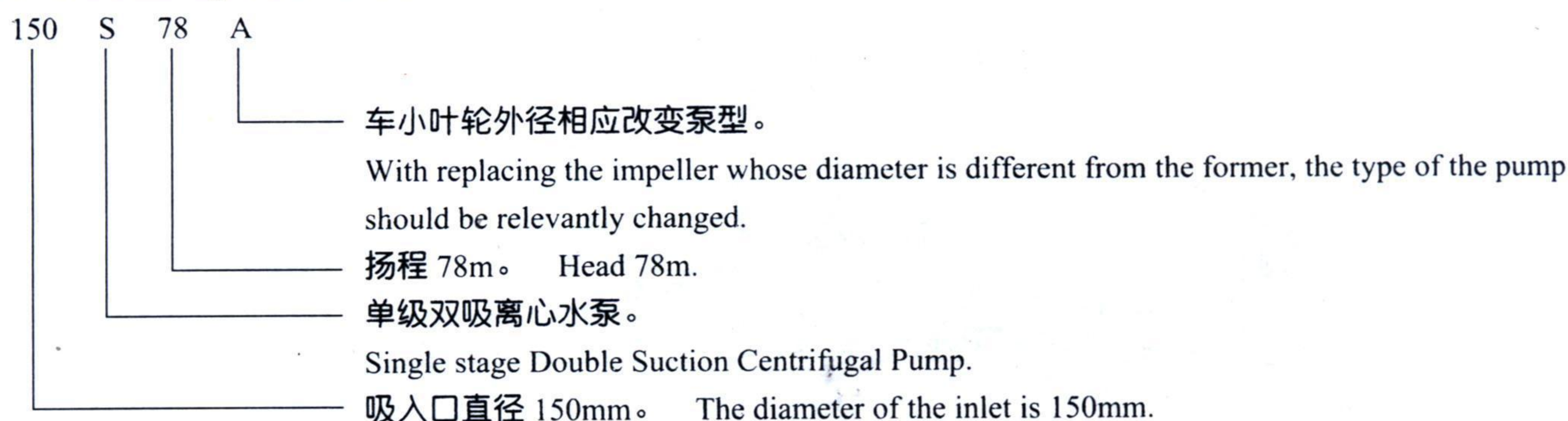


概述 Brief Introduction

S 型单级双吸泵壳中开之离心泵，供抽送清水或物理化学性质类似于水的液体之用。被输送液体的温度不得高于 80°C ，适用于工厂、矿山、城市供水、电站、农田排灌和各种水利工程。S 型泵是取代旧式 SH 型的新型泵。

Series S Pumps are a single stage, double suction and axially split centrifugal pump and are used to pump clean water or similar liquids in physical and chemical properties. The temperature of the pumped liquid should not be exceeded 80°C . And the pump is mainly suitable for water supply in factories, mines, cities, hydropower stations, various conservancy projects and irrigation in farms etc.

泵型号意义 The Meaning of The Model



结构说明 Construction Description

本型泵的吸入口与吐出口均在水泵轴心线的下方，与轴线垂直成水平方向。检修时无需拆卸进出口水管及电动机。从驱动端看去，水泵为顺时针方向旋转(根据用户需要亦可改为逆时针方向旋转)。

泵的主要零件有：泵体、泵盖、叶轮、轴、双吸密封环、轴套等。除轴的材料为优质碳钢外，其余主要零件为铸铁制成。

泵体与泵盖构成叶轮的工作室。在进出水法兰上，制有安装真空表和压力表的管螺孔。进出水法兰的下部，制有放水的管螺孔。

经过静平衡校验的叶轮，用轴套和两边的轴套螺母固定在轴上，其轴向位置可通过轴套螺母进行调整。叶轮的轴向力利用其叶片对称布置、两面进水达到平衡。

泵轴由两个深沟球轴承支承。轴承装在轴承体内、安装在泵体两端，用黄油润滑。

双吸密封环用以减少水泵压水室的水漏回吸水室。

泵通过弹性联轴器由电动机直接传动，必要时亦可用内燃机传动。

轴封为软填料密封。为了防止空气进入泵内和冷却润滑密封腔，在填料之间装有填料环，水泵工作时少量高压水，通过泵盖中开面上梯形凹槽流入填料腔，起水封作用。

The inlet and outlet of the pump are both under the centreline of the pump shaft, they are vertical to the shaft centreline and go to horizontal direction. You needn't dismount the outlet and inlet pipes for inspection. Looking from the driven direction the rotary direction is clockwise (Or can change to counterwise as user's requirement).

Main parts of the pump:

Pump Casing, Pump Cover, Impeller, Shaft, Double Suction Seal Ring, Shaft Sleeve etc.

They are made of cast iron except the shaft material being made of fine steel.

The impeller working house is composed of pump casing and pump cover. The threaded holes for installing the vacuum gauge and manometer are separately located at the suction flange and the discharge flange. At the bottom of the inlet or outlet flange a drain threaded hole equipped here.

The impeller checked by statical equilibrium is fixed on the shaft by the shaft sleeves and the shaft sleeve nuts, which axial position can be adjusted by the sleeve nuts. And for the axial force of the impeller, it can be adjusted by using the symmetrical distribution of the impeller and the balance of the two-sides water.

The pump shaft is supported by two single radial ball bearings.

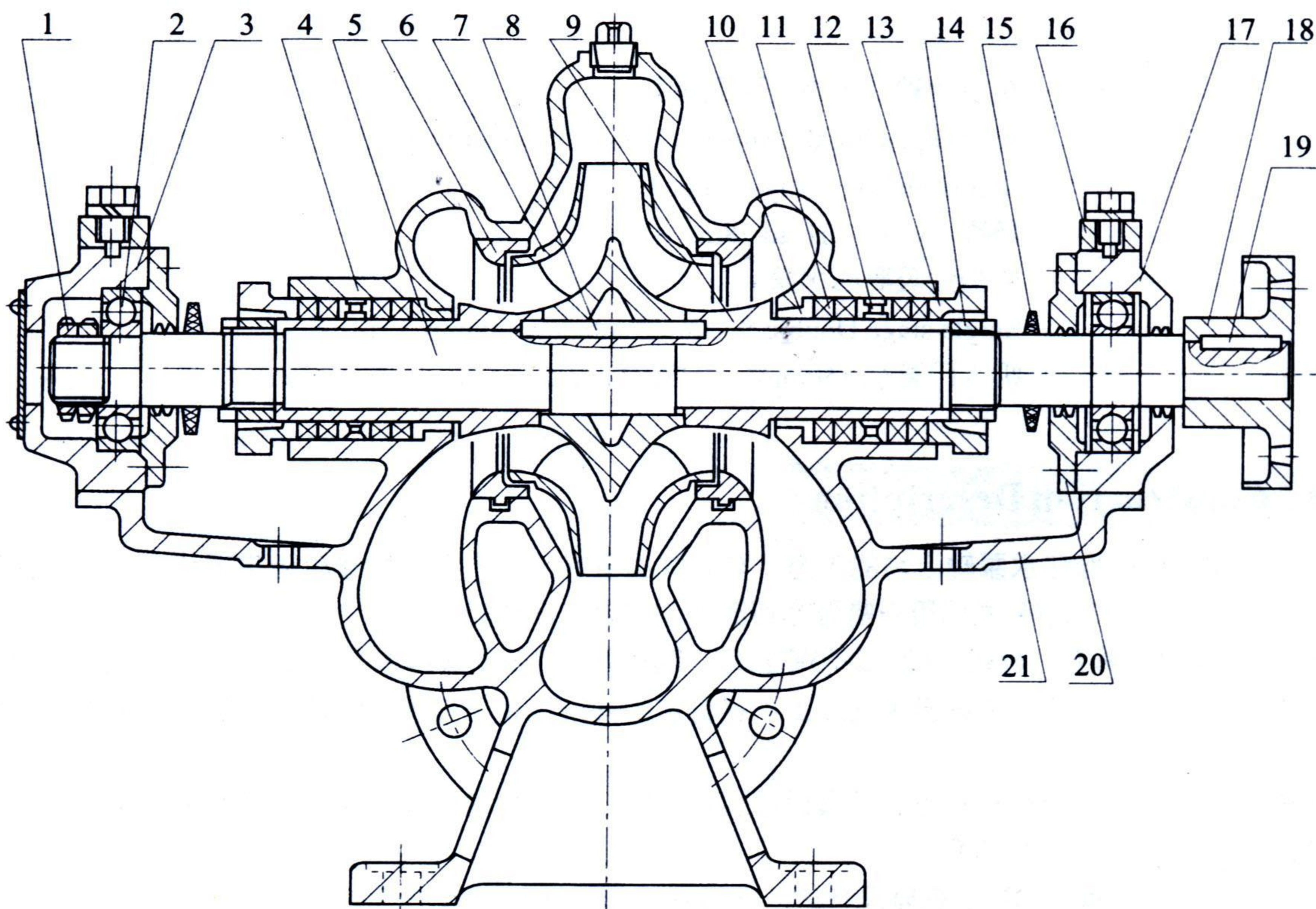
The bearing fitted on the ends of the pump casing is installed in the bearing body and is lubricated by oil grease.

The double suction seal ring is used to reduce the leaking water from the pressure water house which would flow back to the suction water house.

The pump is driven by the motor though the flexible coupling (It also can be driven by diesel engine if it is necessary)

The shaft seal is soft stuff. The packing ring is installed among the packings in order to prevent air from coming into the pump and cooling lubricating sealing case, and while the pump working, it is allowed to let a little high pressure water going through the trapezoidal concave groove on the horizontally split face of the pump cover and flow into the packing case, function as water seal.

结构图 Construction Drawing



1. 圆螺母 Gircle Nut 2. 深沟球轴承 Single Radial Ball Bearing 3. 轴承体乙 Second Bearing Body 4. 泵盖 Pump Cover
 5. 轴 Shaft 6. 双吸密封环 Double Suction Seal Ring 7. 叶轮 Impeller 8. 键 Key 9. 轴套 Shaft Sleeve
 10. 填料套 Packing Sleeve 11. 填料 Packing 12. 填料环 Packing Ring 13. 填料压盖 Packing Gland
 14. 轴套螺母 Shaft Sleeve Nut 15. 挡水圈 Defle Ctor 16. 轴承体压盖 Bearing Body Cover 17. 轴承体甲 First Bearing Body
 18. 泵联轴器 Pump Coupling 19. 键 Key 20. 轴承端盖 Bearing Section Cover 21. 泵体 Pump Casing

性能表 Table of Standard Performance

型号 Type	相应 旧型号 Old Type	流量 Capacity Q (m ³ /h)	扬程 Head H (m)	转速 Speed n (r/min)	功率 Power P(KW)		效率 Efficiency η (%)	汽蚀余量 (NPSH)r (m)
					轴功率 Shaft	电机功率 Motor		
100S90	—	60	95	2950	25.5	37	61	2.5
		80	90		30.1		65	
		95	84		33.7		64.5	
100S90A	—	50	78	2950	17.7	30	60	2.5
		72	75		23		64	
		86	70		26		63	
150S100	—	126	102	2950	50	75	70	3.5
		160	100		59.8		73	
		202	93		68.8		74.4	

性能表 Table of Standard Performance

型号 Type	相应 旧型号 Old Type	流量 Capacity Q (m ³ /h)	扬程 Head H (m)	转速 Speed n (r/min)	功率 Power P(KW)		效率 Efficiency η (%)	汽蚀余量 (NPSH)r (m)
					轴功率 Shaft	电机功率 Motor		
150S78	6SH-8	126 160 198	82 78 70	2950	40 45 52.4	55	70.3 75.5 72	3.5
150S78A	6SH-6A	112 144 180	67 62 55	2950	30 33.8 38.5	45	68 72 70	3.5
150S50	8SH-9	130 160 220	52 50 40	2950	25.3 27.3 31.1	37	72.9 80 77.2	3.9
150S50A	6SH-9A	112 144 180	44 40 35	2950	18.5 20.9 24.5	30	72.5 75 70	3.9
150S50B	6SH-9B	108 133 160	38 36 32	2950	17.2 18.6 19.4	22	65 70 72	3.9
200S95	8SH-6	183 280 324	103 95 87	2950	83.1 91.7 100	110	62 79.2 76.8	5.3
200S95A	—	198 270 310	82 75 68	2950	65 73.5 77.6	90	68 75 74	5.3
200S63	8SH-9	216 280 351	69 63 53	2950	54.8 58.3 66.4	75	74 82.7 76.3	5.8
200S63A	8SH-9A	180 270 324	54.5 46 37.5	2950	38.2 45.1 47.3	55	70 75 70	5.8
200S42	8SH-13	216 280 342	48 42 35	2950	34.8 38.1 40.2	45	81 84.2 81	6
200S42A	8SH-13A	198 270 310	43 36 31	2950	30.5 33.1 34.4	37	76 80 76	6
250S65	10SH-6	360 485 612	71 65 58	1450	92.8 109 129.6	132	75 78.6 74.6	3
250S65A	10SH-6A	342 468 540	61 54 50	1450	76.8 89.4 98	110	74 77 75	3
250S39	10SH-9	360 485 612	42.5 39 32	1450	54.8 61.5 68.6	75	76 83.6 79	3.2
250S39A	10SH-9A	324 468 576	35.5 30.5 25	1450	42.5 49.3 50.9	55	74 79 77	3.2
250S24	10SH-13	360 485 576	27 24 19	1450	33.1 36.9 36.4	45	80 85.8 82	3.5
250S24A	10SH-13A	342 414 482	22.2 20.3 17.4	1450	25.8 27.6 28.6	37	80 83 80	3.5
250S14	10SH-19	360 485 576	16 14 11	1450	19.6 21.5 22.1	30	80 85.8 78	3.8
250S14A	10SH-19A	320 432 504	13.7 11 8.6	1450	15.4 15.8 15.8	18.5	78 82 75	3.8
300S90	12SH-6	590 790 936	93 90 82	1450	202 242.8 279	315	74 79.6 75	4
300S90A	12SH-6A	576 756 918	86 78 70	1450	190 217 247	280	71 74 71	4

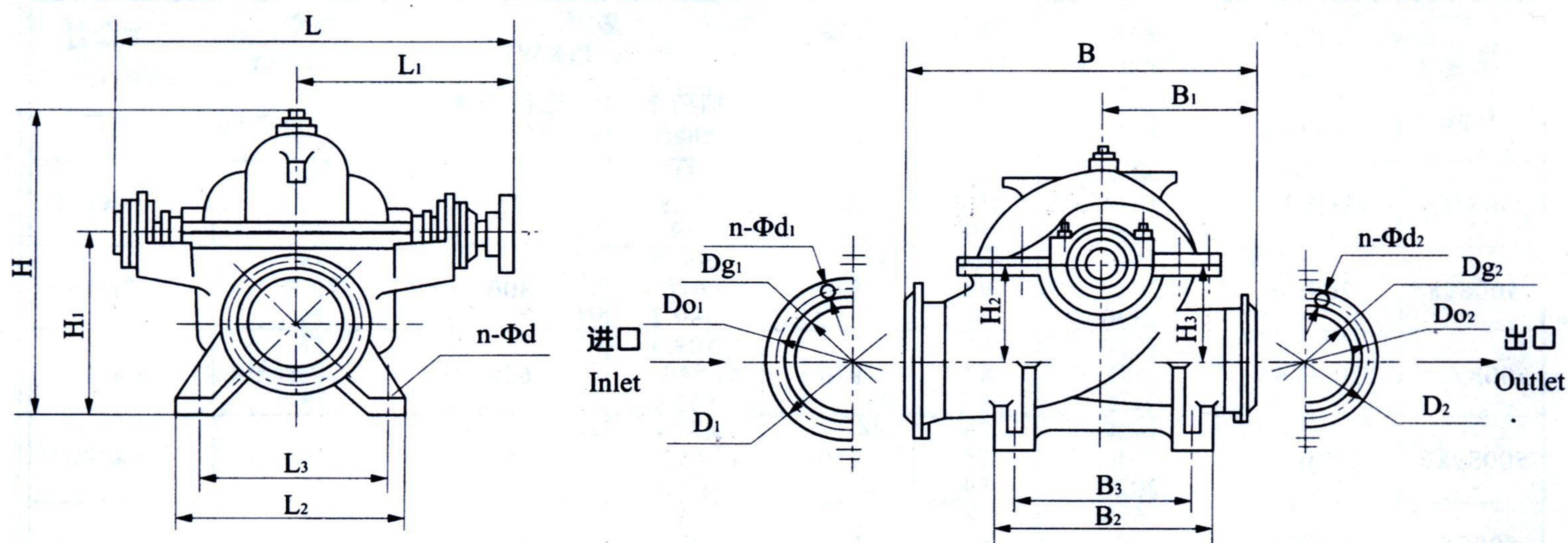
性能表 Table of Standard Performance

型号 Type	相应 旧型号 Old Type	流量 Capacity Q (m ³ /h)	扬程 Head H (m)	转速 Speed n (r/min)	功率 Power P(KW)		效率 Efficiency η (%)	汽蚀余量 (NPSH)r (m)
					轴功率 Shaft	电机功率 Motor		
300S90B	12SH-6B	540	72	1450	151	220	70	4
		720	67		180		73	
		900	57		200		70	
300S58	12SH-9	576	63	1450	136	185	72.7	4.4
		790	58		149.9		84.2	
		972	50		165.5		80	
300S58A	12SH-9A	529	53	1450	99.9	160	76.4	4.4
		720	49		118.6		81	
		893	42		131		78	
300S58B	12SH-9B	504	46	1450	88.8	132	71.1	4.4
		684	43		100		80	
		835	37		108		78	
300S32	12SH-13	612	36	1450	75	110	80	4.6
		790	32		79.2		86.8	
		900	28		86		80	
300S32A	12SH-13A	551	31	1450	58.1	75	80	4.6
		720	26		60.7		84	
		810	24		68		78	
300S19	12SH-19	612	22	1450	45.9	55	80	5.2
		790	19		47		86.8	
		935	16		47.6		85.6	
300S19A	12SH-19A	504	20	1450	38.7	45	71	5.2
		720	16		39.2		80	
		829	13		39.1		75	
300S12	12SH-28	612	14.5	1450	30.2	37	80	5.5
		790	12		30.4		84.8	
		900	10		33.1		74	
300S12A	12SH-28A	522	11.8	1450	23.3	30	72	5.5
		684	10		23.9		78	
		792	8.7		24.7		76	
350S125	——	850	140	1450	462	710	70	5.4
		1260	125		534		80.5	
		1660	100		623		72.5	
350S125A	——	803	125	1450	391	630	70	5.4
		1181	112		462		78	
		1570	90		550		70	
350S125B	——	745	108	1450	313	500	70	5.4
		1098	96		373		77	
		1458	77		422		72.5	
350S75	14SH-9	972	80	1450	271	355	78	5.8
		1260	75		303		85.2	
		1440	65		319		80	
350S75A	14SH-9A	900	70	1450	220	280	78	5.8
		1170	65		247		84	
		1332	56		257		79	
350S75B	14SH-9B	828	59	1450	177	220	75	5.8
		1080	55		197		82	
		1224	47.5		206		77	
350S44	14SH-13	972	50	1450	164	220	81	6.3
		1260	44		173		87.5	
		1476	37		189		79	
350S44A	14SH-13A	864	41	1450	121	160	80	6.3
		1116	36		131		84	
		1332	30		136		80	
350S26	14SH-19	972	30	1450	99.7	132	79.7	6.7
		1260	26		102		87.5	
		1440	22		105		82	
350S26A	14SH-19A	864	26	1450	76.5	90	80	6.7
		1116	21.5		78.8		83	
		1296	16.5		80		73	
350S16	14SH-28	972	20	1450	64	75	83	7.1
		1260	16		64.5		85.3	
		1440	13.4		71		74	

性能表 Table of Standard Performance

型号 Type	相应 旧型号 Old Type	流量 Capacity Q (m ³ /h)	扬程 Head H (m)	转速 Speed n (r/min)	功率 Power P(KW)		效率 Efficiency η (%)	汽蚀余量 (NPSH)r (m)
					轴功率 Shaft	电机功率 Motor		
350S16A	14SH-28A	864	16	1450	51	55	74	7.4
		1044	13.4		48.8		78	
		1260	10		49		70	
500S98	20SH-6	1620	114	970	644.8	800	78	4
		2020	98		678		79.5	
		2340	79		680.3		74	
500S98A	20SH-6A	1500	96	970	509.3	630	77	4
		1872	83		540		78.5	
		2170	67		542.4		73	
500S98B	20SH-6B	1400	86	970	431.4	560	76	4
		1746	74		452		78	
		2020	59		432.8		75	
500S59	20SH-9	1620	68	970	379.7	450	79	4.5
		2020	59		391		83	
		2340	47		374.4		80	
500S59A	20SH-9A	1500	57	970	315	400	74	4.5
		1872	49		333		75	
		2170	39		320		72	
500S59B	20SH-9B	1400	46	970	240.2	315	73	4.5
		1746	40		257		74	
		2020	32		247.9		71	
500S35	20SH-13	1620	40	970	207.6	280	85	4.8
		2020	35		219		88	
		2340	28		209.9		85	
500S35A	20SH-13A	1400	31	970	144	220	82	4.8
		1746	27		151		85	
		2020	21		116.9		84	
500S22	20SH-19	1620	24.5	970	140.4	185	77	5.2
		2020	22		144.1		84	
		2340	19.4		145.4		85	
500S22A	20SH-19A	1400	20	970	103	132	74	5.2
		1746	17		101		80	
		2020	14		93.9		82	
500S13	20SH-28	1620	15	970	83.8	110	79	5.7
		2020	13		86.2		83	
		2340	10.4		82.8		80	
600S75	24SH-9	2500	78	970	610	800	87	7.5
		3170	75		727		89	
		3400	68		787.5		90	
600S75A	24SH-9A	2300	66	970	480.5	630	86	7.5
		2880	65		580		88	
		3250	56		627		79	
600S75B	24SH-9B	1800	60	970	367.6	560	80	6
		2710	55		477.5		85	
		3060	51		531.3		80	
600S47	24SH-13	2500	56	970	460	560	83	7.5
		3170	47		465		88	
		3500	38		452.8		80	
600S47A	24SH-13A	1980	46	970	318	450	78	6.5
		2920	40		361		88	
		3240	37		380		86	
600S32	24SH-19	2520	37	970	295	400	86	7.5
		3170	32		310		89	
		3960	22		279		85	
600S32A	24SH-19A	2304	31.5	970	235	280	84	7.5
		2880	27		238		89	
		3600	20		231		85	
600S22	24SH-28	2500	26	970	218.5	280	81	7.5
		3170	22		223		85	
		3600	19		232.8		80	
600S22A	24SH-28A	2300	21	970	162.3	200	81	7.51
		2880	18.2		168.5		84.5	
		3250	16		176.9		80	

