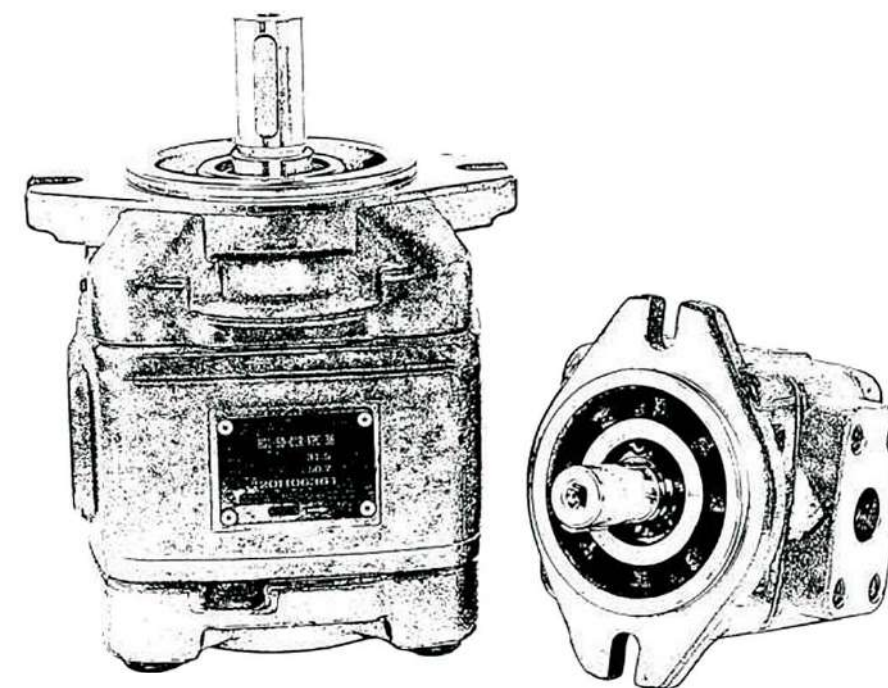




TAIZHOU
ETERNAL HYDRAULIC



GHG内啮合齿轮泵单泵系列

GHG Single Internal Gear Pump Series.....1

GHG内啮合齿轮泵双泵系列

GHG Double Internal Gear Pump Series.....9

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台州永畅液压机械有限公司

Taizhou Eternal Hydraulic Machine Co.,Ltd.

GHG系列单泵 GHG series single pump

GHG0系列 规格 8、10、13、16、20
GHG0 Series displacement 8、10、13、16、20
GHG1系列 规格 25、32、40、50、63
GHG1 Series displacement 25、32、40、50、63
GHG2系列 规格 80、100、125、160
GHG2 Series displacement 80、100、125、160



产品简介 Brief introduction

采用轴向和径向压力补偿设计，即使在低转速和低粘度下仍保持较高的容积效率。
With special design of pressure compensate,it is High Volumetric efficiency even when low rotation speed and low viscosity.
超低的噪音，采用高强度铸铁和内部独特的消音设计，使噪音更低。
The noise is very low.Adopt high-strength iron casting and special noise-deduction design inside,the noise of pump is much lower.
极低的流量和压力脉动，在低速状况仍可保持稳定的流量和压力输出。
Very low flow and pressure fluctuation.It can keep stable flow and pressure even it is low speed.
高压设计，最高使用压力可达到35MPa。
It is high-pressure design.The highest pressure is 35MPa.
转速范围宽广，最高转速可达3000r/mim。
Rotation speed range is large.The highest rotation speed is 3000R/Min.
可进行组合形成双联泵。
It can be assembled to double pump.
对油液污染不敏感，使用寿命长。
It is not sensitive to greasy dirt so that the lifetime is much longer.
可广泛适用于工业，如塑机、鞋机、压铸机械以及叉车等 行业的液压系统。尤其适用于伺服变频驱动的节能系统。
It is widely applied in industry,such as hydraulic system in plastic moulding machine,shoes machine,casting machine and forklift...
Especially in system that servo variable-frequency drives.

型号说明 Model Descriptions

GHG	0	-20	-01	R	-V	P	C
泵类型 Pump Type							
内啮合齿轮泵 Internal gear pump		GHG					
系列号 Series No							
排量8...20 Displacement		0					
排量25...63 Displacement		1					
排量80...160 Displacement		2					
规格 Spec							
排量 Displacement (mL/r)							
8	10	13	16	20	25	32	
40	50	63	80	100	125	160	
设计号 Designing No.							
							01
旋转方向（从轴端看）Direction of rotation (From shaft end cover)							
顺时针 Clockwise rotation							R
逆时针 Counter clockwise rotation							L
密封形式 Sealing							
氟橡胶 Viton							V
轴伸形式 Shaft type							
平键轴 Straight key shaft							P
花键轴 Spline shaft							S
安装形式 Mounting							
SAE 2孔 SAE 2 Hole							C

结构 Structure

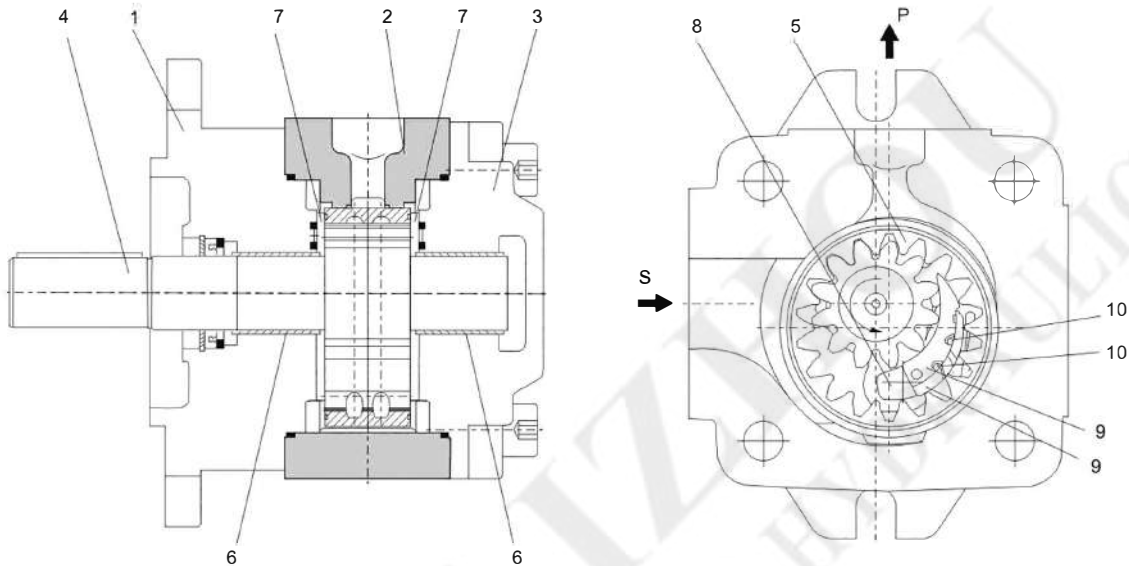
GHG系列液压泵为具有固定排量的间隙补偿的内啮合齿轮泵。

GHG series is an internal gear pump with backlash compensation and fixed displacement.

