

Symbol	Typ	Titel
B	Sektion	SECTION B — PERFORMING OPERATIONS; TRANSPORTING
B61	Klasse	RAILWAYS
B61L	Unterklasse	GUIDING RAILWAY TRAFFIC; ENSURING THE SAFETY OF RAILWAY TRAFFIC (power supply lines for electrically propelled vehicles B60M; arrangement of signalling devices, the mounting or supporting thereof or circuits therefor, for vehicles in general B60Q; brakes or auxiliary equipment B61H, B61K; point or crossing construction E01B; insulated rail joints E01B 11/54; optical devices in general G02; controlling in general G05; electric communication technique H04)
B61L 1/00	Hauptgruppe	Devices along the route controlled by interaction with the vehicle or vehicle train (detonators B61L 5/20; operation of points or signals by passage of the vehicle B61L 11/00, B61L 13/00; central traffic control systems controlled by train B61L 27/04; operation of gates, or gates and signals, by approaching vehicle B61L 29/18)
B61L 1/02	1-Punkt Untergruppe	. Electric devices associated with track
B61L 1/04	2-Punkt Untergruppe	. . mechanically actuated by a part of the vehicle
B61L 1/06	2-Punkt Untergruppe	. . actuated by deformation of rail; actuated by vibration in rail
B61L 1/08	2-Punkt Untergruppe	. . magnetically actuated; electrostatically actuated
B61L 1/10	2-Punkt Untergruppe	. . actuated by electromagnetic radiation; actuated by particle radiation
B61L 1/12	1-Punkt Untergruppe	. Electric devices associated with overhead trolley wires
B61L 1/14	1-Punkt Untergruppe	. Devices for indicating the passing of the end of the vehicle or vehicle train
B61L 1/16	1-Punkt Untergruppe	. Devices for counting axles; Devices for counting vehicles (counting moving objects in general G06M)
B61L 1/18	1-Punkt Untergruppe	. Railway track circuits (automatically-operated track circuits specially adapted for section blocking for controlling traffic B61L 23/00; rail joints E01B 11/00)
B61L 1/20	1-Punkt Untergruppe	. Safety arrangements for preventing or indicating malfunction of the device, e.g. by leakage current, by lightning
B61L 3/00	Hauptgruppe	Devices along the route for controlling devices on the vehicle or vehicle train, e.g. to release brake, to operate a warning signal
B61L 3/02	1-Punkt Untergruppe	. at selected places along the route, e.g. intermittent control
B61L 3/04	2-Punkt Untergruppe	. . controlling mechanically
B61L 3/06	2-Punkt Untergruppe	. . controlling by electromagnetic or particle radiation, e.g. by light beam (using radio waves B61L 3/12)
B61L 3/08	2-Punkt Untergruppe	. . controlling electrically
B61L 3/10	3-Punkt Untergruppe	. . . using current passing between devices along the route and devices on the vehicle train
B61L 3/12	3-Punkt Untergruppe	. . . using magnetic or electrostatic induction; using radio waves
B61L 3/14	2-Punkt Untergruppe	. . to cut-off the power supply to traction motors of electrically-propelled vehicles
B61L 3/16	1-Punkt Untergruppe	. Continuous control along the route
B61L 3/18	2-Punkt Untergruppe	. . using electric current passing between devices along the route and devices on the vehicle or vehicle train
B61L 3/20	3-Punkt Untergruppe	. . . employing different frequencies or coded pulse groups
B61L 3/22	2-Punkt Untergruppe	. . using magnetic or electrostatic induction; using electromagnetic radiation
B61L 3/24	3-Punkt Untergruppe	. . . employing different frequencies or coded pulse groups

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B61L 5/00	Hauptgruppe	Local operating mechanisms for points or track-mounted scotch-blocks (track-mounted scotch-blocks <u>per se</u>B61K); Visible or audible signals; Local operating mechanisms for visible or audible signals (B61L 11/00 takes precedence)
B61L 5/02	1-Punkt Untergruppe	. Mechanical devices for operating points or scotch-blocks
B61L 5/04	1-Punkt Untergruppe	. Fluid-pressure devices for operating points or scotch-blocks
B61L 5/06	1-Punkt Untergruppe	. Electric devices for operating points or scotch-blocks
B61L 5/08	1-Punkt Untergruppe	. Underground actuating arrangements, e.g. for tramways
