FLEISCHMANN

The model railway for experts

N «piccolo»

2005/06

Lokshop

LIST OF CONTENTS

SYMBOLS

	New items
7025	Article number of a standard loco equipped for 2-rail D.C. operation
67052 TWIN-DIGITAL	Digital version of a loco with TWIN-DECODER
8 7025 DCC-DIGITAL	Digital version of a loco with DCC-decoder
7 7236	Digital loco with DCC-sound-decoder
NEM	Standard NEM 651 socket for installation of a TWIN-/DCC-decoder
Overall length	Length of an item of rolling stock from buffer end to buffer end (Overall length)
	Traction tyres
	Brushes and springs
	Coach interior lighting
	White bulb*
	Red bulb* (for train end)
	Coach tail lighting
	Automatic tail lighting installed
	Triple headlights and red tail lighting, co-ordinated with the direction of travel
	Isolating plastic rail-joiner
	Spare Standard-Coupling
	PROFI-coupling
	Coupling connector piece
	Coupling connector piece for the "Rolling Road"
	Adapter
K	Slot-guide mechanism in vehicle chassis for true close-coupling in conjunction with the PROFI-coupling

** For simultaneous operation of both digital- and traditional D. C. vehicles, the bulbs of the D. C. vehicles should be replaced by the corresponding exchange bulbs for digital operation (see page 121).*

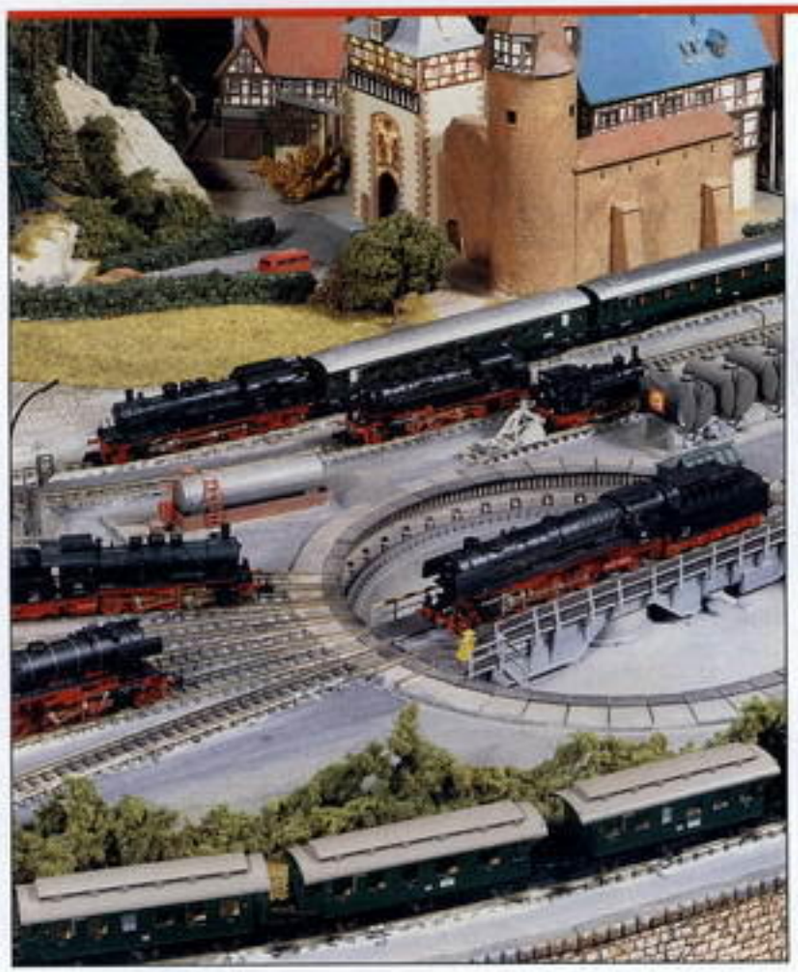
RAILWAY INSIGNIA

	German Railways up to 1949 (DRG/DR), epoch II
DR	German Railways in the formerly DDR from 1949 (DR), epoch III
DB	German Federal Railways up to 1994/ Deutsche Bahn AG from 1994
	Deutsche Reichspost, epoch II
	Deutsche Bundespost, epoch III
	Deutsche Bundespost, epoch IV
EC	EuroCity = IC trains crossing national borders
IC	InterCity
ICE	InterCityExpress
IR	InterRegio
S-BAHN	S-Bahn = commuter trains of the DB
DSG	German society of sleeping and restaurant coaches
MITROPA	Society of sleeping and restaurant coaches of Middle Europe
SNCF	French Railways, SNCF Société Nationale des Chemins de Fer Français
NS	Dutch Railways NS Nederlandse Spoorwegen
ÖBB	Austrian Railways ÖBB Österreichische Bundesbahnen
SJ	Swedish Railways SJ Statens Järnvägar
SBB	SBB Swiss State Railways CFF Chemins de Fer Fédéraux Suisses FFS Ferrovie Federali Svizzere

PERIODS OF THE GERMAN RAILWAYS

Epoch I	Rolling stock of the Länderbahn period (regional railways) from 1835 (Start of the Railway Era in Germany) up to 1920 (end of the regional railways).
Epoch II	Period of the German Railways up to 1945 (DRG).
Epoch III	The period of the 50's and 60's up to around 1970.
Epoch IV	1970 up to 1985. Start of the introduction of the computerised numbering system for locos and rolling stock.
Epoch V	The modern railway from 1985 onwards. The ICE period. Various colour concepts. Introduction of the colour "traffic red" since 1996.

THE FLEISCHMANN SYSTEM: QUALITY DOWN TO THE TINIEST DETAIL



Dear Railway Modeller,

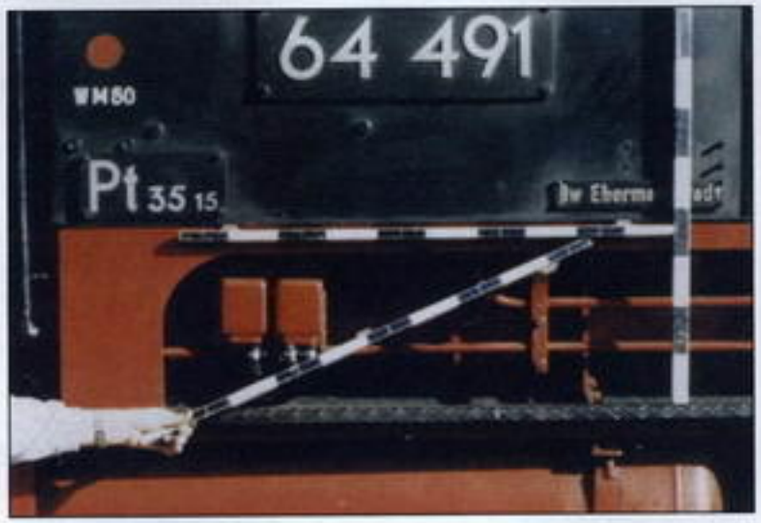
Quality is certainly not a mere accident of production, but the result of an extensive development and manufacturing process. Ever since FLEISCHMANN model railways have been made, our top priority has been the highest quality and precision.

From time immemorial, our traditional company has made models – to within a tenth of a millimetre accuracy – strenuously tested at each every step of the production process. Our rolling stock is true to the prototype right down to the minutest detail.

No wonder then, that FLEISCHMANN has been always awarded the outstanding "model railway oscar" in the quality category.

Naturally, the large prototype stands at the heart of every new development. The "master modelmakers" from Nürnberg reproduce the "big" railway in miniature detail.

And, so that your enjoyment is not spoilt, not only do our models look extremely good, they are robust enough to give "reliable service" on model layouts at home or equally gigantic exhibition layouts too.



In our manufacturing processes nothing is left to chance. This begins with careful research into the prototype: The original plans are evaluated, vehicles are measured and then transferred by our modelmakers, millimetre exact, into the model railway scale. Selection of the correct raw materials is also very important. High value plastics are prerequisites for high product quality and perfect reproduction. Incredible sharpness is also achieved with the so-called tampo printing. That's how, for example, the loco lettering can be easily read with the aid of a magnifying glass, yet is fine enough to be within scale size. Steam engines radiate in their black, silk matt finish. Colour variations between plastic and metal parts cannot be perceived because of the excellent materials used. It's only on closer examination that one discovers the exquisite details like the boiler vents, air pumps or fine rows of rivets. Not merely on the grounds of perfect detailing, but also the shear variety of classes, has FLEISCHMANN become known as the steam engine specialist. Besides the appearance, we also set additional standards of quality: Our rolling stock is famous for outstanding free-running. Connoisseurs say that our wagons even have the "sensitivity of a level". The "engine drivers" of long trains would certainly agree with this comment.

Saving the best to last:

All locomotives, wagons, points, signals and turntables are thoroughly tested and checked for outward appearance and operational capability. No locomotive leaves our production works before they have each successfully completed a thorough running test.

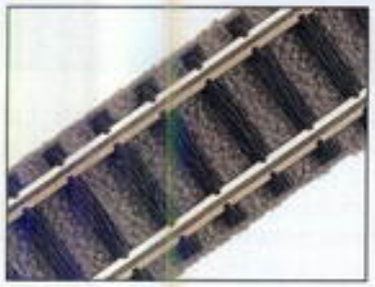
Thus, it's only after our extensive manufacturing processes and strict quality control, at each and every stage at FLEISCHMANN, can an imposing steam engine be placed "in service" on your model layout.

CLIMB ABOARD!

THE FLEISCHMANN SYSTEM: YOU'RE RUNNING "INTERNATIONAL" WITH US

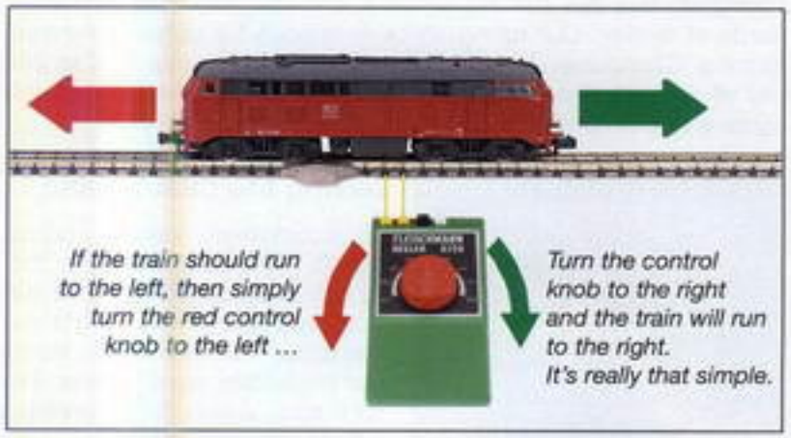
There are good reasons why FLEISCHMANN runs with the international two-rail D.C. system:

FLEISCHMANN runs on "international" tracks, because the majority of model railways around the world are run with the two-rail D.C. system. Our tiny "power packs" are driven by D.C. power at a maximum of 14 volts.



So that everything runs smoothly, the N «piccolo» track system is at your disposal. The robust tracks have full-profile rails and moulded ballasted bed. Tedious ballasting of the trackwork is a thing of the past. One more advantage: power can be connected to the track anywhere around the layout.

Besides the very good current carrying by the two rails, there's the additional advantage of the realistic appearance.



The control is simple because the direction of travel is simply determined by the direction of the control knob.

Equally smooth acceleration and superbly smooth slow running make our transformers and controllers distinctive. That makes shunting that much more enjoyable!

No matter whether it's analog or digital – you can rely on the model railway for experts:

As the layout continues to grow, so does the desire to get the most out of all the **fascinating operational possibilities** for the layout. And now it's become much easier: increasingly more and more railway modellers are using digital control so that they can get prototypical multi-train operation on their layouts. With ***FLEISCHMANN-DIGITAL*** you can control several locos on one track, yet independently of each other, switch complete routes of points and even individually set the running characteristics of each loco.

How is this possible? As opposed to the standard analog operation – where the locomotive is fed with power directly from the track – with digital multi-train control, there is a constant power in the track.

This means: On an **analog layout**, the further you "open up" the regulator, the faster the loco runs. If you now put a second loco on the track, it will receive the same power as the first one. In order to run the trains independently from each other, the layout must be split up into separate electrical sections (fed from additional transformers/controllers). The FLEISCHMANN block system, the comprehensive switching accessories as well as the track-diagram controls or push-button switches enable the "analog modeller" to recreate a versatile prototypical operation.

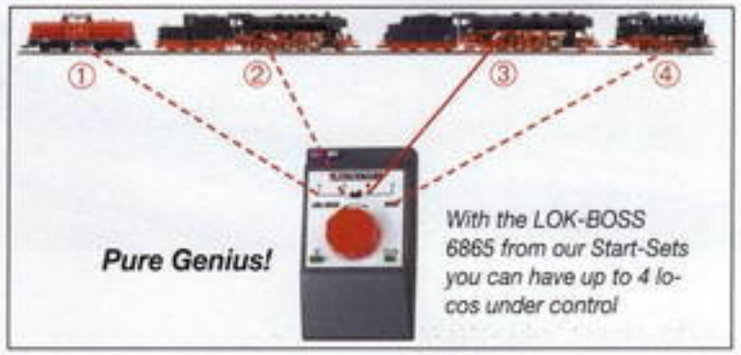
It's different for digital multi-train control: the constant power serves first of all to provide power to the vehicle, and secondly to carry the digital control commands. The decoders in the locomotives recognise these signals and translate them into control commands. They control how much power the motor is to receive, and thereby determine the speed and direction of the loco.

Each digitally controlled loco with its inbuilt decoder has its own address and only reacts to commands sent to its own specific address. So, within one circuit, you can be shunting for example, whilst other trains can be running in and out of the station. Another advantage is the possibility of "work sharing": several operators – i.e. father and son – can run trains together with "equal rights", because all loco addresses can be accessed from several controllers.

FLEISCHMANN-DIGITAL – a digital multi-train system for beginners, learners and digital experts.

FLEISCHMANN-DIGITAL is a complete multi-train system with the whole range of power providers, controllers and control components – all from one source! You can enlarge your layout step by step and extend it with new operations.

Just as each of us speak different languages – and as often as not, don't understand – there are several digital languages for model railways. The most widespread digital language for railway modellers throughout the world is DCC as per the NMRA-standard, which is also used by FLEISCHMANN. You'll make the right start in the digital model railway world with our digital Start-Sets. "Unpack, put it together, off you go" – as we say. Each Start-Set is a complete miniature layout with a digital loco, wagons, tracks and a digital controller: the LOK-BOSS 6865 with mains supply unit. The layout is soon put together and the LOK-BOSS controller itself will look after the operations. They will now all listen to its – digital – commands.



Our versatile central controller **TWIN-CENTER 6802**, offers you no end of possibilities for digital operation; the TWIN covers **two digital languages:** one, the international standard **DCC**, the other, **FMZ** – the well-known FLEISCHMANN multi-train control system.

Our **Sound locomotives** are the "crowning glory" of digital operation. These bring real railway atmosphere to your layout. The locos are not just impressive to the eye. With their original noises, these tiny "works of wonder" will give pleasure to your ears.

CLIMB ABOARD!

THE FLEISCHMANN-SYSTEM: BUILDING IN STYLE

Why is it so important to choose the right track system?

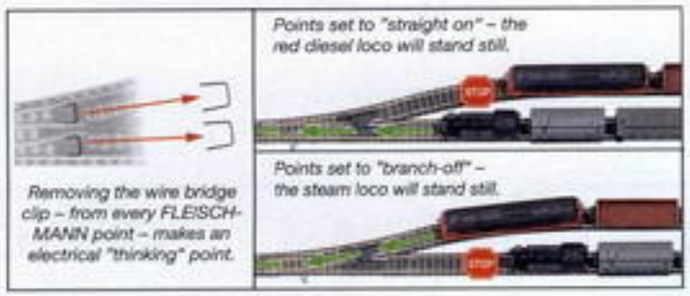
Quite simple: The correct choice determines the amount of enjoyment when planning the trackwork later.

Realistic looking with an easily understandable track geometry – that makes it simple for the beginner and can easily be built up into larger model railway layouts. A super-layout grows step by step from the original purchase of a Start Set with N «piccolo»-tracks together with corresponding track sets and individual track pieces.

The FLEISCHMANN N «piccolo» track conforms to the international N gauge standard, i. e. the distance between the rails is 9 mm.

Can points think?

At least with FLEISCHMANN! All points are made to be **"thinking" points.** A quick flick of the wrist is enough to make the current only flow in the same direction as the points are set. Completely automatically. In this way, you can run several trains within the same power circuit without needing any additional wiring. This huge advantage is even offered by the three-way point, which – especially in shunting operations – can save a great deal of space.



Besides:
Our points are available already fitted with point motors for electrical operation, or as manual points with a lever for hand operation. All the manual points can be converted later to electrical operation by just plugging in the point motor.

Can trains climb mountains?

At least with FLEISCHMANN! Our original rack railway can climb gradients of up to 25 %. Our flexible rack & pinion track is ideal for making rack sections, because it can be simply used for any straight or curved routes.

Is there a turntable with up to 48 track exits?

Yes, from FLEISCHMANN! Our huge, electrically operated supermodel turntable with up to 48 track exits can be fitted into most layouts and offers lots of possibilities to accomodate locomotives. Plus, it can even "think" too: Only the track exit lined up with, and electrically connnected, to the turntable is fed with power. Thus one exit has power - whilst the other "47" exits remain without power.

Unpack, put it together, off you go – complete enjoyment from the very beginning!

Enjoyment is written large for FLEISCHMANN model railways – right from the very start. "Unpack, put it together, off you go" – whether young or old, digital freak or steam engine fan, everyone is always astonished by our model railways.

With the large choice of Start-Sets, whether analog or digital, you'll be starting off right in the world of model railways. Each Start-Set is a complete miniature layout with loco, wagons, tracks and a controller or likewise LOK-BOSS. Following the ABC-system, the layout can be extended step by step using the track packs right up to a large model railway layout.

For the perfect start, we recommend the Start-Set of the Year (analog: Art.-No. 9395; digital: Art.-No. 8 9395). Because of the many accessories, with its combination of road and rail, it offers all sorts of operational possibilities.

Whether analog – or ...

... digital:

FLEISCHMANN is just the right choice!

CLIMB ABOARD!

START SET WITH GOODS TRAIN

9315

A
START-SET

Size of layout
51 cm x 40 cm

9315 · START SET with goods train.
Containing: 1 tank loco, 1 low-sided wagon, 1 tank wagon, 1 high-sided wagon, 1 controller and 1 mains transformer, 10 tracks (1 x 9101, 8 x 9120, 1 straight feed track). Train length ca. 250 mm.

TRACK SETS WITH READY BALLASTED TRACK

B
9189

9189 · STATION SET
Containing: 4 straight tracks 9100, 2 uncoupler tracks 9114, 1 curved point left 9174 and 1 curved point right 9175 for a long "platform track".

C
9190

9190 · SHUNTER SET
Containing: 6 straight tracks 9100, 1 uncoupler track 9114, 2 buffer stops 9116, 2 curved tracks 9136, 1 left point 9170 and 1 right point 9171.

D
9191

9191 · COMPLETE SET
Containing: 12 straight tracks 9100, 8 curved tracks 9125, 1 curved point left 9174, 1 curved point right 9175 and 1 track feed clip 9400.

E
9194

9194 · THREE-WAY POINT SET
Containing: 1 three-way point 9157, 2 uncoupler tracks 9114, 2 buffer stops 9116, 13 straight tracks (7 x 9100, 3 x 9101, 2 x 9102, 1 x 9103), 2 curved tracks 9136.

THE SIMPLE, STEP BY STEP WAY TO BUILD UP YOUR LAYOUT!

All manually operated points (standard-, curved-, three-way- or double slips) as well as manual uncoupler tracks, can be converted to electrical operation by simply clipping on an electric motor.

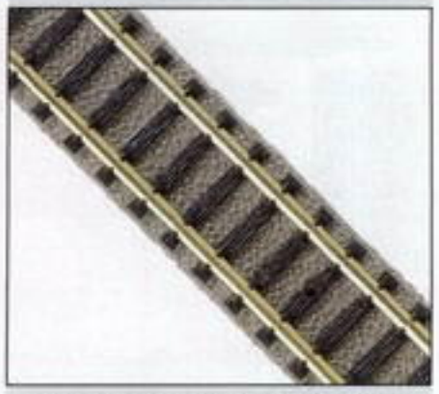
START SET WITH READY-BALLASTED TRACKS

With goods train and siding for shunting trains

START-SET

9336

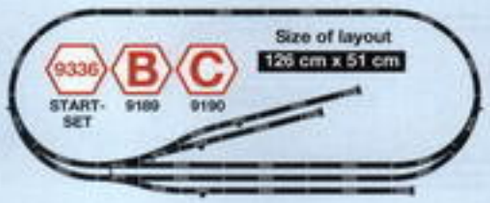
9336 · START-SET.
Complete ready-to-run-set with lots of play value.
Contents: 1 mixed traffic tank locomotive, 1 open goods wagon, 1 stake wagon, 1 controller and 1 mains transformer, 4 straight tracks (3 x 9100, 1 straight track with connecting wire), 8 x 9125, 1 buffer stop 9116, 1 standard point left 9170.
Train length approx. 185 mm.



The ready-ballasted N «piccolo»-track.

The point can be converted to electrical operation at a later date.

POSSIBLE COMBINATIONS WITH TRACK SETS (PAGES 6/7):



All manually operated points (standard-, curved-, three-way- or double slips) as well as manual uncoupler tracks, can be converted to electrical operation by simply clipping on an electric motor.

START SET "REGIONALEXPRESS"

with controller and ballast trackwork for the perfect start into the world of modern trains.

Pack with handy carrying handle!

9367

9367 · The *"RegionalExpress"* in an attractive Startset together with everything else needed to set off on your journey into the world of modern trains.

1 Diesel loco, Class 218, **with standard NEM 651 socket for installation of a decoder (DCC: 6859, TWIN: 6839)**, with headlights co-ordinated with the direction of travel, in traffic red livery, 2 double-decker coaches in traffic red livery (1st/2nd class and 2nd class), 1 controller and 1 mains transformer, 5 straight tracks (3 x 9100, 1 x 9101, 1 straight feed track), 8 curved tracks 9125 and one N «piccolo»-catalogue (German language). Train length: approx. 430 mm.

The trackwork contained in this set gives a stretched oval with the larger radius 2 curves.

Diesel loco with standard NEM 651 socket for installation of a decoder (DCC: 6859, TWIN: 6839).

Diesel loco, Class 218, with light change according to direction of travel!

POSSIBLE COMBINATIONS WITH TRACK SETS (PAGES 6/7):

All manually operated points (standard-, curved-, three-way- or double slips) as well as manual uncoupler tracks, can be converted to electrical operation by simply clipping on an electric motor.

INTERCITY-EXPRESS ICE 2 FOR BEGINNERS

Start Set with controller and large track oval for the perfect start into the world of the fastest trains!

9382 Ⓚ

9382 ICE 2 START SET

9382 · The ICE 2 supertrain with traffic red stripe of the DB AG:
Contents: One ICE 2-driving coach with motor*, **with standard NEM 651 socket for installation of a DCC-decoder 6857,** and one ICE 2-control-cab coach both white/red headlights co-ordinated with the direction of travel, one 1st class ICE 2-intermediate coach, epoch V. One controller and 1 mains transformer, 6 straight tracks (5 x 9100, 1 x 9101), 1 straight feed track, 8 curved tracks 9125, 1 re-railer 9480, 2 coupling adapters 38 7007, 2 standard couplings 9525. Approximate length of train ca. 470 mm. The track contained in this set gives a long stretched oval with the larger radius R 2 curves. The three-part ICE 2 can be increased by adding any of the intermediate coaches 7491-7496 (see pages 56/57).
The close-coupling mechanism and the swivelling corridor connections ensure the white/red ICE 2 looks really super on the layout.

*Dummy pantograph on roof without electrical connection, motor without flywheel, otherwise technical as per 7490 (see page 56).

ICE 2: One whole train made up from two half-trains.
The concept of the ICE 2 is basically different from the ICE 1. Whilst the ICE 1 consists of two power cars and up to a maximum of 13 intermediate coaches, an ICE 2 can be made up from two train units ("Half-trains") coupled together to form one complete train ("Long Train"). After opening the bow doors on the ends of the trains, by using a special coupling, the two train units – each consisting of a power car, six intermediate coaches and a cab trailer – can be made up into one long train. Even on the FLEISCHMANN models, two ICE 2 units can be prototypically joined together.

Driving coach with standard NEM 651 socket for installation of a DCC-decoder 6857.

POSSIBLE COMBINATIONS WITH TRACK SETS (PAGES 6/7):

All manually operated points (standard-, curved-, three-way- or double slips) as well as manual uncoupler tracks, can be converted to electrical operation by simply clipping on an electric motor.

START SET OF THE YEAR FROM FLEISCHMANN

All sorts of play value from the very beginning because of lots of accessories, and the combination of road and rail!

9395

9395 START-SET A + B

Size of layout
85 cm x 45 cm

9395 · Startset of the Year from FLEISCHMANN with large contents.

The complete beginner's set for the perfect start, with lots of operating possibilities.

Contents: 1 tender loco of the Class 53, with double headlights, 3 goods wagons, 4 model cars, 1 controller and 1 mains transformer, 6 straight tracks (3 x 9100, 2 x 9101, 1 x 9103), 1 straight feed track, 8 curved tracks 9120, 2 uncoupler tracks 9114, 1 curved point left 9168, 1 curved point right 9169, 1 level crossing 9499, 1 re-railer 9480 and 1 N «piccolo»-catalogue (German language). Train length: approx. 305 mm.
The track contained will make up an oval Ⓐ with a long passing loop Ⓑ.

Points and uncoupler tracks can be converted to electrical operation at a later date.

POSSIBLE COMBINATIONS WITH TRACK SETS (PAGES 6/7):

THE ATTRACTIVELY PRICED ENTRY INTO DIGITAL MULTI-TRAIN

"Unpack, put it together, and off you go" – the simplest start with the attractively priced DCC-START-SETS from FLEISCHMANN

With our **DCC-START-SETS** you enter the world of digital model railways in the right way. "Unpack, put it together, and off you go" – that's just how it goes. Each START-SET is a complete miniature layout with a digitally controlled loco, wagons, tracks, **LOK-BOSS** controller and mains transformer unit.
The layout is soon made up and the **LOK-BOSS** controller looks after the enjoyment: everything now awaits your digital commands!

Practical: The locos contain a load-independent decoder. This means that the speed is unaffected by the loading, in other words, whether running up or downhill, the speed remains the same (as long as there is sufficient power to the motor).
You can easily build up your layout with all of the track pieces of the FLEISCHMANN track system – ideally using the track packs.

DIGITAL-START-SET with Goods Train

8 9332
DCC-DIGITAL

8 9332 DIGITAL-START-SET

8 9332 · DIGITAL-START-SET.
Contents: 1 digital tank loco, Class 80, **with power regulated DCC-decoder,** 2 open goods trucks, **1 controller LOK-BOSS** and 1 mains transformer, 10 tracks (1 x 9101, 8 x 9125, 1 straight feed track) and 1 N «piccolo»-catalogue (German language). Train length: approx. 185 mm.

Track contents of DCC-START-SET 8 9332

Size of layout
58 cm x 47 cm

Possible combinations with Track Sets B and C of the pages 6/7

All manually operated points (standard-, curved-, three-way- or double slips) as well as manual uncoupler tracks, can be converted to electrical operation by simply clipping on an electric motor.

CONTROL WITH THE DCC-START-SETS FROM FLEISCHMANN

Digital START-SET of the Year from FLEISCHMANN with large contents

8 9394
DCC-DIGITAL

8 9394 DIGITAL-START-SET

8 9394 · Digital START-SET of the Year from FLEISCHMANN – with large contents.

The complete beginner's set for the perfect start, with lots of operating possibilities.

Contents: 1 digital diesel loco, Class V 100, **with power regulated DCC-decoder**, with headlights co-ordinated with the direction of travel, 3 goods trucks, 4 model cars, **1 controller LOK-BOSS** and 1 mains transformer, 6 straight tracks (3 x 9100, 2 x 9101, 1 x 9103), 1 straight feed track, 8 curved tracks 9120, 2 uncoupler tracks 9114, 1 curved point left 9174, 1 curved point right 9175, 1 level crossing 9499, 1 re-railer 9480 and 1 N «piccolo»-catalogue (German language). Train length: approx. 280 mm.

The track contained will make up an oval with a long passing loop.

Track contents of the DCC START-SET of the Year 8 9394

Size of layout
85 cm x 45 cm

START-SET of the Year 9190

Size of layout
107 cm x 48 cm

START-SET of the Year 9196

Size of layout
150 cm x 56 cm

Further possible combinations of the digital START-SET of the Year 8 9394 with Track Sets: see page 11

All manually operated points (standard-, curved-, three-way- or double slips) as well as manual uncoupler tracks, can be converted to electrical operation by simply clipping on an electric motor.

THE ATTRACTIVELY PRICED ENTRY INTO DIGITAL MULTI-TRAIN CONTROL – WITH THE DCC-START-SET OF THE YEAR FROM FLEISCHMANN

Digital START-SET of the Year from FLEISCHMANN with large contents

8 9395
DCC-DIGITAL

8 9395 DIGITAL-START-SET

8 9395 · Digital START-SET of the Year from FLEISCHMANN – with large contents. The complete beginner's set for the perfect start, with lots of operating possibilities.
Contents: 1 digital tender loco, class 53, **with power regulated DCC-decoder** and double headlights, 3 goods trucks, 4 model cars, **1 controller LOK-BOSS** and 1 mains transformer, 6 straight tracks (3 x 9100, 2 x 9101, 1 x 9103), 1 straight feed track, 8 curved tracks 9120, 2 uncoupler tracks 9114, 1 curved point left 9168, 1 curved point right 9169, 1 level crossing 9499, 1 re-railer 9480 and 1 N «piccolo»-catalogue (German language). Train length: approx. 305 mm.
The track contained will make up an oval with a long passing loop.

The steam loco with DCC-decoder has lighting which can be switched on or off, as well as acceleration and braking inertia.

For further informations on the FLEISCHMANN Multi-Train Control System please refer to pages 130 - 143.

Track contents of the DCC START-SET of the Year 8 9395

Size of layout
85 cm x 45 cm

START-SET of the Year 9190

Size of layout
107 cm x 48 cm

START-SET of the Year 9196

Size of layout
150 cm x 56 cm

Further possible combinations of the digital START-SET of the Year 8 9395 with Track Sets: see page 11

All manually operated points (standard-, curved-, three-way- or double slips) as well as manual uncoupler tracks, can be converted to electrical operation by simply clipping on an electric motor.

ENTRY WITH THE "MAID OF ALL WORK" – THE TWIN-CENTER – INTO THE DIGITAL FUTURE OF MODEL RAILWAYS

The TWIN-CENTER: robust technology – simple operation!

- *Two independent controllers to run locomotives*
- *Keyboard to switch points and signals – yes, even complete routes of points*
- *Fine speed step controls with up to 128 speed steps (DCC)*
- *Switching loco lighting on/off*
- *8 Special functions can be called up – ideal for the sound-locos from FLEISCHMANN!*
- *And lots more ...*

You can find further information on pages 130 – 143.

DIGITAL START-SET "CARGOEXPRESS" with TWIN-CENTER

6 9368 *TWIN-DIGITAL*

6 9368 DIGITAL-START-SET

6 9368 - DIGITAL-START-SET "CARGO-EXPRESS" WITH TWIN-CENTER

Contents: 1 digital diesel loco, class 218 with **TWIN-DECODER** and light change, 4 "Cargo" goods wagons, **1 TWIN-CENTER 6802** with hand book, 1 *DIGITAL CONTROL*-transformer 6811, 7 straight tracks (6 x 9100, 1 x 9101), 8 curved tracks 9120, 2 uncoupler tracks 9114, 1 curved point left 9174, 1 curved point right 9175, 1 re-railer 9480, 1 current feed clip 9400, electric connection equipment and 1 N «piccolo»-catalogue (German language). Train length approx. 495 mm.
The track contents will make up an oval with a long passing loop.

The loco with TWIN-DECODER has lighting which can be switched on or off, as well as individual acceleration and braking inertia and settable minimum/maximum speed.

Track contents of the DIGITAL-START-SET 6 9368

Possible combinations with Track Sets B C and D of the pages 6/7:

Important: Each digital loco from FLEISCHMANN can be controlled from the TWIN-CENTER 6802!

ENTRY WITH THE "MAID OF ALL WORK" – THE TWIN-CENTER – INTO THE DIGITAL FUTURE OF MODEL RAILWAYS

Digital Start-Set "REGIONALEXPRESS" with TWIN-CENTER

6 9369
TWIN-DIGITAL

6 9369 DIGITAL-START-SET

6 9369 · Digital Start Set "REGIONALEXPRESS" with TWIN-CENTER.

Contents: 1 digital diesel loco, class 218, with **TWIN-DECODER** and light change, 2 double-decker coaches (1st/2nd class and 2nd class), 1 double-decker control-cab coach (2nd class), **1 TWIN-CENTER 6802** with handbook, 1 *DIGITAL CONTROL*-transformer 6811, 10 straight tracks (6 x 9100, 4 x 9101), 8 curved tracks 9125, 2 uncoupler tracks 9114, 1 curved point left 9174, 1 curved point right 9175, 1 re-railer 9480, current-feed clip 9400, electric connection equipment and 1 N «piccolo»-catalogue (German language). Train length approx. 602 mm. The track contained in this set gives a long, stretched oval (with the larger radius 2 curves) and a long passing loop.

The TWIN-CENTER: robust technology – simple operation!

- *Two independent controllers to run locomotives*
- *Keyboard to switch points and signals – yes, even complete routes of points*
- *Fine speed step controls with up to 128 speed steps (DCC)*
- *Switching loco lighting on/off*
- *8 Special functions can be called up – ideal for the sound-locos from FLEISCHMANN!*
- *And lots more ...*

You can find further information on pages 130 – 143.

The loco with TWIN-DECODER has lighting which can be switched on or off, as well as individual acceleration and braking inertia and settable minimum/maximum speed.

Track contents of the DIGITAL STARTSET 6 9369

Possible combinations with Track Sets B, C, E and f of the pages 6/7:

Important: Each digital loco from FLEISCHMANN can be controlled from the TWIN-CENTER 6802!

BR 194

Crocodiles that bite!

In ancient Egypt, crocodiles were honoured as holy animals, and elevated to the level of Gods through the figure of the God Sobek who was depicted with a crocodile head. It's just the same for those animals with a much tinier "bite" in the model railway jungle: Although they have only just "escaped" from the FLEISCHMANN factory gates, they are already assured of the worship of railway modellers. Recognised as the "Model of the Year", the class 194 *(Art.-No. 7394)* have snapped away at the competition to be awarded the top prize, proving that only they have the "bite".

Drive is through eight wheels from a total of six axles. Four wheels are fitted with traction tyres to enhance the tractive effort. The diecast metal chassis gives the goods traffic loco sufficient axle weight to transfer the smooth running from the flywheel-fitted motor.

The loco body as well as the roof details, such as the isolators and cables, are made from high-quality plastic. The neat rows of rivets down the loco sides are extremely finely detailed. Even the grills of the air vents can be picked out by eye – and that goes for the plastic handrails and grab rails on the doors too. On the front sections, the grab rails are actually free standing. Just take a look at the minute steps. There is even a full interior inside the cabs.

For such a small N gauge model the roof cables are really neatly carried out. The isolators and cables are even correctly coloured: the first brown, the last one red. Beneath the prototypical roofline guttering, you will find neat rows of rivets, maintenance covers, etc. The pantographs are robustly constructed to actually pick up power from the overhead catenary.

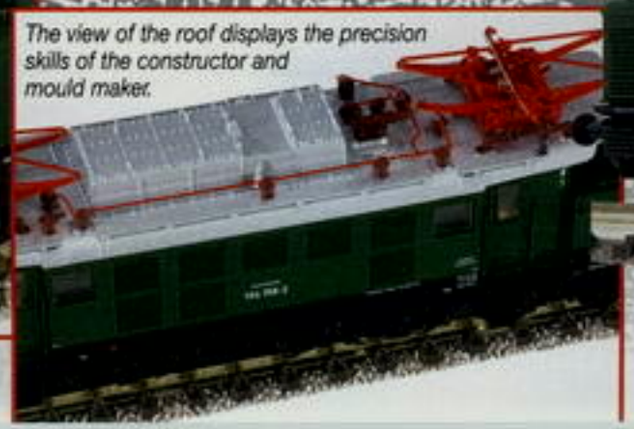
The well-proportioned reproduction of the loco body is set off by the details included on the bogie frames. Axle mountings, suspension springs, sand pipes and sand boxes, plus lots more to delight the beholder.

For those already used to FLEISCHMANN railways none of that is new: looking through a magnifying glass, you can easily recognise the epoch-correct lettering for epoch IV. A little closer study will reveal further details like the loco depot or the weight indications.

Enough to whet your appetite for "more"? In September 2005 an even rarer crocodile species was discovered: 194 178 *(Art.-No. 7395)*, uniquely christened the "Blue Mauritius" because of her colours.

However, whether it's the green version or the turquoise blue/beige: the crocodiles from FLEISCHMANN will give the services on your layout just that extra little bit of "bite"!

reproductions characteristic ections.



The view of the roof displays the precision skills of the constructor and mould maker.

7000 · Tank locomotive. Overall length: 55 mm. Finely detailed, livered and lettered. Cast metal chassis and body. Drive on all 4 driving wheels. Automatic couplings at each end.

The loco hauled local traffic of light goods and passenger trains on both branch lines and industrial lines.

6518 9521 9541

7000

7025

8 7025 DCC-DIGITAL

7025 · Class 80, tank locomotive of the DB. Overall length: 60 mm. Super-detailling, -livery and -lettering. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 6 driving wheels. Automatic couplings at each end. Epoch III.

8 7025 · Digital version of the loco 7025 with DCC-Decoder.

6518 9521 9541

7026 · Class 80, tank locomotive of the DR. Overall length: 60 mm. Super-detailling, -livery and -lettering. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 6 driving wheels. Automatic couplings at each end. Epoch III.

The prototype bore the number 80 003, developed 575 Hp (423 kW), weighed 52.1 tons, ran forwards and backwards at 45 km/h, and was based at Leipzig Main Station West. The lettering corresponds to that of the Deutsche Reichsbahn in epoch III.

6518 9521 9541

7026

7027

7027 · Class 80, tank locomotive of the DRG. Overall length: 60 mm. Super-detailling, -livery and -lettering. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 6 driving wheels. Automatic couplings at each end. Epoch II.

In 1928 and 1929, the shunting locos of class 80 were delivered to the DRG from the companies of Hohenzollern, Union, Wolf and Jung. In the first instance, they were designed for shunting duties in the large stations of Cologne and Leipzig. Apart from one engine, all of them survived the second World War.

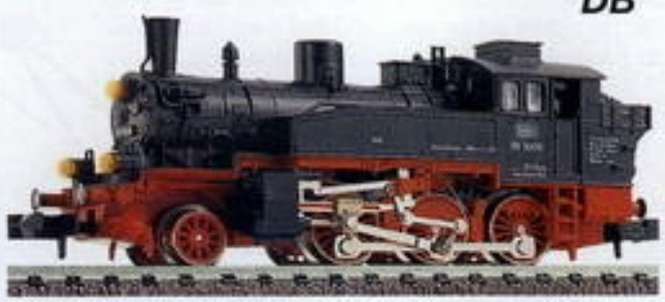
6518 9521 9541

7030 · Class 91[3-10], tank locomotive of the DB. Overall length: 68 mm. Super-detailling, -livery and -lettering. Operational valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 6 driving wheels. Triple headlights. Automatic couplings at each end. Epoch III.

The prototype bore the number 91 1001, developed 324 kW (440 HP), weighed 57 tons and ran at 65 km/h. More than 1.500 locos of this class hauled light local, goods and passenger traffic.

6518 6535 9520 9570 + 9572

7030



7033

7033 · Class 91[3-10], tank locomotive of the DR. Overall length: 68 mm. Super-detailling, -livery and -lettering. Operational valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 6 driving wheels. Double headlights. Automatic couplings at each end. Epoch III.

6518 6535 9520 9570 + 9572

7035 · Tank loco of the DRG, class 81. Overall length: 70 mm. Super-detailling, -livery and -lettering. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 8 driving wheels. Double headlights. Automatic couplings at each end. Epoch II.

The original bore the number 81 001, developed 630 kW (860 HP), weighed 67,5 tons and could travel both forwards and backwards at 45 km/h.

6518 6535 9521 9541

7035

7036

7036 · Class 81, tank locomotive of the DB. Overall length: 70 mm. Super-detailling, -livery and -lettering. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 8 driving wheels. Triple headlights. Automatic couplings at each end. Epoch III.

During the DB period, (Epoch III) the shunting locos of class 81 were mainly stationed in the Oldenburg area. The FLEISCHMANN model is fitted with the epoch-typical triple headlight and the well known DB "biscuit" plate.

6518 6535 9521 9541

Photo: Carl Bellingrodt/EK-Verlag

With their top speed of 100 km/h, the class 62 (first built in 1928) were in the front line for use hauling express and passenger trains over short distances, although designed for light expresses in hilly areas.

After the second World War, seven engines remained with the DB and eight on the DR. All of the federal railway locos which were stationed in depots in Düsseldorf, Dortmund, Essen and Krefeld, were gradually removed from service up until 1956. Just one engine, the "training loco" 62 003, remained in service in AW Schwerte. The last DR engines were in use up until 1970 based at the Frankfurt/Oder depot. Unfortunately, the loco from the Dresden museum 62 015, is not available for service any more due to boiler problems. However, a reconstruction of this elegant loco by the DB AG is still in question.

MODEL OF THE YEAR 2001

eisenbahn magazin
Bahn Profi
RAIL HOBBY

DB

7052
Ⓚ
6 7052 TWIN-DIGITAL

7052 · Class 62, tank locomotive of the DB. Overall length: 107 mm. Super-detailling, -livery and -lettering. Inset windows. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive on all 6 driving wheels with 2 traction tyres. **Current pick-up on all wheels.** Double headlights at each end. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch III.

6 7052 · Digital version of the loco 7052 with TWIN-DECODER and light change.

54 7004 6535 9525 9545

7052 8045 8041 8044

The DB of fifty years ago:
Class 62 tank engine at the head of a train of Prussian compartment coaches

7053
Ⓚ
6 7053 TWIN-DIGITAL

7053 · Class 62, tank locomotive of the DRG. Overall length: 107 mm. Super-detailling, -livery and -lettering. Inset windows. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive on all 6 driving wheels with 2 traction tyres. **Current pick-up on all wheels.** Double headlights at each end. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch II.

6 7053 · Digital version of the loco 7053 with TWIN-DECODER and light change.

54 7004 6535 9525 9545

7061 · Class 64, tank locomotive of the DB. Overall length: 78 mm. Super-detailling, -livery and -lettering. Inset windows. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive on all 6 driving wheels with 2 traction tyres. **Current pick-up on all axles.** Triple headlights. Automatic couplings at each end. Standard NEM 355 coupling socket. Epoch III.

7061 **DB**

54 7004 6535 9525 9545

DR **7062**

7062 · Class 64, tank locomotive of the DR. Overall length: 78 mm. Super-detailling, -livery and -lettering. Inset windows. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive on all 6 driving wheels with 2 traction tyres. **Current pick-up on all axles.** Double headlights. Automatic couplings at each end. Standard NEM 355 coupling socket. Epoch III.

54 7004 6535 9525 9545

TANK LOCOMOTIVES

7063 · Class 64, tank locomotive of the DRG. Overall length: 78 mm. Super-detailing, -livery and -lettering. Inset windows. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive on all 6 driving wheels with 2 traction tyres. **Current pick-up on all axles.** Double headlights. Automatic couplings at each end. Standard NEM 355 coupling socket. Epoch II.

The class 64 ("Black Knave") was originally required by the DRG in their plan for replacement of older types of construction. With their 15 t axle weight, they were designed for use on branch lines, but with the top speed of 90 km/h they were also allowed out in service on the main lines, too.

7063

8 7063 *DCC-DIGITAL*

MODEL OF THE YEAR 2000

Bahn Profi

8 7063 · Digital version of the loco 7063 with DCC-Decoder.

54 7004 · 6535 · 9525 · 9545

7064 · Class 064, tank locomotive of the DB. Overall length: 78 mm. Super-detailing, -livery and -lettering. Inset windows. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive on all 6 driving wheels with 2 traction tyres. **Current pick-up on all axles.** Triple headlights. Automatic couplings at each end. Standard NEM 355 coupling socket. Epoch IV.

7064

8 7064 *DCC-DIGITAL*

DB

8 7064 · Digital version of the loco 7064 with DCC-Decoder.

54 7004 · 6535 · 9525 · 9545

7065 · Tank loco of the DB, class 65. Overall length: 97 mm. Super-detailing, -livery and -lettering. Inset windows. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 8 driving wheels, with 2 traction tyres. Triple headlights at each end. Automatic couplings at each end. Epoch III.

The prototype is a new built steam locomotive of the DB. The top speed both forwards and backwards was 85 km/h. She weighed 107,6 tons and developed 1088 kW (1480 HP). 18 of this modern type of steam loco were built, of which the first was built by Krauss-Maffei, and delivered to the DB in 1951! Our 65 018 was made under the production number 17 987 and delivered to the DB on 7th April 1956.

7065

6 7065 *TWIN-DIGITAL*

DB

6 7065 · Digital version of the loco 7065 with TWIN-DECODER and light change.

54 7004 · 6518 · 6535 · 9522 · 9542

7075 · Tank loco of the DRG, class 78[0-4]. Overall length: 93 mm. Super-detailing, -livery and -lettering. Inset windows. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive on all 6 driving wheels, with 2 traction tyres. Double headlights at each end. Automatic couplings at each end. Epoch II.

7075

8 7075 *DCC-DIGITAL*

8 7075 · Digital version of the loco 7075 with DCC-decoder and light change.

54 7004 · 6518 · 6535 · 9521 · 9541

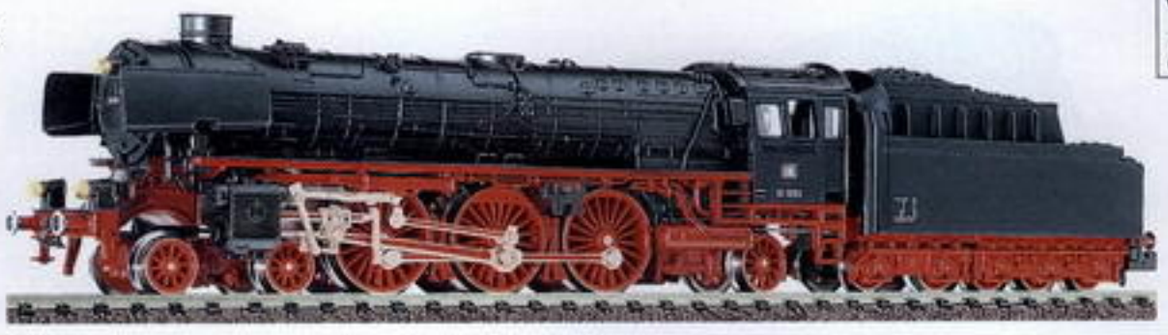
DB

7169

7169 · Tender locomotive of the DB, class 011. Overall length: 158 mm. Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. **With standard NEM 651 socket for installation of the DCC-decoder 6858.** Drive in tender on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic coupling on the tender. Epoch IV.

