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AYG 型立式管线泵

MODEL AYG VERTICAL PIPELINE PUMP



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概 述 Outline

该泵的设计和制造符合美国石油学会的标准API610《石油、重化学和天然气工业用离心泵》（第八版）和GB3215-82标准要求。其中AYG为OH3型泵。该系列泵可输送各种清洁、低温和高温的易燃、易爆、腐蚀性介质。主要应用于炼油厂、石油化工、管线加压、低温工程、煤化工等。

Design and manufacture of this pump conforms to the requirements in API610《Centrifugal pumps used for petroleum, heavy chemical and natural gas industries》(Version 8) and GB3215-82, AYG of which comes as type OH3 pump. Pumps of this series can be used for refineries, petrochemical industry, pipeline booster, cryogenic engineering, coal chemistry etc. to transport various clean, cryogenic and high-temperature combustible, explosive and corrosive media.

适用范围 Rangle of application

- ◇ 炼油厂、石油化厂、普通工业流程
- ◇ 煤化工和低温工程
- ◇ 供水及水处理、海水淡化
- ◇ 管线加压

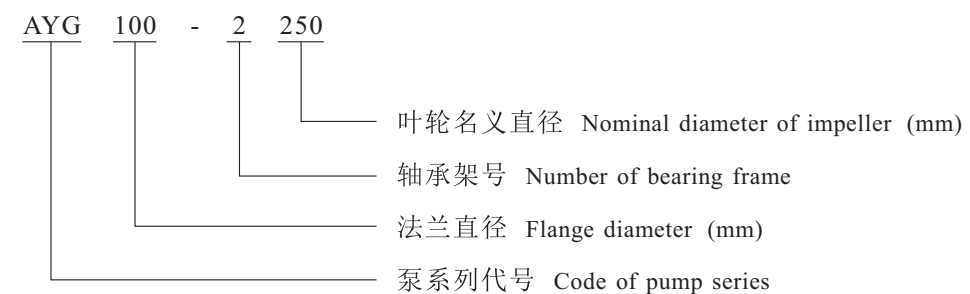
- ◇ Refineries, petrochemical plants, common industrial processes
- ◇ Coal chemistry and cryogenic engineering
- ◇ Water supply, water treatment and seawater desalination
- ◇ Pipeline pressure

运行参数 Running data

流 量: Q 3-600 m³/h
 扬 程: H 4-120 m
 工作压力: P 0-2.5 MPa
 温度: T -20℃ ~ +250℃

Flow: Q 3-600 m³/h
 Head: H 4-120 m
 Working pressure: P 0-2.5 MPa
 Temperature: T -20℃ ~ +250℃

型号意义 Model meaning



结构特点 Characteristics of structure

本系列泵系单级、单吸、径向剖分的立式管线离心泵。泵体为径向剖分，泵体和泵盖之间由一个被限制的密封垫密封；口径80mm以上的泵体采用双蜗壳设计以减小由水力引起的径向力，减小泵的振动；泵体上有排残液接口。泵体的吸入和排出法兰有测量和密封冲洗的接口。

泵的进、出口法兰压力等级相同，公称直径相同，垂直轴向呈直线分布。进、出口的法兰联接形式、执行的标准可以根据用户的要求的尺寸和压力等级而变化，可以选用GB、DIN标准及ANSI标准。

泵盖具有保温和冷却功能，可以用来输送对温度有特殊要求的介质。泵盖上设有排气塞，可以在泵启动前排除泵内和管路内的气体。密封腔尺寸满足填料密封或各种机械密封的需要，填料密封腔体和机械密封腔体可以通用，并配有密封冷却、冲洗系统。密封管路循环系统的布置符合API682标准要求。

AYG系列泵由滚动轴承承受泵载荷，其中包括泵的载荷、转子的重量及泵启动引起的瞬时载荷。轴承安装在成为一体的轴承架内，轴承由油脂润滑。

本系列泵的叶轮为单级、单吸、闭式叶轮，由一个键和带有钢丝螺套的叶轮螺母安装到轴上，钢丝螺套具有自锁功能，叶轮的安装安全、可靠；所有的叶轮都作平衡处理，当叶轮最大外径与叶轮宽度的比值小于6时，需要作动平衡；叶轮水力设计最大限度提高泵的汽蚀性能。

泵的轴向力通过叶轮的前后耐磨环及平衡孔来平衡。可以更换的泵及叶轮的耐磨环来使泵保持较高的水力效率。较低的NPSH值，泵安装高度小，减小安装成本。

从电机端看，泵顺时针方向旋转。

Pumps of this series are single-stage single-suction radially split vertical pipeline centrifugal pumps. The pump casing is in radial split and the place between the pump casing and cover is sealed by a limited sealing gasket; the pump casings of an aperture over 80mm is in dual-volute design, for the purpose to reduce the waterpower caused radial force and the pump vibration; a connector for residual liquid drain-out is set on the pump casing. Both suck-in and drain-out flanges of the pump casing are available with connectors for measuring and seal flushing.

Both inlet and outlet flanges of this pump hold same pressure class and nominal diameter and the vertical axis is presented in a linear layout. The linking type of the inlet and outlet flanges and the executive standard can be varied in accordance with the required size and pressure class of users and either GB, DIN or ANSI can be chosen.

The pump cover features insulation and cooling function and can be used to transport the medium which has a special requirement on temperature. On the pump cover an exhaust cork is set, used to exhaust both pump and pipeline before the pump is started. The size of the sealing cavity meets with the need of the packing seal or various mechanical seals, both packing seal and mechanical seal cavities are interchangeable and equipped with a seal cooling and flushing system. The layout of the seal pipeline cycling system complies with API682.

AYG series pump uses a rolling bearing to bear the pump load, which includes the pump load, the rotor weight and the instantaneous load caused at the pump start. The bearing is set in the incorporated bearing frame and lubricated with grease.

The impeller of this series pump comes as a single-stage single-suction closed impeller and is mounted on the axis with one key and one impeller nut with a steel screwed sleeve, whose self-lock function makes the impeller safely and reliably mounted; all the impellers have been balancing processed and, when the specific value between the maximum outer diameter and the width of the impeller is less than 6, dynamic balance is needed; the waterpower design of the impeller makes the cavitation property of the pump enhanced to the maximum.

The axial force of the pump is made balanced by means of the front and back wearable rings and balancing holes of the impeller and the pump can be kept at a higher waterpower efficiency by replacing either the pump's or the impeller's wearable ring. A lower NPSH value will leave a lower pump installation height and a reduced installation cost.

Viewing from the motor, the pump moves clockwise.

基本结构 Basic structure

AYG系列泵的电机和泵之间带轴承架，可使用在较高的温度和较为重要的场合（见剖面图）。同卧式泵相比，相同性能的立式管线泵具有较小的占地面积和简单的管路联接，节省基础的投资费用。

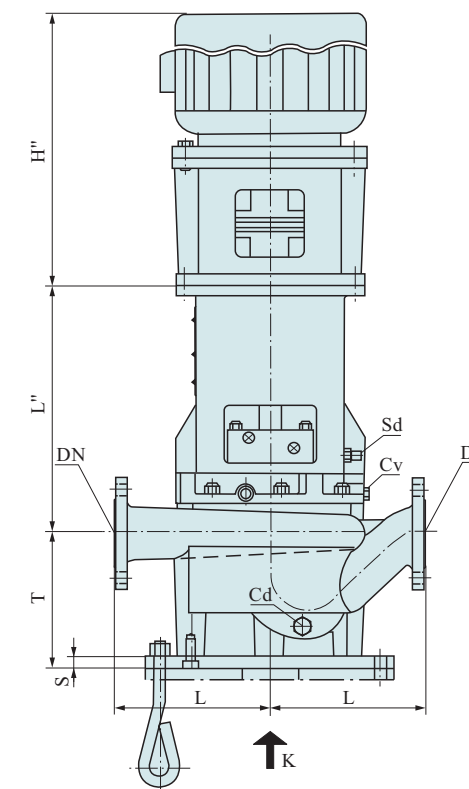
For AYG series pump, a bearing frame is set in between its motor and pump, so it can be used in a place of a higher temperature or in an important case (see the sectional view). Compared with the horizontal pump, the vertical pipeline pump of the same property features a less land area and a simpler pipeline link, saving the basis investment.

型谱 Spectrum

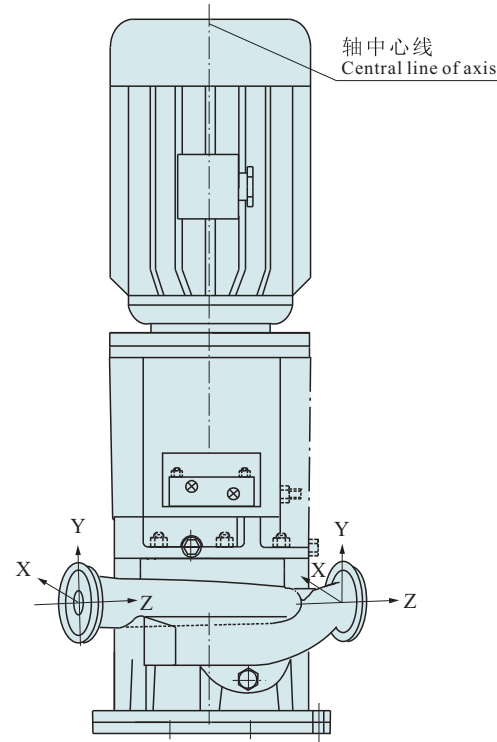
泵选型时，泵性能的大致范围的确定可以依据相应的转速通过型谱来确定。最终的选型应考虑泵的NPSH值、泵的效率及最大许用扭矩（电机功率），需要使用每个规格单独的的性能曲线来完成。

At pump model selection, the approximate property range of it can be decided by means of the model spectrum upon the corresponding speed and the final selection needs to think of the pump's NPSH value, efficiency and maximum allowed torque (power of the motor) and use the individual performance curve of each norm.

外形图 External form drawing



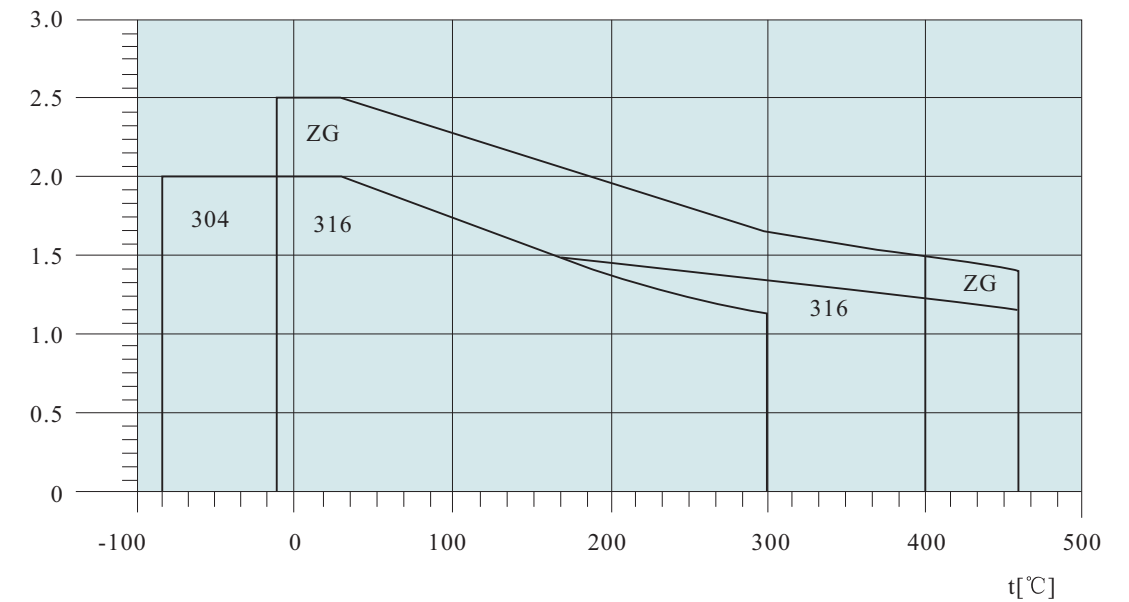
管口载荷 Nozzle loads



- 注:
- 1、所提及的力和力矩同时适用于每一台泵
 - 2、箭头所指方向为正
 - 3、力和力矩的大小执行API610标准
 - 4、F=力
M=力矩
FR=合力
MR=合力矩
 - 5、数值含义: 所给数值表示一个范围, 例如: 1420表示的范围是-1420~+1420。
- Note:
1. Both mentioned force and moment are applicable for each of the pumps.
 2. The direction the arrow points at comes as the positive one.
 3. Refer to API610 for the size of both force and moment.
 4. F = force, M = moment, FR = resultant force, MR = resultant moment
 5. Meaning of values: the given value means one range, for instance: 1420 means the range -1420 ~ +1420.

型号 Model	DN (mm)	管口载荷 Nozzle loads							
		力 Force				力矩 Torque			
		F _x	F _y	F _z	F _R	M _x	M _y	M _z	M _R
40-200	40								
50-160	50	1420	1160	1780	2560	920	460	700	1240
50-200									
50-250									
50-315									
80-160	80	2140	2660	1780	3860	1910	940	1440	2560
80-200									
80-250									
80-315									
100-160	100	2840	3560	2320	5120	2660	1360	2000	3600
100-200									
100-250									
100-315									
150-160	150	4980	6220	4100	8960	4600	2360	3520	6260
150-200									
150-250									
150-315									
151-200									
151-250									
151-315									
200-250	200	7560	9780	6220	13840	7060	3520	5160	9420
200-315									

压力-温度曲线 Pressure-temperature curve



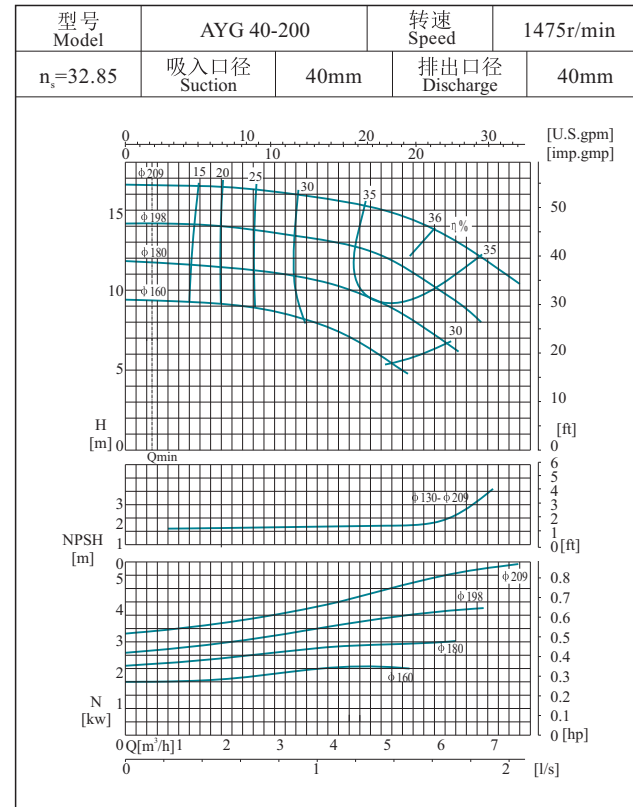
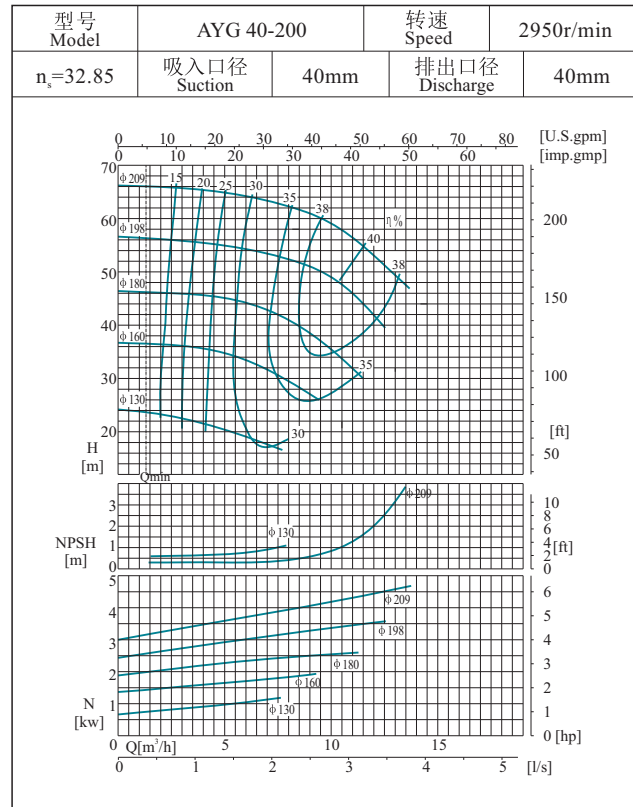
允许的P/n值 The allowable value of P/n

	Nmax(rpm)	轴承架号 The bearing frame number				
		lk0	lk1	lk2	lk3	lk4
泵轴最大允许扭矩 The maximum allowable torque of pump shaft		3600	3600	3600	3600	3600
P/n值 The value of P/n	3Cr13	0.0060	0.0130	0.0330	0.0810	0.1260

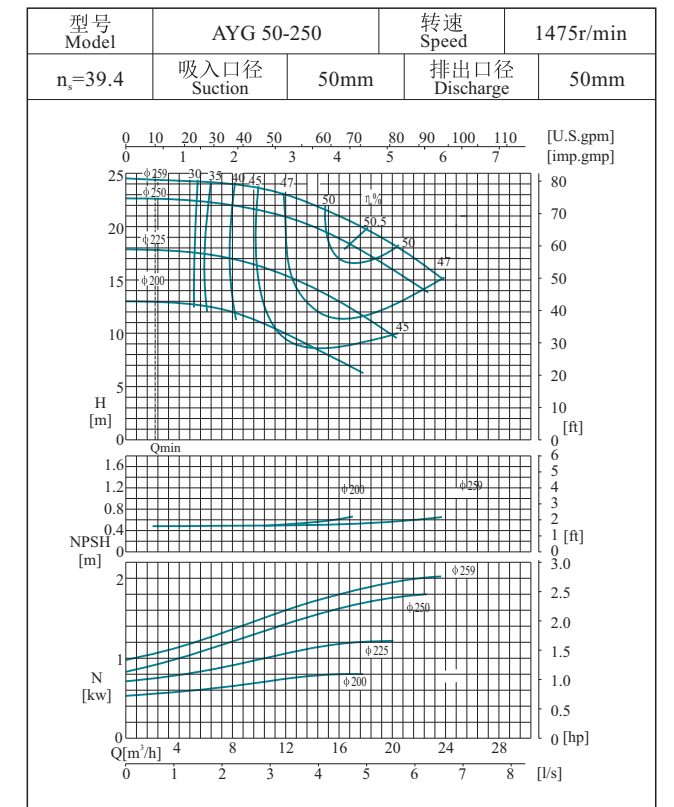
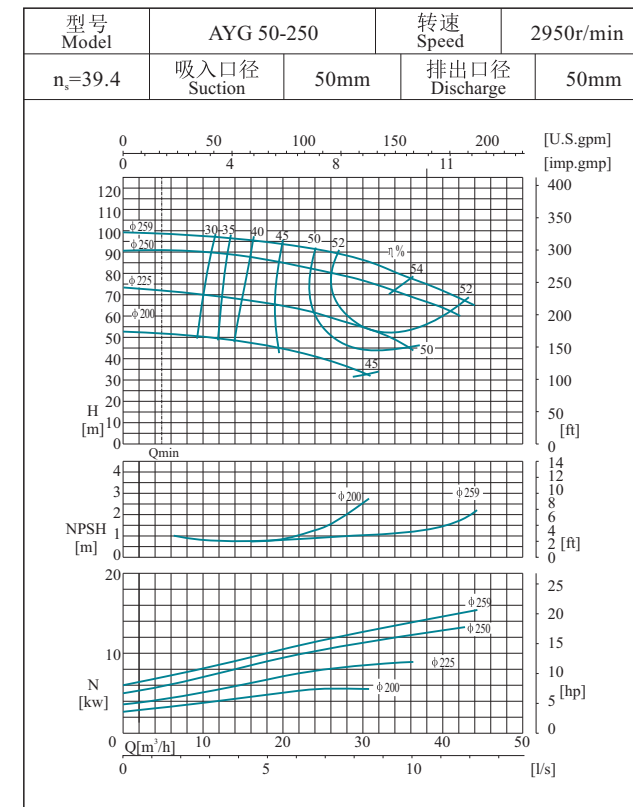
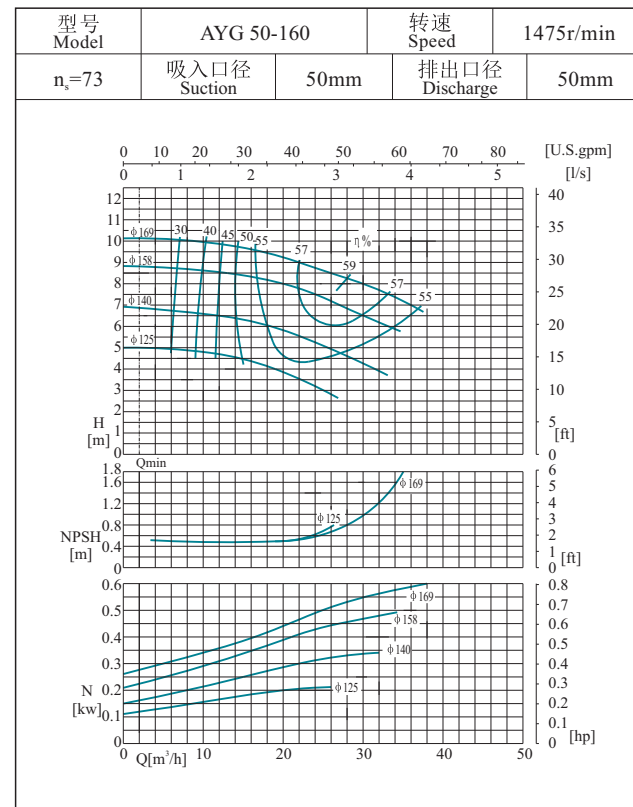
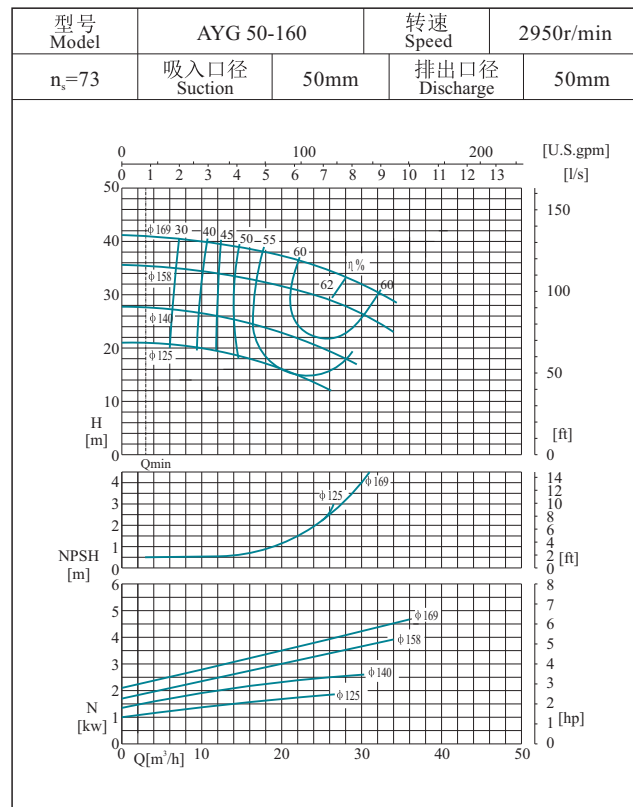
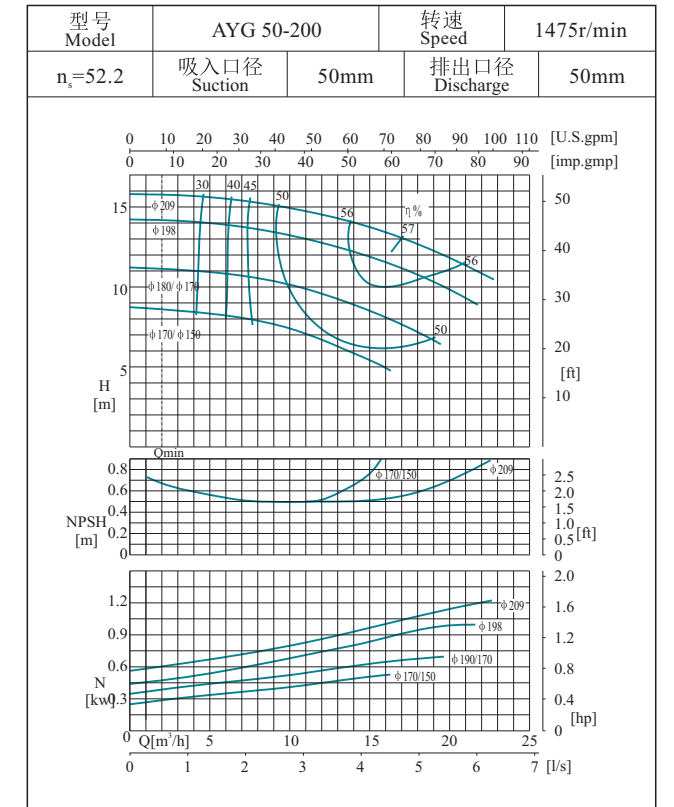
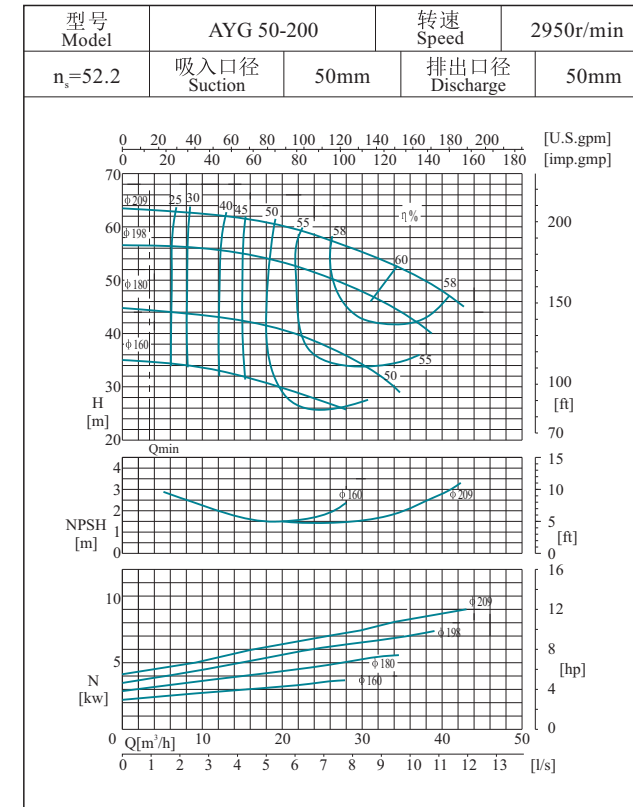
允许功率 The allowable power

