TOMY EC

N GAUGE MADE IN JAPAN — JAPANESE MODELS CONQUER THE WORLD OF SCALE MODELLING!

BUS SYSTEM, TRAM SYSTEM,
TRACK SYSTEM AND TRACK CLEANING

www.faller.de

TOMYTEC

Scale modelling inspired by Japanese and European originals

TOMYTEC is well known far beyond the frontiers of Japan as a manufacturer of high-quality model railway products and a comprehensive range of accessories focusing on the N track gauge.

That wide range offers tracks in various designs, points, crossings, and of course matching accessories such as transformers and speed controllers, connecting cables and signals, cleaning rails or turntables.

The bus system also brings a lot of movement in the streets. Bus models, which can be made mobile with motorizable chassis, offer a particular eye-catching feature on a model railway installation. There is also a tram system to match which is accurately adapted to the radii of curves of the bus system. Thus both systems make it possible to reproduce city scenes with tram and road traffic very realistically.

Another highlight in that range of products are track cleaning carriages. Although of simple technical design, they thoroughly serve their purpose: cleaning tracks by the wet or dry process, vacuuming and grinding them, if required.

The wide range of Japanese high-speed trains, building models that are easy to assemble as well as accessories and decoration parts complement the production programme.



On the following pages you will find all the interesting facts about our track cleaning carriages.

CONTENTS

TRACK CLEANING CARRIAGE 4

The right way to maintain your tracks!

BUS SYSTEM **7**Fascinatingly simple!

TRAM SYSTEM 12
Tramways

TRACKS 17
Tomix tracks offer the greatest diversity!

How to compute current consumption properly.

SPEED CONTROLLERS 32

TRANSFORMERS AND CONTROL SYSTEM **34**Einfach und vor allem sicher!

VEHICLES 36

Vehicles for model railway installation.

KITS 39

Most varied building models in various designs!

ROLLING STOCK 42
Shinkansen and bogies



Track cleaning carriage, blue

Art. 976425

With suction attachment, three polishing and three grinding wheels, mounting tool, sponge and brush. Perfect to clean, grind and polish all commercially available N tracks. A railway engine is required to trail it.



Track cleaning carriage, transparent

Art. 976426

With suction attachment, three polishing and three grinding wheels, mounting tool, sponge and brush. Perfect to clean, grind and polish all commercially available N tracks. A railway engine is required to trail it.

TRACK CLEANING CARRIAGE

The right way to maintain your tracks!

TOMYTEC's track cleaning carriage offers various ways of maintaining tracks, whether they are hardly accessible, dirty or corroded.

It sucks up dust and lightweight dirt through an extractor and collect them in a bin. Quickly replace the suction attachment with the grinding or polishing wheel using the special tool supplied, and track maintenance just goes on. For wet cleaning a cleansing agent may be used that is poured into a small tank located within the vehicle.

Extractor and polishing/grinding wheel are operated by their own motor – while the vehicle itself requires a railway engine to drag the cleaning trailer.

The track cleaning carriage is supplied complete with suction attachment, three polishing and three grinding wheels, mounting tool, sponge and brush as well as detailed instructions in several languages.

Operating the track cleaning vehicle is recommended only on analogue circuits! Accessories to buy separately include the polishing and grinding wheels as well as springs for the rotating ring.



Spare attachments for track cleaning carriage

Art. 976423

Three polishing and three grinding wheels, one brush and one sponge.



Spare attachments for track cleaning carriage

Art. 976424

20 polishing and 10 grinding wheels.

Spare springs for track cleaning carriage

Art. 971263

Spare springs for current input in the bogies of track cleaning carriage, 4 pieces, 7.5 mm long.



BUS SYSTEM

Fascinatingly simple!

Assemble ready-made road elements as you wish without any difficulty, switch the vehicles on, and the fun begins!

A great number of functions (stop points, bus stops and intersections) are a source of much fun and pleasure. Tomytec's bus system is fascinatingly simple. Roads are ready-made and provided with a wire that guides the vehicles. There are bus stops and branch-off junctions to actuate manually. Road elements are 6 mm high and 37 mm wide. And are available in various lengths, radii and designs. Moreover, roads perfectly match TOMYTEC's tram system – thus allowing to create fantastic city scenes with tram and bus traffic.

Buses – like trams – are available as stationary models. Such models can be made mobile by retrofitting using a chassis powered by two round cells of type LR44 (the new European types also accomodating LIPO rechargeable batteries that can be charged via a USB port). Conversion is easy: without requiring any tool, the base is taken out of the bus and the chassis is pressed in – it's ready!

LIPO batteries are charged via a USB connector.

Approximately 20 minutes of charging time are sufficient for about 2 hours of running time.



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TOMYTEC

Bus system, Mercedes Citaro Set

Art. 970356

Bus system, with vehicle (Citaro in silver), USB charging cable, roads, links, spare tyres and bus stop.

Bus system, GMC Set $\,$

Art. 975799

Bus system, with vehicle type GMC, USB charging cable, roads, links, spare tyres and bus stop.



Bus system, Citaro DB

Art. 974545

Bus system, Citaro bus of Deutsche Bahn. Ready-made model, expandable for operation on TOMYTEC's road system by installing a chassis 976297.



Bus system, Citaro HVV

by installing a chassis 976297.

Art. 974552

Bus system, Citaro PTT

Art. 974569

Bus system, Citaro bus of Hamburg football Bus system, Citaro bus of Swiss postal club HVV. Ready-made model, expandable service PTT. Ready-made model, for operation on TOMYTEC's road system expandable for operation on TOMYTEC's road system by installing a chassis 976297.



Bus system, Citaro Silver

Art. 974576

Bus system, Citaro bus, neutral in silver. Ready-made model, expandable for operation on TOMYTEC's road system by installing a chassis 976297.

.....



Bus system, GMC bus Yellow

Art. 976433

Bus system, GMC bus Yellow. Bus system, American GMC bus in yellow. Ready-made model, expandable for operation on TOMYTEC's road system by installing a chassis 974583.

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Bus system, GMC bus Orange

Art. 976434

Bus system, GMC bus Orange. Bus system, American GMC bus in orange. Ready-made model, expandable for operation on TOMYTEC's road system by installing a chassis 974583.

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Bus system, GMC bus Green

Art. 976435

Bus system, GMC bus Green. Bus system, American GMC bus in green. Ready-made model, expandable for operation on TOMYTEC's road system by installing a chassis 974583.

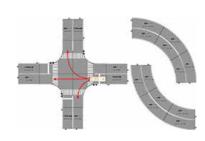
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Bus system, Bus stop

Art. 973211

Bus stop composed of 4 road elements each 70 mm long, waiting shelter with decoration, stop function and magnets.



