

Where there is Alarko  
there's technology

**WHERE THERE IS TECHNOLOGY  
THERE'S WATER!**



 **ALARKO**

**SUBMERSIBLE PUMPS**



Alarko submersible pumps are  
**UNIQUE INDIVIDUAL  
 and UNINTERRUPTED  
 WATER SOURCE**

in potable water status by

- Evertime being ready to use,
- With no trouble
- And with short reimbursement term.



Alarko submersible pumps are  
**MULTIFUNCTIONAL**  
 because of usable from detached  
 houses to skyscrapers and because of  
 obtained advantage using it as a  
 water stocking hydrophore.



Alarko submersible pumps are  
**PROPER INVESTMENT**  
 in providing using water and process water  
 in industrial facilities and administrations  
 because of

- High efficiency
- And long life period.



Alarko submersible pumps are  
**RELIABLE FRIENDS**  
 of garden lovers and farmers on  
 horticulture, agriculture and from  
 little house garden to agricultural  
 land as thousands acres.



Alarko submersible pump is a  
**UNIQUE RELIABLE WATER  
 SOURCE** for touristic facilities, which  
 especially need more water in tourism term.



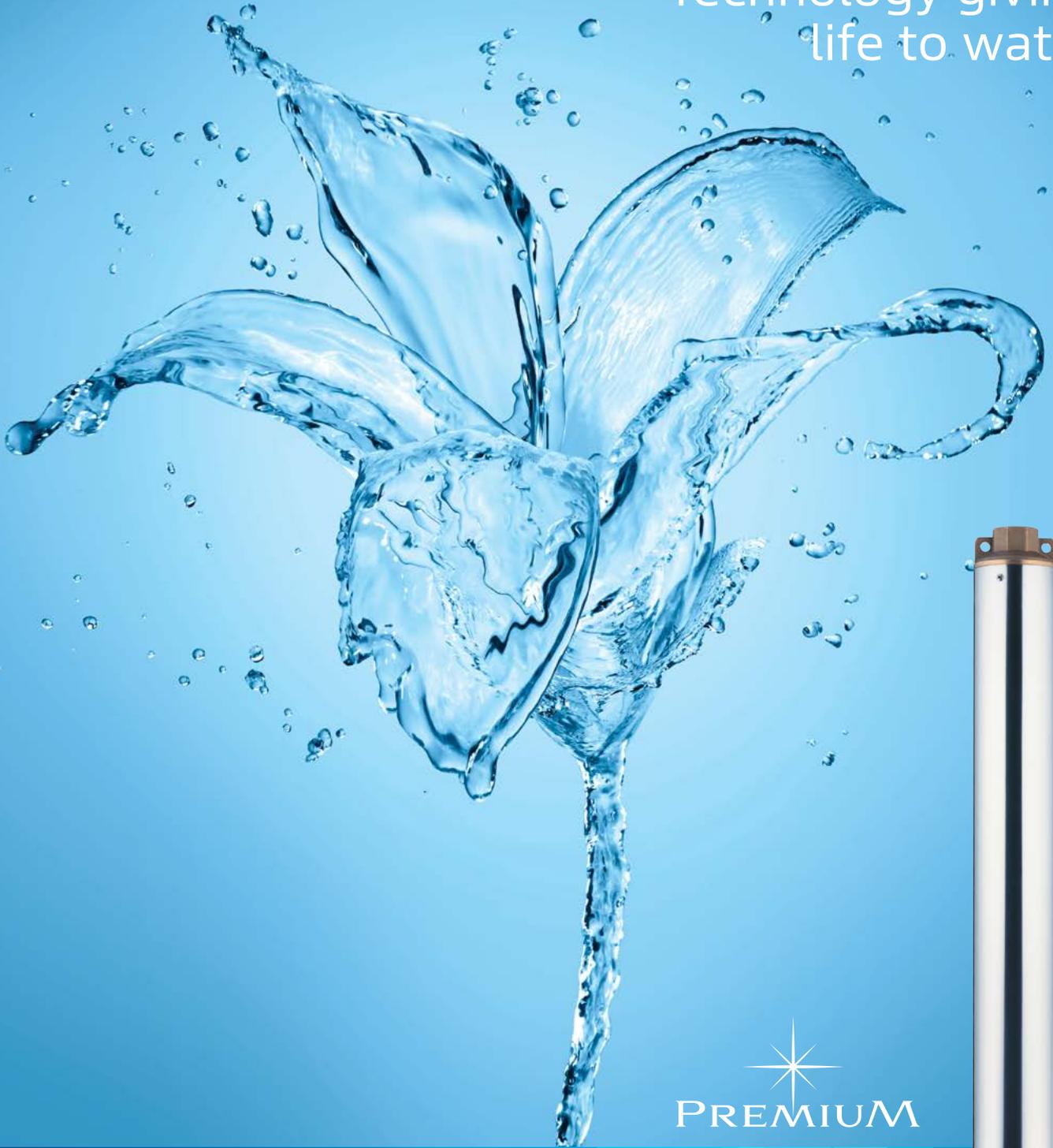
Alarko submersible pumps are  
**PREMINENT**  
 because of

- High technology
- Economy
- Continual and quality service
- Quick procurement of spare part.

**ALARKO,**  
 ALWAYS  
**NUMBER  
 ONE** IN  
 SUBMERSIBLE  
 PUMPS



Technology giving  
life to water



PREMIUM

## Submersible Pump 4" DMD-P Series

**ALARKO**



SABKOD  
BUREAU VERITAS  
Certification



TÜV  
AUSTRIA  
HELLAS  
EN ISO 27001:2013  
No.: 081936402745





Submersible pump is your biggest helper when present resources are inadequate and ground waters should be extracted. It is unrivaled, problem-free and economic in supplying drinking and usage waters. It is robust and long-lived Especially in tourism season, in touristic facilities where water is needed more than ever, it helps the problem of water be remedied in cases where city main is inadequate.

It is the most suitable solution for well water use in buildings, and car wash stations It is farmer and producer's biggest friend in irrigation of garden and agricultural areas. It overcomes water-problem and drought, and brings life to the soil and abundance to the produce. Alarko Diamond submersible pumps meet all your needs with 5 type, 43 models and high-reliability components with a capacity interval of 0,5-18 m<sup>3</sup>/hour.



**Suction Case:**

Durability and pump life is extended against aggressive well waters by Cu ASTM280 material with high corrosion resistance.



**Valve Table and Bearing:**

Durability and pump life is extended against aggressive well waters by "Fiberglas Reinforces Thermoplastic" material with high corrosion resistance.



**Impellers:**

Pump life and efficiency is increased with "Acetal" material with low surface roughness, and durable against sand abrasion. It is designed with floating fan against sand jamming.



**Diffuser and Impeller Cover:**

The stainless bearing fitted over the diffuser and diffuser cap provides high abrasion strength. It is manufactured from polycarbonate material.

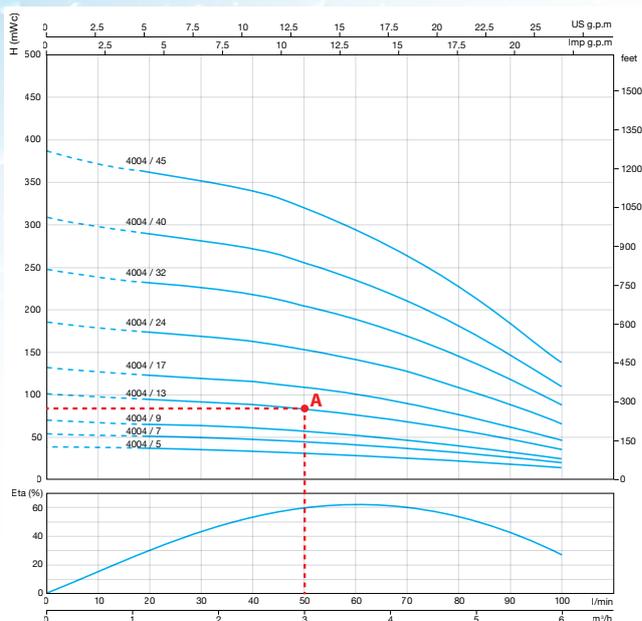
**FOR SECURE AND EFFICIENT USE**

- The well water temperature and the amount of sand in the well water must be analyzed in a laboratory. The maximum sand amount in the well water must be 25 gr/m<sup>3</sup>, and maximum well water temperature must be 40°C.
- Pipes and pipe clamps must have enough strength to carry the pump group, the water in the vertical pipe and its own weight.
- It is recommended that the well diameter is at least 2" (inches) larger than the pump diameter.
- The distance between the pump suction filter and well filter must have maximum distance.
- The lower end of the motor and the well bottom must be at least 50 cm apart. The height of the pump descending into the well is determined accordingly.
- The assembly depth of the pump is the Net Positive Suction Height which is the minimum depth that the pump can operate without sucking air. Must be suitable to (NPSH) values.

**TECHNICAL SPECIFICATIONS**

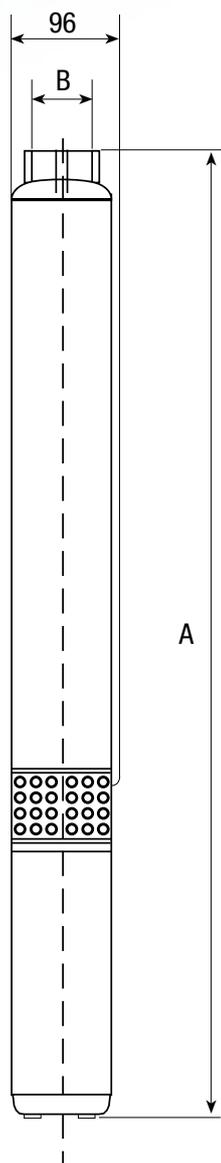
Operation Voltage	3-380 V	1-220 V
Permissible Maximum Voltage Change	-10.....+10 %	+ %5,-%10
Frequency	50 Hz	
Pump Type	4SD / SDM 2,4,6,10,12,16	
Motor RPM	2850 Rev / Min	
Permissible Maximum Starts per Hour	30	
Maximum Well Water Temperature	40°C	

“General Selection Chart” is used to determine the pump type zone that the intersection of the desired flow rate and manometric height (A) remains in. If the well diameter is 4”, flow rate (Q) is 3 m<sup>3</sup>/hour and manometric height (H) is 75 mWc; on “Pump General Curves” the 3 m<sup>3</sup>/hour on the horizontal axis and 75 mWc points on the vertical axis are intersected. The intersection point (A) remains inside the 4 SD / SDM 4 type pump zone. From here, the 4 SD / SDM 4 type pump “Independent Characteristic Curve” is consulted. 3 m<sup>3</sup>/hour and 75 mWc point intersection point is on the 13th stage curve. Pump stage is selected as 13. “Electrical Characteristics, Dimensions and Weights Table” shows the pump motor power as 1.1 kW. Order notation is determined as 4 SD / SDM 4/13 DMD-P+1.1 kW.



4SD / SDM 4 DMD-P

## ELECTRICAL FEATURES, DIMENSIONS AND WEIGHTS

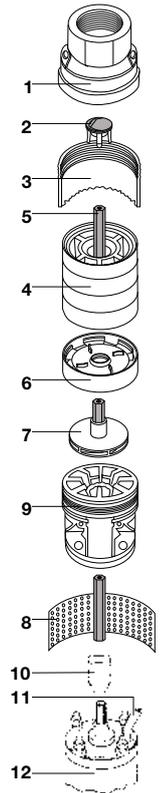


Pump Type	Number of Stage	Motor Power (HP)	Nominal Current		Total Dimension Approximate (mm)		Total Weight Approximate (kg)		Pump Exit Diameter
			220 V	380 V	220 V	380 V	220 V	380 V	
4 SD / SDM 2 DMD-P2	8	0.5	3.5	1.6	741	741	10.4	10.1	Pipe Thread ISO 228-G1 ¼"
	11	0.75	4.6	2	831	831	11.9	11.5	
	16	1	6	2.7	985	970	14.4	13.4	
	22	1.5	8	3.4	1175	1155	17.7	16.5	
	28	2	10.5	4.3	1406	1371	21.3	19.4	
	38	3	15	6.3	1749	1709	28.3	26.1	
	50	4	-	8.5	-	2058	-	31.6	
	52	4	-	8.5	-	2182	-	35.7	
	58	4	-	8.5	-	2368	-	39.5	
	62	5.5	-	10.3	-	2454	-	40.5	
65	7.5	-	12.3	-	2554	-	42.8		
4 SD / SDM 4 DMD-P2	8	0.75	4.6	2	783	783	9.9	11	Pipe Thread ISO 228-G1 ¼"
	10	1	6	2.7	872	857	11	12.3	
	14	1.5	8	3.4	1029	1009	13	15.1	
	18	2	10.5	4.3	1227	1202	15.9	16.1	
	24	3	15	6.3	1479	1439	19.3	23.6	
	32	4	-	8.5	-	1715	25.8	28.3	
	40	5.5	-	10.3	-	2006	-	33.7	
45	7.5	-	12.3	-	2203	-	37		
50	7.5	-	12.3	-	2532	-	43.1		
4 SD / SDM 6 DMD-P2	8	1	6	2.7	863	848	12.5	11.8	Pipe Thread ISO 228-G1 ½"
	9	1.5	8	3.4	-	-	-	-	
	11	1.5	8	3.4	1006	986	15.3	14.5	
	14	2	10.5	4.3	1191	1166	18.5	17.3	
	17	3	15	6.3	1348	1360	22.1	22.1	
	20	3	15	6.3	1491	1463	25	23	
	26	4	-	8.5	-	1750	-	28.8	
	34	5.5	-	10.3	-	2162	-	35	
42	7.5	-	12.3	-	2526	-	41.6		
4 SD / SDM 10 DMD-P2	5	1	6	2.7	645	645	9.9	9.7	Pipe Thread ISO 228-G2"
	7	1.5	8	3.4	793	873	14.2	13.4	
	10	2	10.5	4.3	1058	1033	17.4	16.2	
	14	3	15	6.3	1335	1307	23.4	21.4	
	18	4	-	8.5	-	1539	-	26.7	
	22	5.5	-	10.3	-	1796	-	31.8	
	28	7.5	-	12.3	-	2146	-	37.8	
	30	7.5	-	12.3	-	2358	-	41	
36	10.0	-	15.2	-	2679	-	48		
4 SD / SDM 12 DMD-P2	6	1.5	8	3.4	963	943	14.4	13.6	Pipe Thread ISO 228-G2"
	8	2	10.5	4.3	1125	1100	14.4	16.3	
	12	3	15	6.3	1473	1445	17.5	21.8	
	16	4	-	8.5	-	1744	23.8	27.4	
	20	5.5	-	10.3	-	2108	-	32.9	
	26	7.5	-	12.3	-	2533	-	39.4	
32	10.0	-	15.2	-	2670	-	47.3		
4 SD / SDM 16 DMD-P2	6	2	10.5	4.3	1088	1063	17.2	16	Pipe Thread ISO 228-G2"
	9	3	15	6.3	1412	1390	23.3	21.3	
	12	4	-	8.5	-	1675	-	26.2	
	16	5.5	-	10.3	-	2084	-	32.5	
	20	7.5	-	12.3	-	2448	-	38.6	
25	10.0	-	15.2	-	2966	-	51.0		

# MAIN PARTS / STANDARD CONSTRUCTION 4SD / SDM 2, 4, 6, 10, 12, 16 DMD-P Models



- 1- CASING:** It is on the upper part of the pump. Pump exit connection is made here. It is manufactured from Bronze material (Cu ASTM 280)
- 2- CHECK VALVE:** It is inside the valve body. Prevents the return of the pumped water.
- 3- BODY PIPE:** It holds together the pump stages that are stacked between the suction mouth and valve body. It is manufactured from AISI 304 stainless steel material.
- 4- BEARING BODY:** Centralizes the pump shaft through the bearings.
- 5- PUMP SHAFT:** It is fixed to the motor shaft through special coupling. It is of hexagon type, made of AISI 304 stainless steel material.
- 6- DIFFUSER:** Enables the water to be transferred suitably between stages. It is manufactured from polycarbonate material.
- 7- IMPELLER:** There is one fan in every stage. It is designed with floating impeller against sand jamming. It is manufactured from acetal material.
- 8- SUCTION STAINER:** Prevents entrance of particles of size that can damage the pump.
- 9- SUCTION CASE:** Enables the pump and motor to be connected to each other. Water enters the pump through the suction opening. It has a suction filter that prevents large particles from entering. It is manufactured from Bronze material (Cu ASTM 280)
- 10- COUPLING:** Connects the pump and motor shaft, manufactured from AISI 304 or AISI 316 stainless steel material.
- 11- ELECTRICAL CABLE:** Special underwater electrical cable. Has number of lines and cross section suitable for the motor.
- 12- MOTOR:** Manufactured suitably for operating underwater. The bearings that carry radial and axial loads are lubricated and cooled with the special liquid filled inside the motor. Motor is started directly.