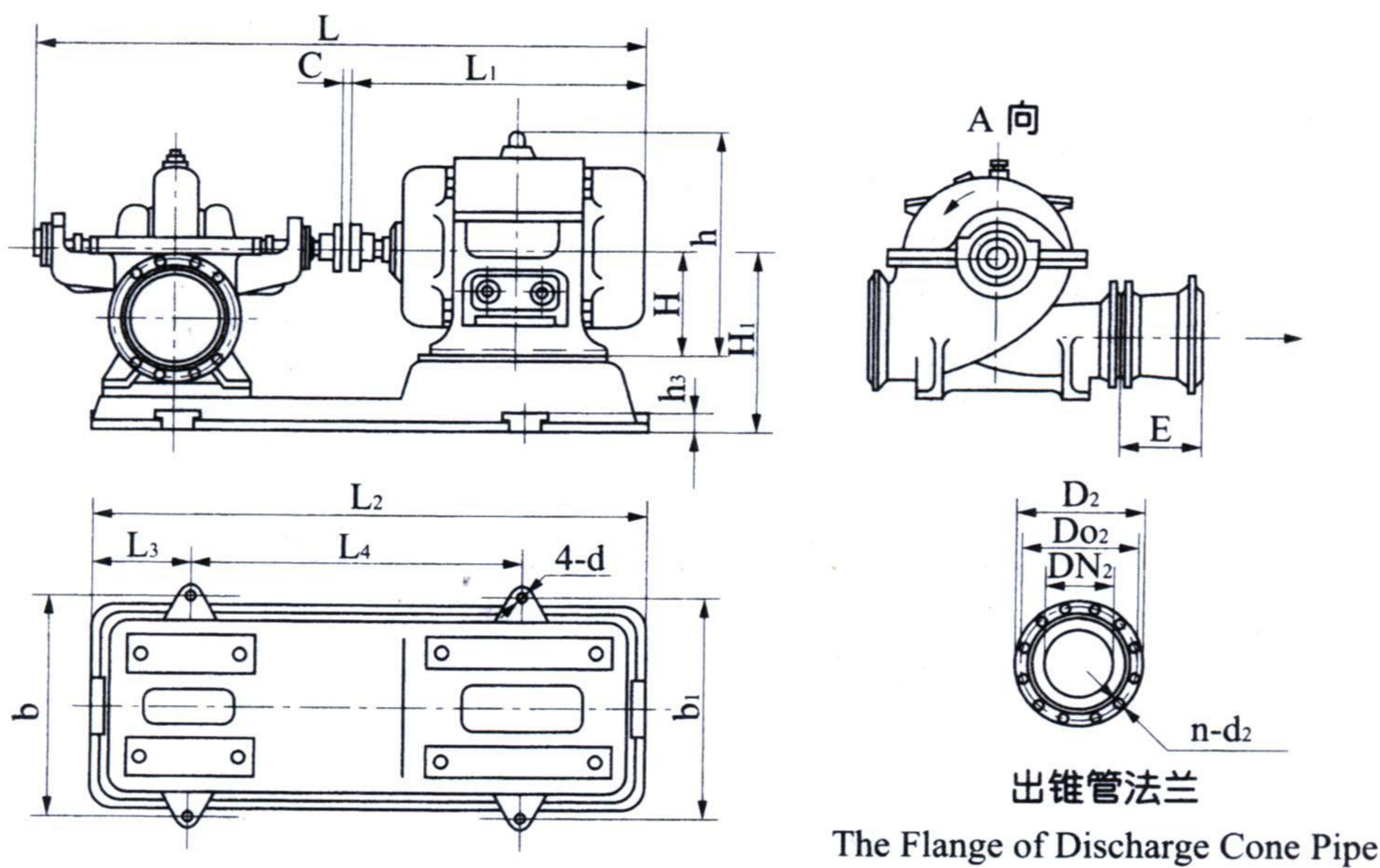
外形尺寸图 The Drawing for The Outline Dimensions



外形尺寸 The form for The Outline Dimensions

型号 Type	泵尺寸 Pump Dimensions													进口法兰尺寸 Inlet Flange Dimensions				出口法兰尺寸 Discharge Flange Dimensions			
	L	L ₁	L ₂	L ₃	B	B ₁	B ₂	B ₃	H	H ₁	H ₂	H ₃	n- Φd	Dg ₁	Do ₁	D ₁	n- Φd_1	Dg ₂	Do ₂	D ₂	n- Φd_2
100S90	700.5	382	240	190	520	250	300	210	455	265	140	149	4- $\Phi 18$	100	180	220	8- $\Phi 17.5$	70	150	185	4- $\Phi 17.5$
150S100	740.5	410	300	250	550	250	340	250	490	285	140	174	4- $\Phi 18$	150	240	285	8- $\Phi 22$	100	180	220	8- $\Phi 17.5$
150S78	704.5	388	300	250	550	250	340	250	472.5	285	140	155	4- $\Phi 18$	150	240	285	8- $\Phi 22$	100	180	220	8- $\Phi 17.5$
150S50	704.5	388	300	250	550	250	340	250	455	285	140	140	4- $\Phi 18$	150	240	285	8- $\Phi 22$	100	180	220	8- $\Phi 17.5$
200S95	861.5	485	300	250	650	300	340	250	568	355	170	170	4- $\Phi 18$	200	295	340	8- $\Phi 22$	125	210	250	8- $\Phi 17.5$
200S63	744.5	410	300	250	620	300	340	250	549	355	170	170	4- $\Phi 18$	200	295	340	8- $\Phi 22$	150	240	285	8- $\Phi 22$
200S42	744.5	410	300	250	620	300	340	250	547	355	170	170	4- $\Phi 18$	200	295	340	8- $\Phi 22$	150	240	285	8- $\Phi 22$
250S65	1046.5	581	410	350	880	400	510	400	796	450	240	290	4- $\Phi 28$	250	350	395	12- $\Phi 22$	150	240	285	8- $\Phi 22$
250S39	983.5	552	410	350	890	440	510	450	750	450	200	260	4- $\Phi 26$	250	350	395	12- $\Phi 22$	200	295	340	8- $\Phi 22$
250S24	923.5	502	410	350	850	400	510	400	738	450	230	230	4- $\Phi 26$	250	350	395	12- $\Phi 22$	200	295	340	8- $\Phi 22$
250S14	882.5	475	410	350	745	330	510	400	709	450	210	215	4- $\Phi 26$	250	350	395	12- $\Phi 22$	200	295	340	8- $\Phi 22$
300S90	1167.5	644	520	450	1046	470	600	450	898	510	268	325	4- $\Phi 28$	300	400	445	12- $\Phi 22$	200	295	340	8- $\Phi 22$
300S58	1132	626	510	450	1070	530	620	550	860	510	240	310	4- $\Phi 28$	300	400	445	12- $\Phi 22$	250	350	395	12- $\Phi 22$
300S32	1062.5	574	520	450	880	410	600	450	824	510	260	270	4- $\Phi 26$	300	400	445	12- $\Phi 22$	250	350	395	12- $\Phi 22$
300S19	958.5	517	520	450	900	400	600	450	815	510	250	260	4- $\Phi 26$	300	400	445	12- $\Phi 22$	250	350	395	12- $\Phi 22$
300S12	1008.5	552	520	450	1000	500	660	510	810	510	265	265	4- $\Phi 26$	300	400	445	12- $\Phi 22$	300	400	445	12- $\Phi 22$
350S125	1447.5	830	600	500	1210	550	690	500	1080	620	330	410	4- $\Phi 35$	350	460	505	16- $\Phi 22$	200	295	340	12- $\Phi 22$
350S75	1271.5	710	600	500	1250	600	690	500	1008	620	274	356	4- $\Phi 35$	350	460	505	16- $\Phi 22$	250	350	395	12- $\Phi 22$
350S44	1232.5	675	600	500	1080	510	690	500	980	620	300	300	4- $\Phi 35$	350	460	505	16- $\Phi 22$	300	400	445	12- $\Phi 22$
350S26	1161.5	633	580	500	1040	460	680	600	963	620	290	300	4- $\Phi 35$	350	460	505	16- $\Phi 22$	300	400	445	12- $\Phi 22$
350S16	1090.5	584	600	500	1168	584	690	500	970	620	310	310	4- $\Phi 33$	350	460	505	16- $\Phi 22$	350	400	505	16- $\Phi 22$
500S98	1639.5	912	760	580	1550	750	1020	800	1381	800	425	545	4- $\Phi 42$	500	620	670	20- $\Phi 26$	300	400	445	12- $\Phi 22$
500S59	1637.5	905	760	580	1640	810	1020	800	1300	800	370	480	4- $\Phi 42$	500	620	670	20- $\Phi 26$	350	460	505	16- $\Phi 22$
500S35	1373.5	766	760	580	1350	630	1020	800	1270	800	415	415	4- $\Phi 42$	500	620	670	20- $\Phi 26$	350	460	505	16- $\Phi 22$
500S22	1375.5	750	760	580	1460	640	1020	800	1266	800	410	410	4- $\Phi 42$	500	620	670	20- $\Phi 26$	400	515	505	16- $\Phi 26$
500S13	1311.5	717.5	760	580	1550	775	1020	800	1251	800	410	410	4- $\Phi 42$	500	620	670	20- $\Phi 26$	500	620	670	20- $\Phi 26$
600S75	1694.5	940	940	760	1900	940	1020	800	1550	950	425	555	4- $\Phi 42$	600	725	780	20- $\Phi 30$	400	515	565	16- $\Phi 26$
600S47	1694.5	940	940	760	1595	745	1020	800	1505	950	490	490	4- $\Phi 42$	600	725	780	20- $\Phi 30$	400	515	565	16- $\Phi 26$
600S32	1609.5	882	940	760	1600	750	1020	800	1490	950	480	480	4- $\Phi 42$	600	725	780	20- $\Phi 30$	500	620	670	20- $\Phi 26$
600S22	1471.5	810	940	760	1790	840	1020	800	1476	950	160	460	4- $\Phi 42$	600	725	780	20- $\Phi 30$	500	620	670	20- $\Phi 26$

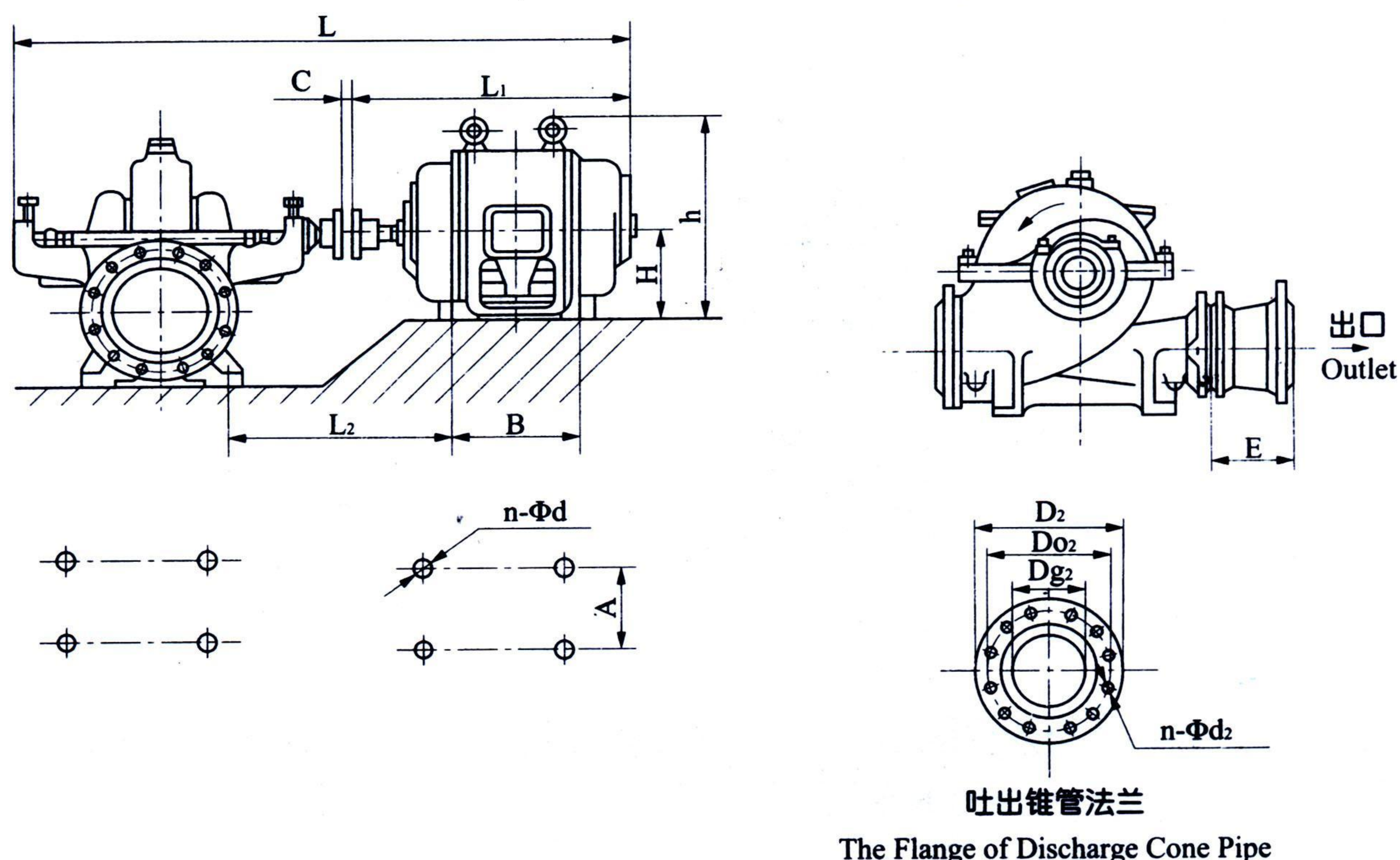
安装尺寸图(带底座) The Drawing for The Installation Dimensions (with Bedplate)



安装尺寸表(带底座) The Table for The Installation Dimensions (with Bedplate)

型 号 Type	电 动 机 Motor			电 机 尺 寸			底 座 尺 寸					E	H ₁	L	吐出锥管法兰尺寸			
	型 号 Type	功 率 Power	电 压 Voltage	Motor Dimensions			Bedplate Dimensions								Discharge Cone Flange Dimensions			
				L ₁	h	H	L ₂	L ₃	L ₄	b	b ₁				Dg ₂	Do ₂	D ₂	n-Φd ₂
100S90	Y200L ₂ -2	37	380	775	475	200	1140	141	780	385	490	150	365	1479.5	100	180	220	8-Φ17.5
100S90A	Y200L ₁ -2	30	380	775	475	200	1140	141	780	385	490	150	365	1479.5	100	180	220	8-Φ17.5
150S100	Y280S-2	75	380	1000	640	280	1390	173	930	430	640	220	385	1744.5	150	240	285	8-Φ22
150S78	Y250M-2	55	380	930	575	250	1390	173	930	430	640	220	385	1638.5	150	240	285	8-Φ22
150S78A	Y225M-2	45	380	815	530	225	1200	173	800	430	540	220	385	1523.5	150	240	285	8-Φ22
150S50	Y200L ₂ -2	37	380	775	475	200	1200	173	800	430	540	220	385	1483.5	150	240	285	8-Φ22
150S50A	Y200L ₁ -2	30	380	775	475	200	1200	173	800	430	540	220	385	1483.5	150	240	285	8-Φ22
150S50B	Y180M-2	22	380	670	430	180	1108	173	745	430	465	220	385	1378.5	150	240	285	8-Φ22
200S95A	Y280M-2	90	380	1050	640	280	1523	173	1030	430	680	330	470	1915.5	200	295	340	12-Φ22
200S63	Y280S-2	75	380	1000	640	280	1398	173	930	430	655	350	455	1748.5	200	295	340	8-Φ22
200S63A	Y250M-2	55	380	930	575	250	1335	173	900	430	600	350	455	1678.5	200	295	340	8-Φ22
200S42	Y225M-2	45	380	815	530	225	1238	173	810	472	595	350	455	1563.5	200	295	340	8-Φ22
200S42A	Y200L ₂ -2	37	380	775	475	200	1238	173	810	472	595	350	455	1523.5	200	295	340	8-Φ22
250S39	Y280S-4	75	380	1000	640	280	1636	258	1100	658	720	300	550	1987.5	250	350	395	12-Φ22
250S39A	Y250M-4	55	380	930	575	250	1565	258	1005	655	655	300	550	1917.5	250	350	395	12-Φ22
250S24	Y225M-4	45	380	845	530	225	1435	255	950	640	640	300	570	1772.5	250	350	395	12-Φ22
250S24A	Y225S-4	37	380	820	530	225	1435	255	950	640	640	300	570	1747.5	250	350	395	12-Φ22
250S14	Y200L-4	30	380	775	475	200	1255	228	830	600	535	300	550	1661.5	250	350	395	12-Φ22
250S14A	Y180M-4	18.5	380	670	430	180	1255	228	830	600	535	300	550	1556.5	250	350	395	12-Φ22
300S32	Y315S-4	110	380	1220	865	315	1800	320	1160	785	785	300	610	2286.5	300	400	445	12-Φ22
300S32A	Y280S-4	75	380	1000	640	280	1710	283	1150	690	690	300	610	2066.5	300	400	445	12-Φ22
300S19	Y250M-4	55	380	930	575	250	1550	283	970	720	630	300	610	1892.5	300	400	445	12-Φ22
300S19A	Y225M-4	45	380	845	530	225	1550	283	970	720	630	300	610	1807.5	300	400	445	12-Φ22
300S12	Y225S-4	37	380	820	530	225	1500	283	920	750	595	-	610	1832.5	-	-	-	-
300S12A	Y200L-4	30	380	775	475	300	1500	283	920	750	595	-	610	1787.5	-	-	-	-
350S26	Y315M ₁ -4	132	380	1270	865	315	1970	360	1250	785	785	300	740	2435.5	350	460	505	16-Φ22
350S26A	Y280M-4	90	380	1050	640	280	1840	350	1140	785	720	-	740	2215.5	350	460	505	16-Φ22
350S16	Y280S-4	75	380	1000	640	280	1732	316	1105	790	720	-	740	2094.5	-	-	-	-
350S16A	Y250M-4	55	380	930	575	250	1732	316	1105	790	720	-	740	2024.5	-	-	-	-

安装尺寸图(不带底座) The Drawing for The Installation Dimensions (Without Bedplate)



安装尺寸表(不带底座) The Table of The Installation Dimensions (Without Bedplate)

泵型号 Type of pump	C	电动机 Motor			电机尺寸 Motor dimensions						E	L	L ₂	吐出锥管尺寸 Discharge conce flange dimensions			
		型号 Type	功率 Power (kW)	电压 Voltage (V)	L ₁	H	h	B	A	n-Φd				Dg ₂	D ₀₂	D ₂	n-Φd ₂
200S95	4	Y250M-2(IP23)	110	380	825	250	600	349	406	4-Φ24	330	1691	674	200	295	340	12-Φ22
	4	Y315S-2	110	380	1190	315	865	406	508	4-Φ28	330	2056	720	200	295	340	12-Φ22
250S65	4	Y280M-4(IP23)	132	380	970	280	655	419	457	4-Φ24	500	2021	770	250	350	395	12-Φ22
	4	Y315M ₁ -4	132	380	1270	315	865	457	508	4-Φ28	500	2321	796	250	350	395	12-Φ22
250S65A	4	Y280S-4(IP23)	110	380	920	280	655	368	457	4-Φ24	500	1791	770	250	350	395	12-Φ22
	4	Y315S-4	110	380	1220	315	865	406	508	4-Φ28	500	2271	796	250	350	395	12-Φ22
300S90	5	Y355M ₂ -4(IP23)	315	380	1290	355	704	560	610	4-Φ28	500	2463	888	300	400	445	12-Φ22
300S90A	5	Y355M ₂ -4(IP23)	280	380	1290	355	704	560	610	4-Φ28	500	2463	888	300	400	445	12-Φ22
300S90B	5	Y355M ₂ A-4(IP23)	220	380	1210	315	865	457	508	4-Φ28	500	2383	810	300	400	445	12-Φ22
300S58	5	Y315M ₁ A-4(IP23)	185	380	1210	315	865	457	508	4-Φ28	300	2347	792	300	400	445	12-Φ22
300S58A	4	Y315S-4(IP23)	160	380	1160	315	865	406	508	4-Φ28	300	2305	792	300	400	445	12-Φ22
	4	Y315M ₂ -4	160	380	1270	315	865	457	508	4-Φ28	300	2406	791	300	400	445	12-Φ22
300S58B	4	Y280M-4(IP23)	132	380	970	280	655	419	457	4-Φ24	300	2106	765	300	400	445	12-Φ22
	4	Y315M ₁ -4	132	380	1270	315	865	457	508	4-Φ28	300	2406	791	300	400	445	12-Φ22
350S125	7	Y450-50-4	710	6000	2035	450	1350	1120	800	4-Φ35	750	3490	1152	350	470	520	16-Φ26
350S125A	6	Y450-46-4	630	6000	2035	450	1350	1120	800	4-Φ35	750	3490	1152	350	470	520	16-Φ26
350S125B	6	Y400-50-4	500	6000	1860	400	1200	1000	710	4-Φ35	750	3315	1131	350	470	520	16-Φ26
350S75	6	Y355L-4(IP23)	355	380	1360	355	704	630	610	4-Φ28	500	2638	930	350	460	505	16-Φ22

