

**CPC****COOPERATIVE PATENT CLASSIFICATION****E05B****LOCKS; ACCESSORIES THEREFOR; HANDCUFFS****Parts of locks or the like mountable on or in wings**

- E05B 1/00**      **Knobs or handles for wings** ({specially adapted for vehicle doors [E05B 85/10](#)}; for furniture [A47B 95/02](#)); **Knobs, handles or press buttons for locks or latches on wings** ([E05B 5/00](#), [E05B 7/00](#) take precedence)
- [E05B 1/0007](#)      . {Knobs ([E05B 1/0015](#), [E05B 1/0053](#), [E05B 1/0061](#), [E05B 1/0069](#) take precedence)}
- [E05B 1/0015](#)      . {Knobs or handles which do not operate the bolt or lock, e.g. non-movable; Mounting thereof}
- [E05B 2001/0023](#)      . . {being movable into a non-operating position, e.g. foldable towards the mounting plane}
- [E05B 1/003](#)      . {Handles pivoted about an axis perpendicular to the wing ([E05B 3/00](#), [E05B 5/00](#), [E05B 13/106](#) take precedence)}
- [E05B 1/0038](#)      . {Sliding handles, e.g. push buttons ([E05B 13/105](#) takes precedence)}
- [E05B 1/0046](#)      . . {sliding parallel to the plane of the wing}
- [E05B 1/0053](#)      . {Handles or handle attachments facilitating operation, e.g. by children or burdened persons ([foot-operation E05B 53/001](#))}
- [E05B 1/0061](#)      . {Knobs or handles with protective cover, buffer or shock absorber}
- [E05B 1/0069](#)      . {Sanitary doorknobs or handles, e.g. comprising a disinfectant}
- [E05B 2001/0076](#)      . {The handle having at least two operating positions, e.g. the bolt can be retracted by moving the handle either upwards or downwards}
- [E05B 1/0084](#)      . {Handles or knobs with displays, signs, labels pictures, or the like ([displays on locks E05B 17/226](#); [displays on keys E05B 19/0088](#))}
- [E05B 1/0092](#)      . {Moving otherwise than only rectilinearly or only rotatively ([E05B 5/003](#) takes precedence)}
- [E05B 1/04](#)      . with inner rigid member and outer cover or covers
- [E05B 1/06](#)      . of sheet material
- E05B 3/00**      **Fastening {knobs or} handles to lock or latch parts** {([E05B 79/06](#) takes precedence)}
- [E05B 3/003](#)      . {Fastening knobs or handles to hollow cylindrical spindles, e.g. of tubular locks}
- [E05B 2003/006](#)      . {Fastening knobs or handles to the spindle by means of tilt-plates}
- [E05B 3/02](#)      . Fastening {knobs or} handles to the spindle by pinning or riveting {([E05B 3/10](#) takes precedence)}
- [E05B 3/04](#)      . Fastening {the knob or} the handle shank to the spindle by screws, springs or snap bolts {([E05B 3/10](#) takes precedence)}
- [E05B 3/06](#)      . by means arranged in or on the rose {or escutcheon}
- [E05B 3/065](#)      . . {with spring biasing means for moving the handle over a substantial distance, e.g. to its horizontal position}
- [E05B 3/08](#)      . Fastening the spindle to the follower

- E05B 3/10
  - by a bipartite or cleft spindle in the follower or in the handle shank
- E05B 5/00**
**Handles completely let into the surface of the wing** {(E05B 85/10 takes precedence)}
- E05B 5/003
  - {Pop-out handles, e.g. sliding outwardly before rotation}
- E05B 5/006
  - {essentially defining a completely closed surface together with the wing}
- E05B 7/00**
**Handles pivoted about an axis parallel to the wing** (E05B 5/00, {E05B 85/14} take precedence; {combined with bolt movement E05C 1/00, E05C 3/00})
- E05B 9/00**
**Lock casings or latch-mechanism casings; {Fastening locks or fasteners or parts thereof to the wing}** (padlock casings E05B 67/02; for vehicles E05B 79/04, E05B 85/02)
- E05B 9/002
  - {Faceplates or front plates (E05C 9/004 takes precedence)}
- E05B 2009/004
  - {Shape of the lock housing}
- E05B 2009/006
  - • {circular}
- E05B 2009/008
  - • {circle segment}
- E05B 9/02
  - {Casings} of latch-bolt {or deadbolt} locks
- E05B 9/04
  - {Casings} of cylinder locks {(details specific for pin or ball tumbler cylinder locks E05B 27/0014; details specific for plate tumbler cylinder locks E05B 29/00)}
- E05B 9/041
  - • {Double cylinder locks (E05B 9/045, E05B 9/048 take precedence)}
- E05B 9/042
  - • • {Stators consisting of multiple parts being assembled together (E05B 9/045 takes precedence)}
- E05B 2009/043
  - • • {whereby the casing contains an inner and outer rotor which are simultaneously operated by a long key}
- E05B 9/045
  - • {Modular casings for adjusting the length of cylinder locks}
- E05B 2009/046
  - • {Cylinder locks operated by knobs or handles}
- E05B 2009/047
  - • {Means for returning cylinder locks to their neutral position}
- E05B 9/048
  - • {Stator reinforcements (for drill protection E05B 15/1614)}
- E05B 9/08
  - Fastening {locks or fasteners or parts thereof, e.g.} the casings of latch-bolt locks or cylinder locks to the wing {(on glass wings E05B 65/0025)}
- E05B 9/082
  - • {with concealed screws}
- E05B 9/084
  - • {Fastening of lock cylinders, plugs or cores}
- E05B 9/086
  - • • {Fastening of rotors, plugs or cores to an outer stator}
- E05B 9/088
  - • • • {Means for preventing loss of tumblers during mounting or removal}
- E05B 9/10
  - Coupling devices for the two halves of double cylinder locks {e.g. devices for coupling the rotor with the locking cam (E05B 47/0611 takes precedence)}
- E05B 9/105
  - • {including disengagement means, e.g. opening from one side being still possible even if the key is inserted from the other side}
- E05B 11/00**
**Devices preventing keys from being removed from the lock; {Devices preventing falling or pushing out of keys}** (preventing turning of the key E05B 13/00; keyhole guards E05B 17/14; E05B 35/086 takes precedence)}
- E05B 11/005
  - {by key modifications or attachments, e.g. excentric centre of gravity}
- E05B 11/02
  - before the wing is locked

- E05B 11/04 . before the wing is closed
- E05B 11/06 . for catching skeleton or incorrect keys

**E05B 13/00** **Devices preventing the key or the handle or both from being used** {(covers or guards for keyholes [E05B 17/14](#))}

- E05B 13/001 . {Covers preventing access to handles or keys}
- E05B 13/002 . {locking the handle ([E05B 13/10](#), [E05B 47/0657](#) take precedence)}
- E05B 13/004 . . {by locking the spindle, follower, or the like}
- E05B 13/005 . {Disconnecting the handle ([E05B 13/101](#), [E05B 47/0676](#), [E05B 55/06](#) take precedence)}
- E05B 13/007 . {Handles which are locked or blocked in the open position}
- E05B 13/008 . {A single handle being used for actuation of several wings, e.g. simultaneously}
- E05B 13/04 . shaped as fork-like implements grasping and fixing the key {or a handle, e.g. a thumb-turn}
- E05B 13/10 . formed by a lock arranged in the handle
- E05B 13/101 . . {for disconnecting the handle ([E05B 13/103](#), [E05B 13/105](#) take precedence)}
- E05B 13/103 . . {Combination lock}
- E05B 13/105 . . {the handle being a pushbutton ([E05B 13/103](#) takes precedence)}
- E05B 13/106 . . {for handles pivoted about an axis perpendicular to the wing ([E05B 13/101](#), [E05B 13/103](#), [E05B 13/105](#) take precedence)}
- E05B 13/108 . . . {the lock coaxial with spindle}

**E05B 15/00** **Other details of locks; Parts for engagement by bolts of fastening devices** (fastening devices for wings other than locks or associated with locks [E05C](#))

- E05B 15/0006 . {Devices for aligning wing and frame; Anti-rattling devices (for vehicle doors [E05B 83/367](#))}
- E05B 15/0013 . {Followers; Bearings therefor}
- E05B 15/002 . {Energy storage by movement of wing}
- E05B 15/0026 . {Adaptors cooperating with and acting on keys inserted in an existing lock, e.g. for transformation of a key actuated lock to handle actuation}
- E05B 15/0033 . {Spindles for handles, e.g. square spindles}
- E05B 15/004 . {Lost motion connections}
- E05B 15/0046 . {Ratchet mechanisms}
- E05B 15/0053 . {means providing a stable, i.e. indexed, position of lock parts}
- E05B 15/006 . . {Spring-biased ball or roller entering a notch}
- E05B 2015/0066 . . {axially operated}
- E05B 15/0073 . . {magnetically operated}
- E05B 15/008 . . {friction type}
- E05B 15/0086 . {Toggle levers (toggle fasteners [E05C 19/14](#))}
- E05B 15/0093 . {Weight arrangements in locks; gravity activated lock parts ([E05B 65/5292](#), [E05B 77/06](#) take precedence)}
- E05B 15/02 . Striking-plates; Keepers; Bolt staples; Escutcheons {(keyhole finders [E05B 15/08](#); escutcheons made of hard materials [E05B 15/1614](#); finger-plates [E06B 7/285](#))}

- E05B 15/0205 . . {Striking-plates, keepers, staples (means for reducing friction [E05B 17/007](#); electric strikers [E05B 47/0046](#); staples for padlocks [E05B 67/383](#); strikers for espagnolettes [E05C 9/1808](#))}
- E05B 15/021 . . . {Strikers having multiple positions for the bolt}
- E05B 2015/0215 . . . . {Screw-type}
- E05B 15/022 . . . {movable, resilient or yieldable (adjustable into different discrete positions [E05B 15/024](#); yieldable striker for emergency opening [E05B 65/1026](#))}
- E05B 15/0225 . . . . {Resilient block type, e.g. made from rubber}
- E05B 2015/023 . . . {Keeper shape}
- E05B 2015/0235 . . . . {Stud-like}
- E05B 15/024 . . . {adjustable}
- E05B 15/0245 . . . . {Movable elements held by friction, cooperating teeth, or the like}
- E05B 15/025 . . . . {the striker being movable by a screw/nut}
- E05B 15/0255 . . . . {Deformable element}
- E05B 2015/026 . . . . {using eccentrics}
- E05B 2015/0265 . . . . {pivoting or tilting}
- E05B 2015/027 . . . . {auto-adjustable}
- E05B 2015/0275 . . . . {in two directions}
- E05B 2015/028 . . . . {in three directions}
- E05B 2015/0285 . . . {Portable striker}
- E05B 15/029 . . . {Closures, e.g. preventing dirt or paint from entering into the striker}
- E05B 15/0295 . . . {specially adapted for forked or bifurcated bolts (for vehicles [E05B 85/045](#))}
- E05B 15/04 . . Spring arrangements in locks {([E05B 3/065](#), [E05B 15/101](#), [E05B 15/143](#), [E05C 19/06](#) take precedence)}
- E05B 2015/0403 . . {Wound springs}
- E05B 2015/0406 . . . {wound in a cylindrical shape}
- E05B 2015/041 . . . . {loaded perpendicular to cylinder axis}
- E05B 2015/0413 . . . . {loaded by compression}
- E05B 2015/0417 . . . . {loaded by traction}
- E05B 2015/042 . . . {wound in a plane, e.g. spirally}
- E05B 2015/0424 . . . {of conical shape}
- E05B 2015/0427 . . . {curved, e.g. toroidal}
- E05B 2015/0431 . . {Modifying spring characteristic or tension ([E05B 2015/0441](#) takes precedence)}
- E05B 2015/0434 . . . {Automatically}
- E05B 2015/0437 . . {Attachments or mountings; Mounting of springs}
- E05B 2015/0441 . . . {Tensioning after mounting}
- E05B 2015/0444 . . {Springs additionally fulfilling an electric function}
- E05B 2015/0448 . . {Units of springs; Two or more springs working together}
- E05B 2015/0451 . . {Folded springs}
- E05B 2015/0455 . . {Torsion springs of bar type}

