

Symbol	Typ	Titel
G	Sektion	SECTION G — PHYSICS
G04	Klasse	HOROLOGY
G04B	Unterklasse	MECHANICALLY-DRIVEN CLOCKS OR WATCHES; MECHANICAL PARTS OF CLOCKS OR WATCHES IN GENERAL; TIME-PIECES USING THE POSITION OF THE SUN, MOON, OR STARS (spring- or weight-driven mechanisms in general F03G; electromechanical clocks or watches G04C; electromechanical clocks with attached or built-in means operating any device at preselected times or after predetermined time intervals G04C 23/00; clocks or watches with stop devices G04F 7/08; structural details or housings specially adapted for electronic time-pieces with no moving parts G04G 17/00)
		<u>Driving mechanisms</u>
G04B 1/00	Hauptgruppe	Driving mechanisms
G04B 1/02	1-Punkt Untergruppe	. with driving weight
G04B 1/04	2-Punkt Untergruppe	. . Mechanisms in which the clockwork acts as the driving weight
G04B 1/06	2-Punkt Untergruppe	. . with several weights
G04B 1/08	2-Punkt Untergruppe	. . Driving weights; Chains; Chain wheels; Arbors for chain wheels
G04B 1/10	1-Punkt Untergruppe	. with mainspring
G04B 1/12	2-Punkt Untergruppe	. . with several mainsprings
G04B 1/14	2-Punkt Untergruppe	. . Mainsprings; Bridles therefor (mainsprings with bridles G04B 1/18; alloys C22C; springs in general F16F)
G04B 1/16	2-Punkt Untergruppe	. . Barrels; Arbors; Barrel axles (arrangements facilitating the removal of the mainspring G04B 33/14)
G04B 1/18	2-Punkt Untergruppe	. . Constructions for connecting the ends of mainsprings with the barrel or the arbor
G04B 1/20	3-Punkt Untergruppe	. . . Protecting arrangements against rupture or overwinding of the mainspring located in the barrel or attached to the barrel (in connection with keys or the like G04B 3/06, G04B 3/10; in connection with automatic winding devices G04B 5/24)
G04B 1/22	2-Punkt Untergruppe	. . Compensation of changes in the motive power of the mainspring (by mechanical shaping of the mainspring G04B 1/14)
G04B 1/24	1-Punkt Untergruppe	. with both mainsprings and driving weights
G04B 1/26	1-Punkt Untergruppe	. driven by liquids or gases; Liquid or gaseous drives for mechanically-controlled secondary clocks
		<u>Winding</u>
G04B 3/00	Hauptgruppe	Normal winding of clockworks by hand or mechanically; Winding-up several mainsprings or driving weights simultaneously
G04B 3/02	1-Punkt Untergruppe	. Removably-mounted keys or the like
G04B 3/04	1-Punkt Untergruppe	. Rigidly-mounted keys, knobs, or crowns (divided winding stems G04B 37/06)
G04B 3/06	1-Punkt Untergruppe	. Keys or the like with means preventing overwinding (protecting devices arranged in, or attached to, the barrel G04B 1/20; in connection with automatic winding devices G04B 5/24)
G04B 3/08	1-Punkt Untergruppe	. by parts of the cases
G04B 3/10	2-Punkt Untergruppe	. . Protecting means preventing overwinding (arranged in, or attached to, the barrel G04B 1/20; in connection with keys G04B 3/06; in connection with automatic winding devices G04B 5/24)
G04B 3/12	1-Punkt Untergruppe	. by mechanical means, e.g. pneumatic motor (winding-up with electric or electromechanical means G04C)
G04B 5/00	Hauptgruppe	Automatic winding-up

Symbol	Typ	Titel
G04B 5/02	1-Punkt Untergruppe	. by self-winding caused by movement of the watch
G04B 5/04	2-Punkt Untergruppe	. . by oscillating weights the movement of which is limited
G04B 5/06	3-Punkt Untergruppe	. . . acting in one direction only
G04B 5/08	3-Punkt Untergruppe	. . . acting in both directions
G04B 5/10	2-Punkt Untergruppe	. . by oscillating weights the movement of which is not limited
G04B 5/12	3-Punkt Untergruppe	. . . acting in one direction only