Bus system, Intersection Set

Art. 975422

4 x straight with stop function, 4 x straight, 6 x curve C177, 6 x curve 214. Two-lane, change of direction manually switchable.



Bus stop, right-hand side (Europe)

Art. 976479

Bus stop for left-hand drive, bus stop on the right side.



Bus system, 6 straights

Art. 975418

Width 37 mm, length 70 mm. For TOMYTEC's bus system.



Bus system, 6 curves, Ø 30, r 177 mm

Art. 973190

Width 37 mm. For TOMYTEC's bus system.

.....



Bus system, 6 curves, Ø 30, r 214 mm

Art. 973191

Width 37 mm. For TOMYTEC's bus system.



Bus system, 6 curves, Ø 30, r 140 mm

Art. 973188

Width 37 mm. For TOMYTEC's bus system.

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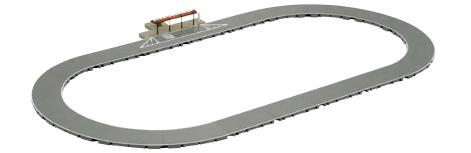


Bus system, 6 curves, Ø 30, r 103 mm

Art. 973187

Width 37 mm. For TOMYTEC's bus system.

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Bus system, Track Set A

Art. 975417

For an oval, including stop point, base surface area 563 x 281 mm.



Bus system, Start Set A

Art. 972823

Motorized chassis for buses, bus body like Hino Osaka Bus, bus stop with stop function, road oval composed of 6 curves with 103 and 140 mm radius respectively, 8 straights of 70 mm, bus stop.



Bus system, Set A

Art. 975689

1 x motorized chassis, 2 bus bodies (1 x printed and 1 x unprinted), 2 bus stops with stop function and shelters, various road parts and small parts allowing to build a circuit with 1400 x 170 mm area.



Bus system, 6 curves, Ø 30, r 66 mm

Art. 973186

Width 37 mm. For TOMYTEC's bus system.

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Bus system, 4 straights with manual stop function

Art. 975419

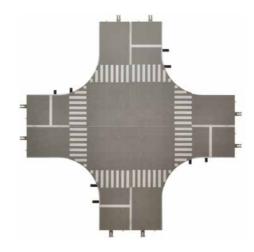
Width 37 mm, length 74 mm, with manual stop function for TOMYTEC's bus system.



Bus system, 4 straights

Art. 975829

Width 37 mm, length 70 mm. For TOMYTEC's bus system.



Bus system, Intersection, left-hand traffic

Art. 977115

Intersection composed of four parts, and matching links.



Bus system, Power chassis WMB-L02, Citaro

Art. 976297

Power chassis for Citaro buses, including 2 spare tyres, USB charging cable and assembly instructions.



Bus system, Power chassis WMB-L01, GMC

Art. 974583

Power chassis for GMC buses, including 2 spare tyres, USB charging cable und assembly instructions.



Bus system, Spare tyres 6.5 x 12 mm, 50 pieces

Art. 975078

Spare tyres for buses.



Bus system, Spare tyres 6.2 x 12 mm, 50 pieces

Art. 975085

Spare tyres for buses.





Tram system, Start Set, Munich

Art. 970143

With 3-piece Munich Tram, motorized chassis, selection of tracks for an oval (420 x 280 mm), transformer, connection cable and plug adapter for European users.



Tram system, Munich Tramway, type 2000

Art. 974260

Stationary model of a three-carriage tram of Munich public transport company, with piece of track. Model can be motorized using chassis 978710.

TRAM SYSTEM

Tramways

Simply versatile – it's TOMYTEC's tram system!

Design your scenes and installations with realistic tram operation! Diverse vehicle and track variants ensure plenty of action and activity. And the radii of rails are exactly those of the bus system – which thus allows to design city scenes with tram and bus traffic. The structure of vehicles is similar to that of the bus system: the base of stationary models can just be removed without using any tool, and the motorized chassis is pressed in – ready! Chassis are provided with flywheel mass, motor and current input on all axles.

Tracks for the trams are easy to assemble and dismantle. There are various lengths, radii of curves and surface finish such as concrete surface, pavement or simply ecological grass covering. Of course tram tracks can be combined with the range of rails so that points and signals can be used, while control procedures are ensured via transformers and speed controllers from TOMYTEC's range of products. Power supply is safe and easy through connectors. Rail height up to top edge is 6 mm. You will find all details on the topic Tracks on pages 17 to 31.



Tram system, Berlin Tramway, type 1000

Art. 974253

Stationary model of a three-carriage tram of Berlin public transport company, with piece of track. Model can be motorized using chassis 978710.



Motorized chassis, TM-LRT04, for three-carriage trains, trams

Art. 978710

Motorized chassis for tram stationary model with three carriages. Pivot pitch 118.2 mm, axle base 12 mm. Not suitable for Super Mini Tracks.



Tram system, Stationary model, Santram, type T102

Art. 975656

Stationary model, can be converted into a mobile model for tram system with chassis TM-LRT02.

Tram system, Stationary model, Toyohashi Rail Road, type T1001

Art. 975658

Stationary model, can be converted into a mobile model for tram system with chassis TM-LRT02.

.....



Motorized chassis, TM-LRT02, for trams

Art. 975468

Motorized chassis for trams, pivot pitch 62.8 mm, axle base 12 mm, length 108 mm, height 18 mm, width 15 mm. With motor, flywheel mass, rotary articulation, drive on four axles.



Tram system, Stationary model, Hiroshima Electric LRT Piccola

Art. 975538

Stationary model, can be converted into a mobile model for tram system with chassis TM-LRT03.



Tram system, Stationary model, Hankai Tramway, type 1001

Art. 975657

Stationary model, can be converted into a mobile model for tram system with chassis TM-LRT02.



Tram system, Stationary model, Kumamoto City, type 5000

Art. 976445

Stationary model, can be converted into a mobile model for tram system with chassis TM-LRT03.



Tram system, Stationary model, Hankai Tramway MO, type 161 green

Art. 976582

Stationary model, can be converted into a mobile model for tram system with chassis TM-TR04.



Motorized chassis, TM-LRT03, for trams

Art. 975469

Motorized chassis for trams, pivot pitch 62.8 mm, axle base 12 mm, length 108 mm, height 18 mm, width 15 mm. With motor, flywheel mass, rotary articulation, drive on four axles.

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${\bf Motorized\ chassis, TM\text{-}LRT01, for\ trams}$

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Art. 975977

Motorized chassis for trams, pivot pitch 61 mm, axle base 12 mm, length 120 mm. With motor, flywheel mass, rotary articulation, drive on four axles.



