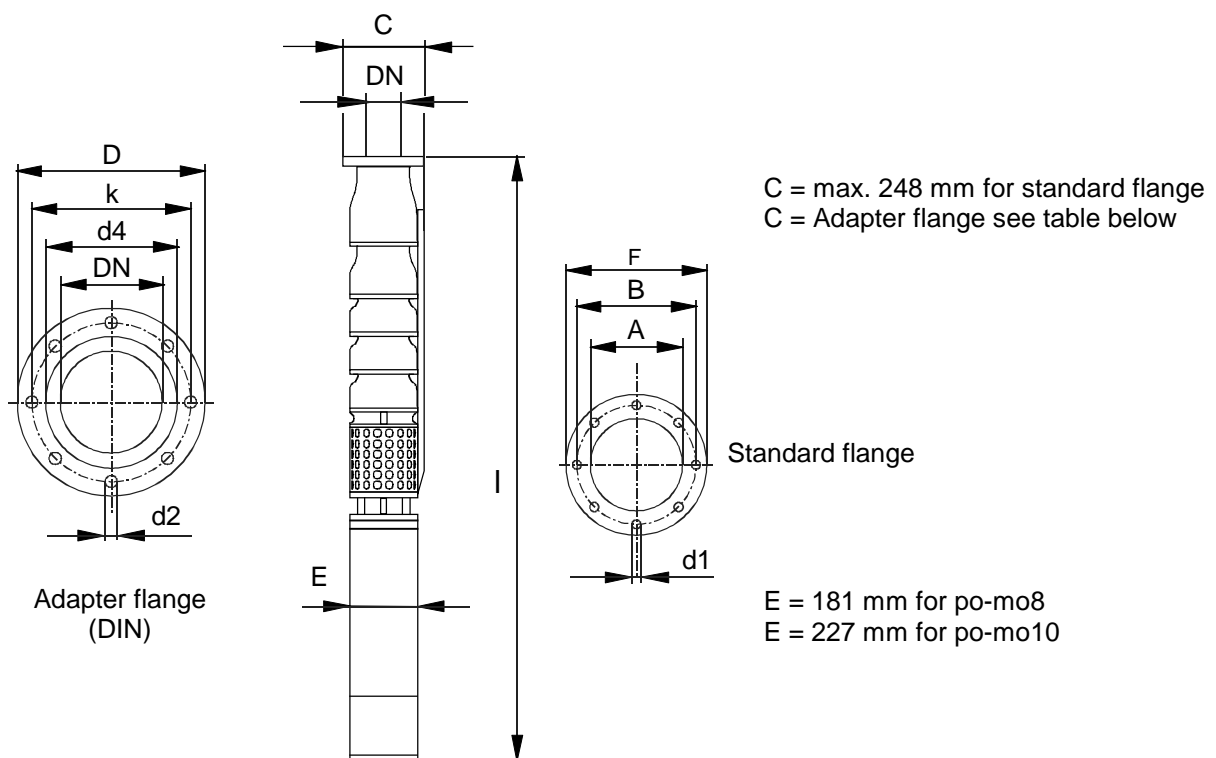


## Specification

- multistage centrifugal pump in structured design coupled with **oddesse** submersible motor
- discharge end with integrated non-return valve
- driven by three-phase AC motors
- minimal water level above the pump unit 2 m
- min. cooling flow 0.5 m/s, max. ambient temperature 30 °C (higher temperature on request)
- pure, clean water with content of solid up to 50 mg/l
- standard connection: flange, counter flange included
- other connections on request
- hydraulic performance tests for acceptance according to DIN EN ISO 9906 class 2
- special design (Horizontal installation, etc.) on request