## STANDARD ELECTRICAL CONTROL PANEL PARTS



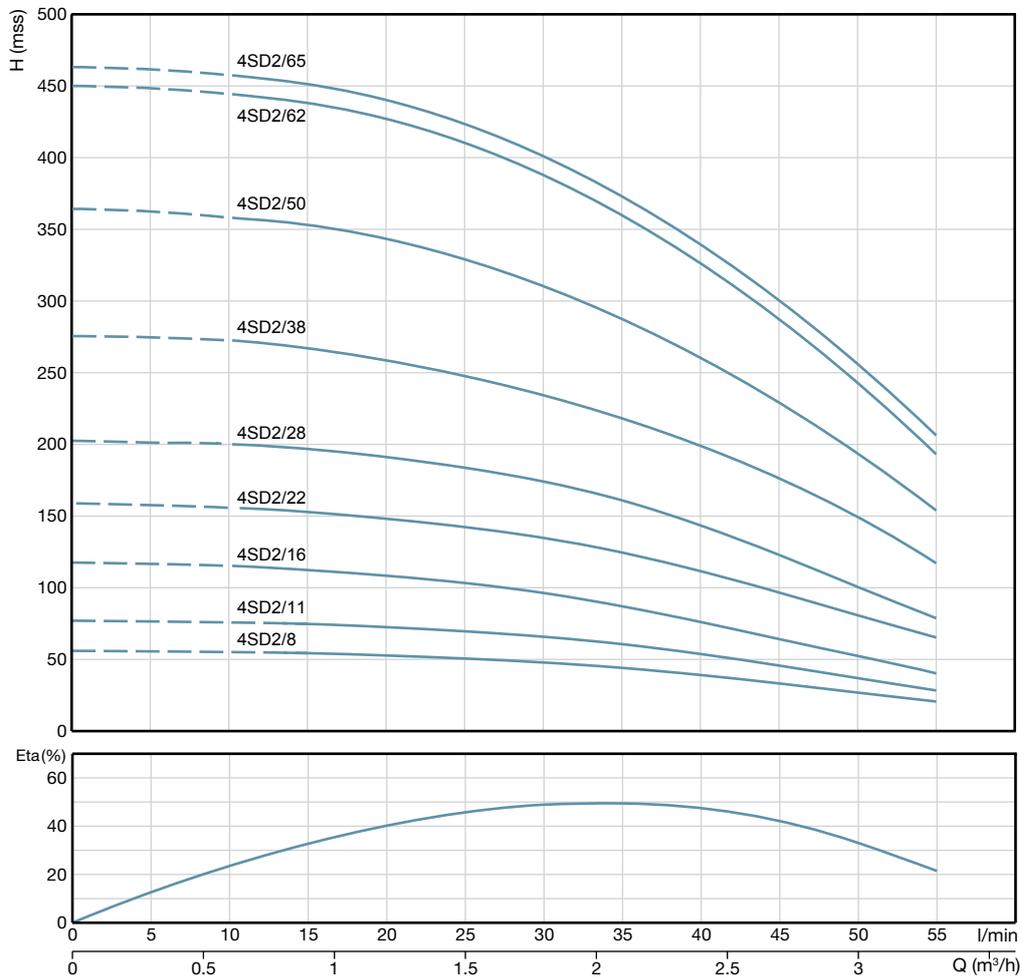
- Energy Control Lamp:** Displays whether there is power feed to the panel.
- Main Switch:** Turns on/off the power feed to the panel.
- Control Switch:** Powers the motor.
- Water Level Automat:** Controls the pump's activation/deactivation automatically according to the well water level. Prevents the pump from operating without water. Water level servo is a set with level control electrodes and electrode cable assembly.
- Phase (Motor) Control Relay and Warning Lamp:** Prevents the three-phase motors from being left with two phases. It also provides protection by stopping the pump in phase instabilities in the power main.
- Fuses:** Protection against short circuit.
- Thermal Relay:** Protection against excessive load
- Warning Lamps:** "Malfunction", "Operation", "Well Without Water" lamps. Enables easy monitoring of the pump operation
- Amperometer and Voltmeter:** Current and voltage values can be measured. (Optional)

## ELECTRICAL CABLE SELECTION CHART

NOMINAL VOLTAGE	Motor Power		Cable Section (mm <sup>2</sup> )						Maximum Cable Length (m)
	kW	HP	1.5	2.5	4	6	10	16	
MONOPHASE 220 V	0.37	0.5	71	118	190	285	495	776	
	0.55	0.75	55	92	149	223	386	604	
	0.75	1	45	74	120	179	308	479	
	1.1	1.5	30	50	81	121	209	325	
	1.5	2	24	40	64	96	166	259	
	0.37	0.5	479	796	-	-	-	-	
	0.55	0.75	352	586	940	-	-	-	
0.75	1	267	325	713	1064	-	-		
1.1	1.5	196	244	522	779	-	-		
1.5	2	147	173	392	585	1000	-		
TRIPHASE 380 V	2.2	3	104	126	277	413	707	1090	
	3	4.0	76	99	203	302	518	798	
	4	5.5	59	87	159	237	406	626	
	4.4	6	21	104	139	207	355	548	
	5.5	7.5	41	69	110	165	283	437	
	7.5	10	-	50	81	121	207	320	

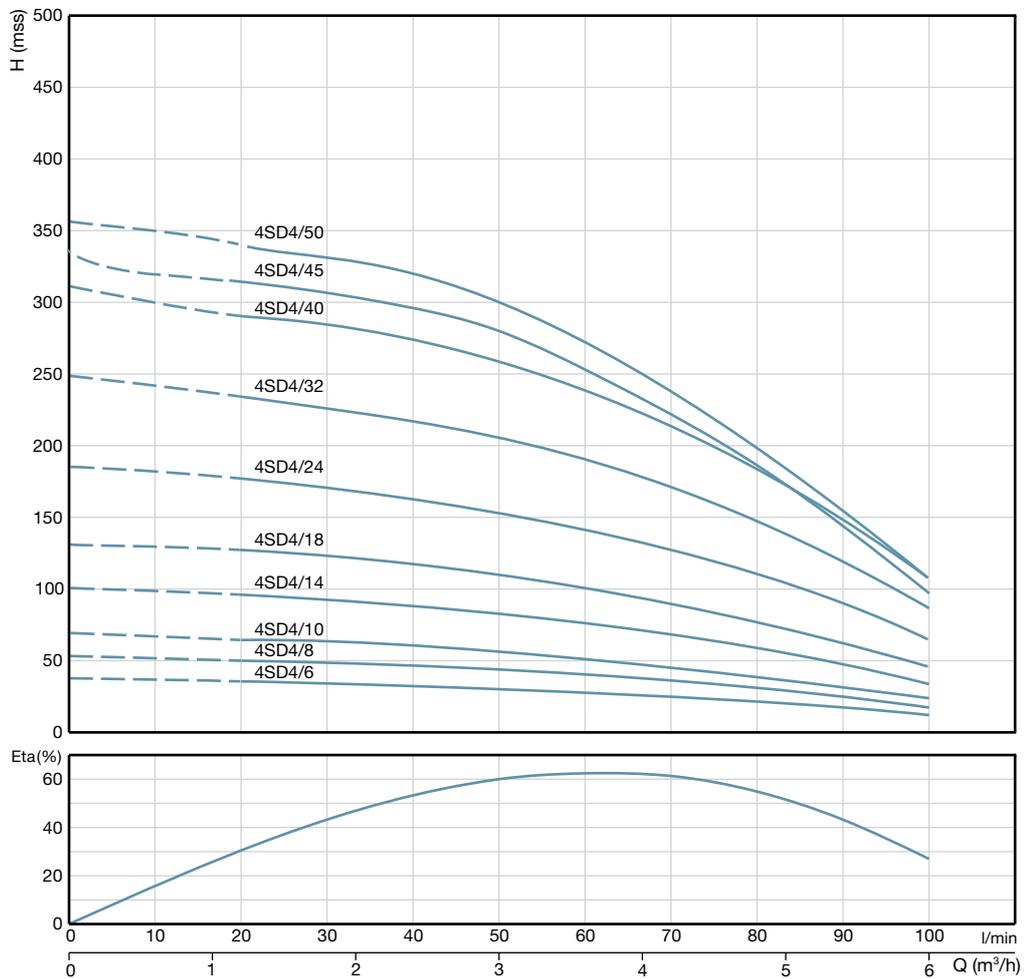
# 4SD / SDM 2 DMD-P

MODEL		P <sub>2</sub>		n ≈ 2850 1/min															
1 ~ 220V / 240V	3 ~ 380V / 415V	KW	HP	n	m <sup>3</sup> / h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3	3.3		
					l / min	0	5	10	15	20	25	30	35	40	45	50	55		
4SDM2 / 8 DMD	4SD2 / 8 DMD	0,37	0,5	H (m)	64	63	63	62	60	58	54	51	47	41	35	29			
4SDM2 / 11 DMD	4SD2 / 11 DMD	0,5	0,75		85	84	84	83	80	77	72	68	62	54	47	38			
4SDM2 / 16 DMD	4SD2 / 16 DMD	0,75	1		106	105	105	103	100	96	90	85	78	68	59	50			
4SDM2 / 22 DMD	4SD2 / 22 DMD	1,1	1,5		149	147	146	145	140	135	126	118	109	95	82	67			
4SDM2 / 28 DMD	4SD2 / 28 DMD	1,5	2		198	196	195	193	187	180	168	158	145	127	110	90			
4SDM2 / 38 DMD	4SD2 / 38 DMD	2,2	3		262	259	258	255	247	238	222	209	191	168	145	119			
	4SD2 / 50 DMD	3	4		364	361	356	350	340	327	310	287	260	227	190	155			
	4SD2 / 52 DMD	3	4		378	374	368	358	349	338	319	295	266	251	192	157			
	4SD2 / 58 DMD	3	4		408	403	399	392	380	362	341	316	287	252	214	174			
	4SD2 / 62 DMD	4	5,5		451	448	442	434	422	406	384	356	322	282	236	192			
	4SD2 / 65 DMD	5,5	7,5		513	509	502	493	480	461	436	404	366	320	268	218			



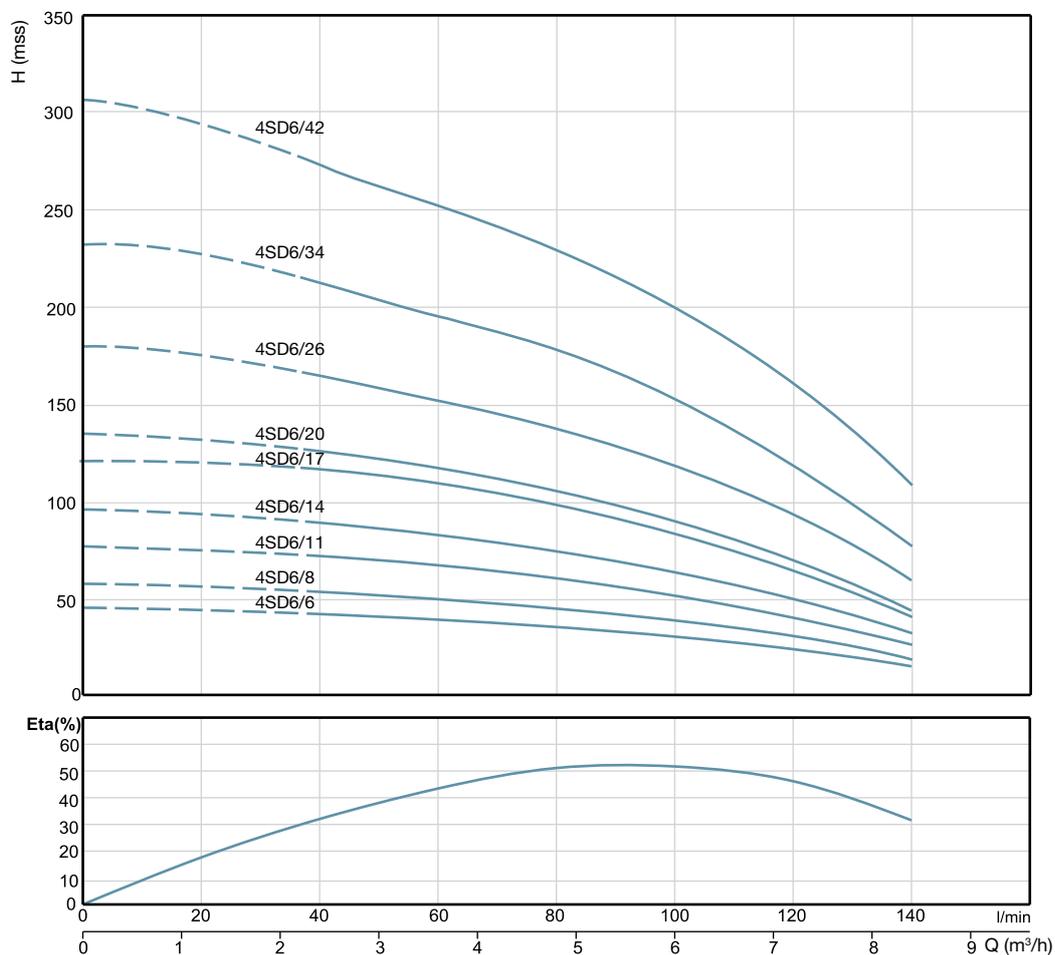
# 4SD / SDM 4 DMD-P

MODEL		P <sub>2</sub>		n ≈ 2850 1/min													
1 ~ 220V / 240V	3 ~ 380V / 415V	KW	HP	n	m <sup>3</sup> / h	0	0.6	1.2	1.8	2.4	3	3.6	4.2	4.8	5.4	6	
					l / min	0	10	20	30	40	50	60	70	80	90	100	
4SDM4 / 8 DMD	4SD4 / 8 DMD	0,5	0,75	H (m)	58	56	55	54	52	49	44	39	33	26	16		
4SDM4 / 10 DMD	4SD4 / 10 DMD	0,75	1		74	71	69	67	65	61	59	53	46	38	29		
4SDM4 / 14 DMD	4SD4 / 14 DMD	1,1	1,5		103	100	96	94	91	86	83	74	65	53	40		
4SDM4 / 18 DMD	4SD4 / 18 DMD	1,5	2		132	129	123	121	117	111	107	95	84	68	61		
4SDM4 / 24 DMD	4SD4 / 24 DMD	2,2	3		177	171	165	161	156	147	142	127	111	91	69		
	4SD4 / 32 DMD	3	4		235	229	219	215	208	197	190	169	149	121	91		
	4SD4 / 40 DMD	4	5,5		294	286	274	269	260	246	237	211	186	151	114		
	4SD4 / 45 DMD	5,5	7,5		327	316	309	302	293	274	248	218	183	144	103		
	4SD4 / 50 DMD	5,5	7,5		363	352	344	335	325	304	275	242	203	160	115		



