

# MAGNETACT

## Magnetic Track Brakes for Mainline: MagnetAct Flex

Magnetic track brakes (MTB) apply brake force directly to the rail. Track brakes from Knorr-Bremse offer performance and reliability. Extensive in-service operation around the world is proof of the technological leadership of Knorr-Bremse.

### Customer benefits

- Independent braking system
- Braking force applied directly to the track
- High braking performance even under poor track conditions
- Total deceleration can be increased safely
- Shorter braking distance due to rapid response behaviour
- Track cleaning effect: improvement for wheel-effective brake systems

### Applications

- High-speed trains
- Intercity passenger coaches
- Regional commuter trains



**KNORR-BREMSE**

## MagnetAct Flex

Example of MTB designs applied to cross-border long-distance, main line and high-speed traffic



### Technical Data

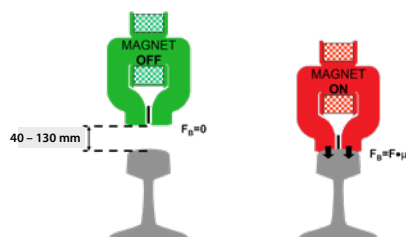
- Attractive force:  $2 \times 84 \text{ kN} = 168 \text{ kN}$  per unit
- Effective braking length: 1052 mm
- Width / height of magnet: 130 mm / 136 mm

### Benefits

- Increased brake performance (up to +10%)
- Lower energy consumption (up to -15%)
- Lightweight design (up to -10%)
- Easier maintenance of friction elements
- Customer friendly cable connection system

### Function

Magnetic track brakes are magnetically attracted to the rails. The brake force is built up by using the friction between the magnetic track brake and the rail. Rapid braking, automatic braking and also emergency braking are typical tasks for MTBs.



## Example of MagnetAct Flex

Example of MTB designs applied to a regional/commuter train



### Range of use

The MTB is activated automatically in case of emergency braking and should also be activated under low adhesion conditions and on steep descents.

### MagnetControl

- Next generation control for MTB in LRV and main-line
- Modular system
- Enhanced function monitoring
- Supports condition-based maintenance



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