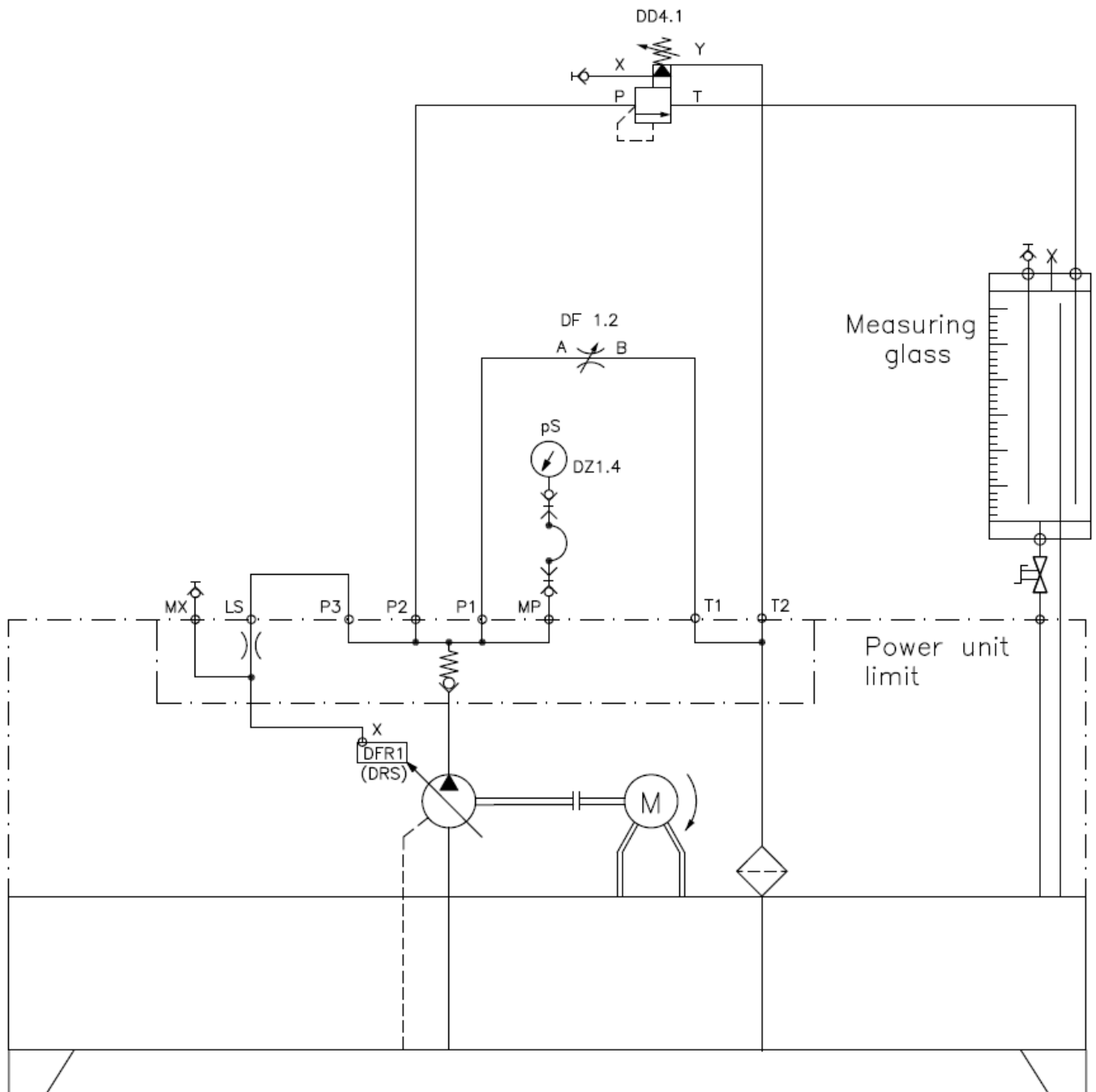
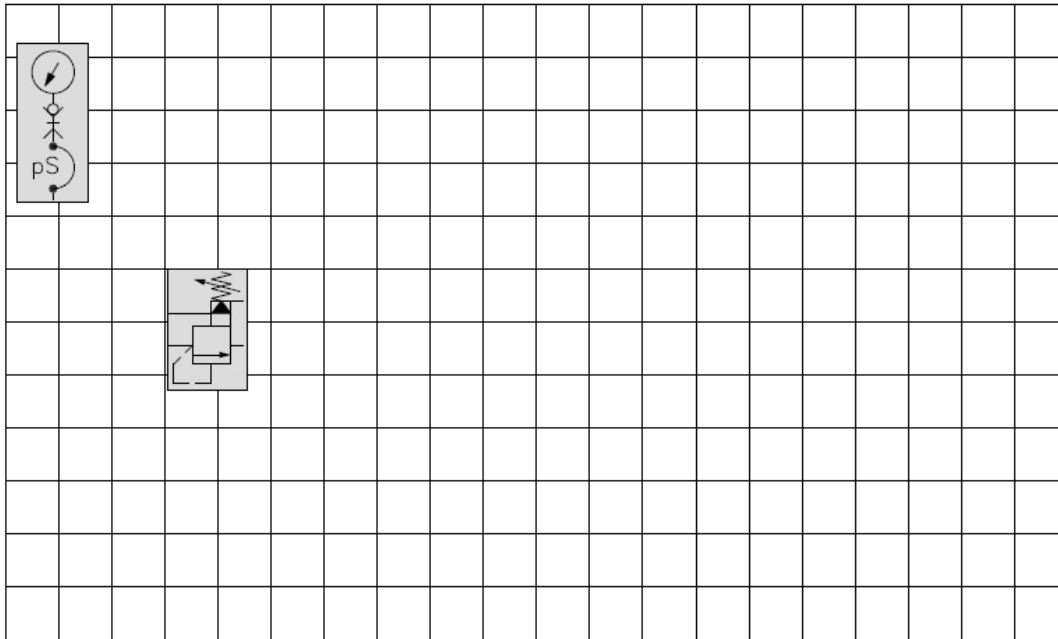


Pilot Operated Relief – Cracking Pressure

Install a pilot operated relief DD4.1 per the following circuit





The cracking pressure of the pressure relief valve is to be determined.

Set the relief valve DD4.1 to a full flow pressure setting of 40 bar
(i.e. maximum possible system pressure should be 40 bar)

- Open the throttle valve DF1.2 completely (minimum pressure should be seen on the gauge and there should be no flow at the measuring glass)
- Begin slowly closing the throttle valve DF1.2 until you notice oil flow start from the 'P' port of valve to the measuring glass. Note the pressure at which this flow stream first begins.

Pressure: 38 bar

Contrast what you observed to the operation of the direct operated relief:

The cracking pressure is much closer to the full flow pressure setting.

Leakage drops always appeared in the measuring glass with the pilot operated valve.