

Symbol	Typ	Titel
E	Sektion	FIXED CONSTRUCTIONS
E05	Klasse	LOCKS; KEYS; WINDOW OR DOOR FITTINGS; SAFES
E05F	Unterklasse	DEVICES FOR MOVING WINGS INTO OPEN OR CLOSED POSITION; CHECKS FOR WINGS; WING FITTINGS NOT OTHERWISE PROVIDED FOR, CONCERNED WITH THE FUNCTIONING OF THE WING
E05F 1/00	Hauptgruppe	Closers or openers for wings, not otherwise provided for in this subclass [1, 2006.01]
E05F 1/02	1-Punkt Untergruppe	. gravity-actuated [1, 2006.01]
E05F 1/04	2-Punkt Untergruppe	. . for wings which lift during movement [1, 2006.01]
E05F 1/06	3-Punkt Untergruppe	. . . Mechanisms in the shape of hinges or pivots, operated by the weight of the wing [1, 2006.01]
E05F 1/08	1-Punkt Untergruppe	. spring-actuated [1, 2006.01]
E05F 1/10	2-Punkt Untergruppe	. . for swinging wings [1, 2006.01]
E05F 1/12	3-Punkt Untergruppe	. . . Mechanisms in the shape of hinges or pivots, operated by springs [1, 2006.01]
E05F 1/14	3-Punkt Untergruppe	. . . with double-acting springs, e.g. for closing and opening or checking and closing [1, 2006.01]
E05F 1/16	2-Punkt Untergruppe	. . for sliding wings [4, 2006.01]
E05F 3/00	Hauptgruppe	Closers or openers with braking devices, e.g. checks; Construction of pneumatic or liquid braking devices (construction of non-pneumatic or non-liquid braking devices E05F 5/00; friction devices in hinges E05D 11/08) [1, 2006.01]
E05F 3/02	1-Punkt Untergruppe	. with pneumatic piston brakes (rotary type E05F 3/14) [1, 2006.01]
E05F 3/04	1-Punkt Untergruppe	. with liquid piston brakes (rotary type E05F 3/14) [1, 2006.01]
E05F 3/06	2-Punkt Untergruppe	. . in which a torsion spring rotates a member around an axis perpendicular to the axis of the piston [1, 2006.01]
E05F 3/08	2-Punkt Untergruppe	. . in which a torsion spring rotates a member around an axis arranged in the direction of the axis of the piston [1, 2006.01]
E05F 3/10	2-Punkt Untergruppe	. . with a spring, other than a torsion spring, and a piston, the axes of which are the same or lie in the same direction [1, 2006.01]
E05F 3/12	2-Punkt Untergruppe	. . Special devices controlling the circulation of the liquid, e.g. valve arrangement (valves <u>per se</u> F16K) [1, 2006.01]
E05F 3/14	1-Punkt Untergruppe	. with fluid brakes of the rotary type [1, 2006.01]
E05F 3/16	1-Punkt Untergruppe	. with friction brakes [1, 2006.01]
E05F 3/18	1-Punkt Untergruppe	. with counteracting springs (double-acting springs E05F 1/14) [1, 2006.01]
E05F 3/20	1-Punkt Untergruppe	. in hinges [1, 2006.01]
E05F 3/22	1-Punkt Untergruppe	. Additional arrangements for closers, e.g. for holding the wing in opened or other position [1, 2006.01]
E05F 5/00	Hauptgruppe	Braking devices, e.g. checks; Stops; Buffers (construction of pneumatic or liquid braking devices E05F 3/00; braking devices, buffers or end stops on drawers for tables, cabinets or like furniture A47B 88/473; combined with devices for holding wings open E05C 17/00; devices for limiting opening of wings or for holding wings open by a movable member extending between frame and wing E05C 17/04) [1, 4, 2006.01, 2017.01]
E05F 5/02	1-Punkt Untergruppe	. specially for preventing the slamming of wings [1, 2006.01]

Symbol	Typ	Titel
E05F 5/04	2-Punkt Untergruppe	. . hand-operated; operated by centrifugal action [1, 2006.01]
E05F 5/06	1-Punkt Untergruppe	. Buffers (E05F 5/02 takes precedence) [1, 2006.01]
E05F 5/08	2-Punkt Untergruppe	. . with springs [1, 2006.01]
E05F 5/10	2-Punkt Untergruppe	. . with piston brakes [1, 2006.01]
E05F 5/12	1-Punkt Untergruppe	. specially for preventing the closing of a wing before another wing has been closed [1, 2006.01]
