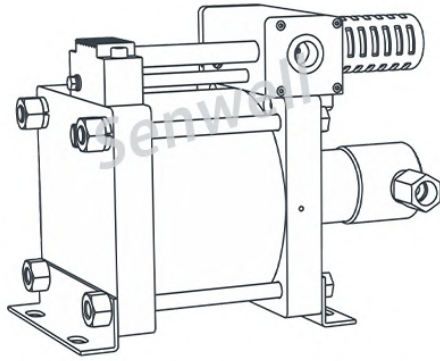
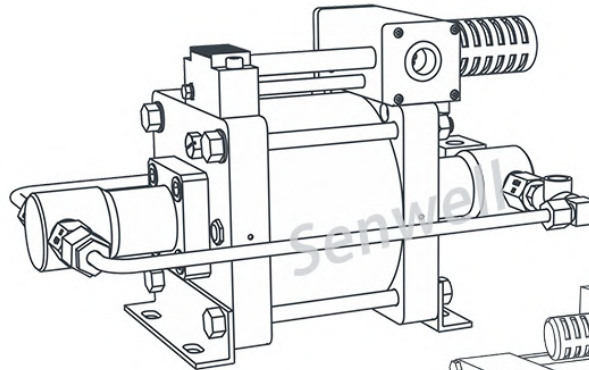


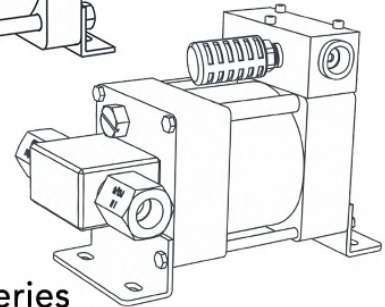
High Pressure Pump Operation Guidance



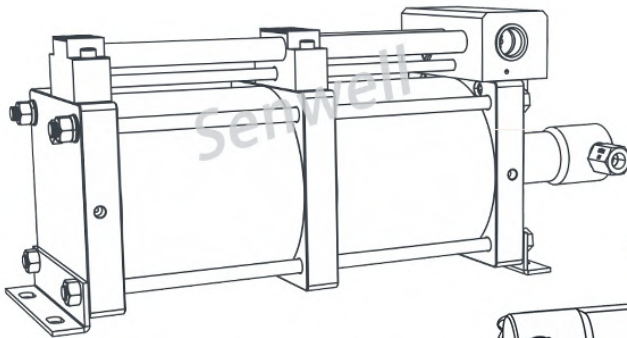
LBS Series (LBS07~LBS400)



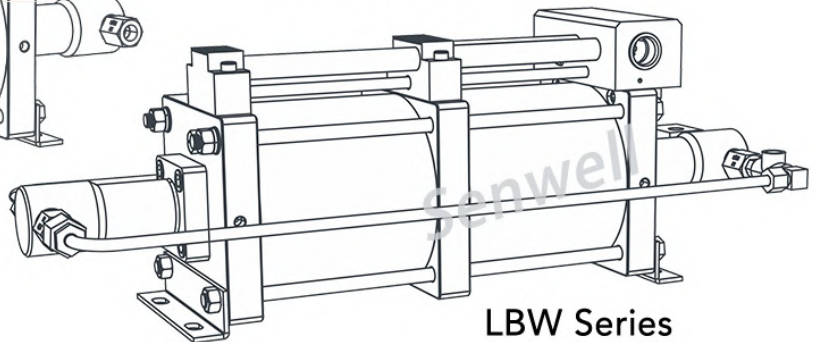
LBD Series



LBM Series



LBS Series (LBS510~LBS800)



LBW Series

Functions

High-pressure pump is a pneumatic pump that can output high pressure up to 6400bar, thus suitable to serve as hydro test pump, hydrostatic pump or hydraulic pump. It is widely used for hydrostatic test, burst pressure test, hydraulic pressure and hydraulic power unit.