## Main dimensions



## Dimensions of standard flanges and adapters

Type	Standard flange Dimensions				Adapters						
	F [mm]	B [mm]	A [mm]	d1 [mm]	Flange	D [mm]	b [mm]	k [mm]	d4 [mm]	d2 [mm]	m [kg]
po-so-180/10.4	240	208	170	8x ø16	DN150, PN16	285	22	240	212	8x ø22	15
po-so-200/10.4					DN150, PN40	300	28	250	218	8x ø26	19
po-so-300/10.4											

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/10.4

Components acc. to DIN	Design
impeller	stainless steel / 1.4301
stage casing	grey cast iron GG25 / 0.6025
suction casing	grey cast iron GG25 / 0.6025
outlet branch	grey cast iron GG25 / 0.6025
radial bearing	VITON / stainless steel
suction strainer	stainless steel / 1.4301
coupling	stainless steel / 1.4005
shaft	stainless steel / 1.4021
screws, nuts and bolts	stainless steel A2 1.4301 / 1.4303
motor	see chapter submersible motor

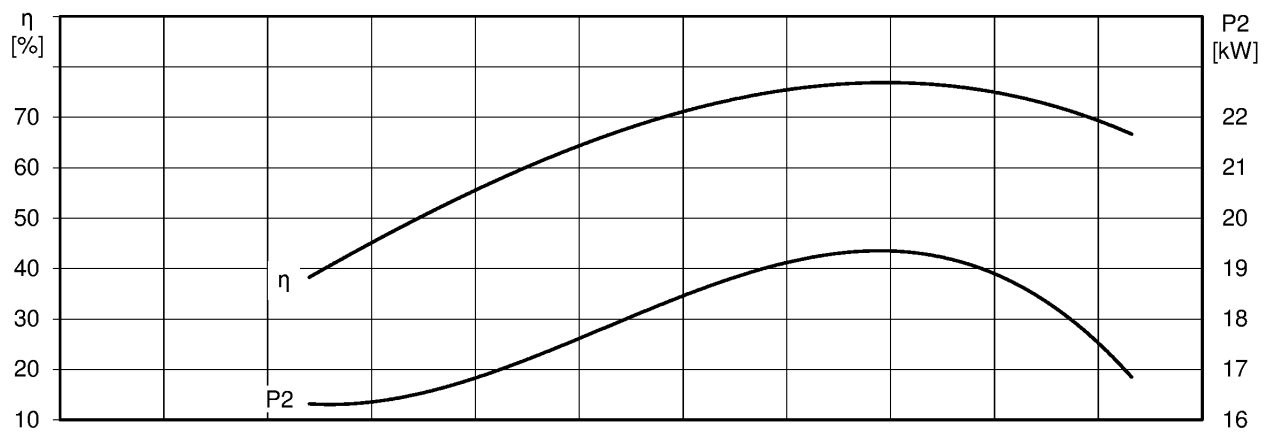
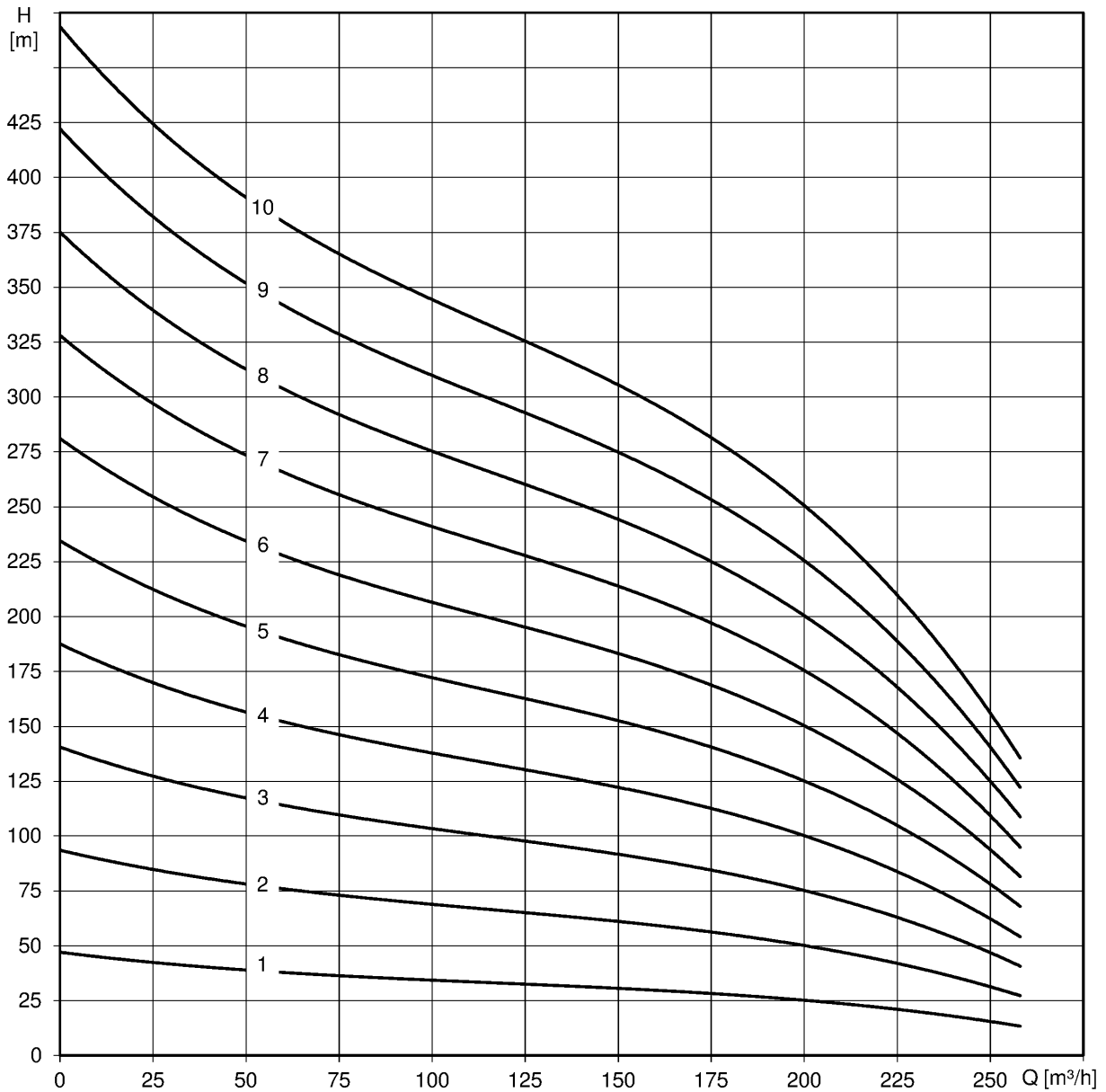
Components acc. to AISI	Design
impeller	stainless steel / AISI 304
stage casing	grey cast iron A48-40B
suction casing	grey cast iron A48-40B
outlet branch	grey cast iron A48-40B
radial bearing	VITON / stainless steel
suction strainer	stainless steel / AISI 304
coupling	stainless steel / AISI 416
shaft	stainless steel / AISI 420
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