轴承型号 Bearing model	轴材质 Bearing material	扭矩 Torque	最大允许轴功率 (直联) The max. allowable power of pump shaft (direct connection)	
			转速n Speed (rpm)	
			1475	2950
lk0	3Cr13	57.3	8.7	17.4
lk1		124.2	18.9	37.7
lk2		315.2	47.8	95.7
lk3		733.6	117.5	234.9
lk4		1203.3	182.7	365.4

性能曲线图 Performance curve

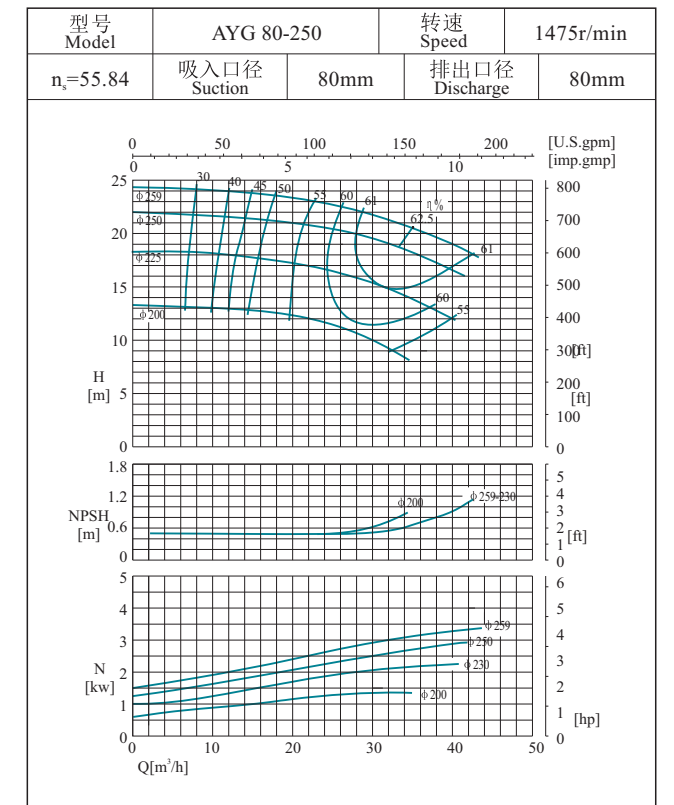
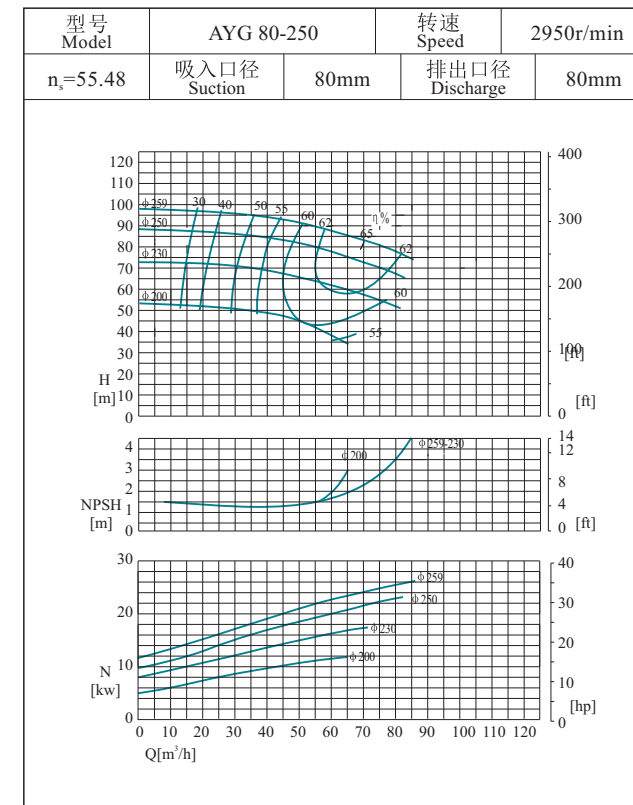
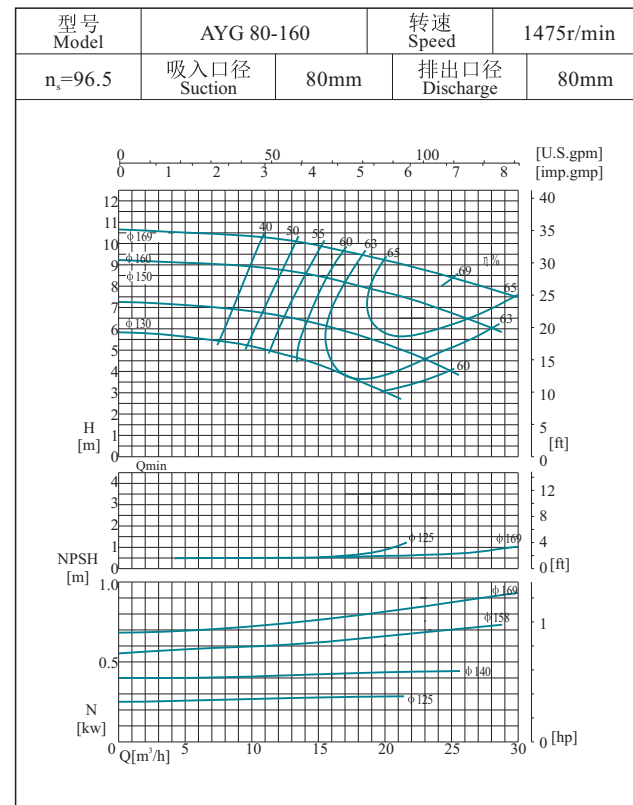
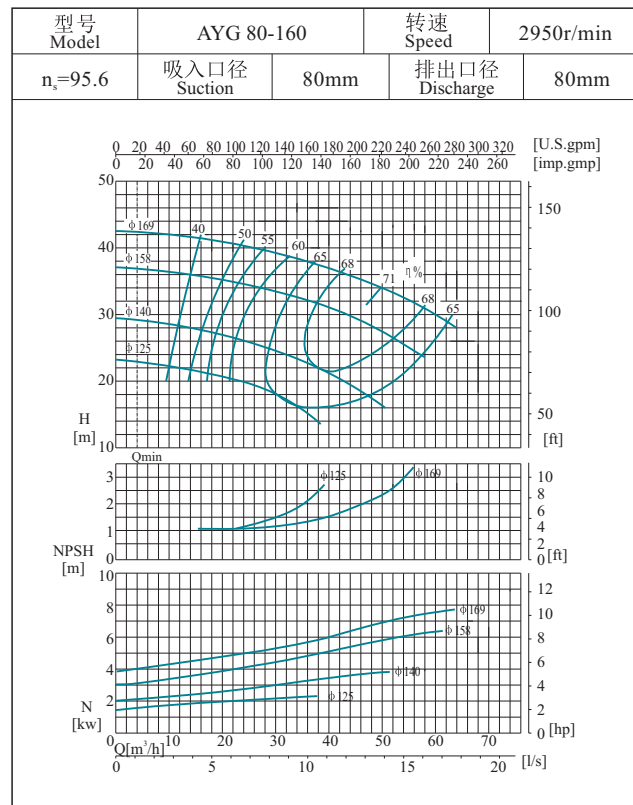
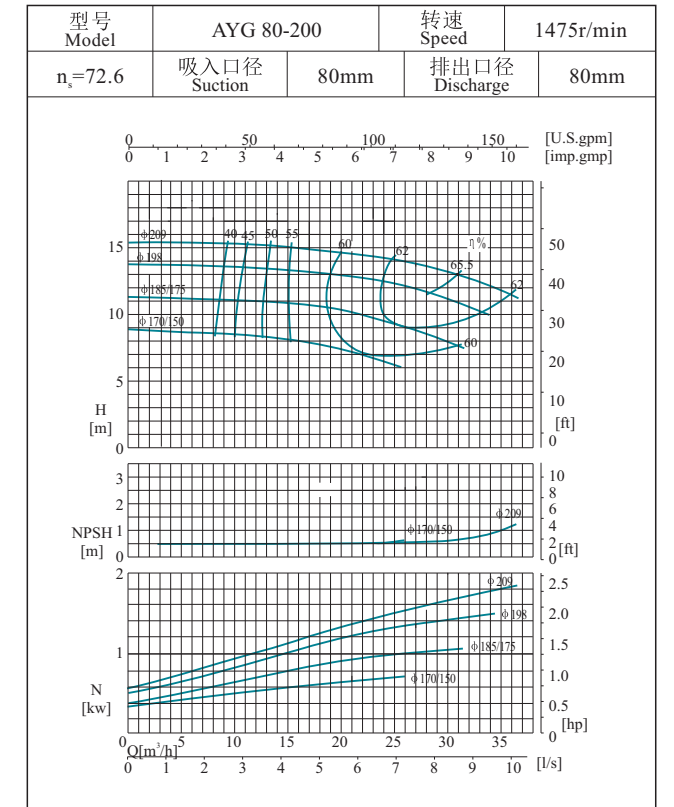
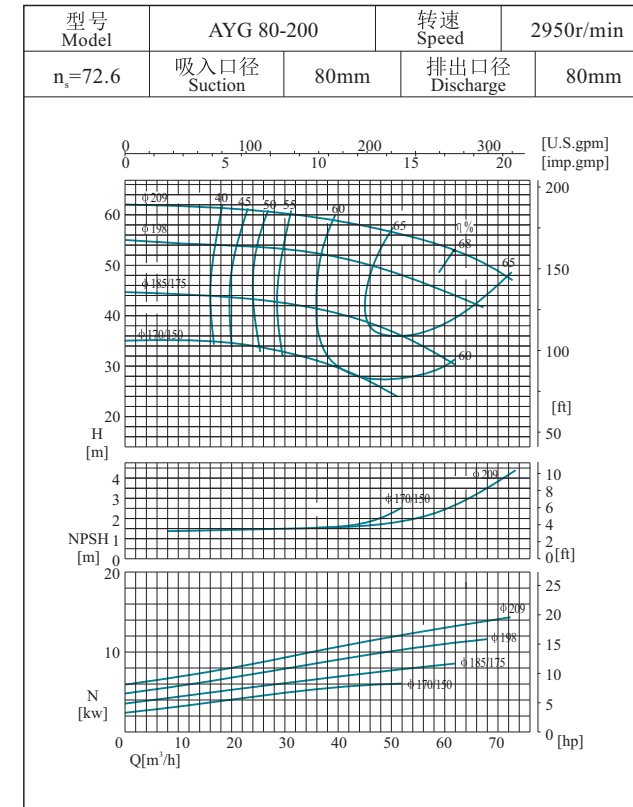
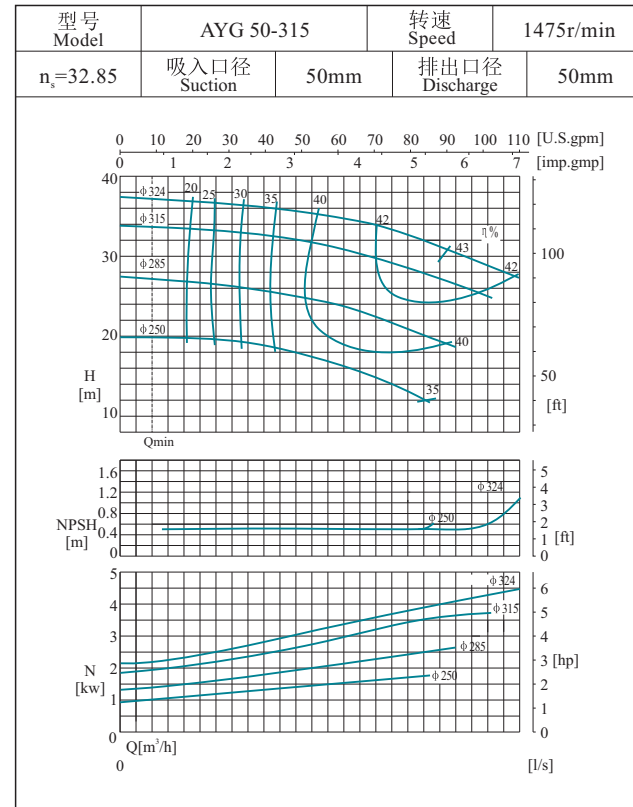
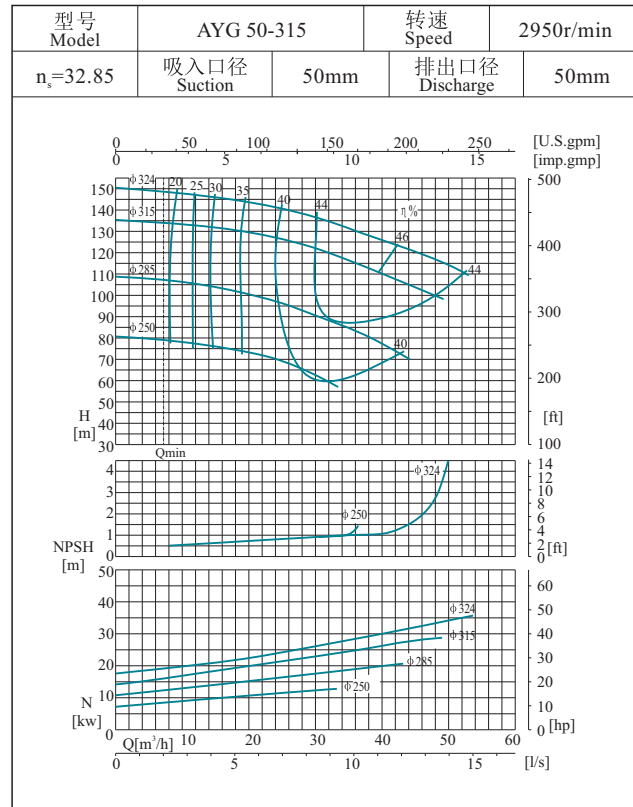


性能曲线图 Performance curve

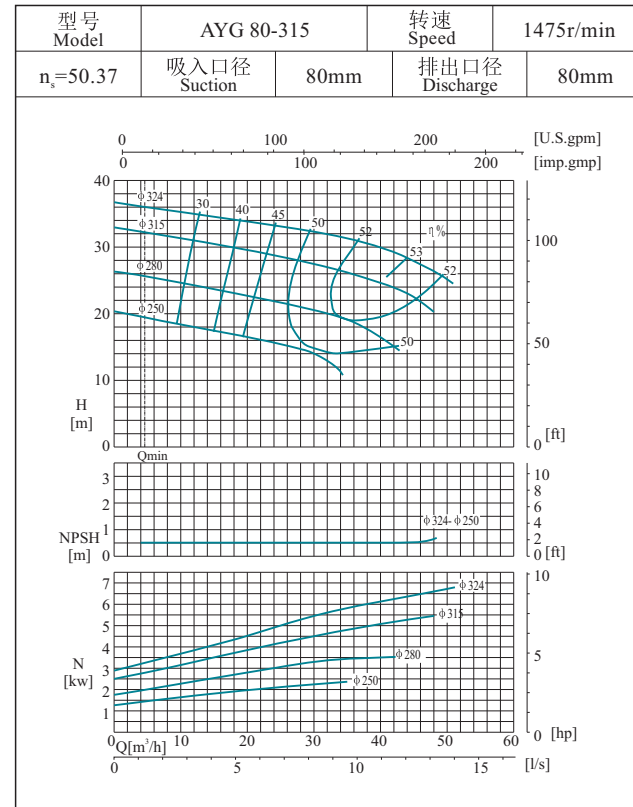
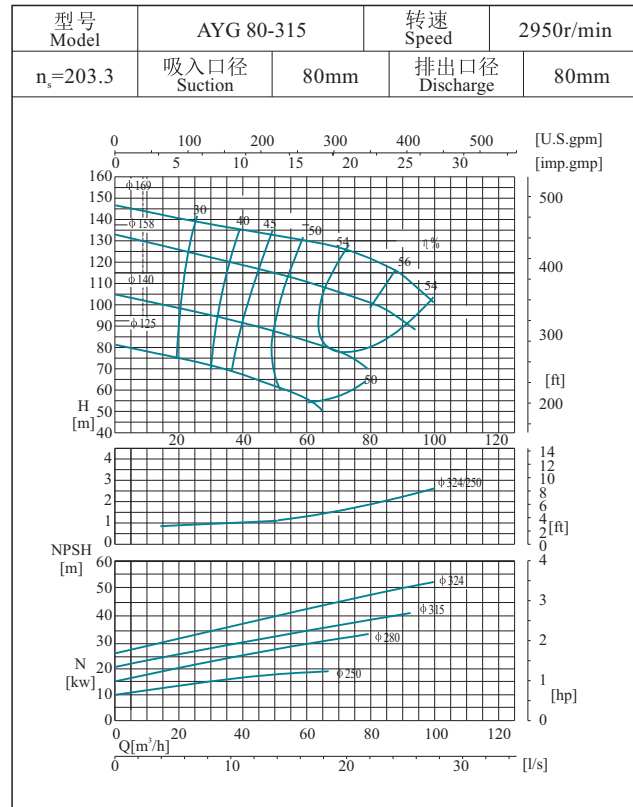


