30-25	1,50	2,00		160	139	134	129	123	117	110	90	61

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
293	2,4
356	3
419	3,6
482	4,2
545	4,7
629	5,5
691	6,1

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

Tolleranze secondo ISO 9906, allegato A.
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Tolerancias según ISO 9906, anexo A.

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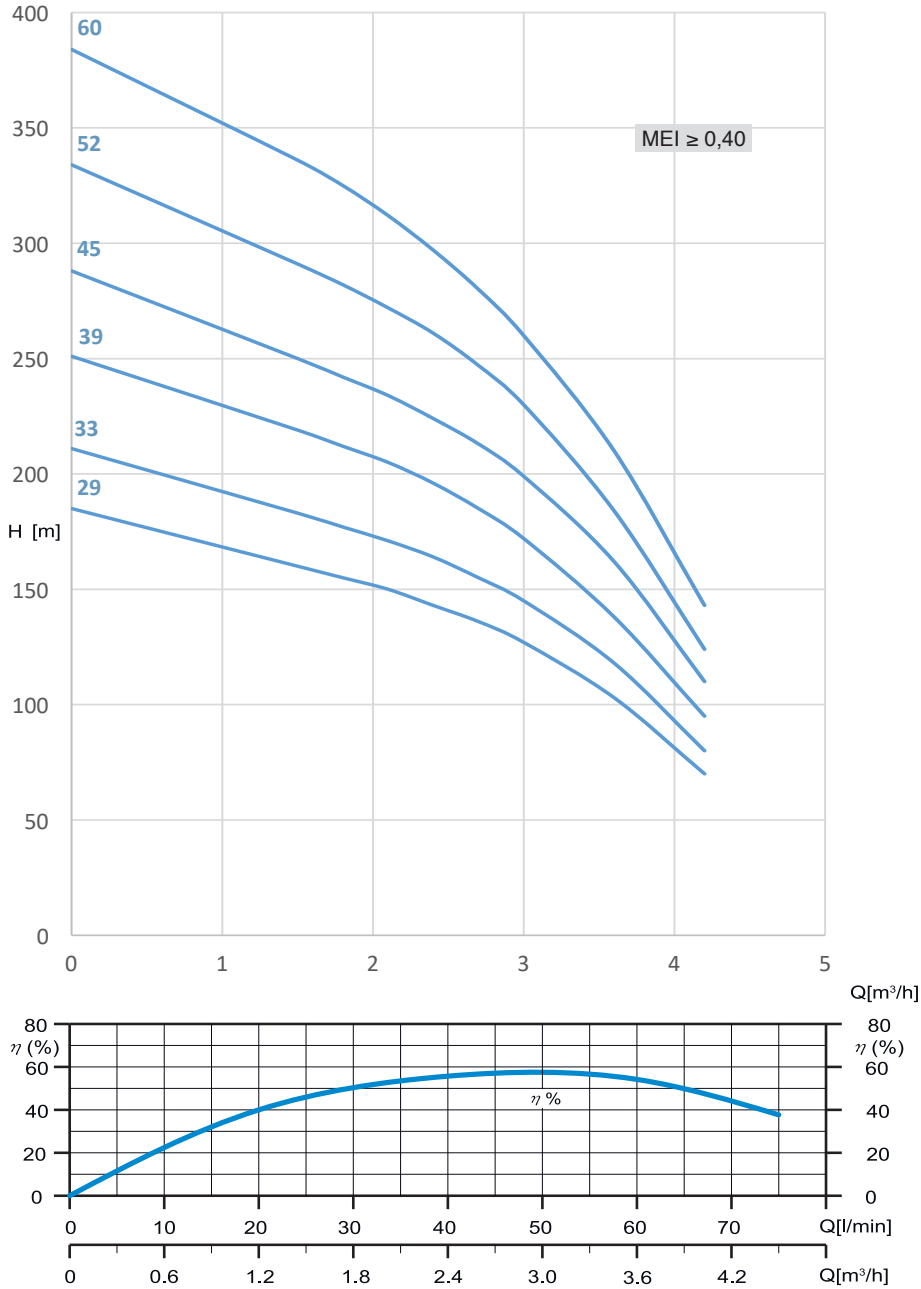
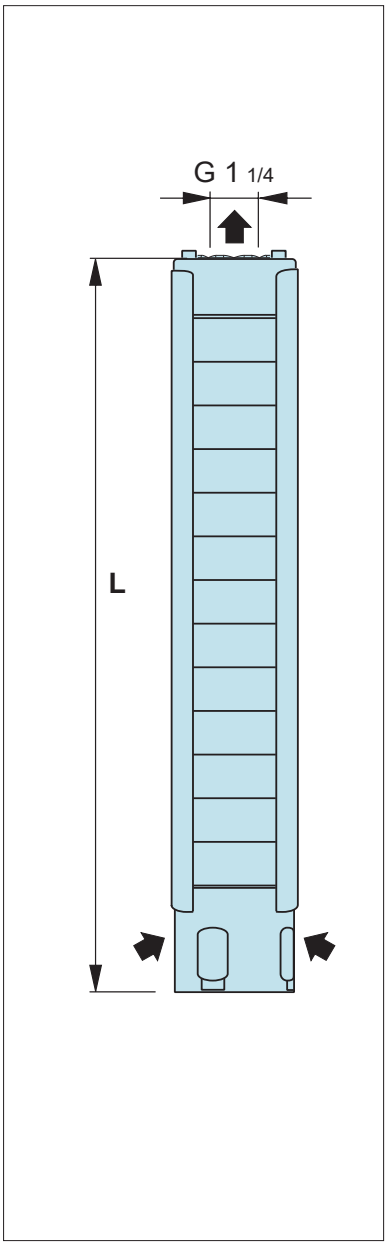
4SDX 30

4" SUBMERSIBLE BOREHOLE PUMPS

calpeda

50 Hz - n ≈ 2900 rpm





TIPO TYPE	P_2		Q	n≈2900 1/min								
			m3/h	0	1,5	1,8	2,1	2,4	2,7	3	3,6	4,2
	kW	HP	l/min	0	25	30	35	40	45	50	60	70
4SDX 30-29	2,20	3,00	H [m]	185	160	155	150	143	136	127	103	70
4SDX 30-33	2,20	3,00		211	183	177	171	164	155	145	118	80
4SDX 30-39	3,00	4,00		251	219	212	205	196	185	172	138	95
4SDX 30-45	3,00	4,00		288	250	242	234	224	213	199	162	110
4SDX 30-52	4,00	5,50		334	291	282	272	261	247	230	184	124
4SDX 30-60	4,00	5,50		384	336	325	312	297	280	260	210	143

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
776	6,8
883	9,7
1009	11,2
1135	12,7
1282	14,5
1450	16,6

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

Tolleranze secondo ISO 9906, allegato A.
Tolerances according to ISO 9906, annex A.
Tolérances selon ISO 9906, annexe A.
Tolerancias según ISO 9906, anexo A.

