

# ROLLER SYSTEM INTEGRATED INTO THE PLATE

# "PIROLL" for switch assemblies with a low switch profile

# Description

PIROLL (Plate Integrated Rolling System) is a VAE-developed rolling system for asymmetric, low profile switch assemblies that eliminates the need for high-effort cleaning and lubrication of the slide plates in the switch assembly area.

The PIROLL system thus completely meets customer needs and demands for less maintenance and improved environmental protection.



#### System advantages

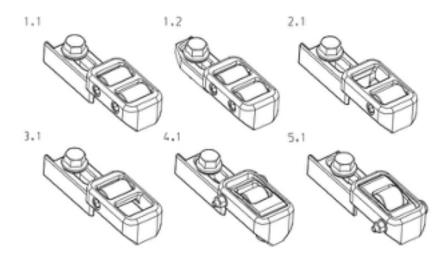
- » Elimination of maintenance
- » (Cleaning and lubrication of the slide plates)
- » Reduction of switching forces
- » No components in the sleeper compartment (roller cassettes mounted to the plates)
- » No obstruction during sleeper tamping work

- » Can be pre-assembled in the switch assembly
- » Easily replace individual rollers or the entire roller cassette
- » No inlet grooves in the switch base due to the use of plastic rollers
- » Also available in a design with variable height-adjustable rollers



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#### **Typenübersicht**



# Material

- » Cassette: GJS ductile iron
- » Roller: modified polyamide / stainless steel

## Description

The roller cassettes are mounted to the plates next to the slide chairs.

The standard roller cassettes are designed so that the switch is raised slightly by 1 mm up to max. 2.5 mm from the slide plates during changeover. The switch rolls on the rollers during the movement. The switch–driven on that is on the stock rail is always on the slide plates and not on the rollers. The applied switch that is not driven on is on the rollers.

To support the setting movement, roller cassettes of the type Piroll-S (spring) can be arranged in the area of the switch root, which raise the spring-loaded switch by a maximum of 1 mm from the slide chairs.

Roller cassettes of the type PIROLL-P (push) press the applied switch with even more spring-load onto the stock rail.

# **Technical description**

- » Roller cassettes with plastic rollers
- » The rollers are mounted on plain bearings
- » Pre-assembly possible

The roller cassettes are arranged adjusted to the switch assembly type.

The uniform arrangement of the PIROLL roller-cassettes across the entire switch length to the clamping point causes:

- » A uniform raising of the switches during the switching process
- » Only a slight bending of the switches in the vertical direction
- » A uniform movement of the switches during the switching process