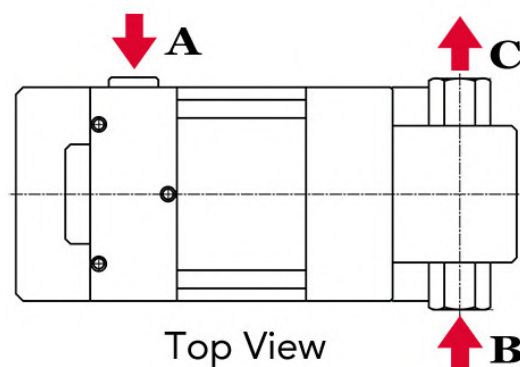
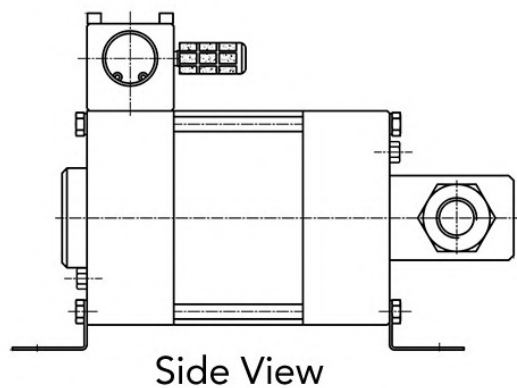
Connection Port Diagram

A: Drive air inlet

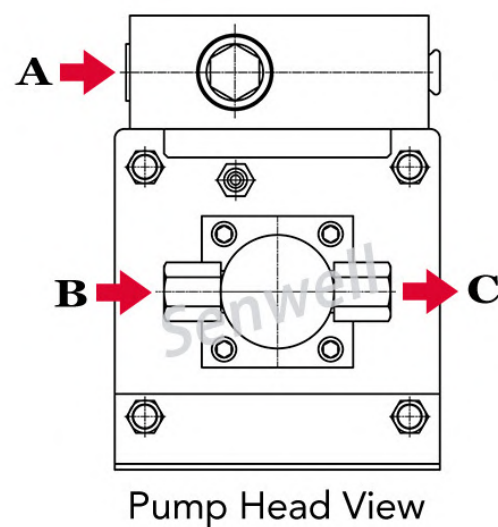
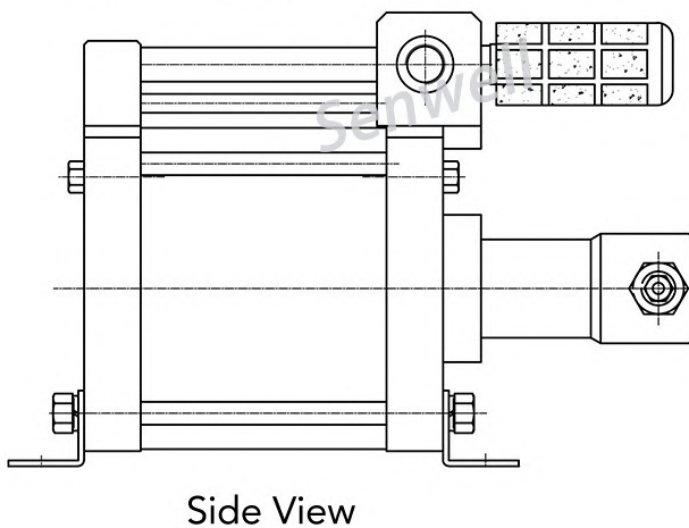
B: Liquid inlet

C: Hydraulic outlet

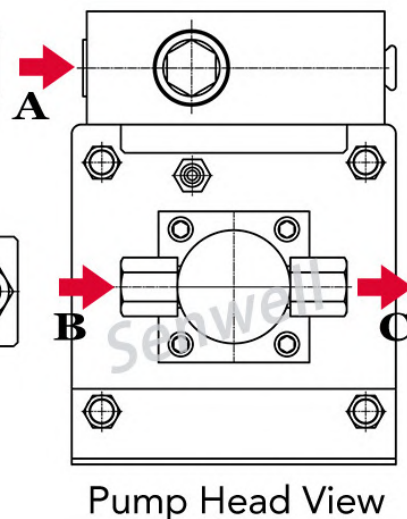
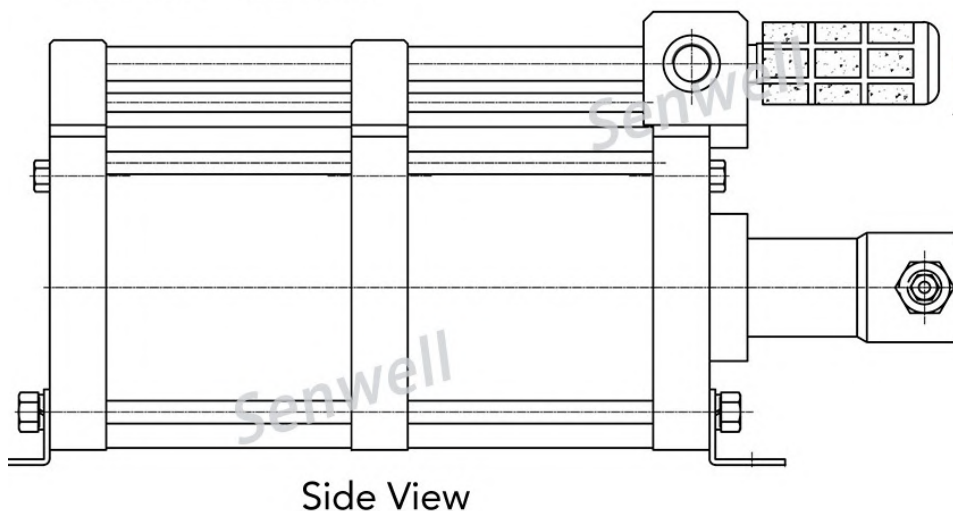
LBM Series