Con riserva di modifiche
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Sous réserves de modifications
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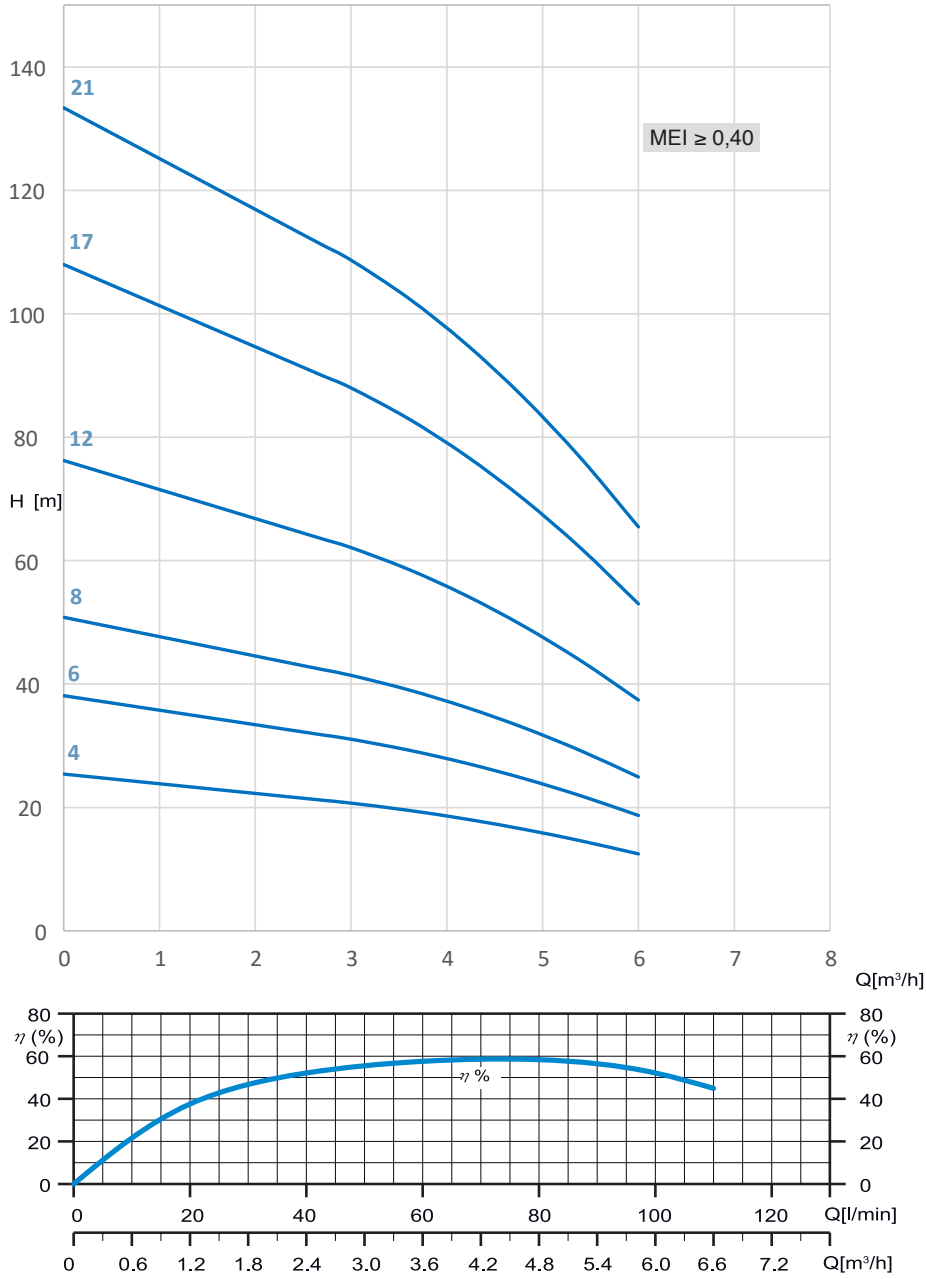
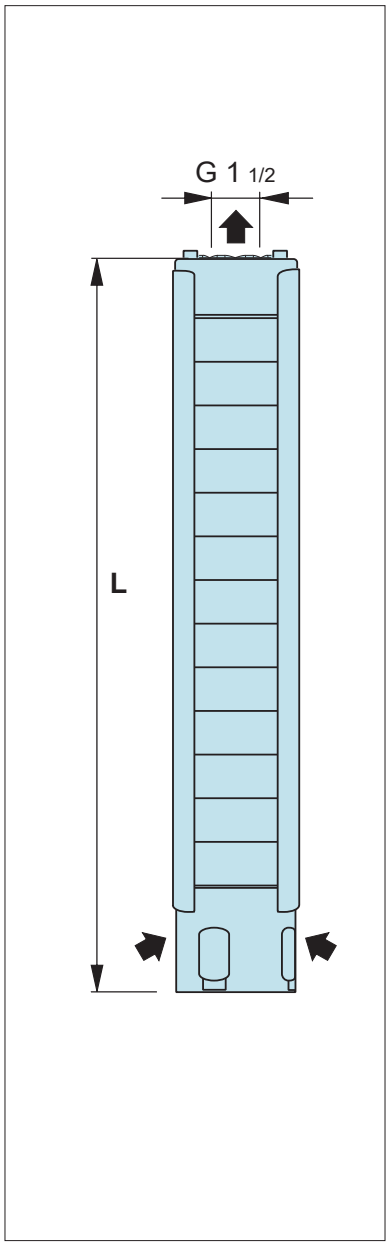
4SDX 45 4" SUBMERSIBLE BOREHOLE PUMPS

calpeda

50 Hz - n ≈ 2900 rpm





TIPO TYPE	P_2		Q	n≈2900 1/min										
			m3/h	0	1,8	2,1	2,4	2,7	3	3,6	4,2	4,8	5,4	6
	kW	HP	l/min	0	30	35	40	45	50	60	70	80	90	100
4SDX 45-04	0,37	0,50		25	23	22	21	20,5	20	19	17	15	12	10
4SDX 45-06	0,55	0,75		38	34	33	32	31	30	28	26	23	20	16
4SDX 45-08	0,75	1,00	**H**	51	45	44	43	42	41	39	36	32	28	23
4SDX 45-12	1,10	1,50	[m]	77	68	67	66	64	63	60	56	51	44	37
4SDX 45-17	1,50	2,00		108	96	94	92	90	88	83	77	70	62	53
4SDX 45-21	2,20	3,00		134	118	115	113	111	108	103	96	87	77	67

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
251	2
293	2,4
335	2,8
419	3,6
524	4,5
608	5,3

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

Tolleranze secondo ISO 9906, allegato A.
Tolerances according to ISO 9906, annex A.
Tolérances selon ISO 9906, annexe A.
Tolerancias según ISO 9906, anexo A.