泵型号 Type of pump	C	电动机 Motor			电机尺寸 Motor dimensions						E	L	L ₂	吐出锥管尺寸 Discharge conce flange dimensions			
		型号 Type	功率 Power (kW)	电压 Voltage (V)	L ₁	H	h	B	A	n-Φd				Dg ₂	Do ₂	D ₂	n-Φd ₂
350S75A	5	Y355M ₁ -4(IP23)	280	380	1290	355	704	560	610	4-Φ28	500	2567	930	350	460	505	16-Φ22
350S75B	5	Y315M ₂ A-4(IP23)	220	380	1210	315	865	457	508	4-Φ28	500	2487	851	350	460	505	16-Φ22
350S44	5	Y315M ₂ A-4(IP23)	220	380	1210	315	865	457	508	4-Φ28	300	2448	816	350	460	505	16-Φ22
350S44A	5	Y315S-4(IP23)	160	380	1160	315	865	406	508	4-Φ28	300	2420	816	350	460	505	16-Φ22
	5	Y315M ₂ -4	160	380	1270	315	865	457	508	4-Φ28	300	2508	816	350	460	505	16-Φ22
350S26	4	Y280M-4(IP23)	132	380	970	280	655	419	457	4-Φ24	300	2136	747	350	460	505	16-Φ22
	4	Y315M ₁ -4	132	380	1270	315	865	457	508	4-Φ28	300	2436	773	350	460	505	16-Φ22
350S26A	4	Y280M-4	90	380	1050	280	640	419	457	4-Φ24	300	2220	749	350	460	505	16-Φ22
	4	Y315S-4	110	380	1220	315	865	406	508	4-Φ28	300	2386	773	350	460	505	16-Φ22
350S16	4	Y280S-4	75	380	1000	280	640	368	457	4-Φ24	无	2095	668	无	无	无	无
350S16A	4	Y250M-4	55	380	930	250	575	349	406	4-Φ24	无	2025	646	无	无	无	无
500S98	7	Y500-54-6	800	6000	2220	500	1500	1250	900	4-Φ42	880	3870	1354	500	620	670	20-Φ26
500S98A	7	Y450-64-6	630	6000	2080	450	1650	1120	800	4-Φ35	880	3827	1234	500	620	670	20-Φ26
	7	Y500-50-6	630	6000	2220	500	1900	1250	900	4-Φ42	880	3890	1347	500	620	670	20-Φ26
500S98B	7	Y450-54-6	560	6000	2080	450	1350	1120	800	4-Φ35	880	3730	1234	500	620	670	20-Φ26
	7	Y450-64-6	560	6000	2080	450	1650	1120	800	4-Φ35	880	3750	1234	500	620	670	20-Φ26
500S59	7	Y450-46-6	450	6000	2080	450	1350	1120	800	4-Φ35	800	3725	1227	500	620	670	20-Φ26
	7	Y450-50-6	450	6000	2080	450	1650	1120	800	4-Φ35	800	3750	1227	500	620	670	20-Φ26
500S59A	6	Y400-54-6	400	6000	1860	400	1200	1000	710	4-Φ35	800	3504	1166	500	620	670	20-Φ26
	6	Y450-46-6	400	6000	2080	450	1650	1120	800	4-Φ35	800	3750	1227	500	620	670	20-Φ26
500S59B	6	Y400-46-6	315	6000	1860	400	1200	1000	710	4-Φ35	800	3504	1166	500	620	670	20-Φ26
	6	Y400-50-6	315	6000	1860	400	1450	1000	710	4-Φ35	800	3530	1166	500	620	670	20-Φ26
500S35	6	Y355L ₁ -6(IP23)	280	380	1360	355	704	630	610	4-Φ28	800	2740	946	500	620	670	20-Φ26
500S35A	6	Y355M ₃ -6(IP23)	220	380	1290	355	704	560	610	4-Φ28	800	2670	946	500	620	670	20-Φ26
500S22	5	Y355M ₁ -6(IP23)	185	380	1290	355	704	560	610	4-Φ28	600	2671	929	500	620	670	20-Φ26
500S22A	5	Y315M ₁ -6(IP23)	132	380	1210	315	865	457	508	4-Φ28	600	2591	851	500	620	670	20-Φ26
	5	Y315M ₃ -6	132	380	1270	315	865	457	508	4-Φ28	600	2651	851	500	620	670	20-Φ26
500S13	4	Y315S-6(IP23)	110	380	1160	315	865	406	508	4-Φ28	600	2480	818	500	620	670	20-Φ26
	4	Y315M ₂ -6	110	380	1270	315	865	457	508	4-Φ28	600	2586	818	500	620	670	20-Φ26
600S75	7	Y500-54-6	800	6000	2220	500	1500	1250	900	4-Φ42	600	3922	1292	500	620	670	20-Φ26
	7	Y500-64-6	800	6000	2220	500	1900	1250	900	4-Φ42	600	3922	1292	500	620	670	20-Φ26
600S75A	7	Y450-64-6	630	6000	2080	450	1350	1120	800	4-Φ35	600	3782	1172	500	620	670	20-Φ26
	7	Y500-50-6	630	6000	2220	500	1900	1250	900	4-Φ42	600	3922	1292	500	620	670	20-Φ26
600S75B	7	Y450-54-6	560	6000	2080	450	1350	1120	800	4-Φ35	600	3782	1172	500	620	670	20-Φ26
	7	Y450-64-6	560	6000	2080	450	1650	1120	800	4-Φ35	600	3782	1172	500	620	670	20-Φ26
600S47	7	Y450-54-6	560	6000	2080	450	1350	1120	800	4-Φ35	600	3782	1172	500	620	670	20-Φ26
	7	Y450-64-6	560	6000	2080	450	1650	1120	800	4-Φ35	600	3782	1172	500	620	670	20-Φ26
600S47A	7	Y450-46-6	450	6000	2080	450	1350	1120	800	4-Φ35	600	3782	1172	500	620	670	20-Φ26
	7	Y450-50-6	450	6000	2080	450	1650	1120	800	4-Φ35	600	3782	1172	500	620	670	20-Φ26
600S32	6	Y400-54-6	400	6000	1860	400	1200	1000	710	4-Φ35	600	3476	1053	500	620	670	20-Φ26
	6	Y450-46-6	400	6000	2080	450	1650	1120	800	4-Φ35	600	3696	1113	500	620	670	20-Φ26
600S32A	6	Y400-43-6	280	6000	1860	400	1200	1000	710	4-Φ35	600	3476	1053	500	620	670	20-Φ26
	6	Y355L ₁ -6(IP23)	280	380	1360	355	704	630	610	4-Φ28	600	2976	972	500	620	670	20-Φ26
600S22	6	Y355L ₁ -6(IP23)	280	380	1360	355	704	630	610	4-Φ28	600	2838	900	500	620	670	20-Φ26
600S22A	5	Y355M ₂ -6(IP23)	200	380	1290	355	704	560	610	4-Φ28	600	2768	900	500	620	670	20-Φ26

装配与拆卸 Assembly and Disassembly

1. 装配转子部件：依次将键、叶轮、轴套、轴套螺母、填料环、填料压盖、挡水圈装在轴上，套上双吸密封环，装上轴承部件和联轴器。

2. 分别检查转子部件上叶轮的密封部位外圆及轴套外圆的径向跳动，不超过下表规定：

名义直径	≤ 50	> 50 - 120	> 120 - 260	> 260 - 500	> 500 - 800	> 800 - 1250
跳动值	0.06	0.08	0.10	0.12	0.15	0.20

3. 将转子部件和螺柱装在泵体上，装好轴承体压盖。用轴套螺母调整叶轮的轴向位置到泵体流道的中间，加以固紧。

4. 装上填料，放好中开面纸垫，盖上泵盖，打紧螺尾锥销拧紧泵盖螺母。压紧填料压盖。但不要将填料压得太紧，过紧会使轴套发热，同时耗能增多；也不要压得太松，过松会使液体渗漏大，水泵效率降低。

5. 装配完毕用手转动转子，无卡擦、旋转均匀即可。

6. 拆卸可按上述装配顺序相反进行。

(Please use the following procedures to assemble)

1. Assemble keys, impeller sleeves, sleeve nuts, packing rings, and block water ring in order on the pump shaft. Afterwards sleeve the suction seal ring, and then the bearing part and coupling.

2. Individually inspect the radial beats of the excircle of the impeller seal position and the sleeve excircle on the rotor part, which is not allowed to exceed its provisions as following:

Norminal-Diameter	≤ 50	> 50 - 120	> 120 - 260	> 260 - 500	> 500 - 800	> 800 - 1250
Beats	0.06	0.08	0.10	0.12	0.15	0.20

3. Assemble the rotor part and studs on the pump casing, and well install the bearing gland and tighten it with bolts, then you can adjust the axial position of the impeller with shaft sleeve nuts up to middle flow passage way of the pump casing and tighten it.

4. Feed the packing into the packing box, place the horizontal joint paper gasket, cover the pump, hammer (or other things) the taper pin with external thread tightly, the following, screw its nuts and mount the packing gland which degree of the packing tightness must be suitable (if too light, the shaft sleeve would be over-heated, namely, more power would be consumed; if too loose, the leakage of liquid would be found from here and thus would decrease the pump efficiency.)

5. After finish assembling the pump, turn the rotor with hands, it should be flexible and smooth as well as no block and no rubbing, that is OK! and then you can operate it freely.

(Disassemble it according to the opposite order of assembling)

安装 Installation

1. 检查水泵和电机应无损坏。

2. 水泵的安装要保证装置提供的汽蚀余量大于泵给定的汽蚀余量值。基础尺寸应符合泵机组的安装尺寸。

3. 安装顺序：

(1) 将水泵和电机套上地脚螺栓，戴上螺母，放在预留地脚螺栓孔的混凝土基础上。用调整基间楔形垫块的方法，校正水平，并校好泵与电机轴的同轴度。然后将全部地脚螺孔灌满混凝土。

(2) 待混凝土干固后，再校泵与电机轴的同轴度。在两联轴器外圆上校正，误差不大于 0.1mm。端面间隙沿圆周不均匀度允差 0.3mm。紧固地脚螺母后查校正精度，然后在电机与泵脚底部灌满混凝土，但楔形块周围必须空出。

(3) 检查电机旋向与泵相符后，装上联轴器的连接柱销。

4. 进出水管应另设支撑，不得借泵体支承。

5. 泵与管路之间结合面，应保持良好密封性，尤其是进水管路必须严格保证不漏气，并在装置上应无窝存空气的可能。

6. 如水泵装置在进水水位以上时，为了灌水起动，应装底阀。也可采用抽真空引水的方法。

以上为不带公共底座的泵机组的安装方法和要求。对于配带公共底座的泵机组的安装，参照上述方法进行。

1. Check whether the pump and the motor are in good condition.

2. Make sure that the value of NPSH must be higher than the one that have been given, and its foundation dimensions should be in conformity with the installation drawing.

3. The steps of installation:

(1) Sleeve the foot bolts and hat the nuts on the pump and the motor, place the pump on the concret foundation where some foot bolt holes are pre-built, correct the horizontal and the coaxial degree between the pump shaft and the motor shaft by means of adjusting the wedge-shaped cushion, then fully pour the concret into all the foot bolt holes.

(2) After the concret solidified, again correct the coaxial degree on the excircle of the two couplings, the error of the correction is not more than 0.1mm, the allowable error of the inhomogeneous degree of the endface clearance ailing the circle is 0.3mm. Re-inspect the correct pricision after tightening the foot nuts, finally, pour ccncret fully under the foot of the pump and the motor except the around of the wedge shaped cushion.

(3) After check the rotary direction of the motor which is now in keeping with that of the pump, you can install the connecting parallal pin of the coupling.

4. The inlet pipe and outlet pipe should be supported by a brasket instead of the pump casing.

5. The combination between the pump and the pipe must be keeping good sealing, especially no leakage of air occures from the inlet pipe and no possible remained air in it in the cause of installation.

6. If the pump is installed above the suction water level, it should be equiped foot valve for pouring water and driving and it also can suck water by suction vacuum.

Above all the mentioned methods and requirements are suitable for the pump set without common bedplate; samely, for the pump set with common bedplate, you also can refer to the above mention methods.

启动、停止和运行 Starting, Stopping and Running**一、启动与停止:**

(1) 启动前, 转动机组转子应转动均匀。

(2) 关闭出水闸阀, 灌引水(若无底阀则用真空泵抽气引水), 要保证泵内充满水, 无空气窝存。

(3) 如果泵上装有真空泵, 要关闭其与泵连接管路上的旋塞, 再启动电机, 待转速正常后再打开。然后逐渐打开出水闸阀, 达到所需流量。

(4) 均匀地拧紧填料压盖上的螺母, 使液体少量漏出, 同时注意填料腔的温升。

(5) 当水泵停止运转时, 要先关闭真空表的旋塞和排水管路上的闸阀, 然后停止电动机。所处环境的温度较低时, 应将泵体下部的四方螺塞打开, 以免冻裂泵体。

(6) 长期停止使用时, 应拆开水泵, 将零件上的水擦干, 在加工表面上涂上防锈油。

二、运行:

(1) 水泵轴承最高温度不应超过 75°C 。

(2) 润滑轴承用的钙基黄油的数量, 以占轴承体空间的 $1/3 \sim 1/2$ 为宜。并应定期更换。

(3) 填料磨损时, 可适当压紧填料压盖。若磨损过多, 应更换。

(4) 定期检查弹性联轴器部件, 注意电机轴承温升。

(5) 运转过程中, 如发现噪声或其他不正常声响时, 应立即停车, 检查原因, 加以消除。

(6) 不得任意提高水泵的转速, 但可以降速使用。

Starting And Stopping:

1. Before starting, turning the rotor, it should be flexible.

2. Close the discharge valve, nour water in it (if no foot valve, with a vacuum pump for drawing water instead). Bd sure the pump full of water and no air remained in it.

3. If there is a vacuum gauge installed on the pump, the cocks on the pipe passage way which connect the pump should be turned off, then start the motor. It is not allowed to turn on the motor until the running speed is normal, and then open gradully the brake valve untill the suction water of the two sides reachs to balance.

4. Screw homogenizenously the nuts on the pump packing gland so as to the leakage of liquid is little, at the same time, pay more attention to the packing case temperature rising.

5. While stopping the pump runing, firstly turn off the cocks of the vacuum gauge and manometer and turn off the brake valve on the discharge pipe passage way. If the ambient temperature is low, the coach under the pump casing shoule be loosen to drain away the rest water so as to keep the pump casing from being splitted by forst.

6. If it will not be used for a long time, the pump must be disconnected and all the parts should be kept dring, and smear the machining face with rust-proof grease oil.

Running:

1. The temperature of the pump bearing should not be exceeded 75°C.
2. The suitable quantity of the good Ca-base grease which is used to lubricate the bearing occupies 1/3 to 1/2 space of the bearing body, and it should be changed periodically.
3. When the packing worn, tighten the packing gland properly or change it if it is necessary.
4. Check the flexible coupling part, care more for the motor bearing temperature rising.
5. During running, if any noise or unnormal sounds are heard, stop the pump immediately, and look for the causes, then clear out.
6. It is not allowed to increase the running speed wantonly, but you can decrease the running speed of the pump for working.

