



# WHEELACT / AXLEACT

## BRAKE CALIPER UNITS FOR AXLE- AND WHEEL-MOUNTED BRAKE DISCS

Freight Cars | High-Speed Trains | Light Rail Vehicles | Locomotives |  
Metros | Passenger Coaches | Regional and Commuter Trains



**KNORR-BREMSE**

# WheelAct / AxleAct



Depending on the application, Knorr-Bremse conventional **WheelAct Classic / AxleAct Classic** or **WheelAct Compact / AxleAct Compact** brake calipers can be used. Both types are highly modularized to match any application, mounting space and operational conditions. This equipment incorporates a proven robust design delivering highest availability and low life-cycle costs.

## WheelAct Classic / AxleAct Classic with Hangers

- For axle- and wheel-mounted brake discs
- Service proven for many decades
- Wide variety of cylinder variants



## BasicAct Cylinder

- Compact Cylinder combines advantages of proven Knorr-Bremse U-Cylinder and D-Cylinder
- Weight saving of 10 kg (spring parking brake) and 6 kg (service brake) compared to U-Cylinder
- High spring parking brake force of 25 kN (at 4.5 bar) due to internal lever mechanism
- Less installation space
- Enlarged overhaul period
- Modular design with optional features
  - spring-operated, pneumatic released parking brake
  - hand-operated parking brake (hand wheel)
  - SafePark function available
  - electrical indication of brake status
  - pneumatic valves for various functions



## WheelAct Compact / AxleAct Compact

Cost-effective single-point interface models for fast and easy bogie assembly. Highly compact design offering many advantages in weight, space, noise emissions and 33% reduced LCC because of increased overhaul period. Suitable for use in combination with either a hand brake or a spring-operated parking brake.

### AxleAct Compact (Type WZT)



*Axle-mounted*

### WheelAct Compact (Type RZKT)



*Low forces – wheel-mounted*

### WheelAct Compact (Type RZT)



*High forces – wheel-mounted*

WheelAct Compact (Type RZT) and AxleAct Compact (Type WZT) are further developments of the service-proven Knorr-Bremse standard products WheelAct Compact (Type RZS) and AxleAct Compact (Type WZK), with optimized robustness and overhaul period.

## Technical Data

	WZT	RZKT	RZT (XS, S, M, L)
<b>Total pad force</b>			
- service brake	110 kN	50 kN	90 kN
- spring-operated parking brake	60 kN (4.8 bar)	45 kN (4.8 bar)	60 kN (4.5 bar)
- hand brake	110 kN	85 kN	90 kN
<b>Lateral axle movement</b>	+/- 25 mm	+/- 25 mm	+/- 25 mm
<b>width</b>	305 mm	305 mm	348 mm
<b>Weight</b>	60 kg	68 kg	84 kg

## Advantages

- Allows maximum lateral movement and tilting of the wheelset without usage constraints
- Standard interface to bogie
- Maximum brake force of service brake adjustable by changing the diaphragm cylinder
- Installation space independent of brake force
- Superposition of brake forces in failure cases admissible
- Robust design for very harsh environmental conditions (ice, sand, low temperature -60 °C)
- Overhaul period of 8 to 10 years (depending on environmental conditions)
- Sealed bearings for less wear, less noise and low maintenance
- Modular design with optional features
  - spring-operated, pneumatic released parking brake
  - hand-operated parking brake (hand wheel)
  - SafePark function available
  - electrical indication of brake status
  - pneumatic valves for various functions

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