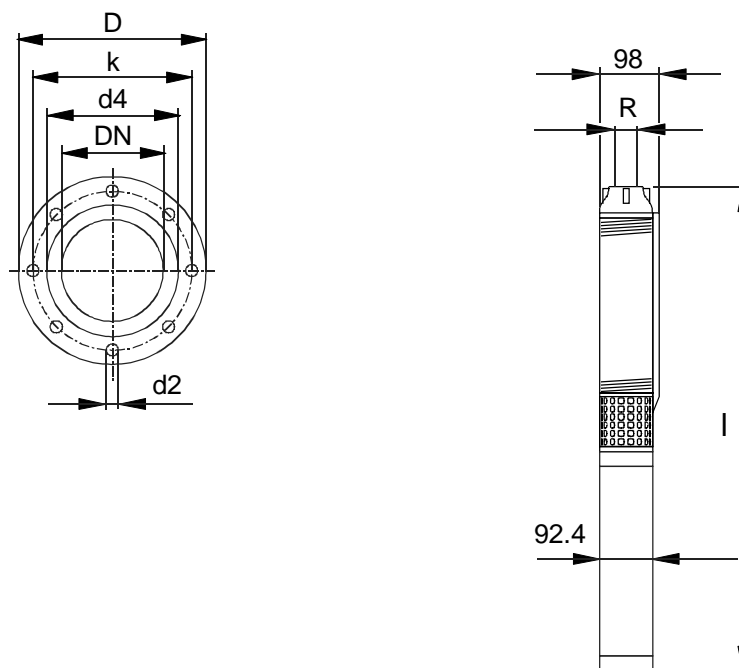


Specification

- multistage centrifugal pump in jacked design coupled with **oddesse** submersible motor
- discharge end with integrated non-return valve
- driven by three-phase or mono-phase AC motors
- minimal water level above the pump unit 1 m
- min. cooling flow 0.08 m/s, max. ambient temperature 30 °C (higher temperature on request)
- pure, clean water with content of solids up to 50 mg/l
- standard connection: R = G2 (pipe thread according to DIN ISO 228 part 1)
- other connections on request
- hydraulic performance tests for acceptance according to DIN EN ISO 9906 class 2
- special design (Horizontal installation, etc.) on request
- minimum efficiency index $MEI \geq 0.4$ (po-so-10/4.6 $MEI \geq 0.1$)

Main dimensions



Dimensions of adapters

Type	reduction thread	adapters						
		thread \Rightarrow flange	dimensions					
			D [mm]	b [mm]	k [mm]	d4 [mm]	d2 [mm]	m [kg]
po-so-1.6/4.6 po-so-3.2/4.6 po-so-6.3/4.6 po-so-10/4.6	G2 \Rightarrow G1 ¼	G2 \Rightarrow DN32, PN16	140	16	100	78	4x \varnothing 18	2.5
		G2 \Rightarrow DN32, PN40	140	18	100	78	4x \varnothing 18	2.7
		G2 \Rightarrow DN50, PN16	165	18	125	102	4x \varnothing 18	3.5
		G2 \Rightarrow DN50, PN40	165	20	125	102	4x \varnothing 18	3.7
		G2 \Rightarrow DN65, PN16	185	18	145	122	4x \varnothing 18	4.1
		G2 \Rightarrow DN65, PN40	185	22	145	122	8x \varnothing 18	4.3
		G2 \Rightarrow DN80, PN16	200	20	160	138	8x \varnothing 18	4.7
		G2 \Rightarrow DN80, PN40	200	24	160	138	8x \varnothing 18	5.7

Flange dimensions according to DIN 2633 (PN16) and DIN 2635 (PN40)

Material: zinc-coated or stainless steel

PN nominal pressure [bar], DN nominal diameter [mm], b thickness of flange [mm], m weight [kg]

Flanges with 2 cable recesses

subject to alterations

Material of construction

According to DIN

components	material
impeller	LEXAN
stage casing, diffuser	noryl / GFN2
external casing	stainless steel / 1.4301
suction casing, outlet branch	brass
radial bearing	sintered bronze / rubber
suction strainer	stainless steel / 1.4301
coupling	stainless steel / 1.4404
shaft	stainless steel / 1.4104
screws, nuts and bolts	stainless steel A2 / 1.4301/1.4303
motor	see chapter submersible motors

According to AISI

components	material
impeller	LEXAN
stage casing, diffuser	noryl / GFN2
external casing	stainless steel / AISI 304
suction casing, outlet branch	brass
radial bearing	sintered bronze / rubber
suction strainer	stainless steel / AISI 304
coupling	stainless steel / AISI 316L
shaft	stainless steel / AISI 316L
screws, nuts and bolts	stainless steel A2 / AISI 304/305
motor	see chapter submersible motors

oddesse reserve the right to employ construction materials following German (DIN) standard

Note:

The minimum efficiency index (MEI) is based on the full impeller diameter. All pumps belonging to this series reach to delivery only with full impeller diameter.