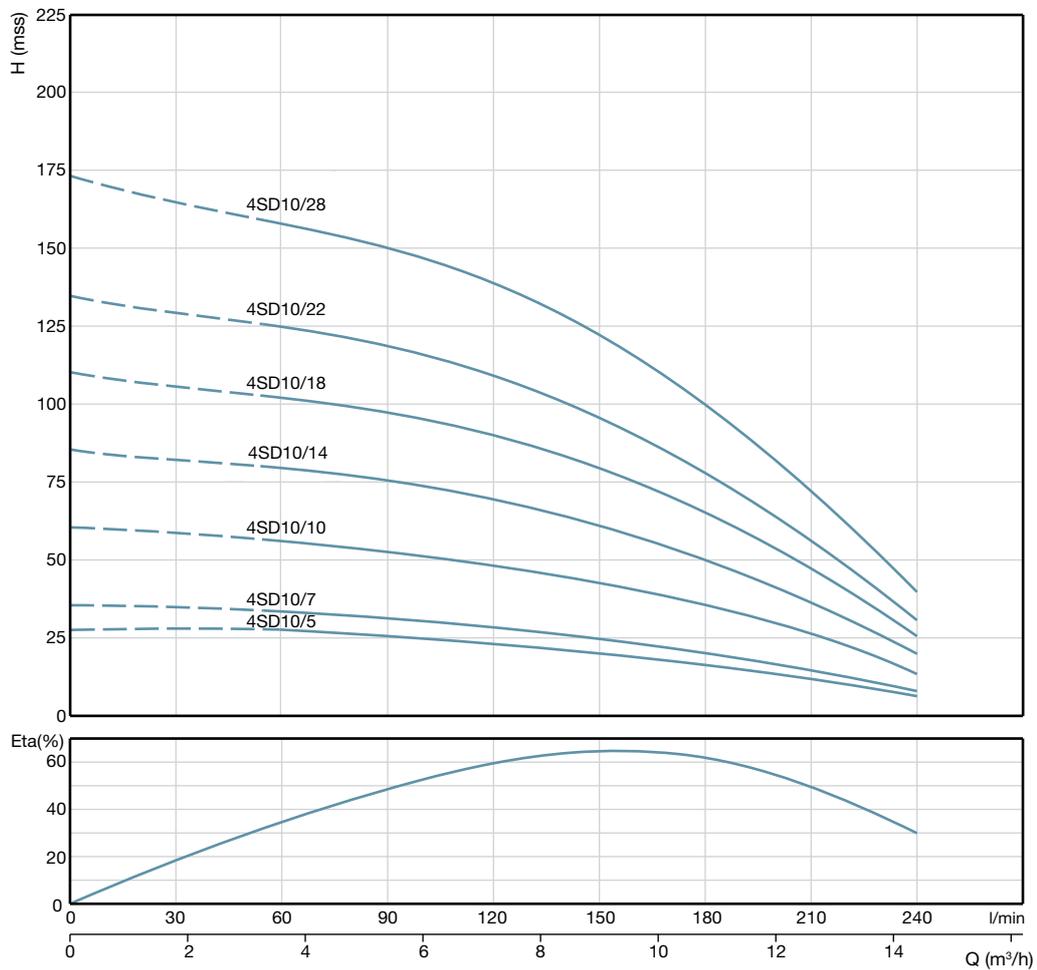
# 4 SD / SDM 6 DMD-P

MODEL		P <sub>2</sub>		n ≈ 2850 1/min									
1 ~ 220V / 240V	3 ~ 380V / 415V	KW	HP	n	m <sup>3</sup> / h	0	1.2	2.4	3.6	4.8	6	7.2	8.4
					l / min	0	20	40	60	80	100	120	140
4SDM6 / 8 DMD	4SD6 / 8 DMD	0,75	1	H (m)		56	54	52	48	44	36	27	16
4SDM6 / 9 DMD	4SD6 / 9 DMD	1,1	1,5			72	69	66	62	55	46	35	19
4SDM6 / 11 DMD	4SD6 / 11 DMD	1,1	1,5			79	76	73	68	61	51	38	21
4SDM6 / 14 DMD	4SD6 / 14 DMD	1,5	2			108	104	100	93	83	70	52	29
4SDM6 / 17 DMD	4SD6 / 17 DMD	2,2	3			119	114	110	103	93	76	58	33
4SDM6 / 20 DMD	4SD6 / 20 DMD	2,2	3			151	145	139	130	116	97	72	40
	4SD6 / 26 DMD	3	4			194	186	179	167	150	125	93	51
	4SD6 / 34 DMD	4	5,5			244	235	226	210	189	158	117	65
	4SD6 / 42 DMD	5,5	7,5			302	290	279	260	233	195	145	80



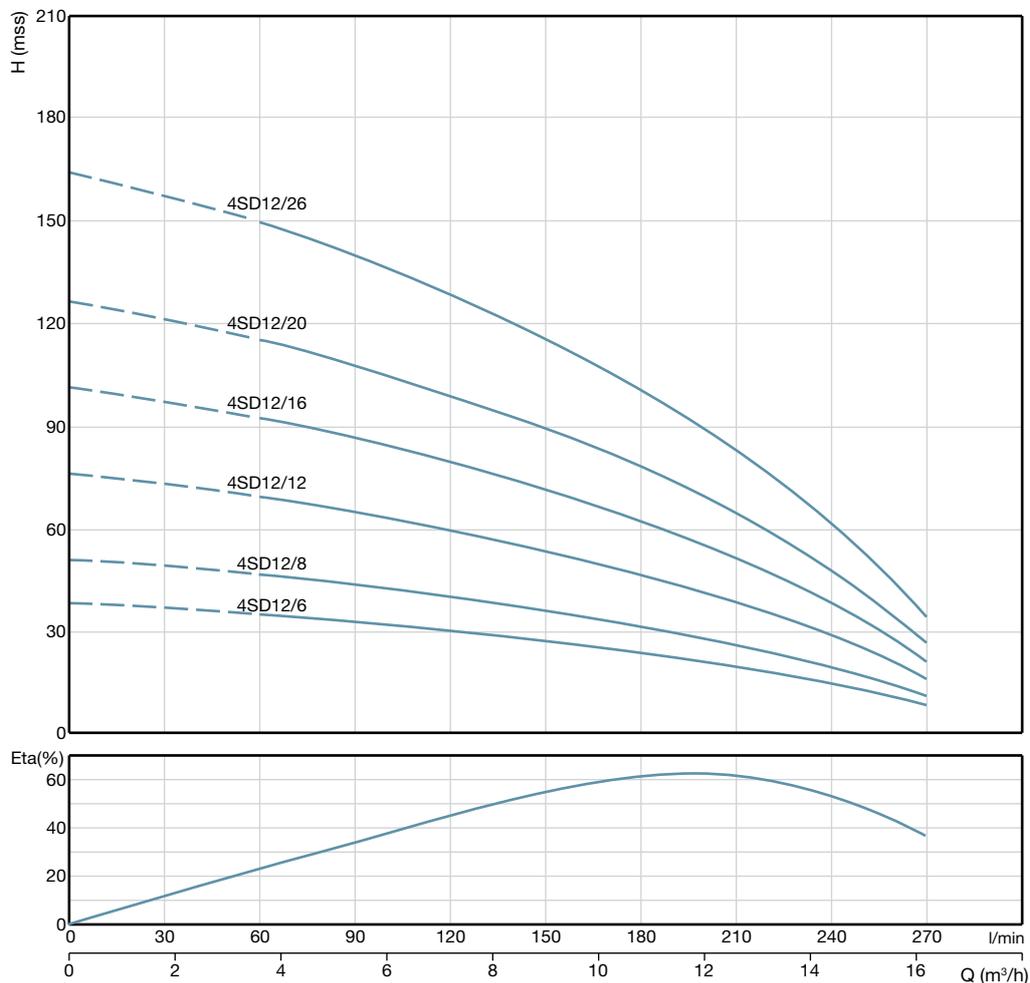
# 4 SD / SDM 10 DMD-P

MODEL		P <sub>2</sub>		n ≈ 2850 1/min										
1 ~ 220V / 240V	3 ~ 380V / 415V	KW	HP	n	m <sup>3</sup> / h	0	1.8	3.6	5.4	7.2	9	10.8	12.6	14.4
					l / min	0	30	60	90	120	150	180	210	240
4SDM10 / 5 DMD	4SD10 / 5 DMD	0,75	1	H (m)		34	33	30	29	27	25	20	14	7
4SDM10 / 7 DMD	4SD10 / 7 DMD	1,1	1,5			47	46	43	40	38	34	29	21	10
4SDM10 / 10 DMD	4SD10 / 10 DMD	1,5	2			61	59	55	51	49	44	37	27	13
4SDM10 / 14 DMD	4SD10 / 14 DMD	2,2	3			88	86	79	75	71	64	53	39	19
	4SD10 / 18 DMD	3	4			115	112	104	98	93	84	70	51	25
	4SD10 / 22 DMD	4	5,5			155	152	140	132	126	113	95	69	33
	4SD10 / 28 DMD	5,5	7,5			173	166	158	150	140	124	101	72	40
	4SD10 / 30 DMD	5,5	7,5			195	191	177	166	159	142	119	87	42
	4SD10 / 36 DMD	7,5	10			236	231	213	201	191	172	144	105	50



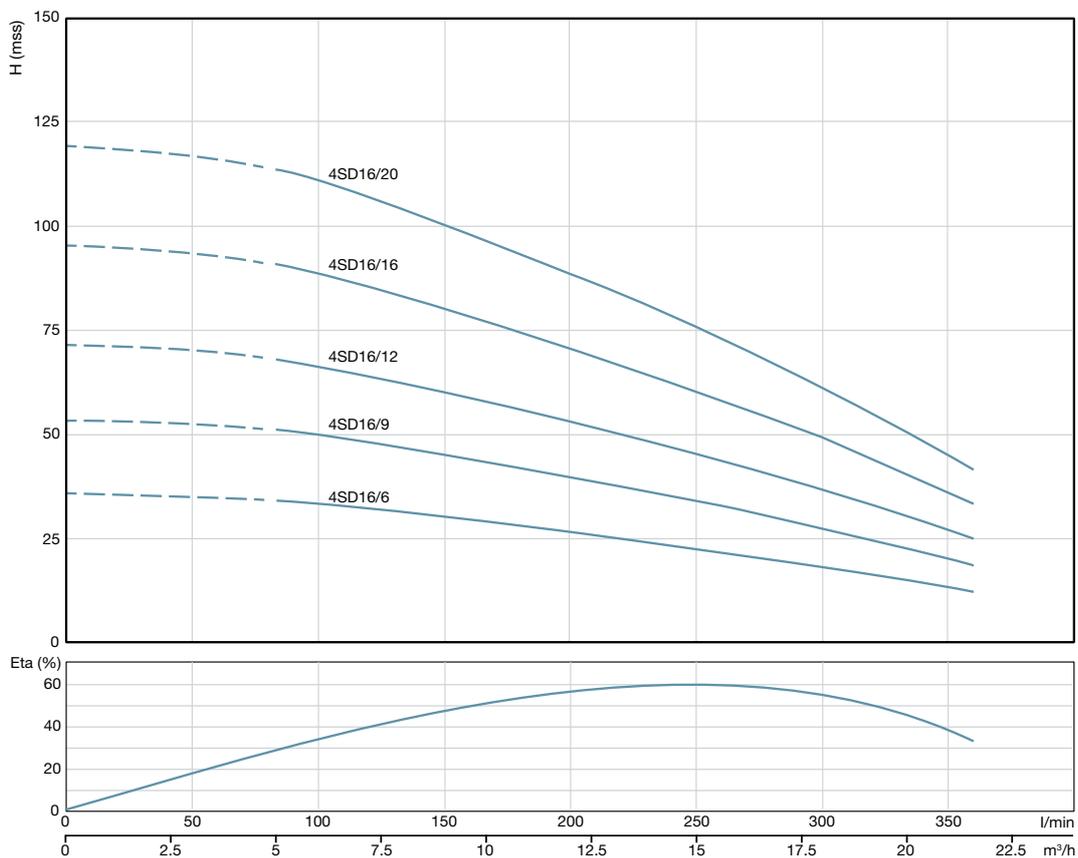
# 4 SD / SDM 12 DMD-P

MODEL		P <sub>2</sub>		n ≈ 2850 1/min											
1 ~ 220V / 240V	3 ~ 380V / 415V	KW	HP	n	m <sup>3</sup> / h	0	1,2	3,6	5,4	7,2	9	10,8	12,6	14,4	16,2
					H (m)	l / min	0	30	60	90	120	150	180	210	240
4SDM12 / 6 DMD	4SD12 / 6 DMD	1,1	1,5	H (m)		38	38	35	32	30	27	24	20	16	10
4SDM12 / 8 DMD	4SD12 / 8 DMD	1,5	2			54	52	49	45	43	39	35	30	24	14
4SDM12 / 12 DMD	4SD12 / 12 DMD	2,2	3			81	78	74	68	64	58	52	45	36	21
	4SD12 / 16 DMD	3	4			108	104	98	90	85	78	70	60	48	28
	4SD12 / 20 DMD	4	5,5			142	137	129	118	112	102	92	79	63	37
	4SD12 / 26 DMD	5,5	7,5			176	169	159	146	139	127	114	98	78	46
	4SD12 / 32 DMD	7,5	10			210	202	190	175	165	151	135	117	93	55



# 4 SD / SDM 16 DMD-P

MODEL		P <sub>2</sub>		n ≈ 2850 1/min									
1 ~ 220V / 240V	3 ~ 380V / 415V	KW	HP	n	m <sup>3</sup> / h	0	3	6	9	12	15	18	21
					l / min	0	50	100	150	200	250	300	350
4SDM16 / 6 DMD	4SD16 / 6 DMD	1,5	2	H (m)		44	42	39	35	31	26	21	15
4SDM16 / 9 DMD	4SD16 / 9 DMD	2,2	3			63	60	55	50	44	37	30	22
	4SD16 / 12 DMD	3	4			82	78	72	65	57	48	39	28
	4SD16 / 16 DMD	4	5,5			107	102	94	85	75	63	51	37
	4SD16 / 20 DMD	5,5	7,5			133	126	116	105	93	78	63	46
	4SD16 / 25 DMD	7,5	10			158	150	138	125	110	93	75	54



Technology giving  
life to water



## Submersible Pump AL 6"-8" KPS Series

 **ALARKO**



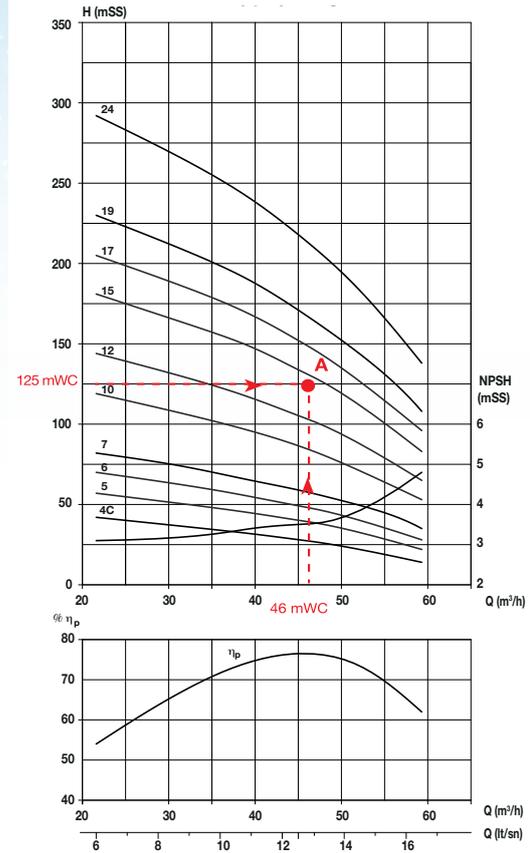


# SELECTING PUMP

It is determined that requested intersection point (A) of flow and manometer height is remained in which pump's area from "General Selection Abac". In order to select pump, its "Independent Characteristic Curve" is checked Level number on the upper nearest curve to intersection point of flow and manometer head. According to determined pump type and level, motor type and power are defined from "Electrical Specifications, Dimensions and Weight Table". Pump according to "Order Notation" is demanded from Alarko Carrier vendor with determining electrical switchboard demand and electrical cable length.

## SELECTION SAMPLE

Let the well diameter be 8 5/8", the flow-rate (Q) be 46 m<sup>3</sup>/hour and manometric height (H) be 125 mWc. The points of the 46 m<sup>3</sup>/hour on the horizontal axis and 125 mWc on the vertical axis are intersected on the "General Selection Chart". The intersection point (A) stays in the region of 6046 KPS type of pump. This leads us to 6046 type pump "Independent Characteristic Curve". The intersection point of the values of 46 m<sup>3</sup>/hour and 125 mWc is on 15th stage curve. The pump stage is selected as 15. The efficiency of the pump is 74%. The pump type is specified as AL 6-30 using "Electrical Specification, Dimensions and Weights Table". The order notation is specified as 6046/15 KPS+AL 6-30.



