



VARIABLE PISTON PUMP TXV0xxx00

A variable displacement pumps are axial piston pumps in design, pump displacement is proportional to stroke of the pistons.

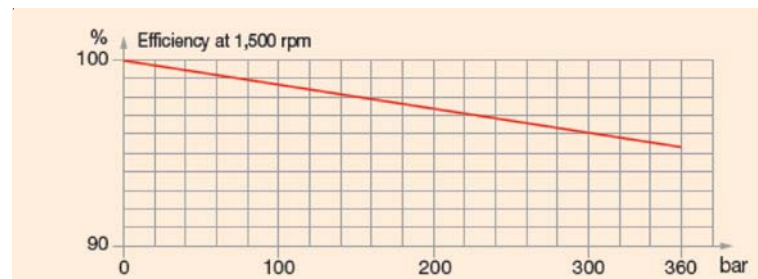
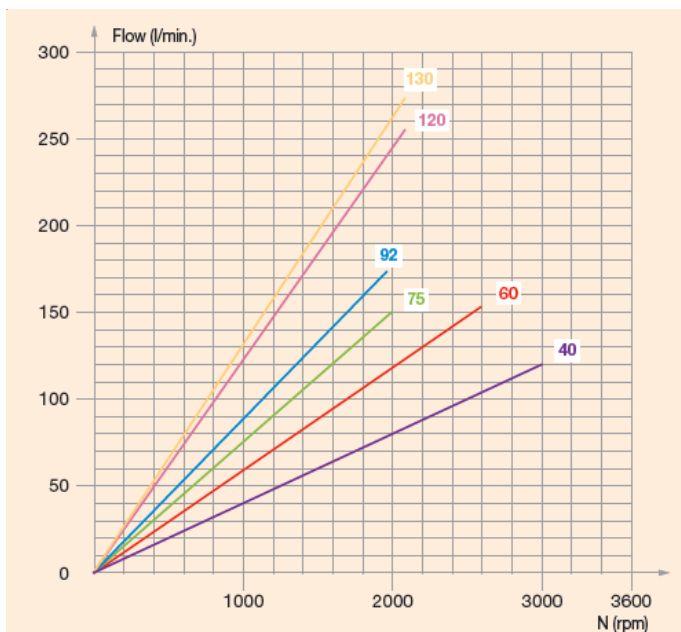
Leduc Variable Pumps are designed especially to meet the requirements of truck applications.

Features:

