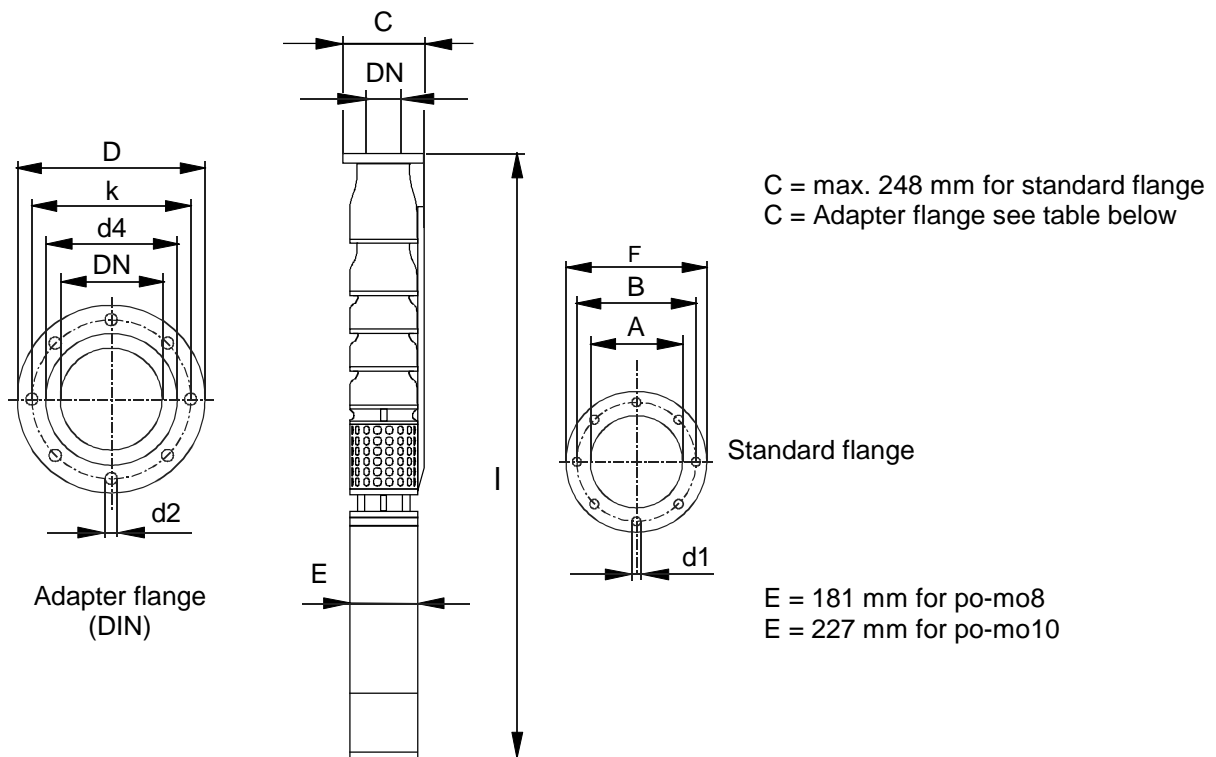


## Specification

- 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-180/10.3	240	208	170	8x ø16	DN150, PN16	285	22	240	212	8x ø22	15
po-so-200/10.3											
po-so-270/10.3					DN150, PN40	300	28	250	218	8x ø26	19
po-so-300/10.3											