Motorized chassis, TM-LRT03, for Tram Piccola

Art. 975979

Motorized chassis for trams, pivot pitch 76 mm, axle base 12 mm. With motor, flywheel mass, rotary articulation, drive on four axles.

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Tram system, Stationary model, Hankai Tramway MO, type 161 Nankai

Art. 976597

Stationary model, can be converted into a mobile model for tram system with chassis TM-TR04.



Tram system, Stationary model, IyoRailway, type 2000 MOHA

Art. 976695

Stationary model, can be converted into a mobile model for tram system with chassis TM-TR01.



Tram system, Stationary model, Toyama Tramway LRT, type T100

Art. 977266

Stationary model, can be converted into a mobile model for tram system with chassis TM-LRT02.



Tram system, Stationary model, Hankai Tramway LRT, type 1001

Art. 977267

Stationary model, can be converted into a mobile model for tram system with chassis TM-LRT02.



Motorized chassis, TM-TR01, for trams

Art. 975981

Motorized chassis for trams, axle base 9.2 mm. With motor, flywheel mass, rotary articulation, drive on four axles. Pivot pitch can be adjusted between 36/38.6 and 41.2 mm



Motorized chassis, TM-TR03, for trams

Art. 976448

Motorized chassis for trams, pivot pitch 72 mm, axle base 9.2 mm, length 118 mm. With motor, flywheel mass, rotary articulation, drive on four axles. Front bogie adjustable in various positions.



Motorized chassis, TM-TR04, for trams

Art. 976596

Motorized chassis for tram stationary models. Axle base 46.4 mm.



TRACKS

Tomix tracks offer the greatest diversity!

TOMYTEC has about 150 different tracks in its range of products!

TOMYTEC's track system offers a large, most varied choice and is compatible with nearly all tracks of other manufacturers as well as the current N gauge vehicles. With more than 150 different designs Tomix Tracks offer the greatest diversity in the trade. Tracks are easy to assemble thanks to their plug-in system. Points, buffer stops, curves with superelevation, bridges and many others more complement the product line. Tracks are suitable for both, digital and analogue drive, digital drive requiring the right decoder for the points. The following track types are available:

- Ballasted, narrow track bedding, sleepers made of wood, straight and curved.
- Ballasted, narrow track bedding, sleepers made of concrete, straight and curved.
- Ballasted, broad track bedding, sleepers made of concrete, straight and curved, curved tracks also available with superelevation.
- 4. Tracks in **viaduct bedding, concrete,** straight and curved, two-track and single-track.
- 5. Tracks in **viaduct bedding, ballasted,** straight and curved, two-track and single-track.
- 6. Tram tracks in concrete bedding, straight and curved.

The advantages are, among others:

The different radii of the tracks allow an accurate fit on double-track lines. This also makes it possible to represent realistic curves by means of a superelevation. Very small radii are possible with »Super-Curved-Tracks«.

GOOD TO KNOW!

Standard track, straight: 5-1/2" 140 mm

Standard track, curved: 11" 280 mm radius, 45°

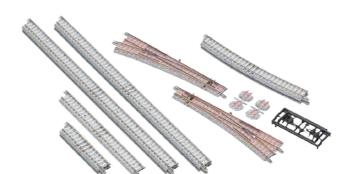
Spacing from centre to centre, double tracks: 37 mm