E05F 7/00	Hauptgruppe	Accessories for wings not provided for in other groups of this subclass (specially adapted for furniture A47B 95/00; door-lifters B66F, E04F 21/00; knobs or handles E05B) [1, 2, 2006.01]
E05F 7/02	1-Punkt Untergruppe	. for raising wings before being turned [1, 2006.01]
E05F 7/04	1-Punkt Untergruppe	. Arrangements affording protection against rattling (with buffering action E05F 5/00) [1, 2006.01]
E05F 7/06	1-Punkt Untergruppe	. Devices for taking the weight of the wing, arranged away from the hinge axis [1, 2006.01]
E05F 7/08	1-Punkt Untergruppe	. Means for transmitting movements between vertical and horizontal sliding bars, rods, or cables (means for transmitting movements between vertical and horizontal sliding bars, rods, or cables, for the fastening of wings E05C 9/24) [1, 2006.01]
		<u>Operating mechanisms for wings [2]</u>
E05F 9/00	Hauptgruppe	Means for operating wings by hand rods not guided in or on the frame, including those which also operate the fastening (bolts or fastening devices for wings E05C) [1, 2006.01]
E05F 11/00	Hauptgruppe	Man-operated mechanisms for operating wings, including those which also operate the fastening (connecting mechanisms for a plurality of wings E05F 17/00) [1, 2006.01]
E05F 11/02	1-Punkt Untergruppe	. for wings in general, e.g. fanlights (E05F 11/36 takes precedence; for windows to be lowered vertically E05F 11/38; for doors E05F 11/54) [1, 2006.01]
E05F 11/04	2-Punkt Untergruppe	. . with cords, chains, or cables [1, 2006.01]
E05F 11/06	3-Punkt Untergruppe	. . . in guide-channels [1, 2006.01]
E05F 11/08	2-Punkt Untergruppe	. . with longitudinally-moving bars guided, e.g. by pivoted links, in or on the frame [1, 2006.01]
E05F 11/10	3-Punkt Untergruppe	. . . Mechanisms by which a handle moves the bar [1, 2006.01]
E05F 11/12	3-Punkt Untergruppe	. . . Mechanisms by which the bar shifts the wing [1, 2006.01]
E05F 11/14	4-Punkt Untergruppe	 directly, i.e. without links, shifting the wing, e.g. by rack-and-gear or pin-and-slot [1, 2006.01]
E05F 11/16	4-Punkt Untergruppe	 shifting the wing by pivotally-connected members moving in a plane perpendicular to the pivot axis of the wing [1, 2006.01]
E05F 11/18	5-Punkt Untergruppe	 consisting of a lever, e.g. an angle lever, only [1, 2006.01]
E05F 11/20	5-Punkt Untergruppe	 consisting of a lever, e.g. an angle lever, and only one additional link [1, 2006.01]
E05F 11/22	5-Punkt Untergruppe	 consisting of a lever, e.g. an angle lever, and two or more additional links in series [1, 2006.01]
E05F 11/24	4-Punkt Untergruppe	 shifting the wing by pivotally-connected members moving in a plane parallel to the pivot axis of the wing [1, 2006.01]
E05F 11/26	5-Punkt Untergruppe	 consisting of a lever, e.g. an angle lever, only [1, 2006.01]
E05F 11/28	5-Punkt Untergruppe	 consisting of a lever, e.g. an angle lever, and one or more additional links [1, 2006.01]
E05F 11/30	5-Punkt Untergruppe	 consisting of links in rhomb form [1, 2006.01]
E05F 11/32	2-Punkt Untergruppe	. . with rotary bars guided in the frame (E05F 11/34 takes precedence) [1, 2006.01]

Symbol	Typ	Titel
E05F 11/34	2-Punkt Untergruppe	. . with screw mechanisms [1, 2006.01]
E05F 11/36	1-Punkt Untergruppe	. specially designed for passing through a wall [1, 2006.01]
E05F 11/38	1-Punkt Untergruppe	. for sliding windows, e.g. vehicle windows, to be opened or closed by vertical movement [1, 2006.01]
E05F 11/40	2-Punkt Untergruppe	. . operated by screw mechanism [1, 2006.01]
E05F 11/42	2-Punkt Untergruppe	. . operated by rack bars and toothed wheels [1, 2006.01]
E05F 11/44	2-Punkt Untergruppe	. . operated by one or more lifting arms [1, 2006.01]