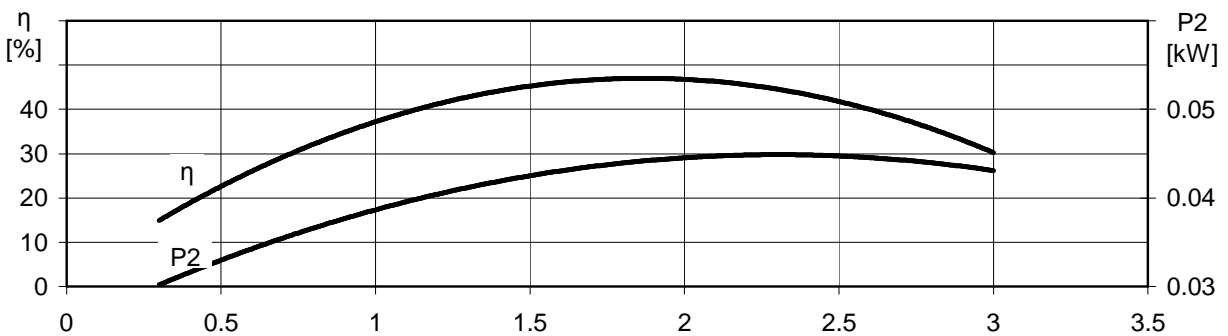
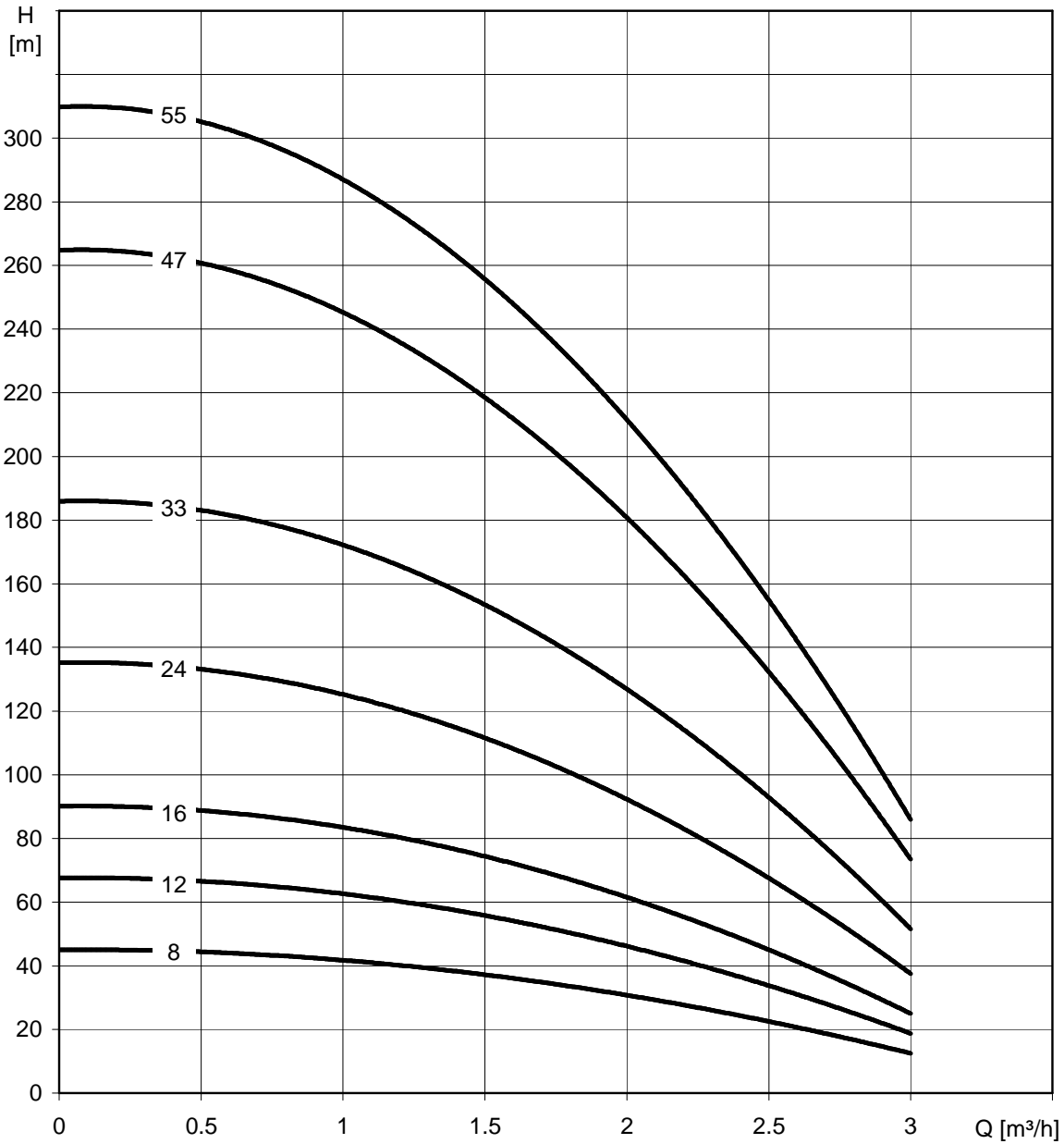
The trimming of the impeller can adapt the pump to a fixed duty point, leading to reduced energy consumption. The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter.

The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.

Information about the efficiency reference value is available at www.europump.org, reference value charts are available at www.europump.org/efficiencycharts.

