1977 E

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Gebr. Märklin & Cie. GmbH Manufacturers of high quality toys D-7320 Göppingen

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111

Locomotives

Trade Mark

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märklin HO

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márklín HO

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márklín HO

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Your Märklin dealer:

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Märklin mini-club

The mini-club SET program Railroad sets Locomotives Passenger cars Freight cars

68-85

Building kits, grade crossing and bridges Tracks Catenary system, lighting Accessories, power packs

ars

märklin T

Märklin I

Railroad sets, locomotives, cars, tracks and accessories

86-95

márklín Sprint

Märklin-Sprint

Race track sets, racing and sports automobiles, track sections, accessories

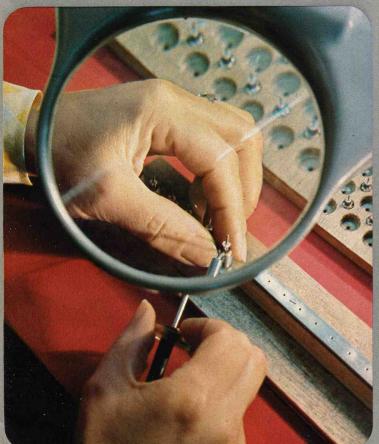
96-101

márklín metall

Märklin metall

102-109

Märklin products are characterized by precision manufacture, quality-controlled production, fantastic reproduction of details from the originals, high reliability and ability to provide unlimited entertainment.

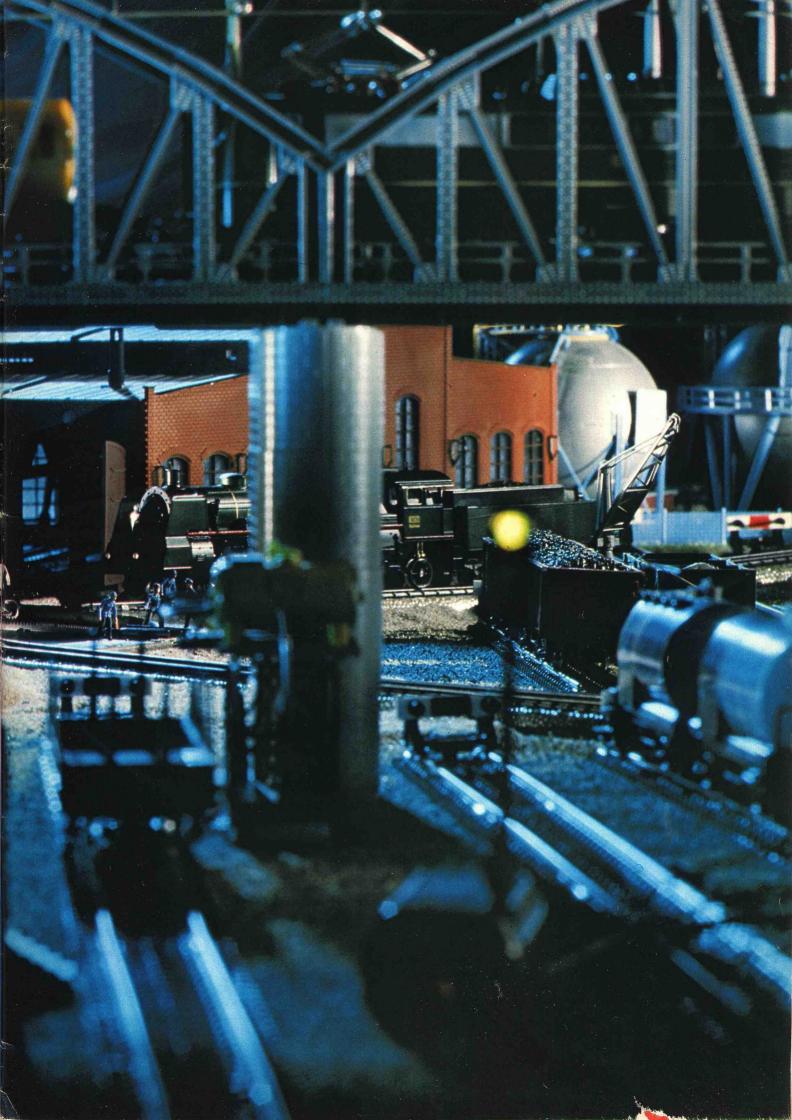


Soldering an armature winding onto the commutator



Planning and building accurately to scale







Model railroad system for use with alternating current Scale 1:87

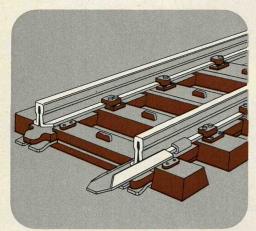
Märklin HO for simpler construction and safer operating

There are many advantages in planning, building and operating a Märklin HO gauge railroad, from the first train to a fully developed layout. The key feature of the system is the center-conductor technique used with an alternating current supply - an unsurpassed Märklin speciality. The positive current path is not just reliable, it also makes it a simple matter to isolate track sections or provide electrical control.

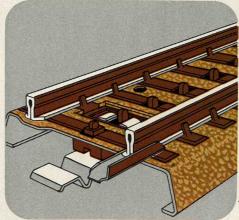
The entertainment value is increased by many special Märklin features: the TELEX and RELEX couplings, for instance, which make realistic railroading operations such as switching possible. The handy size of the HO gauge makes for a relaxing and varied leisure activity which can be enjoyed by young railroad enthusiasts as well as by adults, who will particularly appreciate its unfailing reliability in operation, its unlimited versatility

and the accuracy with which the fullscale originals have been reproduced.

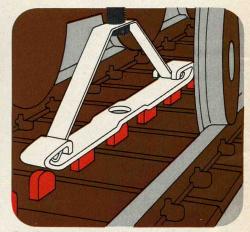
Märklin provide hints and suggestions to help you in extending your layout. These are easy to follow, as is everything in the Märklin HO system with its unsurpassed entertainment value.



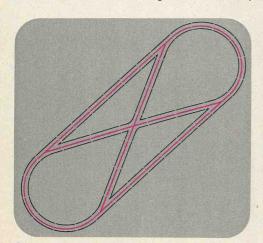
K-track (plastic cross-ties) Six-fold connection between track sections. Consisting of two rail clips, two sprung connectors for the center conductor and two claw couplings on the tie strip



M-track (metal track body) Triple connection between track sections consisting of a sprung connector for the center conductor and two rail clips.

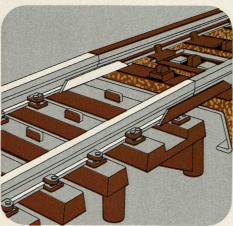


Reliable power supply to the motor from stud contacts via the pick-up shoe. Current return path via the locomotive wheels on both sides.



Simple circuitry All kinds of track configurations, includ-

ing reversing loops, can be powered with- tween M-tracks and K-tracks. out the need for complex electrical switching.



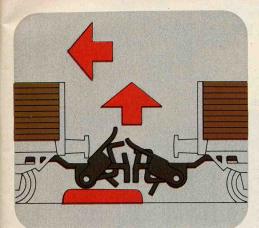
Adapter track section

makes a simple, reliable connection be-



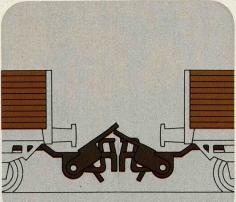
Reversing direction of travel of locomotives by turning the control knob on the transformer (provides an over-voltage pulse).

Advantages of alternating current and the well-proven center conductor technique



Automatic coupling

When cars are brought into contact the coupling engages automatically. At the uncoupling track section uncoupling can be carried out manually or by remote control.



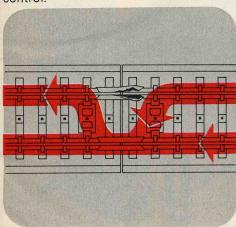
RELEX coupling

After uncoupling, the cars can be pushed for parking without the coupling re-engaging.



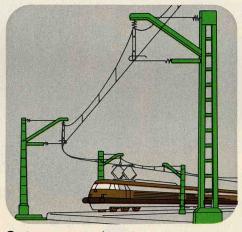
TELEX coupling

Uncoupling can be carried out at any point by remote control from the transformer.



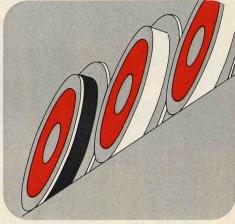
Reliable current path

because even if one of the two rail joint clips should get distorted the other one will still ensure a perfect connection.



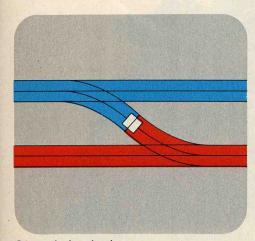
Catenary system

If the overhead line is wired up as a second circuit, two locomotives can be run independently of one another on the same track.



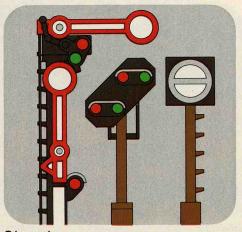
Non-skid tires

are used on every locomotive to increase tractive force by improving the grip of the wheels on the rails.



Circuit isolation

using center conductor isolator 5022 for M-tracks, or center conductor isolator 7522 for K-tracks. Special isolating track sections are not required.



Signals

enable trains to be controlled fully automatically.

Radio interference suppression

All locomotives are fitted with suppressors. Compliance with German legal requirements for suppression is guaranteed, provided that feeder track sections 5131 or 2192, or the feeder masts 7201 or 7501 are used, and that exclusive use is made of Märklin items, which are matched for suppression purposes together with the Märklin transformers recommended.



Märklin models High quality and accurate scale modeling

Diesel locomotive 3065

Märklin locomotives are masterpieces of realistic model engineering. The reliable working models are composed of many precision made parts. Delicately formed and yet robust. More than 100 years' experience of modeling – that is the basis of Märklin's success.

Item No. Description

234567

16 17

18

43

Locomotive body (complete)

Lighting fitting (front upper)
Lighting fitting (rear upper)
Lighting fitting (front and rear)

Roof Countersunk head screw Driving truck (complete) with major components: Cluster gear

Bearing pin Cluster gear Bearing pin Idler gear

Idler gear
Idler gear
Idler gear
Part of driving axle,
with non-skid tire
Driving crank
Part of driving axle

Part of driving axle Driving wheel

Driving wheel
Driving wheel
Buffer
Field magnet
Armature
Motor end plate
Cheese-head screw
Pair of brushes
VHF choke
Reversing switch unit
with
Cheese-head screw

Light bulb

Coupling hook Armature

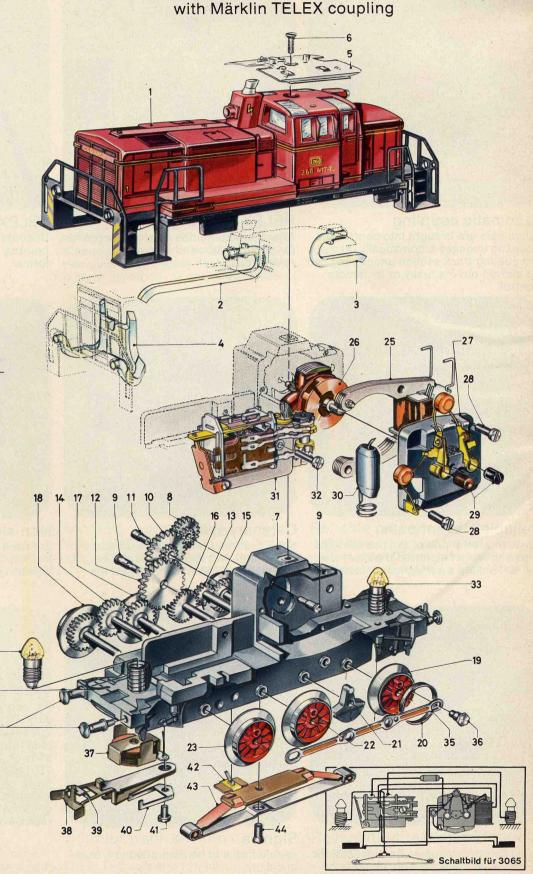
Contact plate

Spring clip
Coupling rod
Hexagonal headed shoulder bolt
Magnet for the TELEX coupling

Coupling spring Cheese-head screw Cheese-head screw (insulator)

Pick-up shoe Countersunk head screw

with Non-skid tire Crank disk



Märklin SET-HO Stage-by-stage extension program

Part of the SET-HO 123 layout ▼



Our suggestion for a systematic start:

SET-HO 123 with Toporama 7298

Items not forming part of our range of accessories can be obtained in any toy store.

This layout consists of basic set \$ (2920–2929 or 2930–2939), extension set \$ 5190 or 5191, double track set \$ 15192, station track set \$ 25193 and switching track set \$ 35194 = SET 123 and Toporama 7298. See page 10 for track plan and parts list. See also pages 8–11.



márklín HO

Märklin SET-HO extension program

You start with a gift set S containing a passenger train S 2920-2929 S 2930-2939 freight train each with transformer and oval track (see page 11).

The first extension stage is an extension set E 5190 or extension set E 5191.

From here on, three further track extension sets are available for building up to the ideal HO layout:
double track set T 1 5192
station track set T 2 5193 switching track set T 3 5194

The three track sets T1, T2 and T3 can be added in any order. Here we show only four of the ways leading from a small beginning to the ideal HO layout. You can consider any of these ways, depending on how you prefer to operate your layout or you can devise some variation of your own. With the Märklin SET-HO extension program, the build-up to the ideal HO layout is as easy as



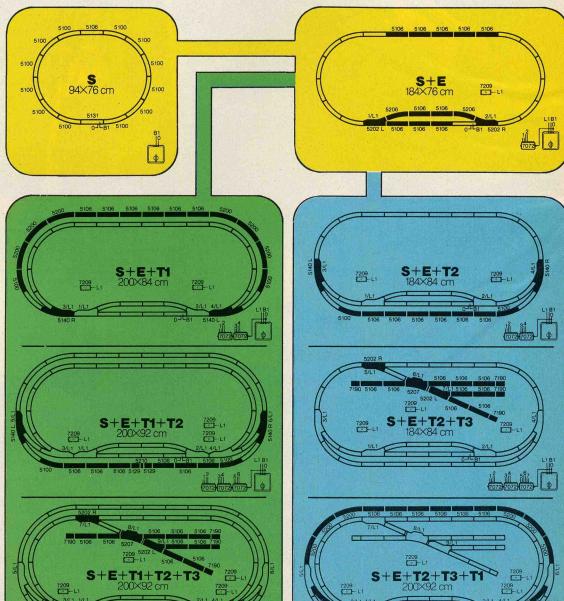
Passenger train S 2920-2929





5190
Extension set E · Contents: 10
straight track sections 5106, 2 curved track sections 5206, one pair of manually operated turnouts 5221 and instructions for extending the layout





The Märklin SET-HO extension program culminates in the addition of the HO catenary system. You will find a very interesting suggestion about this on page 10.

The Märklin range also includes many kinds of accessories which can increase the scope of your railroading operations, e.g. sig-nals, bridges, rotating crane,

Märklin SET-HO the way to a fine layout



5191

Extension set E · Contents: 10 straight track sections 5106, 1 pair of solenoid-operated turnouts 5202, 2 curved track sections 5206, 1 control box 7072, 1 distribution strip 7209, connector materials such as leads, sleeves and plugs · Instructions for extending the layout



5192

Double track set T1 Contents:
2 curved track sections 5100,
6 straight track sections 5106, 1 pair
of solenoid-operated curved turnouts
5140, 6 curved track sections 5200,
1 control box 7072, 1 distribution strip
7209, connector materials such as
leads, sleeves and plugs Instructions for extending the layout



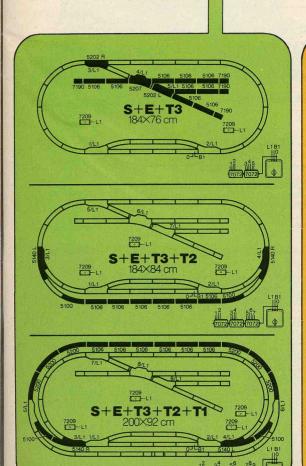
5193

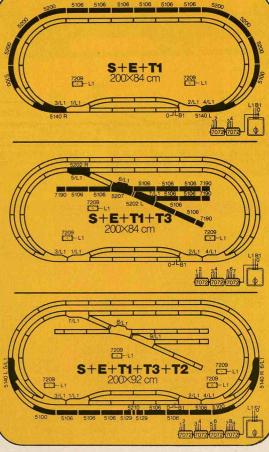
Station track set T2 · Contents: 2 curved track sections 5100, 6 straight track sections 5106, 2 straight track sections 5129, 1 pair of solenoid-operated curved turnouts 5140, 1 straight track section 5210, 1 control box 7072, 1 distribution strip 7209, connector materials such as leads, sleeves and plugs · Instructions for extending the layout



5194

Switching track set T3 Contents: 9 straight track sections 5106, 1 pair of solenoid-operated turnouts 5202, 1 double slip switch 5207, 1 control box 7072, 4 bumpers 7190, 1 distribution strip 7209, connector materials such as leads, sleeves and plugs Instructions for extending the layout







7298

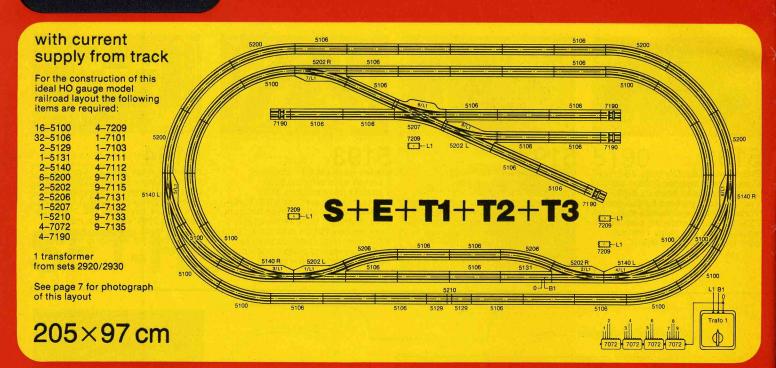
Märklin-Toporama for the Märklin SET-HO extension program leading to the ideal HO layout · Realistic printed model railroad landscape · Multicolored design · Track layout up to SET 123 is printed on · Tufted grass areas give three dimensional effect · Size 205×97 cm

The Märklin-Toporama 7298 is highly recommended as a way of enhancing Märklin SET-HO. The Toporama can be used from stage E (5190, 5191) onward. The track layout up to stage T3 (5194) is printed on.

And how is the Toporama used?

It is quite simple: glue or fasten the Toporama mat on a firm base, lay the track in accordance with the full scale printed layout, make the connections and you are ready to roll. No other land-scaping is necessary; the Märklin Toporama includes meadows, streams, lakes, roads and parking lots.

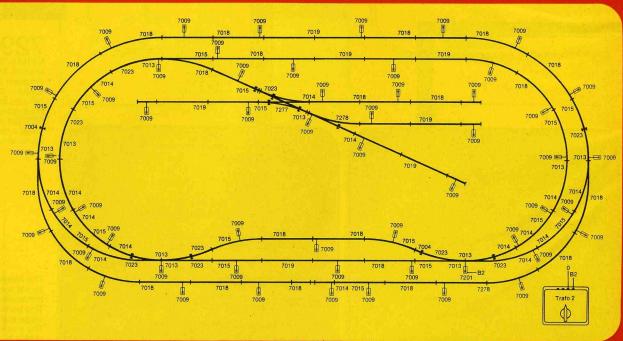




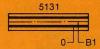
with current supply from overhead line

54-7009 10-7013 16-7014 9-7023 1-7201 1-7277 22-7018

1 30 VA transformer



Explanation of symbols used on the track plan



raction current feeder track section for the stud contact conductor. Red and brown leads go to sockets of the same color on transformer 1



Blue lead with green plug goes to the green socket; blue lead with red plug in the red socket of the pair of sockets marked (in this example) "3" on the control box (7072).

L1
Yellow lead goes to the yellow lighting socket L on transformer 1 or to the distribution strip L1 connected to it.



Traction current feeder mast for the Traction current feeder mast for the catenary system. Red lead goes to the red socket on transformer 2. If there is not already a ground connection – brown lead – in use for the track current supply system, the brown leads from the feeder track sections must be connected to the brown socket on the transformer or to a distribution strip connected to it.



The overhead lines are connected using fixing kit 7004 (bolt, nut and washer).

Gift sets for a good start complete with transformer, for immediate use. A good basis for later extension.



All train sets on this page have an oval track and a transformer with traction and lighting current connections.

2920 S
Local passenger train with transformer · With tank locomotive, 2 passenger cars, 12 curved track sections 5100, 1 straight track section 5106, 1 feeder track section 5131 with built-in capacitor for radio interference suppression and 1 transformer · Length of train 35 cm

Like all Märklin railroad transformers, the ones included in these sets have connections for traction current and current for lights and solenoid-operated items, as well as providing an overvoltage for reversing the locomotives. These transformers can also be used to provide power for bigger locomotives or additional turnouts or signals. The transformer switches itself off if subjected to overloading or excessive temperature.

markin 9

The transformers supplied with these basic sets are not available separately.



Fully extendable basic sets

2930 S 220 volts

Freight train with transformer With locomotive 3000, 2 freight cars, 12 curved track sections 5100. 1 straight track section 5106, 1 feeder track section 5131 with built-in capacitor for radio interference suppression and 1 transformer

Length of train 34.5 cm

For basic sets 2920–2929 and 2930–2939 we recommend the Märklin SET-HO, an extension program building up to the ideal HO layout, using items E (5190, 5191), T1 (5192), T2 (5193) and T3 (5194). See pages 7–10 for detailed descriptions.



Connect transformers to Alternating Current (AC) mains supply only.





marklin HO Train sets in gift packs



3185 S + E

Express train with turnouts (without transformer) With express locomotive 3085, 1 each express coach 4092,

4093 and 4094, 12 curved track sections 5100, 11 straight track sections 5106, 1 feeder track section 5131 with built-in capacitor for radio interference suppression, 1 pair solenoid-

operated turnouts 5202, 2 curved track sections 5206, 1 control box 7072, 1 distribution strip 7209 and 2 leads · Length of train 113 cm



Express train (without transformer)
With diesel locomotive 3075, 2 express coaches with interior fittings, 1 express baggage car, 12 curved track

sections 5100, 5 straight track sections 5106 and 1 feeder track section 5131 with built-in capacitor for radio interference suppression · Length of train

For enlarging train set 3175 we recommend the publications
"HO gauge track layouts for
M-tracks" 0321 and 0392
(see page 66).



3203 S
Freight train (without transformer)
With locomotive 3003, 3 freight cars, 12 curved track sections 5100, straight track section 5106 and 1 feeder track section 5131 with built-in capacitor for radio interference sup-pression · Length of train 57 cm

For enlarging train set 3203 we recommend Märklin SET-HO, an extension program leading to the ideal HO layout, using items E (5190, 5191), T1 (5192), T2 (5193) and T3 (5194). For detailed descriptions see pages 7-10.



With oval track, and capable of extension Does not include transformer



For enlarging train set 3185 we recommend using the following items from the Märklin SET-HO extension program: T1 (5192), T2 (5193) and T3 (5194). For detailed descriptions see pages 7–10.



Gift packs - a good idea



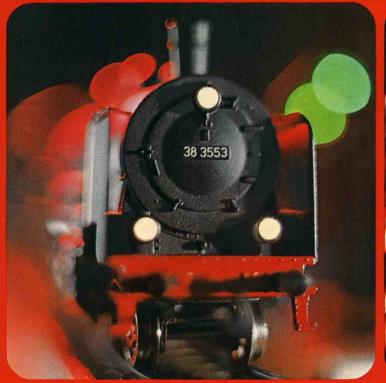


These bigger train sets are really fabulous. An ideal gift for someone – or for yourself. The only other item you have to buy is a transformer, and then you can use the layout straight away.





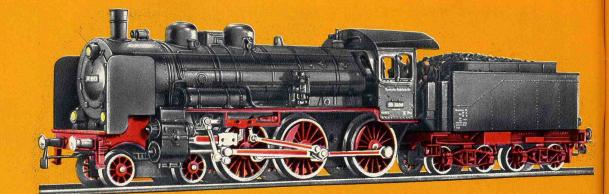
marklin HO Steam locomotives







Locomotive with tender "BR 38"



2099 New Locomotive with tender · A model of the former German State Railways' 4-6-0 class 38 locomotive · 3 driven axles · 2 nonskid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights · Mat

black metal body with large smoke deflector plates and detailed representation of the fittings on the boiler and in the driver's cab. Die cast zinc frame · 4-axled tender · Coupling hook in front, automatic coupling with advance uncoupler (RELEX)

on the tender \cdot Length over buffers 21.8 cm \cdot Figures of the driver and the fireman are included

① = 7152 == 7185 Q = 60015



The same model as 3099, but arranged for 2 rail direct current (DC) supply

The successful class 38 locomotive of the former German State Railways, with express coaches







The P8 family of passenger train locomotives, which started with the machines built for the Prussian State Railways in 1906, by order of the Berlin Railway Administration under its director, Garbe, proved to be one of Germany's most fortunate locomotive designs. This locomotive, with its superior performance for those days and its low running costs, became very popular. 3370 machines were supplied to Prussiá alone. For the first time in a major series-produced locomotive, the Schmidt smoke tube superheater was used and with outstanding success. When the German State Railway Company was formed, the P8 was re-designated class 38, and was put into service not only throughout Germany but also abroad. Locomotives of this type were still to be seen in southern Germany until a few years ago, frequently on express services. They could be recognised by the unusual wheel arrangement, with the third driving axle displaced to the rear.

In 1911, the coach building firm of J. Rathgeber in Munich supplied 20 type C4 ü-bay. 11 express coaches for the Royal Bavarian Railways, and the firm of MAN in Nürnberg supplied a further 14. These cars, which weighed 40.4 tons each, contained 64 passenger seats and were provided with gas lighting and steam heating. They were given the serial numbers "München 13031–13064".

After being incorporated in the stocks of the German State Railway Company in 1924, the cars were gradually modified to receive electric lighting, sleeve buffers and strengthened couplings. From 1931 onward the cars still in service went under the serial numbers "17936–966 München". Only 4 of these cars were still in service in 1955, when their numbers were changed again to "019471–474". German Federal Railways took the last car of this type, "019472", out of service in April 1956.

The first batch of express baggage cars type Pw 4ü – bay. 09 supplied by the Munich firm Rathgeber in 1909 consisted of 12 vehicles. They were provided with gas lighting and steam heating, and their empty weight was 29.6 tons. They would take a freight load of 8 tons. 20 further cars of this type were ordered later. Serial numbers of the first batch were 17667–678, of the second batch 17864–873 and of the third batch 17851–860. The total quantity of this type of vehicle was 32, of which the last example was taken out of service in 1962.

See page 39 for technical descriptions of express car 4136 and express baggage car 4137.

marklin Steam locomotives



Tank locomotive

3087

Tank locomotive modeled on a 0-6-0 type used on branch lines · 1 driven axle · 2 non-skid tires · Remote control for forward and reverse drive Green and black plastic body · Green water tanks and driver's cab · Die cast zinc frame · Coupling hooks at each end · Length over buffers 10.8 cm 0 = 7154 == 7185



Tank locomotive

3090

Tank locomotive modeled on a 0-6-0 type used on branch lines · 1 driven axle · 2 non-skid tires · Remote control for forward and re-verse drive · Mat black plastic

body · Die cast zinc frame · Cou-pling hooks at each end · Length over buffers 10.8 cm

Tank locomotive

Tank locomotive · Model of the 0-6-0 class 89 locomotive · 3 driven axles · 2 non-skid tires · Remote control for forward and reverse drive · Three working headlights · Mat black plastic body · Die cast zinc frame · Coupling hooks at each end · Length over buffers 11 cm

 $\bigcirc = 7154 \implies = 7185 \bigcirc = 60010$

Many people favor these double end locomotives because of the many locomotives because of the many uses to which they can be put in passenger and freight train service, especially for work in switching yards, and for their design and the ease with which they can be put on the track. Their ability to stay on curves at high speed and to pull heavy loads and their attractive appearance are special advantages of pearance are special advantages of these locomotives.



