

Title (en)

Compensated individual segment flow regulator.

Title (de)

Individueller Strömungsregler mit Druckwaage.

Title (fr)

Régulateur de débit individuel à chute de pression constante.

Publication

EP 0310454 B1 19940824 (EN)

Application

EP 88309199 A 19881003

Priority

US 10361087 A 19871002

Abstract (en)

[origin: EP0310454A2] An individual segment flow regulator is shown having a two landed spool (46) and two landed bore, all with the same nominal diameter, a plug (38), a spring (54) and a sensing passage (58) from the main spool (30) of the valve. Supply oil entering between the two lands (42, 44) of the bore is separated from a sensing pressure by one spool land (52) which is slidable within the bore. The other spool land (50) meters the supply fluid. The metering land (50) of the regulator spool opens away from the valve bore land to allow supply fluid through and can shut off the supply. A spring chamber (56) above the spool senses the load pressure which opens the metering spool, thereby increasing the flow and therefore the pressure drop across the main spool area opening. Feedback pressure developed at the bottom of the metering land of the spool is used to close down the regulator spool as the flow, and therefore the pressure drop, across the main spool increases beyond the pre-load force of the bias spring. The feedback land at the bottom of the spool is also the metering land that controls supply pressure to the regulated pressure.

IPC 1-7

F15B 11/05

IPC 8 full level

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