BRAKE CALIPER
WITH ELECTRIC PARKING BRAKE (EPB)
EPB: TREND SETTER AMONG THE SYSTEMS

THE BRAKE EVOLUTION.

Our customers know from experience: when talking about BRAKES, the products of HELLA PAGID are hard to beat, both, technically and economically. The annual expansion of our portfolio by up to 600 new products is a clear indication of this. This is why consequently we have expanded our current product range to include brake calipers with electrical parking brake. We thus meet the trend towards a solution promising the driver clear additional driving comfort. Simultaneously, this additionally strengthens our brake hydraulics product range, providing you, our partners, with the best foundation for optimally meeting your preferences while consolidating easily our dominant position among competitors.

RECYCLING

Respecting the environment and a careful handling of resources are the point of departure and objective in what amounts to increasingly valuing used materials. We at HELLA PAGID share this perspective, promote it concretely by remanufacturing used brake calipers – of course also those with electric parking brakes – and integrate used part market recirculation throughout.

Good – is that which benefits all...

The safety aspect plays an outstanding role when it comes to brakes. This results in particularly high requirements in terms of used parts recirculation. We meet those in all respects. We provide workshops and drivers with cost-effective alternatives by offering used parts that we have recycled. These of course meet the highest standards regarding quality and safety.

At the same time, our reconditioning and reuse of valuable used parts and components actively contributes to protecting the environment by:

➔ Protecting resources
➔ Recycling raw materials
➔ Reducing energy and material consumption
➔ Reduction in CO2 emissions
➔ Saving on new parts
➔ Avoiding waste
Key function for the EPB brake caliper

The EPB control button, an electronic control unit and the EPB brake caliper are important elements of the electronically-operated system.

The EPB brake caliper also acts as EPB basic element, for it is equipped with an additional electric motor, which operates the electronic parking brake by putting pressure on the pistons via a transmission, thus also putting pressure on the brake pads and discs. The parking brake therefore saves space and is directly integrated into the EPB brake caliper.

DID YOU KNOW ...

...that the EPB technology already entered the market in the year 2000 and that more than 60 million EPB brake calipers are currently on the road worldwide?

EPB – A SUSTAINABLE SYSTEM

The vision of a self-driving vehicle that is road-worthy in all situations is quickly becoming a reality. Already at the current state-of-the-art for this project, EPB technology is playing an important role. Furthermore, additional aspects mean outstanding future prospects for EPB.

More interior space comfort
A small operating button replaces the handbrake lever. Designers can use the resulting space for individualised interior.

(Mountain) start-up aid
It recognises the start-up intention due to acceleration or clutch and/or gas pedal use, then automatically releases the parking break.

Fuel consumption
The omission of components results in significant weight savings and thus leads to a significant reduction of gas and CO2 emissions.

Auto-hold
When standing, the auto-hold function secures the vehicle against rolling off. The stability control unit sends out a locking request to this end, thus activating the EPB. A release command then undoes this action.

Emergency braking
In case of an emergency braking or when the service brake fails, pushing the EPB button can bring the vehicle to a standstill.

Roll-off protection
Hot brakes lead to a loss in clamping force in mechanical parking brakes. But with EPB, roll-off protection monitors and controls the clamping force in order to ensure a safe parking brake condition irrespective of temperature and friction loss. This prevents the vehicle from rolling off even under extreme temperatures. This provides important added safety especially in mountainous regions.

Static braking
A function enabling, both, the use and the release of the parking brake via a control button when the vehicle stands still. The tilt angle is taken into account throughout.

Automatic de-/activation
Automatic activation and/or deactivation of the parking brake, depending of whether the driving or parking position is required.