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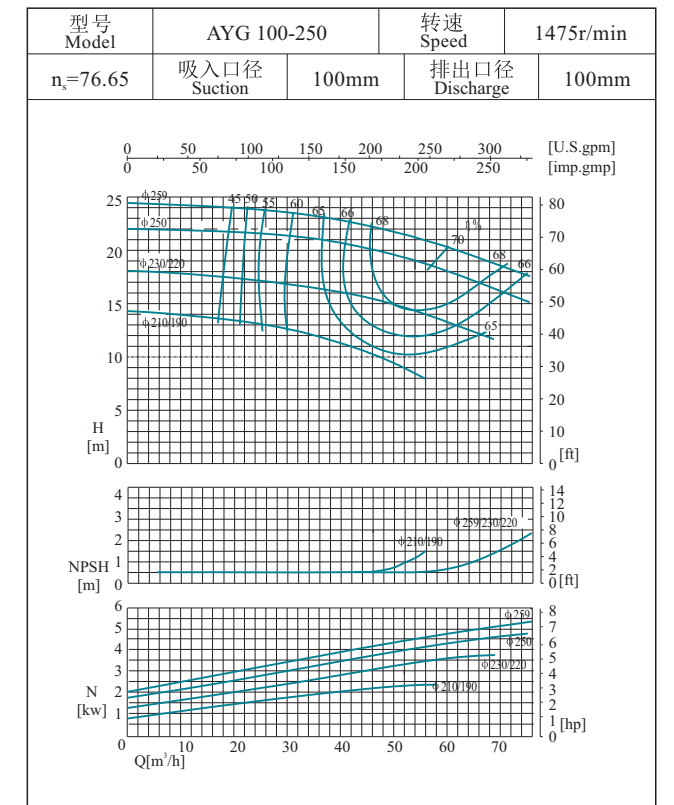
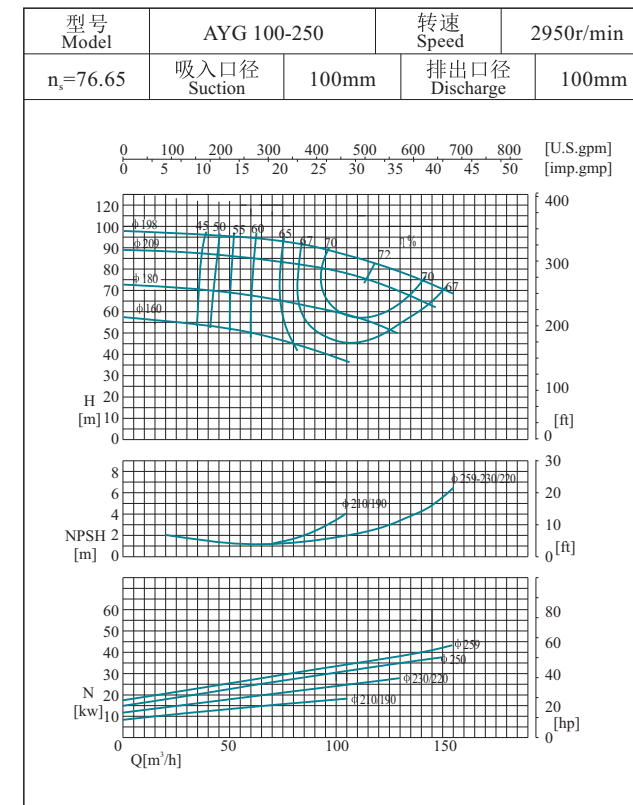
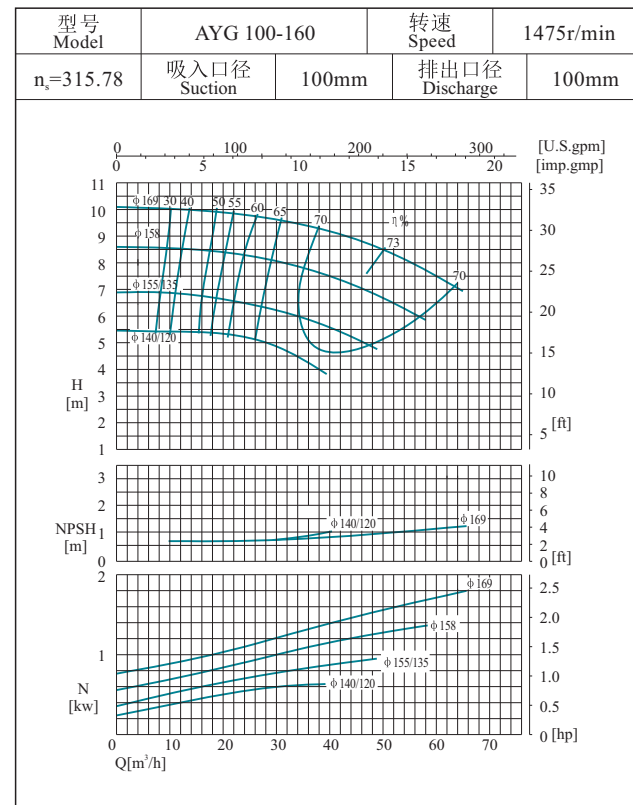
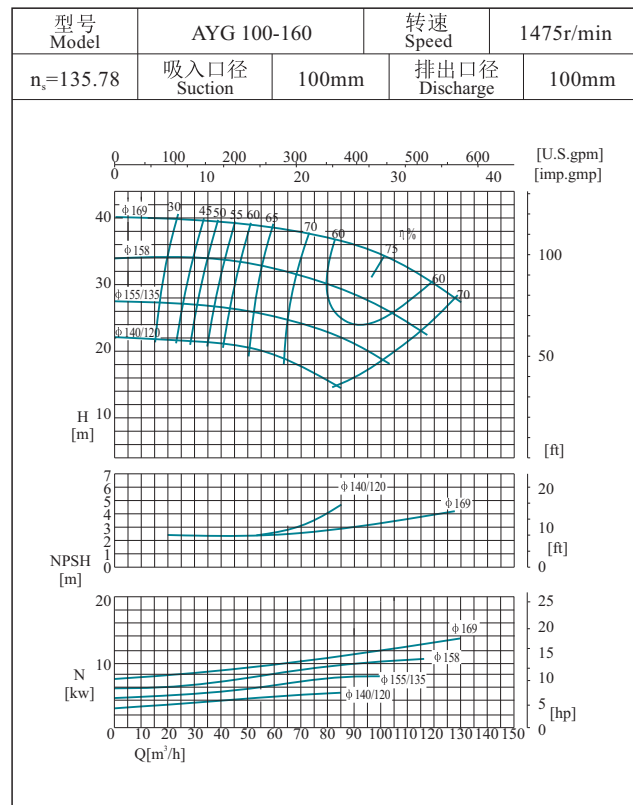
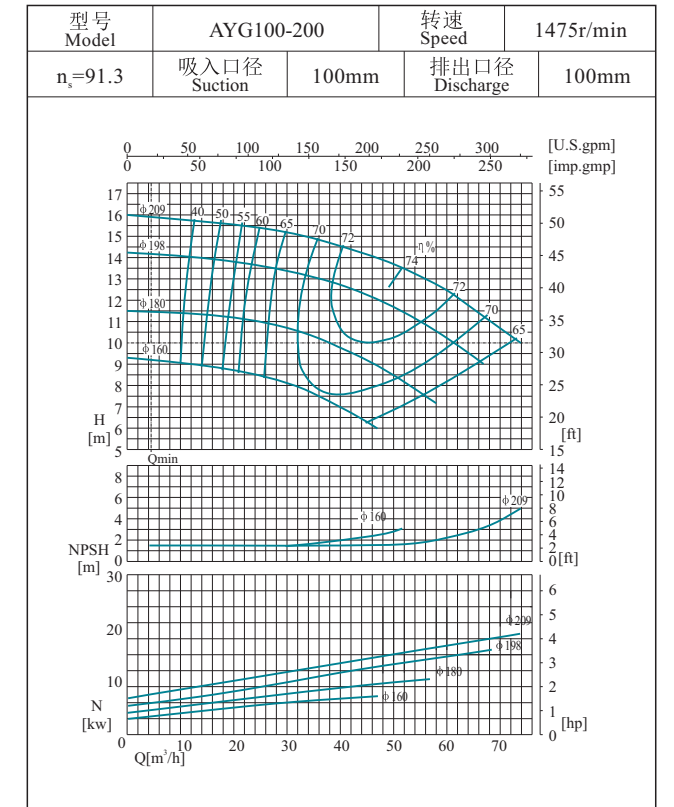
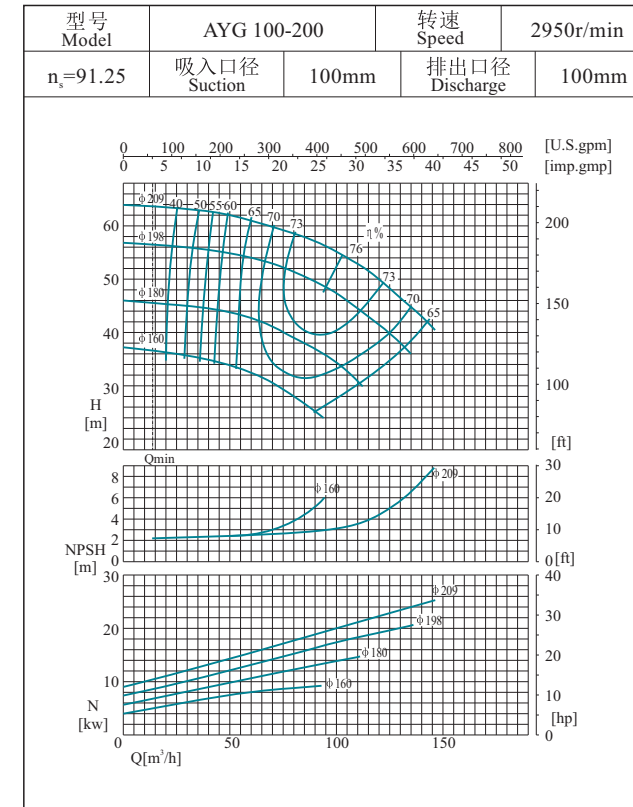
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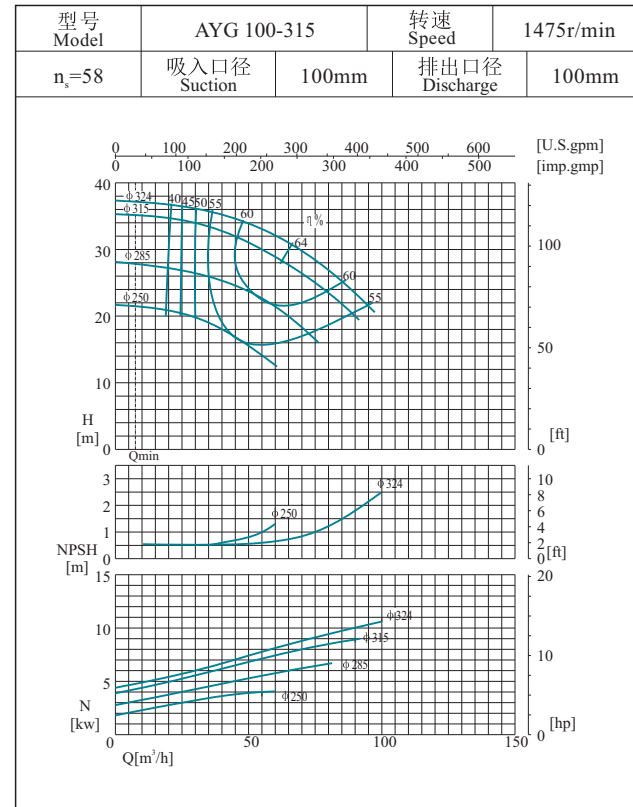
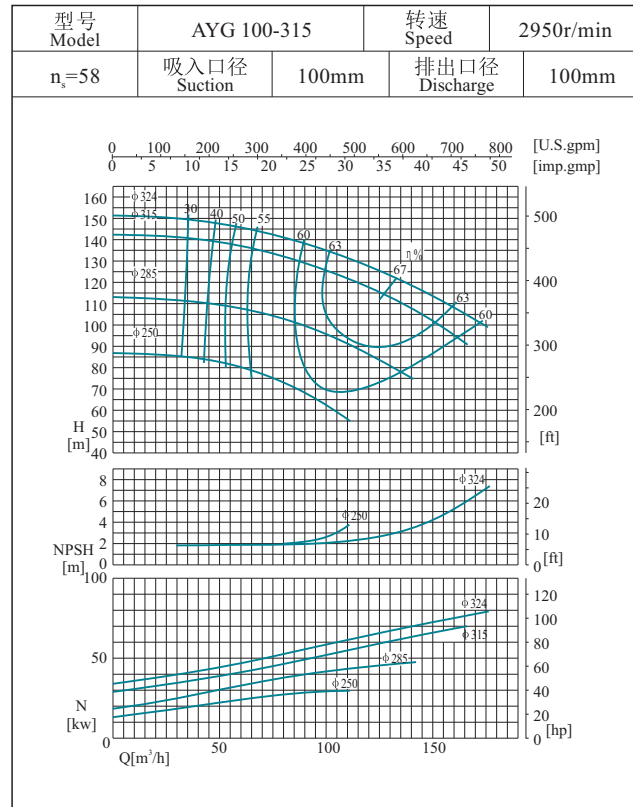
性能曲线图 Performance curve



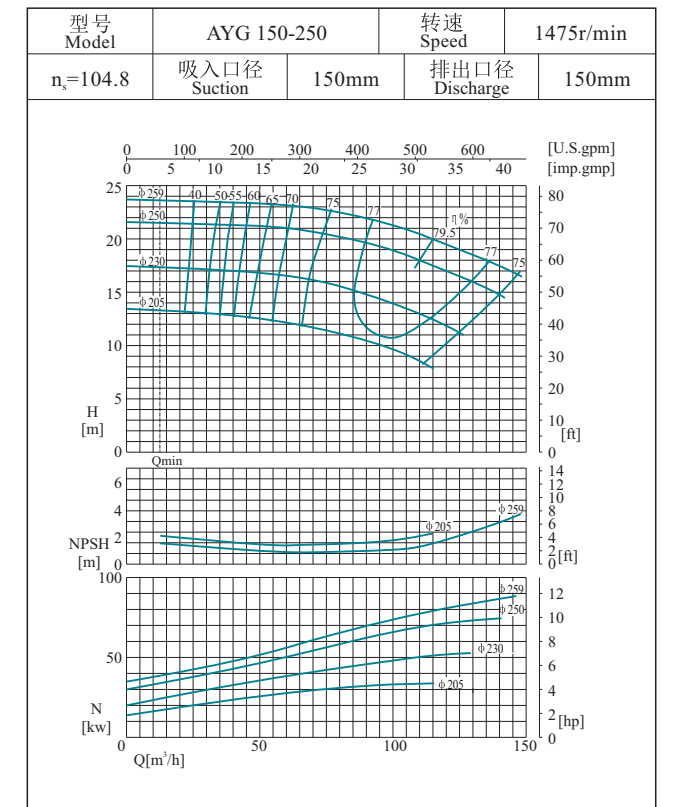
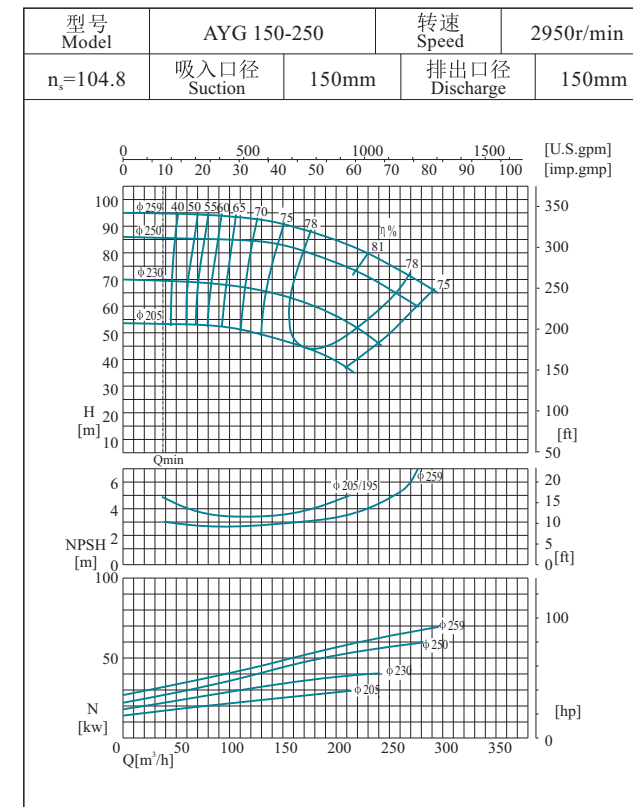
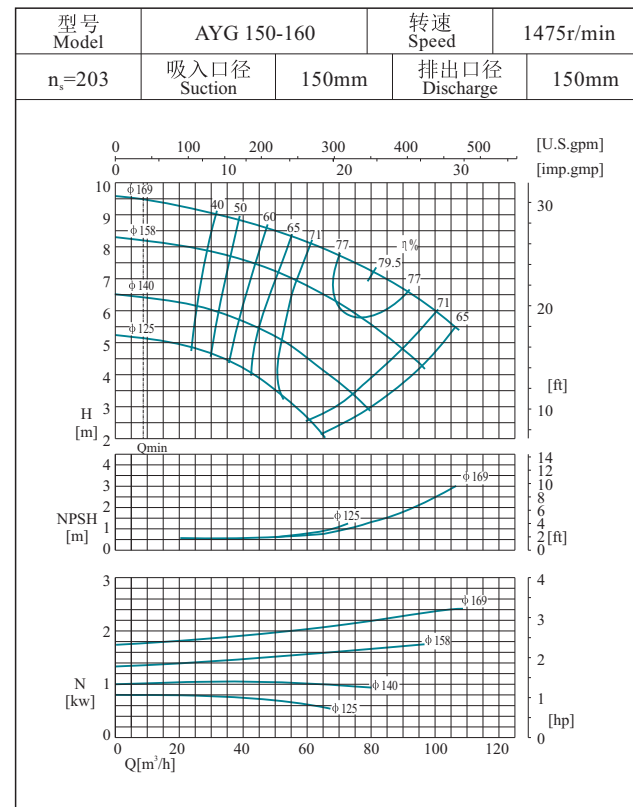
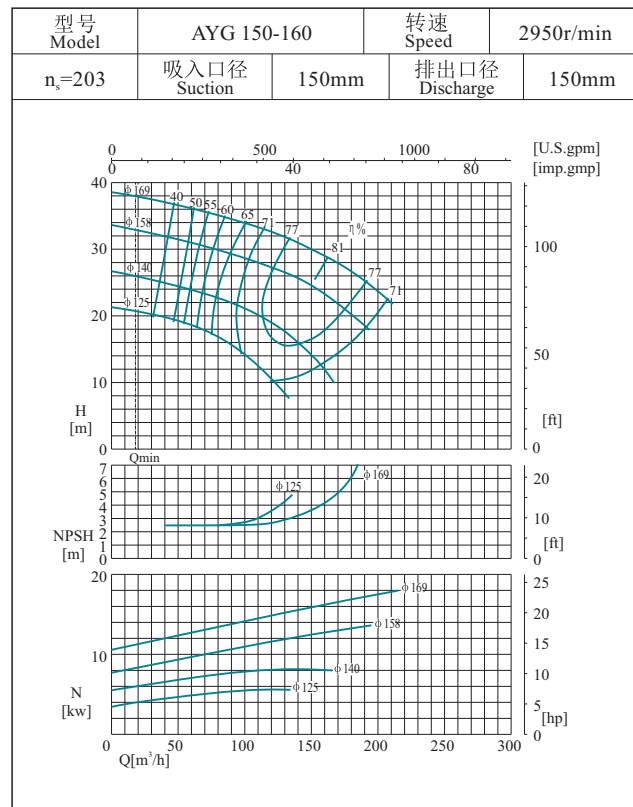
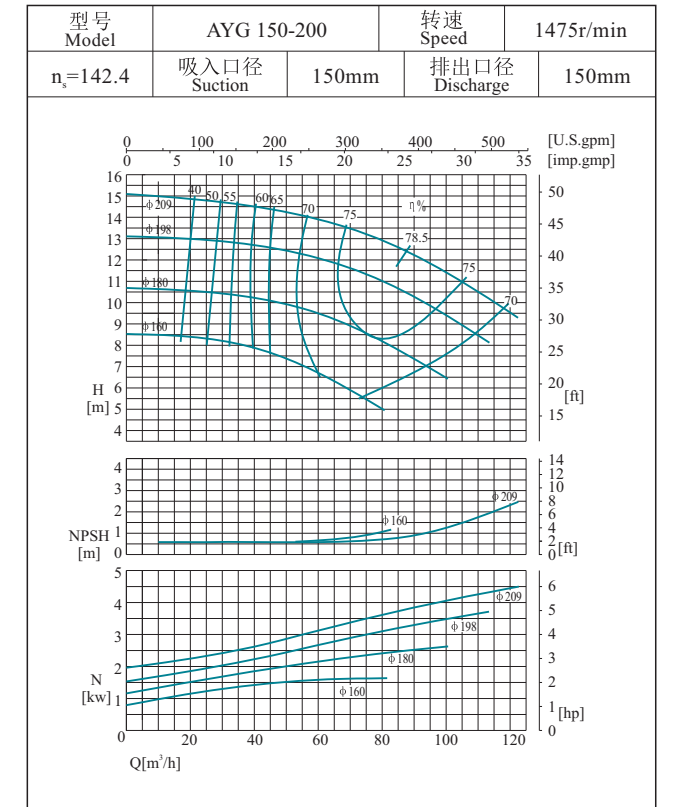
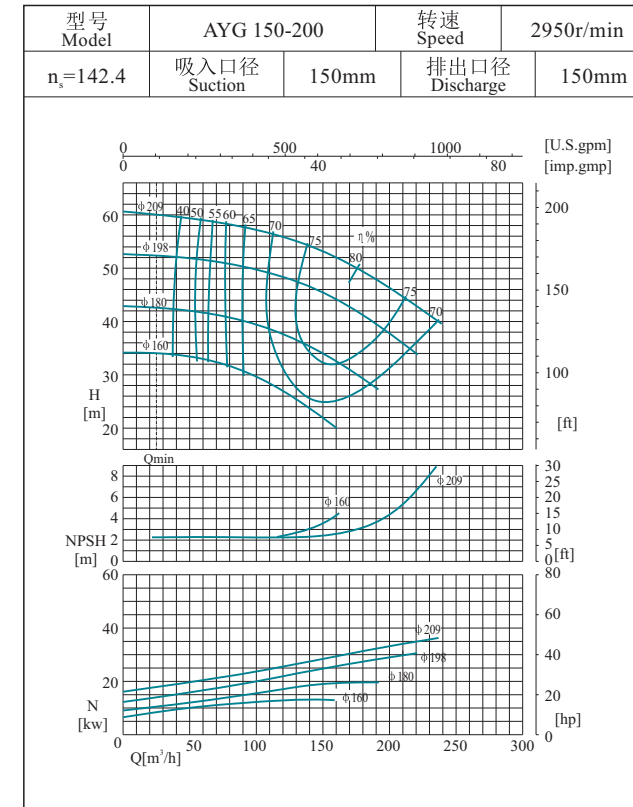
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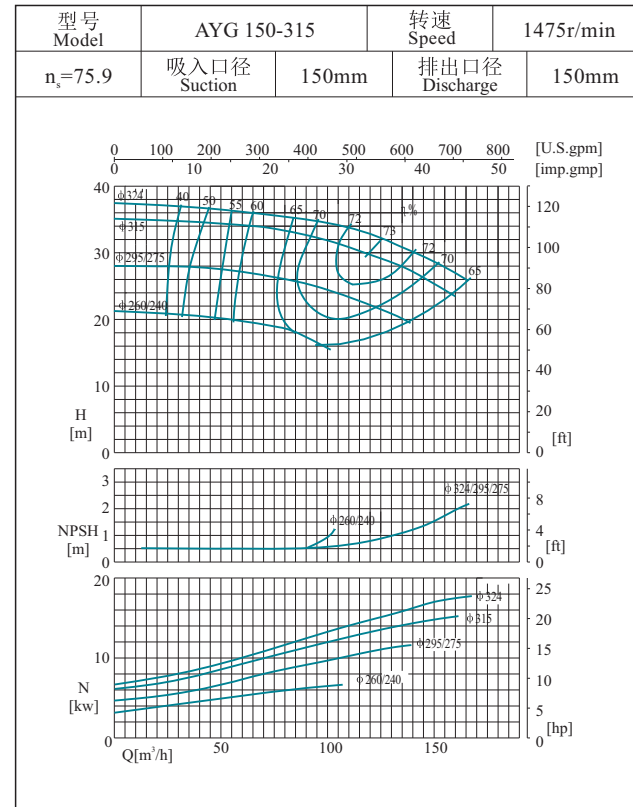
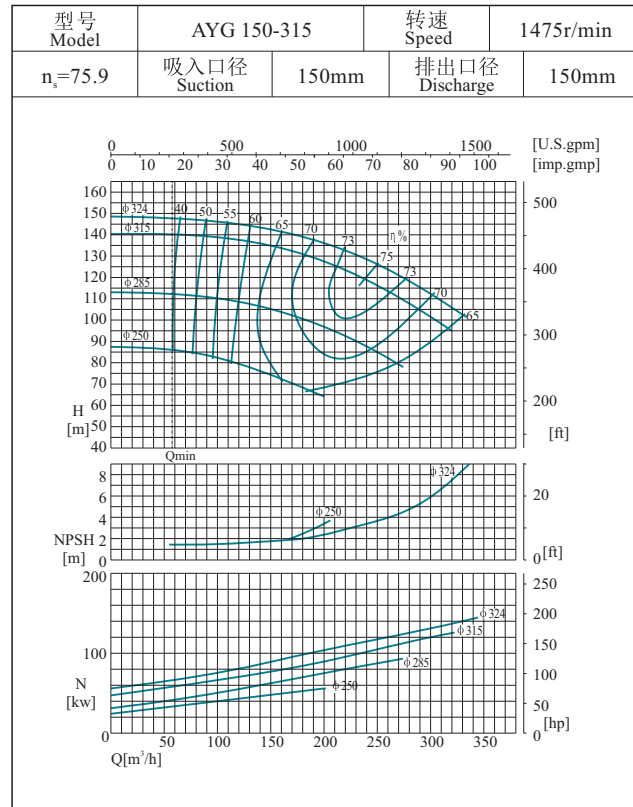
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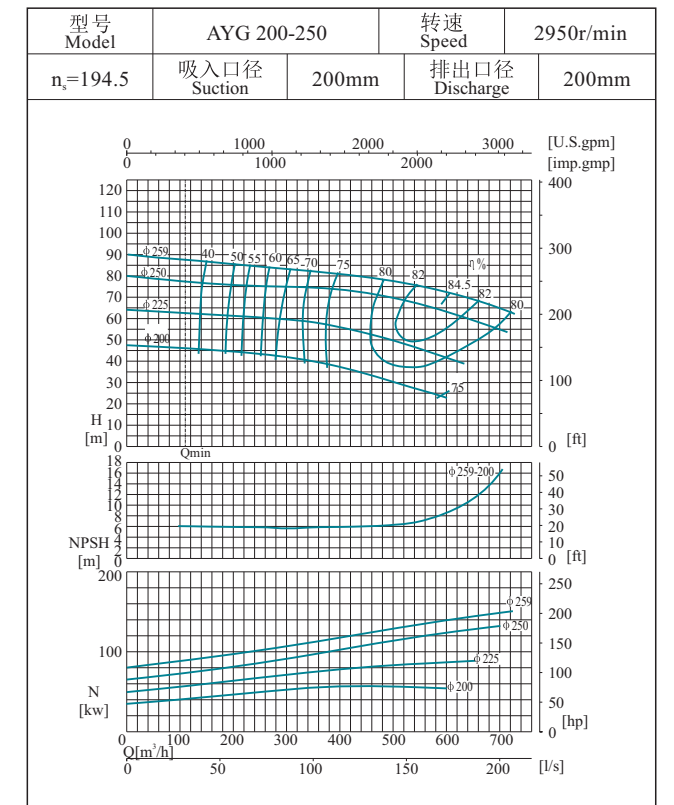
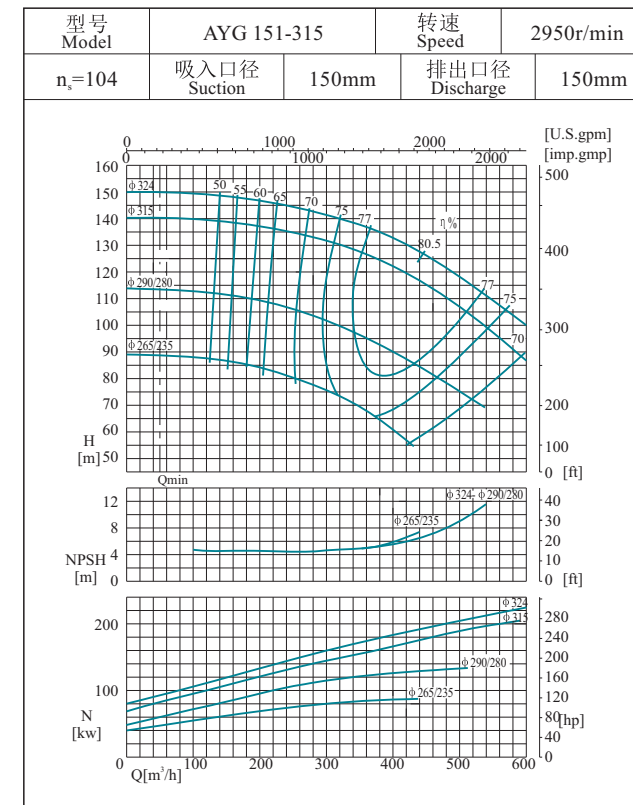
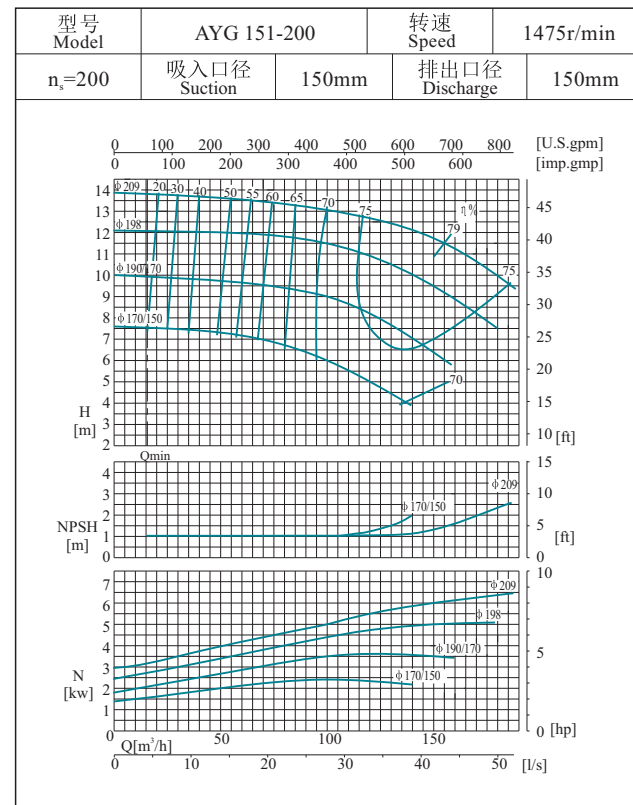
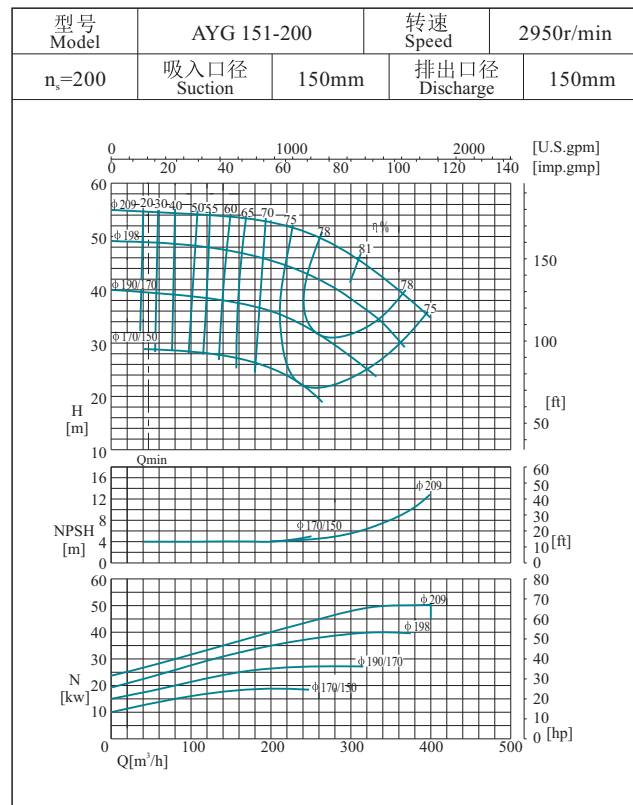
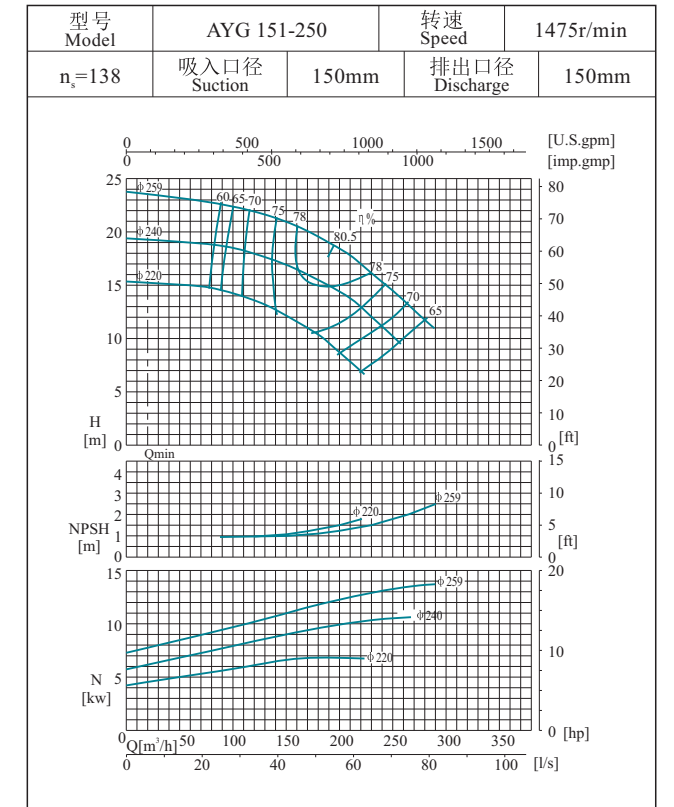
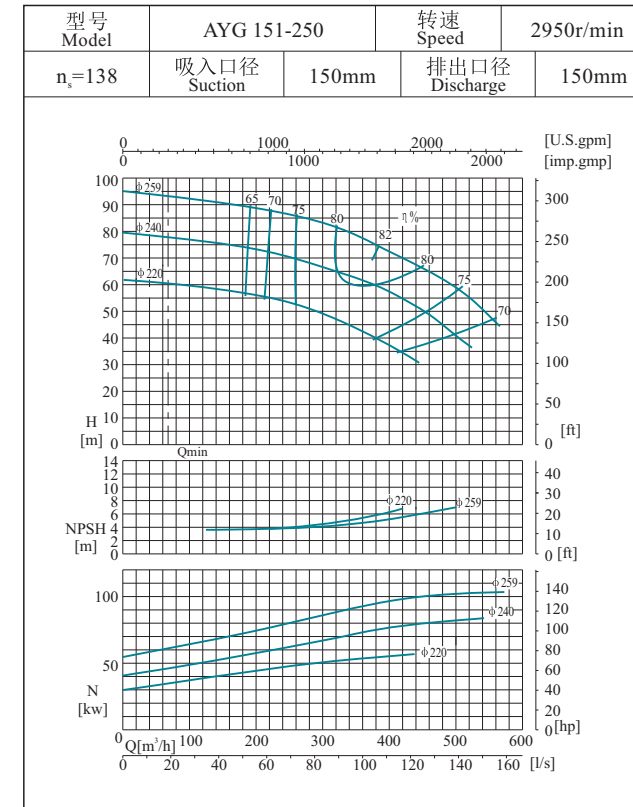
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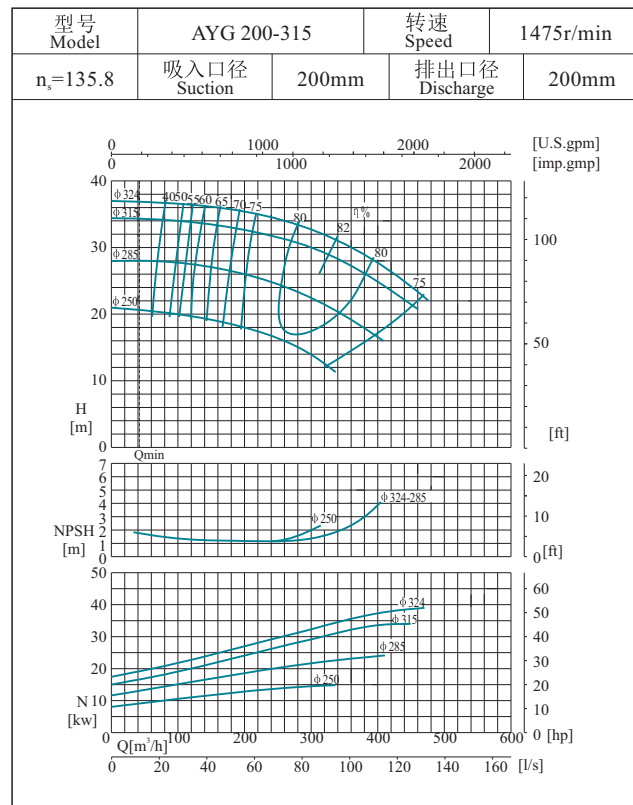
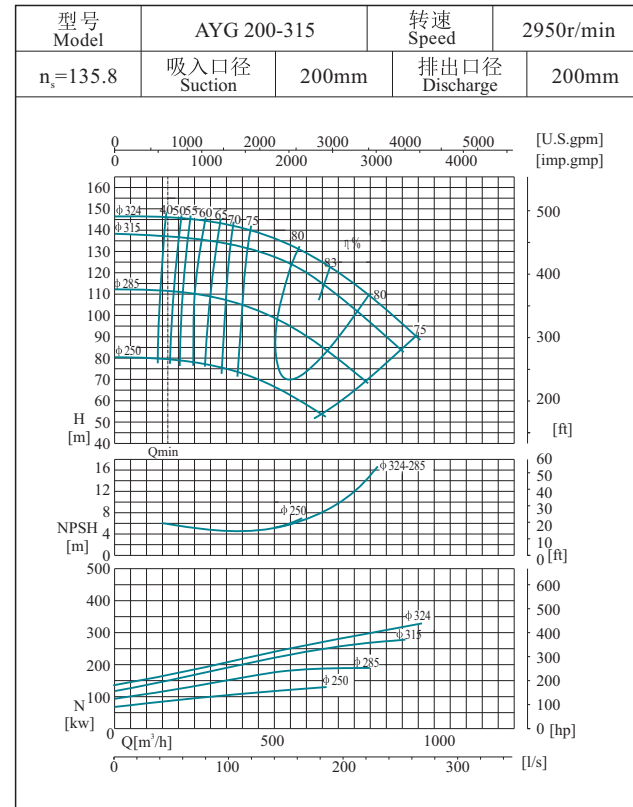
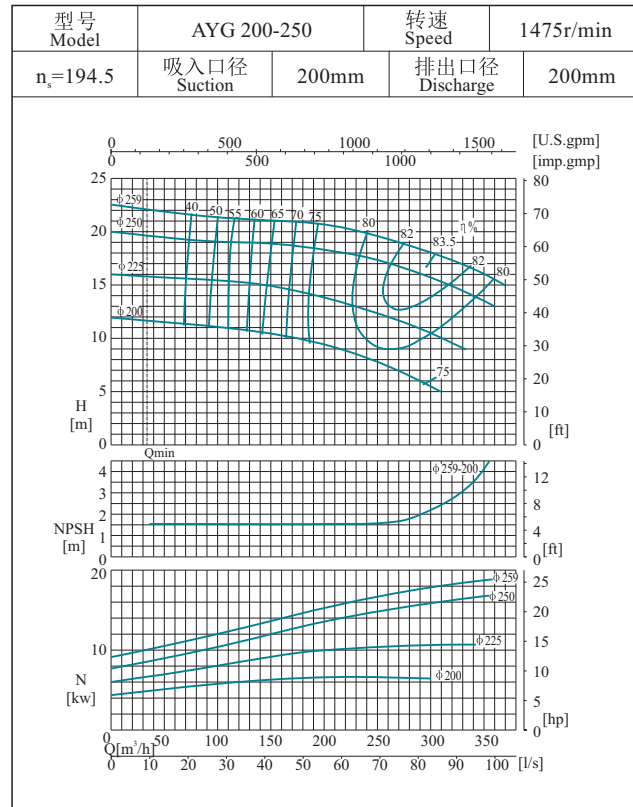
性能曲线图 Performance curve



