

EFFICIENT. TECHNOLOGY. WORLDWIDE.



**EDT101**

***Pneumatic Derailment detector***



**RAIL VEHICLE SYSTEMS**

APPLICATIONS: Freight Cars | Transportation of hazardous goods

**KNORR-BREMSE** 

# EDT 101 PNEUMATIC DERAILMENT DETECTOR



**THE EDT101 ACTIVATES AN AUTOMATIC EMERGENCY STOP IN CASE OF DERAILMENTS.** The detector demonstrated its reliable performance in numerous tests. A lot of positive experiences have been gained by a wide range of field applications for many years.

## 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. Then the EDT101 returns to its normal operation position independently and a red pin on the indicator device shows which unit has triggered. The indicator pin easily can be reset manually. By a stopcock in the bracket of the device the detector can be deactivated manually at any time.

## CUSTOMER BENEFITS

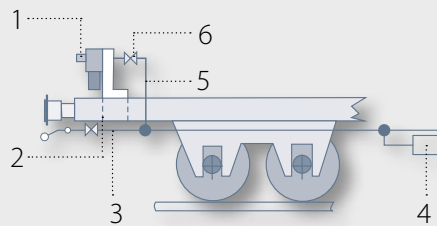
- Reduces consequential damage of derailments
- Increased safety for persons and environment
- Immediate train brake activation when derailed axle recognized
- Easy retrofitting at existing wagons
- High reliability
- No false activation experienced
- Independent system
- UIC homologated

## EDT 101 PNEUMATIC DERAILMENT DETECTOR



### INSTALLATION

- 2 derailment detectors per vehicle
- Mounted at well-chosen positions on the chassis of the freight wagon.
- Easily connected to the main brake pipe using a branch flange
- Mounted on a specific bracket with integrated stopcock

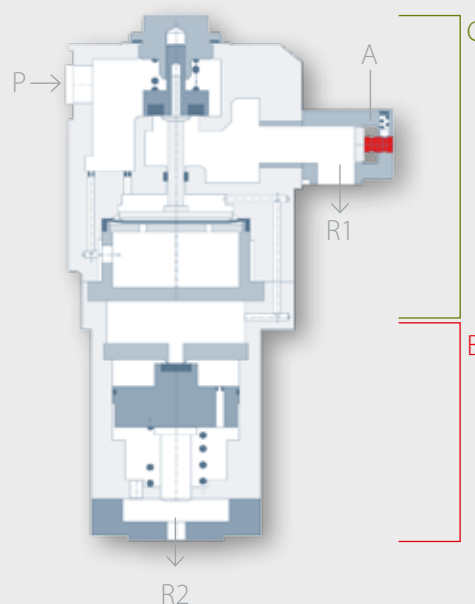


- » 1 Derailment detector
- 2 Buffer beam
- 3 Brake pipe
- 4 Distributor valve
- 5 Connecting pipe
- 6 Stopcock

### TECHNICAL SPECIFICATION

<b>secure triggering vertical acceleration</b>	> 11.5g (0 - 100Hz)
<b>secure non-trigger vertical acceleration</b>	< 6.5g (0 - 100Hz)
<b>Medium</b>	treated air (DIN/ISO 8573-1)
<b>Service pressure</b>	5,0 bar
<b>Max. pressure</b>	8,0 bar
<b>Connecting pipe</b>	min. Ø 19 mm
<b>Venting pipe</b>	min. Ø 19 mm
<b>Operational temp</b>	-40°C...+70°C

### SCHEME



- » A Indicator device
- B Spring-mass valve
- C Emergency brake valve
- P Compressed air connection, main air pipe
- R1 Air outlet, main air pipe
- R2 Air outlet, control air

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