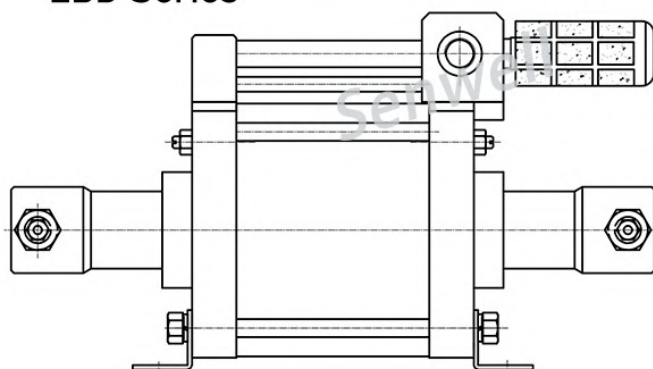
LBS07 ~ LBS400



LBS510 ~ LBS800

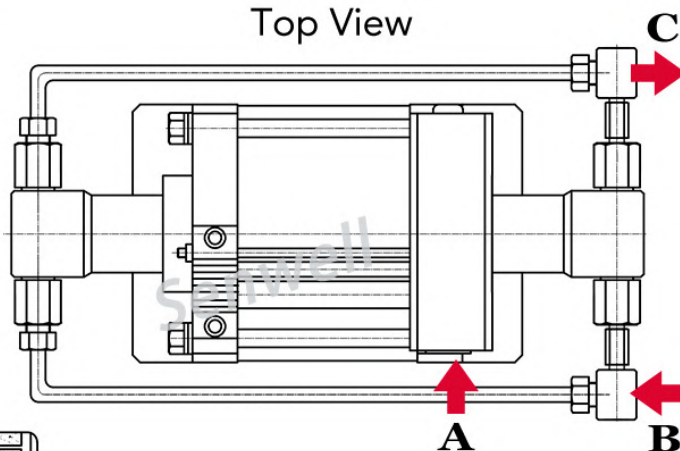


LBD Series

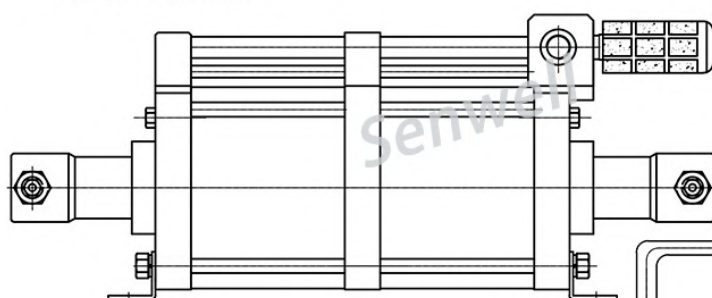


Side View

Top View

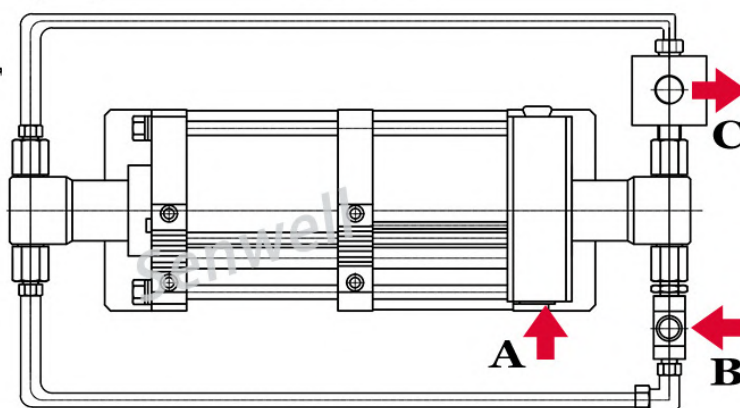


LBW Series

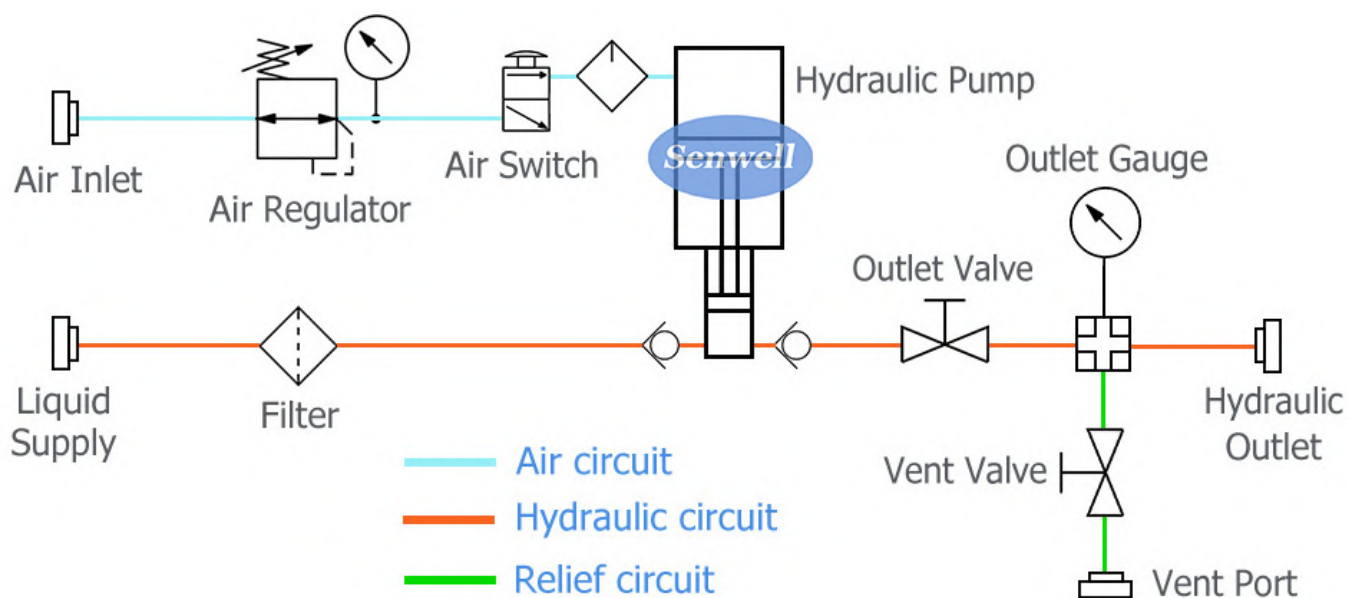


Side View

Top View



Typical Mounting Circuit



Preparations

1. Install high-pressure pump.

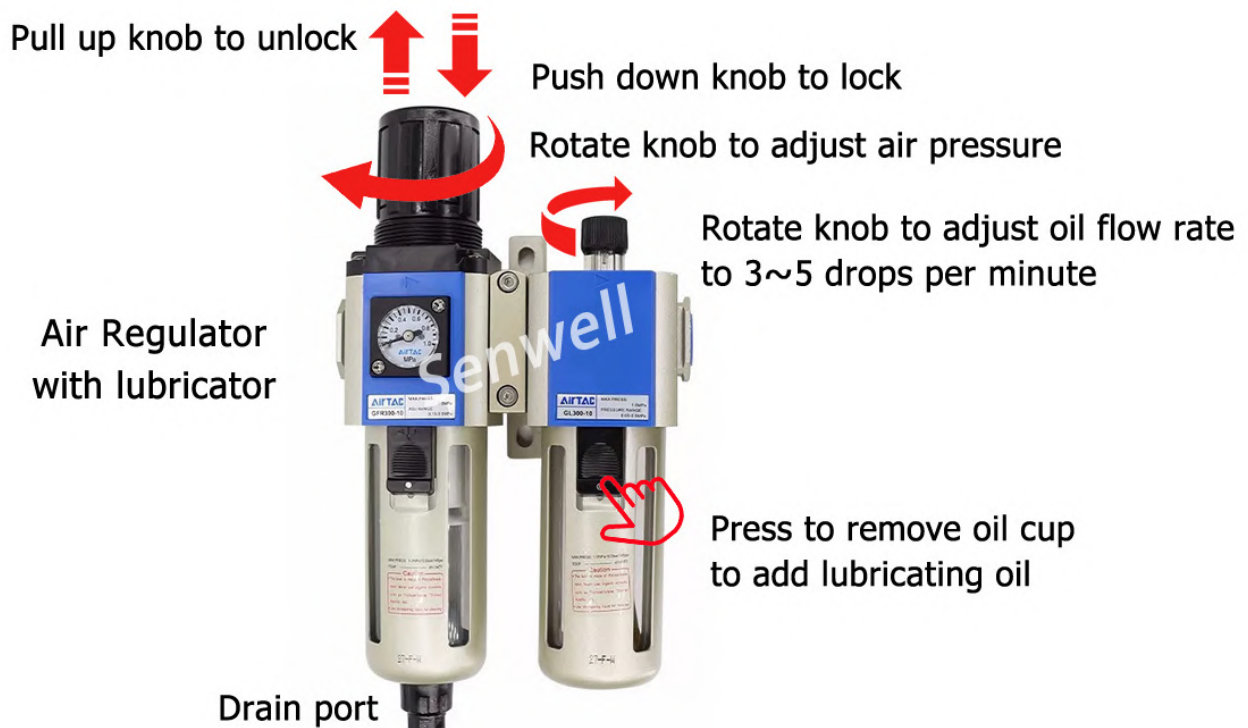
For your easy installation, the high-pressure pump is equipped with two slotted mounting brackets, you can mount the hydraulic at any angle.

2. Connect Drive air inlet port.

