

Title (en)

ACTUATOR WITH A NON-ROTATABLE PISTON ROD

Publication

EP 0346716 B1 19920902 (DE)

Application

EP 89110115 A 19890605

Priority

DE 3820337 A 19880615

Abstract (en)

[origin: EP0346716A1] Actuator unit (10) which can be acted upon by compressed air and whose piston rod (12) is secured against rotation by a plurality of ball tracks being provided at least in the longitudinal area (36) passing through the allocated cylinder lid (32), which ball tracks are distributed over the periphery of the piston rod and run in the longitudinal direction of the piston rod. A bearing component (46), through which the piston rod (12) passes, is fastened to the outside of the cylinder lid (32) removed from the piston, which bearing component (46) is in turn provided with ball tracks in alignment with the ball tracks of the piston rod (12), rows of bearing balls (42) being provided in the intermediate space between the outer surface of the piston rod (12) and the inner surface of the bearing component (46), which bearing balls (42) roll on the ball tracks of the piston rod (12) on the one hand and the ball tracks of the bearing component (46) on the other hand. In the connecting area between the cylinder lid (32) and the bearing component (46), a lip sealing ring (60) having a passage opening corresponding in complementary fashion to the cross-sectional shape of the piston rod (12) is provided in an encircling location groove (62) surrounding the piston rod (12) at a radial distance, the sealing lips (68; 70) of which lip sealing ring (60) are directed into the interior of the actuator (10). <IMAGE>

IPC 1-7

F15B 15/14

IPC 8 full level

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CPC (source: EP)

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Cited by

DE29721432U1; EP0896159A3; US5761985A; DE19639548C2; GB2243873A; DE9212073U1; DE4430373A1; GB2283283A; US5524868A; GB2283283B; US7127982B2; EP0965779A2; EP2199624A1

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