Con riserva di modifiche
Changes reserved
Sous réserves de modifications
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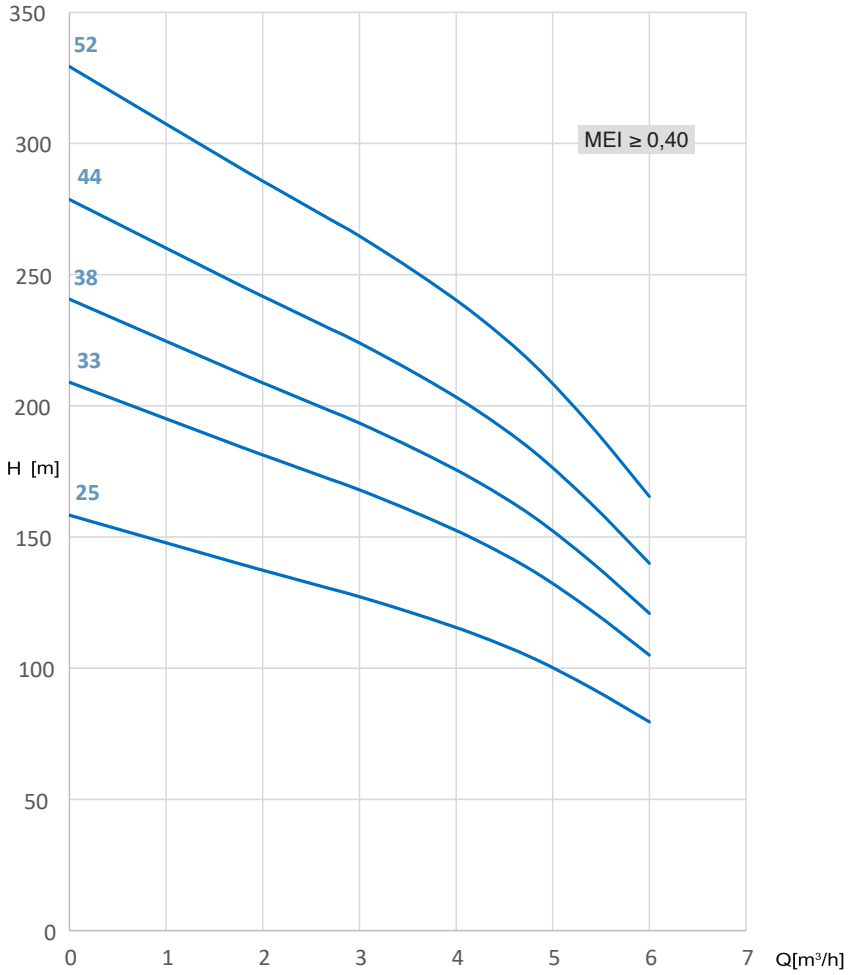
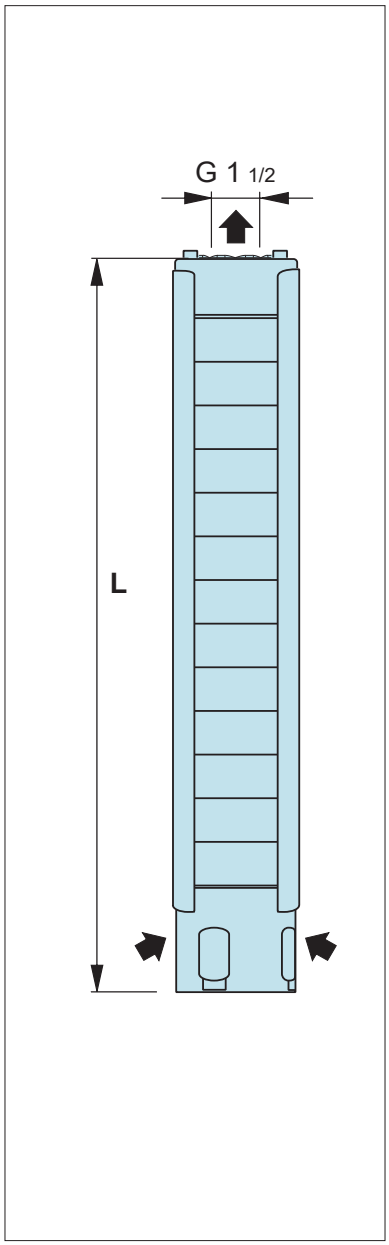
4SDX 45 4" SUBMERSIBLE BOREHOLE PUMPS

calpeda

50 Hz - n ≈ 2900 rpm





TIPO TYPE	P_2		Q	n≈2900 1/min										
			m3/h	0	1,8	2,1	2,4	2,7	3	3,6	4,2	4,8	5,4	6
	kW	HP	l/min	0	30	35	40	45	50	60	70	80	90	100
4SDX 45-25	2,20	3,00	H [m]	157	138	136	133	130	127	121	113	103	90	78
4SDX 45-33	3,00	4,00		209	184	180	176	172	168	159	149	137	122	105
4SDX 45-38	4,00	5,50		242	212	208	203	199	194	184	172	158	142	123
4SDX 45-44	4,00	5,50		279	247	242	237	231	226	215	202	187	166	143
4SDX 45-52	5,50	7,50		332	291	285	279	273	267	253	237	218	195	166

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
692	6
868	9,6
973	10,9
1099	12,4
1267	14,4

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

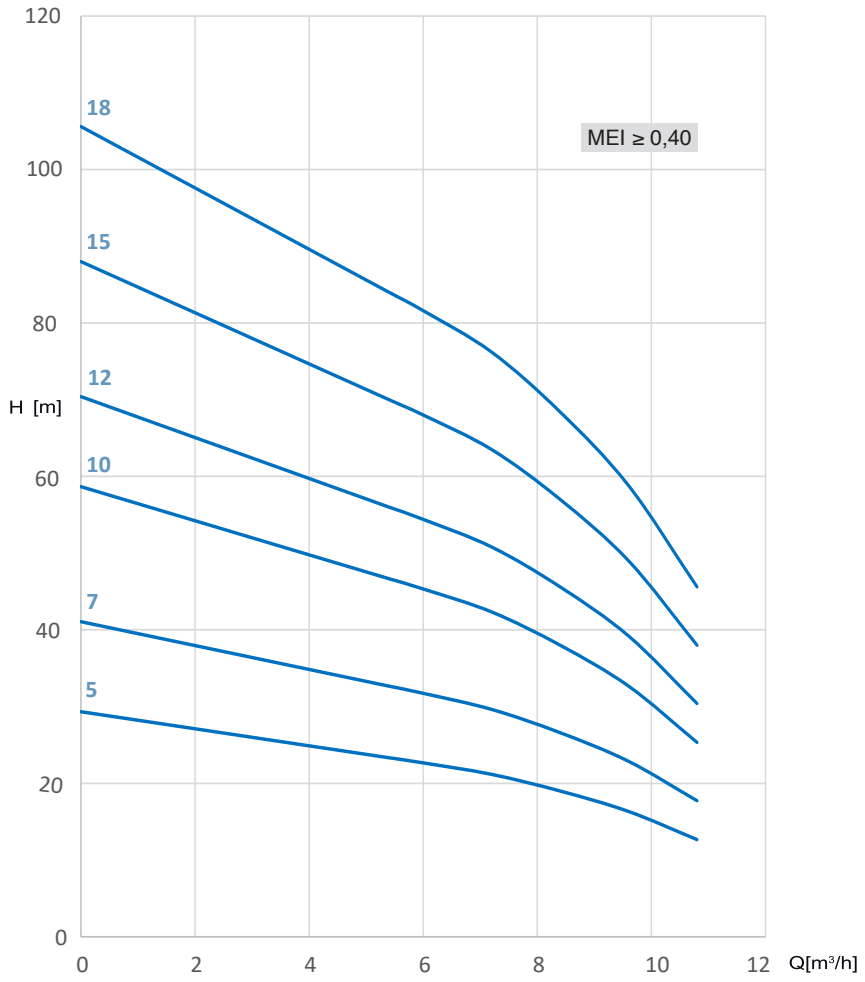
Tolleranze secondo ISO 9906, allegato A.
Tolerances according to ISO 9906, annex A.
Tolérances selon ISO 9906, annexe A.
Tolerancias según ISO 9906, anexo A.

