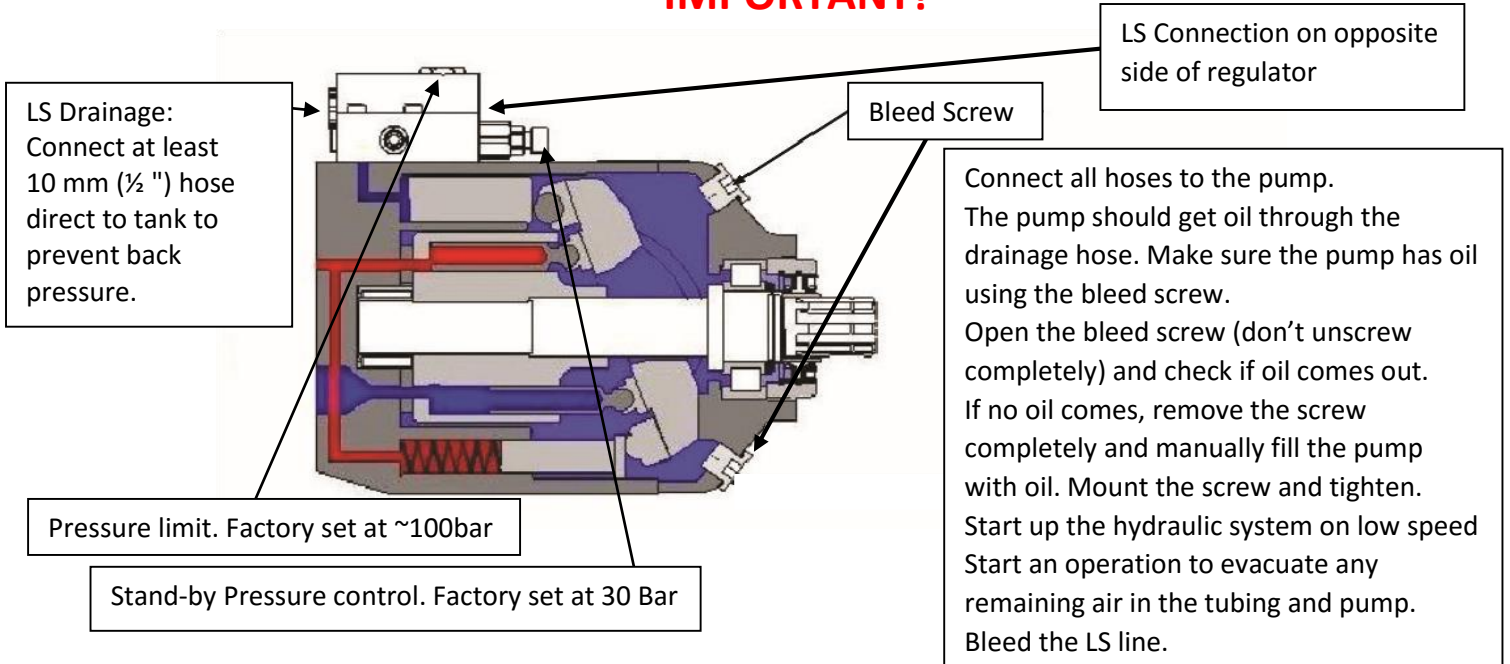


IMPORTANT!



HOW TO CHANGE ROTATION DIRECTION ON THE PUMP:

- Remove the 4 screws **1**
 - Remove the 2 flange halves **2**
 - Remove the fitting **3**
 - Switch place on screw **4** and plug **5** and reassemble fitting on the other port
- NOTE: Do not rotate the pump shaft before the set screw **4** is in place.
NOTE: Rotation adjustment screw **4** is always the output side of the pump.

Calculation of suction hose:

Flow	Size suction hose
0-65	1 ½" / 38 mm
0-120 l/min	2" / 50 mm
120-160 l/min	2 ½" / 63 mm
160-250 l/min	3" / 76 mm

This is valid when tank is place above the pump.

When tank is placed beside or under the pump the max flow/ hose size should be reduced.

Selection of Oil:

Please consider the following recommendations
mineral oil

Viscosity	20 to 40 cst
Minimum Viscosity	5 cst
Viscosity of the optimal operation Values above 400 cst can damage the pump	10 to 400 cst
Cleaness class	class 9 NAs 1638 class 6 SAE class 20/18/15 ISO ISO/DIS 4406
Max temperature	100°C

Start-up and adjustment of TXV Pump:

Ensure that the technical parameters of the PTO are compatible with the use of indexable TXV pump (necessary torque, continuous operation, weight torque).

See HYDRO LEDUC variable displacement Pump Catalogue for the pump characteristics.

Check the direction of rotation of the pump according to the PTO. If you look at the front of the PTO, the rotation is clockwise, then the pump rotation must be counter-clockwise (and vice versa).

Installation of pump onto PTO:

Make sure there is a front square seal placed correctly in its groove. Do not use paper seals.

- If no recommendation from the PTO Manufacturer, lube the splines with graphite grease.
- Install the pump on the PTO and ensure the tightening torque of all bolts conforms to the PTO manufacturer's recommendation.

Use cylindrical connectors provided with a seal to ensure perfect tightness. ‘

P G1 ¼"	Drain G ½"
LS G ¼"	Suction TXV Flange

The inner diameter of the suction pipe must be in accordance with the table on the first page.

This supply line should be as short as possible to facilitate the oil supply to the pump.

The drain line from the LS valve assembly should be properly sized and must be connected directly to the tank
The pump should always be below the oil level in the tank.

This is to ensure that no air intake is possible when the pump is not used for some time.

Connect the LS port on the pump directly to the LS port on the proportional valve.

The plastic tube on the front of the pump should be attached to a hydraulic hose. Be careful not to bend it, It identifies any leaks in the shaft seals.

Settings on the pump:

- **Standby setting:** The TXV pumps supplied from the factory has a standby pressure of 30bar (Adjustable on request from 25 to 60 bar).
- **Maximum pressure:** pressure cap (PC) must match the maximum working pressure of your installation.
 - Either: Enter the PC pressure you need when you order - or the pump will come standard pressure setting of 100 bar, when installing, adjusting screw to set the desired pressure.
- **valve in the intake plate of the proportional valve:** Must be set 25 to 30 bar higher than the chosen PC pressure.

Periodic inspection (1 or 2 times per year):

- Periodically check the tightness pump on the PTO;
- Regularly check the absence of oil in the air valve connected to the pump.

For environmental oil Please contact HLAB for verification.