

Symbol	Typ	Titel
<b>B</b>	<b>Sektion</b>	<b>PERFORMING OPERATIONS; TRANSPORTING</b>
<b>B61</b>	<b>Klasse</b>	<b>RAILWAYS</b>
<b>B61F</b>	<b>Unterkategorie</b>	<b>RAIL VEHICLE SUSPENSIONS, e.g. UNDERFRAMES, BOGIES OR ARRANGEMENTS OF WHEEL AXLES; RAIL VEHICLES FOR USE ON TRACKS OF DIFFERENT WIDTH; PREVENTING DERAILING OF RAIL VEHICLES; WHEEL GUARDS, OBSTRUCTION REMOVERS OR THE LIKE FOR RAIL VEHICLES (for vehicles in general B60; axles or wheels B60B; vehicle tyres B60C)</b>
<b>B61F 1/00</b>	<b>Hauptgruppe</b>	<b>Underframes (making railway vehicle underframes by forging or pressing B21K 7/12) [1, 2006.01]</b>
B61F 1/02	1-Punkt Untergruppe	. with a single central sill [1, 2006.01]
B61F 1/04	1-Punkt Untergruppe	. of triangulated type [1, 2006.01]
B61F 1/06	1-Punkt Untergruppe	. specially adapted for locomotives or motor-driven railcars [1, 2006.01]
B61F 1/08	1-Punkt Untergruppe	. Details [1, 2006.01]
B61F 1/10	2-Punkt Untergruppe	.. End constructions [1, 2006.01]
B61F 1/12	2-Punkt Untergruppe	.. Cross bearers [1, 2006.01]
B61F 1/14	2-Punkt Untergruppe	.. Attaching or supporting vehicle body structure [1, 2006.01]
<b>B61F 3/00</b>	<b>Hauptgruppe</b>	<b>Types of bogies (B61F 5/00 takes precedence) [1, 2006.01]</b>
B61F 3/02	1-Punkt Untergruppe	. with more than one axle [1, 2006.01]
B61F 3/04	2-Punkt Untergruppe	.. with driven axles or wheels [1, 2006.01]
B61F 3/06	3-Punkt Untergruppe	... with three or more axles [1, 2006.01]
B61F 3/08	2-Punkt Untergruppe	... without driven axles or wheels [1, 2006.01]
B61F 3/10	3-Punkt Untergruppe	... with three or more axles [1, 2006.01]
B61F 3/12	1-Punkt Untergruppe	. specially modified for carrying adjacent vehicle bodies of articulated trains [1, 2006.01]
B61F 3/14	1-Punkt Untergruppe	. specially modified for reducing air resistance [1, 2006.01]
B61F 3/16	1-Punkt Untergruppe	. with a separate axle for each wheel [1, 2006.01]
<b>B61F 5/00</b>	<b>Hauptgruppe</b>	<b>Constructional details of bogies; Connections between bogies and vehicle underframes; Arrangements or devices for adjusting or allowing self-adjustment of wheel axles or bogies when rounding curves [1, 2006.01]</b>
B61F 5/02	1-Punkt Untergruppe	. Arrangements permitting limited transverse relative movements between vehicle underframe or bolster and bogie; Connections between underframes and bogies [1, 2006.01]
B61F 5/04	2-Punkt Untergruppe	.. Bolster supports or mountings (side bearings B61F 5/14) [1, 2006.01]
B61F 5/06	3-Punkt Untergruppe	... incorporating metal springs [1, 2006.01]
B61F 5/08	3-Punkt Untergruppe	... incorporating rubber springs [1, 2006.01]
B61F 5/10	3-Punkt Untergruppe	... incorporating fluid springs [1, 2006.01]
B61F 5/12	3-Punkt Untergruppe	... incorporating dampers [1, 2006.01]
B61F 5/14	2-Punkt Untergruppe	.. Side bearings [1, 2006.01]
B61F 5/16	2-Punkt Untergruppe	.. Centre bearings or other swivel connections between underframes and bolsters or bogies [1, 2006.01]

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B61F 5/18	3-Punkt Untergruppe	... King-bolts [1, 2006.01]
B61F 5/20	3-Punkt Untergruppe	... with springs allowing transverse movements [1, 2006.01]
