



VG21 Series-----

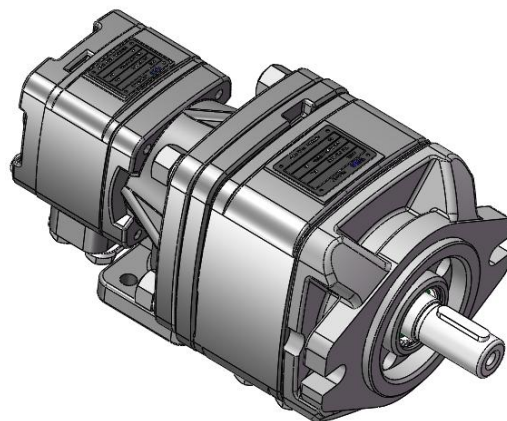
Internal meshing duplex gear pump consists of pump body, internal gear ring, gear shaft, spline coupling, front cover, intermediate body, back cover, flow distribution disc, crescent plate, sealing rod and other components. It is assembled and connected by two single pumps, VG2 and VG1, with a common inlet and an outlet that can provide two independent circuits. Internal axial and radial pressure compensation design, with high working pressure, wide range of speed, low noise, reliable work and so on. Flexible and convenient combination, the same series of front and rear displacements can be arbitrarily combined. The rear pump can be rotated 180°, which can flexibly change the position of inlet and outlet oil direction. Mainly used in injection moulding machines, die-casting machines and other machinery in the hydraulic system.

Model Description

VG21 - G **--R P F**

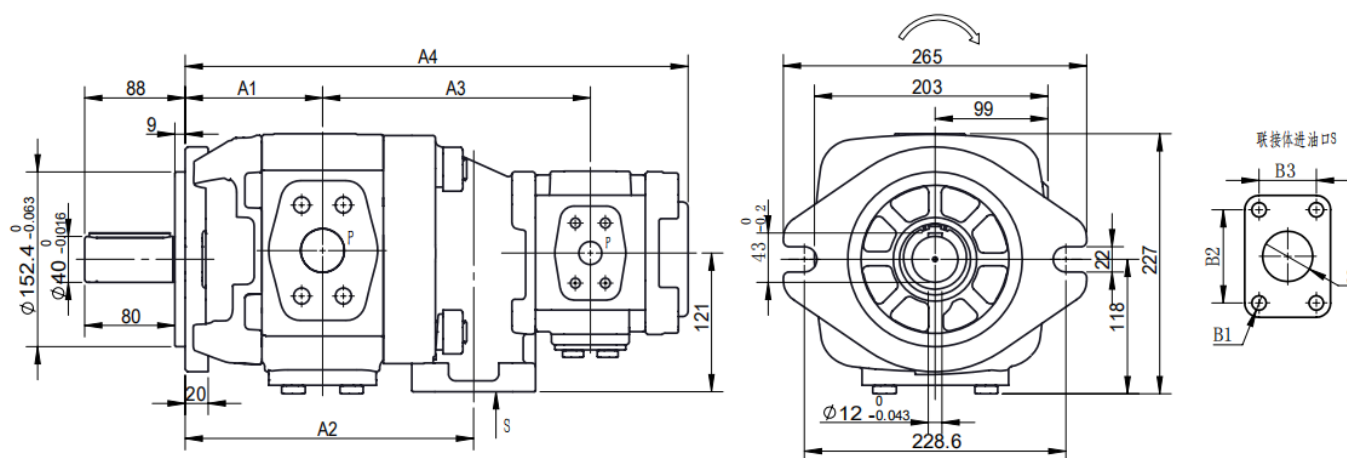
① ② ③ ④ ⑤ ⑥ ⑦

- ① Product code
- ② Pressure rating G: 31.5 MPa
- ③ Front Pump Displacement
- ④ Rear Pump Displacement
- ⑤ Direction of rotation R: CW L: CCW
- ⑥ Axis extension form P: Flat key
- ⑦ Oil port form F: Flange form