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/10.3

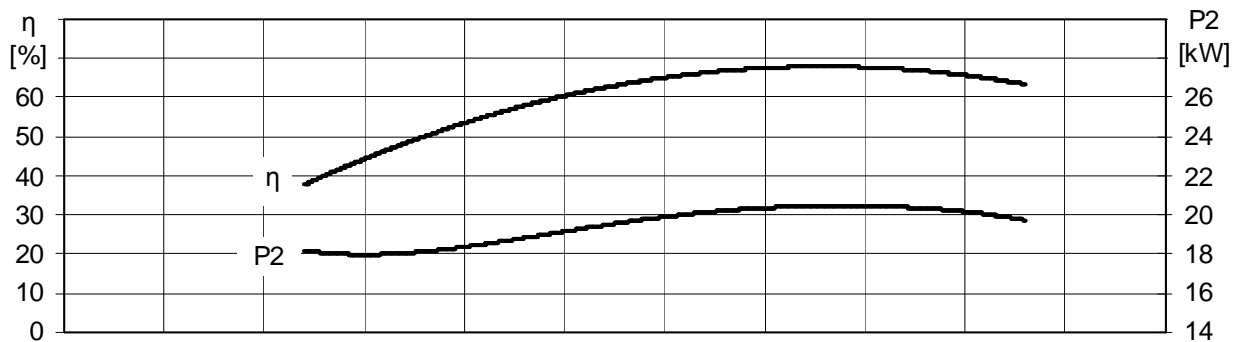
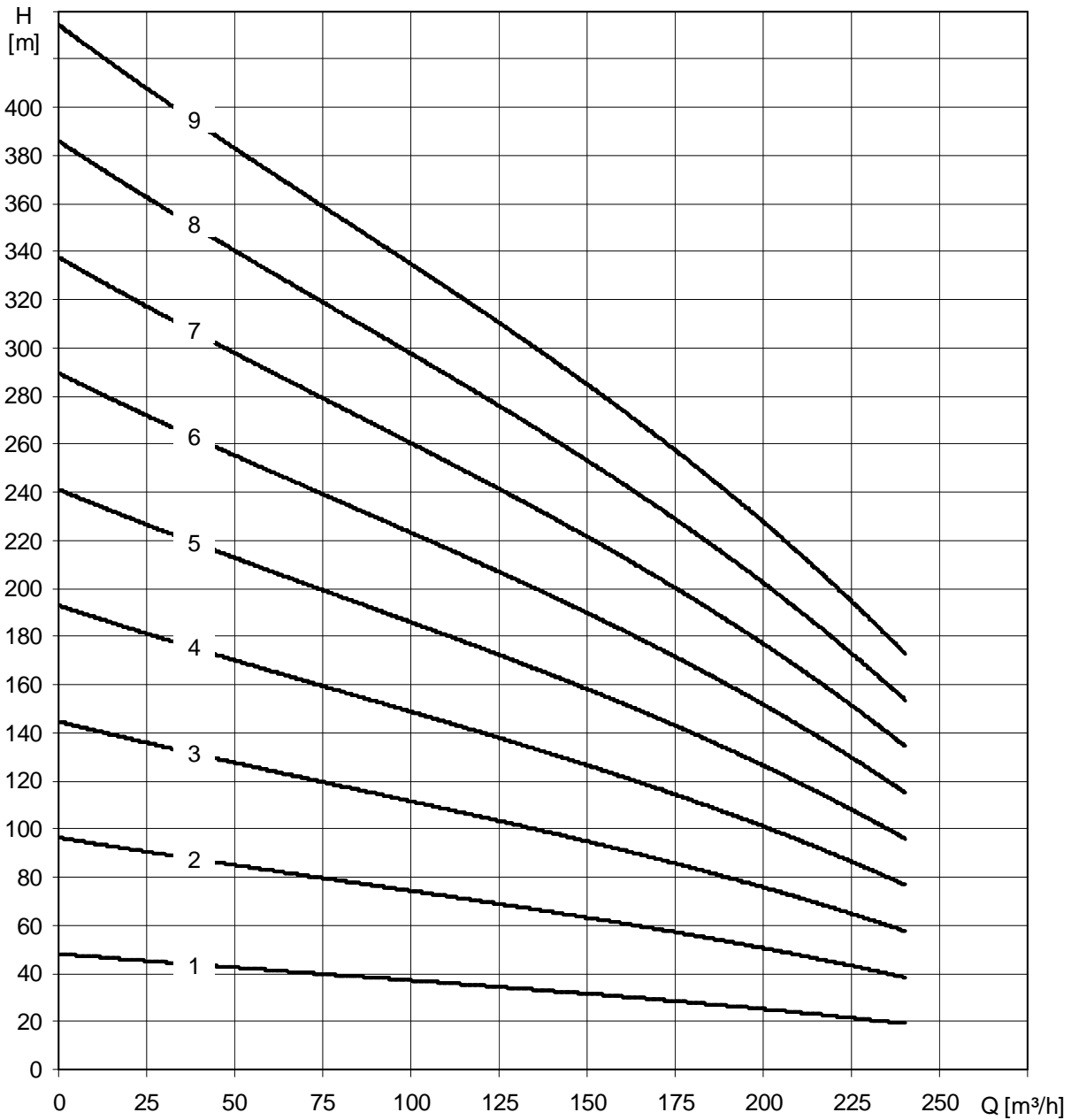
According to DIN components	design		
	po-so-180 ... po-so-270		po-so-300
	standard-version	L-version	
impeller	grey cast iron GG25 / 0.6025	stainless steel / 1.4301	stainless steel / 1.4301
		bronze CuSn10 / 2.1050	
stage casing	grey cast iron GG25 / 0.6025		
suction casing	grey cast iron GG25 / 0.6025		
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		