(1). High-pressure pump's maximum air consumption is 800L/minute. 7.5KW/10HP Air compressor is recommended. High-pressure pump will automatically adjust the air intake volume as per current working conditions and load, no requiring human intervention.

(2). Add lubricating oil into oil cup of Air Regulator, and the oil level should not exceed half capacity of oil cup. Lubricating oil type: ISO VG32.

Please keep Air Regulator as close to high-pressure pump as possible, and ensure there is sufficient lube oil in Air Regulator during high-pressure pump running.



3. Connect Liquid inlet port.

The port marked with "IN" is the pump's liquid inlet. If your liquid contains solid impurities, the check-valve inside the inlet port may be damaged, resulting in abnormal running of the pump. It is recommended to install a liquid filter.

4. Connect Hydraulic outlet port.

The port marked with "OUT" is the pump's hydraulic outlet. Please connect your terminal device tightly to prevent high pressure leaking.

High Pressure Pump Outlet Pressure Calculation Formula

High-pressure pump outlet pressure is always directly proportional to driving air pressure. Therefore, if you change driving air pressure, high-pressure pump outlet pressure will be changed accordingly; if you set a driving air pressure, high-pressure pump outlet discharge pressure will be preset too.

Each model of high-pressure pump has a boost ratio. For example, model LBS100 means its boost ratio is 100; and model LBD400 means its boost ratio is 400.