- E05B 2015/0458 . . {Leaf springs; Non-wound wire springs}
- E05B 2015/0462 . . {Ring springs}
- E05B 2015/0465 . . {Cup- or dished-disc springs}
- E05B 2015/0468 . . {made of one piece with a lock part}
- E05B 2015/0472 . . {Made of rubber, plastics or the like}
- E05B 2015/0475 . . . {of block type}
- E05B 2015/0479 . . . {of elastic string type}
- E05B 2015/0482 . . {Heavy springs which cannot be operated by hand}
- E05B 2015/0486 . . {A single spring working on more than one element}
- E05B 2015/0489 . . . {on more than one tumbler}
- E05B 2015/0493 . . {Overcenter springs}
- E05B 2015/0496 . . {Springs actuated by cams or the like}
- E05B 15/06 . Lock wards
- E05B 15/08 . Key guides; Key pins {Keyholes; Keyhole finders ([E05B 17/10](#) takes precedence)}
- E05B 15/10 . Bolts of locks or night latches {(made of hard materials e.g. to prevent sawing [E05B 15/1614](#); lengthwise adjustable [E05B 63/06](#))}
- E05B 15/101 . . {Spring-retracted bolts}
- E05B 15/102 . . {Bolts having movable elements ([E05B 23/00](#) takes precedence)}
- E05B 15/104 . . . {Movable key-operated elements ("Schluesselangriff")}
- E05B 2015/105 . . . {Two pivoting latch elements with opposite inclined surfaces mounted on one slidable main latch-piece}
- E05B 2015/107 . . . {Roller bolt, i.e. a slidable main latch-piece with a roller-, ball- or barrel-shaped rotating element}
- E05B 15/108 . . {Bolts with multiple head ([E05B 65/0075](#) takes precedence)}
- E05B 15/14 . Tumblers
- E05B 15/143 . . {elastic, e.g. formed by a spring}
- E05B 2015/146 . . {Tumblers with parts movable to each other}
- E05B 15/16 . Use of special materials for parts of locks (for handles [E05B 1/00](#) {for reducing friction [E05B 17/007](#); for keys [E05B 19/26](#)})
- E05B 15/1607 . . {Adhesive}
- E05B 15/1614 . . {of hard materials, to prevent drilling ([E05B 67/04](#), [E05B 67/38](#) take precedence)}
- E05B 15/1621 . . . {Hardened bolts, or bolts with hardened inserts}
- E05B 2015/1628 . . . {Free-rotating protecting covers or discs}
- E05B 15/1635 . . {of plastics materials (springs [E05B 15/04](#))}
- E05B 2015/1642 . . . {for the whole lock}
- E05B 2015/165 . . . {for bolts}
- E05B 2015/1657 . . . {for escutcheons}
- E05B 2015/1664 . . . {for lock housing ([E05B 17/002](#), [E05B 17/0041](#), [E05B 17/0045](#) take precedence)}
- E05B 2015/1671 . . . {for strikers ([E05B 15/022](#) takes precedence)}

E05B 2015/1678 . . . {for handle bearings}

E05B 2015/1685 . . {Sheet materials}

E05B 2015/1692 . . {Wires or straps (for springs [E05B 2015/0403](#))}

## E05B 17/00

**Accessories in connection with locks** (buffers [E05F 5/00](#); means for preventing rattling of wings [E05F 7/04](#); means for taking the weight of the wing [E05F 7/06](#))

E05B 17/0004 . {Lock assembling or manufacturing (making locksmith's goods of sheet metal [B21D 53/38](#); assembling in general [B23P 21/00](#))}

E05B 17/0008 . . {Lock parts made by extrusion process}

E05B 17/0012 . {for lock parts held in place before or during mounting on the wing}

E05B 17/0016 . {Defrosting, e.g. heating devices}

E05B 17/002 . {Weather or dirt protection ([E05B 15/029](#), [E05B 17/14](#) take precedence; for vehicle locks [E05B 77/34](#))}

E05B 17/0025 . {Devices for forcing the wing firmly against its seat or to initiate the opening of the wing ([E05B 15/022](#), [E05B 65/0817](#), [E05B 81/20](#), [E05C 19/14](#) take precedence)}

E05B 17/0029 . . {motor-operated (for vehicles [E05B 81/20](#))}

E05B 17/0033 . . {for opening only ([E05B 17/0029](#) takes precedence)}

E05B 17/0037 . . . {Spring-operated}

E05B 17/0041 . {Damping means (for vehicles [E05B 77/42](#); time locks with retarders [E05B 43/00](#))}

E05B 17/0045 . {Silencing devices; Noise reduction (resilient strikers [E05B 15/022](#); for vehicles [E05B 77/36](#))}

E05B 17/005 . {Preventing accidental lock-out, e.g. by obstruction in the striker (securing the bolt in the retracted position [E05B 63/18](#); stops and buffers preventing the slamming of wings [E05F 5/02](#))}

E05B 17/0054 . {Friction or shear lines; Slip-clutches, resilient parts or the like for preventing damage when forced or slammed}

E05B 17/0058 . . {with non-destructive disengagement ([E05B 17/045](#) takes precedence)}

E05B 17/0062 . . {with destructive disengagement}

E05B 17/0066 . . . {Handles with destructible elements}

E05B 17/007 . {Devices for reducing friction between lock parts ([E05B 17/08](#) takes precedence)}

E05B 17/0075 . {Insulating, e.g. for limiting heat transfer; Increasing fire-resistance of locks}

E05B 17/0079 . {Locks with audio features ([E05B 45/00](#) takes precedence)}

E05B 17/0083 . . {Sound emitting devices, e.g. loudspeakers}

E05B 17/0087 . . {Sound receiving devices, e.g. microphones}

E05B 17/0091 . {including protruding or recessed symbols in a surface for tactile indication/information, e.g. Braille symbols}

E05B 2017/0095 . {Means preventing wrong operation, e.g. preventing damaging contact between extended bolt and striker or bolt and frame (retaining the bolt in the retracted position [E05B 63/18](#))}

E05B 17/04 . Devices for coupling the turning cylinder of a single or a double cylinder lock with the bolt operating member



- E05B 17/041 . . {Coupling device with a shaft projecting axially rearwardly from the cylinder, e.g. affording a degree of universal motion to compensate for misalignment}
- E05B 17/042 . . {using toothed wheels or geared sectors ([E05C 9/023](#), [E05C 9/041](#) take precedence)}
- E05B 2017/043 . . . {Planetary gear}
- E05B 17/044 . . {Clutches, disengageable couplings}
- E05B 17/045 . . . {for keeping the rotor disconnected from the bolt actuating member, when being turned, e.g. forcefully, without the proper key}
- E05B 17/046 . . . {disengaged manually from inside}
- E05B 17/047 . . {with rotating output elements forming part of cylinder locks, e.g. locking cams of double cylinder locks}
- E05B 17/048 . . {with sliding output elements forming part of cylinder locks, e.g. in the form of pins or cams}
- E05B 17/049 . . . {sliding essentially in the axial direction of the cylinder lock}
- E05B 17/06 . Templates for marking the position of apertures in fittings of wings {or frames; Apparatus for installation of a lockset (drill jigs [B23B 47/28](#); mortised work [B27F 5/12](#); templates for hinges [E05D 11/0009](#))}
- E05B 17/08 . Lubricating devices
- E05B 17/10 . Illuminating devices on or for locks or keys; {Transparent or translucent lock parts; Indicator lights}
- E05B 17/103 . . {on keys ([E05B 17/106](#) takes precedence; attached to key rings [A44B 15/005](#); on key bags or wallets [A45C 11/32](#))}
- E05B 17/106 . . {fluorescent}
- E05B 17/12 . Devices for removing keys stuck in the lock
- E05B 17/14 . Closures or guards for keyholes {(for vehicle ignition or steering lock [B60R 25/023](#))}
- E05B 17/142 . . {with key-operated locks, e.g. padlocks}
- E05B 17/145 . . {with combination lock}
- E05B 17/147 . . {electrically-operated}
- E05B 17/16 . . shaped as pins or key bits {([E05B 17/145](#) takes precedence)}
- E05B 17/18 . . shaped as lids or slides {([E05B 17/142](#), [E05B 17/145](#), [E05B 17/147](#) take precedence)}
- E05B 17/181 . . . {pivoting inwardly}
- E05B 17/183 . . . {pivoting outwardly}
- E05B 17/185 . . . {pivoting about an axis perpendicular to the lock face}
- E05B 17/186 . . . {sliding}
- E05B 17/188 . . . {flexible}
- E05B 17/20 . Means independent of the locking mechanism, {i.e. other than the tumblers or detents} for preventing unauthorised opening, e.g. for securing the bolt in the fastening position {([E05B 63/12](#) takes precedence)}
- E05B 17/2003 . . {Preventing opening by insertion of a tool, e.g. flexible, between door and jamb to withdraw the bolt}
- E05B 17/2007 . . {Securing, deadlocking or "dogging" the bolt in the fastening position ([E05B 15/0046](#), [E05B 15/0086](#), [E05B 67/383](#) take precedence)}

