

VG 系列齿轮泵 Series Gear Pump



主要特点/Main Features

1. 采用轴向和径向压力补偿设计，容积效率高。
 2. 超低的噪音，采用高强度铸铁和独特的消音设计。
 3. 极低的流量和压力脉动，在低速工况下仍保持稳定的流量和压力输出。
 4. 高压设计，最高使用压力可达35Mpa。
 5. 转速范围广，最高转速可达3000rpm。
 6. 可进行组合形成双联泵。
 7. 广泛适用于液压机械，如注塑机、压铸机、油压机等伺服液压系统。
1. Adopting axial and radial pressure compensation design, high volume efficiency.
 2. Ultra-low noise, using high-strength cast iron and unique noise-absorbing design.
 3. Very low flow and pressure pulsation, maintaining stable flow and pressure output under low-speed working conditions.
 4. High pressure design, the highest working pressure can reach 35Mpa.
 5. Wide speed range, the highest speed can reach 3000rpm.
 6. It can be combined to form a double pump.
 7. It is widely used in hydraulic machinery, such as injection molding machine, die-casting machine, hydraulic press and other servo hydraulic systems.

型号说明/Model Designation

VG1	-63	R	E	W	-A1
系列号 Series	排量 ml/r Displacement	旋转方向 Rotation	轴伸形式 Shaft type	密封材料 Sealing material	设计号 Design number
VG0	8、10、13、16、20、25	从泵轴端看 Views from shaft end of pump R=顺时针旋转 Right hand for clockwise L=逆时针旋转 Left hand for counter-clockwise	E=平键轴 Straight key shaft R=SAE花键轴 Spline shaft	W=丁腈橡胶 NBR V=氟橡胶 FKM	A1
VG1	25、32、40、50、63 50H、63H				
VG2	80、100、125、145、160				

以上表格排量可组合成双联泵系列为：VG10, VG11, VG21, VG22, 详细参数请参阅齿轮泵专用样册。
The displacement in the above table can be combined into a series of double pumps: VG10, VG11, VG21, VG22.
For detailed parameters, please refer to the gear pump catalogue.

技术参数/Technical Data

系列号 Series	排量 ml/r Displacement	理论排量 ml/r Theory Displacement	额定压力 Mpa Rated Pressure	最高压力 Mpa Max.pressure	最高转速 r/min Max.speed	重量 kg Weight
VG0	8	8.2	31.5	35	3000	4.6
	10	10.2				4.8
	13	13.3				4.9
	16	16.0	25	5.2		
	20	20.0		5.6		
	25	24.0		6.0		
VG1	25	25.3	31.5	35	3000	14.5
	32	32.7				15
	40	40.1				16
	50	50.7				17
	63	63.7				18.5
VG2	80	81.4	31.5	35	3000	43.5
	100	100.2				45.5
	125	125.3				48
	145	145.2	25	28		50
	160	162.8	21	26		52

ABT 系列伺服叶片泵 Series Servo Vane Pump

ABT系列伺服泵是我公司与美国艾伯特流体动力有限公司、浙江大学机电控制工程研究所三方合作共同研发的高性能伺服液压系统专用油泵。其核心部件从国外进口。

本产品我公司拥有自主知识产权并获得国家创新基金支持，广泛应用于橡塑、压铸、鞋革、锻压、挤压、折弯、剪板机械等伺服液压系统中。

ABT Series Servo Pump is high performance servo hydraulic system special oil pump. It is researched and developed together by three party-Ningbo Vicks Hydraulic Co.,Ltd. American Albert Hydraulic Co.,LTD. Zhejiang University Mechanical Control Engineering Research Institute. The core components are imported from abroad. We have the proprietary intellectual property rights for this product and we have got the state innovation fund support, the pump have been widely used in servo hydraulic systems of rubber and plastic machines, shoes machines, forging and press machines, bending machines and shearing machines.



其主要特点为/Main Features

1. 柱销式叶片结构设计，使油泵在启动时扭矩小，电流小，更节能。
 2. 采用外泄、泄漏量可调控设计，明显降低油泵温升。根据液压元器件泄漏大小，可灵活调整外泄量，泵在低速高压工况下脉动小，制品精度高。
 3. 柱销底部通高压油和辅助弹性机构的合理配合，使油泵可以在低速下正常工作，能适应伺服液压系统快慢速、高低压、正反快速切换的工况。
 4. 双作用及正反旋转结构设计，使油泵工作更加平稳，伺服液压系统的响应速度更快。
 5. 高压、高速结构和双刃口叶片设计，转速范围广，抗污能力强，使用寿命长。
 6. 低噪声结构设计，排量范围广，可根据客户要求灵活定制不同排量。
 7. 采用插装式结构，维修时只需更换泵芯，维修更便捷、成本更低。
 8. 双泵油口采用一进两出设计，结构更加紧凑，安装空间小。
 9. 进油口有四种不同的相对方位，安装灵活。
1. Dowel pin type vane kits designation can make the pump with small resistance, low electronic, and with more energy saving.
 2. Use outside leakage and leakage volume control designation low the oil temperature obviously. Based on the hydraulic components leakage volume, can adjust the oil leakage smartly, the pump pressure pulse is small at high pressure and low speed, the injection finished products will be more higher accuracy.
 3. With the coordination of high pressure oil and vice spring structure, can make the pump run normally at low speed, can fit low and high speed shift, high and low pressure speed shift, right and left rotation shift etc working status of servo hydraulic system perfectly.
 4. Double action and right-left rotation structure designation make the pump work more steadily, servo hydraulic system response more quickly.
 5. High pressure, high speed structure and double cutting edges designation make the speed range more wide, and with more better pollution resistance, and more longer working life.
 6. Low noise sturcture designation and wide range of flow, can be customized according to different requirements.
 7. Use the cartridge kit installation structure, repairing only need change the cartridge kit, more convenient for repairing, and with more lower cost.
 8. Double pump use one inlet port and two outlet ports, the structure is more compact with small installation space.
 9. There are four directions each at inlet and outlet port, installation is more flexible.

ABT-T 系列型号说明/Model Designation

ABT2T	-80	-2	R	02	-C	1
系列号 Series	排量 ml/r Flow code	轴伸形式 Shaft type	旋转方向 Rotation	出油口位置 Outlet Positions	设计号 Design number	密封等级 Sealing Level
ABT1T	6, 10, 16, 20, 25, 32, 40, 50, 55, 64	-1 平键轴 -2 平键轴 Keyed shaft	(从泵的轴端看) (Viewed from shaft end of pump) R-顺时针旋转 Right hand for clockwise L-逆时针旋转 Left hand for counter-clockwise	(从泵的轴端看) (Viewed from shaft end of pump) 00-进油口对面 Opposite inlet port 01-进油口同侧 Inline with inlet 02-从进油口逆时针90° 90° CCW from inlet 03-从进油口顺时针90° 90° CW from inlet	C	1-S1, 丁腈橡胶 NBR 2-S2, 氢化丁腈 HNBR
ABT2T	64, 80, 100, 110, 125, 140, 160	-2 平键轴 Keyed shaft				
ABT3	160, 180, 190, 200	-1 平键轴 Keyed shaft				

注：多种规格安装尺寸、双联泵及花键轴详见叶片泵综合样本

Note: Types of specifications installation size, double pump and splined key shaft details can be found in the vane pump catalogue.