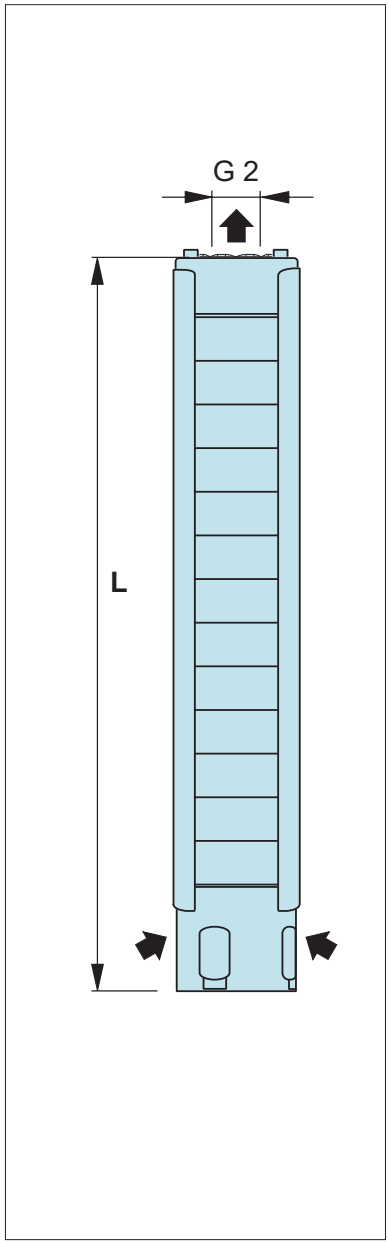
Con riserva di modifiche
Changes reserved
Sous réserves de modifications
Con reserva de modificaciones

4SDX 80 4" SUBMERSIBLE BOREHOLE PUMPS

calpeda

50 Hz - n ≈ 2900 rpm





TIPO TYPE	P_2		Q	n≈2900 1/min												
			m3/h	0	2,4	2,7	3	3,6	4,2	4,8	5,4	6	7,2	8,4	9,6	10,8
	kW	HP	l/min	0	40	45	50	60	70	80	90	100	120	140	160	180
4SDX 80-05	0,75	1,00	H [m]	30	28	27	26	26	25	24	23	22	21	19	15	11
4SDX 80-07	1,10	1,50		41	39	38	38	37	36	35	34	33	32	28	24	18
4SDX 80-10	1,50	2,00		58	54	53	52	51	49	48	47	46	43	38	32	25
4SDX 80-12	2,20	3,00		71	65	64	63	61	60	58	56	55	52	47	40	31
4SDX 80-15	2,20	3,00		88	80	79	78	76	74	72	70	68	64	57	49	38
4SDX 80-18	3,00	4,00		104	98	96	95	93	90	88	86	84	79	72	60	46

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
412	4,3
496	5,3
622	6,8
706	7,8
832	9,3
958	10,8

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

Tolleranze secondo ISO 9906, allegato A.
Tolerances according to ISO 9906, annex A.
Tolérances selon ISO 9906, annexe A.
Tolerancias según ISO 9906, anexo A.

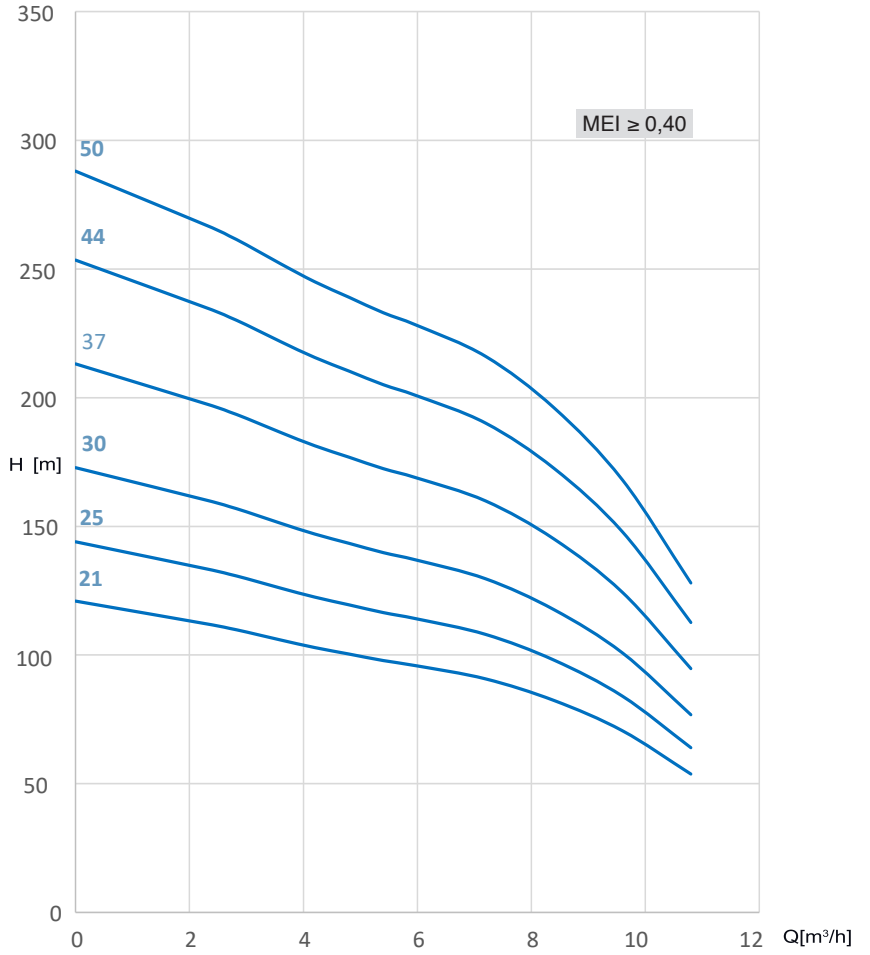
Con riserva di modifiche
Changes reserved
Sous réserves de modifications
Con reserva de modificaciones