- E05B 17/2011 . . . {using balls or the like cooperating with notches ([E05B 63/121](#) takes precedence)}
- E05B 17/2015 . . . {with wedging action}
- E05B 17/2019 . . . {elastic, i.e. the dog or detent being formed or carried by a spring}
- E05B 17/2023 . . . {Loose pins, screws, or the like; Portable devices}
- E05B 17/2026 . . . {automatic, i.e. actuated by a closed door position sensor}
- E05B 17/203 . . . {not following the movement of the bolt}
- E05B 17/2034 . . . . {moving pivotally or rotatively}
- E05B 17/2038 . . . . {moving rectilinearly}
- E05B 17/2042 . . . . {moving otherwise than only rectilinearly and only pivotally or rotatively}
- E05B 17/2046 . . . . . {performing both movements simultaneously, e.g. screwing}
- E05B 17/2049 . . . {following the movement of the bolt}
- E05B 17/2053 . . . . {moving pivotally or rotatively relating to the bolt}
- E05B 17/2057 . . . . {moving rectilinearly relating to the bolt}
- E05B 17/2061 . . . . {moving otherwise than only rectilinearly and only pivotally or rotatively relating to the bolt}
- E05B 17/2065 . . . . . {performing both movements simultaneously, e.g. screwing}
- E05B 17/2069 . . . {by means of an additional dogging movement of a sliding bolt}
- E05B 17/2073 . . . . {pivotally or rotatively}
- E05B 17/2076 . . . . . {about an axis parallel to its sliding movement}
- E05B 17/208 . . . {by means of an additional dogging movement of a rotary bolt}
- E05B 17/2084 . . . {Means to prevent forced opening by attack, tampering or jimmying ([E05B 15/1614](#) takes precedence; for ignition or steering locks [B60R 25/023](#))}
- E05B 17/2088 . . . {Means to prevent disengagement of lock and keeper ([E05B 63/12](#) takes precedence)}
- E05B 17/2092 . . . {Means responsive to tampering or attack providing additional locking (for safes [E05B 65/0082](#))}
- E05B 2017/2096 . . . {Preventing tampering by removal of lock parts which are vital for the function}
- E05B 17/22 . . Means for operating or controlling lock or fastening device accessories, i.e. other than the fastening members, e.g. switches, indicators {([E05B 39/00](#) to [E05B 45/00](#) take precedence)}
- E05B 17/223 . . . {preventing lock actuation after detection of drug use, e.g. alcohol consumption}
- E05B 17/226 . . . {Displays on locks, e.g. LED or LCD screens (on handles [E05B 1/0084](#); on keys [E05B 19/0088](#))}
- E05B 19/00** **Keys; Accessories therefor** (making keys, see the relevant places e.g. [B21D 53/42](#) {or [B23P 15/005](#)}; milling grooves in keys [B23C 3/35](#)); {([E05B 11/005](#) takes precedence; illuminating devices [E05B 17/103](#); key rings [A44B 15/00](#); key cases [A45C 11/32](#); key holders [A47G 29/10](#))}
- E05B 19/0005 . . {Key safes ([E05B 35/086](#) takes precedence)}



- E05B 19/0011 . {Key decoders (general measuring of contours and curvatures [G01B 3/14](#), [G01B 5/20](#), [G01B 7/28](#))}
- E05B 19/0017 . {Key profiles}
- E05B 19/0023 . . {characterized by variation of the contact surface between the key and the tumbler pins or plates}
- E05B 19/0029 . . {characterized by varying cross-sections of different keys within a lock system (cross-sections of single keys [E05B 19/0041](#))}
- E05B 19/0035 . . {characterized by longitudinal bit variations}
- E05B 19/0041 . . {characterized by the cross-section of the key blade in a plane perpendicular to the longitudinal axis of the key}
- E05B 19/0047 . . . {with substantially circular or star-shape cross-section}
- E05B 19/0052 . . . {Rectangular flat keys}
- E05B 19/0058 . . . . {with key bits on at least one wide side surface of the key}
- E05B 19/0064 . . . . . {and with additional key bits on at least one narrow side edge of the key}
- E05B 19/007 . . . {with U- or V-shaped cross-section}
- E05B 19/0076 . . {Keys with a curved longitudinal axis}
- E05B 19/0082 . {Keys or shanks being removably stored in a larger object, e.g. a remote control or a key fob (general constructional details of electronic keys [G07C 9/00944](#))}
- E05B 19/0088 . {Displays on keys, e.g. LED or LCD screens}
- E05B 19/0094 . {protruding elements on the key preventing unauthorized insertion into the keyhole}
- E05B 19/04 . Construction of the bow {or head} of the key; Attaching the bow to the shank
- E05B 19/043 . . {the shank being pivotably mounted on the bow, e.g. for storage}
- E05B 19/046 . . {the shank being slidingly mounted on the bow, e.g. for storage}
- E05B 19/14 . Double {or multiple} keys, {e.g. with two or more bows or bits ([see also E05B 35/14](#))}
- E05B 19/18 . Keys adjustable before use
- E05B 19/20 . Skeleton keys; Devices for picking locks; Other devices for similar purposes; {Means to open locks not otherwise provided for, e.g. lock pullers ([forcing doors open A62B 3/005](#))}
- E05B 19/205 . . {Lock decoders}
- E05B 19/22 . Keys with devices for indicating whether the last operation was locking or unlocking
- E05B 19/24 . Key distinguishing marks {(fluorescent [E05B 17/106](#))}
- E05B 19/26 . Use of special materials for keys {(fluorescent [E05B 17/106](#); magnets [E05B 47/0038](#))}

#### **Locks with rotary keys moving lamelliform tublers perpendicular to the key**

- E05B 21/00 Locks with {lamelliform} tublers {which are not set by the insertion of the key and which are} not following the movement of the bolt {, e.g. Chubb-locks}

- E05B 21/003
  - {comprising tumblers moving in opposite directions, e.g. tumbler sets on opposite sides of the keyhole for operation by a double-bit key}
- E05B 21/006
  - {the bolt being operated by other means than the key bit, e.g. via a key-operated thrower}
- E05B 21/06
  - Cylinder locks, e.g. Protector locks
- E05B 21/063
  - . {of the sliding-plate tumbler type}
- E05B 21/066
  - . {of the rotary-disc tumbler type (tumblers which are set by inserting the key [E05B 29/0013](#))}

**E05B 23/00**      **Locks with {lamelliform} tumblers {which are not set by the insertion of the key and which are} following the movement of the bolt**

**E05B 27/00**      **Cylinder locks {and other locks} with tumbler pins which are set by pushing the key in {(fastening of cylinders, rotors, plugs or cores [E05B 9/084](#); with magnetic tumblers [E05B 47/0044](#); with electromagnetic control [E05B 47/0611](#))}**

- E05B 27/0003
  - {Details}
- E05B 27/0007
  - . {Rotors}
- E05B 27/001
  - . . {having relatively movable parts, e.g. coaxial- or split-plugs (for anti-picking purposes [E05B 27/0075](#))}
- E05B 27/0014
  - . . {Stators (cylinder lock casings in general [E05B 9/04](#))}
- E05B 27/0017
  - . . {Tumblers or pins}
- E05B 27/0021
  - . . . {having movable parts}
- E05B 2027/0025
  - . . {having means preventing rotation of the tumbler}
- E05B 27/0028
  - {Other locks than cylinder locks with tumbler pins or balls}
- E05B 27/0032
  - {with both axially and radially arranged tumbler pins or balls}
- E05B 27/0035
  - {with indirectly actuated tumblers}
- E05B 27/0039
  - {with pins which slide and rotate about their axis}
- E05B 27/0042
  - {with additional key identifying function, e.g. with use of additional key operated rotor-blocking elements, not of split pin tumbler type ([E05B 27/0078](#) takes precedence)}
- E05B 27/0046
  - {Axially movable rotor}
- E05B 27/005
  - {with changeable combinations}
- E05B 27/0053
  - {for use with more than one key, e.g. master-slave key (master key systems in general [E05B 35/10](#))}
- E05B 27/0057
  - {with increased picking resistance}
- E05B 27/006
  - . {whereby a small rotation without the correct key blocks further rotation of the rotor ([E05B 27/0067](#) takes precedence)}
- E05B 27/0064
  - . . {whereby the rotor is irreversibly blocked or can only be moved back with an authorized tool or key}
- E05B 27/0067
  - . . {whereby a small rotation without the correct key blocks further movement of a tumbler ([E05B 27/0082](#) takes precedence)}
- E05B 27/0071
  - . . {by means preventing opening by using the bump-technique}
- E05B 27/0075
  - . . {by movable rotor elements}
- E05B 27/0078
  - {Asymmetrical tumbler pins, e.g. with a key operating on a radial protrusion of a tumbler pin}

- E05B 27/0082
  - {Side bar locking}
- E05B 27/0085
  - {wherein the key can be inserted or withdrawn in different positions or directions (in general [E05B 63/0047](#))}
- E05B 27/0089
  - . {wherein the key can be withdrawn in several angular positions}
- E05B 27/0092
  - . {wherein the key can be inserted from both sides of the lock}
- E05B 27/0096
  - . {reversible keys}
- E05B 27/02
  - Operated by the edge of the key
- E05B 27/08
  - . arranged axially
- E05B 27/083
  - . . {of the split-pin tumbler type}
- E05B 27/086
  - . . {of the bar-tumbler type, the bars having slots or protrusions in alignment upon opening the lock}
- E05B 2027/10
  - {Tumblers operated by other surfaces than the edge of the key}

**E05B 29/00**      **Cylinder locks {and other locks} with plate tumblers which are set by pushing the key in {(fastening of cylinders, rotors, plugs or cores [E05B 9/084](#); with magnetic tumblers [E05B 47/0044](#); with electromagnetic control [E05B 47/0611](#))}**

- E05B 29/0006
  - {Other locks than cylinder locks with plate tumblers}
- E05B 29/0013
  - {with rotating plate tumblers ([E05B 29/0033](#) takes precedence; plate tumblers which are not set by inserting the key [E05B 21/06](#))}
- E05B 29/002
  - . {rotating about an axis perpendicular to the key axis}
- E05B 29/0026
  - {with longitudinally movable cylinder}
- E05B 29/0033
  - {with floating plate tumblers, i.e. sliding or sliding and rotating in a plane}
- E05B 29/004
  - {with changeable combinations}
- E05B 29/0046
  - {for use with more than one key, e.g. master-slave key (master key systems in general [E05B 35/10](#))}
- E05B 29/0053
  - {with increased picking resistance}
- E05B 29/006
  - . {by movable rotor elements}
- E05B 29/0066
  - {Side bar locking}
- E05B 29/0073
  - {wherein the key can be inserted or withdrawn in different positions or directions (in general [E05B 63/0047](#))}
- E05B 29/008
  - . {wherein the key can be withdrawn in several angular positions}
- E05B 29/0086
  - . {wherein the key can be inserted from both sides of the lock}
- E05B 29/0093
  - . {reversible keys}

**E05B 31/00**      **Cylinder locks with both tumbler pins or balls and plate tumblers**

**E05B 33/00**      **Cylinder locks in which the bolt is moved by means other than the key**

**E05B 35/00**      **Locks for use with special keys or a plurality of keys; {keys therefor}**

- E05B 35/001
  - {with key identifying function}
- E05B 35/002
  - {for flexible keys}
- E05B 35/003
  - {for keys with movable bits (keys adjustable before use [E05B 19/18](#))}
- E05B 35/004
  - . {pivoting about an axis perpendicular to the main key axis}