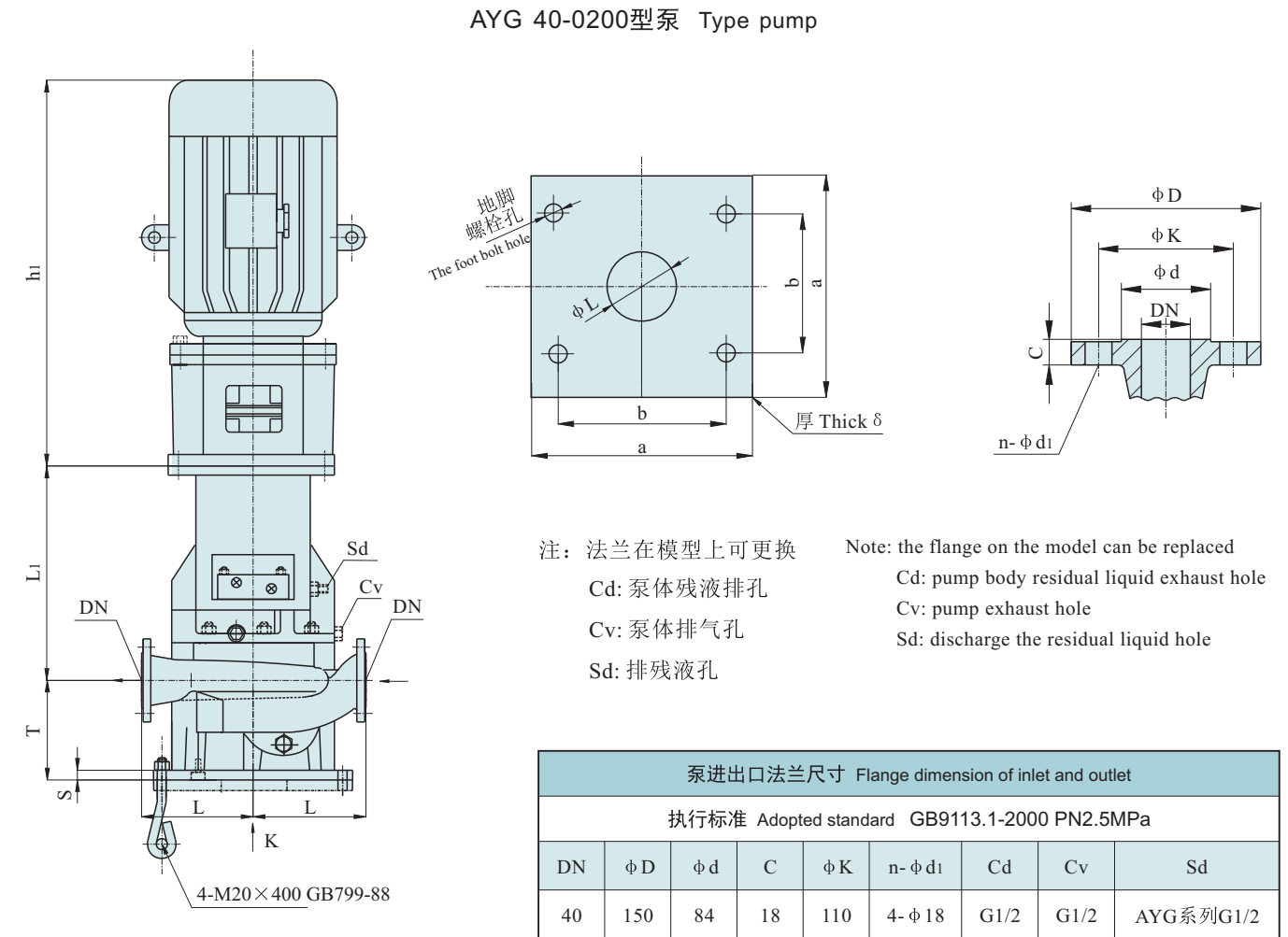
性能曲线图 Performance curve



性能曲线图 Performance curve



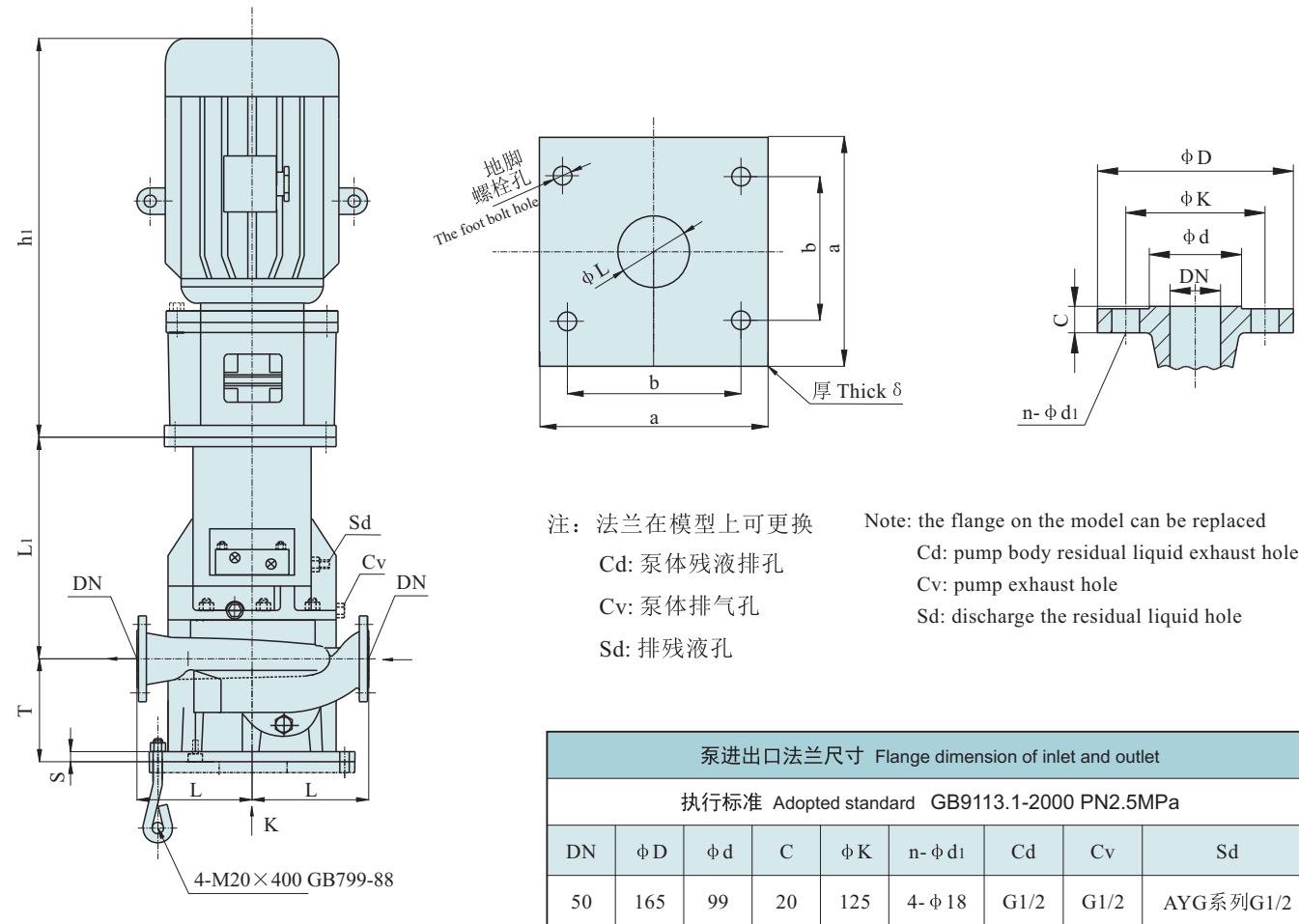
外形及安装尺寸图 External form and installation dimension drawing



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L1		a	b	δ	φL
	40	200	30	200	342		300	180	30	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h1 Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h1 Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	132									

外形及安装尺寸图 External form and installation dimension drawing

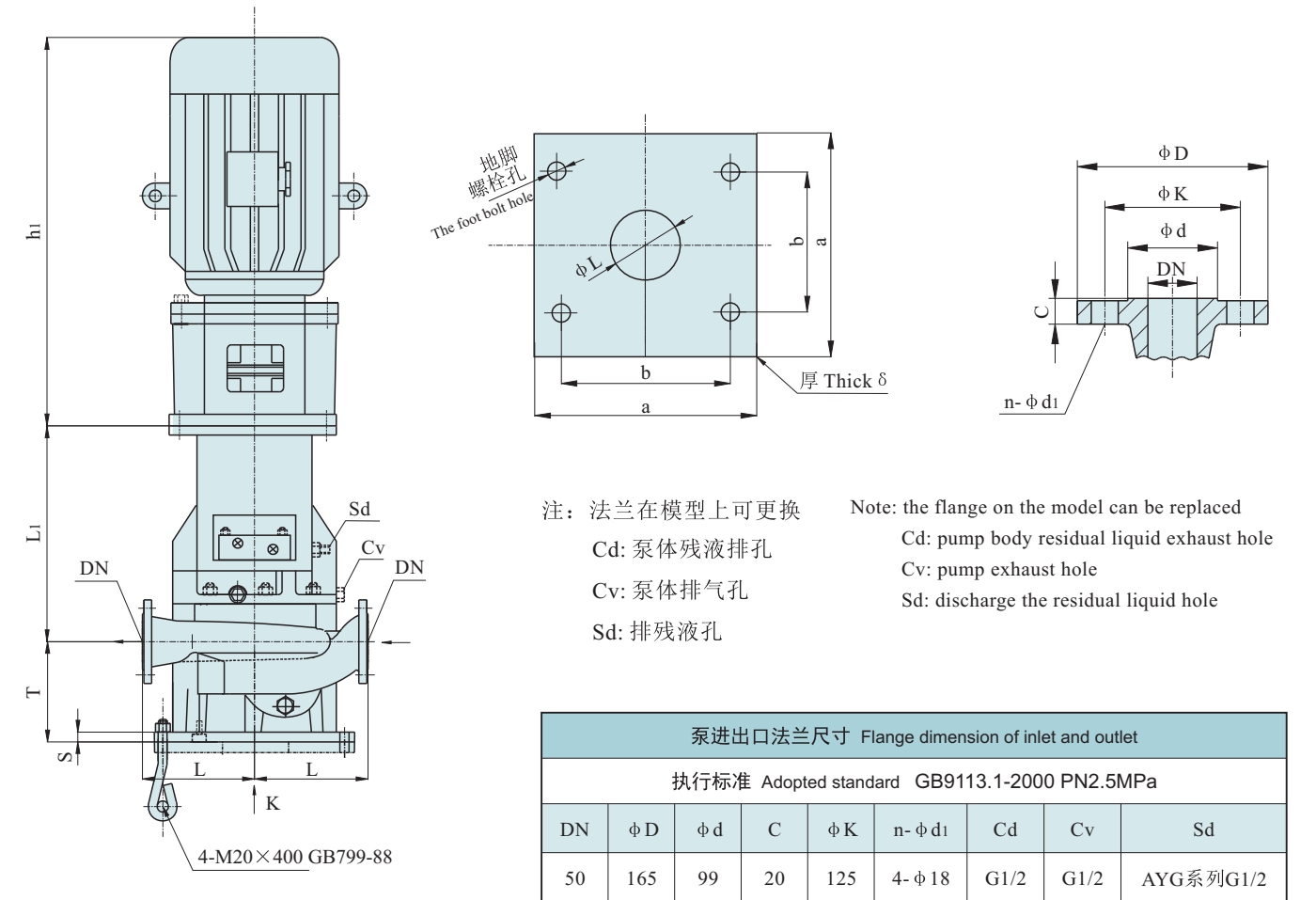
AYG 50-1160型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
		50	200	30	200	405		300	180	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	142									

外形及安装尺寸图 External form and installation dimension drawing

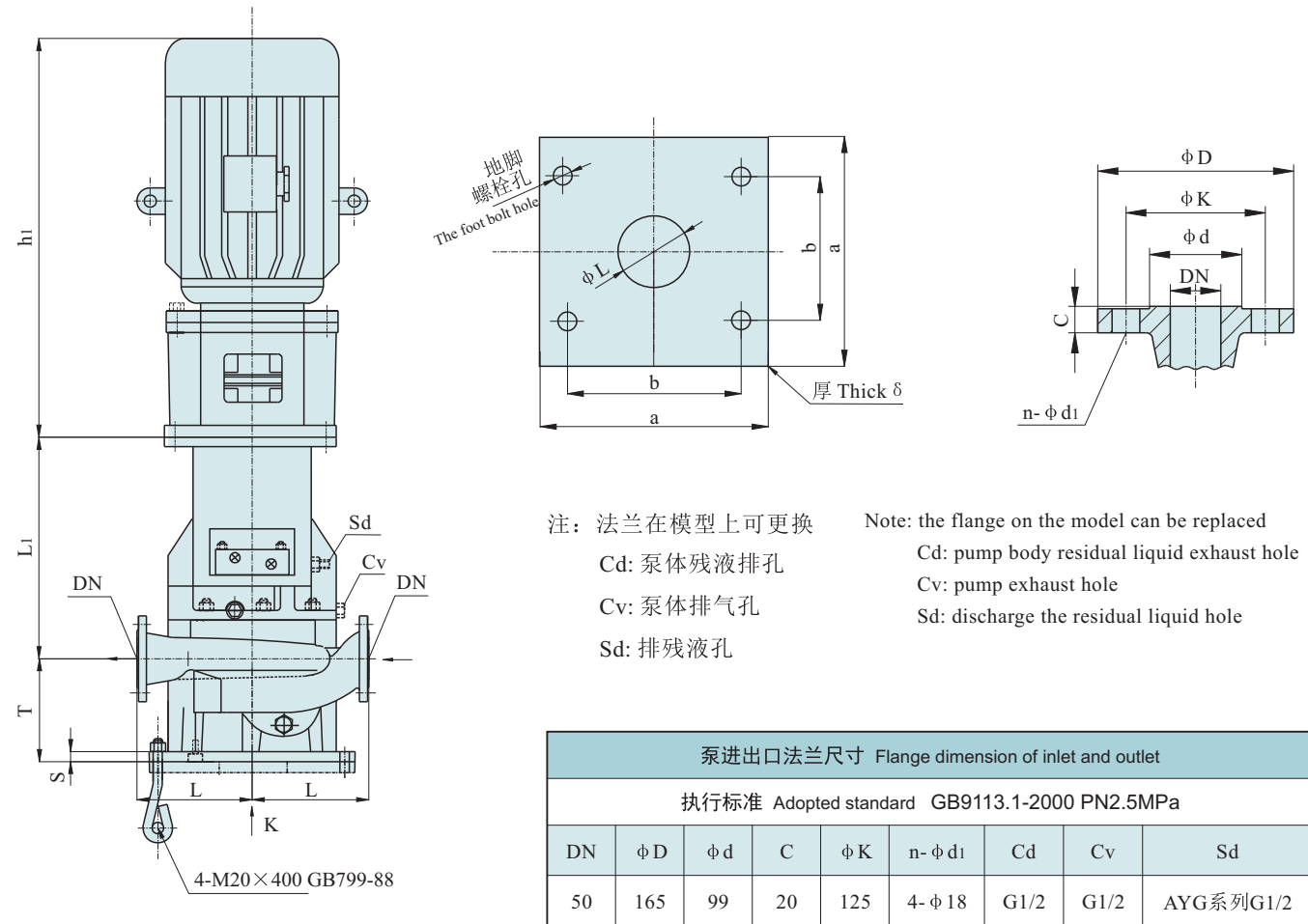
AYG 50-1200型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
		50	220	30	200	405		300	180	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	191									