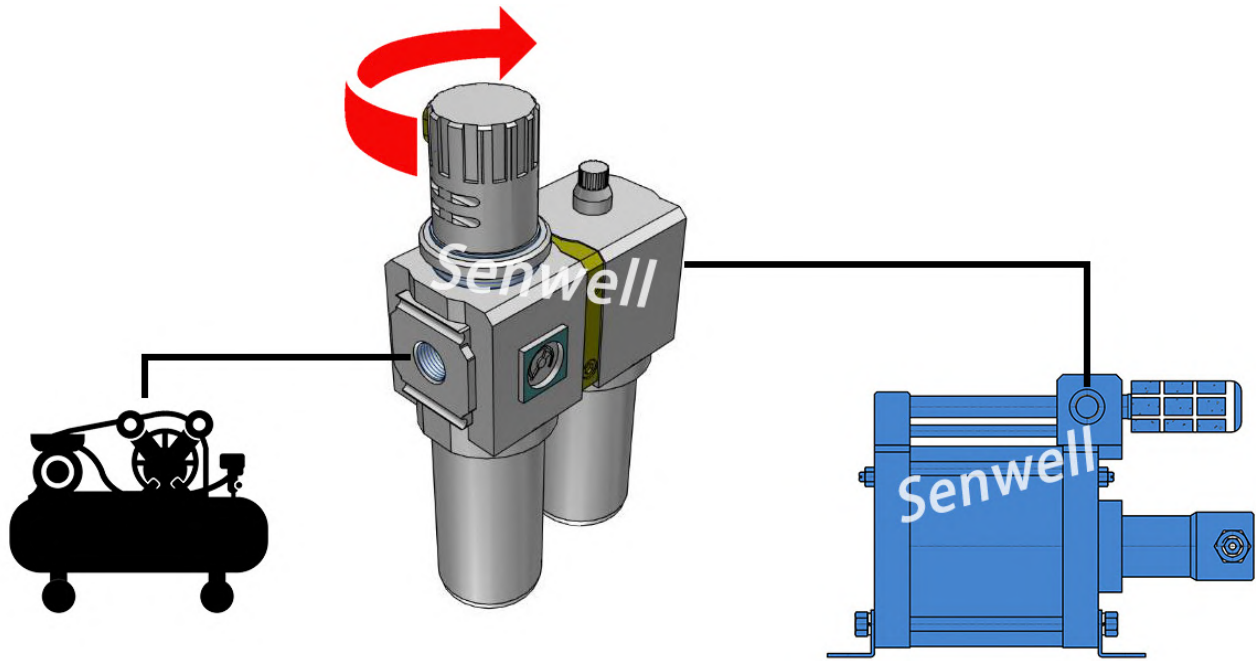
High-pressure pump outlet pressure = Driving air pressure x Boost ratio.

For example, model LBS100, boost ratio is 100, when you set driving air pressure at 5bar, it will output 500bar high pressure.

How to Set or Adjust Pressure

Pull up Air Regulator knob and rotate it clockwise, and the compressed air begins entering high-pressure pump. As driving air pressure rising, high-pressure pump outlet pressure will rise accordingly. When air pressure reaches your desire, push down Air Regulator to lock it. In this case, high-pressure pump will constantly generate hydraulic pressure. When the pressure in your terminal device reaches

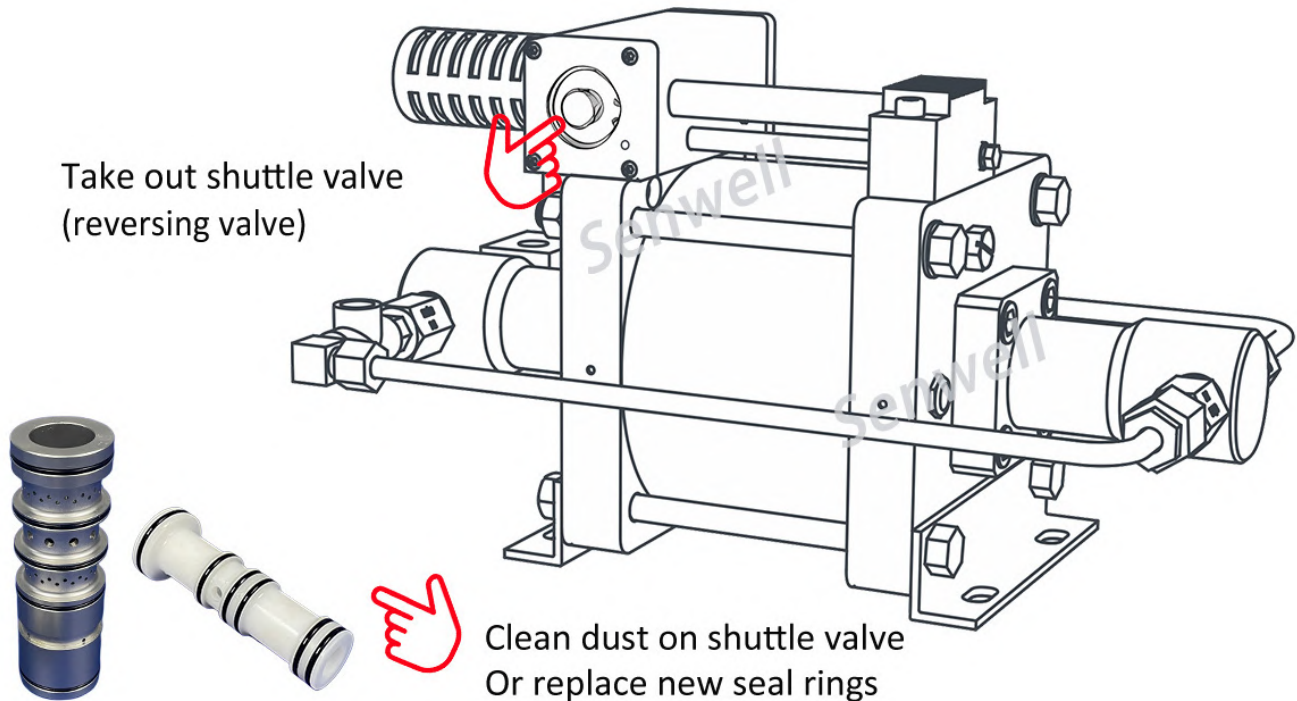
your preset pressure, high-pressure pump will automatically stop and standby, thus avoiding overpressure. And when the terminal pressure drops, high-pressure pump will restart automatically to supplement hydraulic pressure.



