

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



WheelAct / AxleAct



Depending on the application, Knorr-Bremse conventional **WheelAct 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)
Total pad force			
- 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
Lateral axle movement	+/- 25 mm	+/- 25 mm	+/- 25 mm
width	305 mm	305 mm	348 mm
Weight	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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