G04B 5/14	3-Punkt Untergruppe	. . . acting in both directions
G04B 5/16	2-Punkt Untergruppe	. . Construction of the weights
G04B 5/18	2-Punkt Untergruppe	. . Supports, suspensions, or guide arrangements, for oscillating weights
G04B 5/19	3-Punkt Untergruppe	. . . Suspension of the oscillating weight at its centre of rotation [3]
G04B 5/20	1-Punkt Untergruppe	. by movements of other objects, e.g. by opening hand-bag, by opening case, by opening door; Winding-up by wind power
G04B 5/22	1-Punkt Untergruppe	. by thermometric, barometric, or like effects or alterations
G04B 5/24	1-Punkt Untergruppe	. Protecting means preventing overwinding (arranged in, or attached to, the barrel G04B 1/20; in connection with keys or the like G04B 3/06; in connection with parts of the cases G04B 3/10)
G04B 7/00	Hauptgruppe	Combined normal and automatic winding-up
G04B 9/00	Hauptgruppe	Supervision of the state of winding, e.g. indicating the amount of winding
G04B 9/02	1-Punkt Untergruppe	. Devices controlled by such state, e.g. device affording protection against overwinding (protecting means preventing overwinding arranged in or on the barrel G04B 1/20; protecting means in connection with keys or the like G04B 3/06; in connection with parts of the cases G04B 3/10; in connection with automatic winding devices G04B 5/24)
G04B 11/00	Hauptgruppe	Click devices; Stop clicks; Clutches
G04B 11/02	1-Punkt Untergruppe	. Devices allowing the motion of a rotatable part in only one direction [3]
G04B 11/04	2-Punkt Untergruppe	. . Pawl constructions therefor, e.g. pawl secured to an oscillating member actuating a ratchet [3]
G04B 13/00	Hauptgruppe	Gearwork
G04B 13/02	1-Punkt Untergruppe	. Wheels; Pinions; Spindles; Pivots (bearings G04B 31/00)
G04B 15/00	Hauptgruppe	Escapements (electric or magnetic means for converting oscillatory to rotary motion in electromechanical time-pieces G04C 5/00)
G04B 15/02	1-Punkt Untergruppe	. permanently in contact with the regulating mechanism
G04B 15/04	2-Punkt Untergruppe	. . Cylinder escapements
G04B 15/06	1-Punkt Untergruppe	. Free escapements
G04B 15/08	2-Punkt Untergruppe	. . Lever escapements
G04B 15/10	1-Punkt Untergruppe	. with constant impulses for the regulating mechanism
G04B 15/12	1-Punkt Untergruppe	. Adjusting (tools therefor G04D 1/02); Restricting the amplitude of the lever or the like
G04B 15/14	1-Punkt Untergruppe	. Component parts or constructional details, e.g. construction of the lever or the escape wheel
G04B 17/00	Hauptgruppe	Mechanisms for stabilising frequency [3]
G04B 17/02	1-Punkt Untergruppe	. Oscillators acting by gravity, e.g. pendulum swinging in a plane

Symbol	Typ	Titel
G04B 17/04	1-Punkt Untergruppe	. Oscillators acting by spring tension
G04B 17/06	2-Punkt Untergruppe	. . Oscillators with hairsprings, e.g. balance
G04B 17/08	2-Punkt Untergruppe	. . Oscillators with coil springs stretched and unstretched axially
G04B 17/10	2-Punkt Untergruppe	. . Oscillators with torsion strips or with springs acting in the same manner as torsion strips, e.g. weight oscillating in a horizontal plane
G04B 17/20	1-Punkt Untergruppe	. Compensation of mechanisms for stabilizing frequency
G04B 17/22	2-Punkt Untergruppe	. . for the effect of variations of temperature (alloys independent of variations of temperature C22C)
G04B 17/24	2-Punkt Untergruppe	. . for the effect of variations of atmospheric pressure
G04B 17/26	2-Punkt Untergruppe	. . for the effect of variations of the impulses
G04B 17/28	2-Punkt Untergruppe	. . for the effect of unbalance of the weights, e.g. tourbillon