DCC: 6858 · 54 7001 · 6518 · 6535 · 9521 · 9541

DB



67170 TWIN-DIGITAL

67170 · Tender locomotive of the DB, class 01[10], in digital version. Overall length: 158 mm. Switchable on/off constant triple headlights, co-ordinated with direction of travel. **With installed TWIN-DECODER.** Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive in tender on 8 wheels with 2 traction tyres. Automatic coupling on the tender. Epoch III.

The original bore the number 01 1093. It developed 1728 kW (2350 horsepower), weighed 176 tons, and ran forward at 140 km/h and backwards at 50 km/h. There were over 30 locomotives of this class. This type of loco pulled long distance express trains.

54 7001 · 6518 · 6535 · 9521 · 9541

DB

67171 TWIN-DIGITAL

67171 · Tender locomotive of the DB, class 012, in digital version. Overall length: 158 mm. Switchable on/off constant triple headlights, co-ordinated with direction of travel. **With installed TWIN-DECODER.** Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive in tender on 8 wheels with 2 traction tyres. Automatic coupling on the tender. Epoch IV.

Prototype No. 012 081-6. 1818 kW (2470 horsepower). Weight: 180 tons. Top speed forwards 140 km/h and reverse 50 km/h. Service: Fast passenger trains.

54 7001 · 6518 · 6535 · 9521 · 9541

DB

7172

7172 · Tender locomotive of the DB, class 01[10]. Overall length: 158 mm. Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical „daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. **With standard NEM 651 socket for installation of the DCC-decoder 6858.** Drive in tender on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic coupling on the tender. Epoch III.

DCC: 6858 · 54 7001 · 6518 · 6535 · 9521 · 9541

6 7173 · Express loco, class 01[10], of the DRG, with fully streamlined bodywork, in digital version. Overall length: 154 mm. Switchable on/off constant headlights, co-ordinated with direction of travel. **With installed TWIN-DECODER.** Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive in tender on 8 wheels with 2 traction tyres. Prototypical double headlights with triple lights on tender end, co-ordinated with the direction of travel. Automatic coupling on the tender. Epoch II.

54 7001 · 6518 · 6535 · 9521 · 9541

67173
TWIN-DIGITAL

7174 · Express loco, class 01[10], of the DRG, with fully streamlined bodywork. Overall length: 154 mm. Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. **With standard NEM 651 socket for installation of the DCC-decoder 6858.** Drive in tender on 8 wheels with 2 traction tyres. Prototypical double headlights with triple lights on tender end, co-ordinated with the direction of travel. Automatic coupling on the tender. Epoch II.

DCC: 6858 · 54 7001 · 6518 · 6535 · 9521 · 9541

7174

7180 · Tender locomotive of the DRG, class 50. Overall length: 144 mm. Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive in tender on 8 wheels with 4 traction tyres. Double headlights at each end. Close-coupling loco/tender. Automatic couplings at each end. Epoch II.

The standard locomotives of class 50 count amongst the most successful design of the DRG. Up until 1943, some 3,164 engines of this universal locomotive had been built, which, thanks to their low axle loading, could even be used on secondary lines. The FLEISCHMANN model shows 50 002 in her typical epoch II appearance, with double headlights, boiler with four domes, Wagner smoke deflectors and 2'2' T26 tender. On delivery (1939) the locomotive was first stationed at the loco depot Leipzig-Wahren.

54 7001 · 6518 · 6535 · 9525 · 9545

7180

7181 · Tender locomotive of the DR, class 50. Overall length: 144 mm. Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive in tender on 8 wheels with 4 traction tyres. Triple headlights at each end. Close-coupling loco/tender. Automatic couplings at each end. Epoch III.

The prototype bore the number 50 849, and can still be seen in Zwickau, preserved in traditional DR condition, under the tender care of the Zwickau Model Railway e.V. An outstanding feature are the brass coloured boiler bands which were mounted on the prototype in 1983.

54 7001 · 6518 · 6535 · 9525 · 9545

7181

DR

Altering the loco address: **TWIN-DECODER** with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS 6865 · **DCC-DECODER** with TWIN-CENTER 6802 and LOK-BOSS 6865

Cab tender:

Up until 1962, almost 800 tenders of the Class 50 were fitted with guards cabs, in order to save using a separate guards van on all goods trains. The cab was located in the middle of the tender, making it necessary to lengthen the water tanks over the rear buffer beam.

DB

7182

8 7182
DCC-DIGITAL

7182 · Tender locomotive of the DB, class 50, with cab tender. Overall length: 144 mm. Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive in tender on 8 wheels with 4 traction tyres. Triple headlights at each end. Close-coupling loco/tender. Automatic couplings at each end. Epoch III.

The number of various types of the class 50 are almost uncountable. Particularly interesting though, is the type with four domes, footplate with skirting, Witte style smoke deflectors, cab in the tender and disc bogie wheels. Typical of epoch III was the sometimes fitted, aluminium coloured lettering along with the DB logo.

8 7182 · Digital version of the loco 7182 with DCC-Decoder.

54 7001 · 6518 · 6535 · 9525 · 9545

Tub tender:

Several examples of the class 50 received the unusual tub-tender 2'2' T 30 from the so-called "war-time" locomotives of the class 52. This tender, which also was used, for example, on the class 38[10-40], contained 30 m³ of water and 10 tons of coal.

DB

7183

7183 · Tender locomotive of the DB, class 50, with tub tender. Overall length: 147 mm. Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Drive in tender on 4 wheels with 4 traction tyres. Triple headlights. Automatic couplings at each end. Epoch III.

Although relatively seldom, but nevertheless, of charming appearance, were the variations of the DB class 50 with large Wagner smoke deflectors and tub tender. The tender K 2'2'T 30 carries 10 t of coal and 30 m³ of water. The prototype of the FLEISCHMANN 50 220 was last stationed in Hohenbudberg loco depot (once a large shunting yard between Duisburg and Krefeld).

54 7001 · 6518 · 6535 · 9525 front, 9521 rear · 9545 front, 9541 rear

DB

7184

8 7184
DCC-DIGITAL

7184 · Tender locomotive of the DB, class 050 - 053. Overall length: 144 mm. Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive in tender on 8 wheels with 4 traction tyres. Triple headlights at each end. Close-coupling loco/tender. Automatic couplings at each end. Epoch IV.

Now in Epoch IV with box tender. Classic DB-equipment.

8 7184 - Digital version of the loco 7184 with DCC-decoder with light change.

54 7001 · 6518 · 6535 · 9525 · 9545

Inscription for Belgium

Inscription for Czechoslovakia

7186

7186 · Tender locomotive as used in many european countries, delivery in lettering of the ÖBB, class 50. Overall length: 144 mm. Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis. Motor with flywheel. Drive in tender on 8 wheels with 4 traction tyres. Double headlights at each end. Close-coupling loco/tender. Automatic couplings at each end.

Self-adhesive lettering is included for other European railways: **Netherland, Belgium, France, Czechia, Poland, Rumania** as well as an additional **Austrian** variation.

54 7001 · 6518 · 6535 · 9525 · 9545

DIESEL LOCOMOTIVES

7218 · Diesel industrial loco. Overall length: 63 mm. Finely detailed, livered and lettered. Inset windows. Cast metal chassis. Drive on all 6 wheels. Automatic couplings at each end.

6518 9521 9541

7218

7215 · Diesel loco of the DB AG (DB-Cargo), class 212, in traffic red livery. Overall length: 78 mm. Super-detailing, -livery and -lettering. Inset windows. Cast metal chassis. Drive on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with direction of travel. Automatic couplings at each end. Epoch V.

The second series of this diesel hydraulic mixed traffic loco of class V 100 were delivered with 1350 Hp after 1962. Overall length: 12.3 m, top speed 100 km/h.

7215 ***DB***

54 7001 6518 6535 9521 9541

7230 · Diesel loco of the DB, class V100[20]. Overall length: 78 mm. Super-detailing, -livery and -lettering. Inset windows. Cast metal chassis. Drive on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with direction of travel. Automatic couplings at each end. Epoch III.

The diesel locos V 100 2001-2381 were built between 1962 and 1966. In 1968 they got the numbers 212 and 213.

7230 ***DB***

8 7230 *DCC-DIGITAL*

8 7320 · Digital version of the loco 7320 with DCC-Decoder.

54 7001 6518 6535 9521 9541

7231 · Diesel loco of the DB, class 212. Overall length: 78 mm. Super-detailing, -livery and -lettering. Inset windows. Cast metal chassis. Drive on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with direction of travel. Automatic couplings at each end. Epoch V.

The prototype loco bears the number 212 248-9 and the new DB-logo.

7231 ***DB***

8 7231 *DCC-DIGITAL*

8 7321 · Digital version of the loco 7321 with DCC-Decoder.

54 7001 6518 6535 9521 9541

Altering the loco address: **TWIN-DECODER** with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS 6865 · **DCC-DECODER** with TWIN-CENTER 6802 and LOK-BOSS 6865

DB

7235

67235
TWIN-DIGITAL

7235 · Diesel loco of the DB, class 218. Overall length: 102 mm. Super-detailing, -livery and -lettering. Inset windows. Cast metal chassis. Motor with flywheel. Drive on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with direction of travel. Automatic couplings at each end. Epoch V.

The prototype has the number 218 390-3, and is service hauling passenger and goods trains, based at the Mühldorf depot.

This model has prototypical crosswise ribbed roof ventilators and exhaust filters, as well as dummy Megi-rubbers suspension on the bogies.

6 7235 · Digital version of the loco 7235 with TWIN-DECODER.

54 7001 · 6518 · 6535 · 9521 · 9541

DB

7236

67236
TWIN-DIGITAL

7236 · Diesel loco of the DB, class 218, in traffic red livery. Overall length: 102 mm. Super-detailing, -livery and -lettering. Inset windows. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with direction of travel. Automatic couplings at each end. Epoch V.

The colour "Traffic red" (RAL 3020) is gradually being carried by more and more diesel locos of the Deutsche Bahn (German Railway).
One of the first is the 218 356-4 from the goods yard Mühldorf, the prototype of the FLEISCHMANN model. With black bogies, her basalt grey frame and traffic rad bodywork, she looks particularly attractive.

6 7236 · Digital version of the loco 7236 with TWIN-DECODER.

DCC: 6859 / TWIN: 6839 · 54 7001 · 6518 · 6535 · 9521 · 9541

Sound on Board – now in N «piccolo»! Diesel locos in double heading with the perfect runnung noises.


Foto: G. Neumann

DB

7 7236

*The locos 7 7236 are fitted with a **load-controlled digital decoder** for **DCC-operation** according to the NMRA standard. The sounds of the original engines are digitally reproduced inside these models, by a miniature, hi-tech loudspeaker. This makes it possible to realistically reproduce the "oil injector" of the loco, "powerful increase in engine revs on acceleration" and even the "squealing" of the brakes automatically switched in, when coming to a halt.*

The noises and other individual sounds, such as the "signal tone high/deep" or "air pump blast", can be called up using the function keys of the TWIN-CENTER 6802, TWIN-CONTROL 6822 and LOK-BOSS 6865. An inbuilt random generator also caters for the operating sounds like the "compressor".

7 7236 · Diesel locos in double heading of the DB AG, class 218, in traffic red livery. Overall length: ca. 206 mm.

1 Diesel loco with load-controlled digital DCC sound-decoder, without motor, 1 diesel loco with motor. The locos have different running numbers. Super-detailing, -livery and -lettering. Inset windows. Cast metal chassis. Motor with flywheel. Drive on 8 wheels with 2 traction tyres. **Switchable on/off triple headlights at each end, co-ordinated with direction of travel.** Automatic couplings at each end. Rigid coupling bar between the vehicles. Epoch V.

54 7001 · 6518 · 6535 · 9521 · 9541

DIESEL LOCOMOTIVES

7237 · Diesel loco of the DB, class 218. Overall length: 102 mm. Super-detailling, -livery and -lettering. Inset windows. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with direction of travel. Automatic couplings at each end. Epoch IV.

DCC: 6859 / TWIN: 6839 · 54 7001 · 6518 · 6535 · 9521 · 9541

7237

DB

7238 · Diesel loco of the DB, class 218. Overall length: 102 mm. Super-detailling, -livery and -lettering. Inset windows. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with direction of travel. Automatic couplings at each end. Epoch V.

6 7238 · Digital version of the loco 7238 with TWIN-DECODER.

DCC: 6859 / TWIN: 6839 · 54 7001 · 6518 · 6535 · 9521 · 9541

7238

6 7238
TWIN-DIGITAL

DB

7250 · Diesel loco of the DB, class V 200¹. Overall length: 115 mm. Super-detailling, -livery and -lettering. Inset windows. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels with 2 traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch III.

7250 Ⓚ

DB

MODEL OF THE YEAR 2003

eisenbahn magazin
N-Bahn Magazin
Bahn Profi
RAIL HOBBY

The class V 200¹ is a later development based on the V 200. The first series were delivered to the DB in 1962. The last ones were taken out of service from the loco depot of Oberhausen 1 during the summer timetable of 1988. This universal mixed traffic loco developed 2.700 Hp. This was of great advantage in hauling various types of train. Their legend was built on their years of service on the „Vogelfluglinie" (the famous route out over the sea to Denmark) and the hilly terrain of the Black Forest lines.
To make up a suitable prototypical train, the D-train coaches with the Art.-Nrs. 8640 – 8644 would be correct. Towards the end of their "career" these powerful locos used to haul goods trains in the Ruhr industrial area. Together with the large capacity hopper wagons Fad (Art.-Nr. 8521) the diesel loco legend returns to your layout.

DCC: 6858 / TWIN: 6849 · 54 7001 · 6518 · 6535 · 9525 · 9545

New Construction – "Herkules"

ÖBB

Prototype photo

With the 2016, the first member of the newly created family of "EuroRunner" locos from Siemens, the Austrian Railways (ÖBB) have completed their vehicle range. The 70 – with an option of a total of another 80 engines – as ordered in November 1998 – main line diesel locos for both passenger and goods traffic, will gradually replace, and take over the duties of the aging large diesels. In accordance with modern usage, the locos can be used in both double heading and in push/pull modes.

7260 Ⓚ

7260 · Diesel loco of the ÖBB, class 2016. Overall length: 121 mm. Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels with 2 traction tyres. Triple LED-headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch V.

DCC: 6858 / TWIN: 6839 · 54 7002 · 6518 · 9525 · 9545

At the moment, there is quite an interest in these new 3,000 horse power diesel locomotives. As well as the ÖBB, Siemens can also count amongst their newly-won customers, the Kowloon Canton Railway Corporation in Hongkong, who have ordered five almost identical maschines. In addition, DB-Cargo, together with several other private railway companies are showing great interest in thir powerful engines.

Technical Data: Construction year from 2001 • Axle formation: Bo'Bo' • Performance: 2000 kW • Top speed: 140 km/h • Service weight: 80 tons • Overall length: 19.275 mm • Power transfer: diesel electric..

7305

8 7305 DCC-DIGITAL

7305 · Rack-and-pinion loco, for both standard and rack railways. Overall length: 63 mm. Finely detailed, livered and lettered. Inset windows. Sprung pantographs (not electrically functional). Cast metal chassis. Drive on all 6 wheels, one axle of which is fitted with rack gear wheel (module 0,4). Automatic couplings at each end.

With its extraordinary climbing abilities (up to 25 %), this loco can conquer great heights in the smallest amount of space. Its specially low gearing and slow running, mean that the loco is also best suited for shunting work. It can run on both standard or rack track.
When running on rack track (cat.-nr. 9119), then – just as on the prototype – the loco should always be on the valley end of the train.

8 7305 · Digital version of the rack-and-pinion loco 7305 with DCC-Decoder.

6518 · 9521

9119

9119 · Flexible rack-and-pinion track, 222 mm long. This track can be used straight or curved to the minimum radius (9120) or any wide radius you choose. The rackrail always retains its original length, but the running rails project to 230 mm and must be nipped off to match up, since when curved they will project farther or less at the ends. The rails are then joined by means of rail-joiners 9403 or 9404.

7312 - Electric loco. class 128 ("12X").

-lettering. Inset windows. ... ing -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 6 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

54 7002 — 6518 — 6535 — 9525 — 9545

7320 Ⓚ

6 7320 *TWIN-DIGITAL*

7320 - Electric loco of the DB (DB-Cargo), class 145, in traffic red livery. Overall length: 118 mm. Super-detailing -livery and -lettering. Inset windows. Interior details in driver's cab. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Integrated socket for soldering of digital receivers. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch V.

6 7320 - Digital version of the loco 7320 with TWIN-DECODER.

54 7002 — 6518 — 6538 — 9525 — 9545

DB

7322 Ⓚ

7322 - Electric mixed traffic loco of the DB AG, class 145. Overall length: 118 mm. Super-detailing. -livery and -lettering. Inset windows. Interior details in driver's cab. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Integrated socket for soldering of digital receivers. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch V.

As compared to the standard "Cargo" version, the so called "Regio-locomotives" of class 145, are fitted with UIC connectors and coupler handrails.

54 7002 — 6518 — 6538 — 9525 — 9545

DB

7323 Ⓚ

7323 - Electric loco of the SBB (SBB-Cargo), class 481. Overall length: 118 mm. Super-detailing. -livery and -lettering. Inset windows. Interior details in driver's cab. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch V.

The class 486 locos of the former MthB (Mittelthurgau-Bahn) are now running as class 481 of the Swiss SBB-Cargo.

DCC: 6839 / TWIN: 6839 — 54 7002 — 6518 — 6538 — 9525 — 9545

SBB

The FLEISCHMANN models of the Class 145/481 incorporate the most modern techniques:
The slot guide mechanism Ⓚ for a prototypically true close-coupling between loco and wagons.

Altering the loco address: **DCC-DECODER** with TWIN-CENTER 6802 and LOK-BOSS 6865

DB

7325

7325 · Electric loco of the DB AG, class 141, in traffic red livery. Overall length: 98 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Standard NEM 355 coupling socket. Epoch V.

The remaining examples of the class 141 have been painted in traffic red in the meantime. They are now once more active on regional traffic services.

DCC: 6857 / TWIN: 6849 · 54 7002 · 6518 · 6535 · 9525 · 9545

DB

7327

67327 TWIN-DIGITAL

7327 · Electric loco of the DB, class 141. Overall length: 98 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

6 7327 · Digital version of the loco 7327 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

DB

7328

67328 TWIN-DIGITAL

7328 · Electric loco of the DB, class 141. Overall length: 98 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch IV.

6 7328 · Digital version of the loco 7328 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

DB

7329

67329 TWIN-DIGITAL

7329 · Electric loco of the DB, class 141, fitted out for S-Bahn working. Overall length: 98 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

Since 1987 the DB has had over 7 examples of this converted loco series in use. They are both optically, and mechanically different from the main series, because they are specifically equipped for service on S-Bahn trains.
Naturally these details have been faithfully reproduced on this FLEISCHMANN model. The running number of our loco is 141441-6 based at the Nuremberg 1 loco depot.

6 7329 · Digital version of the loco 7329 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

Altering the loco address: **TWIN-DECODER** with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS 6865

ELECTRIC LOCOMOTIVES

7331 · Electric loco of the DB AG (DB-Cargo), class 139. Overall length: 104 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

Each locomotive of class E 40, which were mainly used on heavy gradients, was given an electric resistance brake. The otherwise unaltered locos were designated as E 40''. After the renumbering programme on 1st January 1968, they then ran as class 139.

6 7331 · Digital version of the loco 7331 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

7331

6 7331 TWIN-DIGITAL

6 7332 · Digital version of the electric loco, Class 140, with TWIN-DECODER. Epoch V. Otherwise as per 7331.

54 7002 · 6518 · 6535 · 9525 · 9545

6 7332 TWIN-DIGITAL

6 7336 TWIN-DIGITAL

6 7336 · Digital version of the electric loco, Class 110, with TWIN-DECODER. Epoch V. Otherwise as per 7331.

54 7002 · 6518 · 6535 · 9525 · 9545

7335 · Electric loco of the DB, Class 110. Overall length: 106 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch IV.

Prototype No: 110 155-9 · kW: 3702 (horsepower: 5030) · Weight: 84 tons · Top speed: 140 km/h (90 mph) · Number built: about 200 · Service: fast heavy freight and passenger trains on long main lines.

6 7335 · Digital version of the loco 7335 with TWIN-DECODER.

DCC: 6857 / TWIN: 6849 · 54 7002 · 6518 · 6535 · 9525 · 9545

7335

NEW

6 7335 TWIN-DIGITAL

7337· Electric loco of the DB AG, class 110, in traffic red livery. Overall length: 104 mm. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

8 7337 · Digital version of the loco 7337 with DCC-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

7337

8 7337 DCC-DIGITAL

SBB

7339

7339 · Electric loco of the SBB (SBB-Cargo), class Re 4/4ᴵᴵ. Overall length: 98 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Standard NEM 355 coupling socket. Epoch V.

Now with decoder socket. In the current SBB-Cargo livery.

DCC: 6857 / TWIN: 6849 · 54 7002 · 6518 · 6535 · 9525 · 9545

SBB

7341

6 7341 TWIN-DIGITAL

7341 · Electric loco of the SBB, class Re 4/4ᴵ in TEE-livery. Overall length: 98 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with fly-wheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch IV.

The prototype bears the number 11 158, develops 4652 kW (6320 Hp), weighs 80 tons, runs at 140 km/h and is finished in the attractive TEE livery of wine red/cream. In TEE service the loco also hauled DB coaches on SBB routes.

6 7341 · Digital version of the loco 7341 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

SBB

7343

6 7343 TWIN-DIGITAL

7343 · Electric loco of the SBB, class Re 4/4ᴵᴵ. Overall length: 98 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with fly-wheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch IV.

The well known Swiss class Re 4/4ᴵᴵ is also around in red livery with squared headlights. Our prototype bears the number 11178.

6 7343 · Digital version of the loco 7343 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

SOB

7344

6 7344 TWIN-DIGITAL

7344 · Electric loco "Pfäffikon" of the Swiss South-East Railway (SOB), class Re 4/4ᴵᴵ. Overall length: 98 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

The well-known Swiss electric loco, the Re 4/4, was also to be seen in service with the Swiss South East railway (SOB). Particularly noticeable on the FLEISCHMANN model is the "Pfäffikon" shield and the melon yellow insignia "SÜDOSTBAHN".

6 7344 · Digital version of the loco 7344 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

ELECTRIC LOCOMOTIVES

7346 · Electric loco of the DB AG, class 111, in traffic red livery. Overall length: 105 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

The universal locomotives of class 111 are currently to be found based in Munich-West, Dortmund Bbf and Frankfurt (M)1. The FLEISCHMANN model has 111 133-5 as her prototype, in traffic red livery. She looks really at home hauling the traffic red double-decker coaches (FLEISCHMANN models 8623 to 8628) or the current "modus"-coaches (8653/8654).

6 7346 · Digital version of the loco 7346 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

7346

6 7346 TWIN-DIGITAL

DB

7347 · Electric loco of the DB, class 111. Overall length: 105 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

6 7347 · Digital version of the loco 7347 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

7347

6 7347 TWIN-DIGITAL

DB

7349 · Electric loco of the DB, class 111, in S-BAHN livery. Overall length: 105 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch IV.

The original has the number 111 186-9, develops 3700 kW (5030 hp), weighs 84 tons and reaches the speed of 160 km/h. The S-Bahn electric loco of the Class 111 pulls not only S-Bahn trains naturally, but also other types of trains.

6 7349 · Digital version of the loco 7349 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

7349

6 7349 TWIN-DIGITAL

DB
S-Bahn

7353 · Electric loco of the DB AG, class 120', in traffic red livery. Overall length: 120 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

The famous locomotives of the class 120' can be found almost everywhere within Germany. The universal locomotives are based at Munich West. Together with the class 101, they make up the backbone of fast passenger traffic. Worthy of mention is their long haulage capabilities at the head of IC-push/pull trains. The FLEISCHMANN model has 120 146-6 as her prototype, in traffic red livery.

6 7353 · Digital version of the loco 7353 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9525 · 9545

7353

6 7353 TWIN-DIGITAL

DB
IC/EC

DB
IC/EC

State of the art technology – and not just on the railways!
The FLEISCHMANN model of the Class 101 includes that extra something special: close-coupling mechanism Ⓚ on each end of the loco. The 101 from FLEISCHMANN makes a true close-coupling between loco and coaches a reality!

7355 Ⓚ

6 7355 TWIN-DIGITAL

7355 · Electric express loco of the DB, class 101. Overall length: 119 mm. Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch V.

6 7355 · Digital version of the loco 7355 with TWIN-DECODER.

DCC: 6859 / TWIN: 6839 · 54 7002 · 6518 · 6538 · 9525 · 9545

SNCF

7361

7361 · Electric loco of the SNCF, class 22300. Overall length: 109 mm. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Double headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

Strange – but true to prototype: as with the SNCF class 22300 electric loco, the pantographs on the model also point out in one direction!

54 7002 · 6518 · 6535 · 9521 · 9541

NS

7362

7362 · Electric loco of the NS, class 1600. Overall length: 109 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

For some considerable time now, the Dutch electric locos of class 1600 have been running with an attractive box-shape covering of the signal horns („typhoon-cab").

54 7002 · 6518 · 6535 · 9521 · 9541

NS

7364

7364 · Electric loco of the NS (NS-Cargo), class 1600. Overall length: 109 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

The class 1600 has been an extraordinarily successful electric locomotive, constructed by the French company of Alsthom. Almost identical locomotives run right across Europe, for example in France and Belgium, and can even be found on the Portuguese broad gauge railways too.

54 7002 · 6518 · 6535 · 9521 · 9541

ELECTRIC LOCOMOTIVES

7365 · Electric loco of the SJ, class Rc 4. Overall length: 98 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Fourfold headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch IV.

7367 · Electric loco of the ÖBB, class 1043. Overall length: 98 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch IV.

54 7002 · 6518 · 6535 · 9525 · 9545

7365 SJ

ÖBB 7367

7368 · Electric loco of the SJ, class Du 2. Overall length: 81 mm. Finely detailed, livered and lettered. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Brake shoes between the wheels. Cast metal chassis. With jack shaft drive. Drive on all 6 driving wheels. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end, mounted on the set of carrying wheels. Epoch III.

7369 · Electric loco of the DB, class 132. Overall length: 81 mm. Finely detailed, livered and lettered. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Brake shoes between the wheels. Cast metal chassis. With jack shaft drive. Drive on all 6 driving wheels. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end, mounted on the set of carrying wheels. Epoch IV.

6518 · 6535 · 9523 (7368) / 9521 (7369) · 9541

7368 SJ

7369 DB

7370 · Electric loco of the DB, class E 32. Overall length: 81 mm. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Brake shoes between the wheels. Cast metal chassis. With jack shaft drive. **With standard NEM 651 socket for installation of a DCC decoder.** Drive on all 6 driving wheels. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end, mounted on the set of carrying wheels. Epoch III.

Now as Epoche III variation with decoder socket.

DCC: 6859 · 6518 · 62 7400 · 9521 · 9541

7370

DB

7376 · Electric loco of the DB, class 103¹. Overall length: 122 mm. Super-detailing, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of decoder.** Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch IV.

Throughout epoch IV, the class 103¹ displayed her characteristic powerful capabilities. Later, in summer 1979, with the introduction of the double class IC-system, this elegant electric loco was indespensible for the DB. In an hourly service, she hauled IC trains all over Germany. And, at the head of EC-coaches, she ran as far as the Austrian western line into Vienna.

DCC: 6857 / TWIN: 6849 · 54 7002 · 6518 · 6535 · 9521 · 9541

7376

DB
IC/EC

DB
IC/EC

7377

7377 · Electric loco of the DB, class 103'. Overall length: 122 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

The prototype of the FLEISCHMANN model is the 103 197-0 of Frankfurt depot 1. With a power rating of 14 000 hp and a weight of 112 tons, she can reach speeds of 200 km/h.

54 7002 · 6518 · 6535 · 9521 · 9541

DB

6 7380 TWIN-DIGITAL

6 7380 · Electric loco of the DB, class 151, in digital version. Overall length: 122 mm. Switchable on/off constant triple headlights, co-ordinated with direction of travel. **With installed TWIN-DECODER.** Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Automatic couplings at each end. Epoch V.

Standard No. 151 040-3 · kW: max. 5962 (horsepower 8100) · Weight: 118 tons · Maximum speed/km/h: 120 · Procured piece No.: 170 · Intended use: Long-distance fast heavy goods trains.

54 7002 · 6518 · 6535 · 9521 · 9541

DB

7382

6 7382 TWIN-DIGITAL

7382 · Electric loco of the DB, class 151. Overall length: 122 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

The prototype of this loco bears the number 151 016-3.

6 7382 · Digital version of the loco 7382 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9521 · 9541

DB

7383

6 7383 TWIN-DIGITAL

7383 · Electric loco of the DB (DB-Cargo), class 151, in traffic red livery. Overall length: 122 mm. Super-detailling, -livery and -lettering. Inset windows. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch V.

The famous goods loco class 151 now presents itself in the current traffic red. The FLEISCHMANN model carries the imposing DB-Cargo symbol and has basalt grey painted pantographs.

6 7383 · Digital version of the loco 7383 with TWIN-DECODER.

54 7002 · 6518 · 6535 · 9521 · 9541

ELECTRIC LOCOMOTIVES

7385 Ⓚ

7385 · Electric loco of the DB AG, class 185. Overall length: 118 mm. Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple LED-headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch V.

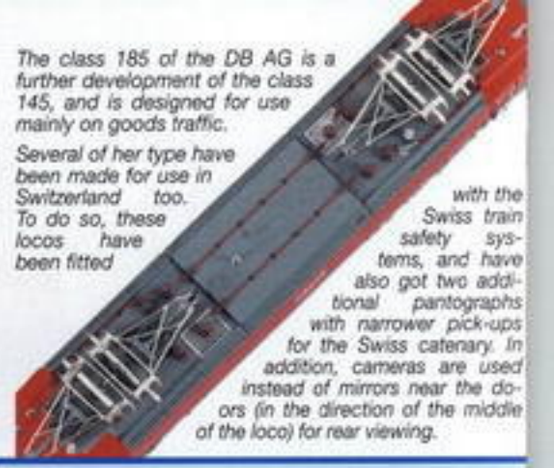
DCC: 6859 / TWIN: 6839 · 54 7002 · 6518 · 9525 · 9545

With 4 pantographs.

DB

The class 185 of the DB AG is a further development of the class 145, and is designed for use mainly on goods traffic.

Several of her type have been made for use in Switzerland too. To do so, these locos have been fitted with the Swiss train safety systems, and have also got two additional pantographs with narrower pick-ups for the Swiss catenary. In addition, cameras are used instead of mirrors near the doors (in the direction of the middle of the loco) for rear viewing.



*LIMITED EDITION SPECIAL SERIE**

84 7385 Ⓚ

84 7385 · Electric loco of the HGK/MRCE, class 185. Overall length: 118 mm. Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple LED-headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch V.

DCC: 6859 / TWIN: 6839 · 54 7002 · 6518 · 9525 · 9545

With 4 pantographs.

*** Only available from dealers as long as stock lasts!**

7394 Ⓚ

7394 · Electric loco of the DB, class 194. Overall length: 116 mm. Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels, of which 4 are fitted with traction tyres. Triple LED-headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch IV.

7394/7395:

DCC: 6859 / TWIN: 6839 · 54 7002 · 6518 · 9525 · 9545

DB

Class 194 (E 94) – the "German Crocodile"

During the thirties of the 20th century, the development of the electric loco made several large strides, in particular, with the new classes E 18, E 44 and E 93 modern locomotives were now available which were powerful and yet low-maintenance. The more powerful version of the E 93, represents one of the most famous locos of the German electric loco history – the E 94 was born.

Because of its top speed of 90 km/h the loco could be used on many more duties, thus permitting its use on express trains and fast goods as well as its basic duty of heavy goods haulage.

MODEL OF THE YEAR 2004

eisenbahn magazin
N-Bahn Magazin

7395 Ⓚ

7395 · Electric loco of the DB, class 194. Overall length: 116 mm. Super-detailing, -livery and -lettering. Inset windows. Interior details in driver's cab. Sprung pantographs. Current pick-up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder.** Drive on 8 wheels, of which 4 are fitted with traction tyres. Triple LED-headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Slot-guide mechanism at each end for true close coupling by using the PROFI-coupling 9545 (delivered with standard couplings). Standard NEM 355 coupling socket. Epoch IV.

DB

Colour variation

The introduction of the turquoise blue and beige livery in the mid 1970's didn't stop at the older electric locos. As a trial run, in 1975/1976 number 194 178 was given this new livery in AW München-Freimann and left the depot on the 8th. January 1976 in her new clothing. Although the U3 review later ended the career of the E 94 on the DB, 194 178 remained as the single surviving example, and therefore was given the nickname "Blue Mauritius" by the railway fans and personnel.

Altering the loco address: **TWIN-DECODER** with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS 6865 · **DCC-DECODER** with TWIN-CENTER 6802 and LOK-BOSS 6865

As "saviour of the branch line", the little red railbusses appeared on the scene in the 50's. The prototype of the FLEISCHMANN model is the single engined railbus VT 95 with accompanying trailer coach VB 142, which is a little shorter than the motor coach. All the characteristic details of quarter light windows, steel springs as buffers and simplified Scharfenberg couplings are reproduced. One VT 95 was built in 1954 by the DB as a museum piece.

Because the trailer coach was not fitted out with a driving cab, the railbus ran not as a permanently coupled push-pull unit, but always with the motor coach in front. The motor coach had to be run round at the destination station. If this operation is to be repeated in model form, then the vehicles of the railbus can be coupled together using the PROFI-coupling 9545 instead of the standard coupling bar. However, to do so, the Scharfenberg couplings with a small part of the front will need to be pulled off.

7400
Ⓚ

8 7400
DCC-DIGITAL

Interior lighting already factory fitted!

7401
Ⓚ

DB

7400 · Railbus Motor Coach of the DB, Class VT 95. Length: 83 mm. Super-detailling, -livery and -lettering. Inset windows. Cast metal chassis. Motor with flywheel. Drive on 4 wheels. **Triple headlights and red tail lights co-ordinated with direction of travel.** With interior lighting. Close-coupling mechanisms at each end in conjunction with the rigid coupling bar included, or by using PROFI-couplings. Epoch III.

8 7400 · Digital version of the railbus motor coach 7400 with DCC-decoder.

6518 · 2x 62 7400 · 9545 · 38 7401

7401 · Railbus Trailer Coach of the DB, Class VB 142. Length: 69 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. **Double headlights and red tail lights co-ordinated with direction of travel.*** With interior lighting. Close-coupling mechanisms at each end in conjunction with the rigid coupling bar included, or by using PROFI-couplings. Epoch III.

*Light change not suitable for digital sys

2x 62 7400 · 9545 · 38 7401

Interior lighting already factory fitted!

7402
Ⓚ

8 7402
DCC-DIGITAL

7403
Ⓚ

DB

7402 · Railbus Motor Coach of the DB, Class 795. Length: 83 mm. Super-detailling, -livery and -lettering. Inset windows. Cast metal chassis. Motor with flywheel. Drive on 4 wheels. **Triple headlights and red tail lights co-ordinated with direction of travel.** With interior lighting. Close-coupling mechanisms at each end in conjunction with the rigid coupling bar of the accompanying trailer coach 7403, or by using PROFI-couplings. Epoch IV.

8 7402 · Digital version of the railbus motor coach 7402 with DCC-decoder.

6518 · 2x 62 7400 · 9545 · 38 7401

7403 · Railbus Trailer Coach of the DB, Class 995. Length: 69 m With interior fittings. Super-detailling, -livery and -lettering. Inset windo **Double headlights and red tail lights co-ordinated with direction of t vel.*** With interior lighting. Close-coupling mechanisms at each end conjunction with the rigid coupling bar included, or by using PROFI-c plings. Epoch IV.

*Light change not suitable for digital sys

2x 62 7400 · 9545 · 38 7401

"PANORAMIC TRAIN"

7411 · Panoramic view railcar of the DB, the "Panoramic Train", class 491 in dark blue livery. Overall length: 129 mm. Super-detailling, -livery and -lettering. With inset windows and interior details. Cast metal chassis. Drive on 4 wheels of which 1 is fitted with traction tyre. 2 different sprung pantographs. Choice of pick up from rails or overhead catenary. **Triple headlights and red tail lights co-ordinated with direction of travel.** With interior lighting. Epoch V.

7411

DB

54 7001 — 6518 — 6535

Interior lighting
already factory fitted!

"PENDOLINO"

7415 - Diesel railcar unit of the DB (double unit), Class 610 ("Pendolino"), with tilting coach body mechanism for negotiating curves. Overall length: 320 mm. Automatic coach body tilting when negotiating curves. Super-detailling, -livery and -lettering. Inset windows. Interior details. Cast metal chassis. Motor with flywheel. Drive on 4 wheels, of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Close-coupling between the coaches. Dummy coupling equipment on coach ends. Adapter with NEM 355 coupling socket to mount couplings onto the vehicles is included. The coaches are designed to accept interior lighting. Epoch V.

67415 · Digital version of the railcar 7415 with TWIN-DECODER.

7415
Ⓚ
67415
TWIN-DIGITAL

right-hand curve — straight — left-hand curve

The Pendolino lays elegantly into the curve at Hohenstadt. The top speed of the VT 610 is about 160 km/h.

DB

54 7001 — 6518 — 9446
2 x 6535 — 2 x 9531
38 9005 — 9545

In Regional traffic of the DB AG, the "Pendolino" can run coupled as multiple units as well. This is no problem in N «piccolo» gauge, thanks to the coupling possibilities at each end of the coaches. The picture shows the coupling variations to make up a multiple train.

1-unit

2-unit

3-unit

Altering the loco address: **TWIN-DECODER** with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS 6865 · **DCC-DECODER** with TWIN-CENTER 6802 and LOK-BOSS 6865

"PENDOLINO"

7418 Ⓚ

67418 TWIN-DIGITAL

7418 - Diesel railcar unit of the DB (double unit), Class 610 ("Pendolino"), in traffic red livery, with tilting coach body mechanism for negotiating curves. Overall length: 320 mm. Automatic coach body tilting when negotiating curves. Super-detailling, -livery and -lettering. Inset windows. Interior details. Cast metal chassis. Motor with flywheel. Drive on 4 wheels, of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Close-coupling between the coaches. Dummy coupling equipment on coach ends. Adapter with NEM 355 coupling socket to mount couplings onto the vehicles is included. The coaches are designed to accept interior lighting. Epoch V.

67418 - Digital version of the railcar 7418 with TWIN-DECODER.

54 7001 — 6518 — 9446 — 2 x 6535 — 2 x 9531 — 38 9005 — 9545

"DESIRO"

7420 Ⓚ NEW

7420 - "Desiro" diesel railcar unit of the DB AG, class 642. Overall length: 261 mm. Prototypical livery and lettering. Inset windows. Diecast metal chassis in both vehicles. Motor with flywheel. **With standard NEM 651 socket for installation of a decoder. Triple LED-headlights and red tail lighting, co-ordinated with the direction of travel.** Drive on 4 wheels, of which 2 are fitted with traction tyres. Close-coupling fitted to the Jakob-bogies between the vehicles. Also included are the dummy couplings at each end of the vehicles, replaceable using the adapter with standard NEM 355 socket as well as PROFI-couplings 9545 for linking units together. Prepared ready to install interior lighting. Epoch V.

New construction – "Desiro"!

From 2000 onwards, the DB AG has been putting the modern and environmentally friendly diesel railcars of class 642 "Desiro" with their top speed of 120 km/h into service for regional traffic.

Important comfortable innovations of these trains are:

- *60 % low-floor section with a floor height of just 575 mm*
- *lighter and larger capacity interior, large window bands, vision though the whole trains*
- *Disabled friendly toilet system*
- *Boarding assistance for wheelchair users*
- *Air cooling equipment*
- *Air-sprung bogies for optimum ride comfort*

By the clever usage of mass-produced components from the bus manufacturing industry, the class 642 guarantees low-cost investment and running costs, thus making it possible to run an attractive and economic service on local branch lines and within high-density areas of population. Variations on the "Desiro" theme are running on private rail networks and on foreign rails too.

Prototype photo

DCC: 6858 / TWIN: 6839 — 9465 — 54 7006 — 9545 front

7 7420 Ⓚ

Sound on Board!

7 7420 - Diesel railcar "Desiro" of the DB AG, class 642, with load-controlled digital DCC sound-decoder. Switchable on/off constant triple LED-headlights and red tail lights, co-ordinated with direction of travel.

Otherwise as per 7420.

*The model is fitted with a **load-controlled digital sound decoder** for **DCC-operation** according to the NMRA standard. The sounds of the original engine is digitally reproduced inside the model, by a miniature, hi-tech loudspeaker. Realistic sounds will be automatically activated. At random, an inbuilt incidental generator releases typical sounds for the relevant vehicle. The various sounds can be called up individually by using the function keys of the TWIN-CENTER 6802, the TWIN-CONTROL 6822 or the LOK-BOSS 6865.*

9465 **9465 - Interior Lighting Unit** for the diesel railcar "Desiro" 7420.

9530 Current consumption ca. 100 mA.

RAILCARS

7427 · Diesel railcar of the DB AG, class 628² (two-part) in traffic red livery. Overall length: 284 mm. Super-detailing, -livery and -lettering. Inset windows. Inset cast metal chassis in power coach. Motor with flywheel. Driven on 4 wheels of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Power coach and trailer coach are joined with a clip connector. Automatic couplings at each end. Epoch V.

547001 ▬▬ 6518 2x9530 2x6535 2x9531
9521 front 9541 front 38 7428 between the coaches

7427

6 7427 · Digital version of the railcar 7427 with TWIN-DECODER.

6 7427 TWIN-DIGITAL

DB

The class 628² has been an every-day sight on lots of DB AG routes for some time now. The mass delivery of these diesel units lead a generation change on branch lines. Along with the railbuses (class 795/796/798) as well as the uneconomic loco hauled short trains, all were gradually replaced by the 628². The FLEISCHMANN model present the unit in current traffic red livery.

7428 · Diesel railcar of the DB, class 628² (two-part). Overall length: 284 mm. Super-detailing, -livery and -lettering. Inset windows. Inset cast metal chassis in power coach. Motor with flywheel. Driven on 4 wheels of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Power coach and trailer coach are joined with a clip connector. Automatic couplings at each end. Epoch V.

547001 ▬▬ 6518 2x9530 2x6535 2x9531
9521 front 9541 front 38 7428 between the coaches

7428

DB

The prototype has the number 628 201-6, develops 375 kW (510 HP), travels at 120 km/h and 150 examples were built up to 1989. The distance between the railcar units can be set at 3 individual stages.

7431 · Diesel railcar (two coach unit) of the DB, Class 614. Overall length: 334 mm. Super-detailing, -livery and -lettering. Inset windows. Cast metal chassis. Drive on 4 wheels of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Designed to accept interior lighting. With close-coupling mechanism and PROFI-couplings between the coaches. Epoch V.

547001 ▬▬ 6518 2x9530 2x6535 2x9531
9522 front
9525 between the coaches
9542 front
9545 between the coaches

7431 Ⓚ

DB

7433 · Centre coach for railcar set of the DB, Class 914. Without motor. Overall length of coach body: 160 mm. Super-detailing, -livery and -lettering. Inset windows. Designed to accept interior lighting. With close-coupling mechanism and PROFI-coupling. Epoch V.

9450 9530 9525 9545

7433 Ⓚ

DB

Now you can have a true close-coupling on the diesel railcar unit 7431 in conjunction with the centre coach 7433! To do so, the slot-guide mechanism Ⓚ and the PROFI-couplings 9545 are fitted to the rear of each diesel railcar driving unit, and at each end of the centre coach.

Altering the loco address: **TWIN-DECODER** with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS 6865

DB

7438

Ⓚ

The prototype of our class 614 diesel railcar is painted in the colours of the Regional Railways. It bears the numbers 614 024-8 and 614 023-0, develops 2 x 331 kW (2 x 450 HP) and runs at a speed of 140 km/h.

7438 · Diesel railcar (two coach unit) of the DB, Class 614, in "RegionalBahn"-livery. Overall length: 334 mm. Super-detailling, -livery and -lettering. Inset windows. Cast metal chassis. Drive on 4 wheels of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Designed to accept interior lighting. With close-coupling mechanism and PROFI-couplings between the coaches. Epoch V.

54 7001 · 6518 · 2x9530 · 2x6535 · 2x9531
9522 front, 9525 between the coaches · 9542 front, 9545 between the coaches

DB

7439

Ⓚ

Now you can have a true close-coupling on the diesel railcar unit 7438 in conjunction with the centre coach 7439! To do so, the slot-guide mechanism Ⓚ and the PROFI-couplings 9545 are fitted to the rear of each diesel railcar driving unit, and at each end of the centre coach.

7439 · Centre coach for railcar set of the DB, Class 914, in "RegionalBahn"-livery. Without motor. Overall length of coach body: 160 mm. Super-detailling, -livery and -lettering. Inset windows. Designed to accept interior lighting. With close-coupling mechanism and PROFI-coupling. Epoch V.

9450 · 9530 · 9525 · 9545

NS

7471

Between 1981 and 1983, the Dutch Railways had 31 of these diesel railcars built for them by the makers Uerdingen. They are primarily used on the northern branch lines. They develop 424 kW (576 Hp) and their top speed is nearly 100 km/h.

7471 · Diesel railcar unit of the NS (known in Holland as the "Mud-flat waddler" or "Dirty Harry"), type DH 2. Overall length: 267 mm. Super-detailling, -livery and -lettering. Inset windows. Cast metal chassis inset in the driving coach. Motor with flywheel. Drive on 4 wheels of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Driving and trailer coach are coupled with a clip-fit bar. The distance between the railcar units can be set at 3 individual stages. Designed to accept interior lighting. Epoch IV.

54 7001 · 6518 · 2x9530 · 2x6535 · 2x9531
9525 front · 9545 front · 38 7428 between the coaches

DB

7968

8 7968 DCC-DIGITAL

This loco has rotating discs driven by the motor so that the rails can be kept clean without cleaning fluid.

Spare cleaning pad 35 7969.

7968 · Electric "Track Cleaning" loco of the DB. Overall length: 63 mm. A loco designed to keep the rails clean. Super-detailling, -livery and -lettering. Inset windows. Sprung pantograph (without electr. function). Cast metal chassis. Drive on all 4 wheels. Automatic coupling at each end. Epoch V.

8 7968 · Digital version of the electric "Track Cleaning" loco 7968 with DCC-Decoder.

6518 · 9521 · 9541

ICE – THE SUPERTRAIN FROM FLEISCHMANN

7440 · High Speed Train "ICE" of the DB, Class 401, consisting of 2 driving ends of which one is motorised. Length of each end: 129 mm.
Super-detailing, -livery and -lettering. Inset windows. Interior details in drivers cab. One sprung pantograph on each driving end. Choice of pick up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Close-coupling on one end (coach end). Epoch V.

67440 · Digital version of the High Speed Train 7440 with TWIN-DECODER.

