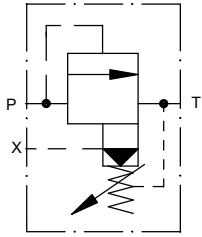


COMPOSITE PILOT RELIEF VALVE

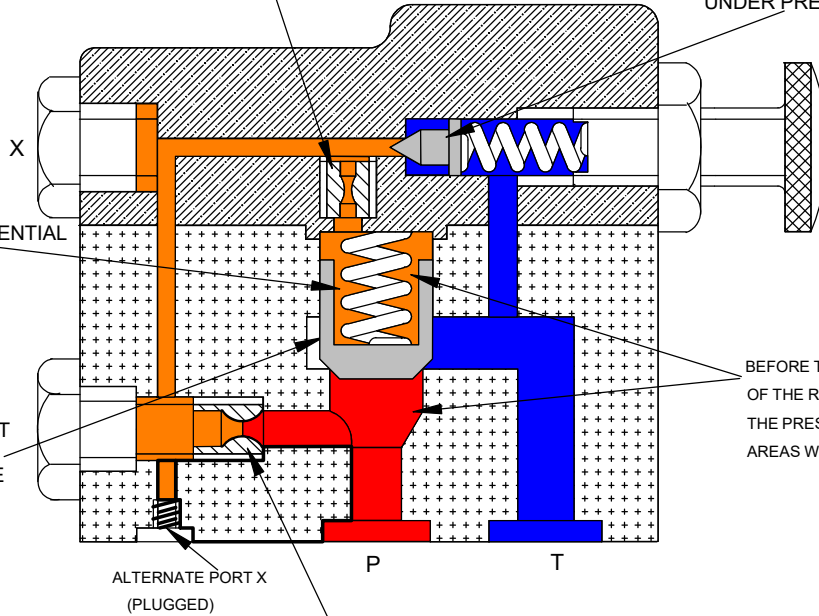


ORIFICE CONTROLS POSSIBLE MAIN VALVE OSCILLATION.

1. WHEN THIS POPPET VALVE LIFTS UNDER PRESSURE....

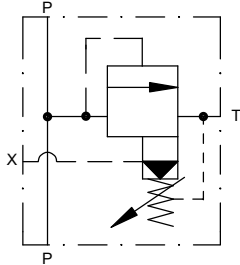
3. THE PRESSURE DIFFERENTIAL ACROSS THE ORIFICE WILL CAUSE A LOWER PRESSURE IN THIS CHAMBER....

4. THE HIGHER PRESSURE IN CHAMBER "P" WILL LIFT THE MAIN VALVE PISTON CAUSING THE PRESSURE TO RELIEVE TO TANK THROUGH PORT "T".



BEFORE THE PRESSURE SETTING OF THE RELIEF VALVE IS REACHED THE PRESSURES IN BOTH THESE AREAS WILL BE THE SAME

2. THERE WILL BE FLUID FLOW THROUGH THIS ORIFICE, RESULTING IN A PRESSURE DIFFERENTIAL....

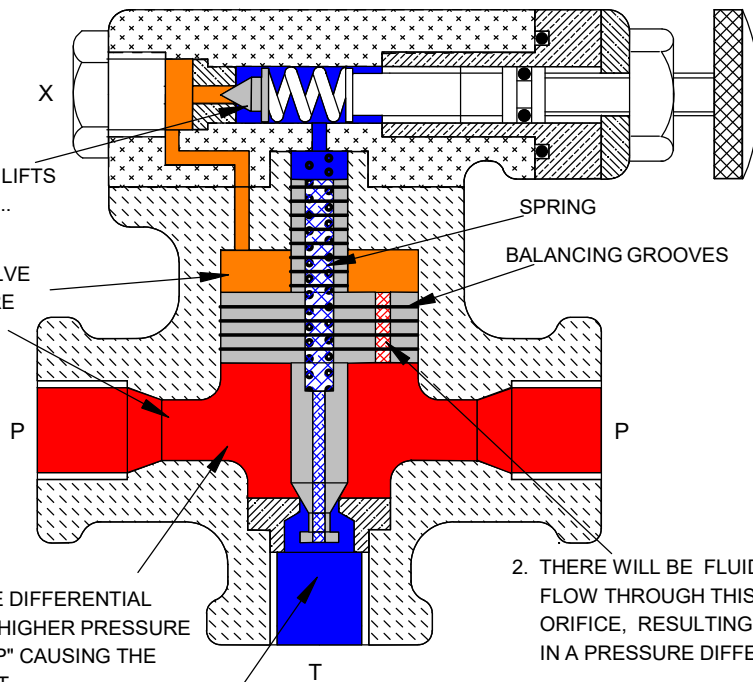


1. WHEN THE POPPET LIFTS UNDER PRESSURE....

BEFORE THE RELIEF VALVE UNLOADS THE PRESSURE IN BOTH CHAMBERS WILL BE THE SAME.

3. THE PRESSURE DIFFERENTIAL RESULTS IN A HIGHER PRESSURE IN CHAMBER "P" CAUSING THE PISTON TO LIFT....

4. ALLOWING THE RELIEF VALVE TO BLOW-OFF FROM PORT P TO TANK.



2. THERE WILL BE FLUID FLOW THROUGH THIS ORIFICE, RESULTING IN A PRESSURE DIFFERENTIAL....