"BR 74" A very desirable Märklin model

Tank locomotive · A model of the German Federal Railways 2-6-0 class 74 locomotive · 3 driven axles · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · Three working headlights · Mat black plastic body · Die cast zinc frame · Coupling hook with advance uncoupler at the front automatic coupling with ad-

 $\bigcirc = 7153 \quad = 7185 \quad \bigcirc = 60010$

front, automatic coupling with advance uncoupler (RELEX) at rear Length over buffers 13.5 cm



The first of these superheated steam tank locomotives was put into service by the Royal Berlin Railways in 1902. It proved so successful that hundreds of the same type were working untiringly on suburban passenger services until the 1920's, when the Berlin city and circle line

was electrified. Over the years nearly 1000 of these very reliable machines were built. When they were no longer required in Berlin, other railon local passenger services and for switching operations. Their length was 11.80–12 m. With a working

weight of 70 tons they could reach a speed of 80 km/h either forwards or backwards.

Steam locomotives

"BR 86" standard locomotive used on the German Federal Railways, with Märklin TELEX coupling

3096

Tank locomotive · A model of the German Federal Railways 2-8-2 class 86 locomo-tive · 4 driven axles · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights at each end Outstandingly detailed black plastic body with many fittings. Die cast zinc frame. Märklin TELEX coupling at each end Length over buffers 15.8 cm

 $\bigcirc = 7153 = 7164 = 60015$

8396

The same model as 3096, but arranged for 2 rail direct current (DC) operation



The Märklin TELEX coupling enables the attached train to be uncoupled at any point on the track, by remote control from the transformer. Trains can also be coupled-up at any desired point, again using the automatic coupling. No extra equipment is required. The following locomotives are equipped with Märklin TELEX couplings: 3096 and 3065 (see page 27).

The standard class 86 locomotive, which was developed for mixed service on branch lines with a high traffic-density, achieved the respectable representation of 774 machines in the stocks of the former German State Railways. The German Federal Railways acquired 385 of these, which

have since been taken out of service. Some machines were equipped with Krauss-Helmholtz frames, enabling the speed to be raised from the original 70 to 80 km/h. The locomotive is 13.82 m long. At the working weight of 88.5 tons the maximum axle load is 15.6 tons

Mixed traffic locomotive

3003

Passenger locomotive with tender · A model of the German Federal Railways 2-6-0 class 24 locomotive · 3 driven axles · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights · Mat black plastic body · Die cast zinc frame · Coupling hook in front · Automatic coupling with advance uncoupler (RELEX) on the tender · Length over buffers 20 cm

 \bigcirc = 7153 \triangle = 7185 \bigcirc = 60010



The standard class 24 locomotive was used on German Federal Railways for local passenger and freight services. Its maximum speed was 90 km/h.

The beautiful "P 8" as a Märklin model

Locomotive with tender - A model of the German Federal Railways 4-6-0 class 38 locomotive · 3 driven axles · 2 non-skid locomotive · 3 driven axies · 2 flor shouters · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights · Mat black metal body with detailed representation of the fittings on the boiler and in the driver's cab · Die cast zinc frame · Trough shaped tender on two trucks · Coupling hook in front · Automatic coupling with advance uncoupler (RELEX) on the tender · Length over buffers 23.7 cm

The same model as 3098, but arranged for 2 rail direct current (DC) operation



The P 8 was built by Schwartzkopff in Berlin as early as 1906 and was put into service on the Prussian State Railways for express and local passenger services. Although its maximum permitted speed was

only 100 km/h, it remained a favored type of locomotive in several regions for many years because of its reliability. 3800 of these machines were eventually produced by a number of different firms.

marklin Steam locomotives

Express locomotive with tender "S 3/6"



3092

Express locomotive with tender · A model of the former Royal Bavarian Railways 4-6-2 class S 3/6 series i locomotive · 4-6-2 class 53/6 series indicative.

3 driven axles · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights · Dark green metal body with yellow boiler hoops · Fairing at

the driver's cab · Fittings accurately detailed · Die cast zinc frame · Automatic coupling with advance uncoupler (RELEX) on the tender · Length over buffers 24.9 cm · This locomotive can be fitted with the smoke set 7227 (see page 51)

 \bigcirc = 7152 = 7185 \bigcirc = 60015

8392

The same model as 3092, but arranged for 2 rail direct current (DC) operation

"BR 18" express locomotive

Express locomotive with tender · A model Express locomotive with tender · A model of the German Federal Railways 4-6-2 class 18⁴ locomotive (Bavarian class S 3/6, series i) · 3 driven axles · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights · Mat black metal body · Fittings very finely detailed · Die cast zinc frame · Automatic coupling with advance uncoupler (RELEX) coupling with advance uncoupler (RELEX) on the tender · Length over buffers 24.9 cm · This locomotive can be fitted with the smoke set 7227 (see page 51) \bigcirc = 7152 = 7185 \bigcirc = 60015



The same model as 3093, but arranged for 2 rail direct current (DC) operation



Connoisseurs regard the Bavarian class \$3/6 locomotive, with its powerful cylin-der group, clearly arranged underframe, streamlining and characteristic rimmed smoke stack, as the finest steam locomo tive of all. The S3/6s, later re-designated class 184 by the German State Railways, were often used to pull international expresses, including the famous "Rhein

gold", not only because of their appear-ance but also because of their excellent performance. They reached a maximum speed of 120 km/h at a working weight of 92.3 tons. Their length over the buffers was 21.22 m. The last machine of this type, No. 18 478, was taken out of service in July, 1960.

Belgian State Railways' locomotive with tender

Locomotive with tender · A model of the Belgian State Railways (NMBS/SNCB) 4-6-0 class 64 locomotive · 3 driven axles · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights · Green metal body bronze-colored boiler hoops and external places tring frame · Coupling piping · Die cast zinc frame · Coupling hook in front, automatic coupling with advance uncoupler (RELEX) on the tender · Length over buffers 21.4 cm $\bigcirc = 7152 \implies = 7185 \bigcirc = 60015$



Steam locomotives

Heavy freight locomotive with cab tender



3084

Heavy freight locomotive with cab tender · A model of the German Federal Railways 2-10-0 class 050 locomotive · 5 axles driven by concealed gears · 4 non-skid tires · To give easy running on curves, the frame is divided into two groups of driving wheels, flexibly coupled together · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights · Mat black plastic and metal body in finest detail · Die cast zinc frame · Coupling hook in front, automatic coupling with advance uncoupler (RELEX) on the tender · Length over buffers 26.1 cm · This locomotive can be fitted with the

smoke set 7226 (see page 51)

① = 7153 == 7164 Q = 60015

Because of its low axle load of 15 tons, this freight locomotive, now known as class 050, can also be used on light railroads. Most European locomotive manufacturers

shared in the building of over 3000 of these machines. In the sixties, most of the locomotives still in service had a driver's cab incorporated in the tender, making them even more versatile. Maximum speed is 80 km/h, at which the machine develops 1625 HP. Length over buffers 22.94 m.

German Federal Railways' express locomotive "BR 003"



3085

Express locomotive with tender A model of the German Federal Railways 4-6-2 class 003 locomotive 3 axles driven by concealed gears 2 non-skid tires Simulated Heusinger reversing gear Remote control for forward and reverse drive 3 working headlights Mat

8385

The same model as 3085, but arranged for 2 rail direct current (DC) operation

The former German State Railways used about 300 class 03 (now known as class 003) locomotives, a lighter version of the class 01, for pulling express trains on track sections where an axle load as high as 20 tons was not permitted. They developed 1980 HP giving a maximum speed of 130 km/h. Coupled to the T32 tender the overall length over the buffers was 23.90 m.

French express locomotive



3083 new Express locomotive with tender

Express locomotive with tender · A model of the former French State Railways 4-6-2 class 231 locomotive · 3 driven axles · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working

headlights · Green and black metal body · Bronze-colored boiler hoops · Smoke deflector plates · Finely detailed fittings · Die cast zinc frame · Automatic coupling with advance uncoupler (RELEX) on the tender · Length over buffers

25.5 cm · This locomotive can be fitted with the smoke set 7227 (see page 51)

 \bigcirc = 7152 \triangle = 7185 \bigcirc = 60015

marklin HO Steam locomotives



Streamlined express locomotive "0310"

Streamlined express locomotive with tender · A model of the 4-6-2 class 03¹º locomotive · 3 driven axles · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 2 working headlights · Dark red streamlined body with silver stripes · Black smoke deflector plates · Detailed simulation of fittings on boiler and in driver's cab · Die cast zinc frame · Automatic coupling with advance uncoupler (RELEX) on the tender · Length over buffers 27.4 cm

 \bigcirc = 7152 = 7185 \bigcirc = 60015





In 1937, after the value of streamlined fairings in reducing drag at high speeds had been proved on other locomotives, the three-cylinder class 03¹⁰ with streamlined fairings was put into service. For easier maintenance, however, the driving

gear was left uncovered. The locomotive was developed as a lighter version of the class 01, and originally had an axle load of 17 tons and a maximum speed of 140 km/h.

Electric locomotives

Electric express locomotive "111"

3042 new

Electric express locomotive · A model of the German Federal Railways B-B class 111 locomotive · 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Lever for selecting operaat each end · Lever for selecting opera-tion by overhead line or track supply · Turquoise and beige plastic body · Win-dows inset in plastic frames · 2 spring-loaded pantographs on roof · Die cast zinc frame · Automatic coupling with ad-vance uncoupler (RELEX) at each end · Length over buffers 19.1 cm

 $\bigcirc = 7153 = 7164 = 60015$

The first locomotives of the new class 111, which is a further development of the well proved class 110, have been in service with German Federal Railways since the end of December 1974. With this locomotive emphasis has been placed not so much on increasing the power as on optimizing the engine driv-

er's cab layout, reducing track loading and increasing running safety. The max-imum permitted speed of this locomo-tive, which is 16.75 m long and weighs 83 tons, is 150 km/h. It can be equipped either with pantographs or single bar current collectors.



"141" the multi purpose electric locomotive

3034

Electric locomotive · A model of the German Federal Railways B-B class 141 locomotive · 2 driven axles · 4 non-skid locomotive · 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Lever for selecting operation by overhead line or track supply · 2 spring-loaded pantographs on roof · Turquoise and beige metal body · Windows inset in plastic frames · Coupling hook with advance uncoupler at each end · Length over buffers 17.5 cm

 $\bigcirc = 7153 = 7164 = 60015$

Electric locomotive · A model of the German Federal Railways class 141 locomotive · Similar to 3034, except that the body is green

 $\bigcirc = 7153 \quad = 7164 \quad \bigcirc = 60015$

The class 141 locomotive has a working weight of 66.4 tons and a length of 15.66 m. Its four motors are rated at a total of 2280 kW (3100 HP) continu-ous. The maximum speed is 120 km/h. The locomotive is used for passenger and freight services





Electric express locomotive "110"

Electric express locomotive · A model of the German Federal Railways B-B class 110 locomotive · 2 driven axles · 4 nonskid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Lever for selecting operation by overhead line or track supply · Blue metal body · Outstanding reproduction of all roof details · 2 spring-loaded pantographs on roof · Silver colored roof · Windows inset in plastic frames · Coupling hook with advance uncoupler at each end · Length over buffers 18.1 cm Electric express locomotive · A model of

 $\bigcirc = 7153 = 7164 = 60015$

The class 110 electric locomotives were purchased by the German Federal Rail-ways from 1956 onward. The 110 is used as an express locomotive, with a maximum permitted speed of 150 km/h. The

class 110 locomotive has 4 motors giv-ing a total of about 3680 kW (5000 HP). The locomotive weighs 85 tons and its length over the buffers is 16.44 m.



marklin Electric locomotives

Electric switching locomotive "EA 800"

The locomotives of this type were built for heavy track and switching service on works' rail systems, and for transferring rolling stock to the mainline railroads. They can draw current either from over-head lines or from internal batteries. Their maximum speed is 50 km/h. The locomotive develops a starting tractive force of 19500 kg with single-axle drive. Its weight is 60 tons and its length 10.20 m.

3044

Electric locomotive · A model of the 0-6-0 Type EA 800 multi system industrial loco-motive · 3 driven axles · 2 non-skid tires Remote control for forward and reverse drive · Lever for selecting operation by overhead line or track supply · 3 working headlights at each end · Red plastic body · Single bar current collector on roof · Die cast zinc frame · Finely detailed axle box covers · Coupling hook at each end · Length over buffers 11.2 cm

 $\bigcirc = 7154 = 7185 \bigcirc = 60015$



"194" heavy electric freight locomotive

3022

Electric freight locomotive · A model of the German Federal Railways' C-C class 194 locomotive · 3 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Lever for selecting operation by overhead line or track supply 2 spring-loaded pantographs on roof Green three-section metal body · Silver-colored roof · Windows inset in plastic frames · Automatic coupling with advance uncoupler (RELEX) at each end · Length over buffers 21 cm

 $\bigcirc = 7153 = 7164 = 60015$

8322

The same model as 3022, but arranged for 2 rail direct current (DC) operation



The class 194 locomotive is a heavy-weight. The 6 motors give it a starting power of about 4670 kW (6350 HP). With a total weight of 120 tons the machine has a maximum starting tractive force of

only 90 km/h, it is perfectly capable of tackling any gradient, even with the heaviest freight train. 124 of these 18.60 m long giants are in service with the German Federal Railways

French high power electric locomotive

The French original of our model 3038 runs on certain stretches of the French Railways at a maximum speed of 160 km/h. The class BB 9200 locomotives have 4 motors developing a total of 4050 kW (5500 HP), hourly rating. Their weight is 80 tons.

Electric locomotive · A model of the Société Nationale des Chemins de Fer Franclete Nationale des Chemins de Fer Fran-çais (SNCF) B-B class BB 9200 locomo-tive · 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 2 working headlights at each end · Lever for selecting operation by overhead line or track supply • 2 spring-loaded pantographs on roof • Turquoise metal body • Coupling hook with advance uncoupler at each end • Length over buffers 18 cm

 $\bigcirc = 7153 = 7164 = 60015$





The catenary system adds realism to the operation of the railroad

Italian electric locomotive

Electric locomotive · A model of the Italian State Railways' (FS) B-B class E 424 locomotive · 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 2 working headlights at each end · Lever for selecting operation by overhead line or track supply · 2 spring-loaded pantographs on roof Brown metal body · Coupling hook with advance uncoupler at each end · Length over buffers 17.5 cm

 \bigcirc = 7153 = 7164 \bigcirc = 60015



Austrian Federal Railways' multi-purpose locomotive

3041

Multi-purpose electric locomotive A model of the Austrian Federal Railways' (ÖBB) B-B class 1043 locomotive 2 driven axles 4 non-skid tires Remote conen axies · 4 non-skid tires · Hemote control for forward and reverse drive · 3 working headlights at each end · Lever for selecting operation by overhead line or track supply · Red plastic body · Windows inset in plastic frames · 2 single-bar current collectors on roof · Die cast zinc frame. Causling hook at each end frame · Coupling hook at each end Length over buffers 17.5 cm

 \bigcirc = 7153 = = 7164 \bigcirc = 60015

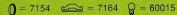


After extensive trials with this locomotive, which was built by the Swedish firm ASEA, the Austrian Federal Railways acquired four of them initially and put them into service with the class designation 1043. The 162/3 Hz alternating current supply

from the overhead line is converted to direct current by means of thyristors. The four motors develop almost 3680 kW (5000 HP), enabling the 77.4 ton, 15.5 m long locomotive to reach a maximum speed of 135 km/h.

Netherlands Railways' electric locomotive

Blectric locomotive - A model of the Neth erlands Railways' (NS) C-C class 1200 locomotive - 3 driven axles - 4 non-skid tires - Remote control for forward and reverse drive - 3 working headlights at each end - Lever for selecting operation by overhead line or track supply - Gray and yellow metal body - 2 spring-loaded pantographs on roof - Windows inset in plastic frames - Coupling hook at each end - Length over buffers 19.6 cm





markin Electric locomotives

Swedish electric locomotive

The class Da is used on Swedish State Railways (Statens Järnvägar) as the standard electric locomotive for passenger and freight service. Since these machines have only one motor and the low axle loading of 15 or 17 tons, they are fitted with main driving rods so that individual wheels do not "run away" on starting.

3030

Electric locomotive · A model of the Swedish State Railways' (SJ) 2-8-2 class Da locomotive · 3 driven axles · Jackshaft driven through gears · 2 non-skid tires. Remote control for forward and reverse drive · 3 working headlights at each end · Lever for selecting operation by overhead line or track supply · 2 spring loaded pantographs on roof · Brown metal body. Die cast zinc frame · Automatic coupling with advance uncoupler (RELEX) at each end · Length over buffers 14.7 cm

 $\bigcirc = 7153 = 7185 \bigcirc = 60015$



Interesting Swedish multi-purpose locomotive

3043

Electric multi-purpose locomotive A model of the Swedish State Railways' (SJ) B-B class Rc locomotive 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 4 working headlights at each end · Lever for selectneadignts at each end · Lever for selecting operation by overhead line or track supply · Orange plastic body · Windows inset in plastic frames · 2 spring-loaded pantographs on roof · Die cast zinc frame · Coupling hook at each end · Length over buffers 17.5 cm

 $\bigcirc = 7153 = 7164 \bigcirc = 60015$

In these machines of very advanced design, the 16% Hz alternating current supply from the overhead line is converted by thyristors into direct current, which drives the four motors, developing a pow-er of almost 3680 kW (5000 HP). The ma-chine weighs 76 tons and can reach a speed of 135 km/h. It is almost 15.50 m



The Swiss Federal Railways' powerful multi-purpose locomotive

The Swiss Federal Railways ordered the class Ae 6/6 for international passenger and freight express service. The locomo-tive's 120 tons weight and 4400 kW (6000 HP) from six motors give it enor-mous starting and climbing power. The maximum speed is 125 km/h. For all its brute force, it is of particularly stylish appearance. That's why we have made an exact copy of it.

3050

Multi-purpose electric locomotive
A model of the Swiss Federal Railways'
(SBB) C-C class Ae 6/6 locomotive · 3 driven axles · 4 non-skid tires · Remote con-trol for forward and reverse drive · 3 work-ing headlights at each end · Lever for selecting operation by overhead line or track supply · 2 spring-loaded panto-graphs on roof · Green metal body · Sil-ver-colored roof · Locomotive has the crest of Berne Canton · Coupling hook at each end · Length 20 cm · Crests of the other Swiss cantons are supplied with this locomotive

 $\bigcirc = 7153 \quad \underline{\bigcirc} = 7164 \quad \bigcirc = 60015$



The catenary system providing the power to operate two trains on one track

Express locomotive "103"

This is the strongest, fastest and most elegant electric express train in service with German Federal Railways at this time. It is 19.50 m long and has 6 motors driving 6 axles. With its almost 6600 kW (9000 HP) hourly rating, its working weight of 112 tons and its mighty tractive force on

starting of 32 000 kg, it caters for future requirements. On suitable tracks, expresses pulled by the "103" travel at maximum speeds of 200 km/h. All the splendid features of the original are captured in the small Märklin model.

3054

Electric express locomotive · A model of the German Federal Railways' C-C class 103 locomotive · 3 driven axles · 4 nonskid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Lever for selecting operation by overhead line or track supply · Di cast zinc frame · Specially low center of gravity · Plastic body in the TEE colors, beige and red · Aluminum-colored roof · Windows inset in plastic frames · 2 spring-loaded pantographs on roof Electric express locomotive · A model of 2 spring-loaded pantographs on roof Coupling hook at each end · Length over buffers 21.9 cm

 $\bigcirc = 7153 = 7164 = 60015$



Freight locomotive "151"

3057 new

Electric freight locomotive · A model of the German Federal Railways' C-C class 151 locomotive · 3 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Lever for selecting operation by overhead line or track supply · Dummy interior fittings · Die cast zinc frame, permitting a favorable center of gravity position · Green plastic body · Windows inset in plastic frames · 2 spring-loaded pantographs on roof · Coupling hook at each end · Length over buffers 22.2 cm

 $= 7153 \quad \underline{\hspace{1cm}} = 7164 \quad Q = 60015$



Freight locomotive "151"

The development of a new heavy freight locomotive became necessary as the speeds of express freight trains rose to 120 km/h. By using well proved compo-nents from other locomotives it was possible to produce a new and very powerful machine within a short time. The new locomotive, which has a working weight of only 118 tons, develops a starting tractive force of 45 tons, and with its 6 motors developing a total of 6540 kW (8900 HP) continuous rating it can pull a train weighing 1000 tons on the level at a speed of 120 km/h. The class 151 locomotives are 19.49 m long

Electric freight locomotive · A model of the German Federal Railways' class 151 loco-motive · Similar to 3057, but with a turquoise and beige plastic body

 \bigcirc = 7153 \bigcirc = 7164 \bigcirc = 60015



The same model as 3058, but arranged for 2 rail direct current (DC) operatio

marklin HO Electric locomotives

Swiss heavy freight locomotive "Crocodile"

3056

Electric freight locomotive

A model of the Swiss Federal Railways' (SBB) 1C-C1 class Be 6/8^{III} locomotive "Crocodile" · 3 driven axles · 4 non-skid tires · Because of its articulated construction it can easily negotiate curves of normal radius · Remote control for forward and reverse drive · 3 working headlights at each end

Lever for selecting operation by overhead line or track supply · 2 spring-loaded pantographs on roof · Green plastic body · Windows inset in plastic frames · Automatic coupling with advance uncoupler (RELEX) at each end

Length over buffers 22.8 cm

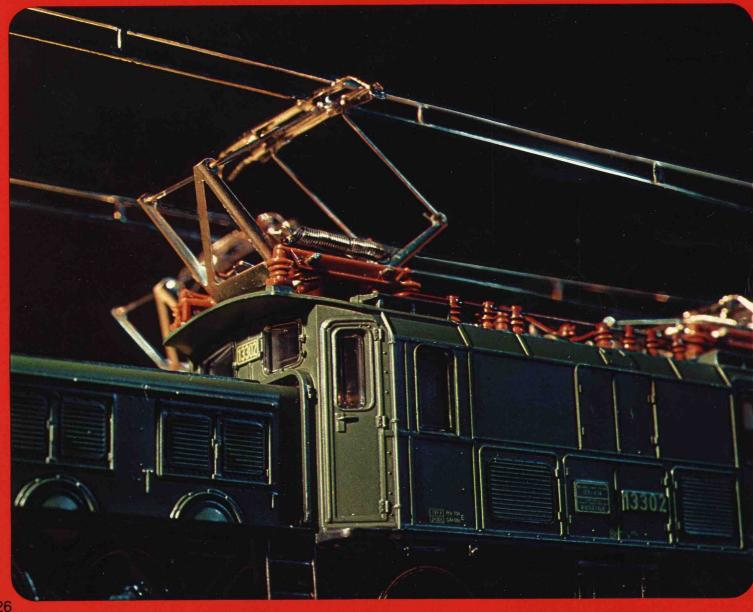
0 = 7153 = 7164 **2**

The same model as 3056, but arranged for 2 rail direct current (DC) operation



As a result of the growth in traffic density on the Gotthard route, another 18 locomo-tives designated Be 6/8" were put into service in 1926 and 1927. Like the class Ce 6/8 machines already in service, they became well-known under the nickname "Crocodile" far beyond the frontiers of

Switzerland. With a length of 20.06 m and a motor power of 1800 kW (2460 HP), giving a maximum speed of 75 km/h, they were for many years one of the most impressive sights in the Swiss heavy freight train service.



Diesel locomotives

Diesel-hydraulic locomotive "DHG 500"

3078

Diesel locomotive · A model of the 0-6-0 industrial locomotive known as the Type DHG 500 · 3 driven axles · 2 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Blue plastic body with decorative silver-colored bands · Die cast zinc frame · Coupling hook at each end · Length over buffers 11.2 cm

 $= 7154 \implies = 7185 \quad Q = 60015$

These "small" diesel locomotives with hydraulic transmissions are in fact at least 10–11 m long and they have a power of several hundred kW under the hood. In particular, the heavily loaded transmissions are especially robust, so that these locomotives can be used for quite long periods without too much maintenance. The Märklin models 3078 and 3080, which are typical industrial locomotives, have windows in the lower corners of the front panel of the cab, which enable the driver to have a clear view of the buffers and to position the locomotive accurately in switching op-



Industrial locomotive

3080

Diesel locomotive · A model of a 0-6-0 industrial locomotive · 3 driven axles · 2 non-skid tires · Remote control for forward and reverse drive · Yellow plastic body with dark decorative bands · Die cast zinc frame · Coupling hook at each end · Length over buffers 11.2 cm



Diesel-hydraulic switching locomotive "260" with Märklin **TELEX** coupling

3065

TELEX see page 17

Diesel locomotive · A model of the German Federal Railways 0-6-0 class 260 locomotive · 3 driven axles · 2 non-skid tires Remote control for forward and reverse drive · 3 working headlights at each end · Red plastic body · Windows inset in plastic frames · Die cast zinc frame · Märklin TELEX coupling at each end · Length over buffers 12 cm

 $\bigcirc = 7153 = 7185 \bigcirc = 60010$

with coupling hooks

3064

Diesel locomotive - A model of the German Federal Railways' class 260 loco-motive · Similar to 3065, but without the Märklin TELEX coupling · Coupling hook with advance uncoupler at each

 $\bigcirc = 7153 = 7185 \bigcirc = 60010$



Diesel-hydraulic locomotive "212"

Diesel locomotive · A model of the German Federal Railways' B-B class 212 loco-motive · 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end Die cast zinc frame · Red plastic body Narrow front and rear ends to scale · Windows inset in plastic frames · Automatic coupling with advance uncoupler (RELEX) at each end · Length over buffers 14.1 cm · A suitable positioning of the motor in model 3072 has enabled the front and rear end super-structure to be kept narrow as on the original

 $\bigcirc = 7154 \quad = 7164 \quad \bigcirc = 60010$

The 212 is a multi-purpose diesel locomotive with a working weight of 63.2 tons and a length of over 12 m. The new types develop about 1000 kW (1350 HP), and this power is transmitted by means of cardan shafts to the 4 axles arranged in 2 trucks.



To suit the tractive force of the powerful motor to the requirements of passenger and freight traffic, a twospeed gearbox is used. The gear ratio must be selected when the lo-

the locomotive exerts its maximum tractive force, but has a maximum speed of only 65 km/h, while in high gear it reaches 100 km/h.

markin Diesel locomotives

Danish State Railways' diesel-electric locomotive



3067

Diesel locomotive · A model of the Danish State Railways' (DSB) A1A-A1A Type My 1100 locomotive · 3 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Black and red metal body · Gray roof · Windows inset in plastic frames · Coupling hook at each end · Length over buffers 20.5 cm

 $\bigcirc = 7154 = 7164 = 60015$

These Danish State Railways' class My 1100 multi-purpose locomotives have diesel-electric drive. With this system, electric motors on the axles are provided with current from the generators which in turn are driven by diesel motors. This locomotive is very similar to the Belgian Type 204.