Material: nickel silver

Track code: 80

Bedding height up to top edge rail: 6 mm

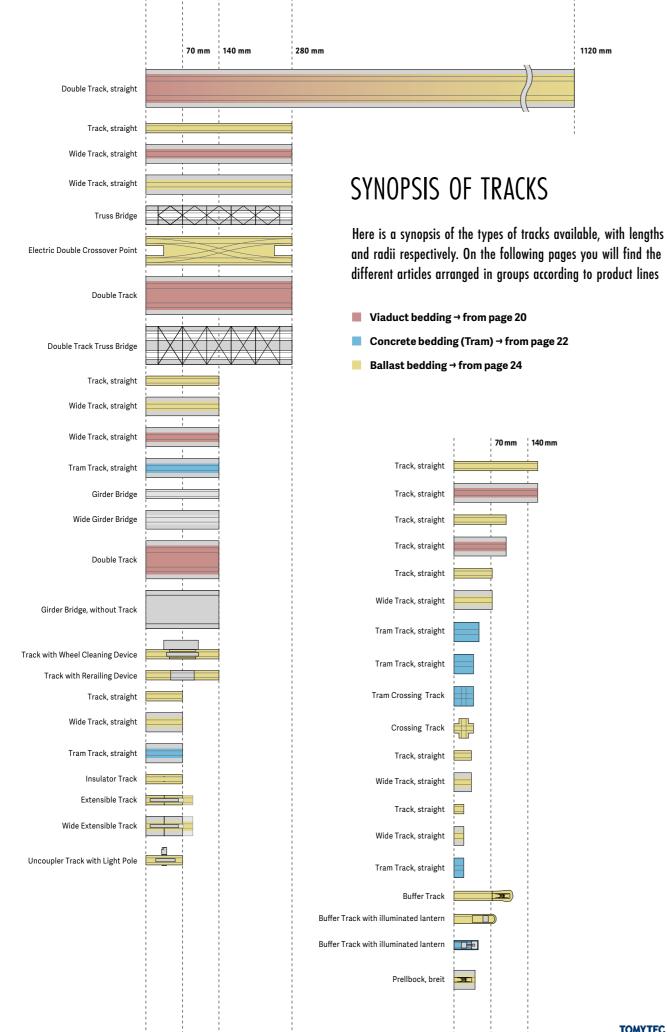
Basic grid: 70 mm

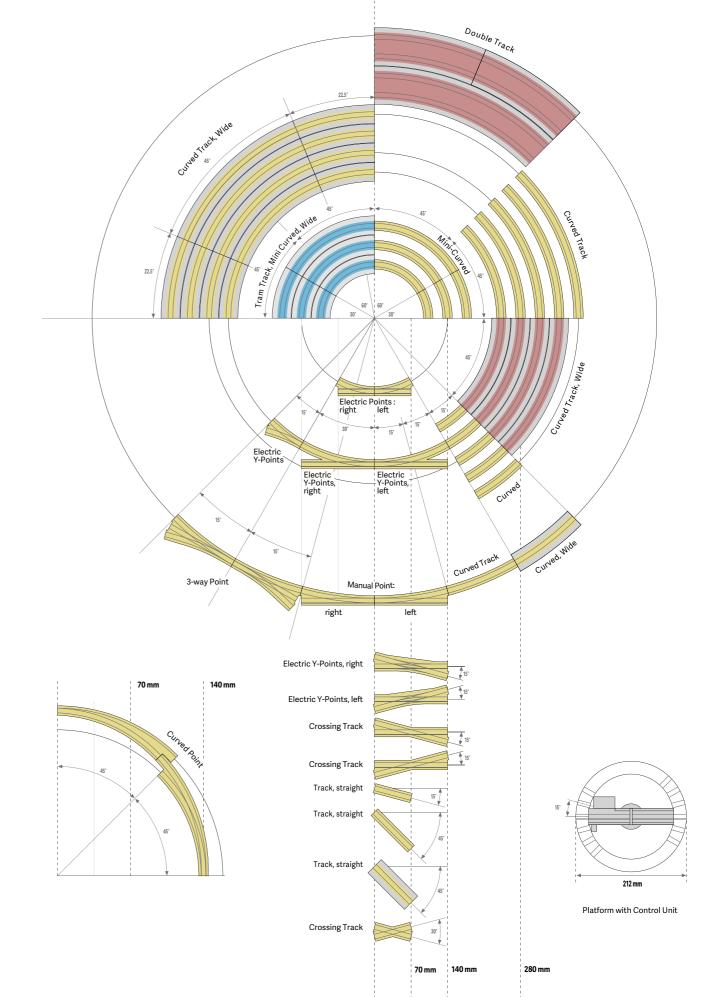


Track Set for an oval, concrete sleepers

Art. 970251

Track set for a turnout. With 2 points, 4 straights 280 mm, 1 straight 140 mm, 2 straights 72.5 mm and 2 curves: radius 541 mm/angle 15°.





VIADUCT BEDDING:

Tracks in viaduct bedding, ballasted or with concrete slabs.

The version with ballast is mainly used for bridges. The version with concrete slabs, in contrast, rather for high-speed trains. The originals of the socalled slab tracks or ballastless tracks (tracks without any ballast) are nearly maintenance-free, require little mounting depth, ensure high reliability and present better noise and vibration characteristics.

Track spacing 37 mm. Bedding height up to top edge rail 6 mm, basic grid 70 mm.

2 Double tracks, straight, in ballasted viaduct bedding, each 1120 mm Art. 971069



Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

2 Tracks, straight, in concrete viaduct bedding, each 99 mm Art. 971075

Track spacing 37 mm. Bedding height up to

2 Double tracks, straight, in concrete viaduct bedding, each 280 mm Art. 971067

top edge rail 6 mm, basic grid 70 mm.

2 Double tracks, straight, in concrete viaduct bedding, each 140 mm Art. 971066

2 Double tracks, straight, in concrete viaduct bedding

Art. 971070

4 Double tracks, straight, in concrete viaduct bedding, each 140 mm Art. 971047

With concrete sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to

4 Tracks, straight, in concrete viaduct bedding, each 140 mm

Art. 971821

4 Tracks, straight, in concrete viaduct bedding, each 280 mm

Art. 971822

4 Tracks, straight, in concrete viaduct bedding, each 99 mm Art. 971825

4 Tracks, straight, in concrete viaduct bedding, each 99 mm

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Art. 971826

4 Tracks, straight, in concrete viaduct bedding, each 99 mm

Art. 971871



Track spacing 37 mm. Bedding height up to top edge rail 6 mm, basic grid 70 mm.

2 Double tracks, curved, in concrete viaduct bedding, 45°, r 465 mm Art. 971168

2 Double tracks, curved, in concrete viaduct bedding, 45°, r 465 mm Art. 971169



With concrete sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

4 Tracks, curved, in concrete viaduct bedding, 45°, r 317 mm Art. 971872

4 Tracks, curved, in concrete viaduct bedding, 45°, r 243mm Art. 971873



With concrete sleepers. With curve superelevation. You need Art. 1753 as start

4 Tracks, curved, in concrete viaduct bedding, 45°, r 345 mm Art. 971874

CONCRETE BEDDING:

Tracks in concrete beddings are used for trams. Additionally there are also versions with grass covering and others with pavement.



4 Tram tracks, straight, each 70 mm long, in concrete bedding

Art. 971792

4 Tram tracks, straight, each 70 mm long, in concrete bedding.



4 Tram tracks, curved, Super Curved, with broad concrete bedding

Art. 971795

4 pieces, 2 x 30° angle, 2 x 60° angle. Radius 103 mm.



4 Tram tracks, straight, in concrete bedding

Art. 971798

••••• 4 pieces, 18.5, 47.5 mm and 2 x 37 mm long.



4 Tram tracks, straight, each 140mm long, in concrete bedding

Art. 971793

Tracks for tram system in concrete design, 4 tracks with link.



4 Tram tracks, curved, Mini Curved, with broad concrete bedding

Art. 971796

4 pieces, 2 x 30° angle, 2 x 60° angle. Radius 140 mm.



Tram system, 90° intersection

Art. 971799

Tram tracks, intersection. With joining clips and an intersection. 2 straights of each: 18.5 mm and 47.5 mm as well as 4 straights 37 mm.



4 Tram tracks, straight, 70 mm, pavement

Art. 971794

Tracks for tram system in pavement design, 4 tracks.



4 Tram tracks, curved, Mini Curved, with broad concrete bedding

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Art. 971797

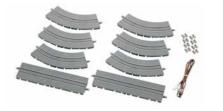
4 pieces, 2 x 30° angle, 2 x 60° angle. Radius 177 mm.



Tram tracks, Basic set

Art. 971088

Tram tracks with joining clips and an intersection. One curve each with radius 140 mm/angle 30°, radius 140 mm/angle 60°, radius 177 mm/angle 60°, radius 177 mm/ angle 30°, 2 straights of each: 18.5, 47.5 and 70 mm and 4 straights 37 mm.



Tram Tracks, Basic set

Art. 971085

8 Tram tracks, supply terminal and joining clips for bedding. Version: 2 x 140 mm, 6 curves: radius 103 mm/angle 60°, with street

.....



Tram Tracks, Basic set

Art. 971086

10 Tram tracks, supply terminal and joining clips for bedding. Version: 2 x 140 mm, 2 curves with each radius 177 mm/angle 60°, radius 177 mm/angle 30°, radius 140 mm/ angle 40°.

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Tram system, Track link

Art. 970113

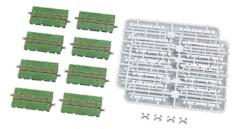
For TOMYTEC trams, 32 pieces, made of plastic.