E05F 11/46	2-Punkt Untergruppe	. . operated by lazy-tongs mechanism [1, 2006.01]
E05F 11/48	2-Punkt Untergruppe	. . operated by cords or chains [1, 2006.01]
E05F 11/50	2-Punkt Untergruppe	. . Crank gear with clutches or retaining brakes, for operating window mechanisms [1, 2006.01]
E05F 11/52	2-Punkt Untergruppe	. . combined with means for producing an additional movement, e.g. a horizontal or a rotary movement [1, 2006.01]
E05F 11/53	1-Punkt Untergruppe	. for sliding windows, e.g. vehicle windows, to be opened or closed by horizontal movement [2, 2006.01]
E05F 11/54	1-Punkt Untergruppe	. for doors [1, 2006.01]
E05F 13/00	Hauptgruppe	Operating mechanisms for wings, operated by the movement or weight of a person or vehicle (through power-operated wing-operating mechanisms E05F 15/00) [1, 2006.01]
E05F 13/02	1-Punkt Untergruppe	. by devices, e.g. lever arms, affected by the movement of the user [1, 2006.01]
E05F 13/04	1-Punkt Untergruppe	. by platforms lowered by the weight of the user [1, 2006.01]
E05F 15/00	Hauptgruppe	Power-operated mechanisms for wings (motor-operated accessories in locks for completing closing or initiating opening of a wing E05B 17/00) [1, 2006.01, 2015.01]
E05F 15/40	1-Punkt Untergruppe	. Safety devices, e.g. detection of obstructions or end positions [2015.01]
E05F 15/41	2-Punkt Untergruppe	. . Detection by monitoring transmitted force or torque (E05F 15/48 takes precedence); Safety couplings with activation dependent upon torque or force, e.g. slip couplings [2015.01]
E05F 15/42	2-Punkt Untergruppe	. . Detection using safety edges [2015.01]
E05F 15/43	3-Punkt Untergruppe	. . . responsive to disruption of energy beams, e.g. light or sound [2015.01]
E05F 15/44	3-Punkt Untergruppe	. . . responsive to changes in electrical conductivity [2015.01]
E05F 15/46	3-Punkt Untergruppe	. . . responsive to changes in electrical capacitance [2015.01]
E05F 15/47	3-Punkt Untergruppe	. . . responsive to changes in fluid pressure [2015.01]
E05F 15/48	3-Punkt Untergruppe	. . . by transmission of mechanical forces, e.g. by rigid or movable members [2015.01]
E05F 15/49	2-Punkt Untergruppe	. . specially adapted for mechanisms operated by fluid pressure, e.g. detection by monitoring transmitted fluid pressure (E05F 15/47 takes precedence) [2015.01]
E05F 15/50	1-Punkt Untergruppe	. using fluid-pressure actuators [2015.01]
E05F 15/51	2-Punkt Untergruppe	. . for folding wings [2015.01]
E05F 15/53	2-Punkt Untergruppe	. . for swinging wings [2015.01]
E05F 15/54	3-Punkt Untergruppe	. . . operated by linear actuators acting on a helical track coaxial with the swinging axis [2015.01]
E05F 15/56	2-Punkt Untergruppe	. . for horizontally-sliding wings [2015.01]

Symbol	Typ	Titel
E05F 15/57	2-Punkt Untergruppe	. . for vertically-sliding wings [2015.01]
E05F 15/59	3-Punkt Untergruppe	. . . for overhead wings [2015.01]
E05F 15/60	1-Punkt Untergruppe	. using electrical actuators [2015.01]
E05F 15/603	2-Punkt Untergruppe	. . using rotary electromotors [2015.01]
E05F 15/605	3-Punkt Untergruppe	. . . for folding wings [2015.01]
E05F 15/608	3-Punkt Untergruppe	. . . for revolving wings [2015.01]
E05F 15/611	3-Punkt Untergruppe	. . . for swinging wings [2015.01]
E05F 15/614	4-Punkt Untergruppe	 operated by meshing gear wheels, one of which being mounted at the wing pivot axis; operated by a motor acting directly on the wing pivot axis [2015.01]
E05F 15/616	4-Punkt Untergruppe	 operated by push-pull mechanisms [2015.01]
E05F 15/619	5-Punkt Untergruppe	 using flexible or rigid rack-and-pinion arrangements [2015.01]
E05F 15/622	5-Punkt Untergruppe	 using screw-and-nut mechanisms [2015.01]
E05F 15/624	5-Punkt Untergruppe	 using friction wheels [2015.01]
