

Title (en)

UNLOCKABLE NON-RETURN VALVE FOR VERY HIGH SYSTEM PRESSURES

Title (de)

ENTSPERRBARES RÜCKSCHLAGVENTIL FÜR SEHR HOHE SYSTEMDRÜCKE

Title (fr)

CLAPET ANTIRETOUR DEBLOCABLE POUR SYSTEME DE TRES FORTES PRESSIONS

Publication

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Application

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Abstract (en)

[origin: WO0218799A1] The invention relates to an unlockable non-return valve used for very high system pressures, and a valve housing (35) provided with a continuous receiving bore (36) lying on a valve axis (37), a push-piston (70) which can be subjected to pressure on a piston collar (71) in order to unlock a closing member (50) and which is guided on both sides of the piston collar (71) on end sections (79,80) having at least approximately the same diameter in the direction of the valve axis. Two inserts (60) are disposed in the receiving bore on each side of the piston collar. The end section of the push-piston plunges into said inserts. The end section is guided in a first insert made of a metal material with good sliding qualities, close to the piston collar and a second insert (44,45) following said first insert is provided with a high pressure seal (86) supported by the first insert, lying radially adjacent to the end section of the push-piston (70), whereby the first insert has a guidance diameter for the push-piston for only a short distance on the front surface thereof facing the piston collar and a support ring (88) is arranged axially between the high pressure seal and the first insert in a receiving element (87) whose diameter is substantially smaller than the outer diameter of the inserts (44,60,55), said support ring also being made of a metal material exhibiting good sliding qualities and being produced with only a narrow amount of slackness in relation to the end section and with a large amount of radial slackness in relation to the receiving element.

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