subject to alterations

**po-so-180/10.4**

2850 1/min - 50 Hz



in-between sizes on request

subject to alterations

## po-so-180/10.4 2850 1/min - 50 Hz

Type	Power [kW]	Amperes 400V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
			[l/s]	17	30	37	42	50	58	65	72		
			[m³/h]	60	108	132	150	180	210	234	258		
po-so-180- 1/10.4	22*	45*	Delivery head H [m]	38	34	32	31	28	24	19	14	1699	175
po-so-180- 2/10.4	45*	88*		76	68	64	62	56	47	38	28	2119	237
po-so-180- 3/10.4	63*	127*		115	101	95	93	84	71	57	41	2459	283
po-so-180- 4/10.4	90	175		153	135	127	123	112	94	76	55	2954	470
po-so-180- 5/10.4	110	215		191	169	159	154	139	117	95	69	3264	531
po-so-180- 6/10.4	130	250		229	202	191	185	167	141	115	82	3564	600
po-so-180- 7/10.4	150	290		267	236	222	216	195	164	134	96	3824	645
po-so-180- 8/10.4	170	325		305	270	254	246	223	188	153	110	4094	693
po-so-180- 8/10.4	190	365		343	303	286	277	251	211	172	123	4334	732
po-so-180-10/10.4	220	425		381	337	318	308	279	235	191	137	4574	771

\* 8 inch motor

1-stage pump: efficiency  $\eta$  - 7%

2-stage pump: efficiency  $\eta$  - 3%

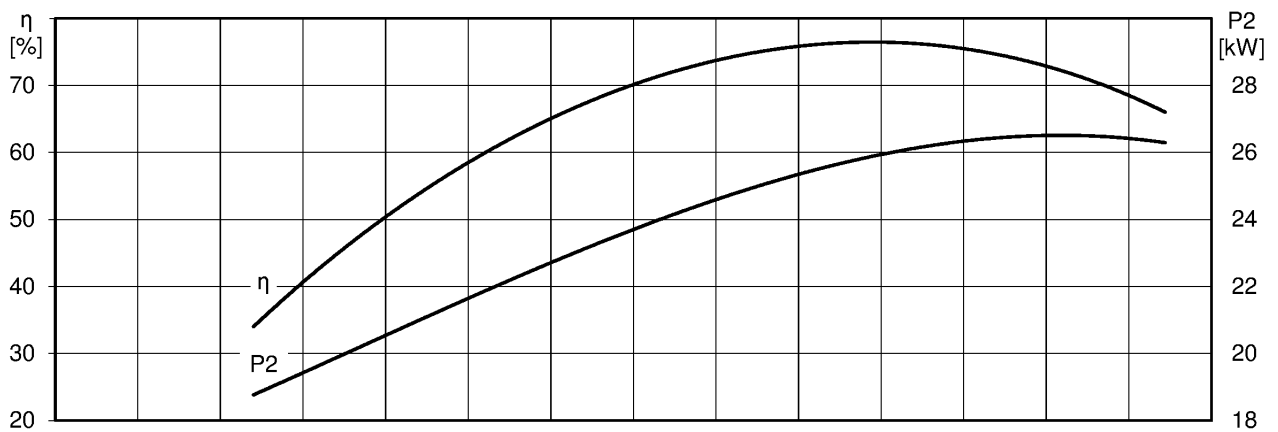
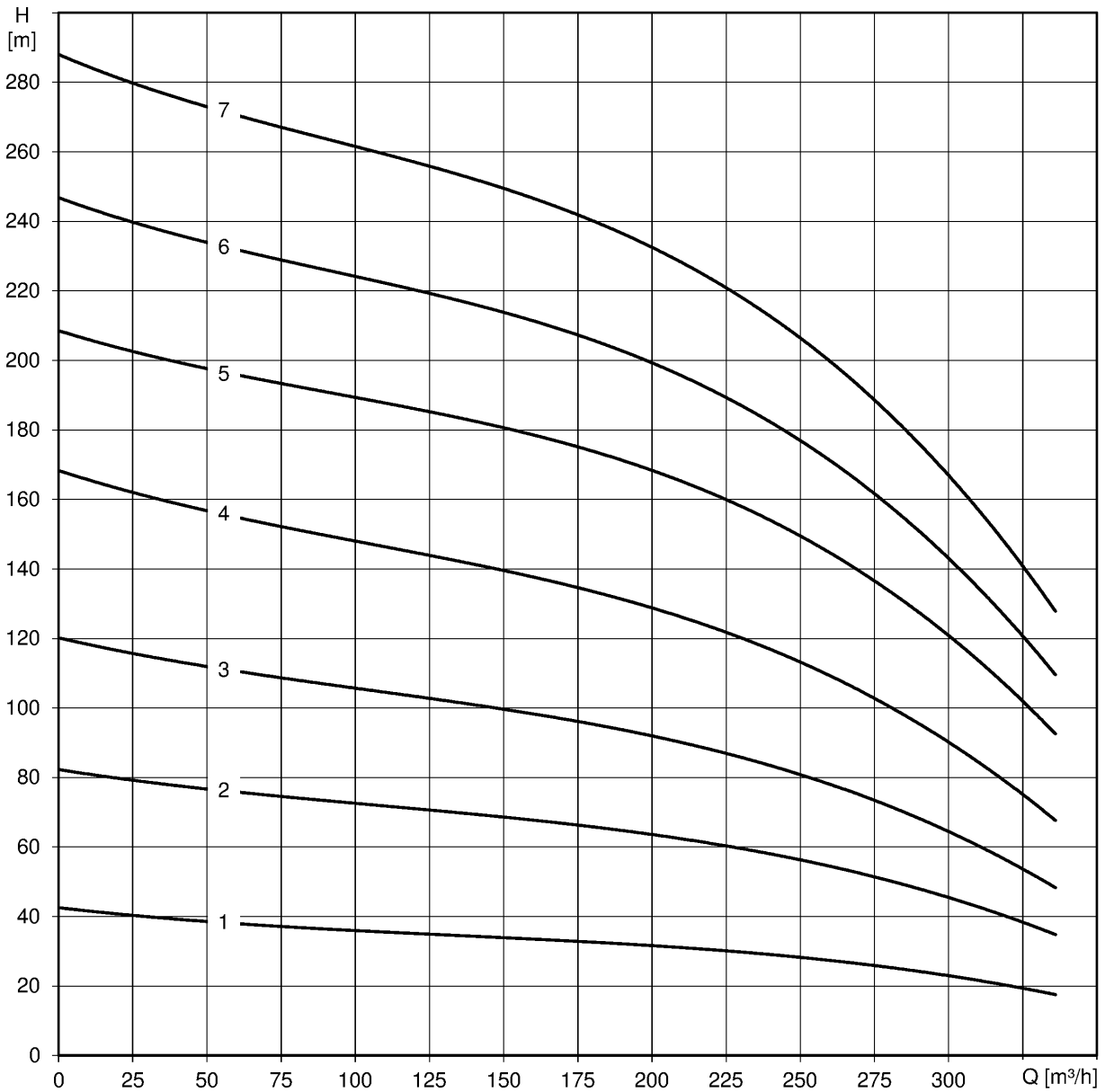
3-stage pump: efficiency  $\eta$  - 1%