According to AISI components	design		
	po-so-180 ... po-so-270		po-so-300
	standard-version	L-version	
impeller	grey cast iron A48-40B	stainless steel AISI 304	stainless steel AISI 304
		bronze B584 C90500	
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-180/10.3**  
2850 1/min - 50 Hz



in-between sizes on request

subject to alterations

## po-so-180/10.3 2850 1/min - 50 Hz

Type	Power [kW]	Amperes 400V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
			[l/s]	17	33	40	47	50	57	63	67		
			[m³/h]	60	120	144	168	180	204	228	240		
<b>po-so-180-1/10.3</b>	22*	45	Delivery head H [m]	42	35	32	30	<b>28</b>	25	21	19	1679	174
<b>po-so-180-2/10.3</b>	45*	88		83	70	64	59	<b>56</b>	50	43	38	2119	237
<b>po-so-180-3/10.3</b>	63*	127		125	105	97	89	<b>84</b>	75	64	57	2459	283
<b>po-so-180-4/10.3</b>	90	175		167	139	129	118	<b>112</b>	99	85	76	2954	483
<b>po-so-180-5/10.3</b>	110	215		208	174	161	148	<b>140</b>	124	107	95	3264	544
<b>po-so-180-6/10.3</b>	130	250		250	209	193	177	<b>168</b>	149	128	114	3564	600
<b>po-so-180-7/10.3</b>	150	290		292	244	225	207	<b>196</b>	174	149	133	3824	645
<b>po-so-180-8/10.3</b>	170	325		333	279	257	236	<b>224</b>	199	171	152	4094	693
<b>po-so-180-9/10.3</b>	190	365		375	314	290	266	<b>252</b>	224	192	171	4334	732