B61F 5/22	2-Punkt Untergruppe	... Guiding of the vehicle underframes with respect to the bogies [1, 2006.01]
B61F 5/24	3-Punkt Untergruppe	... Means for damping or minimising the canting, skewing, pitching, or plunging movements of the underframes [1, 2006.01]
B61F 5/26	1-Punkt Untergruppe	. Mounting or securing axle-boxes in vehicle or bogie underframes [1, 2006.01]
B61F 5/28	2-Punkt Untergruppe	... Axle-boxes integral with, or directly secured to, vehicle or bogie underframes [1, 2006.01]
B61F 5/30	2-Punkt Untergruppe	... Axle-boxes mounted for movement under spring control in vehicle or bogie underframes [1, 2006.01]
B61F 5/32	3-Punkt Untergruppe	... Guides, e.g. plates, for axle-boxes [1, 2006.01]
B61F 5/34	4-Punkt Untergruppe	.... Wedge mechanisms for adjusting clearance between underframes and axles [1, 2006.01]
B61F 5/36	3-Punkt Untergruppe	... Arrangements for equalising or adjusting the load on wheels or springs, e.g. yokes [1, 2006.01]
B61F 5/38	1-Punkt Untergruppe	. Arrangements or devices for adjusting or allowing self-adjustment of wheel axles or bogies when rounding curves, e.g. sliding axles, swinging axles [1, 2006.01]
B61F 5/40	2-Punkt Untergruppe	... Bogies with side frames mounted for longitudinal relative movements [1, 2006.01]
B61F 5/42	2-Punkt Untergruppe	... Adjustment controlled by buffer or coupling gear [1, 2006.01]
B61F 5/44	2-Punkt Untergruppe	... Adjustment controlled by movements of vehicle body [1, 2006.01]
B61F 5/46	2-Punkt Untergruppe	... Adjustment controlled by a sliding axle under the same vehicle underframe [1, 2006.01]
B61F 5/48	2-Punkt Untergruppe	... Trailing or leading bogies for locomotives or motor-driven railcars (B61F 5/40 takes precedence) [1, 2, 2006.01]
B61F 5/50	1-Punkt Untergruppe	. Other details [1, 2006.01]
B61F 5/52	2-Punkt Untergruppe	... Bogie frames [1, 2006.01]
<b>B61F 7/00</b>	<b>Hauptgruppe</b>	<b>Rail vehicles equipped for use on tracks of different width [1, 2006.01]</b>
<b>B61F 9/00</b>	<b>Hauptgruppe</b>	<b>Rail vehicles characterised by means for preventing derailing, e.g. by use of guide wheels [1, 2006.01]</b>
<b>B61F 11/00</b>	<b>Hauptgruppe</b>	<b>Rail vehicles characterised by rail-engaging elements other than wheels, e.g. balls [1, 2006.01]</b>
<b>B61F 13/00</b>	<b>Hauptgruppe</b>	<b>Rail vehicles characterised by wheel arrangements, not otherwise provided for [1, 2006.01]</b>
<b>B61F 15/00</b>	<b>Hauptgruppe</b>	<b>Axle-boxes (mounting or securing axle-boxes B61F 5/26; lubrication B61F 17/00; bearings in general F16C) [1, 2006.01]</b>
B61F 15/02	1-Punkt Untergruppe	. with journal bearings [1, 2006.01]
B61F 15/04	2-Punkt Untergruppe	... for locomotives [1, 2006.01]
B61F 15/06	2-Punkt Untergruppe	... for cars [1, 2006.01]
B61F 15/08	2-Punkt Untergruppe	... the axle being slidable or tiltable in the bearings [1, 2006.01]
B61F 15/10	3-Punkt Untergruppe	... and having springs opposing such movements [1, 2006.01]
B61F 15/12	1-Punkt Untergruppe	. with roller, needle, or ball bearings [1, 2006.01]
B61F 15/14	2-Punkt Untergruppe	... constructed for taking-up axial pressure [1, 2006.01]