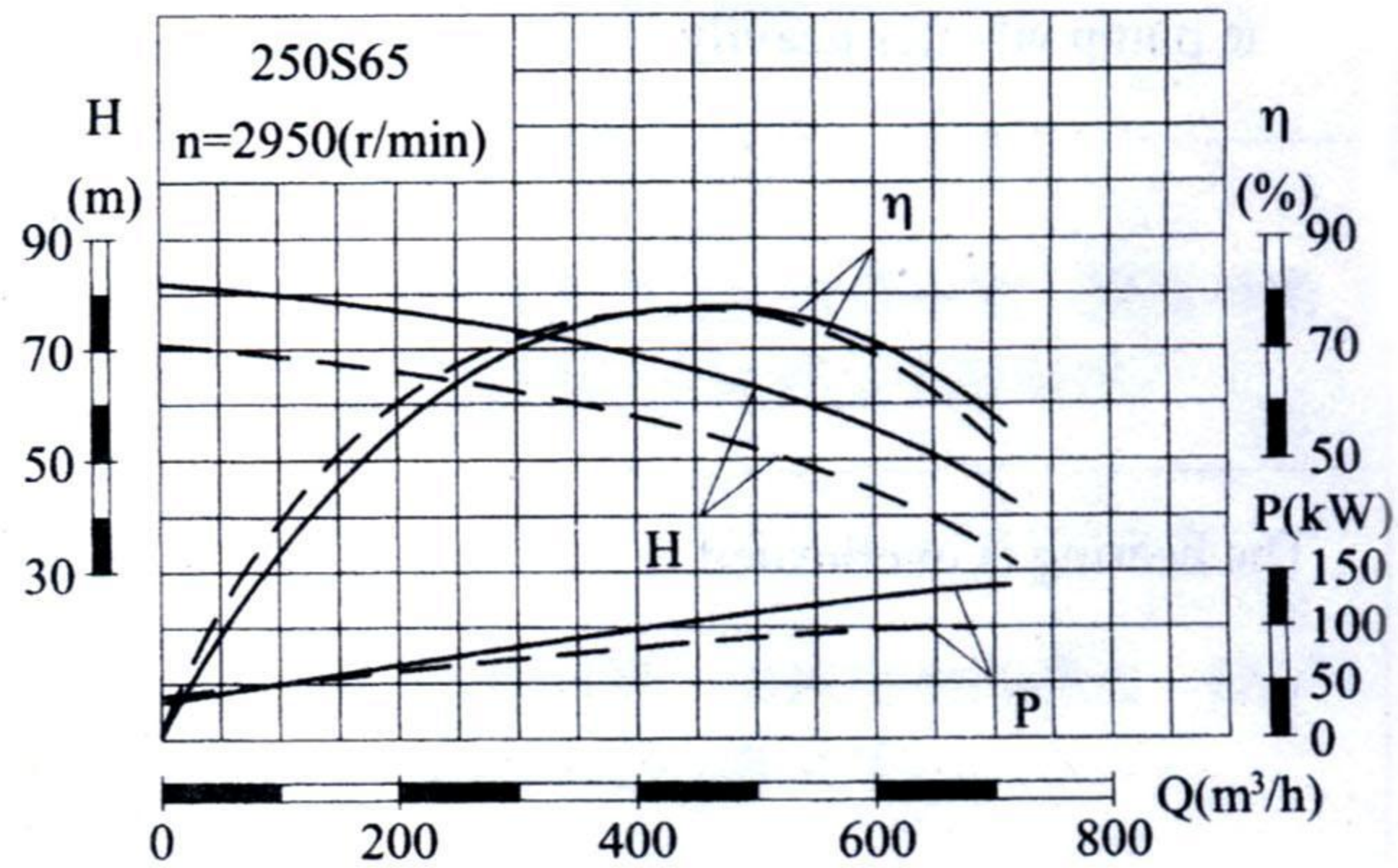
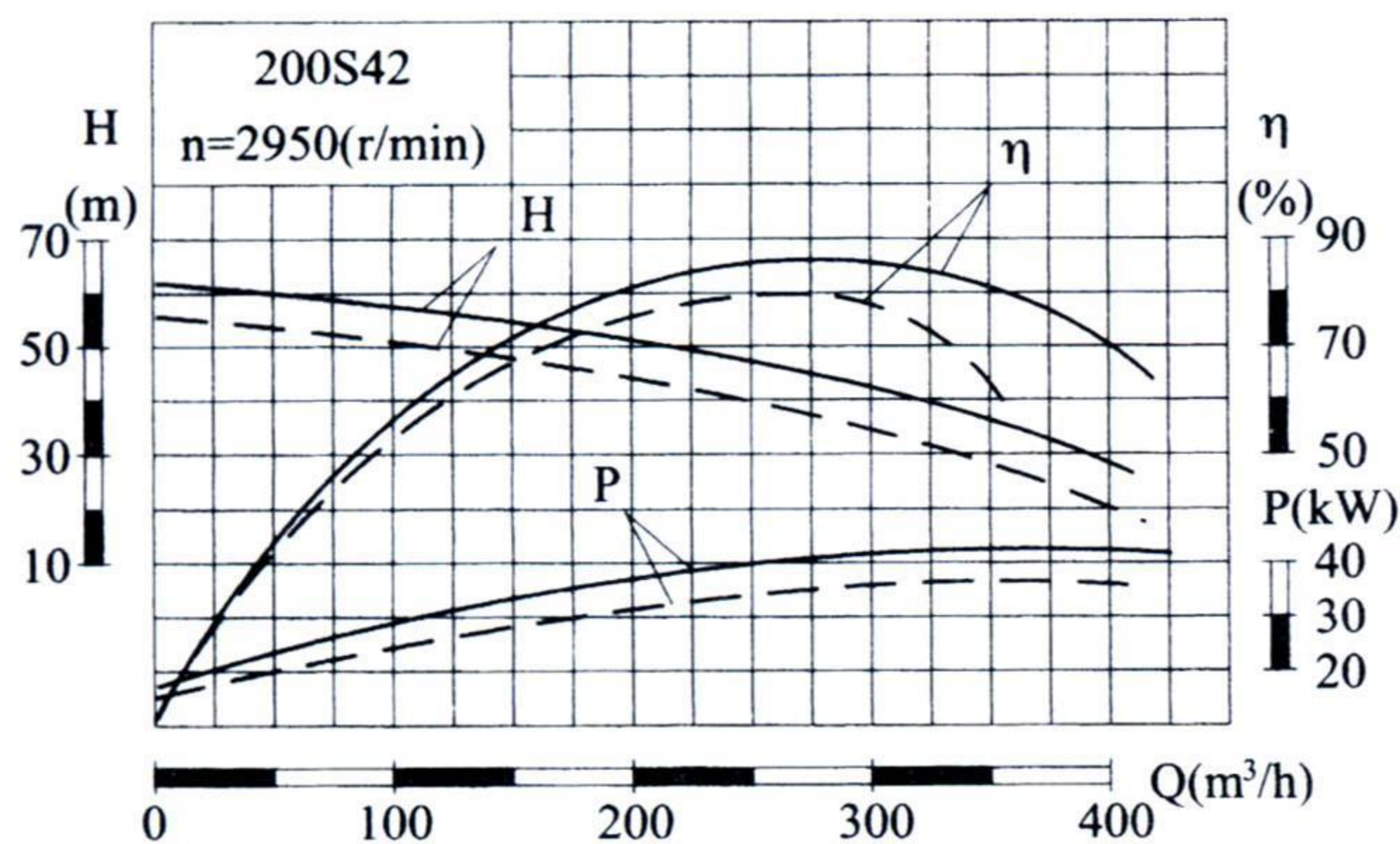
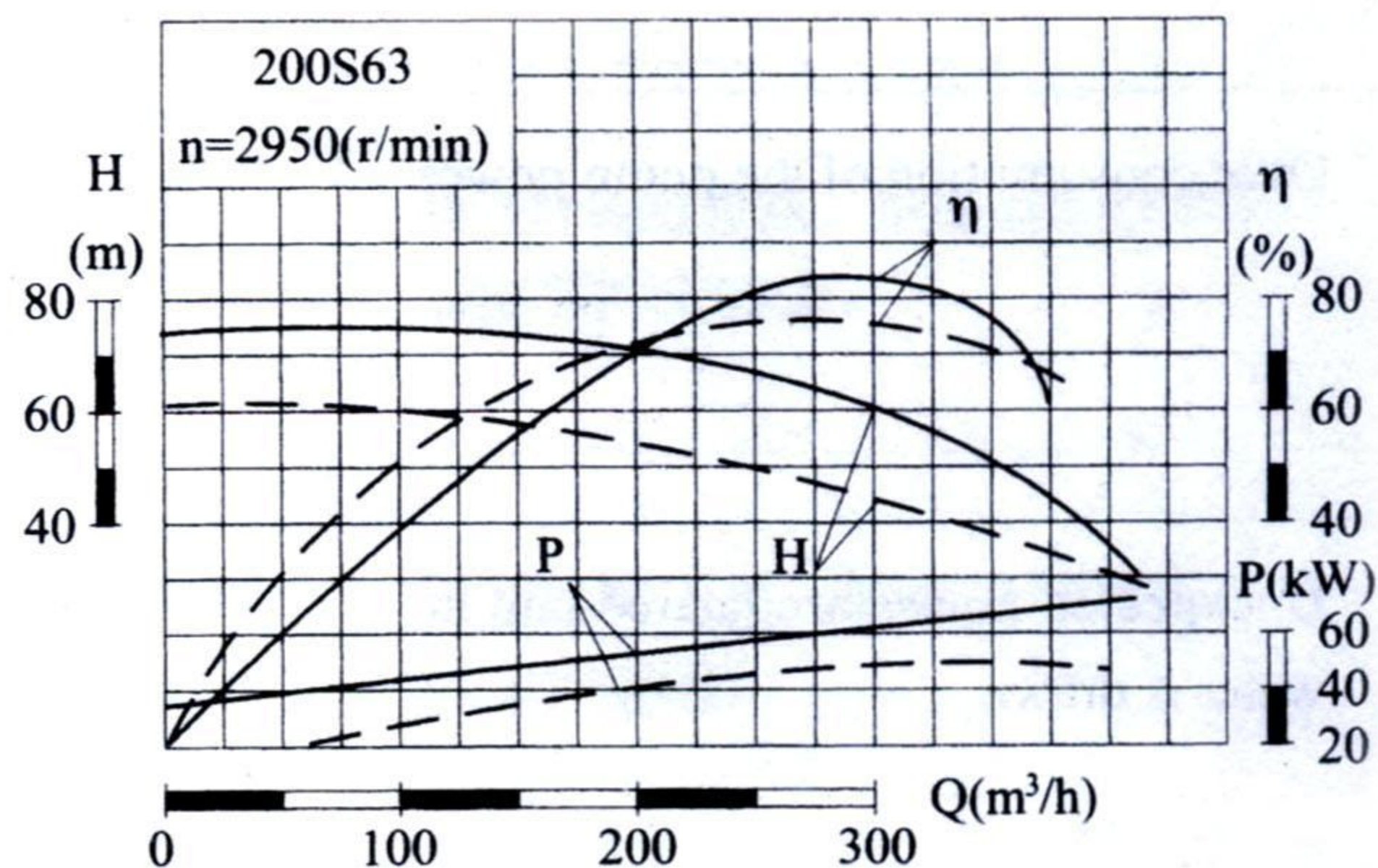
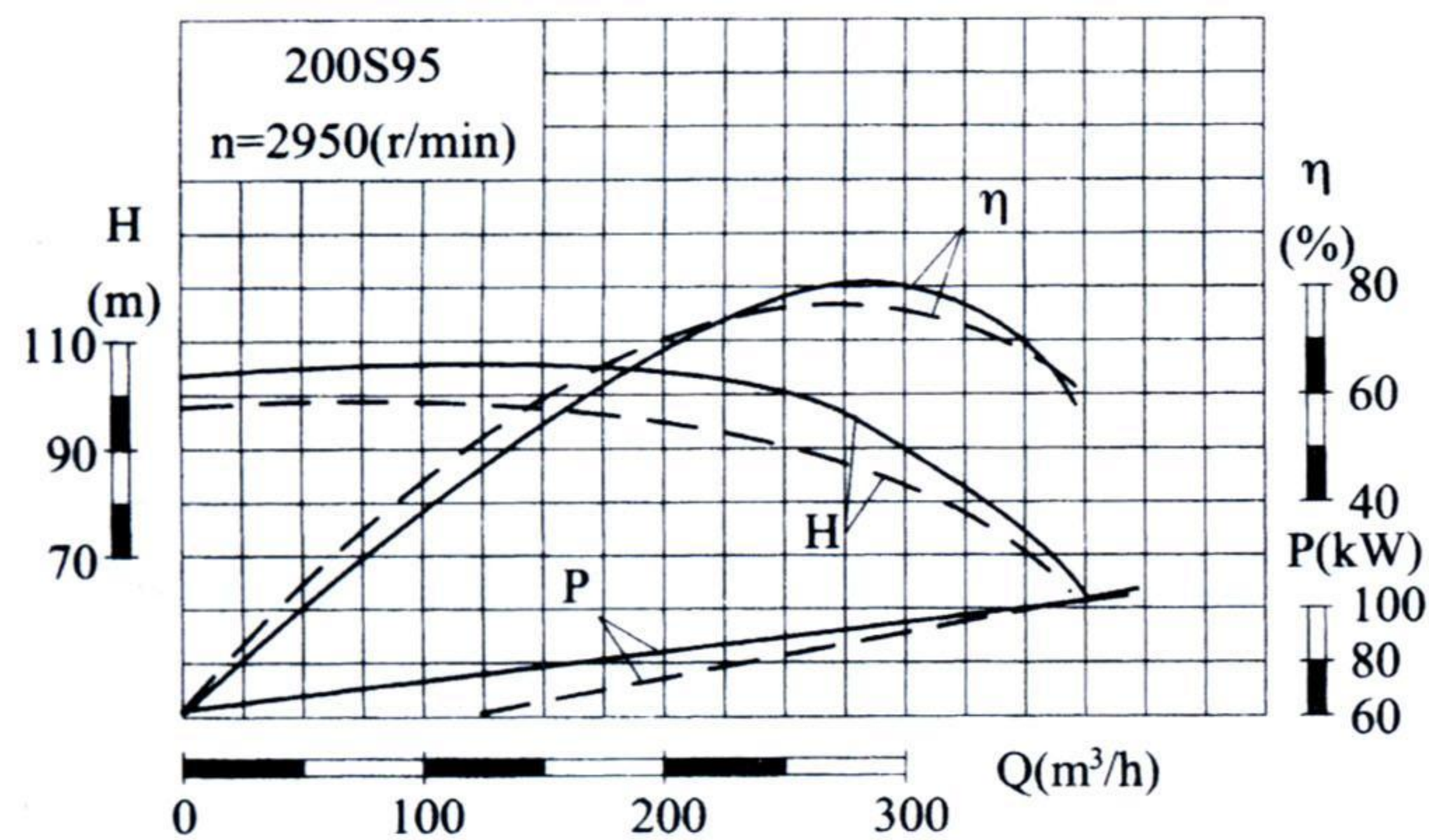
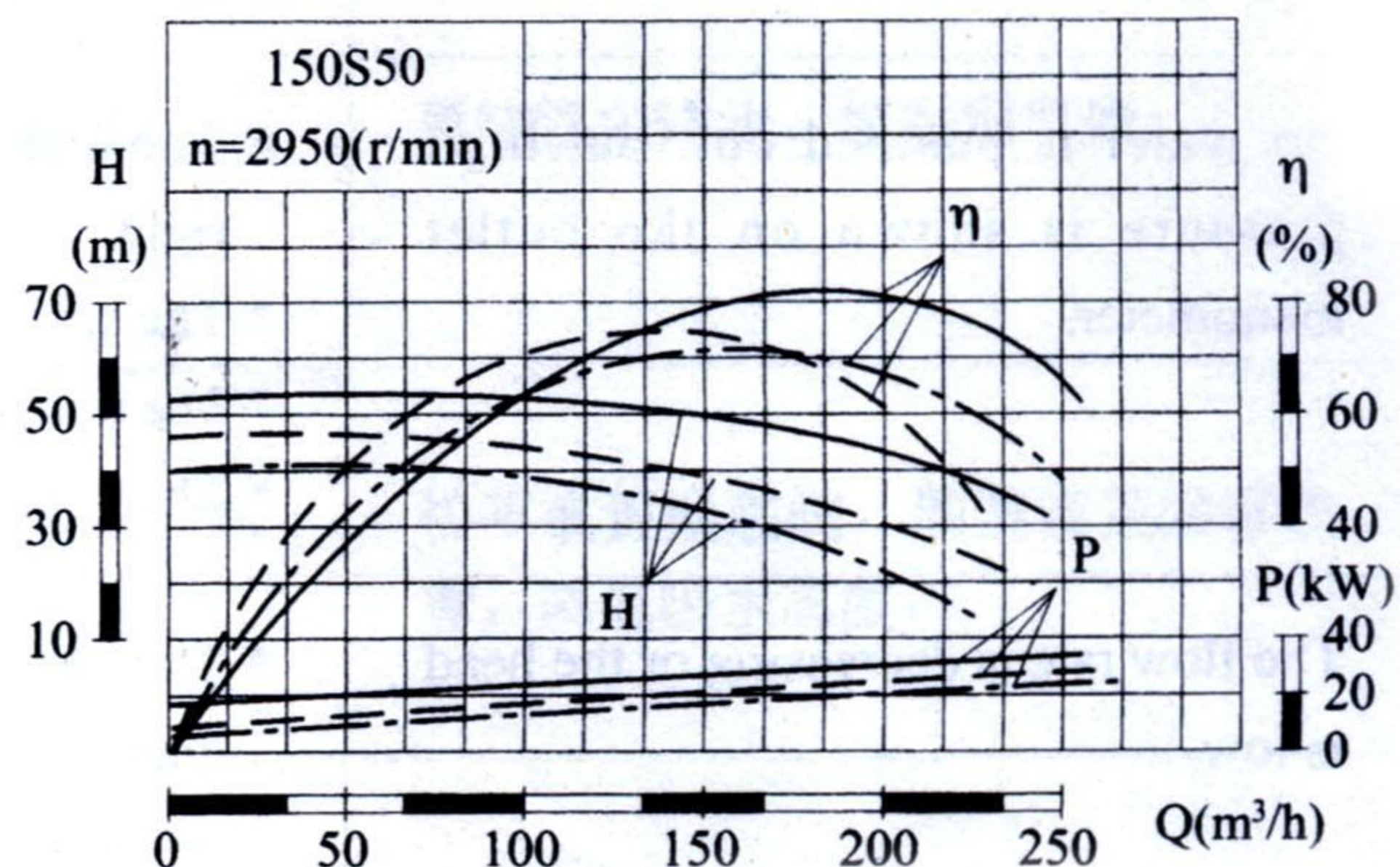
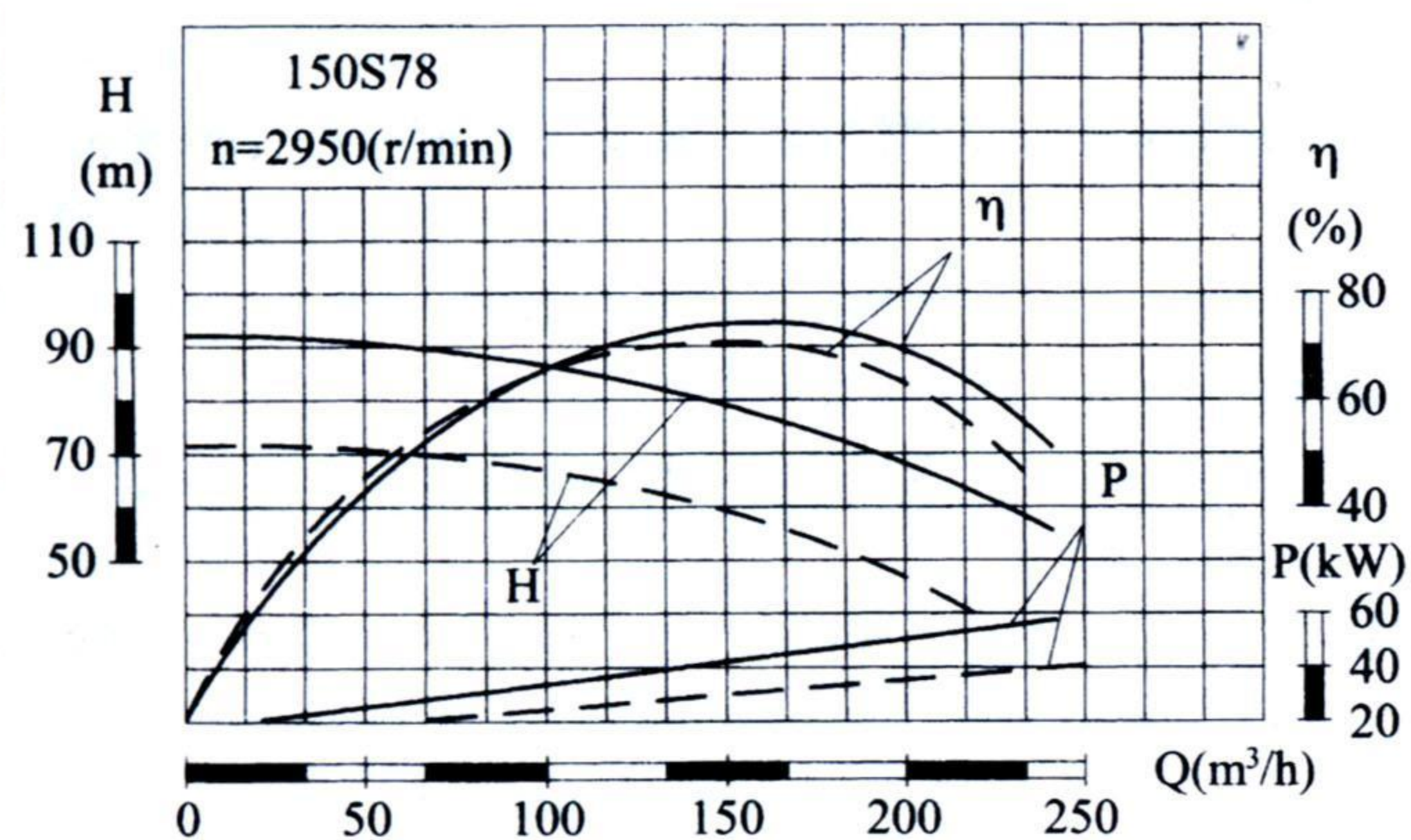
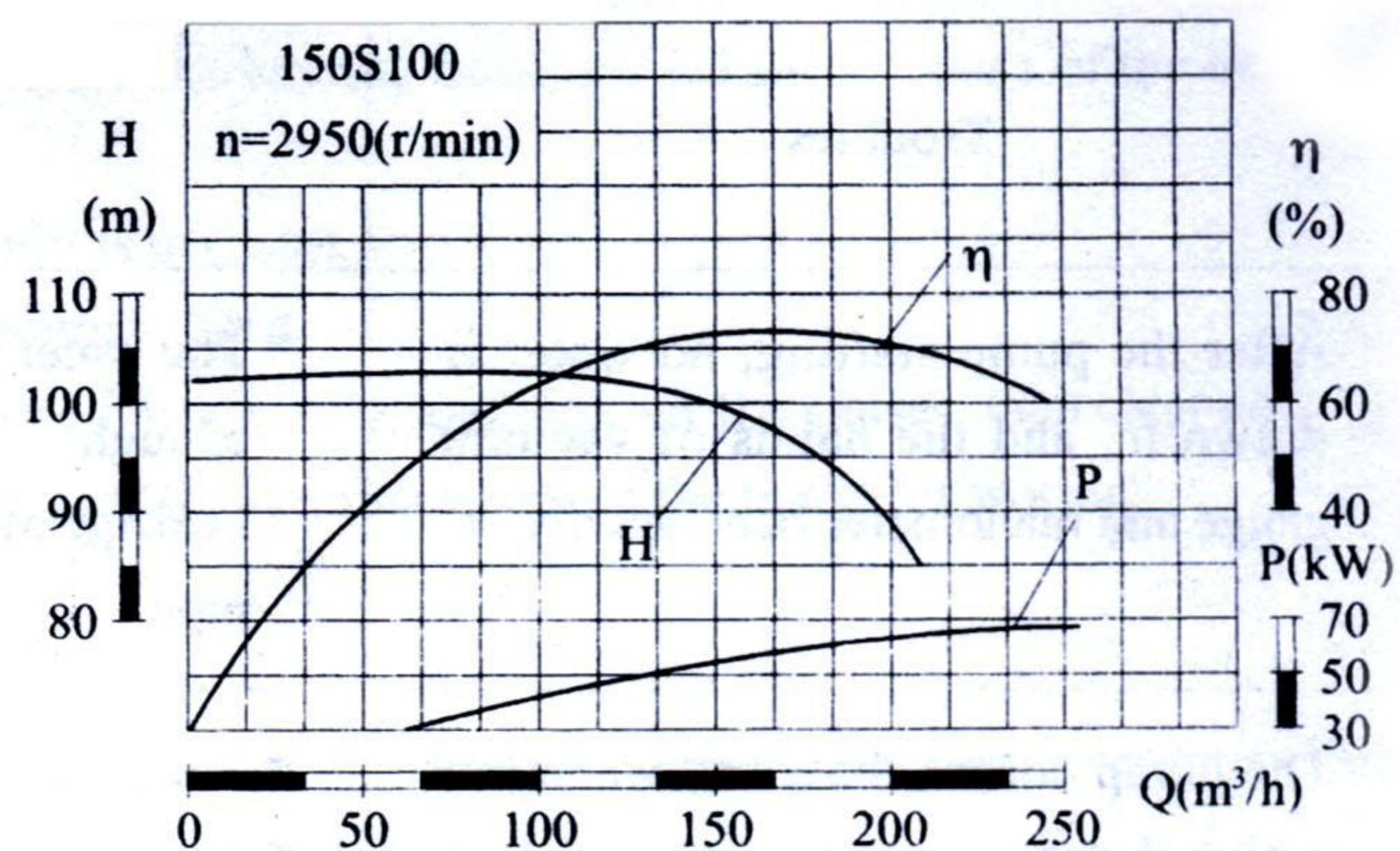
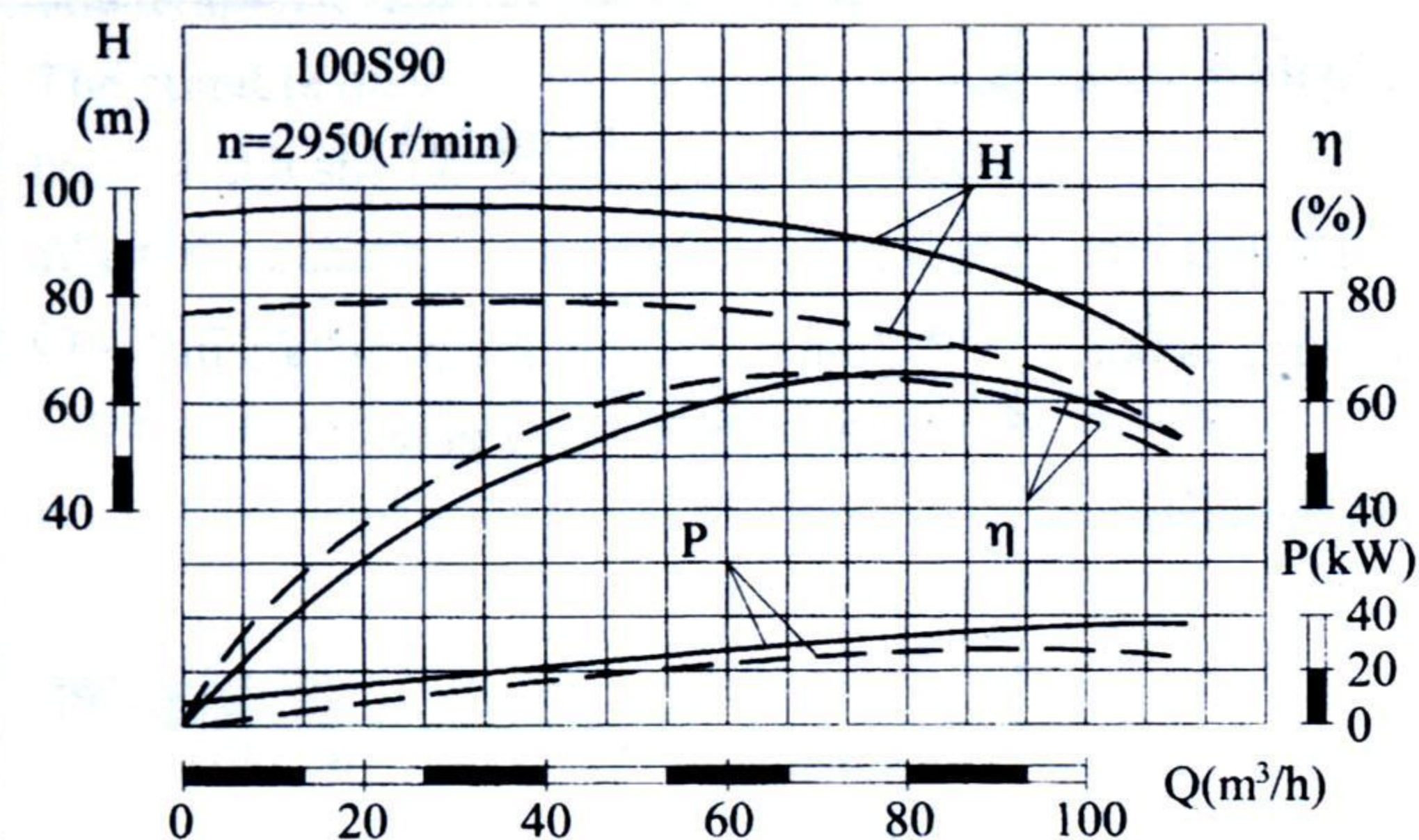
故障及消除方法