其基本构成是：前盖（1）泵体（2）后盖（3）齿轮轴（4）内齿圈（5）滑动轴承（6）前后侧板（7）和定位杆（8）以及由月牙块组件（9）和月牙块密封件（10）组成的径向补偿功能。

Main Spare part: Front cover (1), Housing (2), Rear cover (3), Pinion shaft (4), Internal gear (5), Plain bearings (6), Thrust plates (7), Filler pin (8)

and radial compensation by Filler segment carrier (9) and Filler sealing segment (10)



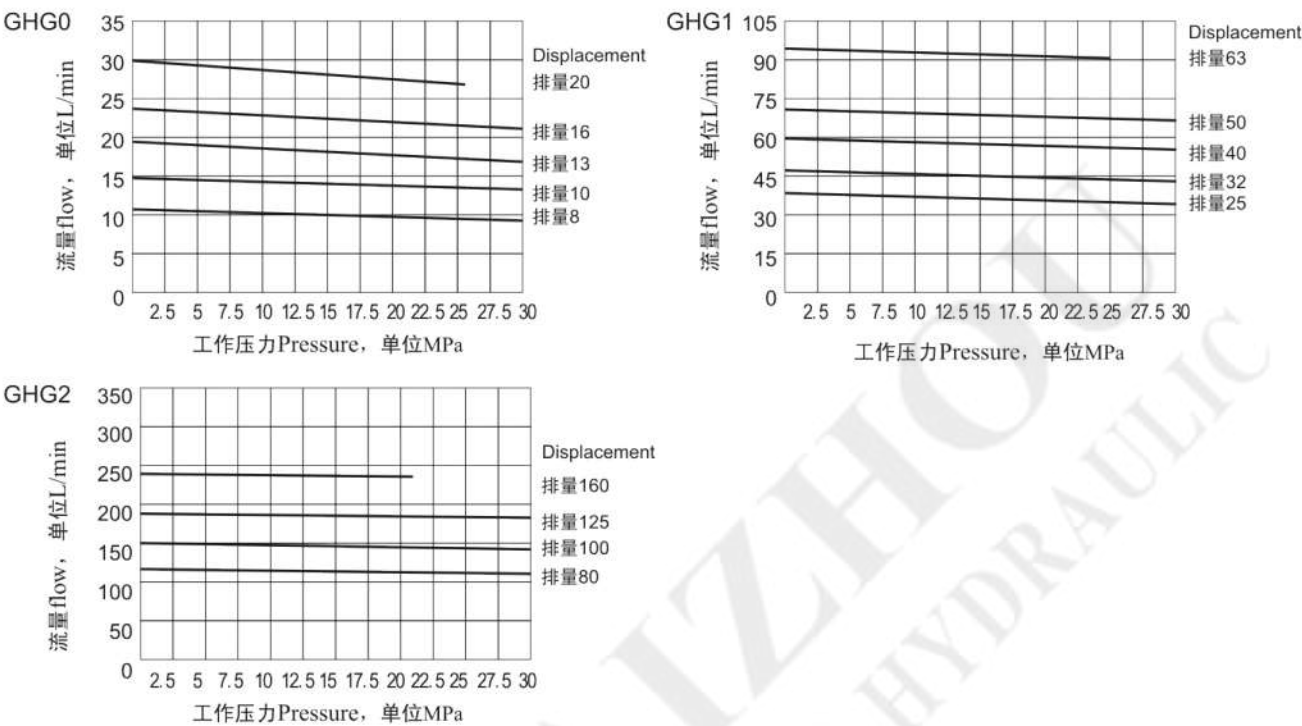
性能参数 Performance parameter

系列号 Series No	规格 Spec	排量 mL/r Displacement	工作压力MPa Pressure		转速范围 r/min Rotation Speed		重量KG Weight
			额定Rated	最高Max	最高Max	最低Min	
GHG0	8	8.2	31.5	35	3000	600	4.6
	10	10.2	31.5	35	3000	600	4.8
	13	13.3	31.5	35	3000	600	4.9
	16	16.0	31.5	35	3000	600	5.2
	20	20.0	25	30	3000	600	5.6
GHG1	25	25.3	31.5	35	3000	200	14.5
	32	32.7	31.5	35	3000	200	15
	40	40.1	31.5	35	3000	200	16
	50	50.7	31.5	35	3000	200	17
	63	63.7	25	30	3000	200	18.5
GHG2	80	81.4	31.5	35	3000	200	43.5
	100	100.2	31.5	35	3000	200	45.5
	125	125.3	31.5	35	3000	200	48
	160	162.8	21	26	3000	200	52

