INTRODUCTION

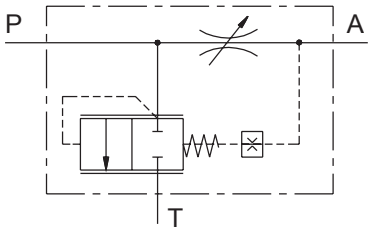
The main characteristic of Flow control valves described in this chapter is that compensator and flow regulator are mounted directly inside the manifold, so that this type of valve is directly installed in the hydraulic circuit.

There are 2 different types of flow control valves, according to the type of adjuster:

- Electro-proportional flow regulators
- Manual flow regulators

3 WAYS IN LINE MOUNTED FLOW REGULATORS

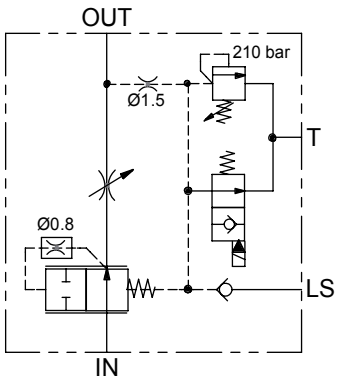
Whatever working pressure is, 3-way flow regulators grant a constant adjustment of oil flow inside an hydraulic line (A), draining excess flow through a third line (T).
Main components are: an flow regulator device and a 2-way NC compensator.
To have an efficient functionality, pressure on third line (T) must be lower than pressure on regulated line (A).



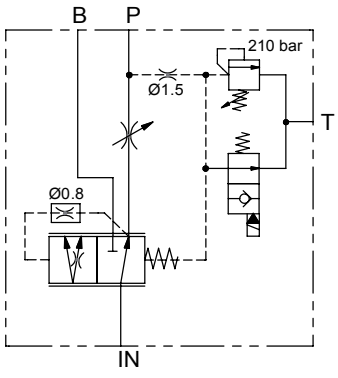
FLOW REGULATORS FOR EARTH MOVING MACHINES

Flow regulators for Earth movement machines are hydraulic valves designed to allow the installation of hydraulic hammers, trenchers and/or other hydraulic tools on excavators, backhoes and/or other machines.

Flow regulators for earth moving machines are designed in two different types: 2 way or 3 way valves. They are equipped with: (1) relief valves, to reduce pressure on regulated line; (2) dump electric valves.



2 way LS Regulator



3 way priority Regulator

FLOW CONTROL VALVES

To have an efficient functionality, when flow control valve is not operating, it is necessary to assure at least 7.5 Bar pressure on the regulated port (OUT or P). For applications linked to hydraulic engines or open-centre direct control valves, the installation of a 7.5 Bar-pre-loaded uni-directional valve is required.