

Title (en)
HYDRAULIC ENERGY ACCUMULATOR WITH METAL BELLOWS

Title (de)
HYDRAULIKENERGIESPEICHER MIT EINEM AUS METALL BESTEHENDEN FALTENBALG

Title (fr)
ACCUMULATEUR D'ENERGIE HYDRAULIQUE AVEC SOUFFLET EN METAL

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Application
EP 01984061 A 20010622

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• DE 10030937 A 20000624

Abstract (en)
[origin: WO0201076A2] A hydraulic energy accumulator consisting of a housing (7) with a space (4) for inserting metal bellows (5), comprising a non-moveable end and a moveable end with a front wall arranged in a sealed manner on the bellows and separating a hydraulic pressure medium from a pressurized gas is already known per se. The advantage of using metal bellows is that they are gas-tight in so far as no leak arises over time. According to the invention, the bellows are embodied in such a way that the pressure of said bellows in the gas is reduced in comparison with the hydraulic medium as a result of the longitudinal elasticity of said bellows and a sensor system (6) is provided which indicates a longitudinal expansion of the bellows (5) when the hydraulic pressure medium flows through a leak in said bellows into the area containing the gas. The inventive hydraulic energy accumulator (2) and the sensor system (6) thereof are also capable of indicating when such a leak occurs in the bellows. The indication of a leak is also an indication that a motor vehicle braking system fitted therewith has become unsafe.
[origin: WO0201076A2] A hydraulic energy accumulator consisting of a housing with a space for inserting metal bellows, comprising a non-moveable end and a moveable end with a front wall arranged in a sealed manner on the bellows and separating a hydraulic pressure medium from a pressurized gas is already known per se. The advantage of using metal bellows is that they are gas-tight in so far as no leak arises over time. According to the invention, the bellows are embodied in such a way that the pressure of said bellows in the gas is reduced in comparison with the hydraulic medium as a result of the longitudinal elasticity of said bellows and a sensor system (6) is provided which indicates a longitudinal expansion of the bellows (5) when the hydraulic pressure medium flows through a leak in said bellows into the area containing the gas. The inventive hydraulic energy accumulator (2) and the sensor system (6) thereof are also capable of indicating when such a leak occurs in the bellows. The indication of a leak is also an indication that a motor vehicle braking system fitted therewith has become unsafe.

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