G04B 17/30	1-Punkt Untergruppe	. Rotating governors, e.g. centrifugal governors, fan governors (for striking mechanism G04B 21/06)
G04B 17/32	1-Punkt Untergruppe	. Component parts or constructional details, e.g. collet, stud
G04B 17/34	2-Punkt Untergruppe	. . for fastening the hairspring onto the balance [3]
G04B 18/00	Hauptgruppe	Mechanisms for setting frequency [3]
G04B 18/02	1-Punkt Untergruppe	. Regulator devices; Indexing devices [3]
G04B 18/04	1-Punkt Untergruppe	. Adjusting the beat of the pendulum, balance, or the like, e.g. putting into beat [3]
G04B 18/06	2-Punkt Untergruppe	. . by setting the collet or the stud of a hairspring [3]
G04B 18/08	1-Punkt Untergruppe	. Component parts or constructional details [3]
		<u>Time indicating</u>
G04B 19/00	Hauptgruppe	Indicating by visual means (by electric lamps G04C 17/02; display arrangements in general G09)
G04B 19/02	1-Punkt Untergruppe	. Back-gearing arrangements between gear train and hands
G04B 19/04	1-Punkt Untergruppe	. Hands; Discs with a single mark or the like
G04B 19/06	1-Punkt Untergruppe	. Dials (for time-pieces without clockwork G04B 49/04)
G04B 19/08	2-Punkt Untergruppe	. . Geometrical arrangement of the graduations
G04B 19/10	2-Punkt Untergruppe	. . Ornamental shape of the graduations or the surface of the dial; Attachment of graduations to the dial
G04B 19/12	2-Punkt Untergruppe	. . Selection of materials for dials or graduations
G04B 19/14	2-Punkt Untergruppe	. . Fastening the dials to the clock or the watch plates
G04B 19/16	2-Punkt Untergruppe	. . Shiftable dials, e.g. indicating alternately from 1 to 12 and from 13 to 24
G04B 19/18	2-Punkt Untergruppe	. . Graduations on the crystal or glass, on the bezel, or on the rim
G04B 19/20	1-Punkt Untergruppe	. Indicating by numbered bands, drums, discs, or sheets
G04B 19/21	2-Punkt Untergruppe	. . Drums [3]
G04B 19/22	1-Punkt Untergruppe	. Arrangements for indicating different local apparent times; Universal time-pieces
G04B 19/23	2-Punkt Untergruppe	. . by means of additional hands or additional pairs of hands [3]

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G04B 19/24	1-Punkt Untergruppe	. Clocks or watches with date indicators; Clockwork calendars
G04B 19/243	2-Punkt Untergruppe	. . characterised by the shape of the date indicator [3]
G04B 19/247	3-Punkt Untergruppe	. . . disc-shaped [3]
G04B 19/25	4-Punkt Untergruppe Devices for setting the date indicators manually [3]
G04B 19/253	4-Punkt Untergruppe Driving or releasing mechanisms [3]
G04B 19/257	3-Punkt Untergruppe	. . . drum-shaped [3]
G04B 19/26	1-Punkt Untergruppe	. Clocks or watches with indicators for tides, for the phases of the moon, or the like
G04B 19/28	1-Punkt Untergruppe	. Adjustable guide marks or pointers for indicating determined points of time
G04B 19/30	1-Punkt Untergruppe	. Illumination of dials or hands
G04B 19/32	2-Punkt Untergruppe	. . by luminescent substances
G04B 19/34	1-Punkt Untergruppe	. Position of the hands projected optically
G04B 21/00	Hauptgruppe	Indicating by acoustic means (at preselected times G04B 23/00; by electro-acoustic means G04C 21/04; sound-producing apparatus <u>per se</u>G10)
G04B 21/02	1-Punkt Untergruppe	. Regular striking mechanisms giving the full hour, half hour, or quarter hour
G04B 21/04	2-Punkt Untergruppe	. . Hour wheels; Racks or rakes; Snails or similar control mechanisms
G04B 21/06	2-Punkt Untergruppe	. . Details of striking mechanisms, e.g. hammer, fan governor
G04B 21/08	2-Punkt Untergruppe	. . Sounding bodies; Whistles; Musical apparatus (with electro-acoustic transmitters G04C 21/00)