\* 8 inch motor

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

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

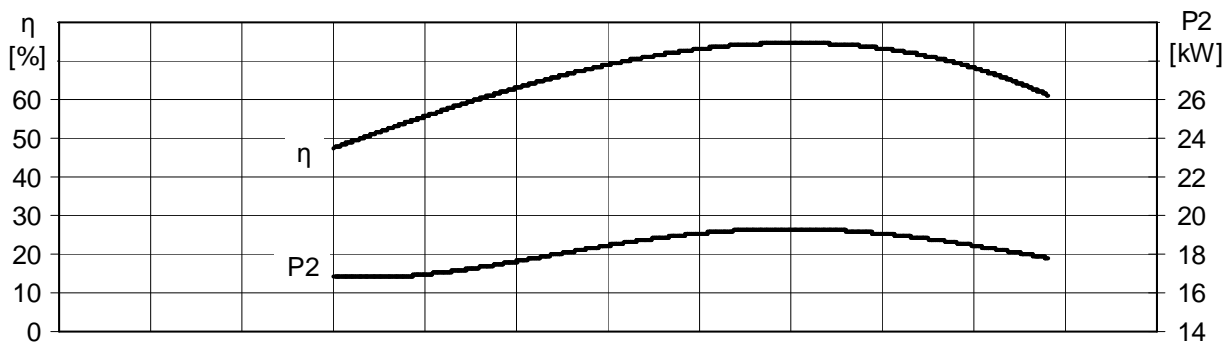
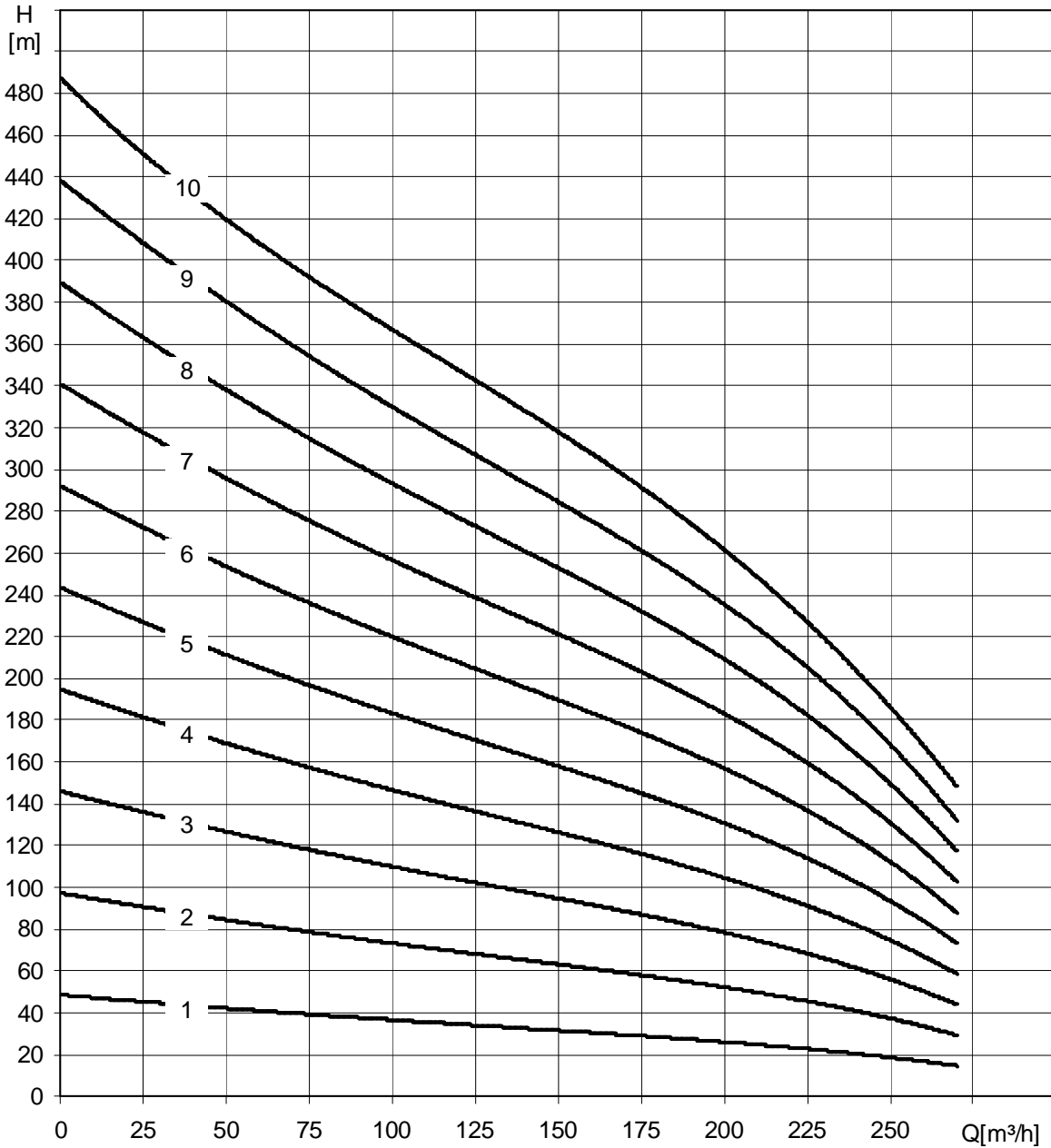
3-stage pump: efficiency  $\eta$  - 1%