External figure



Performance Parameters

Front pump model	Pressure (MPa)		Angular velocity(r/min)		Volumetric efficiency (≥%)	A2	A1
	rated	max	min	max			
VG21-G80-*	31.5	35	200	3000	92	109	231
VG21-G100-*	31.5	35	200	3000	92	114	240
VG21-G125-*	31.5	35	200	3000	92	120	252
VG21-G145-*	31.5	35	200	3000	92	124.5	261
VG21-G160-*	31.5	35	200	3000	92	129	270

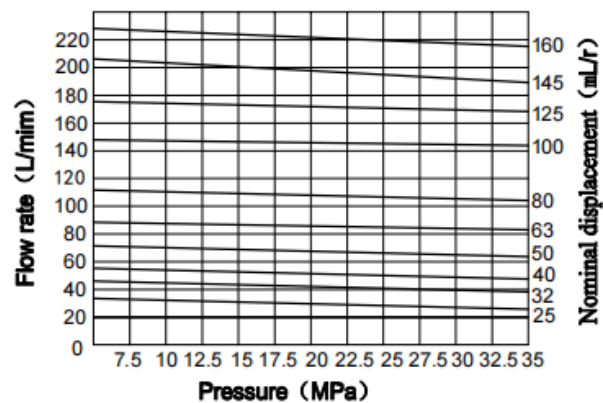
Front pump model	Rear pump model												S	B1	B2	B3
	VG0-G08		VG0-G10		VG0-G13		VG0-G16		VG0-G20		VG0-G25					
	A3	A4	A3	A4	A3	A4	A3	A4	A3	A4	A3	A4				
VG10-G25-*	204	380	208	387	211	394	216	404	223	418	204	380	76	M16*25	106.4	61.9
VG10-G32-*	209	389	212	396	216	403	221	413	228	427	209	389				
VG10-G40-*	215	401	218	408	222	415	227	425	234	439	215	401				
VG10-G50-*	220	410	223	417	227	424	232	434	239	448	220	410				
VG10-G63-*	224	419	227	426	231	433	236	443	243	457	224	419				



Characteristic curve

Flow pressure characteristics:

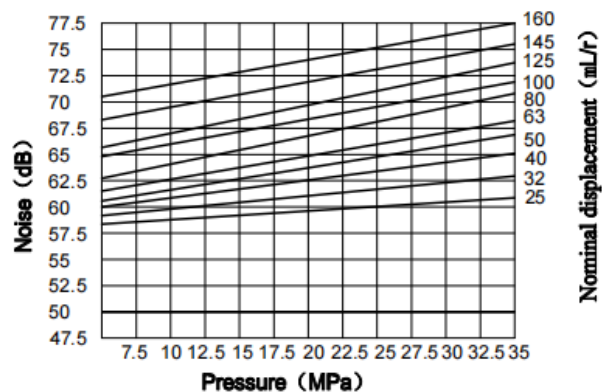
Test conditions: $n=1450r/min, V=46mm^2/S, t=55^\circ C$



Noise curve

Pressure noise characteristics:

Test conditions: $n=1450r/min, V=46mm^2/S, t=55^\circ C$





Precautions for use

1. Working medium

The viscosity range of 10-300mm²/s petroleum-based mineral oil can be used, it is recommended to use 46# anti-wear hydraulic oil, different types of hydraulic oil do not mix.

2. Working temperature

Operating temperature range -20-100°C, in order to extend the service life of the pump is recommended to work in the range of 20-80°C.

3. Drive installation

The drive shaft must not be subjected to any radial and axial pressure.

4. Cleanliness

System fluid cleanliness is required to be no more than Class 9 (NAS 1638).

5. Pipe connection

Choose suitable tubing and joints, avoid using hard connections, and carefully clean the tubing and joints before assembly.

6. Exhaust

Before initial use, fill the pump with oil and remove air from the pump and piping under low pressure and no load conditions. If there is air in the pump and piping, it will cause noise and vibration of the pump and affect the service life of the pump.

7. Maintenance

Pump installation maintenance and reconditioning is handled by professionally trained personnel, the pump is only allowed to work within the set range, frequently check whether the bolts are locked according to the standard torque, timely maintenance.