- E05B 35/005 . . {pivoting about an axis parallel to the main key axis}
- E05B 35/006 . {for rack- or pinion-like keys}
- E05B 35/007 . {the key being a card, e.g. perforated, or the like ([E05B 47/0045](#) takes precedence)}
- E05B 35/008 . {for simple tool-like keys}
- E05B 2035/009 . {Locks where a characteristic part of the user's body is used as a key (control of electronic locks by characteristics of body parts [G07C 9/00563](#))}
- E05B 35/02 . which can be shifted laterally {or rotated about an axis perpendicular to the key axis}
- E05B 35/06 . for screw keys
- E05B 35/08 . operable by a plurality of keys
- E05B 35/083 . . {with changeable combination ([E05B 35/125](#) takes precedence; for cylinder locks [E05B 27/005](#), [E05B 29/004](#))}
- E05B 35/086 . . {using a pair of interlocked keys, one of the keys being non-removable; key-storing devices from which only one key can be removed at a time}
- E05B 35/10 . . with master and pass keys {(for cylinder locks [E05B 27/0053](#))}
- E05B 35/105 . . . {Locks allowing opening by official authorities, e.g. master key opening of luggage locks by customs officials}
- E05B 35/12 . . requiring the use of two keys, e.g. safe-deposit locks (locks with key-operated keyhole cover [E05B 17/142](#))
- E05B 35/125 . . . {with changeable combination}
- E05B 35/14 . with keys of which different parts operate separate mechanisms {([E05B 35/003](#) takes precedence)}
  
- E05B 37/00** **Permutation {or combination} locks** ({handles with combination locks [E05B 13/103](#); keyhole guards with combination locks [E05B 17/145](#); alarms therefor [E05B 45/061](#); electric permutation locks [E05B 49/00](#); {for container closures [B65D 55/145](#); combination switches [H01H 27/10](#)}); **Puzzle locks**
- E05B 37/0003 . {preventing detection of the combination}
- E05B 37/0006 . . {by avoiding unauthorized viewing of the combination}
- E05B 37/001 . . {through listening or feeling}
- E05B 37/0013 . . . {by producing noise}
- E05B 37/0017 . . . {by producing false clicks; by use of false gates}
- E05B 37/002 . . {Speed sensors}
- E05B 37/0024 . . {limited number of tries}
- E05B 37/0027 . {X-ray protection}
- E05B 37/0031 . {Locks with both permutation and key actuation ([E05B 17/145](#) takes precedence)}
- E05B 37/0034 . . {actuated by either}
- E05B 37/0037 . . {with a key requiring successive operations, e.g. different mechanisms in a predetermined order ([E05B 35/003](#) takes precedence)}
- E05B 37/0041 . . {Key actuation allowing recovery of a lost/forgotten combination}
- E05B 37/0044 . {with telephone-type dial}
- E05B 37/0048 . {with changeable combination}

- E05B 37/0051 . . {by moving pins to another hole}
- E05B 37/0055 . . {by radial disengagement between hub and rim of tumbler discs or rings}
- E05B 37/0058 . . {by axial disengagement between hub and rim of tumbler discs or rings}
- E05B 37/0062 . {Operation by feeling, e.g. in darkness using Braille signs}
- E05B 37/0065 . {Master combination}
- E05B 37/0068 . {in padlocks ([E05B 37/025](#), [E05B 37/10](#) and [E05B 37/14](#) take precedence)}
- E05B 37/0072 . {Sign-, picture- or letter-based permutations}
- E05B 37/0075 . {Automatic scrambling}
- E05B 37/0079 . . {when unlocking}
- E05B 37/0082 . . {when locking}
- E05B 37/0086 . . {when the wing is opened}
- E05B 37/0089 . . {when the wing is closed}
- E05B 37/0093 . . {Obligatory manual scrambling}
- E05B 37/0096 . {with tumbler discs arranged on concentric axes, each axis being operated by a different rotating knob}
  
- E05B 37/02 . with tumbler discs or rings arranged on a single axis, each disc being adjustable independently of the others
  
- E05B 37/025 . . {in padlocks}
- E05B 37/04 . with tumbler discs on a single axis, all the discs being adjustable by rotating a shiftable knob
  
- E05B 37/08 . with tumbler discs on a single axis, all the discs being adjustable by a rotary knob which is not shifted {for adjusting the discs ([E05B 37/0044](#) takes precedence)}
  
- E05B 37/10 . . in padlocks
- E05B 37/12 . with tumbler discs on several axes
- E05B 37/14 . . in padlocks
- E05B 37/16 . with two or more push or pull knobs, slides, or the like {([E05B 65/461](#) takes precedence)}
  
- E05B 37/163 . . {the knobs being pushed in a prescribed sequence}
- E05B 37/166 . . {each knob being pushed a predetermined number of times ([E05B 37/163](#) takes precedence)}
  
- E05B 37/20 . Puzzle locks, {e.g. of labyrinth type; Fasteners with hidden or secret actuating mechanisms}

### **Locks with indicating or timing devices**

- E05B 39/00 **Locks giving indication of {authorised} or unauthorised unlocking {(with key identification means [E05B 35/001](#); alarm locks [E05B 45/00](#))}**
- E05B 39/002 . {by releasing a liquid, e.g. ill-smelling or dye}
- E05B 39/005 . {Locks with means for tracking the location of locked items, e.g. freight containers}
- E05B 39/007 . {Indication by a tactile impulse to the user, e.g. vibration of a lock-, handle- or key-part}

- E05B 39/02 . with destructible seal closures or paper closures (seals per se [G09F 3/00](#))
- E05B 39/025 . . {with fracturable glass or the like, e.g. for emergency exits}
- E05B 39/04 . with counting or registering devices {(time recording locks [G07C 1/32](#))}

**E05B 41/00**      **Locks with visible indication as to whether the lock is locked or unlocked**  
 {(indicator lights [E05B 17/10](#))}

**E05B 43/00**      **Time locks, {e.g. locks with delaying means}** (clocks or clock mechanisms with attached or built-in means operating any device at preselected times or after a predetermined time interval [G04B 23/00](#) {time recording locks [G07C 1/32](#)})

- E05B 2043/002 . {using mechanical clocks}
- E05B 43/005 . {Timer devices controlling electrically operated locks}
- E05B 2043/007 . {using hydraulic or pneumatic retarders}

**E05B 45/00**      **Alarms locks** (alarm devices actuated by tampering with fastenings, in general [G08B](#); {vehicle fittings actuating a signalling device [B60R 25/10](#); bicycle appliances indicating unauthorised use [B62H 5/20](#)})

- E05B 45/005 . {Chain-locks, cable-locks or padlocks with alarms}
- E05B 45/02 . with mechanically-operated bells
- E05B 45/04 . with detonating alarm devices {(detonating alarm devices in general [G08B 3/14](#), [G08B 13/06](#))}
- E05B 45/06 . Electric alarm locks {([E05B 45/005](#) takes precedence)}
- E05B 45/0605 . . {for preventing of leaving the key (key ejection [E05B 63/003](#))}
- E05B 45/061 . . {for combination locks}
- E05B 2045/0615 . . {triggered by movement of the handle}
- E05B 2045/062 . . {by traction on a chain}
- E05B 2045/0625 . . {by pressure on a safety bar}
- E05B 2045/063 . . {by movement of the wing}
- E05B 2045/0635 . . {by rotation of key or rotor}
- E05B 2045/064 . . {by movement of the lock housing or part thereof}
- E05B 2045/0645 . . {by movement of the keyhole cover}
- E05B 2045/065 . . {Switch or sensor type used in alarm locks}
- E05B 2045/0655 . . . {Photo-diodes}
- E05B 2045/066 . . . {Mercury switches}
- E05B 2045/0665 . . . {Magnetic switches, e.g. reed- or hall-switch}
- E05B 2045/067 . . . {Switches triggered by inertia}
- E05B 2045/0675 . . . {Foam or rubber element with contacts which close a circuit due to deformation of the element}
- E05B 2045/068 . . . {Piezo-electric sensors}
- E05B 2045/0685 . . . {Optical fibres for transmitting the sensor signal}
- E05B 2045/069 . . {Timers therefor}
- E05B 2045/0695 . . {Actuation of a lock triggering an alarm system, e.g. an alarm system of a building}



- E05B 45/08 . . with contact making inside the lock or in the striking plate
- E05B 45/083 . . . {with contact making either in the striking plate or by movement of the bolt relative to the striking plate}
- E05B 45/086 . . . . {by transverse movement}
- E05B 45/10 . . . by introducing the key {or another object}
- E05B 45/12 . . . by movement of the bolt {(E05B 45/083 takes precedence)}
- E05B 45/125 . . . . {by transverse movement}

**Operation or control of locks by non-mechanical means, e.g. from a distance** (locking doors simultaneously in passenger vehicles [E05B65/36](#); key switches [H01H 27/00](#))

- E05B 47/00**      **Operating or controlling locks or other fastening devices by electric or magnetic means** (electric permutation locks [E05B 49/00](#); holding in open position or limiting movement of wings by magnetic or electromagnetic attraction [E05C 17/56](#); {[E05B 17/0029](#), [E05B 17/147](#), [E05B 81/00](#), [E05C 19/16](#) take precedence})
- E05B 47/0001 . . {with electric actuators; Constructional features thereof (for vehicles [E05B 81/04](#))}
  - E05B 47/0002 . . {with electromagnets}
  - E05B 47/0003 . . . {having a movable core}
  - E05B 47/0004 . . . . {said core being linearly movable}
  - E05B 47/0005 . . . . {said core being rotary movable}
  - E05B 47/0006 . . . {having a non-movable core; with permanent magnet}
  - E05B 2047/0007 . . . {with two or more electromagnets}
  - E05B 2047/0008 . . . . {having different functions}
  - E05B 47/0009 . . {with thermo-electric actuators, e.g. heated bimetals}
  - E05B 47/0011 . . {with piezo-electric actuators (piezo-electric devices per se [H01L 41/00](#))}
  - E05B 47/0012 . . {with rotary electromotors (actuators with rotary electromotors per se [H02K 7/06](#), [H02K 23/68](#))}
  - E05B 2047/0013 . . . {more than one motor for the same function, e.g. for redundancy or increased power (electric spare devices [E05B 2047/0087](#))}
  - E05B 2047/0014 . . {Constructional features of actuators or power transmissions therefor (for vehicles [E05B 81/24](#))}
  - E05B 2047/0015 . . . {Output elements of actuators}
  - E05B 2047/0016 . . . . {with linearly reciprocating motion}
  - E05B 2047/0017 . . . . {with rotary motion}
  - E05B 2047/0018 . . . {Details of actuator transmissions}
  - E05B 2047/002 . . . . {Geared transmissions}
  - E05B 2047/0021 . . . . . {Geared sectors or fan-shaped gears}
  - E05B 2047/0022 . . . . . {Planetary gears}
  - E05B 2047/0023 . . . . {Nuts or nut-like elements moving along a driven threaded axle}
  - E05B 2047/0024 . . . . {Cams}
  - E05B 2047/0025 . . . . . {in the form of grooves}

