

Title (en)
FLUID PRESSURE ACTUATOR WITH SLOTTED CYLINDER AND SEALED ENDS

Publication
EP 0068088 B1 19850220 (DE)

Application
EP 82103023 A 19820408

Priority
DE 3124915 A 19810625

Abstract (en)
[origin: EP0068088A1] 1. A pressure fluid cylinder comprising a longitudinally slotted cylinder tube (1) closed at its ends and enclosing a piston (10) provided therein in a sealed relationship and for longitudinal displacement, the longitudinal slot (7) of said cylinder tube being sealed by a flexible sealing strip (25) which is provided in the interior of the cylinder tube on both sides of the piston and extending beneath a load transmission element (14) in the zone of the piston, which load transmission element projects outwardly through the longitudinal slot (7) and is directly connected with the piston (10), the load transmission element being longitudinally guided by means of parallel guide means (18, 19) rigidly connected with the cylinder tube (1) and having at least two guideways (18) arranged outside the cylinder tube, characterized in that at least one guideway (18) of each of the parallel guide means is arranged in the zone between the outer edge of the longitudinal slot (7) and the horizontal plane (23) in which the axis of the piston is located and which extends perpendicular to the longitudinal central plane (22) extending through the axis (3) of the piston and the longitudinal slot (7), on both sides of the longitudinal slot (7), directly on the outer surface of the cylinder tube (1), and in that the load transmission element (14) has a bow-like guide member (16) which overlaps the cylinder tube (1) to the height of the guideways (18), which guide member is laterally supported against the guideways (18) and by means of which the cylinder tube (1) is held together in the zone of the longitudinal slot (7).

IPC 1-7
F15B 15/08

IPC 8 full level
F15B 15/08 (2006.01)

CPC (source: EP)
F15B 15/082 (2013.01)

Citation (examination)
• DE 846493 C 19520814 - BROWN BROTHERS & CO LTD
• DE 843482 C 19520710 - BROWN BROTHERS & CO
• DE 804632 C 19510426 - BROWN BROTHERS & CO LTD
• DE 2908605 A1 19800911 - MUELLER GEB KOTZ ROSA
• NAVY TECHNICAL DISCLOSURE BULLETIN, Band 4, Nr.11, November 1979, J.A. CYMERMAN: "Dynamic seal for slotted cylinder", Seiten 5 bis 9

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