54 7001 · 6518 · 2 x 6535 · 2 x 9531 · 38 9005 · 9570 + 9577

7440 Ⓚ

67440 *TWIN-DIGITAL*

Intermediate coaches: 7441 – 7449

Triple headlights and red tail lights co-ordinated with direction of travel

ICE INTERMEDIATE COACHES

7441 · ICE-Coach – 1st Class of the DB, type Avmz 801.8. Length: 165 mm. With interior fittings (red). Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7442 · ICE-Coach – 1st Class of the DB, type Avmz 801.0. Length: 165 mm. With interior fittings (blue). Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7441 Ⓚ

7442 Ⓚ

7443 · ICE-Coach – 1st Class of the DB, type Avmz 801.4. Length: 165 mm. With interior fittings (red). Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7444 · ICE-Coach "Bord Restaurant" of the DB, type WSmz 804.0. Length: 165 mm. With interior fittings (pink). Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7443 Ⓚ

7444 Ⓚ

7445 · ICE-Service-Coach – 2nd Class of the DB, type BSmz 803.0. Length: 165 mm. With interior fittings (orange). Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.
In the prototype, coaches of this type have telephones, telefaxes and conference compartments available.

7446 · ICE-Coach – 2nd Class of the DB, type Bvmz 802.3. Length: 165 mm. With interior fittings (green). Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7445 Ⓚ

7446 Ⓚ

Altering the loco address: **TWIN-DECODER** with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS 6865

THE ICE WITH DOUBLE PANTOGRAPHS FOR GERMAN – SWISS TRAFFIC

DB

For the ICE traffic between Germany and Switzerland, a few of the ICE driving units have been fitted with a second pantograph, so that they can also run under the Swiss catenary. FLEISCHMANN has reproduced this exactly with the second current collector having a shorter slider, as is on the prototype. Not only that, the magnet for the Swiss train safety mechanism "Integra" is also mounted on the bogies.

7450 Ⓚ

67450 TWIN-DIGITAL

7450 · High Speed Train "ICE" of the DB, Class 401, consisting of 2 driving units with 2 different pantographs on each (Motor in one driving coach). Length of each driving coach: 129 mm. Super-detailing, -livery and -lettering. Inset windows. Interior cab details. Choice of pick up from the rails or overhead catenary. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with direction of travel.** Close-coupling on one end (coach end). Epoch V.

6 7450 · Digital version of the High Speed Train 7450 with TWIN-DECODER.

54 7001 · 6518 · 2 x 6535 · 2 x 9531 · 38 9005 · 9570 + 9577

Intermediate coaches: 7441 – 7449

ICE INTERMEDIATE COACHES

7447 Ⓚ

7448 Ⓚ

7447 · ICE-Coach – 2nd Class of the DB, type Bvmz 802.0. Length: 165 mm. With interior fittings (orange). Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7448 · ICE-Coach – 2nd Class of the DB, type Bvmz 802.8. Length: 165 mm. With interior fittings (blue). Super-detailing, -livery and -lettering. In-set windows. The coach is equipped ready to install interior lighting. Epoch V.
On the prototype, these coaches have video screens available.

7449 Ⓚ

7449 · ICE-Coach – 2nd Class of the DB, type Bvmz 802.6. Length: 165 mm. With interior fittings (blue). Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7441 - 7449: 9447 · 6535 · 38 9005 · 9570 + 9577

Since its beginning in 1991, the ICE meanwhile still runs on several routes, even though they are not the especially constructed high speed stretches, on which it can attain its timetabled speed of 250 km/h.
The absolute top speed allowed for the ICE is 280 km/h, each power car generating 4 800 kW (6 526 Hp).

THE ICE 2 – THE SUPERTRAIN FROM FLEISCHMANN

7452
Ⓚ
6 7452
TWIN-DIGITAL

DB

7452 · High Speed Train "ICE 2" of the DB, consisting of 1 power car, class 402, length 129 mm and 1 trailer car 2nd Class, class 808.0, length 166 mm.
Super-detailing, -livery and -lettering. Inset windows. Interior details in drivers cab of both power car and trailer car. One sprung pantograph on the power car. Choice of pick up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. **Triple headlights and red tail lights co-ordinated with the direction of travel.** The trailer car is equipped ready to install interior lighting. Close-coupling between coaches. Epoch V.

Coupling facility on the front end of the power car and trailer car by removing the bow caps:
a) by using the accompanying adapter socket 38 7007 of NEM 355 for the accompanying automatic standard coupling 9525, or automatic PROFI-coupling 9545 with pre-uncoupling (suitable for all track configurations except directly opposite curves) or
b) by using the accompanying coupling bar 38 9005 for a fixed coupling for all track configurations.

6 7452 · Digital version of the High Speed Train 7452 with TWIN-DECODER.

A big advantage of the ICE 2 from FLEISCHMANN:

By removing the bow caps on the fronts, two ICE 2 units can be coupled together.
Either permanently coupled up with the accompanying adapter 38 7007 and accompanying coupling bar 38 9005, or –
automatically couple up, or uncouple again using the accompanying standard coupling 9525 or the PROFI-coupling 9545.

Power car:				
54 7001	6518	6535	9531	38 7007 adapter
38 9005	9525 front	9545 front	9570 + 9577 between the coaches	
Trailer car:	9464	6535	9531	38 7007 adapter
38 9005	9525 front	9545 front	9570 + 9577 between the coaches	

The Deutsche Bahn AG (German Railways) uses the ICE 2 in the form of half-trains, which consist of one power car, six intermediate coaches as well as a control-cab trailer car (Class 402, 805 to 808). As necessary, two half-trains can be coupled together to make up a full train set. As a rule, the full trains run trailer car to trailer car, so that with a power car on each end of the train, the speed of 250 km/h can be reached.

The power cars of Class 402 may be differentiated from their predecessors firstly by their altered front, which can be opened in order to couple together. This front is also fitted to the trailer car, which, like the intermediate coaches is fitted with a new style of bogie. The restaurant coach has the same roof height as that of the other coaches. All coaches are fitted out as open coaches and are therefore without compartments.

7452 Ⓚ

7456 Ⓚ

Altering the loco address: TWIN-DECODER with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS

ICE 2 - INTERMEDIATE COACHES

7453 Ⓚ

7453 · ICE 2-Coach – 1st Class of the DB, type 805.3. Length: 165 mm.
With interior fittings (claret). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7454 Ⓚ

7454 · ICE 2-Coach – 1st Class of the DB, type 805.0. Length: 165 mm.
With interior fittings (claret). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7455 Ⓚ

7456 Ⓚ

7455 · ICE 2-Restaurant-Coach "Bord Restaurant" of the DB, type 807.0. Length: 165 mm.
With interior fittings (grey). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7456 · ICE 2-Coach – 2nd Class with children's compartment of the DB, type 806.0. Length: 165 mm.
With interior fittings (turquoise). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7457 Ⓚ

7458 Ⓚ

7457 · ICE 2-Coach – 2nd Class of the DB, type 806.3. Length: 165 mm.
With interior fittings (turquoise). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7458 · ICE 2-Coach – 2nd Class of the DB, type 806.6. Length: 165 mm.
With interior fittings (turquoise). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

Intermediate coaches 7453 - 7458: 9447 6535 38 9005 9570 + 9577

TOP SPEED WITH TILT-TECHNOLOGY – THE *ICE-T* FROM FLEISCHMANN

7460 Ⓚ

NEM

DB

7460 · Electric ICE-train "ICE-T" of the DB AG, with tilt-technology, consisting of
one 1st class power car, class 411.0, length 169 mm,
one restaurant coach "BordRestaurant" with motor, class 411.2, length 157 mm and
one 2nd class power car, class 411.5, length 169 mm.

Automatic tilting coach body according to the track curvature. Super-detailing, -livery and -lettering. Inset windows. Interior details. One sprung pantograph on each power car*. Cast metal chassis. Motor with flywheel. Drive on 8 wheels, of which 2 are fitted with traction tyres. **With standard NEM 651 socket for installation of a decoder.** Triple headlights and red tail lights co-ordinated with the direction of travel (in digital operation headlights cannot be switched off). The coaches/power cars are equipped ready to install interior lighting. Rigid coupling bar with moveable passages between the wagons. Epoch V.

*Pantographs without electrical function

Technical innovation à la FLEISCHMANN:
*The **tilt mechanism** of the high speed train ICE-T. Whilst the carriages are leaning into the curve, the pantograph remains prototypically upright.*

DCC: 6859/6876 TWIN: 6839 · 9468 · 9530/Restaurant Coach 6535/Driving car

54 7005 · 6518 · 38 9005

Since 1999, German Rail (DB AG) offers its long distance passengers a completely new travel experience! The ICE-T – a multiple unit with tilt technology – will replace InterCity trains, which up to now have been loco hauled. It consists of intermediate coaches with restaurant coach and driving cars fitted with control cabs. Besides the tilt technology – what is really new – is the dispensing with powered driving units as in the ICE. Instead, the individual bogies of the intermediate coaches and restaurant coaches are fitted with traction motors, which means that the ICE-T is a true "multiple unit" in the classical sense.
A seven-car unit with five driven intermediate coaches has a power rating of 4000 kW, and can reach a top speed of 230 km/h. The futuristic design bears more resemblance to a jet than the previous trains.

Altering the loco address: **TWIN-DECODER** with TWIN-CENTER 6802, DIGITAL CONTROL DC 6803 C and LOK-BOSS 6865 · **DCC-DECODER** with TWIN-CENTER 6802 and LOK-BOSS 6865

ICE-T-CENTRECOACHES

7461 Ⓚ

7461 · ICE-T-Centrecoach – 1st/2nd Class of the DB AG, type 411.1. Length: 157 mm.
Automatic tilting coach body according to the track curvature. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

☼ 9467 💡 6535 38 9005

7463 Ⓚ

7463 · ICE-T-Centrecoach – 2nd Class of the DB AG, type 411.8. Length: 157 mm.
Automatic tilting coach body according to the track curvature. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

☼ 9467 💡 6535 38 9005

7464 Ⓚ

7464 · ICE-T-Centrecoach – 2nd Class of the DB AG, type 411.7. Length: 157 mm.
Automatic tilting coach body according to the track curvature. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

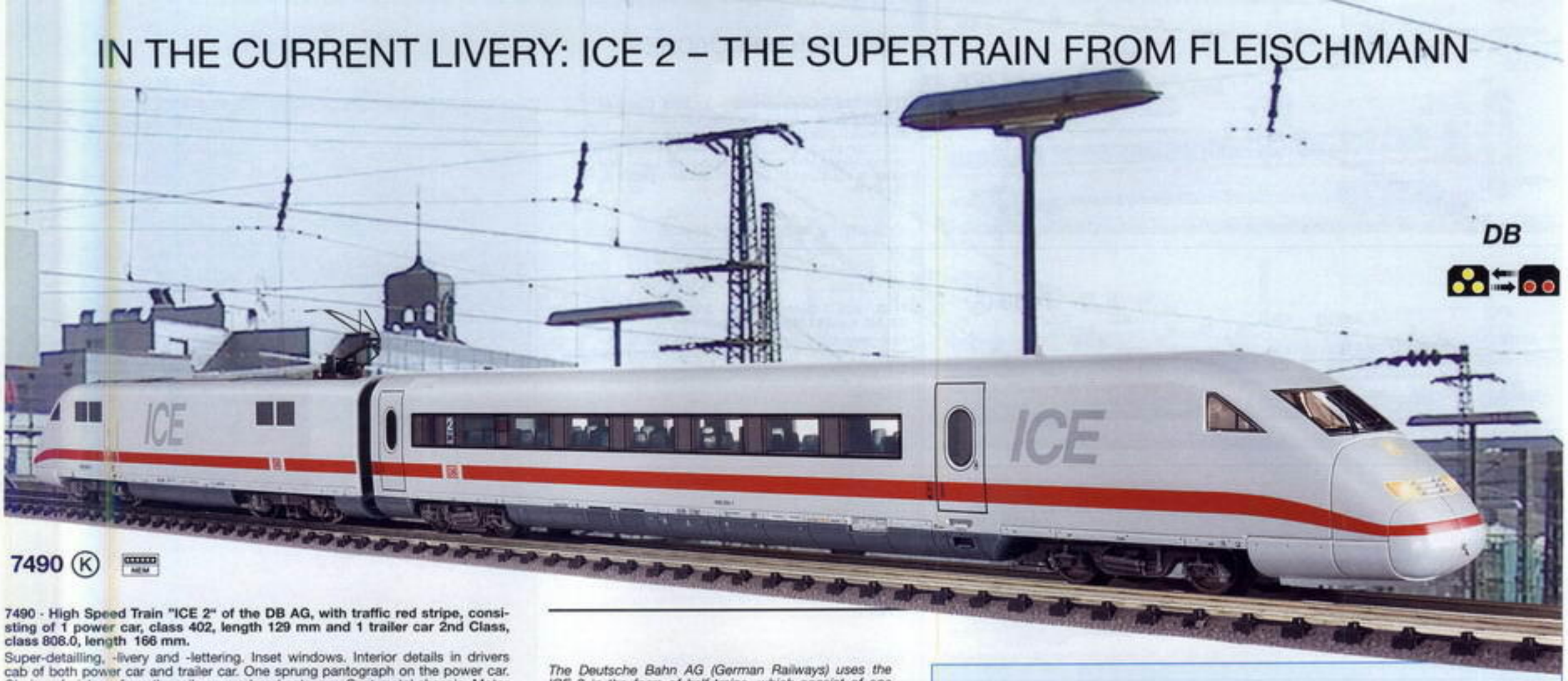
☼ 9467 💡 6535 38 9005

7465 Ⓚ

7465 · ICE-T-Centrecoach – 2nd Class of the DB AG, type 411.6. Length: 157 mm.
Automatic tilting coach body according to the track curvature. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

☼ 9467 💡 6535 38 9005

IN THE CURRENT LIVERY: ICE 2 – THE SUPERTRAIN FROM FLEISCHMANN



7490 Ⓚ

7490 - High Speed Train "ICE 2" of the DB AG, with traffic red stripe, consisting of 1 power car, class 402, length 129 mm and 1 trailer car 2nd Class, class 808.0, length 166 mm.

Super-detailling, -livery and -lettering. Inset windows. Interior details in drivers cab of both power car and trailer car. One sprung pantograph on the power car. Choice of pick up from the rails or overhead catenary. Cast metal chassis. Motor with flywheel. **Power car with standard NEM 651 socket for installation of a DCC-decoder.** Drive on 8 wheels, of which 2 are fitted with traction tyres. Triple headlights and red tail lights co-ordinated with the direction of travel (in digital operation headlights cannot be switched off). The trailer car is equipped ready to install interior lighting. Close-coupling between coaches. Epoch V.

Coupling facility on the front end of the power car and trailer car by removing the bow caps:

a) by using the accompanying adapter socket 38 7007 of NEM 355 for the accompanying automatic standard coupling 9525, or automatic PROFI-coupling 9545 with pre-uncoupling (suitable for all track configurations except directly opposite curves) or

b) by using the accompanying coupling bar 38 9005 for a fixed coupling for all track configurations.

Intermediate coaches: 7491 – 7496.

The Deutsche Bahn AG (German Railways) uses the ICE 2 in the form of half-trains, which consist of one power car, six intermediate coaches as well as a control-cab trailer car (Class 402, 805 to 808). As necessary, two half-trains can be coupled together to make up a full train set. As a rule, the full trains run trailer car to trailer car, so that with a power car on each end of the train, the speed of 250 km/h can be reached. However, any other combination is also to be found.

Power car:

DCC 6857 | 54 7001 | 6518 | 6535 | 9531 | 38 7007 adapter
38 9005 | 9525 front | 9545 front | 9570 + 9577 between the coaches

Trailer car:

9464 | 6535 | 9531 | 38 7007 adapter
38 9005 | 9525 front | 9545 front | 9570 + 9577 between the coaches

A big advantage of the ICE 2 from FLEISCHMANN:

By removing the bow caps on the fronts, two ICE 2 units can be coupled together.
Either permanently coupled up with the accompanying adapter 38 7007 and accompanying coupling bar 38 9005, or automatically couple up, or uncouple again using the accompanying standard coupling 9525 or the PROFI-coupling 9545.

Altering the loco address: **DCC-DECODER** with TWIN-CENTER 6802 and LOK-BOSS 6865

7491 Ⓚ

9447 6535 38 9005 9570 + 9577

7492 Ⓚ

9447 6535 38 9005 9570 + 9577

7491 · ICE 2-Coach with traffic red stripe, 1st Class, type 805.3 of the DB AG. Length: 165 mm. With interior fittings (claret). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7492 · ICE 2-Coach with traffic red stripe, 1st Class, type 805.0 of the DB AG. Length: 165 mm. With interior fittings (claret). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7493 Ⓚ

9447 6535 38 9005 9570 + 9577

7494 Ⓚ

9447 6535 38 9005 9570 + 9577

7493 · ICE 2-Restaurant-Coach "BordRestaurant" with traffic red stripe, type 807.0 of the DB AG. Length: 165 mm. With interior fittings (grey). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7494 · ICE 2-Coach with traffic red stripe, 2nd Class with children's compartment, type 806.0 of the DB AG. Length: 165 mm. With interior fittings (turquoise). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7495 Ⓚ

9447 6535 38 9005 9570 + 9577

7496 Ⓚ

9447 6535 38 9005 9570 + 9577

7495 · ICE 2-Coach with traffic red stripe, 2nd Class, type 806.3 of the DB AG. Length: 165 mm. With interior fittings (turquoise). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

7496 · ICE 2-Coach with traffic red stripe, 2nd Class, type 806.6 of the DB AG. Length: 165 mm. With interior fittings (turquoise). Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

The PROFI-coupling:

Because in real life, the ICE High Speed Train runs as a permanently coupled unit, then the models are also delivered with a rigid close-coupling so that when the coaches and driving ends are connected together, they cannot be uncoupled on uncoupler tracks. Taking the coaches apart and re-assembling is really no problem.

*Because all of the coaches **7440 to 7458** and **7490 to 7496** are fitted with the close-coupling mechanism Ⓚ, they can also be fitted with the PROFI-coupling if desired. The PROFI-coupling head 9570 and adapter 9577 can be fitted; fitting instructions are included in the instructions accompanying the driving units. In this way the ICE can be simply automatically uncoupled or pre-uncoupled over uncoupler tracks.*

DB

"Black gold on German rails" –

Tanker wagon train from Epoch IV

85 7087

*Limited Edition Special Series**

83 8415 Ⓚ

84 8415 Ⓚ

85 8415 Ⓚ

83 8416 Ⓚ

84 8416 Ⓚ

85 8416 Ⓚ

85 7087 · Tank loco of the DB, class 086, Overall length: 87 mm.
Loco is weathered. Triple headlights at each end.

54 7002 · 6518 · 6535 · 9525 · 9545

83 8415 / 84 8415 / 85 8415 - Tanker wagons "EVA", with brake platform. Overall length: 55 mm.
Wagons are weathered. Various running numbers.

9525 · 9545

83 8416 / 84 8416 / 85 8416 - Tanker wagons "VTG", with brake platform. Overall length: 55 mm.
Wagons are weathered. Various running numbers.

9525 · 9545

*Only available from dealers as long as stock lasts!

The so-called "birdcage" look-out in the centre of the roof of the baggage coach Pw4, enabled the guard to observe the signals. Right up to the sixties, verification of the signals was part of his duties.

DB

8040 Ⓚ

8040 · Baggage coach, type Pw4 of the DB. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. 4 moveable, sliding doors. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

DB

8041 Ⓚ

8041 · Compartment coach 1st class, type A4 of the DB, with brakeman's cab. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

DB

8042 Ⓚ

8042 · Compartment coach 1st/2nd class, type AB4 of the DB, with brakeman's cab. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

DB

8043 Ⓚ

8043 · Compartment coach 2nd class, type B4 of the DB, with brakeman's cab. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

DB

8044 Ⓚ

8044 · Compartment coach 2nd class, type B4tr of the DB, with load bay. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

PASSENGER COACHES

PROVINCIAL STYLE

8045 · Post coach, type Post 4 of the Deutsche Bundespost, with brakeman's cab. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8045 Ⓚ

8046 · Compartment coach 2nd class, type B4 of the DB, with tail-end indicators. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8046 Ⓚ

DB

*The **tail-end indicators** on the roof of the last wagon in the train belong to the romantic railways of an earlier era.*

The model 8046 bears them in exactly the right size for N «piccolo».

8051 · 3rd Class passenger coach, type Ci Pr86 of the DRG. Overall length: 57 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9456 9530 9525 9545

8051 Ⓚ

8052 Ⓚ

8052 · 2nd/3rd Class passenger coach, type BCL Bay05 of the DRG. Overall length: 57 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9456 9530 9525 9545

8053 · 2nd Class passenger coach for Edelweiß Local. Overall length: 57 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting.

9456 9530 9525 9545

8053 Ⓚ

8054 Ⓚ

8054 · Baggage coach for Edelweiß Local. Overall length: 57 mm. With interior fittings. 2 operating sliding doors. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting.

9456 9530 9525 9545

8055 · Baggage coach, type GwL Bay 96 of the DRG. Overall length: 57 mm. With interior fittings. 2 operating sliding doors. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9456 9530 9525 9545

8055 Ⓚ

8057 Ⓚ

8057 · Post-/baggage coach, type Pw Post i Pr84 of the DRG. Overall length: 56 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some guarded with grills. The coach is equipped ready to install interior lighting. Epoch II.

9456 9530 9525 9545

8058 · 2nd/3rd Class passenger coach, type BCi Pr86 of the DRG. Overall length: 56 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9456 9530 9525 9545

8058 Ⓚ

8059 Ⓚ

8059 · 3rd Class passenger coach, type Ci Pr86 of the DRG. Overall length: 57 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9456 9530 9525 9545

8070 · 2-axled Post-/Baggage coach, type Pw Posti of the DB. Overall length: 74 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545

8070 Ⓚ

DB

DB

8071 Ⓚ

8071 · 3-axled passenger coach 1st/2nd class, type AB 3 is of the DB. Overall length: 80 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Centre axle slides sideways. The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545

8072 · 3-axled passenger coach, 2nd class with load bay, type B 3 itr of the DB. Overall length: 76 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Centre axle slides sideways. The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545

8072 Ⓚ

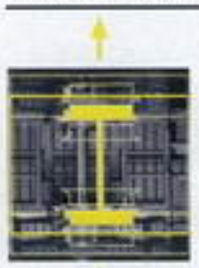
DB

DB

8073 Ⓚ

8073 · 3-axled passenger coach, 2nd class with load bay, type B 3 itr of the DB. Overall length: 76 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Centre axle slides sideways. The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545



8071 - 8074:
The centre axle slides sideways.

Right through into the German Federal Railway period – Epoch III – the older Prussian coaches could not be dispensed with, primarily on branch lines, but also to be found on main line services too. The triple-axled coaches of the Royal Prussian Railway Company (K.P.E.V.) which luckily survived from the regional railways, enjoyed a long career. Most trains were still made up with the double-axled Pw Posti coach.

So by using the FLEISCHMANN coaches 8070 – 8074, one can make up a local passenger train that's also capable of fulfilling all requirements – parcel and post compartment, upholstered class, wooden class and baggage compartment too.

DB

8074 Ⓚ

8074 · 3-axled passenger coach, 2nd class with load bay, type B 3 itr of the DB. Overall length: 76 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Centre axle slides sideways. The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545

PASSENGER COACHES

CONVERT COACHES

8078 – 8083 see page 65

8096 · 3-axled convert coach, 2nd class, type B3yg of the DB with electronic tail lighting. Overall length: 83 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Centre axle slides sideways. Epoch III.

9525 9545

8096 Ⓚ

DB

8097 Ⓚ

8097 · 3-axled convert coach, 2nd class, with luggage compartment, type BD3yg of the DB. Overall length: 83 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Centre axle slides sideways. Epoch III.

9525 9545

8098 · 3-axled convert coach, 1st/2nd class, type AB3yg of the DB. Overall length: 83 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Centre axle slides sideways. Epoch III.

9525 9545

8098 Ⓚ

DB

8099 Ⓚ

8099 · 3-axled convert coach, 2nd class, type B3yg of the DB. Overall length: 83 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Centre axle slides sideways. Epoch III.

9525 9545

"THUNDERBOXES"

8600 - 8654 see pages 77-84

8659 · Passenger coach, 3rd class, type Cid-27 of the DRG. Overall length: 87 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some of which are open. The coach is equipped ready to install interior lighting. Epoch II.

9455 9530 9525 9545

8659 Ⓚ

8660 Ⓚ

8660 · Baggage coach, type Pwi of the DRG. Overall length: 87 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some guarded with grills. 2 operating sliding doors. The coach is equipped ready to install interior/tail lighting. Epoch II.

9455 9530 9525 9545

8661 · Passenger coach, 2nd class, type Bi of the DRG. Overall length: 87 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some of which are open. The coach is equipped ready to install interior lighting. Epoch II.

9455 9530 9525 9545

8661 Ⓚ

8662 Ⓚ

8662 · Passenger coach, 3rd class, type Ci of the DRG. Overall length: 87 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some of which are open. The coach is equipped ready to install interior lighting. Epoch II.

9455 9530 9525 9545

8663 · Passenger coach, 2nd/3rd class, type BCi of the DRG. Overall length: 87 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some of which are open. The coach is equipped ready to install interior lighting. Epoch II.

9455 9530 9525 9545

8663 Ⓚ

8664 - 8687 see pages 84-86

With slot-guide mechanism

8693 · Compartment coach 3rd class, type Ctf of the SNCF. Overall length: 69 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Centre axle slides sideways.** The coach is equipped ready to install interior lighting. Epoch III.

9449 9530 9525 9545

8693
Ⓚ

SNCF

8694

8694 · Compartment coach of the SNCF type C⁴ tf, with brakeman's cab. Overall length: 69 mm. With interior details. 3 axles – **centre axle slides sideways.** Inset windows. All details faithfully reproduced. Epoch III.

9521 9543

8695 · Baggage coach of the SNCF type D p with 2 sliding doors. Overall length: 69 mm. With interior details. 3 axles – **centre axle slides sideways**. Inset windows. All details faithfully reproduced. Epoch III.

9521 9543

8695

SNCF

8740-8748 see page 87

8765
Ⓚ

8765 · 3rd Class passenger coach with luggage compartment, type CPwi Pr05⁵/35 of the DRG. Overall length: 68 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some guarded with grills. The coach is equipped ready to install interior lighting. Epoch II.

9449 9530 9525 9545

8766
Ⓚ

8766 · 3rd Class passenger coach with load bay, type CCitr Pr05 of the DRG. Overall length: 68 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some of which are open. The coach is equipped ready to install interior lighting. Epoch II.

9449 9530 9525 9545

8767
Ⓚ

8767 · 3rd Class passenger coach with load bay, type CCitr Pr05⁵ of the DRG. Overall length: 68 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some of which are open. The coach is equipped ready to install interior lighting. Epoch II.

9449 9530 9525 9545

8770 · 2-axled Post-/Baggage coach, type Pw Posti of the DR. Overall length: 74 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545

8770
Ⓚ

DR

8771
Ⓚ

8771 · 3-axled passenger coach 2nd class, type B3ip of the DR. Overall length: 80 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Centre axle slides sideways.** The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545

PASSENGER COACHES
PROVINCIAL STYLE

8772 · 3-axled passenger coach 2nd class with load bay, type B3itr of the DR. Overall length: 76 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Centre axle slides sideways.** The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545

8772 Ⓚ DR

8773 · 3-axled passenger coach 2nd class with load bay, type B3itr of the DR. Overall length: 76 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Centre axle slides sideways.** The coach is equipped ready to install interior lighting. Epoch III.

9461 9530 9525 9545

8773 Ⓚ DR

Some of the two- and three-axled Prussian Länderbahn (regional) coaches were still running right into the sixties on the DR. These interesting coaches were replaced first of all by reconstructed versions. Suitable train locos for rakes with these coaches would be, for example, the class 38[10-40] (Art. 7168) or 86 (Art. 7087).

8779-8781 see page 88

8782 · 2nd Class passenger coach with load bay, type Bitr of the DR. Overall length: 68 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some of which are open. The coach is equipped ready to install interior lighting. Epoch III.

9449 9530 9525 9545

8782 Ⓚ DR

DR

8783 Ⓚ

8783 · 2nd Class passenger coach with load bay, type Bitr of the DR. Overall length: 68 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows, some of which are open. The coach is equipped ready to install interior lighting. Epoch III.

9449 9530 9525 9545

8788-8790 see page 88

8792 · Compartment coach 2nd class without brakeman's cab, 3-axled type B3 of the DB. Overall length: 69 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Centre axle slides sideways.** The coach is equipped ready to install interior light-ing. Epoch III.

9449 9530 9525 9545

8792 Ⓚ DB

DB

8794 Ⓚ

8794 · Compartment coach 2nd class with brakeman's cab, 3-axled, type B3 of the DB. Overall length: 69 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Centre axle slides sideways.** The coach is equipped ready to install interior light-ing. Epoch III.

9449 9530 9525 9545

8795 · Baggage coach, 3-axled, type Pw3 of the DB. Overall length: 69 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Centre axle slides sideways.** 2 operating sliding doors. The coach is equipped ready to install interior lighting. Epoch III.

9449 9530 9525 9545

8795 Ⓚ DB

The shortage of coaches in the '50's forced the DB to renovate and convert older coaches. That's how the 3-axle convert coaches for local traffic, type 3yg (article 8096-8099) came into being. For the conversion job, the old chassis were cut out to a suitable length and fitted with a new body and interior details.

The forerunners of the convert coaches were the 3-axle Prussian compartment coaches which had to remain in service up until the end of the '50's. They are included in the FLEISCHMANN range in the DB logo version (article 8792-8795).

Typical locos used to haul these 3-axle convert coaches would be for example, the Class 65 steam loco (7065) or the Class 86 (7086), whilst for the 3-axle Prussian compartment coaches the former Prussian T 18 tank loco would be eminently suitable (Class 78, article 7077).

MITROPA

The former Prussian express coaches were also the mainstay of the D-train traffic in epoch II. Typical styling – with the exception of the baggage coach, which had a barrel roof – were the lantern roofs, the Prussian standard i. e. swan-neck bogies and the bellows connection on the coach ends.

FLEISCHMANN has put all the essential coaches in the range, from baggage coach to restaurant car, which are naturally, all fitted with the close-coupling mechanism Ⓚ.

8078 Ⓚ

8078 · Sleeping coach, type WL 4ü Pr01 of the MITROPA. Overall length: 128 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9459 9530 9525 9545

8080 Ⓚ

8080 · Express baggage coach, type Pw4ü Pr04 of the DRG. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. With 4 moveable sliding doors. The coach is equipped ready to install interior lighting. Epoch II.

9459 9530 9525 9545

Lighting for quieter times

MITROPA

8081 Ⓚ

8081 · Express restaurant coach of the MITROPA, type WR4ü Pr11. Overall length: 128 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9459 9530 9525 9545

8082 Ⓚ

8082 · Express coach 1./2./3. class, type ABC 4ü Pr09 of the DRG. Overall length: 124 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9459 9530 9525 9545

Besides the perfect colour match, the exact, correctly-sized lettering is above all, the special characteristic of the Prussian D-Zug coaches from FLEISCHMANN. The outstanding quality is indicated by, for example, the lettering beneath the windows, which although only measuring 0,25 mm high are still contour-sharply printed. (Detail: 8083)

8083 Ⓚ

8083 · Express coach 3rd class, type C4ü Pr08 of the DRG. Overall length: 124 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

9459 9530 9525 9545

EXPRESS COACHES

8100 · Baggage coach, type Dümsᵒᵒ of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8100 Ⓚ

DB

8110 · Express coach 1st class, type Avümzᵗᵗ of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8110 Ⓚ

DB

8112 · Restaurant coach, type WRümhᵗᵗ of the DB. Overall length: 170 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8112 Ⓚ

DB

8113 · Express coach 1st/2nd class, type ABümᵐ of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9447 6535 9525 9545

8113 Ⓚ

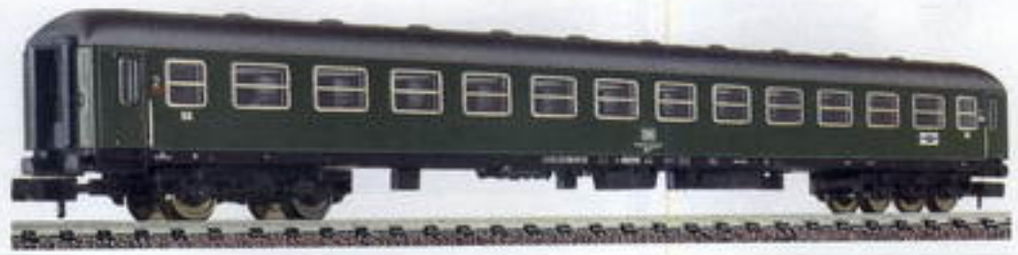
DB

The green, 26,4 m long express coaches were the standard DB express train coach of epoch IV.
The ideal train locos:
Class 110 (Art.-Nr. 7335) or
Class 011 (Art.-Nr. 7169).

8114 · Express coach 2nd class, type Bümᵐᵐ of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9447 6535 9525 9545

8114 Ⓚ



DB

DB

8116
Ⓚ

8116 · Couchette coach 2nd class with special compartments, type Bctüm[206] of the DB. Overall length: 170 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

The prototype of this couchette coach, which is in service with the daughter company of the DB – "DB AutoZug GmbH", doesn't just run inside German borders, but also travels far afield down to the Mediterranean. The longest journey runs through to Narbonne.

DB

8117
Ⓚ

8117 · "DB-AutoZug" 2nd class couchette coach, type Bocmh[241] of the DB AG. Overall length: 170 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

A "Rolling Road" train normally is made up of – next to the hauling loco, i. e. Class 151 (7382/7383) – a couchette coach Bcm[242] (8119), a wagon with buffer beam end (Saadkms[800]/8270), and then as many as you like, of intermediate wagons (Saadkms[800]/8271/8276-8279), finally bringing up the rear with another intermediate wagon, with the other buffer beam from the first 8270 clipped in place on the end.

DB

8119
Ⓚ

8119 · Couchette coach 2nd class for the "The Rolling Road", type Bcm[242] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

LOCAL COACHES

DOUBLE-DECKER COACHES

8121 · Double-decker coach 1st/2nd Class, type DABz™ "Schindler" of the DB. Overall length: 167 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior and tail lighting. Epoch V.

9447 6535 9448 9525 9545

8121
Ⓚ

DB

Since 1993, the DB has been using double-decker coaches of the "Schindler" type for regional commuter services. The obvious advantage of these double-decker coaches is that considerably more passengers can be carried for the same number of conventional coaches.
These double-decker coaches are almost 60 cm higher and just 17 tons heavier as a previous coach. The permitted top speed is 140 km/h.

8122 · Double-decker coach 2nd Class, type DBz™ "Schindler" of the DB. Overall length: 167 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior and tail lighting. Epoch V.

9447 6535 9448 9525 9545

8122
Ⓚ

DB

8123 · Double-decker control-cab coach 2nd class, type DBbzf™ "Görlitz" of the DB. Overall length: 171 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. **Triple headlights and red tail lighting, co-ordinated with the direction of travel*.** The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

8123
Ⓚ

DB

*So-called **control cab coaches** run on one end of push-pull local trains. They have a control cab at one end from which the loco driver can drive the loco at the other end of the train! That means that the loco remains coupled to the train, and saves shunting time.*

White lights: being pushed

Red lights: being pulled

8124 · Double-decker coach 1st/2nd class, type DABz™ "Görlitz" of the DB. Overall length: 167 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior and tail lighting. Epoch V.

9447 6535 9448 9525 9545

8124
Ⓚ

DB

Modern wagons in regional traffic are the three double-decker coaches from Görlitz, which can be differentiated from their predecessors of the "Schindler" type (articles 8121/22) mainly by their bogies, an enclosed toilet system, a flatter roof as well as further alterations to the ventilators and door areas. The DB uses the new "Görlitz" style double-decker coaches in conjunction with the older "Schindler" style double-deckers.

Rub-on lettering for prototypically correct terminus station indicators are included in 8123, 8124 and 8125.

8125 · Double-decker coach 2nd class, type DBz™ "Görlitz" of the DB. Overall length: 167 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior and tail lighting. Epoch V.

9447 6535 9448 9525 9545

8125
Ⓚ

DB

*Light change not suitable for digital system

LOCAL COACHES

CONVERT COACHES

After the second world war there was still a huge number of very old 2-, 3- and 4-axled passenger carriages of various types of construction to be collated.
There was an immediate need for the German Railways to have coaches for local traffic available without too much cost in both time and money, so the "convert coach" was developed.
They were constructed from various groups of wagon chassis of a suitable size which fitted together. On top of these, they mounted the coach bodies with only the barest necessities for interior fittings that were thought to be sufficient for the local traffic of those times!

DB

8127 Ⓚ

8127 · Local coach 2nd class with luggage compartment, type BDyg[800] of the DB. Overall length: 122 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9459 9530 9525 9545

8128 Ⓚ

DB

8129 Ⓚ

8128 · Local coach 1st/2nd class, type AByg[800] of the DB. Overall length: 122 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

8129 · Local coach 2nd class, type Byg[815] of the DB. Overall length: 122 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

8128/29: 9459 9530 9525 9545

INTERNATIONAL PASSENGER COACHES

EXPRESS COACHES

SBB

8130 Ⓚ

8130 · Baggage coach (convert coach), type D of the Swiss State Railways (SBB). Overall length: 128 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9459 9530 9525 9545

8136 Ⓚ

SOB

8137 Ⓚ

8136 · Express coach 1st/2nd class, type AB of the Swiss South-East Railway (SOB). Overall length: 134 mm.
8137 · Express coach 2nd class, type B of the Swiss South-East Railway (SOB). Overall length: 134 mm.
With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

8136/37: 9459 9530 9525 9545

INTERNATIONAL PASSENGER COACHES

EXPRESS COACHES

8138 · Express coach 1st/2nd class, type AB (convert coach) of the Swiss State Railways (SBB). Overall length: 134 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9459 9530 9525 9545

8138 Ⓚ

SBB

8139 · Express coach 2nd class, type B (convert coach) of the Swiss State Railways (SBB). Overall length: 134 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9459 9530 9525 9545

8139 Ⓚ

SBB

LOCAL COACHES

"SILVER FISHES"

8140 · Local control-cab coach 2nd class with luggage compartment, type BDnrzf[740] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. With prototypical **triple headlights and red tail lights which alter automatically according to the direction of travel***. With illuminated terminus indicator. The coach is equipped ready to install interior lighting. Epoch V.

8140 Ⓚ

DB

*So-called **control-cab coaches** run on one end of pushpull local trains. They have a control cab at one end from which the loco driver can drive the loco at the other end of the train! That means that the loco remains coupled to the train, and saves shunting time.*

9530 2 x for interior lighting 6535 1 x for cabend light
9531 1 x for tail light 9525 9545

8141 · Local coach 1st/2nd class, type ABnrzb[704] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8141 Ⓚ

DB

8142 · Local coach 2nd class, type Bnrz[725] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8142 Ⓚ

DB

---

*Light change not suitable for digital system

*So-called **control-cab coaches** run on one end of pushpull local trains. They have a control cab at one end from which the loco driver can drive the loco at the other end of the train! That means that the loco remains coupled to the train, and saves shunting time.*

White lights: being pushed

Red lights: being pulled

*Just like the prototype, the FLEISCHMANN control-cab coaches 8140, 8143 and 8146 show the **triple white headlights** and indicator panel when being pushed, and the **red tail lights** when being pulled – with the loco up front.*

9530, 2 x for interior lighting · 6535, 1 x for cabend light · 9531 1 x for tail light · 9525 · 9545

DB

8143 Ⓚ

8143 · Local control-cab coach "RegionalBahn" 2nd class, with luggage compartment, type BDnrzf[401] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. With prototypical **triple headlights and red tail lights which alter automatically according to the direction of travel*.** With illuminated terminus indicator. The coach is equipped ready to install interior lighting. Epoch V.

DB

8144 Ⓚ

8144 · Local coach "RegionalBahn" 1st/2nd class, type ABnrz[401] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 · 9530 · 9525 · 9545

DB

8145 Ⓚ

8145 · Local coach "RegionalBahn" 2nd class, type Bnrzb[778.2] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 · 9530 · 9525 · 9545

9530 2 x for interior lighting · 6535 1 x for cabend light · 9531 1 x for tail light · 9525 · 9545

DB

8146 Ⓚ

8146 · Local control-cab coach "RegionalBahn" 2nd class, with luggage compartment, type BDnrzf[483] of the DB in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. With prototypical **triple headlights and red tail lights which alter automatically according to the direction of travel*.** With illuminated terminus indicator. The coach is equipped ready to install interior lighting. Epoch V.

Even the Deutsche Bahn business sector for local traffic is converting over to the traffic red colour. Therefore you will often come across the famous silver-fish coaches painted in this attractive livery.

The FLEISCHMANN models correspond in colour, lettering and all important details to their large counterparts.

DB

8147 Ⓚ

8147 · Local coach "RegionalBahn" 1st/2nd class, type ABn[417] of the DB in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 · 9530 · 9525 · 9545

---

*Light change not suitable for digital system

LOCAL COACHES

REGIONALBAHN

8148 · Local coach "RegionalBahn" 2nd class, type Bnrz^{m1} of the DB in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8148 Ⓚ

DB

8150 · Baggage coach, type Dm^{810} of the DB in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8150 Ⓚ

DB

The baggage coach type Dm^{810} also appears in attractive traffic red.

INTERNATIONAL PASSENGER COACHES

DOUBLE-DECKER COACHES

8154 · Double-decker coach 1st/2nd class, type AB of the SBB. Overall length: 167 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

8155 · Double-decker coach 2nd class, type B of the SBB. Overall length: 167 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

8154 Ⓚ

SBB **8155** Ⓚ

8755 · Double-decker coach 2nd class, type B of the "Sihltal-Bahn" (Switzerland). Overall length: 167 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

8755 Ⓚ

Sihltal-Bahn

8154/8155, 8755:

9447 6535 9525 9545

The double-decker coaches types AB and B of the Swiss railways are the Swiss prototypes of the DB coaches DABz^{m} and DBz^{m} (articles 8121/8122). The FLEISCHMANN models are perfectly finished in the attractive blue/grey/yellow livery.

Rub-on lettering for prototypically correct terminus station indicators are included.

INTERNATIONAL PASSENGER COACHES
EXPRESS COACHES

8158 Ⓚ

ÖBB
IC/EC

8158 · IC/EC coach 1st class, type Amz of the ÖBB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach ist equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8159 Ⓚ

8159 · IC/EC coach 2nd class, type Bmz of the ÖBB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach ist equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

DB
IC/EC

8161 Ⓚ

8161 · IC/EC compartment coach 1st class, type Avmz[207] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

DB
IC/EC

8162 Ⓚ

8162 · IC/EC restaurant coach, type WRmz[135] of the DB. Overall length: 170 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Prototypical single arm pantograph (without electrical function). The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

DB
IC/EC

8163 Ⓚ

8163 · IC/EC open-plan coach 1st class, type Apmz[121] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

LONG DISTANCE COACHES

INTERCITY, EUROCITY

8164 · IC/EC open-plan coach 1st class, type Apmz[181] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8164 Ⓚ

DB IC/EC

8165 · IC/EC dining coach, type WRbmz[181] of the DB. Overall length: 170 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. Prototypical single arm pantograph (without electrical function). The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8165 Ⓚ

DB IC/EC

INTERNATIONAL PASSENGER COACHES

EXPRESS COACHES

8170 · Express baggage coach, type DF 39 of the SJ (Sweden). Overall length: 145 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach ist equipped ready to install interior lighting. Epoch IV.

8170/8171/8172:

9459 9530 9522 9542

8170

SJ

8171 · Express coach 1st class, type A3 of the SJ (Sweden). Overall length: 145 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach ist equipped ready to install interior lighting. Epoch IV.

8172 · Express coach 2nd class, type B3 of the SJ (Sweden). Overall length: 145 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach ist equipped ready to install interior lighting. Epoch IV.

8171

SJ

8172

DB
IR

8175
Ⓚ

8175 · InterRegio control-cab coach, 2nd class, with bicycle compartment, type Bimdzf[865.0] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Triple headlights and red tail lighting, co-ordinated with the direction of travel*.** The coach is equipped ready to install interior lighting. Epoch V.

9460 6535 9525 9545

DB
IR

8176
Ⓚ

8176 · InterRegio, long distance coach 1st class, type Aimh[865] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

The InterRegio coaches with the typical blue window band are the successors of the old express coaches.

DB
IR

8177
Ⓚ

8177 · InterRegio, long distance coach 2nd class, type Bim[865] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

DB
IR

8178
Ⓚ

8178 · InterRegio, long distance coach, "Bistro-Cafe" with seating compartments, type ARbuimz[865.0] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

---

*The **electronic train tail lighting** will operate on low voltage and remains brightly lit. Because of its special design, the lights only come on in **one** direction. When the train travels in the opposite direction the lights automatically go out – just like the real thing – the red tail light.*

DB
IR

8179
Ⓚ

8179 · InterRegio, long distance coach 2nd class, type Bim[865] of the DB, with electronic train tail lighting. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

*Light change not suitable for digital system

LONG DISTANCE COACHES

INTERCITY, EUROCITY

8189 · Post coach, type Post mrz of the Deutsche Bundespost. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8189 Ⓚ

8190 · Baggage coach, type Dms[205] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8190 Ⓚ

DB

8191 · IC/EC compartment coach 1st class, type Am[205] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

8192 · IC/EC compartment coach 2nd class, type Bm[205] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8191 Ⓚ

DB
IC/EC

8192 Ⓚ

8193 · Long distance compartment coach 1st/2nd class, type ABm of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9447 6535 9525 9545

8193 Ⓚ

DB

Typical long distance wagon of the 80's.

8194 · IC/EC open-plan coach 2nd class, type Bpmz[291] of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

8194 Ⓚ

DB
IC/EC

*The **electronic train tail lighting** will operate on low voltage and remains brightly lit. Because of its special design, the lights only come on in **one** direction. When the train travels in the opposite direction the lights automatically go out – just like the real thing – the red tail light.*

DB
IC/EC

8199 Ⓚ

8199 · IC/EC compartment coach 2nd class, type Bm[235] of the DB, with electronic train tail lighting. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

2 x 9530 · 9530 · 9525 · 9545

DB
IC/EC

8600 Ⓚ

8600 · IC/EC control-cab coach, 2nd class, type Bimdzf[286.1] of the DB AG in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. **Triple headlights and red tail lighting, co-ordinated with the direction of travel*.** The coach is equipped ready to install interior lighting. Epoch V.

9460 · 6535 · 9525 · 9545

DB
IC/EC

8601 Ⓚ

8601 · IC/EC compartment coach 1st class, type Avmz[107.5] of the DB AG in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 · 9530 · 9525 · 9545

DB
IC/EC

8602 Ⓚ

8602 · IC/EC open-plan coach 1st class, type Apmz[121.2] of the DB AG in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 · 9530 · 9525 · 9545

DB
IC/EC

8604 Ⓚ

8604 · IC/EC compartment coach 2nd class, type Bvmz[185.3] of the DB AG in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9447 · 6535 · 9525 · 9545

Ⓚ = Slot-guide mechanism in vehicle chassis for true close-coupling in conjunction with the PROFI-coupling 9545

*Light change not suitable for digital system

LONG DISTANCE COACHES
INTERCITY, EUROCITY

8605 · IC/EC open-plan coach 2nd class, type Bpmbz[803.6] of the DB AG in traffic red livery. Overall length: 165 mm. With interior fittings. Super-detailing. -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8605 Ⓚ

DB *IC/EC*

8606 · IC/EC restaurant coach, type WRmz[107.6] of the DB AG in traffic red livery. Overall length: 170 mm. With interior fittings. Super-detailing. -livery and -lettering. Inset windows. Prototypical roof pantograph (without electrical function). The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8606 Ⓚ

DB *IC/EC*

8610 · IC/EC control-cab coach, 2nd class, type Bimdzf[805.2] of the DB AG in ICE livery. Overall length: 165 mm. With interior fittings. Super-detailing. -livery and -lettering. Inset windows. **Triple headlights and red tail lighting, co-ordinated with the direction of travel*.** The coach is equipped ready to install interior lighting. Epoch V.