外形及安装尺寸图 External form and installation dimension drawing

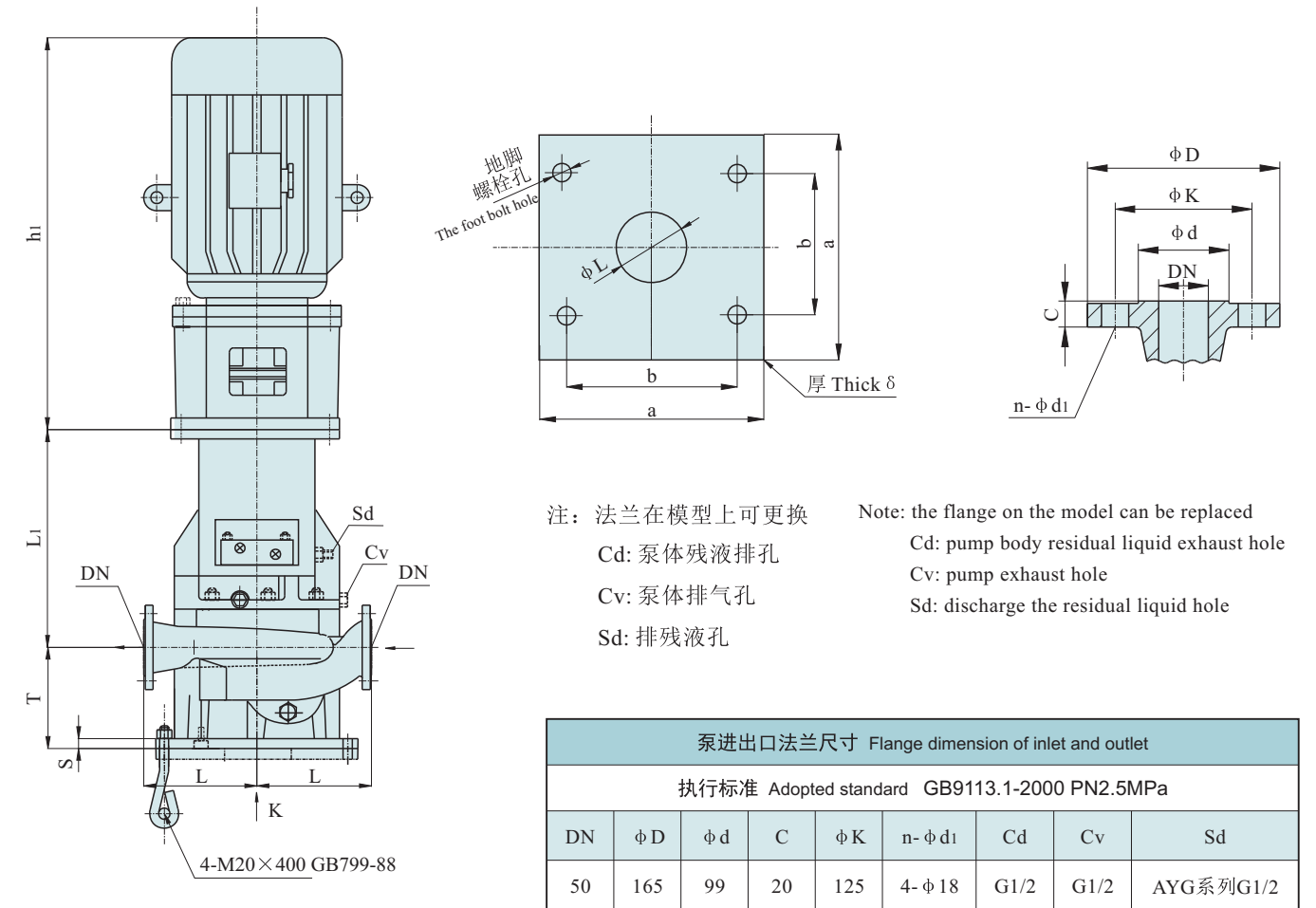
AYG 50-2250型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
		50	260	30	200	475		350	20	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	190									

外形及安装尺寸图 External form and installation dimension drawing

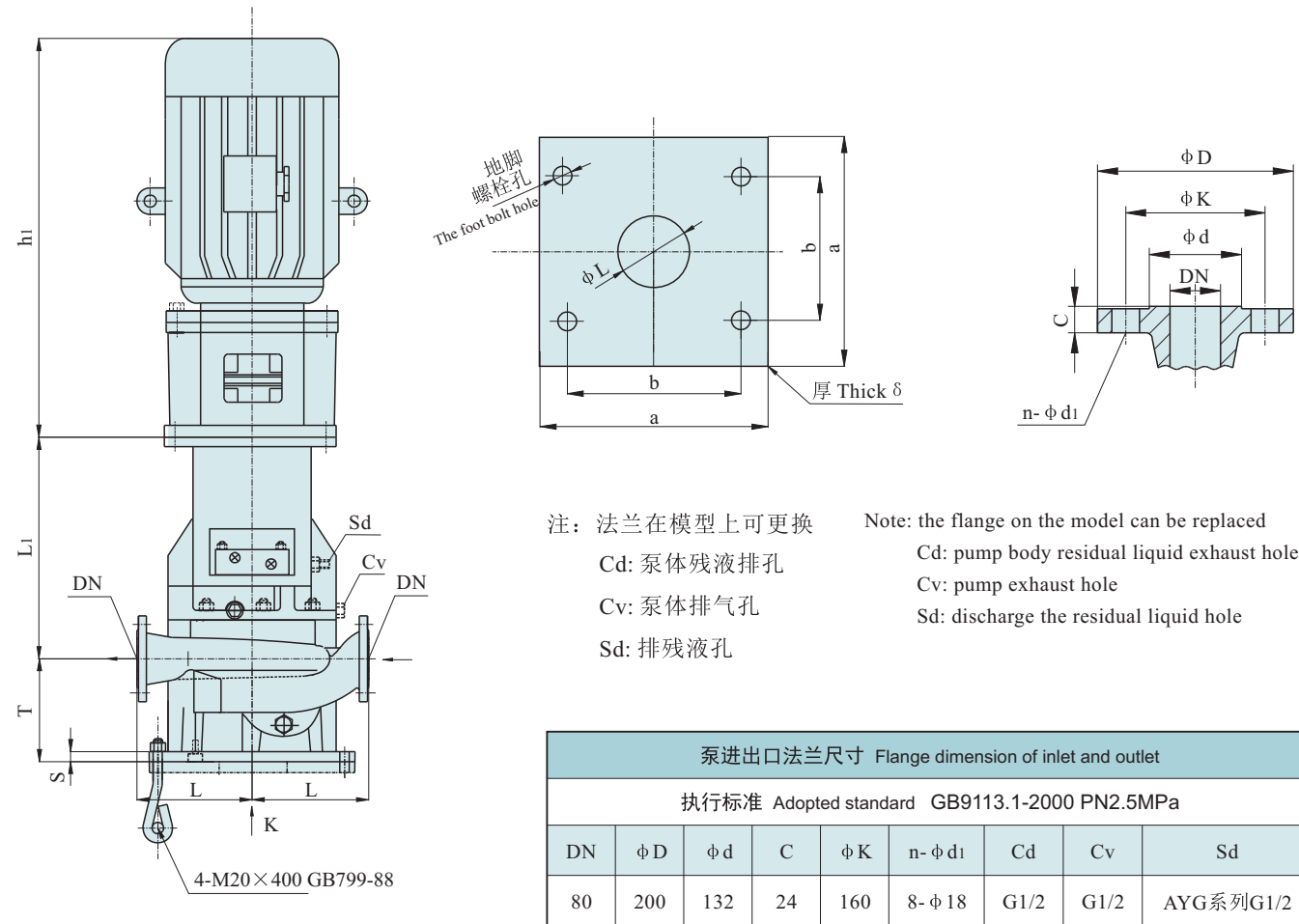
AYG 50-2315型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
		50	300	30	230	475		450	300	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	296									

外形及安装尺寸图 External form and installation dimension drawing

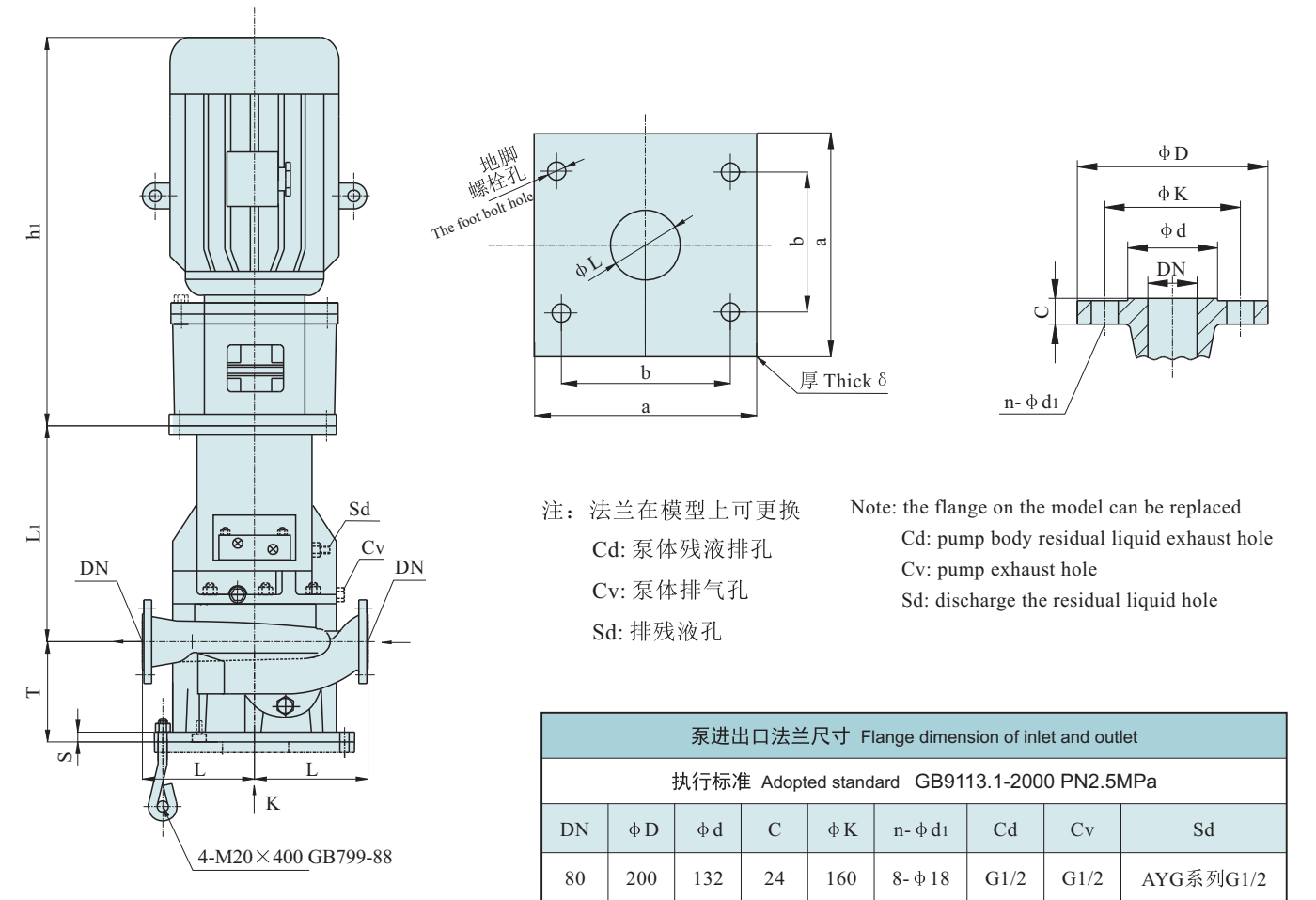
AYG 80-2160型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
	80	220	30	230	475		300	180	30	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	173									

外形及安装尺寸图 External form and installation dimension drawing

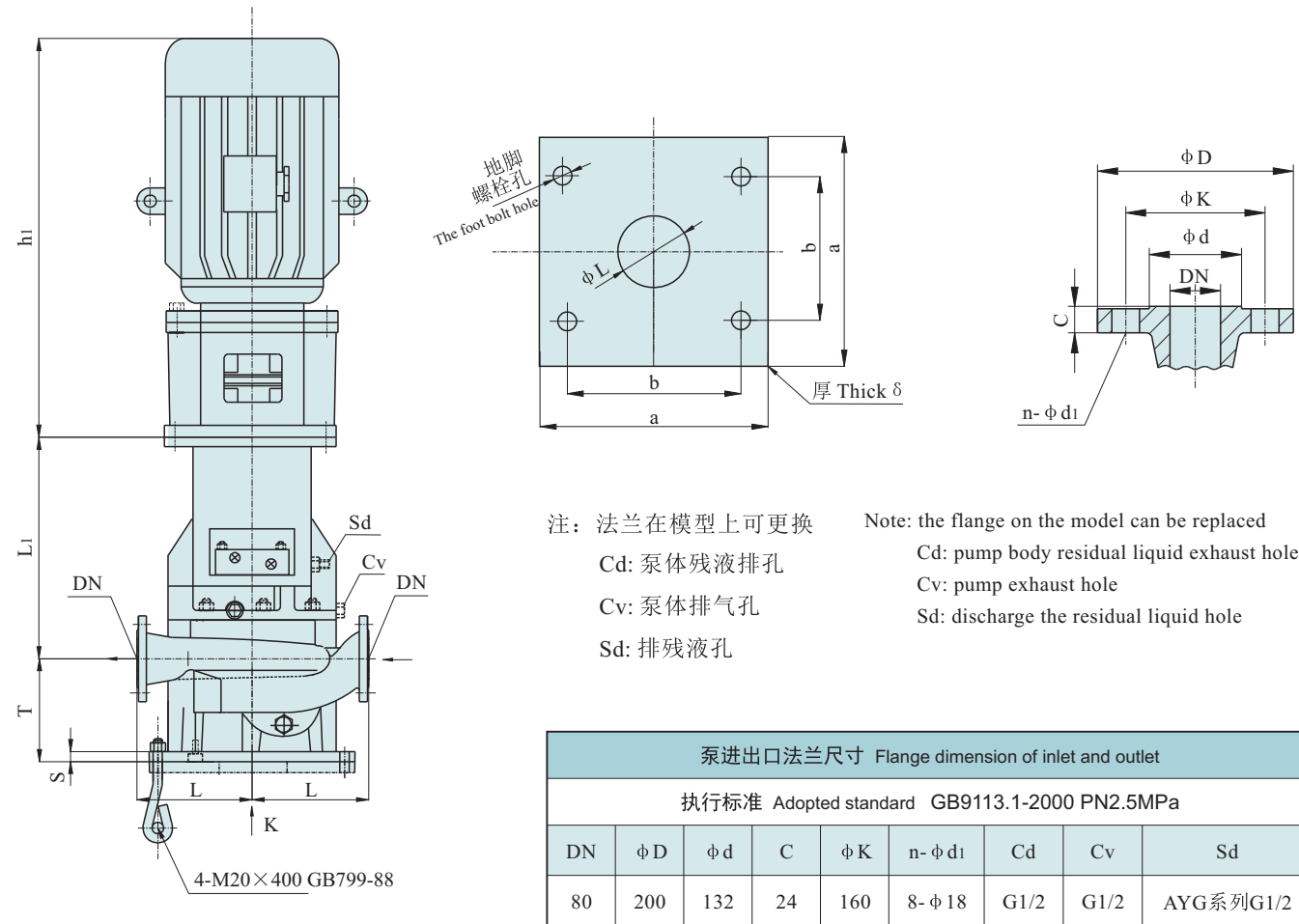
AYG 80-2200型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
	80	260	30	250	475		350	200	30	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	218									

外形及安装尺寸图 External form and installation dimension drawing

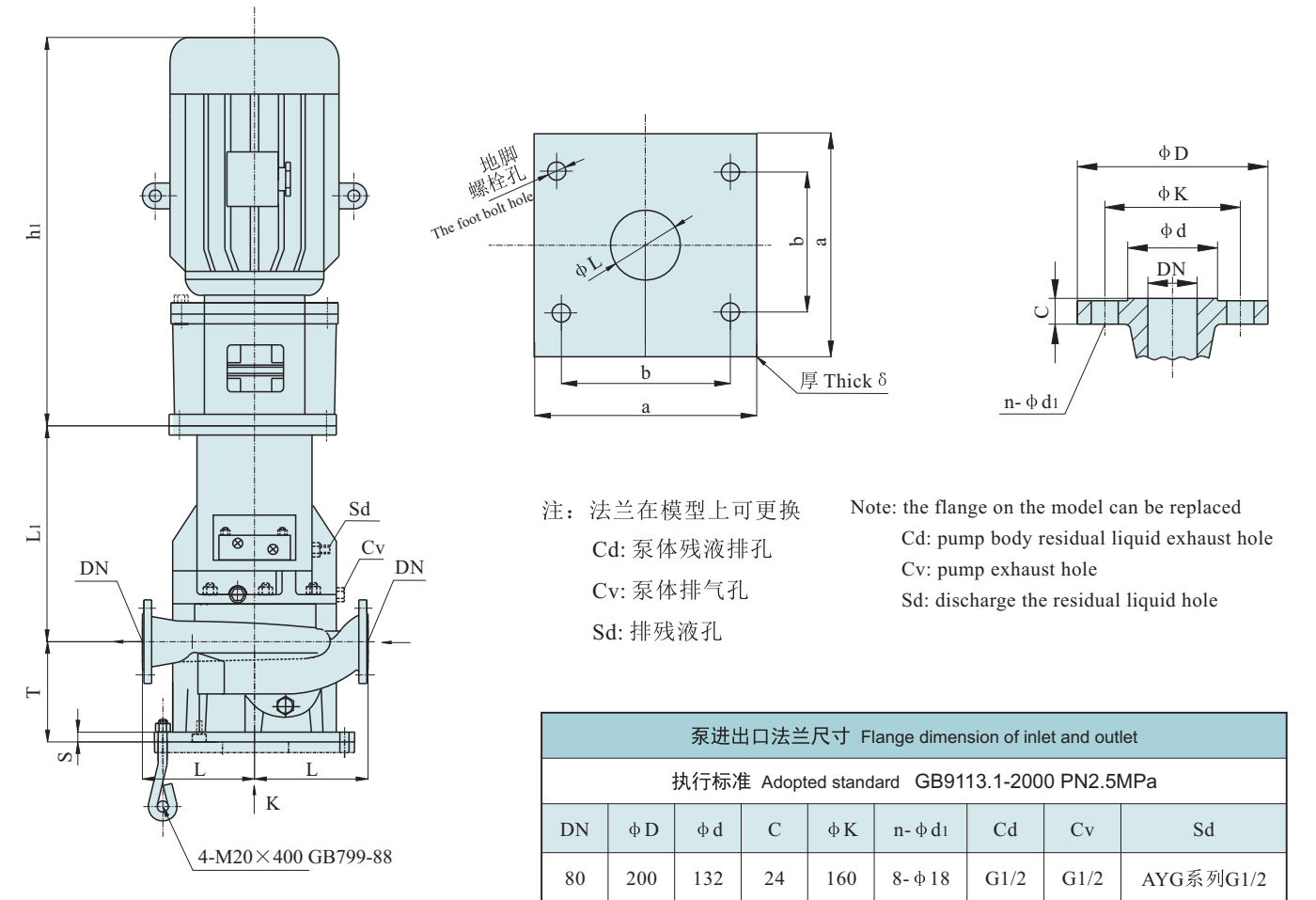
AYG 80-2250型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
		80	280	30	250	475		350	200	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	237									

外形及安装尺寸图 External form and installation dimension drawing

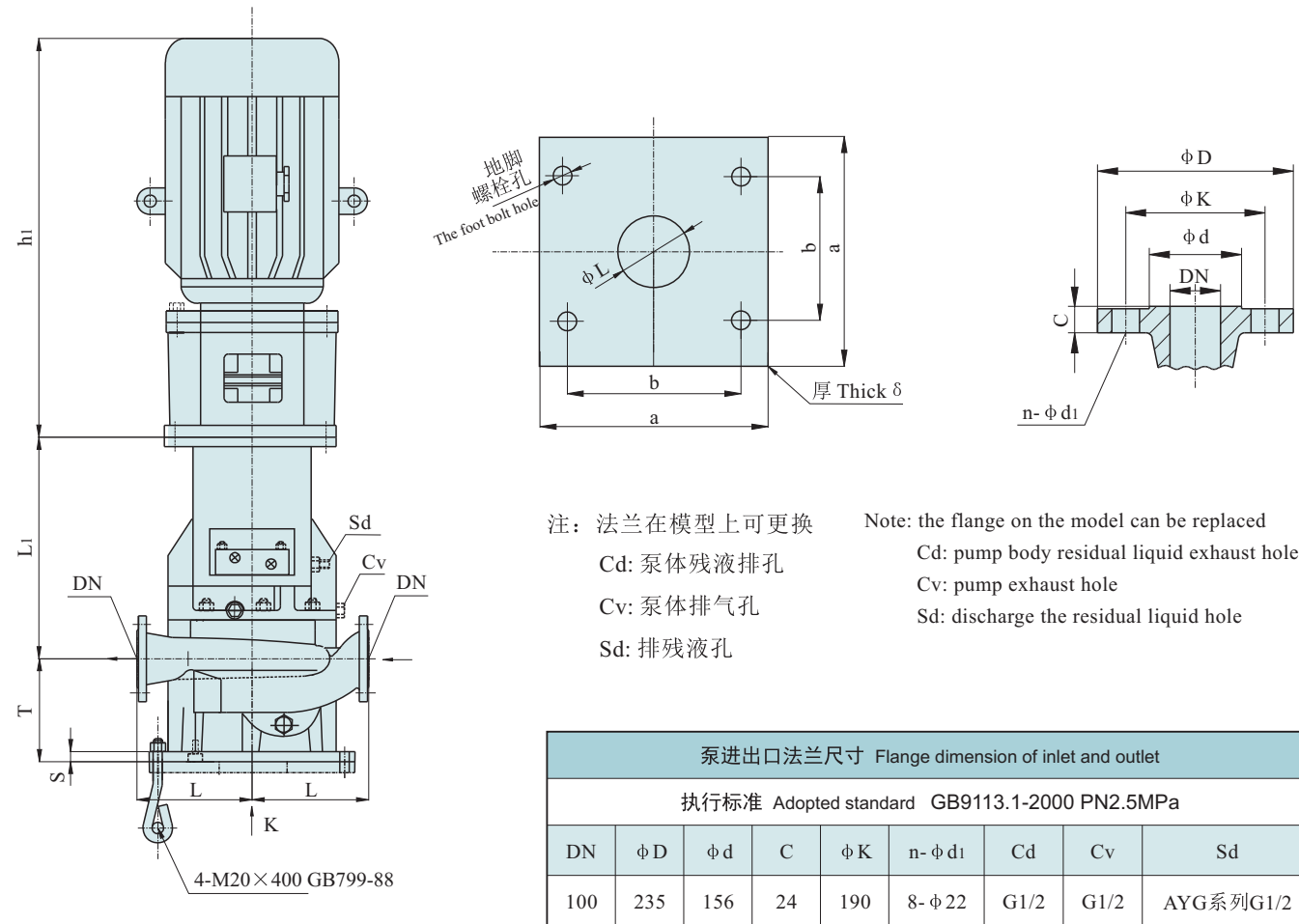
AYG 80-2315型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
		80	320	30	250	475		450	350	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	339									