故 障	原 因	消 除 方 法
1. 泵不出水，压力表及真空表指针剧烈跳动。	注入泵的水不够，进水管漏气。	再往泵内注水，堵塞漏气处。
2. 泵不吸水，但真空表显示高度真空。	底阀没打开或淤塞，吸水管阻力太大，吸水高度太高。	校平或更换底阀，清洗或更换吸水管，降低吸水高度。
3. 泵不出水，压力表显示有压力。	泵轴旋转方向不对，出水管阻力太大，叶轮淤塞，转数不够。	改正转向，检查水管长度或淤塞，清洗叶轮，增加转数。
4. 泵流量减少或扬程下降。	叶轮或管路阻塞，密封环或叶轮严重磨损，转速低于规定值。	清洗叶轮或管路，更换损坏的零件，调整到额定转速。
5. 泵消耗的功率过大。	填料压得太紧，叶轮与双吸密封环磨损，流量过大。	拧松填料压盖，消除机械磨损，关小出水闸阀。
6. 泵内声音反常，吸不上水。	吸水高度过高，吸水管漏气，流量过大，发生汽蚀。	减少吸水高度，堵塞漏气处，调节出水闸阀在规定工况用。
7. 泵振动厉害。	泵发生汽蚀，叶轮不平衡，泵与电机不同心，地脚螺栓松动。	消除汽蚀，叶轮校平衡，校泵与电机的同轴度，拧紧地脚螺栓。
8. 轴承过热。	润滑油不足或过多，或变质，泵与电机轴不同心。	检查油量，清洗轴承并换油，校泵轴与电机的同轴度。

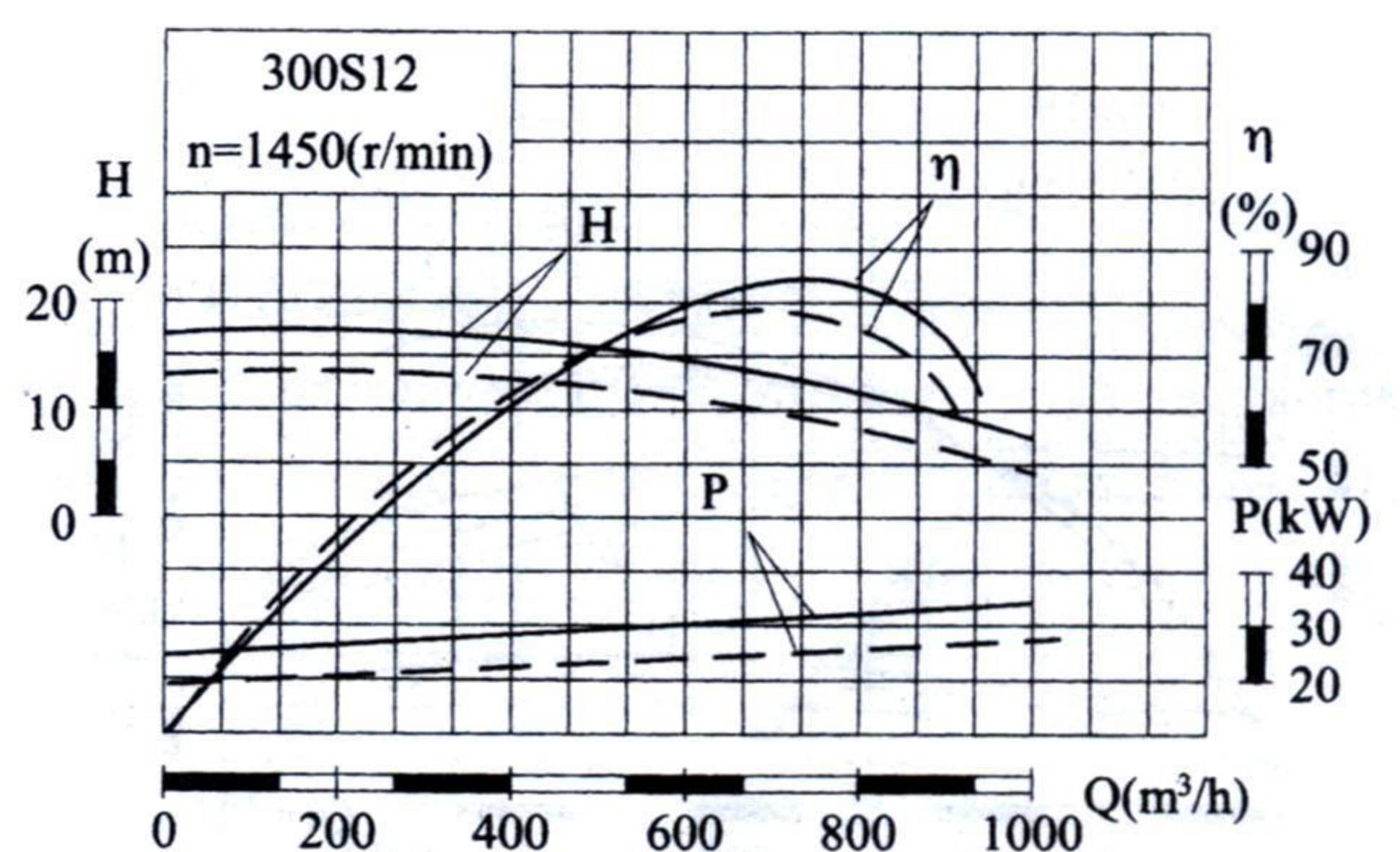
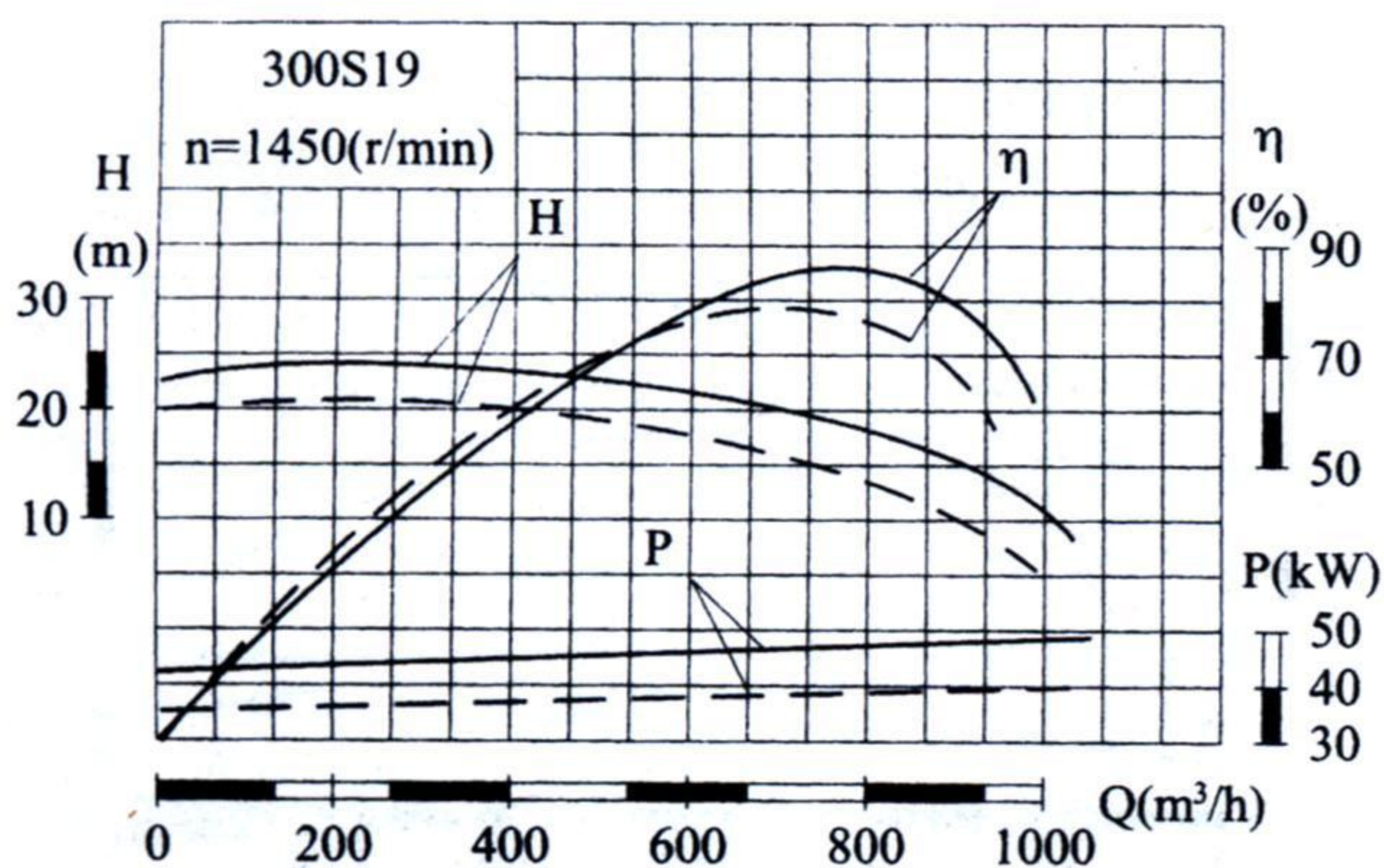
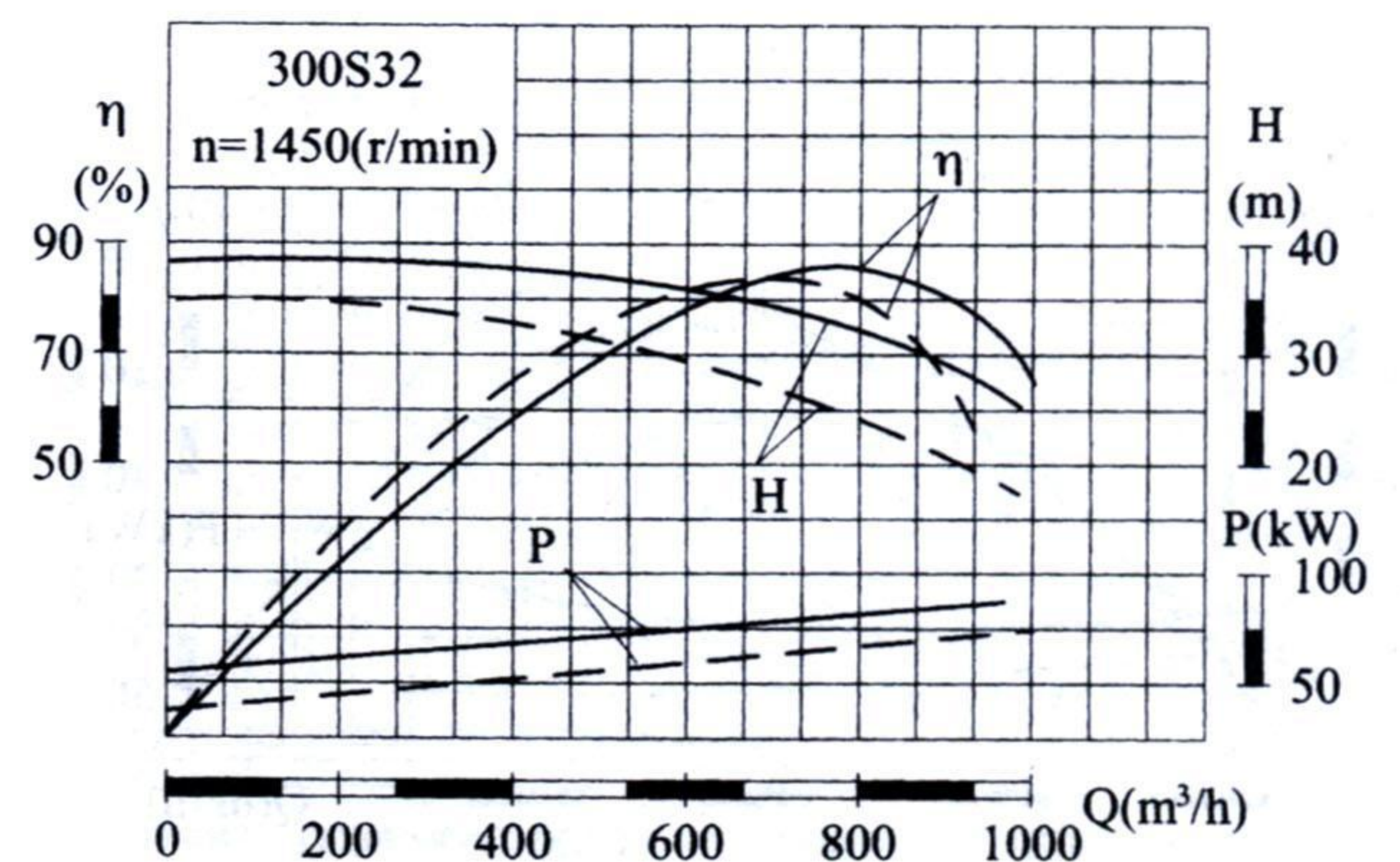
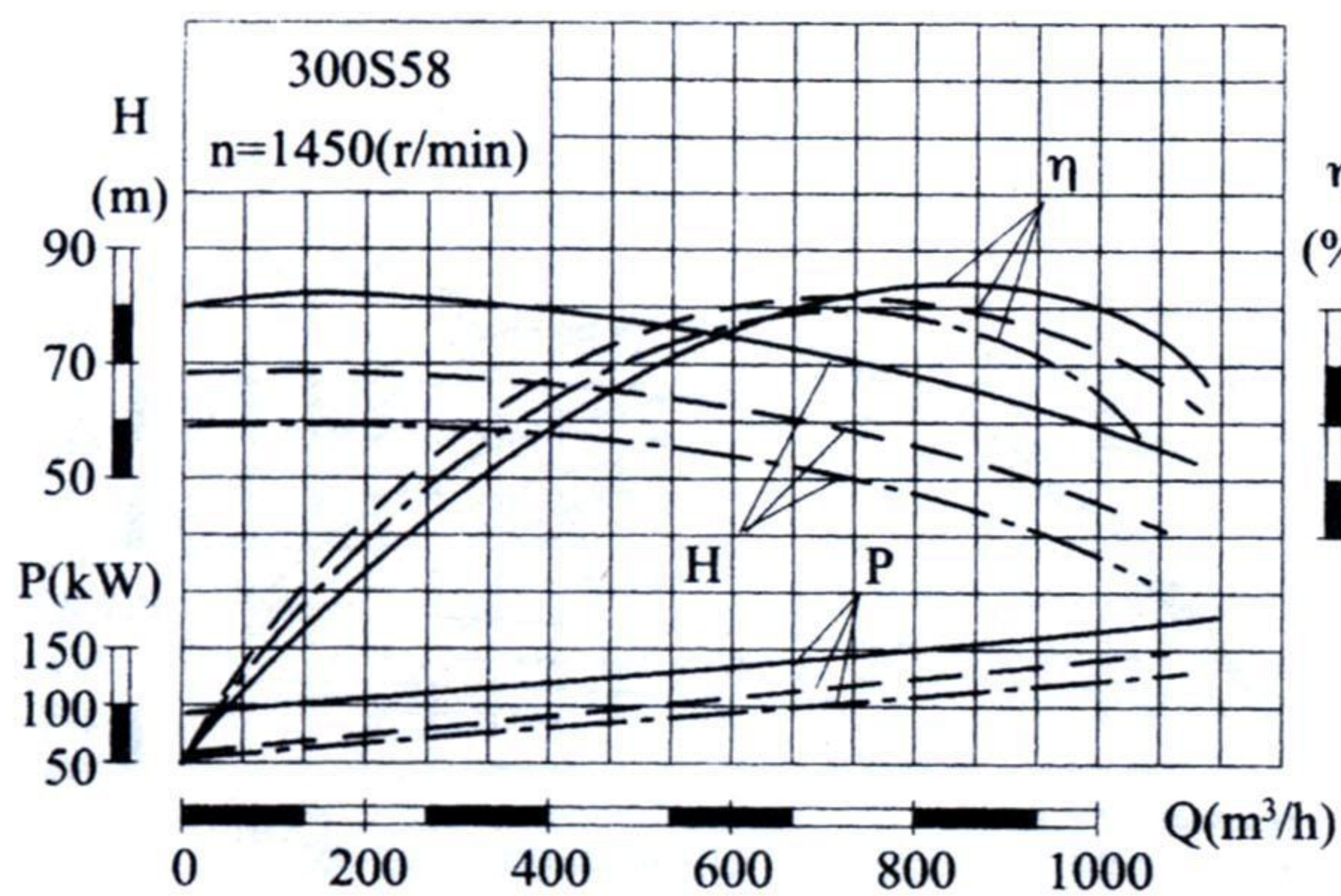
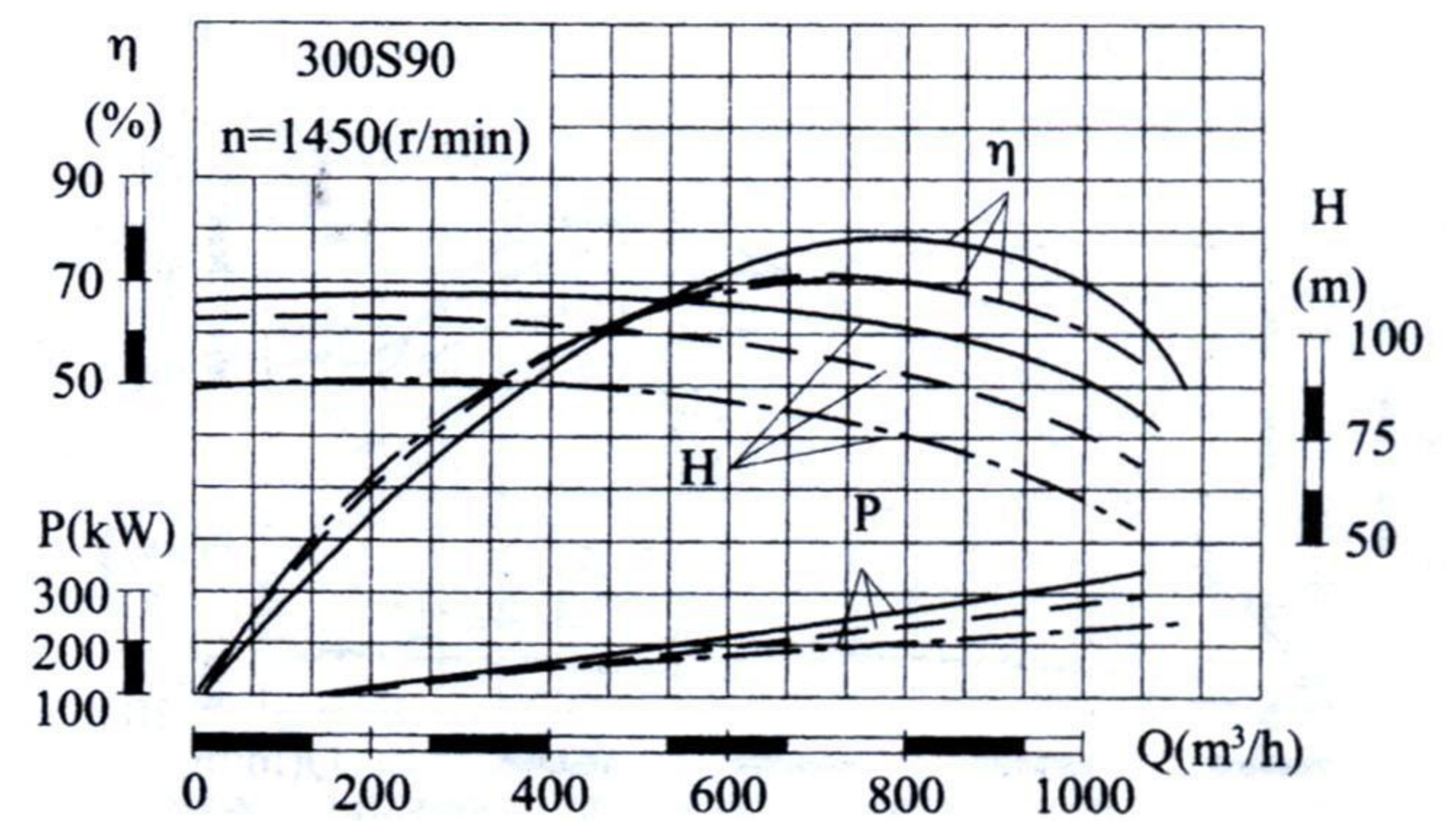
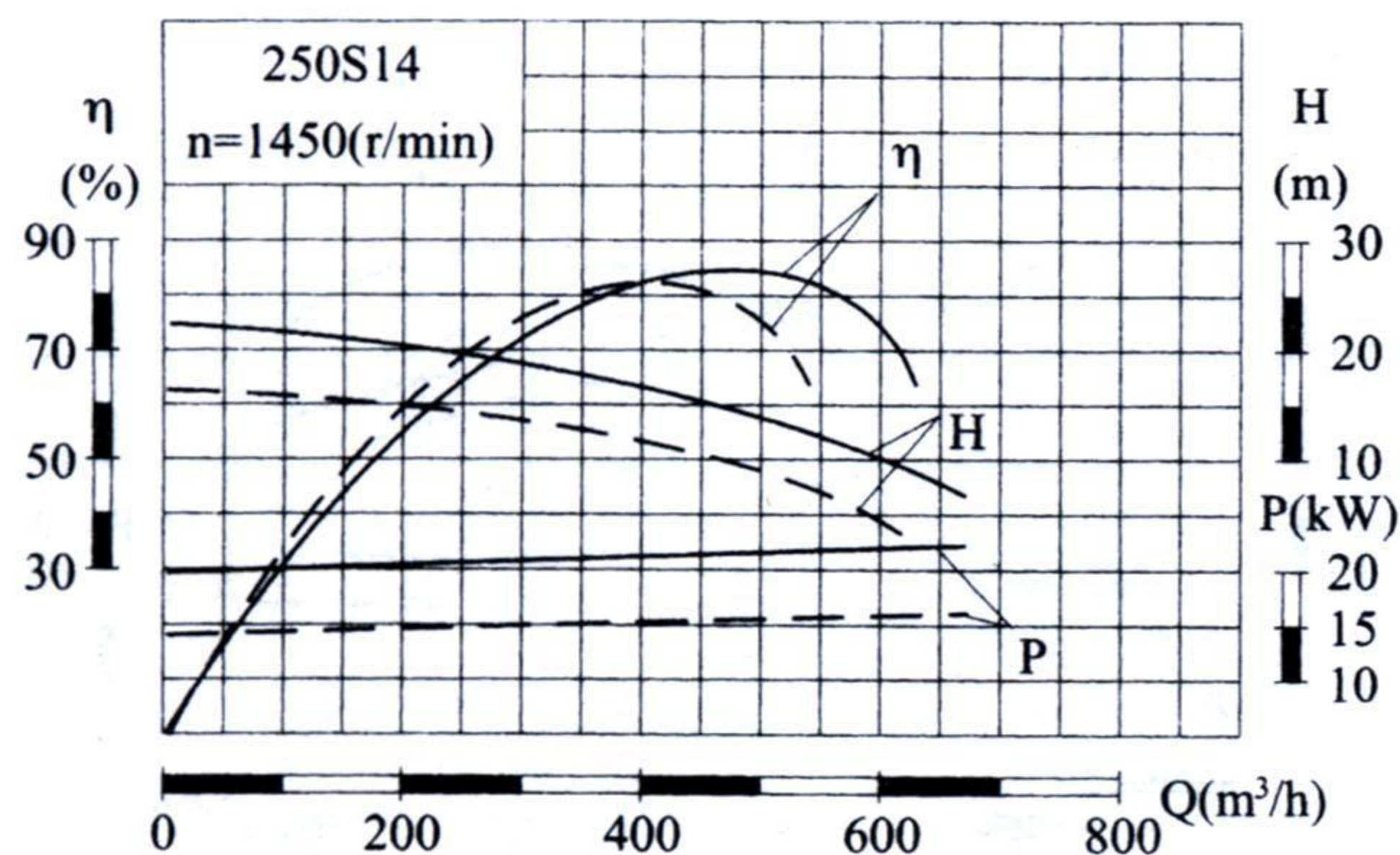
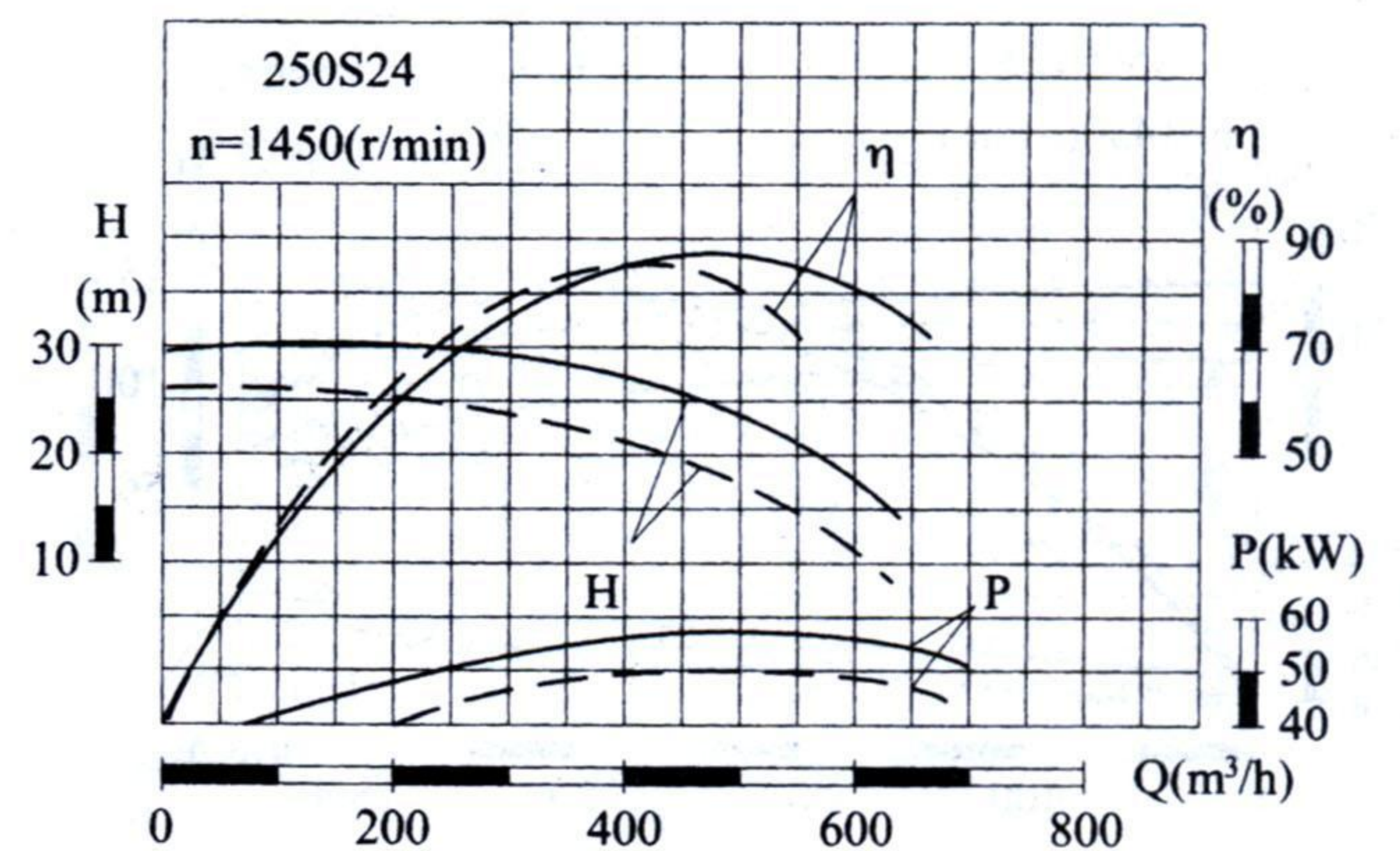
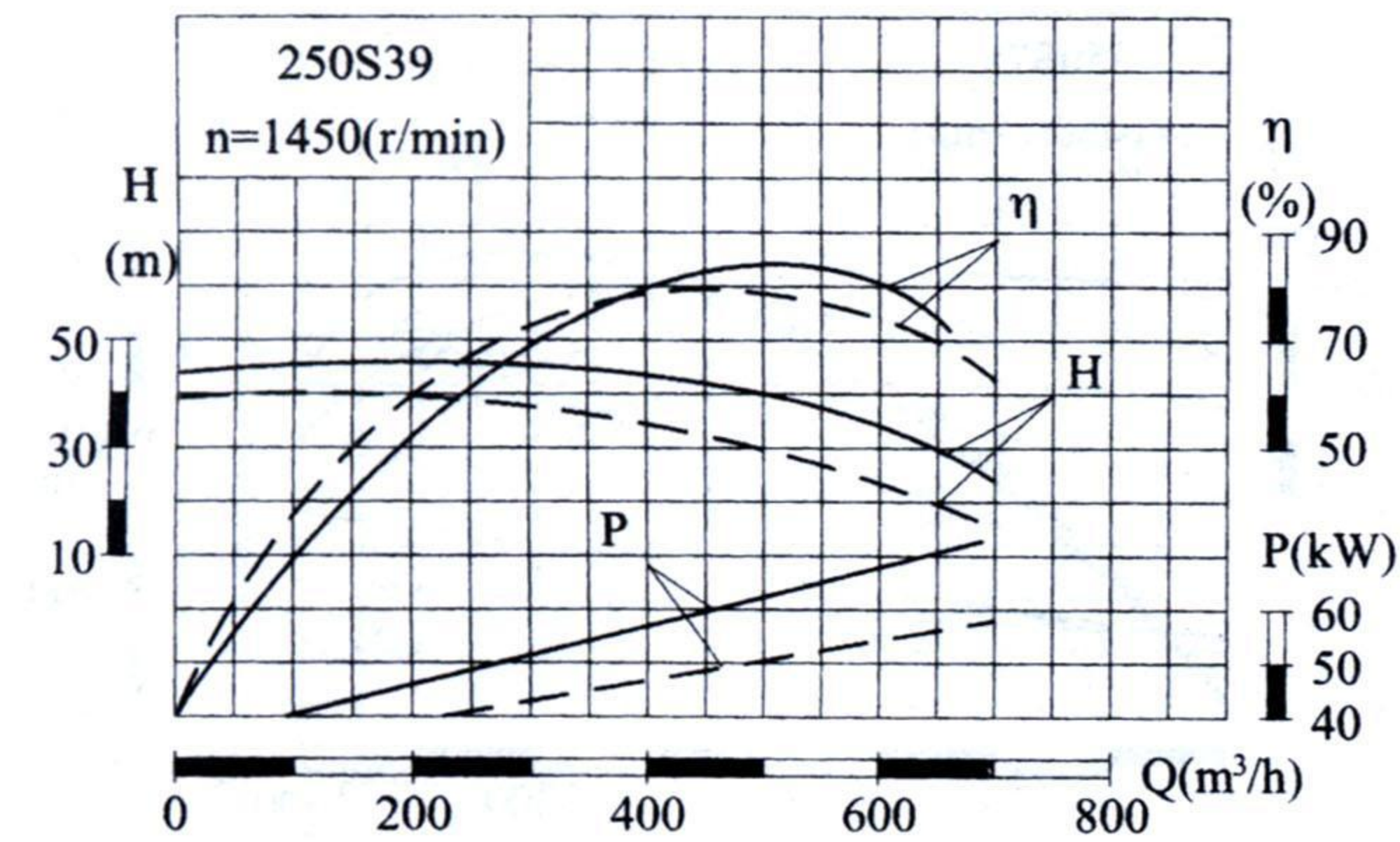
Possible Troubles & Remedies