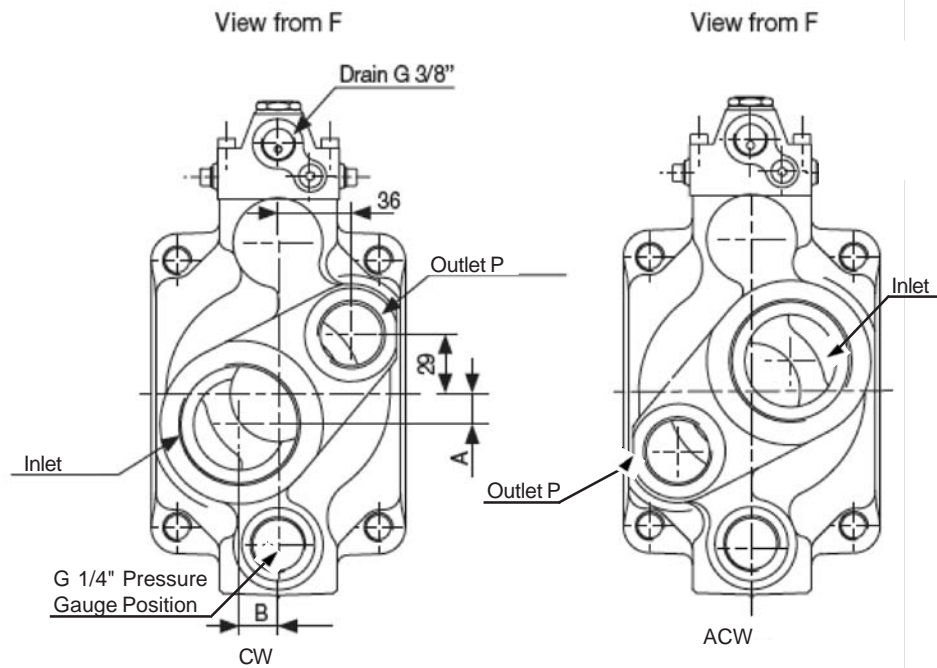
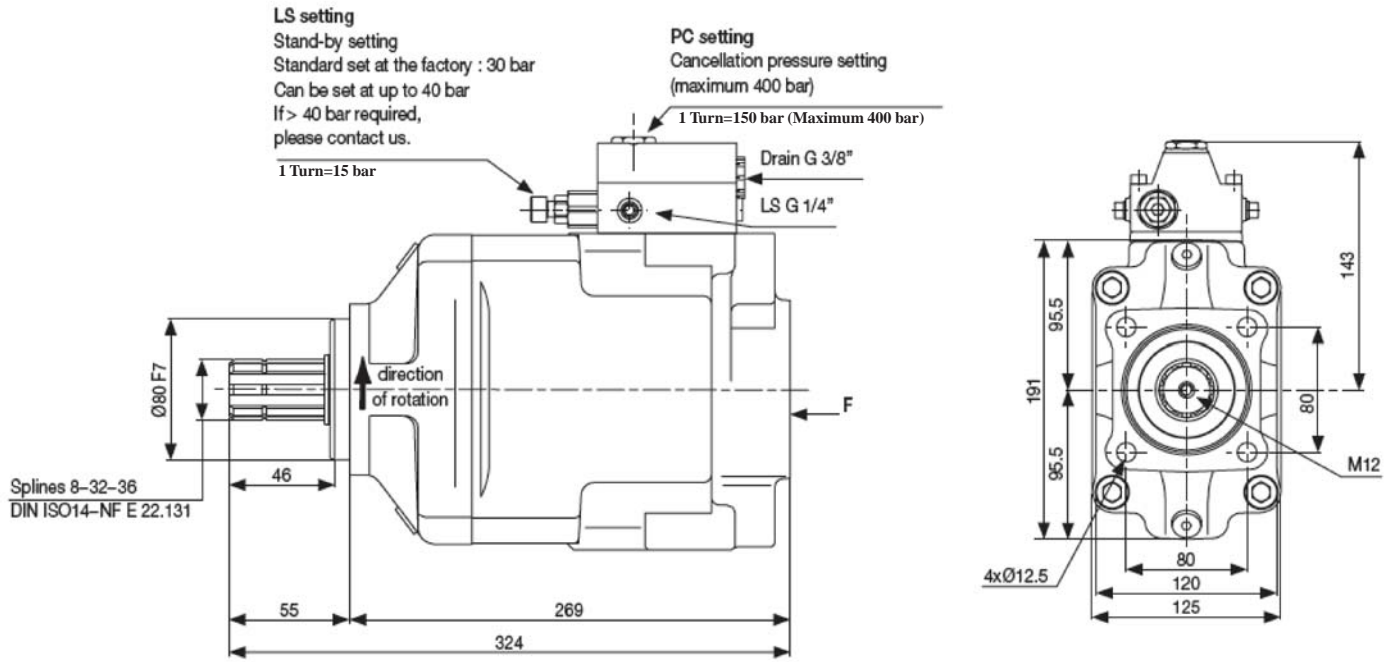
- Compact design to fit in truck applications
- Rapid response times
- Full speed control