特性曲线 Performance Characterstic

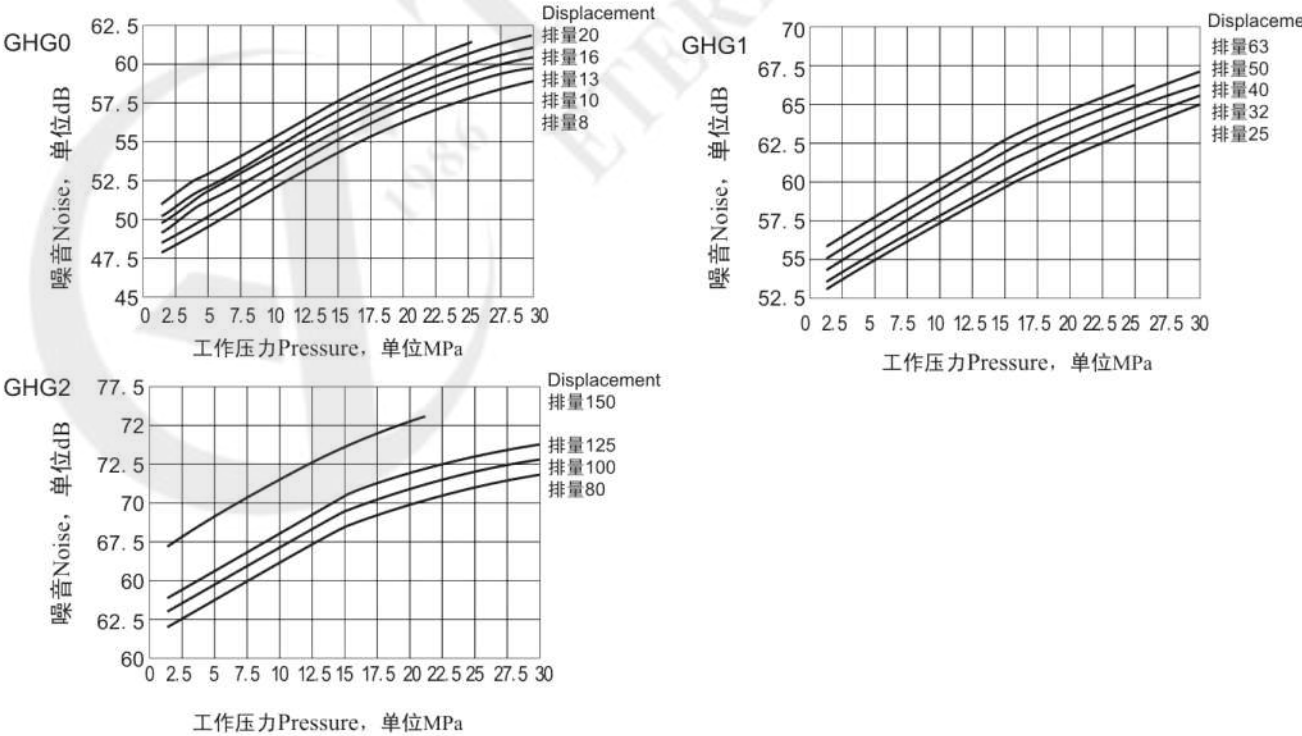
流量压力曲线 Flow-Pressure Characterstic

测试条件: $n=1450\text{r/min}, v=46\text{mm}^2/\text{s}, t=50^\circ\text{C}$
testing conditions: $n=1450\text{r/min}, v=46\text{mm}^2/\text{s}, t=50^\circ\text{C}$



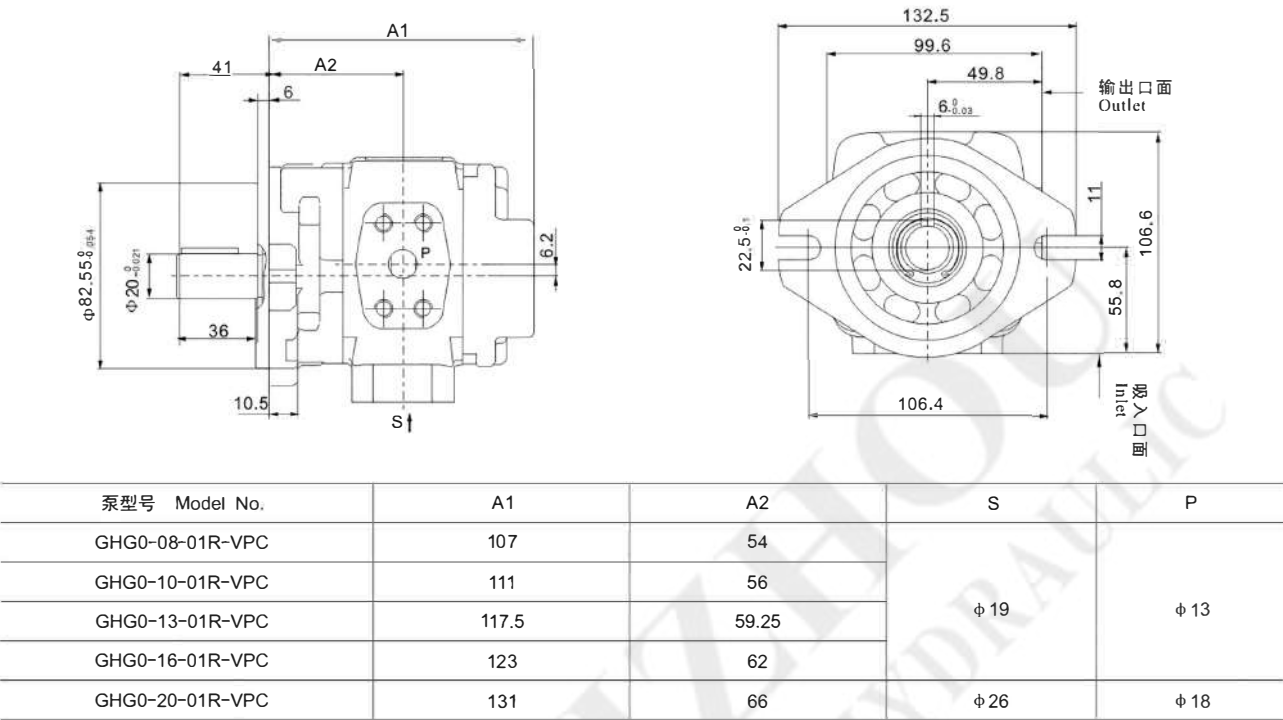
噪音曲线 Noise Characteristic

测试条件: $n=1450\text{r/min}, v=46\text{mm}^2/\text{s}, t=50^\circ\text{C}$ 传感器与泵距离=1m
test conditions: $n=1450\text{r/min}, v=46\text{mm}^2/\text{s}, t=50^\circ\text{C}$ the distance between transducer and pump=1m