Troubles	Causes	Remedies
After the pump starting, no water is drawn in, and the hands of vacuum gauge and manometer beat heavily.	* The water poured in the pump is not enough. * Leakage of air found from the suction pipe.	* Pour water into the pump again. * Block the leaking place.
The pump doesn't draw any water but a high degree vacuum is indicated on the vacuum gauge.	* The foot valve is not opened. * The resistance of suction is too high. * The suction head is too high. * The revolution is not enough.	* Correct or renew the foot valves. * Clean or renew the suction pipe. * Make the suction head lower.
No water is pumped out, but high pressure is shown on the outlet manometer.	* The direction of the rotation is not right. * The suction resistance is too high. * The impeller flow passage is clogged. * The revolutions is not enough.	* Change the direction of the rotation. * Check the length of the pipe. * Whether it clogged. * Clean the impeller. * Increase the revolutions.
The flow rate is decreasing or the head is low.	* The impeller flow passage or (inlet pipe and outlet pipe) in-out-let pipes are clogged. * The seal ring or the impeller is out worn. The running speed of the pump is lower than the rated.	* Clean the impeller and the pipe passage way. * Renew the worn parts. * Increase the revolutions.
Over consumption of the pump power.	* Packing is too tight and the impeller is rubbed by double suction seal ring. * The flow rate is too large.	* Loosen the packing gland. * Clear out the mechanic friction. * Turn the discharge valve brake smaller.
Unexpected noises are heard and no water is drawn.	* The suction resistance is too high. * The suction head is too high. * Leakage of air found from the suction pipe. * Error is found.	* Check the pipe and the foot valve. * Make the suction head lower. * Block the leaking place. * Adjust the use of discharge brake valve in specific working condition.
The pump vibrates heavily.	* Error is found. * The impeller is not balance. * The pump shaft is not concentric with the motor. * The nuts of foundation are loose.	* Clear out the erosion. * Correct impeller static balance. * Screw the nuts of the foot bolt tightly. * Correct the coaxial degree between pump and motor shaft.
The bearing is overheated.	* The grease is not enough or too much or goes bad. * The pump and the motor shaft is not concentric.	* Clean the bearing and renew the oil. * Correct the pump and the motor shaft coaxial degree.