外形及安装尺寸图 External form and installation dimension drawing

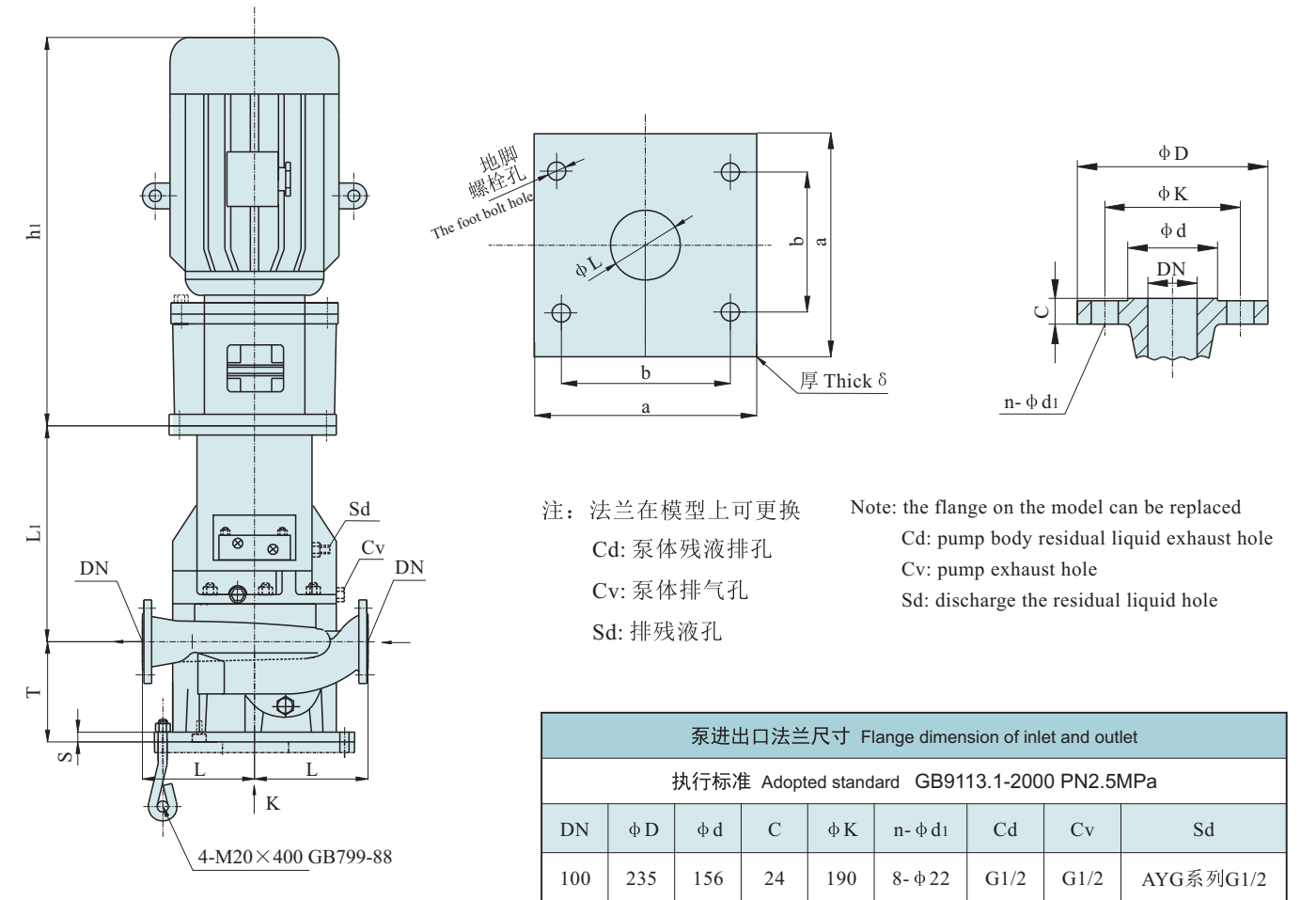
AYG 100-2160型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
	100	250	30	260	475		350	200	30	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	178									

外形及安装尺寸图 External form and installation dimension drawing

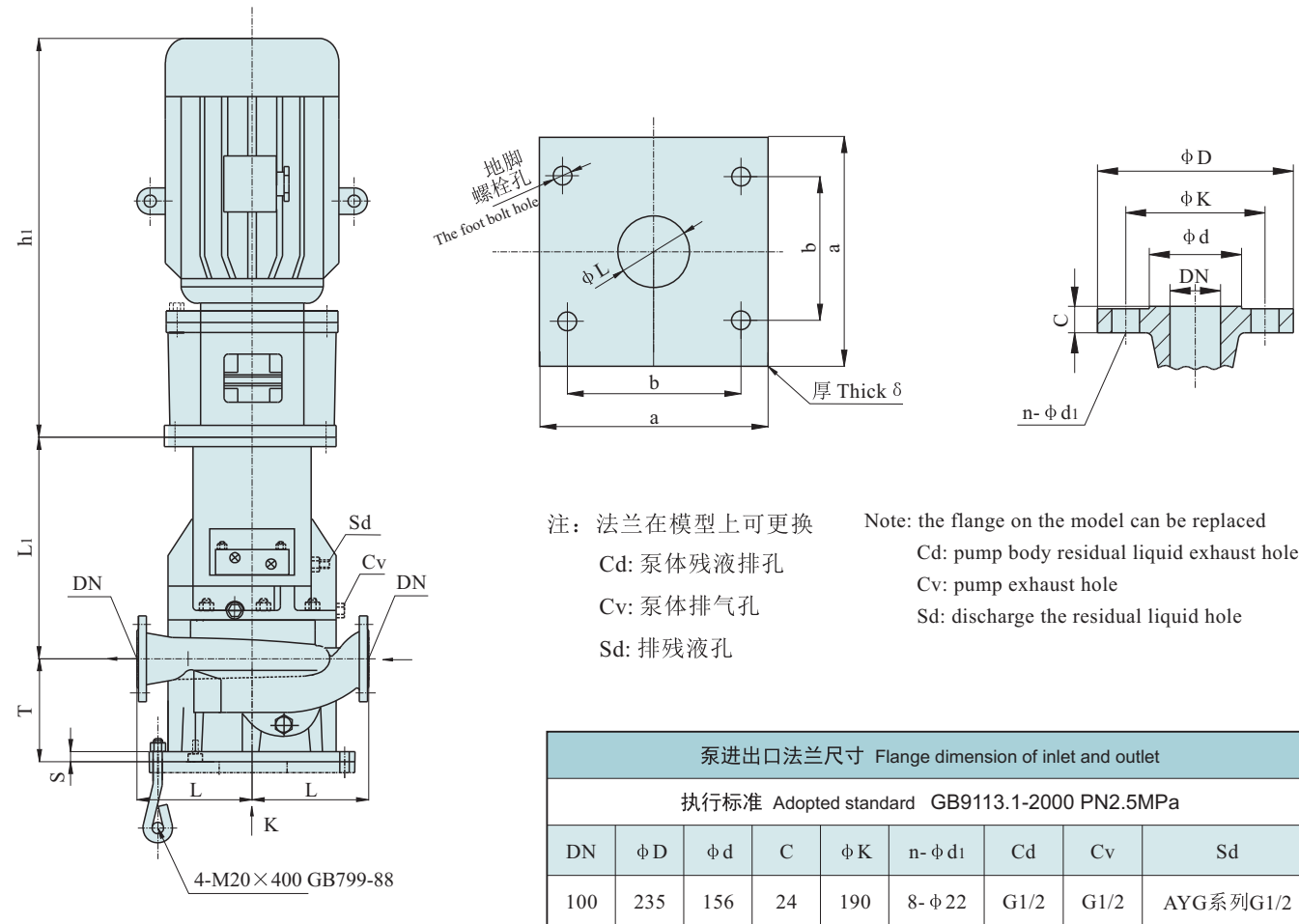
AYG 100-2200型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
	100	280	30	270	475		400	250	30	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	259									

外形及安装尺寸图 External form and installation dimension drawing

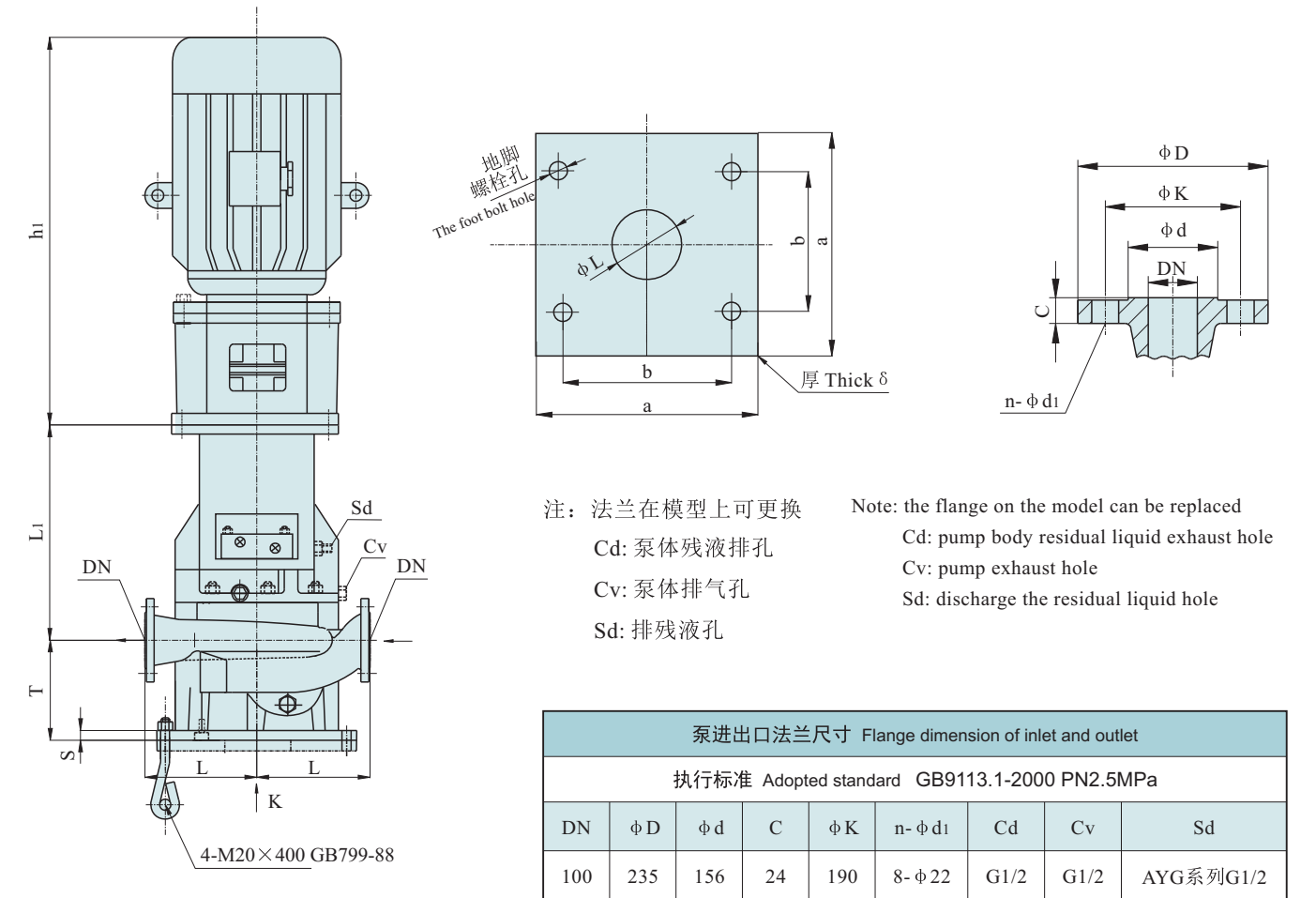
AYG 100-2250型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L1		a	b	δ	φL
	100	320	30	280	475		350	200	30	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h1 Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h1 Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	265									

外形及安装尺寸图 External form and installation dimension drawing

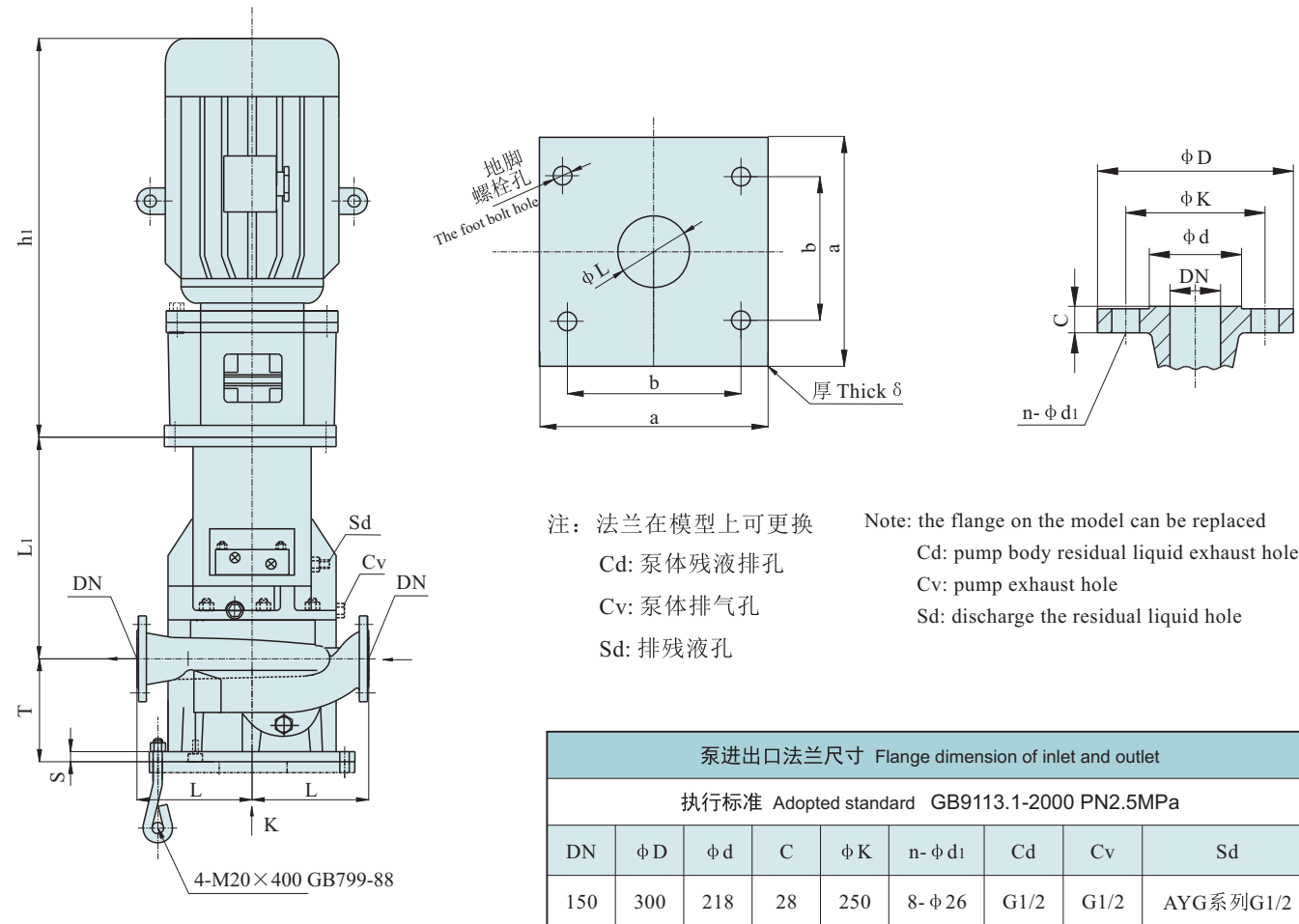
AYG 100-2315型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L1		a	b	δ	φL
	100	370	35	280	475		450	350	35	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h1 Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h1 Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	374									

外形及安装尺寸图 External form and installation dimension drawing

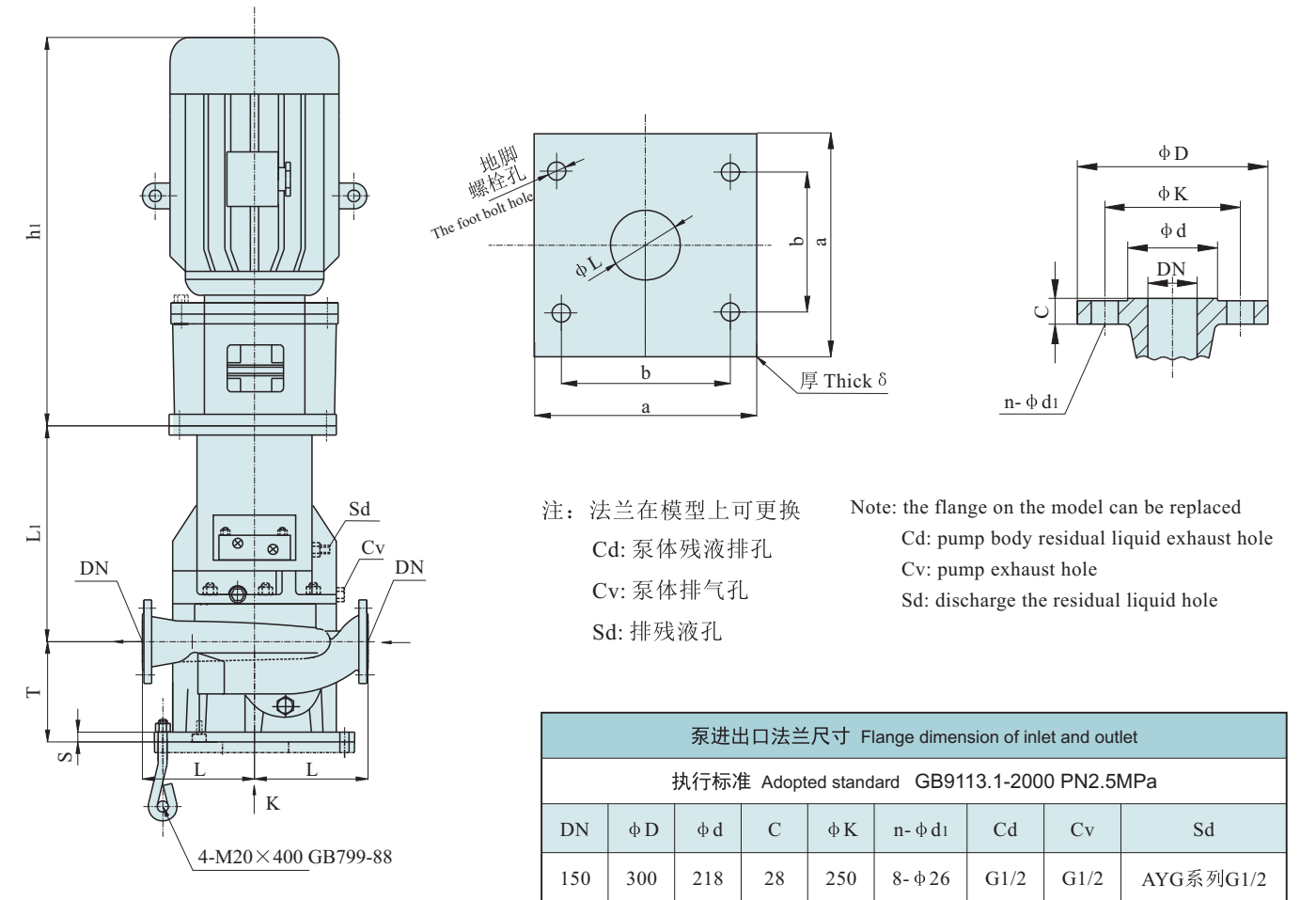
AYG 150-2160型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
		150	320	30	300	475		350	200	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	194									

外形及安装尺寸图 External form and installation dimension drawing

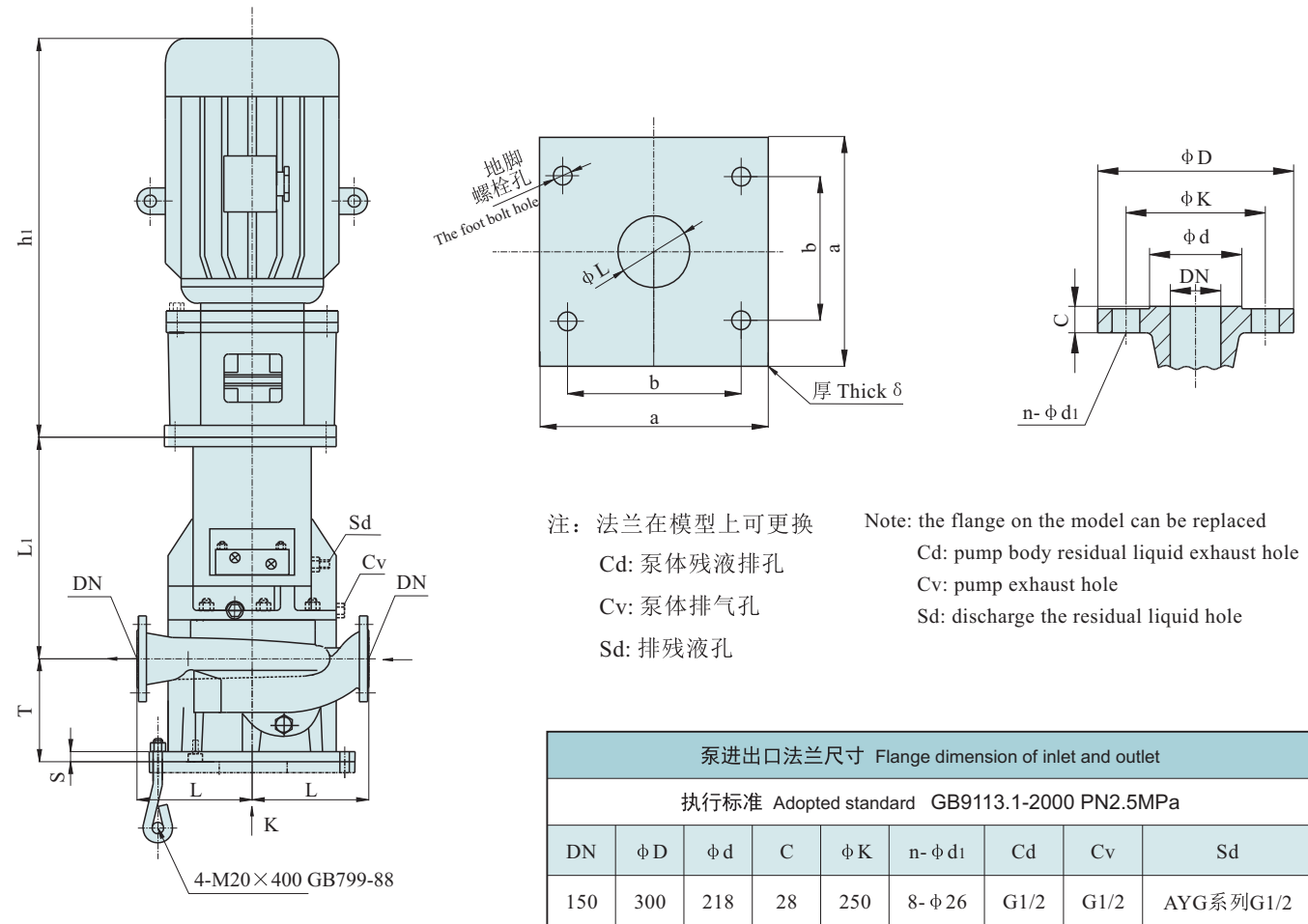
AYG 150-2160型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
		150	340	30	300	475		400	250	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	260									