- E05B 2047/0026 . . . . {Clutches, couplings or braking arrangements}
- E05B 2047/0027 . . . . . {using centrifugal action}
- E05B 2047/0028 . . . . . {using electromagnetic means}
- E05B 2047/003 . . . . . {of the overload- slip- or friction type}
- E05B 2047/0031 . . . . . {of the elastic type}
- E05B 2047/0032 . . . . . {using flywheel action}
- E05B 2047/0033 . . . . . {using electro-rheological or magneto-rheological substances}
- E05B 2047/0034 . . . . . {using materials with a volume which changes due to electrical voltage or current}
  
- E05B 2047/0035 . . . {Actuators being driven in a single direction only}
- E05B 2047/0036 . . . {Reversible actuators}
- E05B 2047/0037 . . . {Powered actuators with automatic return to the neutral position by non-powered means, e.g. springs.}
  
- E05B 47/0038 . {using permanent magnets}
- E05B 47/004 . . {the magnets acting directly on the bolt}
- E05B 47/0041 . . {with tumbler pins suspended for a pendulum movement}
- E05B 47/0042 . . {with rotary magnet tumblers}
- E05B 47/0043 . . {Mechanical locks operated by cards having permanent magnets}
- E05B 47/0044 . . {Cylinder locks with magnetic tumblers ([E05B 47/0041](#), [E05B 47/0042](#) take precedence)}
- E05B 47/0045 . . {keys with permanent magnets ([E05B 47/0043](#), [E05B 47/0044](#), [E05B 73/0052](#) take precedence)}
- E05B 47/0046 . {Electric or magnetic means in the striker or on the frame; Operating or controlling the striker plate ([E05B 47/0696](#), [E05B 63/248](#) take precedence)}
- E05B 47/0047 . . {Striker rotating about an axis parallel to the wing edge}
- E05B 2047/0048 . {Circuits, feeding, monitoring}
- E05B 2047/005 . . {Opening, closing of the circuit}
- E05B 2047/0051 . . . {by closing the wing}
- E05B 2047/0052 . . . {opening the circuit by detection of current increase}
- E05B 2047/0053 . . . {by operating the handle}
- E05B 2047/0054 . . . {using microprocessor, printed circuits, or the like}
- E05B 2047/0055 . . . {by blowing}
- E05B 2047/0056 . . . {by sensing the presence of a person, e.g. body heat sensor}
- E05B 2047/0057 . . {Feeding}
- E05B 2047/0058 . . . {by batteries}
- E05B 2047/0059 . . . {by transfer between frame and wing}
- E05B 2047/0061 . . . . {using induction}
- E05B 2047/0062 . . . {by generator}
- E05B 2047/0063 . . . {Energy transfer from key to lock, e.g. for emergency opening}
- E05B 2047/0064 . . . {by solar cells}
- E05B 2047/0065 . . {Saving energy ([E05B 2047/0053](#), [E05B 2047/0074](#), [E05B 2047/0077](#), [E05B 2047/0079](#), [E05B 2047/0081](#) take precedence)}

- E05B 2047/0066 . . . {Reduced holding current}
- E05B 2047/0067 . . {Monitoring}
- E05B 2047/0068 . . . {Door closed}
- E05B 2047/0069 . . . {bolt position}
- E05B 2047/0071 . . {Connecting lockparts by electronic communication means only, e.g. bus systems, time multiplexing}
- E05B 2047/0072 . {Operation}
- E05B 2047/0073 . . {Current to unlock only}
- E05B 2047/0074 . . . {holding means other than current (mechanical, magnetic)}
- E05B 2047/0075 . . . {locked by gravity}
- E05B 2047/0076 . . {Current to lock only, i.e. "fail-safe"}
- E05B 2047/0077 . . . {holding means other than current}
- E05B 2047/0078 . . . {unlocked by gravity}
- E05B 2047/0079 . . {Bi-stable electromagnet(s), different pulse to lock or unlock}
- E05B 2047/0081 . . {Same pulse to lock or unlock}
- E05B 2047/0082 . {Induction for charging or current transformation}
- E05B 2047/0083 . {Devices of electrically driving keys, e.g. to facilitate opening}
- E05B 2047/0084 . {Key or electric means; Emergency release}
- E05B 2047/0085 . . {Key and electromagnet}
- E05B 2047/0086 . . {Emergency release, e.g. key or electromagnet ([E05B 63/0073](#) takes precedence)}
- E05B 2047/0087 . . . {Electric spare devices, e.g. auxiliary batteries or capacitors for back up}
- E05B 2047/0088 . . {Key-operated switch}
- E05B 2047/0089 . {with electronic learning functions ([electronic locks G07C 9/00](#))}
- E05B 2047/0091 . {Retrofittable electric locks, e.g. an electric module can be attached to an existing manual lock ([electrically driven keys E05B 2047/0083](#))}
- E05B 2047/0092 . {including means for preventing manipulation by an external magnetic field, e.g. preventing opening by using a strong magnet}
- E05B 2047/0093 . {including means for preventing manipulation by external shocks, blows or the like}
- E05B 2047/0094 . {Mechanical aspects of remotely controlled locks ([electronic locks G07C 9/00](#))}
- E05B 2047/0095 . . {Mechanical aspects of locks controlled by telephone signals, e.g. by mobile phones ([electronic locks G07C 9/00](#))}
- E05B 2047/0096 . . {Mechanical aspects of locks whose actuation is dependent on geographical location, e.g. by means of a GPS system ([electronic locks G07C 9/00](#))}
- E05B 2047/0097 . {including means for monitoring voltage, e.g. for indicating low battery state}
- E05B 2047/0098 . {Arrangements for grounding electrical locks or elements thereof, e.g. for avoiding shocks or failure due to static electricity}
- E05B 47/02 . {Movement of the bolt by electromagnetic means}; Adaptation of locks, latches, or parts thereof, for movement of the bolt by electromagnetic means {(by means in the striker [E05B 63/248](#))}
- E05B 47/023 . . {the bolt moving pivotally or rotatively}
- E05B 47/026 . . {the bolt moving rectilinearly}

- E05B 47/06
  - Controlling mechanically-operated bolts by electro-magnetically-operated detents
- E05B 47/0603
  - • {the detent moving rectilinearly}
- E05B 47/0607
  - • {the detent moving pivotally or rotatively}
- E05B 47/0611
  - • {Cylinder locks with electromagnetic control}
- E05B 47/0615
  - • • {operated by handles, e.g. by knobs}
- E05B 47/0619
  - • • {by blocking the rotor}
- E05B 47/0623
  - • • • {axially, i.e. with an axially engaging blocking element}
- E05B 47/0626
  - • • • {radially}
- E05B 47/063
  - • • • • {with a rectilinearly moveable blocking element}
- E05B 47/0634
  - • • • • {with a pivotally moveable blocking element}
- E05B 47/0638
  - • • {by disconnecting the rotor}
- E05B 47/0642
  - • • • {axially, i.e. with an axially disengaging coupling element}
- E05B 47/0646
  - • • • {radially}
- E05B 47/0649
  - • • • • {with a rectilinearly moveable coupling element}
- E05B 47/0653
  - • • • • {with a pivotally moveable coupling element}
- E05B 47/0657
  - • {by locking the handle, spindle, follower or the like}
- E05B 47/0661
  - • • {axially, i.e. with an axially engaging blocking element}
- E05B 47/0665
  - • • {radially}
- E05B 47/0669
  - • • • {with a pivotally moveable blocking element}
- E05B 47/0673
  - • • • {with a rectilinearly moveable blocking element}
- E05B 47/0676
  - • {by disconnecting the handle}
- E05B 47/068
  - • • {axially, i.e. with an axially disengaging coupling element}
- E05B 47/0684
  - • • {radially}
- E05B 47/0688
  - • • • {with a pivotally moveable coupling element}
- E05B 47/0692
  - • • • {with a rectilinearly moveable coupling element}
- E05B 47/0696
  - • {locking the bolt by an electromagnet in the striker}

**E05B 49/00**      **Electric permutation locks; Circuits therefor; {Mechanical aspects of electronic locks; Mechanical keys therefor}** (arrangements for sensing or reading record carriers [G06K 7/00](#), [G06K 9/00](#); mechanisms including electronic locks actuated by nonmechanical keys such as passive and active electrical keys and other data carriers [G07C 9/00](#), [G07F 7/00](#); electronic switching [H03K 17/00](#))

- E05B 49/002
  - {Keys with mechanical characteristics, e.g. notches, perforations, opaque marks}
- E05B 49/004
  - • {actuating mechanical switches}
- E05B 49/006
  - • {actuating opto-electronic devices}
- E05B 49/008
  - • • {by alignment of movable perforated parts, e.g. perforated tumblers}

**E05B 51/00**      **Operating or controlling locks or other fastening devices by other non-mechanical means**

- E05B 51/005
  - {by a bimetallic or memory-shape element (heated by electricity [E05B 47/0009](#); for panic door actuation [E05B 65/104](#))}

- E05B 51/02 . by pneumatic or hydraulic means {(E05B 17/0029 takes precedence)}
- E05B 51/023 . . {actuated in response to external pressure, blast or explosion (E05B 65/102 takes precedence)}
- E05B 2051/026 . . {with manually generated fluid pressure}

**E05B 53/00 Operation or control of locks by mechanical transmissions, e.g. from a distance**

- E05B 53/001 . {Foot-operation}
- E05B 53/003 . {flexible}
- E05B 53/005 . . {Bowden}
- E05B 53/006 . {of ball-train type}
- E05B 53/008 . {by planetary gears}

**Locks with provision for latching** (for passenger vehicle doors E05B65/20)

**E05B 55/00 Locks in which a sliding latch is used also as a locking bolt**

- E05B 55/005 . {Cylindrical or tubular locks}
- E05B 55/06 . the handle being disconnected {(E05B 13/101, E05B 47/0676 take precedence)}
- E05B 55/12 . the bolt being secured by the operation of a hidden parallel member; {Automatic latch bolt deadlocking mechanisms, e.g. using a trigger or a feeler}