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

subject to alterations

**po-so-240/10.3**

2850 1/min - 50 Hz



in-between sizes on request

subject to alterations

## po-so-240/10.3

2850 1/min - 50 Hz

Type	Power [kW]	Amperes 400V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
			[l/s]	21	42	50	58	63	<b>67</b>	71	75		
			[m³/h]	75	150	180	210	225	<b>240</b>	255	270		
po-so-240- 1/10.3	22*	45	Delivery head H [m]	39	32	28	25	23	<b>20</b>	18	15	1679	174
po-so-240- 2/10.3	45*	88		79	63	57	50	46	<b>41</b>	36	29	2119	237
po-so-240- 3/10.3	63*	127		118	95	85	75	69	<b>61</b>	54	44	2459	283
po-so-240- 4/10.3	90	175		157	127	113	100	91	<b>81</b>	71	59	2954	483
po-so-240- 5/10.3	110	215		197	158	142	125	114	<b>102</b>	89	73	3264	544
po-so-240- 6/10.3	130	250		236	190	170	150	137	<b>122</b>	107	88	3564	600
po-so-240- 7/10.3	150	290		275	222	198	175	160	<b>142</b>	125	103	3824	645
po-so-240- 8/10.3	170	325		315	253	227	200	183	<b>163</b>	143	117	4094	693
po-so-240- 9/10.3	190	365		354	285	255	225	206	<b>183</b>	161	132	4334	732
po-so-240-10/10.3	220	425		393	317	283	250	228	<b>203</b>	178	147	4574	771