Tips: The air trapped in your pipeline will affect the operation of hydraulic circuit. After starting high-pressure pump, it is recommended that you let the pump run idle for a while to bleed the air from your pipeline.

Precautions

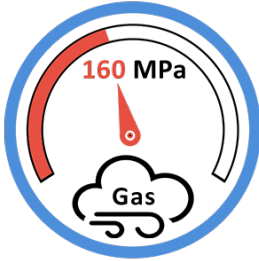
1. The optimal range of driving air entering high-pressure pump is 1~8bar. If exceeds 8bar, it may damage the pneumatic components inside the pump.
2. If your normally working pump suddenly fails, the symptoms are that the pump cannot reciprocate, and it can no longer output high pressure. In this case, it is basically because the dust and impurities contained in compressed air accumulate in the shuttle valve of high-pressure pump, blocking the holes of the shuttle valve and even causing the shuttle valve seal rings to wear. Please remove the shuttle valve, clean off dust or replace new seal rings to solve the trouble.



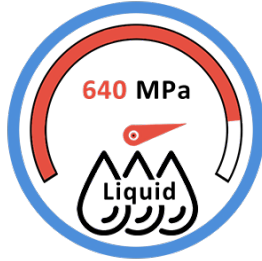
High Pressure Pump Troubleshooting

The high-pressure pump has been fully inspected before leaving factory. If the pump is not working properly for some reason, you can troubleshoot as below.

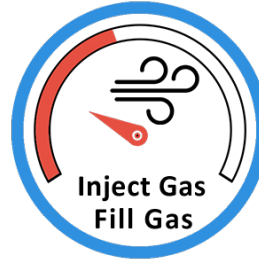
	Fault phenomenon	Reason Analysis	Solution
1.	Pump does not reciprocate, and muffler does not exhaust air or exhausts little air only.	1.Reversing valve is stuck	Take out the valve core of reversing valve, clean dust or foreign objects, apply grease and install it back
		2. Muffler blocked	Take the muffler off, clean it and install back.
2.	Pump does not reciprocate, but the muffler exhausts a lot of air.	O-rings on valve core of reversing valve severely worn.	Take out the valve core of reversing valve, replace new O-rings, apply grease and install it back.
3.	Pump piston reciprocates, but the piston stroke is not complete, causing pump working frequency is abnormally fast or slow.	1.The firing pin is stuck.	Remove firing pin and clean it
		2. Firing pin O-ring falls off	Remove the firing pin and reset the O-ring.
4.	Pump works normally, but can't pressurize medium or can't reach the rated pressure.	1. Foreign objects inside the check-valve cause it to jam	Disassemble the check valve and remove any foreign objects
		2. High-pressure piston seal is severely worn.	Replace new high-pressure seals for high-pressure piston.



Gas booster



High-pressure pump



Gas fill machine



Pressure test machine

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Any improvements or upgrades will be made without prior notification. Pls refer to actual products.

