

Title (en)
SCREW-ON PRESSURE MEDIUM-ACTUATED WORKING CYLINDER WITH CLOSURE COMPONENTS FOR COUPLING THE CYLINDER TUBE

Title (de)
VERSCHRAUBBARER DRUCKMITTELBETÄTIGTER ARBEITSZYLINDER MIT VERSCHLUSSTEILEN ZUR KOPPLUNG DES
ZYLINDERROHRES

Title (fr)
CYLINDRE DE TRAVAIL VISSABLE ACTIONNE PAR UN FLUIDE DE PRESSION AVEC ELEMENTS DE FERMETURE POUR ACCOUPLEMENT
DU TUBE CYLINDRIQUE

Publication
EP 0880652 B1 20020828 (DE)

Application
EP 97914049 A 19970104

Priority
• DE 9700039 W 19970104
• DE 29602088 U 19960207

Abstract (en)
[origin: US6196112B1] The fluid pressure actuator includes a cylinder tube for at least one piston and a closure element provided on a first end of the cylinder tube. Respective sealing chamfers are provided on the closure element and on the first end of the cylinder tube or on a manufactured insert between the closure element and the first end of the cylinder tube. Each sealing chamfer has a slope between 6 degrees and 12 degrees. Respective screw threads are provided on the closure element and the first end of the cylinder tube, near the corresponding sealing chamfers. Portions of the closure element or the manufactured insert and the first end of the cylinder tube including the sealing chamfers are made of a material having a modulus of elasticity in a range between 60*103 N/mm2 and 250*103 N/mm2 plus or minus 10%, and an elastic limit in a range between 200 and 1050 N/mm2, over a temperature range of 0° C. to 200° C., so that, when the closure element is screwed on the first end of the cylinder tube by respective screw threads, the sealing chamfers are pressed on each other and thus interact to prevent leakage of fluid between the closure element and the first end of the cylinder tube. The sealing chamfers and the screws threads are preferably formed in non-cutting or non-milling operations and the sealing chamfers have a surface roughness that does not exceed 0.4 microns.

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F15B 15/14; F16J 10/02

IPC 8 full level
F15B 15/14 (2006.01); **F16J 10/00** (2006.01); **F16J 10/02** (2006.01)

CPC (source: EP US)
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Cited by
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