USA - "F 7" diesel locomotive of the Rio Grande Railway Company



3062

Diesel locomotive - A model of the Rio Grande Railway Company version of the Ho Grande Railway Company version of the American B-B Type F 7 locomotive made by the Electro-Motive Division of General Motors 2 driven axles 4 non-skid tires · Remote control for forward and reverse drive · Lights as on original · N al body in black, yellow, green and

aluminum color scheme - Coupling hook with advance uncoupler at driver's cab Automatic coupling with advance un-coupler (RELEX) at rear end · Length

 $\bigcirc = 7154 = 7185 = 60015$

4062

Supplementary section, unpowered
Matching diesel locomotive 3062 · Lights
as on original · Metal body · Coupling
hook with advance uncoupler at driver's
cab end · Length 17.5 cm

= 7185 Q = 60015

USA - "F 7" diesel locomotive of the Atchison Topeka and Santa Fé Railway



Diesel locomotive · A model of the Atchi-Diesel locomotive · A model of the Atchison Topeka and Santa Fé Railway version of the American B-B Type F 7 locomotive made by the Electro-Motive Division of General Motors · 2 driven axles · 4 nonskid tires · Remote control for forward and reverse drive · Lights as on original Red and silver colored metal body · Coupling hook with advance uncoupler at driver's cab · Automatic coupling with advance uncoupler (RELEX) at rear end Length 17.5 cm

 \bigcirc = 7154 = = 7185 \bigcirc = 60015

4060

Supplementary section, unpowered Matching diesel locomotive 3060 · Lights as on original · Red and silver-colored metal body · Coupling hook with advance uncoupler at driver's cab end · Length 17.5 cm

= 7185 \(\text{\tinx{\text{\ti}\text{\texi{\text{\texi{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\texi}\text{\text{\texi}\text{\texi{\texi{\texit{\texi}\texi{\texi{\texi{\texi}\texi{\texi}\texi{\texi{\texi{\texi}\tinz{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\tet

Diesel locomotives

Diesel-hydraulic express locomotive "220"

3021

Diesel locomotive · A model of the German Federal Railways' B-B class 220 locomotive · 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Red and gray metal body · Silvery-gray roof · Coupling hook with advance uncoupler at each end · Length over buffers 21 cm





Diesel locomotive "216"

3074

Diesel locomotive · A model of the German Federal Railways' B-B class 216 locomotive · 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Turquoise and beige plastic body · Windows inset in plastic frames and with simulated windshield wipers · Die cast zinc frame · Automatic coupling with advance uncoupler (RELEX) at each end · Length over buffers 18.2 cm

 $\bigcirc = 7154 \implies = 7164 \bigcirc = 60015$

8374

The same model as 3074, but arranged for 2 rail direct current (DC) operation

Diesel locomotive - A model of the German Federal Railways' class 216 locomotive · Similar to 3074, but with a red and gray body

0 = 7154 = 7164 Q = 60015

The same model as 3075, but arranged for 2 rail direct current (DC) operation



The class 216 diesel locomotive is used for mainline duty over medium distances. The working weight with full fuel tanks is 79 tons. It develops a power of 1400 kW (1900 HP), giv-ing a maximum speed of 120 km/h



Belgian State Railways' multi-purpose diesel locomotive

Diesel locomotive · A model of the Belgian State Railways' (NMBS/SNCB) C-C Type 204 locomotive · 3 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Green metal body. Black roof · Windows inset in plastic frames · Coupling hook at each end · Length over buffers 20.5 cm

 $\bigcirc = 7154 = 7164 = 60015$



The Belgian multi-purpose diesel locomotive type 204 has diesel-electric drive. It is used for local and express passenger trains, and its power of 1300 kW (1750 HP) gives it a maximum speed of 140 km/h.



Railbus Rail Zeppelin

"TEE" high speed railcar

3071

TEE high speed railcar, in three parts A model of the Netherlands-Swiss TRANS-EUROP-EXPRESS train, consisting of a lo-comotive, a combined first class and dining car and a spacious first-class compartment car with driver's section Length of model 70 cm

Locomotive: 3 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · Mat black die cast zinc frame · Plastic body in the TEE colors, beige and red · Gray roof · Windows inset in plastic frames

Dining car and driver's car: Each with 2 accurately reproduced trucks. Plastic body in the TEE colors, beige and red Gray roof · Windows inset in plastic frames



Special couplings connect the 3 units very closely together · The walk-ways between the cars have specially tightly closing covers · At each end of the train there are 3 headlights and 2 red tail lights, which operate in accordance with the direction of motion · A current pick-up shoe at

each end of the train, the leading one always collecting the current

① = 7154 == 7164 Q

= 60015 w

 $= 7175 \ Q = 60001 \ r$

Railbus with trailer

Railbus · A model of the German Federal Railways Type 795 · 1 driven axle · 2 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Interior lighting · Red plastic body · Die cast zinc frame · Special symmetrical couplings at each end for coupling the cars tightly together · Length over buffers 14.7 cm

 $\bigcirc = 7153 \quad = 7164 \quad \bigcirc = 60010$

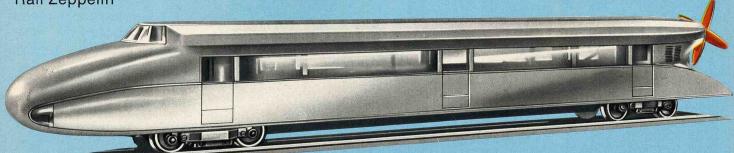


4018

Railbus trailer · A model of the German Federal Railways Type 995 · Red taillights operate at either end · Interior lighting · Red plastic body · Special symmetrical coupling, to fit railbus only · Length over buffers 12 cm

= 7175 Q = 60010

Rail Zeppelin



Rail Zeppelin based on Kruckenberg's system 4 axles 2 driven axles 4 non-skid tires. Remote control for forward and reverse drive. As the traction voltage is slowly increased from 4V, first the propeller spins up, driven by a special motor, and the tracket to track. and then the locomotive starts to roll

2 working headlights · Silver-gray plastic body · Fitted windows with simulated struts · Die cast zinc frame · Length 28.8 cm

 $\bigcirc = 7154 = 7164 = 60015$

8377

The same model as 3077, but arranged for 2 rail direct current (DC) operation

The Rail Zeppelin, built for the Flugbahn-GmbH from Franz Kruckenberg's design, attained the world record speed of 230 km/h during reliability test runs in 1931. The drive was obtained from a 450 kW (600 HP) BMW aircraft engine at the rear of the vehicle, acting through the propeller.

TRANS EUROP EXPRESS



4071



4071

TEE compartment coach · 1st class · 2 four-wheel trucks true to the original · Gray roof · Windows inset in plastic frames · Flexible covers for the walk-ways between cars at each end · Special coupling fitting the TEE train only · Length 23.3 cm

The Netherlands-Swiss TRANS-EUROP-EXPRESS operated 5 trains on the Zürich-Amsterdam route as the TEE "Edelweiss". They usually consisted of 4 cars. Three powerful diesel motors developing a total of 1700 kW (2300 HP) gave the train a speed of 140 km/h. Windows could not be opened in this train, as every car was fully air conditioned. As in all TEE trains, there were only 1st class coaches, containing 114 seats. The dining car section could seat 32.

The TEE train illustrated consists of the three-part unit 3071 together with the supplementary car 4071, giving the usual four-car composition. Length over the 4 unit train is 93.5 cm.

Electric railcar "515" with control car "815"



3028 new

Electric railcar · A model of the German Federal Railways' B-2 battery-powered Type 515 railcar · 2 driven axles · 4 non-skid tires · Remote control for forward and reverse drive · At each end of the locomotive there are 3 headlights and 2 red tail lights which operate in accordance with the direction of motion · Turquoise and beige plastic body

Interior fittings · Interior lighting Windows inset in plastic frames · Coupling hook at each end · Length over buffers 24 cm

 \bigcirc = 7154 = 7164 \bigcirc = 60001 r

Q = 600017

8328 **new**

The same model as 3028, but arranged for 2 rail direct current (DC) operation

4028 new

Control car to go with railcar 3028. A model of the German Federal Railways Type 815 control car. Turquoise and beige plastic body. Interior fittings. Interior lighting. Windows inset in plastic frames. When coupled to railcar 3028, 3 headlights or 2 red tail lights operate at each end of the train, depending on the direction of motion. Coupling

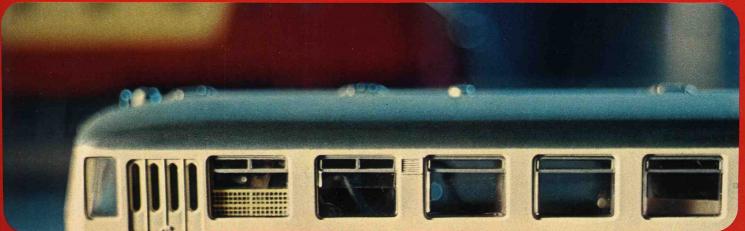
eye at one end, coupling hook at the other end · Length over buffers 24 cm

 $= 7164 \ Q = 60001 \ r$

Q = 60015 w

8428 **new**

The same model as 4028, but arranged for 2 rail direct current (DC) operation



márklín HO

TEE coaches and local passenger service cars with interior fittings 24 cm

TEE coaches with interior fittings

4085

TEE compartment car 1st class
A model of the German Federal Railways' Type Avm Windows inset in
plastic frames Interior fittings with

side corridor · Length 24 cm · This car can be fitted with the interior lighting set 7320 (see page 50)



4087

TEE dining car · A model of the German Federal Railways' Type WRm · Windows inset in plastic frames · Interior fittings, divided into kitchen and dining sections · Length 24 cm · This car can be fitted with the interior lighting set 7320 (see page 50)



4089

TEE compartment car · Similar to car 4085, but with current pick-up shoe and wiring for interior lighting and tail-lights

 $= 7175 \ Q = 60015$



The TEE coaches are the show pieces of the German Federal Railways, being the best equipped, the most comfortable and certainly the most stylish cars in the Federal Railways service.

4090

TEE dome car · 1st class · A model of the German Federal Railways Type ADm · Windows inset in plastic frames · Interior fittings · Transparent plastic dome · Length 24 cm · This car can be fitted with the interior lighting set 7322 (see page 50)



German Federal Railways' local passenger service cars with interior fittings

4077

Local passenger service car with baggage compartment and driver's

cab · 2nd class · A model of the German Federal Railways' Type BDnf · Car body stainless steel-colored with peacock's eye pattern · Interior fittings · Windows with plastic frames · Dummy hooter on roof · Headlights at the cab end · Length 24 cm · This car can be fitted with the interior lighting set 7077 (see page 50)

= 7175 Q = 60000



4082

Local passenger service car · 2nd class · A model of the German Federal Railways' Type Bnb · Car body stainless steel-colored with peacock's eye pattern · Interior fittings · Windows with plastic frames · Length 24 cm · This car can be fitted with the interior lighting set 7077 and the current pickup shoe 7198 (see page 50)



4083

Local passenger service car 1st and 2nd class · A model of the German Federal Railways' Type ABnb · Car body stainless steelcolored with peacock's eye pattern · Interior fittings · Length 24 cm · This car can be fitted with the interior lighting set 7077 and the current pick-up shoe 7198 (see page 50)



Express coaches with interior fittings 24 cm

German Federal Railways' express coaches

4111

Express coach · 1st class · A model of the German Federal Railways' Type A üm · Interior fittings · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7077 and current pick-up shoe 7198 (see page 50)



The bodies of our express cars are made of metal or plastic, with inset plastic window frames and panes. Door bays and other important details and the tiny indelible lettering are modeled exactly on the original. The mat finish makes the cars look completely realistic. The cars can easily be fitted with interior lighting. The simulated Minden-Deutz type trucks have movable side plates which compensate for irregularities in the track and permit a safe and quiet ride. The inter-connections between cars are fitted with simulated rubber beading or bellows. Automatic coupling with advance uncoupler (RELEX).

4112

Express coach · 2nd class · A model of the German Federal Railways Type B üm Interior fittings · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7077 and current pick-up shoe 7198 (see page 50)



4026

Express baggage car · A model of the German Federal Railways Type D ym · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7077 and current pick-up shoe 7198 (see page 50)



4051

Express coach · 1st class · A model of the German Federal Railways Type A üm Interior fittings · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7077 and current pick-up shoe 7198 (see page 50)





4052

Express coach · 2nd class · A model of the German Federal Railways' Type B üm · Interior fittings · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7077 and current pick-up shoe 7198 (see page 50)



4054

Express dining car · A model of the German Federal Railways' Type WR üm¹³² · Interior fittings, divided into kitchen and dining sections · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7320 (see page 50)



märklin HO

Express coaches 24 cm

The express and local passenger service cars on pages 34/35 are equipped with automatic coupling and advance uncouplers (RELEX).

4029

Express sleeping car · A model of the International Sleeping Car Co.'s Type ISG No. 4581 · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7077 and current pick-up shoe 7198 (see page 50)



German Federal Railways' express coaches

4037

Express coach · 2nd class, one of the older designs · A model of a type used by German Federal Railways · Windows with "cellon" panes · Length 22 cm · This car can be fitted with interior lighting set 7077 and current pick-up shoe 7198 (see page 50)



4064

Express sleeping car · 1st and 2nd class · A model of the German Sleeping and Diner Car Co.'s (DSG) WL AB üm Series 33 200 · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7320 (see page 50)



Lightweight express coaches of the Swiss Federal Railways

4066

Passenger car · A model of the Swiss Federal Railways' Series A 2500 1st class coach · Windows inset in plastic frames Roof with longitudinal ribs and imitation ventilators · Length 24 cm · This car can be fitted with interior lighting set 7320 (see page 50)

4068

Express dining car · A model of the Swiss Federal Railways' Type RIC dining car · Windows inset in plastic frames · Screwed-on roof with longitudinal ribs · Single bar current collector on roof · Length 24 cm · This car can be fitted with interior lighting set 7077 (see page 50)





Interior fittings for coaches 4037, 4045, 4049, 4066, 4072, 4073, 4079 and 4080

0225

Set of interior fittings for express coaches, with 18 single-colored double seats, 6 single seats and 2 rest rooms Interior fittings and figures are made in finely detailed plastic, the figures being hand painted. Illustrated installation instructions are included with every set.

i gight girth

0226

Pack with 10 realistically-colored figures to supplement the interior fittings

International express coaches 24 cm

Danish State Railways' express coach

4045Express coach · 2nd class · A model of the Danish State Railways' (DSB) Type B 2300 · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7077 and current pickup shoe 7198 (see page 50)



Netherlands Railways' express coach

4049

Express passenger coach · 2nd class · A model of the Netherlands Railways' Type B 6600 · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7320 (see page 50)



Swedish State Railways' express coaches

4072

Express coach · 2nd class · A model of the Swedish State Railways' Type Bo 1 · Plastic car body · Windows inset in plastic frames · Length 23.7 cm · This car can be fitted with interior lighting set 7197 (see page 50)

4073
Express dining car · A model of the Swedish State Railways' Type RBo 2 · Plastic car body · Windows inset in plastic frames · Length 23.7 cm · This car can be fitted with interior lighting set 7197 (see page 50)



French State Railways' express coach

4076

Express coach · 1st class · A model of Express coach · Ist class · A model of the SNCF's stainless steel Type A8myfi · Plastic body · Interior fittings · Windows inset in plastic frames · Length 24 cm · This car can be fitted with interior lighting set 7197 (see page 50)





márklín HO

TEE coaches with interior fittings 27 cm

4095

TEE compartment car · 1st class · A model of the German Federal Railways' Type Avm · Plastic car body · Interior fittings with side corridor · Windows inset in plastic frames · Length 27 cm · This car can be fitted with interior lighting set 7325 (see page 50)



4096
TEE open-interior coach · 1st class · A model of the German Federal Railways' Type Apm · Plastic car body · Interior fittings, seats arranged in one single and one double row separated by gangway · Windows inset in plastic frames · Length 27 cm · This car can be fitted with interior lighting set 7325 (see page 50)



4097

TEE dining car · A model of the German Federal Railways' Type WRm · Plastic car body · Interior fittings, divided into kitch-en and dining sections · Windows inset in plastic frames · Length 27 cm · This car can be fitted with interior lighting set 7325 (see page 50)



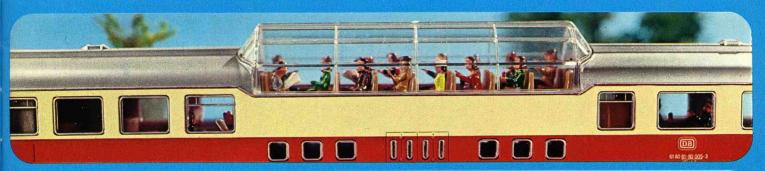
4099

TEE dome car · 1st class · A model of the German Federal Railways' Type ADm · Plastic car body · Interior fittings, divided into bar, seating compartment and raised row of seats · Transparent plastic observation dome · Windows inset in plastic frames · Length 27 cm · This car can be fitted with interior lighting set 7325 (see page 50)





Express coaches with interior fittings 27 cm



4150
Express sleeping car · 1st and 2nd class · A model of the German Federal Railways' Type WLABsm in the TEN version · Plastic car body · Interior fittings · Windows inset in plastic frames · Length Care · This care an be fitted with interior 27 cm · This car can be fitted with interior lighting set 7325 (see page 50)



4091

Express coach 1st class A model of the German Federal Railways' Type A üm²⁰¹ Plastic car body Interior fittings Windows inset in plastic frames Length 27 cm This car can be fitted with interior lighting set 7325 (see page 50)



4092

Express coach · 2nd class · A model of the German Federal Railways' Type B üm²³⁴ · Plastic car body · Interior fittings · Windows inset in plastic frames · Length 27 cm · This car can be fitted with interior lighting set 7325 (see page 50)



4093

Express baggage car · A model of the German Federal Railways' Type D üm⁹⁰² · Plastic car body · **Moveable roller shutters** on each side · Windows inset in plastic frames · Length 27 cm · This car can be fitted with interior lighting set 7325 (see page 50)



4094
Express dining car · A model of the German Federal Railways' Type WR ümh¹s². Plastic car body · Interior fittings, divided into kitchen and dining sections · Windows inset in plastic frames · Length 27 cm · This car can be fitted with interior lighting set 7325 (see page 50)



mark in Local service coaches



4000

Local service coach · Platform and entrance at each end · Unglazed windows Length 11.5 cm

4040

Local service coach · Platform and entrance at each end . Unglazed windows Length 11.5 cm



Local service coaches with automatic coupling and advance uncouplers RELEX (see page 45)



4004

Compartment car without brakeman's cab Car sides divided into 6 compartments · Windows glazed with "cellon" panes · Length 13 cm · This car can be fitted with interior lighting set 7074 (see page 50)

4005

Compartment car with brakeman's cab Car sides divided into 6 compartments Windows glazed with "cellon" panes -Length 13 cm - This car can be fitted with interior lighting set 7074 (see page 50)



4007

Local service coach . Modeled on a pri-Local service coach · Modeled on a private railroad coach · Platform and entrance at each end · Plastic car body · Imitation ventilators on roof · Windows inset in plastic frames · Interior fittings · Length 11 cm · This car can be fitted with interior lighting set 7323 (see page 50)



Baggage car · Modeled on the Type Pwi No. 0116911 Stgt. · Platform and entrance at each end · Plastic car body · Imitation ventilators, superstructure for conductor's cab · Windows inset in plastic frames · Length 11 cm · This car can be fitted with interior lighting set 7323 (see page 50)



4079

Local service coach · A model of the German Federal Railways' Type B3yge · Plastic car body · Windows inset in plastic frames · Simulated rubber beading · Length 15.2 cm · This car can be fitted with interior lighting set 7074 (see page 50)

4080

Local service coach with baggage compartment · A model of the German Federal Railways' Type BD3yge · Plastic car body · Windows inset in plastic frames · Simulated rubber beading · Length 15.2 cm · This car can be fitted with interior lighting set 7074 (see page 50)



Express coaches of the former German State Railways Automobile rack cars

4136 NEWExpress coach · 3rd class, old-fashioned design · A model of the former German State Railways' Type C4ü · Windows inset in plastic frames · Interior fittings · Imitation ventilators on roof · Length 22 cm · This car can be fitted with interior lighting set 7396 (see page 50) set 7326 (see page 50)



4137 new

Express baggage car · An old-fashioned design · A model of the former German
State Railways' Type Pw 4ü · Windows inset in plastic frames · Roof superstructure · Length 20 cm · This car can be
fitted with interior lighting set 7326 (see page 50)



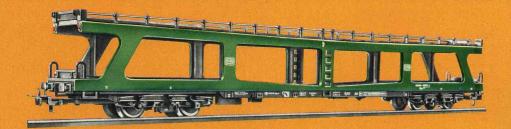


4074
Automobile rack car A model of the German Federal Railways' Type DDm 915
With 8 WIKING miniature automobiles aboard · Length 26.4 cm



4084

Automobile rack car · A model of the German Federal Railways' Type DDm 915 Without automobiles · Length 26.4 cm



marklin HO Scale model freight cars 4400

Scale model freight cars with automatic coupling and advance uncouplers RELEX (see page 45)

Underframes and bodies are made of plastic, wheels of die cast zinc.

4416 Beer car · A model of a car owned by the Dort-munder Kronen brewery Length 11.4 cm



Box car · A model of the German Federal Railways Type Gs Length 11.4 cm



Beer car · A model of a car owned by the Alpirs-bacher Klosterbräu brew-ery Length 11.4 cm



4411

Box car with working taillight · A model of the German Federal Railways'

Type Grs-v · Current pickup shoe · Length 11.4 cm



4423 new Low-sided car · A moo Length 11.4 cm

A model of the German Federal Railways' Type Kkim 505

Tipping bucket car Bucket can tip to either side or be latched in the upright position Length



4424 new

Low-sided car · Loaded with WIKING commercial vehicle · Length 11.4 cm

Box car for transporting bananas · A model of the German Federal Railways' Type lbbls · Length 11.4 cm



Open freight car · A model of the German Federal Railways' Type El-u

4415

Refrigerator car · A model of the German Federal Railways' Type Ichqrs 377 · Length 11.4 cm



Open freight car (DB-EI-u) · With removable load, representing coal Length 11.4 cm



Scale model freight cars 4400 Freight cars 4500 American freight cars





4441 new Tank car · ESSO · Length 11.4 cm

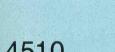


4442 new Tank car SHELL Length 11.4 cm



Freight cars with automatic coupling and advance uncouplers RELEX (see page 45)

These cars all have metal underframes with mat black finish. All wheels are of die cast zinc. The bodies are made of plastic. All lengths quoted are measured over the buffers.





4514 Low-sided car · Length 18 cm

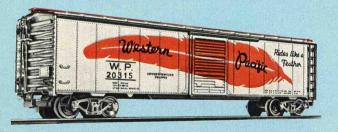
Wine car · Length 10 cm

4511



Pulverized coal car - Length 10 cm





American freight cars

Box car · A model of a 50 ton car of Western Pacific Railroad · Walkway mounted on roof · Doors on both sides which will open · Length 20.5 cm



4575 Gondola · A Dixie Line model · Length 20 cm



4578

Caboose · Roof structure with walkway and ladders · Length 8 cm

márklín HO

Scale model freight cars 4600

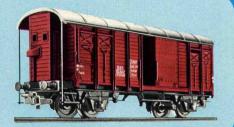
4600 Freight train baggage car (German Federal Railways' Type Dg) · Doors on both sides which will open · Length 9 cm



4601 Open freight car with brakeman's cab (German Federal Railways' Type Omm 33) · Length 11.5 cm



4605
Box car with brakeman's cab (Swiss Federal Railways' Type K³) Doors on both sides which will open - Length 11 cm



4607

Low sided car (German Federal Railways' Type Rmms 33) with removable stanchions which can be stored in the sliding box under the car floor Length 13 cm



4610

Ballast car with unloading doors operated by a hand lever · Length 9.5 cm



4612
Automobile transporter with loading ramp · Not loaded · Length 11.5 cm (On the German Federal Railways two transporters are always coupled to-gether to form a unit known as Off 52)



Crane car with rotating crane, with movable boom and boom support.

Crane hook can be raised and lowered by hand-cranking. Length of underframe 9 cm. (Low-sided car 4423 is not included in the price, but this item is recommended for use when moving the crane car)



4617
Well car Loaded with transformer Length 25 cm



4618
Well car - Loaded with crate - Length 25 cm



Scale model freight cars 4600

4613

Automobile transporter with loading ramp Loaded with miniature automobiles - Length 11.5 cm



4619

Sliding-roof car (German Federal Railways' Type Kmmks 51) · The two halves of the roof will slide open · Length 11.5 cm



4624

High-capacity freight car A model of the German Federal Railways' Type OOtz 50 · Length 13.3 cm



This type of car is used in international traffic for transporting coal, coke, ore etc. generally in permanently made-up high capacity trains.

4626

High-capacity freight car with hinged hatches on roof · A model of the German Federal Railways' Type KKt 57 · All hatches will open · Length 13.3 cm



On a number of high-capacity freight cars, fixed covers are fitted so that bulk materials such as grain, which need protection from the elements, can

4627

Box car · A model of the German Federal Railways' Type Glmmehs 57 Length 13.3 cm



4631 Side dumping car A model of the German Federal Railways' Type Otmm 70 · Length 11.2 cm



The discharge doors can be operated by handlevers, or by remote control using the uncoupling track sections 5112 (see page 54) and 2197 (page 56).

4632 Beer car Length 19.5 cm



4633

Freight car with sliding sides and roof (German Federal Railways' Type KImmgks 66) The roof halves and the sides will slide open · Length 15.7 cm



4635

Tipping bucket car A model of the German Federal Railways' Type Ommi 51 · The buckets can be tipped when the center holding bar is un-latched · Length 10.5 cm



4639 Open freight car

of the Netherlands State Railways' (NS) car Length 11.5 cm



Tank car · A model of the standard tank car, with BP markings · Length 10 cm



4646

Tank car · A model of the standard tank car, with ARAL markings · Length 10 cm



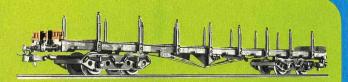
märklin HO Scale model freight cars 4600











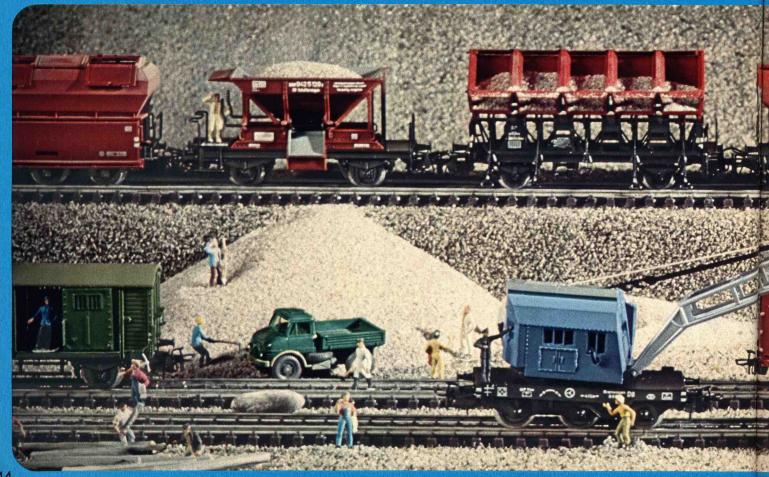
4663

Flat car · A model of the German Federal Railways' Type SSImas 53 · Car floor made of die cast zinc · Uprights can fold down · Length 22.7 cm

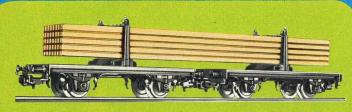


4664

· A model of the German Federal Railways' "Berlin" type Loaded with 2 removable containers · Length 15.6 cm



Scale model freight cars 4600



4665 Lumber car in two parts - Loaded with sawn lumber Length 19.5 cm



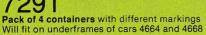
4668
Container car · A model of the German Federal Railways' "Berlin" type container car · Loaded with 2 removable containers · Length 15.6 cm



Scale model freight cars with automatic coupling and advance uncouplers RELEX

We have paid particular attention to the details of these models. The RELEX coupling is essential for realistic switching. When the coupling has been opened by means of an uncoupling track section, the catch of the coupling stays open so that the car can be pushed away or allowed to roll





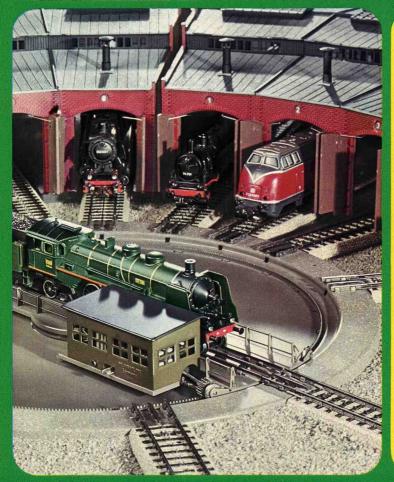




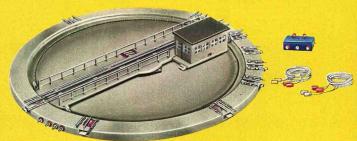




märklin Accessories HO



Remote controlled turntable



186

Turntable set Consisting of turntable with 360 mm outside diameter turning in either direction by remote control, with reversing switch and lead · Current is automatically cut off from all sidings not in contact with the turntable track

A turntable and roundhouse make a steam locomotive layout even more realistic. The turntable is used to turn locomotives round on the spot and get the smoke stack in front. Most steam locomotives are permitted to travel forwards faster than in reverse. The turntable is also used to feed locomotives into the 3 or 6 track round-house or to put them back on the right departure track. Current is disconnected from all sidings not in contact with the turntable track

Adapter track section 2191 (see page 56) enables K-tracks of the 2100 series to be connected to the turntable 7186.