B61L 5/10	1-Punkt Untergruppe	. Locking mechanisms for points; Means for indicating the setting of points
B61L 5/12	1-Punkt Untergruppe	. Visible signals
B61L 5/14	2-Punkt Untergruppe	. . Form signals, e.g. semaphore arms
B61L 5/16	3-Punkt Untergruppe	. . . Local operating mechanisms for form signals
B61L 5/18	2-Punkt Untergruppe	. . Light signals; Mechanisms associated therewith, e.g. blinders
B61L 5/20	1-Punkt Untergruppe	. Audible signals, e.g. detonator
B61L 5/22	2-Punkt Untergruppe	. . Devices for initiating the release of detonators in a certain position of a signal
B61L 5/24	2-Punkt Untergruppe	. . Replacement of detonators
B61L 7/00	Hauptgruppe	Remote control of local operating means for points, signals, or track-mounted scotch-blocks (B61L 11/00 takes precedence; interlocking arrangements B61L 19/00)
B61L 7/02	1-Punkt Untergruppe	. using mechanical transmission, e.g. wire, lever
B61L 7/04	1-Punkt Untergruppe	. using fluid-pressure transmission
B61L 7/06	1-Punkt Untergruppe	. using electrical transmission
B61L 7/08	2-Punkt Untergruppe	. . Circuitry
B61L 7/10	3-Punkt Untergruppe	. . . for light signals, e.g. for supervision, back- signalling
B61L 9/00	Hauptgruppe	Illumination specially adapted for points, form signals, or gates (lighting in general F21)
B61L 9/02	1-Punkt Untergruppe	. non-electric
B61L 9/04	1-Punkt Untergruppe	. electric
B61L 11/00	Hauptgruppe	Operation of points from the vehicle or by the passage of the vehicle
B61L 11/02	1-Punkt Untergruppe	. using mechanical interaction between vehicle and track
B61L 11/04	2-Punkt Untergruppe	. . Trailable point locks
B61L 11/06	2-Punkt Untergruppe	. . with fluid-pressure transmission
B61L 11/08	1-Punkt Untergruppe	. using electrical or magnetic interaction between vehicle and track
B61L 13/00	Hauptgruppe	Operation of signals from the vehicle or by the passage of the vehicle
B61L 13/02	1-Punkt Untergruppe	. using mechanical interaction between vehicle and track
B61L 13/04	1-Punkt Untergruppe	. using electrical or magnetic interaction between vehicle and track
B61L 15/00	Hauptgruppe	Indicators provided on the vehicle or vehicle train for signalling purposes
B61L 15/02	1-Punkt Untergruppe	. Head or tail indicators, e.g. light

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B61L 17/00	Hauptgruppe	Switching systems for classification yards (rail brakes B61K)
B61L 17/02	1-Punkt Untergruppe	. Details, e.g. indicating degree of track filling
B61L 19/00	Hauptgruppe	Arrangements for interlocking between points and signals by means of a single interlocking device (station block arrangements B61L 21/00)
B61L 19/02	1-Punkt Untergruppe	. Interlocking devices having mechanical or fluid-pressure operation
B61L 19/04	2-Punkt Untergruppe	. . Details, e.g. hand lever, back-signalling device
B61L 19/06	1-Punkt Untergruppe	. Interlocking devices having electrical operation
B61L 19/08	2-Punkt Untergruppe	. . Special arrangements for power supply for interlocking devices
B61L 19/10	2-Punkt Untergruppe	. . with mechanical locks
B61L 19/12	3-Punkt Untergruppe	. . . Details
B61L 19/14	2-Punkt Untergruppe	. . with electrical locks
B61L 19/16	3-Punkt Untergruppe	. . . Details
B61L 21/00	Hauptgruppe	Station blocking between signal boxes in one yard (interlocking between points and signals by means of a single interlocking device B61L 19/00)
B61L 21/02	1-Punkt Untergruppe	. Mechanical locking and release of the route; Repeat locks; Coupling of semaphores
B61L 21/04	1-Punkt Untergruppe	. Electrical locking and release of the route; Electrical repeat locks
B61L 21/06	1-Punkt Untergruppe	. Vehicle-on-line indication; Monitoring locking and release of the route
B61L 21/08	1-Punkt Untergruppe	. Order transmission and reception arrangements for giving or withholding permission
B61L 21/10	1-Punkt Untergruppe	. Arrangements for trains which are closely following one another (automatic central traffic control systems B61L 27/04)