$\eta$ -curves do not apply to adjusted impellers

subject to alterations

**po-so-240/10.4**

2850 1/min - 50 Hz



in-between sizes on request

subject to alterations

## po-so-240/10.4 2850 1/min - 50 Hz

Type	Power [kW]	Amperes 400V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
			[l/s]	17	33	42	50	58	<b>67</b>	75	93		
			[m³/h]	60	120	150	180	210	<b>240</b>	270	336		
<b>po-so-240-1/10.4</b>	30*	58*	Delivery head H [m]	38	35	34	33	31	<b>29</b>	27	18	1820	189
<b>po-so-240-2/10.4</b>	55*	108*		76	71	69	66	62	<b>58</b>	52	35	2260	254
<b>po-so-240-3/10.4</b>	90*	172*		110	103	100	96	90	<b>83</b>	74	49	2779	318
<b>po-so-240-4/10.4</b>	110	215		154	145	140	134	127	<b>117</b>	104	68	3145	538
<b>po-so-240-5/10.4</b>	150	290		195	186	181	175	165	<b>154</b>	138	93	3541	623
<b>po-so-240-6/10.4</b>	170	325		231	220	214	207	196	<b>182</b>	164	110	3826	675
<b>po-so-240 7/10.4</b>	190	365		270	257	250	241	228	<b>213</b>	191	128	4082	719