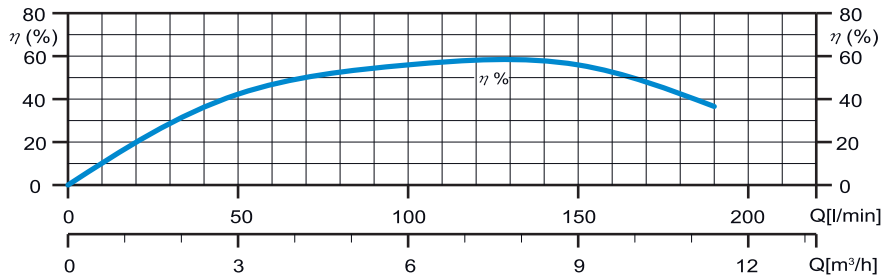
4SDX 80

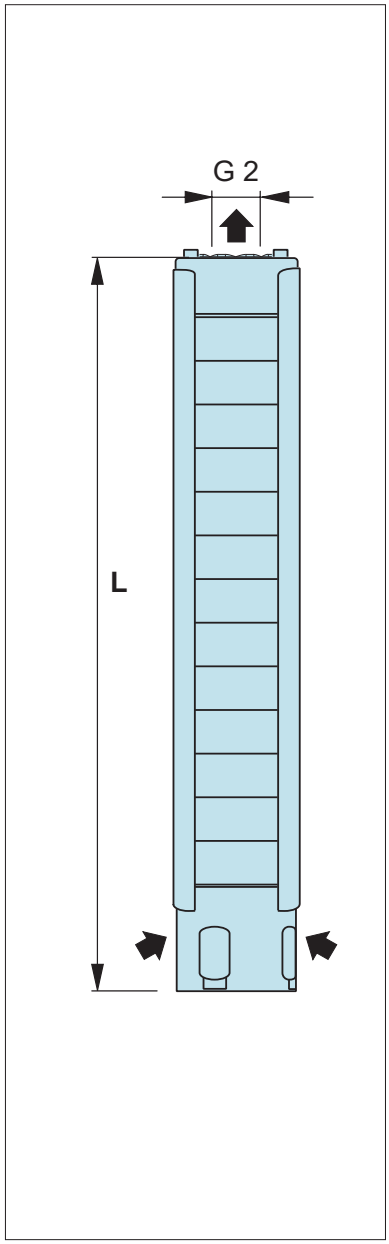
4" SUBMERSIBLE BOREHOLE PUMPS

calpeda

50 Hz - n ≈ 2900 rpm







TIPO TYPE	P_2		Q	n≈2900 1/min												
			m3/h	0	2,4	2,7	3	3,6	4,2	4,8	5,4	6	7,2	8,4	9,6	10,8
	kW	HP	l/min	0	40	45	50	60	70	80	90	100	120	140	160	180
4SDX 80-21	4,00	5,50	H [m]	122	114	112	111	107	105	102	100	98	93	85	72	55
4SDX 80-25	4,00	5,50		144	133	131	129	126	122	119	116	114	108	98	84	64
4SDX 80-30	5,50	7,50		174	163	160	157	154	149	145	142	139	132	120	102	79
4SDX 80-37	5,50	7,50		215	199	196	194	188	183	177	173	169	160	145	122	93
4SDX 80-44	7,50	10		256	240	236	232	224	217	212	207	203	192	175	148	112
4SDX 80-50	7,50	10		290	269	266	261	254	247	241	236	231	219	199	168	127

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
1084	12,3
1252	14,3
1462	16,8
1753	20,3
2047	23,3
2299	26,04

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

Tolleranze secondo ISO 9906, allegato A.
Tolerances according to ISO 9906, annex A.
Tolérances selon ISO 9906, annexe A.
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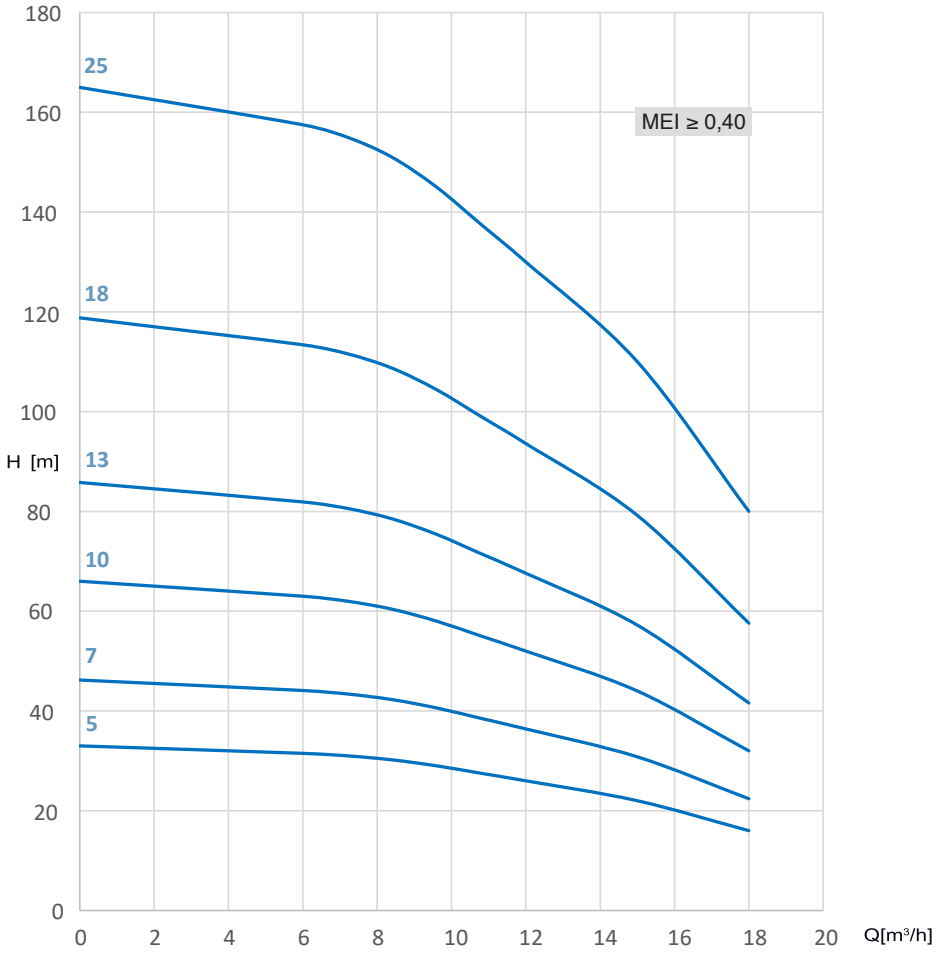
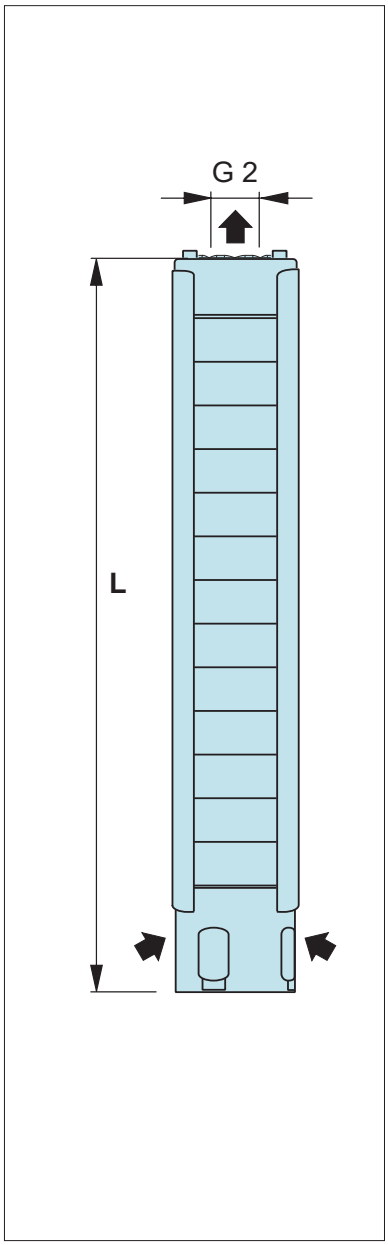
4SDX 120

