

Title (en)

Piston and cylinder assembly control system.

Title (de)

Steuereinrichtung für eine Kolben-/Zylinderanordnung.

Title (fr)

Système de contrôle pour ensemble piston et cylindre.

Publication

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Application

EP 93308912 A 19931108

Priority

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Abstract (en)

A piston and cylinder assembly control system is described which includes a piston (16a; 18a) reciprocating in a cylinder (16b; 18b) and connected to a part (12; 14) to be driven by the piston and cylinder assembly, a position sensor (34; 36) arranged to provide signals indicative of the position of the piston in the cylinder, a valve (20; 22) for controlling fluid flow to and from the cylinder, and a control unit (28). The control unit is arranged to: (i) receive the position dependent signals, (ii) determine the actual current speed of the piston in the cylinder, (iii) determine the maximum permitted speed of the piston at the current position from a predetermined relationship between maximum piston speed and current piston position, (iv) compare the maximum permitted speed with the actual speed, and (v) generate valve control signals to control the fluid flow to and from the cylinder such that the maximum permitted piston speed is never exceeded. The piston and cylinder assembly may be double acting or single acting. If double acting it may comprise a double acting ram or two single acting rams. <IMAGE>

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F15B 11/04; G05D 3/14

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Citation (search report)

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