\* 8 inch motor

1-stage pump: efficiency  $\eta$  - 6%

2-stage pump: efficiency  $\eta$  - 3%

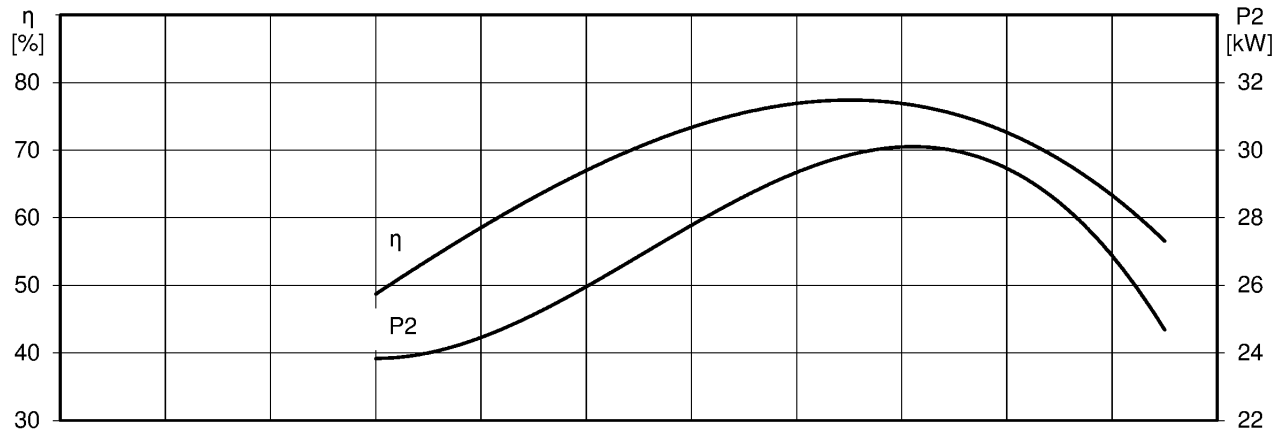
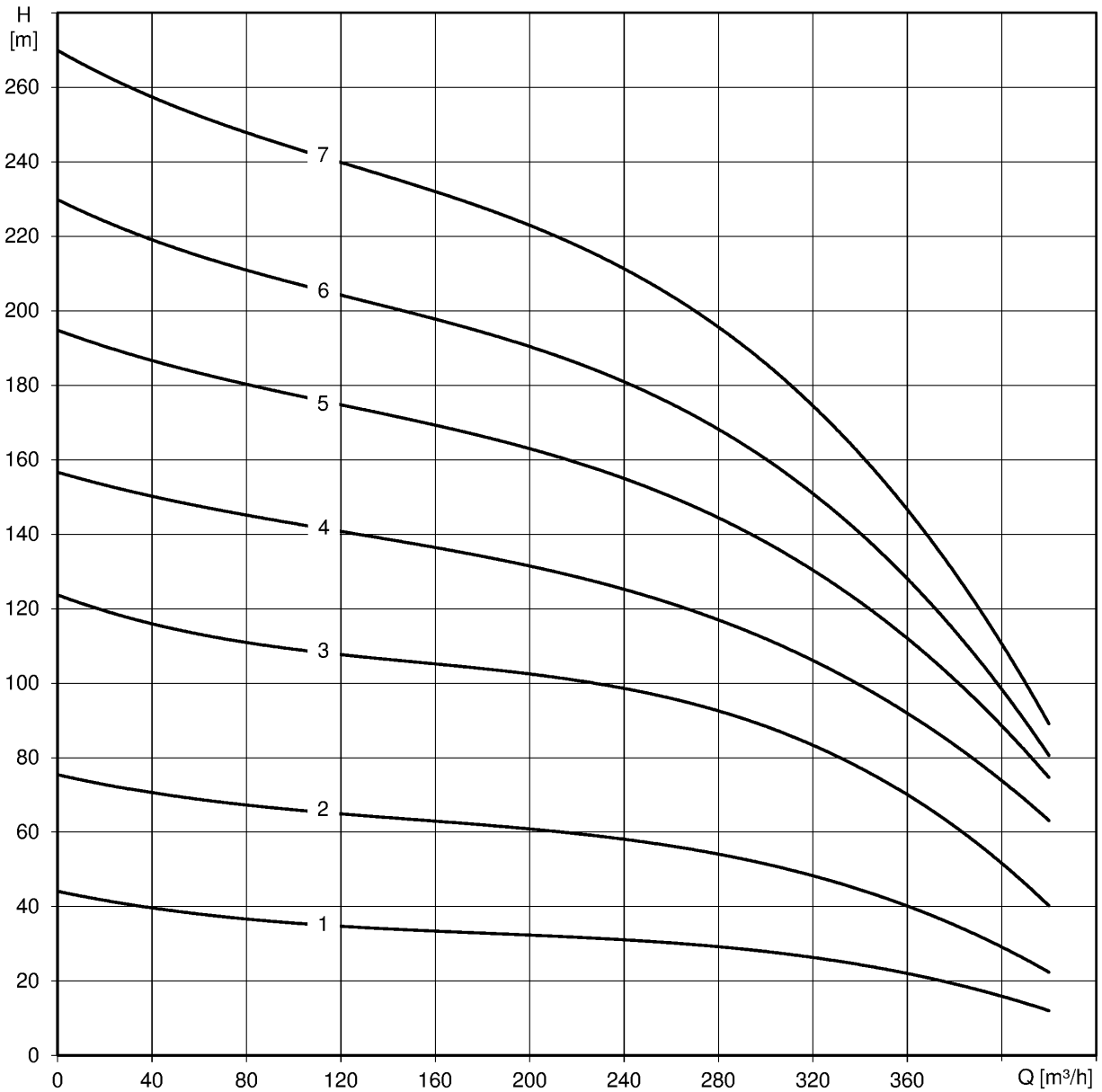
3-stage pump: efficiency  $\eta$  - 1%