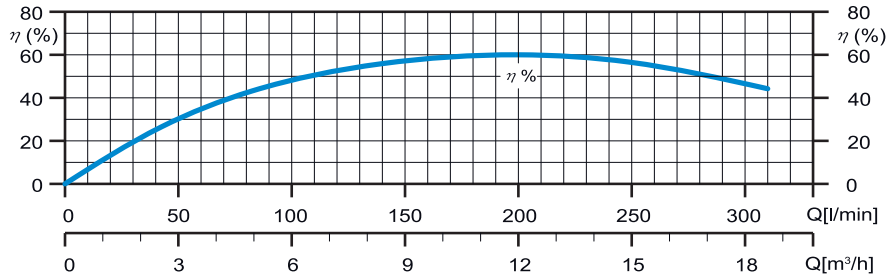
4" SUBMERSIBLE BOREHOLE PUMPS

calpeda

50 Hz - n ≈ 2900 rpm







TIPO TYPE	P_2		Q	n≈2900 1/min								
			m3/h	0	6	7,2	8,4	9,6	10,8	12	15	18
	kW	HP	l/min	0	100	120	140	160	180	200	250	300
4SDX 120-05	1,50	2,00	H [m]	33	32	31	30	29	28	26	22	16
4SDX 120-07	2,20	3,00		46	44	43	42	40	38	36	30	20
4SDX 120-10	3,00	4,00		65	62	60	58	56	54	51	43	29
4SDX 120-13	4,00	5,50		84	80	78	77	74	71	67	56	38
4SDX 120-18	5,50	7,50		117	111	108	104	102	97	93	77	54
4SDX 120-25	7,50	10		163	154	149	145	141	135	129	107	75

Dimensioni Dimensions	
Length [mm]	Weight [Kg]
505	5
635	6,3
830	8,2
1025	10,2
1350	13,4
1805	17,8

P_2 Potenza nominale motore
Rated motor power output
Puissance nominale du moteur
Potencia nominal del motor

H Prevalenza totale in m
Total head in m
Hauteur totale en m
Altura total en m

Tolleranze secondo ISO 9906, allegato A.
Tolerances according to ISO 9906, annex A.
Tolérances selon ISO 9906, annexe A.
Tolerancias según ISO 9906, anexo A.

Con riserva di modifiche
Changes reserved
Sous réserves de modifications
Con reserva de modificaciones

4MXS

4" Submersible motors

Calpeda 4" submersible motors are built using advanced technology and components of superior quality that they ensure good mechanical strength and excellent electrical reliability.
Performance is guaranteed thanks to strict tests of all the different components during the various production phases.

Rewindable motor MXS series

The **MXS** 4" motors have a special food grade dielectric fluid that gives a better lubricant effect, increasing the life of all moving parts and the copper wires.
The special design of all our motors allows easy access to the various components, simplifying maintenance and repair. All the **MXS** motors can be rewound and are NEMA STANDARD.

Operation data

2-pole induction motor, 50 Hz (n ≈ 2900 rpm).
Sized for connection to the pumps according to NEMA Standards. Standard voltages:

- single-phase 230 V - up to 2,2 kW for 4" motors.
- three-phase 400 V for 4" motors.

Voltage tolerance : +6% / -10%.

Motor suitable operation with frequency converter (4" single-phase excluded).
Protection IP 68.

Operating conditions

Max. Liquid temperature 35 °C.
Cooling minimum flow velocity 0,08 m/s.
Suitable for horizontal applications up to 3 HP included. Maximum number of starts per hour = 20
Continuous duty.

Materials

Components	4"
External frame	Cr-Ni steel AISI 304
Motor flange	Cr-Ni steel AISI 304
Shaft end	Cr-Ni-Mo steel AISI 316
Thrust bearing	Oil wetted

Cable

Motor 230V - 50Hz - 1~	Section	Length
0,37 ÷ 1,5 kW	3x1,5 + 1G1,5 mm²	2 m
2,2 kW	3x2 + 1G2 mm²	2 m

Motor 400V - 50Hz - 3 ~	Section	Length
0,37 ÷ 1,5 kW	3x1,5 + 1G1,5 mm²	2 m
2,2 ÷ 5,5 kW	3x1,5 + 1G1,5 mm²	3 m

Performance, dimensions and weights

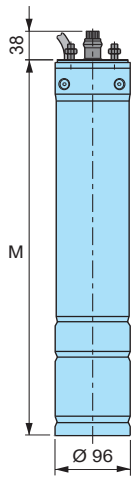
4"MXS - 1 ~

Type	PN kW	PN HP	IN 230 V A	Power factor cos φ 4/4	3/4	2/4	Efficiency η % 4/4	3/4	2/4	R.P.M.	Direct start IA/IN	CA/CN	Capacitor 450 Vc µF	Axial thrust N	M mm	Weight kg
4MXS 037M	0,37	0,5	3.2	0.96	0.93	0.85	53	46	29	≈ 2850	3.8	0.78	16	1500	327	7,6
4MXS 055M	0,55	0,75	4.0	0.99	0.97	0.89	62	54	35		4.6	0.80	25		362	9,4
4MXS 075M	0,75	1	5.6	0.98	0.99	0.99	62	55	36		4.2	0.81	35		402	10,7
4MXS 110M	1,1	1,5	8.4	0.97	0.93	0.83	61	55	36		4.2	0.81	40		447	12,4
4MXS 150M	1,5	2	11.2	0.99	0.97	0.89	64	59	39		3.9	0.75	60		467	13,5
4MXS 220M	2,2	3	14.7	0.96	0.93	0.80	67	64	44		4.2	0.51	70		517	15,7