外形及安装尺寸图 External form and installation dimension drawing

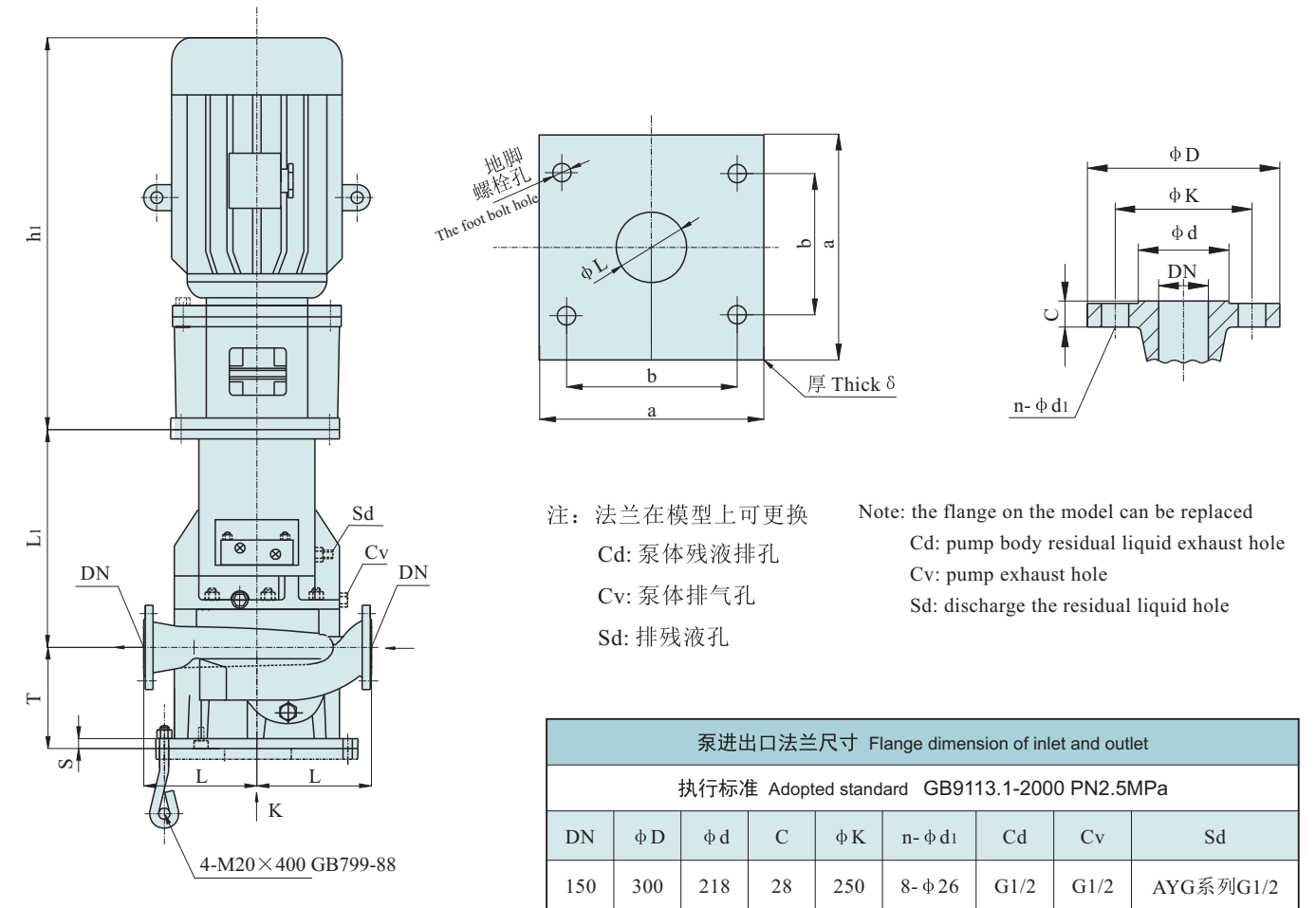
AYG 150-2250型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L1		a	b	δ	ϕL
		150	380	30	320	475		450	300	30
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h1 Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h1 Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	282									

外形及安装尺寸图 External form and installation dimension drawing

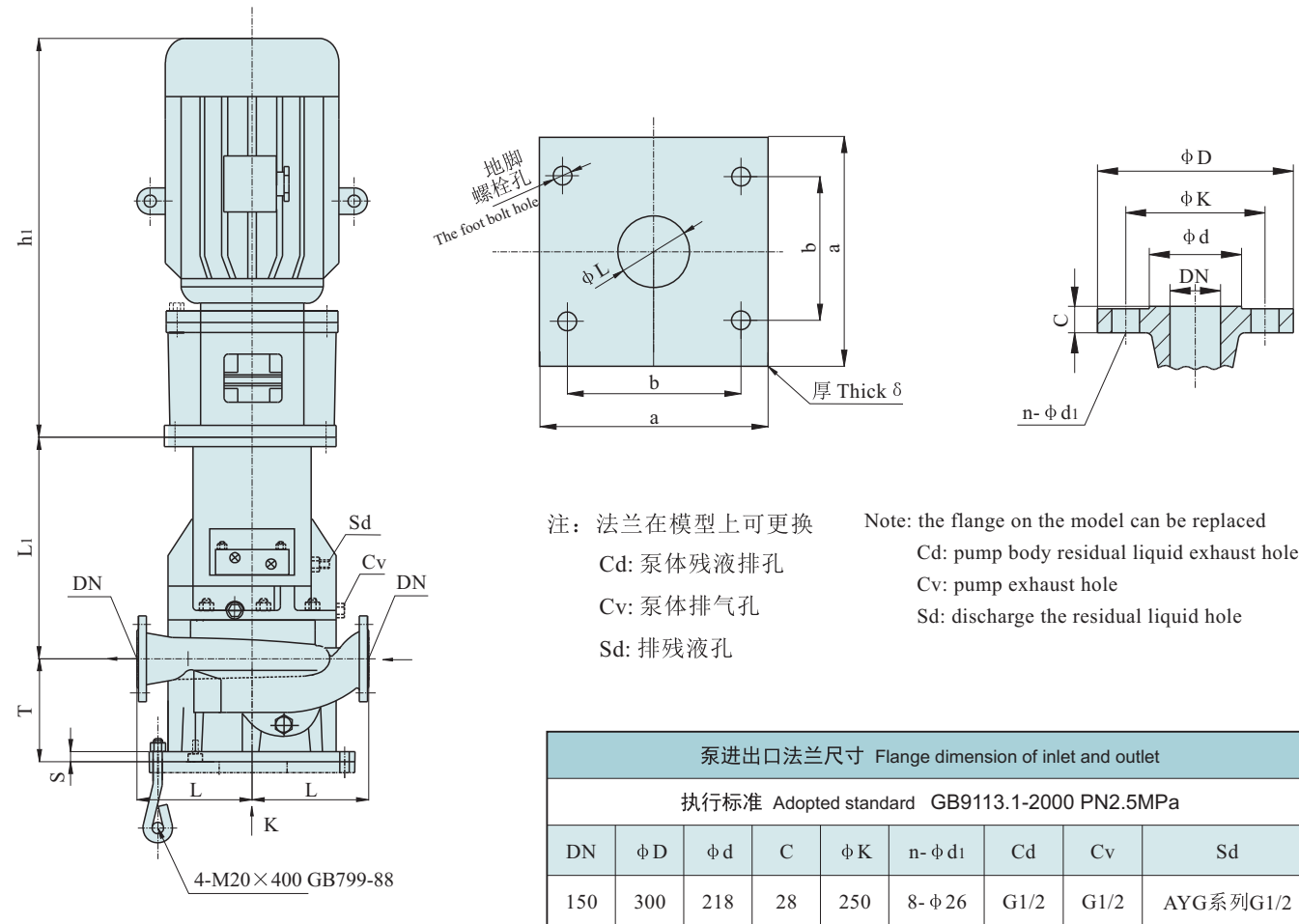
AYG 150-3315型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L1		a	b	δ	ϕL
		150	420	35	335	500		500	350	35
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h1 Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h1 Foundation size	995	1050	1120	1145	1230	1305	1355			
泵重 (kg) Pump weight	432									

外形及安装尺寸图 External form and installation dimension drawing

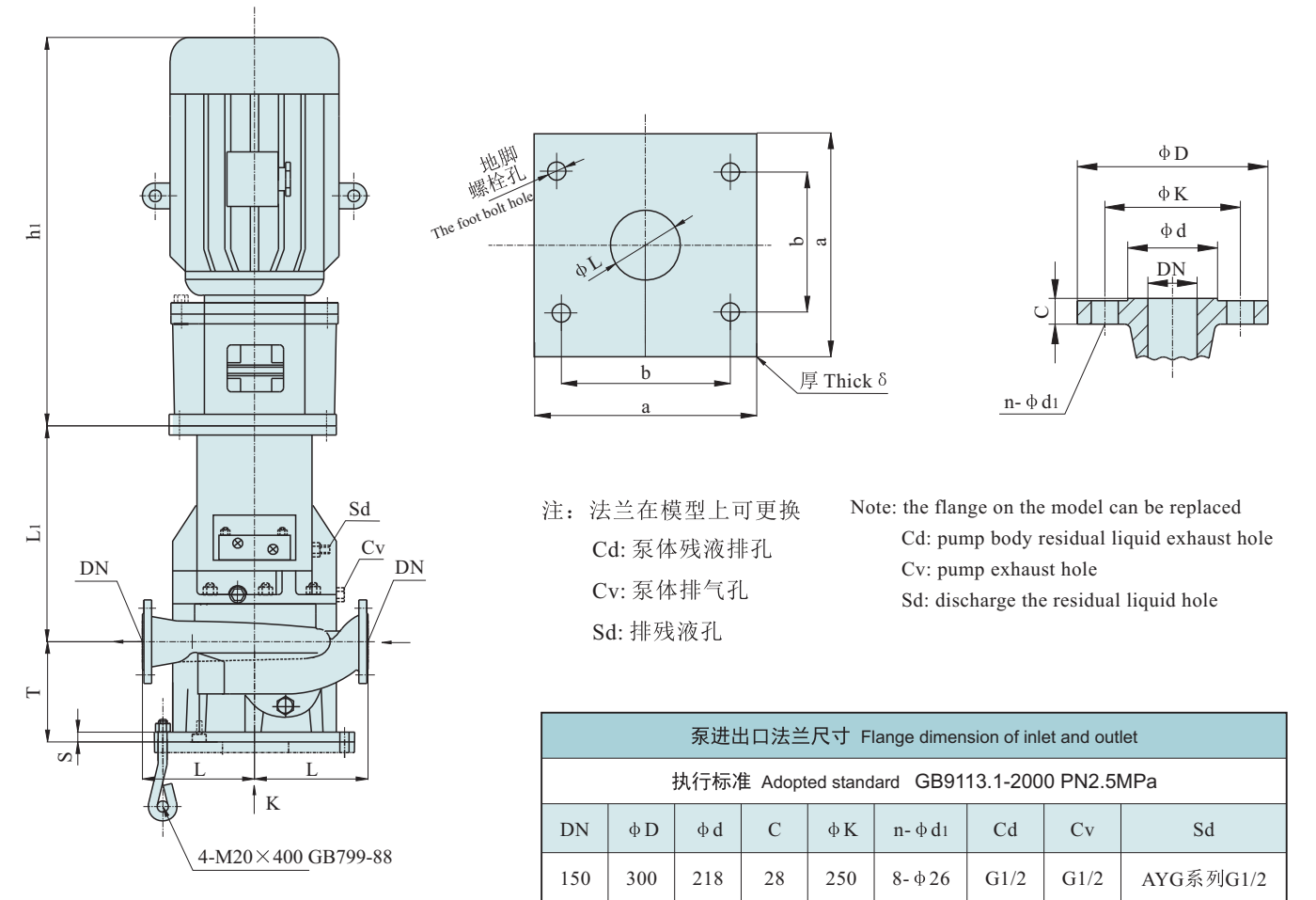
AYG 151-2200型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L1		a	b	δ	ϕL
	150	380	30	350	475		400	250	30	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h1 Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h1 Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	289									

外形及安装尺寸图 External form and installation dimension drawing

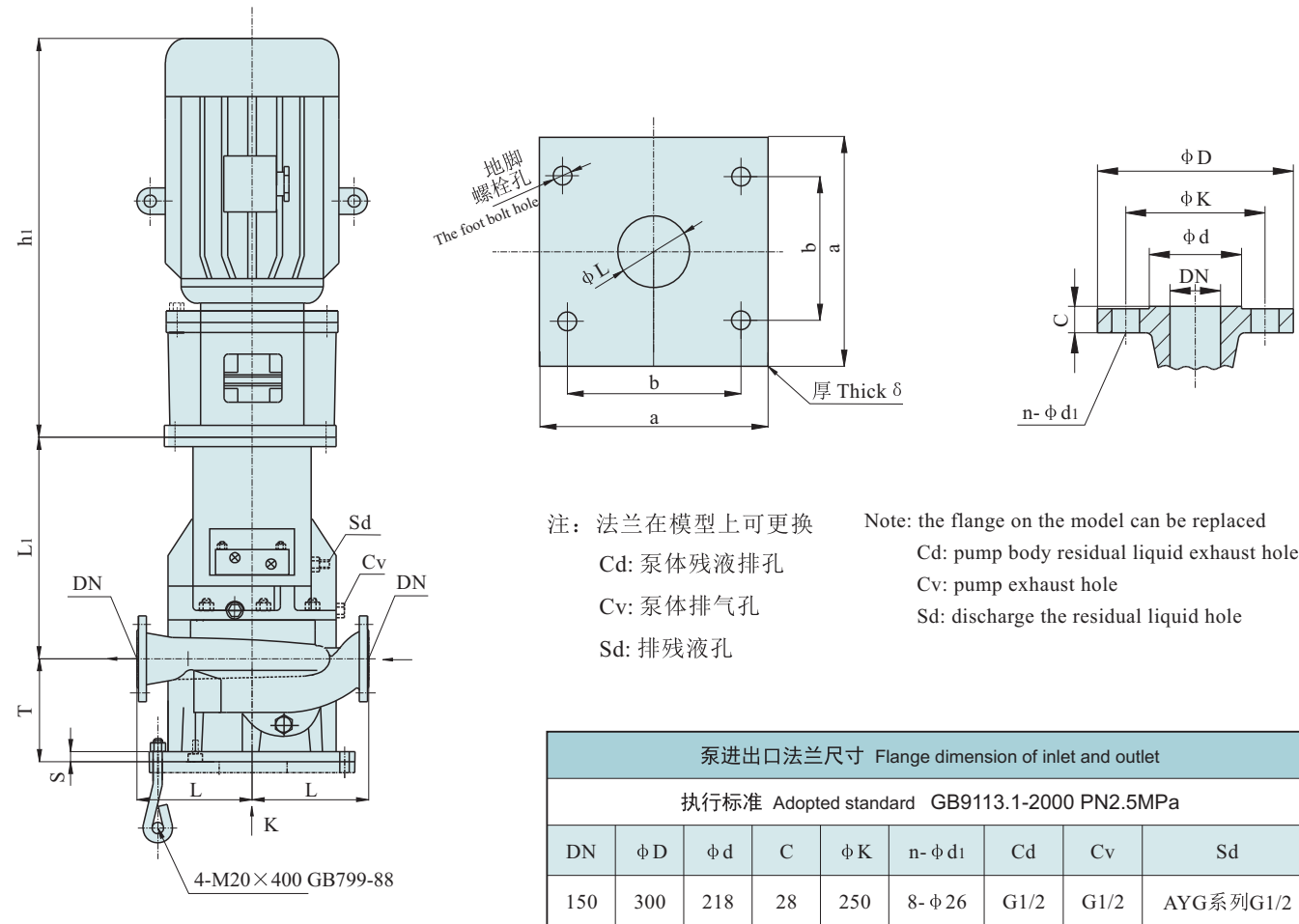
AYG 151-3250型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L1		a	b	δ	ϕL
	150	420	35	380	500		450	300	35	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h1 Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h1 Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	334									

外形及安装尺寸图 External form and installation dimension drawing

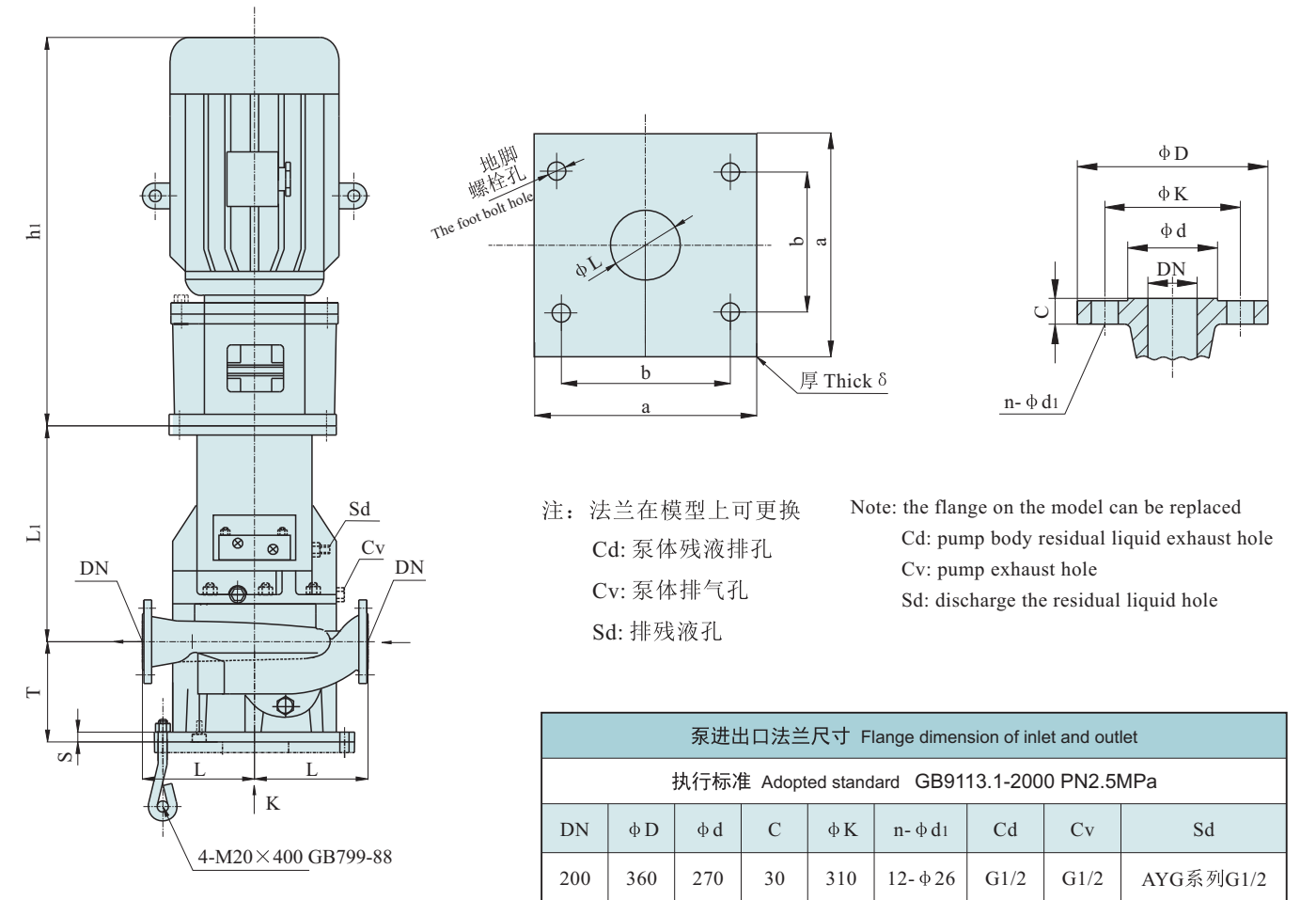
AYG 151-3315型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
	DN50	420	S5	380	1500		300	350	$\delta 35$	$\phi 100$
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	463									

外形及安装尺寸图 External form and installation dimension drawing

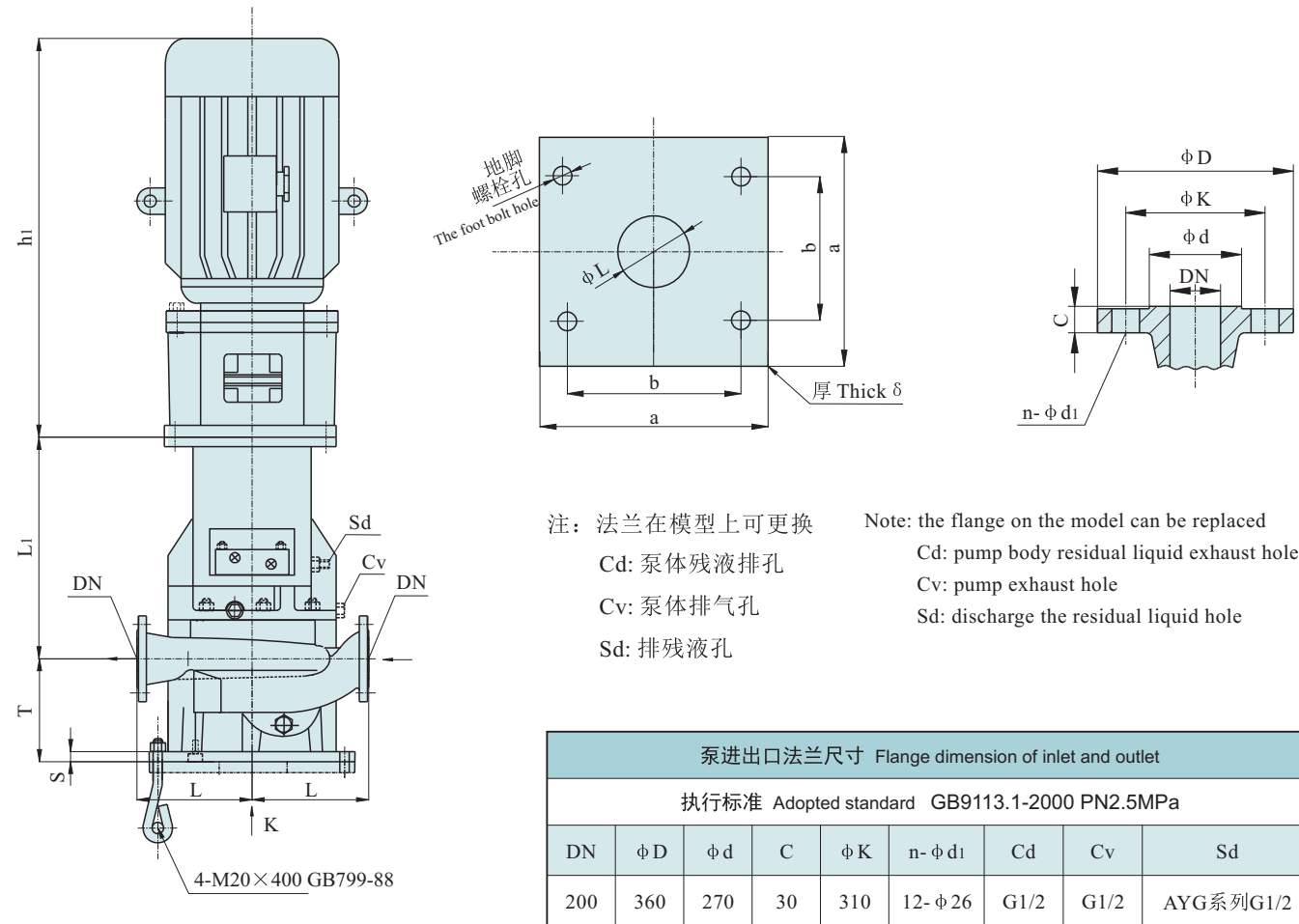
AYG 200-3250型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L ₁		a	b	δ	ϕL
	200	450	35	400	500		450	300	35	100
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h ₁ Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h ₁ Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	334									

外形及安装尺寸图 External form and installation dimension drawing

AYG 200-4315型泵 Type pump



GDS外形尺寸 External form dimensions (mm)	DN	L	S	T	L1		a	b	δ	φL
机座号 Foundation No.	80	90S	90L	100L	112M	132S	132M	160M	160L	180M
机座尺寸 h1 Foundation size	500	531	555	613	653	730	768	905	945	975
机座号 Foundation No.	180L	200L	225S	225M	250M	280S	280M	315S	315M	315L
机座尺寸 h1 Foundation size	995	1050	1120	1145	1230	1305	1355	1565	1675	1785
泵重 (kg) Pump weight	420									

泵体材料介质适应表 Table of the pump casing materials suitable for the media

符号说明 Symbol meaning

符号 symbol	说明(耐蚀情况, 腐蚀率、毫米/年) Notice(about corrosion resisting, corrosive rate:mm/year)	
A	优良, <0.05	Excellent, <0.05
B	良好, <0.05~0.5	Good, <0.05~0.5
C	可用, 但腐蚀较重, 0.5~1.5	Use, but severe corrosive, 0.5~1.5
D	不适用, 腐蚀严重, >1.5	Unsuitable, severe corrosive, >1.5
*	可能产生应力腐蚀破裂	Possibly to produce stress corroded cracking
△	溶液或介质变色	Color change with solution or medium
∅	可能产生晶间腐蚀	Possibly to form corrosion between crystals
∞	可能产生孔蚀	Possibly to produce hole corrosion

铸铁和低碳钢泵适应介质表

Table of the media suitable to both cast iron and low carbon steel made pumps

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature (°C)			
		25	50	80	100
过氧化氢(双氧水) Hydrogen peroxide	10	B	B	B	B
	20~40	D			
氨水 Ammonia	<30	A	B	B	B
	40	A			
甲醇 Methanol	<100	B	B	B	B
	100	A	A	A	A
乙醇 Ethanol	<100	A	A	A	A
	100	A	A	A	A
丙醇 Propyl alcohol		A	A	A	A
		A	A	A	A
丁醇 Butanol		A	A	A	A
		B(120)			
甲醛 Ormaldehyde	10~30	D			
	40~50	C			
	80~90			D	D
乙醛 Acetaldehyde	10	C	C		
	100	A	A	A	A
丙醛 Propionic aldehyde		A	A		
丁醛 Butyric aldehyde		A	A	A	A
(二)甲醚 Dimethyl ether		B	B	B	B
丙酮 Acetone	<100	B			
	100	A	A	A	A
甲烷 Methane		A	A	A	A
		A(120)			