## SELECTING CABLE

Rated Voltage	Motor Power		Cable Section (mm <sup>2</sup> )										
	kW	HP	4x1.5	4x2.5	4x4	4x6	4x10	3x16+10	3x25+16	3x35+16	3x50+25	3x70+35	3x95+50
3-Phase 380 V	0.37	0.5	545										
	0.55	0.75	347	575									
	0.75	1	296	490									
	1.1	1.5	199	331	528								
	1.5	2	155	257	411	612							
	2.2	3	108	180	287	429	707						
	3	4	80	133	213	317	522						
	3.7	5	70	125	186	290	420						
	4	5.5	62	104	166	248	400						
	4.4	6	50	82	160	240	260	645	1005				
	5.5	7.5	45	75	119	178	293						
	7.5	10		60	95	145	245	390	610	855			
	11	15		40	66	100	170	275	430	605			
	15	20		30	50	75	130	205	325	455	650		
	18.5	25		35	60	90	155	245	390	545	780		
	22	30		30	50	75	130	205	325	455	650		
	30	40				55	95	155	240	340	485	680	925
37	50				45	75	125	195	275	390	550	745	
45	60					65	100	160	225	325	455	620	
55	75					50	80	130	180	260	365	495	
70	96						65	100	140	205	285	390	
80	110							85	120	170	240	330	
96	130								100	145	205	275	
110	150								85	125	175	240	
132	180									105	145	200	

25 HP and above motors are star-delta. In star-delta motors, 2 of the cables with lengths specified above should be used.

# MAIN PARTS

**1- Valve Casing:** The upper part of the pump. The pump outlet is connected to this part. Extra safety during installation thanks to specific type of ring and extended switch platform originated from material made up of precision cast 304 rustproof steel.

**2-Check Valve:** Prevents the water in pillar tube from reverse-flowing, which will cause the motor to overturn. Water-hammer reduces any risk of shock.

**3-Upper Bearing:** Coated with durable chrome material. It reduces abrasion in case the well is surrounded by harsh sand.

**4-Labyrinth Rings:** Contributes to the efficiency and robustness of high pumps. It has the self-aligning function. It is made up of Teflon.

**5-Cable Housing:** Made up of peculiarly thinned rustproof steel. It facilitates installation in the wells with less tolerance.

**6-In-Pump "Upthrust" Protection:** Prevents the pump from getting damaged in case of requirement of much water and in initial launches. It maintains high durability against failures in cases of open valve and frequent stop/launch.

**7-Suction Filter:** Ensures that the pump is not damaged in case of requirement of much water and in initial launches by preventing the abrasive parts from entering into the pump. It is made up of 304 rust-proof steel.

**8-Coupling Protective Filter:** Prevents the abrasive components from damaging coupling and motor shaft. It is made up of 304 rustproof steel.

**9-Suction Case:** Ensures that the pump and the motor are interconnected. It ensures excellent pump-motor connection through any type of plunger motor with NEMA standard. The water enters into the pump through the suction opening. It has a suction strainer on the upper side of it, which blocks the chunks.



## OPTIONAL ELECTRIC BOARD



### SOFT STARTER CONTROL PANELS

- Reduction in control panel and wiring cost up to 25% average
- Use of single cable instead of double-wire for 25 - 180 HP motor power ( Star-Delta connected )
- With the use of single cable ,
  - » An average % 20 reduction in installation time
  - » An average % 50 reduction in cable attachment
- With the use of soft starter panels
  - » Low fault rate and longer pump life
  - » Low water hammer risk
  - » High customer satisfaction

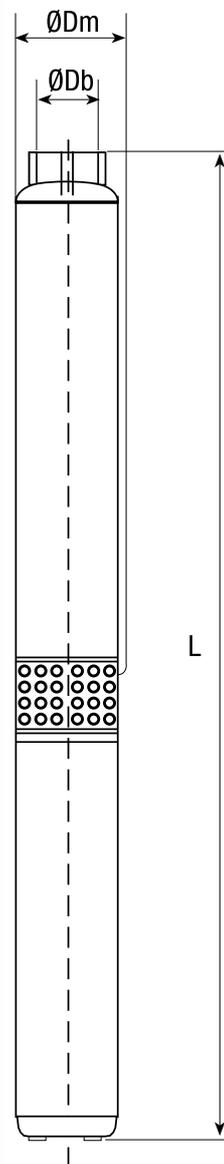
## FOR SECURE AND EFFICIENT USES

- Well water temperature and sand ratio in the well water should be controlled in the laboratory. Maximum sand in the well water should be 50 gr/m<sup>3</sup> and well temperature should be 30°C.
- Pipes and Pipe clamps should have durability as carrying water in the vertical tube, tube group and itself weight.
- It is recommended that well diameter is bigger than pump diameter as at least 2" (inch).
- Distance between pump suction filter and well filter should be maximum.
- Distance between the bottom end of the motor and base of the well should be at least 50 cm. Length of pump in the well is determined due to this measurement.
- Since pump does not suck air, pump assembly depth should be proper to Net Positive Suction Height (minimum depth it can work at) values.

Alarko plunger pumps are shipped from the factory after being packaged safely. The packages of 6" plunger pumps include hex-wrench, water filling hopper and locktite. Control board, water level control electrodes and cable are optional. They are delivered in a separate package if ordered.

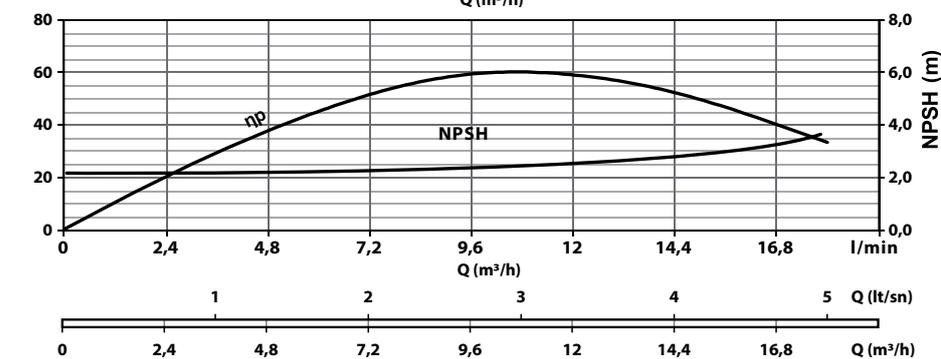
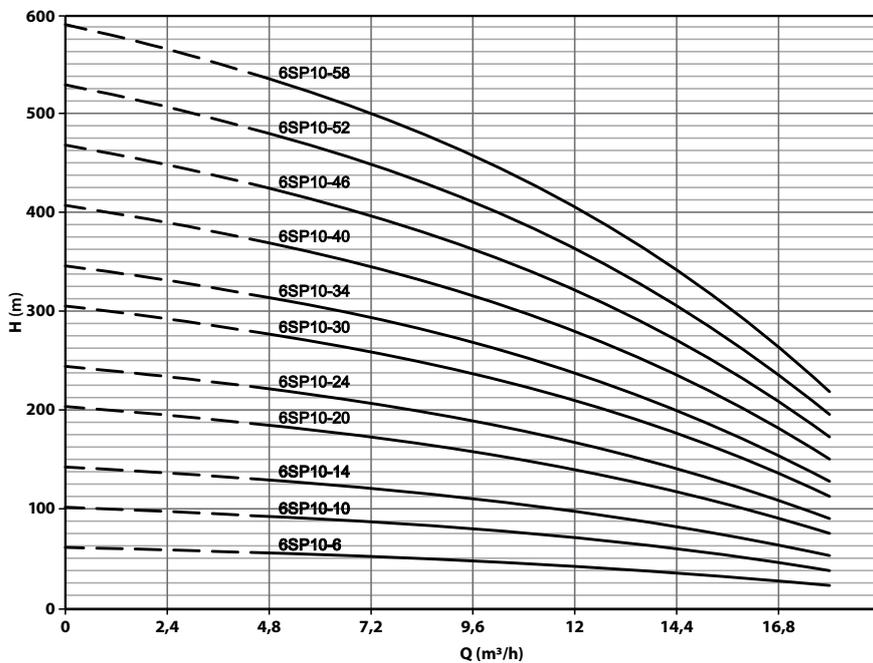
# ELECTRICAL SPECIFICATIONS, DIMENSIONS AND WEIGHTS

TYPE / Pump + Motor		MOTOR POWER		MOTOR CURRENT (A)	PUMP OUTLET DIAMETER	PUMP+MOTOR LENGTH (mm)	PUMP BODY OUTER DIAMETER (mm)	WEIGHT (Kg)
		(HP)	(kW)					
ALK 6010 KPS /6	ALK 4 - 3	3	2.2	6		1056		37.8
ALK 6010 KPS /8	ALK 4 - 4	4	3	7		1201		42.4
ALK 6010 KPS /10	ALK 6 - 5.5	5.5	4	10		1346		48.5
ALK 6010 KPS /14	ALK 6 - 7.5	7.5	5.5	13		1616		59.6
ALK 6010 KPS /18	ALK 6 - 10	10	7.5	18		1901		72.2
ALK 6010 KPS /20	ALK 6 - 10	10	7.5	18		2011		74.7
ALK 6010 KPS /24	ALK 6 - 12.5	12.5	9.2	21		2291		87.6
ALK 6010 KPS /26	ALK 6 - 12.5	12.5	9.2	21		2401		90.5
ALK 6010 KPS /28	ALK 6 - 15	15	11	25		2576		101.2
ALK 6010 KPS /30	ALK 6 - 15	15	11	25		2686		104.1
ALK 6010 KPS /34	ALK 6 - 17.5	17.5	13	31	BSP G3	2966	145	117.3
ALK 6010 KPS /36	ALK 6 - 17.5	17.5	13	31		3076		120.2
ALK 6010 KPS /38	ALK 6 - 20	20	15	35		3246		130.1
ALK 6010 KPS /40	ALK 6 - 20	20	15	35		3356		133.0
ALK 6010 KPS /43	ALK 6 - 25	25	18.5	42		3546		140.4
ALK 6010 KPS /46	ALK 6 - 25	25	18.5	42		3711		144.7
ALK 6010 KPS /49	ALK 6 - 25	25	18.5	42		3876		149.0
ALK 6010 KPS /52	ALK 6 - 30	30	22	50		4116		162.5
ALK 6010 KPS /55	ALK 6 - 30	30	22	50		4281		166.8
ALK 6010 KPS /58	ALK 6 - 30	30	22	50		4446		171.1
ALK 6030 KPS /6	+ ALK6-7.5	7.5	5.5	13		1583		
ALK 6030 KPS /8	+ ALK6-10	10	7.5	18		1820		69
ALK 6030 KPS /11	+ ALK6-12.5	12.5	9.2	21		2138		78
ALK 6030 KPS /13	+ ALK6-15	15	11	25		2360		84
ALK 6030 KPS /15	+ ALK6-17.5	17.5	13	31		2602		94
ALK 6030 KPS /17	+ ALK6-20	20	15	34.5	BSP G3	2834	149.5	101
ALK 6030 KPS /21	+ ALK6-25	25	18.5	42		3303		117
ALK 6030 KPS /26	+ ALK6-30	30	22	49.2		3828		132
ALK 6030 KPS /30	+ ALK6-35	35	26	58		4317	151	150
ALK 6030 KPS /35	+ ALK6-40	40	30	66		4907		171
ALK 6030 KPS /39	+ ALK6-50	50	37	81		5381		188
ALK 6036 KPS /2	ALK 4 - 4	4	3	7		953		37.6
ALK 6036 KPS /3	ALK 6 - 5.5	5.5	4	10		1084		43.0
ALK 6036 KPS /4	ALK 6 - 7.5	7.5	5.5	13		1230		51.0
ALK 6036 KPS /5	ALK 6 - 10	10	7.5	18		1391		60.5
ALK 6036 KPS /6	ALK 6 - 10	10	7.5	18		1487		62.3
ALK 6036 KPS /7	ALK 6 - 12.5	12.5	9.2	21		1643		71.3
ALK 6036 KPS /8	ALK 6 - 12.5	12.5	9.2	21		1804		80.9
ALK 6036 KPS /9	ALK 6 - 15	15	11	25		1900		82.7
ALK 6036 KPS /10	ALK 6 - 17.5	17.5	13	31		2056		92.2
ALK 6036 KPS /11	ALK 6 - 20	20	15	35		2212		101.3
ALK 6036 KPS /12	ALK 6 - 20	20	15	35	BSP G3	2308	145	103.3
ALK 6036 KPS /14	ALK 6 - 25	25	18.5	42		2525		110.4
ALK 6036 KPS /15	ALK 6 - 25	25	18.5	42		2621		112.4
ALK 6036 KPS /17	ALK 6 - 30	30	22	50		2888		125.6
ALK 6036 KPS /18	ALK 6 - 30	30	22	50		2984		127.6
ALK 6036 KPS /20	ALK 6 - 35	35	26	58		3251		141.7
ALK 6036 KPS /22	ALK 6 - 40	40	30	66		3518		154.7
ALK 6036 KPS /24	ALK 6 - 40	40	30	66		3710		159.1
ALK 6036 KPS /26	ALK 6 - 50	50	37	81		3976		173.0
ALK 6036 KPS /28	ALK 6 - 50	50	37	81		4242		180.0
ALK 6036 KPS /30	ALK 7 - 60	60	45	91		4360		193
ALK 6046 KPS /4C	+ ALK6-7.5	7.5	5.5	13		1459		60
ALK 6046 KPS /5	+ ALK6-10	10	7.5	18		1617		73
ALK 6046 KPS /6	+ ALK6-12.5	12.5	9.2	21		1760		81
ALK 6046 KPS /7	+ ALK6-15	15	11	25		1903		87
ALK 6046 KPS /8	+ ALK6-17.5	17.5	13	31		2066		96
ALK 6046 KPS /10	+ ALK6-20	20	15	34.5	BSP G3	2332	149.5	110
ALK 6046 KPS /12	+ ALK6-25	25	18.5	42		2643		122
ALK 6046 KPS /15	+ ALK6-30	30	22	49.2		3027		138
ALK 6046 KPS /17	+ ALK6-35	35	26	58		3358	151	154
ALK 6046 KPS /19	+ ALK6-40	40	30	66		3694		177
ALK 6046 KPS /24	+ ALK6-50	50	37	81		4349		199
ALK 6060 KPS /4	+ ALK6-10	10	7.5	18		1504		69
ALK 6060 KPS /5	+ ALK6-12.5	12.5	9.2	21		1647		76
ALK 6060 KPS /6	+ ALK6-15	15	11	25		1790		81
ALK 6060 KPS /7	+ ALK6-17.5	17.5	13	31		1953		89
ALK 6060 KPS /8	+ ALK6-20	20	15	34.5	BSP G4	2106	149.5	99
ALK 6060 KPS /10	+ ALK6-25	25	18.5	42		2417		115
ALK 6060 KPS /12	+ ALK6-30	30	22	49.2		2688		126
ALK 6060 KPS /15	+ ALK6-35	35	26	58		3132	151	148
ALK 6060 KPS /17	+ ALK6-40	40	30	66		3468		166
ALK 6060 KPS /21	+ ALK6-50	50	37	81		4010		190
ALK 7077 KPS /1	+ ALK6-7.5	7.5	5.5	13		1284		59
ALK 7077 KPS /2	+ ALK6-10	10	7.5	18		1457		78
ALK 7077 KPS /3	+ ALK6-15	15	11	25		1645		87
ALK 7077 KPS /4	+ ALK6-20	20	15	34.5		1863		101
ALK 7077 KPS /5	+ ALK6-25	25	18.5	42		2076		113
ALK 7077 KPS /6	+ ALK6-30	30	22	49.2		2249		122
ALK 7077 KPS /7	+ ALK6-35	35	26	58	BSP G5	2482	175	136
ALK 7077 KPS /9	+ ALK6-40	40	30	66		2848		155
ALK 7077 KPS /11	+ ALK6-50	50	37	81		3194		172
ALK 7077 KPS /12	+ ALK7-60	60	45	91		3099		187
ALK 7077 KPS /15	+ ALK7-80	80	59	119		3669		224
ALK 7077 KPS /18	+ ALK8-85	85	63	126		3980		251
ALK 7077 KPS /21	+ ALK8-100	100	75	147		4504	191	290
ALK 7095 KPS /3	+ ALK6-17.5	17.5	13	31		1695		93
ALK 7095 KPS /4	+ ALK6-25	25	18.5	42		1948		110
ALK 7095 KPS /5	+ ALK6-30	30	22	49.2		2121		118
ALK 7095 KPS /6	+ ALK6-35	35	26	58		2354		133
ALK 7095 KPS /7	+ ALK6-40	40	30	66		2592	175	148
ALK 7095 KPS /9	+ ALK6-50	50	37	81		2938		185
ALK 7095 KPS /10	+ ALK7-60	60	45	91		2843		180
ALK 7095 KPS /12	+ ALK7-80	80	59	119		3285		213
ALK 7095 KPS /14	+ ALK8-85	85	63	126		3468		237
ALK 7095 KPS /16	+ ALK8-100	100	75	147		3864	191	272
ALK 7095 KPS /20	+ ALK8-125	125	92	182		4576		323
ALK 8100 KPS /3	+ ALK6-30	30	22	49.2		1918		113
ALK 8100 KPS /4	+ ALK6-40	40	30	66		2272		141
ALK 8100 KPS /5	+ ALK6-50	50	37	81		2501		156
ALK 8100 KPS /6	+ ALK8-60	60	45	90		2390		193
ALK 8100 KPS /8	+ ALK8-75	75	55	112	BSP G5	2748	191	219
ALK 8100 KPS /9	+ ALK8-85	85	63	126		2927		231
ALK 8100 KPS /10	+ ALK8-100	100	75	147		3176		265
ALK 8100 KPS /13	+ ALK8-125	125	92	182		3823		318
ALK 8125 KPS /2-AA	+ ALK6-17.5	17.5	13	31		1697		104
ALK 8125 KPS /2-A	+ ALK6-25	25	18.5	42		1822	209	117
ALK 8125 KPS /2	+ ALK6-30	30	22	49.2		1867		122
ALK 8125 KPS /3-AA	+ ALK6-30	30	22	49.2		2023	214	128
ALK 8125 KPS /3	+ ALK6-40	40	30	66		2238		150
ALK 8125 KPS /4	+ ALK6-50	50	37	81		2484		167
ALK 8125 KPS /5-A	+ ALK8-60	60	45	90	BSP G6	2390	220	204
ALK 8125 KPS /5	+ ALK8-75	75	55	112		2470		219
ALK 8125 KPS /6-A	+ ALK8-75	75	55	112		2626		257
ALK 8125 KPS /6	+ ALK8-90	90	66	131		2736		277
ALK 8125 KPS /7	+ ALK8-90	90	66	131		2892	220	286
ALK 8125 KPS /8	+ ALK8-100	100	75	147		3118		310
ALK 8125 KPS /9	+ ALK8-125	125	92	182		3474		355
ALK 8125 KPS /10	+ ALK8-125	125	92	182		3630		364
ALK 8160 KPS /11	+ ALK6-17.5	17.5	13	31		1500	207	91
ALK 8160 KPS /2	+ ALK6-35	35	26	58		1931		126
ALK 8160 KPS /3	+ ALK6-50	50	37	81		1987		176
ALK 8160 KPS /4A	+ ALK8-60	60	45	90		2193		190
ALK 8160 KPS /4	+ ALK8-75	75	55	112		2273		202
ALK 8160 KPS /5	+ ALK8-80	80	59	117		2439	210	209
ALK 8160 KPS /6A	+ ALK8-90	90	66	131	BSP G6	2695	210	239
ALK 8160 KPS /7A	+ ALK8-100	100	75	147		2921		261
ALK 8160 KPS /8	+ ALK8-125	125	92	182		3277		304
ALK 8160 KPS /9	+ ALK8-150	150	110	220		3583		355
ALK 8160 KPS /11	+ ALK10-175	175	129	255		3714		419
ALK 8160 KPS /12	+ ALK10-200	200	147	290		3910		448
ALK 8160 KPS /14	+ ALK10-225	225	165	325		4372	236	503
ALK 8160 KPS /16	+ ALK10-250	250	185	355		4784		545