Remote controlled rotating crane with lifting magnet. One motor rotates the boom, another raises and lowers the load. Load hook and lifting magnet enable iron or iron-containing objects to be transferred by remote control. Boom elevation adjustable by hand. Working light in control cab · Height 260 mm · Base 90 × 90 mm · 1 combined control and switch panel Price does not include locomotive, cars or track

Q = 60000

If you want to load and unload your trains properly, you need this crane
The lifting magnet only attracts iron
objects, of course, You are not confined to handling "scrap-metal" and
"pig-iron" however. Screw a couple of
small steel screws inconspicuously into pieces of wood representing freight, and everyone will be surprised to see the magnet lift a wooden box or crate out of a truck onto a freight car.
A rotating crane not only introduces
new, interesting variations into the operation of a model railroad, since all
the operations can be remotely controlled, but it also adds realism to the whole transport process.

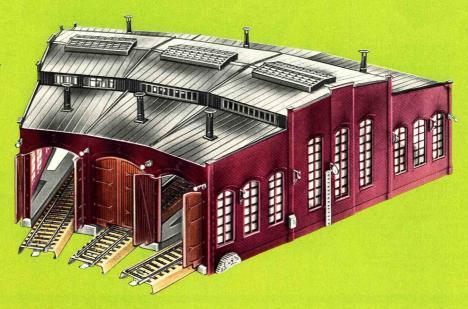


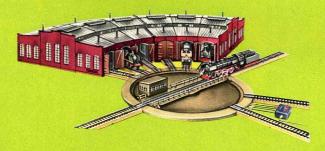
Accessories

Locomotive roundhouse building kit

7288 new

Locomotive roundhouse building kit, made of plastic · With 3 automatically closing doors for 3 tracks · (Track section not included) · Base 442×350 mm · Height 128 mm





This illustration shows the realistic effect obtained by combining 2 roundhouse sections and a turntable.



Suggested combination of roundhouse 7288 with three-way turnout 5214.

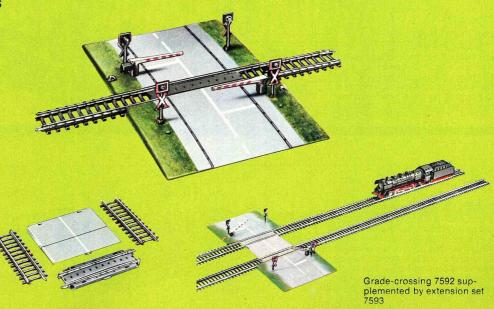
Grade-crossing for K-tracks

7592**K**

Grade-crossing with half-barrier for K-tracks The set consists of 2 solenoid-op-erated barriers, each with 2 red warning lights which come on when the barriers close, and a set of contact track sections (11/2 straight track sections long) · Size of base: 137 × 95 mm

Q = 60201

7593K
Extension set for grade-crossing 7592. One is required for each additional parallel track. Consists of a set of contact track sections (1½ straight track sections long) and a separation piece, adjustable between 43 and 78 mm, which is placed between the two tracks.



märklin Grade-crossings

Grade-crossings for M-tracks

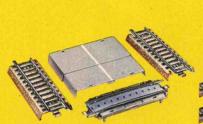
7292 M
Grade-crossing with half-barriers for metal tracks • The set consists of two solenoid-operated barriers, each with two red warning lights which come on when the barriers close, and a set of contact track sections (1½ straight track sections long) · Size of base: 137 × 95 mm



Guarded grade-crossings with automatic barriers. As soon as an approaching train runs on to the contact track sections the barriers close. They open again when the last of the rolling stock has cleared the contact section beyond the crossing.



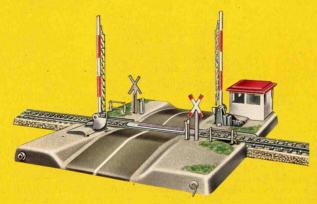
Extension set for grade-crossing 7292 One is required for each additional parallel track · Consists of a set of contact track sections (11/2 straight track sections long) and a separating piece, adjustable between 43 and 78 mm, which is placed between the two tracks



Grade-crossing 7292 supplemented by extension set 7293

7192 M
Fully automatic grade-crossing with M-track sections · The set consists of two solenoid-operated barriers with an attendant's box (capable of being fitted with interior lighting), warning crosses and a set of contact track sections (2 straight track sections long) - Size of base: 180 × 90 mm

The grade-crossing 7192 can also be adapted for use with more than one track by the addition of the extension set 7193. In this case, it still operates automatically.



Contact track sections

5115 straight Length 180 mm

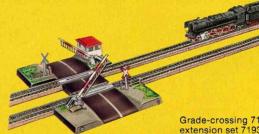
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5116 curved Radius 360 mm

M-track sections 5115 and 5116 are for extending the contact sections of gradecrossings 7192 and 7292. The contact sections can be extended only with track sections 5115 and 5116.

7193 M
Extension set for the fully automatic grade-crossing 7192, one being required for each additional parallel track · Consists of a set of contact track sections and a separating piece which is placed between the track between the tracks





Grade-crossing 7192 supplemented by extension set 7193

7390 **M**

Mechanically operated grade-crossing for a single-track line, including a section of M-track. The barriers are operated by a lever arm which is pressed down by the wheels of a passing train. The length of the grade-crossing track section is the same as that of track section 5106. Base 120 × 180 mm



Adapter track section 2191

(see page 56) enables K-tracks of the 2100 series to be connected to grade-crossings 7192 and 7390

Märklin bridges in plastic for K + M-tracks

With the Märklin bridge parts any With the Markiin bridge parts any size or combination of bridges or ramps can be built. The pier construction elements 7252 and 7253, which fit together like building blocks, enable piers of any height to be built up in steps of 6 mm. By using base plate 7250 it is even possible to raise the height in steps of sible to raise the height in steps of 3 mm. For fixing the pier sections to each other and to the plate the use of flat-head wood screws 7599 is recommended.

Complete instructions for the assembly of bridges are included with bridges 7262 and 7263.



7267 **K** + **M**

Curved ramp section · Gray · Radius of curvature 360 mm · For use with plastic or metal tracks · 3 clips for fixing K-tracks · Length and radius as for track sections 2121 and 5100



7268 **K** + **M**

Straight ramp section · Gray · For use with plastic or metal tracks 3 clips for fixing K-tracks Length



7269 for M only Curved ramp section Gray Radius of curvature 437.4 mm For use with 5200 series metal tracks only · Track curves through 30°



7569 for **K** only Curved ramp section · Gray · Radius of curvature 424.6 mm For use with plastic tracks only (standard circle II, see page 56) 3 clips for fixing track sections Length and radius as for track section 2131



7262 K + M

Truss bridge · Gray · Can be used on its own or with arched bridge 7263 · For use with plastic or metal tracks · 3 clips for fixing the K-tracks, and instructions for building the bridge Height 45 mm Length 180 mm

7263 K + M

Arched bridge · Gray · For use with plastic or metal tracks · 6 clips for fixing the K-tracks and instructions for building the bridge · Maximum height 117 mm · Length 360 mm



7200 series to bridges



7250 Base plate .5 mm thick Light brown Can be used as foundation



7251

3 mm thick Light brown Can only be used in conjunction with 7250

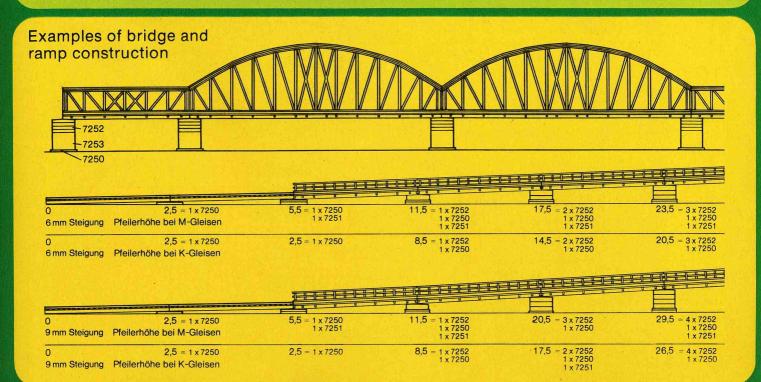


Pier · 6 mm high · Gray · Suitable for building ramps with 6 mm rise from one pier to the next

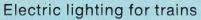


Pier · 30 mm high · Gray

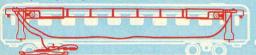




marklin Train lighting



7197, 7320, 7325, 7326





7077



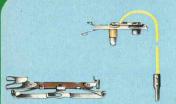
7198

7074

7076

7079









7322
Interior lighting set for the TEE coach 4090 · Consists of current pick-up shoe 7198, 2 lamp sockets and 2 bulbs - Installation instruc-tions are included

 $= 7175 \quad Q = 60015$

076

Current pick-up shoe for taillight 7079 when used on passenger cars 4000, 4040 and on two-axle freight

Interior lighting set for most ex-press coaches With socket for connecting addi-tional lighting sets · Light bulb = 60000

198

Current pick-up shoe for interior lighting set 7077 = 7175

079

Taillight including bulb · Clips onto buffer · For use on cars with metal buffers only · For connecting it up, 7074, 7076, 7077 or 7198 is required

= 60001 (red)

7074
Interior lighting

set for passenger cars 4004, 4005, 4079 and 4080 With socket for connecting additional lighting sets · Light bulb

Q = 60020

Interior lighting set for coaches 4007 and 4008 · Light bulb

 $= 7175 \ Q = 60010$



Interior lighting set for express coaches 4072, 4073 and 4076. Consists of current pick-up shoe 7198, light diffuser, 2 lamp sockets and 2 bulbs. Installation instructions are included

<u>←</u> = 7175 Q = 60015



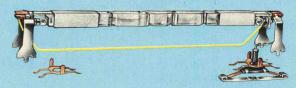
Interior lighting set for TEE coaches 4085 and 4087 and for express coaches 4049, 4054, 4064, 4066 and 4069. Consists of current pick-up shoe 7198, light diffuser, 2 lamp sockets and 2 bulbs - Installation instructions are included

= 7175 Q = 60015



Interior lighting set for express coaches 4091, 4092, 4093 and 4094 marked "A" on bottom of car, for TEE coaches 4095, 4096, 4097, 4099 and for the express sleeping car 4150. Consists of current pick-up shoe, light diffuser, 2 lamp sockets and 2 bulbs. Installation instructions are included

Q = 60015



7326 new

Interior lighting set for express coaches 4136 and 4137 Consists of current pick-up shoe, light diffuser, 2 lamp sockets and 2 bulbs · Installation instructions are included

= 41494 Q = 60015

Light bulbs

for the following items

60000 4

2161, 3015, 4044, 4077, 4081, 5117, 5128, 5137, 5140, 5202, 7036, 7037, 7038, 7039, 7040, 7041, 7042, 7051, 7077, 7191, 7280, 7281, 7282, 7283, 7284

60001

3028, 3071, 3076, 4028, 7079, 7188, 7339 (red)

60002

7188, 7339, 7539 (green)

60010 3000, 3003, 3016, 3021, 3031, 3064, 3065 3072, 3095, 4018, 4506, 5113, 7046, 7047 7048, 7323

60015

3022, 3028, 3030, 3034, 3035, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3050, 3054, 3055, 3056, 3057, 3058, 3060, 3062, 3066, 3067, 3068, 3071, 3074, 3075, 3076, 3077, 3078, 3083, 3084, 3085, 3086, 3089, 3092, 3093, 3094, 3096, 3098, 3099, 4028, 4053, 4060, 4062, 4089, 6631, 7197, 7320, 7322, 7324, 7325, 7326

60020

60200

60201

7239, 7240, 7241, 7292, 7592

60202

7187, 7236, 7237, 7238, 7239, 7240, 7241 (green)

60204

7187, 7236, 7237, 7238, 7240, 7241 (orange)

Non-skid tires

for the following locomotives

7152

3083, 3085, 3086, 3089, 3092, 3093, 3094, 3098, 3099

71533003, 3015, 3016, 3022, 3030, 3034, 3035, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3050, 3054, 3056, 3057, 3058, 3064, 3065, 3084, 3095, 3096

7154

3000, 3021, 3028, 3031, 3044, 3055, 3060, 3062, 3066, 3067, 3068, 3071, 3072, 3074, 3075, 3076, 3077, 3078, 3080, 3087, 3090

Current pick-up shoes

for the following locomotives, cars and lighting sets

164

3016, 3022, 3028, 3034, 3035, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3050, 3054, 3055, 3056, 3057, 3058, 3066, 3067, 3068, 3071 front, 3072, 3074, 3075, 3076, 3077, 3084, 3085, 3096, 4028

7175

3015, 3071 rear, 4018, 4044, 4053, 4077, 4081, 4089, 7197, 7198, 7320, 7322, 7323,

7183

7185

3000, 3003, 3030, 3031, 3044, 3060, 3062, 3064, 3065, 3078, 3080, 3083, 3086, 3087, 3089, 3090, 3092, 3093, 3094, 3095, 3098, 3099, 4060, 4062

Reverser unit springs

7194

Pack with 5 springs for reversing switches

Instructions for fitting non-skid tires, current pick-up shoes, light bulbs and reverser unit springs will be found in the "instructions for use"



Pantograph current collector with fixing screw



7219 Single bar current

collector with fixing screw · The catenary system must be very carefully set up when 7219 is used



Pair of carbon brushes for most

HO gauge locomo-

60035

Pair of carbon brushes for locomotive 3015

60146 Pair of carbon

brushes for locomotives 3034, 3035, 3037, 3038, 3039, 3042, 3056, 3057, 3058, 3084 and 3085



Smoke set · Consisting of smoke unit (to fit locomo-tives 3084 and 3085), substitute steam pipe, clean-ing wire, pair of tweezers and a capsule of smoke



Smoke set · Con-

sisting of smoke unit (to fit locomo-tives 3083, 3092 and 3093) and a capsule of smoke fluid



Smoke fluid in plastic capsule as refill for smoke sets 7226 and 7227

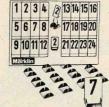


Bottle of oil · Contains about 10 cc lubricating oil for locomotives and cars



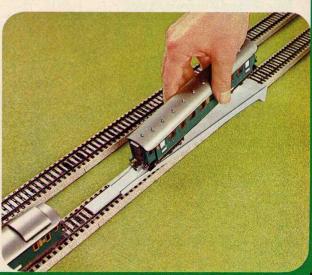
7001

Coupling gauge made of nickel plated steel sheet for checking locomotive and car couplings



Number plate set · For identifying turnouts and signals on the track layout · Con-tents: 12 slotted bases, number plates 1-24 which can fit in the slots

7224
Re-railing device
Made of plastic
Makes it easier to set multi-axle vehicles on the track Length 300 mm Height 25 mm



märklín HO

The Märklin metal track system

How the different Märklin M-track circles compare

This diagram shows the three Märklin M-track circles, with their radii, distances apart from each other, and curvatures, and also the number of track sections comprising a semicircle (Fig. 1).

comprising a semicircle (Fig. 1).

1 circle 5200 = 12 track sections
1 circle 5100 = 12 track sections

1 circle 5100 = 12 track sections 1 circle 5120 = 8 track sections Concentric circles

Concentric circles can be constructed by using track sections of the 5100 and 5200 series. This gives a distance between track centers of 77.4 mm (measured from contact stud to contact stud) and a clearance between tracks of 39 mm. The turnouts 5202, 5221 or 5140 are used to cross from the inner to the outer loop (Fig. 2).

M-turnouts and their use

The electromagnetic turnouts 5137, 5140 and 5202 and the double slip switches 5128 and 5207 are operated by double solenoids. If a vehicle approaches the turnout from the wrong direction, its wheels open up the closure rail, so that derailment does not take place. The turnouts return automatically to their initial setting. Further turnouts can be joined directly on to either end of a turnout section.

Branches using 5100 series turnouts

When track section 5100 is fitted as a reverse curve onto the branch track of turnout 5137, the resulting distance between track centers is 96.4 mm. With the through track extended by track section 5106, the two branches have exactly the same length. Length of this assembly is 2×180 mm = 360 mm, i.e. the same as 2 track sections 5106 (Fig. 3).

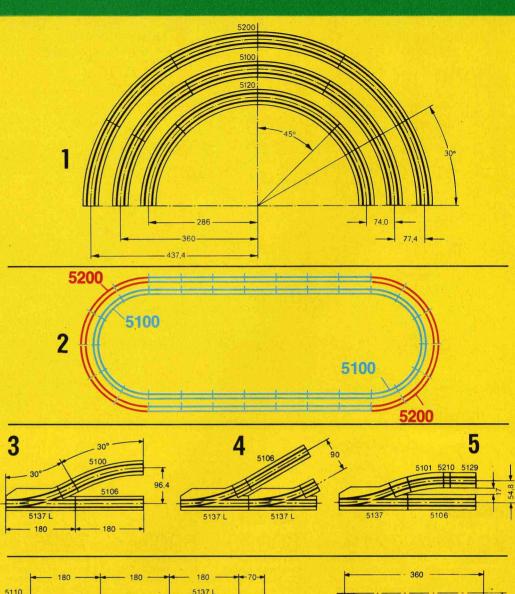
Branching of a parallel track section using turnouts 5137 (Fig. 4).

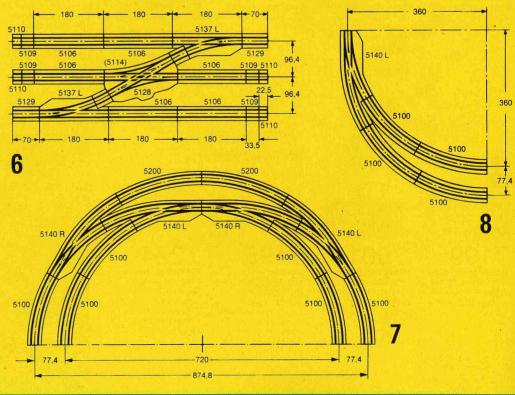
When the track sections supplied are used as reverse curves the distance between track centers is reduced from 96.4 mm to 54.8 mm (Fig. 5).

If the tracks of a 3- or more track layout are to be interconnected, retaining the 96.4 mm distance between track centers it is necessary to use crossing 5114 or double slip switch 5128. The double slip switch has the advantage that a train directed by a turnout on one of the outer tracks can be switched onto the center track. The simple crossing interconnects only the two outer tracks and does not enable transfer to the inner track (Fig. 6).

Märklin curved turnouts 5140
These turnouts were developed to enable track interconnections to be made on the curve, hence saving space. Close examination of the diagram will show that a standard circle track section (5100) is fitted to the single track end of each curved turnout, even when this lies on the large concentric circle. In other words, the longer track section 5200 of the large concentric circle is not used, as with this the track center separation of 77.4 mm and the coincidence of the track section joints would be lost. The curved turnouts can be used to interconnect the standard circle only with the large concentric circle (Fig. 7).

Branch using a curved turnout 5140 (Fig. 8).





Features of the M-track (M = metal track body)

Here we show our proven metal track. The special feature of this track is the covered current feeder in the roadbed, with its stud contacts which project upwards in the center of the track through the crossties. The long pick-up shoes between the locomotive wheels slide over these contacts. Each track section

consists of the roadbed, which looks very realistic with its rock ballast and strong cross-ties and the two rails, which are electrically connected to the roadbed. Each rail has one jointing clip, at opposite ends of the track section.

The current feeder has spring contact tongues at each end. These lock together when the track sections are joined. At the same time the jointing clips slide onto the rails. The result is the solid electrical connection

typical of the Märklin system combined with good mechanical rigidity of the assembled layout.

The screws needed for mounting the track using sound-absorbent strips 7171 (see page 55) are included in the pack. For track mounting without sound absorbent strips we recommend the use of screws 7299 (see page 55).

Branches using turnouts 5200

Track section 5206 is used as the reverse curve for turnouts 5202. The distance between track centers is 77.4 mm, the same as the distance between the standard and the large concentric circles. If the through track is extended by track section 5106, it terminates in line with the end of track section 5206 (Fig. 9).

Branching of a parallel track section using turnouts 5202 (Fig. 10).

Parallel track sections with turnouts 5202 (Fig. 11).

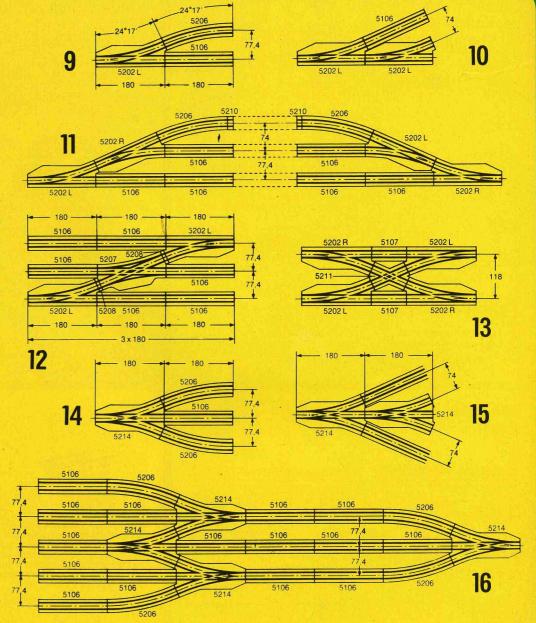
If the tracks of a 3- or more track layout are to be interconnected, retaining the 77.4 mm distance between the centers of the normal circle and the large concentric circle tracks, the double slip switch 5207 is required. An advantage of this double slip switch is that the straight sections are exactly the same length as straight track sections 5106. But note that the diagonally running track of the double slip switch 5207 must be made up using the track sections 5208, 8 mm in length (Fig. 12). These are supplied with 5207.

Interconnection of parallel tracks (Fig. 13)

Märklin three-way turnout 5214 In the Märklin three-way turnout 5214, two simple turnouts 5202 are combined, the unit being the same length as a turnout 5202 and hence the same length as a straight track section 5106 (full length: 180 mm). The three-way turnout can thus save a lot of space, which can be particularly helpful in station tracks and in groups of crossings (Fig. 14).

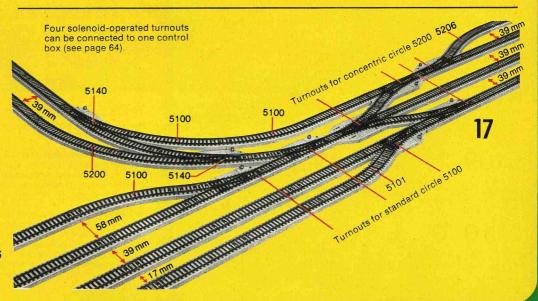
This figure shows how the Märklin threeway turnout enables a main track and 4 branch tracks to be formed in the least possible space (Fig. 15).

Track branching using three-way turnouts (Fig. 16).



Summary of examples of use of Märklin M-turnouts (Fig. 17)

You will find further examples of possible combinations and methods of use in publication 0392, "HO gauge layouts for M-tracks 5100/5200" (see page 66).



märklin

M(=metal)-tracks for trouble-free assembly

Curved track sections 5100 for standard circle

Twelve 5100 track sections make up a circle with an outside diameter of 76 cm.



Full length = 30°

1203315301

Half length = 15°

101101

5102 Quarter length = 7° 30'



Curved feeder track section 5103 Full length = 30° 2 connecting leads

5147 Curved switching track section Half length = 15°

Switching track sections

Switching track sections (5146, 5147, 5213) can be used to control one operation in each direction of travel-i.e. two altogether. Each operation may apply to one solenoid-operated item or to several simultaneously. The switching track sections are triggered by the current pickup shoes on locomotives or cars.



Small radius track for branch lines and industrial railroads

Curved track section \cdot Full length = $45^{\circ} \cdot 8$ track sections make up a circle an outside diameter of 61 cm

Curved track sections 5200 for large concentric circle

Twelve 5200 track sections make up a circle with an outside diameter of 91.2 cm



Full length = 30°



5206 Length = 24° 17' Matches the curve of turnouts 5202 and 5221

TATUTUTUTE

Half length = 15° 5201

JAMES.

Length = 5° 43' This section, used with section 5206, equals track section 5200

Curved switching track section

circle - Half length = 15° - Assembly and use as for 5146 and 5147



5208

Straight make-up section Length 8 mm

Straight make-up section Length 16 mm



Crossing

Crossing angle 481/2

Length 98 mm · The center conductors of the crossing are electrically isolated from each other

Straight track sections 5100



5106 Full length = 180 mm



Half length = 90 mm



5129 Make-up section Length 70 mm



5108 Quarter length = 45 mm



 $\frac{3}{16}$ length = 33.5 mm 5109



1/8 length = 22.5 mm



Straight feeder track section Full length = 180 mm 2 connecting leads



5 | 3 | section Full length = 180 mm · Built-in radio interference suppres-

sor · 2 connecting leads · One 5131 should be used for each traction current circuit



Straight switching track section · Half length = 90 mm



Crossing Length 193 mm = 30° The center conductors of the crossing are electrically isolated from each other



Uncoupling track section for releasing automatic couplings · When the button on the control box is pressed, the sole-noid-operated ramps on either side of the stud contacts are raised, releasing the couplings · 2 connecting leads · Length of track 90 mm



Light standard to go with the uncoupling track section Die cas zinc The light shows while uncoupling is in process · Height

Q = 60010







The coupling is opened by raising

The RELEX coupling is designed to stay open after uncoupling, enabling cars to be pushed or dropped off at any desired point without the coupling closing again.

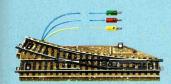
Railroading can only become really true to life when cars no longer have to be uncoupled manually from one another or from locomotives. This can be achieved by the use of uncoupling track sections, with their

light standards which indicate when the uncoupler is being operated. That not only looks right, it makes uncoupling easier too, when the coupling concerned, whether loco-motive/car or car/car, is next to the signal standard, press the appro-priate button on the control box once and the coupling will open, leaving the disconnected car or sec-tion of the train standing still. Cars with the advance uncoupler (RELEX) can then be pushed back again by the locomotive under remote control without the coupling closing.

M(=metal)-turnouts and accessories

Märklin M-turnouts 5100 and 5200 with sprung points

with double solenoid operation for remote control





Pair of solenoid-operated turnouts Consisting of one right-hand and one left-hand turnout. Each with double solenoid. Working signal lights.

The track lengths are the same as those of track sections 5206 and 5106 = 60000





Pair of manually-operated turnouts Track dimensions as for 5202

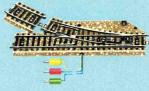


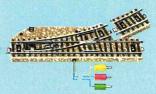


Pair of solenoid-operated curved turnouts · Consisting of one righthand and one left-hand inside curve turnout, each operated by double solenoid · Working signal lights Length and curvature of tracks as for track section 5100 - Length of through track 265.4 mm

= 60000

If curved turnouts are included in the layout, trains can be switched from one track to another while still on the curve. The narrow interval (77.4 mm) between the parallel curves of the track is maintained and the saving in space makes a longer overtaking section possible.



