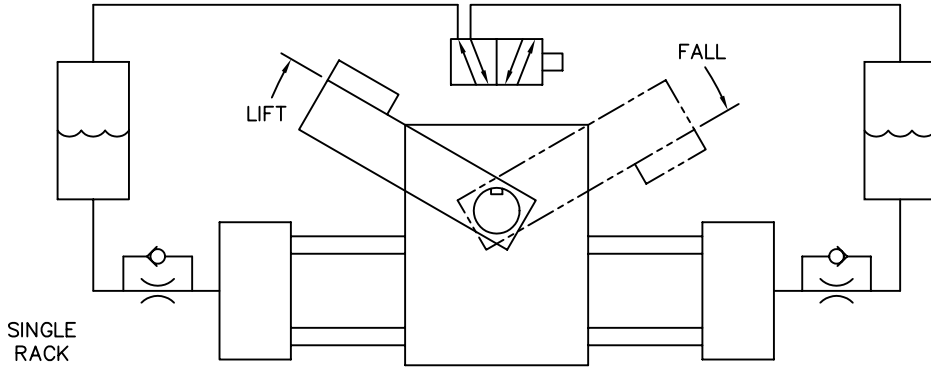


AIR OVER OIL CIRCUITS

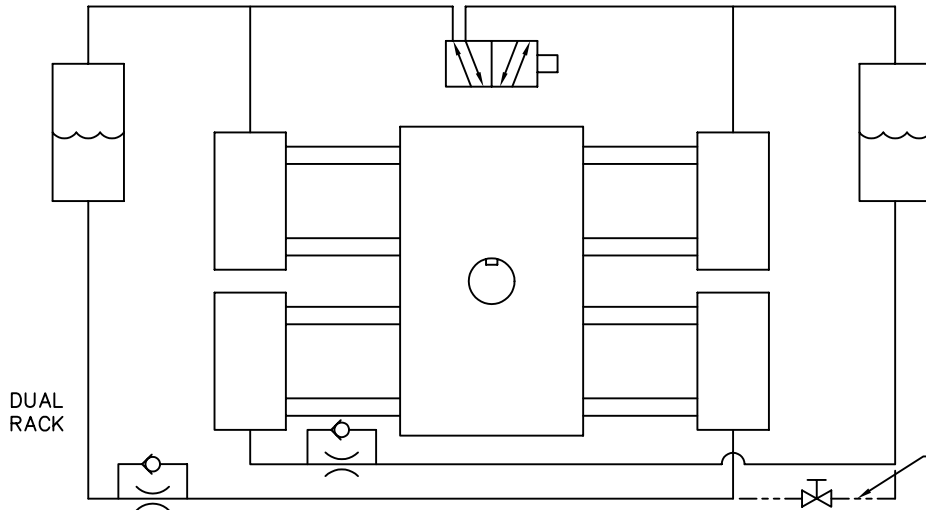
General:

Air/oil circuits produce smooth motion, positive control. Especially useful in applications where a weight is lifted, goes over center and tends to fall during second half of stroke.

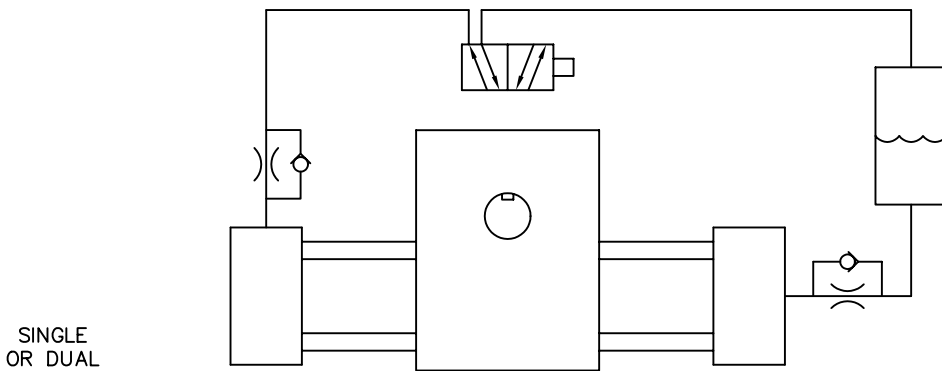
1. EXTERNAL TANK(S)



- OIL RESERVOIR VOLUME APPROXIMATELY 2X ACTUATOR DISPLACEMENT
- SPECIFY PRETENSIONED SEALS ('T' OPTION) TO MINIMIZE LEAKAGE
- DEVELOPS FULL TORQUE LESS FLOW LOSSES

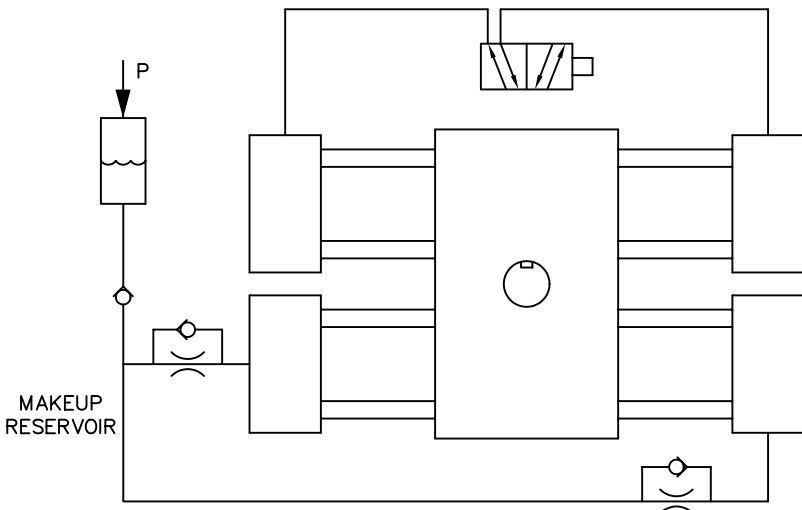


- USE OIL IN (2) CYLINDERS ONLY, AS SHOWN, TO MINIMIZE RESERVOIR SIZE
- IF DESIRED, DOUBLE RESERVOIR SIZE, SUPPLY OIL TO ALL CYLINDERS



- FOR LOADS WITH LARGE MOMENTUM OR OVER-CENTER PROBLEMS IN ONE DIRECTION ONLY, A SINGLE RESERVOIR CAN BE USED

2. SHUNT TYPE



- AIR IS SUPPLIED TO (2) CYLINDERS OF A DUAL RACK ACTUATOR. OTHER (2) CYLINDERS SHUNTED TOGETHER. SMALL RESERVOIR WITH CONSTANT PRESSURE TO MAKE UP FOR TEMPERATURE FLUCTUATIONS AND/OR LEAKAGE
- TORQUE IS THAT OF SINGLE RACK ONLY