E05F 15/627	4-Punkt Untergruppe	 operated by flexible elongated pulling elements, e.g. belts, chains or cables (using flexible elongated push-pull mechanisms E05F 15/619) [2015.01]
E05F 15/63	4-Punkt Untergruppe	 operated by swinging arms [2015.01]
E05F 15/632	3-Punkt Untergruppe	. . . for horizontally-sliding wings [2015.01]
E05F 15/635	4-Punkt Untergruppe	 operated by push-pull mechanisms, e.g. flexible or rigid rack-and-pinion arrangements (E05F 15/652 takes precedence) [2015.01]
E05F 15/638	5-Punkt Untergruppe	 allowing or involving a secondary movement of the wing, e.g. rotational or transversal [2015.01]
E05F 15/641	5-Punkt Untergruppe	 operated by friction wheels [2015.01]
E05F 15/643	4-Punkt Untergruppe	 operated by flexible elongated pulling elements, e.g. belts, chains or cables (by flexible elongated push-pull mechanisms E05F 15/635) [2015.01]
E05F 15/646	5-Punkt Untergruppe	 allowing or involving a secondary movement of the wing, e.g. rotational or transversal [2015.01]
E05F 15/649	4-Punkt Untergruppe	 operated by swinging arms [2015.01]
E05F 15/652	4-Punkt Untergruppe	 operated by screw-and-nut mechanisms [2015.01]
E05F 15/655	4-Punkt Untergruppe	 specially adapted for vehicle wings [2015.01]
E05F 15/657	5-Punkt Untergruppe	 enabling manual drive, e.g. in case of power failure [2015.01]
E05F 15/659	5-Punkt Untergruppe	 Control circuits therefor [2015.01]
E05F 15/662	5-Punkt Untergruppe	 Motor units therefor, e.g. geared motors [2015.01]
E05F 15/665	3-Punkt Untergruppe	. . . for vertically-sliding wings [2015.01]
E05F 15/668	4-Punkt Untergruppe	 for overhead wings [2015.01]
E05F 15/67	5-Punkt Untergruppe	 operated by flexible or rigid rack-and-pinion arrangements [2015.01]
E05F 15/673	5-Punkt Untergruppe	 operated by screw-and-nut mechanisms [2015.01]

Symbol	Typ	Titel
E05F 15/676	5-Punkt Untergruppe	 operated by friction wheels [2015.01]
E05F 15/678	5-Punkt Untergruppe	 operated by swinging lever arms [2015.01]
E05F 15/681	5-Punkt Untergruppe	 operated by flexible elongated pulling elements, e.g. belts [2015.01]
E05F 15/684	6-Punkt Untergruppe	 by chains [2015.01]
E05F 15/686	6-Punkt Untergruppe	 by cables or ropes [2015.01]
E05F 15/689	4-Punkt Untergruppe	 specially adapted for vehicle windows [2015.01]
E05F 15/692	5-Punkt Untergruppe	 enabling manual drive, e.g. in case of power failure [2015.01]
E05F 15/695	5-Punkt Untergruppe	 Control circuits therefor [2015.01]
E05F 15/697	5-Punkt Untergruppe	 Motor units therefor, e.g. geared motors [2015.01]
E05F 15/70	1-Punkt Untergruppe	. with automatic actuation [2015.01]
E05F 15/71	2-Punkt Untergruppe	. . responsive to temperature changes, rain, wind or noise [2015.01]
E05F 15/72	2-Punkt Untergruppe	. . responsive to emergency conditions, e.g. fire [2015.01]
E05F 15/73	2-Punkt Untergruppe	. . responsive to movement or presence of persons or objects [2015.01]
E05F 15/74	3-Punkt Untergruppe	. . . using photoelectric cells [2015.01]
E05F 15/75	3-Punkt Untergruppe	. . . responsive to the weight or other physical contact of a person or object [2015.01]
E05F 15/76	3-Punkt Untergruppe	. . . responsive to devices carried by persons or objects, e.g. magnets or reflectors (E05F 15/77 takes precedence) [2015.01]
E05F 15/77	2-Punkt Untergruppe	. . using wireless control [2015.01]
E05F 15/78	3-Punkt Untergruppe	. . . using light beams [2015.01]
E05F 15/79	2-Punkt Untergruppe	. . using time control [2015.01]
E05F 17/00	Hauptgruppe	Special devices for shifting a plurality of wings operated simultaneously (for simultaneously moving a plurality of interconnected ventilating lamellae E06B 7/086) [1, 2, 2006.01]