

ABSTRACT

Disclosed is a box cover (100) for a button type sealing box, comprising an upper cover (1), a lower cover, a dish-shaped sealing ring (2), a button (3), a rotary toothed part (4), a vertical shaft (5) and a lever and spring mechanism. The rotary toothed part (4) comprises a sleeve (401) and N spline teeth (402). The bottom and the top of each spline tooth (402) respectively comprise a helical surface, the upper helical surface (404) and the lower helical surface (403) having opposite rotating directions. The vertical shaft (5) is fixed to the button (3), and the rotary toothed part (4) is rotatably installed at the lower part of the vertical shaft (5). A bottom plate (102) of the upper cover comprises a splined hole (107) with N gullets, a bottom surface of the bottom plate comprises an end-surface gear (104), the end-surface gear (104) comprises 2N end surface teeth, and gullets of the splined hole (107) with N gullets are located at gullet parts of the end surface teeth. The lower cover comprises an end-surface ratchet wheel (705) with 2N ratchets, the ratchets of the end-surface ratchet wheel (705) with 2N ratchets are adapted to the lower helical surfaces (403) of the spline teeth (402), where N is greater than or equal to 3. The box cover of this button type sealing box is convenient to assemble, and has high reliability and stable operation performance. Further disclosed is a button type sealing box comprising such a box cover.