

European model railroad standards

# wheelset and track for special systems

340

1 page

documentation

size in mm

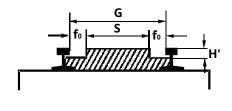
Edition 2008 (30092010)

(replaces 1997 edition)

## 1. Purpose

This standard contains dimensions for wheel sets and track that differ from NEM 110 and 310 in accordance with the MÄRKLIN systems, as well as information about the center conductor and current pickup for H0.

## 2. wheel set and track



B T D'

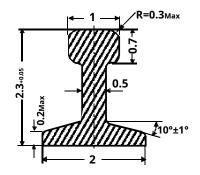
All horizontal dimensions in this standard are measured between the vertical edges of the rails.

#### Measurement table:

Gauge G of the track		Track				wheelset		wheel			
		С	S	f	Н	K	В	N	Т		D
face value	Max	at least	Max	Max	at least	Max	at least	at least	at least	Max	Max
16.6	16.7	15.0	13.6	1.7	1.3	15.0	14.0	3.0	0.9	1.0	1.35
45	45.3	41.8	39.3	2.8	2.2	41.8	39.8	5.7	1.5	1.7	2.2

The comments in NEM 110 and 310 apply accordingly

In addition to the rail profiles recommended in NEM 120, a 2.3 mm high rail profile (Profile 23) with the dimensions shown is also used for nominal size H0 for central conductor operation.



# 3. Special information for the H0 center rail system

The MÄRKLIN H0 system is based on symmetrical center conductor and overhead line operation (feed system 0-4 or 0-3 according to NEM 620).

#### 3.1 Center Conductor

For optical reasons, a row of point contacts is usually used as the middle conductor instead of a continuous rail.

Distance: The point contacts are generally placed at threshold spacing; twice the

threshold distance (approx. 16 mm) must not be exceeded. Between 1.8

Altitude: below SE and 0.6 above SE.

Lateral Deviation:

- on normal track: Usually +/- 0.

Individual point contacts can be up to approx. 2.2 mm off center. The

- in turnouts: lateral deviation is due to the switch geometry.

However, it must also not exceed ± 2.2 mm.

## 3.2 Current collection

The current is picked up from the center conductor via contact shoes with the following dimensions:

Usable length: - with 1 grinder: minimum 44.0 maximum 56.0

- with 2 grinders: per grinder 36.0

Broad: 5.0