9460 6535 9525 9545

8610 Ⓚ

DB *IC/EC*

8611 · IC/EC compartment coach 1st class, type Avmz[107.6] of the DB AG in ICE livery. Overall length: 165 mm. With interior fittings. Super-detailing. -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8611 Ⓚ

DB *IC/EC*

8612 · IC/EC open-plan coach 1st class, type Apmz[107.6] of the DB AG in ICE livery. Overall length: 165 mm. With interior fittings. Super-detailing. -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

8613 · IC/EC compartment coach 2nd class, type Bvmz[105.3] of the DB AG in ICE livery. Overall length: 165 mm. With interior fittings. Super-detailing. -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

8612 Ⓚ

DB *IC/EC*

8613 Ⓚ

*Light change not suitable for digital system

8612: 9458 9530 9525 9545

8613: 9447 6535 9525 9545

Accent on Colour:

The Bahn AG has dramatically improved the image of their IC and similarly, their EC trains. The coaches are presented in a new livery, which derives from the ICE: in light grey with traffic red stripes.

The ideal locos for the coaches 8610 - 8618 are for example the locos, class 101 (art. 7355) or class 218 (art. 7236/see picture below) .

DB
IC/EC

8614
Ⓚ

8614 · IC/EC open-plan coach 2nd class, type Bpmz[293.2] of the DB AG in ICE livery. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

DB
IC/EC

8615
Ⓚ

8615 · IC/EC restaurant coach, type WRmz[137.6] of the DB AG in ICE livery. Overall length: 170 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. Prototypical roof pantograph (without electrical function). The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

Because of the drastic reduction of the InterRegio services on the DB AG, several Bistro Café coaches were made "redundant". They now run in IC- und EC-trains as so-called BordBistro coaches – naturally, they now carry the current livery of light grey with traffic red stripe.

DB
IC/EC

8616
Ⓚ

8616 · IC/EC „BordBistro" coach, type Arkimbz[292.2] of the DB AG in ICE livery. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

DB
IC/EC

8618
Ⓚ

8618 · IC/EC long distance coach 2nd class, type Bm[263.3] of the DB AG in ICE livery. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

LOCAL COACHES

DOUBLE-DECKER COACHES

8623 · Double-decker coach with control cab, 2nd class, type DBbzf[751] "Görlitz" of the DB. Overall length: 171 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. **Triple headlights and red tail lighting, co-ordinated with the direction of travel*.** The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

8623
Ⓚ

DB

*So-called **control cab coaches** run on one end of pushpull local trains. They have a control cab at one end from which the loco driver can drive the loco at the other end of the train! That means that the loco remains coupled to the train, and saves shunting time.*

83 8625 · Double-deck coach 2nd class, type DBz[751] „Görlitz" of the DB AG, with advert panel "ASS+C-ratiopharm". Overall length: 167 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior and tail lighting. Epoch V.

9447 6535 9448 9525 9545

83 8625
Ⓚ

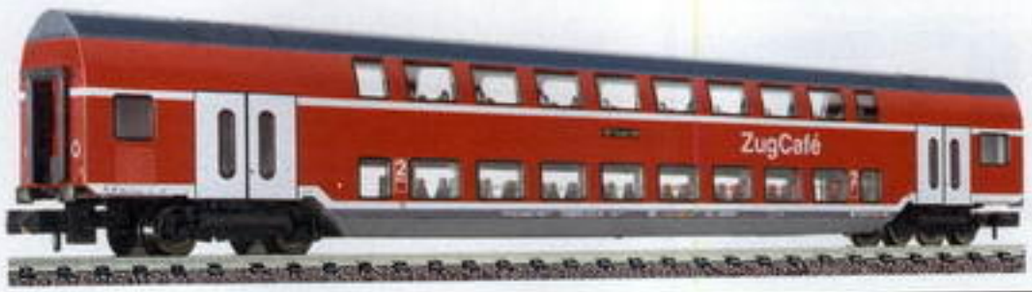
DB

Rub-on lettering for prototypically correct terminus station indicators are included in the coaches 8623 - 8628.

8626 · Double-decker coach 2nd class "ZugCafe", type DBpkz[753.1] "Görlitz" of the DB AG. Overall length: 167 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior and tail lighting. Epoch V.

9447 6535 9448 9525 9545

8626
Ⓚ



DB

*With the advent of the **"Train-Café"** in the double-decker coaches, the commuters' sustenance is at last provided for. A quick cup of coffee before work, or a small beer on the way home – that makes for double enjoyment of rail travel!*

8627 · Double-decker coach 1st/2nd class, type DABpz[756] "Görlitz" of the DB AG. Overall length: 167 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior and tail lighting. Epoch V.

9447 6535 9448 9525 9545

8627
Ⓚ

DB

8628 · Double-decker coach 2nd class, type DABpz[753] "Görlitz" of the DB AG. Overall length: 167 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior and tail lighting. Epoch V.

9447 6535 9448 9525 9545

8628
Ⓚ

DB

*Light change not suitable for digital system

*The so-called **"guard's look-out"** in the roof of the Pw4üe enabled the loco guard to watch out for the signals. Up to the 60's it was the responsibility of the guard to watch out for the signals as well as the loco driver.*

DB

8630 Ⓚ

8630 · Express baggage coach, type Pw4üe of the DB. Overall length: 135 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8631 Ⓚ

DB

8632 Ⓚ

8631 · Express coach 1st class, type A4üe of the DB. Overall length: 135 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

8632 · Express coach 2nd class, type B4üwe of the DB. Overall length: 135 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

8631/32: 9459 9530 9525 9545

DSG

8633 Ⓚ

8633 · Express restaurant coach, type WR4üe of the DSG. Overall length: 147 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

DSG

8634 Ⓚ

8634 · Express sleeping coach, type WLA4üe of the DSG. Overall length: 147 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

In the 1930's, the German Post Office endeavoured to construct their coaches to suit the latest technology. That's how the all-welded construction, 22.9 metre long, 4-axled, post coach came into being to run in express trains. Even through into Epoch III, the 50's and 60's so to speak, the German Post Office still relied heavily on these vehicles. The FLEISCHMANN model of the Post 4e, carries the livery and lettering typical of the period.

8635 Ⓚ

8635 · Express post coach, type Post 4e of the Deutsche Bundespost. Overall length: 143 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8636 · 4-axled standard post and baggage coach, type PwPost 4ü-28 of the DB. Overall length: 141 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows and upper-light windows. The coach is equipped ready to install interior lighting. Epoch III.

9457 9530 9525 9545

8636
Ⓚ

DB

The vehicle programme of 1928 and 1929 (I) saw above all, the construction of 20 four-axled, standard post and baggage coaches of complete steel construction, type PwPost 4ü-28, in two series, each of ten. The construction costs of one coach was 66.843 RM (Reichsmark). The coaches were permitted to run at a top speed of 140 km/h.

After 1950, they saw several conversion measures undertaken by the DB. Their service ended in September 1976 within the Hannover area.

9457

9530

9457 · Interior Lighting Unit for the standard post and baggage coach 8636.
Current consumption ca. 50 mA.

8638 · Express coach 2nd class, type B4üwe of the DB, with electronic tail lighting. Overall length: 135 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8638
Ⓚ

DB

*The **electronic train tail lighting** will operate on low voltage and remains brightly lit.*
*Because of its special design, the lights only come on in **one** direction. When the train travels in the opposite direction the lights automatically go out – just like the real thing – the red tail light.*

8640 · Express baggage coach, type D4üm of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9458 9530 9525 9545

8640
Ⓚ

DB

8641 · Express coach 1st class, type A4üm of the DB. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9447 6535 9525 9545

8641
Ⓚ

DB

In 1953, the first prototypes of the 26.4 m long express coaches of the DB rolled along the rails on the newly developed "Minden-Deutz" bogies. In the course of many years, there have been several alterations to the details. PFA Weiden later converted numerous coaches into InterRegio-coaches.

The ideal express loco for the coaches 8640 - 8649 is for example the class 01[10] (art. 7172) or class V 200' (art. 7250).

DB

8642
Ⓚ

8642 · Express coach 1st/2nd class, type AB4üm of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9447 6535 9525 9545

DB

8643
Ⓚ

8643 · Express coach 2nd class, type B4üm of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9447 6535 9525 9545

DB

8644
Ⓚ

8644 · Express restaurant coach, type WR4üm of the DSG. Overall length: 170 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9458 9530 9525 9545

DB

8649
Ⓚ

8649 · Express coach 2nd class, type B4üm of the DB, with electronic train tail lighting. Overall length: 165 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9447 6535 9525 9545

*The **electronic train tail lighting** will operate on low voltage and remains brightly lit.*
*Because of its special design, the lights only come on in **one** direction. When the train travels in the opposite direction the lights automatically go out – just like the real thing – the red tail light.*

LOCAL COACHES
"modus"

8653 · Local control-cab coach "modus", 1st/2nd class, type ABpybdzf[mo] of the DB AG. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. **Triple headlights and red tail lighting, co-ordinated with the direction of travel*.** The coach is equipped ready to install interior lighting. Epoch V.

8653 (K)

DB

9460 6535 9525 9545

The "modus" sets the standard in Regional Traffic:

55 new local coaches, of which 11 are control cab coaches, have been ordered by the DB AG from PFA in Weiden.

There are two types of "modus" variants: a wholly second class accompanied by a control cab coach with 1st, and multi-purpose compartments. A rake of these 4 - 5 part trains, hauled by a traffic red class 111, make up the perfect picture.

8654 · Local coach "modus", 2nd class, type Bpyz[mo] of the DB AG. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

8654 (K)

DB

9447 6535 9525 9545

8659 - 8663
see page 62

SEMI FAST TRAIN COACHES

8664 · 2nd Class control-cab coach for semi fast trains, with baggage compartment, type BDymf[mo] of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. **Triple headlights and red tail lighting, co-ordinated with the direction of travel*.** The coach is equipped ready to install interior lighting. Epoch IV.

8664 (K)

DB

9460 6535 9525 9545

One speciality: the control-cab coach

A small driver's cab was constructed on the right hand side, end of the coach, whilst on the other side was a small service compartment. In order to be still able to access the next coach in the train, a central corridor connection was made in between these compartments, fitted with doors which could be closed and surrounded by a moulded rubber cushion. Two windows on either side of the corridor connection gave view of the route.

8665 · 1st/2nd Class coach for semi fast trains, type ABymb[m] of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

8665 (K)

DB

9447 6535 9525 9545

The so-called "central entrance coaches" with their new standard length of 26.4 m, count amongst the first new construction programme on the DB. They were designed not only for local traffic but also for long distance routes. In order to reduce the amount of time spent waiting in the station, the coaches had 4 doors on each side. This made it possible to have a quick entry – and – exit, especially on commuter trains. A control cab coach for push-pull operation, matching these coaches, was soon developed. The permitted top speed of these coaches was 120 km/h.

Suitable train locos: (i.e.) Class 218 (Art.-Nr. 7237), Class 141 (Art.-Nr. 7326) or Class 110 (Art.-Nr. 7335).

8666 · 2nd Class coach for semi fast trains, type Bymb[m] of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

8666 (K)

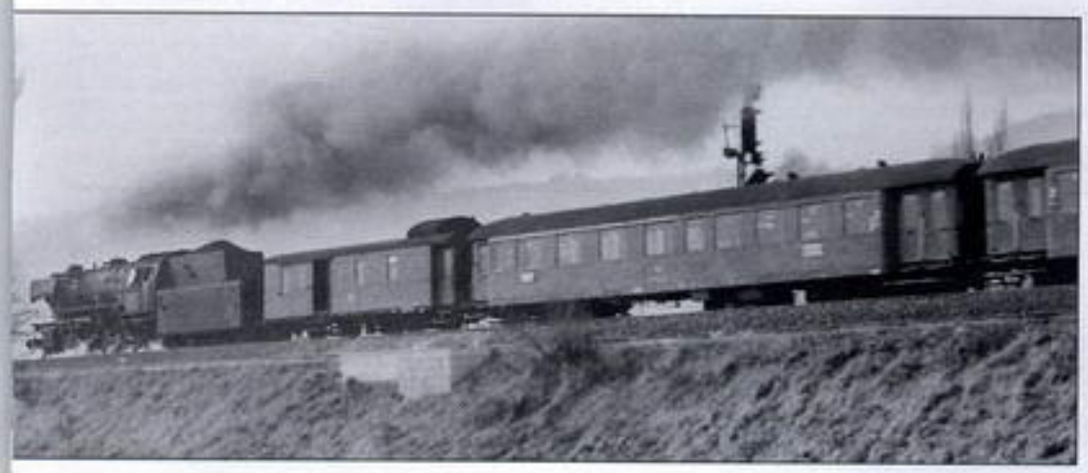
DB

9447 6535 9525 9545

MODELS OF THE YEAR 2004

eisenbahn magazin
N-Bahn Magazin

*Light change not suitable for digital system



New constructions! Welded style.

SEMI FAST TRAIN COACHES

DB

8676 Ⓚ

8676 · 1st/2nd Class coach for semi fast trains, type AB4yswe-37/55 of the DB. Overall length: 131 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

☼ 9459 ☼ 9530 9525 9545

DB

8677 Ⓚ

The delivery period of these four-axied standard corridor coaches lasted from 1930 – 1933. They had a steel underframe with an inset at the ends, two-axled "Görlitz III light" bogies and sleeved buffers with 500 mm buffer plates. The coach body was welded on, the roofing plates were riveted together.

8677 · 2nd Class coach for semi fast trains, type B4ywe-36/50 of the DB. Overall length: 131 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

☼ 9459 ☼ 9530 9525 9545

LONG DISTANCE COACHES

INTERCITY, EUROCITY

The InterCity cab trailer coach was developed from the InterRegio cab trailer coach. The DB uses them to save on locomotives and also to reduce waiting time in terminus stations.

DB
IC/EC

8680 Ⓚ

8680 · IC/EC control-cab coach, 2nd class, with bicycle compartment, type Bimdzf[865.2] of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. **Triple headlights and red tail lighting, co-ordinated with the direction of travel*.** The coach is equipped ready to install interior and tail lighting. Epoch V.

☼ 9460 ☼ 6535 9525 9545

DB
IC/EC

8681 Ⓚ

8681 · IC/EC compartment coach 1st class, type Avmz[107] of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

☼ 9458 ☼ 9530 9525 9545

*Light change not suitable for digital system

LONG DISTANCE COACHES

8683 · IC/EC open-plan coach 1st class, type Apmz[117.2] of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8683 Ⓚ

DB
IC/EC

8685 · IC/EC open-plan coach 1st class, type Apmz[117.8] of the DB, with electronic train tail lighting. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9530 9525 9545

8685 Ⓚ

DB
IC/EC

*The **electronic train tail lighting** will operate on low voltage and remains brightly lit. Because of its special design, the lights only come on in **one** direction. When the train travels in the opposite direction the lights automatically go out – just like the real thing – the red tail light.*

8686 · IC/EC compartment coach 2nd class, type Bvmz[165.5] of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch V.

9447 6535 9525 9545

8686 Ⓚ

DB
IC/EC

8687 · IC/EC restaurant coach, type WRmz[121] of the DB. Overall length: 170 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. Prototypical roof pantograph (without electrical function). The coach is equipped ready to install interior lighting. Epoch V.

9458 9530 9525 9545

8687 Ⓚ

DB
IC/EC

*The coaches 8680 - 8687 have reproductions of the **"pressure protected connections".***
These inter-coach connectors have been developed by the DB to withstand the air pressure caused when two trains pass each other inside tunnels so that nothing is experienced inside the coaches. This ensures the minimum discomfort for passengers.

8693-8695 see page 63

The ideal express loco for the coaches 8740-8748 is for example the Class 39[0-2] (art. 7137)

DR

8740 Ⓚ

8740 · Express baggage coach, type Pw4üe of the DR. Overall length: 135 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8741 Ⓚ

DR

8742 Ⓚ

8741 · Express coach 1st class, type A4üe of the DR. Overall length: 135 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

8742 · Express coach 2nd class, type B4üpe of the DR. Overall length: 135 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

DR

8743 Ⓚ

8743 · Express restaurant coach, type WR4üe of the DR. Overall length: 147 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

Former express coaches of group 35/36 as DR-couchette coaches with ivory stripes.

DR

8744 Ⓚ

8744 · Express couchette coach, type Bc4üe (C4ü-35) of the DR. Overall length: 135 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

*The **electronic train tail lighting** will operate on low voltage and remains brightly lit. Because of its special design, the lights only come on in **one** direction. When the train travels in the opposite direction the lights automatically go out – just like the real thing – the red tail light.*

DR

8748 Ⓚ

8748 · Express coach 2nd class, type B4üpe of the DR, with electronic tail lighting. Overall length: 135 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8755 see page 72 **8765-8773** see pages 63/64

EXPRESS COACHES

8779 · Express baggage coach, type Pw4ü of the DR. Overall length: 116 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. With 4 moveable sliding doors. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8779 Ⓚ

DR

8780 · Express coach 1st/2nd class, type AB4üp of the DR. Overall length: 124 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8780 Ⓚ

DR

8781 · Express coach 2nd class, type B4üp of the DR. Overall length: 124 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8781 Ⓚ

DR

8782/8783 see page 64

PASSENGER COACHES

REGIONAL CONSTRUCTION STYLE

8788 · Post coach, type Post 4 of the Deutsche Post, with brakeman's cab. Overall length: 116 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

9459 9530 9525 9545

8788 Ⓚ

DR

The load bay – detail of the coach 8790.

8789 · Compartment coach 2nd class, type B4 of the DR, with brakeman's cab. Overall length: 116 mm.

8790 · Compartment coach 2nd class, type B4 tr of the DR, with load bay. Overall length: 116 mm.

With interior fittings. Super-detailing, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch III.

8789/90: 9459 9530 9525 9545

8789 Ⓚ

DR

8790 Ⓚ

8792-8795 see page 64

8200
Ⓚ

8200 · Low sided wagon, type X 82 (Kklmmo$^{[m]}$) of the DB. Overall length: 63 mm. Super-detailling, -livery and -lettering. Epoch IV.

9525 9545

8201
Ⓚ

8201 · Low sided wagon, type X 82 (Kklmmo$^{[m]}$) of the DB. Overall length: 63 mm. Super-detailling, -livery and -lettering. Epoch IV.

9525 9545

8202
Ⓚ

8202 · Stake wagon, type Rr 20 of the DB. Overall length: 63 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8204 · High sided wagon, type Ommu 29 of the DB. Overall length: 63 mm. Super-detailling, -livery and -lettering. Epoch III.

8204
Ⓚ

9525 9545

8205
Ⓚ

8205 · Open goods wagon, type Omm 55 of the DB. Overall length: 63 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8208 · Open goods wagon, type O "Schwerin" of the DRG. Overall length: 41 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch II.

8208

9521 9543

8211

8211 · Low sided wagon, type Kklmmo$^{[m]}$ of the DB. Overall length: 63 mm. Super-detailling, -livery and -lettering. With removeable tarpaulin load. Epoch IV.

9521 9543

8212 · Open goods wagon with brakeman's cab, type O "Schwerin" of the DRG. Overall length: 45 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch II.

9521 9543

8212

8213

8213 · Lidded goods wagon, type K "Wuppertal" of the DRG. Overall length: 41 mm. Super-detailling, -livery and -lettering. With moveable lifting lids. With spoked wheels. Epoch II.

9521 9543

8215 · Open goods wagon, type Om "Essen" of the DRG. Overall length: 57 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch II.

9525 9545

8215 Ⓚ

8216 Ⓚ

8216 · Open goods wagon with brakeman's cab, type Om "Breslau" of the DRG. Overall length: 62 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch II.

9525 9545

8217 · Low-loader wagon, type Uis"" of the DB. Overall length: 77 mm. Super-detailling, -livery and -lettering. With removeable "cement pipe" and 8 swivelling load retainers. Epoch IV.

9521 9541

8217

8218 Ⓚ

8218 · Open goods wagon, type Om 12 of the DB. Overall length: 57 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8219 · Lidded goods wagon with brake platform, type K 25 of the DB. Overall length: 55 mm. Super-detailling, -livery and -lettering. With 6 moveable lifting lids. Epoch III.

9525 9545

8219 Ⓚ

8220

8220 · Wagon with pivoted bogie, type H 10 of the DB. Overall length 63 mm. Super-detailling, -livery and -lettering. Pivoted bogie in the centre of the wagon rotates. 8 removeable stakes. Epoch III.

9521 9543

8221 · Acid carrying wagon with brakeman's cab of the company Staub & Co, in service with the DRG. Overall length: 55 mm. Super-detailling, -livery and -lettering. Loaded with acid containers. With spoked wheels. Epoch II.

Acid transporter wagons loaded with 12 ceramic drums which were used to carry liquid acid. Our prototype was in service with the firm of Staub in Nürnberg.

9525 9545

8221 Ⓚ

8223 Ⓚ

8223 · Articulated wagon, type H "Regensburg" of the DRG. Overall length: 130 mm. Super-detailling, -livery and -lettering. One of each wagon, one each with and without brakeman's cab, coupled with a removeable connector shaft. Removeable load of tree trunks. With spoked wheels. Epoch II.

9525 9545 38 9006 between the wagons

8224 Ⓚ

8224 · Double-deck car transporter (particularly for goods trains), type Laaes[041] of the DB. Overall length: 69 mm. Super-detailing, -livery and -lettering. Epoch IV.

In the real thing these wagons always travelled fixed in pairs; i. e. in the picture the left hand side – the hand lever – runs always outside.

9525 9545

8225 Ⓚ

8225 · Double-deck car transporter (particularly for goods trains), type Laaes[041] of the DB. Overall length: 69 mm. Super-detailing, -livery and -lettering. Loaded with 4 removeable cars. Epoch IV.

9525 9545

8227 · Ballast wagon, type Talbot, of the DB. Overall length: 43 mm. Super-detailing, -livery and -lettering. Epoch III.

8227

9521 9543

8228

8228 · Ballast wagon, type Talbot, of the DRG. Overall length: 43 mm. Super-detailing, -livery and -lettering. Ballasted filling is removeable. Epoch II.

The DRG used these wagons for transport of track ballast and large gravel loads.

9521 9543

8230 · Container wagon "EKU" of the DB. Overall length: 90 mm. Super-detailing, -livery and -lettering. Loaded with 5 removeable liquid transporter containers, type Ddlkr[001] of the EKU-Brewery Kulmbach. Epoch IV.

8230 Ⓚ

9525 9545

8233 Ⓚ

8233 · Container wagon "Spatenbräu" of the DB AG. Overall length: 90 mm. Super-detailing, -livery and -lettering. Loaded with 5 removeable liquid transporter containers. Epoch V.

9525 9545

8234 Ⓚ

8234 · Container wagon, type Lbs[006] of the DB. Overall length: 90 mm. Super-detailing, -livery and -lettering. 2 removeable 20' container (with removeable roofs). Epoch IV.

9525 9545

8240 · Container wagon "Bad Reichenhaller", type Lbs[098] of the DB AG. Overall length: 90 mm. Super-detailing, -livery and -lettering. Removeable 40' container (with removeable roof). Epoch V.

9525 9545

8240 (K)

8241 (K)

8241 · Container wagon "P&O Nedlloyd", type Lbs[098] of the DB AG. Overall length: 90 mm. Super-detailing, -livery and -lettering. Removeable 40' container (with removeable roof). Epoch V.

9525 9545

8244/8251: 9525 9545

8244 · Container and exchange container wagon, type Sgns[691] of the DB (DB-Cargo). Overall length: 123 mm. Super-detailing, -livery and -lettering. Loaded with a removeable 40' container of the firm of "HANJIN". Removeable roof on container. Epoch V.

8251 · Container and exchange container wagon, type Sgss-y[703]. Overall length: 123 mm. Super-detailing, -livery and -lettering. Loaded with a removeable 40' container of the firm of "ECS". Removeable roof on container. Epoch V.

8244 (K)

8251 (K)

8255 · Container and exchange container wagon "Kombiwaggon", type Sgss-y[703] of the DB. Overall length: 123 mm. Super-detailing, -livery and -lettering. Loaded with a removeable 40' container of the firm of "NSCSA". Removeable roof on container. Epoch V.

9525 9545

8255 (K)

8256 · Stake wagon, type Rmrso 31 of the DB. Overall length: 75 mm. Super-detailing, -livery and -lettering. Epoch III.

9525 9545

8256 (K)

8257 (K)

8257 · Goods wagon with brake platform, type Rmrso 31 of the DB. Overall length: 80 mm. Super-detailing, -livery and -lettering. Epoch III.

9525 9545

8260 · Open goods wagon, type Ovw "Würzburg" of the DRG. Overall length: 53 mm. Super-detailing, -livery and -lettering. With spoked wheels. Epoch II.

9525 9545

8260 (K)

Around 1883, the Prussian State Railways created a special wagon to transport large animals. These made up a special classification of so-called VO wagons. The last 90 wagons were built between 1896 and 1900. Ten examples were fitted with air-brake pipes so that they could also be used within rakes of passenger trains. The VO wagons were withdrawn from service around 1930.

8261 (K)

8261 · Open goods wagon with brakeman's cab, type Ovw "Würzburg" of the DRG. Overall length: 55 mm. Super-detailing, -livery and -lettering. With spoked wheels. Epoch II.

9525 9545

8262
Ⓚ

8262 · Low sided wagon, type XX (US-construction) of the DB. Overall length: 77 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8263
Ⓚ

8263 · High sided wagon, type OO (US-construction) of the DB. Overall length: 77 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8268
Ⓚ

8268 · Four-axled stake wagon, type Rs[m] of the DB. Overall length: 124 mm. Super-detailling, -livery and lettering. 8 swivelling securing stakes on each side. Epoch IV.

9525 9545

"ROLLING ROAD"

A "Rolling Road" train normally is made up of – next to the hauling loco, i. e. Class 151 (7382/7383) – a couchette coach Bcm[ü] (8119), a wagon with buffer beam end (Saadkms[ttt]/8270), and then as many as you like, of intermediate wagons (Saadkms[ttt])/8271/8276-8279), finally bringing up the rear with another intermediate wagon, with the other buffer beam from the first 8270 clipped in place on the end.

8119
Ⓚ

8119 · Couchette coach 2nd class for the "The Rolling Road", type Bcm[ü] of the DB. Overall length: 165 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch IV.

9458 9530 9525 9545

9549

9549 · PROFI-Coupling for wagons 8270 to 8279.

The buffer beam can be swung out and is removeable.

8270

8270 · 8-axled low-floor wagon for heavy goods vehicle transport, type Saadkms[ttt] of the DB. Overall length: 127 mm. Super-detailling, -livery and -lettering. This wagon is an end wagon and is fitted with two removable automatic couplings (included a low-mounted coupling to the centre wagons). Two removable buffer beams at each end. Epoch V.

38 9000 9549 38 9002 Low-floor-coupling

"ROLLING ROAD"

8271 · 8-axled low-floor wagon for heavy goods vehicle transport, type Saadkms[699] of the DB. Overall length: 117 mm. Super-detailling, -livery and -lettering. This wagon is a centre wagon. One end is fitted with a low-mounted bar coupling. There is a socket for automatic couplings and a buffer beam to be added at each end. Epoch V.

38 9000 9549 38 9002 Low-floor-coupling

8271

The intermediate wagons for the "Rolling Road" range are delivered without buffer beams, enabling them to be coupled up to additional intermediate wagons or onto the end wagon 8270. The wagons loaded with lorries (8276 - 8279) are each numbered differently.

8276 · 8-axled, low-floor wagon for lorry transport, type Saadkms[699] of the DB. Overall length: 117 mm. This centre wagon is loaded with a Wiking lorry. Otherwise similar to 8271. Epoch V.

8278 · 8-axled low-floor wagon for heavy goods vehicle transport, type Saadkms[699] of the DB AG. Overall length: 117 mm. Super-detailling, -livery and -lettering. This wagon is a **centre wagon** and loaded with a Wiking lorry. One end is fitted with a low-mounted bar coupling. There is a socket for automatic couplings and a buffer beam to be added at each end. Epoch V.

38 9000 9549 38 9002 Low-floor-coupling

8276

8278

8279 · 8-axled low-floor wagon for heavy goods vehicle transport ("Rolling Road"), type Saadkms[699] of the DB AG. Overall length: 117 mm. Super-detailling, -livery and -lettering. This wagon serves as a **centre wagon** and is loaded with a Herpa lorry. One end is fitted with a low-mounted bar coupling. There is a socket for automatic couplings and a buffer beam to be added at each end. Epoch V.

38 9000 9549 38 9002 Low-floor-coupling

8279

GOODS WAGONS

8283 · Open goods wagon, type Eaos[106] of the DB. Overall length: 88 mm. Super-detailling, -livery and -lettering. Epoch IV.

9525 9545

8283 Ⓚ

8285 Ⓚ

8285 · Four-axle stake wagon with brakeman's cab, type SSk Köln of the DRG. Overall length: 83 mm. Super-detailling, -livery and -lettering. Clip-in side stakes are included. With spoked wheels. Epoch II.

9525 9545

8286 · Four-axled stake wagon with brake platform, type SSk 07 of the DB. Overall length: 83 mm. Super-detailling, -livery and lettering. Clip-in side stakes are included. Epoch III.

9525 9545

8286 Ⓚ

The prototype of this four-axled stake wagon, primarily used for transportation of iron and steel girders, was first built in 1892, according to drawing II d 6 of the Prussian standards.

The model is fitted with spoked wheels, 10 stakes, tubular buffers and high-mounted brakeman's cab exactly like the prototype.

In the prototype, these wagons are also used for loose loads, like ballast. In the tinier version, you can also transport the FLEISCHMANN ballast 9479.

8287 Ⓚ

8287 · Low sided wagon, type Res[nos] of the DB. Overall length: 124 mm. Super-detailing, -livery and -lettering. 8 swivelling securing stakes on each side. The side loading boards are removeable. Epoch IV.

9525 9545

Wagons of this type are widespread, not only on the DR but also on the DB and many other European railway systems. Because they belong to the so-called Europ-Pool, they can be colourfully mixed in with wagons of all national railways.

8288 Ⓚ

8288 · Low sided wagon, type Res of the DR. Overall length: 124 mm. Super-detailing, -livery and -lettering. 8 swivelling securing stakes on each side. The side loading boards are removeable. Epoch IV.

9525 9545

8292 · Open goods wagon, type Eaos[106], of the DB AG. Overall length: 88 mm. Super-detailing, -livery and -lettering. Epoch V.

8292 Ⓚ

9525 9545

8293 Ⓚ

8293 · Rolling roof wagon, type Tamns[nos] of the DB AG (DB-Cargo). Overall length: 88 mm. Super-detailing, -livery and -lettering. The rolling roof is removeable. Epoch V.

9525 9545

8295 Ⓚ

With different number as 8296.

The ideal couchette coach for 8295 and 8296: 8117

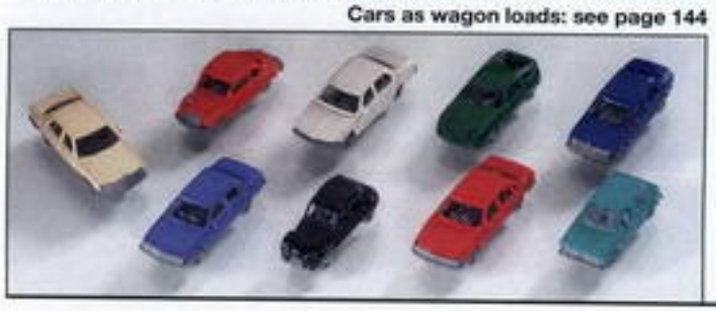
8296 Ⓚ

8295 · Double-decker car transporter in traffic red livery, type DDm[915] of the DB AG. Overall length: 165 mm. Super-detailing, -livery and -lettering. Epoch V.

8296 · Double-decker car transporter in traffic red livery, type DDm[915] of the DB AG. Overall length: 165 mm. Super-detailing, -livery and -lettering. Loaded with 8 removeable model cars. Epoch V.

9525 9545

Cars as wagon loads: see page 144



8299 Ⓚ

8299 · Eight axled, low loader wagon, type SSt 34a of the DB. Overall length: 151 mm. Super-detailing, -livery and -lettering. Loaded with two removeable "Kabelmetal" cable drums which rest on a wooden cradle between 14 stakes. Epoch IV.

9525 9545

8700 · Box goods wagon with brakeman's cab, type Gihs "Stückgut-Schnellverkehr" of the DR. Overall length: 80 mm. Super-detailling, -livery and lettering. With 2 moveable sliding doors. Epoch III.

9525 9545

8700 Ⓚ

8702 Ⓚ

8702 · Brake van, type Pwg of the DR. Overall length: 53 mm. Super-detailling, -livery and -lettering. Inset windows. With 2 moveable sliding doors. Epoch III.

9525 9545

8706 · Cattle wagon with brakeman's cab, type Vh of the DR. Overall length: 60 mm. Super-detailling, -livery and -lettering. With 2 moveable sliding doors. Epoch III.

9525 9545

8706 Ⓚ

8708

8708 · Open goods wagon, type Ou of the DR. Overall length: 41 mm. Super-detailling, -livery and -lettering. Epoch III.

9521 9543

8710 · Ballast wagon, type Talbot, of the DR. Overall length: 43 mm. Super-detailling, -livery and -lettering. Ballasted filling is removeable. Epoch III.

9521 9543

8710

8712

8712 · Open goods wagon, type Ou "Leuna-Werke" of the DR. Overall length: 41 mm. Super-detailling, -livery and -lettering. Epoch III.

9521 9543

8715 · Open goods wagon, type Omu of the DR. Overall length: 57 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8715 Ⓚ

8716 Ⓚ

8716 · Open goods wagon with brakeman's cab, type Omu of the DR. Overall length: 62 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8721 · Acid carrying wagon with brakeman's cab of the VEB Chemie Kombinat Bitterfeld, as used by the DR. Overall length: 55 mm. Super-detailling, -livery and -lettering. Loaded with acid containers. Epoch III.

9525 9545

8721 Ⓚ

8723 Ⓚ

8723 · Articulated wagon, type H of the DR. Overall length: 130 mm. Super-detailling, -livery and -lettering. One wagon with and one wagon without brakeman's cab, coupled with a removeable connector shaft. Removeable load of tree trunks. Epoch III.

9525 9545 38 9006 between the wagons

8725 Ⓚ

8725 · Stake wagon with steel rungs, type Rmrs of the DR. Overall length: 75 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8726 Ⓚ

8726 · Four-axled stake wagon, type SSkw of the DR. Overall length: 83 mm. Super-detailling, -livery and lettering. Clip-in side stakes are included. Epoch III.

9525 9545

8730 Ⓚ

8730 · High sided wagon, type OO (US-construction) of the DR. Overall length: 77 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch III.

9525 9545

8731 Ⓚ

8731 · 3-axled covered goods wagon with brakeman's cab, type Gh of the DR. Overall length: 68 mm. Super-detailling, -livery and -lettering. **Centre axle slides sideways.** 2 movable sliding doors. Epoch III.

9525 9545

8735 Ⓚ

8735 · Low sided wagon, type Ooo (US-construction) of the DR. Overall length: 77 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch III.

9525 9545

Additional wagons of the DR: 8288 see page 95 8311 see page 99 8363 see page 101 8513 see page 106 8522 see page 107

8300 · Brake van, type Pwg of the DRG. Overall length: 52 mm. Super-detailing, -livery and -lettering. Inset windows. With 2 opening sliding doors. Epoch II.

9521 9543

8300

8301

8301 · Brake van, type Pwg of the DB, with interior and tail lighting. Overall length: 52 mm. Super-detailing, -livery and -lettering. Inset windows. With 2 opening sliding doors. Epoch III.

9530 9521 9543

8302 · Brake van, type Pwg of the DRG. Overall length: 53 mm. Super-detailing, -livery and -lettering. Inset windows. With 2 moveable sliding doors. With spoked wheels. Epoch II.

9525 9545

8302 Ⓚ

8305 · Coupled wagon unit, consisting of one box goods van type Gelh "Dresden" and one baggage van, type Pwg, of the DRG. Overall length: 124 mm. Super-detailing, -livery and -lettering. Rigid coupling bar with moveable passages between the wagons. Baggage van with spoked wheels. Each wagon with 2 moveable sliding doors. Epoch II.

9525 9545 38 9007 between the wagons

8305 Ⓚ

MODEL OF THE YEAR 2001
eisenbahn magazin

The Deutsche Reichsbahn made us of so-called "light goods" trains in order to speed up the transport of parcel traffic. The light wagon units were designed for use in these type of trains. Our model consists of a prototypical example of a goods parcel wagon and a covered goods wagon "Dresden", which are close coupled with a closed in connection.

8306 · Coupled wagon unit, consisting of two box goods vans type Glleh "Dresden" of the DRG, of which 1 wagon is fitted with brakeman's cab. Overall length: 156 mm. Super-detailing, -livery and lettering. Rigid coupling bar with moveable passages between the wagons. 4 sliding doors. Epoch II.

9525 9545 38 9007 between the wagons

8306 Ⓚ

This Leig permanently coupled wagon unit consists of two "Dresden" covered box vans, which are close-coupled with a corridor connection between the two. Both wagons possess small side windows, and one of the wagons has a brakeman's cab. The logo "Stückgut-Schnellverkehr" on a white background is typical of the mid '30's.

Moveable corridor connection

8307 · Covered goods wagon "Lebende Fische", with brakeman's cab, in service of the DRG. Overall length: 80 mm. Super-detailing, -livery and -lettering. With 2 moveable sliding doors. Epoch II.

9525 9545

8307 Ⓚ

8309 · Covered goods wagon with brakeman's cab, type Gl "Dresden" of the DRG. Overall length: 80 mm. Super-detailing, -livery and -lettering. With 2 moveable sliding doors. Epoch II.

9525 9545

8309 Ⓚ

8311 Ⓚ

8311 · Covered goods wagon, type Gs of the DR. Overall length: 66 mm. Super-detailing, -livery and -lettering. With 2 opening sliding doors. Epoch IV.

9525 9545

8314 · Box van, type Gl 11 of the DB. Overall length: 75 mm. Super-detailing, -livery and -lettering. With 2 moveable sliding doors. Epoch III.

9525 9545

8314 Ⓚ

8316 Ⓚ

8316 · Box goods wagon, type Gs of the SBB. Overall length: 66 mm. With interior details in goods area. Super-detailing, -livery and -lettering. 2 operating sliding doors. Epoch V.

9525 9545

8317 · Covered goods wagon with brake platform, type Gl 11 of the DB. Overall length: 80 mm. Super-detailing, -livery and -lettering. With 2 moveable sliding doors. Epoch III.

9525 9545

8317 Ⓚ

With tail lighting!

8318 Ⓚ

8318 · Covered goods wagon, type Gmhs 53 of the DB, with tail lighting. Overall length: 66 mm. Super-detailing, -livery and -lettering. With 2 opening sliding doors. Epoch III.

9530 9525 9545

8319 · Covered goods wagon, type Gs[204] of the DB, with tail lighting. Overall length: 66 mm. Super-detailing, -livery and -lettering. With 2 opening sliding doors. Epoch IV.

9530 9525 9545

8319 Ⓚ

8323 Ⓚ

8323 · Refrigerated van "Radeberger". Overall length: 73 mm. Super-detailing, -livery and -lettering. Epoch V.

At least since the fall of the wall, the "Radeberger" has been tasted by all of the various former, Western regions of Germany – reason enough for FLEISCHMANN to produce an attractive refrigerated van for the "cool blonde".

9525 9545

8326 · Refrigerated van "Hasseröder". Overall length: 73 mm. Super-detailing, -livery and -lettering. Epoch V.

9525 9545

8326 Ⓚ

8330 Ⓚ

8330 · Covered goods wagon, type Gs[204] of the DB. Overall length: 66 mm. Super-detailing, -livery and -lettering. With 2 opening sliding doors. Epoch IV.

9525 9545

8335 · Sliding-wall wagon, type Hbis[299] of the DB. Overall length: 88 mm. Super-detailling, -livery and -lettering. With 4 sliding walls, which can be opened. Epoch IV.

8335 Ⓚ

9525 9545

8341 Ⓚ

8341 · Refrigerated van "Seefische", type Gk of the DRG. Overall length: 57 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch II.

9525 9545

8346 · Refrigerated van with brakeman's cab, type Ghk "Berlin" of the DRG. Overall length: 62 mm. Super-detailling, -livery and -lettering. Epoch II.

After 1920, several types of the "Bretter" refrigerated wagon existed. The prototype of the FLEISCHMANN model is the Ghk "Berlin" with thermo-doors.

8346 Ⓚ

9525 9545

8350 Ⓚ

8350 · Refrigerated van with brakeman's cab, type Ghk "Pschorr-Bräu", of the DB. Overall length: 62 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8352 · Livestock truck, type Vwh "Altona" of the DRG. Overall length: 53 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch II.

8352 Ⓚ

9525 9545

Between 1894 and 1912, a range of similar, partitioned wagons with the same production measurements were produced. The same construction details of the flat roof, the two doors at the ends and the additional compartment for small livestock under the coach floor signified the common details of these wagons. The wagons differed however in the various styles of internal partitioning. The last Vwh "Altona" remained in service right up to 1966.

New Construction!

8353 · Covered goods wagon, type Gvwh "Stettin" of the DRG. Overall length: 53 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch II.

8353 Ⓚ

9525 9545

8357 Ⓚ

8357 · Beer van "Pilsner Urquell" with brakeman's cab. Overall length: 60 mm. Super-detailling, -livery and -lettering. With 2 opening sliding doors. Epoch II.

9525 9545

8361 · Livestock truck with brakeman's cab, type Vwh "Altona" of the DRG. Overall length: 55 mm. Super-detailling, -livery and -lettering. With spoked wheels. Epoch II.

8361 Ⓚ

9525 9545

As compared with the "unbraked" version of the Vw "Altona", this wagon has a high-mounted brake cab with finely detailed doors and windows. Even the brake rod from the cab to the wagon frame has been reproduced.

8363
Ⓚ

8363 · Covered goods wagon, type G of the DR. Overall length: 57 mm. Super-detailing, -livery and -lettering. With 2 opening sliding doors. Epoch III.

9525 9545

8368 · Box goods van with end platform ("Fakultativ-Wagen" – "optional wagon"), type Cigd of the DRG. Overall length: 63 mm. Super-detailing, -livery and lettering. With spoked wheels. Inset windows, some of which are open. Epoch II.

The „optional wagon":

Article number 8368 is a so-called "optional wagon", i. e. a 2-axled vehicle, which could be used either as a passenger coach or as a goods wagon. The FLEISCHMANN model is equipped as the ***passenger train version.***

9525 9545

8368
Ⓚ

8369
Ⓚ

8369 · Box goods van with end platform ("Fakultativ-Wagen" – "optional wagon"), type Gwi "Magdeburg" of the DRG. Overall length: 63 mm. Super-detailing, -livery and lettering. With spoked wheels. Epoch II.

9525 9545

8370 · Sliding-wall wagon "InterCargo-Express", type Hbillss-y[307] of the DB. Overall length: 89 mm. Super-detailing, -livery and -lettering. Epoch V.

8370
Ⓚ

8371
Ⓚ

8371 · Sliding-wall wagon, type Hbills[303] of the DB. Overall length: 89 mm. Super-detailing, -livery and -lettering. Epoch V.

9525 9545

9525 9545

8372 · Sliding-wall wagon "DB-Cargo", type Hbillns[303]. Overall length: 89 mm. Super-detailing, -livery and -lettering. Epoch V.

8372
Ⓚ

8373
Ⓚ

8373 · Sliding-wall wagon "RAILION", type Hbillns[303] of the DB AG. Overall length: 89 mm. Super-detailing, -livery and -lettering. Epoch V.

With the current "RAILION" lettering

9525 9545

8375
Ⓚ

8375 · Sliding-wall wagon, type Hbis-tt[293], of the DB AG (DB-Cargo). Overall length: 89 mm. Super-detailing, -livery and -lettering. Epoch V.

9525 9545

Ⓚ = Slot-guide mechanism in vehicle chassis for true close-coupling in conjunction with the PROFI-coupling 9545

GOODS WAGONS

8380 · 3-axled covered goods wagon with brakeman's cab, type Ghwps "Stettin" of the DRG. Overall length: 68 mm. Super-detailling, -livery and -lettering. **Centre axle slides sideways.** 2 movable sliding doors. Spoked wheels. Epoch II.

8380
Ⓚ

9525 9545

8381
Ⓚ

8381 · 3-axled covered refrigerated wagon "Seefische" with brakeman's cab, type Gkwh "Berlin" of the DRG. Overall length: 68 mm. Super-detailling, -livery and -lettering. **Centre axle slides sideways.** With spoked wheels. Epoch II.

9525 9545

8383 · High capacity goods van "Audi". Overall length: 124 mm. Super-detailling, -livery and -lettering. Removeable roof. Epoch V.

8383
Ⓚ

In the beginning was the railway. Then, once the car became mass-produced, it required the support of the railway. Using a modern high-capacity wagon, the individual components are delivered, environmentally friendly, to the factory floors of the car producers.

9525 9545

8384 · High capacity goods van "KNAUF". Overall length: 124 mm. Super-detailling, -livery and -lettering. Removeable roof. Epoch V.

8384
Ⓚ

9525 9545

The roof is removeable. (8383/8384/8385)

8385 · High capacity goods van "BOSCH". Overall length: 124 mm. Super-detailling, -livery and -lettering. Removeable roof. Epoch IV.

8385
Ⓚ

9525 9545

The roof is moveable and the load can be taken out (8386/8387).

The roof is removeable

8389
Ⓚ

8389 · Swing roof wagon, type KKks01 of the DB. Overall length: 72 mm. Super-detailling, -livery and -lettering. 2 prototypical, moveable sliding roof halves. Epoch III.

9525 9545

8390 · Box goods van (US-construction), used as a railway service wagon of the DB. Overall length: 77 mm. Super-detailling, -livery and -lettering. Epoch III.

8390
Ⓚ

9525 9545

Variant with side air vents.

8391
Ⓚ

8391 · Box goods van with side air vents (US-construction), used as a railway service wagon of the DB. Overall length: 77 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8394 · 4-axled horse transporter wagon with brakeman's cab, type GGvwehs "Dresden" of the DRG. Overall length: 74 mm. Super-detailling, -livery and -lettering. Epoch II.

8394
Ⓚ

9525 9545

8395
Ⓚ

8395 · 4-axled horse transporter wagon with brakeman's cab, type GGvwehs of the DB. Overall length: 74 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

The wagons for carrying grain and cereals have a unique purpose alongside other large capacity wagons. In comparison with those other large capacity wagons, which have side wall flaps to unload their cargo, these wagons have no flaps, but a gravity unloading hopper instead.

8396
Ⓚ

8396 · High capacity goods van for grain, type KKt 27 of the DB, with brakeman's cab. Overall length: 79 mm. Super-detailling, -livery and -lettering. **Centre axles slide sideways.** Epoch III.

9525 9545

TANK WAGONS

8410 · Tank wagon "Esso" with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch IV.