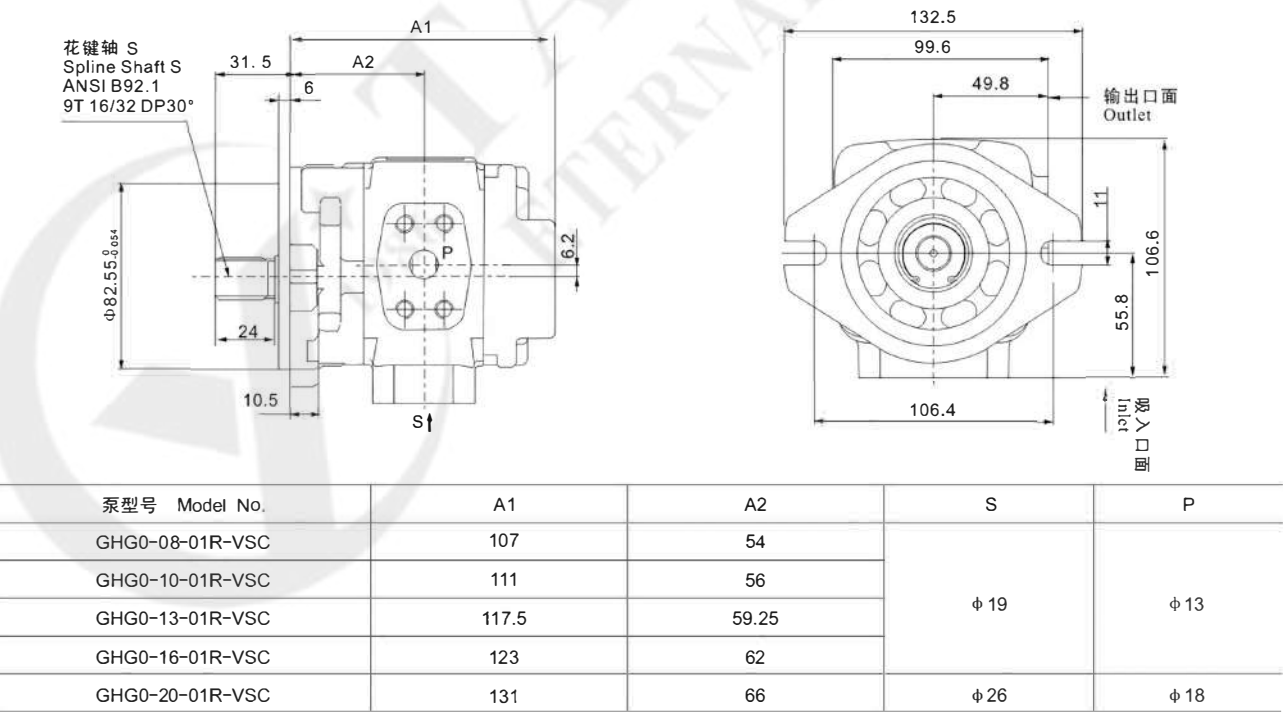


安装连接尺寸 Installation Dimension

GHG0-※-01R-VPC (P型平键轴) P Type Straight Key shaft



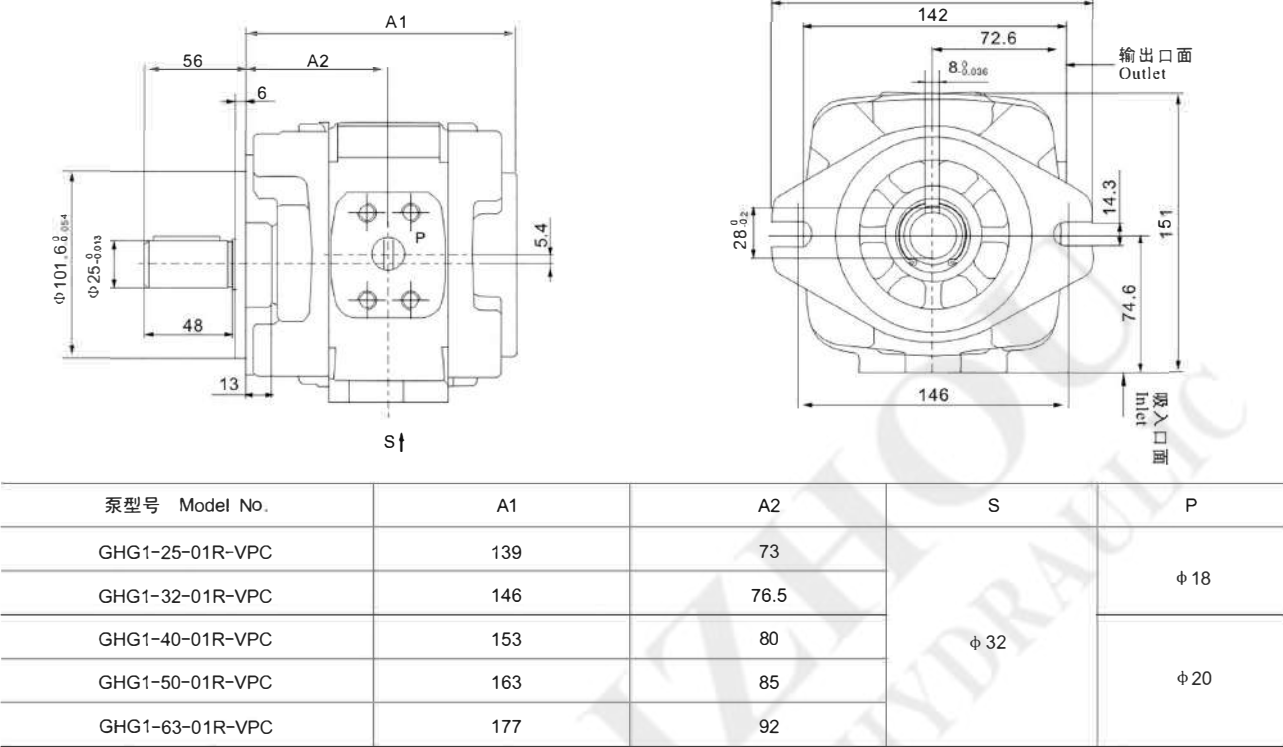
GHG0-※-01R-VSC (S型花键轴) S Type Spline shaft



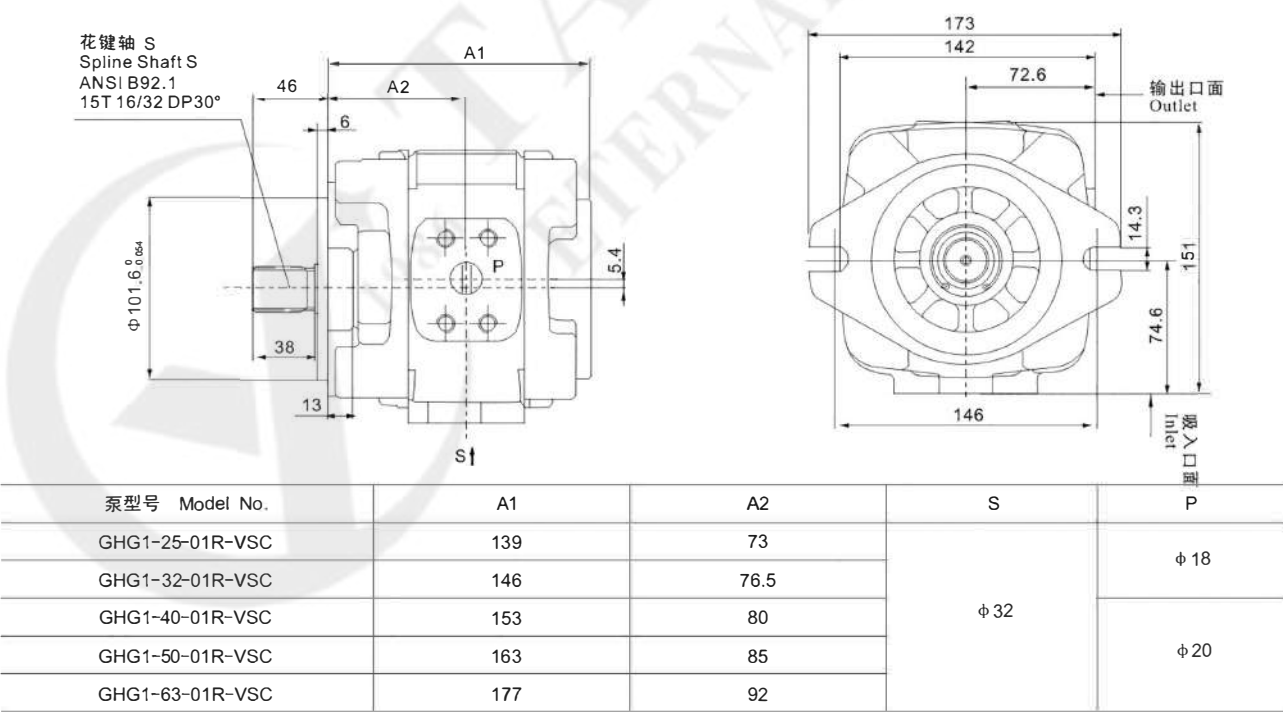
油口法兰连接尺寸见第8页。
For flange installation demension, refer to page 8.

