

# RAIL EXPANSION JOINT WITH MOVABLE

# Rail expansion joint for short to medium extension lengths

# Description

Different longitudinal movements in the track can lead to excessive constraining forces in the rail that may cause damage to the superstructure.

In particular, at the transition from one substructure to another substructure, e.g. from a railway embankment to a bridge or from bridge deck to bridge deck, the different longitudinal movements (mainly due to temperature strains but also due to dynamic loads on the bridge) cannot be sufficiently compensated by the superstructure. This is where rail expansion joints (REJs) are used



#### System advantages

- » Same overall height as many track systems
- » Suitable for ballasted track and slab track
- » Can be integrated into a wide range of track systems
- » Different rail profiles and steel grades possible
- » Continuous wheel overrun
- » Can be provided with or without guard rail system







# General

The REJ provides small and medium extension lengths (up to  $\pm 200$  mm) with movable switch rails, fixed stock rails, and continuous wheel overrun. The stock rails are fixed elastically on their outside and inside. The switch rails have an asymmetric rail profile and are guided in their movable part by guiding plates.

The rail expansion joint is equipped with concrete or wooden sleepers for ballasted track, but is also suitable for slab track.

Depending on the requirements, the rail expansion joint is provided with or without guard rails.

With modifications, the rail expansion joint is suitable for heavy loads up to 35 tons axle load.

# **Technical description**

- » Rails: Rail grade R260, R350HT or R400HT (special grades on request).
- » Reinforcement of the switch rail in the front area is possible (TOZ)
- » Equipped with tension clamps, with e-clips or other fastening systems
- » Available in different gauges