**E05B 57/00 Locks in which a pivoted latch is used also as locking means**

**E05B 59/00 Locks with latches separate from the lock-bolts or with a plurality of latches or lock-bolts**

**E05B 61/00 Other locks with provision for latching**

**Locks {or fastenings} with special structural characteristics or for special use**

**E05B 63/00 Locks {or fastenings} with special structural characteristics**

- E05B 63/0004 . {Additional locks added to existing lock arrangements}
- E05B 63/0008 . . {Mounted on the hinged side of the wing}
- E05B 63/0013 . {Locks with rotary bolt without provision for latching}
- E05B 63/0017 . {Locks with sliding bolt without provision for latching}
- E05B 63/0021 . . {the bolt being shot over an increased length by a single turning operation of the key}
- E05B 2063/0026 . {Elongated, e.g. stud-like, striker entering into an opening in which movable detent means engage the elongated striker (stud-like keepers in general E05B 2015/0235)}
- E05B 63/003 . {with key ejection means}
- E05B 63/0034 . {Locks for use instead of cylinder locks, e.g. locks with cylinder lock profile and a low security operating mechanism}
- E05B 2063/0039 . {Ground mounted locks or lock elements}

- E05B 63/0043
  - {Dummy or simulated locks; Cover elements without lock function}
- E05B 63/0047
  - {Locks having a key withdrawable in different positions (cylinder locks [E05B 27/0085](#), [E05B 29/0073](#))}
- E05B 63/0052
  - {Locks mounted on the "frame" cooperating with means on the "wing" ([E05B 47/0046](#), [E05B 65/0829](#), [E05B 65/0847](#), [E05B 65/0882](#) take precedence)}
- E05B 63/0056
  - {Locks with adjustable or exchangeable lock parts (adjustable strikers [E05B 15/024](#); adjustable to different keys [E05B 35/083](#); adjustable bolt or backset [E05B 63/06](#); adjustable coupling means for bars, rods, cables [E05C 9/20](#))}
- E05B 63/006
  - • {for different door thicknesses ([E05B 9/045](#) takes precedence; for fastening handles to lock or latch parts [E05B 3/00](#))}
- E05B 63/0065
  - {Operating modes; Transformable to different operating modes}
- E05B 63/0069
  - • {Override systems, e.g. allowing opening from inside without the key, even when locked from outside ([E05B 65/1086](#), [E05B 9/105](#) take precedence; by movable striker [E05B 63/246](#))}
- E05B 63/0073
  - • • {by withdrawal of the entire lock unit}
- E05B 63/0078
  - • {allowing opening with key from outside, even with key inserted from inside ([E05B 9/10](#) takes precedence)}
- E05B 2063/0082
  - • {Locking modes}
- E05B 2063/0086
  - • • {Handles used only for locking, while unlocking is achieved by other means}
- E05B 2063/0091
  - • • {Lock actuation dependent on temperature}
- E05B 2063/0095
  - • • {Locking devices actuated or controlled by seismic activity, e.g. earthquakes}
- E05B 63/02
  - without springs
- E05B 63/04
  - for alternative use on the right-hand or left-hand side of wings
- E05B 63/042
  - • {constructed symmetrically}
- E05B 63/044
  - • {with reversible bolt or bolt head}
- E05B 63/046
  - • {with double-bevelled latch or the like}
- E05B 63/048
  - • {with bolt heads at both sides of the lock}
- E05B 63/06
  - with lengthwise-adjustable bolts; {with adjustable backset, i.e. distance from door edge}
- E05B 63/08
  - Mortise locks {(mortised work [B27F 5/12](#))}
- E05B 63/10
  - • requiring only two cylindrical holes in the wing
- E05B 63/12
  - with means carried by the bolt for interlocking with the keeper
- E05B 63/121
  - • {using balls or the like cooperating with notches}
- E05B 63/122
  - • {with transverse, i.e. vertically movable bolt or dropbolt ([E05B 63/126](#) takes precedence)}
- E05B 63/123
  - • {with circular bolts}
- E05B 63/125
  - • {with a sliding bolt rotating about its axis, i.e. of bayonet type}
- E05B 63/126
  - • {the bolt having an additional sliding bolt or movement ([E05B 63/121](#) takes precedence)}
- E05B 63/127
  - • {the bolt having an additional rotating bolt or movement}



- E05B 63/128
  - {with additional bolt in the striker (electric E05B 47/0696)}
- E05B 63/14
  - Arrangement of several locks or locks with several bolts, e.g. arranged one behind the other (locks for keys with several bits E05B 35/14; with provision for latching E05B 59/00, E05B 61/00; arrangements of simultaneously-actuated bolts or other securing devices at well-separated positions on the same wing E05C 9/00; {takes precedence; E05B 15/108, E05B 65/0858, E05B 85/245, E05C 3/28, E05C 3/34 take precedence})
- E05B 63/143
  - {Arrangement of several locks, e.g. in parallel or series, on one or more wings}
- E05B 63/146
  - {locks with two or more bolts, each bolt itself being a tumbler}
- E05B 63/16
  - with the handles on opposite sides moving independently
- E05B 63/18
  - with arrangements independent of the locking mechanism for retaining the bolt {or latch} in the retracted position
- E05B 63/185
  - {Preventing actuation of a bolt when the wing is open (E05B 63/20 takes precedence, similar safety devices E05D 15/526)}
- E05B 63/20
  - released automatically when the wing is closed {(for panic door locks of the vertical rod type E05B 65/1013)}
- E05B 63/202
  - {a latch bolt being initially retained in an intermediate position and subsequently projected to its full extent when the wing is closed}
- E05B 63/205
  - {by a trigger at the hinged edge of the wing}
- E05B 2063/207
  - {Automatic deadlocking}
- E05B 63/22
  - operated by a pulling or pushing action perpendicular to the front plate, {i.e. by pulling or pushing the wing itself (without deadlocking E05C 19/02)}
- E05B 63/24
  - Arrangements in which the fastening members which engage one another are mounted respectively on the wing and the frame and are both movable, e.g. for release by moving either of them (hasp locks E05B 65/48; hasp fastenings E05C 19/08 {E05B 47/0046, E05B 47/0696, E05B 63/128, E05B 65/48, E05C 19/08 take precedence})
- E05B 63/242
  - {Auxiliary bolts on the frame, actuated by bolts on the wing, or vice-versa}
- E05B 63/244
  - {the striker being movable for latching, the bolt for unlatching, or vice-versa}
- E05B 63/246
  - {Emergency release from inside by releasing the striker}
- E05B 63/248
  - {the striker being movable for latching, and pushed back by a member on the wing for unlatching, or vice-versa}
- E05B 65/00**

**Locks {or fastenings} for special use** {(for dishwashers A47L 15/4259; hatch fastenings B63B 19/24; for container closures B65D 55/02; for elevator doors B66B 13/16; for lids or covers of refuse receptacles B65F 1/1615; for laundry washing machines D06F 37/42, D06F 39/14; for two wings E05C 7/00; safety devices F16P 3/08; for furnaces F24C 15/022; coin freed locks G07F 17/12, G07F 17/14; switches operated by key or combination H01H 27/00)}
- E05B 65/0003
  - {for locking a plurality of wings, e.g. simultaneously (E05B 65/0017, E05B 77/46, E05B 65/462, E05C 7/00 take precedence)}
- E05B 65/0007
  - {for gates (for wire gates E06B 11/021)}
- E05B 65/001
  - {for gas- or watertight wings}
- E05B 65/0014
  - {to prevent opening by children (E05B 13/00 takes precedence; child-proof container closures B65D 50/00)}
- E05B 65/0017
  - {Jail locks}

- E05B 65/0021 . {for overhead or roll-up doors, e.g. garage doors}
- E05B 65/0025 . {for glass wings}
- E05B 65/0028 . {for narrow-stile wings}
- E05B 65/0032 . {for hotel rooms (electronic [G07C 9/00904](#))}
- E05B 65/0035 . {for privacy rooms, e.g. bathrooms}
- E05B 2065/0039 . . {with emergency release}
- E05B 65/0042 . {For refrigerators or cold rooms ([E05B 17/0075](#) takes precedence; magnetic [E05C 19/16](#))}
- E05B 65/0046 . . {with a bifurcated bolt}
- E05B 65/005 . . {with sliding bolt}
- E05B 65/0053 . . {with safety release from inside (by releasing the striker [E05B 63/246](#); similar means for safe doors [E05B 65/0078](#))}
- E05B 65/0057 . {for caskets, coffins or burial vaults (coffins in general [A61G 17/02](#))}
- E05B 65/006 . {for covers or panels (for manholes [E02D 29/1427](#); for holes enabling access to installations in buildings [E04F 19/08](#); for pressure vessels [F16J 13/00](#))}
- E05B 65/0064 . . {for openings in masts}
- E05B 65/0067 . . {for portable computers, e.g. for locking the screen panel to the keyboard panel}
- E05B 65/0071 . {for revolving doors}
- E05B 65/0075 . {for safes, strongrooms, vaults, fire-resisting cabinets or the like (safes, closures and fastenings therefor [E05G](#))}
- E05B 65/0078 . . {Safety means for persons trapped within the safe, e.g. release from inside, venting means (by releasing the striker [E05B 63/246](#); similar means for refrigerator or cold-room doors [E05B 65/0053](#))}
- E05B 65/0082 . . {with additional locking responsive to attack, e.g. to heat, explosion (in general [E05B 17/2092](#))}
- E05B 65/0085 . {for folding wings, e.g. bi-fold wings}
- E05B 65/0089 . {for utility meters or the like}
- E05B 65/0092 . {for wardrobe trunks}
- E05B 2065/0096 . {Locks for sport stadiums}
- E05B 65/02 . for thin, hollow, or thin-metal wings {e.g. lockers}
- E05B 65/025 . . {for lockers}
- E05B 65/06 . for swing doors, {i.e. opening inwards and outwards}
- E05B 65/08 . for sliding wings {(for vehicles [E05B 83/04](#), [E05B 83/40](#); holding sliding wings open [E05C 17/60](#))}
- E05B 2065/0805 . . {with a handle operating in both directions}
- E05B 65/0811 . . {the bolts pivoting about an axis perpendicular to the wings}
- E05B 65/0817 . . . {with additional movement, e.g. toggle, overcenter, excentric (toggle fasteners in general [E05C 19/14](#); similar fasteners for building slabs [E04B 1/6183](#))}
- E05B 65/0823 . . . {cooperating with the slide guide, e.g. the rail}
- E05B 65/0829 . . . {mounted on the slide guide, e.g. the rail}
- E05B 65/0835 . . {the bolts pivoting about an axis parallel to the wings}