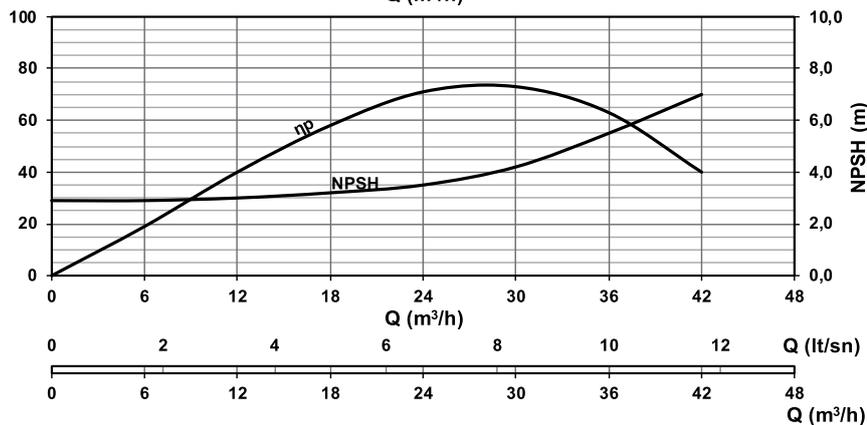
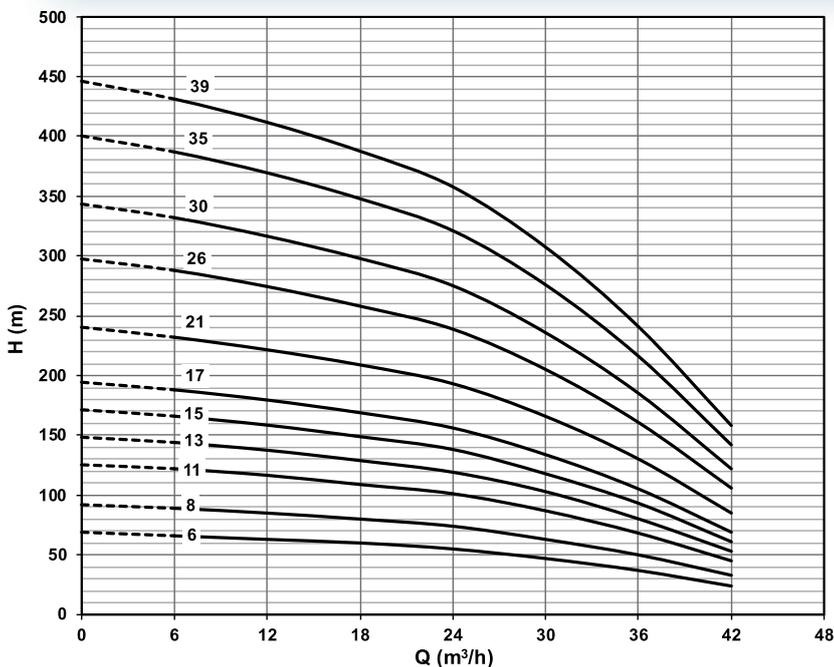
# 6010 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW										
			(m <sup>3</sup> /h)	2,4	4,8	7,2	9,6	12,0	14,4	16,8	18,0	
			(lt/sn)	0,7	1,3	2,0	2,7	3,3	4,0	4,7	5,0	
NPSH			(mWc)	2,7	2,8	2,8	2,8	2,9	3,1	3,5	4,1	
ALK 6010 KPS /6	ALK 4 - 3 HP/2,2 Kw	H (m)	⇨	61	58	55	52	47	42	<b>35</b>	27	23
ALK 6010 KPS /8	ALK 4 - 4 HP/3 Kw			81	78	74	69	63	56	<b>47</b>	36	30
ALK 6010 KPS /10	ALK 6 - 5,5 HP/4 Kw			102	97	92	86	79	70	<b>59</b>	46	38
ALK 6010 KPS /14	ALK 6 - 7,5 HP/5,5 Kw			142	136	129	121	110	98	<b>83</b>	64	53
ALK 6010 KPS /18	ALK 6 - 10 HP/7,5 Kw			183	175	166	155	142	126	<b>106</b>	82	68
ALK 6010 KPS /20	ALK 6 - 10 HP/7,5 Kw			203	195	184	172	158	140	<b>118</b>	91	75
ALK 6010 KPS /24	ALK 6 - 12,5 HP/9,2 Kw			244	234	221	207	189	168	<b>142</b>	109	90
ALK 6010 KPS /26	ALK 6 - 12,5 HP/9,2 Kw			264	253	240	224	205	182	<b>154</b>	118	98
ALK 6010 KPS /28	ALK 6 - 15 HP/11 Kw			285	273	258	241	221	196	<b>166</b>	127	105
ALK 6010 KPS /30	ALK 6 - 15 HP/11 Kw			305	292	277	259	236	209	<b>177</b>	138	113
ALK 6010 KPS /34	ALK 6 - 17,5 HP/13 Kw			346	331	314	293	268	237	<b>201</b>	155	128
ALK 6010 KPS /36	ALK 6 - 17,5 HP/13 Kw			366	351	332	310	284	251	<b>213</b>	164	135
ALK 6010 KPS /38	ALK 6 - 20 HP/15 Kw			387	371	351	328	299	265	<b>225</b>	173	143
ALK 6010 KPS /40	ALK 6 - 20 HP/15 Kw			407	390	369	345	315	279	<b>237</b>	182	150
ALK 6010 KPS /43	ALK 6 - 25 HP/18,5 Kw			437	419	397	371	339	300	<b>254</b>	196	162
ALK 6010 KPS /46	ALK 6 - 25 HP/18,5 Kw			468	448	424	397	362	321	<b>272</b>	209	173
ALK 6010 KPS /49	ALK 6 - 25 HP/18,5 Kw			498	477	452	422	386	342	<b>290</b>	223	184
ALK 6010 KPS /52	ALK 6 - 30 HP/22 Kw			529	507	480	448	410	363	<b>308</b>	237	195
ALK 6010 KPS /55	ALK 6 - 30 HP/22 Kw	559	536	507	474	433	384	<b>325</b>	250	207		
ALK 6010 KPS /58	ALK 6 - 30 HP/22 Kw	590	565	535	500	457	405	<b>343</b>	264	218		



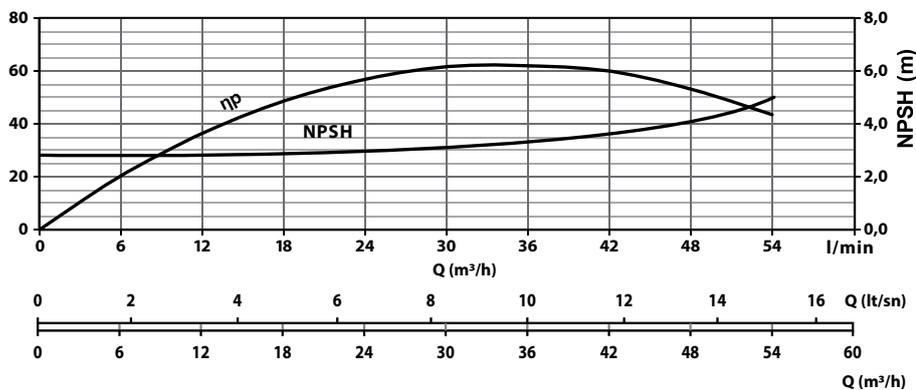
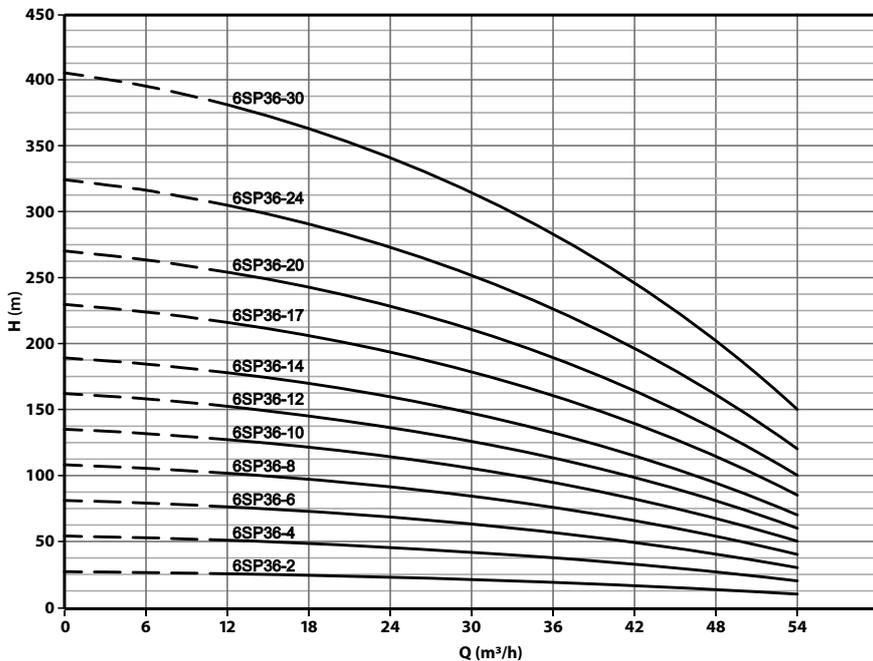
# 6030 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW		0	6	12	18	24	30	36	42
		(m <sup>3</sup> /h)	(lt/sn)	0,0	1,7	3,3	5,0	6,7	<b>8,3</b>	10,0	11,7
		NPSH	(mWc)	2,9	2,9	3,0	3,2	3,5	<b>4,2</b>	5,5	7,0
ALK 6030 KPS /6	ALK 6-7,5HP / 5,5 kW	H (m)	⇒	69	66	63	60	55	<b>47</b>	37	24
ALK 6030 KPS /7	ALK 6-10HP / 7,5 kW			80	77	74	70	64	<b>55</b>	43	28
ALK 6030 KPS /8	ALK 6-10HP / 7,5 kW			92	89	85	80	74	<b>63</b>	50	33
ALK 6030 KPS /9	ALK 6-12,5HP / 9,2 kW			103	100	95	89	83	<b>71</b>	56	37
ALK 6030 KPS /10	ALK 6-12,5HP / 9,2 kW			114	111	106	99	92	<b>79</b>	62	41
ALK 6030 KPS /11	ALK 6-12,5HP / 9,2 kW			125	122	117	109	101	<b>87</b>	68	45
ALK 6030 KPS /12	ALK 6-15HP / 11 kW			137	133	127	119	110	<b>95</b>	74	49
ALK 6030 KPS /13	ALK 6-15HP / 11 kW			148	144	138	129	119	<b>103</b>	80	53
ALK 6030 KPS /14	ALK 6-17,5HP / 13 kW			160	155	148	139	129	<b>110</b>	87	57
ALK 6030 KPS /15	ALK 6-17,5HP / 13 kW			171	166	159	149	138	<b>118</b>	93	61
ALK 6030 KPS /16	ALK 6-20HP / 15 kW			183	177	169	159	147	<b>126</b>	99	65
ALK 6030 KPS /17	ALK 6-20HP / 15 kW			194	188	180	169	156	<b>134</b>	105	69
ALK 6030 KPS /18	ALK 6-25HP / 18,5 kW			206	199	190	179	165	<b>142</b>	111	73
ALK 6030 KPS /20	ALK 6-25HP / 18,5 kW			229	221	211	199	184	<b>158</b>	124	81
ALK 6030 KPS /21	ALK 6-25HP / 18,5 kW			240	232	222	209	193	<b>166</b>	130	85
ALK 6030 KPS /24	ALK 6-30HP / 22 kW			275	266	254	239	221	<b>189</b>	149	98
ALK 6030 KPS /26	ALK 6-30HP / 22 kW			298	288	274	258	239	<b>205</b>	161	106
ALK 6030 KPS /28	ALK 6-35HP / 26 kW			320	310	296	278	257	<b>221</b>	173	114
ALK 6030 KPS /30	ALK 6-35HP / 26 kW			343	332	317	298	275	<b>236</b>	185	122
ALK 6030 KPS /32	ALK 6-40HP / 30 kW			366	354	338	318	294	<b>252</b>	198	130
ALK 6030 KPS /34	ALK 6-40HP / 30 kW			389	376	359	338	312	<b>268</b>	210	138
ALK 6030 KPS /35	ALK 6-40HP / 30 kW			400	387	370	348	321	<b>276</b>	216	142
ALK 6030 KPS /39	ALK 6-50HP / 37 kW			446	431	412	388	358	<b>307</b>	241	158



