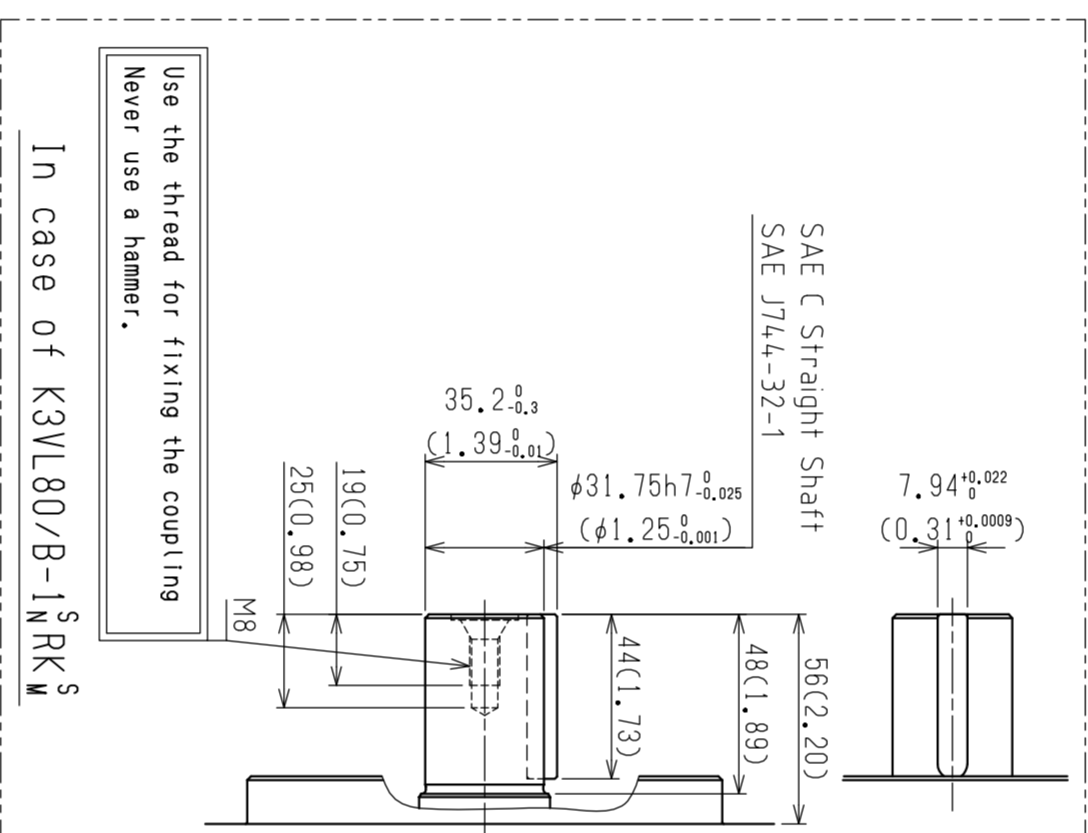
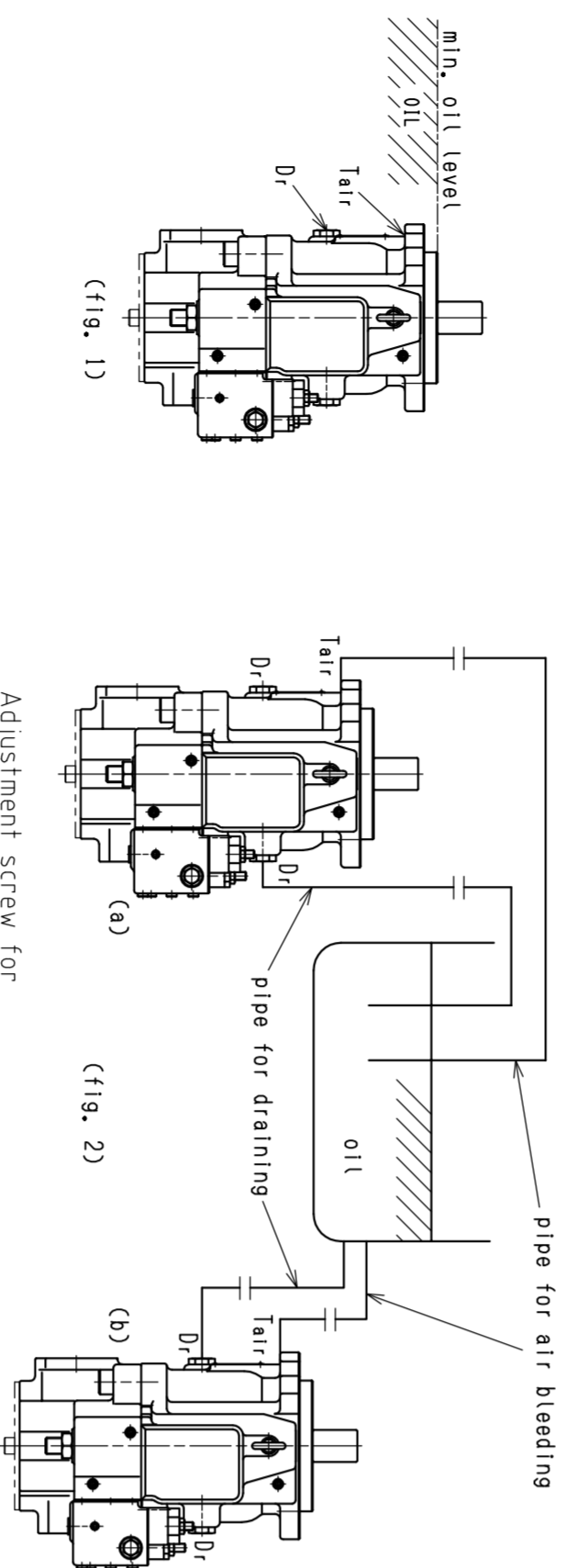