9525 9545

8410 Ⓚ

8411 Ⓚ

8411 · Tank wagon "Shell" with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch IV.

9525 9545

8412 · Tank wagon "BP" with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch V.

9525 9545

8412 Ⓚ

8414 Ⓚ

8414 · Tank wagon "ARAL" with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch IV.

9525 9545

8415 · Tank wagon "OMV", in service of the DB AG, with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch V.

9525 9545

8415 Ⓚ

8416 Ⓚ

8416 · Tank wagon "VTG" with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8419 · Tank wagon "BfB" (Bundesmonopolverwaltung für Branntwein) with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch V.

9525 9545

8419 Ⓚ

8426 Ⓚ

8426 · Tank wagon "VDOM" with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch III.

9525 9545

8427 · Tank wagon "VITA KRAFTFUTTER" of the DB, with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch III.

8434 · Tank wagon "ÖSSAG" with brakeman's cab. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch II.

9525 9545

8427 Ⓚ

8434 Ⓚ

8437 Ⓚ

8437 · Tank wagon of the "Eisenbahnwagen-Leihgesellschaft m. b. H." with brakeman's cab. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch II.

9525 9545

New Construction
Mould alteration of the tank.

8445 · Chemical tanker wagon "VTG", in service of the DB, with brake platform. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch III.

8445 Ⓚ

9525 9545

New Construction

8449 Ⓚ

8449 · Gas tanker wagon with brakeman's cab of the firm of "Deutsche Solvay-Werke Rheinberg", as in service with the DRG. Overall length: 55 mm. Super-detailling, -livery and -lettering. Epoch II.

9525 9545

8480 · Tank wagon "Esso", model of a 77 m³ liquid transport wagon. Overall length: 88 mm. Super-detailling, -livery and -lettering. Epoch IV.

8480 Ⓚ

9525 9545

This tanker wagon with "wooden conversion" is used on the real railways to transport liquid chlorine.

The "wooden conversion" protects the steel tank inside from heat of the sun.

8481 · Tank wagon "Shell", model of a 77 m³ wagon for the transport of liquids. Overall length: 88 mm. Super-detailling, -livery and -lettering. Epoch IV.

8481 Ⓚ

9525 9545

8484 Ⓚ

8484 · Tank wagon "ARAL". Model of a 77 m³ liquid transport wagon, in service of the DB AG. Overall length: 88 mm. Prototypical livery and lettering. Epoch V.

9525 9545

8485 · Tank wagon "100 JAHRE Eva", model of a 77 m³ wagon for the transport of liquids. Overall length: 88 mm. Super-detailling, -livery and -lettering. Epoch V.

8485 Ⓚ

9525 9545

8486 Ⓚ

8486 · Tank wagon "VTG", model of a 77 m³ wagon for the transport of liquids. Overall length: 88 mm. Super-detailling, -livery and -lettering. Epoch V.

9525 9545

8487 · Tank wagon "AVIA", model of a 77 m³ liquid transport wagon. Overall length: 88 mm. Super-detailling, -livery and -lettering. Epoch V.

8487 Ⓚ

9525 9545

8488 Ⓚ

8488 · Tank wagon "DEA", model of a 77 m³ liquid transport wagon. Overall length: 88 mm. Super-detailling, -livery and -lettering. Epoch V.

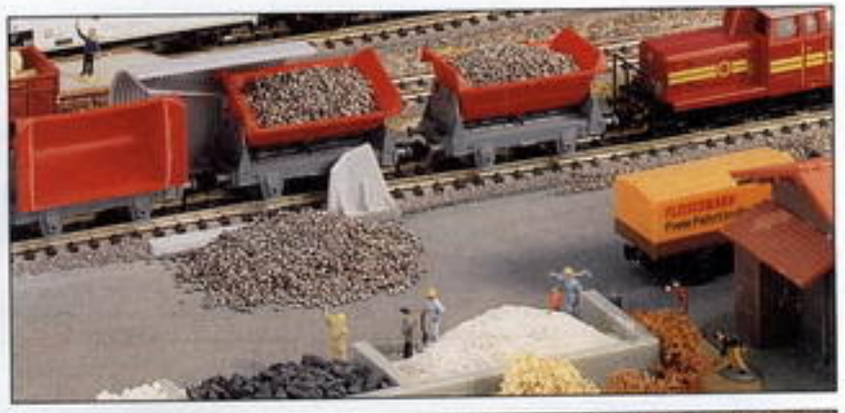
9525 9545

OPERATING WAGONS

8500

8500 · Dump-car. Overall length: 47 mm. Dumps to either side, using unloader 9481.

9521 9543



9481

9481 · Unloader for dump-car 8500, 60 mm long. Consists of roofed unloader and return device, usable with any make of N-„piccolo" gauge track.

The unloading ramp can only be used when the locos are pushing, as they can only run up to the unloading ramp and no further!

Assembly size

8502 Ⓚ

8502 · Crane truck. Model of a 10 t railway crane similar to type "WYHLEN". Overall length: 57 mm. Total length with jib: 86 mm. Jib can be raised or lowered and crane revolves. Epoch IV.

9525 9545

For a prototypical train, we recommend truck 8201 and the tool vans 8390 or 8591.

8503 Ⓚ

8503 · Crane Truck Set, consisting of one model of a 10 t railway crane similar to type "WYHLEN", overall length: 57 mm and one match truck, overall length: 55 mm, each wagon in traffic red livery. Jib can be raised or lowered and crane revolves. Epoch V.

9525 9545

8510 Ⓚ

8510 · Self unloading hopper wagon, type Tds[ooo] of the DB. Overall length: 58 mm. With moveable roof and 4 opening flaps in the bottom for automatic unloading of ballast on the unloading ramp 9482. Super-detailling, -livery and -lettering. Epoch IV.

9525 9545

The self-unloading hoppers 8510, 8513, 8515 (pictured page 107) and 8517, type Tds, have moveable swing roofs and four opening hatches in the wagon floor so that its gravel load can be unloaded.

8513 Ⓚ

8513 · Self unloading hopper wagon, type Tds of the DR. Overall length: 58 mm. Super-detailling, -livery and -lettering. With moveable roof and 4 opening flaps in the bottom for automatic unloading of ballast on the unloading ramp 9482. Epoch IV.

9525 9545

8515 · **Self unloading hopper wagon, type Tds[998] of the DB (DB-Cargo). Overall length: 58 mm.** Super-detailling, -livery and -lettering. With moveable roof and 4 opening flaps in the bottom for automatic unloading of ballast on the unloading ramp 9482. Epoch V.

9525 9545

8515 (K)

8517 (K)

8517 · **Self unloading hopper wagon, type Tds[998] of the DB AG in traffic red livery. Overall length: 58 mm.** Super-detailling, -livery and -lettering. With moveable roof and 4 opening flaps in the bottom for automatic unloading of ballast on the unloading ramp 9482. Epoch V.

9525 9545

8521 · **High-capacity self unloading hopper wagon, type Fad of the DB. Overall length: 72 mm.** Super-detailling, -livery and -lettering. With 2 opening flaps for automatic unloading on the unloading ramp 9482. Epoch III.

The prototype cars were used for hauling heavy materials such as ore, limestone, coal, coke and gravel.

8521 (K)

9525 9545

8522 (K)

8522 · **High-capacity self unloading hopper wagon, type Fad of the DR. Overall length: 72 mm.** Super-detailling, -livery and -lettering. With 2 opening flaps for automatic unloading on the unloading ramp 9482. Epoch IV.

9525 9545

8523 · **High-capacity self unloading hopper wagon, type Falns[180] of the DB AG (DB-Cargo) in traffic red livery. Overall length: 78 mm.** Super-detailling, -livery and -lettering. Epoch V.

9525 9545

8523 (K)

8524 (K)

8524 · **High-capacity self unloading hopper wagon, type Fals[180] of the DB. Overall length: 78 mm.** Super-detailling, -livery and -lettering. Epoch IV.

Now as Epoch-IV variation.

9525 9545

9482

9482 - **Hopper car unloader** with 111 mm straight track, for automatically unloading hopper wagons 8510 - 8526 (not 8523/8524). The outlet closure in the receiving bin can be manually operated to empty the bin. Track on the unloader deck is 80 mm above table level, the outlet of the bin 30 mm, so a second wagon can receive the unloader cargo.

The unloading ramp can only be used when the locos are pushing, as they can only run up to the unloading ramp and no further!

(not shown)
9421 - **Electro magnetic motor for 9482** (see page 117).

8525 · Self unloading hopper wagon "Talbot" of the DB, type 267. Overall length: 73 mm. Super-detailing, -livery and -lettering. With 4 opening flaps in the bottom for automatic unloading of ballast on the unloading ramp 9482. Epoch IV.

These wagons are used to carry heavy ballast loads (such as ore, limestone, gravel etc.).

9525 9545

8525 Ⓚ

8526 Ⓚ

8526 · Self unloading hopper wagon "Talbot" of the "EISENBAHN UND HÄFEN GMBH". Overall length: 73 mm. Super-detailing, -livery and -lettering. With 4 opening unloading flaps in the bottom for automatic unloading of ballast over the unloading ramp 9482. Epoch IV.

9525 9545

New Construction, with handbrake

8530 · Tipper wagon with handbrake, type Fans[138] of the DB AG (DB-Cargo). Overall length: 73 mm. Super-detailing, -livery and -lettering. Free-standing handrails and control wheel. Epoch V.

Tipper wagon with handbrake.

9525 9545

8530 Ⓚ

New Construction, without handbrake

8531 · Tipper wagon, without handbrake, type Fans[138] of the DB AG (DB-Cargo). Overall length: 73 mm. Super-detailing, -livery and -lettering. Free-standing handrails. Epoch V.

Tipper wagon without handbrake.

9525 9545

8531 Ⓚ

On the basis of the 1993 constructed SGKW 2, the FEW Blankenburg developed a double-sided tipper with two hoppers, which were mass produced from 1996.

Around 120 of these types of wagon have brakes which can be operated from the ground (see art. no: 8530). Up until 1998, the DB AG made up to 700 Fans[138], which, when empty, were permitted to run at up to 120 km/h.

WAGON SET "TRACK CLEANING"

8561 · Wagon set "Track cleaning", consisting of one low sided wagon of the DB, loaded with a track rubber, overall length: 63 mm, and one box goods van of the DB with 2 moveable sliding doors, overall length: 66 mm. The wagons are liveried and lettered as railway service vehicles. Epoch V.

9525 9545

8561 Ⓚ

THE 90T BREAKDOWN CRANE WITH VERSATILE OPERATIONS

8595 · 90 t steam breakdown crane of the DB. Overall length: 160 mm. Super-detailling, -livery and -lettering. Die-cast chassis with 4 outriggers which swing out to stabilise the crane when in use. Rotating crane. Crane jib can be raised or lowered. A small auxiliary hook is mounted on the jib tip. The main hook can be raised and lowered by cable. Epoch III.

9525 9545

8596 · Counterweight truck of the DB. Overall length: 58 mm. Super-detailling, -livery and -lettering. The cast counterweights are demountable from the chassis. Just as in the real thing, the counterweights can be hung on the rear wall of the cab. This truck is an essential part of a crane train. Epoch III.

9525 9545

8597 · Match truck of the DB. Overall length: 55 mm. Super-detailling, -livery and -lettering. This truck carries 4 removeable wooden supports and 4 support feet for the crane truck 8595 and serves as spacer truck whilst in motion. Epoch III.

9525 9545

8598 · Jib support truck of the DB. Overall length: 55 mm. Super-detailling, -livery and -lettering. The truck supports the jib of the crane 8595 whilst in motion. Epoch III.

The supporting cradle is rotatable to accomodate the movement of the jib during transport.

9525 9545

8596 Ⓚ **8595** Ⓚ **8597** Ⓚ **8598** Ⓚ

The prototype of our breakdown crane train (see black-and-white picture) is reserved for use in lifting the heaviest equipment, locos and wagons in case of accident, or for construction or unloading work. The load carrying capacity of the main hook is 90 tons with a total crane weight of 104 tons. The crane is used by the DB together with a counterweight truck, a match truck and a jib support truck.

8599 Ⓚ **Brakedown Crane Presentation Pack**
Train length: approx. 240 mm. The pack contains the complete 4-part crane train, consisting of the articles 8595, 8596, 8597 and 8598.

8700-8735 pages 96/97

8591 Ⓚ

9525
9545

8591 · Tool van of the DB, to accompany crane train 8599. Overall length: 57 mm. Super-detailling, -livery and -lettering. With 2 opening sliding doors. Epoch III.

8594 Ⓚ

8594 · 3-axled crew coach of the DB, suitable for use with the 90 t breakdown crane-train 8599. Overall length: 69 mm. Super-detailling, -livery and -lettering. Inset windows. Centre axle slides sideways. The coach is equipped ready to install interior lighting. Epoch III.

9449 9530 9525 9545

YOUR HOBBY ROLLS ON THIS TRACK:

THE READY-BALLASTED N «piccolo» TRACK

Realistic looking with an easily understandable track geometry – that makes it simple for the beginner and can easily be built up into larger model railway layouts. A super-layout grows step by step from the original purchase of a Start Set with N «piccolo»-tracks together with corresponding track sets and individual track pieces.

The FLEISCHMANN N «piccolo» track conforms to the international N gauge standard, i. e. the distance between the rails is 9 mm.

Cross section
of the N «piccolo» track

The Trackwork

The perfect reproduction of the ballast with its irregular outer edging, as well as the finely engraved imitation wooden sleepers – even the wood grain can be picked out – make this trackwork especially realistic.

The width and height of the ballast bed has been so selected so that when laying tracks in the station area a closer distance between parallel tracks can be obtained without the ballast getting in the way.

In case you want to widen the ballasted area, there's the colour-matched loose **ballast 9479**.

The Tracks

The fullprofile rails are made with high quality nickel silver thus giving excellent current conducting qualities particularly on long stretches.

The Track Geometry

The easy to see track geometry makes it easy for both track laying, and operation, thanks to the well thought out measurements and combination possibilities of the individual track pieces (part pieces).

The basis of the track geometry is the straight "basis" track 9101 which measures 111 mm in length. This is the derivative for all other track pieces, for example 9103 – 1/2 length or 9104 – 1/4 length. Naturally, all standard points, three-way points, curved points and double slips are set out within the same grid network.

Curved tracks with 4 radii, a flexible ballasted track, with which one can "curve" extremely large radii, straight-, curved-, three-way points and double slips all make it possible for practically all desired track configurations. Operational tracks complete the layout, like uncoupler tracks for hand or electric operation as well as a buffer stop track, level crossings and a variable extender track.

The Parallel Track Distance

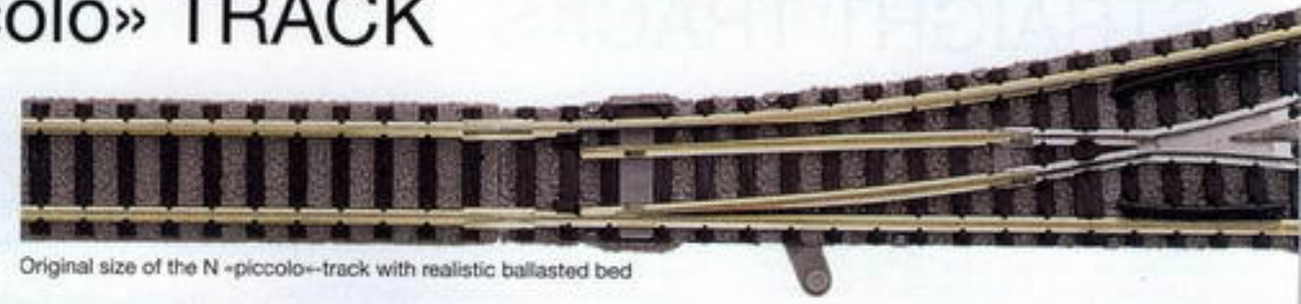
Two parallel running tracks, joined together via standard points, have the narrow gap of 33.6 mm (measured from track centre to track centre).

The "intelligent" Points

The points come complete with electric motors already mounted for operation from a control panel, or just with a hand-operated lever for manual operation. By simply clipping on the point motor, all manual points can be converted to electrical operation. The point motor can even be mounted out of sight under the basebord. Just pull off the motor, pull out the hand lever and turn them over before clipping them back in. This is the casiest way to make "above surface" into a "below surface" operation.

All points are constructed as "thinking" points. A flick of the wrist, and the current will only flow in the direction in which the points are set. As delivered, all points are live points, which means that all tracks permanently conduct power.

The "thinking" points allow locos, or loco hauled trains, to be stored in sidings or passing loops without any additional wiring.

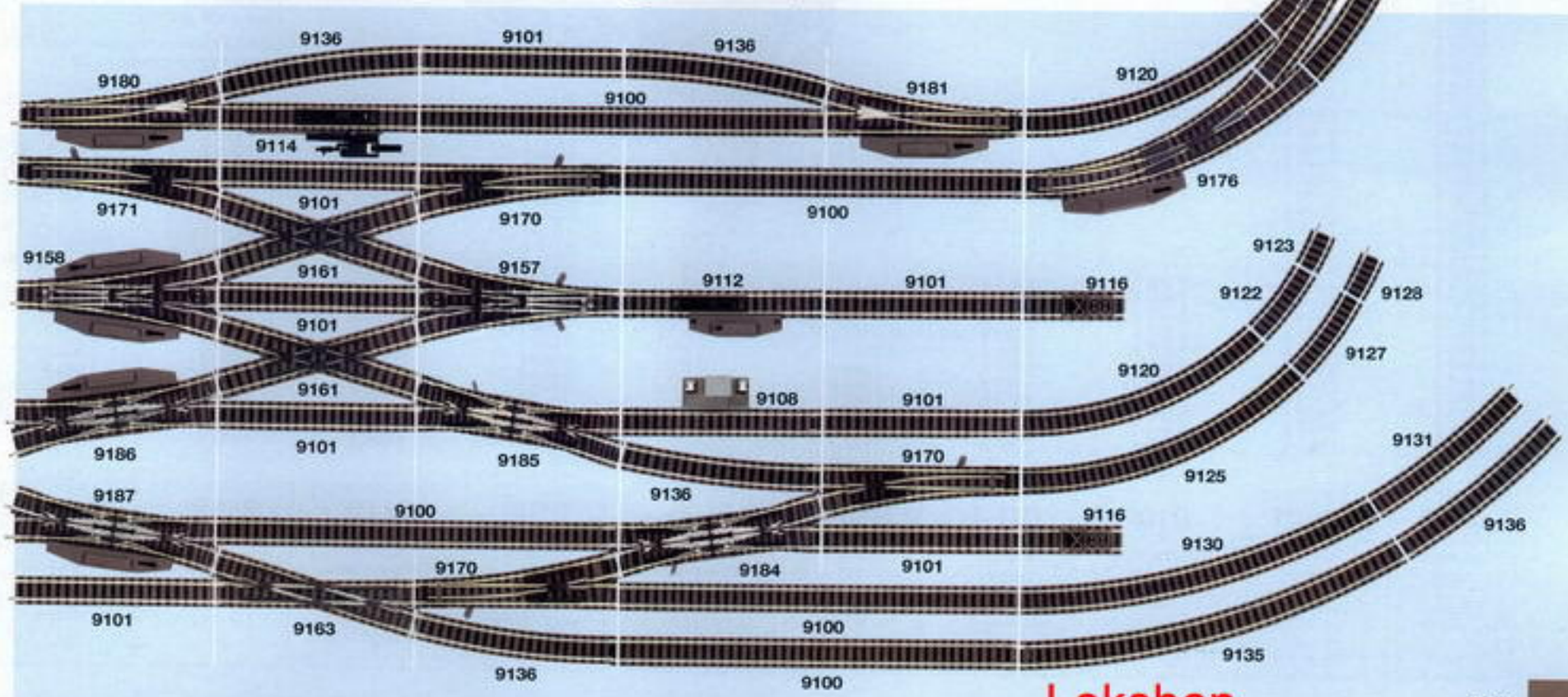


Original size of the N «piccolo»-track with realistic ballasted bed

The Turntables

Whether it be for manual operation or electrically driven, in each case the super-model turntables are the focal point of a loco depot. Due to their wise technology concept – each track exit only receives power when the turntable is lined up with it – that means they can think too!

The easy to understand track geometry:



STRAIGHT TRACKS

The "Basis" Track

The track piece 9101 is the basis track for the N «piccolo» track system. The straight section of a standard point, three-way point, or double slip and the 15° crossings too, correspond exactly to this length. For longer sections of straight track laying, then the 9100 track piece is exactly double this basis track length, measuring 222 mm.

Part Pieces from the Basis Track

The following part pieces of track are derived from the basis track 9101: 9103 with 55.5 mm (1/2 length of 9101) and 9104 with 27.75 mm (1/4 length of 9101).

The Diagonal Connection

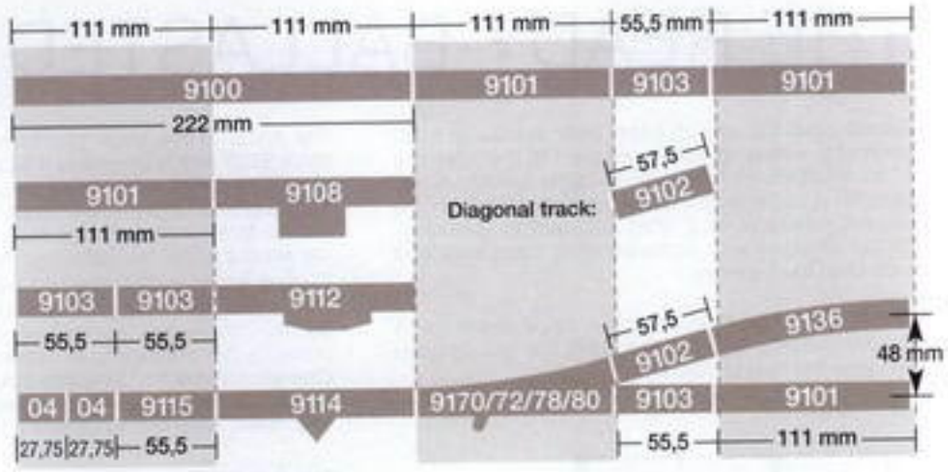
Tracks laid diagonally, or the diagonal crossing track of crossings and double slips, must be a little longer in order to fit into the grid measurement system, namely 115 mm. This length can be achieved by using two "diagonal" tracks 9102. Such a diagonal track equals a half track 9103 in the horizontal.

The Flexible Track

With its length of 777 mm, the flexible track 9106 is seven times the length of a standard 9101 and because of its flexibility is ideal for laying out gently curving parade stretches. With its long length, it can equally well be used to lay straight stretches.

The Uncoupler Tracks

Whether with manual operation (9114) or electrical operation (9112) – if an uncoupler track is introduced into the trackwork, then at this point locos and wagons can be uncoupled.



9117 · Transfer Track to the *ARNOLD® - track system. Length: 111 mm.

9108 - Suppressor, housed in the lines-man telephone-set cabin.

Not suitable for digital system.

Flexible Rack & Pinion Track

This track is designed for straight and curved routes. It can be curved – right down to the tiniest radius (9120) – to suit any desired curvature. The rack section always remains the same length, so any excess rails must be trimmed off. The rails are joined together using rail joiners 9404 (9403).

With the rack-and-pinion loco 7305, you can climb extraordinary gradients up to 25 %.

9119
Flexible rack rail
222 mm

9100
Straight track
222 mm

9101
Straight track
111 mm

9102
Straight track
57.5 mm ("Diagonal track")

9103
Straight track
55.5 mm (1/2 length of 9101)

9104
Straight track
27.75 mm (1/4 length of 9101)

9106
Flexible track with bendable track bed
777 mm

9108
Straight connecting track 2 poles, with suppressor
111 mm

9110
Adapter straight track, can be slid to any desired length between 83 and 111 mm

9112
Uncoupling track for electrical operation
111 mm

9114
Uncoupling track for hand operation
111 mm

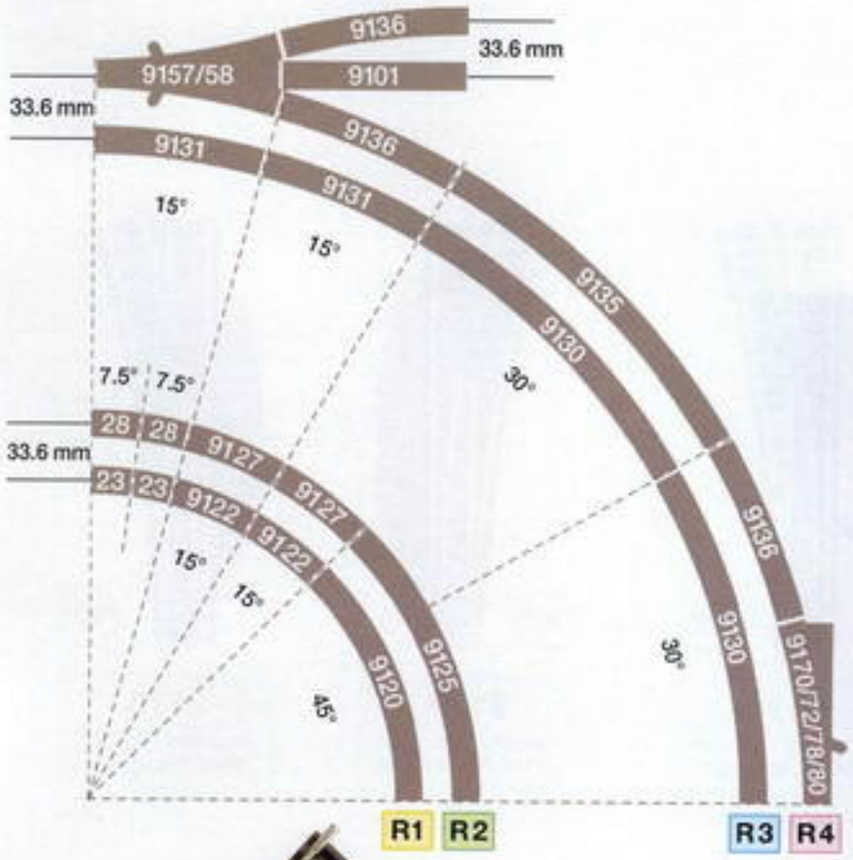
9414
Clip on electric motor for the hand uncoupling track 9114.

9115
Straight track with inbuilt contact switch
55,5 mm

9116
Buffer stop

* ARNOLD® is a registered trademark of Lima.

CURVED TRACKS



The Track Radii

The N »piccolo« track system offers curved track in 4 standard radii – enough to satisfy any demanding track shapes. Each of the two radii pairs (R1 - R2, R3 - R4) always have a running distance of 33.6 mm apart from each other. Even our large tender locos will run around the tiniest radius (R1).

Track Radius R1

For radius R1, the circle will have a radius of 192 mm – measured from the centre point to the track centre – and an other diameter of 401 mm. 8 curves 9120 (45°) make up a complete circle (360°). Additionally there are also 15° tracks (9122) and 7.5° tracks (9123).

Track Radius R2

On the second radius R2, the circle will have a radius of 225.6 mm and an outer diameter of 468 mm. 8 curves 9125 (45°) make up a complete circle (360°). Additionally there are also 15° tracks (9127) and 7.5° tracks (9128).

Track Radius R3

For radius R3, the circle will have a radius of 396.4 mm and an outer diameter of 810 mm. 12 curves 9130 (30°) make up a complete circle (360°). Additionally there are also 15° tracks (9131).

Track Radius R4

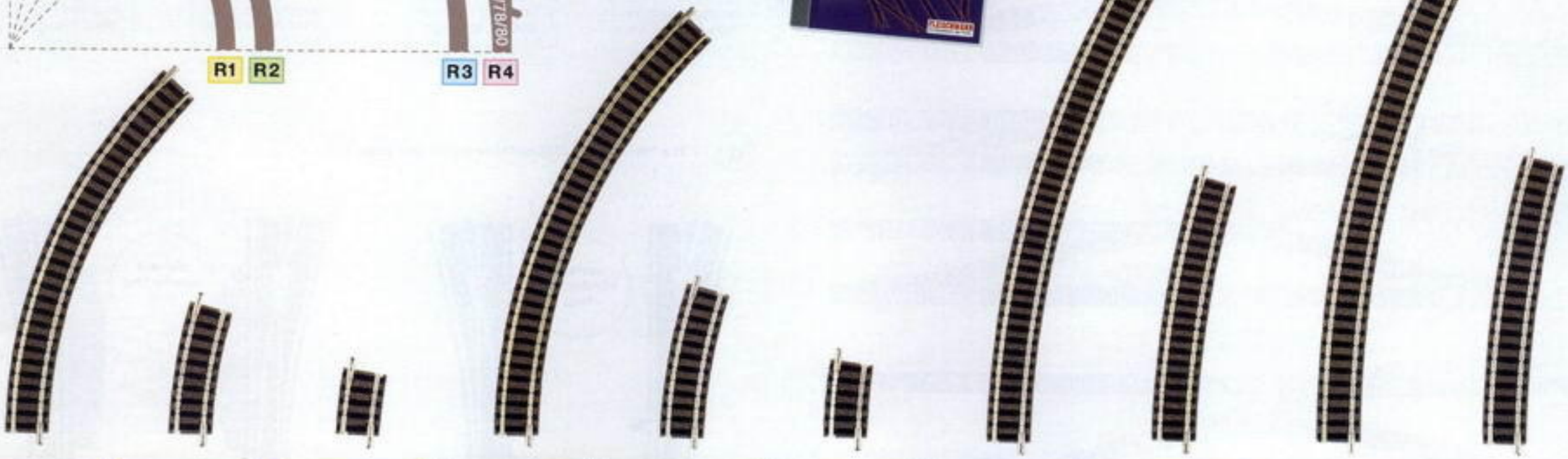
For the fourth radius R4, the circle will have a radius of 430 mm and an outer diameter of 877 mm. 12 curves 9135 (30°) make up a complete circle (360°). Additionally there are also 15° tracks (9136).

Opposite Curves for Points, Three-Way Points and Double Slips

The track 9136 is the opposite curve for the standard points, three-way points and double slips, as well as the 15° crossovers.

99 170 · FLEISCHMANN Model Layout Planner

True-to-scale planning for your FLEISCHMANN model railway layout on computer.
Further informations see page 144.



9120
Curved track
Radius 1: 192 mm
8 curves make up a complete circle
45 °
R1

9122
Curved track
Radius 1: 192 mm
24 curves make up a complete circle
15 °
R1

9123
Curved track
Radius 1: 192 mm
7.5 °
R1

9125
Curved track
Radius 2: 225.6 mm
8 curves make up a complete circle
45 °
R2

9127
Curved track
Radius 2: 225.6 mm
24 curves make up a complete circle
15 °
R2

9128
Curved track
Radius 2: 225.6 mm
7.5 °
R2

9130
Curved track
Radius 3: 396.4 mm
12 curves make up a complete circle
30 °
R3

9131
Curved track
Radius 3: 396.4 mm
24 curves make up a complete circle
15 °
R3

9135
Curved track
Radius 4: 430 mm
12 curves make up a complete circle
30 °
R4

9136
Curved track
Radius 4: 430 mm
24 curves make up a complete circle
Opposite curve for points
15 °
R4

STANDARD POINTS

The standard points 9170-9173 and 9178-9181 are the foundations for variable running operations on the model railway layout. Branch-offs from the straight can be made up with them. Extensive track layouts in the station area as well as storage sidings or industrial yards are made possible with them.

The length of the straight section of the standard point is 111 mm, corresponding to one 9101.

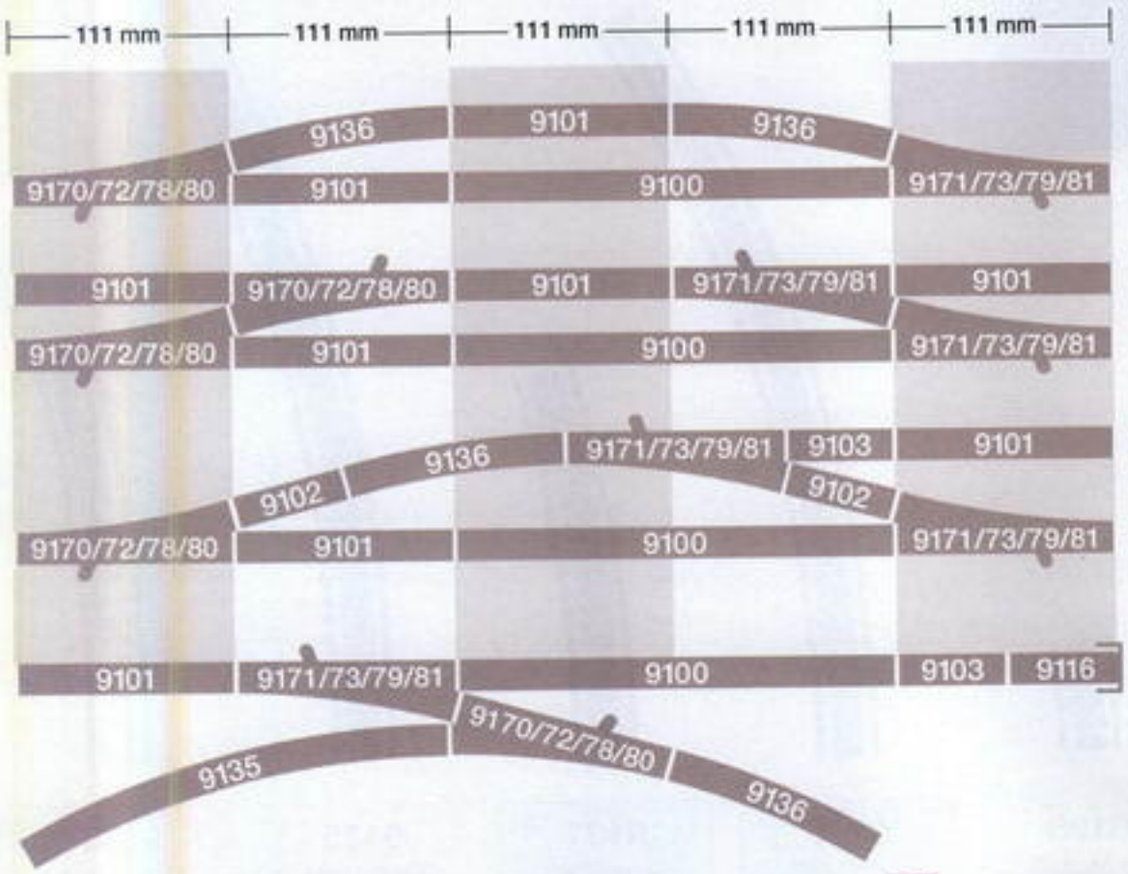
The branch-off section of the point corresponds to a curved track 9136.

In the area around the frog of the point, the points are fitted with contact surfaces so that the flanges of the wheels can pick up power.

If the points are used as "thinking" points, then the current only flows in the direction in which the points are set.

The points are available for manual operation (9170/9171, 9178/9179) or with electric motors attached (9172/9173, 9180/9181). Of course, the manual points can be fitted with electric motors later (9421 - 9423, see page 117).

This point motor can be mounted above the baseboard surface, or even underneath the baseboard. It is then necessary to cut a hole in the baseboard to accommodate the point motor.



R4

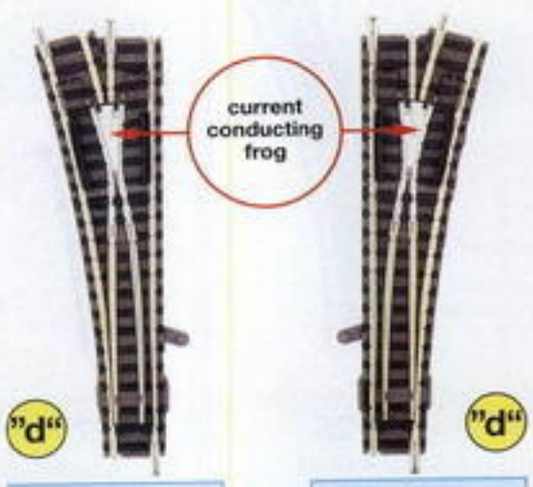
9170
Standard point for manual operation
left

9171
Standard point for manual operation
right

9172
Standard point for electric operation
left

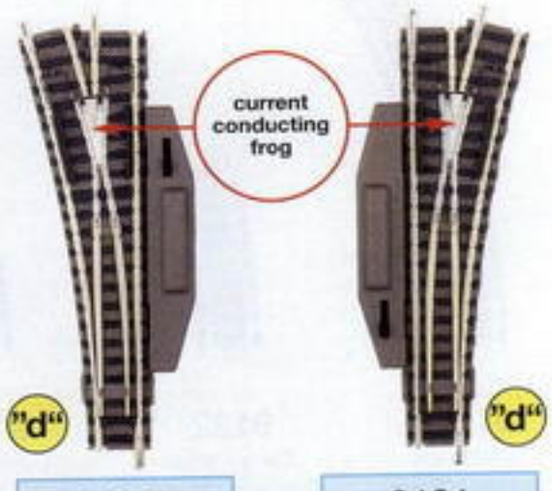
9173
Standard point for electric operation
right

"d" = The "thinking" FLEISCHMANN-points (see page 117)



9178
Standard point for manual operation
left

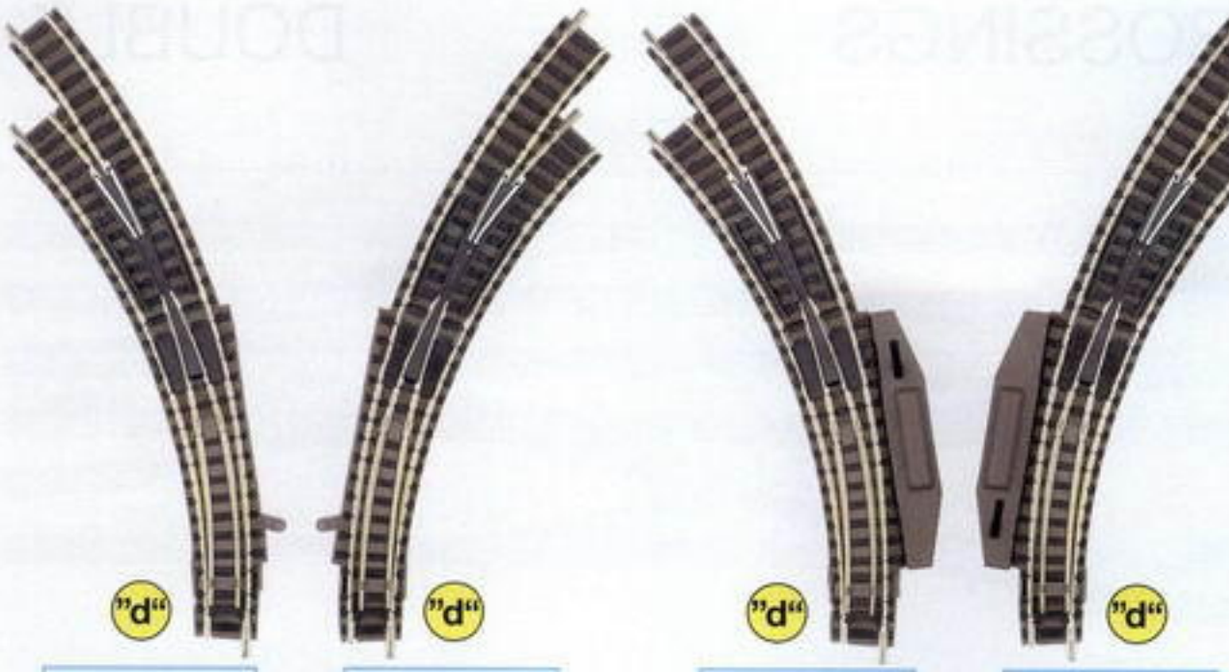
9179
Standard point for manual operation
right



9180
Standard point for electric operation
left

9181
Standard point for electric operation
right

CURVED POINTS



9174
Curved point for manual operation
left

9175
Curved point for manual operation
right

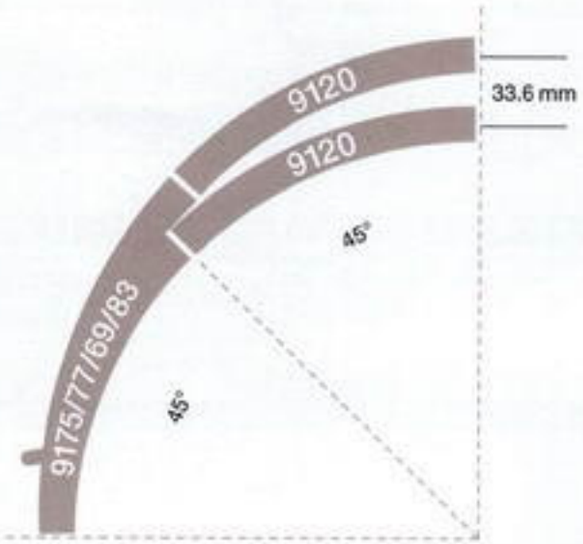
9176
Curved point for electric operation
left

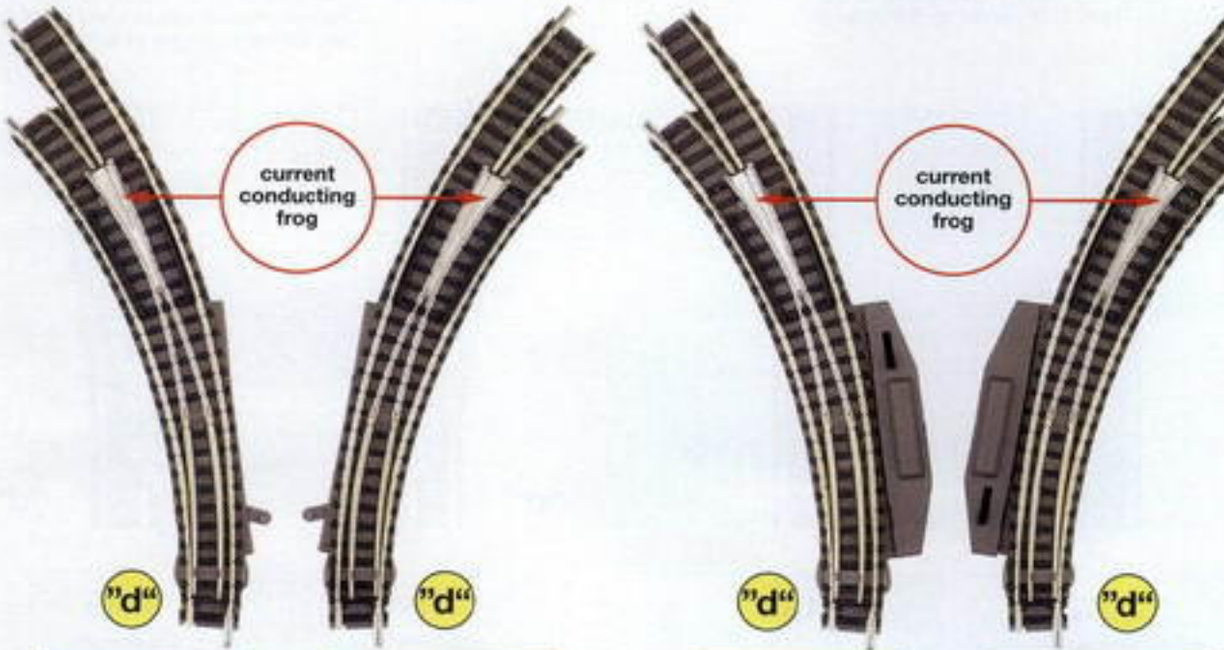
9177
Curved point for electric operation
right

Using the curved points (9174-77, 9168/9169 as well as 9182/9183), you can change from one track circle with radius 1 into another circle of radius 2 – and round the other way. In this way you can save on the space required, especially in the station area, and at the same time extend the usable track length of a platform. Therefore lots of start-sets include this handy type of points

The outer curve of the curved points corresponds to the 45°-curved track 9125 (R2), the inner curve corresponds to the 45°-curved track 9120 (R1).

The curved points 9174/9175 and 9168/9169 can be converted to electrical operation with point motors (9421 - 9423, see page 117) and also made into "thinking" points.





9168
Curved point for manual operation
left

9169
Curved point for manual operation
right

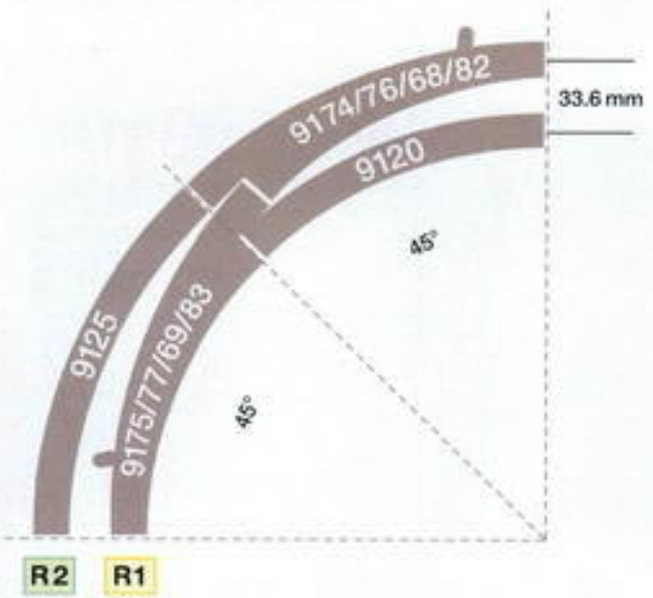
9182
Curved point for electric operation
left

9183
Curved point for electric operation
right

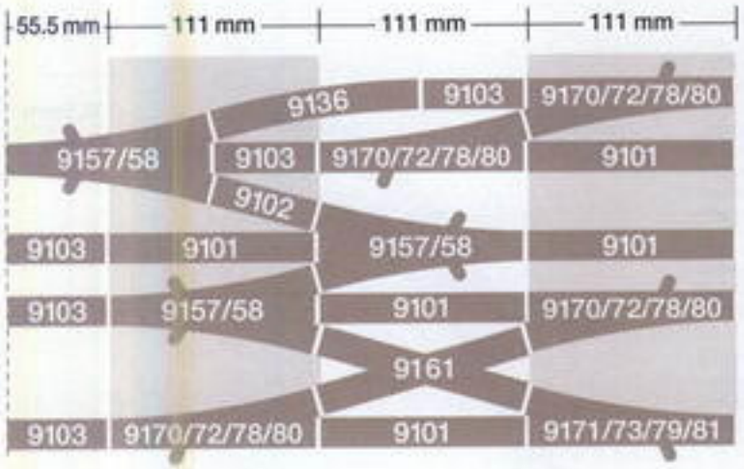
The Current-Conducting Frog

The points 9178-9181 (standard points) and 9168/9169 as well as 9182/9183 (curved points) incorporate a speciality:

On these points, the current-conducting frog ensures good electrical contact when running through the points. These points – just as in real life – cannot be "slipped" through whilst set in the wrong direction, otherwise this can cause a short circuit. Therefore, the points must always be set in the right direction. The polarisation of the frog, in other words, the changing from "positive" to "negative", which is essential as the points are set, is carried out automatically when setting the point.



THREE WAY POINTS



Three-way Points

Three-way points are best utilised to make up routes of points where space is confined. The length of the straight is 111 mm.

The two branch-off tracks correspond to track 9136. The three-way point 9157 can be fitted with point motors later and can be switched as a "thinking" point.