\* 8 inch motor

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

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

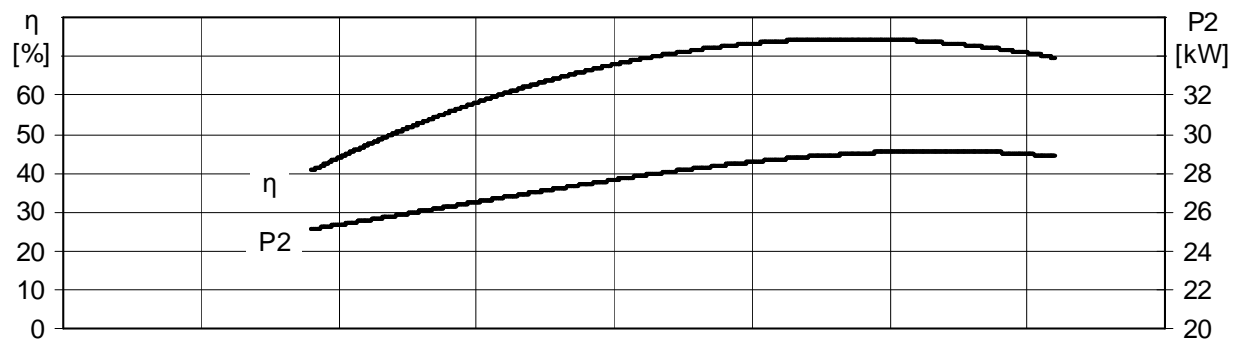
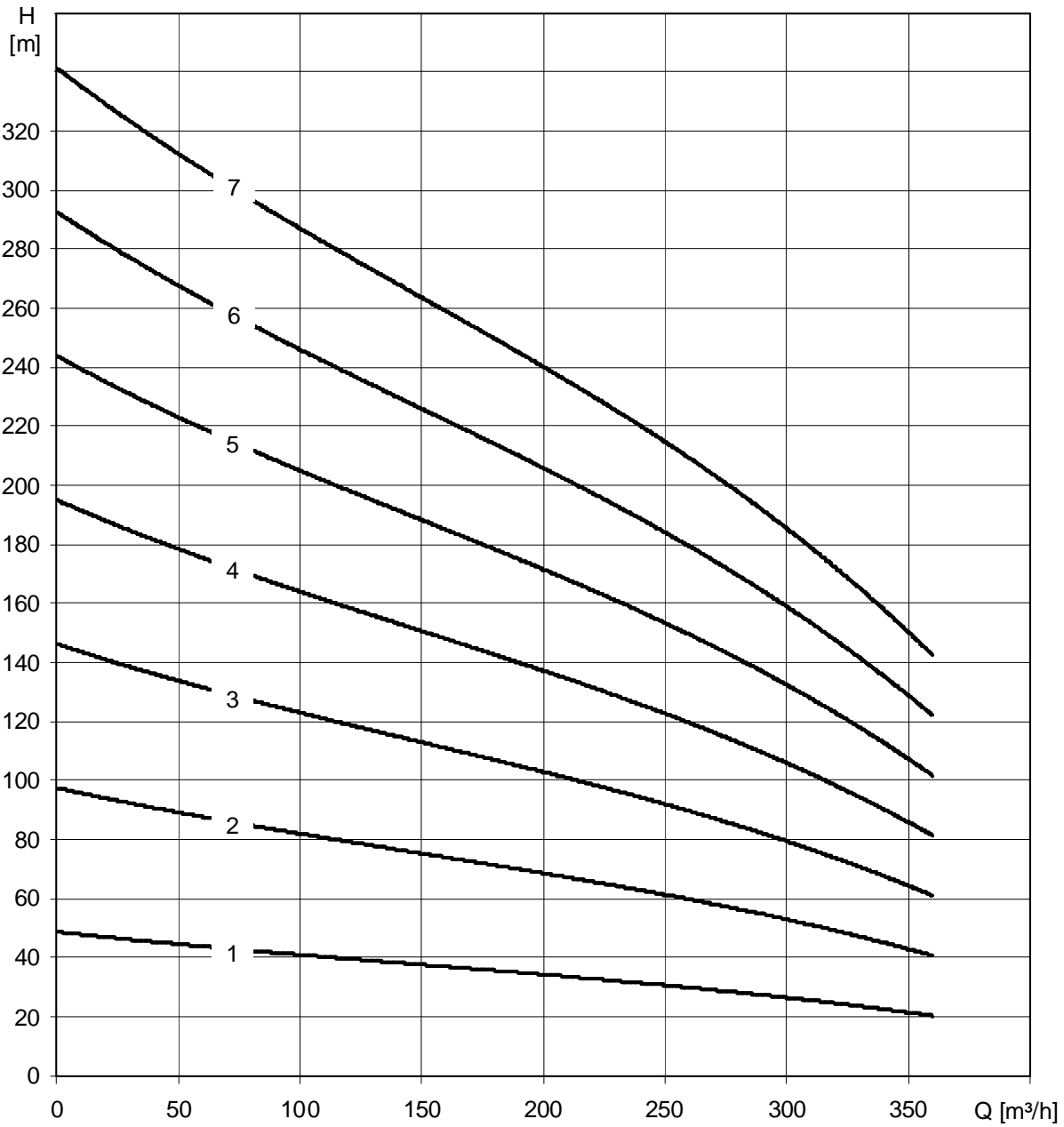
3-stage pump: efficiency  $\eta$  - 1%