Tram tracks, Basic set pavement

Art. 971084

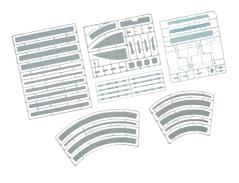
Tram tracks for an oval 495 x 365 mm, in pavement version. 2 curves with each radius 140 mm/angle 30°, radius 140 mm/angle 60°, radius 177 mm/angle 60°, radius 177 mm/angle 30°, 2 straights 140 mm. Including bus stop, connection cable and holding clips.



8 Tram tracks, straight, 70 mm, grass

Art. 971789

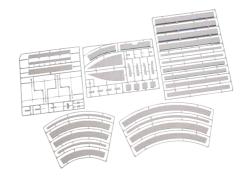
Tracks for tram system in grass-covered version, 8 tracks with link.



Tram system, Filling pieces

Art. 973076

Filling pieces for respectively a semicircle in radius 103 mm, 144 mm or 177 mm, for four straight tracks 140 mm, as well as points 1231 and points 1232, and parts for a tram stop. In pavement version.



Tram system, Filling pieces

Art. 973079

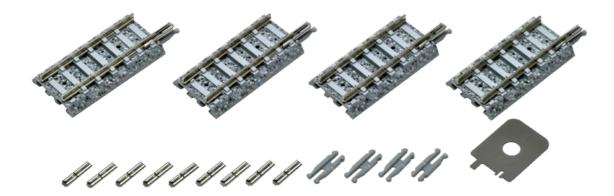
Filling pieces for respectively a semicircle in radius 103 mm, 144 mm or 177 mm, for four straight tracks 140 mm, as well as points 1231 and points 1232, and parts for a tram stop. In asphalt version.

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BALLAST BEDDING:

Tracks in ballast bedding with concrete or wooden sleepers. The most common type of track.

Curved variants from page 26, matching points from page 28.



Transition track to other manufacturers: Sets with 4 transition pieces, each 35 mm long. Including 9 metal and 4 plastic links as well as a mounting tool. Transition to/from Kato, Roco, Fleischmann and Minitrix.

Transition track from/to Roco, Fleischmann, Kato, Minitrix.... Set with 4 straights of 35 mm. With 9 metal links, 4 plastic links and a mounting tool.

Transition track, 35 mm, 4 pieces

Wooden sleepers	Concrete sleepers	
Art. 971529	Art. 971530	



With concrete sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

12 Tracks, straight, in ballast bedding, each 280 mm

Art. 971093

4 Tracks, straight, in ballast bedding, each 140 mm

Art. 971011

4 Tracks, straight, in ballast bedding, each 280 mm

Art. 971012



4 straight tracks, 99 mm

Art. 970159

4 straight tracks, 158.5 mm

Art. 970166



Length 2 x 33 and 2 x 18 mm. With wooden sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

4 Tracks, straight, in ballast bedding

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Art. 971099



With wooden sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

4 Tracks, straight, in ballast bedding, each 280 mm Art. 971802

4 Tracks, straight, in ballast bedding, each 72.5 mm

Art. 971803

4 Tracks, straight, in ballast bedding, each 70 mm

Art. 971804

4 Tracks, straight, in ballast bedding, each 99 mm

Art. 971805

4 Tracks, straight, in ballast bedding, each 158.8 mm

Art. 971806

4 Tracks, curved, in ballast bedding, 45°, r 280 mm

Art. 971851

10 Tracks, straight, in ballast bedding, each 280 mm

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Art. 971092

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With concrete sleepers. Track code 80, Bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

2 Tracks, straight, with broad ballast bedding, each 280 mm Art. 971732

••••••

2 Tracks, straight, with broad ballast bedding, each 140 mm Art. 971739

4 Tracks, straight, with broad ballast bedding, each 140 mm

Art. 971769

Tracks, straight, with broad ballast bedding, 8 p.

Art. 977387

4 Tracks, straight, with broad ballast bedding, each 70 mm Art. 977639

71111.077000

4 Tracks, straight, with broad ballast bedding, each 72.5 mm

Art. 977646







With wooden sleepers. Track code 80,

bedding height up to top edge rail 6 mm,

basic grid 70 mm, parallel spacing from

4 Tracks, curved, in ballast bedding,

4 Tracks, curved, in ballast bedding,

.....

4 Tracks, curved, in ballast bedding,

4 Tracks, curved, in ballast bedding,

centre to centre 37 mm.

15°, r 280 mm

Art. 971854

45°, r 243 mm

Art. 971855

45°, r 354 mm

Art. 971856

45°, r 391 mm

Art. 971858

Two bends with each 30° and 60°. With wooden sleepers.

.....

4 Tracks, curved, Mini Curved, in ballast bedding, r 103 mm Art. 971111

4 Tracks, curved, Mini Curved, in ballast bedding, r 140 mm Art. 971112

4 Tracks, curved, Mini Curved,

in ballast bedding, r 177 mm Art. 971113

basic grid 70 mm, parallel spacing from centre to centre 37 mm.

15°, r 541 mm

2 Tracks, curved, in ballast bedding, 15°, r 243 mm



With concrete sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

4 Tracks, curved, in ballast bedding, 15°, r 280 mm

Art. 971941

4 Tracks curved, in ballast bedding, 45 Ø, r 317 mm

Art. 971192

4 Tracks, curved, in ballast bedding, 15 Ø, r 317 mm Art. 971197

With wooden sleepers. Track code 80, bedding height up to top edge rail 6 mm,

2 Tracks, curved, in ballast bedding,

Art. 971123

2 Tracks, curved, in ballast bedding, 15°, r 317 mm

Art. 971143

Art. 971127



With concrete sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacinÅ g from centre to centre 37 mm.

4 Tracks, curved, in ballast bedding, 15°, r 279 mm

.....

Art. 971863



With wooden sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

2 Tracks, curved, in ballast bedding, 45°, r 354 mm

Art. 971126

4 Tracks, curved, in ballast bedding, 45°, r 317 mm

Art. 971852

4 Tracks, curved, in ballast bedding, 15°, r 541 mm Art. 971853



With concrete sleepers. Track code 80, bedding height up to top edge rail 6 mm, basic grid 70 mm, parallel spacing from centre to centre 37 mm.