CROSSINGS

Crossing 30°

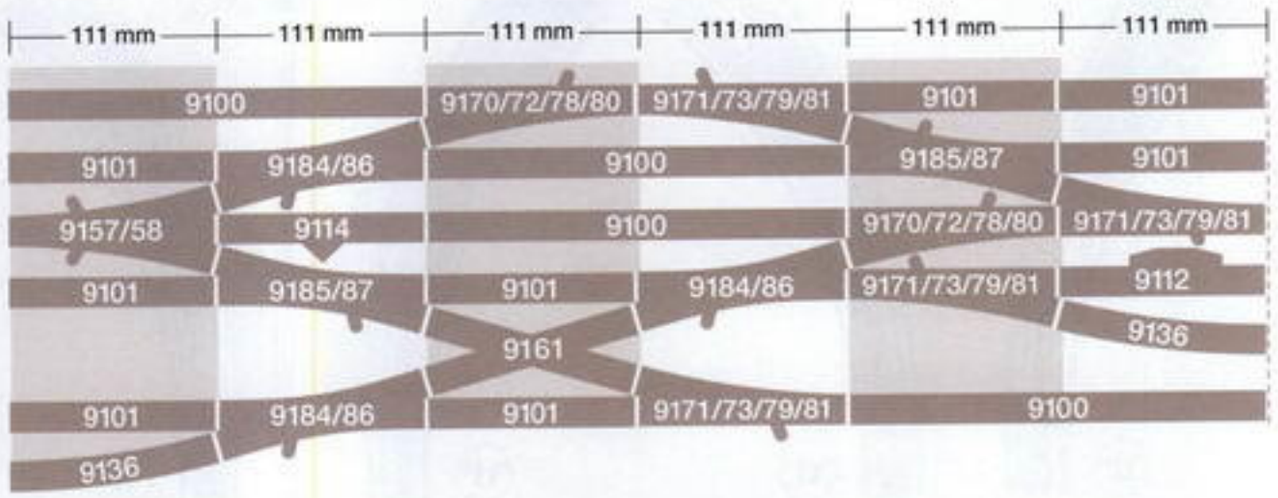
The 30°-crossing 9161 is fitted with guard-rails and frogs. Each leg is 115 mm (about 4½"), equalling 2 x 9102. The two routes are insulated from one another.

Crossings 15°

The 15° crossings 9162 and 9163 are so designed that their 115 mm long crossover track lays in the diagonal, and the straight corresponds to the basis track at 111 mm in the horizontal. Track 9136 serves as the opposite curve leading to a parallel track distance of 33.6 mm.

The two tracks which cross over each other are electrically separated, so that two different track circuits can cross.

DOUBLE-



Double-Slips

The geometry of the double-slips 9184 - 9187 corresponds to the 15°-crossings.

Using the point lever (9184/9185) or the electric point motor (9186/9187) the double-slips can be used to set up two routes: crossover or branch-off.

9157
Three-way point
for manual operation
Length: 111 mm

9158
Three-way point
for electric operation
Length: 111 mm

9161
Crossing
Length: 115 mm
30 °

9162
Crossing
Length: 111 mm
15 °
left

9163
Crossing
Length: 111 mm
15 °
right

9184
Double-slip
for manual operation
Length: 111 mm
15 °
left

9185
Double-slip
for manual operation
Length: 111 mm
15 °
right

SLIPS

After removing the two wire bridge clips, the double slip can be switched for "thinking" point operation, so that the current is able to flow from one electric circuit into another without any additional disconnection.

Point setting "crossing"

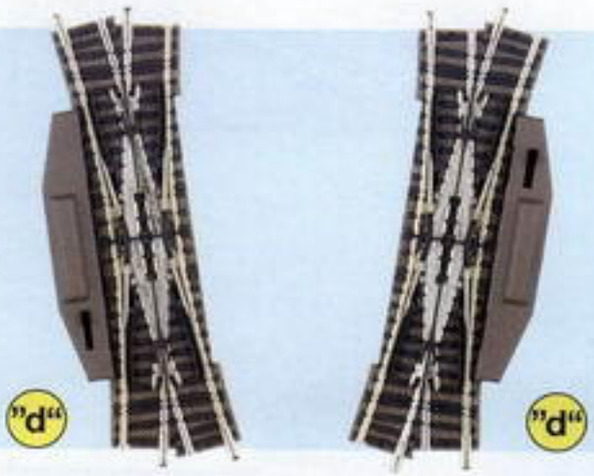
Point setting "branch off"

- Point setting "crossing" –
  the two tracks which cross over each other are electrically separated, so that two different track circuits can cross.
- Point setting "branch off" –
  the electric circuit is separated at the centre of the slip.

As delivered, all track exits deliver power into one circuit. By removing the wire bridge clips the crossing tracks become electrically isolated from each other. On the "crossover" setting, another track circuit can be traversed. On the "branch-off" setting, the current is separated at the centre of the slip.

The double-slips 9184/9185 can be converted with point motors (9421/9422/9423) at a later date.

Just as for the 15° crossover, there is a left and right hand 15° double-slip, according to which way the crossover route diverts from the straight.

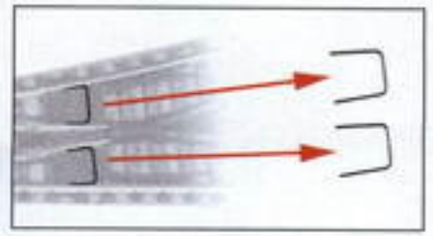


9186
Double-slip
for electric operation
Length: 111 mm
15 °
left

9187
Double-slip
for electric operation
Length: 111 mm
15 °
right

"d" = "Thinking" points

As delivered, all points are so called live points, i.e. all track exits conduct electricity and can be run over by any powered vehicle. If the two wire bridge clips are taken out of the point, then the current only flows in the track exit for which the point is set. Thus making it an electrically "thinking" point. This makes it possible to store trains without power, without any additional wiring. For example, a fast express can pass a stored goods train on a parallel track.



Removing the wire bridge clip – from every FLEISCHMANN point – makes an electrical "thinking" point.

Points set to "straight":
The steam engine receives power and runs.
The diesel loco remains at a standstill without power.

Points set to "curve":
The diesel loco receives power and runs.
The steam engine remains at a standstill without power.

Electric Point Motors:

9421
Electric point motor, left

9421 · Clip-on point motor for left hand points
with end-off wired for 9168/9170/9174/9178, 9157 left and 9184 left crossing.
For converting manual points to electrical operation.
Current consumption ca. 500 mA.

9422
Electric point motor, right

9422 · Clip-on point motor for right hand points
with end-off wired for 9169/9171/9175/9179, 9157 right and 9185 right crossing.
For converting manual points to electrical operation.
Current consumption ca. 500 mA.

9423
Electric point motor, left/right (special low level)

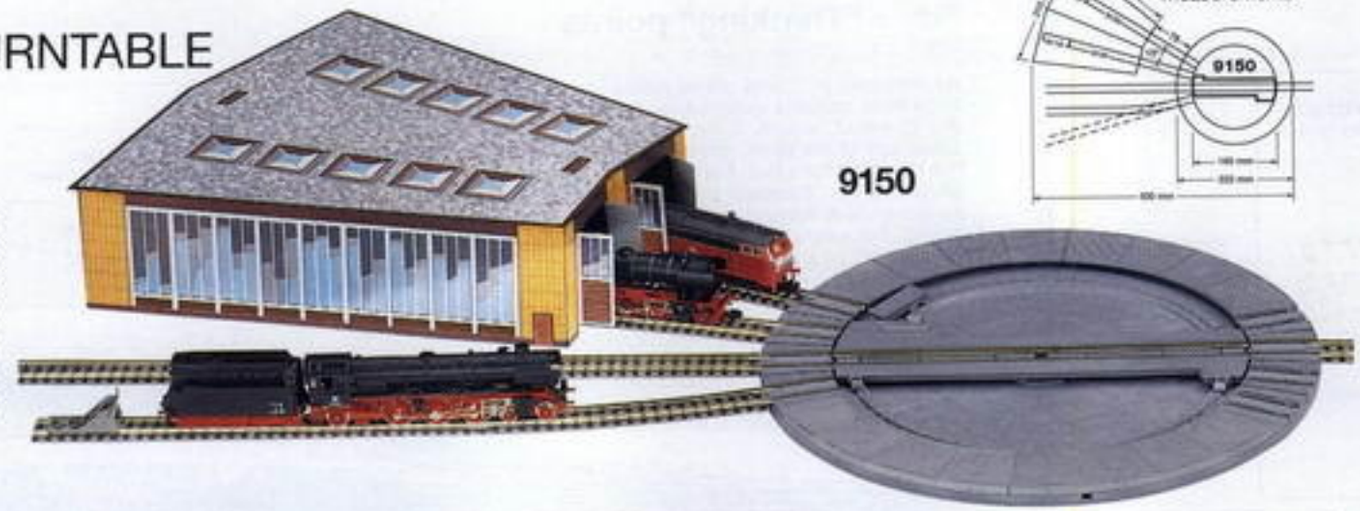
9423 · Clip-on, special low-level point motor for right and left hand points (universal motor)
with end-off wired.
For converting manual points to electrical operation.
Current consumption ca. 1100 mA.
Especially usefull for curved points when using longer vehicles with overhang.

Clip-on point motors for standard points, curved points, three-way points or double-slips

THE MANUAL TURNTABLE

with cut out-sheet
for a loco shed

9150 · Manual turntable.
Measurements: Outer diameter 222 mm = 1 x 9100, rotating table 165 mm long. Even the longest steam loco can be turned. The height of the rails is set so that no extra raising of the track with wedges is necessary. 5 exit tracks and 3 dummies.
The turntable serves simultaneously as a junction track, and provides current for the individual exit track to which the table is set.



9150

9151

9151 · Turntable extension set for turntable 9150 (4 exit tracks and 4 dummies). 2 sets 9151 complete the whole round turntable.

9153

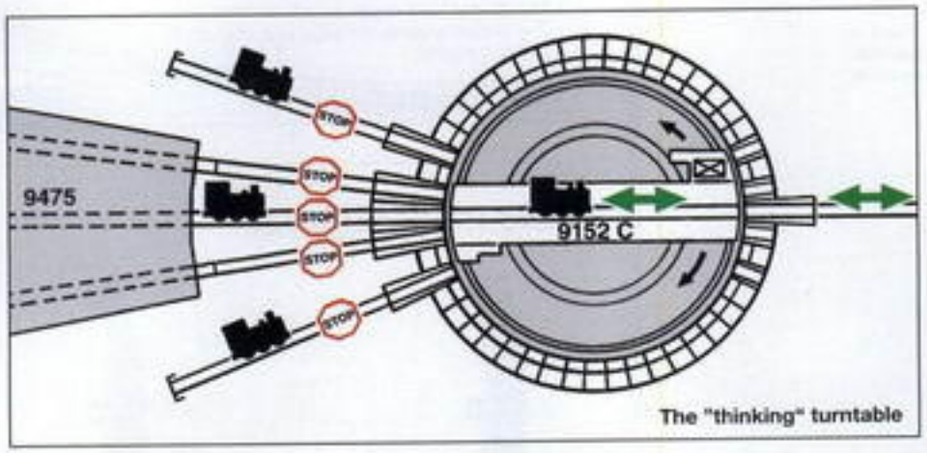
9153 · Turntable extension set for turntable 9152 C consisting of 3 exit tracks and 3 stub tracks.

THE "THINKING" TURNTABLE 9152 C WITH INDIVIDUAL ELECTRICALLY SWITCHABLE TRACK EXITS ...

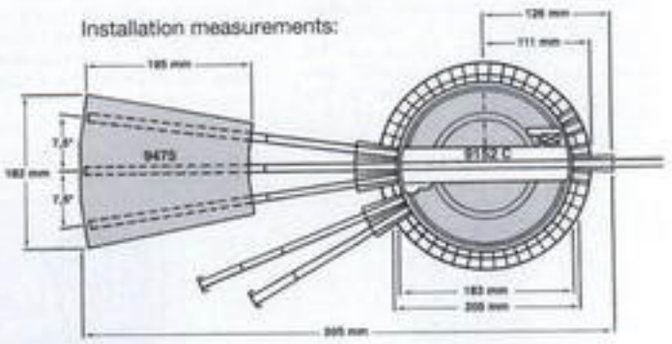
9152 C · Model turntable, electrically driven, with individual electrically switchable track exits, with turntable switch 6910. Length of the turning bridge 183 mm. The turntable is sunk into the ground, exactly like the real thing and is complete with all the correct detailling.
The basic turntable has 6 exit tracks and 4 stub tracks. The track exits are set at 7 ½° intervals, but can be altered if desired, or extended with the extension set 9153 up to total of 48 track exits.

The "thinking" turntable:

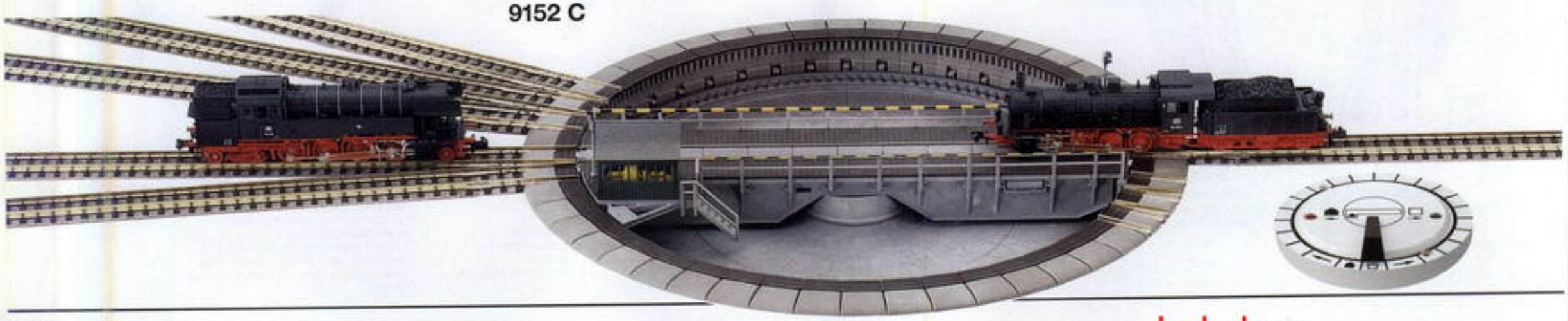
**The turntable movement is controlled by using the switch 6910, in order to reach the desired track exit. The track power feed is via the turntable bridge. Now the switch 6910 will enable the desired track exit, which is lined up with the turntable, to be electrically switched on. All the other track exits (even one directly opposite) will remain without power.
In this way, each of the maximum of 48 track exits can be individually controlled and electrically switched on, without the need for any additional wiring.**

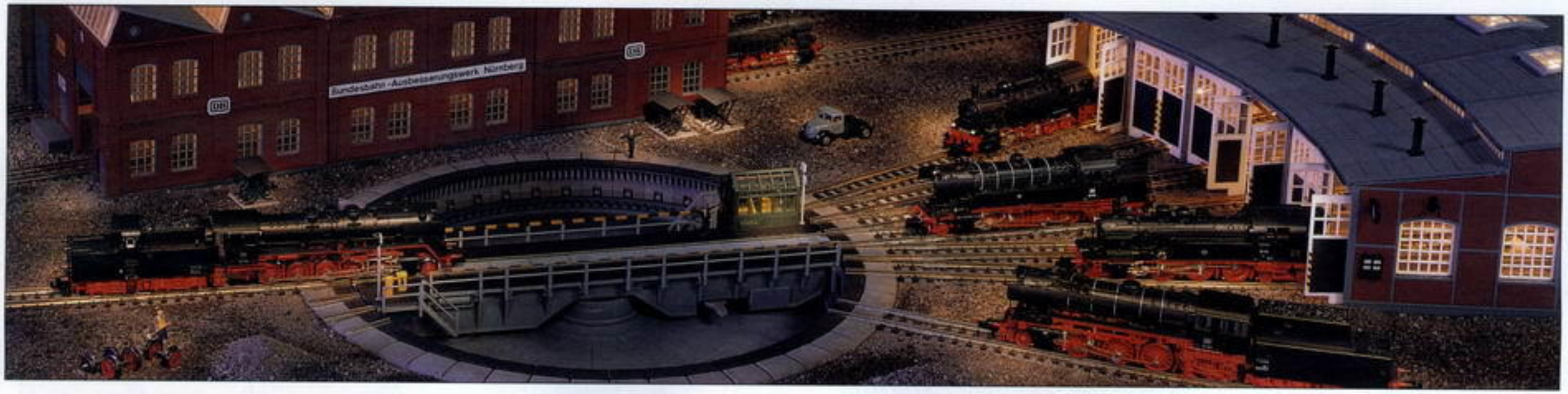


The "thinking" turntable



9152 C





Tip for modelmakers: Interior lighting No. 9458 (see page 121) will fit into the loco shed 9475.

... AND LOCO ROUNDHOUSE TO SUIT

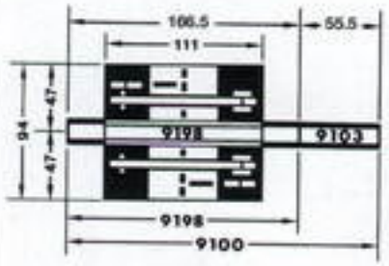
Just as in real life, there is a door at the rear which can be opened to allow through running.

9475

9475 · Loco roundhouse kit, to fit with turntable 9152 C. 3 loco storage tracks at 7½° intervals, with 8 opening doors. Finely detailed realistic plastic details. Lost of special individual parts to make a super detail model. The doors are mounted so that incoming and outgoing locos can open and close them automatically. At the rear of the loco shed is one door so that locos can travel straight through, just like the real thing.

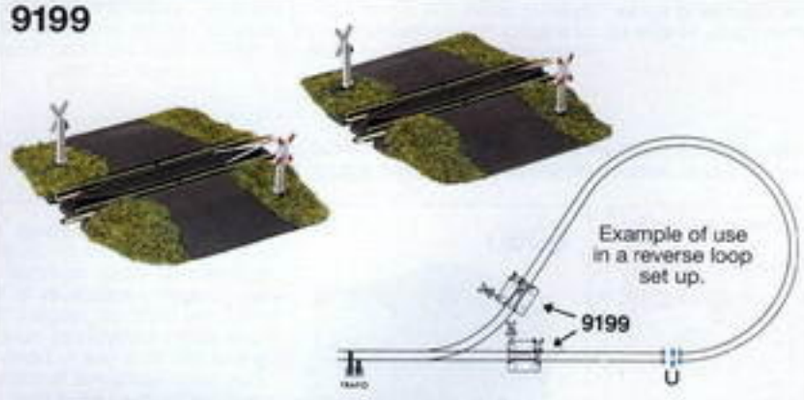
Loco roundhouses can be fitted next to each other.

9198



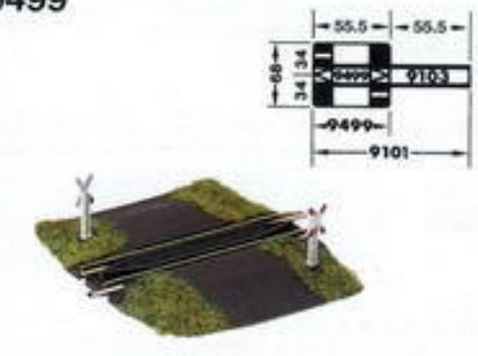
9198 · Level crossing with lifting barriers. Realistic guarded level crossing for single-track straight stretches. With a 166.5 mm long straight track and wooden filler already fitted. The weight of a passing train operates the gates.

9199



9199 · Reversing loop set.
2 x 55.5 mm track length, in the form of two crossings without gates. With warning crossings, rerailing device and insulating rail joiners. **Not suitable for digital system.**

9499



9499 · Grade crossing without gates, 55.5 mm.

9200
6536

9200 · Semaphore distant signal with double-spool magnet operation (end-off wiring) and traincontrol. The signal disc moves and the double yellow-and-green lights operate just like real signals. Height of mast: 43 mm.

9205
6536

9205 · Semaphore home signal with double-spool magnet operation (end-off wiring) and traincontrol. Operating semaphore and red-and-green lights. Height of mast: 73 mm.

9201
6536

9201 · Semaphore distant signal, unlinked. Two separately switchable motors operate either the signal disc or the arm, changing the appropriate light aspects. Finely detailed. Height of mast: 43 mm.

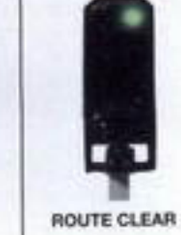
9206
6536

9206 · Semaphore home signal, with two unlinked arms. Three separately switchable electric motors operate either of the two arms changing the appropriate light aspects. Finely detailed. Height of mast: 73 mm.

9220
6536

9220 · Colour Light Distant Signal. With 2 green/2 yellow signal lights and 2 bulbs (6536). Height 41 mm.

9225
6536



9225 · Colour Light Home Signal. With 1 green/1 red signal light and 2 bulbs (6536). Height 58 mm.

✱ **To utilise the automatic train control, one needs 2 contact clips 9401, as well as 2 isolating rail joiners 9403 (examples of use are given in the instruction leaflets accompanying the signals).**
Signal operations: finger tip control panel, track diagram control panel, automatic block system (see pages 128/129).

9295

9295 · Signal Set with semaphore signal.
Containing: 1 semaphore home signal 9205, 1 push-button switch 6927, 3 current-feed clips, 2 single track feed clips 9401, 6 isolating rail joiners 9403, 1 yellow wire, 1 white wire, 1 mounting guide, 1 signal fixing plate.

6960

6960 · Electronic Voltage Automation Unit – EVA – for gradual acceleration and braking of D. C. locomotives. Easily installed ahead of each signal, in block sections or in the station area. All trains, as well as railcars and even push/pull trains with a control cab coach being pushed will be brought to a halt in front of the signal by the "EVA" unit. Additional functions for running backwards within the signal area without train control an immediate braking for occupied block sections. **Not suitable for digital system.**

9597

9597 · Fixing plate
for signals 9200/9201 and 9205/9206 to clip to N «piccolo» trackwork.

Example of use with signal 9206

6410 **Wood-screws** (1 gross = 144 pieces) for fastening down tracks, signals, relays, controlunits, etc. Sold by the gross.

9409 **Track fixing nails** (plastic container of about 500).

6595 **Track cleaner block.** To rub on track surfaces (and also for wheels).

6598 **Tool set,** consisting of 5 model railway tools.

6599 **FLEISCHMANN Special Oil** for maintenance of all vehicles.

9400

Current-feed clip (2 x 1).

9401

Single track feed clip, for connection from semaphore signals.

9403

Plastic rail joiner, (packets of 12) for insulated joint in one rail.

9404

Metal rail-joiner (packets of 20) for non-insulated joint in one rail.

9414

Clip-on electric motor for the hand uncouplertrack 9114 (see page 112).

9421

Clip-on switchmotor for left-hand points with end-off wiring, see page 117.

9422

Clip-on switchmotor for right-hand points with end-off wiring, see page 117.

9423

Clip-on, specially flatter style point motor for all hand points with end-off wiring, see page 117.

9115

Straight track with inbuilt contact switch, 55,5 mm. The switch is operated by the magnets 9426 or 9427.

9425

Contact switch. For use to switch electrical accessories, maximum 800 mA.

9426

Switching magnet, base 7 x 7 mm, height 5 mm. To actuate contact switch 9425 or the in-built switch track 9115, to be stuck fast to any vehicle.

9427

Flat switching magnet, Ø 5 mm, height 3 mm. For operating the contact switch 9425 or the inbuilt switch track 9115, to be stuck fast to any vehicle.

9446 6535

Interior Lighting Unit for Diesel railcars "Pendolino" 7415 and 7418.
Current consumption ca. 100 mA.

9447 6535

Interior Lighting Unit for ICE/ICE 2 -coaches and passenger coaches with an overall length of 165 mm (please see accessory table).
Current consumption ca. 50 mA.

9448

Electric Tail Lighting Unit for double-decker coaches 8121/8122, 8124/8125 and 8626-8628.
Current consumption ca. 15 mA.

9449 9530

Interior Lighting Unit for the coaches 8594, 8693, 8765 - 8767, 8782/8783 and 8792 - 8795.
Current consumption ca. 50 mA.

9450 9530

Interior Lighting Unit for centre coaches for railcars (please see accessory table).
Current consumption ca. 100 mA.

9451 9530

Interior Lighting Unit for passenger coaches with an overall length of 87 mm without close coupling mechanism Ⓚ.
Current consumption ca. 50 mA.

9455 9530

Interior Lighting Unit for passenger coaches with an overall length of 87 mm with close coupling mechanism Ⓚ (please see accessory table). Current consumption ca. 50 mA.

9456 9530

Interior Lighting Unit for the wagons 8051 - 8059 with close coupling mechanism Ⓚ (please see accessory table).
Current consumption ca. 50 mA.

9458 9530

Interior Lighting Unit with light leader for passenger coaches having a length of 165 or 170 mm (please see accessory table).
Current consumption ca. 50 mA.

9459 9530

Interior Lighting Unit with light leader for coaches with an overall length of up to 150 mm (please see accessory table).
Current consumption ca. 50 mA.

9460 6535

Interior Lighting Unit for the control-cab coaches 8175, 8600, 8610, 8653, 8664 and 8680.
Current consumption ca. 50 mA.

9461 9530

Interior Lighting Unit for the coaches 8070 - 8074 and 8770 - 8773.
Current consumption ca. 50 mA.

9464 6535

Interior Lighting Unit for the ICE 2 trailer car 7452.
Current consumption ca. 50 mA.

9467 6535 — **9468** 9530

not shown

9467 · Interior Lighting Unit for the ICE-T intermediate coaches 7461-7465. Current consumption ca. 50 mA.
9468 · Interior Lighting Unit for the ICE-T 7460 (triple unit). Current consumption ca. 200 mA.

9480

Re-railer for use on track.

9552

DB-Logos in earlier style for ICE or express coaches and some locos of the epoch V.
Suitable for mounting on light grey background (i. e. 7440 ff., 8121/8122, 8681 ff).
18 rub-on transfers.

9553

DB-Logos of the latest style for express coaches (i. e. 8161-65, 8176-79, 8190-8199), **7438/39 and several locos.**
12 rub-on transfers.

9554

DB-Logos of the latest style for ICE coaches 7440 - 7449 with DB-logos in earlier style.
12 rub-on transfers.

6518

Round brushes with springs, per pair (see accessory table).

9517

Round brushes with springs, per pair (see accessory table).

9530*
6 9530 DIGITAL

Bulbs for interior lighting units (see accessory table).

9531*
6 6532 DIGITAL

Red bulb with bayonet base, Ø 3 mm (see accessory table).

6535*
6 6535 DIGITAL

Spare bulb clear, with bayonet base, Ø 3 mm (see accessory table).

6536*
6 6536 DIGITAL

Light bulb with lead, for Signals 9200, 9205, 9201, 9206, 9220, 9225.

6538*
6 6535 DIGITAL

Spare bulb clear, with bayonet base, Ø 3 mm (for the locos 7320, 7322, 7355).

Exchange bulbs for digital operation

6 6532 DIGITAL **24 volt bulb, red, with bayonet fitting Ø 3 mm.**

6 6535 DIGITAL **24 volt bulb, clear, with bayonet fitting Ø 3 mm.**

6 6536 DIGITAL **24 volt bulb, clear, with connectingwire, Ø 3 mm.**

6 9530 DIGITAL **24 volt bulb, clear, with 2 connecting wires – for interior lighting.**

9457 see page 82 **9465** see page 47

** For simultaneous operation of both digital- and traditional D. C. vehicles, the bulbs of the D. C. vehicles should be replaced by the corresponding exchange bulbs for digital operation.*

THE PROFI-COUPLING FROM FLEISCHMANN...

With FLEISCHMANN you can couple up lots of trains just as realistically closely as this InterCity train, because most of the wagons are fitted with the so-called slot guide mechanism Ⓚ.
The slot-guide mechanism together with the standard N coupling as fitted makes a noticeable difference in closing the gap between wagons.
If the PROFI-couplings are fitted as well – and that's really easy with the clip-in socket – then a really close-coupling can be achieved.
Even all N «piccolo» vehicles without the slot-guide mechanism couple up noticeably closer with PROFI-couplings if the standard couplings are exchanged for the PROFI-coupling. And for wagons having a length over buffers of up to 70 mm, then the PROFI-coupling 9543 is really just as good as a close-coupling.

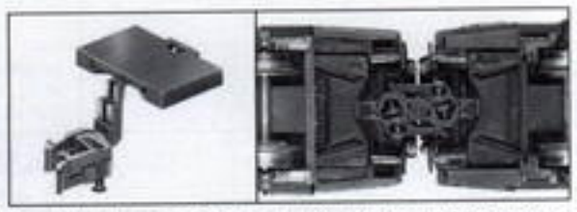
CLOSE-COUPLING IN CONNECTION WITH SLOT-GUIDE MECHANISM Ⓚ:

Distance between vehicles with slot-guide mechanism Ⓚ and standard coupling.

Real close-coupling: Distance between vehicles with slot-guide mechanism Ⓚ and PROFI-couplings.

With the clip-in socket the conversion to PROFI-couplings is really easy: Pull out the standard coupling and just push in the new PROFI-coupling – and it's done!

CLOSE COUPLING UNIT 9574:



With a little bit of modelling skill, the close-coupling accessory 9574 can be fitted to most existing vehicles not having a slot-guide mechanism Ⓚ to convert them to close-coupling (s. p. 124).

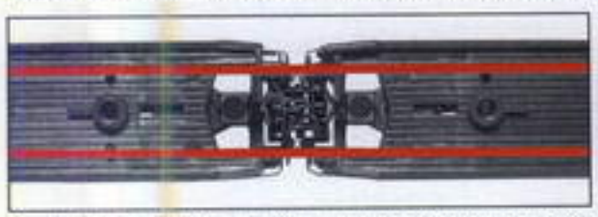
ALMOST A TRUE CLOSE-COUPLING FOR WAGONS UP TO THE LENGTH OF 70 MM:

Distance between vehicles with standard coupling 9521.

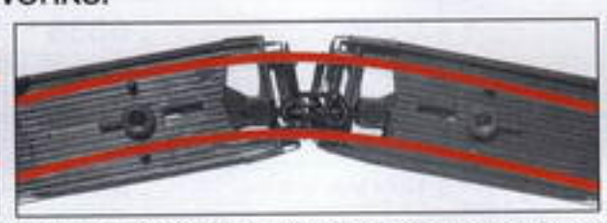
Distance between vehicles with PROFI-coupling 9543.

All waggons without the slot-guide mechanism Ⓚ having a length over buffers of 70 mm, can be closely coupled together using the PROFI-coupling 9543. Nearly as close as with a true close coupling (picture wagon 8208).

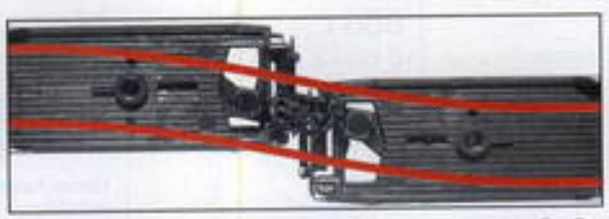
HOW THE SLOT GUIDE MECHANISM Ⓚ WORKS:



On straight tracks the slot guide ensures that the wagons are pushed together.



On curves the slot guide mechanism creates a larger gap between the wagons, so that the buffers do not lock.



Also in opposite curves the slot guide guarantees a safe distance between the wagons.

A FURTHER ADVANTAGE:

Individual vehicles can be easily lefted out from a train.

...THE CLOSEST CONNECTION IN N «piccolo»!

Converting to PROFI-couplings doesn't just give the closest coupling in N «piccolo» – the PROFI-coupling also has quite a few other advantages too:

- gentle, automatic coupling up,
- secure coupling connection when pulling or pushing trains,
- automatic uncoupling on all FLEISCHMANN uncoupler tracks,
- simple removal of individual wagon from the train,
- pre-uncoupling for prototypical shunting operations.

THE PRE-UNCOUPLING FOR SUPERB SHUNTING MANOEUVRES

Pre-uncoupling means that you can need simply uncouple over an uncoupler track and leave your wagons standing, but first of all uncouple them and push them onwards to any desired location on the layout to store them.
That makes shunting really enjoyable!

Picture ①:
A loco pushes a through coach slowly over an uncoupler track to uncouple it ...

Picture ②:
... and pushes the pre-uncoupled through coach onto a waiting passenger train. The through coach automatically couples on.

Picture ③:
A loco pushes a number of goods wagons slowly over an uncoupler track to uncouple them ...

Picture ④:
... and stores the uncoupled rake of wagons in a siding.

AN OVERALL VIEW OF THE FLEISCHMANN N-COUPLING RANGE

9520

9520 · Standard-coupling with coil centreing spring and retaining plate.

9521

9521 · Standard-Coupling with flat centreing spring and retaining plate (with longer holding clips).

9522

9522 · Standard-Coupling with flat centreing spring and retaining plate (with shorter holding clips).

9521

9525

9525 · Standard-clip-in-coupling. To simply clip into the retaining socket of the coupling holder.

9523

9523 · Standard coupling for 7368.

9549

9549 · PROFI-coupling for the wagons 8270 to 8279.

9577

9577 · Adapter for the PROFI-coupling head 9570, suitable for 7440 - 7458 and 7490 - 7496.

9540

9540 · PROFI-Coupling with spiral centreing spring and retaining plate. To convert FLEISCHMANN vehicles which are fitted with the standard coupling 9520.

9541

9541 · PROFI-Coupling with flat centreing spring and retaining plate (with longer holding clips). To convert FLEISCHMANN vehicles in which the standard coupling 9521 has been fitted.

38 9541 · Bumper Pack containing 50 PROFI-Couplings 9541.

9542

9542 · PROFI-Coupling with flat centreing spring and retaining plate (with shorter holding clips). To convert FLEISCHMANN vehicles in which the standard coupling 9522 has been fitted.

389542 · Bumper Pack containing 50 PROFI-Couplings 9542.

The couplings 9541 and 9542 in themselves are identical, the only difference is in the retaining plate.

9543

9543 · PROFI-Coupling with flat centreing spring and retaining plate (with longer holding clips). To convert FLEISCHMANN two- and three-axle vehicles with an overall length of max. 70 mm, which are fitted with the standard coupling 9521. As opposed to the 9541, an even closer distance between vehicles can be achieved.

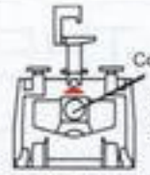
9545

9545 · PROFI-Clip-in-Coupling. To convert FLEISCHMANN vehicles in which the standard coupling 9525 has been fitted.

38 9545 · Bumper Pack containing 50 PROFI-Couplings 9545.

Conversion to PROFI-Couplings 9541, 9542 and 9543:

Using a small screwdriver, carefully loosen and lift off the plastic cover plate of the coupling socket. Change the couplings over (watch out for the coupling spring) and clip the cover plate back into position.



Conversion to PROFI-Coupling 9545.

Pull out the coupling 9525 from the socket, insert coupling 9545 back into the socket – and it's done!

You will find the relevant PROFI-coupling for each FLEISCHMANN vehicle in this catalogue shown in the symbol column under the particular vehicle description, or in the accessory tables on the following pages.

9570

9570 · Adjustable height PROFI-Coupling head. For mounting in conjunction with the adapter 9571, 9572, 9573 or 9577.

9571

9571 · Adapter for the PROFI-Coupling head 9570 (adjustable height). Suitable for all FLEISCHMANN vehicles with couplings 9521 or 9522. For mounting in conjunction with the adjustable height PROFI-Coupling head 9570. The correct coupling height can be set by using the height guide block 9579.

9572

9572 · Adapter for PROFI-Coupling head 9570 (adjustable height). Suitable for all FLEISCHMANN vehicles with couplings 9520, and for many vehicles from other manufacturers.

9573

9573 · Adapter for PROFI-Coupling head 9570 (adjustable height). Suitable for many vehicles from other manufacturers.

For mounting in conjunction with the adjustable height can be set by using the height guide block 9579.

9574

9574 · Close Coupling additional pack. For later conversion of coaches without slot-guide mechanism Ⓚ to true close coupling operation. Containing: 2 slot-guide mechanisms and 2 PROFI-Coupling heads 9570 (adjustable height).

9578

9578 · Mounting Guide for correct mounting of the close-coupling accessory 9574.

9579

9579 · Installation Guide. Using the installation guide 9579, the correct coupling height of the PROFI-coupling head 9570 can be set.

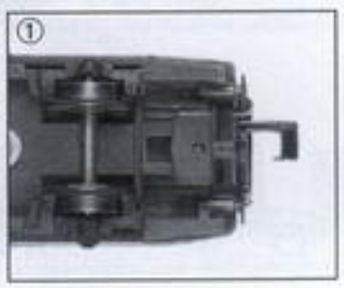
Conversion to PROFI-Couplings using adapters and PROFI-Coupling head 9570: Open up the coupling socket according to the manufacturer's instructions. Put in the standard coupling adapter, parking off the knobs of the adapter to suit, so that the adapter fits securely in the socket. Put on the coupling head and set the height using the guide 9579.

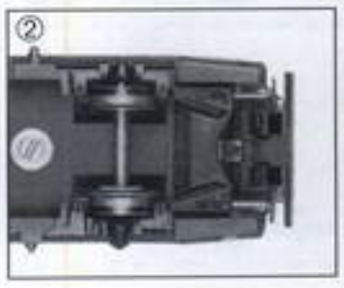
Pictures ① to ③ show an example of mounting of the close-coupling unit 9574 onto an old style 4-axled bogie coach without Ⓚ:

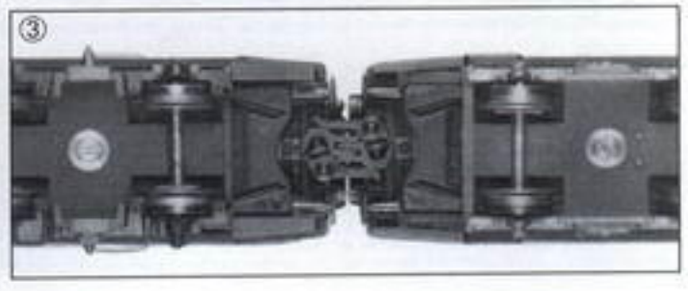
① Starting with the standard coupling as fitted (the underside of the coach is shown).

② With the assistance of the distance mounting guide 9578, the slot-guide mechanism is glued to the floor of the coach.

③ 2 with the coach with the close-coupling unit now built in. The coupling holders for the previous couplings are cut off from the bogies.







Steam, diesel and electric locomotives

Cat.-No.					
7000		6518		9521	9541
7025 - 7027		6518		9521	9541
7030 / 7033		6518	6535	9520	9570 + 9572
7035 / 7036		6518	6535	9521	9541
7052 Ⓚ / 7053 Ⓚ	54 7004	maintenance-free	6535	9525	9545
7061 - 7064	54 7004	maintenance-free	6535	9525	9545
7065	54 7004	6518	6535	9522	9542
7075/7077	54 7004	6518	6535	9521	9541
7086	54 7002	6518	6535	9525	9545
7087	54 7002	6518	6535	9525	9545
7091 - 7095	54 7002	6518	6535	9521	9541
7098		9517	6535	9525	9545
7099		9517	6535	9525	9545
7123 / 7126	54 7001	6518	6535	9525 front 9521 rear	9545 front 9541 rear
7124	54 7001	6518	6535	9521	9541
7135 - 7139	54 7001	6518	6535	9522	9542
7141 / 7143	54 7001	maintenance-free	6535	9525	9545
7152 - 7155	54 7001	6518	6535	9525 front 9521 rear	9545 front 9541 rear
7157/7158	54 7001	6518	6535	9522	9542
7159	54 7001	6518	6535	9522 front 9520 rear	9542 front 9570 + 9572 rear
7160	54 7001	6518	6535	9522 front 9525 rear	9542 front 9545 rear
7165	54 7001	6518	6535	9522	9542
7166	54 7001	6518	6535	9522 front 9521 rear	9542 front 9541 rear
7167/7168	54 7001	6518	6535	9522 front 9520 rear	9542 front 9570 + 9572 rear
7169 - 7174	54 7001	6518	6535	9521	9541
7180 - 7182	54 7001	6518	6535	9525	9545
7183	54 7001	6518	6535	9525 front 9521 rear	9545 front 9541 rear
7184/7186	54 7001	6518	6535	9525	9545
7215	54 7001	6518	6535	9521	9541
7218		6518		9521	9541
7230/7231	54 7001	6518	6535	9521	9541
7235 - 7238	54 7001	6518	6535	9521	9541
7250 Ⓚ	54 7001	6518	6535	9525	9545
7260 Ⓚ	54 7002	6518	LED	9525	9545
7305		6518		9521	
7312	54 7002	6518	6535	9525	9545
7320 Ⓚ - 7323 Ⓚ	54 7002	6518	6538	9525	9545
7325 - 7329	54 7002	6518	6535	9525	9545
7331	54 7002	6518	6535	9525	9545
7335	54 7002	6518	6535	9525	9545
7337	54 7002	6518	6535	9525	9545
7339 - 7349	54 7002	6518	6535	9525	9545
7353	54 7002	6518	6535	9525	9545
7355 Ⓚ	54 7002	6518	6538	9525	9545
7361 - 7364	54 7002	6518	6535	9521	9541

Cat.-No.					
7365	54 7002	6518	6535	9525	9545
7367	54 7002	6518	6535	9525	9545
7368		6518	6535	9523	9541
7369		6518	6535	9521	9541
7370		6518	62 7400	9521	9541
7376	54 7002	6518	6535	9521	9541
7377	54 7002	6518	6535	9521	9541
7382	54 7002	6518	6535	9521	9541
7383	54 7002	6518	6535	9521	9541
7385 Ⓚ	54 7002	6518	LED	9525	9545
7394 Ⓚ / 7395 Ⓚ	54 7002	6518	LED	9525	9545
7968	Cleaning pad 35 7969	6518		9521	9541

Symbols:

- = Traction tyres
- = Brushes and springs
- = White bulb
- = Red bulb (for tail light)
- = Coach interior lighting
- = Tail lighting unit
- = Spare Standard-Coupling
- = PROFI-Coupling
- = Coupling connector piece
- = Coupling connector piece for the "Rolling Road"
- Ⓚ = Slot-guide mechanism in vehicle chassis for true close-coupling in conjunction with the PROFI-Clip in coupling 9545

Signals

Cat.-No.		Cat.-No.		Cat.-No.	
9200	6536	9205	6536	9220	6536
9201	6536	9206	6536	9225	6536

Digital locomotives

Cat.-No.					
8 7025		6518		9521	9541
6 7052 Ⓚ	54 7004	maintenance-free	6535	9525	9545
8 7063 / 8 7064	54 7004	maintenance-free	6535	9525	9545
6 7065	54 7004	6518	6535	9522	9542
8 7075/8 7077	54 7004	6518	6535	9521	9541
8 7124	54 7001	6518	6535	9521	9541
8 7135	54 7001	6518	6535	9522	9542
6 7138 / 6 7139	54 7001	6518	6535	9522	9542
8 7141 - 8 7143	54 7001	maintenance-free	6535	9525	9545
8 7160	54 7001	6518	6535		
6 7170 - 6 7173	54 7001	6518	6535	9521	9541
8 7182 / 8 7184	54 7001	6518	6535	9525	9545
8 7230 / 8 7231	54 7001	6518	6535	9521	9541
6 7235 - 6 7238	54 7001	6518	6535	9521	9541
7 7236	54 7001	6518	6535	9521	9541
8 7305		6518		9521	
6 7320 Ⓚ	54 7002	6518	6538	9525	9545
6 7327 - 6 7332	54 7002	6518	6535	9525	9545
6 7335 / 6 7336	54 7002	6518	6535	9521	9541
8 7337	54 7002	6518	6535	9525	9545
6 7341 - 6 7349	54 7002	6518	6535	9525	9545
6 7353	54 7002	6518	6535	9525	9545
6 7355 Ⓚ	54 7002	6518	6538	9525	9545
6 7380 / 6 7383	54 7002	6518	6535	9521	9541
8 7968	Cleaning pad 35 7969	6518		9521	9541

Railcars / Digital railcars

Cat.-No.								
7400/02 Ⓚ / 8 7400/02 Ⓚ		6518		2 x 62 7400			9545	38 7401
7401 Ⓚ / 7403 Ⓚ				2 x 62 7400			9545	38 7401
7411	54 7001	6518		6535				
7415/18 Ⓚ / 6 7415/18 Ⓚ	54 7001	6518	9446	2 x 6535	2 x 9531		9545 front	38 9005 between the coaches
7420 Ⓚ / 7 7420 Ⓚ	54 7006	maintenance-free	9465	LED	LED		9545	
7427/6 7427/7428/7471	54 7001	6518	2 x 9530	2 x 6535	2 x 9531	9521 front	9541 front	38 7428 between the coaches
7431 Ⓚ / 7438 Ⓚ	54 7001	6518	2 x 9530	2 x 6535	2 x 9531	9522 front 9525 between the coaches	9542 front 9545 between the coaches	
7433 Ⓚ / 7439 Ⓚ			9450	9530		9525	9545	
7440/50 Ⓚ / 6 7440/50 Ⓚ	54 7001	6518		2 x 6535	2 x 9531		9570 + 9577	38 9005
7441 Ⓚ – 7449 Ⓚ			9447	6535			9570 + 9577	38 9005
7452 Ⓚ / 6 7452 Ⓚ / 7490 Ⓚ	54 7001	6518	9464 Trailer car	2 x 6535	2 x 9531	9525 front	9545 front 9570 + 9577 between the coaches	38 9005
7453 – 58 Ⓚ / 7491 – 96 Ⓚ			9447	6535			9570 + 9577	38 9005
7460 Ⓚ	54 7005	6518	9468	6535 driving ends 9530 restaurant coach				38 9005
7461 Ⓚ – 7465 Ⓚ			9467	6535				38 9005

If operating in digital mode, or in compatible operation, then for all vehicles with separate interior lighting fittings, the bulbs must be exchanged for the relevant digital bulbs.

