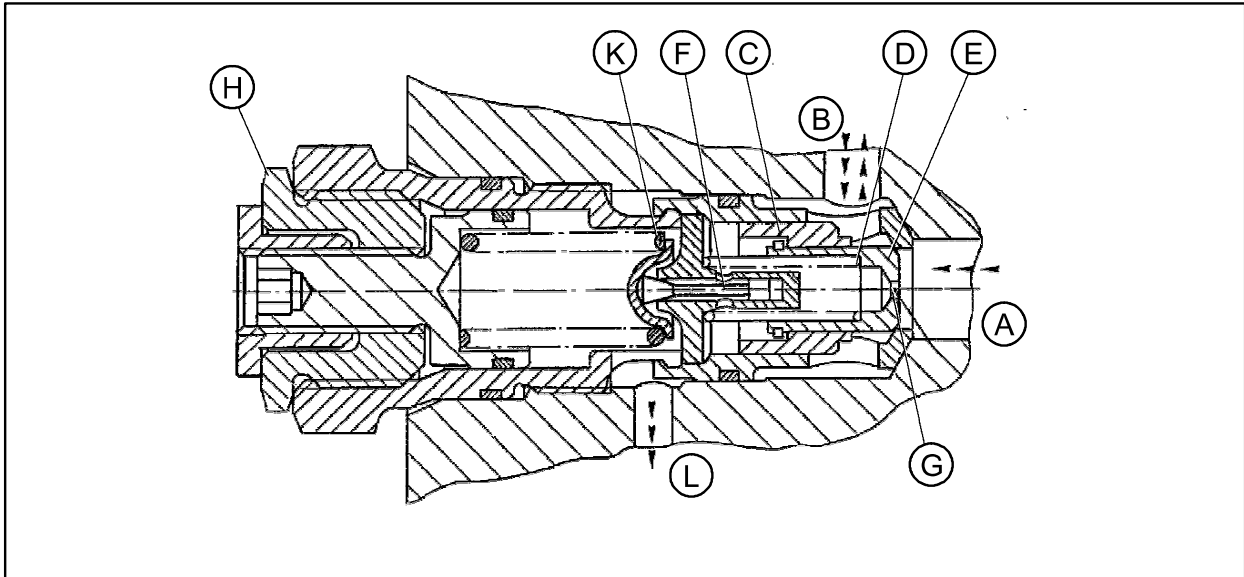


**MULTI-FUNCTION VALVE OPERATION DESCRIPTION**

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- A High pressure
- B Charge pressure
- L To the servo-cylinder

**CHECK VALVES**

If the pressure on support (C) is higher than the pressure on the spring (D), the support (C) moves to the left, driving the piston (E) simultaneously. Oil flows from (B) to (A) and fills the system.

**PRESSURE LIMITERS (PRESSURE DRAIN) - 390 bar**

When the high pressure is over 390 bar, the pressure made on the vertical support (F) pushes the support to the left, so that oil flows to the servo-cylinder through the opening (L).

**HIGH PRESSURE SAFETY VALVE - 420 bar**

The flow in the pressure limiters must pass through the opening (G) in the piston (E), generating a pressure change during opening. When the pressure on piston (E) is over the sum of the pressure of the inner valve closing effort (due to the pressure decrease through the opening) on the left side and of the effort of the spring (D), the piston (E) moves to the left and oil flows to the supply circuit.

**BY-PASS VALVE**

When the outer hexagonal part (H) is rotated by 2.5 turns counter-clockwise, the effort on the vertical support (F) decreases. The pressure limiter gets a very low value. When the shaft of the pump doesn't rotate, while outer forces (motor used as a pump) create pressure inside the high pressure lines, the vertical support (F) moves to the left and the oil flows through the opening (L). Hence, the piston (E) can easily move to the left and oil flows from (A - high pressure) to the opening (B).

**NOTE:** when the machine must be towed, the spring (K) must be released: turn by 3.5 revolutions, counter-clockwise, the hexagonal part (H), to open the circuit.