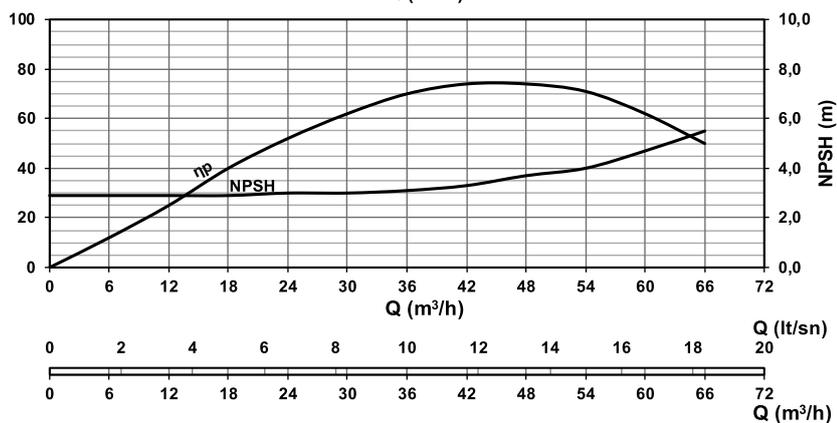
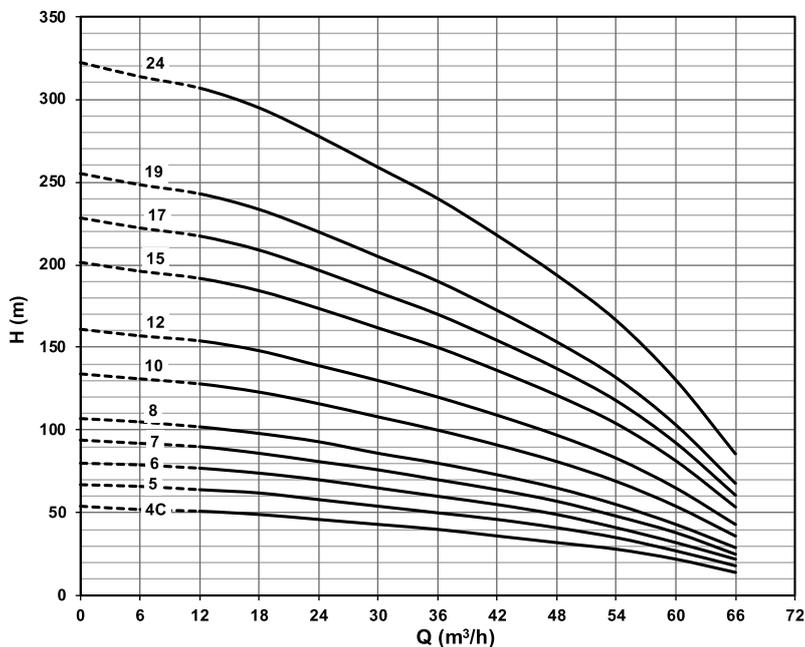
# 6036 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW		0	6	12	18	24	30	36	42	48	54
		NPSH	(m³/h)	0,0	1,7	3,3	5,0	6,7	8,3	10,0	11,7	13,3	15,0
			(mWc)	3	3,1	3,2	3,3	3,3	3,4	3,5	4,1	4,6	5,1
ALK 6036 KPS /2	ALK 4 - 4HP/3 Kw	H (m)	⇒	27	26	25	24	23	21	19	<b>16</b>	14	10
ALK 6036 KPS /3	ALK 6 - 5,5HP/4 Kw			41	39	38	36	34	31	28	<b>25</b>	20	15
ALK 6036 KPS /4	ALK 6 - 7,5HP/5,5 Kw			54	53	51	48	45	42	38	<b>33</b>	27	20
ALK 6036 KPS /5	ALK 6 - 10HP/7,5 Kw			68	66	63	60	57	52	47	<b>41</b>	34	25
ALK 6036 KPS /6	ALK 6 - 10HP/7,5 Kw			81	79	76	73	68	62	56	<b>49</b>	41	30
ALK 6036 KPS /7	ALK 6 - 12,5HP/9,2 Kw			95	92	89	85	80	73	66	<b>58</b>	48	35
ALK 6036 KPS /8	ALK 6 - 15HP/11 Kw			108	105	102	97	91	83	75	<b>66</b>	54	40
ALK 6036 KPS /9	ALK 6 - 15HP/11 Kw			122	119	114	109	102	94	85	<b>74</b>	61	45
ALK 6036 KPS /10	ALK 6 - 17,5HP/13 Kw			135	132	127	121	114	104	94	<b>82</b>	68	50
ALK 6036 KPS /11	ALK 6 - 20HP/15 Kw			149	145	140	133	125	114	103	<b>91</b>	75	55
ALK 6036 KPS /12	ALK 6 - 20HP/15 Kw			162	158	152	145	136	125	113	<b>99</b>	82	60
ALK 6036 KPS /14	ALK 6 - 25HP/18,5 Kw			189	184	178	169	159	146	132	<b>115</b>	95	70
ALK 6036 KPS /15	ALK 6 - 25HP/18,5 Kw			203	198	190	181	170	156	141	<b>123</b>	102	75
ALK 6036 KPS /17	ALK 6 - 30HP/22 Kw			230	224	216	206	193	177	160	<b>140</b>	116	85
ALK 6036 KPS /18	ALK 6 - 30HP/22 Kw			243	237	229	218	205	187	169	<b>148</b>	122	90
ALK 6036 KPS /20	ALK 6 - 35HP/26 Kw			270	263	254	242	227	208	188	<b>165</b>	136	100
ALK 6036 KPS /22	ALK 6 - 40HP/30 Kw			297	290	279	266	250	229	207	<b>181</b>	150	110
ALK 6036 KPS /24	ALK 6 - 40HP/30 Kw			324	316	305	290	273	250	226	<b>198</b>	163	120
ALK 6036 KPS /26	ALK 6 - 50HP/37 Kw			351	342	330	315	296	270	244	<b>214</b>	177	130
ALK 6036 KPS /28	ALK 6 - 50 HP/37 Kw			378	369	356	339	318	291	263	<b>231</b>	190	140
ALK 6036 KPS /30	ALK 7 - 60 HP/45 Kw			405	395	381	363	341	312	282	<b>247</b>	204	150
ALK 6036 KPS /32	ALK 7 - 60 HP/45 Kw			443	432	416	395	368	347	299	<b>261</b>	219	149
ALK 6036 KPS /35	ALK 7 - 60 HP/45 Kw			484	473	455	432	403	379	327	<b>286</b>	239	163



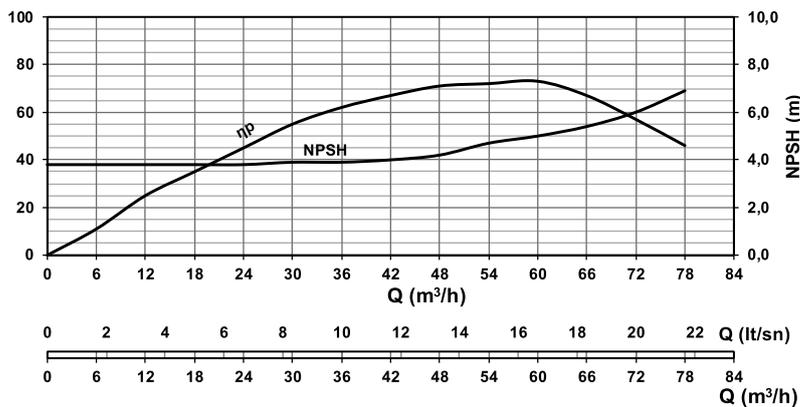
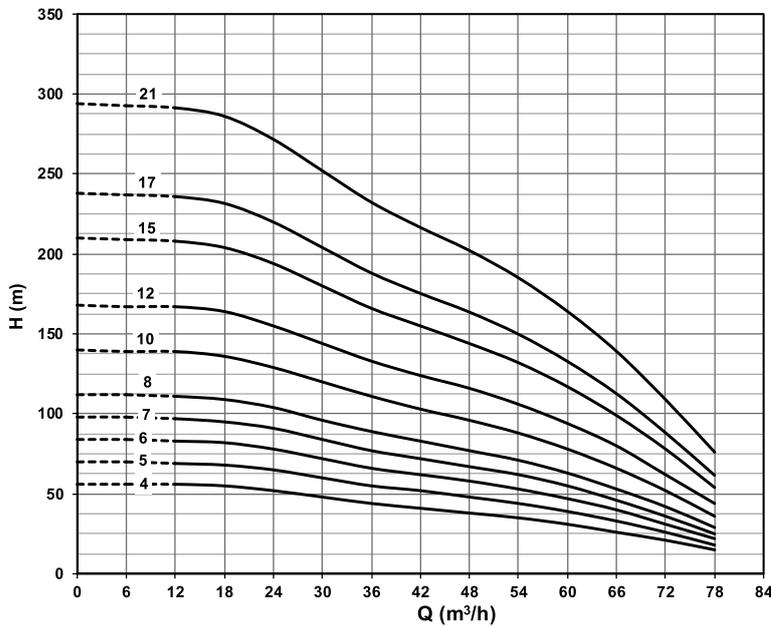
# 6046 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW													
			(m <sup>3</sup> / h)	0	6	12	18	24	30	36	42	<b>48</b>	54	60	66
			(lt / sn)	0	1,7	3,3	5,0	6,7	8,3	10,0	11,7	<b>13,3</b>	15,0	16,7	18,3
NPSH	(mWc)	2,9	2,9	2,9	2,9	3,0	3,0	3,1	3,3	<b>3,7</b>	4,0	4,7	5,5		
ALK 6046 KPS / 4C	ALK 6-7,5HP / 5,5 kW	H (m) ⇒		54	52	51	49	46	43	40	36	<b>32</b>	28	22	14
ALK 6046 KPS / 5	ALK 6-10HP / 7,5 kW		67	66	64	62	58	54	50	46	<b>41</b>	35	27	18	
ALK 6046 KPS / 6	ALK 6-12,5HP / 9,2 kW		80	79	77	74	70	65	60	55	<b>49</b>	41	32	22	
ALK 6046 KPS / 7	ALK 6-15HP / 11 kW		94	92	90	86	81	76	70	64	<b>57</b>	48	38	25	
ALK 6046 KPS / 8	ALK 6-17,5HP / 13 kW		107	105	102	98	93	86	80	73	<b>65</b>	55	43	29	
ALK 6046 KPS / 9	ALK 6-20HP / 15 kW		121	118	115	111	104	97	90	82	<b>73</b>	62	49	32	
ALK 6046 KPS / 10	ALK 6-20HP / 15 kW		134	131	128	123	116	108	100	91	<b>81</b>	69	54	36	
ALK 6046 KPS / 11	ALK 6-25HP / 18,5 kW		147	144	141	135	128	119	110	100	<b>89</b>	76	59	40	
ALK 6046 KPS / 12	ALK 6-25HP / 18,5 kW		161	157	154	148	139	130	120	109	<b>97</b>	83	65	43	
ALK 6046 KPS / 13	ALK 6-30HP / 22 kW		174	170	166	160	151	140	130	118	<b>105</b>	90	70	47	
ALK 6046 KPS / 14	ALK 6-30HP / 22 kW		188	183	179	172	162	151	140	127	<b>113</b>	97	76	50	
ALK 6046 KPS / 15	ALK 6-30HP / 22 kW		201	196	192	184	174	162	150	136	<b>121</b>	104	81	54	
ALK 6046 KPS / 17	ALK 6-35HP / 26 kW		228	222	217	209	197	183	170	154	<b>137</b>	118	92	61	
ALK 6046 KPS / 19	ALK 6-40HP / 30kW		255	248	243	233	220	205	190	172	<b>153</b>	132	103	68	
ALK 6046 KPS / 21	ALK 6-50HP / 37 kW		282	275	269	258	243	227	210	191	<b>170</b>	146	114	75	
ALK 6046 KPS / 23	ALK 6-50HP / 37 kW		309	301	294	283	266	248	230	209	<b>186</b>	159	125	82	
ALK 6046 KPS / 24	ALK 6-50HP / 37 kW		322	314	307	295	278	259	240	218	<b>194</b>	166	130	86	



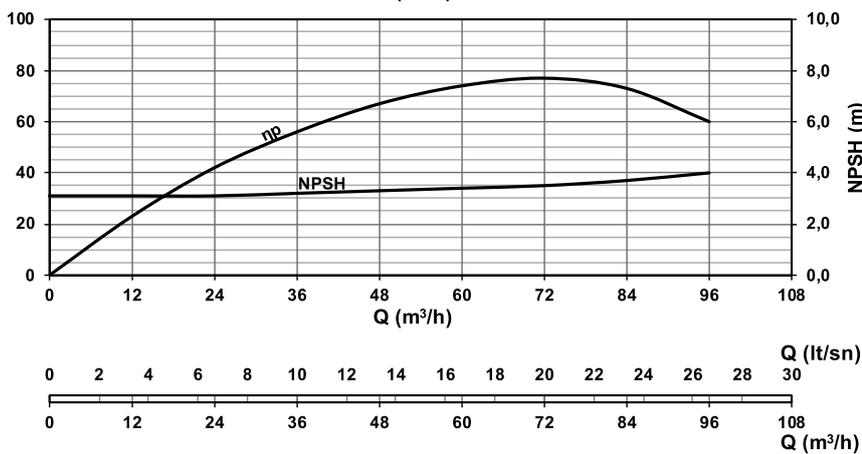
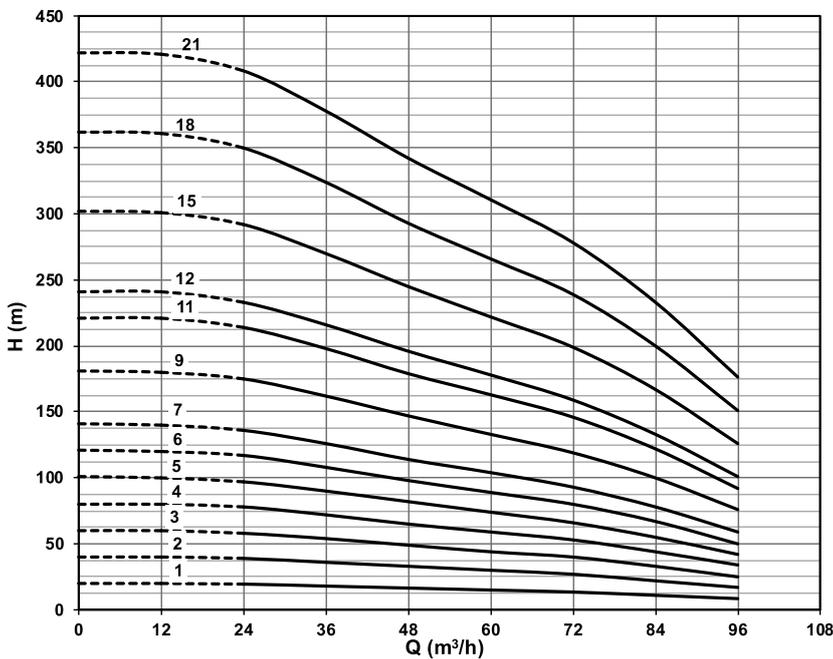
# 6060 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW																	
		NPSH	(m <sup>3</sup> /h)	0	6	12	18	24	30	36	42	48	54	60	66	72	78		
			(lt/sn)	0	1,7	3,3	5,0	6,7	8,3	10,0	11,7	13,3	15,0	16,7	18,3	20,0	21,7		
(mWc)	3,8	3,8	3,8	3,8	3,8	3,9	3,9	4,0	4,2	4,7	5,0	5,4	6,0	6,9					
ALK 6060 KPS / 4	ALK 6-10HP / 7,5 kW	H (m)	⇒	56	56	56	55	52	48	44	41	38	35	<b>31</b>	26	21	15		
ALK 6060 KPS / 5	ALK 6-12,5HP / 9,2 kW			70	70	69	68	65	60	55	52	48	44	<b>39</b>	33	26	18		
ALK 6060 KPS / 6	ALK 6-15HP / 11 kW			84	84	83	82	78	72	66	62	58	53	<b>47</b>	40	31	22		
ALK 6060 KPS / 7	ALK 6-17,5HP / 13 kW			98	98	97	95	91	84	77	72	67	62	<b>55</b>	46	36	25		
ALK 6060 KPS / 8	ALK 6-20HP / 15 kW			112	112	111	109	104	96	89	83	77	71	<b>63</b>	53	42	29		
ALK 6060 KPS / 10	ALK 6-25HP / 18,5 kW			140	139	139	136	129	120	111	103	96	88	<b>78</b>	66	52	36		
ALK 6060 KPS / 12	ALK 6-30HP / 22 kW			168	167	167	164	155	144	133	124	116	106	<b>94</b>	80	62	44		
ALK 6060 KPS / 14	ALK 6-35HP / 26 kW			196	195	194	191	181	168	155	144	135	123	<b>109</b>	93	73	51		
ALK 6060 KPS / 15	ALK 6-35HP / 26 kW			210	209	208	204	194	180	166	155	144	132	<b>117</b>	99	78	54		
ALK 6060 KPS / 16	ALK 6-40HP / 30kW			224	223	222	218	207	192	177	165	154	141	<b>125</b>	106	83	58		
ALK 6060 KPS / 17	ALK 6-40HP / 30kW			238	237	236	232	220	204	188	175	164	150	<b>133</b>	113	88	62		
ALK 6060 KPS / 19	ALK 6-50HP / 37 kW			266	265	264	259	246	228	210	196	183	167	<b>148</b>	126	99	69		
ALK 6060 KPS / 20	ALK 6-50HP / 37 kW			280	279	278	273	259	240	221	206	193	176	<b>156</b>	133	104	73		
ALK 6060 KPS / 21	ALK 6-50HP / 37 kW			294	293	291	286	272	252	232	217	202	185	<b>164</b>	139	109	76		