- E05B 65/0841 . . . {and parallel to the sliding direction of the wings}
- E05B 65/0847 . . . {mounted on the slide guide, e.g. the rail ([E05B 65/0841](#) takes precedence)}
- E05B 65/0852 . . . {with a bolt under compression force}
- E05B 65/0858 . . {comprising simultaneously pivoting double hook-like locking members}
- E05B 65/0864 . . {the bolts sliding perpendicular to the wings}
- E05B 65/087 . . {the bolts sliding parallel to the wings}
- E05B 65/0876 . . . {cooperating with the slide guide, e.g. the rail}
- E05B 65/0882 . . . {mounted on the slide guide, e.g. the rail}
- E05B 65/0888 . . {Locking bars}
- E05B 65/0894 . . {Portable or removable locks ([E05B 65/0864](#), [E05B 65/0888](#) take precedence)}
- E05B 65/10 . . for panic or emergency doors
- E05B 65/1006 . . {of the vertical rod type}
- E05B 65/1013 . . . {Trigger means for holding the bolt in the retracted position and releasing the bolt when the door is closed}
- E05B 65/102 . . {opening under pressure on the surface of the door itself ([E05C 19/02](#) takes precedence)}
- E05B 65/1026 . . . {by a yieldable or breakable bolt or striker}
- E05B 65/1033 . . {emergency release of windows, window grills, escape hatches or the like}
- E05B 65/104 . . {actuated in response to heat, e.g. with fusible element, bimetal, memory shape or swelling material}
- E05B 65/1046 . . {Panic bars}
- E05B 65/1053 . . . {sliding towards and away from the door}
- E05B 65/106 . . . {pivoting}
- E05B 65/1066 . . . . {the pivot axis being substantially parallel to the longitudinal axis of the bar}
- E05B 65/1073 . . . . {the pivot axis being substantially perpendicular to the longitudinal axis of the bar}
- E05B 65/108 . . {Electronically controlled emergency exits}
- E05B 65/1086 . . {Locks with panic function, e.g. allowing opening from the inside without a key even when locked from the outside}
- E05B 65/1093 . . {Dogging means for holding the actuation means, e.g. the actuating handle}
- E05B 65/44 . . for furniture or drawers
- E05B 65/46 . . Special locks for drawers, e.g. for a plurality of drawers {(for electronic unit cases [H05K 7/1401](#))}
- E05B 65/461 . . . {for cash drawers}
- E05B 65/462 . . . {for a plurality of drawers}
- E05B 65/463 . . . . {Drawer interlock or anti-tilt mechanisms, i.e. when one drawer is open, a number, e.g. all, of the remaining drawers are locked}
- E05B 65/464 . . . . . {comprising a plurality of lock element aligned in end-to-end abutting relation}
- E05B 65/465 . . . . . {with rotary locking bars}

- E05B 65/466 . . . . . {with tensionable flexible elements, e.g. cables, bands, chains or ropes}
- E05B 65/467 . . . . . {Locking bars secured in front of the drawers}
- E05B 65/468 . . . . . {using rotary lock bars ([E05B 65/465](#), [E05B 65/467](#) take precedence)}
- E05B 2065/469 . . . . . {for drawers which can be opened from both sides}
- E05B 65/48 . . . . . Hasp locks ([hasp fastenings other than locks E05C 19/08](#))
- E05B 65/50 . . . . . for briefcases {or the like}
- E05B 65/52 . . . . . Other locks for chests, boxes, trunks, baskets, travelling bags, or the like (closures for bags or trunks [A45C 13/06](#), [A45C 13/10](#), [A45C 13/16](#); {hasp locks [E05B 65/50](#); permutation locks [E05B 37/00](#); toggles [E05C 19/14](#); locking slide fasteners [A44B 19/301](#)})
- E05B 65/5207 . . . . . {characterised by bolt movement}
- E05B 65/5215 . . . . . {sliding}
- E05B 65/5223 . . . . . {perpendicular to the surface on which the lock is mounted}
- E05B 65/523 . . . . . {parallel to the surface on which the lock is mounted}
- E05B 65/5238 . . . . . {parallel to the wing edge}
- E05B 65/5246 . . . . . {rotating}
- E05B 65/5253 . . . . . {about an axis perpendicular to the surface on which the lock is mounted}
- E05B 65/5261 . . . . . {with simultaneously operating double bolts}
- E05B 65/5269 . . . . . {about an axis parallel to the surface on which the lock is mounted}
- E05B 65/5276 . . . . . {parallel to the wing edge}
- E05B 65/5284 . . . . . {in which a movable latch is passed through a staple loop (similar fasteners for buckles [A44B 11/00](#))}
- E05B 65/5292 . . . . . {Gravity - or orientation sensitive mechanisms, e.g. to prevent opening when wrongside-up}
- E05B 67/00** **Padlocks** (permutation locks [E05B 37/00](#); {steering wheel padlocks [B60R 25/022](#)}); **Details thereof**
- E05B 67/003 . . . . . {Chain, wire or cable locks (alarms therefor [E05B 45/005](#); [E05B 69/006](#) takes precedence)}
- E05B 67/006 . . . . . {with retraction of the cable for storage ([E05B 73/0029](#) takes precedence; for devices mounted to a fixed surface or a portable object [E05B 73/0011](#))}
- E05B 67/02 . . . . . Cases
- E05B 2067/025 . . . . . {Bumpers}
- E05B 67/04 . . . . . Armoured cases {(parts of the casing protecting the shackle [E05B 67/38](#))}
- E05B 67/06 . . . . . Shackles; Arrangement of the shackle
- E05B 67/063 . . . . . {Padlocks with removable shackles}
- E05B 2067/066 . . . . . {Shackle extensions}
- E05B 67/08 . . . . . Padlocks with shackles hinged on the case
- E05B 67/10 . . . . . with devices for securing the free end of the shackle
- E05B 67/14 . . . . . with devices for securing the hinged end of the shackle
- E05B 67/18 . . . . . with devices for securing both ends of the shackle

- E05B 67/22 . . Padlocks with sliding shackles, with or without rotary or pivotal movement
- E05B 67/24 . . . with built- in cylinder locks
- E05B 67/26 . . . with screw action, with or without the shackle being moved by turning the key
- E05B 67/28 . . Padlocks with shackles forming a circle
- E05B 67/32 . . Padlocks with pincer- like shackles
- E05B 67/36 . Padlocks with closing means other than shackles; {Removable locks, the lock body itself being the locking element; Padlocks consisting of two separable halves or cooperating with a stud}
- E05B 67/365 . . {with locking means in the form of balls or rollers}
- E05B 67/38 . Auxiliary or protective devices {(weather protection E05B 17/002; armoured cases E05B 67/04)}
- E05B 67/383 . . {Staples or the like for padlocks; Lock slings; Arrangements on locks to cooperate with padlocks}
- E05B 2067/386 . . {Padlock holders}

#### **Locking devices for clothing, sticks, umbrellas, or cycles**

- E05B 69/00** **Devices for locking clothing; Lockable clothing holders or hangers** ({anti-theft monitors E05B 73/0017; shoe hangers, clothing}, dress or hat holders in general A47G 25/00)
- E05B 69/003 . {for locking shoes against removal}
- E05B 69/006 . {Lockable hangers or hanger racks}
- E05B 69/02 . Lockable clothing hooks (coin controlled locking hooks G07F)
- E05B 71/00** **Locks specially adapted for bicycles, other than padlocks** ({locks integral with holders for parking or storing bicycles B62H 3/00; locks integral with cycles B62H 5/00})
- E05B 73/00** **Devices for locking portable objects against unauthorised removal; Miscellaneous locking devices** {(motorcycle helmets A42B 3/0413, B62J 11/005; gun racks A47B 81/005; showcases with theft protection A47F 3/002; anti-theft means for peg-boards, grids or rods for hanging merchandise A47F 5/0861; show stands, hangers, shelves with provision against unauthorised removal A47F 7/024; for self-service hand-carts A47F 10/04; locking skis A63C 11/004; locking bolts, nuts or pins F16B 41/00)}
- E05B 73/0005 . {using chains, cables or the like (chain- or cable-locks of the padlock type E05B 67/003; lockable clothing hangers or hanger racks E05B 69/006)}
- E05B 73/0011 . . {with retraction of the flexible element for storage (E05B 73/0029 takes precedence; for padlocks E05B 67/006)}
- E05B 73/0017 . {Anti-theft devices, e.g. tags or monitors, fixed to articles, e.g. clothes, and to be removed at the check-out of shops}
- E05B 73/0023 . . {Containers, boxes, cases or the like, e.g. for compact discs or video-cassettes, specially adapted therefor}
- E05B 73/0029 . . {Tags wrapped around the protected product using cables, wires or the like, e.g. with cable retraction for tensioning}
- E05B 73/0035 . . {for eyeglasses or spectacles}

- E05B 73/0041 . . {for essentially round objects, e.g. bottles or racket handles}
- E05B 73/0047 . . {Unlocking tools; Decouplers}
- E05B 73/0052 . . . {of the magnetic type}
- E05B 73/0058 . . . . {for essentially box-shaped devices}
- E05B 73/0064 . . . {of the mechanical type}
- E05B 73/007 . {for boats, surfboards or parts or accessories thereof}
- E05B 73/0076 . . {outboard motors or propellers}
- E05B 73/0082 . {for office machines, e.g. PC's, portable computers, typewriters, calculators}
- E05B 2073/0088 . . {being lockable or unlockable by means of the office machine itself, e.g. by its keyboard}
- E05B 73/0094 . {for skate-boards}
- E05B 73/02 . for walking sticks or umbrellas ({walking sticks with locks [A45B 1/04](#); stick or umbrella holders in general [A47G 25/12](#))
- E05B 75/00** **Handcuffs {Finger cuffs; Leg irons; Handcuff holsters; Means for locking prisoners in automobiles (retaining devices for the body or body parts [A61F 5/37](#))}**
- E05B 75/005 . {Handcuff holders, e.g. for storage}

### **Locks for vehicles other than bicycles**

- E05B 77/00** **Vehicle locks characterised by special functions or purposes (locks specially adapted for bicycles [E05B 71/00](#); locking arrangements for non-fixed vehicle roofs [B60J 7/185](#))**
- E05B 77/02 . for accident situations
- E05B 77/04 . . Preventing unwanted lock actuation, e.g. unlatching, at the moment of collision
- E05B 77/06 . . . by means of inertial forces
- E05B 77/08 . . Arrangements for protection of pedestrians
- E05B 77/10 . . Allowing opening in case of deformed bodywork, e.g. by preventing deformation of lock parts
- E05B 77/12 . . Automatic locking or unlocking at the moment of collision
- E05B 77/14 . Specially controlled locking actions in case of open doors or in case of doors moved from an open to a closed position, e.g. lock-out prevention or self-cancelling
- E05B 77/16 . . Preventing locking with the bolt in the unlatched position, i.e. when the door is open
- E05B 77/18 . . Keyless locking with self-cancellation, e.g. resulting in an unlocking action when the door is being closed
- E05B 77/20 . . . Override of self-cancellation, e.g. by actuation of the handle while the door is being closed
- E05B 77/22 . Functions related to actuation of locks from the passenger compartment of the vehicle
- E05B 77/24 . . preventing use of an inner door handle, sill button, lock knob or the like
- E05B 77/245 . . . {by blocking the movement of a movable element}