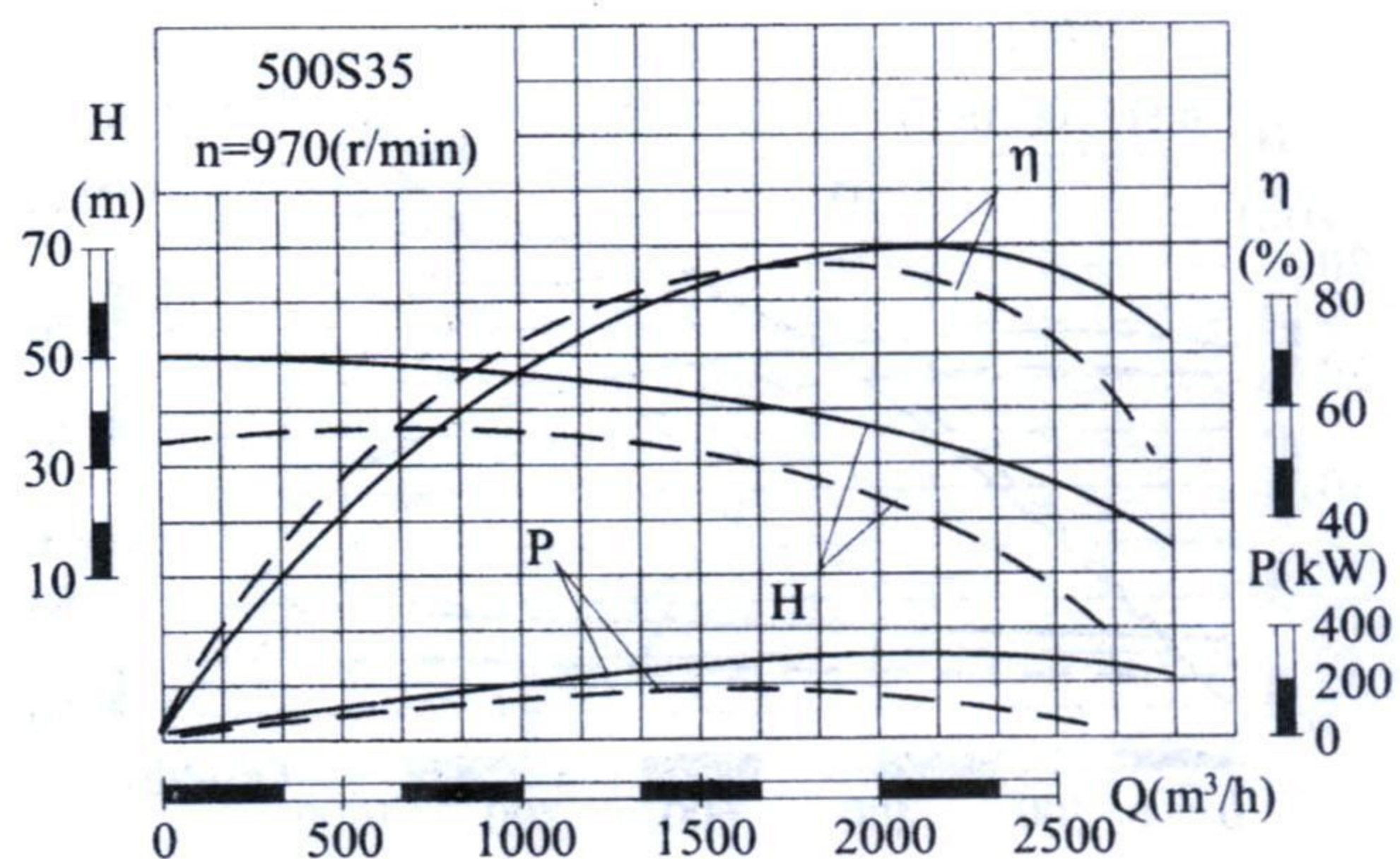
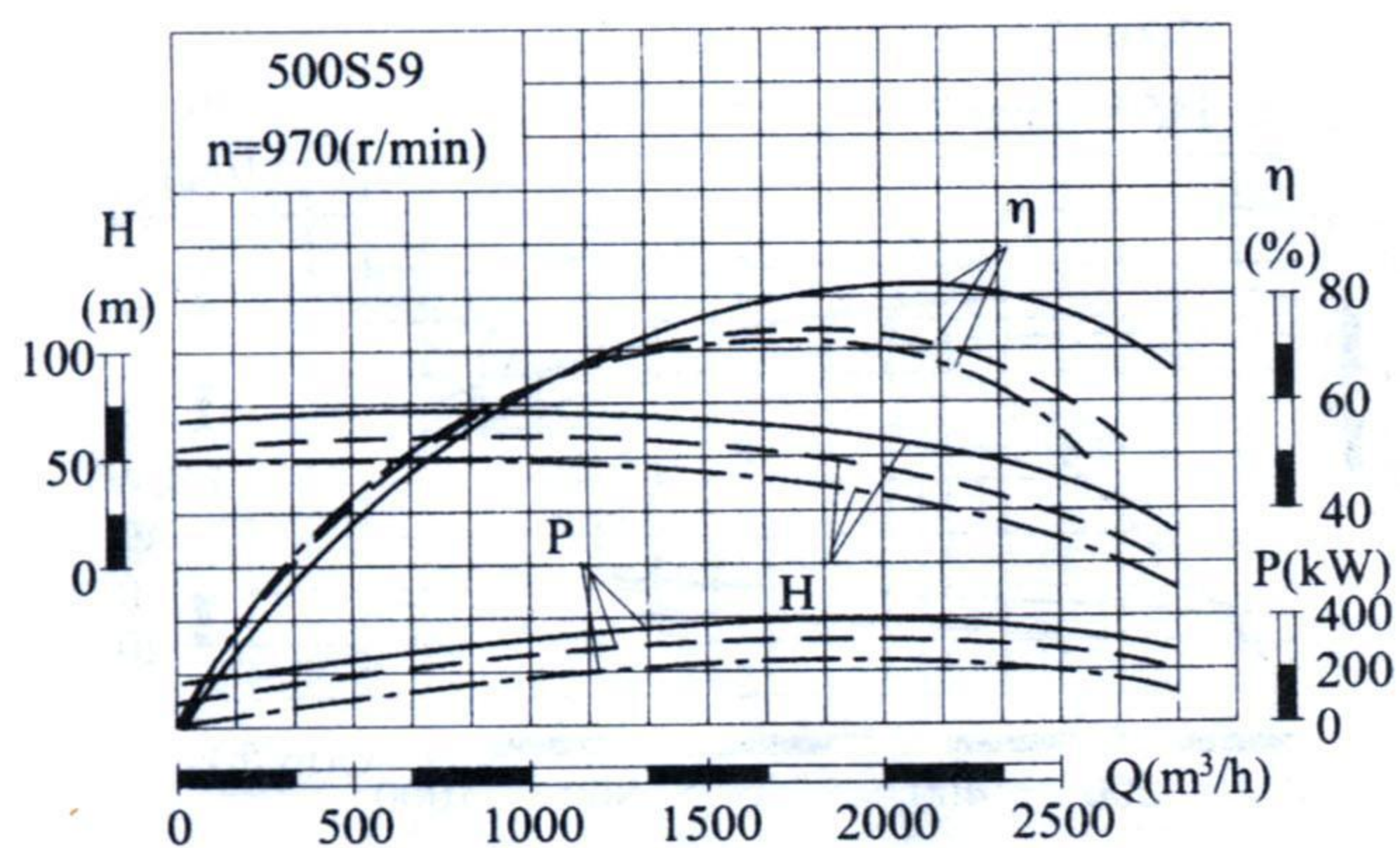
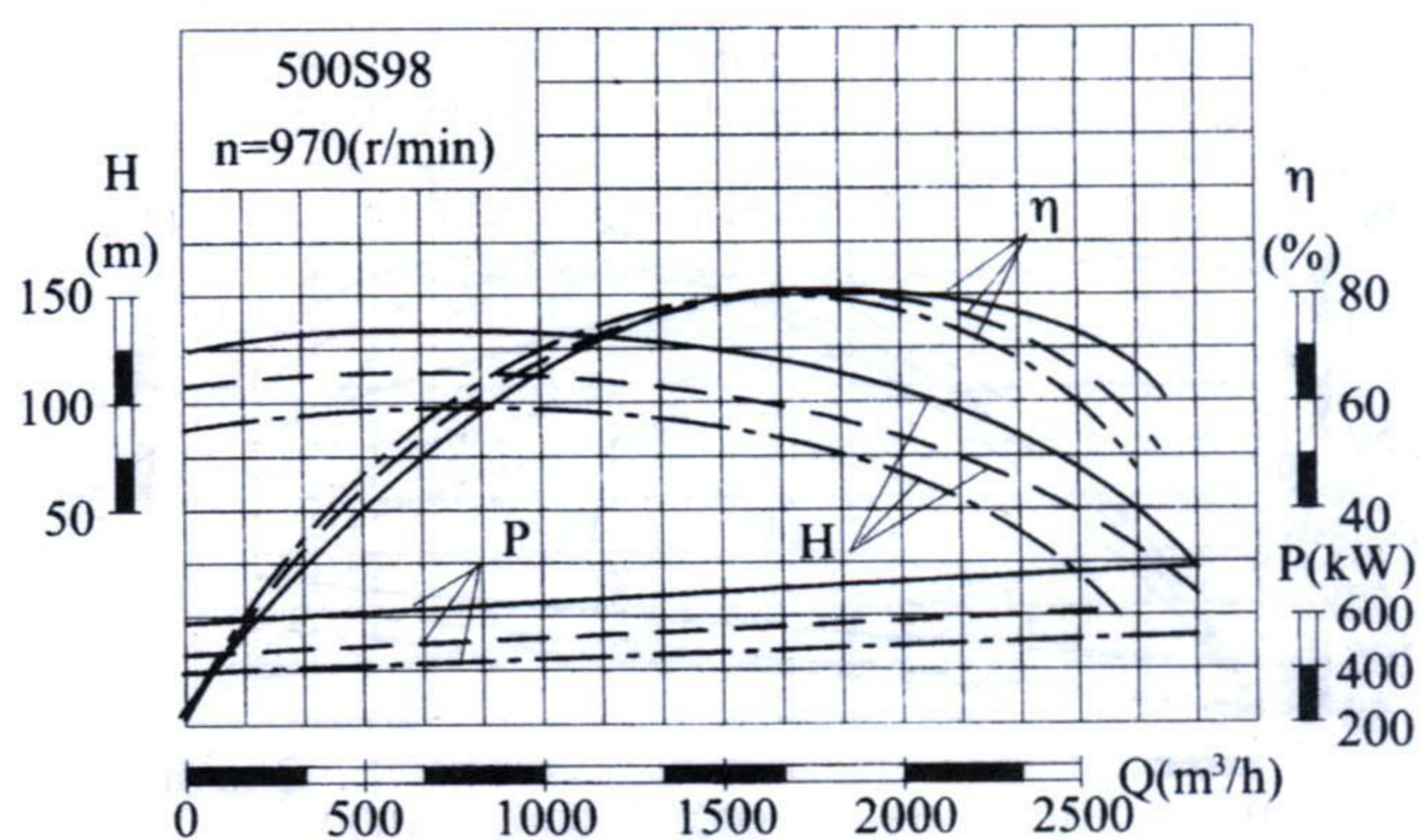
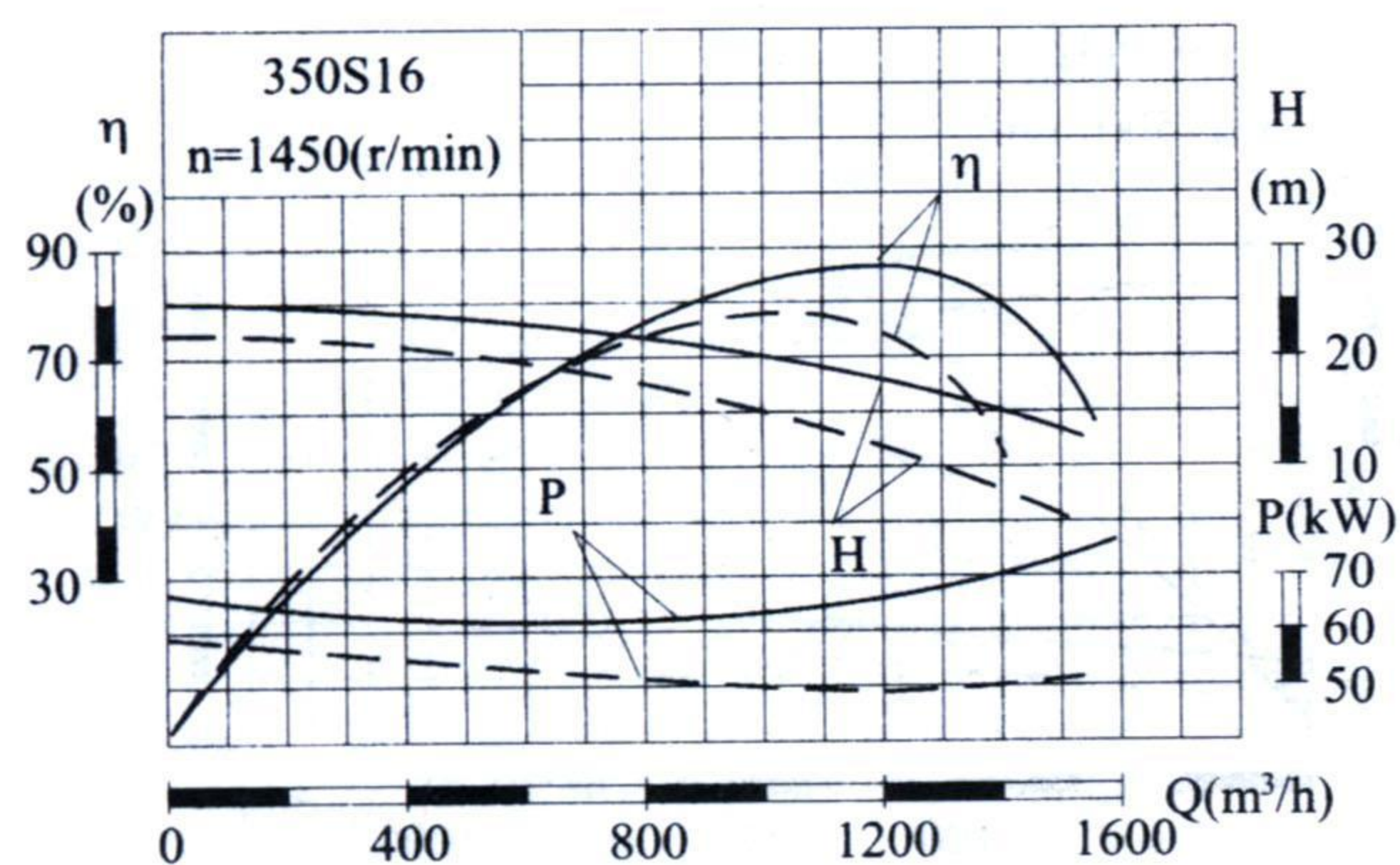
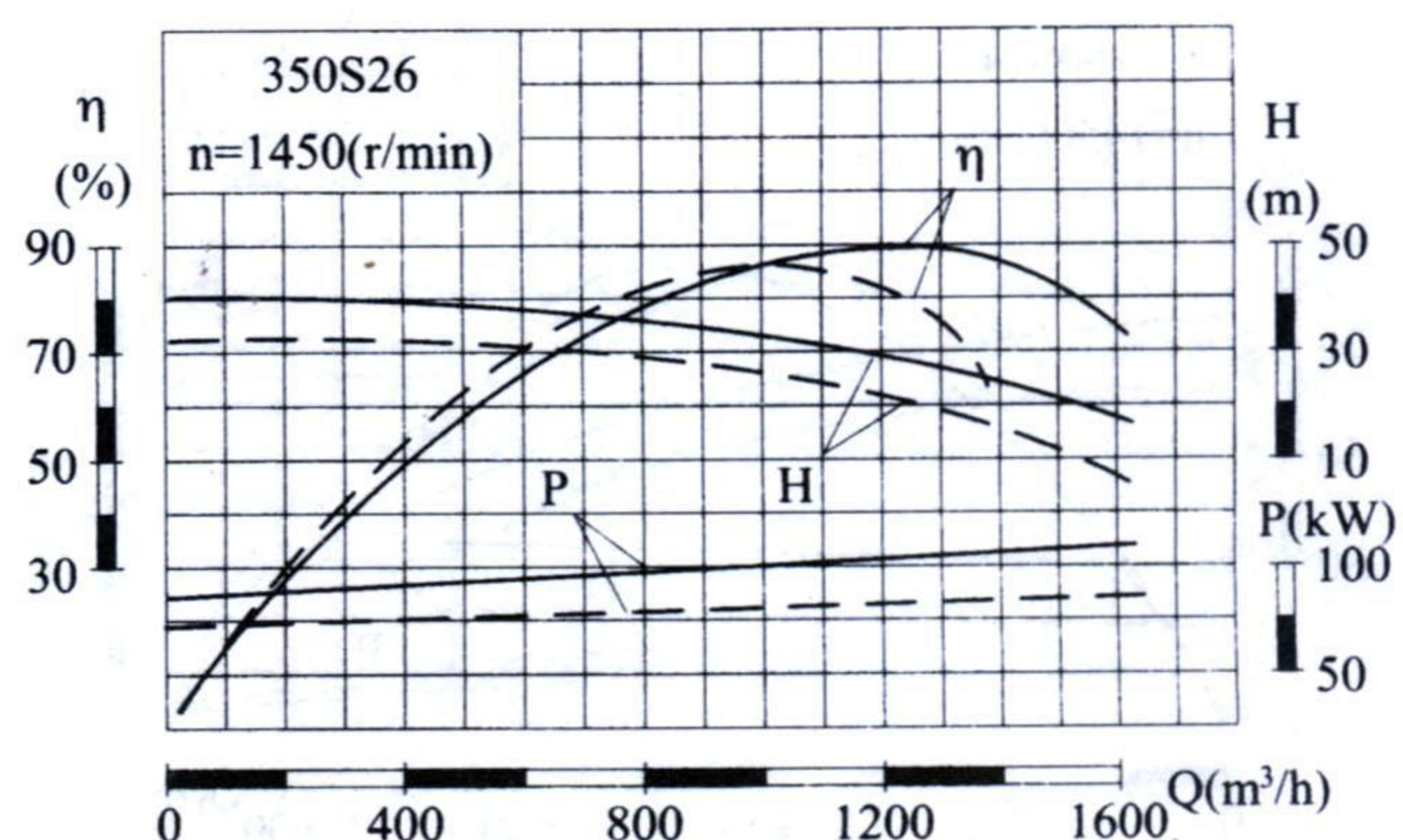
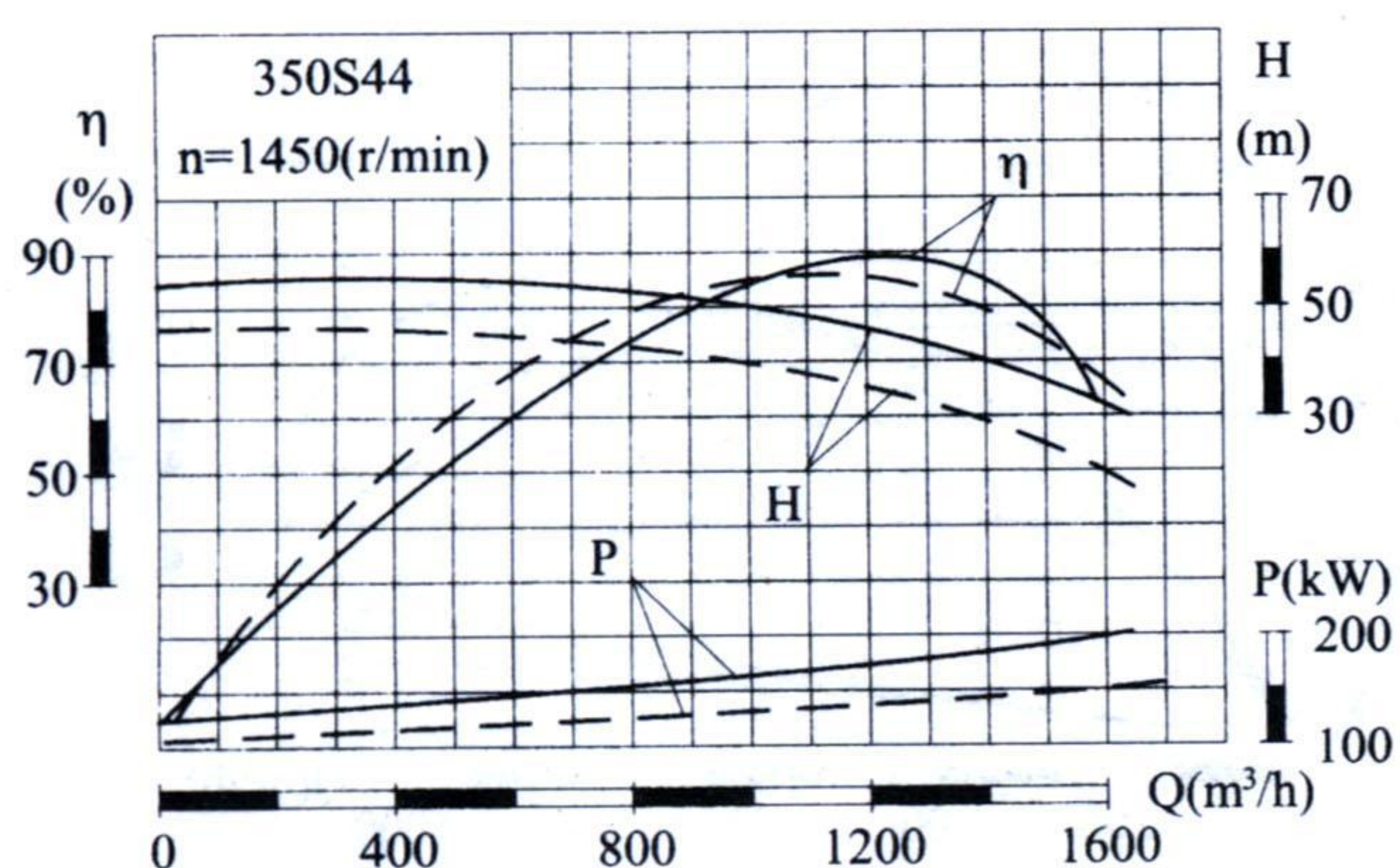
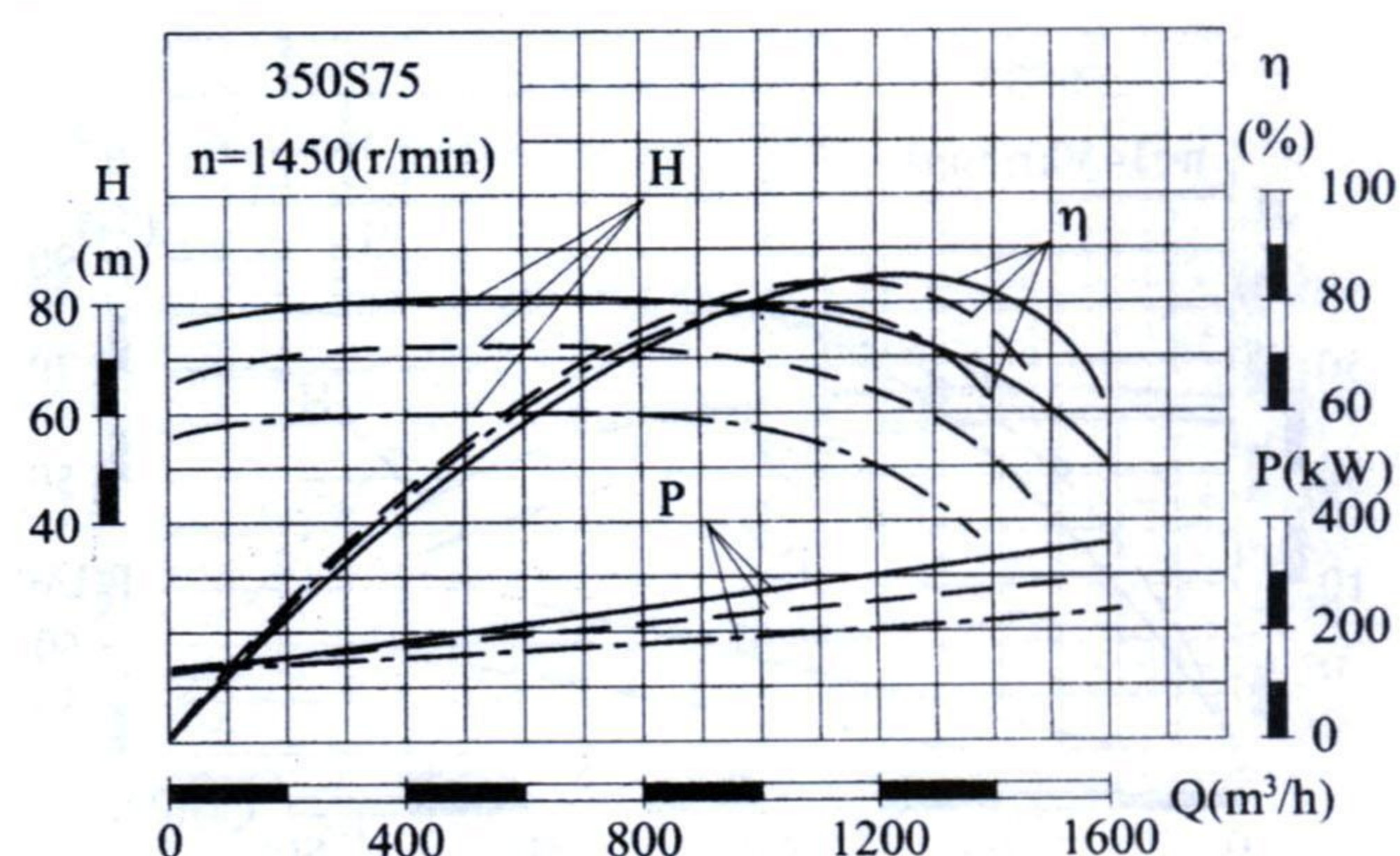
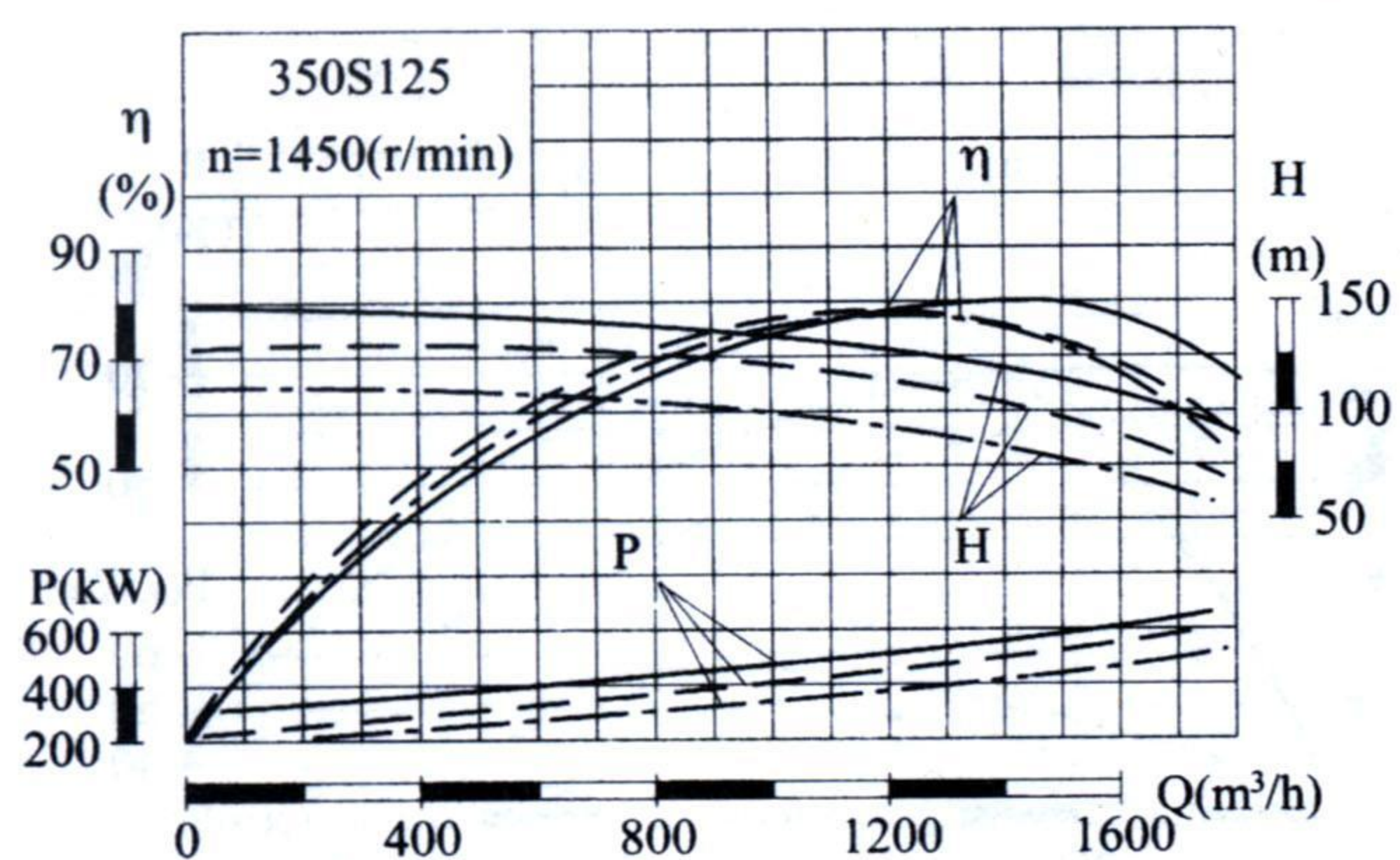
性能曲线图 Performance Curves