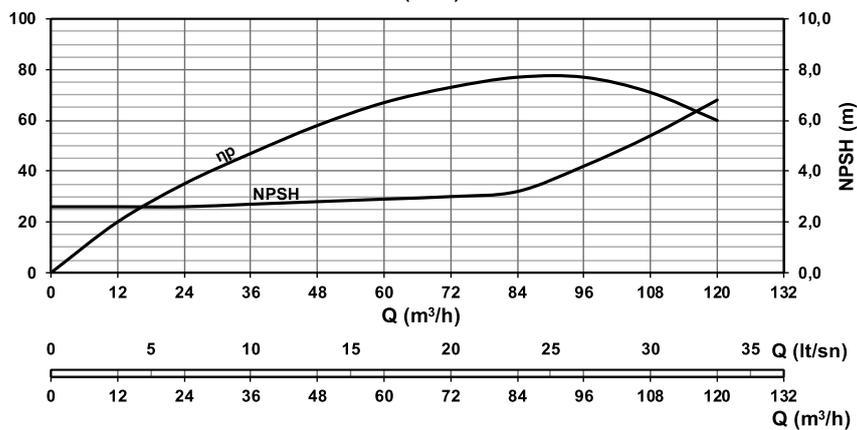
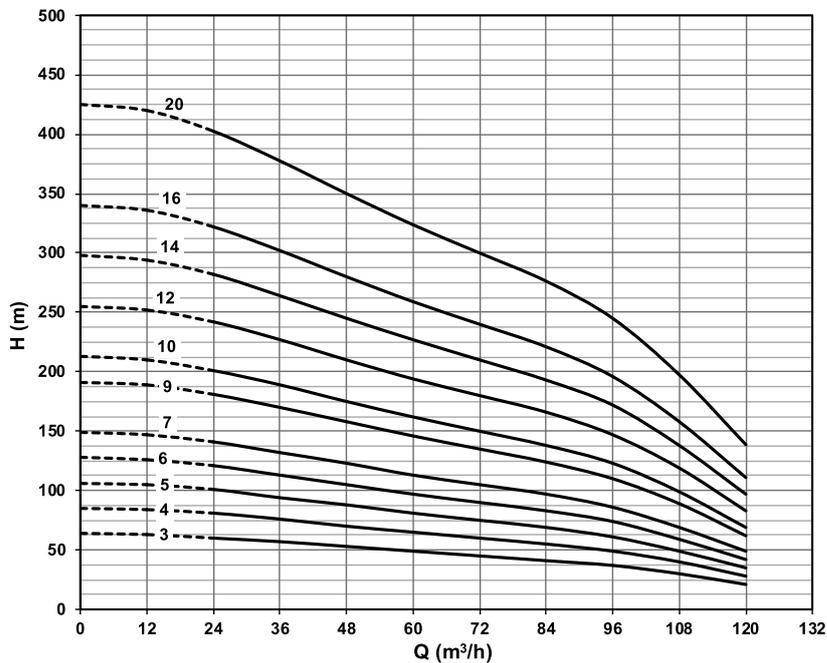
# 7077 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW										
			(m <sup>3</sup> / h)	0	12	24	36	48	60	72	84	96
			(lt / sn)	0	3,3	6,7	10,0	13,3	16,7	<b>20,0</b>	23,3	26,7
NPSH	(mWc)	3,1	3,1	3,1	3,2	3,3	3,4	<b>3,5</b>	3,7	4,0		
ALK 7077 KPS / 1	ALK 6-7,5HP / 5,5 kW	H (m) ⇒	20	20	20	18	17	15	<b>14</b>	11	9	
ALK 7077 KPS / 2	ALK 6-10HP / 7,5 kW		40	40	39	36	33	30	<b>27</b>	22	17	
ALK 7077 KPS / 3	ALK 6-15HP / 11 kW		60	60	58	54	49	44	<b>40</b>	33	25	
ALK 7077 KPS / 4	ALK 6-20HP / 15 kW		80	80	78	72	65	59	<b>53</b>	44	34	
ALK 7077 KPS / 5	ALK 6-25HP / 18,5 kW		101	100	97	90	82	74	<b>66</b>	55	42	
ALK 7077 KPS / 6	ALK 6-30HP / 22 kW		121	120	117	108	98	89	<b>80</b>	67	50	
ALK 7077 KPS / 7	ALK 6-35HP / 26 kW		141	140	136	126	114	104	<b>93</b>	78	59	
ALK 7077 KPS / 8	ALK 6-40HP / 30kW		161	160	156	144	130	118	<b>106</b>	89	67	
ALK 7077 KPS / 9	ALK 6-40HP / 30kW		181	180	175	162	147	133	<b>119</b>	100	76	
ALK 7077 KPS / 10	ALK 6-50HP / 37 kW		201	201	195	180	163	148	<b>133</b>	111	84	
ALK 7077 KPS / 11	ALK 6-50HP / 37 kW		221	221	214	198	179	163	<b>146</b>	122	92	
ALK 7077 KPS / 12	ALK 7-60HP / 45 kW		241	241	233	216	196	178	<b>159</b>	133	101	
ALK 7077 KPS / 13	ALK 7-80HP / 59 kW		261	261	253	234	212	192	<b>172</b>	144	109	
ALK 7077 KPS / 15	ALK 7-80HP / 59 kW		302	301	292	270	245	222	<b>199</b>	167	126	
ALK 7077 KPS / 16	ALK 8-85HP / 63 kW		322	321	311	288	261	237	<b>212</b>	178	134	
ALK 7077 KPS / 17	ALK 8-85HP / 63 kW		342	341	331	306	277	252	<b>225</b>	189	143	
ALK 7077 KPS / 18	ALK 8-85HP / 63 kW		362	361	350	324	293	266	<b>239</b>	200	151	
ALK 7077 KPS / 20	ALK 8-100HP / 75 kW		402	401	389	360	326	296	<b>265</b>	222	168	
ALK 7077 KPS / 21	ALK 8-100HP / 75 kW		422	421	408	378	342	311	<b>278</b>	233	176	



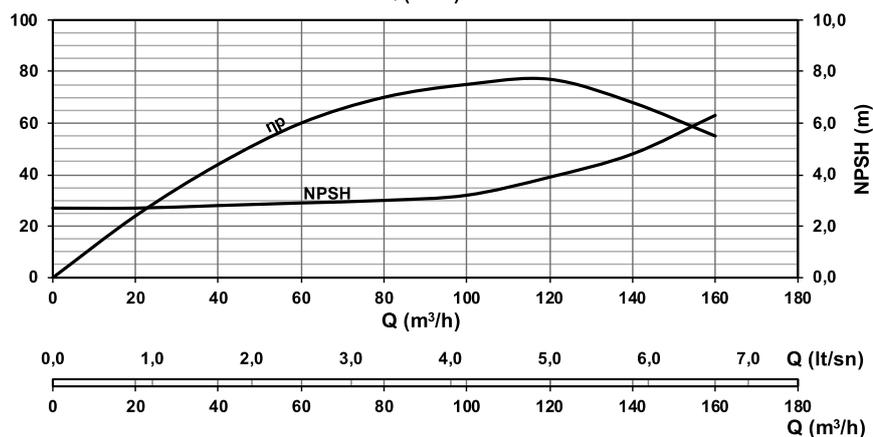
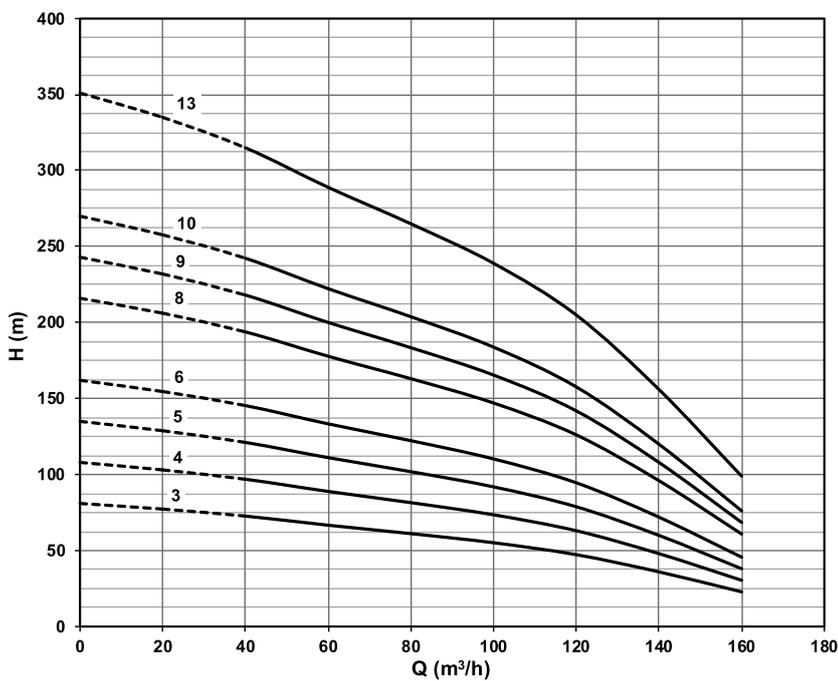
# 7095 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW		0	12	24	36	48	60	72	84	96	108	120
		(m <sup>3</sup> /h)	(lt/sn)	0,0	3,3	6,7	10,0	13,3	16,7	20,0	23,3	26,7	30,0	33,3
		NPSH	(mWc)	2,6	2,6	2,6	2,7	2,8	2,9	3,0	3,2	4,2	5,4	6,8
ALK 7095 KPS / 3	ALK 6-17,5HP / 13 kW	H (m)	⇒	64	63	60	57	53	49	45	41	<b>37</b>	30	21
ALK 7095 KPS / 4	ALK 6-25HP / 18,5 kW			85	84	81	76	70	65	60	55	<b>49</b>	40	28
ALK 7095 KPS / 5	ALK 6-30HP / 22 kW			106	105	101	94	88	81	75	69	<b>61</b>	49	35
ALK 7095 KPS / 6	ALK 6-35HP / 26 kW			128	126	121	113	105	97	90	83	<b>74</b>	59	42
ALK 7095 KPS / 7	ALK 6-40HP / 30kW			149	147	141	132	123	113	105	97	<b>86</b>	69	49
ALK 7095 KPS / 9	ALK 6-50HP / 37 kW			191	189	181	170	158	146	135	124	<b>110</b>	89	62
ALK 7095 KPS / 10	ALK 7-60HP / 45 kW			213	210	201	189	175	162	150	138	<b>123</b>	99	69
ALK 7095 KPS / 11	ALK 7-80HP / 59 kW			234	231	221	208	193	178	165	152	<b>135</b>	109	76
ALK 7095 KPS / 12	ALK 7-80HP / 59 kW			255	252	242	227	210	194	180	166	<b>147</b>	119	83
ALK 7095 KPS / 13	ALK 8-85HP / 63 kW			276	273	262	245	228	210	195	180	<b>159</b>	128	90
ALK 7095 KPS / 14	ALK 8-85HP / 63 kW			298	294	282	264	245	227	210	193	<b>172</b>	138	97
ALK 7095 KPS / 15	ALK 8-100HP / 75 kW			319	315	302	283	263	243	225	207	<b>184</b>	148	104
ALK 7095 KPS / 16	ALK 8-100HP / 75 kW			340	336	322	302	280	259	240	221	<b>196</b>	158	111
ALK 7095 KPS / 20	ALK 8-125HP / 92 kW			425	420	403	378	350	324	300	276	<b>245</b>	198	139



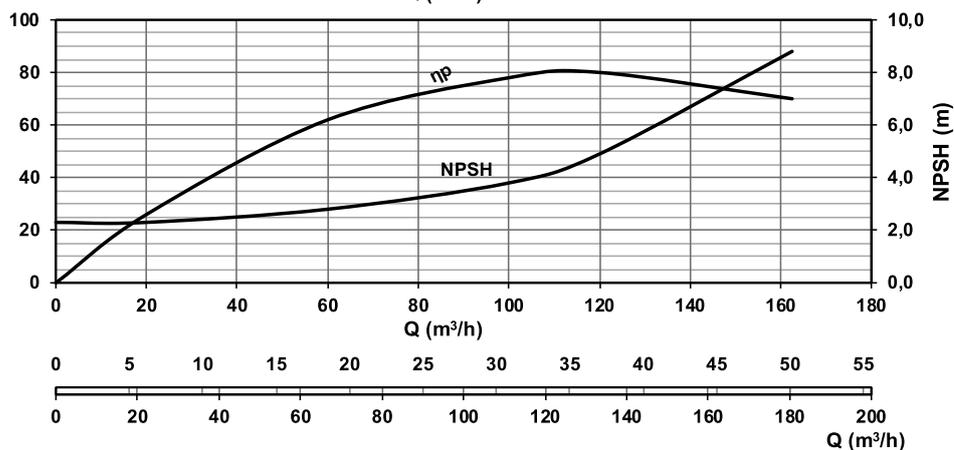
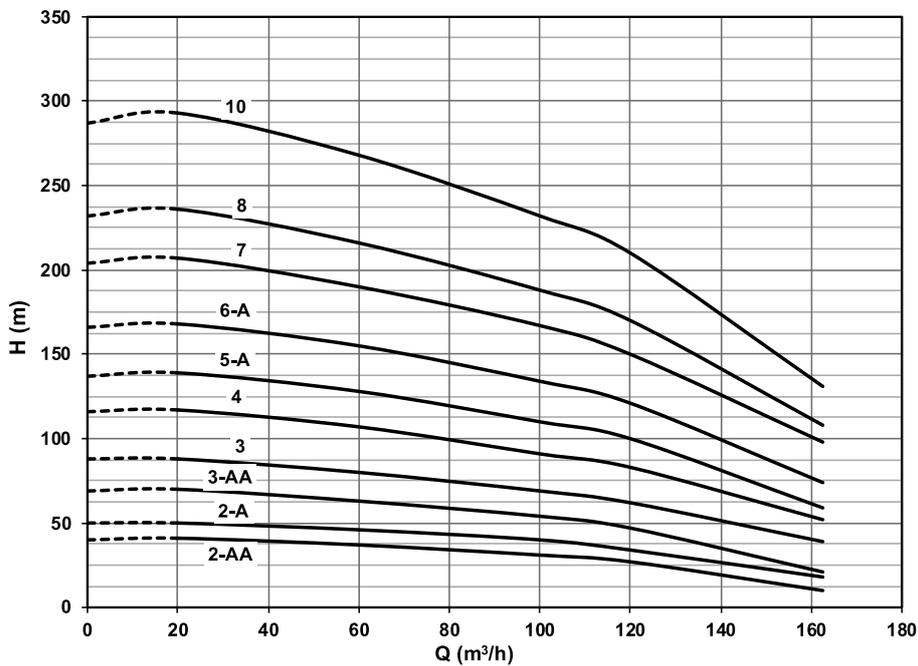
# 8110 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW										
			(m <sup>3</sup> / h)	0	20	40	60	80	100	120	140	160
			(lt / sn)	0	5,6	11,1	16,7	22,2	27,8	<b>33,3</b>	38,9	44,4
NPSH	(mWc)	2,7	2,7	2,8	2,9	3,0	3,2	<b>3,9</b>	4,8	6,3		
ALK 8110 KPS / 3	ALK 6-30HP / 22 kW	H (m) →	81	77	73	67	61	55	<b>47</b>	36	23	
ALK 8110 KPS / 4	ALK 6-40HP / 30kW		108	103	97	89	82	74	<b>63</b>	48	30	
ALK 8110 KPS / 5	ALK 6-50HP / 37 kW		135	129	121	111	102	92	<b>79</b>	60	38	
ALK 8110 KPS / 6	ALK 8-60HP / 45 kW		162	155	145	133	122	110	<b>95</b>	72	46	
ALK 8110 KPS / 7	ALK 8-75HP / 55 kW		189	180	170	156	143	129	<b>110</b>	84	53	
ALK 8110 KPS / 8	ALK 8-75HP / 55 kW		216	206	194	178	163	147	<b>126</b>	96	61	
ALK 8110 KPS / 9	ALK 8-85HP / 63 kW		243	232	218	200	183	165	<b>142</b>	108	69	
ALK 8110 KPS / 10	ALK 8-100HP / 75 kW		270	258	242	222	204	184	<b>158</b>	120	76	
ALK 8110 KPS / 13	ALK 8-125HP / 92 kW		351	335	315	289	265	239	<b>205</b>	156	99	