G04B 21/10	2-Punkt Untergruppe	. . Releasing or locking the regular stroke, e.g. for silence during the night
G04B 21/12	2-Punkt Untergruppe	. . Reiterating watches or clocks
G04B 21/14	2-Punkt Untergruppe	. . Winding-up the striking mechanism by the clockwork; Winding-up the clockwork by the striking mechanism
G04B 23/00	Hauptgruppe	Arrangements producing acoustic signals at preselected times (electrically-released alarm signals G04C 21/00; metronomes G04F 5/02; sound-producing apparatus <u>per se</u>G10)
G04B 23/02	1-Punkt Untergruppe	. Alarm clocks
G04B 23/03	2-Punkt Untergruppe	. . Alarm signal stop arrangements [3]
G04B 23/04	2-Punkt Untergruppe	. . with coarse and fine setting of the preselected time
G04B 23/06	2-Punkt Untergruppe	. . adjustable for several preselected times with automatic stopping of the signal
G04B 23/08	2-Punkt Untergruppe	. . operating on successive days without resetting; operating only once in each 24 hours
G04B 23/10	2-Punkt Untergruppe	. . with presignal; with repeated signal; with changeable intensity of sound
G04B 23/12	2-Punkt Untergruppe	. . Alarm watches to be worn in pockets or on the wrist (giving signals by stimulating the skin G04B 25/04)
G04B 25/00	Hauptgruppe	Indicating the time by other means or by combined means (electric or electromechanical indicating G04C)
G04B 25/02	1-Punkt Untergruppe	. by feeling; Clocks or watches for blind persons
G04B 25/04	2-Punkt Untergruppe	. . Alarm clocks or watches with devices stimulating the skin
G04B 25/06	1-Punkt Untergruppe	. by moving figures, e.g. cuckoo-clock, trumpet clock

Symbol	Typ	Titel
G04B 27/00	Hauptgruppe	Mechanical devices for setting the time-indicating means
G04B 27/02	1-Punkt Untergruppe	. by making use of the winding means
G04B 27/04	2-Punkt Untergruppe	. . with clutch wheel
G04B 27/06	2-Punkt Untergruppe	. . with rocking bar
G04B 27/08	1-Punkt Untergruppe	. by using parts of the case
		<u>Frameworks, supports, or arrangements of the clockwork parts in relation to each other, so-called "calibers"</u>
G04B 29/00	Hauptgruppe	Frameworks
G04B 29/02	1-Punkt Untergruppe	. Plates; Bridges; Cocks
G04B 29/04	1-Punkt Untergruppe	. Connecting or supporting parts
G04B 31/00	Hauptgruppe	Bearings; Point suspensions or counter-point suspensions; Pivot bearings; Single parts therefor (bearings in general F16C)
G04B 31/004	1-Punkt Untergruppe	. characterised by the material used [3]
G04B 31/008	2-Punkt Untergruppe	. . Jewel bearings (G04B 31/04 takes precedence) [3]
G04B 31/012	2-Punkt Untergruppe	. . Metallic bearings [3]
G04B 31/016	2-Punkt Untergruppe	. . Plastic bearings [3]
G04B 31/02	1-Punkt Untergruppe	. Shock-damping bearings
G04B 31/04	2-Punkt Untergruppe	. . with jewel hole and cap jewel [3]
G04B 31/06	1-Punkt Untergruppe	. Manufacture or mounting processes [3]
G04B 31/08	1-Punkt Untergruppe	. Lubrication [3]
G04B 33/00	Hauptgruppe	Calibers
G04B 33/02	1-Punkt Untergruppe	. Circular calibers
G04B 33/04	1-Punkt Untergruppe	. Non-circular calibers
G04B 33/06	1-Punkt Untergruppe	. of extremely flat shape
G04B 33/08	1-Punkt Untergruppe	. in which the gear train is arranged in different planes, e.g. parallel or inclined to each other (G04B 33/10 takes precedence)
G04B 33/10	1-Punkt Untergruppe	. with seconds hand arranged in the centre of the dial
G04B 33/12	1-Punkt Untergruppe	. for extremely-long running times
G04B 33/14	1-Punkt Untergruppe	. Calibers of which the mainsprings or barrels are easily removable (mainsprings G04B 1/14; barrels, arbors G04B 1/16)