B61F 15/16	2-Punkt Untergruppe	... the axle being slidable or tiltable in the bearings [1, 2006.01]

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B61F 15/18	3-Punkt Untergruppe	... and having springs opposing such movements [1, 2006.01]
B61F 15/20	1-Punkt Untergruppe	. Details [1, 2006.01]
B61F 15/22	2-Punkt Untergruppe	... Sealing means preventing entrance of dust or leakage of oil [1, 2006.01]
B61F 15/24	3-Punkt Untergruppe	... preventing oil leakage when vehicle is tilted or inverted [1, 2006.01]
B61F 15/26	2-Punkt Untergruppe	... Covers; Sealing thereof [1, 2006.01]
B61F 15/28	2-Punkt Untergruppe	... Axle-boxes modified to ensure electrical conductivity [1, 2006.01]
<b>B61F 17/00</b>	<b>Hauptgruppe</b>	<b>Lubrication specially adapted for axle-boxes of rail vehicles (lubrication in general F16N) [1, 2006.01]</b>
B61F 17/02	1-Punkt Untergruppe	. with oil [1, 2006.01]
B61F 17/04	2-Punkt Untergruppe	... Lubrication by stationary devices [1, 2006.01]
B61F 17/06	3-Punkt Untergruppe	... by means of a wick or the like [1, 2006.01]
B61F 17/08	4-Punkt Untergruppe	.... Devices for pressing the wick or the like against the rotating axle [1, 2006.01]
B61F 17/10	3-Punkt Untergruppe	... by means of an oil bath [1, 2006.01]
B61F 17/12	3-Punkt Untergruppe	... by gravity [1, 2006.01]
B61F 17/14	2-Punkt Untergruppe	... Rotating lubricating devices [1, 2006.01]
B61F 17/16	3-Punkt Untergruppe	... with rings [1, 2006.01]
B61F 17/18	3-Punkt Untergruppe	... with chains [1, 2006.01]
B61F 17/20	3-Punkt Untergruppe	... with scoops or the like attached to, or coupled with, the axle [1, 2006.01]
B61F 17/22	3-Punkt Untergruppe	... with discs, rollers, or belts engaging the axle [1, 2006.01]
B61F 17/24	2-Punkt Untergruppe	... by built-in lubricating pumps [1, 2006.01]
B61F 17/26	2-Punkt Untergruppe	... by external feeding means, e.g. pneumatic devices [1, 2006.01]
B61F 17/28	2-Punkt Untergruppe	... Applications of oil cleaners not otherwise provided for [1, 2006.01]
B61F 17/30	1-Punkt Untergruppe	. with grease [1, 2006.01]
B61F 17/32	2-Punkt Untergruppe	... by manually-operated lubricators, e.g. screw cups [1, 2006.01]
B61F 17/34	2-Punkt Untergruppe	... by automatic means, e.g. with spring action [1, 2006.01]
B61F 17/36	1-Punkt Untergruppe	. with other, e.g. mixed, lubricating agents [1, 2006.01]
<b>B61F 19/00</b>	<b>Hauptgruppe</b>	<b>Wheel guards; Bumpers; Obstruction removers or the like (for vehicles in general B60R 19/00) [1, 2006.01]</b>
B61F 19/02	1-Punkt Untergruppe	. Wheel guards [1, 2006.01]
B61F 19/04	1-Punkt Untergruppe	. Bumpers or like collision guards [1, 2006.01]
B61F 19/06	1-Punkt Untergruppe	. Nets, catchers, or the like for catching obstacles or removing them from the track (mailbag catchers B61K 1/02) [1, 2006.01]
B61F 19/08	2-Punkt Untergruppe	... of the drop-down type [1, 2006.01]
B61F 19/10	3-Punkt Untergruppe	... automatically operated by engagement with obstacle [1, 2006.01]

Symbol	Typ	Titel
<b>B61F 99/00</b>	<b>Hauptgruppe</b>	<b>Subject matter not provided for in other groups of this subclass [2006.01]</b>