subject to alterations

po-so-1.6/4.6
2850 r.p.m. - 50 Hz



subject to alterations

po-so-1.6/4.6
2850 r.p.m. - 50 Hz

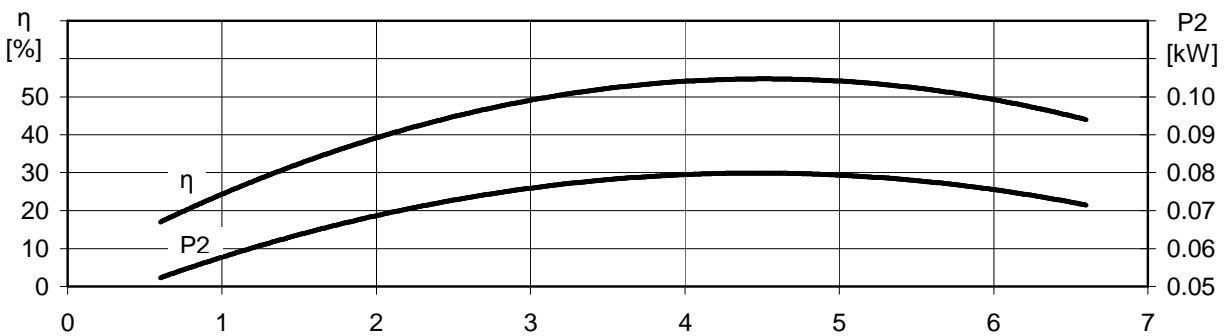
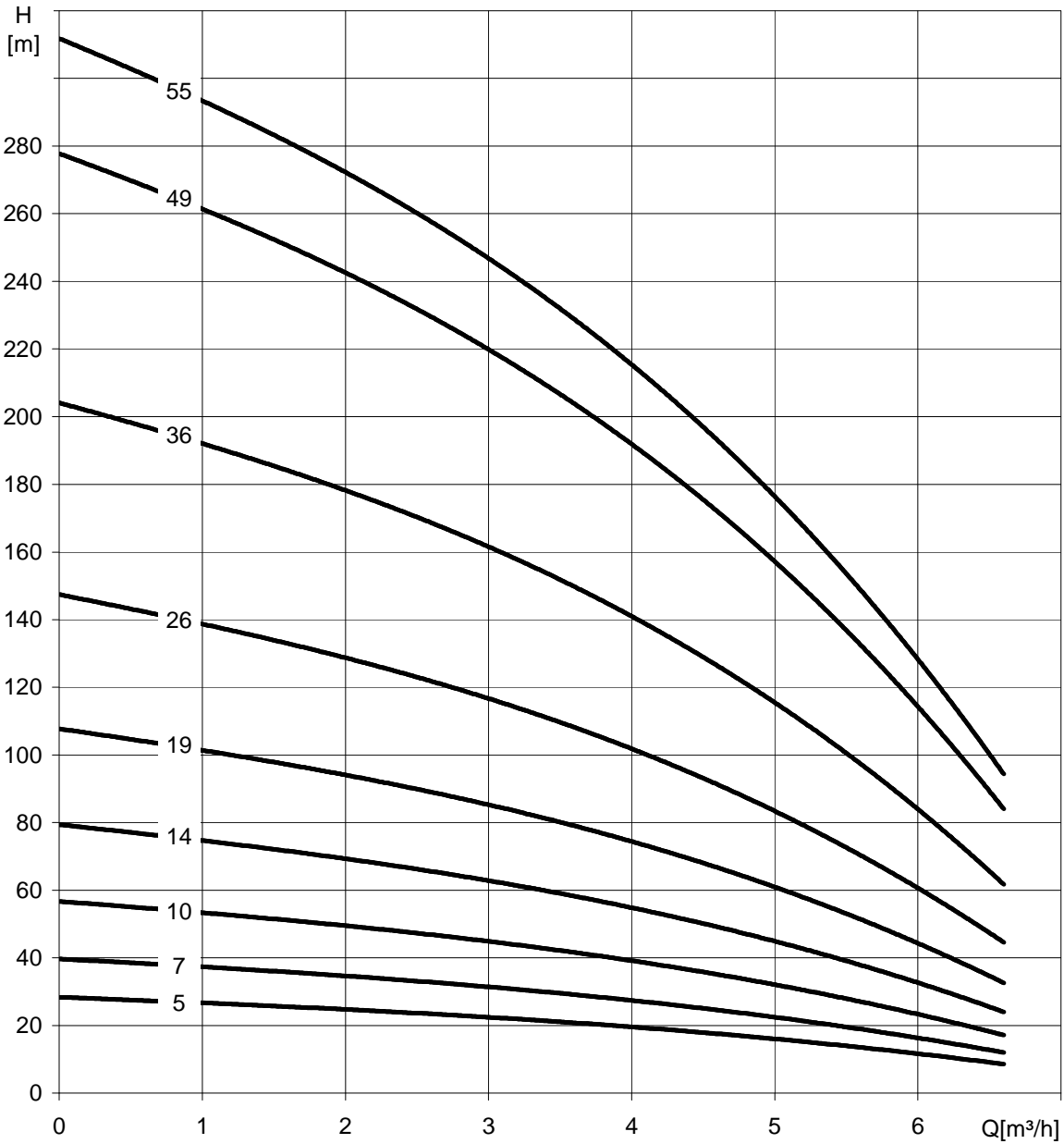
Type	Power P		Amperes 400 V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
	[kW]	[HP]		[l/s]	0.08	0.17	0.25	0.33	0.44	0.58	0.67	0.8		
				[m ³ /h]	0.3	0.6	0.9	1.2	1.6	2.1	2.4	3.0		
po-so-1.6- 8/4.6	0.37	0.5	1.6	Delivery head H [m]	45	44	43	40	36	29	24	13	581	10
po-so-1.6-12/4.6	0.55	0.75	1.9		67	66	64	61	54	44	36	19	691	11
po-so-1.6-16/4.6	0.75	1.0	2.4		89	88	85	81	72	58	48	25	811	13
po-so-1.6-24/4.6	1.1	1.5	3.4		134	131	128	121	109	88	72	38	1011	15
po-so-1.6-33/4.6	1.5	2.0	4.4		184	181	175	167	149	120	99	52	1278	19
po-so-1.6-47/4.6	2.2	3.0	5.9		262	257	250	237	213	172	142	74	1683	23
po-so-1.6-55/4.6	3.0	4.0	8.3		307	301	292	278	249	201	166	87	2024	32