545	
545	
545	
545	
545	
543	
543	
545	
545	38 9007
545	38 9007
545	
545	
545	
545	
545	
545	
545	
545	
545	
545	
545	
545	
545	
545	
545	
545	
545	
543	
545	
545	
545	
545	
545	
545	
545	
543	
543	
545	
545	
545	38 9006 between the coaches
545	
545	

Passenger coaches

Cat.-No.	☼	💡	💡/▭		
8040Ⓚ-8046Ⓚ	9459	9530		9525	9545
8051Ⓚ-8059Ⓚ	9456	9530		9525	9545
8070Ⓚ-8074Ⓚ	9461	9530		9525	9545
8078Ⓚ-8083Ⓚ	9459	9530		9525	9545
8096Ⓚ-8099Ⓚ				9525	9545
8100Ⓚ/8112Ⓚ	9458	9530		9525	9545
8113Ⓚ/8114Ⓚ	9447	6535		9525	9545
8116Ⓚ/8117Ⓚ	9458	9530		9525	9545
8119Ⓚ	9458	9530		9525	9545
8121Ⓚ/8122Ⓚ	9447	6535	9448	9525	9545
8123Ⓚ	9447	6535		9525	9545
8124Ⓚ/8125Ⓚ	9447	6535	9448	9525	9545
8127Ⓚ-8139Ⓚ	9459	9530		9525	9545
8140Ⓚ	9530 2 x for interior lighting	6535 1 x for cab-end light	9531 1 x for tail light	9525	9545
8141Ⓚ/8142Ⓚ	9458	9530		9525	9545
8143Ⓚ	9530 2 x for interior lighting	6535 1 x for cab-end light	9531 1 x for tail light	9525	9545
8144Ⓚ/8145Ⓚ	9458	9530		9525	9545
8146Ⓚ	9530 2 x for interior lighting	6535 1 x for cab-end light	9531 1 x for tail light	9525	9545
8147Ⓚ-8150Ⓚ	9458	9530		9525	9545
8154Ⓚ/8155Ⓚ	9447	6535		9525	9545
8158Ⓚ/8165Ⓚ	9458	9530		9525	9545
8170-8172	9459	9530		9522	9542
8175Ⓚ	9460	6535		9525 rear	9545 rear
8176Ⓚ-8179Ⓚ	9447	6535		9525	9545
8189Ⓚ-8194Ⓚ	9458	9530		9525	9545
8199Ⓚ	2 x 9530	9530		9525	9545
8600Ⓚ	9460	6535		9525	9545
8601Ⓚ/8602Ⓚ	9458	9530		9525	9545
8604Ⓚ	9447	6535		9525	9545
8605Ⓚ/8606Ⓚ	9458	9530		9525	9545
8610Ⓚ	9460	6535		9525	9545
8611Ⓚ/8612Ⓚ	9458	9530		9525	9545
8613Ⓚ	9447	6535		9525	9545
8614Ⓚ/8615Ⓚ	9458	9530		9525	9545
8616Ⓚ/8618Ⓚ	9447	6535		9525	9545
8623Ⓚ	9447	6535		9525	9545
8626Ⓚ-8628Ⓚ	9447	6535	9448	9525	9545
8630Ⓚ-8635Ⓚ	9459	9530		9525	9545
8636Ⓚ	9457	9530		9525	9545
8638Ⓚ	9459	9530		9525	9545
8640Ⓚ	9458	9530		9525	9545
8641Ⓚ-8643Ⓚ	9447	6535		9525	9545
8644Ⓚ	9458	9530		9525	9545

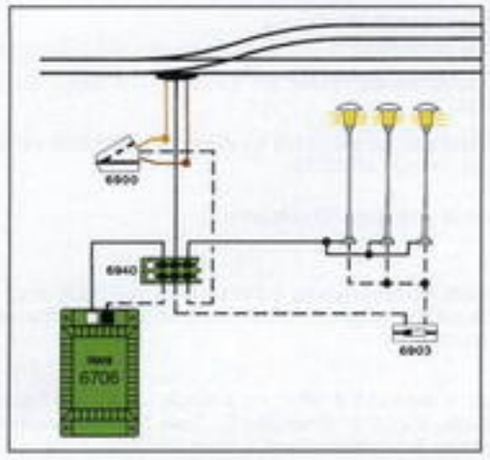
Cat.-No.	☼	💡	💡/▭		
8649Ⓚ	9447	6535		9525	9545
8653Ⓚ	9460	6535		9525	9545
8654Ⓚ	9447	6535		9525	9545
8659Ⓚ-8663Ⓚ	9455	9530		9525	9545
8664Ⓚ	9460	6535		9525	9545
8665Ⓚ/8666Ⓚ	9447	6535		9525	9545
8676Ⓚ/8677Ⓚ	9459	9530		9525	9545
8680Ⓚ	9460	6535		9525	9545
8681Ⓚ/8683Ⓚ	9458	9530		9525	9545
8685Ⓚ	1 x 9530	9530		9525	9545
8686Ⓚ	9447	6535		9525	9545
8687Ⓚ	9458	9530		9525	9545
8693Ⓚ	9449	9530		9525	9545
8694 - 8695				9521	9543
8740Ⓚ-8744Ⓚ	9459	9530		9525	9545
8748Ⓚ	9459	9530		9525	9545
8755Ⓚ	9447	6535		9525	9545
8765Ⓚ-8767Ⓚ	9449	9530		9525	9545
8770Ⓚ-8773Ⓚ	9461	9530		9525	9545
8779Ⓚ-8781Ⓚ	9459	9530		9525	9545
8782Ⓚ/8783Ⓚ	9449	9530		9525	9545
8788Ⓚ-8790Ⓚ	9459	9530		9525	9545
8792Ⓚ-8795Ⓚ	9449	9530		9525	9545

Goods wagons

Cat.-No.	💡				
8200Ⓚ-8202Ⓚ		9525	9545		
8204Ⓚ/8205Ⓚ		9525	9545		
8208-8213		9521	9543		
8215Ⓚ/8216Ⓚ		9525	9545		
8217		9521	9541		
8218Ⓚ/8219Ⓚ		9525	9545		
8220		9521	9543		
8221Ⓚ		9525	9545		
8223Ⓚ		9525	9545	38 9006 between the coaches	
8224Ⓚ/8225Ⓚ		9525	9545		
8227/8228		9521	9543		
8230Ⓚ-8257Ⓚ		9525	9545		
8260Ⓚ-8268Ⓚ		9525	9545		
8270/8271		38 9000	9549		38 9002
8276-8279		38 9000	9549		38 9002

Cat.-No.	☼	💡	
8283Ⓚ			9525
8285Ⓚ-8288Ⓚ			9525
8292Ⓚ/8293Ⓚ			9525
8295Ⓚ/8296Ⓚ			9525
8299Ⓚ			9525
8300			9521
8301		9530	9521
8302Ⓚ			9525
8305Ⓚ			9525
8306Ⓚ			9525
8307Ⓚ-8309Ⓚ			9525
8311Ⓚ-8317Ⓚ			9525
8318Ⓚ/8319Ⓚ		9530	9525
8323Ⓚ/8326Ⓚ			9525
8330Ⓚ			9525
8335Ⓚ			9525
8341Ⓚ-8353Ⓚ			9525
8357Ⓚ			9525
8361Ⓚ/8369Ⓚ			9525
8370Ⓚ-8373Ⓚ			9525
8375Ⓚ			9525
8380Ⓚ/8381Ⓚ			9525
8383Ⓚ-8396Ⓚ			9525
8410Ⓚ-8419Ⓚ			9525
8426Ⓚ-8437Ⓚ			9525
8445Ⓚ/8449Ⓚ			9525
8480Ⓚ-8488Ⓚ			9525
8500			9521
8502Ⓚ/8503Ⓚ			9525
8510Ⓚ-8526Ⓚ			9525
8530Ⓚ/8531Ⓚ			9525
8561Ⓚ			9525
8591Ⓚ			9525
8594Ⓚ	9449	9530	9525
8595Ⓚ-8598Ⓚ			9525
8700Ⓚ-8706Ⓚ			9525
8708/8710			9521
8712			9521
8715Ⓚ/8716			9525
8721 Ⓚ			9525
8723 Ⓚ			9525
8725Ⓚ/8726Ⓚ			9525
8730Ⓚ/8735Ⓚ			9525

Powerful FLEISCHMANN-transformers:			
		Direct current =	Alternating current ~
6706	45 VA		14 V at 3200 mA
6725	12 VA	14 V at 850 mA	
6735	14.5 VA	14 V at 550 mA	14 V at 500 mA
6755	31 VA	15 V at 1100 mA	14 V at 1000 mA



6706
230 V

6706 · High performance transformer.
14 V A.C./3.2 A A.C. power for lighting – and/or electrical accessories.
This transformer is a high performance power source for operation of electrical accessories, i.e. signals, point motors, relays, lighting and other accessories on any model railway layout.
Protected against overload by internal thermal cut-out.
Simple connection to layout using practical quick clamps.

Output rating: **45 VA ≙ 14 V/3.2 A**
(= e. g. 64 bulbs 9530)
Output voltage: **14 V~**

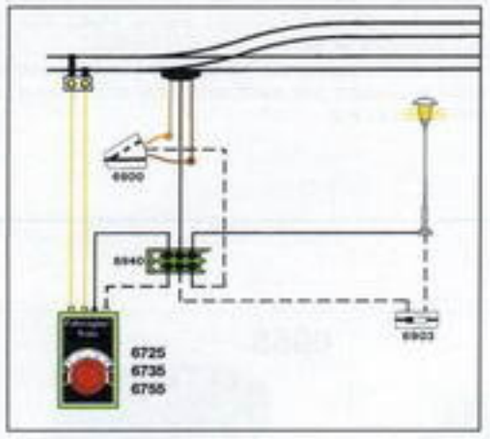
Fitting size: approx. 132 x 72 x 50 mm

6725
230 V

6725 · Controller Set.
14 V=/0.6 A (600 mA) controllable direct current.
Separate output connection for lighting as well as for signal and point connections.
Maximum power rating 850 mA.
This Controller Set is best suited for use by beginners for operation with just one train. It consists of a controller 6720 and a mains transformer unit 6710, designed to work in conjunction with each other.
The controller will give a definite forwards and backwards control.
Notched off position for the control knob when in zero setting.
Automatically protected against overload.
Simple connection to layout using practical quick clamps.

Output rating: **12 VA**
D.C. output controllable from: **0–14 V=**
(at 0.6 A ≙ 600 mA)
D.C. for lights and accessories: **14 V=**
(at 0.85 A ≙ 850 mA)

Fitting size: approx. 125 x 70 x 43 mm



6735
230 V

6735 · "MSF"-Controller-Transformer.
14 V=/0.55 A (550 mA) controllable direct current.
14 V~/0.50 A (500 mA) constant alternating current for lighting as well as for signal and point connections.
This transformer gives a smooth performance using super-fine control speed regulator as well as definite forward and reverse directions.
Notched off position for the control knob when in zero setting.
Automatically protected against overload.
Simple connection to layout using practical quick clamps.

Output rating: **14.5 VA**
D.C. output controllable from: **0–14 V=**
(at 0.55 A ≙ 550 mA)
A.C. for lights and accessories: **14 V~**
(at 0.50 A ≙ 500 mA)

Fitting size: approx. 80 x 170 x 65 mm

6755
230 V

6755 · "MSF"-Controller-Transformer.
15 V=/1.1 A (1100 mA) controllable direct current.
14 V~/1.0 A (1000 mA) constant alternating current for lighting as well as for signal and point connections.
The ideal large transformer that meets all needs.
Extra high output, as well as short circuit indicator lamp for both D.C. and A.C. circuits.
Finest control using super-fine control speed regulator as well as definite forward and reverse directions.
Notched off position for the control knob when in zero setting.
Automatically protected against overload.
Simple connection to layout using practical quick clamps.

Output rating: **31 VA**
D.C. output controllable from: **0–15 V=**
(at 1.1 A ≙ 1100 mA)
A.C. for lights and accessories: **14 V~**
(at 1.0 A ≙ 1000 mA)

Fitting size: approx. 110 x 180 x 90 mm

FLEISCHMANN-articles (examples)		Current consumption
Loco without lights		ca. 120 mA
Loco with lights		ca. 200 mA
Electric turntable		ca. 500 mA
Signal motor	9200, 9205	ca. 500 mA
Signal motor	9201	ca. 300 mA
Signal motor	9206	ca. 230 mA
Uncoupling track	9112	ca. 350 mA
Uncoupling track motor	9414	ca. 350 mA
Electric point motor	9421, 9422	ca. 500 mA
Electric point motor	9423	ca. 1100 mA
Interior lighting set	9468	ca. 200 mA
Interior lighting set	9446, 9450, 9465	ca. 100 mA
Interior lighting set	9447, 9449, 9451 9455, 9456, 9457 9458, 9459, 9460 9461, 9464, 9467	ca. 50 mA
Electronic tail lighting unit	9448	ca. 15 mA
Bulb	6535, 6536, 6538	ca. 50 mA
Bulb	9530, 9531	ca. 45 mA

FLEISCHMANN transformers for train operation with Multi Wave – Super Fine Control = "MSF"
"MSF" – Multi Wave, Super Fine, Control – offers, through "MSF", the slowest crawl speed for shunting operations, by continual variation from half-wave through mixed wave to full wave control.

THE FLEISCHMANN BLOCK SYSTEM

6957

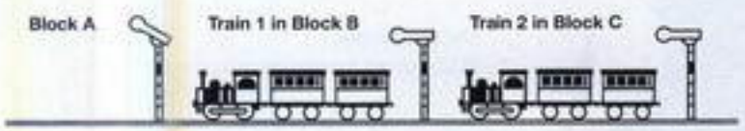
6957 · Automatic self contained control system. This triple unit is a firmly mounted, electrically connected section, consisting of **3** pieces 6958. It can be very easily enlarged into a precision-blockette, by adding to each additional block section any number of supplementary units of 6958.

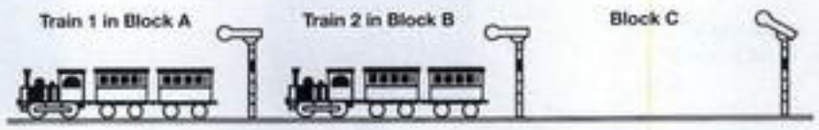
6958

6958 · Supplementary unit for enlarging the self-block Compact-set 6957. This item can only be operated through 6957.

Practical advantages of the FLEISCHMANN block system:

1. Neat and simple construction (even beginners can easily install train control).
2. The relays automatically switch the signals. No extra switches are needed.
3. The settings of the switches are shown on the relay. The relays can also be controlled by hand.
4. The basic block system can be extended by buying single block switches when you like (and as you can afford it).
5. Current consumption of one relay: 30 mA only.





The FLEISCHMANN block system makes it possible to run more than one train on **one** track, because the automatic block switching controls the safety distance between two trains.

For instance:
Two trains are running one behind the other on a single track. The track has been divided into sections. Train 2 is in section C. Train 1 is in block section B. Even if Train 2 is running faster than Train 1, then it cannot catch up with Train 1 because the block system, with its automatic switching, ensures that the signal with train control, behind Train 1 always shows "Halt". The block system relay automatically switches all signals.
If you wish to run two trains automatically on the same track, then one basic block system module 6957 is needed. For each additional train then a block system extension unit 6958 is required.

Operating variations:			
Manually	Using track diagram switch	Using push button switch	From the loco/train
At any time, direct, and without using any extra switches	with 2 x 6902	with 1 x 6927	with 9426/9427 + 9425

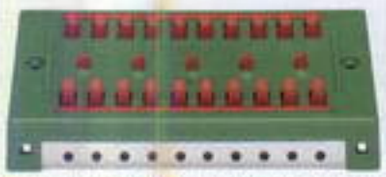
One simple rule for the maximum possible number of trains on one stretch is:

Number of block relays less one is the maximum number of trains on one stretch.

Examples:
1 x 6957 = **3** block relays = **2** trains
1 x 6957 (3 block relays) + 1 x 6958 (1 block relay) = **4** block relays = **3** trains

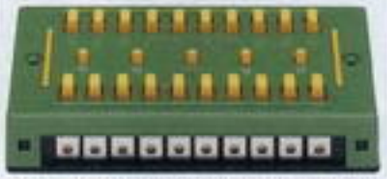
FLEISCHMANN SWITCHING ACCESSORIES

6940



6940 · Distributer panel, double-pole for 10 pairs of connections.

6941



6941 · Clip panel connections for extending 10 wire leads.

6950

6950 · Track rectifier. This unit opens up many possibilities. For details see directions packed with the unit.*

6953

6953 · Station-stop control, adjustable, for stopping a train for 3 to 60 seconds, as desired. Just turn the screw.*

6954

6954 · Slow-down resistance for automatic braking of trains, when approaching stop signals or in slow zones. Adjustable from 10 to 35 Ω by means of sliding knob.*

6955

6955 · Relay with 2 separate switches, capacity each contact: 3 A/25 V, solenoids take 30 mA/10...16 V.

6960

6960 · Electronic Voltage Automation Unit EVA – for gradual acceleration and braking of **D. C. locomotives**. Easily installed ahead of each signal, in block sections or in the station area. All trains, as well as railcars and even push/pull trains with a control cab coach being pushed will be brought to a halt in front of the signal by the "EVA" unit. Additional functions for running backwards within the signal area without train control an immediate braking for occupied block sections.*

6980

6980 · Twin-core-connecting wire, white/white.
Ø 0.19 mm², length 10 m.

6981

6981 · Twin-core-connecting wire, yellow/blue.
Ø 0.19 mm², length 10 m.

6982

6982 · Bifilary connecting wire,
Ø 2 x 0.75 mm², length 10 m.

6983

6983 · Three core wire, length 10 m.

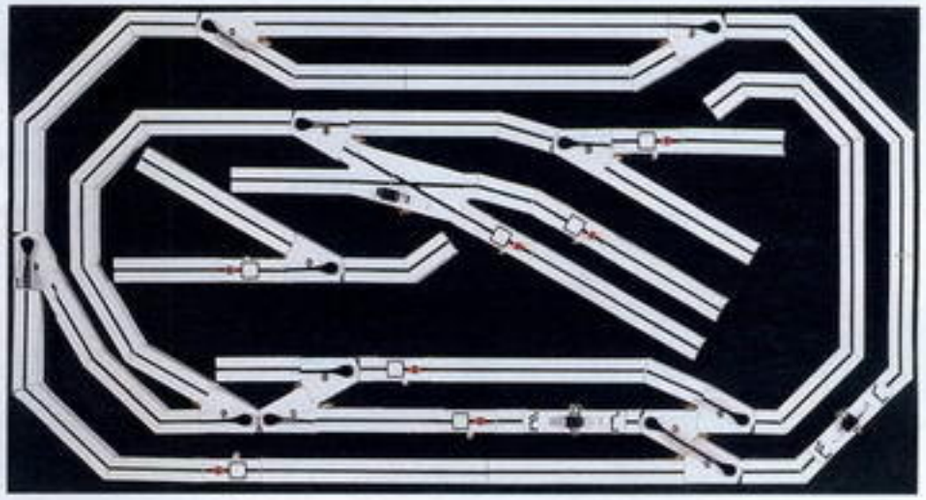
6990

6990 · Radio-interference suppressor for electric trains. Simply install between power and track.*

*Not suitable for digital system.

The FLEISCHMANN track diagram control panel

All routes are controlled from the control panel.



6900

6900 · Switch control, momentary impulse, for throwing any points.

6901

6901 · Control for signal lights that control trains.

6902

6902 · Momentary-Impulse unit for brief operation of stopping sections, uncoupler tracks, etc.

6903

6903 · On-off control for circuits, subsections, lights, etc.

Dependable, safe and simple to use. The point switches are put into the track diagram in exactly the same position as on the layout, all the signals, isolating sections, even the turntable can be reliably controlled.
The build up method is childishly simple. All pieces are ready to screw down.

Fixing the switches 6901 to 6908 as well as 6911 and 6918 with wood screws 6410 *(see page 121).*

Spare srews for 6900, 6910, 6912, 6913 and 6914:
70 6210 (FLEISCHMANN spare part).

6904

6904 · Reverse control for reversing trains.

6905

6905 · Momentary reverse control for momentary impulses to track and for control of magnetic devices.

6906

6906 · Control for double-slip switch. A little aperture always shows the way the switch is set (cross or turn).

6907

6907 · Control for semaphore with magnetic drive.

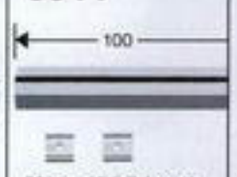
6908

6908 · Three Way Point Switch for a three way point.

6910 ø 63

6910 · Turntable Switch for the electrically driven turntable 9152 C with individual electrically switchable track exits.

6911



6911 · 10 full-length straight-away symbols with 30 footparts for fastening units.

6912

6912 · Switch symbol unit for manual switches.

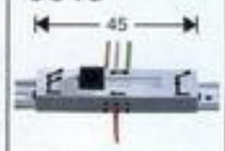
6913

6913 · Crossing symbol for crossings 15° or 30°.

6914 ø 63

6914 · Symbol for hand-operated turntable 9150.

6918



6918 · Control for semaphore with magnetic drive for 2 unlinked arms.

The FLEISCHMANN finger tip control panel

Simple to plug together.
Clear indication panels.

A robust control panel of FLEISCHMANN switches to make up a model railway signal box. All switches have indicator panels (e. g. to number the points) and are clearly marked to indicate their function. Simple for the model railway beginner to connect up.
Dimensions approx.: length 60 mm x width 33 mm x height 34 mm

6920 **6921** **6922** **6923** **6924** **6925** **6927** **6928**

6920 Control for two points, with two number panels or 2 double-slip switches.

6921 Light change, for changing signal indication with train control (9220/9225).

6922 Control for four uncoupler tracks, with four number panels.

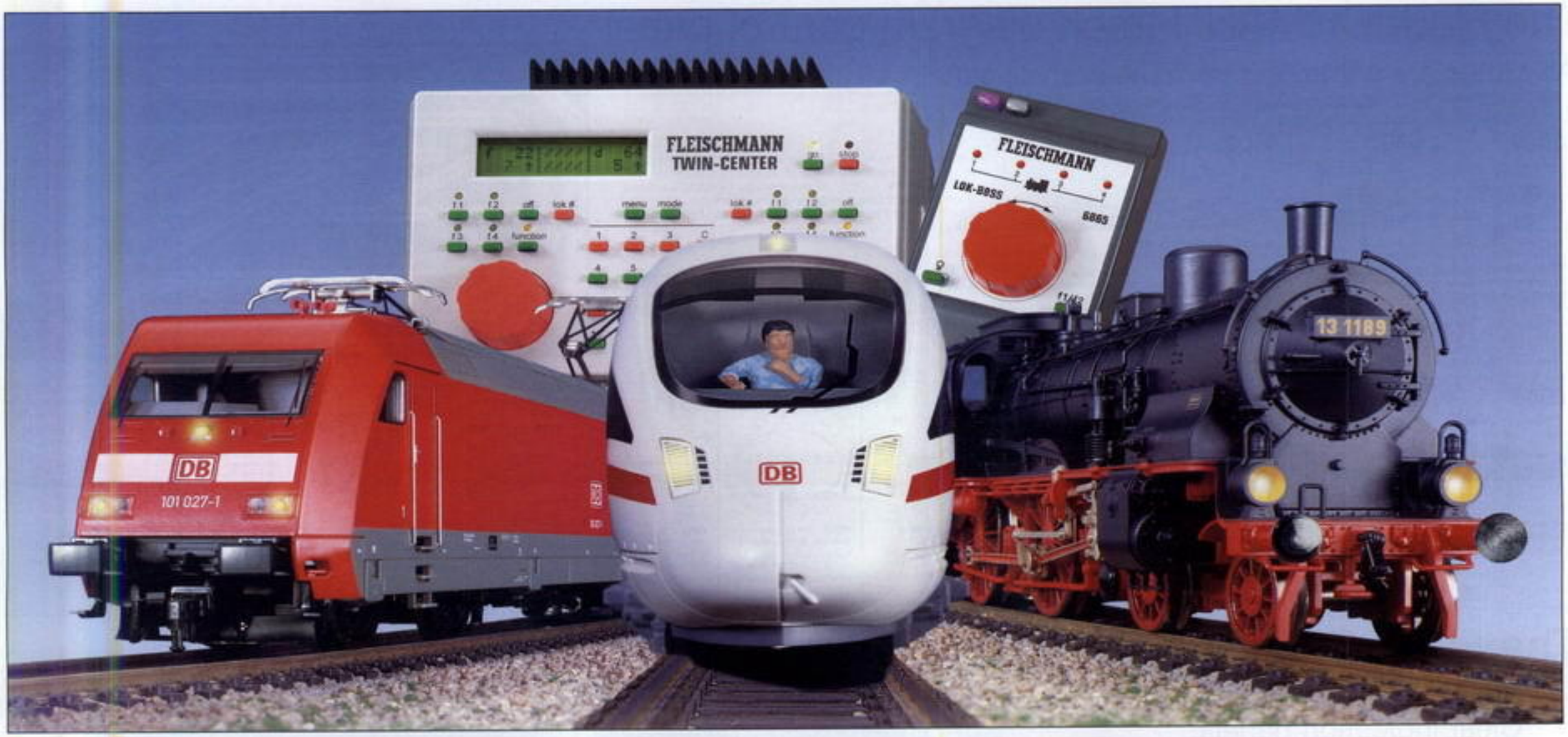
6923 On-off control, for circuits, lights, stopping sections, etc.

6924 Reverse for reversing direction of trains.

6925 Control for 3-way switch.

6927 Signal switch for operating single arm semaphore signals 9200/9205.

6928 Signal switch for operating double arm semaphore signals 9201/9206.



FLEISCHMANN DIGITAL – The world of digital Multi-Train Control

The dream of every railway modeller: operation of the model layout to replicate just what happens on the real railway. This dream becomes a reality with the **digital multi-train control** from FLEISCHMANN. The operational possibilites are both fascinating and unending – enjoyment, though, remains the first priority.

In **traditional analog operation**, the locomotives receive their power direct from the track. The further the control knob is "rotated", the higher the power given, and therefore the faster the loco runs. If you place a second loco on the same track, then this loco, just like the first, will receive the same track power, which means that both locos will run in the same direction at the same speed, fast or slow. If you want to run several locos on the track at the same time, then the layout must be separated into individual track sections each fed by additional controllers.

It's different for **digital multi-train control** from FLEISCHMANN: Here each loco, fitted with a decoder, will run individually according to your commands – fast, slow, forwards or backwards – and what's more, completely independently of all the other locos on the same track.

How can that be? For this type of control, there is a constant power in the track. This serves firstly to provide power to the locos, and secondly to carry the digital control commands to the decoders. The decoders in the locomotives recognise these signals and translate them into control and running commands. They regulate how much power the motor receives from the track, thus determining the speed and direction of the loco.

Each digitally driven loco with an inbuilt decoder has its own unique address which will only react to the signals sent specifically to that address – comparable to a telephone which will

only react when that number is dialled. Because the signals for lots of loco addresses can be carried unbelievably rapidly behind each other, then several locomotives can be controlled all at the same time.

So for example, **within one circuit,** you can be shunting whilst other trains are arriving and departing from the station. You can even couple up two locos to each other and run them as double-headed, you can swop coaches over onto different trains, push them into sidings and reproduce many more operational situations of the real railways. This brings more realism and with it, of course, more enjoyment. An additional advantage of this "delegation of duties": several people – i.e. father and son – can both be "allowed" to play trains with each other.

*Absolutely prototypical: a shunter loco slowly pushes the coach up the waiting train – which is sitting **in the same circuit**, because each loco only receives the digital signals sent to its own address.*

FLEISCHMANN-DIGITAL – a system for the future

FLEISCHMANN-*DIGITAL* is a completely comprehensive multi-train control system with a vast choice of power sources, controllers and control equipment – all from one maker! You can build up your layout step by step and introduce new functions to extend it even further.

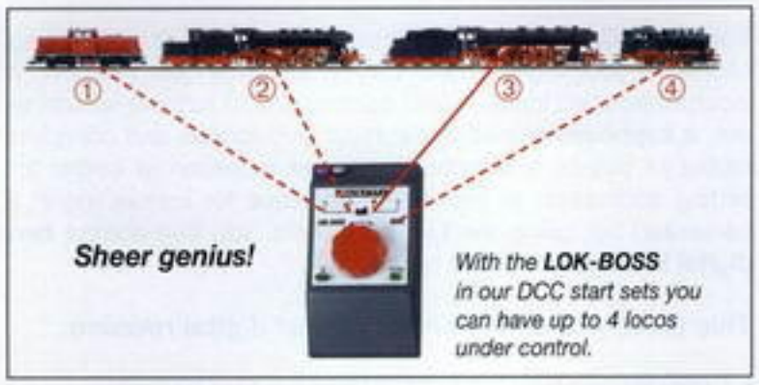
Just as we speak several languages – and sometimes equally not always understand them either – there are several digital languages for model railways too. **DCC** is one of the most recognised digital languages throughout the world.

*With the standardised **DCC**, you're on the "side of safety"*

The simplest start – "Unpack, put it together, and off you go" with a DCC Start Set from FLEISCHMANN

With our **DCC Start Sets** (see pages 12–16) you enter the world of digital model railways in the right way. "Unpack, put it together, and off you go" – that's just how it goes. Each Start Set is a complete miniature layout with a digitally controlled loco, wagons, tracks, **LOK-BOSS** controller and mains transformer unit.

The layout is soon made up and the **LOK-BOSS** controller looks after the enjoyment: everything now awaits your digital commands!



Sheer genius!

*With the **LOK-BOSS** in our DCC start sets you can have up to 4 locos under control.*

Practical: The locos contain a load-independent decoder. This means that the speed is unaffected by the loading, in other words, whether running up or downhill, the speed remains the same (as long as there is sufficient power to the motor).

Thanks to its load-independent decoder, this heavy goods train won't involuntarily turn into a racing ICE when going downhill.

You can easily build up your layout with all of the track pieces of the FLEISCHMANN track system – ideally using the track packs.

Sheer genius – the LOK-BOSS

Our **LOK-BOSS 6865** is tailored to suit smaller layouts, or for digital beginners.

- Using this compact controller you have everything under control. This may be up to 4 locos, which you can run at the same time, yet completely independently from each other.
- Simply place the loco on the track and straight away you're off. By turning the control knob to the right, the loco will run forwards – turn to the left, and the loco runs backwards. It couldn't be easier!
- **LOK-BOSS** with display: 4 LEDs will show you at a glance just which loco is under direct control, which loco is running on "memory" and which loco is at a standstill.
- The **LOK-BOSS** gives you fast and easy access to the loco which you wish to drive.
- And the **LOK-BOSS** can do a lot more: one push of the key will suffice, for example, to turn the lights on or off. Two extra special functions can also be carried out – on the locos in our DCC Start-Sets: inertia on/off (f1), shunting gear on/off (f2). For Sound-locos you can call up the individual sounds with the special functions f1 bis f8.

The **LOK-BOSS** makes it a joy to start off with digital – further simple and uncomplicated additions are possible at a later stage.

LOK-BOSS – sheer genius!

So it goes on:
"sheer genius" – the LOK-BOSS as a controller

If you already own one **LOK-BOSS**, you can extend at any time with a second **LOK-BOSS**, which can be used as another controller (see fig. 1). This makes it easy for you to control your 4 locos from another position around the layout (i.e. in the shunting yard) or a second operator can join in. Both father and son can now join in together.

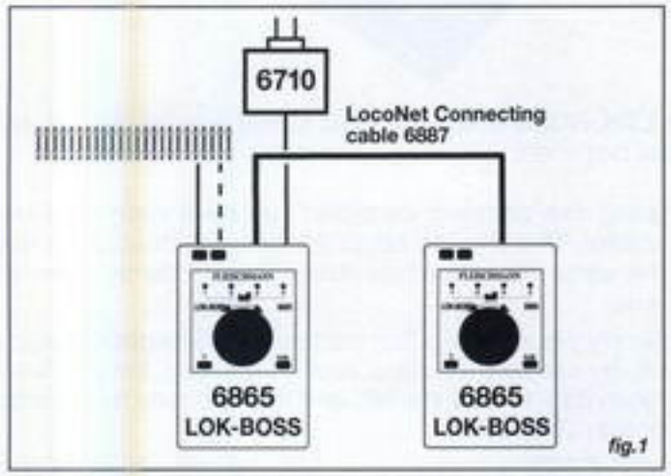


fig.1

In conjunction with the **TWIN-CENTER 6802,** our large central controller, the **LOK-BOSS** can be regarded as another valuable controller (see fig. 2). In this way you can separately control the loco depot or industrial sidings for example.

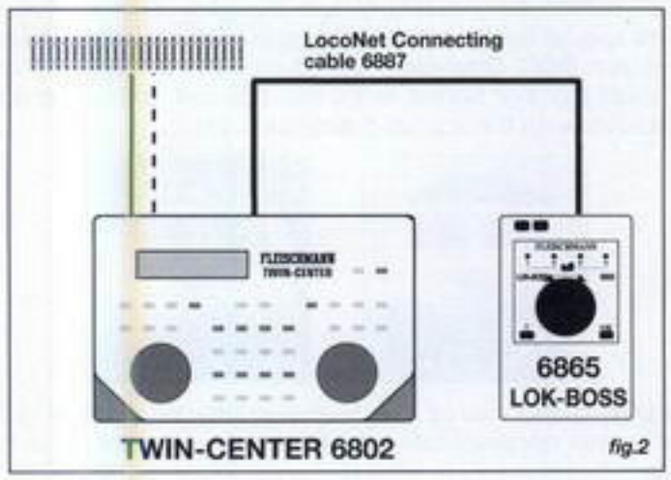


fig.2

THE TWIN-CENTER – THE UNIVERSAL CENTRAL CONTROLLER

Individual control – simultaneous running

The **TWIN-CENTER** is the versatile operational and switching centre for your digital model railway layout. In just one unit, it incorporates two independent **controllers** for running locomotives, a **keyboard** to switch electrical accessories and complete routes of points, a **booster** for power provision, a **coder** for setting addresses, as well as an **interface** for connecting in a computer. So, using the two controllers, you can control **two digital locos at the same time.**

This gives you all the enjoyment of digital running:

- two independent control knobs to run locomotives
- a keyboard to switch points – yes, even complete routes of points –, uncoupler tracks, signals and other electrically operated accessories
- setting a multitude of loco addresses (in DCC-operation: 1 – 9999)
- Fine speed control steps with up to 128 speed steps (DCC)
- Switching loco lighting on/off
- running with double heading
- Calling up the sounds of our Sound-locomotives
- automatic emergency power cut-off in case of short circuits
- Connection possibilites for the LOK-BOSS controller as well as TWIN-Hand controllers (6821) via TWIN-BOX (6827)
- integration of your computer into the layout operation

... and lots more!

All under control with 9999 addresses

Each digital loco with an inbuilt decoder has a specific address. It will only react to commands directed to that specific address. Using the **TWIN-CENTER** in DCC-operation, you can allocate any address from **1 to 9999** to any loco. This means you can call up any of your locos either by article number or by class number.

The TWIN-CENTER speaks two languages

With the **TWIN-CENTER**, there are undreamed of possibilities now open to you: because the **TWIN** covers two digital languages. One is the international standard **DCC**, and the other is the well-known and original **FMZ** – the FLEISCHMANN Multi-train control system. **Do you already have an FMZ-layout?** No problem, because the **TWIN-CENTER** will run that too.

The **TWIN-CENTER** offers you the following possibilities:
❶ You can run your layout in DCC-mode. ❷ You can run in FMZ-format. In which case you can additionally run analog locos too, (using a coupler 6806). ❸ It's even possible to run with two types of digital systems. For example you can use controller 1 to run a TWIN loco in FMZ-format, whilst using controller 2 to run a loco with a DCC decoder as per the NMRA standard – or the other way around.
If you purchase the current locos, which are fitted with load-independent TWIN-DECODERS, then you can also run these together with FMZ-locos.
Info: Locos with a TWIN-DECODER can be recognised by the figure "6" prefix in front of the article number (i.e. 6 7053).

The brain of the digital locos – the decoders

Decoder – these are the central controllers within the digital locomotives, more or less their brain. A decoder ensures that the signals sent by the corresponding control equipment are translated into correct commands for the motor of the loco. With a load-independent decoder, your loco receives the speed setting – irrespective of whether it is going up or downhill (provided there is sufficient power to the motor). Just right for operation: the minimum and maximum speeds of the locos can be determined. Equally the acceleration and braking inertia can be set or turned on/off. This puts you in complete control as an experienced "engine driver". Other controllable functions, such as turning the lights on or will simulate the operation of the "big" railway always more realistic.

FLEISCHMANN has various types of decoders in the range: DCC and TWIN decoders. Many of our locos are already Factory **fitted with a decoder** and are therefore ready **to run for immediate use** on your digital layout. DCC-DIGITAL locos can be recognised by the prefix "8" in front of the article number (i.e. 8 7141) and the 2-language TWIN-DIGITAL-vehicles by the prefix "6" (i.e. 6 7346) in the article number and our Sound-locos with a prefix "7" (7 7236).

Examples from our comprehensive range of locos:

6 7346 • The model of the fast BR 111 has a factory fitted TWIN-DECODER – therefore the prefix "6" in the article number.

6 7053 • The model of the elegant BR 62 likewise has an inbuilt TWIN-DECODER.

87141 • The legendary "Prancing Horse", the BR 24, is already factory fitted with a DCC-DECODER, therefore the prefix "8" in the article number.

7238 • The diesel loco BR 218 incorporates a decoder socket, NEM 651 and is suitable for installation of the DCC-decoder 6859 or the TWIN-DECODER 6839.

Also the railbus (8 7402), BR 795, can immediately "rumble" around your digital layout.

7174 • The model of the 01[10] has a 6-pole decoder socket NEM 651 and is suitable for installation of the DCC-decoder 6858.

7 7236 • Sound on Board – now in N «piccolo»!
Diesel locos in double heading with load-controlled digital DCC sound-decoder.

And if your desired model is not included?: Within the FLEISCHMANN range, there are several locomotives already fitted with the standardised decoder socket (as per NEM). With just a flick of the wrist, these locos can be fitted with a suitable decoder.
For locos in N-gauge we recommend the use of factory fitted locomotives.
Which decoder fits into which loco can be seen on the loco pages in this catalogue.

The locos with decoder sockets can be recognised by this symbol: for the 6-pole decoder socket as per NEM 651.

The DCC-decoder 6857, 6858, 6859 or similarly the TWIN-DECODER 6846 likewise 6839/6849 are suitable for use with these locomotives.
Besides: if your loco doesn't have a decoder socket, then you can convert them to digital multi-train operation by using the FLEISCHMANN-decoder without plug. Please ask your dealer! He will be pleased to advise you.

THE COMPONENTS OF THE DIGITAL MULTI-TRAIN CONTROL AT A GLANCE

6802 · TWIN-CENTER. Powerful central control unit with two control knobs, a keyboard to switch points and signals as well as routes of points, a coder, plus a port to connect to a computer (PC/MAC). The TWIN-CENTER is suitable for use with the multi-train systems DCC as per NMRA-standard and FMZ. 8 special functions can be called up – making sound an experience. ***Now with software-update V1.100.***

The TWIN-CENTER is a real "maid of all work".

6802

Size approx. 180 x 136 x 80 mm

6807

Size approx. 180 x 136 x 80 mm

6807 · TWIN-BOOSTER. Powerful enhancer for the TWIN-CENTER 6802. Each extra electrical circuit can be fed with power from another transformer via a TWIN-BOOSTER.
A brake generator for DCC-operation as per the NMRA-standard and a reverse loop module (for DCC- and FMZ-operation) are inbuilt.

6811 · *DIGITAL CONTROL*-transformer. Output approx. 16.5 V/ 2.73 Amps (45VA) for connection onto the TWIN-CENTER 6802 or the LOK-BOSS 6865 (via connector cable **38 6865**).

As an alternative, electrically operated accessories (i.e. points, signals, uncoupler tracks) can be connected to the additional output 14 V/3.2 A (45 VA) of the transformer 6811.

6811

Size approx. 132 x 72 x 50 mm

6812

Size approx. 110 x 180 x 86 mm

6812 · Transformer. Powerful special transformer for operating the TWIN-CENTER 6802 or additional TWIN-BOOSTER 6807 with full power. Output approx. 18 V (72 VA).
Transformer 6812 is an electrical power pack for your digital layout.

6821 · TWIN-Hand Controller with long wander lead and two switches. It is connected to the TWIN-CENTER 6802 via the TWIN-BOX 6827 and the relevant LocoNet cable, to the TWIN-CONTROL 6822 or to the LOK-BOSS 6865. The sliding regulator controls the direction and speed of a digital FLEISCHMANN loco with its central-off zero setting. The two independent flick switches can be allocated any of the other four available functions from the TWIN-CENTER:

• Individual loco emergency stop / • Emergency stop for the complete layout / • Headlights on/off / • Special function on/off

If required, the hand controller can be clipped into its retaining holder – then it's handy ready for picking up again.

6821

Size approx. 52 x 188 x 30 mm

6822

Size approx. 180 x 136 x 80 mm

6822 · TWIN-CONTROL. Additional controller, which is equipped with two control knobs and a keyboard to switch points, signals and point routes. 8 special functions can be called up – making sound an experience.
It can control all the functions for digital running and switching via the TWIN-CENTER. It is connected to the TWIN-CENTER via the LocoNet connector port.
Now with software-update V1.100.

6827 · TWIN-BOX. Connection unit for 4 hand controllers into the LocoNet-socket on the TWIN-CENTER 6802, TWIN-CONTROL 6822 and LOK-BOSS 6865. Several TWIN-Boxes can be connected into the LocoNet-connector on the TWIN-CENTER.

Using the LocoNet-cable included, the TWIN-BOX can be connected to the TWIN-CENTER 6802, TWIN-CONTROL 6822, LOK-BOSS or another TWIN-BOX.

6827

Size approx. 108 x 73 x 33 mm

6852

Size approx. 93 x 63 x 18 mm

6852 · TWIN-receiver unit for electrically operated accessories. Suitable for both FMZ and DCC as per the NMRA-standard. Via this unit, 4 points or 4 signals, or equally 8 uncoupler tracks can be connected to the TWIN-CENTER 6802.
The address of the unit can be set manually via a set of coding switches to any address from "1" to "119" that is not already allocated to an address of a FLEISCHMANN locos (FMZ-operation). With the 8th switch, the operation can be changed to DCC-operation. Using programming corresponding to DCC as per the NMRA standard, the DCC-addresses can now be electronically set (from "1" to „500") as well as the characteristics of each of the four ouputs of the unit (impulse, continuous, or blinking).
Once set, the ouptut characteristics also operate in FMZ-mode.

6860 · Breaker. To immediately cut off the power in the case of a short circuit and thereby avoid any damage to the vehicles by the short circuit power surge. A breaker is essential when connecting in a TWIN-coupler 6806.

6860

Size approx. 54 x 28 x 18 mm

6865 · LOK-BOSS controller with rotating control knob, two function keys and connecting cable.

Now up to 8 sound-/special functions can be called up!

The controller is suitable for digital operation of up to 4 locomotives with DCC-decoders, with a maximum power output of 1,8 A. 4 LEDs give information about the loco operating situation. Using the 2 function keys up to 8 sound-/special functions can be called up (like sound on/off, whistle/horn, light on/off, etc.).
Locomotives with DCC-decoders can be programmed using the LOK-BOSS (addresses).
In order to achieve the full power availability and thereby the optimum running qualities, the transformer 6811 is required to provide power.

38 6865 · Connection cable to connect the LOK-BOSS 6865 with transformer 6811 (not pictured).

6865

Size approx. 125 x 70 x 43 mm

6806 · TWIN-KOPPLER. The coupler is necessary when running FMZ-DIGITAL- and standard DC-locomotives together in one circuit. The coupler is an intermediary joining the tracks with the digital control equipment and the standard DC transformer.
When connecting onto the TWIN-CENTER 6802, then between the coupler and the track feed it is necessary to install a breaker 6860.

6806

Size approx. 110 x 180 x 86 mm

6885 · Adapter Set for FMZ-Booster. For connecting an FMZ-Booster 6805 to the TWIN-CENTER 6802. Includes: Booster-Adapter, cable set and track connection module 6886.

6885

6886 · Track Connection Module. This track connection module is necessary for the connection of any further FMZ-boosters 6805. It is a condition that one FMZ-booster 6805 is already connected to the TWIN-CENTER 6802 by the adapter set 6885.

6886

Size approx. 78 x 45,5 x 37,5 mm

6887 · LocoNet Connection cable. To connect the TWIN-BOX 6827 and other LocoNet equipment to the TWIN-CENTER 6802, TWIN-CONTROL 6822 or LOK-BOSS 6865.

6887

6890 · Operating Manual for the TWIN-CENTER 6802 and TWIN-CONTROL 6822 (German/English version).
All the knowledge regarding the digital units 6802/6822 collected together in one manual 6890. With practical fast entry.

6890

not shown

TWIN-DECODER:

Size (max.):
16,5 x 9 x 4,3 mm

6839

6839 · TWIN-DECODER with 6-pole plug.
For FMZ and DCC as per NMRA standard. For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 600 mA
Lead length: approx. 30 mm
Size (max.): 16.5 x 9 x 4.3 mm
Especially designed for use with N gauge.

6846

6846 · TWIN-DECODER with 6-pole plug.
For FMZ and DCC as per NMRA standard.
For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 800 mA
Lead length: approx. 20 mm.
Size (max.): 23 x 10.5 x 4.3 mm

69 6846

69 6846 · TWIN-DECODER without plug.
For FMZ and DCC as per NMRA standard. With 6 leads to convert (digitalise) DC locomotives **without** a fitted socket. Installation should be carried out by specialist dealer.
Maximum power rating: 800 mA
Lead length: approx. 150 mm.
Size (max.): 23 x 10.5 x 4.3 mm

6849

6849 · TWIN-DECODER with 6-pole plug.
For FMZ and DCC as per NMRA standard. For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 600 mA
Lead length: approx. 80 mm.
Size (max.): 16.5 x 9 x 4.3 mm
Especially designed for use with N gauge.

69 6849

69 6849 · TWIN-DECODER without plug.
For FMZ and DCC as per NMRA standard. With 6 leads to convert (digitalise) DC locomotives **without** a fitted socket. Installation should be carried out by specialist dealer. Maximum power rating: 600 mA
Lead length: approx. 150 mm.
Size (max.): 16.5 x 9 x 4.3 mm
Especially designed for use with N gauge.

DCC-DECODER:

Size (max.):
12,9 x 9 x 3,4 mm

6857

6857 · DCC-decoder with 6-pole plug.
For DCC as per the NMRA-standard. For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 600 mA
Lead length: approx. 80 mm.
Size (max.): ca. 12,9 x 9 x 3,4 mm
Especially designed for use with N gauge.

6858

6858 · DCC-decoder with integrated 6-pole plug without leads.
For DCC as per NMRA standard. For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 600 mA
Size (max.): 12,9 x 9 x 3,4 mm
Especially designed for use with N gauge.

6859

6859 · DCC-decoder with 6-pole plug.
For DCC as per the NMRA-standard. For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 600 mA
Lead length: approx. 30 mm.
Size (max.): ca. 12,9 x 9 x 3,4 mm
Especially designed for use with N gauge.

69 6859

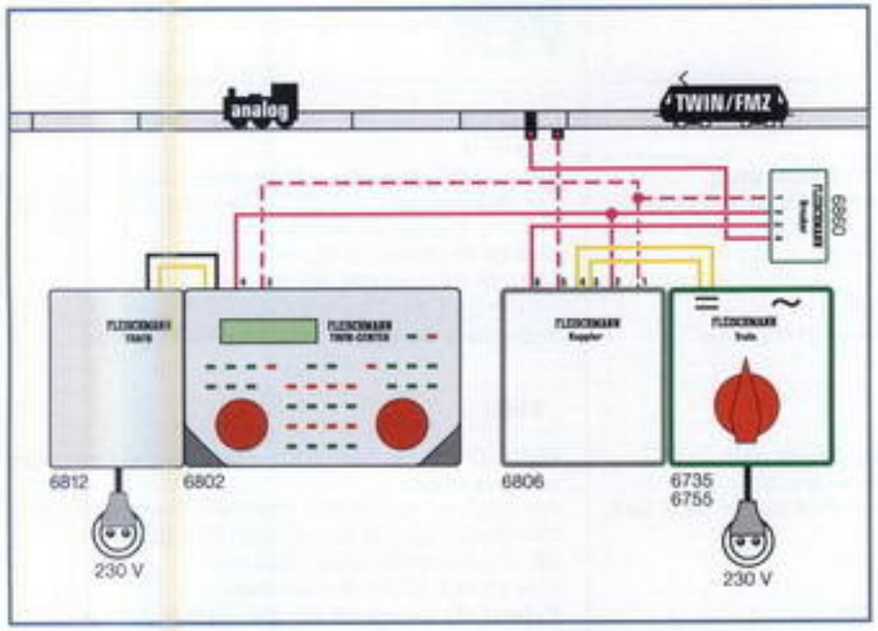
69 6859 · DCC-decoder without plug.
For DCC as per the NMRA-standard. With 6 leads to convert (digitalise) DC locomotives **without** a fitted socket. Installation should be carried out by specialist dealer. Maximum power load: 600 mA.
Lead length: approx. 150 mm.
Size (max.): ca. 12,9 x 9 x 3,4 mm
Especially designed for use with N gauge.