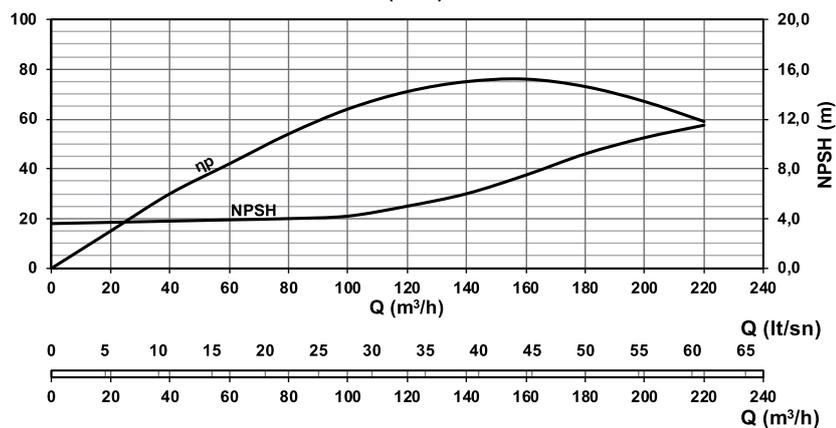
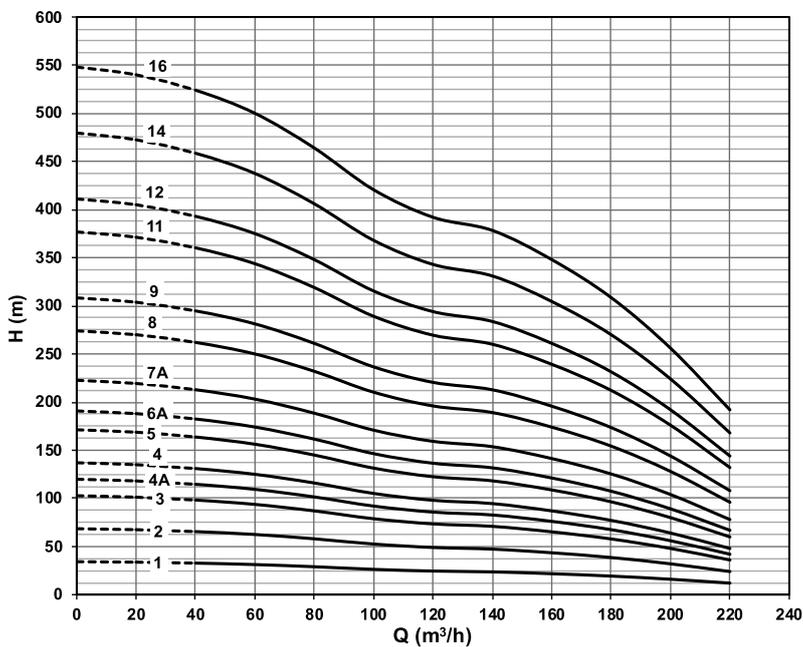
# 8125 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW		0	20	60	100	120	163
		(m <sup>3</sup> / h)	(ft / sn)	0	5,6	16,7	27,8	33,3	45,1
		NPSH	(mWc)	2,3	2,3	2,8	3,8	4,9	8,8
ALK 8125 KPS / 2-AA	ALK 6-17,5HP /13 kW	H (m)	⇨	40	41	37	31	<b>27</b>	10
ALK 8125 KPS / 2-A	ALK 6-25HP /18,5 kW			50	50	46	40	<b>34</b>	18
ALK 8125 KPS / 2	ALK 6-30HP /22 kW			59	60	54	46	<b>41</b>	26
ALK 8125 KPS / 3-AA	ALK 6-30HP /22 kW			69	70	63	54	<b>47</b>	21
ALK 8125 KPS / 3	ALK 6-40HP /30kW			88	88	80	69	<b>62</b>	39
ALK 8125 KPS / 4	ALK 6-50HP /37 kW			116	117	107	91	<b>83</b>	52
ALK 8125 KPS / 5-A	ALK 8-60HP /45 kW			137	139	128	110	<b>100</b>	59
ALK 8125 KPS / 5	ALK 8-75HP /55 kW			147	149	136	118	<b>108</b>	70
ALK 8125 KPS / 6-A	ALK 8-75HP /55 kW			166	168	155	134	<b>121</b>	74
ALK 8125 KPS / 6	ALK 8-90HP /66 kW			176	178	164	143	<b>130</b>	85
ALK 8125 KPS / 7	ALK 8-90HP /66 kW			204	207	190	167	<b>150</b>	98
ALK 8125 KPS / 8	ALK 8-100HP /75 kW			232	236	216	188	<b>170</b>	108
ALK 8125 KPS / 9	ALK 8-125HP /92 kW			260	265	242	210	<b>190</b>	120
ALK 8125 KPS / 10	ALK 8-125HP /92 kW			287	293	268	232	<b>210</b>	131

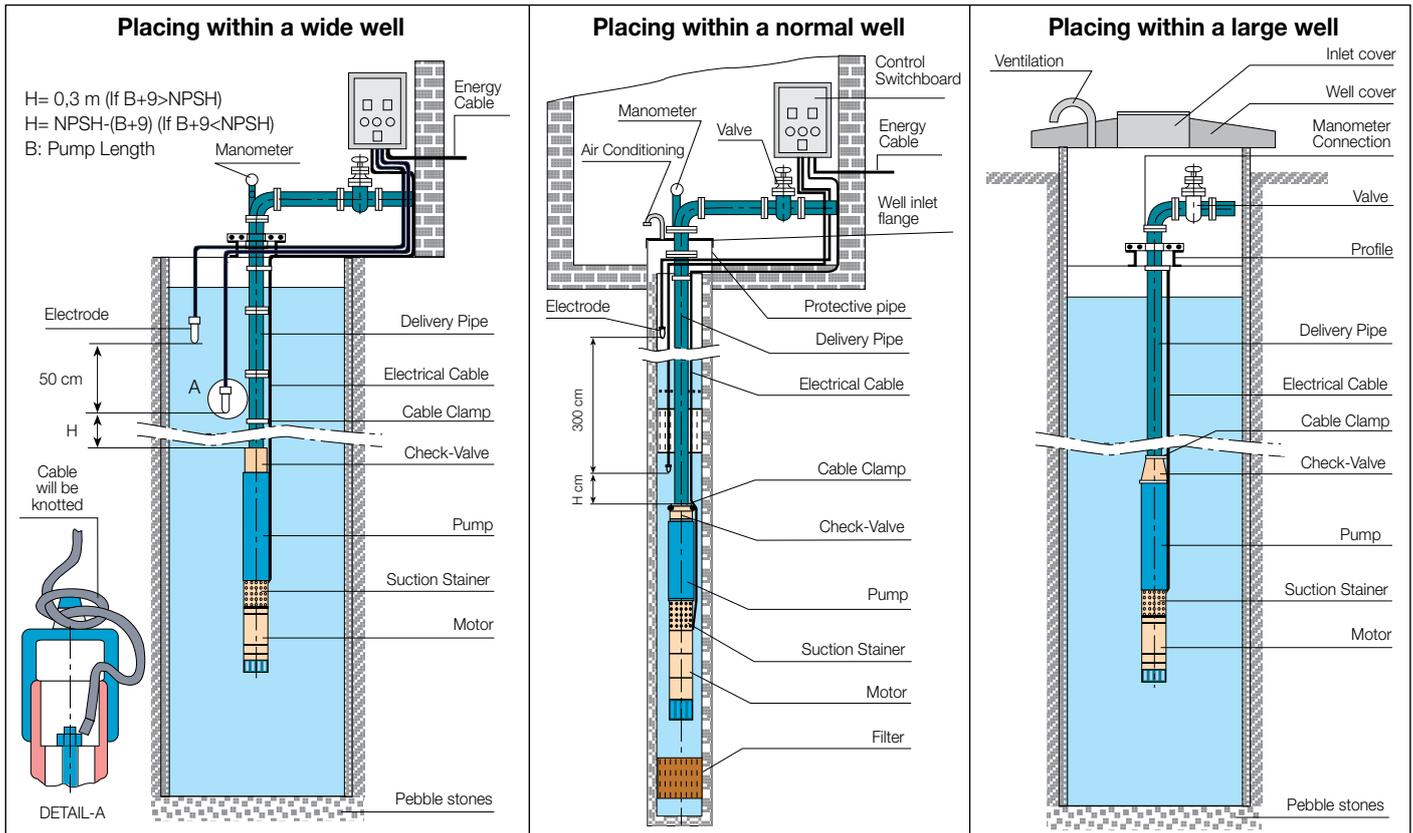


# 8160 KPS

PUMP TYPE	MOTOR TYPE kW/HP	FLOW	Flow Rates															
			(m³/h)	0	20	40	60	80	100	120	140	160	180	200	220			
			(lt/sn)	0	5,6	11,1	16,7	22,2	27,8	33,3	38,9	44,4	50,0	55,6	61,1			
		NPSH	(mWc)	3,6	3,7	3,8	3,9	4,0	4,2	5,0	6,0	7,5	9,2	10,5	11,5			
ALK 8160 KPS / 1	ALK 6-17,5HP / 13 kW	H (m)	⇔	34	34	33	31	29	26	25	24	<b>22</b>	19	16	12			
ALK 8160 KPS / 2	ALK 6-35HP / 26 kW			69	68	66	63	58	53	49	47	<b>44</b>	39	32	24			
ALK 8160 KPS / 3	ALK 8-50HP / 37 kW			103	101	98	94	87	79	74	71	<b>65</b>	58	48	36			
ALK 8160 KPS / 4A	ALK 8-60HP / 45 kW			120	118	115	109	102	92	86	83	<b>76</b>	68	56	42			
ALK 8160 KPS / 4	ALK 8-75HP / 55 kW			137	135	131	125	116	105	98	95	<b>87</b>	77	64	48			
ALK 8160 KPS / 5	ALK 8-80HP / 59 kW			171	169	164	156	145	131	123	118	<b>109</b>	96	80	60			
ALK 8160 KPS / 6A	ALK 8-90HP / 66 kW			191	188	182	174	162	146	137	132	<b>121</b>	107	89	67			
ALK 8160 KPS / 6	ALK 8-100HP / 75 kW			206	203	197	188	174	158	147	142	<b>131</b>	116	96	72			
ALK 8160 KPS / 7A	ALK 8-100HP / 75 kW			223	219	213	203	189	171	159	154	<b>141</b>	125	104	78			
ALK 8160 KPS / 7	ALK 8-125HP / 92 kW			240	236	229	219	203	184	172	166	<b>152</b>	135	112	84			
ALK 8160 KPS / 8	ALK 8-125HP / 92 kW			274	270	262	250	232	210	196	189	<b>174</b>	154	128	96			
ALK 8160 KPS / 9	ALK 8-150HP / 110 kW			308	304	295	281	261	237	221	213	<b>196</b>	174	144	108			
ALK 8160 KPS / 10	ALK 10-175HP / 129 kW			343	338	328	313	290	263	245	236	<b>218</b>	193	160	120			
ALK 8160 KPS / 11	ALK 10-175HP / 129 kW			377	371	360	344	319	289	270	260	<b>239</b>	212	176	132			
ALK 8160 KPS / 12	ALK 10-200HP / 147 kW			411	405	393	375	348	315	294	284	<b>261</b>	231	192	144			
ALK 8160 KPS / 13	ALK 10-225HP / 165 kW			445	439	426	406	377	342	319	307	<b>283</b>	251	208	156			
ALK 8160 KPS / 14	ALK 10-225HP / 165 kW	480	473	459	438	406	368	343	331	<b>305</b>	270	224	168					
ALK 8160 KPS / 15	ALK 10-250HP / 185 kW	514	506	491	469	435	394	368	355	<b>326</b>	289	240	180					
ALK 8160 KPS / 16	ALK 10-250HP / 185 kW	548	540	524	500	464	421	392	378	<b>348</b>	309	256	192					

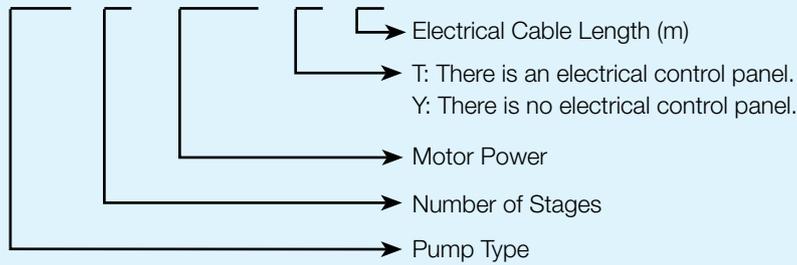


# APPLICATION METHODS



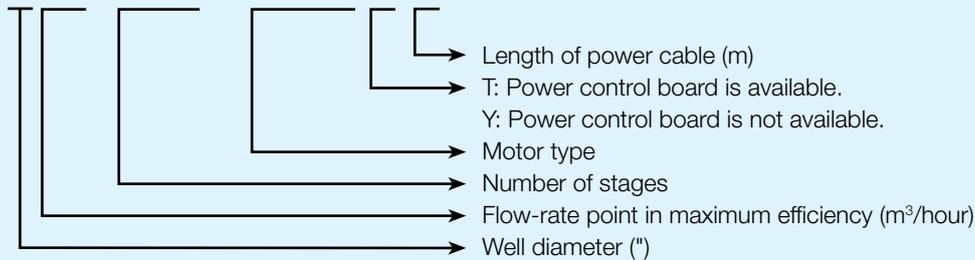
## 4" DMD-P SERIES - ORDER NOTATION

**4 SD / SDM 4 / 13 + 1.5HP - T. 30**



## AL 6" - 8" KPS SERIES - ORDER NOTATION

**6 046 / 15KPS + AL6 - 30 -T. 60**



Note: Manufacturer reserves the right to change any product specifications without notice.

**ALARKO**



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