

Title (en)
PRESSURE FLUID CYLINDER WITHOUT PISTON ROD

Publication
EP 0504450 B1 19930519 (DE)

Application
EP 91104302 A 19910320

Priority
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Abstract (en)
[origin: EP0504450A1] In a pressure fluid cylinder having a hollow profile 1 closed at the ends and at the circumference, a driving piston 9 having two end faces 12, 13 corresponding to the hollow profile 1 is guided in axially displaceable fashion. Arranged on the hollow profile 1 is a driver slide 23 which is likewise longitudinally displaceable in the axial direction. In order with a simple construction and low production outlay to preclude leaks of pressure fluid and to allow the use of the pressure fluid cylinder for the transmission of large forces even in relatively high pressure ranges, the driving piston 9 has between its end faces 12, 13 a central part 18 which deviates in cross-section from the profile of the latter and by means of which the hollow profile 1, composed of an elastic material, can be locally deformed in all piston positions. By virtue of this local deformation 2, the driving piston 9 is always in effective connection with the driver slide 23 and is at the same time constructed as a direct force transmission element.
<IMAGE>

IPC 1-7
F01B 19/04; F15B 15/08

IPC 8 full level
F15B 15/08 (2006.01)

CPC (source: EP)
F15B 15/08 (2013.01)

Citation (examination)
• JP S6241407 A 19870223 - CKD CORP
• JP H01108404 A 19890425 - MATSUI AKIO

Cited by
AT407430B; EP0781931A1; US5701798A

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