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

subject to alterations

**po-so-270/10.3**

2850 1/min - 50 Hz



in-between sizes on request

subject to alterations

**po-so-270/10.3**
**2850 1/min - 50 Hz**

Type	Power [kW]	Amperes 400V [A]	Delivery rate Q									Length l [mm]	Weight m [kg]
			[l/s]	25	50	67	<b>75</b>	83	88	92	100		
			[m³/h]	90	180	240	<b>270</b>	300	315	330	360		
<b>po-so-270-1/10.3</b>	37*	72	Delivery head H [m]	42	35	31	<b>29</b>	27	25	24	20	1859	203
<b>po-so-270-2/10.3</b>	63*	127		84	71	62	<b>59</b>	53	50	47	40	2279	262
<b>po-so-270-3/10.3</b>	90	175		126	106	94	<b>88</b>	80	76	71	61	2774	463
<b>po-so-270-4/10.3</b>	130	250		168	141	125	<b>117</b>	107	101	95	81	3204	557
<b>po-so-270-5/10.3</b>	150	290		210	177	156	<b>147</b>	133	126	118	101	3464	603
<b>po-so-270-6/10.3</b>	190	365		252	212	187	<b>176</b>	160	151	142	121	3794	669
<b>po-so-270-7/10.3</b>	220	425		294	247	218	<b>205</b>	187	176	166	141	4034	708