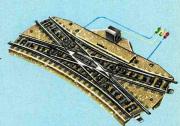


5137
Pair of solenoid-operated turnouts
Consisting of one right-hand and one left-hand turnout, each operated by double-solenoid · Working signal lights · Lengths of the straight section

180 mm · Radius of branch track 360 mm · Can be supplemented by the track section 5102 supplied, to equal section 5100 = 60000

5128

Double slip switch · Crossing angle 30° · Operated by double solenoid · Working electric signal lights which change to indicate the setting of the points (crossing or curve). Hand lever to permit manual setting. Length of straight section 193 mm. The curve is the same as for track section 5100 Q = 60000

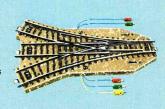


5207

Double slip switch . Enables the track spacing of 77.4 mm to be maintained Operated by double solenoid · Handoperation by double soleroid - Hand-operating lever on actuator case Length of straight section 180 mm - The curve is the same as for 5202, 5221 and 5206 - 2 make-up sections 5208, each 8 mm long, are included



Symmetrical three-way turnout operated by 2 double solenoids . 2 hand levers for manual setting of the two pairs of points · 5 connecting leads · Length of straight section 180 mm · Radius of the branch tracks 437.4 mm, the same as for the concentric circle · When used in conjunction with track section 5206, the 77.4 mm track center spacing can be maintained on both sides





Bumper, riveted steel type Clipped on to 70 mm long track section



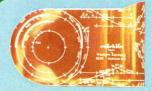
Bumper, riveted steel type, with working signal light - Clipped on to 70 mm long track section = 60000



Countersunk wood screws for mounting metal tracks In packs of 200

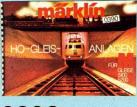


Sound absorbent strips in packs of 50 with 50 countersunk wood screws, for quiet train operation . If the track is laid out on a plywood board, the trains naturally make a certain amount of noise, though not excessive, as they move, to the rhythm of the wheels If it is desired to damp this noise down to about half, it is recommended that the tracks, turnouts and crossings should be laid on sound-absorbent strips This makes no difference to the mounting of the catenary system



206

Track planning stencil for Märklin HO gauge M-track sections (series 5100/5200) · Track sections, turnouts, crossings etc. are marked out on the stencil in 1:10 scale, and with a sharp pencil they can easily be reproduced on paper



Märklin track layouts, HO gauge, for M-tracks 5100 and 5200 · With full-color illustrations and detailed track plans of 16 suggested layouts · 56 pages

A full description of these booklets appears on page 66



Märklin track layouts, HO gauge, for M-tracks 5100 and 5200 · Simple track plans 24 pages

mark in K(=plastic)-tracks

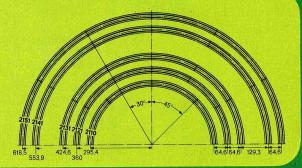
Märklin K-tracks 2100 (K=plastic ties)

The stud-contact system, of which the advantages were described on page 53, is also used in the Märklin 2100 series K-tracks. With this track the rails are laid on plastic cross-ties. The stud-contacts project through the ties from below, ensuring very reliable current pick-up. The six-fold connection between one track section and the next comprises rail jointing clips, sprung connectors for the center conductor and an additional claw coupling on the cross-tie. Countersunk wood screws 7599 (see page 57) are recommended for fixing the K-tracks to a base.

The five Märklin K-track circles are.

2110 = 8 track sections 2121 = 12 track sections 1 industrial circle 1 standard circle I

1 standard circle II 2131 = 12 track sections large circle l 2141 = 12 track sections 2151 = 12 track sections 1 large circle II



Straight track sections



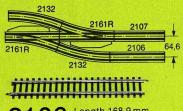
Half length = 90 mm 2101

Full length = 180 mm

2102 Quarter length = 45 mm

2104 1/8 length = 22.5 mm

Straight make-up sections



2106 Length 168.9 mm

2107 Length 156 mm



Length 35.1 mm

Crossing · Crossing angle 45° · Length of straight sections 90 mm



Crossing · Crossing angle 22° 30′ · Length of straight sections

Straight feeder

track section Full length = 180 mm

track section

2 connector terminals marked "O' and "B" for connecting the track

Straight feeder

Similar to 2190, but has in addition a built-in capacitor for radio interference suppression · One 2192 should be used for each traction current circuit

track section Full length

= 180 mm · Enables track sections of the 5100 and 5200 series to be connected to the 2100 series



Uncoupler track

section Half length = 90 mm
For releasing automatic couplings · Incorporates solenoids which permit the uncoupler ramp in the center of the track to be operated from the control box



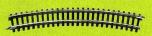
Straight switching track section Half length = 90 mm

Curved track sections

Radius 295.4 mm · Industrial circle



Radius 360 mm · Standard circle I



Full length = 30°

Half length = 15°

2124 Quarter length = 7° 30′

titilli iliti

Curved switching track section Half length = 15° Radius 360 mm

Using the switching track sections (2129, 2139 or 2199) solenoid-operated items can be controlled automatically by a moving train. Each track section, activated by the train's pick up shoe, can trigger two different and independent switch functions, depending on the direction of notion.

Radius 553.9 mm · Large circle I

Radius 424.6 mm · Standard circle II

Full length = 30°



 $^{3/4}$ length = 22° 30

2133 Half length = 15°

Quarter length = 7° 30′

 $1/8 \text{ length} = 3^{\circ} 45'$

Curved switching track section Half length = 15° Radius 424.6 mm

The control pulses are fed out via two terminals isolated from each other.

Radius 618.5 mm · Large circle II

2141 Full length = 30

Full length = 30°

K(=plastic)-turnouts and accessories

Märklin K-turnouts 2100 with sprung points



Pair of solenoid-operated turn-outs · Consisting of one right-hand and one left-hand turnout,



Pair of manually-operated turn-outs · Consisting of one right-hand and one left-hand turnout



Pair of curved solenoid-operated turnouts · Consisting of one right-hand and one left-hand inside turnout, each operated by double sole-



each operated by double solenoid Working signal lights · Radius of branch track 424.6 mm · Length of straight track section 168.9 mm Q = 60000

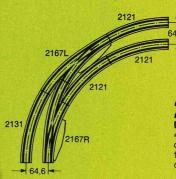


Radius of branch track 424.6 mm Length of straight track section 168.9 mm · Operated by hand lever

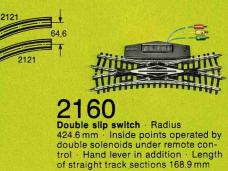




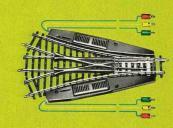
noid · Length and curvature of branch track are the same as for track section Length of through track



Example of use of 2167



Symmetrical three-way turnout operated by 2 double solenoids 2 hand levers for manual setting of the two pairs of points. Length of straight track section 168.9 mm. Radius of branch tracks 424.6 mm





Bumper, riveted steel type · For clipping on to the rails · Length 38 mm · Oval-head countersunk wood screw included



Ground connector with terminal, for connecting the ground lead to 2100 series track sections

7504



Connector for center conductor with terminal Is pushed onto the contact strips at the joint of 2100 series track sections



Center conductor isolator · Is fitted between the contact strips at the joint of 2100 series track sections, to separate the electrical circuits on each side



Countersunk wood screws for fixing plastic tracks · In packs of 200



Track planning stencil for Märklin K-tracks (2100 series), HO gauge Track sections, turnouts, crossings etc are marked out on the stencil and can easily be reproduced on paper by using a sharp pencil



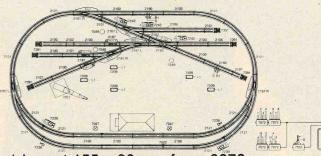
Märklin track layouts, HO gauge, for 2100 series K-tracks · An outstanding guide · 52 pages



Märklin track layouts, HO gauge, for 2100 series K-tracks · Simple track plans · 20 pages
For full description of these booklets

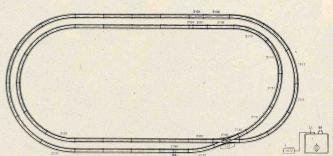
see page 66

HO track patterns for K-tracks from publications 0372 and 0379



1 layout 155×90 cm. from 0372

	4. 100					
16-2100	2-2161	4-7072	3-7101	38-7115	37-7132	
4-2101	1-2167	5-7209	1-7102	15-7117	48-7135	
2-2102	2-2192	2-7236	1-7103	38-7131	37-7137	
3-2106	3-2197	2-7239	1-7105			
1-2107	2-7047	3-7242	8-7111			
14-2121	3-7048	6-7391	12-7112	1 transformer 30 VA		
1-2160	1-7051	9-7000				



4 layout 186×90 cm, from 0379

200							
5-2100	1-2107	1-2132	1-7072	2-7131	1-7102		
2-2101	2-2110	1-2134	1-7111	1-7135	1-7105		
1-2104	9-2121	1-2160					
2_2106	11_9131	1_0100	1 transformer 30 V/ (16 V/A)				

märklin HO

Signals for M(=metal)-tracks



To make the railroad operation truly realistic

The Märklin range of signals for M-tracks

There should be a few suitably ar-ranged signals, even on a small rail-road layout, and not just because the play of red, green and amber lights looks so attractive. You can regulate the traffic by setting the signals to red and green, by remote control, and the signals can control the stopping and starting of the trains

And that's not all: if you just include switching track sections and connect them to the signals, one train can control another automatically via the

signals without any chance of a collision (Block or high-density operation) In this way, while some trains travel in accordance with the program, you are free to see to other things, e.g. switching

The installation of signals is simple. Their base plates are clamped under straight or curved metal track sections, and the leads are connected as shown in the instructions supplied. The signals are connected electrically to the control boxes (7072, see page 64) in such a way that it can be seen from the position of the push buttons whether the signals are at "stop" or

Anyone who wants his layout to be realistic should instal distant signals as well as the home signals described They are mounted in the same way as home signals and are simply connected to them by a lead.

With one control box 7072 it is possible to operate, for example, 4 home signals 7039 together with their distant signals, and also groups of signals and turnouts.

Home and siding signals have traction current switches, which can be used to control the current in the track center conductor or overhead line.

The silver contacts in the switches enable them to cope with heavy loads.

The signal connector leads are fitted with color-coded plugs, which have side sockets for connecting a second plug. There are also sockets in the signal base for connection of the over-head line and grounding leads. Each pack includes small bulbs for the lighting system, insulators for the cur-rent conductor, a base plate and detailed installation instructions

Distant signals without train control



Märklin signa manual for M-tracks For detailed description see page 66



7036 Distant signal with movable disk Signal lights change from amber/amber to green/green Double solenoid Used with home signal 7039 · Width 28 mm Length 65 mm Height 73 mm Q = 60000



7038 Distant signal with movable disk and additional movable semaphore arm Light sequence as for 7036 or from amber/amber to amber/amber/ green · 2 double solenoids · Usually used with home signals 7040 or 7041 · Width 28 mm · Length 65 mm · Height 73 mm Q = 60000



7187 Color light distant signal Used only in con-junction with color light home signal 7188 · Signal lights change from lights change fr green/green to amber/amber using 4 bulbs Width 16 mm Length 11 mm Height 60 mm @ = 60202 green 60204 orange

Signals with train control for catenary and track supply systems



Universal remote control switch

with 2 single-pole switches and one changeover switch for various cir-It can do many kinds of job (up to 3 functions simultaneously), and will carry them out reliably and automatically; for example it can cause a moving train to switch station lighting on and off, or it can override the control of trains by signals for trains traveling in the opposite direction, or many other things. Lots of possible applications are shown in the signal manual 0342 and in the installation instructions. Operated by double solenoid. Can be actuated by switching track section, control box or hand lever · Width 30 mm · Length 70 mm · Height 8 mm



7039

Home signal with one semaphore arm Signal light changes from red to green · Double solenoid · Width 27 mm · Length 70 mm · Height 125 mm



7040

Home signal with 2 coupled semaphore arms Sig-nal lights change from red to green/ amber · Double solenoid · Width 27 mm · Length 70 mm · Height 125 mm





7041

Home signal with 2 independent semaphore arms Signal lights change from red to green or red to green/amber 3 solenoids Width 27 mm Length 97 mm Height 125 mm Q = 60000



7188

Color light home signal · Sig-nal lights change from red to green Double solenoid Lighting by 2 bulbs Additional hand control lever Pair of sockets for con-nection of distant signal 7187 Width 28 mm Length 70 mm Height 90 mm

= 60001 red 60002 green



7042

Yard and siding signal Mast with movable front and rear disks · Double solenoid · Width 28 mm · Length 70 mm · Height



7339

Color light home signal Signal lights change from red to green by manual operation, which at the same time controls the current to the section of metal track joined on to the signal Additional track section 90 mm long with interrupted central conductor · Width 55 mm Length 90 mm Height 90 mm

= 60001 red 60002 green

märklin

Signals for K(=plastic)and M(=metal)-tracks

Märklin signals 7200 for K+M-tracks

The color light home signals and siding signals of the 7200 series have switches which enable them to control traction current in the catenary system and the track center conductor independently. The sig-nal masts, and the lighting unit of yard + siding signal 7242 can be separated from the traction current switch units and set up by themselves. The bracket 7230 is then required for fixing the masts. Ground connection is by the base plates or leads supplied, when used with 2100 series track sections, and via the leads when used with 5100 and 5200 series track sec-

7236
Color light distant signal · Signal lights change from amber (wen) amber/amber (Vr0) to green/green (Vr1) using 4 bulbs · Only used in conjunction with color light home signal 7239 · Includes fixing bracket 7230 and base plate Width 16 mm · Length 28 mm Height 67 mm

= 60202 green 60204 orange



7237
Color light distant signal · Signal lights change from amber/amber (Vr0) to amber/green to amber/green (Vr2) using 4 bulbs · Used only in conjunction with color light home signal 7240 · Includes fixing bracket 7230 and base plate · Width 16 mm · Length 28 mm · Height 67 mm

= 60202 green 60204 orange



7238

Color light distant signal · Signal lights change from



to green/green (Vr1) or amber/ green (Vr2) using 4 bulbs · Double solenoid operation for the amber/ green setting · For use with color light home signal 7241 · Includes base plate · Width 30 mm · Length 70 mm · Height Height

amber/amber (Vr0)

= 60202 green 60204 orange

7239

signal · Signal lights change from red (Hp0) to green (Hp1), and traction current



controlled by double solenoid operation -2 bulbs · Addition-al hand lever · Includes base plate Width 30 mm Length 70 mm Height 90 mm

= 60201 red 60202 green

Center conductor isolators, center conductor connectors and instructions are included with home signals 7239, 7240 and

7240 Color light home signal Signal lights change from red (Hp0) to green/ amber (Hp2), and traction current



controlled by double solenoid operation · 3 bulbs · Additional hand le-

ver · Includes base plate · Width 30 mm · Length 70 mm · Height 90 mm

= 60201 red 60202 green 60204 orange

7241

Color light home lights change from red (Hp0) to green (Hp1) or green/ amber (Hp2), and



traction current controlled by dou-ble solenoid operation with an additional solenoid for the green/amber setting 3 bulbs 2 hand control levers in addition Includes base plate Width 30 mm Length 95 mm Height 90 mm

= 60201 red 60202 green 60204 orange

7230

Fixing bracket · Is required if the mast of light signals 7238, 7239, 7240, 7241 and the yard + siding signals 7242 are set up nal 7242 are set up separated from the traction current control units

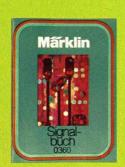


Yard and siding signal, dwarf version white/white (Sh1) and traction current controlled by double solenoid operation

=60200



Signal lights change from red/red (Sh0) to 2 lights bulbs provide the signal lights Additional hand control lever · Width 30 mm · Length 70 mm · Height 18 mm



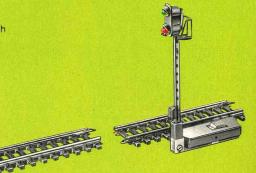


Universal remote control switch with 2 single-pole switches and one change over switch for various circuits. It can do many kinds of job (up to 3 functions simultaneously), and it will carry them out reliably and automatically; for example it can cause a moving train to switch station lighting on and off, or it can override the control of trains by signal for trains traveling in the opposite direction, or many other things · Lots of possible applications are shown in the signal manual 0361 and in the installation instructions · Op-erated by double box or hand lever · Width 30 mm · Length 70 mm · Height 8 mm

7539 for K-tracks only

Color light home signal · Signal lights change from red (Hp0) to green (Hp1) by manual operation, with simultaneous con-trol of the traction current in the track section joined on to the signal · An additional 90 mm long track section with interrupted center conductor · Width 50 mm · Length 90 mm · Height 90 mm

= 60001 red 60002 green



0361

Märklin signal manual for K-tracks For detailed description see page 66

Station and street lighting

Q = 60000



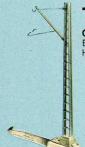
Q = 60000

Q = 60010





Märklin catenary system for M-tracks 5100/5200

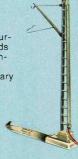


7009 Catenary mast Basic element Height 100 mm



Feeder mast for supplying current, with 2 leads and including instructions for using the catenary

system · Height 100 mm



Feeder mast for signals, with one lead · Height 100 mm



Electric locomotives can draw current from the overhead line with the same reliability and positive electrical contact as from the track center conductor stud contacts. On the locomotive, all that has to be done is to change over the position of a small lever. With the Märklin system, it makes no difference which way round the locomotive is put on the track. It's a good idea to connect the catenary system to a separate transformer, as two trains can then be run independently on the same track, one using the overhead line and one using the track stud contacts.

Catenary set for train control for signals of the 7000 series which are not mounted on tower masts. Consisting of 2 feeder masts 7012, 2 insulator sections 7022 and 2 overhead wire contact sections 7014

Feeder mast for supplying current, with 2 permanently connected leads, one red, one brown - Additional brown lead Built-in capacitor for radio interference suppression · Instructions for setting up the catenary system are included · Height 100 mm

The overhead wires, with their tensioning and cross-span connectors are arranged exactly like the real thing. That is why the Märklin catenary system looks so realistic, spanning the open stretches of railroad and especially around stations. The contact wire sections can be used with both M-tracks and K-tracks. The sprung con-tact wire holders on the masts ensure reliable contact with the contact wires

The push-fit connectors, on contact wire sections 7013 and 7023 for example, enable the contact wires to be slid together to make up the right length.

The contact wires are flexible and can adapt to any curve without the need for special fittings. The longest contact wire section 7019 was designed for use on long straight sections.

Using the tower masts 7021 and the cross-spans 7016 it is possible to span the widest of station or yard track complexes. For 4 tracks one cross-span and two tower masts are required, then one cross-span and one tower mast for every 4 additional tracks. For single tracks outside a pair of masts, the overhead line can be suspended from the cantilever support arm 7525.

Märklin catenary system for K+M-tracks



Tower mast with recesses for hooking in cross-spans 7016 or 7017 and the cantilever support arm 7525 for the overhead line For tower mast with arc light see page 61 Height with M-tracks 157 mm Height with K-tracks 154 mm

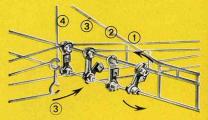


For attaching to the side of plastic bridges and ramp sections · Height 97 mm



Catenary system connector lead for connection to signals when tower masts are used, and for supplying current to any point Length 600 mm

- 0



7004

Fastening kit · Consisting of 5 bolts, 5 nuts and 5 washers Used only in exceptional cases where it is not possible to make a reliable contact by the usual method of assembly



Contact wire insu-lation · For insulating sections of contact wire from cross-spans - One required for each track and cross-span 15 × 6 mm



Contact wire section for push-fit connection, especially for use at turnouts Length 240 mm



Contact wire section · Female portion (for push-fit connection) Length 115 mm



Contact wire section Male portion (for push-fit connection) Length 115 mm

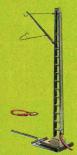
All contact wire sections are nickel-plated.

For realistic operation of electric locomotives, and for operating two trains on one track

Märklin catenary system for K-tracks 2100



Catenary mast -Basic unit for construction of a catenary system over



with a red lead and plug attached to the mast Brown lead with plug · In-cludes instructions for setting up the catenary system Height 97 mm



with a red lead attached, for connecting the catenary system to the home signals Height 97 mm



7501 Feeder mast with two permanently attached leads, one red, one brown · Built-in capacitor for radio interference sup-pression Includes instructions for setting up the cate-nary system · Height 97 mm

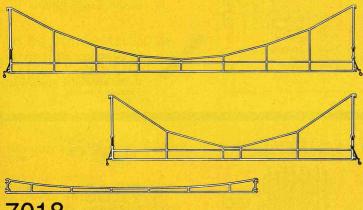


Cantilever support arm for suspending single or double overhead contact wires, in conjunc-tion with tower mast 7021 (see illustration)

7505

Catenary set for train control for 7200 series color light home signals which are not mounted on tower masts. Consisting of 2 feeder masts 7512, 2 interrupted track sections 7022 and 2 contact wire sections 7014 · For use with 2100 series track

Märklin catenary system for K+M-tracks



Contact wire section for straight and curved track sections Length 270 mm



Insulator section · Male portion (for push-fit connection) for interrupting the overhead line current · Length 115 mm

Using contact wire sections 7014, 7015 and 7023 it is possible to make up any length from 177 to 360 mm. The push-fit

p a a a a a a

Make-up section for push-fit connection · Length 100 mm

connections can be strengthened if necessary using the fastening kit 7004 (see illustration).

Cross-span · For hooking into tower masts · Spans about 4 tracks · Span

Cross-span For hooking into tower masts · Spans about 3 tracks · Span 280 mm

Contact wire section for use over the inner track curve on curved double track sections of the 2100 series · Length 235 mm



Contact wire section for straight track sections only Length 360 mm

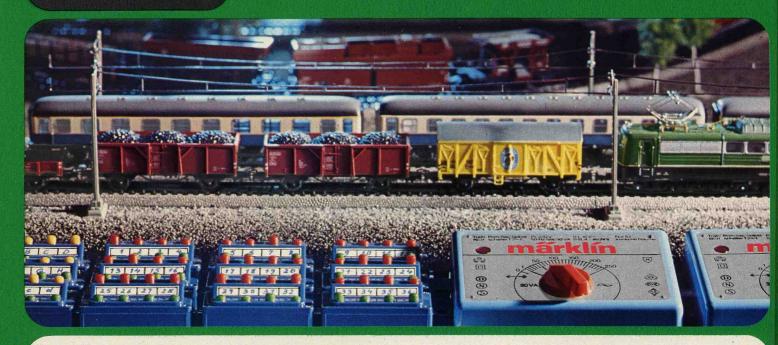


All contact wire sections are nickel-plated.

Crossing section for 2158, 2159, 2160, 5114 5128, 5207 and 5211



marklin Accessories



Usual colors of electrical leads in Märklin circuits:

Red = traction current connection (from transitems former to track center conductor or overhead line)

Brown = ground lead from tracks, lighting sockets or control box to transformer

Yellow = lighting and sole-noid-operated

Blue = return lead from sole noid-operated items to control box or switching track (with green, red and orange plugs)

Electrical leads

The copper conductor in these stranded leads consists of 24 separate strands each of 0.10 mm diameter, giving an overall cross-sectional area of 0.19 mm². That is more than enough even to cope with the current flowing through a short-circuited 40 VA transformer.

7100 Lead · Single Gray · 10 m

7101 Lead · Single core · Blue · 10 m

7102 Lead · Single core · Brown · 10 m

7103 Lead · Single core · Yellow · 10 m

7105 Lead · Single core · Red · 10 m

Sleeves



7111 = brown7112 = yellow 7113 = green

7114 = orange 7115 = red

7117 = gray

7073
Lamp socket with bulb and lead for stations, freight sheds, etc. = 60020

7000

Staples · Bag of 50 · For fixing leads to a wooden base

Plugs with side sockets

7131 = brown

7131 = brown 7132 = yellow 7133 = green 7134 = orange 7135 = red

7137 = gray

5004

Connector lead for center conductor · Length 750 mm



Center conductor isolators for 5 isolation points

Accessories for remote operation



Control box with 8 sockets for connecting 4 double-solenoid-operated articles. The position of signals, turn-outs etc. can be seen from the posi-tion of the push-buttons. Length 80 mm. Width 40 mm Circuit diagram of 7210 (with switch 3 closed)





Control box with indicator push buttons for distributing current to 4 traction current or lighting circuits. Length 80 mm · Width 40 mm

Circuit diagram of 7211 (with switch 3 closed)





Control box for switching 4 different traction or lighting circuits on and off by indicator push buttons Length 80 mm · Width 40 mm



Distribution strip · Width 1 single sockets · Size



Distribution strip with 5 connector terminals, permanently connected together. Length 38 mm · Width 10 mm

Transformers for HO gauge and I gauge

Märklin heavy-duty transformers

Every Märklin transformer is completely safe, with insulation which has been tested to several thousand volts. Furthermore, a built-in cut-out switches off the current if a short circuit occurs somewhere on the track or if the transformer is overloaded. The transformer has a lead and a plug for connection to an a.c. mains socket or standard lamp.

Locomotive speed is proportional to the traction voltage, i.e. when the red control knob is turned to the right the locomotive goes faster, when to the left, slower. If the control knob is turned momentarily to the left of the zero position, a nominal 24 V pulse operates the reversing switch (the "driver") in the locomotive and changes the direction of motion.

We guarantee trouble-free operation of our railroads only when genuine Märklin transformer are used.

Märklin 16 VA and 30 VA transformer have connections for traction current supply and for lighting or solenoidoperated items.

To be connected to alternating current (a.c.) mains supply only

Power consumption by locomotives and

Calculation examples:

This is how to calculate the number of items which can be connected to the transformer: the 3-axle tank locomotive 3000 takes about 9 VA, the express diesel locomotive 3021 and the heavy express steam locomotive 3085 each take about 12 VA. Any margin of power left over after accounting for the locomotives can be used for train or layout lighting, counting 1 VA for each bulb used.

