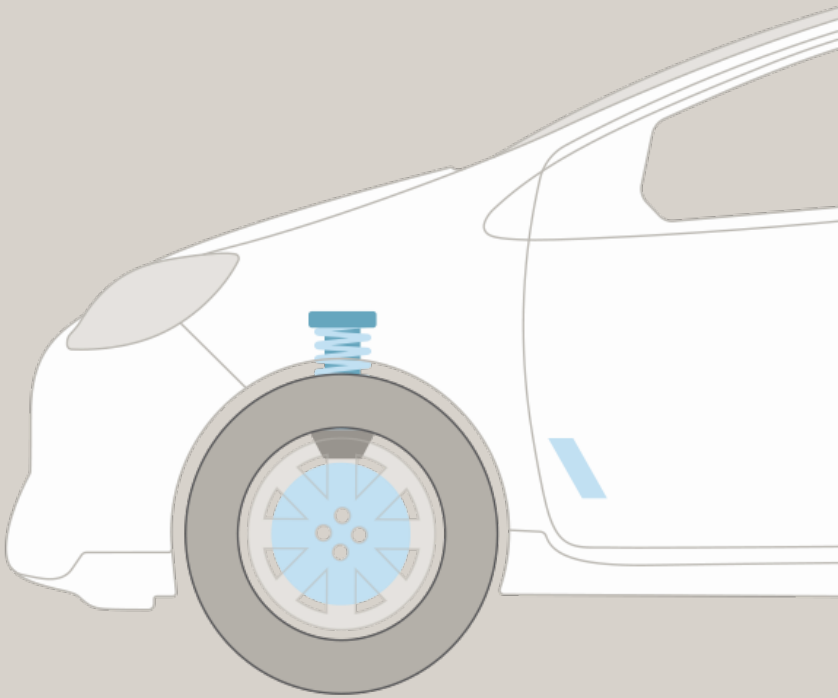
Never compromise on safety



Braking systems

Bekaert

Key trends in Braking Systems

Advanced Braking Functionalities are key to **enhancing safety**

- Additional Electronic controls (ABS, ESC, AEB, torque vectoring,…)
- CPU integration, together with systems (steering, shock absorber, adaptive systems) to further enhance the safety.

The emission of fine particles from brake pads is a long-term sustainability concern.

- Brake pads from disc brakes are the second biggest emitter of fine dust in BEVs.
- New legislation is pushing for a solution for this.

EV triggers **alternative brake systems**.

- The pedal-to-brake system is renewed (e.g., a brake booster system) to deal with BEV, which is the first step in evolving to a full brake-by-wire solution.
- Due to regenerative braking, conventional mechanical brakes are used less frequently. Heat dissipation is no longer critical, but protection against corrosion becomes prominent.

Where can you find our wire solutions?

Component	Bekaert product
Brake system at the wheel (Foundation Brakes)	Bezinal Spring Wire for drum brakes and disc brakes OT spring wire for heavy duty foundation brakes
Brake power transfer: - Pedal - (e-)brake booster system - Hydraulics	High Tensile Spring Wire
Parking brake system (handbrake lever, cable or electronic system, actuator)	Bezinal Spring Wire LoCa wire HD spring Wire Casing Wire, Auto. Rope Wire (blank, galv), Control cable
Brake safety features (ABS, ESP…)	Spring wire Connector wire