4"MXS - 3 ~

Type	PN kW	PN HP	IN 400 V A	Power factor cos φ 4/4	3/4	2/4	Efficiency η % 4/4	3/4	2/4	R.P.M.	Direct start IA/IN	CA/CN	Axial thrust N	M mm	Weight kg
4MXS 037T	0,37	0,5	1.2	0.72	0.64	0.47	63	58	44	≈ 2850	5.6	4.2	1500	327	7,7
4MXS 055T	0,55	0,75	1.5	0.79	0.71	0.53	68	66	52		6.1	4.10		347	8,7
4MXS 075T	0,75	1	2.0	0.77	0.69	0.48	74	71	58		5.7	4.02		362	9,9
4MXS 110T	1,1	1,5	2.9	0.78	0.69	0.48	75	73	60		5.7	3.95		402	10,8
4MXS 150T	1,5	2	4.2	0.73	0.64	0.44	72	70	55		5.9	4.58		447	12,6
4MXS 220T	2,2	3	5.5	0.81	0.71	0.47	72	73	62		4.9	2.2		402	11,7
4MXS 300T	3	4	7,4	0,81	0,72	0,56	73,5	73,5	69		5,7	2,16	4500	481	14,9
4MXS 400T	4	5,5	9,4	0,82	0,74	0,60	74,5	75	71		6,3	2,19		546	18,2
4MXS 550T	5,5	7,5	13	0,81	0,72	0,57	76	76	71		7,8	3,44		646	23

Connection
4" NEMA



4MXS 4" Submersible motors

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Maximum length of electric cables

In A	230 Volt - 50 Hz - 1 ~				
	1 four-wires cable 4 x ....mm²				
	1,5	2,5	4	6	10
	cables max m				
2	142	235			
4	71	118	189		
6	47	78	126	189	
8	35	59	94	142	231
10	28	47	76	113	185
12	24	39	63	95	154
14	20	34	54	81	132
16	18	29	47	71	115
18		26	42	63	103
20		24	38	57	92
25			30	45	74
30			25	38	62

Voltage drop 3%.
Maximum ambient temperature + 30 °C.

Direct-starting

In A	230 Volt - 50 Hz - 3 ~												
	1 four-wires cable 4 x ....mm²								4 cables 1 x ....mm²				
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150
	cables max m												
2	164	272											
4	82	136	218										
6	55	91	145	218									
8	41	68	109	164	267								
10	33	54	87	131	213								
12	27	45	73	109	178								
14	23	39	62	94	152	239							
16	20	34	55	82	133	209							
18		30	48	73	118	186							
20		27	44	65	107	167	257						
25			35	52	85	134	206						
30			29	44	71	111	171	233					
35				37	61	95	147	200					
40				33	53	83	129	175	227				
45					47	74	114	155	202				
50					43	67	103	140	181	249			
60						56	86	116	151	207			
70						48	73	100	130	178	230		
80							64	87	113	155	201	241	
90							57	78	101	138	179	214	
100							51	70	91	124	161	193	224
110								64	82	113	146	175	203
120								58	76	104	134	161	186
130									70	96	124	148	172
140									65	89	115	138	160
150									60	83	107	128	149
160									57	78	101	120	140
170									53	73	95	113	132
180									50	69	89	107	124
190									48	65	85	101	118
200									45	62	81	96	112
220										57	73	88	102
240										52	67	80	93
260											62	74	86
280											58	69	80
300											54	64	75

In A	400 Volt - 50 Hz - 3 ~														
	1 four-wires cable 4 x ....mm²								4 cables 1 x ....mm²						
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240
	cables max m														
2	285	473													
4	143	236	379												
6	95	158	253												
8	71	118	190	285											
10	57	95	152	228											
12	48	79	126	190	309										
14	41	68	108	163	265										
16	36	59	95	142	232										
18		53	84	127	206	323									
20		47	76	114	185	290									
25			61	91	148	232	358								
30			51	76	124	194	298								
35				65	106	166	256	347							
40				57	93	145	224	304							
45					82	129	199	270							
50					74	116	179	243	316						
60						97	149	203	263						
70						83	128	174	225	309					
80							112	152	197	270					
90							99	135	175	240	311				
100							89	122	158	216	280				
110								110	143	197	255	305			
120								101	132	180	233	279			
130									121	166	216	258	299		
140									113	155	200	239	278		
150									105	144	187	223	259	302	
160									99	135	175	209	243	283	
170									93	127	165	197	229	267	
180									88	120	156	186	216	252	297
190									83	114	147	176	205	239	281
200									79	108	140	168	195	227	267
220										98	127	152	177	206	243
240										90	117	140	162	189	223
260											108	129	150	174	206
280											100	120	139	162	191
300											93	112	130	151	178

Electric control panels

M COMP Control panel for 1 single-phase submersible pump

LVBT

Type	Protector max **A**	Capacitor **450Vc**	Motor 230V - 1~ **kW**	Dimensions HxBxP mm
M COMP 4-16	4,5	16 µF	0,37	220x210x110
M COMP 4-20	4,5	20 µF	0,55	220x210x110
M COMP 5-20	5	20 µF	0,55	220x210x110
M COMP 5-25	5	25 µF	0,55	220x210x110
M COMP 6-20	6	20 µF	0,75	220x210x110
M COMP 6-35	6	35 µF	0,9	220x210x110
M COMP 7-25	7	25 µF	0,9	220x210x110
M COMP 7-30	7	30 µF	0,9	220x210x110
M COMP 8-25	8	25 µF	1,1	220x210x110
M COMP 8-30	8	30 µF	1,1	220x210x110
M COMP 10-35	10	35 µF	1,1	220x210x110
M COMP 10-40	10	40 µF	1,1	220x210x110
M COMP 12-35	12	35 µF	1,5	220x210x110
M COMP 12-50	12	50 µF	1,5	220x210x110
M COMP 12-60	12	60 µF	1,5	220x210x110
M COMP 16-70	16	70 µF	2,2	220x210x110

Construction

Control panel with ON-OFF switch and capacitor for 1 submersible pump with single-phase motor.
Suitable for use with LVBT board for level control.
Protection is provided by means of a main bipolar switch with a phase protected against overload by means of a thermal element.