up to 3.7 kW also available in 1~ / 230V version

minimum efficiency index MEI ≥ 0.4

subject to alterations

po-so-3.2/4.6
2850 r.p.m. - 50 Hz



subject to alterations

po-so-3.2/4.6
2850 r.p.m. - 50 Hz

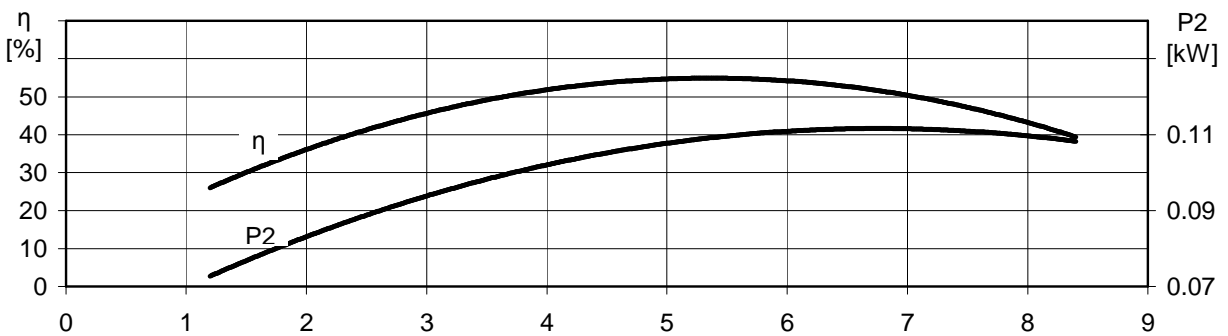
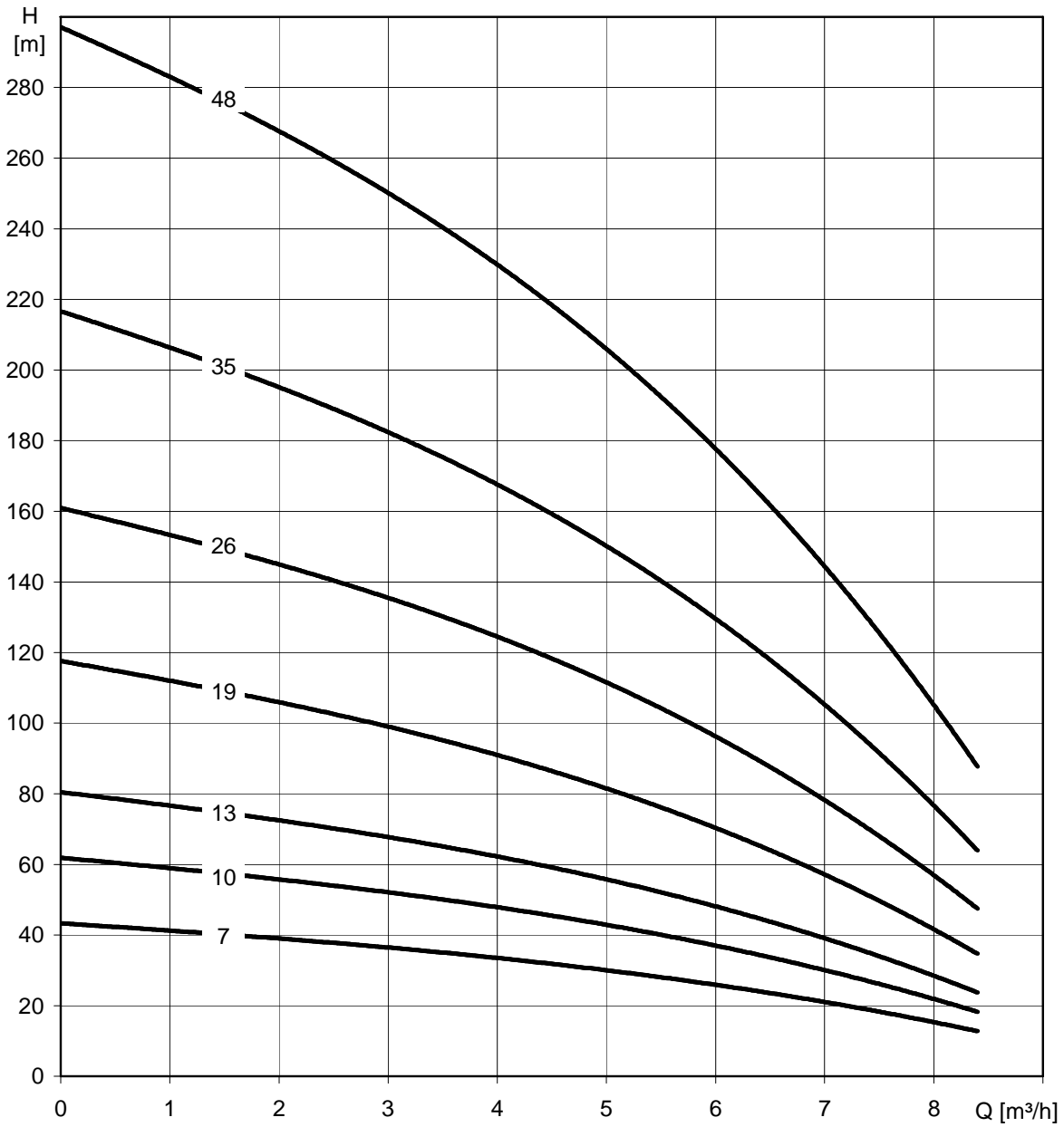
Type	Power P		Amperes 400 V [A]	Delivery rate Q								Length l [mm]	Weight m [kg]	
	[kW]	[HP]		[l/s]	0.17	0.50	0.89	1.00	1.17	1.33	1.50			1.83
				[m³/h]	0.6	1.8	3.2	3.6	4.2	4.8	5.4			6.6
po-so-3.2- 5/4.6	0.37	0.5	1.6	Delivery head H [m]	27	25	22	21	19	17	14	9	551	9
po-so-3.2- 7/4.6	0.55	0.75	1.9		38	35	31	29	26	23	20	12	631	10
po-so-3.2-10/4.6	0.75	1.0	2.4		55	50	44	42	38	33	29	17	751	12
po-so-3.2-14/4.6	1.1	1.5	3.4		76	70	62	59	53	47	40	24	896	14
po-so-3.2-19/4.6	1.5	2.0	4.4		104	95	84	79	72	63	55	33	1108	17
po-so-3.2-26/4.6	2.2	3.0	5.9		142	131	114	109	98	87	75	45	1363	20
po-so-3.2-36/4.6	3.0	4.0	8.3		197	181	158	150	136	120	104	62	1869	30
po-so-3.2-49/4.6	4.0	5.5	10.0		268	246	216	205	185	164	141	84	2329	36
po-so-3.2-55/4.6	5.5	7.5	14.0		300	276	242	230	208	184	158	95	2769	41