The transformers in the gift packs, mentioned on page 11, have the same good features as the transformers described here, the only difference being that their power output is less

Transformer Output 16 VA Traction voltage adjustable between approximately 4 V and 16 V · Lighting voltage 16 V · Plastic case · Weight 1.2 kg · Dimensions 125×135×75 mm

For particular requirements we supply a transformer under the following number

6660

100 Volt Japan

110 Volt USA

240 Volt England

220 Volt

When ordering, please quote the number corresponding to the appropriate mains



Transformer Output 30 VA Traction voltage adjustable between about 4V and 16V - Lighting voltage 16V - Plastic case - Red pilot lamp - Weight 2.1 kg - Dimensions 158 × 135 × 75 mm Q = 60015

For particular requirements we supply transformers under the following numbers:

100 Volt Japan

110 Volt USA 240 Volt England

220 Volt

110 Volt

When ordering, please quote the number corresponding to the appropriate mains voltage



Transformer for lighting

220 Volt

Transformer for lighting and for solenoid-operated items · Output 40 VA · Output voltage approximately 16 V a.c. · Plastic case · Weight 2.0 kg · Dimensions 158 × 135 × 75 mm



marklin Publications



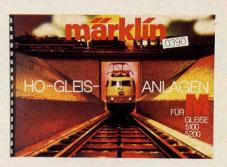
0380

Booklet entitled "Märklin HO railroads and their originals", a handbook for Märklin model railroaders · Contents include suggestions for designing and landscaping model railroad layouts, details of Märklin locomotives and cars and the originals on which they are modeled, signals, railroad regulations and procedures, examples of circuits, e.g. for simultaneous operation of several trains, and much more besides · Contents 228 pages · Size 15×24 cm German text



0327

Booklet entitled "Märklin railroads Booklet entitled "Märklin railroads +landscapes", by Bernd Schmid · An invaluable guide to help you design your own railroad system · Every detail of the construction of an HO gauge system is covered · The book has many illustrations, including some in color · Technical details, track layout, landscape planning and the fitting out of a railroad system are treated in detail by a well-known model railroad expert · An invaluable source of information for any model railroader · Contents 192 pages · Size 16.4×20.3 cm · German text



0392 M

Booklet entitled "Märklin track layouts, HO gauge, for M-tracks 5100 and 5200" With full color illustrations and detailed track plans for 16 fully developed layouts with catenary systems The individual electrical circuits are marked in distinguishing colors. The accompanying text includes many examples of track and turnout combinations. An outstanding guide for the construction of layouts of any size. Contents 56 pages. Size 21×30 cm. English text



0372 K
Booklet entitled "Märklin track layouts, HO
gauge, for K-tracks 2100" With full color
illustrations and detailed track plans for 16 fully developed layouts with catenary systems. The individual electrical circuits are marked in distinguishing colors. The accompanying text includes many examples of track and layout combinations · An outstanding guide for the construction of layouts of any size · Contents 52 pages · Size 21 × 30 cm · English text



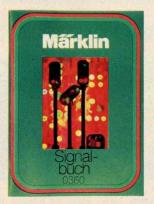
0379 K
Booklet entitled "Märklin track layouts, HO
gauge, for K-tracks 2100" · Contains 7 simple
track plans · Contents 20 pages · Size 15×21 cm · English text



0321 M Booklet entitled "Märklin track layouts, HO gauge, for M-tracks 5100 and 5200", with 11 simple track plans These layouts are easy to construct and can be used in many interesting ways. Contents 24 pages. Size 15×21 cm. English text



Märklin signal manual for signals 7000 and 7100 A detailed explanation, with full color illustrations, of the installation and use of 7000 and 7100 series signals and the universal remote control switch with the M-track system · Contents 28 pages · Size 18×25 cm · English text



0361 K Märklin signal manual for signals 7200

A detailed explanation with six-color illustrations of the installation and use of signals and remote control switches of the 7200 series · Contents 48 pages · Size 18×25 cm · English text

Märklin booklets are available from your Märklin dealer

Märklin magazine the magazine for model railroaders of all ages

The Märklin range, with its mini-club, HO and I gauge programs provides a broad basis for a meaningful use of your leisure time. The Märklin magazine is geared to this wideranging stock. It caters for all levels of sophistication in model construction, having suggestions both for beginners and for the "old hands" with years of experience. Every aspect of model railroad engineering receives appropriate coverage in each issue. Layout planning experts, locomotive constructors and control specialists all contribute. Subjects dealt with range from straight forward supplementing of Märklin models to the construction of your own vehicles, and from elementary control aids to electronic sensor-operated braking-and-acceleration units made with modern semiconductor components. Integrated controls and luminescence diodes (now within everyone's price range) are being discussed more and more frequently. Under the heading "Märklin owners report", readers of Märklin magazine all over the world describe their layouts, frequently giving each other new ideas. New products useful for modeling, such as materials and tools, appear on a special page. Articles about real railroads in various countries, and about narrowgauge, rack drive and museum railroads, as well as reports from the German Federal Railways, all assist you to achieve a truly realistic railroad system.

The Märklin magazine is published in German, four times a year-in mid February, May, September and November. A subscription brings a whole year's worth of valuable and interesting information to your home.

Obtainable from

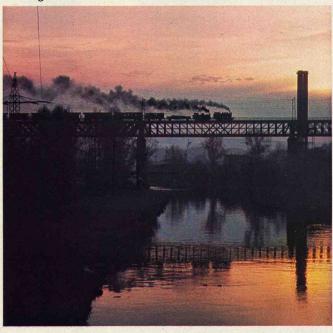
Modellbahnen-Welt Verlags-GmbH Postfach 940, D-7320 Göppingen

or from your Märklin dealer or through bookshops.



für große und kleine Modell-Eisenbahner

DM 2,90









The smallest electric railway in the world Scale 1:220

mini-club, the great leisure activity

Mini-club exposes you to highgrade Märklin precision engineering and a lot of fun in a concentrated package. The small track gauge, only 6.5 millimeters, enhances your pleasure in the exact details and the perfect operation of the models.

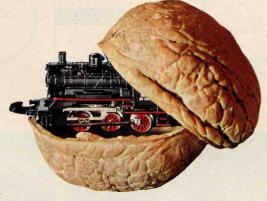
Mini-club is easy to carry around, and it can be set up in lots of different ways. It can operate in the space of a drawer or you can take it with you in your suitcase when you

go visiting or on vacation. The mini-club range is already extensive and is continuing to grow. It offers maximum scope for individuality in planning and operating a railroad. On the other hand, building up with the logical SET extension stages is an equally effective way of achieving a comprehensive and yet compact layout.

Many accessories are available to add interest and realism to your railroading. Or you may have your own bright ideas: quite ordinary little objects can assume fascinating proportions when used as landscaping in a mini-club operation.

It's not without reason that the Märklin mini-club continues to attract fans. You ought to treat yourself (or a friend) to this unique, beautiful little railroad. Mini-club's popularity continues to grow. The traditional Märklin attention to detail and insistence on high quality makes sure of that.

mini-club, the smallest electric railway in the world



This locomotive is depicted in its actual size

Mini-club locomotives should only be operated with Märklin power pack nos. 6711 or 6720–6731 (max. traction voltage 8 V).

Our suggestion for an ideal start:

Märklin mini-club SET 123 with Toporama 8930 This layout consists of basic sets \$8,805–8909 or 8902, extension sets £8190 or £8191, double track set **T1** 8192, station track set **T2** 8193, switching track set **T3** 8194 = SET 123 and Toporama 8930. See page 72 for track plan and parts list for this layout. See also pages 70–73.



märklin mini-club SET extension program

The starting point is a gift set S

freight train with power pack S 8905-8909 or an express train without power pack S 8902.

Each of these gift sets contains track sections to form an oval track (see page 73)

The first extension stage is an extension set E 8190 or extension set E 8191.

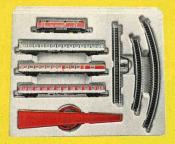
From here on, there are three more extension sets for building up to the ideal mini-club

double track set T1 8192 station track set T2 8193 switching track set T3 8194

show just four possible ways in

program is as easy as that.

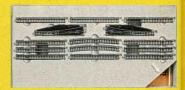
The culmination of the Märklin



Express train without power pack S 8902



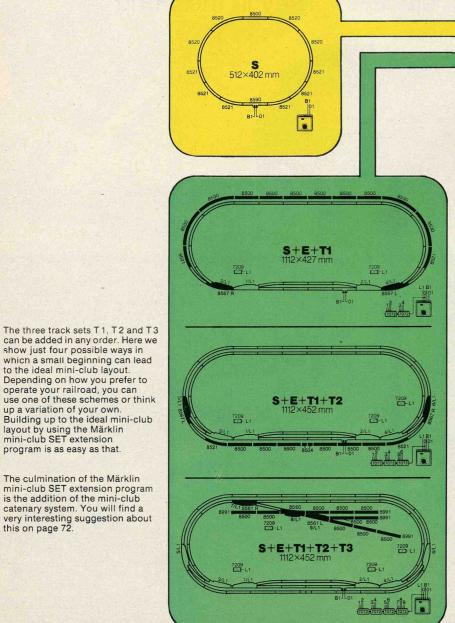
Freight train with power pack \$ 8905–8909

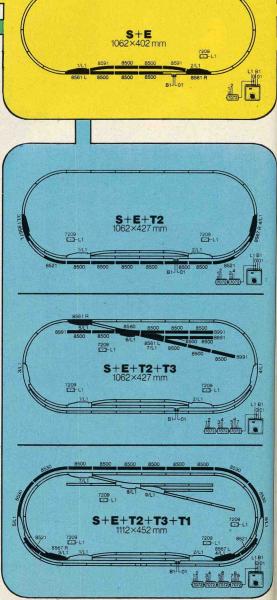


8190

Extension set E · Contents: 10 straight track sections 8500, 1 pair manually-operated turnouts 8564, 2 curved track sections 8591 and instructions for extending the layout

mini-club SET





Märklin mini-club SET, the way to the ideal mini-club layout



Extension set E · Contents 10 straight track sections 8500, 1 pair of solenoid-operated turnouts 8561, 2 curved track sections 8591, 1 control box 7072, 1 distribution strip 7209, plus materials for making connectors, such as leads, sleeves and plugs Instructions for extending the layout



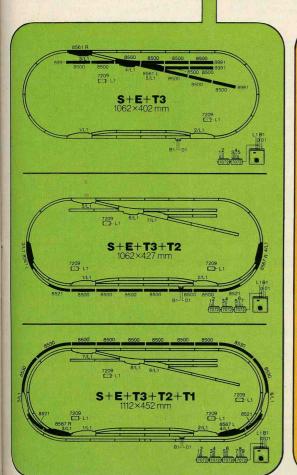
Double track set T1 · Contents: Double track set 11 - Contents:
6 straight track sections 8521, 4 curved
track sections 8521, 4 curved
track sections 8530, 1 pair of solenoid-operated curved turnouts 8567,
1 control box 7072, 1 distribution
strip 7209, plus materials for making connectors, such as leads, sleeves and plugs · Instructions for extend-ing the layout

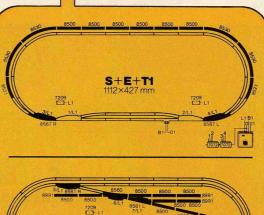


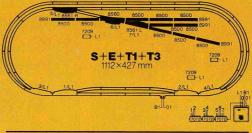
8193
Station track set T2 Contents: 6 straight track sections 8500, 2 straight track sections 8504, 2 curved track sections 8521, 1 pair of solenoid-operated curved turnouts 8567, 1 control box 7072, 1 distribu-tion strip 7209, plus materials for making connectors, such as leads, sleeves and plugs Instructions for extending the layout

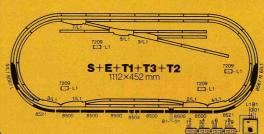


8194
Switching track set T3 · Contents: 10 straight track sections 8500, 1 double slip switch 8560, 1 pair of solenoid-operated turnouts 8561, 4 bumpers 8991, 1 control box 7072, 1 distribution strip 7209, plus materials for making connectors, such as leads. making connectors, such as leads, sleeves and plugs · Instructions for extending the layout











8930 Märklin mini-club

Toporama for mini-club SET extension program leading to the ideal track layout · Realistic printed model railroad landscape Multicolor printing ·
Tracks printed on · Can be used from stage E (8190, 8191) onward · Tufted grass areas give threedimensional effect Size 50×120 cm

Märklin Toporama 8930 is highly recommended as a way of enhancing Märklin mini-club SET. The Topora-ma can be used from stage E (8190, 8191) onward. The track layout up to stage T3 (8194) is pre-printed.

And how is the Toporama used?

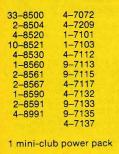
Quite simple: the Toporama mat is laid, or glued, or fas-tened onto a base plate, the track is laid in accordance with the full scale printed layout, the connections are made and you are ready to roll. No other landscaping is needed, as the Toporama in-cludes fields, streams, lakes, roads and parking lots.



Track plan for Märklin mini-club SET 123

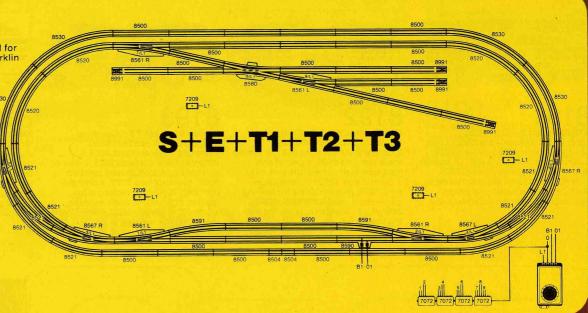
Track current supply system

The following items are required for the construction of the ideal Märklin mini-club SET 123 layout:



See page 69 for photograph of this track plan

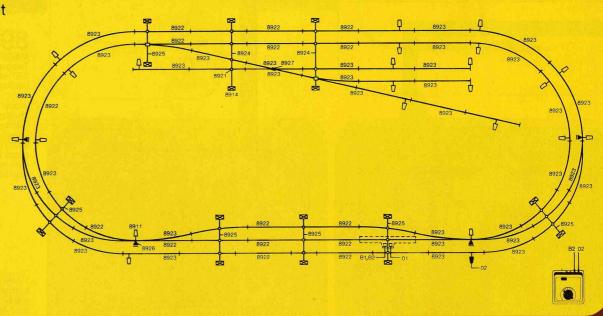
120×50 cm



Catenary current supply system

22–8911 2–8924 1–8912 6–8925 16–8914 1–8926 3–8921 1–8927 15–8922 35–8923

1 mini-club power pack



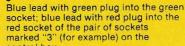
Explanation of symbols on track plans





Track current supply system

Feeder track section
One red and one brown lead from
the terminals to terminals B and O on
power pack 1.



control box.



L1 Yellow lead to the yellow lighting voltage socket L on power pack 1 or the distribution strip L1 connected to it.

Catenary current supply system

Mast for overhead line 8911

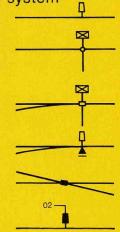
Tower mast 8914 with cross spans 8924 or 8925 and white contact line insulator, for 2 contact lines, from 8921.

Tower mast 8914 with cross spans 8924 or 8925 and gray contact line insulator, for 3 contact lines, from 8921.

Gray isolating section with connecting spring, from 8926

Contact line terminal, without lead, from 8927

O2 = traction current connection for catenary system. Brown lead goes to the brown terminal on power pack 2.



Basic sets in gift packs

and their ideal use see pages 69-72

All you want to know at a glance:

Märklin mini-club has the gauge designation Z (6.5 mm). Märklin mini-club is powered by direct current. Everything carrying the name mini-club is of proven Märklin quality and is as strong, durable and effective as all the other Märklin

ference suppressors. In conjunction with the suppressors incorporated in the Märklin power packs 6711 and 6720–6731 and in the feeder track section 8590, these ensure a high standard of suppression.

Mini-club locomotives should only be operated with Märklin power packs 6711 or 6720-6731 (max. traction voltage 8 V) or with a power pack included

8905 **S** 100 Volt Japan 8907 **S** 110 Volt USA 8908 **S** 240 Volt Australia 8909 **S** 220 Volt





Freight train with power pack. With tank locomotive 8800, banana car 8606, low sided car 8610, 1 straight track section 8500.

4 curved track sections 8520, 6 curved track sections 8521, feeder track section 8590 and power pack - Length of train 160 mm

The power pack included with this set is not available separately



Express train (without power pack) With diesel locomotive 8875, express coach 8720, express coach 8721, express dining car 8723, 1 straight track section 8500,

4 curved track sections 8520, 6 curved track sections 8521, feeder track section 8590 and re-railing ramp 8974. Length of For train sets 8905-8909 and 8902 we recommend Märklin mini-club SET, the extension program leading to the ideal mini-club layout (see pages 69-72).

Märklin mini-club cars come in packs with transparent lids. Make sure that the brand name "Märklin mini-club" appears on the lid.



Märklin mini-club train sets and locomotives can be recognised by the characteristic club packs.





Locomotives

The illustrations of models are actual size

8800

Tank locomotive . A model of the 0-6-0 class 89 locomotive · 3 driven axles · Remote control for foraxies - Remote control for for-ward and reverse drive - Mat black metal body - Die cast zinc frame -Automatic coupling at each end Length over buffers 45 mm



8864

Diesel locomotive · A model of the German Federal Rail-ways' 0-6-0 class 260 locomo-· 3 driven axles · Remote control for forward and reverse drive Red metal body Silver-colored roof · Die cast zinc frame · Automatic cou-pling at each end · Length over buffers 49 mm



8895

Tank locomotive · A model of the German Federal Railways' 2-6-0 class 74 locomotive · 3 driven axles · Remote control for forward and reverse drive · Three working headlights · Mat black metal body · Die cast zinc frame · Hook coupling in front · Auto-

matic coupling at rear end Length over buffers 55 mm = 8953



8803

Passenger train locomotive with tender · A model of the German Fed-eral Railways' 2-6-0 class 24 locomo-tive · 3 driven axles · Remote control for forward and reverse drive Ca-pable of taking the lighting set 8953 for three headlights - Mat black metal

body · Die cast zinc frame Automatic coupling on the ten-der · Length over buffers 82 mm



8885

Express train locomotive with tender A model of the German Federal Railways' 4-6-2 class 003 locomotive 3 driven axles · Remote control for forward and reverse drive · Three working headlights · Mat black metal body Die cast zinc frame · Automatic coupling on the tender · Length over buffers

Q = 8953



Freight train locomotive with tender A model of the German Federal Rail-ways' 2-8-2 class 41 locomotive 4 driven axles Remote control for forward and reverse drive · Three working headlights · Mat black metal body · Die cast zinc frame · Automatic coupling on the tender · Length over buffers 112 mm

Q = 8953



Railbus · A model of the German Federal Railways' type 798 · Both axles driven · Remote control for forward and reverse drive · Three working headlights at each end · Red plastic body · Die cast zinc frame · Length over b

Q = 8953



8817
Trailer for railbus · A model of the German Federal Railways' type 998 Three working headlights at each

end · Red plastic body · Length over buffers 62 mm Q = 8953

Locomotives

8842 new
Electric express locomotive · A model of the German Federal Railways' B-B class 111 locomotive · All axles driven · Remote control for forward and reverse drive · Three working headlights at each end, changing over with change of direction - Turquoise and beige plastic body - Windows in-set in plastic frames - 2 spring-

loaded pantographs on roof. Changeover switch for selecting power supply by overhead line or from the track · Die cast zinc frame · Automatic coupling at each end · Length over buffers 76.8 mm

Q = 8953



8854

Electric express locomotive · A model of the German Federal Railways el of the German Federal Railways C-C class 103 locomotive · Both trucks driven · Remote control for for-ward and reverse drive · Three work-ing headlights at each end, changing over with change of direction · Plastic body in the TEE colors, beige and red · Roof superstructure aluminum-

colored · Windows inset in plastic frames · 2 spring-loaded pantographs on roof · Change-over switch for selecting power supply by overhead line or from the track · Die cast zinc frame Automatic coupling at each end · Length over buffers 88 mm Q = 8953



8857

Electric freight train locomotive

A model of the German Federal Railways' C-C class 151 locomotive Both trucks driven Remote control for forward and reverse drive Three working headlights at each end, changing over with change of direction · Green plastic body · Windows inset in plastic frames · 2 spring-loaded pantographs on roof · Changeover switch for selecting power supply by over-head line or from the track · Die cast zinc frame · Automatic coupling at each end · Length over buffers 88 mm

= 8953



8858

Electric freight train locomotive

A model of the German Federal Railways' C-C class 151 locomotive · Both trucks driven Remote control for forward and reverse drive. Three working headlights at each end, changing over with change of direction quoise and beige plastic body. Windows inset in plastic frames.

2 spring-loaded pantographs on roof · Changeover switch for selecting power supply by overhead line or from the track · Die cast zinc frame · Automatic coupling at each end · Length over buffers 88 mm. buffers 88 mm

= 8953



8874

Diesel locomotive · A model of the German Federal Railways' B-B class 216 locomotive · All axles driven · Re-216 locomotive · All axies driven · He mote control for forward and reverse drive · Three working headlights at each end, changing over with change of direction · Turquoise and beige plastic body · Die cast zinc frame · Automatic coupling at each end ·

Length over buffers 75 mm

g = 8953



Diesel locomotive · A model of the German Federal Railways' B-B class 216 locomotive · All axles driven · Remote control for forward and reverse drive · Three working headlights at each end, changing over with change of direction · Red and gray plastic body · Die cast zinc frame · Automatic

coupling at each end . Length over buffers 75 mm

Q = 8953



márklín mini-club

Express coaches Local passenger service coaches The illustrations of models are actual size

8710

Express coach · 1st class · A model of the German Federal Railways' type A üm · Windows inset in plastic frames · Length 120 mm



8711

Express coach · 2nd class · A model of the German Federal Railways' type B üm Windows inset in plastic frames · Length 120 mm



8712

Express baggage car · A model of the German Federal Railways' type D üm Windows inset in plastic frames · Length 120 mm



8713

Express dining car · A model of the German Federal Railways' type WR üm Windows inset in plastic frames · Length 120 mm



8720

Express coach · 1st class · A model of the German Federal Railways' type A üm Windows inset in plastic frames · Length 120 mm



8721

Express coach · 2nd class · A model of the German Federal Railways' type B üm Windows inset in plastic frames · Length 120 mm



8722

Express baggage car · A model of the German Federal Railways' type D üm Windows inset in plastic frames Length 120 mm



8723

Express dining car · A model of the German Federal Railways' type WR üm Windows inset in plastic frames · Length 120 mm



8716

Local passenger service coach · 2nd class A model of the German Federal Railways' type Bnb · Car body stainless steel-colored with peacock's eye pattern · Windows inset in plastic frames · Length 120 mm



8717

Local passenger service coach - 1st and 2nd class - A model of the German Federal Railways' type ABnb - Car body stainless steel-colored with peacock's eye pattern -Windows inset in plastic frames -Length 120 mm



TEE coaches Branch line passenger coaches

8724

TEE compartment coach . 1st class A model of the German Federal Railways' type Avm · Windows inset in plastic frames Length 120 mm



8725
TEE open-interior coach 1st class A model of the German Federal Railways' type Apm · Windows inset in plastic frames · Length 120 mm



TEE dining car · A model of the German Federal Railways' type WRm · Windows inset in plastic frames Length 120 mm



TEE dome car · 1st class · A model of the German Federal Railways' type ADm Windows inset in plastic frames Transparent plastic observation dome Length 120 mm



8734 new

TEE compartment coach - 1st class A model of the German Federal Railways' type Avm · Interior lighting Windows inset in plastic frames Length 120 mm



8735 new
TEE open interior coach 1st class
A model of the German Federal Railways' type Apm Interior lighting Windows inset in plastic frames Length 120 mm



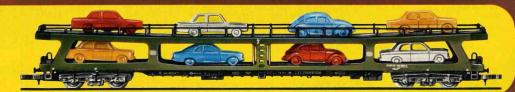
8736 new
TEE dining car · A model of the German
Federal Railways' type WRm · Interior
lighting · Windows inset in plastic frames
Length 120 mm



8738 TEE dome car · 1st class · A model of the German Federal Railways' type ADm · Interior lighting · Windows inset in plastic frames · Transparent plastic observation dome · Length 120 mm



Automobile rack car · A model of the German Federal Railways' type DDm 915 With 8 miniature automobiles aboard Length 120 mm



8700 Branch line

passenger coach Windows with "Cellon" panes Length 60 mm



Branch line passenger coach Windows with "Cellon" panes Length 60 mm



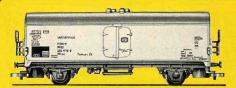


The illustrations of models are actual size



Tank car · SHELL · Length 75 mm





Refrigerator car · A model of the German Federal Railways' type Ichqrs · Length 54 mm



Beer car · A model of a car owned by the Dortmunder Union Brewery · Length 54 mm



8602

Beer car · A model of a car owned by the "Spatenbräu" Brewery, Munich · Length 54 mm



8603

Beer car · A model of a car owned by the Kulmbacher Mönchshof Brewery · Length 54 mm



Beer car · A model of a car owned by the Kulmbacher Reichelbräu Brewery · Length 54 mm



Box car · A model of the German Federal Railways' type Gbrs · Length 54 mm



Box car · A model of the German Federal Railways' type lbbls · Length 54 mm



8609

Freight train baggage car (a model of the German Federal Railways' type Dg) · Doors on both sides which open · Length 40 mm



8610

Low-sided car · Length 54 mm



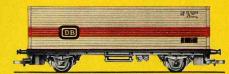
Tank car · SHELL · Length 40 mm



Tank car · ESSO · Length 40 mm



Tank car · ARAL · Length 40 mm



Container car German Federal Railways



Container car · SEALAND · Length 54 mm



Open freight car · A model of the German Federal Railways' type Omm 52 · Length 54 mm

Freight cars



8619
Lumber car, in 2 parts - Loaded with sawn lumber
Length 93 mm



8620

Well car Loaded with transformer Length 154 mm



8621

Crane car with revolving crane, movable boom and boom support · Crane hook can be raised and lowered by hand crank · Length of under frame 35 mm · (Low sided car 8610 is not included in the price, but is recommended for use when moving the crane car)



márklín *mini-club*

Building kits



8963

Apartment block building kit with roof penthouse · The two top sections can also be used separately as a bungalow and a kiosk · Base area 86×84 mm · Height 97 mm · Can be fitted with light socket 8950



8968

Terrace house building kit, with garage · White · Can be built one or two-storied in a number of different ways, or can be used as a terrace house · Base area 81 × 45 mm · Height 29 mm · Can be fitted with light socket



Terrace house building kit, with garage . The same kit as 8968, but with pale blue wall sections

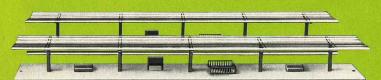


8964

Dwelling house building kit,
with garage · Can be used one or twostoried · Base area 91 × 71 mm · Height

Son he fitted with lighting socke storied · Base area 91×71 mm · Height 45 mm · Can be fitted with lighting socket

Göppingen station (center block) building kit · Modern design · Base area 228×114 mm · Height 44 mm · Can be fitted with lighting socket 8950





8960

8961

Platform building kit - In 2 sections - To-tal length 440 mm - Width 38 mm - Height



8962

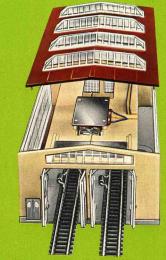
Dürnau station building kit · Multipurpose building with annex and loading ramp · Base area 70×50 mm · Height 30 mm Can be fitted with lighting socket 8950



8965

Signal box building kit · Base area 69×39 mm · Height 46 mm · Can be fitted with lighting socket 8950





Wintersdorf station building kit with main building, annex and covered passage-way · Can be used on its own or in conjunction with 8971 · Base area 72×112 mm · Height 54 mm · Can be fitted with lighting socket 8950



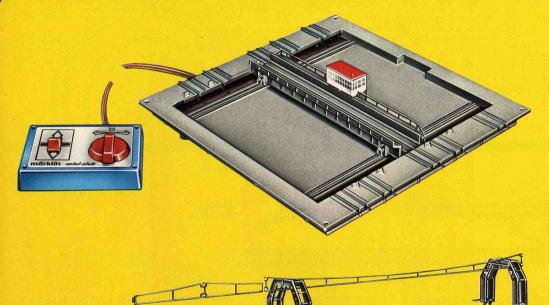
8971

Freight shed building kit with freight storage area, loading ramps and equipment storage room · Can be used on its own or in conjunction with 8970 · Base area 53×130 mm · Height 38 mm · Can be fitted with lighting socket 8950



Building kit for locomotive shed with solenoid-operated door operating mechanism · Arranged to take 2 locomotive parking tracks and overhead power lines · Length 152 mm · Width 74 mm · Height 51 mm · The building kit includes 2 barrier track sections which will stop locomotives automatically as they enter the shed

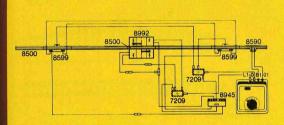
Accessories



8994 new

Transfer table with 2 approach tracks and 4×2 parking tracks · Matches lo-comotive shed 8980 · For flush mount-ing in the layout base plate · Power pack for remote control of the transfer table and locomotives - Electric motor drive - Power is automatically disconnected from all tracks not in contact with the transfer table Width and length both 220 mm

8995 new Catenary system kit for transfer table - Consists of two catenary system support gantries, 1 contact wire section 8922 with lead soldered on, and 10 short contact wire sections





Grade crossing with half barriers Comprising 2 solenoid-operated barriers · 2 red warning lamps on each side, which light when the barrier is closed Size of base 96×37 mm (The track sections shown in the illustration are not supplied with the grade crossing and are not included in the price)

Q = 8953

The following items are also required with the grade crossing:

a) for manual operation 1 manual signal control panel 8946

b) for automatic operation by a moving train

1 universal remote control switch 8945 2 switching track sections (of appropriate type, e. g. 8599, 8529 or 8539)

The various ways in which the grade crossing can be installed are fully described in the accompanying instructions for use.

