

Types of Brake Caliper

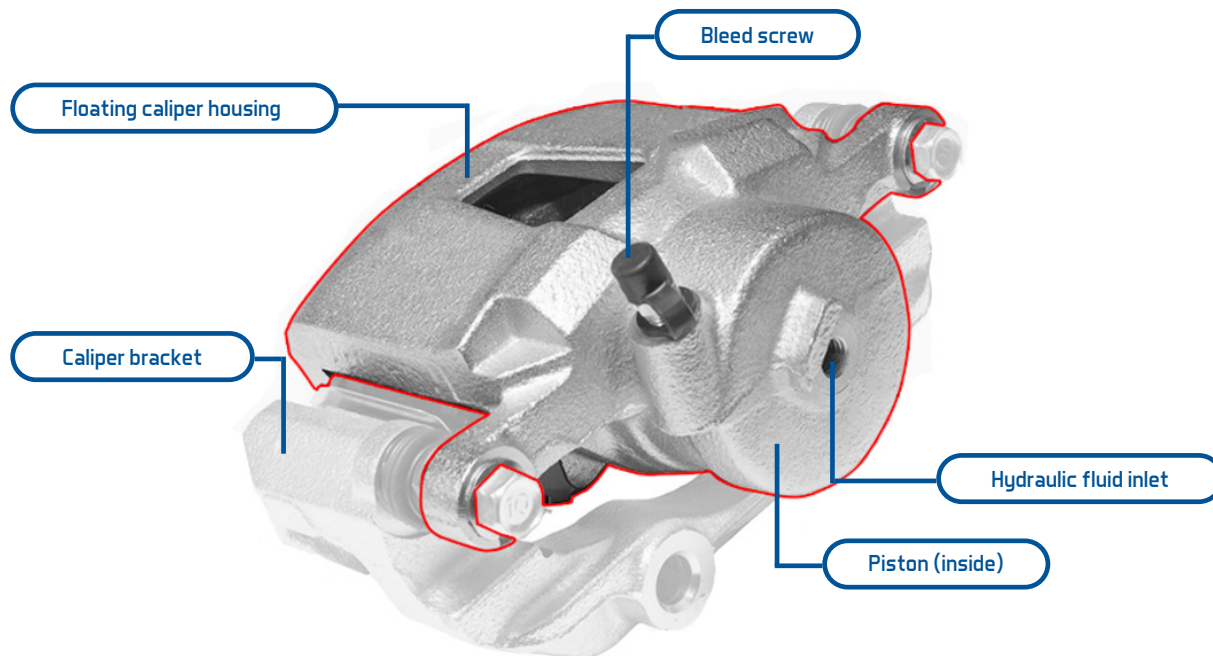
There are two basic types of brake caliper: fixed and sliding. The majority are brake calipers are sliding calipers.



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Sliding Calipers (also known as 'floating' or 'fist type')

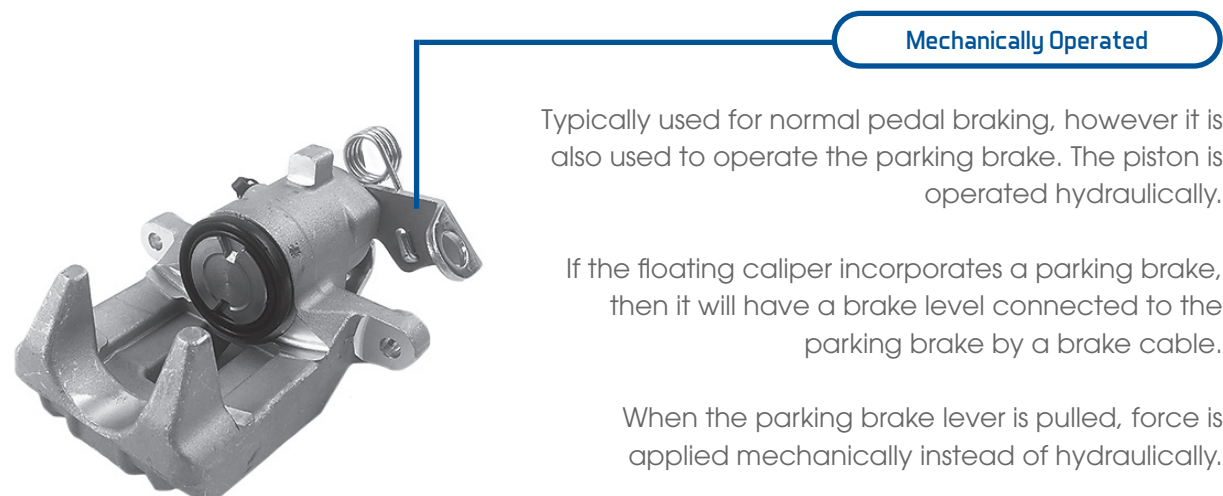
The complete caliper assembly comprises two structural parts: a caliper bracket which is solidly mounted to the axle of the vehicle, and the caliper body which houses the hydraulic pistons.



The inboard element of the caliper body contains pistons. The hydraulic pressure created from the brake pedal via the master cylinder initiates the direct clamp of the piston side brake pad. The resulting reaction force on the outboard side of the caliper clamps the outboard side of the brake pad, to the brake disc. The caliper can slide either on the pins contained within bushes or on the caliper bracket itself.

Handbrake Calipers

Some floating calipers can also be used to operate the parking brake. These can either be mechanically or electronically operated.



Electronically Operated

Also used for normal pedal braking and to operate the parking brake. The piston is operated hydraulically.

If the floating caliper incorporates an electronic parking brake (EPB), it will have EPB actuator fitted. The EPB unit contains an electric drive motor which, via a spindle, provides the actuation force to clamp the brake pads to the brake disc when the holding mechanism is activated by the driver via a switch or button.

The EPB is used as part of a larger electronic brake control system which can provide safety functions such as EPB engagement to prevent 'roll away' in the event of an engine stall, and 'hill hold' to prevent the vehicle rolling backwards.



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Fixed Calipers

With fixed calipers, the entire caliper is solidly mounted to the axle or frame and there is a piston (or pistons) on both sides of the caliper. The pistons push the two brake pads onto both sides of the brake disc and therefore don't require sliding pins to function.



A fixed caliper can apply more power and apply that power more evenly during braking. They also provide a better feel through the brake pedal when applying the brakes.

Why Choose Juratek Brake Calipers?

- ✓ **100% New Units**
We only supply new caliper units, removing the need for our customers to handle and process old units, helping you maintain profitability and efficiency. This also means there is no capital tied up in surcharges.
- ✓ **100% Quality Tested**
All Juratek brake calipers are tested for leaks and high pressure integrity up to 160 bar.
- ✓ **Manufacturing Standards**
All Juratek brake calipers are manufactured by a supplier to the OE industry and are accredited to IATF 16949:2016 which focuses on quality, defect prevention and continual improvement, giving you peace of mind. They're also TUV certified.