up to 3.7 kW also available in 1~ / 230V version

minimum efficiency index MEI ≥ 0.4

subject to alterations

po-so-6.3/4.6
2850 r.p.m. - 50 Hz



subject to alterations

po-so-6.3/4.6
2850 r.p.m. - 50 Hz

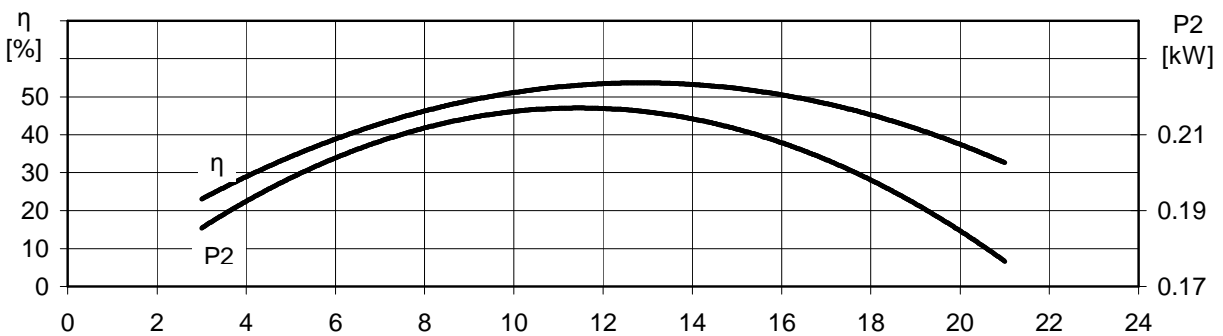
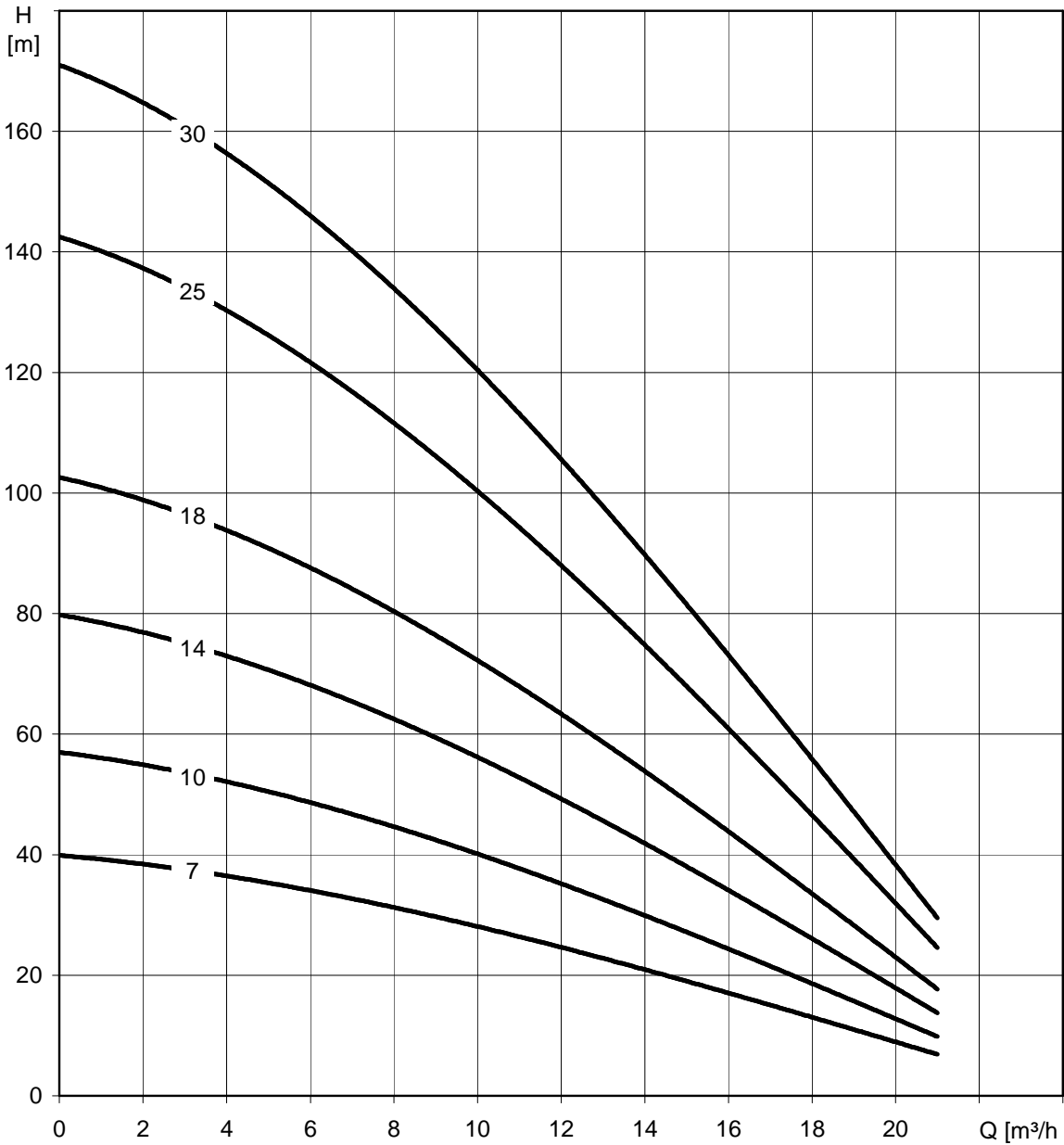
Type	Power P		Amperes 400 V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
	[kW]	[HP]		[l/s]	0.33	0.67	1.00	1.33	1.5	1.75	2.00	2.33		
				[m³/h]	1.2	2.4	3.6	4.8	5.4	6.3	7.2	8.4		
po-so-6.3- 5/4.6	0.55	0.75	1.9	Delivery head H [m]	29	27	25	22	20	17	14	9	571	10
po-so-6.3- 7/4.6	0.75	1.0	2.4		41	38	35	31	29	24	20	13	661	12
po-so-6.3-10/4.6	1.1	1.5	3.4		58	54	50	44	41	35	28	18	771	13
po-so-6.3-13/4.6	1.5	2.0	4.4		76	70	65	57	53	45	37	24	928	16
po-so-6.3-19/4.6	2.2	3.0	5.9		111	103	95	84	78	66	54	35	1158	19
po-so-6.3-26/4.6	3	4.0	8.3		151	141	129	115	106	90	74	48	1514	27
po-so-6.3-35/4.6	4	5.5	10		204	190	174	155	143	122	99	64	1914	33
po-so-6.3-48/4.6	5.5	7.5	14		279	260	239	212	196	167	136	88	2374	38