2 Tracks, straight, with broad ballast bedding, each 140 mm Art. 971739

2 Tracks, curved, with broad ballast bedding, 15°, r 541 mm Art. 971740

2 Tracks, curved, with broad ballast bedding, 22.5°, r 354 mm Art. 971753

> 4 Tracks, curved, with broad ballast bedding, 45°, r 345 mm Art. 971773

4 Tracks, curved, with broad ballast bedding, 45°, r 280 mm Art. 971781

4 Tracks, curved, with broad ballast bedding, 45°, r 354 mm Art. 971782

4 Tracks, curved, with broad ballast bedding, 22.5°, r 345 mm

Art. 971783

4 Tracks, curved, with broad ballast bedding, 45°, r 280 mm Art. 977714

> 4 Tracks, curved, with broad ballast bedding, 45°, r 317 mm Art. 977721

4 Tracks, curved, with broad ballast bedding, 45°, r 391 mm Art. 977746

••••••

4 Tracks, curved, with broad ballast bedding, 22.5°, r 280 mm Art. 977813

4 Tracks, curved, with broad ballast bedding, 22.5°, r 317 mm Art. 977820

4 Tracks, curved, with broad ballast bedding, 22.5°, r 391 mm Art. 977844



Three-way points, left/right

Art. 971262

Length 140 mm, turnout angle 15°.



Three-way points, right/left

Art. 971261

Length 140 mm, turnout angle 15°, turnout radius 541 mm / 280 mm. With drive, 12 V DC.

.....



Electric points, right

Art. 971231

Super-Mini electric points right, 70 mm long, turnout angle 30°, turnout radius 140 mm, with drive.

.....



•••••

140 mm length, turnout angle 15°, turnout radius 541 mm. Manual operation.

Manual points, outgoing track, right Art. 971215

Manual points, outgoing track, left Art. 971216



Length 140 mm, turnout angle Ø 15, turnout radius 541 mm.

Electric points, right

Art. 971271

Electric points, left

Art. 971272



Outer radius 317 mm, bend 45°, turnout radius 280 mm, with drive.

Electric bend points, right

Art. 971278

Electric bend points, left

Art. 971279



Variable track, 70-90 mm

Art. 975253

Telescopic, possible length between 70 and 90 mm.



Variable track, 70-90 mm, in broad ballast bedding, 2 pieces

Art. 975284

Telescopic, possible length between 70 and 90 mm.

.....



Spare attachments for cleaning track Art. 976413

.....

2 spare attachments for TOMYTEC cleaning tracks.



.....

Wheel cleaning track

Art. 976415

With concrete sleepers. 70 mm long.



Buffer stop, 99 mm

Art. 971421

With wooden sleepers.



Buffer stop with LED lamppost and silencer

Art. 971423

With track.



Buffer stop with broad ballast bedding, 1 piece

Art. 971424

With 40 mm track end piece. with wooden sleepers, 37 mm wide.



Buffer stop with broad ballast bedding, 2 pieces

Art. 971425

With 40 mm track end piece, with wooden sleepers, 37 mm wide.



Electric points, left

Art. 971232

Super-Mini electric points left, 70 mm long, turnout angle 30°, turnout radius 140 mm, with drive.



Electric Y-junction

Art. 971240

Length 70 mm, turnout angle 15°, turnout radius 280 mm. Including drive.



Double crossover, in ballast bedding

Art. 972474

Double crossover, with wooden sleepers.

•••••



curved piece of track, connection cable and small parts.

Art. 972313

With wooden sleepers, Mini-Curved, with a

Electric points, left, in ballast bedding Art. 972320



With wooden sleepers.

Art. 972450

> Electric points, left, in ballast bedding Art. 972467



Length 140 mm, turnout angle 30°, turnout radius 280 mm.

••••••

Electric points, right

Art. 971273

Electric points, left Art. 971274



Turntable with control unit

Art. 971633

Ready-made model. Operates on 12 V DC. Overall dimension 212 mm, platform length 166 mm.



Points switch box, single

Art. 975531

For points and semaphores. With one port.

••••••



Points switch box, double

Art. 975532

For points and semaphores. With two ports.



Buffer stop

Art. 971427

With piece of track, concrete sleepers, 70 mm long, buffer stop illuminated by LED.

START SETS — THE QUICK WAY!

Start Sets — the quick way! Track layouts are perfect to combine with one another.



Track start set, oval, with bridge

Art. 970275

Start set tracks for an oval 613 x 1422 mm, with bridge, tracks in viaduct bedding.

•••••



Start set Tracks D

Art. 970640

Track set for an oval, 634×1614 mm. With 2 straights 140 mm, 3 straights 280 mm, 8 curves: radius 317 mm/angle 45°, 4 curves: radius 541 mm/angle 15°, 1 double crossover, points box, connection cable.



Start set Tracks B

Art. 970923

Contains 1 straight 140 mm, 4 straights 280 mm, 2 straights 72.5 mm, 2 curves, 2 points, 2 control boxes for the points. Floor space required 55.5×1120 mm.



Track start set, oval, with rerailing track

Art. 970282

Track set for oval 634 x 1614 mm. With 5 straights 280 mm, 1 straight 140 mm, rerailing track 140 mm, 6 curves: radius 317 mm/angle 45° and 4 curves: radius 541 mm/angle 15° as well as track connection cable.

.....



Start set Tracks Y

Art. 970695

Track set for an oval, 55.5 x 1120 mm. With 4 straights 99 mm, 6 straights 72.5 mm, 2 straights 280 mm, 4 curves: radius 541 mm/ angle 15°, 2 points, points box and connection cable.

<u>.....</u>



Tracks start set for an oval

Art. 970945

Start set for an oval 560 x 1120 mm, including speed controller, mains power pack, points and link.

.....



Tracks start set for an oval

Art. 970946

Start set for an oval 814 x 2158 mm, including speed controller, mains power pack, points, platform, flyover, up and down ramps and bridge.

.....



Track set, oval

Art. 971080

Track set for an oval, 206 x 346 mm. With 2 straights 140 mm and 6 curves: radius 103 mm/angle 60° as well as connection cable.



Track set, descending ramp

Art. 971082

Track set for a turnout, 37 x 490 mm. With one straight 140 mm and one straight 280 mm, 2 straights 70 mm, 2 curves: radius $140 \text{ mm/angle } 30^{\circ}$ and 2 points.



Tracks start set for an oval

Art. 970947

Track set for an oval, 560 x 1120 mm. With 3 straights 280 mm, 1 straight 140 mm, 1 rerailing track 140 mm, 8 curves: radius 280 mm/angle 45°, as well as speed controller, mains power pack and connection cable.



Track set, oval

Art. 971081

Track set for an oval, 317 x 457 mm. With 2 straights 140 mm, 4 curves: radius 140 mm/angle 60° and 4 curves: radius 177 mm/angle 30° as well as connection cable.

.....



Track set, oval

Art. 971083

Track set for an intersection, 273 x 440 mm. With one curve each with radius 140 mm/angle 30°, radius 140 mm/angle 60°, radius 177 mm/angle 60°, radius 177 mm/angle 30°, 2 straights 70 mm, 3 straights 33 mm, 4 straights 18.5 mm and an intersection.



TECHNOLOGY

SPEED CONTROLLERS

How to compute current consumption properly.