$\eta$ -curves do not apply to adjusted impellers

subject to alterations

**po-so-300/10.4**

2850 1/min - 50 Hz



in-between sizes on request

subject to alterations

## po-so-300/10.4

2850 1/min - 50 Hz

Type	Power [kW]	Amperes 400V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
			[l/s]	33	50	67	75	<b>83</b>	92	100	117		
			[m³/h]	120	180	240	270	<b>300</b>	330	360	420		
<b>po-so-300-1/10.4</b>	37*	72*	Delivery head H [m]	35	33	31	30	<b>28</b>	26	22	12	1905	204
<b>po-so-300-2/10.4</b>	63*	127*		65	62	58	56	<b>52</b>	46	40	23	2340	267
<b>po-so-300-3/10.4</b>	110	215		109	103	98	94	<b>89</b>	81	71	39	2950	494
<b>po-so-300-4/10.4</b>	150	290		142	133	125	120	<b>113</b>	103	91	63	3345	597
<b>po-so-300-5/10.4</b>	170	325		176	165	155	148	<b>139</b>	126	111	75	3631	650
<b>po-so-300-6/10.4</b>	190	365		205	193	181	172	<b>162</b>	146	127	82	3886	693
<b>po-so-300-7/10.4</b>	220	425		241	227	211	201	<b>188</b>	168	145	91	4142	737

\* 8 inch motor

1-stage pump: efficiency  $\eta$  - 4%

2-stage pump: efficiency  $\eta$  - 3%

3-stage pump: efficiency  $\eta$  - 1%

$\eta$ -curves do not apply to adjusted impellers

subject to alterations