up to 3.7 kW also available in 1~ / 230V version

minimum efficiency index MEI ≥ 0.4

subject to alterations

po-so-10/4.6
2850 r.p.m. - 60 Hz



subject to alterations

po-so-10/4.6
2850 r.p.m. - 50 Hz

Type	Power P		Amperes 400 V [A]	Delivery rate Q								Length l [mm]	Weight m [kg]	
	[kW]	[HP]		[l/s]	0.8	1.7	2.5	2.8	3.3	4.2	5.0			5.8
				[m³/h]	3	6	9	10	12	15	18			21
po-so-10- 7/4.6	1.5	2.0	4.4	Delivery head H [m]	37	34	30	28	24	19	13	7	1108	17
po-so-10-10/4.6	2.2	3.0	5.9		53	49	43	40	35	27	19	10	1383	21
po-so-10-14/4.6	3.0	4.0	8.3		74	69	60	56	49	38	27	14	1919	30
po-so-10-18/4.6	4.0	5.5	10.0		96	88	77	73	62	49	34	17	2294	36
po-so-10-25/4.6	5.5	7.5	14.0		133	123	107	101	87	68	48	24	2979	45
po-so-10-30/4.6	7.5	10	17.4		159	147	128	121	104	81	57	29	3449	52

up to 3.7kW also available in 1~ / 230V version

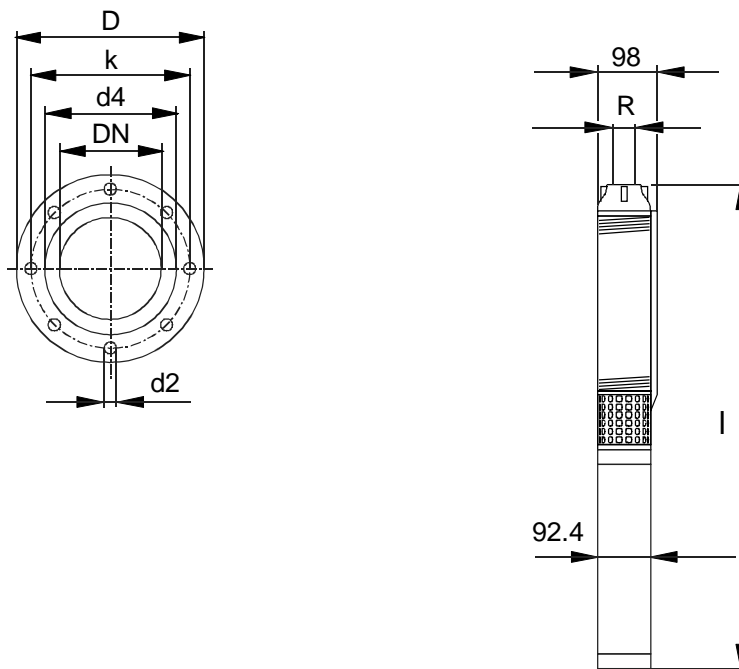
minimum efficiency index MEI ≥ 0.1

subject to alterations

Specification

- multistage centrifugal pump in jacked design coupled with **oddesse** submersible motor
- discharge end with integrated non-return valve
- driven by three-phase or mono-phase AC motors
- minimal water level above the pump unit 1 m
- min. cooling flow 0.2 m/s, max. ambient temperature 30 °C (higher temperature on request)
- pure, clean water with content of solids up to 150 mg/l
- standard connection: R = G2 (pipe thread according to DIN ISO 228 part 1)
- other connections on request
- hydraulic performance tests for acceptance according to DIN EN ISO 9906 class 2B
- special design (Horizontal installation, etc.) on request
- minimum efficiency index MEI ≥ 0.4

Main dimensions



Dimensions of adapters

Type	reduction thread	adapters						
		thread \Rightarrow flange	dimensions					m [kg]
			D [mm]	b [mm]	k [mm]	d4 [mm]	d2 [mm]	
po-so-12/4.7 po-so-16/4.7	G2 \Rightarrow G1 ¼	G2 \Rightarrow DN32, PN16	140	16	100	78	4x \varnothing 18	2.5
		G2 \Rightarrow DN32, PN40	140	18	100	78	4x \varnothing 18	2.7
		G2 \Rightarrow DN50, PN16	165	18	125	102	4x \varnothing 18	3.5
		G2 \Rightarrow DN50, PN40	165	20	125	102	4x \varnothing 18	3.7
		G2 \Rightarrow DN65, PN16	185	18	145	122	4x \varnothing 18	4.1
		G2 \Rightarrow DN65, PN40	185	22	145	122	8x \varnothing 18	4.3
		G2 \Rightarrow DN80, PN16	200	20	160	138	8x \varnothing 18	4.7
		G2 \Rightarrow DN80, PN40	200	24	160	138	8x \varnothing 18	5.7

Flange dimensions according to DIN 2633 (PN16) and DIN 2635 (PN40)

Material: zinc-coated or stainless steel

PN nominal pressure [bar], DN nominal diameter [mm], b thickness of flange [mm], m weight [kg]

Flanges with 2 cable recesses

subject to alterations

Material of construction

Submersible motor pumps po-so/4.7

According to DIN

components	material
impeller	PC / PPO + PS
stage casing, diffuser	PC / PPO + PS
external casing	stainless steel / 1.4301
suction casing, outlet branch	stainless steel / 1.4308
radial bearing	Polymer
suction strainer	stainless steel / 1.4301
coupling	stainless steel / 1.4301
shaft	stainless steel / 1.4301
screws, nuts and bolts	stainless steel A2 / 1.4301/1.4303
motor	see chapter submersible motors

According to AISI

components	material
impeller	LEXAN PC / PPO + PS
stage casing, diffuser	LEXAN PC / PPO + PS
external casing	stainless steel / AISI 304
suction casing, outlet branch	stainless steel / AISI 304
radial bearing	Polymer
suction strainer	stainless steel / AISI 304
coupling	stainless steel / AISI 304
shaft	stainless steel / AISI 304
screws, nuts and bolts	stainless steel A2 / AISI 304/305
motor	see chapter submersible motors

oddesse reserve the right to employ construction materials following German (DIN) standard

Note:

The minimum efficiency index (MEI) is based on the full impeller diameter. All pumps belonging to this series reach to delivery only with full impeller diameter.

