

ModulX DB22LT

Haldex

Technical Info

The Haldex ModulX disc brake is based on a modular design, enabling Haldex to provide a wide range of unhandled variants. For the sliding calliper program, this is achieved by using a two piece calliper and four sliding pins. The two-piece calliper consists of an application unit and a calliper bridge. The self-contained brake mechanism is the same for multiple brake sizes and is assembled into the application unit housing. Likewise, the superior four pin sliding function uses the same parts in multiple brake sizes.

The major benefits of this modular concept are improved serviceability and the ability to provide new variants by only changing one module of the assembly.

The ModulX disc brake is unhandled in the sense that the same brake is fitted on both left and right hand side. This means less parts in stock and fewer part numbers to manage. The sliding function is supported by four stainless steel sliding pins and Teflon slide bearings, resulting in corrosion resistance and a well proven sliding function.

Function

The Haldex ModulX disc brake is designed to provide high performance coupled with low weight, durability and a minimum number of parts prone to wear and tear. Brake pad wear is compensated for by an automatic clearance sensing adjustment mechanism, which is actuated by the brake chamber. It presses the inner brake pad against the brake disc, which then causes the calliper to slide laterally, so that the outer brake pad gets in contact with the brake disc.

Two different options are available to electronically monitor the pad wear. A Pad Wear Indicator (PWI) is a wear indicator with electrical interface for EBS or a separate PWI system. A Pad Wear Sensor (PWS) is a wear sensor fitted as one single push-in unit for easy servicing without calibration. The sensor specification and electrical connectors according to customer demand.



The products range of the ModuX sliding calliper consists of brakes suited for truck, bus and trailer applications using 19.5" and 22.5" wheels, with axle load rates between 7 and 13.5 tonnes.

DB22LT

The DB22LT is a disc brake intended for 430–435 mm disc and used for applications with dynamic axle loads up to 11 tonnes. Maximum rated brake torque is 22 kNm. The brake is available for a number of applications.

Specification

- For wheel size 22.5"
- Efficiency >93 %
- Effective radius 173 mm
- Hysteresis <8 %
- Pad surface area per pad 160 cm²
- Nominal Running clearance 0.6 – 1.0 mm
- Max axle load 10.5 tonnes
- Max calculated service brake torque 22 kNm
- Disc / Rotor size 430 mm
- Weight of complete disc brake unit, including pads ≈35 kg
- Actuator angel 0° – 5°
- Options
 - Friction material
 - Pad Wear Indicator (PWI)
 - Pad Wear Sensor (PWS)
 - Visual Wear Indicator (VWI)

Example of disc brake