Port name	Port size	On delivery	Tightening torque (N·m)
A	Delivery port SAE J5180 Std. pressure Code 61) 1"	Covered with tape	57 (42.0)
B	Suction port SAE J5180 Std. pressure Code 61) 2"	Covered with tape	98 (72.3)
D _r	Drain port SAE J1926/7 Straight thread O-Ring boss 1/2" 0. 0 Tube 24-16UNF-28	Attached with steel plug	98 (72.3)
P _L	Load sensing port (Type L0, L1) SAE J1926/7 Straight thread O-Ring boss 1/4" 0. 0 Tube 7/16-20UNF-28	Attached with steel plug	12 (8.8)
P _C	Pressure control port (Type P0) SAE J1926/7 Straight thread O-Ring boss 1/4" 0. 0 Tube 7/16-20UNF-28	Attached with steel plug	12 (8.8)
T _{air}	Air bleeder port	Attached with steel plug	12 (8.8)

Notes on mounting and operation

- The pump shaft and flange surfaces should be cleaned. Remove an anti-rust material.
- Do not apply any form of axial loading to the pump shaft.
- The uppermost drain port should be used and the drain piping should be so connected as to keep the casing filled with oil.
- Keep the casing pressure below 1 bar (14 psi) normally, and below 4 bar (58 psi) at its peak.
- Make sure the drain piping led into the oil tank is kept below the surface of the oil (to prevent aeration).
- Make sure the suction pressure in the suction flange is kept above 0 bar (0 psi) normally.
- Mineral antiwear type hydraulic oil should be used.
- For satisfactory service life of the pump in application, the operating fluid should be continuously filtered to a minimum cleanliness level of MAS1638 class 9 or 18/15 to ISO/DIS 4406.
- Provide a 150 mesh (100µm) strainer in the suction line.
- Install a 10µm filter in the return line.
- Allowable oil temperature range : -20~95°C.
- Oil viscosity range : 10~1000cSt when 200~1000cSt, take warming up before real working.
- Caution for the vertical mounting.
The oil level in the tank should be upper than the pump mounting flange. (Fig. 1)
If the oil level is lower than the pump level, forced lubrication should be made from the air bleeder port. (flow 1~2 l/min)
- Installation within a tank
 - Installation within a tank
 - Open the drain port and the air bleeder port.
 - Installation outside a tank (Fig. 2)
 - Pipe the drain port and the air bleeder port to tank.
 - If the pipe for draining or air bleeding is upper than the oil level, it should be filled with oil before starting the pump.

