Title (en)

ACTUATOR AND ASSOCIATED METHODS

Title (de)

AKTUATOR UND ZUGEHÖRIGE VERFAHREN

Title (fr)

ACTIONNEUR ET PROCÉDÉS ASSOCIÉS

Publication

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Application

EP 21737454 A 20210629

Priority

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- EP 2021067922 W 20210629

Abstract (en)

[origin: GB2596540A] Actuator 110 for providing a subsea electrical valve 116 actuation has a screw assembly 118 with a screw, 120 e.g. a ball screw, in bearings 142 and a threaded part, 122 e.g. a roller nut, one of which is connected to operate the valve. |Axial stop 126 prevents axial movement relative to the housing of the screw the nut in a normal mode of operation on screw or nut rotation by a primary drive, converting rotational movement to axial valve member movement relative to the housing. An override is provided, operating the actuator in an override mode. The override releasing at least one of the screw, e.g. the axial stop, and the threaded part for axial movement relative to the housing in the override mode. An override tool 190 applies force, from e.g. an ROV, via arms 192a,b, to release sleeve 152 to break a shear pin 154 and allow the sleeve to move, releasing balls 156 to a cavity in the sleeve and releasing a ring retainer 158 for the axial stop. The screw assembly is no longer prevented from axial movement as a unit. In the event of a roller screw failure the valve may be operated.

IPC 8 full level

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CPC (source: EP GB)

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