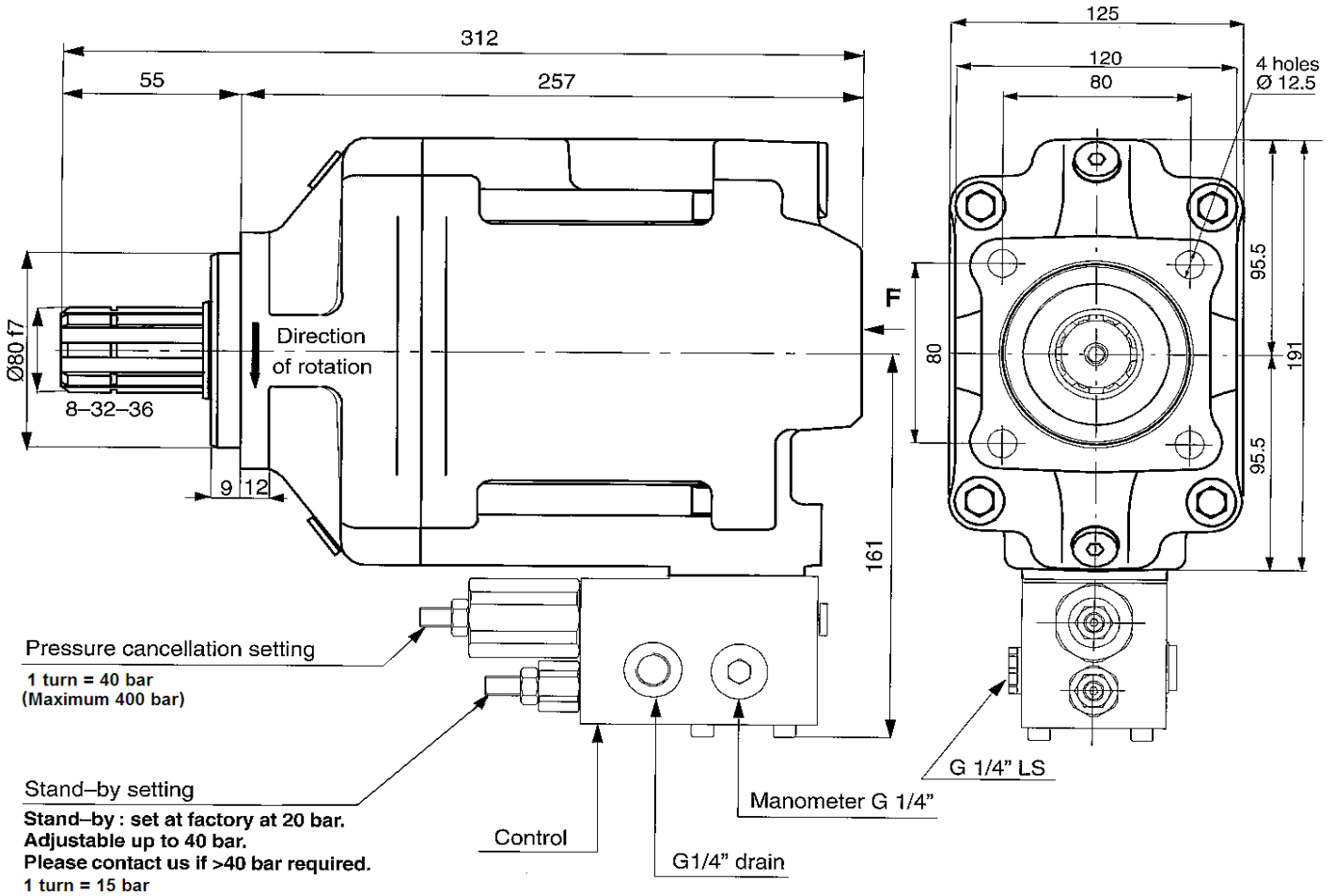
CODE	DISPLACEMENT CM ³ / REV	PRESSURE BAR	MAX SPEED RPM	SUCTION PORT	PRESSURE PORT	WEIGHT KG
TXV060X00	60	400	2600	1 1/2" BSP	3/4" BSP	27
TXV075X00	75	400	2000	1 1/2" BSP	3/4" BSP	27
TXV092X00	92	380	1900	1 1/2" BSP	3/4" BSP	27
TXV120X00	120	380	2100	1 1/2" BSP	1" BSP	28

Flow & Volumetric Efficiency

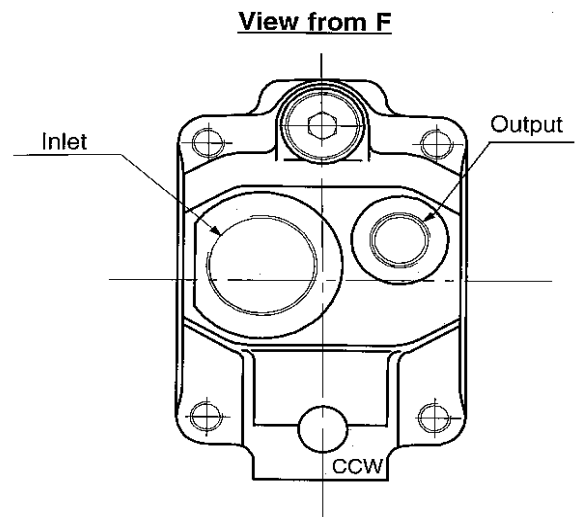
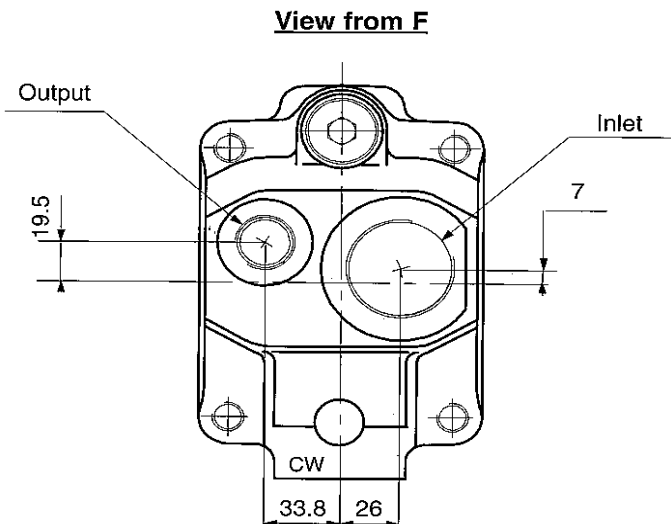


Unit Dimensions.