TOMYTEC's speed controllers are a must for realistic playing. They are available in various versions. Power can be supplied through the European electric network without any difficulty, however a plug adapter is required.

EXAMPLES OF COMPUTATION

Art. no.	Art. name	Power
For Sets	Mains power pack N-400*	0.4 A (400 mA)
975507	TCS Mains power pack N-600	1.2 A (1000 mA)
975068	TCS Mains power pack N-1001-CL#	1.2 A (1200 mA)

*These mains power packs are fitted with a 2-position control system suitable for electric points.

*What means CL?
CL means Constant Lightning
system. Transformers with the
abbreviation CL ensure permanently
constant light within trains,
irrespective of their speed, they may
even be at rest.

EXAMPLES OF CONSUMPTION

Art. Railcar		when using per vehicle
Headlights		•
Rear lights	. 60 mA	. per set
Inside lighting	. max. 60 mA	. per set
Inside lighting – LED	. 25 mA	. per set
Buffer stop, LED	. 20 mA	per buffer stop
Electric points/Traffic lights	150 mA	independent of number
Electric signal light	. max. 2 mA	. per signal
TCS Signal*	. 10 mA	. per signal
TCS Control unit*	. 45 mA – 85 mA	. per unit
TCS Turntable*	. 140 mA	. per piece
Track cleaning vehicle	. max. 300 mA	. per vehicle
Red cleaning track	. max. 300 mA	. per track

*What means TCS?

The junction connector is used to wire and connect several products one after the other, such as signals, for instance. Such system is called Terminal Connection System TCS.

These are theoretical values: they may differ depending on the indicating devices used!

THEORETICAL COMPUTATION OF CURRENT CONSUMPTION

Using the chart on the preceding page you are in a position to calculate the current consumption induced by Tomix products. However, please note that these are only theoretical values! The actual values may differ due to soiling, wear and tear, and the different basic functions performed by the trains!

In the first example given you can use all speed controllers listed on page 32, in examples 2 and 3 you cannot use mains power pack N400 and N600 because they deliver too little power. The number of carriages in a train that can be operated together within the nominal power rating of speed controllers N-1001-CL is up to 8 waggons.

We recommend to use another power supply for products that only require current when trains are operating. In such a case connect the speed controller to the racks, and the other consuming devices such as illumination of the installation or any points to a separate power supply.

Please note that several mains power packs may not be connected to the same track circuit!

Example of calculation of current consumption when operating <u>one railcar with three carriages:</u>

Total 600 mA
Inside lighting set for 3 carriages180 mA
Railcar300 mA
Rear lights
Headlights60 mA

Example of calculation of current consumption when operating <u>one railcar with 13 carriages:</u>

Total	1200 mA
Inside lighting set for 13 carriages	780 mA
Railcar	300 mA
Rear lights	60 mA
Headlights	60 MA

Example of calculation of current consumption when operating two railcars with six carriages:

Total	1080 m
Inside lighting set for 6 carriages	360 mA
2 Railcars	600 mA
Rear lights	60 mA
Headlights	60 mA

TRANSFORMERS AND CONTROL SYSTEM

Simple and, most important, safe!

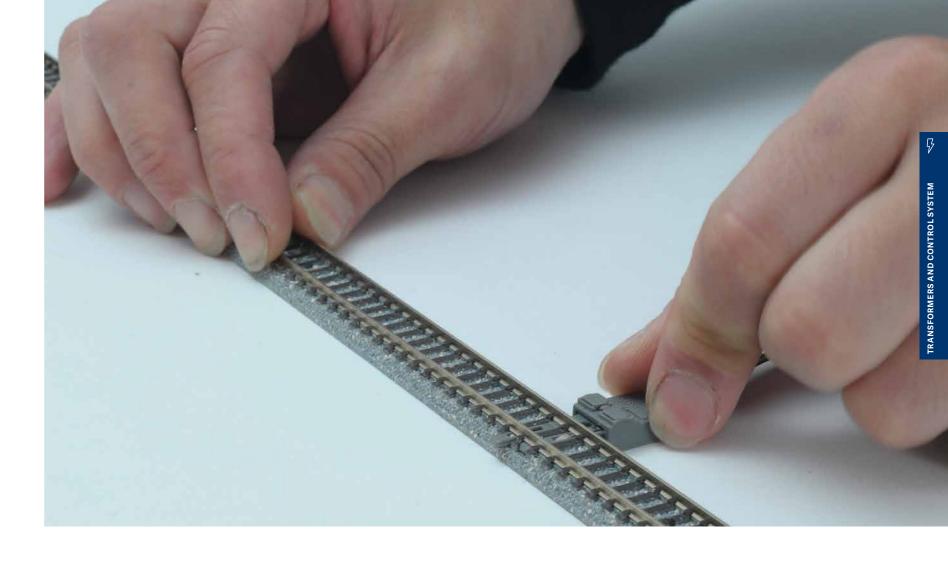
Connection of tracks:

Connection of tracks to the speed controller and thus to the power supply is most simple. Nearly every track features a point of contact.

The connection cable is plugged here, the other end is connected to the speed controller, and there it goes!

Points control box:

It's just as easy to connect points to control boxes. Points, too, feature points of contact where one end of the connection cable is plugged; the other end is connected to the control box. Control boxes in their turn can be connected on one side of speed controllers. The switch box then allows to change the position of the points connected to it, by means of switches.





Speed controller, N600

Art. 975507

Speed controller for railway and tram. 153 x 89 x 71 mm, 12 V DC/1.0 A. Controls speed and direction. Connection possible on one side for the points box.



Speed controller, N-1001 CL*

Art. 975068

Speed controller for railway and tram. $153 \times 89 \times 71$ mm, 12 V DC/1.0 A. Controls speed and direction. With CL function ensuring constant intensity of light. Connection possible on one side for the points box.



Reversed polarity cable for Tomix points

Art. 975817

150 cm long.



Control unit for automatic operation

Art. 975563

Control unit allowing automatic operation. With various programs ensuring the control of trains, points and so on. Also allows to alternate with manual operation. DC for 0.5 A, 0 to 12 V.

*What means CL

CL means Constant Lightning system. Transformers with the abbreviation CL ensure permanently constant light within trains, irrespective of their speed, they may even be at rest.

VEHICLES

Vehicles for model railway installation.



8 Bicycles Art. 973581

Ready-made models.



8 Bicycles

Art. 973582

Ready-made models.



Fire engine Set B

Art. 974284

Fire engine set B, 1 x Hino Rising pump vehicle, 1 x Hino Ranger pump vehicle.