\* 8 inch motor

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

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

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

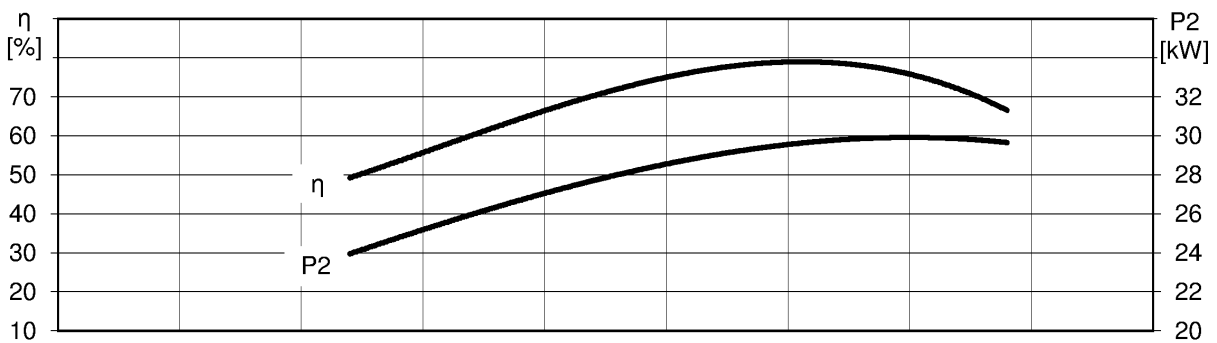
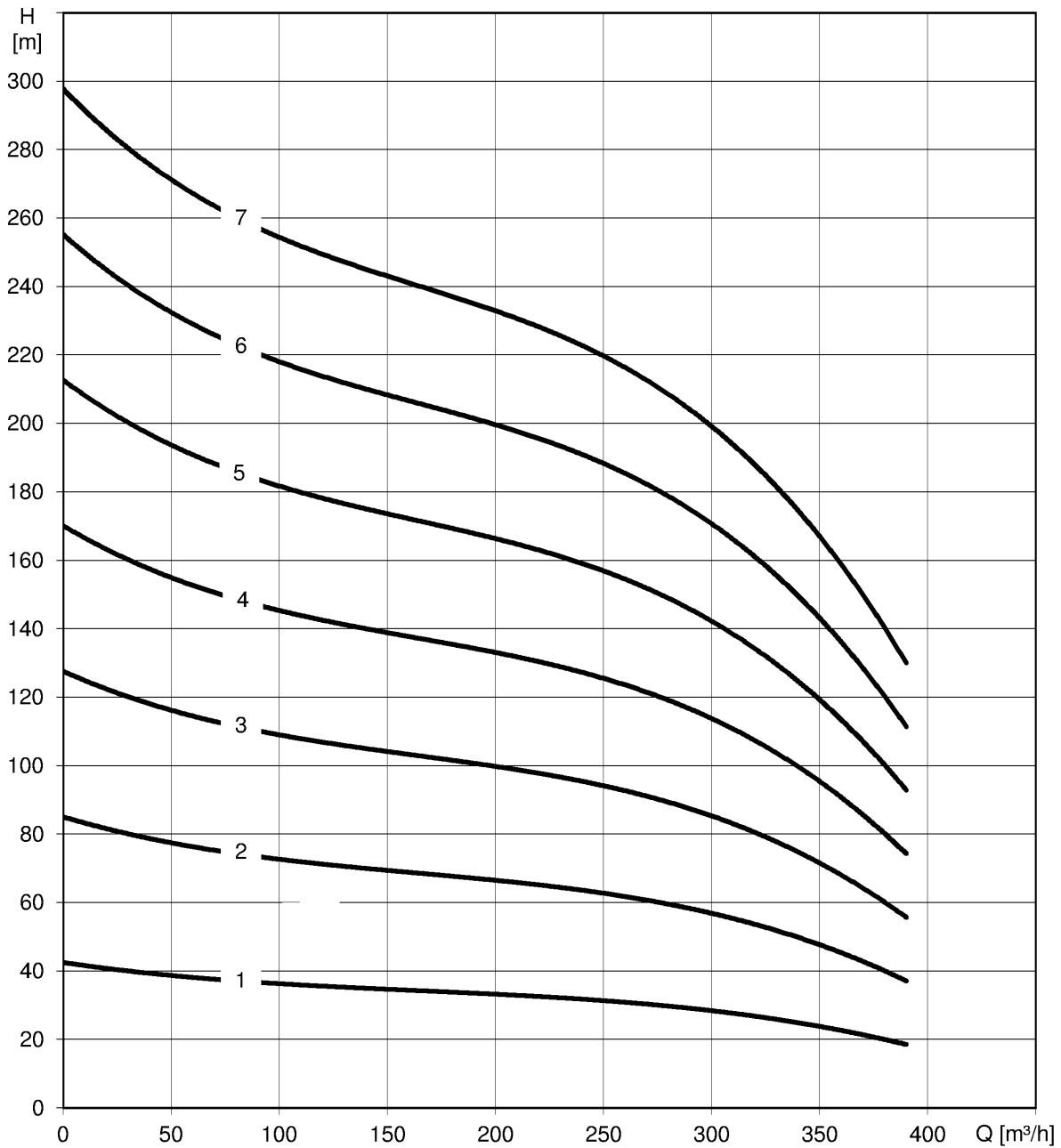
$\eta$ -curves do not apply to adjusted impellers

subject to alterations



**po-so-300/10.3**

2850 1/min - 50 Hz



in-between sizes on request

subject to alterations

## po-so-300/10.3 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	108		
			[m³/h]	120	180	240	270	<b>300</b>	330	360	390		
<b>po-so-300-1/10.3</b>	37*	72*	Delivery head H [m]	36	34	32	31	<b>29</b>	26	23	19	1875	203
<b>po-so-300-2/10.3</b>	63*	127*		72	67	63	61	<b>57</b>	52	45	37	2310	266
<b>po-so-300-3/10.3</b>	110	215		108	101	95	92	<b>86</b>	78	68	56	2950	494
<b>po-so-300-4/10.3</b>	130	250		144	134	126	122	<b>115</b>	104	90	74	3265	573
<b>po-so-300-5/10.3</b>	170	325		180	168	158	153	<b>144</b>	130	113	93	3631	650
<b>po-so-300-6/10.3</b>	190	365		215	202	190	183	<b>172</b>	156	135	112	3886	693
<b>po-so-300-7/10.3</b>	220	425		251	235	221	214	<b>201</b>	182	158	130	4142	737

\* 8 inch motor

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

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

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

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

subject to alterations