

## EDT101 Derailment detection system



### Applications

- Freight Cars
- Transportation of hazardous goods

# EDT101 pneumatic derailment detector

The EDT101 activates an automatic emergency stop in case of derailments.

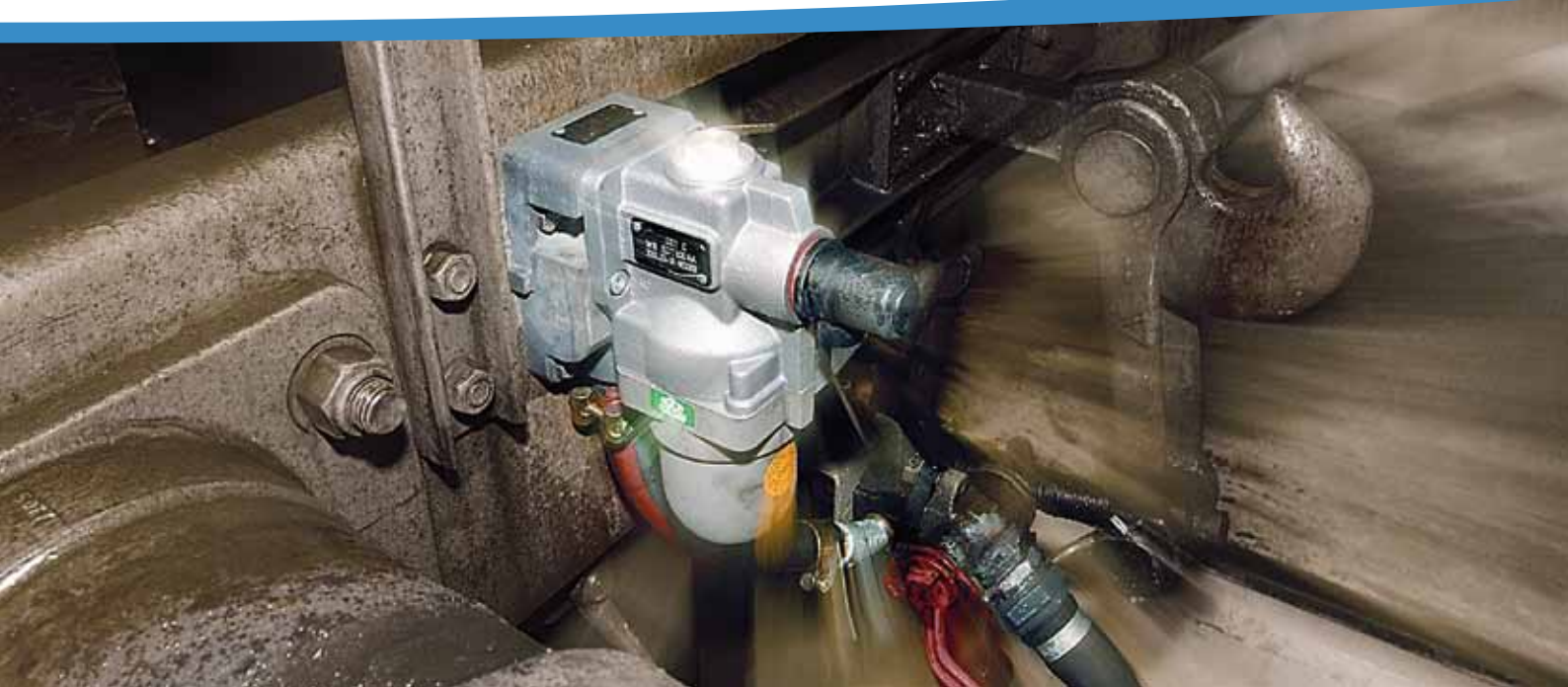
The detector demonstrated its reliable performance in derailment tests in Berlin in 2007. Knorr-Bremse has the experience of wide range field application of the EDT.