Dumper & concrete mixer, red/yellow

Art. 972938

Ready-made model of two lorries, including road parts made of cardboard.



Dumper & concrete mixer, black/white

Art. 972945

Ready-made model of two lorries, including road parts made of cardboard.



Truck set, 2 gas tank trucks

Art. 972956

Ready-made models.



Modern forklifts, 2 pieces, yellow-orange

Art. 973508

Ready-made models.



Forklift, 2 pieces, yellow

Art. 973517

Ready-made models.



Forklift, 2 pieces, orange

Art. 973518

Ready-made models.



Fishing boat II

Art. 971487

Ready-made model, painted. Can be used as full hull or on a waterline.



Vehicles, Tank lorries, Shell

Art. 975848

Ready-made model.



Vehicles, Tank lorries

Art. 974376

Ready-made models.



Truck set, 2 trucks

Art. 974437

2 Japanese lorries as milk tank trucks. Ready-made model.



Lorry set A

Art. 974864

Lorry set, ready-made models. 1 x HINO HE with enclosed trailer in yellow, 1 x HINO HH with open trailer in blue.



Lorry set B

Art. 974871

Lorry set, ready-made models. 1 x Mitsubishi FUSO with enclosed trailer in yellow, 1 x Mitsubishi FUSO with open trailer in blue.



Lorry set C

Art. 974888

Lorry set, ready-made models, 1 x Hino Ranger tip lorry in yellow, 1 x Hiro Ranger with crane in blue.



Lorry set D

Art. 974895

Lorry set, ready-made models, 1 x Hino Ranger tip lorry in turquoise, 1 x Hiro Ranger with crane in light blue.





Art. 975551

Vehicles, 4 Toyotas as taxis.



Vehicles, Set with 4 vehicles

Art. 975659

Vehicles, set with 4 vehicles of make Subaru, Daihatsu and Toyota of the 1950s.

.....



Fire engine set A

Art. 978427

Fire engine set A, 1 x Isuzu TX pump vehicle, 1 x Hino TC turntable ladder.

.....



Truck set, 4 different vans

Art. 975803

Ready-made models.



Truck set, 4 different light lorries

Art. 972935

4 different light lorries of make Nissan, Mazda, Honda and Subaru.



Vehicles, 2 lorries

Art. 975694

Ready-made models of Japanese lorries.



Vehicles, 2 lorries

Art. 975695

Ready-made models of Japanese lorries.













Bicycles and mopeds

Art. 975952

6 different vehicles with riders.



European installations, too.

KITS





Modern chimney

.....

Triple, plug-in kit, 6 x 6 x 30 cm.

Art. 975748

Art. 974317

Underground entrances, 1 x narrow, 1 x broad.



Cellular radio mast

Art. 976713

Plastic model kit, easy to build, painted.



Modern signal tower

Art. 974024

Ready-made model.



Steel bridge, 140 mm, blue

Art. 973029

With built-in track, clearance height maximum 55 mm.



Pedestrian bridge

Art. 976065

Ready-made model of a pedestrian bridge.







Art. 973044

Including ground plate and decoration parts.



Bicycle stand

Art. 973292

Including three figures and bicycles.



Small sand house with two huts.

Lattice bridge, two-lane

Art. 973053

Sand house

Art. 975338

Ready-made model. 280 mm length, clearance height maximum 55 mm.



Gastank

Art. 975750

2 pieces, plug-in kit.



Storage tanks

Art. 975751

Set with three pieces, plug-in kit.

.....



Pedestrian bridge

Art. 972387

Pedestrian bridge, 2 pieces.



St. James church

Art. 975798

Plug-in kit, 6 x 10.5 x 8.5 cm.



Relay station

Art. 974023

14 x 7 x 4.20 cm.



.....

Bank building

Art. 975746

Plug-in kit, 8 x 7 x 6 cm.



Cable railway

Art. 975325

With motor, battery-operated.



Building set, Office building and bar

Art. 975809

Plug-in kits.



Shipyard building

Art. 972941

With ramp and small parts, plug-in kit, 18 x 13 x 8 cm.



Freight hall

Art. 974452

2 pieces, with small parts, 6 x 10 x 5 cm.



Overhead line masts

Art. 973078

24 pieces, for two-track sections.



United Oil, Gasholder

Art. 974485

Plug-in kit, diameter 10 cm, height 12 cm.



Diesel tug

Art. 976087

Ready-made model of a tug, matching fishing boat is Art. 976063.

.....



ROLLING STOCK

ROLLING STOCK

Shinkansen and bogies

Japan is the country of high-speed trains – the Shinkansen that dash on the Japanese well-developped rail-line network with up to 320 kilometres per hour. Despite such high speeds the Shinkansen are considered to be the safest trains worldwide! In scale modelling, too, the Shinkansen make their appearance and are easily identifiable thanks to their highly individual shape. Besides basic sets there are extension sets and special editions, too.



Shinkansen, type N700-880 Sanyo/Kyushu

Art. 972411

Basic set with 3 carriages. Including drive.



Shinkansen, type 100

Art. 972286

Shinkansen, type 100, basic set. Including drive.



Shikansen 500 type EVA, Special edition

Art. 978959

Japanese high-speed train. Special edition with prints of the Japanese, internationally successful animation television serial Neon Genesis Evangelion.



Motorized chassis

Art. 975666

66 mm long, 16 mm axle base, 15 mm wide.



Chassis TM20, motorized

Art. 975971

With flywheel mass, drive on all four axles, standard N coupling. 15M Class C.

.....



Chassis TM14, motorized

Art. 975964

With flywheel mass, drive on all four axles, standard N coupling. 20M Class A2.



Chassis, motorized, 100 mm, TM-05R

Art. 977131

With flywheel mass, drive on all four axles, standard N coupling. Length 100 mm, pivot pitch 74 mm, axle base 14 mm, width 15 mm.



Chassis, motorized, TM-06R

Art. 977132

With flywheel mass, drive on all four axles, standard N coupling. Length 116 mm, pivot pitch 80 mm, axle base 14 mm, width 15 mm.



Chassis, motorized

Art. 973163

With flywheel mass, drive on all four axles, standard N coupling. Length 120 mm, pivot pitch 90 mm, axle base 16 mm.



Chassis TM15, motorized

Art. 975965

With flywheel mass, drive on all four axles, standard N coupling. 20M Class B2.

.....



Chassis, motorized, 119 mm, TM-08R

Art. 977134

With flywheel mass, drive on all four axles, standard N coupling. Length 119 mm, pivot pitch 90 mm, axle base 14 mm, width 15 mm

.....



Chassis TM-12R, motorized

Art. 975962

With flywheel mass, drive on all four axles, standard N coupling. 19M Class A.

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