安装连接尺寸 Installation Dimension

GHG1-※-01R-VPC (P型平键轴) P type straight key shaft



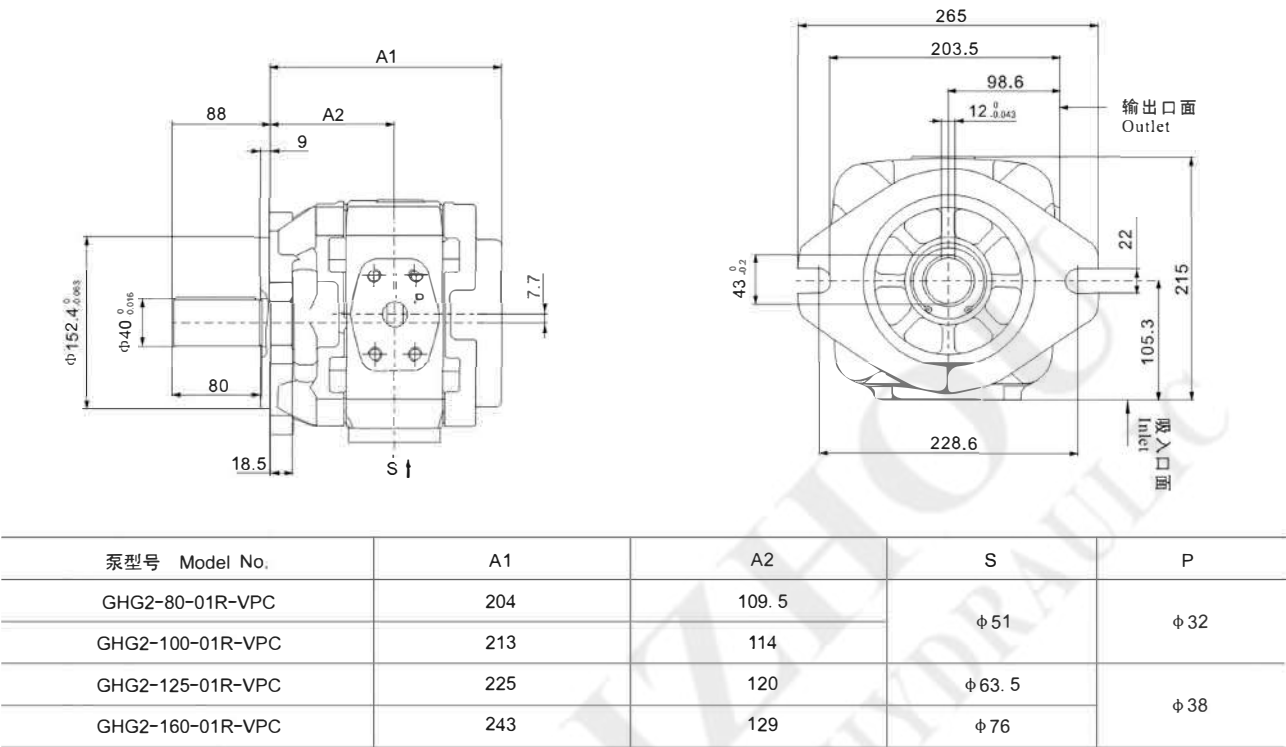
GHG1-※-01R-VSC (S型花键轴) S Type Spline shaft



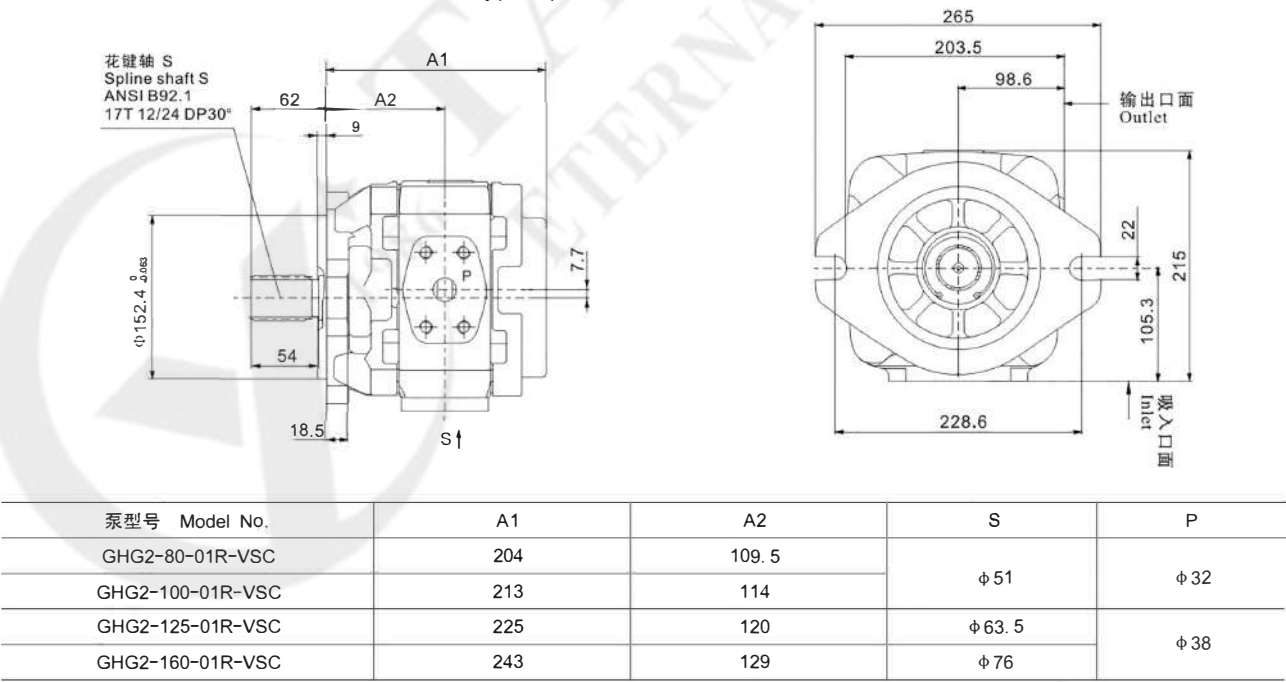
油口法兰连接尺寸见第8页。
For flange installation demension, refer to page 8.

安装连接尺寸 Installation Dimension

GHG2-※-01R-VPC (P型平键型) P Type straight key shaft

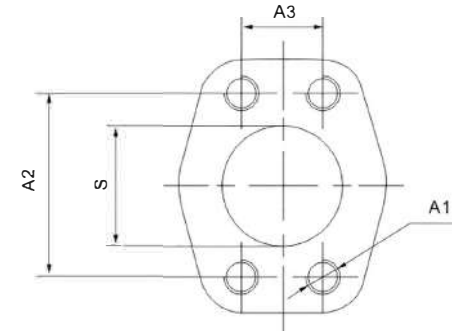


GHG2-※-01R-VSC (S型花键轴) S Type spline shaft

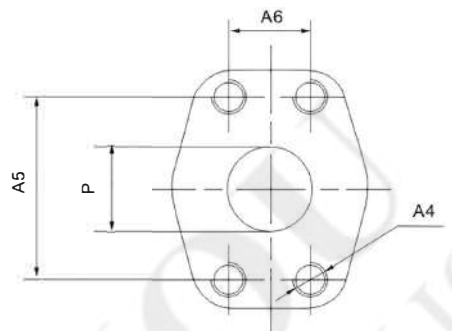


油口法兰连接尺寸 Inlet/Outlet Flange Dimension

进油口 “S”
Inlet “S”