## CUSTOMER BENEFITS

- Reduces consequential damage of derailments
- Increased safety for persons and environment
- Immediate train brake activation when derailed axle recognized
- Easy upgrading
- High reliability
- No false activation experienced
- Self-contained wagon system
- Good cost-benefit ratio
- UIC homologated
- From 2011, mandatory throughout Europe for new registered tank wagons for transport of certain categories of dangerous goods

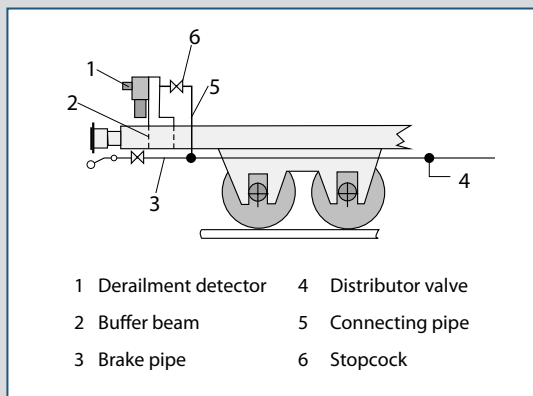
## DESIGN/FUNCTION

The EDT101 consists of an emergency brake valve, a mounted spring-mass valve and an indicator device. In the case of derailment, the increase in vertical acceleration is registered by the spring-mass valve. This immediately activates the emergency brake valve, which opens the main brake pipe and releases the emergency brake. The main brake pipe is almost entirely vented. The EDT101 then independently returns to its operating state and a red cylinder on the indicator device shows which unit has reacted. The cylinder can be easily manually reset. The unit can be deactivated manually at any time.

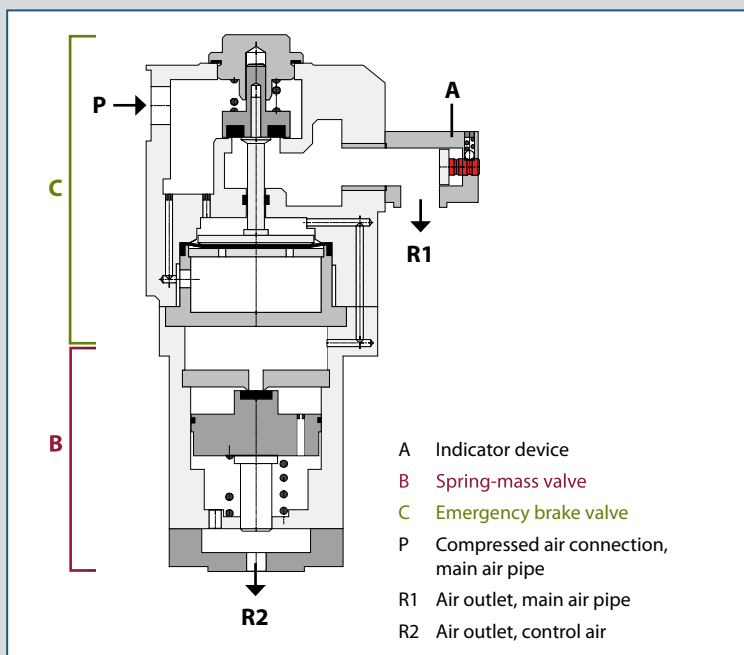


## INSTALLATION

- 2 derailment detectors per vehicle
- Mounted on the buffer beams at the end of each wagon
- Easily connected to the main brake pipe using a branch flange
- Mounting on carrier with integrated stopcock



## SCHEME



## TECHNICAL SPECIFICATION

Responsiveness	Secure activation zone:	Vertical acceleration > 11,5 g
	Secure no-activation zone:	Vertical acceleration < 6,5 g
Medium:	Air	
Operating pressure:	4 ... 6 bar	
Max. pressure:	10.0 bar	
Connecting pipe:	Min. Ø 19 mm	
Exhaust:	Min. Ø 19 mm	
Range of temperature:	- 40° C ... + 70° C	
Weights:	Support with stopcock	1.6 kg
	Derailment detector	2.8 kg
	Branching flange	~ 0.4 kg

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