8598 7209

Circuit diagram showing connection of signal 8939 and connection of switching track section, on "stop" (Hp0)

remote control switch 8945 or by the manual signal control panel 8946 · Height 34.5 mm = 8953

Arch bridge · Made of plastic · Gray



Straight ramp section - Length 110 mm

Color-light home signal - Signal lights change from red (Hp0) to green (Hp1) - 2 bulbs - Can be operated by the universal

8939

Set of approach ramp columns Contains one column of each of following heights: 4 mm, 8 mm, 12 mm, 16 mm, 20 mm, 24 mm, 28 mm, 32 mm, 36 mm and



Curved ramp section · Radius 145 mm · Track curvature 45°

8979

Set of bridge piers Comprising 5 piers 40 mm high



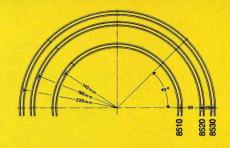


Track sections

With a gauge of 6.5 mm, the overall width of Märklin mini-club track sections is about 11.5 mm. The height is about 2.5 mm. The accurately dimensioned nickel silver rails are mounted on plastic cross-ties. The track sections are joined to each other by means of rail joint clips, as on larger scale railroads. The rigidity of the track joints is increased by means of an additional claw coupling on the cross-ties.

This diagram shows the 3 Märklin mini-club track circles, with their radii, the distances between them and the curvature of the sections.

- 1 circle 8510 = 8 track sections 1 circle 8520 = 8 track sections 1 circle 8530 = 8 track sections



Straight track sections

8500

8504

8505

8506 Length 108.6 mm (see Fig. 2, page 83) Length 112.8 mm (see Fig. 4, page 83)

Curved track sections

8510

8520

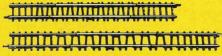
8521

8530 THE RADIUS OF THE PARTY OF

8531

8591
Radius 490 mm · 13° · Matches the curve of turnouts 8561 and 8564 (see Fig. 3, page 83)

Tracks with special uses



Straight track section · For adjusting to required length · Can be extended from 100 to 120 mm

Straight feeder track section · With capacitor for radio interference suppression · 2 terminals for connection of the traction current leads supplied · Length 110 mm



Uncoupling track section · For releasing automatic couplings. Uncoupling ramp is either sole-noid-operated or hand lever operated. Length



8598

Isolating track section, straight . With connector terminals \cdot The rail nearer the terminals has a gap half way along it \cdot Length 110 mm



Switching track section, straight · With connector terminals · To enable moving trains to trigger switching functions · Length 110 mm



8529

Switching track section, curved · With connector terminals · To enable moving trains to trigger switching functions · Radius 195 mm · 30°



8539
Switching track section, curved · Construction and operation as for 8529, but with radius 220 mm · 30°

The switching track sections 8529, 8539 and 8599 enable a moving train to control solenoid-operated items automatically. They are actuated by the locomotive, and can trigger different and inde-pendent switching functions in each direction. The control pulses are fed out via two terminals insulated from each other.

Track sections

Crossings and turnouts

Crossing · Crossing angle 13° · Length of track sections 112.8 mm (see Fig. 1)



8560

Double slip switch · Crossing angle 13° Radius 323 mm · The slip points, which are on the inside, are double solenoid-operated by remote control · Additional hand control lever · Length of straight track sections 112.8 mm · (See Fig. 2 for an example of its installation)







Pair of solenoid-operated turnouts · Consisting of one right-hand and one left-hand turnout, each operated by double

solenoid - Additional hand control lever Turnout angle 13° - Radius of branch track 490 mm - Length of through track section 110 mm - (See Figs. 3 and 4 for examples of turnout installation)





8564

Pair of manually-operated turnouts Consisting of one right-hand and one left-hand turnout · Operated by hand lever ·

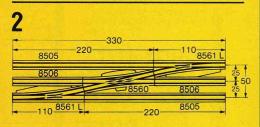
Turnout angle 13° - Radius of branch track 490 mm - Length of straight track section 110 mm - (See Figs. 3 and 4 for examples of its installation)

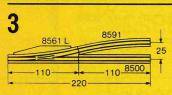


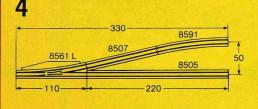


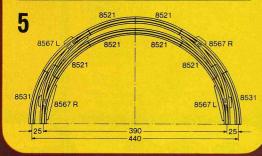
Pair of solenoid-operated curved turn-Consisting of one right-hand and one left-hand inner circle turnout . Each operated by double solenoid. Additional hand control lever. Length and radius of branch track the same as for track section 8521. Length of through track 125 mm. (See Fig. 5 for an example of its installation)

220 \$ 50 110 8561 8505









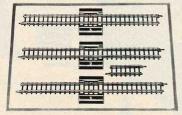
Track accessories

Bumper · For clipping onto the rails Black · Buffer beam white with red stripe · Length 15 mm

Track fixing rails · 0.5×6 mm

8954 new

Pack with 10 isolating and 20 conducting jointing clips for electrical isolation of tracks or for making a conducting connection between track ends



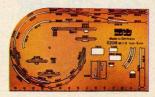
8993

Reversing loop kit · Consisting of 3 track sections, each 110 mm long, which are arranged in the sequence of their identifying numbers, and 1 track section 8504 · Allows one-way travel on reversing loops

0208

Track plan stencil

for Märklin mini-club tracks All track sections are marked out in 1:5 scale on the stencil, from which they can easily be reproduced on paper using a sharp pencil



0292 Booklet entitled "Märklin mini-club track layouts"

Illustrated guide for the building of 16 track layouts and catenary systems, connecting up power packs and solenoid-oper-ated items and for building bridges · Contents 54 pages · Size 21 × 30 cm · English text





Mast for overhead line · Basic unit with supporting plate · Height 38 mm



8912
Feeder mast for power supply With supporting plate and connector lead · Height 38 mm



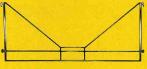
8913

Bridge mast for clipping onto the side of bridges and ramp sections - Height



Tower mast with recesses for hooking in cross-spans 8924 and 8925 Base 7×13 mm · Height 61 mm





8925 Cross-span · For hooking into tower masts · Spans 3 tracks · Span approx



Contact line section for straight and curved tracks · Length 165 mm

Cross-span · For hooking into tower masts · Spans 5 tracks Span approx. 123 mm





Rack of contact line insulators · For insulating contact line sections from cross-spans · Includes white and gray insulators · The white insulators will hold 2 contact line sections, the gray



8926
Pack of isolating sections

and connecting springs
These are required for making isolating points in the overhead line, and at branches above turnouts



8927
Pack of contact wire terminals Conlains screw terminals with and without leads. For feeding power into catenary sections or for holding sections of the contact line together, above crossing the communications of the communications for the communications. ings, for example



Lamp standard Height 46 mm · Base 8×14 mm

=60210



8958

Station lamp standard Height 46 mm Base 8×14 mm = 60210



8959 Sidewalk lamp standard Height 25 mm Base 8×14 mm = 60210



Pack containing various miniature automobiles



Re-railing ramp · Made of plastic · Makes it easier to set locomotives or cars on the track · Length 140 mm Height 13.5 mm



8955 new

Pantograph current collector with one fixing screw



Bottle of oil · Contains about 10 cu.cm. of oil which is suitable for lubricating locomotives and

Pair of carbon brushes for locomotives 8800, 8803, 8864 and 8895

8988

Pair of carbon brushes for locomotives 8816, 8854, 8857, 8858, 8874 and 8875

Pair of carbon brushes for locomotives 8827, 8842 and 8885

60210 Light bulb for items 8957, 8958 and



Light fitting with lamp insert and lead · For stations, buildings, etc Q = 8953



Lamp insert · With 10 V bulb · For use in light fitting 8950, signal 8939, grade crossing 8992 and in locomotives which can take lighting



Accessories Power packs



Control box with 8 sockets for connecting 4 double solenoid-operated articles. The position of signals, turnouts etc. can be seen from the position of the push but-tons · Length 80 mm · Width 40 mm



7210
Control box with 4 sockets for distributing traction or lighting cur-rent to 4 circuits, with push button selection · Length 80 mm · Width

Circuit diagram of 7210 (with switch 3 closed)





Control panel with 8 sockets, for switching 4 different traction or lighting circuits on or off by means for push buttons - Length 80 mm -Width 40 mm

Circuit diagram of 7211 (with switch 3 closed)





Universal remote control switch with 2 single-pole switches and one changeover switch for various circuits. The universal remote control switch can be given a variety of functions to perform (up to 3 simultaneously) and it will per-form them automatically. It can control grade crossings, for example, and lighting installations, and many other things · Examples of applications are shown in book-

of applications are shown in book-let 0292 (see page 83) and in the Märklin mini-club guide. Operating voltage 10 V. Double solenoid-operation. Can be oper-ated by a switching track section, a turnout control box or by means of the hand control lever. Width 30 mm. Length 70 mm. Height



8946

Manual signal control panel with 2 single-pole switches and one changeover switch, which can be used, for example, to control the sequence of lights in signal 8939 and to control the traction cur-rent · Width 30 mm · Length 70 mm · Height 8 mm



Distribution strip With 11 single sockets Size 50 × 20 mm

8947

Double-pole changeover switch (polarity reversing switch) · Operating voltage 10 V · Double solenoid operation · Can be operated switching track section. hold operation · Can be operated by a switching track section, a turnout control box or by means of the hand control lever · Width 30 mm · Length 70 mm · Height



Distribution strip with 5 lead terminals, permanently connected to-gether · Length 38 mm · Width gether 10 mm

220 Volt

Märklin mini-club power pack for use with AC power supply · Single knob control for adjusting the **traction voltage (DC)** between 0 and 8 V and for determining the direction of travel by turning clockwise or anticlockwise from its central position - Power output in the traction circuit up to 8 VA, and in the **lighting circuit** (AC) about 12 VA at 10 V - Blue plastic case - Weight 1.65 kg - Dimensions 155×110×88 mm



6720 100 Volt Japan 6729 240 Volt England

6726 110 Volt 6731 220 Volt

6727 110 Volt USA

Märklin mini-club power pack for use with AC power supply · Output 12 VA · Traction voltage (DC) adjustable between 2 V and 8 V · Polarity reversing switch for selecting the direction of travel · Lighting voltage (AC) 10 V · Blue plastic case · Weight 1.2 kg · Dimensions 125×135×75 mm

Usual colors of electrical leads in

7100

Lead · Single core · Gray · 10 m Gray = a. Lead for lighting voltage, from lighting units to the gray socket (0) on the power pack.

b. Lead from control box or switching track section to the gray socket (0) on the power pack.

c. Extension of red and green leads between signals and the signal control

Lead · Single core · Blue · 10 m Blue = Lead from solenoid-operated items to the control box or switching track section.

7102 Lead Single core

Brown · 10 m

Brown = Lead for traction voltage, from the feeder track section to the brown socket (01) on the power pack.

7103

Lead · Single core ·

Yellow = Lead for lighting voltage,

from lighting units and solenoid-on from lighting units and solenoid-oper-ated items to the yellow socket (L1) on the power pack.

7105

Lead · Single core · Red · 10 m
Red = a. Lead for traction voltage, from the feeder track section to the red socket (B1) on the power pack. b. Leads for connecting isolating track sections to the signal control panel or the control box.

Electrical leads

The copper conductor in these stranded leads consists of 24 separate strands each of 0.10 mm diameter, giving an overall cross-sectional area of 0.19 mm². That is more than enough to cope even with a short circuit current flowing through a 40 VA transformer.

Sleeves

7111 = brown

7112 = yellow 7113 = green

7114 = orange 7115 = red

7117 = gray

Plugs with side sockets

7131 = brown 7132 = yellow 7133 = green

7134 = orange 7135 = red 7137 = gray

7000



Staples Bag of 50 For fixing leads to a wooden base

7599



Countersunk wood screws for fixing bridge sections onto bridge piers Pack of 200

marklin The large scale Märklin model railroad Scale 1:32

Scale 1:32



Train sets

5500

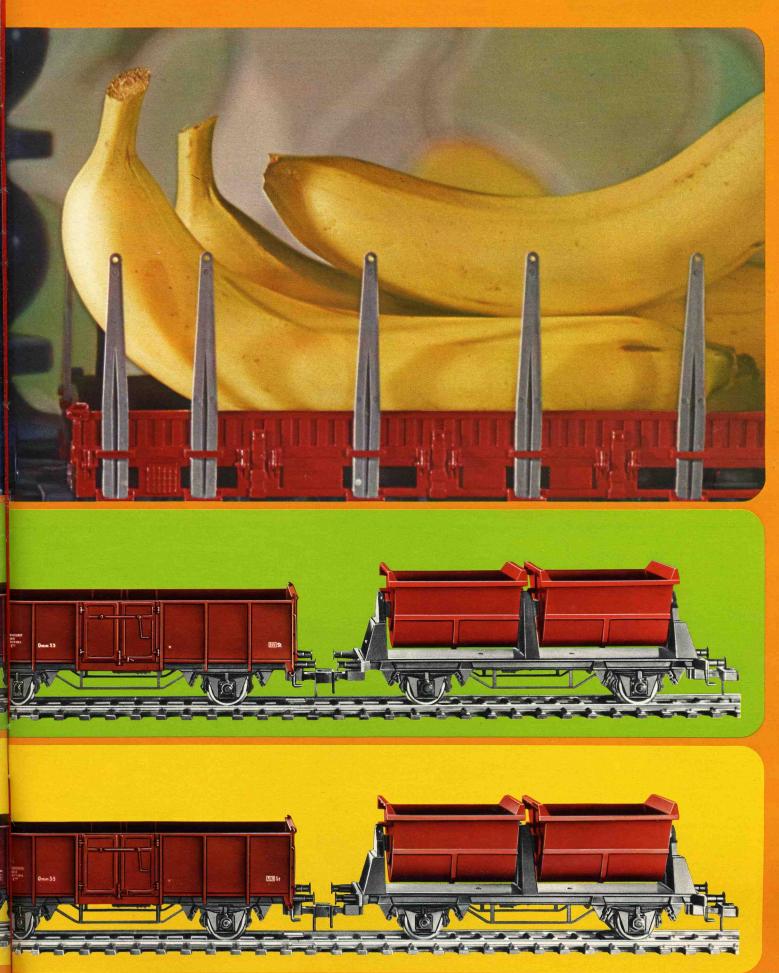
Freight train (without transformer) With tank locomotive 5700, 1 open freight car 5850, 1 dump car 5859, 2 straight track sections, 5900, 12 curved track sections 5921 and 1 connector kit 5604 Length of train 97 cm



Freight train (without transformer)
With diesel locomotive 5720, 1 open freight car 5850, 1 dump car 5859, 2 straight track sections 5900, 12 curved track sections 5921 and 1 connector kit 5604 · Length of train 97 cm



Train sets



marklin Locomotives

Tank locomotive

Tank locomotive · Wheel arrangement 0-6-0 · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights at each end · Plastic body, black boiler, dark green water tanks and cab, brass-colored window frames and hand rails · Driver's cab doors will open · Windows with 'Cellon' panes · Die cast zinc frame · Automatic claw coupling and spring buffers at each end · Length over buffers 30.25 cm

Q = 60015

60041
Pair of carbon brushes for I-gauge



Tank locomotive

5700

Tank locomotive · A model of the German Federal Railways' 0-6-0 class 80 locomotive · 2 non-skid tires · Simulated Heusinger reversing gear · Remote control for forward and reverse drive · 3 working headlights at each end · Mat black plastic body · Driver's cab doors will open · Windows have "Cellon" panes · Die cast zinc frame · Automatic claw coupling and spring buffers at each end · Length over buffers 30.25 cm Tank locomotive · A model of the German

Q = 60015



Diesel locomotive

Diesel locomotive · A model of a 0-6-0 industrial locomotive · 2 non-skid tires · Remote control for forward and reverse drive · 3 working headlights at each end · Red plastic body with two yellow horizontal stripes · Driver's cab doors will open · Windows have "Cellon" panes · Die cast zinc frame · Automatic claw coupling and spring buffers at each end · Length over buffers 30.25 cm

= 60015

Märklin transformer 6631 is suitable for supplying power for I-gauge locomotives



Passenger cars

Passenger cars with interior fittings

5800Passenger car · Modeled on a private railroad coach · 2 doors which will open · Dummy ventilators on roof · Windows inset in plastic frames · Interior fittings representing wooden seats · Length 31 cm



5801

Passenger car · Modeled on an original of the former Royal Württemberg Railway · Similar in design to 5800, except that it is green





marklin Treight cars

5865 New

Tank car · ESSO · With filler cap and discharge valve which open and close, brakeman's stand, ladder and walkway Length 31 cm



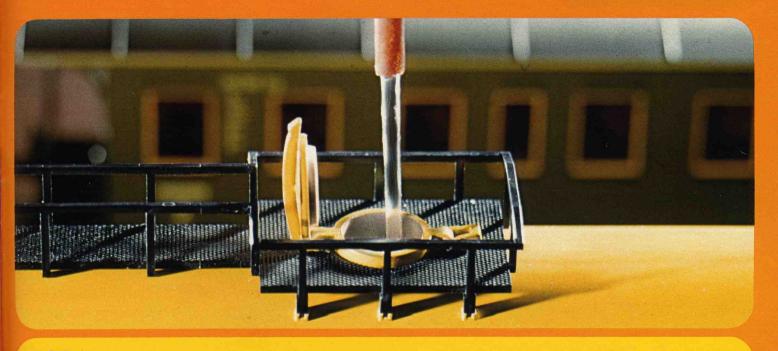
Tank car · SHELL · With filler cap and discharge valve which open and close, brakeman's stand, ladder and walkway Length 31 cm



5850Open freight car · A model of the German Federal Railways' type Omm55 · Length 31 cm



Märklin I gauge, the most realistic model railroad system of all



5851Open freight car · A model of a Belgian State Railways' (SNCB) freight car · Length 31 cm



5853
Flat car · With removable stanchions Length 31 cm

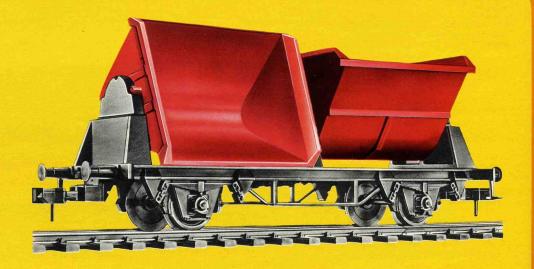


marklin Freight cars

5856 Open freight car · Light green car body Black frame · Length 31 cm



5859Dump car · 2 independent hoppers dump to either side · Latch holds hoppers in upright position · Length 31 cm



5860

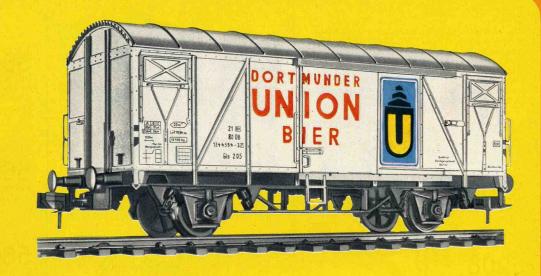
Box car · A model of the German Federal Railways' type Gls · Doors on each side which will open · Length 31 cm



Märklin I gauge, for larger scale entertainment

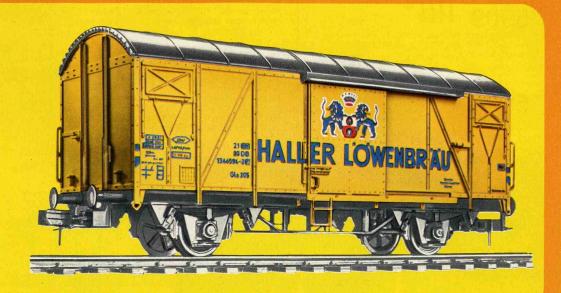
5861

Beer car · A model of a car owned by the Dortmunder Union Brewery · Doors on each side which will open · Length 31 cm



5863

Beer car · A model of a car owned by the Haller Löwenbräu Brewery · Doors on each side which will open · Length 31 cm



5864

Beer car · A model of a car owned by the Kulmbacher Mönchshof Brewery · Doors on each side which will open · Length 31 cm



marklin Track sections

Track sections

The rails, mounted on plastic ties and insulated from one another, not only guide the wheels but also act as conductors for current supply and return. Track sections are joined together by rail jointing clips and also by a clip on the tie strip. The solid rails are stainless and corrosion-resistant so you can even lay them in your yard. Outer diameter of a track circle is 1.28 m.

Straight track section Length 300 mm

Straight track section Length 80.4 mm

Isolating track section, straight For dividing the layout into electrically isolated sections Length 80.4 mm

Curved track section Radius 600 mm

Solenoid-operated left-hand turnout · Operated by double solenoid · Sprung switch points · Turnout angle 30° · Radius of branch track 600 mm Length of straight track section

Solenoid-operated right-hand turnout · Operated by double solenoid · Sprung switch points · Turnout angle 30° · Radius of branch track 600 mm · Length of straight track section

Manually-operated left-hand turnout Sprung switch points . Turnout angle 30° . Radius of branch track 600 mm · Length of straight track section 300 mm

5966 Manually-operated right-hand turnout Sprung switch points Turnout angle 30° Radius of branch track 600 mm Length of

straight track section 300 mm

5600

Uncoupler - Can be fitted between the rails of track section 5900 · Releases couplings, in one direction of travel only, thus enabling cars to be pushed away · Length 175 mm

5603



Retaining clips · Bag of 28 · For securing the joints between I-gauge track section

5604

Connector kit · Consisting of 2 connector terminals, with one red and one brown lead 1 meter long - Incorporates a capacitor for radio interference suppression

Although a two-rail conductor system is used, a polarity problem does not arise even when you construct reversing loops, diagonals or Y-tracks. This large scale Märklin railroad uses AC motors, sharing the advantages of this technique with the HO gauge system. As with the HO-gauge, the direction of travel is switched by the "driver" built in to the locomotive.

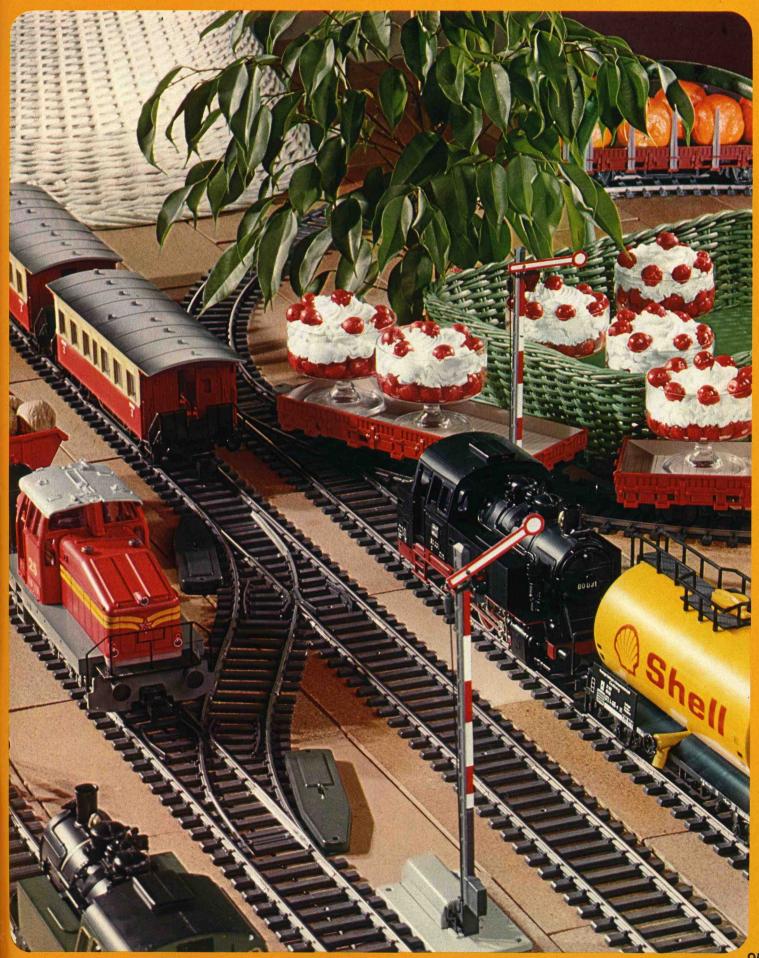


5602 Bumper, riveted steel type Sprung buffers Clips onto the rails Length 98 mm





Märklin I gauge, a large scale railroad for use in or out of doors





Automobile race track Scale 1:32 Gift packs for beginners

Märklin-Sprint, the high speed race track system with the most advanced technical features

The distinctive features of Märklin-Sprint are the thoroughly planned design of the whole system, its compact scale and the many extra details. Front axle steering gives the Märklin racing automobiles excellent cornering characteristics. Skid-type electrical pickups with compensating suspensions ensure that reliable contact is made with the track and clean themselves and the feeder rails at the same time. The high speed Märklin motors are located to give a good center of gravity position, and their technical excellence will be appreciated

by connoisseurs. Attached to the motors are gearboxes with gear ratios designed to give the automobiles maximum sensitivity to changes in traction voltage, so that short, sharp braking can be applied before entering a curve and rapid acceleration while in the curve.

There is also an emergency stop button, which provides scope for development of a very individual type of driving technique. The speed controller lead can be connected to the track at the point which seems to the "driver" to be well to prolonged hard tactically most favorable.

The speed controllers provide infinitely variable speed control (1591 also provides stepped speed control). And one particularly good point: the Märklin automobile race track can be assembled the same way as it used-at high speed and without problems.

The use of hinged locking couplings and electrical sprung contacts enables a robust and reliable race track to be assembled quickly. Although no retaining clips are used, the track will stand up

The track can be extended from two-lane to four- or six-lane, it can have long straight sections or many banked or unbanked curves: and inclines, overpasses and lane crossovers with or without automatic braking sections can be constructed. Lap counters can be used to indicate how many laps the race has run.

Märklin racing brings the tension of the great international automobile racing events into the home. It's quite an experience to drive one of the highspeed Märklin racers in competition.

It is best to start with the Märklin-Sprint automobile race track set 1409. This contains two top quality racing automobiles

(Porsche Can Am 917/10), a race track with a variety of features such as straight supports, piers, and speed sections, banked and un-

banked curves, as well as crash barriers with their controllers.

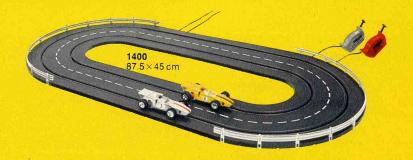
Märklin-Sprint automobile race tracks are fitted with radio interference suppressors to comply with regulations, and are marked to that effect





1400 87.5×45 cm

Race track set · Contains 2 McNamara racing automobiles, 1 red and 1 gray speed controller, 2 straight course sections 1205, 4 curved course sections 1220, crash barrier and 20 crash barrier supports · These parts will make up an oval circuit · Full instructions are included



1409

Race track set with 1 banked curve Race track set with 1 banked curve Contains 2 Porsche Can Am 917/10 sports cars, 1 red and 1 grey speed controller, 2 straight course sections 1200, 2 straight course sections 1201, 2 straight course sections 1206, 3 curved course sections 1220, 2 curved course sections 1241, 4 banked curve sections 1248, crash 4 banked curve sections 1248, crash barriers, 19 crash barrier supports, parriers, 19 crash parrier supports,
2 piers and 1 jointing section 1547
These parts will make up
a figure-eight course with overpass
and 1 banked curve Full instructions are included

1412 220×82 cm

Race track set with 1 banked curve Race track set with 1 banked curve
Contains 2 Porsche 935 sports cars,
1 red and 1 gray speed controller,
1 straight course section 1200,
1 straight course section 1201,
4 straight course sections 1205,
1 straight course sections 1206,
8 curved course sections 1241,
4 banked curve sections 1248, crash
harriers, 30 crash harrier supports barriers, 30 crash barrier supports, 4 piers and 1 jointing section 1547 These parts will make up a figure-eight course with overpass and 1 banked curve Full instructions are included

Caution! Märklin-Sprint automobiles must be supplied only with DIRECT CURRENT (DC).