- E05B 77/26 . . . specially adapted for child safety
- E05B 77/265 . . . . {hand actuated, e.g. by a lever at the edge of the door}
- E05B 77/28 . . . for anti-theft purposes, e.g. double-locking or super-locking
- E05B 77/283 . . . . {initiated by hand actuation, e.g. by using a mechanical key}
- E05B 77/287 . . . . {Prevention or overriding of a super-lock condition, e.g. for preventing being trapped in the vehicle}
- E05B 77/30 . . allowing opening by means of an inner door handle, even if the door is locked
- E05B 77/32 . allowing simultaneous actuation of locking or unlocking elements and a handle, e.g. preventing interference between an unlocking and an unlatching action
- E05B 77/34 . Protection against water, e.g. against water ingress (closures or guards for keyholes E05B 17/14)
- E05B 77/36 . Noise prevention; Anti-rattling means
- E05B 77/38 . . Cushion elements, elastic guiding elements or holding elements, e.g. for cushioning or damping the impact of the bolt against the striker during closing of the wing
- E05B 77/40 . . Lock elements covered by silencing layers, e.g. coatings
- E05B 77/42 . Means for damping the movement of lock parts, e.g. slowing down the return movement of a handle (E05B 77/38 takes precedence)
- E05B 77/44 . Burglar prevention, e.g. protecting against opening by unauthorised tools (E05B 77/28 takes precedence)
- E05B 77/46 . Locking several wings simultaneously
- E05B 77/465 . . {Automatic locking when all passengers have left the vehicle}
- E05B 77/48 . . by electrical means
- E05B 77/50 . . by pneumatic or hydraulic means
- E05B 77/52 . Locking one wing by shutting another
- E05B 77/54 . Automatic securing or unlocking of bolts triggered by certain vehicle parameters, e.g. exceeding a speed threshold (triggered by vehicle collision E05B 77/12)

**E05B 79/00****Mounting or connecting vehicle locks or parts thereof**

- E05B 79/02 . Mounting of vehicle locks or parts thereof
- E05B 79/04 . . Mounting of lock casings to the vehicle, e.g. to the wing
- E05B 79/06 . . Mounting of handles, e.g. to the wing or to the lock
- E05B 79/08 . . Mounting of individual lock elements in the lock, e.g. levers
- E05B 79/10 . Connections between movable lock parts
- E05B 79/12 . . using connecting rods
- E05B 79/14 . . . the rods being linked to each other
- E05B 79/16 . . . characterised by the means for linking the rods to other lock parts, e.g. to levers
- E05B 79/18 . . . Rod guides
- E05B 79/20 . . using flexible connections, e.g. Bowden cables

- E05B 79/22
  - . . Operative connections between handles, sill buttons or lock knobs and the lock unit ([mounting of non-movable base elements of a handle to a lock E05B 79/06](#))

## E05B 81/00 **Power-actuated vehicle locks**

- E05B 81/01
  - . {Comfort closing, i.e. the locking action for a wing is combined with actuation of other vehicle functions, e.g. locking the doors and closing the windows simultaneously}
- E05B 81/02
  - . characterised by the type of actuators used
- E05B 81/04
  - . . Electrical ([electrical circuits E05B 81/54](#))
- E05B 81/05
  - . . . {moving in one direction only}
- E05B 81/06
  - . . . using rotary motors
- E05B 81/08
  - . . . using electromagnets or solenoids
- E05B 81/10
  - . . Hydraulic or pneumatic ([hydraulic or pneumatic circuits E05B 81/52](#))
- E05B 81/12
  - . characterised by the function or purpose of the powered actuators
- E05B 81/13
  - . . {a single actuator for driving a lock and additional vehicle components, e.g. window wipers or window lifters}
- E05B 81/14
  - . . operating on bolt detents, e.g. for unlatching the bolt
- E05B 81/15
  - . . . {with means preventing the detent to return to its latching position before the bolt has moved to the unlatched position}
- E05B 81/16
  - . . operating on locking elements for locking or unlocking action
- E05B 81/18
  - . . to effect movement of a bolt or bolts ([E05B 81/20 takes precedence](#))
- E05B 81/20
  - . . for assisting final closing or for initiating opening
- E05B 81/21
  - . . . {with means preventing or detecting pinching of objects or body parts}
- E05B 81/22
  - . . . by movement of the striker
- E05B 81/24
  - . characterised by constructional features of the actuator or the power transmission
- E05B 81/25
  - . . {Actuators mounted separately from the lock and controlling the lock functions through mechanical connections}
- E05B 81/26
  - . . Output elements
- E05B 81/28
  - . . . Linearly reciprocating elements
- E05B 81/30
  - . . . Rotary elements
- E05B 81/32
  - . . Details of the actuator transmission
- E05B 81/34
  - . . . of geared transmissions
- E05B 81/36
  - . . . . Geared sectors, e.g. fan-shaped gears
- E05B 81/38
  - . . . . Planetary gears
- E05B 81/40
  - . . . Nuts or nut-like elements moving along a driven threaded axle
- E05B 81/42
  - . . . Cams
- E05B 81/44
  - . . . . in the form of grooves
- E05B 81/46
  - . . . Clutches
- E05B 81/48
  - . . Actuators being driven in a single direction
- E05B 81/50
  - . . Powered actuators with automatic return to the neutral position by non-powered means, e.g. by springs

- E05B 81/52 . Pneumatic or hydraulic circuits ([for locking several wings simultaneously E05B 77/50](#))
- E05B 81/54 . Electrical circuits ([for locking several wings simultaneously E05B 77/48](#))
- E05B 81/56 . . Control of actuators
- E05B 81/58 . . . including time control, e.g. for controlling run-time of electric motors
- E05B 81/60 . . . using pulse control, e.g. pulse-width modulation
- E05B 81/62 . . . for opening or closing of a circuit depending on electrical parameters, e.g. increase of motor current
- E05B 81/64 . . Monitoring or sensing, e.g. by using switches or sensors
- E05B 81/66 . . . the bolt position, i.e. the latching status
- E05B 81/68 . . . . by sensing the position of the detent
- E05B 81/70 . . . the wing position
- E05B 81/72 . . . the lock status, i.e. locked or unlocked condition
- E05B 81/74 . . . . by sensing the state of the actuator
- E05B 81/76 . . . Detection of handle operation; Detection of a user approaching a handle; Electrical switching actions performed by door handles
- E05B 81/77 . . . . {comprising sensors detecting the presence of the hand of a user}
- E05B 81/78 . . . . as part of a hands-free locking or unlocking operation
- E05B 81/80 . . characterised by the power supply; Emergency power operation
- E05B 81/82 . . . using batteries other than the vehicle main battery
- E05B 81/84 . . . using manually operated generator means
- E05B 81/86 . . . using capacitors
- E05B 81/88 . . . using inductive energy transmission
- E05B 81/90 . . Manual override in case of power failure
- E05B 83/00** **Vehicle locks specially adapted for particular types of wing or vehicle** ([locks specially adapted for bicycles E05B 71/00](#); [locking arrangements for non-fixed vehicle roofs B60J 7/185](#); [latching means for sideboards or tailgates of open load compartments B62D 33/037](#))
- E05B 83/01 . {Locks for military or armoured vehicles}
- E05B 83/02 . Locks for railway freight-cars, freight containers or the like; Locks for the cargo compartments of commercial lorries, trucks or vans
- E05B 83/04 . . for sliding wings
- E05B 83/06 . . . of railway freight-cars
- E05B 83/08 . . with elongated bars for actuating the fastening means
- E05B 83/10 . . . Rotary bars
- E05B 83/12 . . for back doors of vans ([E05B 83/04](#), [E05B 83/08 take precedence](#))
- E05B 83/14 . . with provisions for sealing
- E05B 83/16 . Locks for luggage compartments, car boot lids or car bonnets
- E05B 83/18 . . for car boot lids or rear luggage compartments
- E05B 83/20 . . . with two or more wings, which together close a single compartment
- E05B 83/22 . . for luggage compartments at the side of the vehicle, e.g. of buses or camper vans

- E05B 83/24 . . for car bonnets
  - E05B 83/243 . . . {Hood clamps, i.e. individually actuated, usually yielding hooks}
  - E05B 83/247 . . . {Simultaneously actuated fasteners at separated positions}
  - E05B 83/26 . . Emergency opening means for persons trapped in the luggage compartment
  - E05B 83/28 . Locks for glove compartments, console boxes, fuel inlet covers or the like
  - E05B 83/30 . . for glove compartments
  - E05B 83/32 . . for console boxes, e.g. between passenger seats
  - E05B 2083/33 . . {}
  - E05B 83/34 . . for fuel inlet covers essentially flush with the vehicle surface
  - E05B 83/36 . Locks for passenger or like doors
  - E05B 83/363 . . {for railway vehicles (E05B 77/54 takes precedence)}
  - E05B 83/367 . . {with centering alignment pin}
  - E05B 83/38 . . for pillar-less vehicles, i.e. vehicles where a front and a back door engage each other in the closed position
  - E05B 83/40 . . for sliding doors
  - E05B 83/42 . . for large commercial vehicles, e.g. trucks, construction vehicles or vehicles for mass transport
  - E05B 83/44 . . for recreational vehicles, e.g. caravans or camper vans
- E05B 85/00 Details of vehicle locks not provided for in groups E05B 77/00 - E05B 83/00**
- E05B 85/01 . {Mechanical arrangements specially adapted for hands-free locking or unlocking (handles with means for initiation of a hands-free locking or unlocking process E05B 81/78)}
  - E05B 85/02 . Lock casings (mounting of lock casings E05B 79/04)
  - E05B 85/04 . Strikers
  - E05B 85/045 . . {for bifurcated bolts}
  - E05B 85/06 . Lock cylinder arrangements
  - E05B 85/08 . Sill-buttons, garnish buttons or inner door lock knobs
  - E05B 85/085 . . {Manipulators therefor (E05B 19/20 takes precedence)}
  - E05B 85/10 . Handles
  - E05B 85/103 . . {creating a completely closed wing surface}
  - E05B 85/107 . . {Pop-out handles, e.g. sliding outwardly before rotation}
  - E05B 85/12 . . Inner door handles
  - E05B 85/13 . . . {with a locking knob forming part of the inside door handle unit}
  - E05B 85/14 . . Handles pivoted about an axis parallel to the wing
  - E05B 85/16 . . . a longitudinal grip part being pivoted at one end about an axis perpendicular to the longitudinal axis of the grip part
  - E05B 85/18 . . . a longitudinal grip part being pivoted about an axis parallel to the longitudinal axis of the grip part
  - E05B 85/20 . Bolts or detents
  - E05B 85/22 . . Rectilinearly moving bolts
  - E05B 85/24 . . Bolts rotating about an axis

- E05B 85/243      . . . {with a bifurcated bolt}
- E05B 85/245      . . . {with a pair of bifurcated bolts}
- E05B 85/247      . . . {about a vertical axis}
- E05B 85/26       . . . Cooperation between bolts and detents
- E05B 85/28       . . . in which the member engaging the keeper is shaped as a toothed wheel  
or the like