6876

6876 · DCC-decoder with 6-pole plug.
For DCC as per the NMRA-standard. For locomotives with 6-pole socket as per NEM 651 standard, for item no. 7460.
Maximum power rating: 1000 mA.
Lead length: approx. 80 mm.
Size (max.): ca. 20 x 10,5 x 3,8 mm

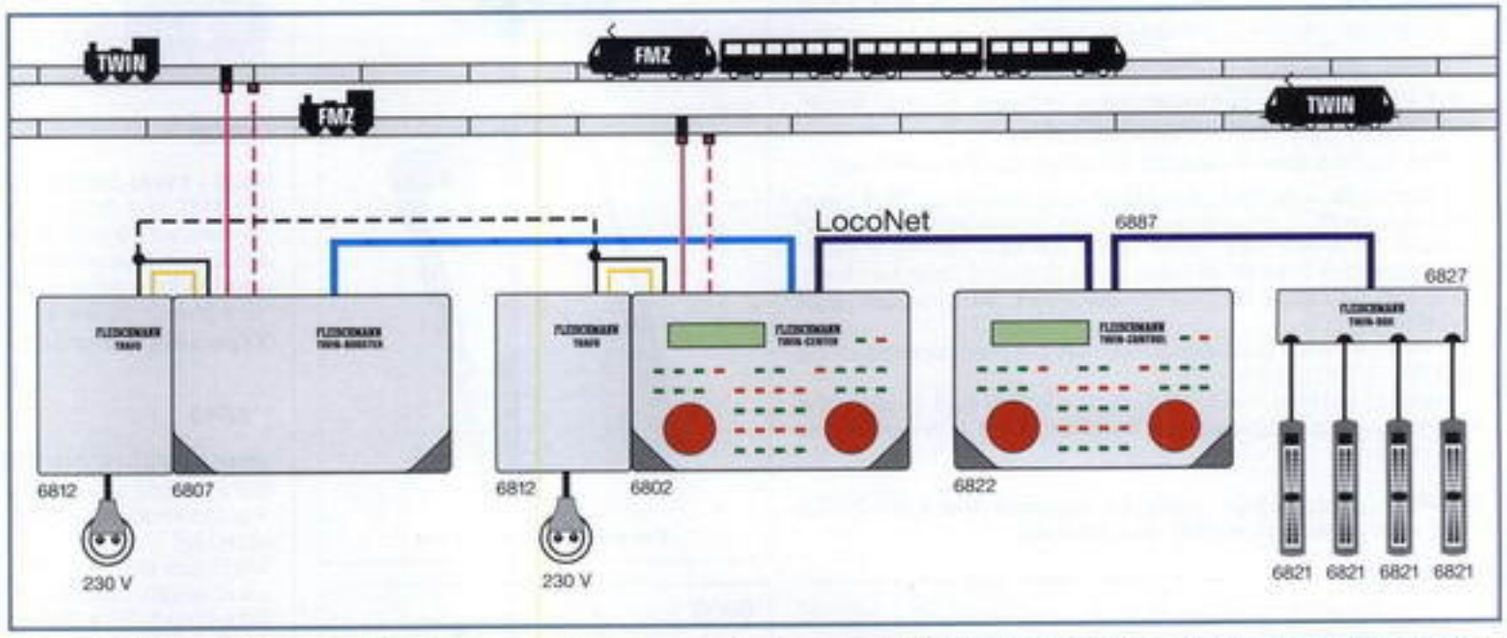
All FLEISCHMANN DCC- and TWIN-DECODERS are power regulated and protected against short circuit.

Advantages offered by the TWIN-TECHNIK:



Alongside the TWIN- or likewise FMZ-Technik fitted digital vehicles, analogue vehicles can also be run on the same track at the same time, and yet, still be independently controlled. To do this, one simply needs a coupler, to transmit the control instructions through the track, a breaker to protect the layout from an accidental short circuit and a transformer/controller for D.C. locos.

Building up the TWIN-TECHNIK:



If lots of digital vehicles are to be in use – as in our example, locos with FMZ- and TWIN-decoders – it would be nice to have them all under control at once. One TWIN-CONTROL 6822 with its two control knobs and keyboard is ideally sufficient. However, the system can be built upon: Hand controllers 6821 can be integrated within the system – up to 4 hand controllers can be connected via a TWIN-BOX 6827. Continuing on from there, up to 4 TWIN-BOXES, each with 4 hand controllers, or even 16 TWIN-BOXES, each with just one hand controller, can be connected up, and if that were not enough you can also couple up 6 TWIN-CONTROLs with the TWIN-CENTER which will give you complete control of up to 30 locos at any one time.

TRAIN-NAVIGATION

Railway Operation just like Real Life

Block System Operation

Light on (before tunnel)

Push/pull routes

Station Management

Slow-down settings

Call up Routes of Points

TRAIN-NAVIGATION –
The dream of every railway modeller becomes reality: Railway operation on the model railway layout just like the larger prototype.
And all without using a computer!

"Feedback information & switching" – with TRAIN-NAVIGATION you have your layout "under control". Each vehicle fitted with a tiny, unnoticable transmitter will be clearly identified, and its data will be "sent back".
In this way, the different functions and sequences will be automatically activated: Slow-down sections, stopping at a signal, switching on lights before a tunnel, block system operation, push/pull routes plus a whole lot more!

New: Pre-programmed functions!

Feed back information and switching on the digital layout with ...

loco individual, specific control

How does *TRAIN-NAVIGATION* work?

Quite simply: The "rolling stock" is fitted with a **navigation transmitter**. Scarcely noticeable **navigation sensors** are built into the track in the desired location, which are then connected to a **navigation receiver**. As a vehicle, either loco or coach, fitted with a navigation transmitter, runs over a sensor the navigation receiver recognises the address of the vehicle. This is known as "feedback information". The navigation receiver then activates the control commands for the respective vehicle which were stored in the TWIN-CENTER 6802.

TRAIN-NAVIGATION – Feedback information & switching on the digital model railway layout

What can I achieve with *TRAIN-NAVIGATION* ?

Almost everything you know that the „big" railway does:

- *Switch points and signals:*
  - ✓ Change points
  - ✓ Set the signals
  - ✓ Control blocksystems
  - ✓ Call up routes of points
- *Alter running speeds and directions:*
  - ✓ Start off other trains – and accelerate
  - ✓ Braking down to a standstill (before a signal)
  - ✓ Brake and run with reduced speed through a rail work site, and then accelerate up to running speed again
  - ✓ Dictate stopping duration and then start up again
  - ✓ Run push/pull routes
  - ✓ Call up individual emergency stops
- *Call up special functions:*
  - ✓ Switch on the lights (i.e. entering tunnels)
  - ✓ Switch off the lights (i.e. exiting tunnels)
  - ✓ Activate the loco whistle/horn
  - ✓ Switch on/off the clang of the bell
  - ✓ Activate station announcements
  - ✓ Activate the shrill whistle
  - ✓ Turn sound on-/-off

How can I install *TRAIN-NAVIGATION* ?

You simply insert the navigation sensors at the desired locations in the track, wherever you wish to activate a function. The navigation sensors are inserted into a small hole drilled in the track and connected to the accompanying navigation receiver, which in turn, is connected via LocoNet to the **TWIN-CENTER 6802**. The size of the navigation sensors has been selected so that they are suitable for use for **H0-**, and similarly for **N-trackwork**.

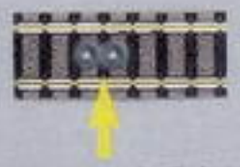
If you use two navigation sensors, one directly after the other, (for directional recognition for example), then the navigation receiver can carry out even more complex control commands (push/pull routes etc.).

Each navigation receiver is allocated the desired control commands from the TWIN-CENTER 6802.

It's a similar procedure for the navigation transmitter, which you have fitted underneath the vehicle (with current pick-up). The navigation transmitter is also set with the TWIN-CENTER 6802. Now the vehicle is „fit" for service!

And that's all without a PC!

A control-cab coach fitted with a navigation transmitter 6832.



2 sensors, built into an N «piccolo»-track.

TRAIN-NAVIGATION components:

6831 C · *TRAIN-NAVIGATION*-Start-Set consisting of 2 navigation transmitters, 2 pre-set navigation receivers each with 2 navigation sensors, 2 LocoNet-cables (each 2,15 m) and 1 manual.

6832 · Navigation Transmitter. This is mounted underneath the vehicle (loco or coach with current pick-up). Type of vehicle and its address is settable and readable with the TWIN-CENTER 6802. Approx. measurements 9 x 13,5 x 2,5 mm.

TRAIN-NAVIGATION – Feedback information & switching on the digital model railway layout

When can *TRAIN-NAVIGATION* fully realise its strenghts?

Basically, we recommend our well known **TWIN-CENTER 6802** as the central control unit with the **software update version V 1.100**.

This means for you that everything is supplied **„out of one hand"**.

Why is *TRAIN-NAVIGATION* ideally also suited for layouts which are already complete?

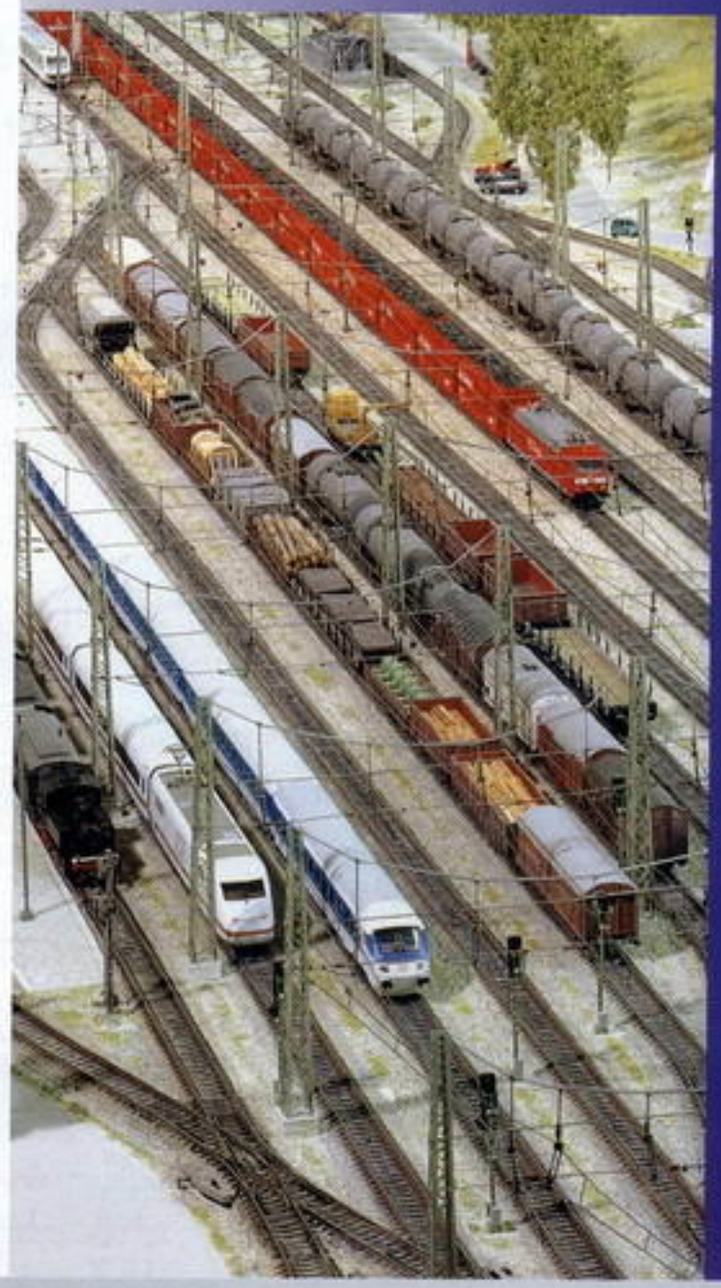
(Additional) isolating sections are not necessary. And if you already have the TWIN-CENTER 6802 from FLEISCHMANN, then with the update version V 1.100, you can as described above, have all this on the layout in its current state of development.

***TRAIN-NAVIGATION* is therefore the optimum extension for your digital layout.**

Do I need lots of different components to realise *TRAIN-NAVIGATION*?

On the contrary!

TRAIN-NAVIGATION consists of a finite number of individual components (shown below). For a successful start, we recommend our **Start-Set number 6831 C**.



More compact than you think:

With just a few components you're already "on the train"

6832

Navigation Transmitter

6833 C

Pre-set Navigation receiver
with 2 Navigation sensors and LocoNet-cable

6836

LocoNet-Distributor

6833 C · Navigation receiver with 2 navigation sensors and 60 cm LocoNet cable. The pre-set navigation receiver translates the information from the navigation sensors into commands for the TWIN-CENTER 6802. It is connected via the LocoNet-cable to the TWIN-CENTER. The navigation sensors are inserted into small holes drilled in the track and connected to the corresponding navigation receiver using the 60cm long wires. The programming of the navigation receiver is carried out per LocoNet with the TWIN-CENTER.

Approx. measurements: Navigation sensor Ø 5 mm, Navigation receiver 53 x 50 x 21 mm

6836 · LocoNet-Distributor. With 5 connections for navigation receivers, extendable with additional distributors as required.

Measurements approx. 89 x 35 x 26 mm.

6887 · LocoNet-cable 2,15 m.

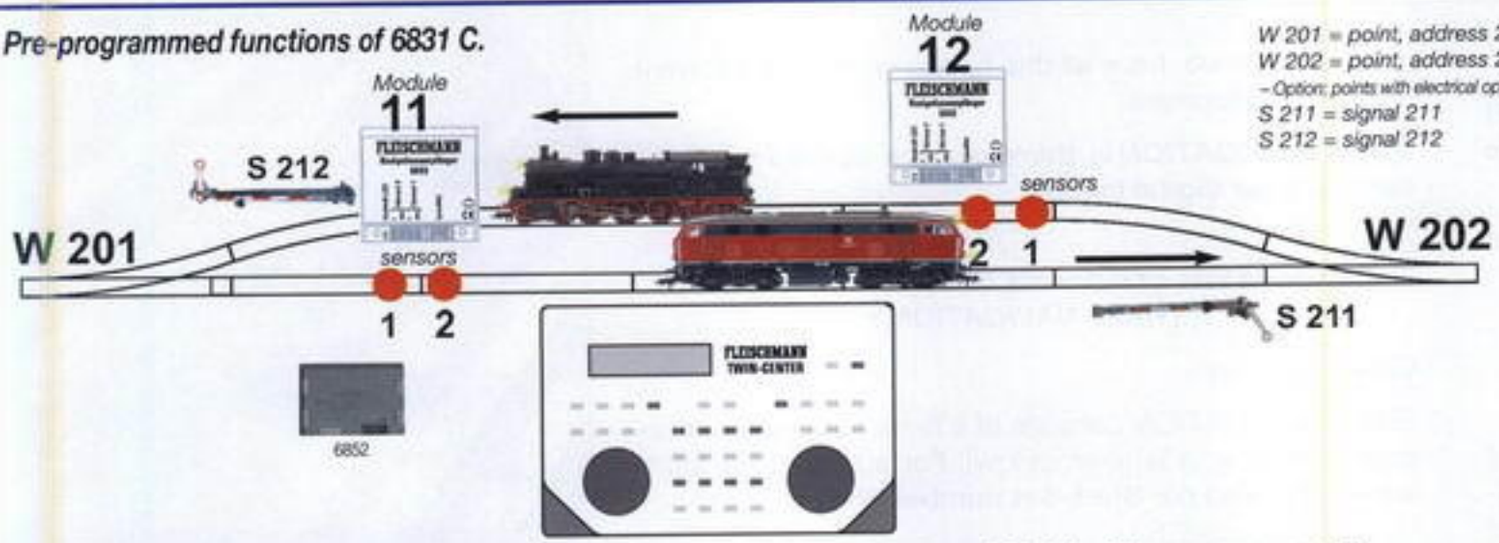
6888 · LocoNet-cable 0,60 m.

6889 · LocoNet-coupler with 2 sockets.
To join up 2 LocoNet-cables.

6893 · *TRAIN-NAVIGATION* Manual german/englisch.

TRAIN-NAVIGATION – An example of its use
"2-track station with two trains travelling in opposite directions"

Fig. 1: Pre-programmed functions of 6831 C.



W 201 = point, address 201
W 202 = point, address 202
– Option: points with electrical operation –
S 211 = signal 211
S 212 = signal 212

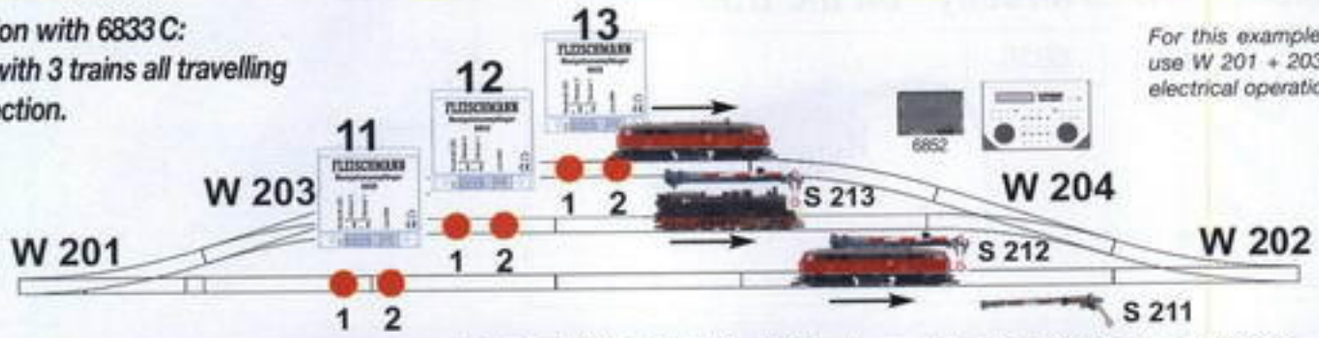
Functions of Module 11 (pre-programmed)
- switch on light on setting off
- after 8 seconds switch off again after running over the sensors

F 1 switch on Sound when setting off (on Sound-Locos)
Request the setting of signal **211**, if "red" stop
Set signal **212** to "green"

Functions of Module 11 (pre-programmed)
- switch on light on setting off
- after 8 seconds switch off again after running over the sensors

F 1 switch on Sound when setting off (on Sound-Locos)
Request the setting of signal **212**, if "red" stop
Set signal **211** to "green"

Fig. 2 – Extension with 6833 C: 3-track station with 3 trains all travelling in the same direction.



For this example you have to use W 201 + 203 (points) with electrical operation.

This operation can be programmed in the TWIN-CENTER with just one alteration to the LocoNetCVs.

Feedback information & switching with "comfort":

*The **TRAIN-NAVIGATION-Start-Set 6831 C** will allow you to step up a train swop-over (basic fuction) in a **2-track station** without any additional pre-settings – so called **train crossovers**. The pre-set modules are set to activate the following functions: Light on/off, Sound on. You can operate points and signals that you may have already connected into the electrical accessory module 6852 (optional).*

*Article **6833 C** is an **ideal extension** to the start-set 6831 C. You can use it to extend the train swop-over to incorporate yet another track (3 trains all travelling in the same direction).*
*Equally, using one of each article 6831 C and 6833 C, you can easily set a prototypical **block system** and a **push/pull, backwards & forwards operation**.*

The great advantage:
When using the TRAIN-NAVIGATION there is no need to put in any isolating sections, so in other words, your existing layout remains UNALTERED!

THE FLEISCHMANN MULTI-TRAIN CONTROL (FMZ)

Whoever already owns a FLEISCHMANN model railway can, at any time, convert it to FMZ digital operation. The previous – analogue – D.C. locos are controlled as before. The transformer (6735 or 6755) is no longer connected directly to the trackwork, but via a coupler 6806.

Besides, digital operation is really simple. For the operation and functions we offer two types of control equipment – *DIGITAL CONTROL DC 6803 C* and the "large" FMZ-Central Control Unit 6800.

DIGITAL CONTROL DC 6803 C – the value for money FMZ-controller

***DC 6803 C* is a compact, digital controller for several locos. By reducing it down to just two control knobs, running locos is so childishly simple, just like the previous controller transformer.**

Here is what *DC 6803 C* has to offer:

- Up to four digital FLEISCHMANN locos can be operated by the *DC 6803 C* – with just two simple knobs!
- If a hand controller 6821 is plugged in as well, then an extra digital loco can be run, and similarly a second digital loco under direct control. That's really practical for a second operator for example.
- Can be used with all digital locos (FMZ/TWIN) from FLEISCHMANN.
- Compatability – in addition to the digital locos, one or more analogue FLEISCHMANN locos can be run just as before, by using a coupler 6806.
- Easily readable digital display for loco addresses, inertia levels, light function, etc.
- Special function for addressing digital FLEISCHMANN locos with electronically codable receivers (i. e. TWIN-DECODER).

Lots of extras, that don't cost any "extra":

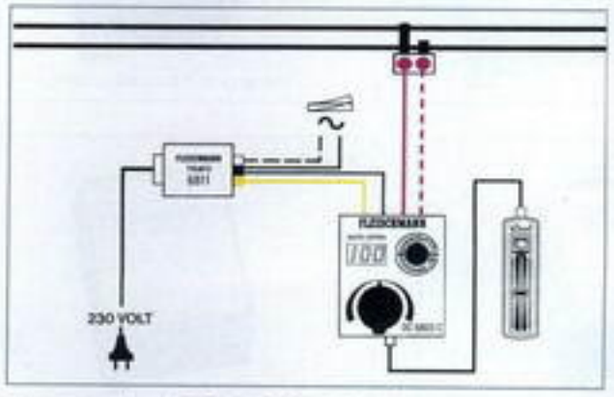
- switch on/off loco lighting,
- programmable minimum and maximum speed,
- programmable control characteristics,
- programmable levels for acceleration and breaking inertia
- emergency stop,
- double-heading with two locos.

Connecting up *DIGITAL CONTROL:*

A *DIGITAL CONTROL*-transformer 6811 (16.5 V / max. 2.73 A) is required to operate the *DIGITAL CONTROL DC 6803 C*. Other transformers will not be suitable.
From the four connecting wires of the *DIGITAL CONTROL*, two are connected to the yellow and black clips of the transformer, the other two are connected to the track. Then lastly, insert the plug of the transformer into the mains supply. That's all.

Whoever already has a FLEISCHMANN railway running in standard D.C. technology, can convert their D.C. locos for *DIGITAL CONTROL* with TWIN-DECODER 69 6846/69 6849*. Or you can continue to run your standard locos just as before, in other words, in one or more D.C. circuits via one or more transformers – alongside the digital locos!

To do so, however, one would need a coupler 6806 for each controller, i.e. D.C. circuit. *DIGITAL CONTROL* is not then connected directly to the track but to the relevant coupler. The D.C. controller is also connected into the coupler. The digital power for the digital locos as well as the D.C. power for the standard D.C. locos goes from the coupler to the track.**



The connection of DIGITAL CONTROL DC 6803 C with the DIGITAL CONTROL-transformer and one hand controller 6821.

That's why *DIGITAL CONTROL* is called compatible – modern digital technology and standard D.C. running are both possible simultaneously!

**The conversion of suitable locos can only be carried out by trained dealers, or in the case of FLEISCHMANN locos, by FLEISCHMANN themselves. Only locos which have sufficient space to install the receiver unit are suitable for conversion.*

***Advice: When using illuminated traditional D.C. locos and coaches fitted with interior lighting, then the inbuilt 14 volt bulbs must be exchanged for 24 volt bulbs if you use DIGITAL CONTROL. Exchange bulbs are available.*

FMZ-Central Controller 6800

With the FMZ-Central Controller 6800, one steps into the FMZ-multi-train control system like a professional, because this controller can not only run 32 digital FLEISCHMANN locos simultaneously, but also carry out lots more additional functions:

- All **points, signals or uncoupler tracks** which are connected into the digital multi-train system via a receiver module, can be called up via the keyboard of the central controller either individually or as part of 8 single command programme as quick as a flash. For example, 8 individual points can be grouped together into a route selection programme. 40 programmes can be stored in the Central Control Unit.

- The **acceleration- and braking inertia** of all digital locos is programmeable for each individual loco in 8 steps. Set at step 8, the locos accelerate really slowly up to the desired speed setting and slow down to a halt with the same level of deceleration.

- Even whilst on the move, the **lights** of illuminated digital locos can be **switched on or off** by each of the locos, as desired. If the lights are switched on, then they light up constantly in the direction of travel.

- The A. C. continuous power gives 20 volts across the tracks, so that all illuminated locos and coaches have **constant lighting.** This means that the lights continue to burn with the same brightness even when stopped in the station.

- Of course, the Central Control Unit is **compatible,** because besides the digital locos you can run one or more traditional FLEISCHMANN locos using one or more transformers 6735 or 6755 accordingly.
  The transformers are no longer connected direct to the track, but into the FLEISCHMANN multi-train control system via a coupler 6806. **One coupler is already inbuilt in the Central Control Unit.**

- For computer fans, the possibility exists to connect your personal **computer** via the interface socket into the FMZ-Central Control Unit. To do this you will need the FLEISCHMANN computer cable 6882 with inbuilt connector plug.

To operate the Central Control Unit 6800 one needs an FMZ-Transformer 6810 as well as one or more hand controllers 6821.

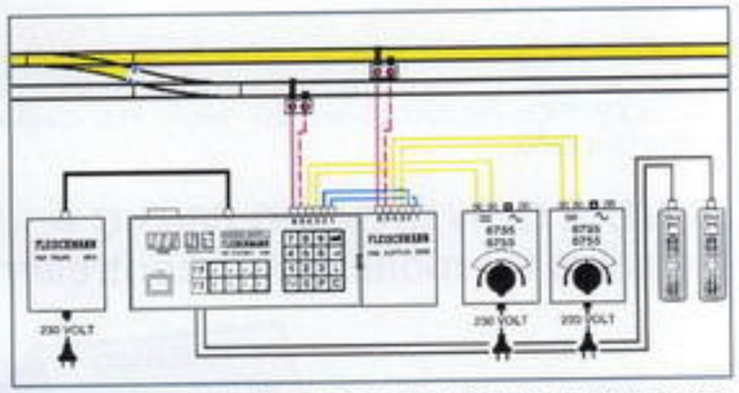
The control of digital locos using the Central Control Unit

Just like using a pocket calculator, you type in the control commands using the two keyboards for up to 119 receiver modules, which are either built into digital locos or to set points, signals or uncoupler tracks.
The commands remain stored until you erase them, or you alter them by giving new instructions.

You can see from the indicators the commands as soon as you input them so you check to see if there are any errors. The contents of the memory of the Central Control Unit can also be checked later and shown on the indicators. Wrong commands can be got rid of straight away by using the cancel button C.
The commands are not lost even when the Central Control Unit is switched off by pulling out the mains plug on the transformer. Three 1.5 volt batteries ensure that this does not happen (not included as delivered).

If one so desires, just to control his digital locos only, and dispense with the opportunity to switch the electrical accessories either individually or grouped in route selection via the Central Control Unit, then they need not be connected into the FLEISCHMANN multi-train control system via the appropriate receiver module. All electrically operated accessories like points, signals and uncouplers, can naturally be operated by the push-button control system or the track-diagram control panel from FLEISCHMANN just as normal (cat.-no. 6900 ff.).

The Central Control Unit can give up to 3 Amps power. Of course, the Central Control Unit is protected against short-circuits. An inbuilt thermo-switch protects it against overload.



The connection of the Central Control Unit 6800 with transformer 6810, two hand controllers 6821, Coupler 6806 and two MSF-Transformers 6735 or likewise 6755 with simultaneous use of several digital FLEISCHMANN locos (FMZ/TWIN) and two conventional FLEISCHMANN locos. The digital locos will run completely unhindered over the isolating breaks between the D.C. circuits. Each of the conventional locos can be run within the two D.C. circuits.

THE COMPONENTS OF THE FLEISCHMANN MULTI-TRAIN CONTROL SYSTEM (FMZ)

6800 · FMZ Central Controller. Digital controller to operate up to 32 digital FLEISCHMANN-locos with additional applications for switching electrical accessories, route-setting programming and lots more. Power output max. 3 Amps.

6800

Size approx. 306 x 180 x 86 mm

6803 C

Size approx. 110 x 180 x 86 mm

6803 C · *DIGITAL CONTROL DC 6803 C.* Digital controller to operate 4 digital FLEISCHMANN-locos (FMZ/TWIN) with childishly simple 2-knob control. By connecting in a hand-held controller 6821, an additional digital loco can be run as well. Power output max. 1.5 Amps.

6805 · FMZ-Booster. For large layouts, or for lots of trains with interior lighting, it may be necessary to connect in one or more Boosters, each with an FMZ-Transformer 6810, to ensure sufficient electrical power to each section of the layout. Power output max. 3 Amps. Boosters can only be connected to the central controller 6800, via Adapter-Set 6885 also to the TWIN-CENTER 6802.

6805

Size approx. 110 x 180 x 86 mm

6806

Size approx. 110 x 180 x 86 mm

6806 · Coupler. In existing model railway layouts with one or more D. C. circuits, then for digital operation (FMZ), the controllers for the conventional FLEISCHMANN locos are no longer connected directly to the track but each connected to a coupler. One coupler is already built into the central controller 6800.
By connecting to the TWIN-CENTER 6802, a Breaker 6860 has to be installed between coupler and track connection.

THE COMPONENTS OF THE FLEISCHMANN MULTI-TRAIN CONTROL SYSTEM (FMZ)

6839

6839 · TWIN-DECODER with 6-pole plug.
For FMZ and DCC as per NMRA standard. For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 600 mA
Lead length: approx. 30 mm
Size (max.): 16.5 x 9 x 4.3 mm
Especially designed for use with N gauge.

6846

6846 · TWIN-DECODER with 6-pole plug.
For FMZ and DCC as per NMRA standard. For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 800 mA
Lead length: approx. 20 mm.
Size (max.): 23 x 10.5 x 4.3 mm

69 6846

69 6846 · TWIN-DECODER without plug.
For FMZ and DCC as per NMRA standard. With 6 leads to convert D.C. locos **without** a fitted connector socket. Installation will be made by your specialized trade.
Maximum power rating: 800 mA
Lead length: approx. 150 mm.

6849

6849 · TWIN-DECODER with 6-pole plug.
For FMZ and DCC as per NMRA standard. For locomotives with 6-pole socket as per NEM 651 standard.
Maximum power rating: 600 mA
Lead length: approx. 80 mm.
Size (max.): 16.5 x 9 x 4.3 mm
Especially designed for use with N gauge.

69 6849

69 6849 · TWIN-DECODER without plug.
For FMZ and DCC as per NMRA standard. With 6 leads to convert D.C. locos **without** a fitted connector socket. Installation will be made by your specialized trade.
Maximum power rating: 600 mA.
Lead length: approx. 150 mm.
Especially designed for use with N gauge.

6810 · FMZ-Transformer. This special transformer delivers the energy to operate the Central Control Unit (6800) or the Booster (6805). It is essential to use one FMZ-Transformer each to power the Central Controller or the Booster.

6810

Size approx. 110 x 180 x 86 mm

6811

Size approx. 132 x 72 x 50 mm

6811 · *DIGITAL CONTROL*-transformer. Output approx. 16.5 V/ 2.73 A (45 VA) to connect up to *DIGITAL CONTROL DC 6803 C* and the TWIN-CENTER 6802.
As an alternative, electrically operated accessories (i.e. points, signals, uncouplers) can be connected to the additional output 14V/ 3.2 A (45 VA) of the transformer 6811.

6821 · Hand Controller with long wander lead and two switches. Can be plugged into the *DIGITAL CONTROL DC 6803 C*, into the central controller (6800) or via the TWIN-BOX (6827) and the relevant Loco-Net cable into the TWIN-CENTER (6802). The sliding regulator controls the direction and speed of a digital FLEISCHMANN loco with its central-off zero setting. The two independent flick switches can be allocated to any of the other four available functions from the TWIN-CENTER:

• Individual loco emergency stop / • Complete emergency stop for the whole layout / • Headlights on/off / • Special function on/off

If required, the hand controller can be clipped into its retaining holder – then it's handy ready for picking up again.

6821

Size approx. 52 x 188 x 30 mm

6852

Size approx. 93 x 63 x 18 mm

6852 · Receiver Module for electrical accessories. Suitable for FMZ and DCC according to the NMRA standard. 4 points, 4 signals or equally 8 uncouplers can be connected via this module to the FMZ-central controller (6800) or onto the TWIN-CENTER (6802). Not possible to be operated by the *DIGITAL CONTROL DC 6803 C*. The module is fitted with a coding switch which can be set manually to any address from "1" to "119" which is not already allocated to digital FLEISCHMANN locos (FMZ operation).

6882 · FMZ-Computer Cable. To connect up computers with an RS 232/V 24 interface into the Central Control Unit 6800, 200 cm long.

6882

6860

Size approx. 54 x 28 x 18 mm

6860 · Breaker. To immediately cut off the digital power in the event of a short circuit and avoid any damage by the short circuit surge. Can be connected to the Central Control Unit 6800 (older versions do not have a built-in breaker), *DIGITAL CONTROL DC 6803 C*, FMZ-Booster 6805 or Coupler 6806.

6883 · Connecting Plug. To connect up the Control 4 into a Central Control Unit 6800. In this way the Control 4 can be utilised as a booster with up to 2 Amps rating to assist the "larger" Central Controller.

6883

6884

6884 · Adapter. To connect in the transformer 6755 to a Control 4 for operation with a lower power rating.

6885 · Adapter-Set for FMZ-Booster. For connecting an FMZ-Booster 6805 to the TWIN-CENTER 6802. Includes: Booster-Adapter, Cable Set and Track-Connection-Module 6886.

6885

6886

Size approx. 78 x 45.5 x 37.5 mm

6886 · Track-Connection-Module. This Track-Connection-Module is necessary for the connection of any further FMZ-Boosters 6805. It is condition that one FMZ-Booster 6805 is already connected to the TWIN-CENTER 6802 by the Adapter-Set for FMZ-Booster 6885.

MODEL CARS

9810
VW Golf

9811
Audi 100

9812
BMW 745

9813
Mercedes 500

9814
Opel Rekord

9815
Porsche 928

9816
Citroën 2 CV

9817
Daimler Benz 190

9818
DKW 3=6

FLEISCHMANN model cars are finely detailed and are absolutely ideal as wagon loads for simply decorating any N gauge model railway layout.
The colours of the model cars may vary from those actually shown. There are two cars in one pack.

PLANNING AIDS

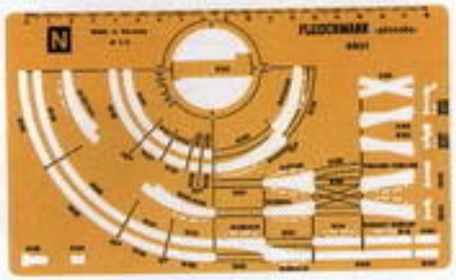
9940

9940 · Track plan book N «piccolo».
Practical suggestions, for using FLEISCHMANN track sets, as well as handy hints for different set-ups and extensions.
18 pages in four colours, size DIN A6.

9950

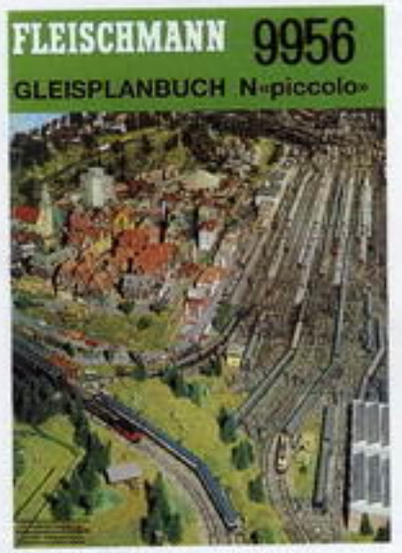
9950 · N «piccolo» layout planbook.
All layouts are complete with track-diagram control panel, shopping list, wiring and landscaping suggestions. Covers a wide range from simple to complex layouts.
(Also available in English.)
Format: ca. 8 ⅛ x 9 ⅞ (25 x 22 cm), 24 pages, in full colour.

9951



9951 · Track plan stencil N «piccolo».
Suitable for N «piccolo» tracks. The track stencil is an assistance when planning your layout. It is made of yellow transparent plastic, and scaled at 1:5.

9956



9956 · Track-layout Plan Book N «piccolo».
Lots of textual description material and detailed construction tips, trackage-, wiring- and control-diagrams as well as explicit help in operation traffic and getting the most fun out of each layout. There is a colourful landscape sketch and list of needed parts for each of the layouts.
60 pages, DIN A4, four colours.
In German language.

VIDEO

99 134

99 134 · Videofilm "ICE-T, the star of the curves" – from Prototype to Model.
The latest high speed train, which – on the DB and on model layouts – leans into the curves.
Approx. 20 mins. System VHS.
In German language.

CD-ROM

99 170

99 170 · FLEISCHMANN CD-ROM Model Layout Planner.
True-to-scale planning for your FLEISCHMANN model railway layout on computer. All the various components of the FLEISCHMANN track systems

99 175

99 175 · FLEISCHMANN CATALOGUE CD-ROM 2005.
The FLEISCHMANN products interactive – available at the click of the mouse:
Catalogue-Information in both H0 gauge and

9957

9957 · The huge Model Track Plan Book for N «piccolo».
Comprehensive looseleaf format bound in hard back ring folder. Easily understandable information about the N «piccolo» track system for beginners and the experienced alike, with track plans and lots of colour examples (for the digital Multi-Train Control System). Topics covered: Prototype and model, layout construction, electronics, service etc. Comprehensive alphabetical index of terminology. (Also available in English.)
Actual version – including 9957-1 (1st supplement) and 9957-2 (2nd supplement).
(German language only)

9957-1

9957-1 · 1st supplement to the large Model Track Plan Book for N «piccolo» (9957).
Important for all those who already own the large N «piccolo» Model Track Plan Book, because there are further suggestions for layouts in this supplement (also with wiring diagrams for digital system in part), tips for the construction of a large loco depot and lots of other technical tips.
(Also available in English.)

9957-2

9957-2 · 2nd addition to the large Model Track Plan Book for N «piccolo» (9957).
Important for everyone who already possesses the large N «piccolo» Model Track Plan Book, because this addition contains yet more layout suggestions and technical extensions, for example, the points with current-conducting frogs and *DIGITAL CONTROL*.

PRINTS

99 270

99 270 · "FLEISCHMANN – from tinplate toys to model railways. 1887-2000".
A comprehensive history of products from the house of FLEISCHMANN. The pictorial collection shows historical examples of the maritime toys, steam engines, working models, Auto Rallye slot cars and 0 gauge trains, as well as the classical current model railways in both H0 and N «piccolo» gauges.
144 pages, with complete descriptions of the individual chapters. (German language only)

Information about a new Experience:

ZEITREISE

Eine Zeitreise mit FLEISCHMANN

Travel through Time with FLEISCHMANN

The town museum of Schwabach presents "Travel through Time with FLEISCHMANN", the traditional Franconian company with the world-wide reputation.

From time immemorial, the products from FLEISCHMANN have embodied the highest precision, quality and faithful detail reproduction.

Now, fitted into an 800 square metre area, you can experience the world's largest collection of all the products of the company from its very foundation in 1887 right up the the present day – an exhibition not just for collectors and fans, but an experience for the whole family.

The attractions include ...

- Over 2,000 rare and valuable examples in the ownership of the museum and from the archives of the company
- six display layouts: Gauges 0, H0, N«piccolo», Magic Train and Auto-Rallye
- "Toy Fair Stand" with the current ranges of the year from the company
- Interactive media display of the historical moments in time
- Children's play area with train layouts to play with
- Museum Shop

We hope that you will enjoy your visit!

The museum openening times and instruction how to get there can be found on the Internet at:

www.schwabach.de/stadtmuseum

Start: 20. 11. 2005

FLEISCHMANN
The model railway for experts

stadtmuseum schwabach

LIMITED EDITION 2005*: *"Goods Train with passenger accomodation of the K.P.E.V.", epoch I*

The goods train with passenger accomodation, shortly known as "GmP", of the Royal Prussian Railways (K.P.E.V.) was an everyday sight throughout the early epoch I period.

Hauled by a tank engine of class G 4² (later 53⁰), of which a total of 58 were in use from 1907 onwards.

7902 (K) **Presentation Pack "Goods Train with passenger accomodation of the K.P.E.V., epoch I.**

With a tender loco 85 7902 and one of each coach 85 8820, 85 8821, 85 8822, 85 8823 and 85 8824. Epoch I. Overall train length: approx. 410 mm.

All of the vehicles contained in the presentation pack are available individually.

Awareness campaign:
The rolling stock contained in the set 7902 are fitted with PROFI-couplings. With it you can run the wagons with true close-coupling operation. 4 standard exchange couplings are included.

7902

85 7902

85 7902 · Tender loco, class G4² of the K.P.E.V. Overall length: 103 mm. Super-detailing, -livery and -lettering. Inset windows. Prototypical "daylight" between boiler and chassis. Operational valve gear. Brake shoes between the wheels. Cast metal chassis and tender body. Drive in tender on 6 wheels, of which 4 are fitted with traction tyres. Double headlights. Automatic couplings at each end. Epoch I.

88 7902 DCC-DIGITAL

88 7902 · Digital version of the loco 85 7902 with DCC-decoder. Switchable on/off double headlights.

Only available individually!

85 7902/88 7902: 54 7001 · 6518 · 6535 · 9521 · 9541

85 8820 (K)

85 8820 · Brake van, type Pg of the K.P.E.V. Overall length: 53 mm. Super-detailing, -livery and -lettering. Inset windows. With 2 moveable sliding doors. With spoked wheels. Epoch I.

85 8821 (K)

85 8821 · Box goods van with end platforms, type Ni of the K.P.E.V. Overall length: 63 mm. Super-detailing, -livery and -lettering. Inset windows, some of which are open. With spoked wheels. Epoch I.

85 8820/85 8821/85 8823 - 85 8827: 9525 · 9545

85 8822 (K)

85 8822 · Passenger coach 3rd/4th class with load bay, 3-axled, type CD 3i of the K.P.E.V. Overall length: 76 mm. With interior fittings. Super-detailing, -livery and -lettering. Inset windows. **Centre axle slides sideways.** With spoked wheels. The coach is equipped ready to install interior lighting. Epoch I.

9461 · 9530 · 9525 · 9545

85 8823 (K)

85 8823 · Open goods wagon with brakeman's cab, type Onmmk(u) of the K.P.E.V. Overall length: 62 mm. Super-detailing, -livery and -lettering. With spoked wheels. Epoch I.

85 8824 (K)

85 8824 · Tank wagon "Rheinisch-Nassauische Bergwerks und Hütten Act. Ges. Nievenheim", in service of the K.P.E.V., with brakeman's cab. Overall length: 55 mm. Super-detailing, -livery and -lettering. Epoch I.

85 8825 (K)

Only available individually!

85 8825 · Box goods van, type Gm of the K.P.E.V. Overall length: 75 mm. Super-detailing, -livery and -lettering. 2 moveable sliding doors. Epoch I.

85 8826 (K)

Only available individually!

85 8826 · Cradle truck, type Hrmz of the K.P.E.V. Overall length: 57 mm. Super-detailing, -livery and -lettering. Pivoted bogie in the centre of the wagon rotates. 8 clip-in side stakes are included. With spoked wheels. Epoch I.

85 8827 (K)

Only available individually!

85 8827 · 3-axled refrigerated wagon with brakeman's cab, type N of the K.P.E.V. Overall length: 68 mm. Prototypical livery and lettering. **Centre axle slides sideways.** With spoked wheels. Epoch I.

*** As for all limited edition 2005: Only available from dealers as long as stock lasts!**

LIMITED EDITION 2005*: *"Express Train of the Deutsche Reichsbahn Gesellschaft", epoch II*

7912

85 7912 **85 8860 (K)** **85 8861 (K)** **85 8862 (K)** **85 8863 (K)**

With tail end indicators

The class 39$^{0-2}$ developed 1.620 horsepower, weighed 162 tons, and ran forwards at 110 km/h and backwards at 50 km/h. From 1922 onwards, 260 of these locomotives were delivered to the DRG. Their special area of service was hauling heavy express trains through the mountainous regions of Germany.

Class 39$^{0-2}$ loc, and DRG-coaches carrying the Reichsadler (Imperial eagle) emblem.

85 8860 - 85 8865: 9459 9530 9525 9545

85 8860 · Express baggage coach, type Pw4ü Pr04 of the DRG. Overall length: 116 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. With 4 moveable sliding doors. The coach is equipped ready to install interior lighting. Epoch II.

85 8861 · Express coach 1./2./3. class, type ABC 4ü Pr09 of the DRG. Overall length: 124 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

85 8862 · Express restaurant coach of the MITROPA, type WR4ü Pr11. Overall length: 128 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

85 8863 · Express coach 3rd class, type C4ü Pr08 of the DRG, with tail end indicators. Overall length: 124 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

85 7912

85 7912 · Class 39$^{0-2}$, tender locomotive of the DRG. Overall length: 144 mm.

Super-detailling, -livery and -lettering. Inset windows. Interior details in driver's cab. Prototypical "daylight" between boiler and chassis. Operational Heusinger valve gear. Brake shoes between the wheels. Cast metal chassis and tender body. Drive in tender on 8 wheels, of which 2 are fitted with traction tyres. Double headlights at each end, co-ordinated with the direction of travel. Automatic couplings at each end. Epoch II.

88 7912 DCC-DIGITAL

88 7912 · Digital version of the loco 85 7912 with DCC-decoder. Switchable on/off double headlights with light change.

Only available individually!

85 7912/88 7912: 54 7001 6518 6535 9522 9542

Additional coaches to the Presentation Pack 7912, only available individually:

85 8864 (K)

85 8864 · Express coach 3rd class, type C4ü Pr08 of the DRG. Overall length: 124 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

85 8865 (K)

85 8865 · Sleeping coach, type WL 4ü Pr01 of the MITROPA. Overall length: 128 mm. With interior fittings. Super-detailling, -livery and -lettering. Inset windows. The coach is equipped ready to install interior lighting. Epoch II.

7912 **Presentation Pack "Express Train of the DRG".**

With a tender loco 85 7912 and one of each coach 85 8860, 85 8861, 85 8862 and 85 8863. Epoch II. Overall train length: ca. 640 mm.

All of the vehicles contained in the presentation pack are available individually.

*** As for all limited editions 2005:**

Only available from dealers as long as stock lasts!

Awareness campaign:
The rolling stock contained in the set 7912 are fitted with PROFI-couplings. With it you can run the wagons with true close-coupling operation. 4 standard exchange couplings are included.

GEBR. FLEISCHMANN GMBH & CO. KG · POSTFACH 91 01 48 · D-90259 NÜRNBERG
TELEFON (09 11) 33 70-0 · TELEFAX (09 11) 33 70 299
E-mail: info@fleischmann.de
Internet: www.fleischmann.de

GB

Helpful advice is always available by your FLEISCHMANN dealer:

www.lokshop.com

4 005575 996150