Formula racing automobile · A model of the Mercedes W 196 Monoposto Driven through multiratio gearbox · Silver-colored plastic body · Length 12.8 cm Spare tires for this automobile: front 1500, rear 1501



1301 Formula racing automobile · A model of the Ferrari Supersqualo · Driven through multiratio gearbox · Red plastic body · Length 12.5 cm · Spare tires for this automobile: front 1500, rear 1501

Racing and sports cars 1:32 Racing cars for experts

The front wheels are steered by slots in the course. Accurate reproduction of the suspension arm assembly. Current pick-up by 2 sprung skids.



Sports car · A model of the E-type Jaguar · Swing front axle · Driven through spur gears · Red plastic body · Inset windows · Length 13.4 cm Spare tires for this automobile: front 1500, rear 1503



Sports car · A model of the Porsche 911 T Targa · Swing front axle · Driven through spur gears · Orange plastic body · Inset windows · Length 12.9 cm · Spare tires for this automobile: front 1500, rear 1503



Sports car · A model of the Mercedes C 111 · Swing front axle · Driven through spur gears · White body · Black chassis · Inset windows · Length 12 cm · Spare tires for this automobile: front 1500, rear 1503



Sports car · Same design as 1311 · But with orange body



Sports car · A model of the Porsche Carrera 6 · Driven through multiratio gearbox · Silver-colored plastic body · 2 working headlights · Cockpit covered with transparent plastic canopy · Length 13 cm · Spare tires for this automobile: front 1500, rear 1503



Sports car · Same design as 1316, but with open cockpit with windshield Red plastic body · Length 13 cm

60209



Sports car · Porsche 911 T Targa as police car · Continuously operating flashing blue light · Swing front axle · Driven through spur gears · Green and white plastic body · Inset windows · Length 12.9 cm · Spare tires for this automobile: front 1500, rear 1503



Racing automobile · A model of the McNamara · Driven through spur gears · Yellow plastic body · Length 12.3 cm · Spare tires for this automobile: 1505



Racing automobile · A model of the Lola T 222 · Driven through spur gears Red plastic body · Length 12.7 cm · Spare tires for this automobile: 1505



Sports car · A model of the Porsche Can Am 917/10 · Driven through spur gears · White plastic body · Open cockpit with windshield · Length 13.4 cm Spare tires for this automobile: 1505



Sports car · A model of the BMW 2002 turbo · Driven through spur gears · Orange plastic body · Length 12.6 cm · Spare tires for this automobile: 1505



Sports car · Same design as 1322 · But with white body



Sports car · A model of the Porsche 935 · Driven through spur gears · White plastic body with stabilizer surface fitted at rear end · Length 14.5 cm · Spare tires for this automobile: 1505



Sports car · Same design as 1324 · But with red body

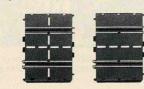


Course sections 1:32

Straight course sections



205 Length 424.2 mm (twice the length of 1200)



1204 Length 44 mm



1207
Controlled zone kit · Consists of two course sections each 106 mm long · For use at approach to bottlenecks or lane crossovers. The first vehicle into the con-

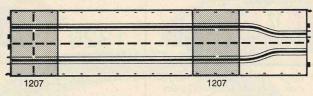
Double lane · 1200, 1201, 1205 and 1206 can be used for power supply connection

206 Length 300 mm (twice the length of 1201)



1200





trolled zone automatically cuts off the current in the other lane, and only switches it on again as it leaves the controlled zone

All course sections are made of rigid plastic and have inset channels for steering the automobiles. Current is supplied to the vehicles by contact rails on each side of the channels. The locking hinge couplings are all that is required to ensure an absolutely positive joint between course sections. The sections are black with a broken white line in the center.

Straight bottleneck

Straight bottleneck Double lane Track separation reduces from 75 to 38 mm Length 150 mm Two of these course sections are required





Straight lane crossover

Crossover sections 1217 cannot be used singly They are used in pairs.



Length 212.1 mm · Double lane The current feeders are isolated electrically where they cross over

Curved course sections

1220, 1241 and 1261 can be used for power supply connection



90° curved course section Double lane Mean radius 150 mm

45° curved course section Double lane · Mean radius 150 mm

1241

45° curved course section · Double lane · Mean radius 300 mm

1261

45° curved course section · Double lane · Mean radius 450 mm

45° banked curve course sections



45° banked curve

course section Mean radius 300 mm

45° banked curve

course section Mean radius 450 mm

Inclines 1290

1546

Set of banked curve supports
Consisting of 7 cross supports,
3 posts with a height of 128 mm,
4 posts with a height of 78 mm and
12 jointing sections Made of plas-

1291 Straight course section for end of

incline · Similar to 1290 but convex · Includes a clip for increasing rigidity of the section

1290

Straight course section for start of incline · Double lane · Concave form · Angle of incline about 30° Length 220 mm



Caution! Märklin-Sprint automobiles must only be operated with DIRECT CURRENT (DC).



1592

Rectifier · For connecting to Märklin railroad transformers Dimensions 57 × 52 × 15 mm DC supply for operating up to 4 automobiles simultaneously can be taken from the two pairs of sockets marked "Auto 1" and "Auto 2" · The transformer used must be rated at 16 VA or



593

Starting clock For connecting between the power pack and the race track layout When the time set on the knob (adjustable between 0 and 5 minutes) has elapsed, the current supply to the track is cut off Pressing the red start" button gives clearance



545

Mechanical lap counter -Mounted on a 106 mm double lane course section - Displays up to 99 laps for each lane in either direction - Indicators zeroed by hand - Height 130 mm - Width 150 mm

A course section 1202 is required as a make-up length On multi-lane courses several lap counters can be places in a continuous line across the



6//1

Märklin-Sprint power pack for connecting to 220 V AC mains supply Output approx. 14 V DC · Power output 10 watts · Overload protection by automatic current limiter · Plastic case · Weight 1.2 kg · Dimensions 125×135×55 mm

The use of power pack 6771 is recom-mended. If Märklin railroad trans-formers are used it is essential to connect the rectifier 1592 between the transformer and the speed controller



1591

Speed controller with connection kit.

Red. Shaped for easy handling. The control key is notched to enable various speeds to be set. The emergency stop button enables the current to be cut off without disturbing the setting of the speed control key. Built-in capacitor for radio interference suppression. The connection kit consists of a connector plate, which is conof a connector plate, which is connected to the speed controller by a 1.5 m long two-core lead, and a 1 m long two-core lead with a plug for connecting to the power pack.
A speed controller may only be used to control one automobile at a time



1594

Speed controller with connection kit · Large version · 40 Ohms · Electrodynamic braking operates when press key is not being pressed. Built-in capacitor for radio interference suppression. Connection kit consists of a connector plate, which is connected to the speed controller by a 3-core lead, and a two-core lead with plugs for connecting to the power pack. A speed controller may only be used to control one automobile at a time



1540

Crash barrier Corrugated type, made of flexible plastic · White



Crash barrier support · Made of white plastic · For fixing crash barriers to



1544

Bridge parapet For adding rigidity to overpasses Made of gray plastic Length 135 mm Height 38 mm



Overpass construction kit Consists of

2 piers 27 mm high, 2 piers 49 mm high, 2 piers 61.5 mm high and 2 piers 61.5 mm high and 2 bridge parapets All parts are made of gray plastic

Enables a very robust overpass to be built which is capable of spanning multi-lane courses



1547

Jointing section Length 74 mm Made of black plastic For connect-ing adjoining straight course sections and stiffening the joints



Tire sets

1500

Contains 2 rubber tires 20.5 mm (diameter)×6 mm · For models 1300, 1301, 1308, 1310, 1311, 1312, 1316, 1317, 1318

1501

Contains 2 rubber tires 23 mm (diameter) × 7 mm · For models 1300,

1503

Contains 2 rubber tires 20.5 mm (diameter)×7.6 mm · For models 1308, 1310, 1311, 1312, 1316, 1317,

Contains 2 rubber tires 20.5 mm (diameter) × 8.5 mm · For models 1319, 1320, 1321, 1322, 1323, 1324,

Current pick-up adapters

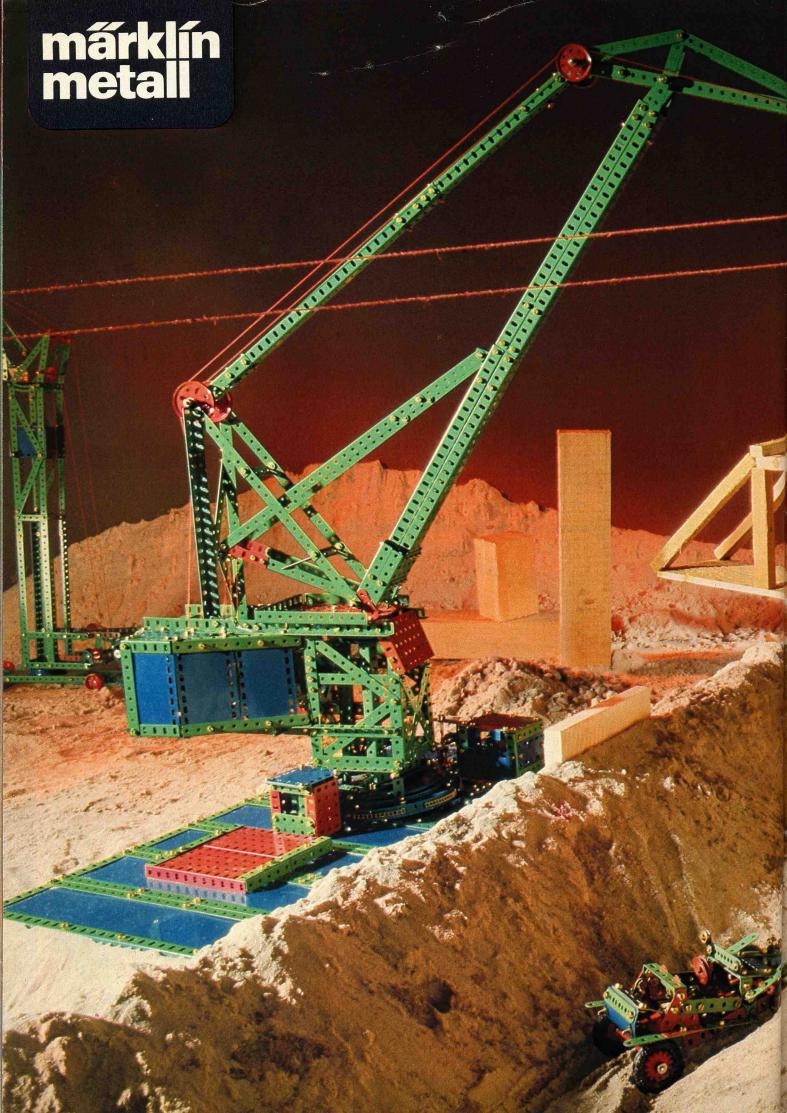
1510

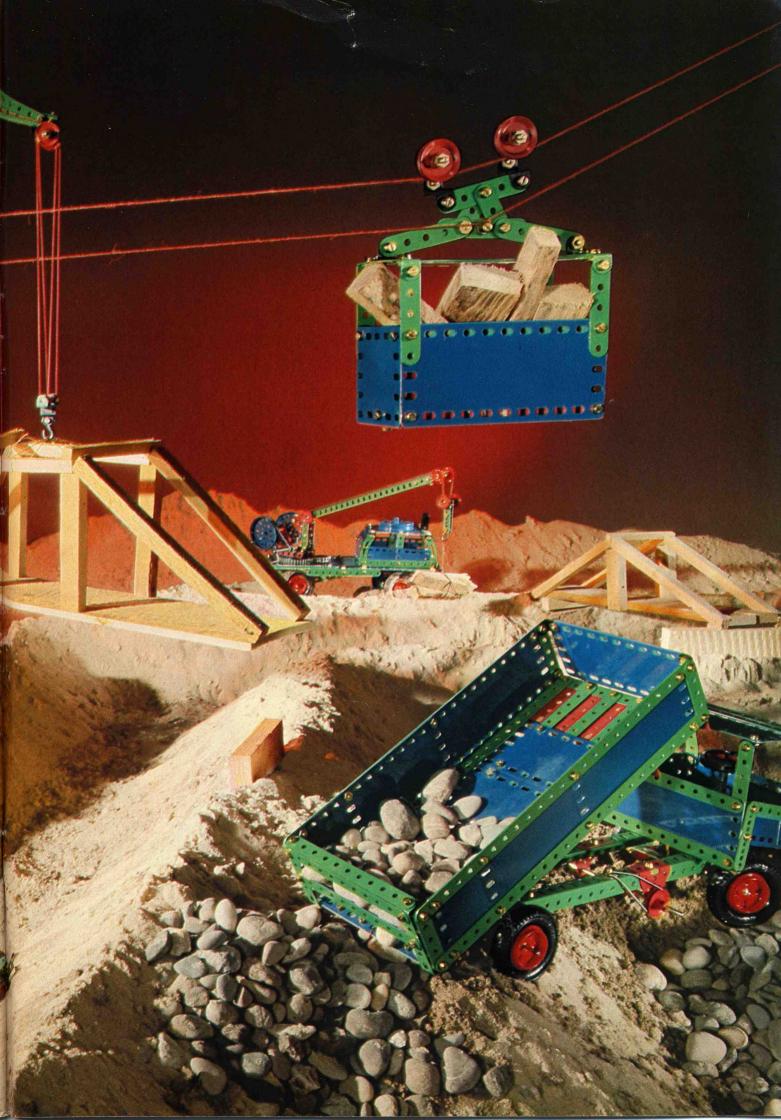
(1 pair) For clipping onto the pick-up skids of Märklin-Sprint automobiles To enable them to be used on race tracks of other makes

Pair of carbon brushes

60146 for motors of Märklin-Sprint

automobiles







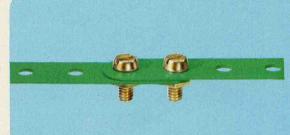
Construction system using real nuts and bolts

A technical world in which there was no metal cannot be imagined. And many parts of the technical world are held together with nuts and bolts. Märklin metall has an important role to play here, as early experience with it is of direct benefit to one's practical engineering skill in later life. Märklin metall models not only look realistic - they work, too. The Märklin metall system offers unlimited scope to inventors and practical hobbyists.



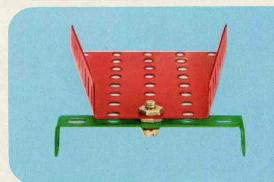
One of the most important things ever invented

The screw thread is ingeniously simple, and for many practical applications there is nothing to beat it. If you master the use of nuts and bolts while enjoying your hobby, you are acquiring valuable technical know-how at the same time.



Rugged construction

Structures made with Märklin metall can withstand heavy loads indefinitely, being made of robust materials joined firmly together by nuts and bolts. Märklin models can be used vigorously and for as long as you like.



Moving parts add to the fun

Nut and bolt techniques are versatile and instructive. By using non-rigid joints, mechanisms can be devised. With imagination, all kinds of things can be built up from the simple basic components.



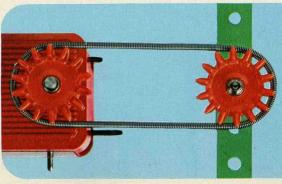
Even the tools show the

functional character of



Functional realism

This practical hobby enables you to have fun while gaining technical knowledge. Physical problems are understood in a practical context. Gear wheels, pulleys, shafts, rollers, wheels, transmissions: the variety is stimulating and fascinating.



Building and motorizing

A vehicle made of Märklin metall parts is not just strong; it can be motorized, too, if you want it to be able to operate by itself. Märklin electric motors add both fun and value to this hobby.

Good planning, practical construction, and a safe hobby



Robust compartmented boxes ____

These compact compartmented boxes are included with all Märklin metall sets. With them you can group individual components together realy for immediate use. In this way you can see everything you need and enjoy your modeling without delays.

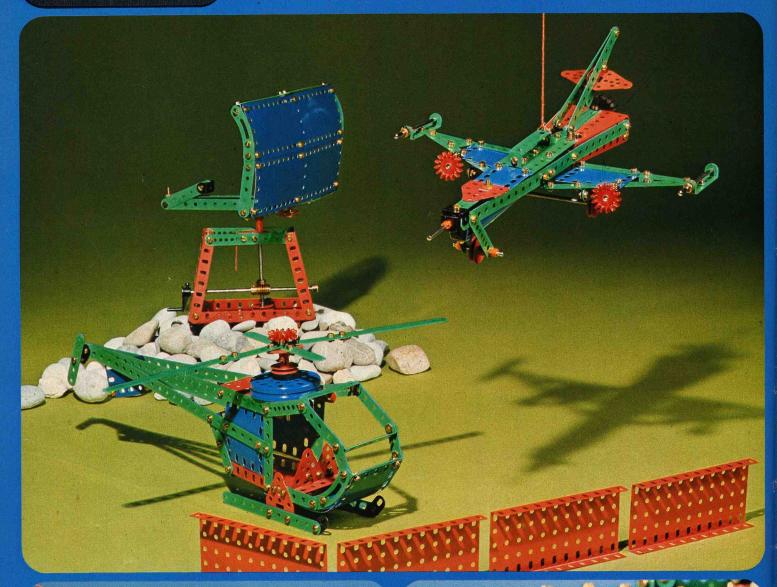
Large instruction book

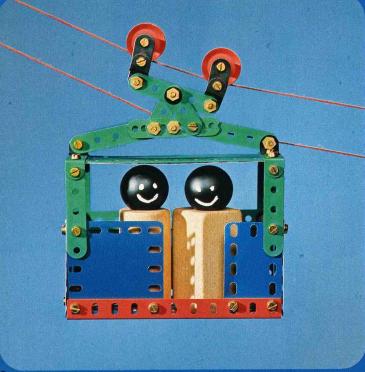
A 100 page instruction book is included with every basic set. The stages of construction of all kinds of models are shown in an easy-to-follow form. The examples given are meant to give you ideas for designing and building further models on your own.

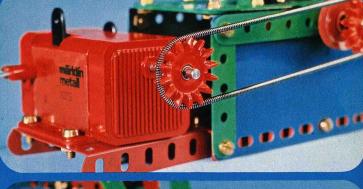


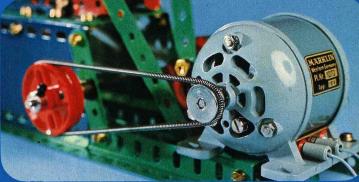
märklin metall

Examples of models and model groups

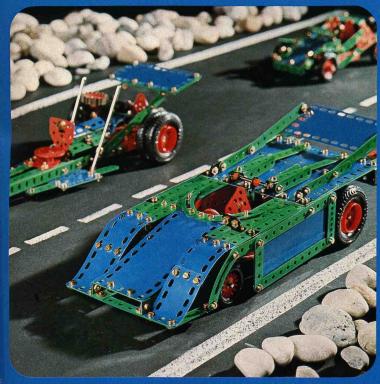




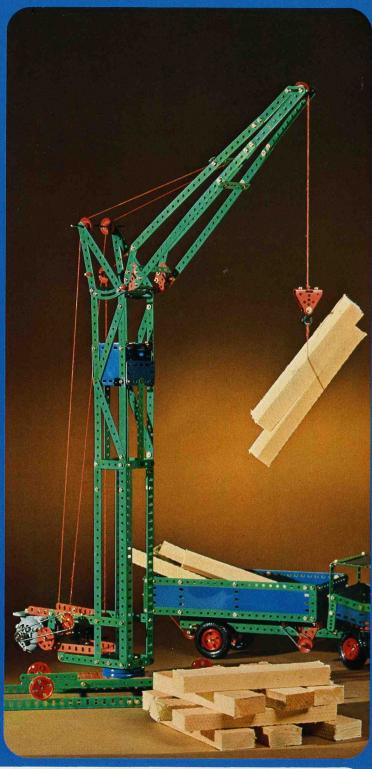




Rugged construction Moving parts add to the fun







1073 **new**Electric motor incorporating gearbox with two selectable gear ratios and switch for reversing the direction of rotation · Speeds at no load approx. 250 and 1000 rpm respectively



1072 ELEX
ELEX electric motor with 2 pulley wheels running in opposite directions and at variable speeds · Speeds at no load approx.
1100 and 3000 rpm respectively

Can be run from any model transformer with an output between 12 and 16 volts direct or alternating current.



Can be run from any model transformer with an output between 12 and 16 volts direct or alternating current.

márklín metall

Steady progress in nut-and-bolt techniques



Outline of the system:

Märklin metall Basic set A 1051/1081

Märklin metall Basic set B 1052/1082

Märklin metall Basic set C 1053/1083 A broad-based introduction to nutand-bolt techniques used in making all kinds of small models. 100-page instruction book and compartmented box are included.

A more advanced set, with which working models can be constructed. 100-page instruction book and compartmented box are included.

The large metall construction set, with which a thousand different models or assemblies can be made. Includes 2 compartmented boxes and instruction book.

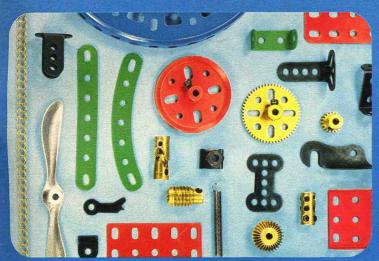
Märklin metall Extension set E 1 1061/1091

Märklin metall Extension set E 2 1062/1092 The contents of this set added to Basic set A are equivalent to Basic set B.

The contents of this set added to Basic set B are equivalent to Basic set C.

You can also buy the individual components of these sets separately, as well as many special parts. The use of Märklin electric motors provides almost unlimited scope for the more experienced designer.

No limit to design and construction possibilities



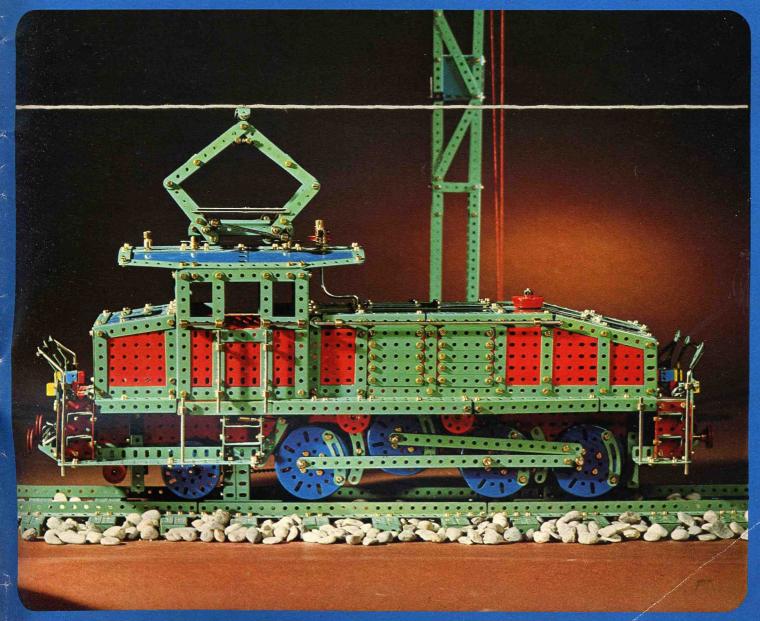
Märklin metall Special parts

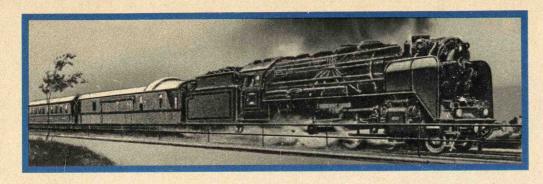
Special parts for use in conjunction with the Märklin metall construction system can be obtained from your Märklin dealer.



Märklin metall Individual components

There are no limits on the size of your constructions. All individual components used in the construction sets can also be purchased separately.





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Lokomotive

mit Tender, für Spur 0 großer Kreis, 5achsig, mit 3achsigem Tender, vor- und rückwärtsfahrend durch Handschaltung und mit automatischer Umschaltung für Fernsteuerung, Steckanschluß für Wagenbeleuchtung, Führerstandbeleuchtung, 2 elektrische Stirnlampen, mattschwarz. Länge mit Tender 40 cm Erforderliche Anschluß-Garnitur:

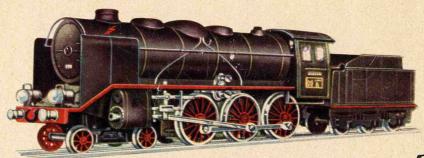
bei Wechselstrom: Transformator-Garnitur BG \ Spannung angeben \ Gleichstrom: Umformer \ , BG \ siehe Seite 44-45

Elektrische Lokomotiven Spur 0

Spur $0 = 32 \, \text{mm}$ Spurweite

zum Anschluß an Lichtleitungen von 110—250 Volt Wechsel-(Dreh-)Strom unter Verwendung eines Transformators

zum Anschluß an Lichtleitungen von 110—250 Volt Gleichstrom unter Verwendung eines Einanker-Umformers



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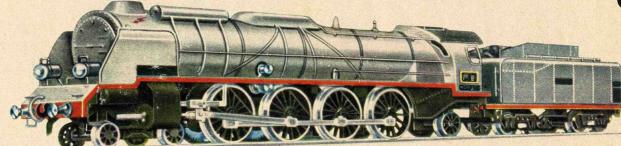


ME 66/12920

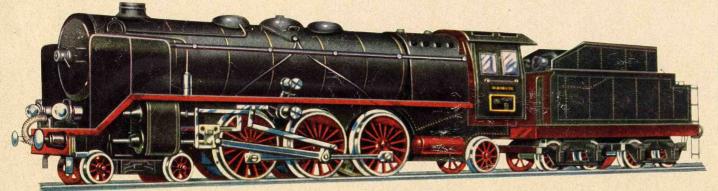
Lokomotive

7 achsig, mit 4achsigem Tender, nur für Modellschienen 3630 geeignet. Modellmäßige Wiedergabe, vor- und rückwärtsfahrend durch Handschaltung und mit automatischer Umschaltung für Fernsteuerung, 2 elektrische Stirnlampen, Führerstandbeleuchtung, Steckanschluß für Wagenbeleuchtung, Federpuffer, mattschwarz oder grau handlackiert. Länge mit Tender 59 cm

Für den Anschluß erforderlich:
bei Wechselstrom: Transformator-Garnitur BG
,, Gleichstrom: Umformer- ,, BG
Spannung angeben; siehe Seite 44-45



ME 66/12920



HR 66/12920

HR 66/12920 Lokomotive

6 achsig, mit 4 achsigem Tender für Spur 0 großer Kreis, naturgetreues Modell einer schweren Schnellzugslokomotive, mit genauer Wiedergabe der "Heusinger Steuerung", kräftiger Motor mit automatischem Umschalter, vor- und rückwärtsfahrend durch Handschaltung und durch Fernsteuerung, Steckanschluß für Wagenbeleuchtung, Führerstand mit Beleuchtung und Zelluloidfenstern, elektrische Stirnlampen, Feder-

puffer, mattschwarz handlackiert.

Länge mit Tender 52 cm

Für den Anschluß erforderlich:
bei Wechselstrom: Transformator-Garnitur BG
,, Gleichstrom: Umformer- ,, BG
Spannung angeben; siehe Seite 44-45