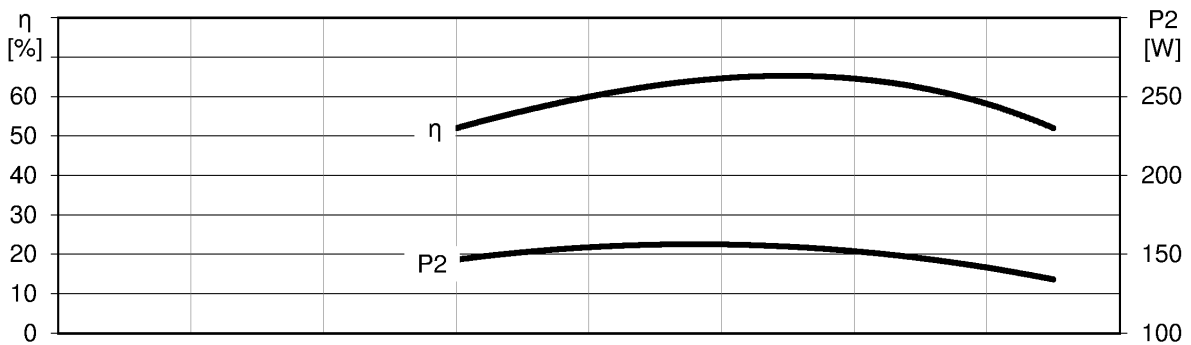
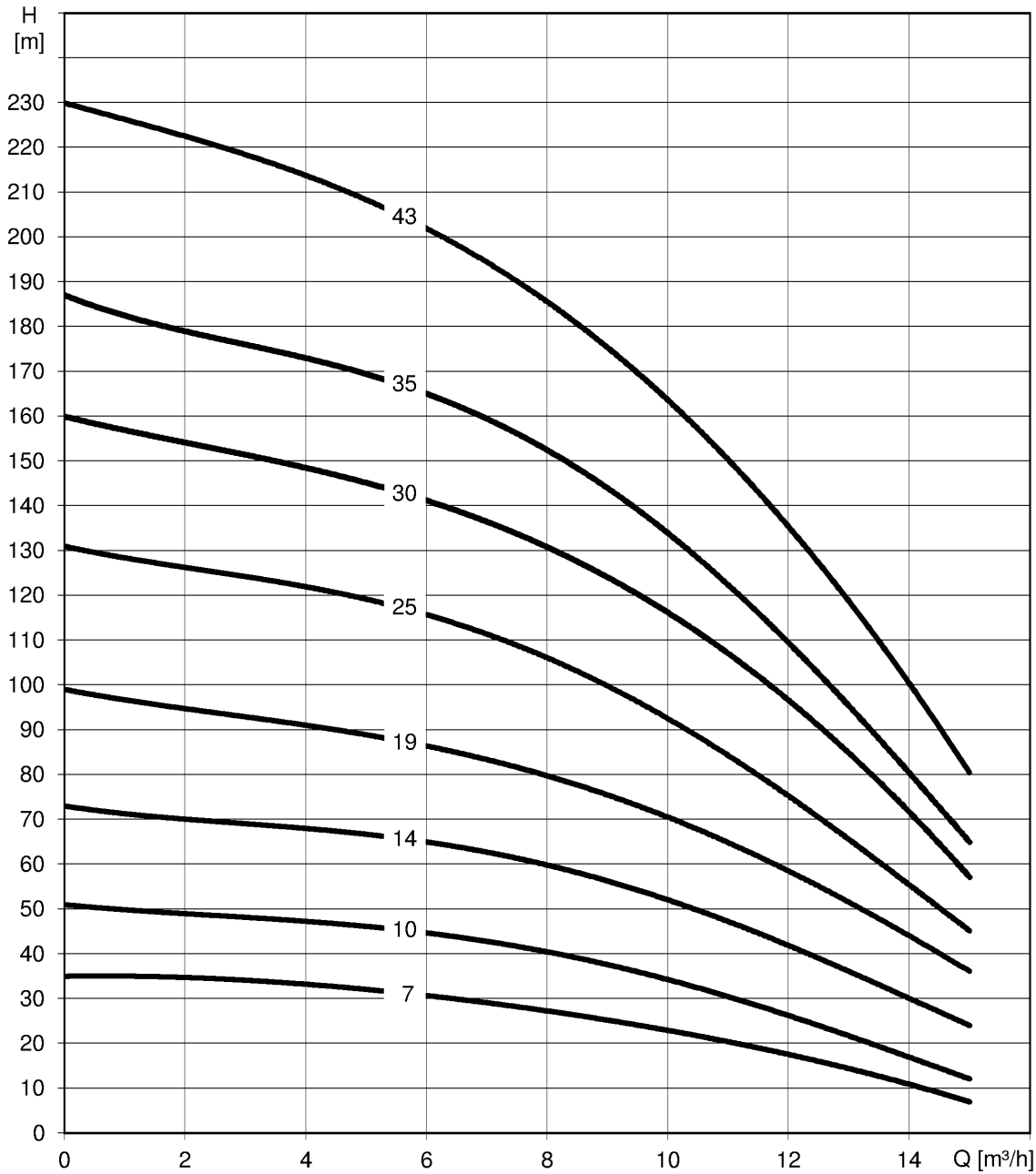
The trimming of the impeller can adapt the pump to a fixed duty point, leading to reduced energy consumption. The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter.

The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.