出油口 “P”
Outlet “P”



系列 Model No.	规格 Spec	S	A1	A2	A3	P	A4	A5	A6
GHG0	8	φ 19	M10深15 M10 deep 15	47.6	22.2	φ 13	M8深13 M8 deep 13	38.1	17.5
	10			52.4	26.2				
	13								
	16								
	20	φ 26		58.7	30.2	φ 18	M10深15 M10 deep 15	47.6	22.2
GHG1	25	φ 32	M10深17 M10 deep 17	58.7	30.2	φ 18	M10深17 M10 deep 17	47.6	22.2
	32					φ 20		52.4	26.2
	40								
	50								
	63								
GHG2	80	φ 51	M12深20 M12 deep 20	77.8	42.9	φ 32	M12深20 M12 deep 20	69.9	35.7
	100	φ 63. 5		88.9	50.8	φ 38	M16深25 M16 deep 25	79.4	36.5
	125								
	160			φ 76	M16深25 M16 deep 25				

油口法兰连接尺寸见第8页。
For flange installation dimension, refer to page 8.

GHG 系列齿轮泵双联泵
GHG series double gear pump

GHG10系列 GHG11系列
GHG10 Series GHG11 Series

GHG21系列 GHG22系列
GHG21 Series GHG22 Series



产品介绍 Products introduction

双联泵由两个单泵串联组合而成，具有一个共同进油口和两个可以输向两个独立回路的出油口；
Double pump is connected by two single pumps, it is with the same inlet and two outlets to two independent outlets.

相同尺寸或不同尺寸的两个GHG单泵可组合形成不同双联泵；
GHG single pumps of identical or different sizes can be combined in double pumps.

泵的布置，按外形尺寸与泵排量以升序排列；
The pumps are arranged in increasing order according to frame size and delivery.

如果相同型号或尺寸相同组合，大流量的泵应放置于靠近驱动装置的地方；
If identical types or identical sizes follow each other, the pump with the higher pump flow is placed closer to the drive.

型号说明 Model Descriptions

GHG	1	1	-63	-63	-01	R	-V	P	C
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泵类型 Pump Type

内啮合齿轮泵 Internal gear pump	GHG
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前泵系列号 Front Pump Series No.

排量Displacement 25...63	1
排量Displacement 80...160	2

后泵系列号 Rear Pump Series No.

排量Displacement 8...20	0
排量Displacement 25...63	1
排量Displacement 80...160	2

前泵规格 Front Pump Spec

排量Displacement (mL/r)					
25	32	40	50	63	80
100	125	160			

后泵规格 Rear Pump Spec

排量Displacement (mL/r)							
8	10	13	16	20	25	32	40
50	63	80	100	160			

安装形式 Mounting

SAE 2孔 SAE 2 Hole	C
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轴伸形式 Shaft type

平键轴 Straight key shaft	P
花键轴 Splined shaft	S

密封形式 Sealing

氟橡胶 Viton	V
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旋转方向（从轴端看）
Direction of rotation (From shaft end cover)

顺时针 Clockwise rotation	R
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设计号 Designing No.

	01
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安装连接尺寸 Installation Dimension

GHG10-※-※-01R-VPC (P型平键轴) P Type Straight Key shaft

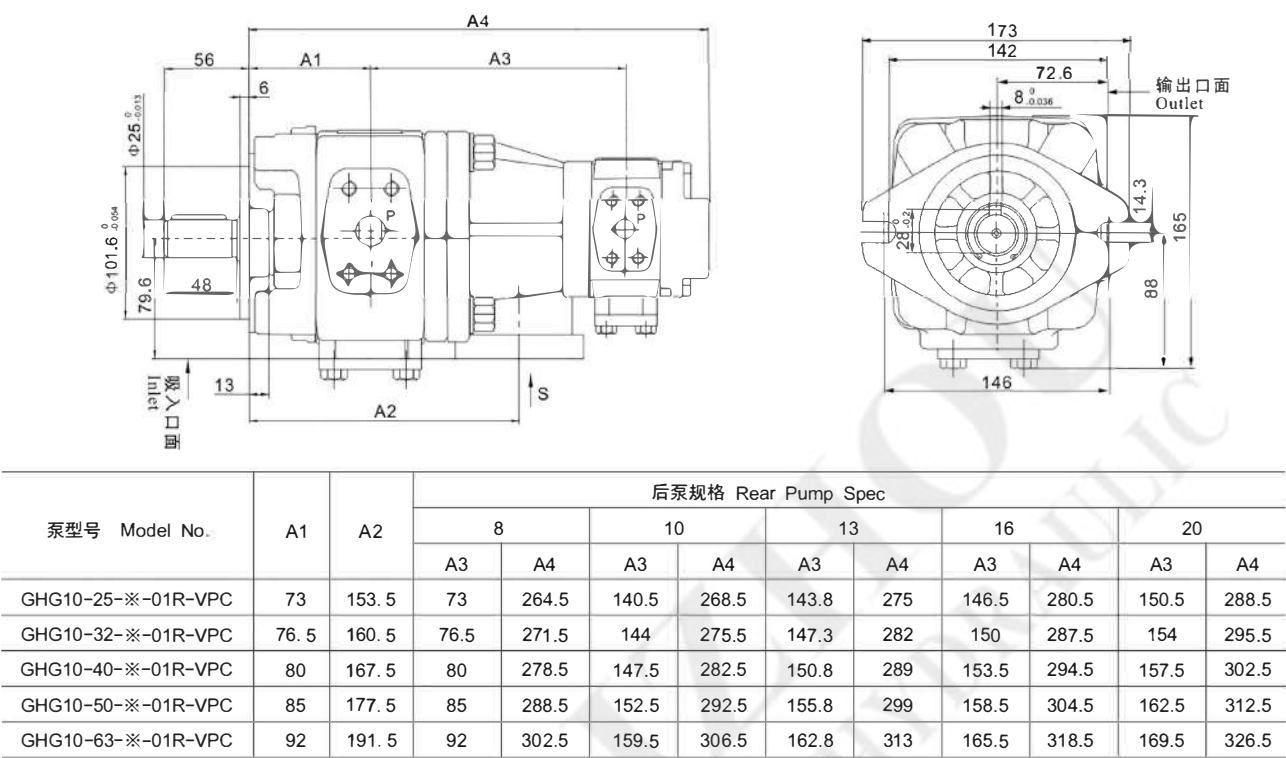


Table with 13 columns: 泵型号 Model No., A1, A2, 8 (A3, A4), 10 (A3, A4), 13 (A3, A4), 16 (A3, A4), 20 (A3, A4). Rows include GHG10-25-※-01R-VPC, GHG10-32-※-01R-VPC, GHG10-40-※-01R-VPC, GHG10-50-※-01R-VPC, GHG10-63-※-01R-VPC.