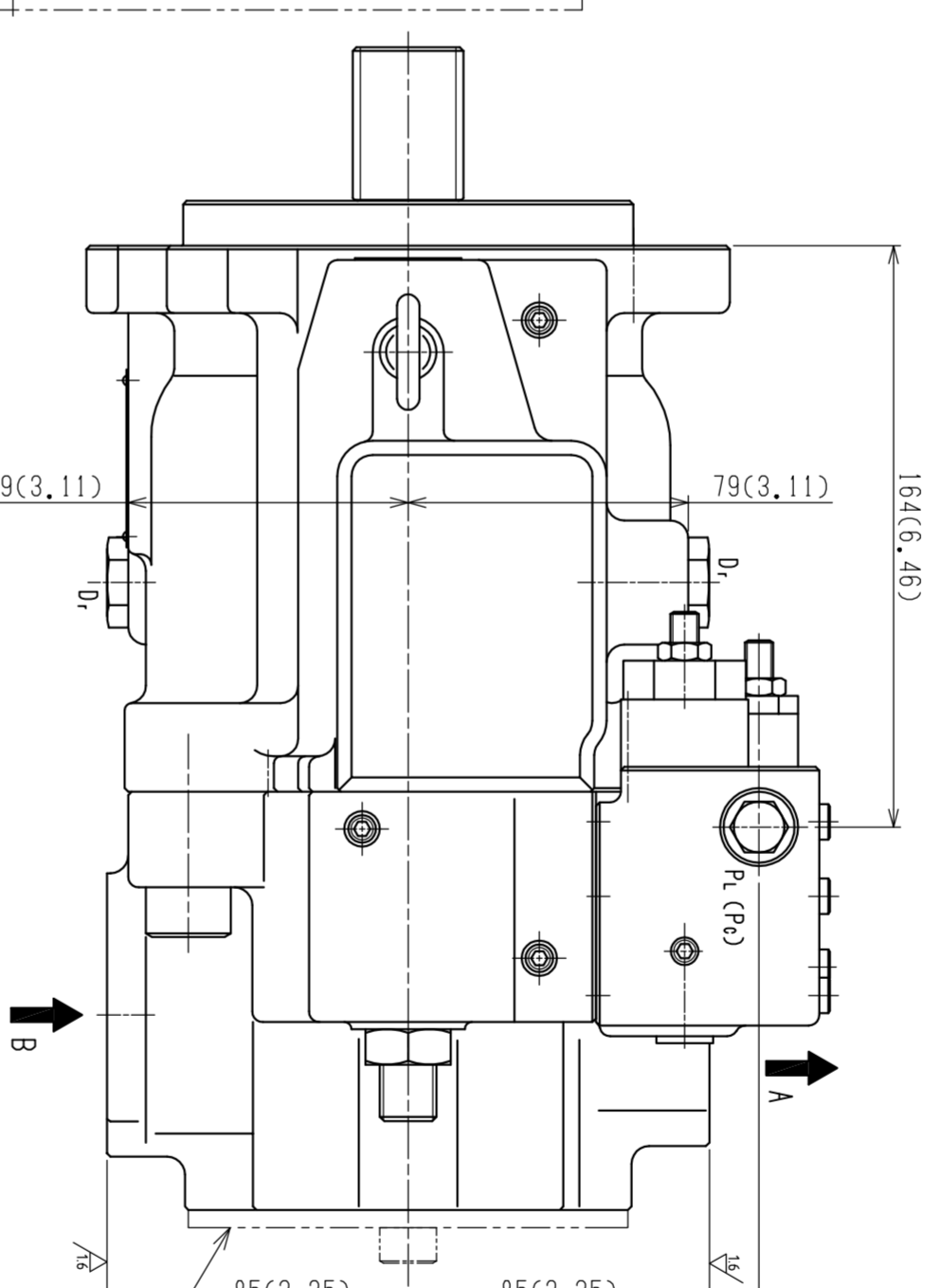


In case of K3VL80/B-1SRKM

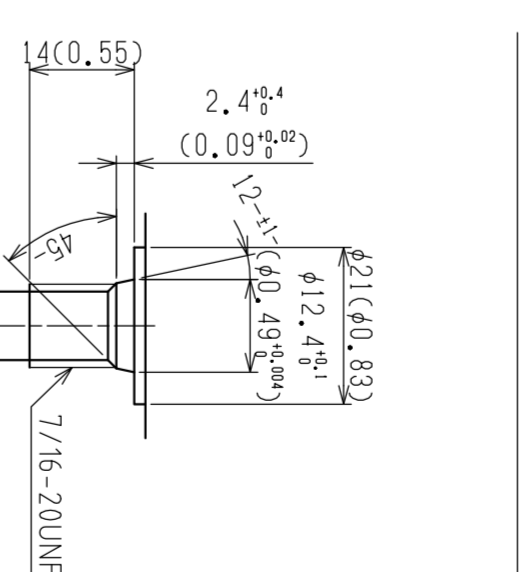
Use the thread for fixing the coupling.
Never use a hammer.

Operating specifications

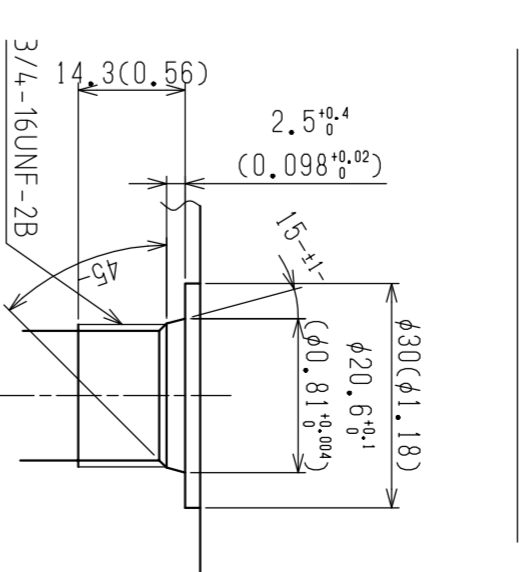
Displacement	cm ³ (in ³)	80 (4.88)