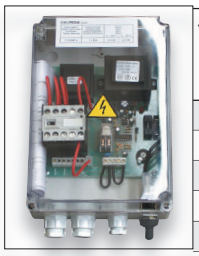
PFC-M Control panel for 1 submersible pump with single-phase motor, PF control

Type	Setting **A**	Capacitor **450Vc**	Motor 50/60Hz 220V-240V - 1~ **kW**	Dimensions HxBxP mm
PFC-M 18-16	1 - 18	16 µF	0,37	220x210x110
PFC-M 18-20	1 - 18	20 µF	0,55	220x210x110
PFC-M 18-25	1 - 18	25 µF	0,55	220x210x110
PFC-M 18-30	1 - 18	30 µF	0,75	220x210x110
PFC-M 18-35	1 - 18	35 µF	0,75	220x210x110
PFC-M 18-40	1 - 18	40 µF	1,1	220x210x110
PFC-M 18-50	1 - 18	50 µF	1,5	220x210x110
PFC-M 18-60	1 - 18	60 µF	1,5	220x210x110
PFC-M 18-70	1 - 18	70 µF	2,2	220x210x110

Construction

Control panel for controlling one submersible pump with single-phase motor.
Electronic control of the operation and dry-running protection through the power factor (PF) control.
The installation of level probes into the well is not required.
It stops the pump in case of lack of air cushion in the pressure vessel (patented system).
Displayed operating data and alarms available in four languages.

T COMP Control panel for 1 submersible pump with three-phase motor



Type	Protector **A**	Motor 230V - 3~ **kW**	Motor 400V - 3~ **kW**	Dimensions HxBxP mm
T COMP 8	1 ÷ 8	0,37 ÷ 1,5	0,5 ÷ 2,2	170x145x85
T COMP 10	7 ÷ 10	---	3 ÷ 3,7	230x180x155
T COMP 12	9 ÷ 12	2,2	4	230x180x155
T COMP 16	11 ÷ 16	3	5,5	230x180x155
T COMP 20	14 ÷ 20	3,7 - 4	7,5	230x180x155

Construction

Control panel and protection for 1 submersible pump with three-phase motor.
Arranged for the LVBT level control internal connection against dry running (T COMP8 model has the level control as a standard).
Control pumps with pressure switch and float-type switch.

PFC-T Control panel for 1 submersible pump with three-phase motor, PF control

Type	Motor 400V - 3~ **kW**	Setting **A**	Dimensions *HxBxP mm*
PFC-T 16/A	0,37 - 5,5	1 - 16	250x205x105

Construction

Control panel for controlling 1 submersible pump with three-phase motor. Electronic control of the operation and dry-running protection through the power factor (PF) control.
The installation of level probes into the well is not required.
It stops the pump in case of lack of air cushion in the pressure vessel (patented system) Displayed operating data and alarms, available in four languages.

Motor Cooling

To ensure a suitable cooling, water must be in touch with the motor casing with a minimum velocity according to the following table

Rewindable motor 4MXS series

Motor	Max. Liquid temperature	Cooling: minimum flow velocity	Max. starts per hour	Motor P2
4CS	35 °C	0,08 m/s	20	all types

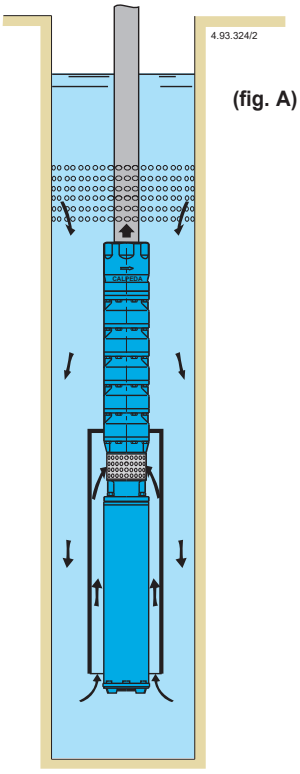
For operation with higher temperatures, contact our Technical Sales Department

Cooling jacket

When the submersible motor is installed :

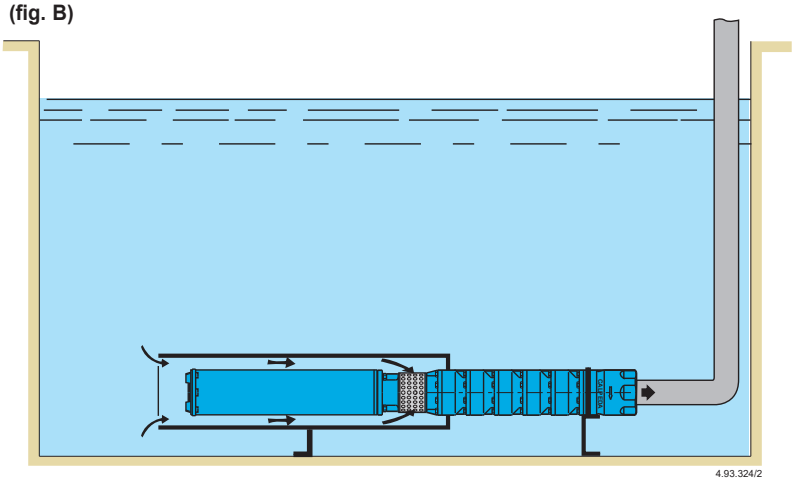
- below the well inlet points (**picture A**);
- in tanks, lakes, basins, etc… (**pictures B and C**)

an external jacket must be installed to create a cooling flow around the motor. Only in this way a safe operation can be assured avoiding any overheating which can damage the motor.

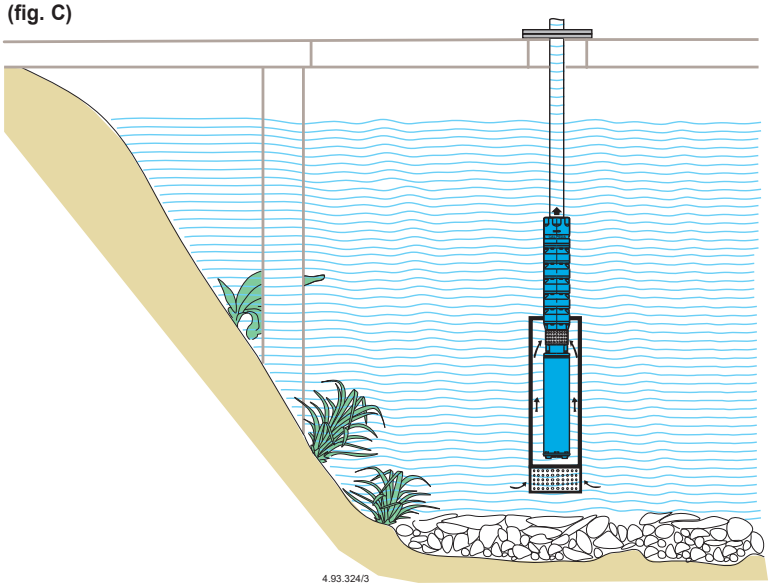


(fig. A)

(fig. B)



(fig. C)



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