GHG10-※-※-01R-VSC (S型花键轴) S Type Spline shaft

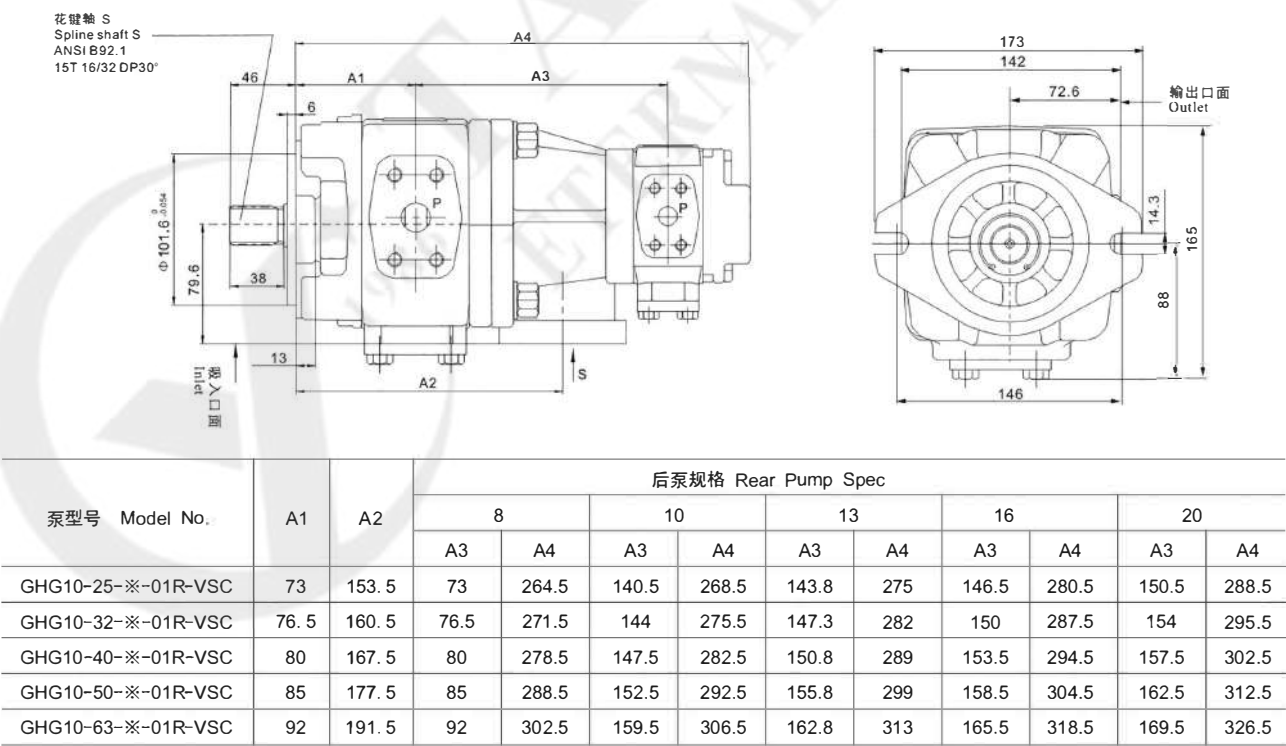


Table with 13 columns: 泵型号 Model No., A1, A2, 8 (A3, A4), 10 (A3, A4), 13 (A3, A4), 16 (A3, A4), 20 (A3, A4). Rows include GHG10-25-※-01R-VSC, GHG10-32-※-01R-VSC, GHG10-40-※-01R-VSC, GHG10-50-※-01R-VSC, GHG10-63-※-01R-VSC.

吸油口法兰见第15页。For inlet flange, refer to page 15.
出油口法兰见第8页。For outlet flange, refer to page 8.

安装连接尺寸 Installation Dimension

GHG11-※-※-01R-VPC (P型平键轴) P Type Straight Key shaft

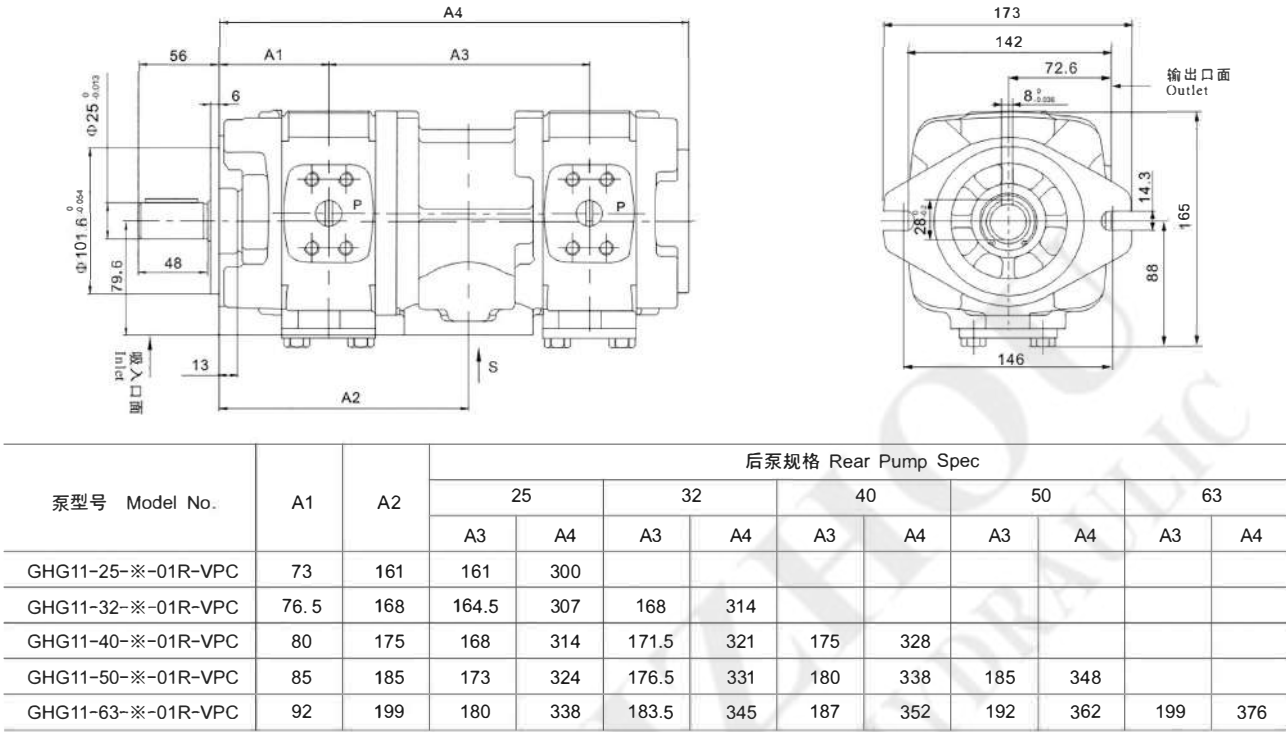


Table with 13 columns: 泵型号 Model No., A1, A2, 25 (A3, A4), 32 (A3, A4), 40 (A3, A4), 50 (A3, A4), 63 (A3, A4). Rows include GHG11-25-※-01R-VPC, GHG11-32-※-01R-VPC, GHG11-40-※-01R-VPC, GHG11-50-※-01R-VPC, GHG11-63-※-01R-VPC.