Max. self priming speed	min ⁻¹	2400 (clockwise viewed from shaft end)
Rated pressure	bar (psi)	320 (4600)
Peak pressure	bar (psi)	350 (5000)
Pump model name		K3VL80/B-1SRKM L1



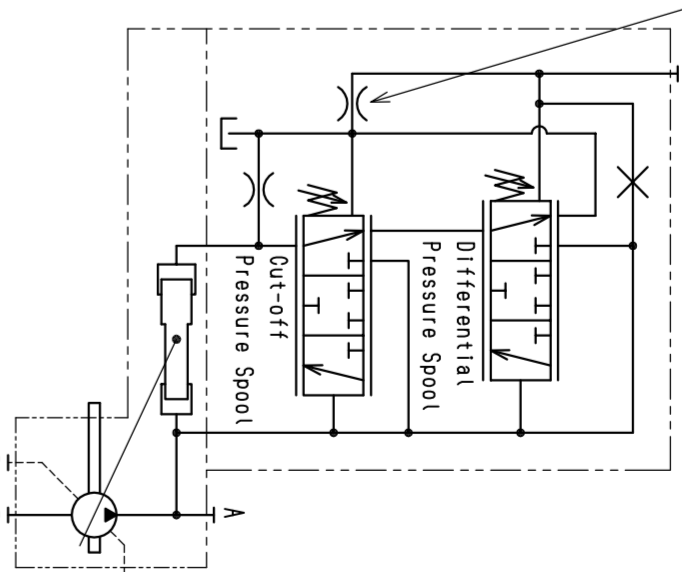
Detail of P_L (P₀), T_{air} ports (1/1)