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature (°C)			
		25	50	80	100
乙烷 Elayl		A	A	A	A
		A(120)			
乙烯 Ethane		A	A	A	A
丙烷 Propane		A	A	A	A
		A(120)			
丁烷 Tetrane		A	A	A	A
汽油(高辛烷值) Gasoline(high octane value)		B	B	B	
汽油(喷气机燃料) Gasoline(fuel for oil sprayer)		B	B	B	
汽油(含H2S) Gasoline(containing H2S)		B			
汽油(含HCL, SO2, H2O) Gasoline(containing HCL, SO2, H2O)		C	C		
煤油 Coal oil		B	B	B	B
三乙醇胺 Triethanolamine		B	B	B	B
植物油 Vegetable oil	100	A	A	A	A
	90	D	产生催化 Producing catalyze		
豆油 Soy bean oil		B	B		
玉米油 Corn oil		B	B	B	
棉籽油 Cottonseed oil		B	B	B	
饮用水 Drinking water		B	B	B	
高纯水 High pure water		A			
		A	A		
海水 Sea water	流速 Flowrate				
	<1.5m/s	B			
	>1.5m/s	D	D		
水 PH=7 Water PH=7		C	C	C	C

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature (°C)			
		25	50	80	100
水 PH<7 Water PH<7		D			
水 PH>7 Water PH>7		A	B		
硫酸 Sulphuric acid	<65	D	D		
	65~75	C	C	D	D
	75~100 ^①	B	C	D	D

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature (°C)			
		25	50	80	100
氢氟酸 (不含氧) Hydrofluoric acid (containing no oxygen)	<70	D	D		
	70~90	C			
	100	B	B		
氢氟酸 (含氧) Hydrofluoric acid (containing oxygen)	<70	B	B		
	70~90	C			

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature (°C)			
		25	50	80	100
铬酸 Chromic acid	100	B	B	C	
	<25	D			
	30~80	B			
硼酸 Boric acid	<10	C	C	C	C
	>10	D		D	
70~90%硫酸+硝酸 70~90% sulphuric acid+nitric acid		A			
氢氧化钠 Sodium hydroxide	<30 ^②	A	B	B	B*
		D*(200)			
	30~40	A	B	B	C
	50~60	B	B	D	D
		D*(200)			
	80	B	D	D	D
90			D	D	
100	B		D		
	D*(370)				
氯化铵 Ammonium hydride	<10	C	D		
	10~99	D	D		
	100	B			
硫酸钠(PH>7) Sodium sulphate(PH>7)		B	B	B	B
硝酸钠 Sodium nitrate	<90	A	A	B	C
	100	A	A	A	A
碳酸钠 Sodium carbonate		A	A	A	A
氯化钠(含氧) Solidum chloride (containing oxygen)	10	D ^④	C	C	D
	20~30	C			
	100	A			
氰化钠 Sodium cyanide	10	A	A	A	A
		A(120)			
20~90	A	A	A	A	

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature (°C)			
		25	50	80	100
碳酸氢钠 Sodium bicarbonate	<100	B	B	B	B
	100	C			
硅酸钠 Sodium silicate		B	B	B	B
		B(120)			
柠檬酸钠 Sodium citrate	10	D			
	100	A			
硫酸钾△ Potassium sulphate△	10~20	B	B	B	D ^④
		D			
100	A				
	<90	B	B	B	B
硝酸钾 Potassium nitrate	100	A	A	A	A
		A(120)			
氟化钾 Potassium fluoride	20	B	B	B	B
	100	A	B	B	B
氰化钾 Potassium cyanide	<50	C ^③	C	C	C
	60~70			C	C
	80~90	B			C
100	B	B	B	B	
	C(120)				
重铬酸钾 Heavy Potassium chromate	<60	B	B	B	B
		B	120		
100	B	B	B	B	
	<100	B	B	B	C
高锰酸钾 Potassium permanganate	100	B			
		A	A	A	A
氯化钙 Lime chloride	10	A(120)			
	20~70	B	B	C	D
	100	A	A	A	A
		A(120)			
氟化钙 Calcium fluoride	90	C			
	100	B	B	B	B

注：①高转速泵、阀，用高铬镍不锈钢为好。铸铁优于碳钢，可用于80~100℃以下。②铸铁不耐100℃。③铸铁为C。④铸铁为D。
 Note: ①It is better to use the high Cr-Ni stainless steel for the pump and valve of a high rotating speed. Cast iron is better than carbon steel. May be used below 80~100℃.
 ②Cast iron does not withstand 100℃. ③Cast iron to be C. ④Cast iron to be D.

铬18镍19不锈钢(304, 304L)泵适应介质表
 Table of the media suitable to the pump made of cr18ni9 stainless steel(304,304L)

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
无机酸 Inorganic acid					
硫酸*(不充气) Shlphuric acid* (without gas filled)	<5	B	D		
	10~80	D	D		
	90	B	D		
	100	B	C		D
硫酸*(充气) Shlphuric acid* (gas filled)	<20	C	D		
	30~60	D	D		
	70~80	C	D		
	90~100	B	C	D	D
发烟硫酸 Fuming sulphuric acid		D			
硝酸 Nitric acid	<30	A	A	A	A
		C(120)		D(150)	
	40~60				
70					
盐酸 Chlorhydric acid		D			
磷酸 Phosphoric acid	<5	B	B	B	B
		B(沸点) B(Boiling point)			
	10	B	D	D	D
		D(沸点) D(Boiling point)			
10~85	D				
氢氟酸(不充气)*∞ Hydrofluoric acid (without gas filled)*∞	<100	D			
	100	B	D		
氢氟酸(充气)*∞ Hydrofluoric acid (gas filled)*∞		D		D	
铬酸*∞ Chromic acid*∞	<10	B	C	C	
		C(沸点) C(Boiling point)			
	20~30	B	D	D	D
	50	D			
100	D				
硼酸∞ Boratic acid∞	<30	A	A	A	A
		A(沸点) A(Boiling point)			
	40	B	B	B	B
	B(150)				
50	B	B	B	B	

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
硼酸∞ Boratic acid∞	70~80	D			
	70~80	D(120)			
	100	B	B		
	D(200)				
混酸: 硫酸>50%+硝酸 <50%+水>20% Mixed acid: sulphuric acid>50%+nitric acid <50%+water>20%		B	B	B	D(沸点) D(Boiling point)
硫酸20~60%+硝酸 <25%+水>20% Sulphuric acid 20~ 60%+nitric acid<25%+water>20%		D			
硫酸15%+硝酸 5%+水80% Sulphuric acid 15%+nitric acid 5%+water 80%		B	B	B	B (沸104) (Boiled 104)
氢氧化钠 Sodium hydroxide	<50	A	C	C	D
		D*(200)			
	70*	B	B	B	D*
		D*(200)			
	80*	B	B	B	D
	D*(200)				
100	B	B	B	B	
	C(316)		D(370)		
氢氧化钾* Potassium hydroxide*	<50	B	B	B	B
		B(沸点) B(Boiling point)			
	50	B	B	B	D
		D(200)			
60~70	B	B	B	C	
	C(120)				
80	B			D	
	D(200)				
氢氧化钾 Potassium hydroxide	100	A			
	D(250)				
硫酸钠* Sodium sulphate*		A	A	A	A
		A(200)		B(840)	

铸铁和低碳钢泵适应介质表

Table of the media suitable to the pump made of cast iron and low carbon steel

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
硝酸钠∞ Sodium nitrate∞	<70	A	A	A	A
	100	A(沸点) A(Boiling point)			
		B		D	
碳酸钠 Sodium carbonate	10	A	A	A	A
		A(沸点) A(Boiling point)			
	20~40	B	B	A	A
	100	A	A	A	B
碳酸钠 Sodium carbonat	100	D*(400)		D*(900)	
氯化钠*∞ Sodium chloride*∞	10~30	B	B	B	B
		B(沸点) B(Boiling point)			
	90	D			
	100	B	B	B	
		D(260)		D(700)	
氧化钠 Sodium cyanide	10	A	A	A	A
	20~30	A			
	40~100	A	A	A	D
		D(700)			
硅酸钠 Sodium silicate		A	A	A	A
		D(800)			
醋酸钠∞ Sodium acetate∞	10	A	A	A	A
		A(150)			
	20~60	B	B	B	B
	100	B	B	B	B
		B(370)			
柠檬酸钠 Sodium citrate	<40	B	B	B	B
	100	B			
硫酸钾 Potassium sulphate	<饱和	A	A	A	A
		A(沸点) A(Boiling point)			
	100	D(200)			
硝酸钾 Saturation	<80	B	B	B	B
		B(沸点) B(Boiling point)			
	100	A	A	A	A
		A(560)			
氯化钾 Potassium fluoride		B	B	B	B
氰化钾 Potassium cyanide	<30	A	A	A	A
	40~	B	B	B	B

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
氰化钾 Potassium cyanide	90				
	100	B			
重铬酸钾 Heavy potassium chromate	<30	A	A	A	A
		A(沸点) A(Boiling point)			
	40~60	A	A	A	A
	100	B			
高锰酸钾 Potassium permanganate	<30	B	B	B	B
		B(沸点) B(Boiling point)			
	100	B			
氯化钙*∞ Calcium chloride*∞	<20	A	A	A	D
	30~80	B	B	B	D
	100	B			
		D(150)			
氯化钙 Calcium fluoride	10	A	A	A	A
	100	A	A	A	A
过氧化氢(PH>7) Solozone(PH>7) (双氧水) (Hydrogen peroxide solution)	10~40	B	B	B	B
		B(沸点) B(Boiling point)			
	90	A	A		
	100	B			C
氨水 Ammonium water		A	A	A	A
氨(无水) Ammonium (free of water)		A	A	A	A
		A(316)		A(500)	
甲醇 Methanol	<100	A	A	A	A
	100	A	A	A	C
乙醇 Alcohol		A	B	B	B
丙醇 Propanol		A	A	A	A
丁醇 Butanol		A	A	A	A
甲醛∞ Formaldehyde∞	<40	A	A	A	A
		A(150)			
	50	A	A	B	B
		B(300)			
	60~70	A	A		
	80~90	A	A	A	
	100	A			
乙醛 Acetaldehyde		A	A	A	A
丙醛 Propionic aldehyde		A			
丁醛 Butyric aldehyde		A	A	A	A
(二)甲醚 Dimethyl ether		B	B	B	B

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
乙醚 Ethyl ether		A	A	A	A
丙酮 Acetone		A	A	A	A
甲烷 Methane		A	A	A	A
		A(370)			
乙烷 Ethane		A	A	A	A
		A(316)			
丙烷(液及气) Propane(liuid and gas)		A	A	A	A
		A(370)			
丁烷 Tetrane		A	A	A	A
		A(316)			
汽油(高辛烷值) Gasoline(high value of octane)		B	B	B	
	汽油(喷汽燃料) Gasoi(fuel of steam sprayer)	B	B	B	
煤油 Coal oil		A	A	A	A
		A(200)			
三乙醇胺 Triethanolamine		B	B	B	B

铬18镍12钼(钛)(316,316L)不锈钢泵的适应介质表

Table of the media suitable to the pump made of Cr18Ni12Mo(Ti) (316,316L) stainless steel

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
硫酸*(充气) Vitriol* (gas filled)	<5	B	B	D	D
	10~30	B	C	D	D
	40~50	C	D	D	
	60~70	D	D	D	
	90	B ⁰	C	D	D
	100	B	C	C	C
		D(120)			
硫酸*(不充气) Vitriol* (without gas filled)	<5	B	D	D	D
	20~80	D	D	D	D
	80~90	B	D	D	
	100	B	B	B	C
硝酸 Nitric acid	<20	A	A	A	A
		C(120)		D(150)	
	30~60	A	B	B	B
		D(120)			
	70	A	B	B	
	80	A	B	D	
	90	A	D		
	100	A ₂	D		
磷酸*(充气) Phosphoric acid (gas filled)	<25	A	A	A	A
		A(沸点) A(Boiling point)			
	25-50	A	A	A	B
		D(>120)			

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
植物油 Vegetable oil		A	A	A	A
		A(350)			
豆油 Soy bean oil		A	A	A	A
玉米油 Corn oil		A	A	A	A
棉子油 Cottonseed oil		A	A	A	A
饮用水 Drinking water		A	A	A	A
海水 Sea water	流速 Flowrate				
	<1.5m/s	A∞		A	
	>1.5m/s	A∞			

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
磷酸*(不含氧) Phosphoric acid*(containing no oxygen)	50~85	A	B	B	B
		D(120)			
	90	D			
	100	B			
氢氟酸(不充气) Hydrofluoric acid (without gas filled)	<100	D			
	100	B			
氢氟酸(充气) Hydrofluoric acid (gas filled)	<10	B			
	10~90	D			
	100	B			
碳酸 Carbethylic acid	10	B			
	30				A
	100	A	A	A	A
		A(816)			
铬酸 Chromic acid		D			D
氯酸∞ Chloric acid∞		D			
四磷酸 Tetra-phosphoric acid		B			
硼酸∞ Boric acid∞	<10	A	A	A	A
		A(沸点) A(Boiling point)			
	20~50	B	B	B	B

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
		B(150)		B(沸点) B(Boiling point)	
	70~80	B		D(120)	
	100	B	B	D(250)	
王水 Nitro-hydrochloric acid		D			
混酸: 硫酸>50%+硝酸<50%+水<20% Mixed acid: sulphuric acid>50%+nitric acid<50%+water<20%		B	B	B	
		D(沸点) D(Boiling point)			
		D			
混酸: 硫酸20~60%+硝酸<25%+水<20% Mixed acid: sulphuric acid>20~60%+nitric acid<25%+water<20%		D			
混酸: 硫酸30%+硝酸15%+水55% Mixed acid: sulphuric acid 30%+nitric acid 15%+water55%		B	B	B	
		B(沸点) B(Boiling point) (110)			
混酸: 硫酸15%+硝酸5%+水80% Mixed acid: sulphuric acid 15%+nitric acid 5%+water80%		B	B	B	
		B(沸点) B(Boiling point) (110)			
甲酸 [∞] Aminic acid	<5	B	B	B	
	>5	C	C	C	
		D(沸点) D(Boiling point)			
醋酸 [∞] (不充气) (乙酸) Acetic acid* (without gas filled) (acetic acid)	<50	A	A	A	
	60~90	B	B	B	
	100	B	B	B	
		D(200)			
醋酸(充气) Acetic acid (gas filled)	<40	A	A	A	
		B(150)			
	50	A	B	B	
	60~90	A	B	C	
	100	A	B	C	
		D(150)			
氢氧化钠 Sodium hydroxide	<20	A	A	A	
		B(沸点) B(Boiling point)		D(150)	
	30~50	A	A	B	
		D*(150)			
	70	A	A	B	
		D*(150)			
	80	A	A	B	
		D(260)		D(370)	

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
		C(260)		D(370)	
氢氧化钠 Sodium hydroxide	100	A	A	A	
		C(260)			
		D(370)			
氢氧化钾* Potassium hydroxide*	<50	A	A	A	
		A(沸点) A(Boiling point)			
	50	B	B	B	
		D(200)			
	60~70	B	B	B	
		C(150)			
	80	B		B	
		D(200)			
	100	A		A	
		D(260)			
硫酸钠 Sodium sulphate		A	A	A	
		A(200)		B(840)	
硝酸钠 Sodium nitrate	<70	A	A	A	
		A(沸点) A(Boiling point)			
	100	B		B	
		A(510)			
碳酸钠 Sodium carbonate	10	A	A	A	
		A(沸点) A(Boiling point)			
	20~40	B	B	B	
		A(沸点) A(Boiling point)			
	100	B	B	B	
		D*(400)		D*(900)	
氯化钠 [∞] Sodium chloride [∞]	10	B	D	B	
	20~30	B	B	B	
		B(沸点) B(Boiling point)		D(120)	
	90	D		D	
	100	A		A	
		D(700)			
碳酸氢钠 Sodium bicarbonate		A	A	A	
氰化钠 [∞] Sodium cyanide [∞]	<10	A	A	A	
	20~30	A		A	
	40~100	B		D	
		D(700)			
硅酸钠 Potassium silicate		A	A	A	
		D(800~100)			
硫酸钠 Potassium sulphate	<100	A	A	A	
		A(沸点) A(Boiling point)			

MODEL AYG VERTICAL PIPELINE PUMP

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
		100			
硝酸钾 Potassium nitrate	<80	B	B	B	
		B(沸点) B(Boiling point)			
	100	B		B	
		B(550)			
碳酸钾 Potassium bicarbonate	<70	B	B	B	
		B(沸点) B(Boiling point)			
	100	B	B	B	
氟化钾 Potassium fluoride		B	B	B	
氰化钾 Potassium cyanide	<90	B	B	B	
	100	B		B	
重铬酸钾 Heavy potassium chromate	<30	A	A	A	
		A(沸点) A(Boiling point)			
	40~60			A	
	10	B		B	
高锰酸钾 Potassium permanganate	<30	B	B	B	
	10	B	D	B	
	20~30	B	B	B	
氯化钙 [∞] Calcium chloride [∞]	40~90	B	B	B	
		D(沸点) D(Boiling point)			
	100	A	A	A	
	50	C(-18)			
氟化钙 Calcium fluoride	10	A	A	A	
	100	A	A	A	
甲醇 Methanol	<100	A	A	A	

注: ① Cr26Mo1铁素体钢不耐蚀;
② 高流速和摩擦会增加腐蚀;
③ 不许含微量盐酸、硫酸或氯化钠。Cr26Mo1铁素体钢耐蚀较好。
Note: ① Cr26Mo1 ferritic steel does not withstand corrosion;
② High flowrate and friction may increase corrosion;
③ Not allowed to contain micro chlorhydric acid, sulphuric acid or sodium chloride. Cr26Mo1 ferritic steel is of a better corrosion resistance.

钛及钛合金泵泵适应介质表
Table of the media suitable to the pump of titanium and titanium alloy

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
		100			
硫酸 [∞] (充气) Vitriol [∞] (gas filled)	1	B	B	B	
		B(沸点) B(Boiling point)			
	<3	B	B	D	
	<10	B	C	D	
	10~30	B	C	D	
	40~50	C	D	D	
	50~100	D	D	D	
硫酸(不充气) Vitriol (without gas filled)	<10	B		B	
	10~100	D		D	

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
		100			
乙醇 Alcohol		A	A	A	
乙二醇 Ethandiol		A	A	A	
甲醛 [∞] Formaldehyde [∞]	<40	A	A	A	
		A(150)			
	50	A	A	B	
		B(300)			
	60~70	A	A	A	
	80~90	A	A	A	
	100	A		A	
乙醚 Ethyl ether		A	A	A	
丙酮 Acetone		A	A	A	
醋酸乙酯 Ethyl ester acetate		A	A	B	
甲苯 Toluene		A	A	A	
		A(沸点) A(Boiling point)			
汽油 Gasoline		A	A	A	
		A(175)			
煤油 Coal oil		A	A	A	
		A(200)			
苯酚 Phenyl hydroxide	70~90	B	B	B	
		B(150)		D(200)	
海水 Sea water	流速 Flowrate				
	<1.5m/s	A [∞] *		A(PH≈7)	
	>1.5m/s	A [∞] *			

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
盐酸 [®] (不充气) Chlorhydric acid [®] (without gas filled)	10	B	D		
	20	C	D		
	>30	D			
盐酸 [®] (充气) Chlorhydric acid [®] (gas filled)	1	B	B	B	B(沸点) B(Boiling point)
	<20	B			D(35)
	30	B	D		
	>50	D			
磷酸(充气) Phosphoric acid (gas filled)	5	B	B	B	B
	<10	B	B	B	
磷酸(充气) Phosphoric acid (gas filled)		D(沸点) D(Boiling point)			
	10~20	B	D		
	30	B	C		D
	40	C	C		
	50~70	C	C	D	
100	D				
磷酸 [®] (不充气) Phosphoric acid [®] (without gas filled)		D			
铬酸 Chromic acid	10	A	A	A	A
	<90	A	A	A	A
硼酸 Boric acid	10	A	A	A	A
	<饱和 <Saturation	A	A	A	A
盐酸1%+硝酸3% Chlorhydric acid 1%+nitric acid 3%		A			
盐酸2%+硝酸1% Chlorhydric acid 2%+nitric acid 1%		A			
王水 Nitro-hydrochloric acid		A	A	B	B
盐酸4%+硝酸1% Chlorhydric acid 4%+nitric acid 1%		A			

注：①含Cu、Ni等离子或其他氧化剂能降低腐蚀。
②含微量Cl的甲、乙醇可能产生应力腐蚀破裂，含2%以上的水时可避免。

Note: ①Containing Cu, Ni etc.ions or other oxidants can lower the corrosion.

②Both methanol and alcohol containing micro cl⁻ may produce stress corrosive craking,which can be avoided by containing more than 2% water.

介质名称 Medium name	浓度 Concentration (%)	温度 Temperature(°C)			
		25	50	80	100
甲酸(不充气) Aminic acid (without gas filled)	<10	A	A	A	
		A(沸点) A(Boiling)			
	30	D			D
	<50	B	B	D	D
90			D	D	
甲酸(充气) Aminic acid(gas filled)		B	B	B	B
醋酸 Acetic acid		A	A	A	A
		A(200)			
氢氧化钾 Potassium hydroxide	10	A	A	A	A
氢氧化钾 Potassium hydroxide	20~100	A(沸点) A(Boiling point)			
		B			D(沸点) D(Boiling point)
		D(260)			
氢氧化钠 Sodium hydroxide	10	A	A	A	A
		A(沸点) A(Boiling point)			
硫酸钠 Sodium sulphate	10~30	A	A	A	A
		A(沸点) A(Boiling point)			
	饱和 Saturation	A	A		
		D(900)			
硝酸钠 Sodium nitrate	<饱和 <Saturation	A	A	A	A
		A(300)			
氯化钠 Sodium chloride	<饱和 <Saturation	A	A	A	A
		A(沸点) A(Boiling point)			
	100	A*(沸点) A*(Boiling point)			
乙醇* [®] Alcohol*		A	A	A	A
乙二醇 Ethandiol		A	A	A	A
乙醚 Ethyl ether		A	A	A	A
丙酮 Acetone		A	A	A	A
醋酸乙酯 Ethyl ester acetate		A	A	A	A
甲苯 Toluene		A	A	A	A
苯酚 Phenyl hydroxide		A			

ZGOOCr20Ni25Mo4.5Cu1.5(904L)耐腐蚀性能表
ZGOOCr20Ni25MO4.5CU1.5(904L)Table of anti-corrosive performance

介质名称 Medium name	介质条件 Medium condition		腐蚀情况 Corrosion condition
	浓度 Concentration(%)	温度 Temperature(°C)	
硫酸 Vitriol	5-40	60	A
	10	80	B
	20	70	B
	30	70	B
	40	30-50	A
	50	40	A
	50	50	B
	60	20-35	A
	60	40	B
	80-98	40	A
80-98	50	B	

介质名称 Medium name	介质条件 Medium condition		腐蚀情况 Corrosion condition
	浓度 Concentration(%)	温度 Temperature(°C)	
硝酸 Nitric acid	10-40	20-沸腾 20-Boiling	A
	50	100	A
	60	90	A
	70	100	B
	80	80	B
醋酸 Acetic acid	1-80	沸腾 Boiling	A
	99.5	200	A
	100	20-75	A
	100	100	A
	100	沸腾 Boiling	A

ZG1Cr13(410)耐腐蚀性能表
ZG1Cr13(410) Table of anti-corrosive performance

介质名称 Medium name	介质条件 Medium condition		延长时间 Extended time h	腐蚀情况 Corrosion condition
	浓度 Concentration(%)	温度 Temperature(°C)		
硝酸 Nitric acid	5	20		A
	7	20	720	A
	5	沸腾 Boiling		D
	20	20		A
	20	沸腾 Boiling		A
	50	20		A
	50	沸腾 Boiling	24	C
	65	20		A
	65	沸腾 Boiling	24	D
	90	20		A
90	沸腾 Boiling		D	
醋酸 Acetic acid	10-50	20		C
	10	沸腾 Boiling		D
蚁酸 Formic acid	10-50	20		A
	10-50	沸腾 Boiling		D
柠檬酸 Citric acid	1	20		A
	1	沸腾 Boiling		D
	25	20	720	C
氨 Ammonia	溶液或气体 Solution or air	20-100		A
氢氧化钠 Sodium hydroxide	20	20		A
	20	沸腾 Boiling		A
	50	100		D
	浓液 Thick liquid	20		A

介质名称 Medium name	介质条件 Medium condition		延长时间 Extended time h	腐蚀情况 Corrosion condition
	浓度 Concentration(%)	温度 Temperature(°C)		
草酸 Oxalic acid	浓液 Thick liquid	20		A
	浓液 Thick liquid	沸腾 Boiling		D
硝酸铵 Ammonium nitrate	约65 About 65	20	1127	A
	约65 About 65	125	110	C