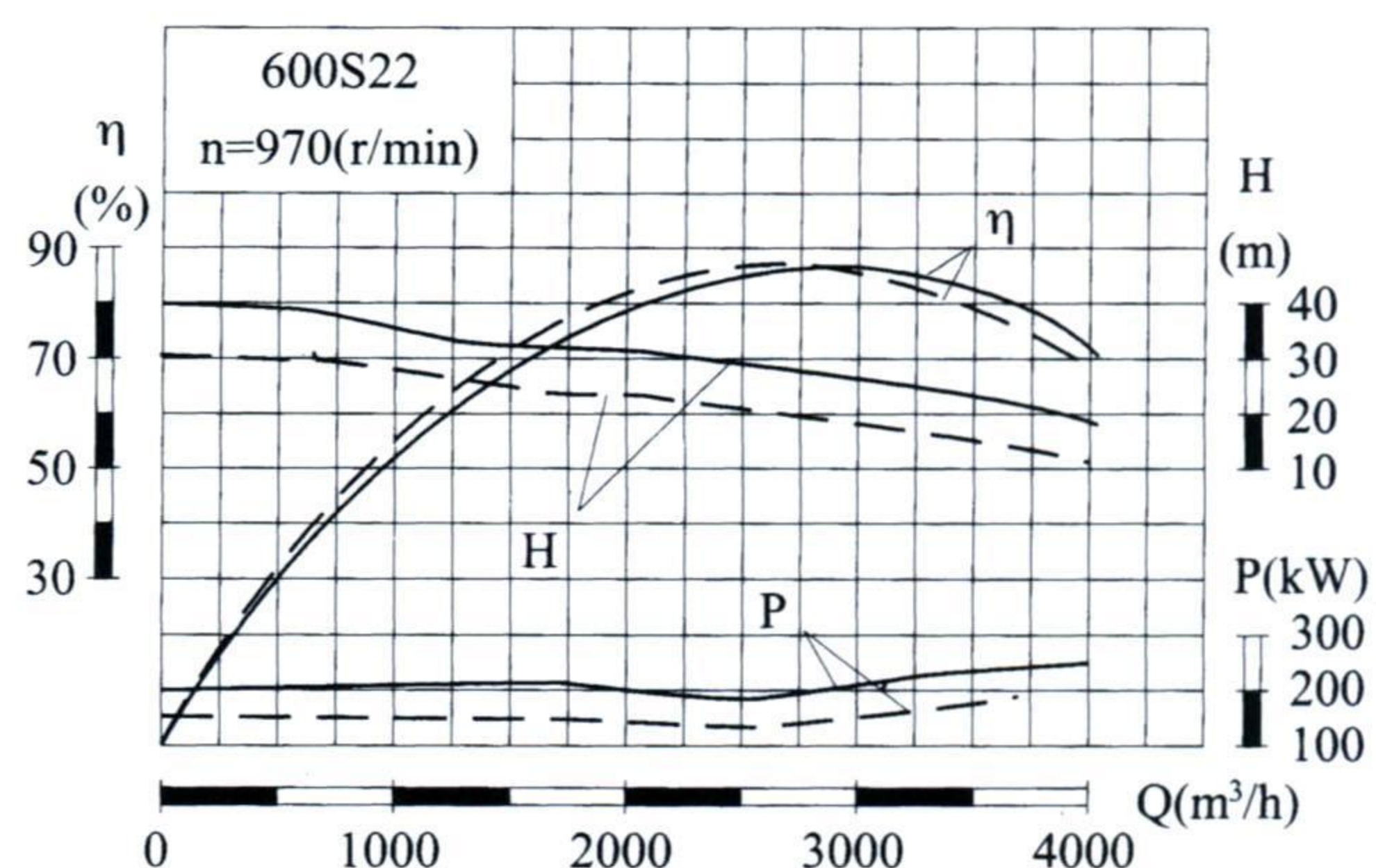
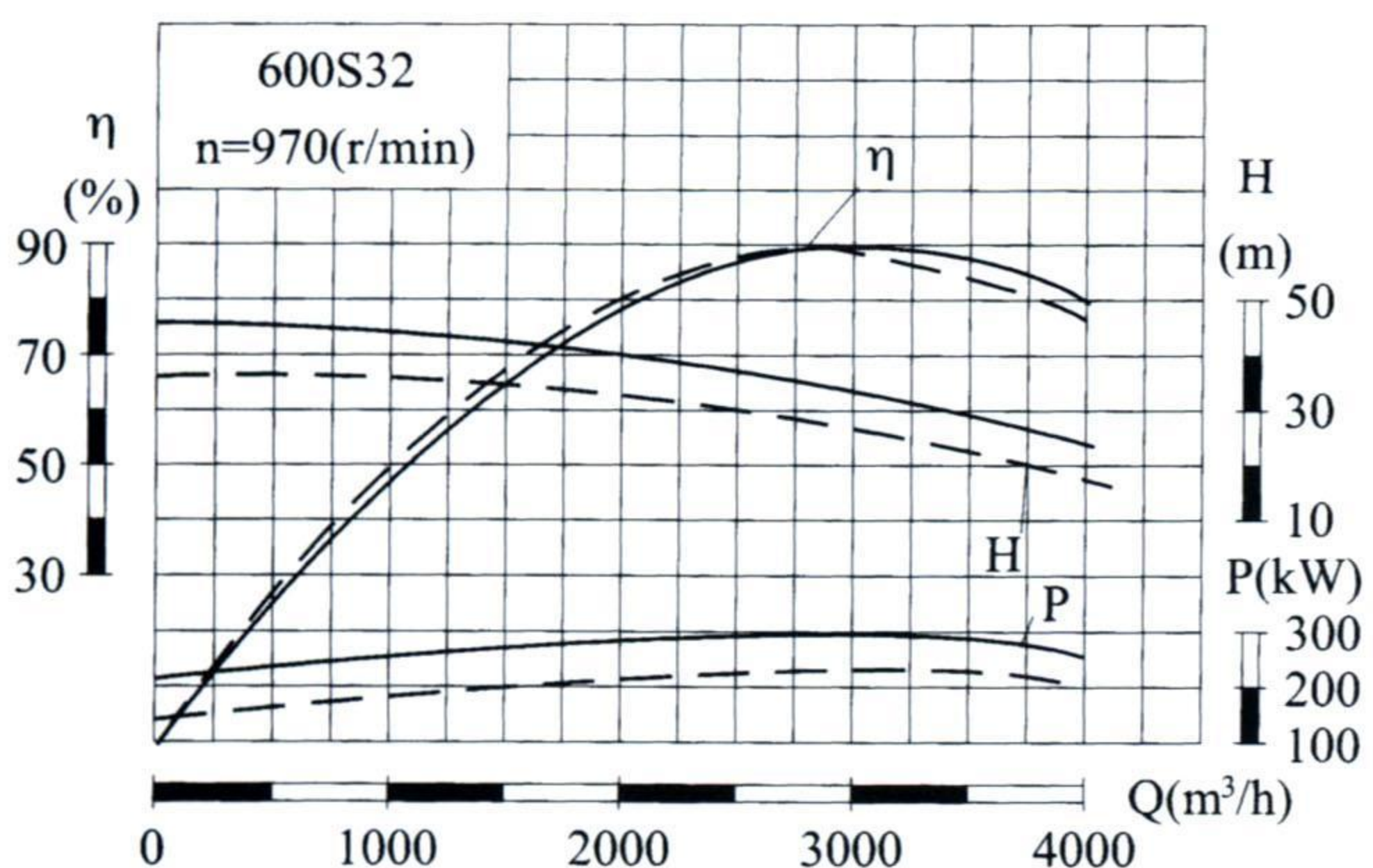
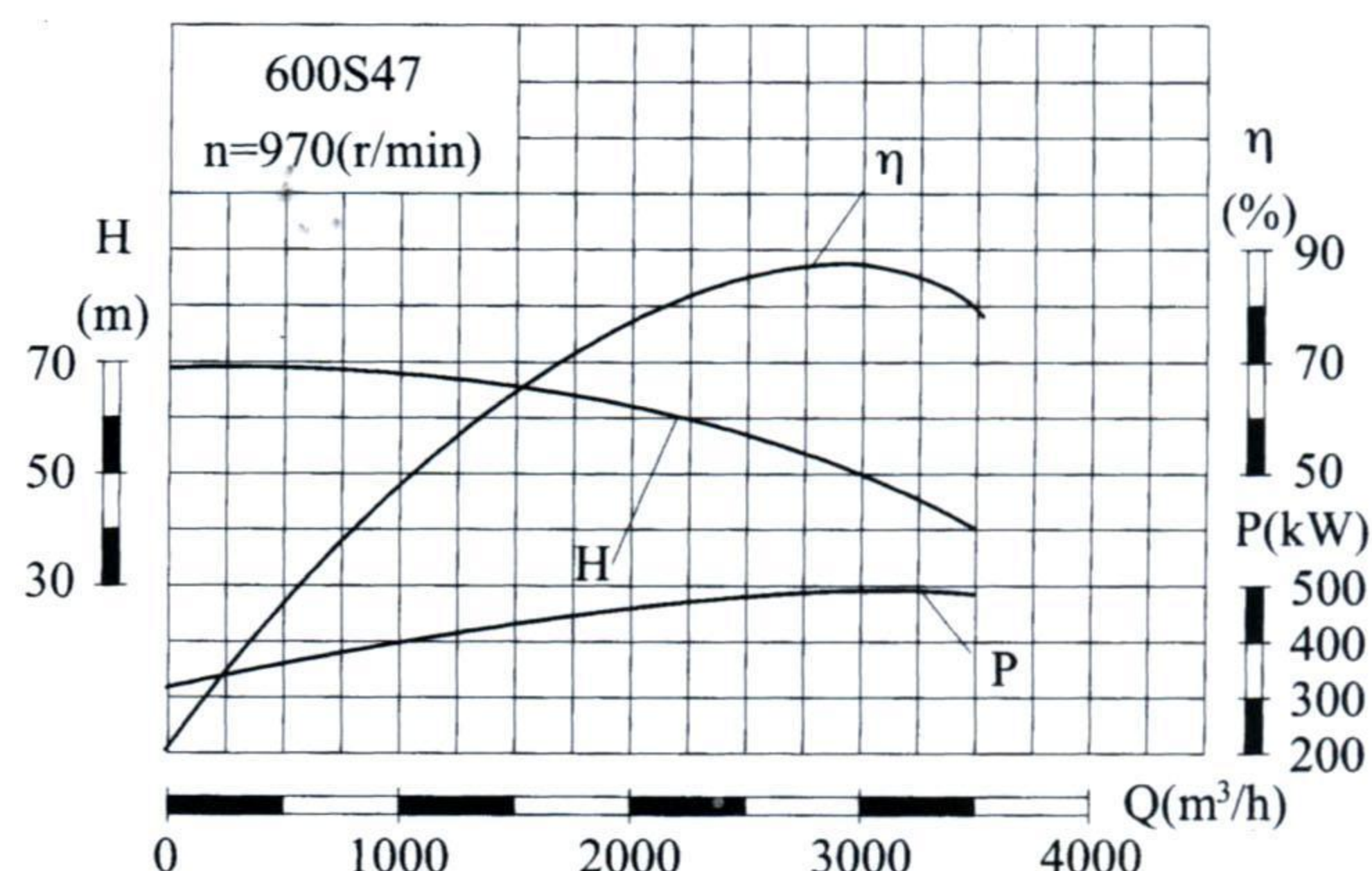
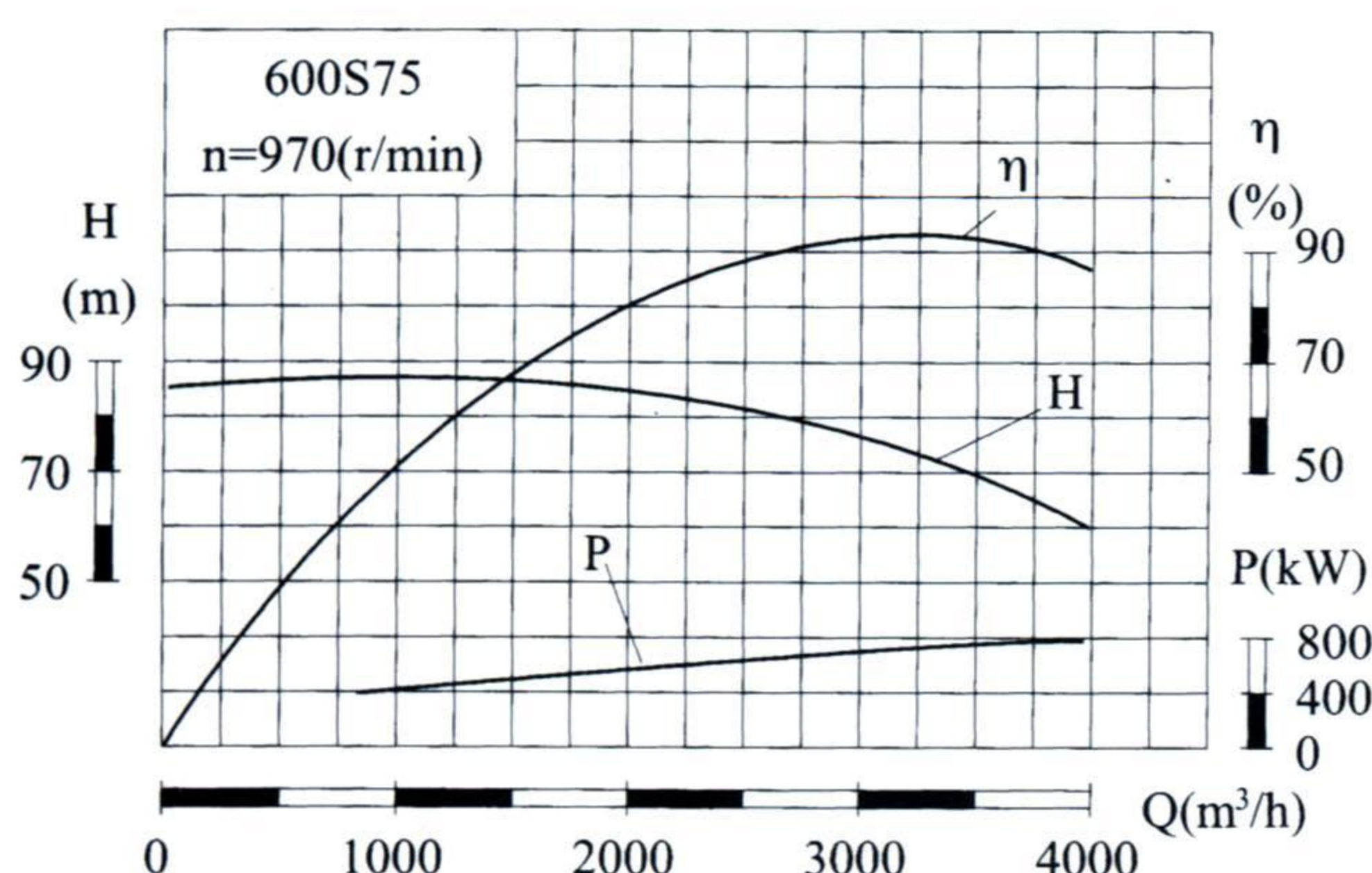
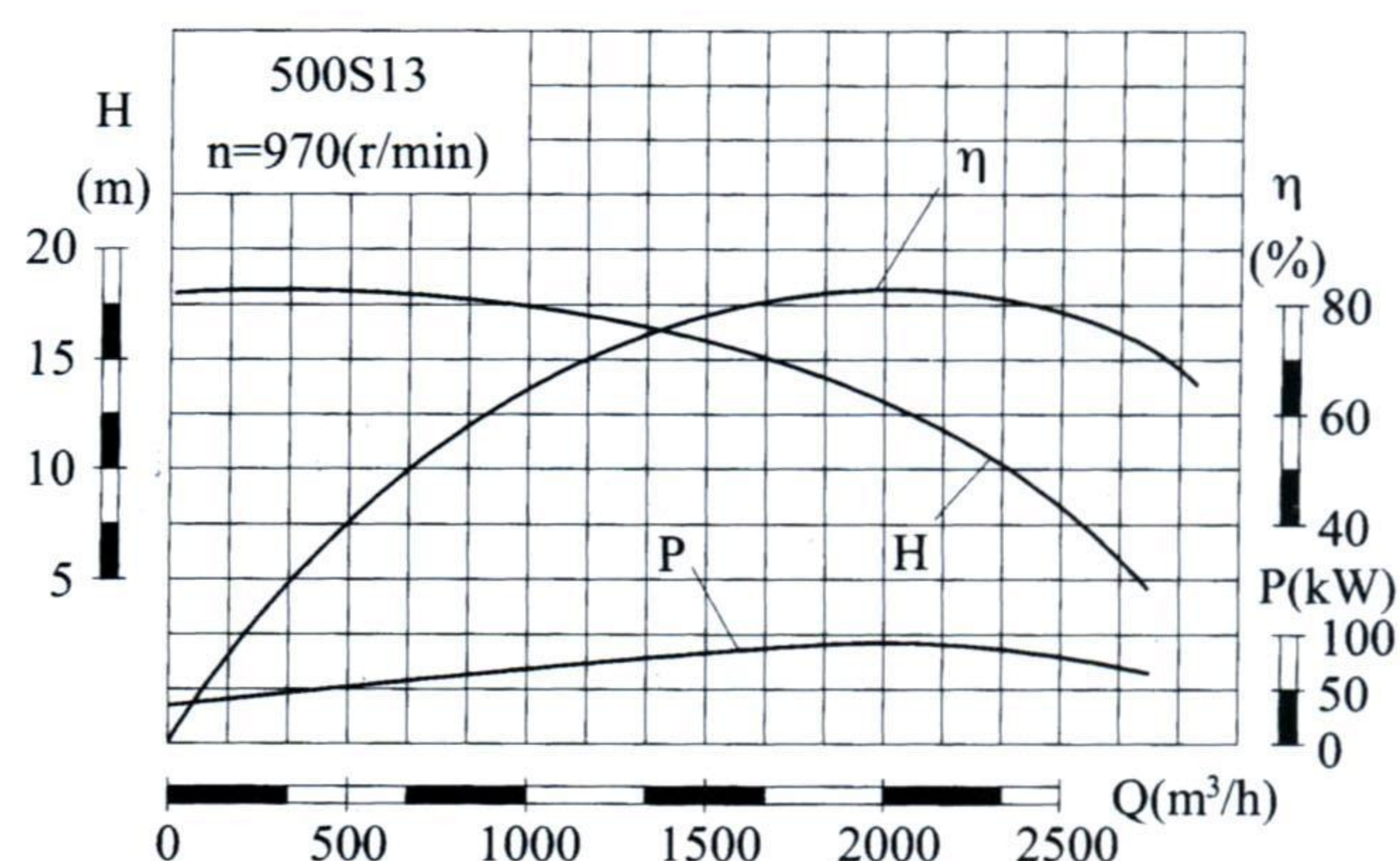
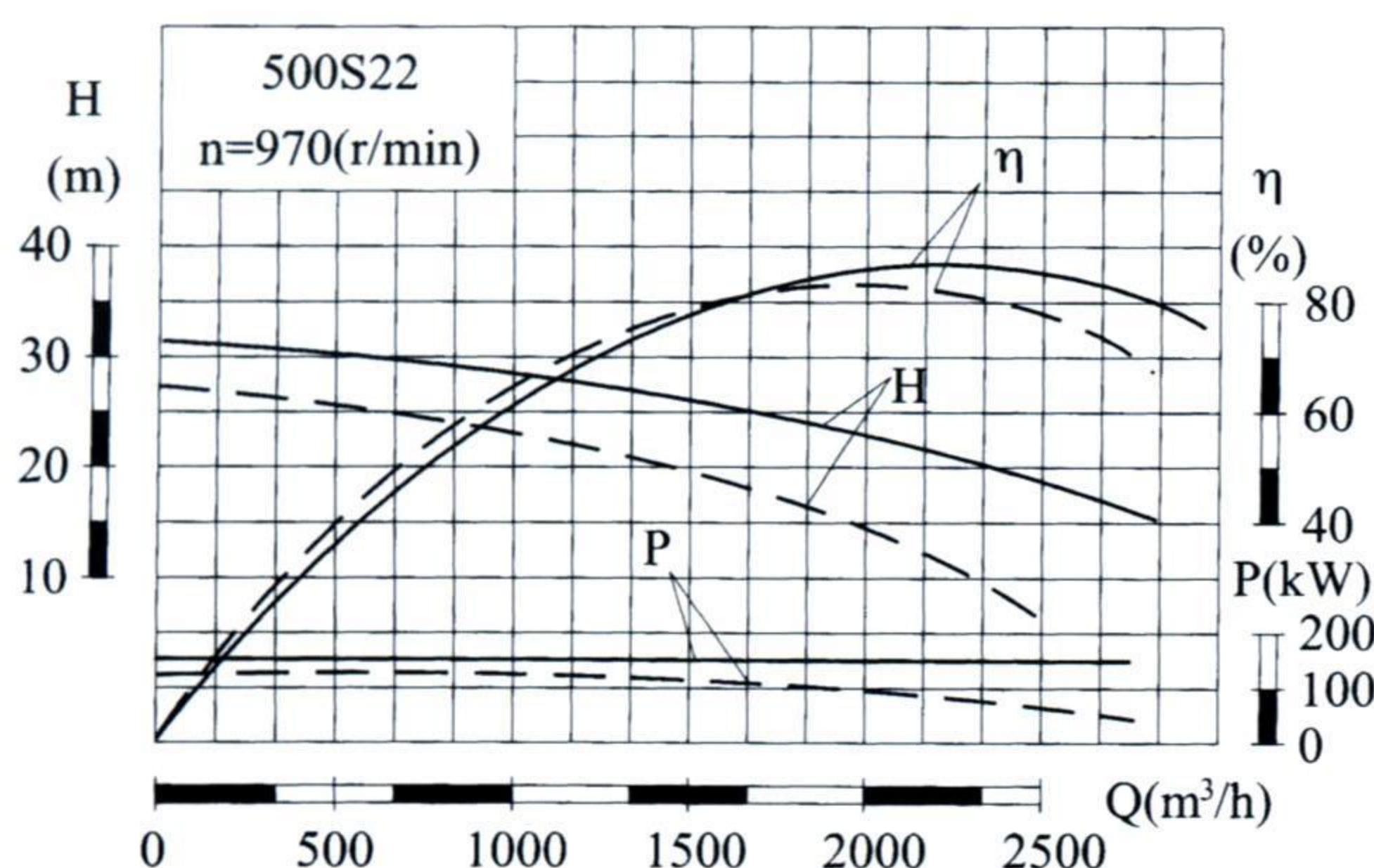
性能曲线图 Performance Curves



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保证事项 WARRANTY

在用户选用产品恰当和遵守本安装使用说明书有关使用要求的条件下，从本厂发货日起 18 个月内，连续运转不超过 12 个月，经分析产品确因制造质量不良而发生损坏和不能正常工作时，本厂负责更换或修理，易损件的正常磨损不在此限。

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