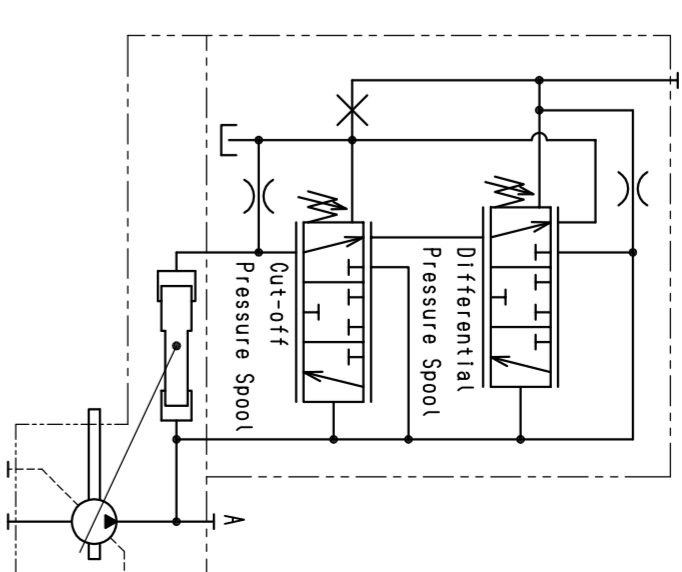
Detail of D_r ports (1/1)



For Type L1
This orifice is plugged



Hydraulic circuit (Type L0, L1)



Hydraulic circuit (Type P0)

Pump model name	K3VL80/B
Adjustable range of max. displacement	35~80
L	0.5~15

In case of K3VL80/B-1NRSS P0
Steel cover, O-ring and Bolts are attached
In case of K3VL80/B-1SRKM L1
Covered with tape

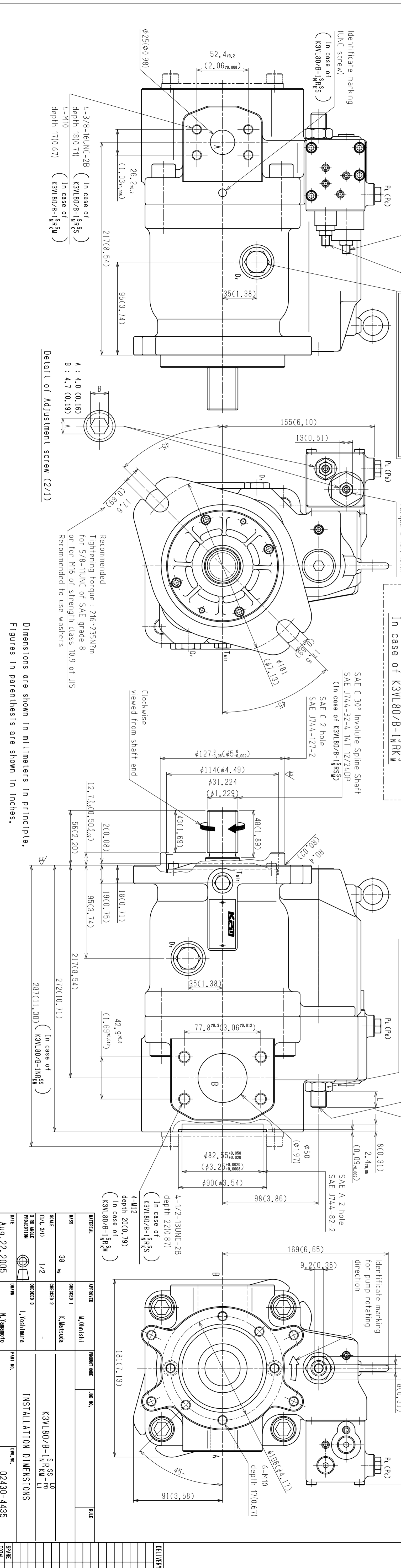
Adjustment screw for cut-off pressure
Approx. pressure change per revolution of screw : 80 bar (1160 psi)

Adjustment screw for differential pressure
Approx. pressure change per revolution of screw : 13 bar (188 psi)

Lock-nut tightening torque = 15.7 N·m

Max. flow adjusting screw
Approx. displacement change per revolution of screw : 6cm³

Lock-nut tightening torque=128N·m



Dimensions are shown in millimeters in principle.
Figures in parenthesis are shown in inches.

REVISION	DATE	BY	CHK	APP	REASON
1	2005.08.22	N. Yamamoto			INITIAL DIMENSIONS

ITEM	UNIT	VALUE
WEIGHT	kg	3.8
INSTALLATION DIMENSIONS		

DELIVERY	DATE