B61L 23/00	Hauptgruppe	Control, warning or like safety means along the route or between vehicles or vehicle trains [4]
B61L 23/02	1-Punkt Untergruppe	. for indicating along the route the failure of brakes
B61L 23/04	1-Punkt Untergruppe	. for monitoring the mechanical state of the route
B61L 23/06	1-Punkt Untergruppe	. for warning men working on the route
B61L 23/08	1-Punkt Untergruppe	. for controlling traffic in one direction only (station blocking between signal boxes in one yard B61L 21/00)
B61L 23/10	2-Punkt Untergruppe	. . manually operated
B61L 23/12	2-Punkt Untergruppe	. . partly operated by train
B61L 23/14	2-Punkt Untergruppe	. . automatically operated
B61L 23/16	3-Punkt Untergruppe	. . . Track circuits specially adapted for section blocking
<i>B61L 23/18</i>	<i>3-Punkt Untergruppe</i>	<i>. . . specially adapted for maintaining a safe distance between vehicles or vehicle trains depending upon speed and traffic density [1, 2006.01]</i>
B61L 23/20	3-Punkt Untergruppe	. . . with transmission of instructions to stations along the route
B61L 23/22	1-Punkt Untergruppe	. for controlling traffic in two directions over the same pair of rails (station blocking between signal boxes in one yard B61L 21/00)
B61L 23/24	2-Punkt Untergruppe	. . using token systems, e.g. train staffs, tablets
B61L 23/26	2-Punkt Untergruppe	. . with means for actuating signals from the vehicle or by passage of the vehicle

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B61L 23/28	2-Punkt Untergruppe	. . using non-automatic blocking from a place along the route
B61L 23/30	2-Punkt Untergruppe	. . using automatic section blocking
B61L 23/32	3-Punkt Untergruppe	. . . with provision for the blocking of passing sidings
B61L 23/34	1-Punkt Untergruppe	. for indicating the distance between vehicles or vehicle trains by the transmission of signals therebetween [4]
B61L 25/00	Hauptgruppe	Recording or indicating positions or identities of vehicles or vehicle trains or setting of track apparatus
B61L 25/02	1-Punkt Untergruppe	. Indicating or recording positions or identities of vehicles or vehicle trains
B61L 25/04	2-Punkt Untergruppe	. . Indicating or recording train identities
B61L 25/06	1-Punkt Untergruppe	. Indicating or recording the setting of track apparatus, e.g. of points, of signals
B61L 25/08	2-Punkt Untergruppe	. . Diagrammatic displays
B61L 27/00	Hauptgruppe	Central traffic control systems
B61L 27/02	1-Punkt Untergruppe	. Manual systems
B61L 27/04	1-Punkt Untergruppe	. Automatic systems, e.g. controlled by train; Change-over to manual control
B61L 29/00	Hauptgruppe	Safety means for rail/road crossing traffic
B61L 29/02	1-Punkt Untergruppe	. Guards or obstacles for preventing access to the route (cattle guards connected to the permanent way E01B 17/00)
B61L 29/04	1-Punkt Untergruppe	. Gates for level crossings
B61L 29/06	2-Punkt Untergruppe	. . yielding to vehicles in one direction but operated in a different direction
B61L 29/08	1-Punkt Untergruppe	. Operation of gates; Combined operation of gates and signals
B61L 29/10	2-Punkt Untergruppe	. . Means for securing gates in their desired position
B61L 29/12	2-Punkt Untergruppe	. . Manual operation
B61L 29/14	3-Punkt Untergruppe	. . . mechanically
B61L 29/16	3-Punkt Untergruppe	. . . electrically
B61L 29/18	2-Punkt Untergruppe	. . Operation by approaching rail vehicle or rail vehicle train
B61L 29/20	3-Punkt Untergruppe	. . . mechanically
B61L 29/22	3-Punkt Untergruppe	. . . electrically
B61L 29/24	1-Punkt Untergruppe	. Means for warning road traffic that a gate is closed or closing, or that rail traffic is approaching, e.g. for visible or audible warning
B61L 29/26	2-Punkt Untergruppe	. . mechanically operated
B61L 29/28	2-Punkt Untergruppe	. . electrically operated
B61L 29/30	3-Punkt Untergruppe	. . . Supervision, e.g. monitoring arrangements
B61L 29/32	3-Punkt Untergruppe	. . . Timing, e.g. advance warning of approaching train
B61L 99/00	Hauptgruppe	Subject matter not provided for in other groups of this subclass [2006.01]