

Title (en)
Fluid-operated cylinder-piston unit

Title (de)
Druckmittelangetriebene Kolben-Zylindervorrichtung

Title (fr)
Unité de vérin

Publication
EP 1101952 A2 20010523 (EN)

Application
EP 00203870 A 20001106

Priority
IT RE990118 A 19991117

Abstract (en)
The cylinder-piston unit comprises a headpiece, within the body (25) of which there are provided: a pressurized fluid inlet (23) to be connected to the feed; a fluid outlet (24); at least one conduit (21) communicating with the first operating chamber; between the inlet (23) and the conduit (21), a first passage (A) having in a lateral face of the body (25) two spaced-apart ports (31a, 32a), one communicating with the inlet (23) and the other with the conduit (21); and finally, between the outlet (24) and the conduit (21), a second passage (B) having in a lateral face of the body (25) two spaced-apart ports (31b, 32b), one communicating with the outlet (24) and the other with the conduit (21). In each of said passages (A, B) there is provided a valve for opening or closing the fluid passage, comprising a lateral chamber (35) covering said communication ports (31, 32) and formed in a cover (27d, 27s) positioned on the lateral face of the body of the headpiece, and a free flexible membrane (36) separating said ports (31, 32) from the lateral chamber (35) and being arranged to assume a first position in said ports (31, 32) are closed and a second position in which they are open; thin pilot channels (51, 52) are provided to feed into the lateral chamber (35) a pilot fluid to urge the membrane (36) into the first position for closing the ports (31, 32), against the thrust of the fluid present in the ports; a pilot valve means (40) is also provided communicating with the fluid feed, to distribute, when commanded, pressurized pilot fluid to the lateral chambers (35) via said pilot channels (51, 52), to open the first passage (A) and close the second (B) and vice versa. <IMAGE>

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