SMG HPAC Double Acting Hydraulic Pump Power Pack

Operation Manual





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ELECTRIC HIGH PRESSURE OIL PUMP

The electric oil pump is a high-pressure pump made up of a single-phase asynchronous motor, magnetic valve, high-pressure oil pump, and gasoline tank. It is compact, lightweight, and easy to use, with features like high pressure, a simple structure, and wired remote control for added convenience.

To help users monitor pressure changes during operation, the pump comes with a pressure gauge for real-time observation. Additionally, it can be equipped with a manual switch or foot control switch based on user requirements.

TECHNICAL PARAMETERS

Model	SMG HPAC-750B	SMG HPAC-1500B	SMG HPAC-3000B
High-voltage pressure	**70Mpa**	**70Mpa**	**70Mpa**
High-voltage flow	**0.9L/min**	**1.7L/min**	**2.8L/min**
Low-voltage pressure	10Mpa	10Mpa	10Mpa
Low-voltage flow	**5L/min**	**7.9L/min**	**14L/min**
Motor power	**.75Kw**	**1.5Kw**	**3Kw**
Frequency	**50Hz-60Hz**	**50Hz-60Hz**	**50Hz-60Hz**
Oil storing quantity	**7L (Customizable)**	**10L (Customizable)**	**30L (Customizable)**

Voltage	**110V - 380V**		**380V/6.8A**
Rotating speed	**1400r/min**		**1400r/min**
Oil Specification	**15#antiwear**		**15#antiwear**

APPLICATION

1. The pump can provide hydraulic power for various types of hydraulic equipment.
2. When paired with other hydraulic tools, the pump is suitable for tasks such as lifting, shaping, pipe bending, panel bending, straightening, cutting, assembly, disassembly, and more. This helps reduce effort and improve work efficiency.

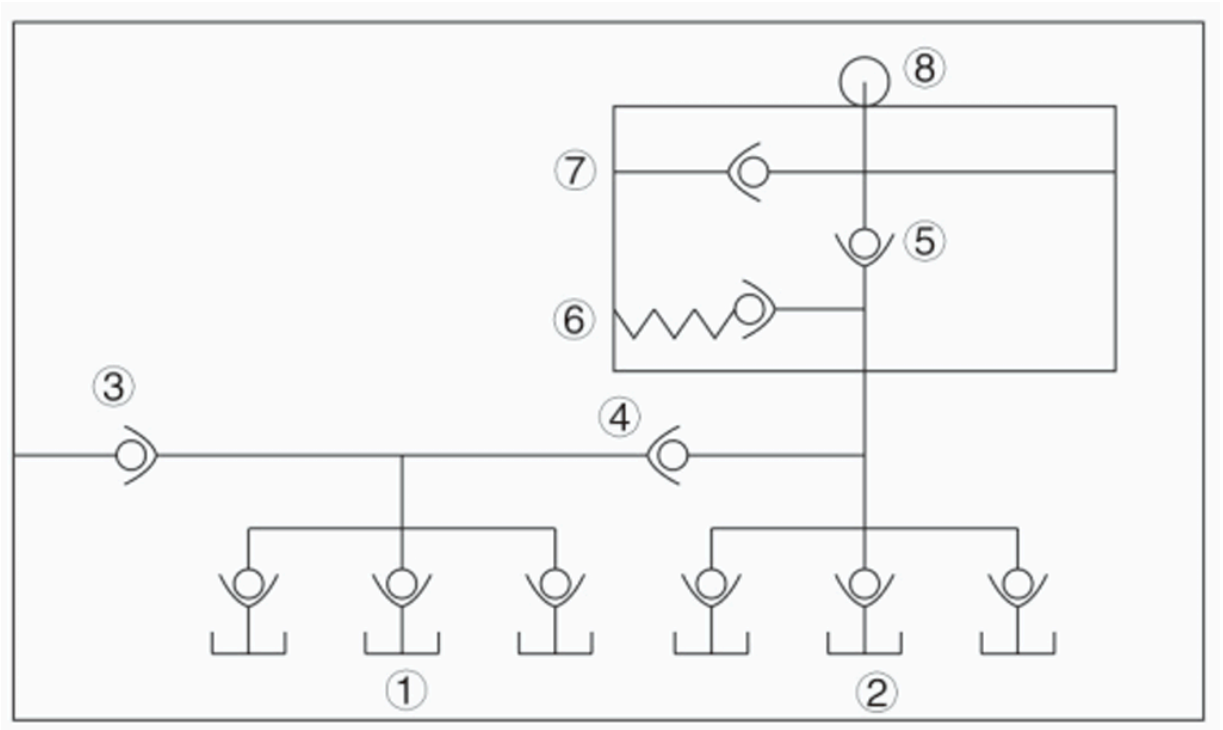
APPLICATION METHOD

Before use, fill the tank and connect the quick coupling to the corresponding hydraulic appliance. Plug in the power supply, turn on the power switch, and the pump will begin operating. When the hydraulic oil pressure reaches 70Mpa under load and needs to be released, turn the handle of the manual valve and press the magnetic valve's pressure relief switch. Once the task is complete, disconnect the power supply and detach the quick coupling.

THE WORKING PRINCIPLE

When the output pressure is below 7Mpa, both the high and low-pressure plungers release oil outward. When the output pressure exceeds 7Mpa, the low-pressure flow drains outward while the high-pressure flow continues, reaching up to 70Mpa.

OIL CIRCUIT SYSTEM DIAGRAM



1 Low-pressure pump

2 High-pressure pump

3 Pressure relief valve

4 One-way valve

5 Pressure retaining valve

6 Overflow valve

7 Electronic magnetic oil return valve

8 Pressure gauge

MAINTENANCE NOTES

1. **Use #15-46 anti-wear hydraulic oil for the pump.**
2. **Change the oil every three months to ensure the pump operates smoothly.**
3. **The operating oil temperature should remain between 10°C and 50°C.**
4. **When using the pump for the first time, allow it to run without stress for a period of time.**
5. **The pump is pre-adjusted at the factory. Do not make any adjustments unless performed by a professional.**
6. **Clean the pump every six months.**

TROUBLESHOOTING GUIDE

Issue	Possible Cause	Recommended Solution
Motor Malfunction		
Motor does not run	Power supply or switch issue	Check power connection and ensure the switch is functional
Slow motor speed	Loose wiring or faulty components	Inspect and secure wiring in the junction box, check capacitor condition, and confirm the three-phase motor is not experiencing phase loss
Pressure Abnormality		
High-pressure overflow	Faulty relief valve	Adjust or reset the high-pressure relief valve

Oil leakage at solenoid valve	Contamination in valve assembly	Clean the valve block and solenoid core
Worn plunger	Mechanical wear	Replace the plunger
Leakage from pump seal bolts	Loose bolts or damaged gasket	Tighten bolts or replace the gasket
Insufficient Flow		
Inoperative plunger section	Blockage or internal contamination	Clean the pump
Excessive oil viscosity	Hydraulic oil too thick	Replace with hydraulic oil of correct specification
Leakage at dispensing valve	Worn valve or poor sealing	Regrind valve surface and replace valve spool if needed