G04B 33/16	1-Punkt Untergruppe	. with arrangements affording protection of the clockwork against damage as a consequence of a rupture of the mainspring
G04B 35/00	Hauptgruppe	Adjusting the gear train, e.g. the backlash of the arbors, depth of meshing of the gears
		<u>Protection of the clockwork against damage from outside</u>
G04B 37/00	Hauptgruppe	Cases
G04B 37/02	1-Punkt Untergruppe	. Evacuated cases; Cases filled with gases or liquids; Cases containing substances for absorbing or binding moisture or dust
G04B 37/04	1-Punkt Untergruppe	. Mounting the clockwork in the case; Shock-absorbing mountings

Symbol	Typ	Titel
G04B 37/05	2-Punkt Untergruppe	. . Fixed mountings for pocket or wrist watches [3]
G04B 37/06	1-Punkt Untergruppe	. Forming the passage for the winding stem through the case; Divided winding stems
G04B 37/08	1-Punkt Untergruppe	. Hermetic sealing of openings, joints, passages, or slits
G04B 37/10	2-Punkt Untergruppe	. . of winding stems
G04B 37/11	2-Punkt Untergruppe	. . of the back cover of pocket or wrist watches [3]
G04B 37/12	1-Punkt Untergruppe	. Cases for special purposes, e.g. watch combined with ring, watch combined with button (watch guards or protectors A45C 11/10, A45C 11/12; watches combined with cosmetic powder containers A45D 33/30)
G04B 37/14	1-Punkt Untergruppe	. Suspending devices, supports, or stands for time-pieces in so far as they form part of the case (wrist-watch straps, fastening means therefor A44C 5/00)
G04B 37/16	2-Punkt Untergruppe	. . Fastening the case to the bracelet [3]
G04B 37/18	1-Punkt Untergruppe	. for pocket or wrist watches (G04B 37/02-G04B 37/16 takes precedence) [3]
G04B 37/20	2-Punkt Untergruppe	. . with hinged covers or backs [3]
G04B 37/22	1-Punkt Untergruppe	. Materials or processes of manufacturing pocket watch or wrist watch cases [3]
G04B 39/00	Hauptgruppe	Watch crystals; Fastening or sealing crystals; Clock glasses
G04B 39/02	1-Punkt Untergruppe	. Sealing crystals or glasses [3]
G04B 41/00	Hauptgruppe	Locking or holding devices for pendulums, chimes, or the like, for use during transport
G04B 43/00	Hauptgruppe	Protecting clockworks by shields or other means against external influences, e.g. magnetic fields <u>Clocks with unusual features</u>
G04B 45/00	Hauptgruppe	Time-pieces of which the indicating means or cases provoke special effects, e.g. aesthetic effect (ornamental shaping of dials G04B 19/10)
G04B 45/02	1-Punkt Untergruppe	. Time-pieces of which the clockwork is visible partly or wholly
G04B 45/04	1-Punkt Untergruppe	. Time-pieces with invisible drive, e.g. with hands attached to rotating glass disc
G04B 47/00	Hauptgruppe	Time-pieces combined with other articles which do not interfere with the running or the time-keeping of the time-piece (G04B 37/12 takes precedence; writing or drawing implements with devices for indicating time B43K 29/087; combinations with vehicle mirror assemblies B60R 1/12; combined with cameras, projectors, or photographic printing apparatus G03B 29/00)
G04B 47/02	1-Punkt Untergruppe	. Installations within mirrors, pictures, furniture, or other household articles
G04B 47/04	1-Punkt Untergruppe	. with attached ornaments or amusement apparatus
G04B 47/06	1-Punkt Untergruppe	. with attached measuring instruments, e.g. pedometer, barometer, thermometer, compass
G04B 49/00	Hauptgruppe	Time-pieces using the position of the sun, moon, or stars
G04B 49/02	1-Punkt Untergruppe	. Sundials
G04B 49/04	2-Punkt Untergruppe	. . Graduation or shaping of dials
G04B 99/00	Hauptgruppe	Subject matter not provided for in other groups of this subclass [2006.01]