Connections



Installation

Choice of Fluid

Generally should be mineral based hydraulic fluid, of ISO class 32 or 46; depending on ambient temperature conditions.

Filtration should be 20 micron

**Note - high viscosity oil will effect maximum rotating speed, contact Mega Pacific for further advice.

Operational Temperature

Should not exceed 80° C.

Hydraulic Hoses

ALL pumps should have a supply (suction) line of 2" (50mm) or greater to suit maximum system flow

Pressure lines should be correctly sized to accomodate maximum flow and pressure conditions as per hose suppliers recommendations

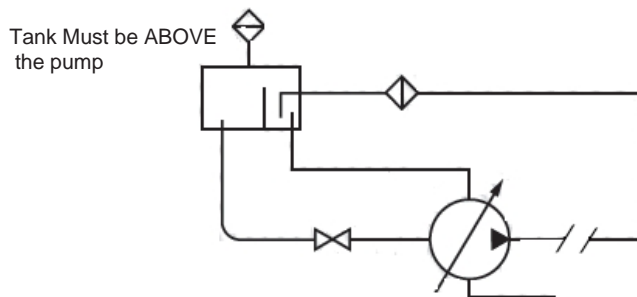
LS (signal line) to the pump MUST have a diameter of 6mm ID and a drain line of 10mm diameter ID, and all lines should be of minimum length.

The use of steel tubing is recommended for the LS line with flexible hose only at the connections

Ensure the compensator drain is returned to the tank via its own dedicated port located below the minimum oil level. **Failure to do this may result in air entering the pump and causing irreparable damage**

Use only BSPP fittings for all connections

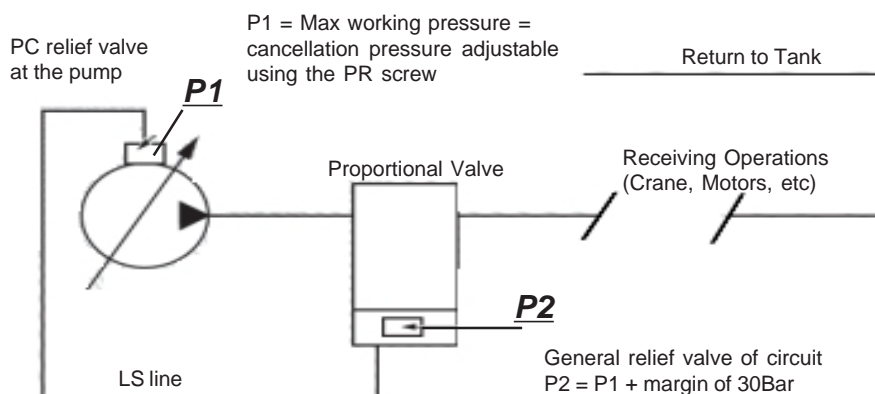
Ideal Installation of the Pump



Grease Spline with HP lithium based grease

Tension the mounting hardware in accordance with INS001 PTO fitting instructions

Setting up the Pump



(Cont. over)

Setting up the Pump Continued.

Before start-up:

Loosen uppermost bleed screw and ensure ALL air is expelled.

The load sense line (LS), **BEWARE this line (LS) is under high pressure.**

Fit Pressure gauges, capable of 400 bar, to the gauge port of the compensator and to the main valve bank.

Fit a flow gauge into the circuits to be flow adjusted.

Ensure all system controls are in "Neutral"

If the pump is to be mounted horizontally, prefill with filtered hydraulic oil via the bleed port and the suction port.

Ensure any "Shut-off" valve in the pump inlet (suction) hose is locked in the open position.

Start-up.

For vehicles where the pump is in constant rotation (live drive) Pulse the starter to expell any trapped air in the pump and fill the piston cavities.

For vehicles where the pump is PTO driven, engage the PTO and use the clutch to pulse the pump to expell any trapped air and fill the piston cavities.

Air in the pump will be evident by a very noisy pump.

Commisioning the System.

CAUTION: Ensure all components, including but not limited to, hoses, motors cylinders and valves, are capable of the maximum settings that will be obtained during the setting of the General System relief valve and the compensator cancellation pressure.

Start the system operation with the main control valve and operate each function, to expell any trapped air, with no load and do not extend any cylinder to the end of its stroke.

The General System relief valve, on the main control valve, must be set 30 bar higher than the compensator cancellation pressure. Failure to do this will cause eratic system behaviour.

The Stand-by pressure setting must be higher than the pressure drop of the whole system.

CAUTION: do not adjust pressure of the General relief valve or the compensator under load.