Information about the efficiency reference value is available at www.europump.org, reference value charts are available at www.europump.org/efficiencycharts.

subject to alterations

po-so-12/4.7
2850 1/min - 50 Hz



subject to alterations

po-so-12/4.7
2850 1/min - 50 Hz

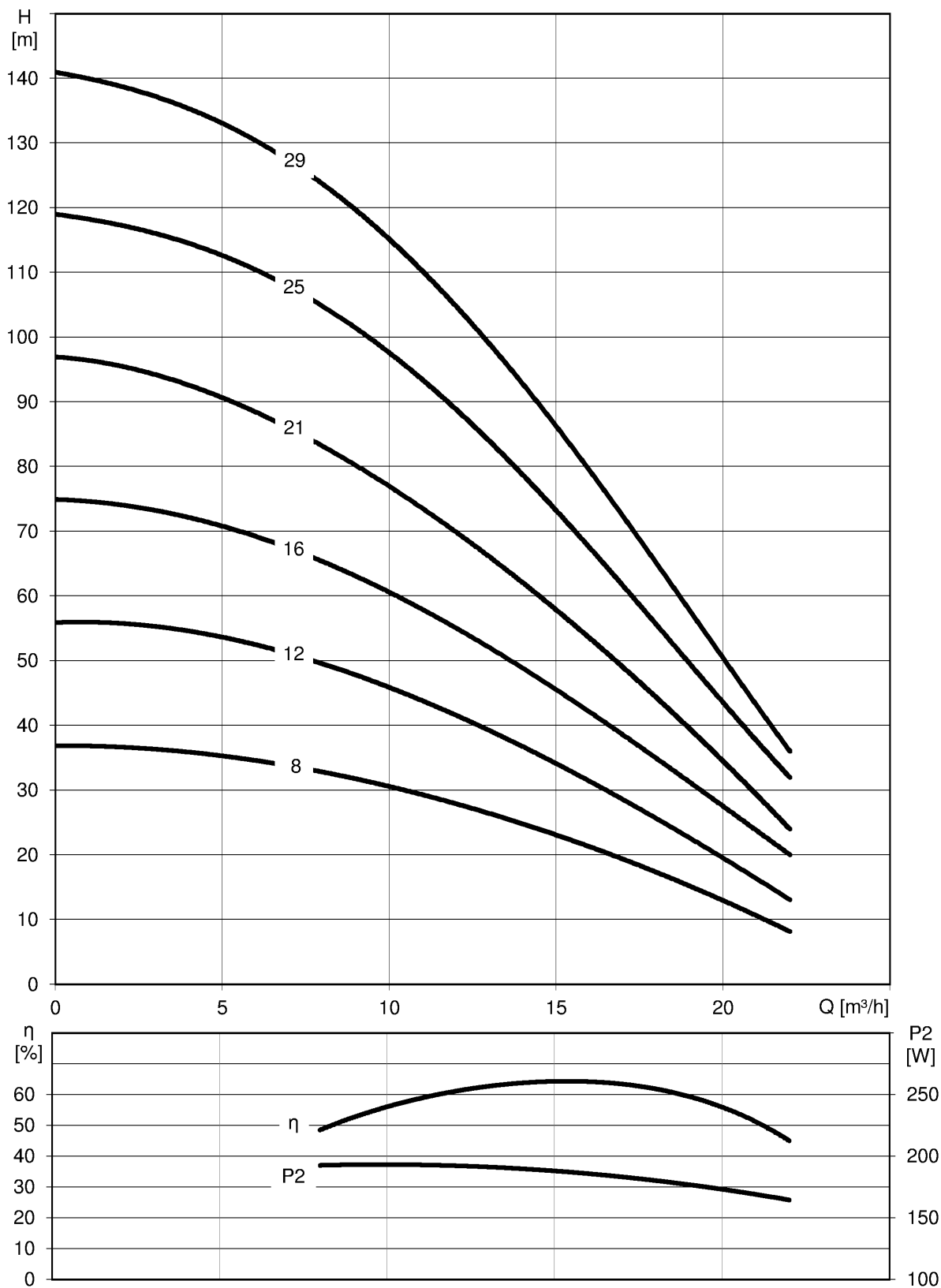
Type	Power [kW] [HP]		Amperes 400V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
				[l/s]	1.67	2.22	2.50	2.78	3.06	3.33	3.61	4.17		
				[m³/h]	6	8	9	10	11	12	13	15		
po-so-12-7/4.7	1.1	1.5	3.4	Delivery head H [m]	31	27	25	23	20	18	14	7	825	14
po-so-12-10/4.7	1.5	2.0	4.4		45	40	38	34	30	26	22	12	1043	18
po-so-12-14/4.7	2.2	3.0	5.9		65	60	56	52	48	42	36	24	1333	22
po-so-12-19/4.7	3.0	4.0	8.3		86	80	76	70	66	58	52	36	1744	32
po-so-12-25/4.7	4.0	5.5	10.0		116	106	100	92	84	75	66	45	2143	39
po-so-12-30/4.7	5.5	7.5	14.0		142	130	125	115	108	97	85	57	2473	45
po-so-12-35/4.7	5.5	7.5	14.0		165	152	145	133	123	110	95	65	2733	48
po-so-12-43/4.7	7.5	10.0	17.4		202	187	175	162	150	135	120	80	3228	57

up to 3.7 kW also available in 1 ~ / 230 V version

minimum efficiency index MEI ≥ 0.4

subject to alterations

po-so-16/4.7
2850 1/min - 50 Hz



subject to alterations

po-so-16/4.7
2850 1/min - 50 Hz

Type	Power [kW] [HP]		Amperes 400V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
				[l/s]	2.22	2.78	3.33	3.89	4.44	5.00	5.56	6.11		
				[m³/h]	8	10	12	14	16	18	20	22		
po-so-16-8/4.7	1.5	2.0	4.4	Delivery head H [m]	33	31	28	24	21	18	13	8	1030	18
po-so-16-12/4.7	2.2	3.0	5.9		50	46	41	37	31	26	19	13	1346	23
po-so-16-16/4.7	3.0	4.0	8.3		66	60	55	49	42	35	28	20	1768	32
po-so-16-21/4.7	4.0	5.5	10.0		84	76	70	62	54	44	35	24	2235	40
po-so-16-25/4.7	5.5	7.5	14.0		105	97	90	77	69	55	44	32	2575	46
po-so-16-29/4.7	5.5	7.5	14.0		124	115	105	92	80	65	51	36	2848	49

up to 3.7 kW also available in 1 ~ / 230 V version

minimum efficiency index MEI ≥ 0.4

subject to alterations