GHG11-※-※-01R-VSC (S型花键轴) S Type Spline shaft

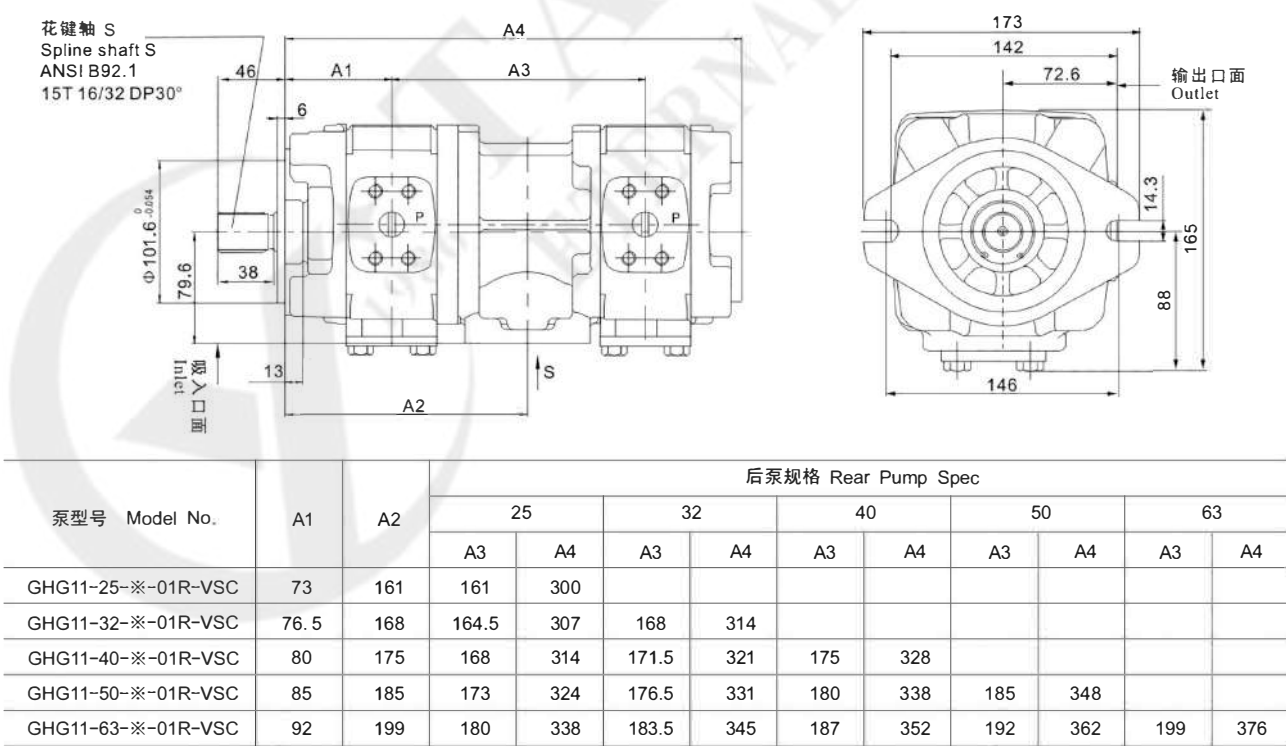
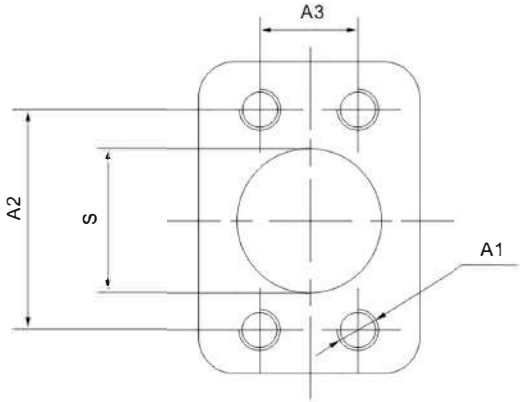


Table with 13 columns: 泵型号 Model No., A1, A2, 25 (A3, A4), 32 (A3, A4), 40 (A3, A4), 50 (A3, A4), 63 (A3, A4). Rows include GHG11-25-※-01R-VSC, GHG11-32-※-01R-VSC, GHG11-40-※-01R-VSC, GHG11-50-※-01R-VSC, GHG11-63-※-01R-VSC.

吸油口法兰见第15页。For inlet flange, refer to page 15.
出油口法兰见第8页。For outlet flange, refer to page 8.

双泵进油口法兰尺寸 “S”

Double Pump Inlet Dimension “S”



系列 Series	S	A1	A2	A3
GHG10	φ 38	M12深20 M12 Deep 20	69. 9	35.7
GHG11	φ 51		77. 8	42.9
GHG21	φ 76	M16深25 M16 Deep 25	106. 4	61.9
GHG22	φ 89		120. 7	69.9

使用注意事项 Application

- 1、工作介质 Operating Oil
- 可使用粘度范围在10-300mm²/s的石油基矿物油，推荐使用ISO VG46抗磨液压油。
- Viscosity range:10-300mm2/s , ISO VG46 Anti-wear hydraulic oil is recommended for better performance.
- 2、工作温度 Operating Temperature
- 工作温度范围 -10℃-100℃，为保证长期的可靠寿命，最佳工作温度范围20℃-80℃。
- Operating temperature range:-10℃-100℃. To ensure the reliable lifetime,the best operating temperature range is20℃-80℃
- 3、清洁度控制 cleanliness control
- 要求控制系统油液的清洁度水平，不超过9级（NAS 1638）或17/14（ISO 4066）
- Control cleanliness of system oil,can not over 9 lever(NAS 1638)or 17/14（ISO 4066）
- 4、泵安装 Installation
- 轴与电机连接尽可能使用挠性联轴器，以避免产生弯曲力矩或轴向推力，轴与电机轴最大允许同轴度误差小于0.15mm。
- Shaft and motor should be connected by flexible coupling to avoid harmful effects.Concentricity of shafts between pump and motor is important to pump life snd should be within 0.15mm
- 5、吸入口压力与配管 Pressure of Inlet and Pipline
- 允许吸入口绝对压力为0.2-2 Bar。合理的配管通径应不小于泵的吸油品，以确保平均0.6-1.2m/s的最佳吸油速度。
- Absolute pressure of inlet is 0.2-2Bar.Diameter of absorb pipline can't be smaller than inlet to ensure the best average oil speed 0.6-1.2m/s.
- 6、进出口连接 Inlet/outlet connection
- 尽力避免进出油管采用钢管硬连接，建议使用橡胶软管，避免出现额外的负载导致额外的噪音。
- Rubber hose is recommended to avoid extra load causing extra noise.Don't connect with steel pipe.
- 7、维护 Maintenance
- 为提高泵的使用寿命，应定期检查系统的异常振动、噪音、油液温度、油箱内是泵有气泡生成以及有无泄漏等问题，并及时维护。
- In order to mke the life of pump longer,customer should check the system in time,such as if abnormal shocking,noise,oil temperature,bubble in tank, leakage....and maintenance in time.