

# TECHNICAL INFORMATION



**The Haldex ModuLT program is a new air disc brake platform developed specifically for the purpose of meeting increased customer demands on performance, robustness, service up-time, weight and total cost.**

- › Low weight whilst retaining stiffness and durability
- › A single tappet mechanism with similar clamping force distribution as the Haldex twin tappet mechanism
- › Simplified maintenance safe boltless pad retainer and only two bolts for the complete brake
- › Modular the same mechanism and sliding function design used on multiple brake sizes
- › Long service life stainless sliding pins, PTFE coated steel bushings, and the mechanism bellows is folded inwards thus protected from external affection
- › High efficiency the use of double roller bearings for the mechanism lever keeps the hysteresis low and thus a high efficiency is achieved

## ModuLT DBT22LT

The ModuLT program consists of a number of variants for various wheel sizes and various applications within the truck, bus and trailer segments.

The basic design of the ModuLT consists of a large single tappet mechanism, a monobloc calliper and two sliding pins.

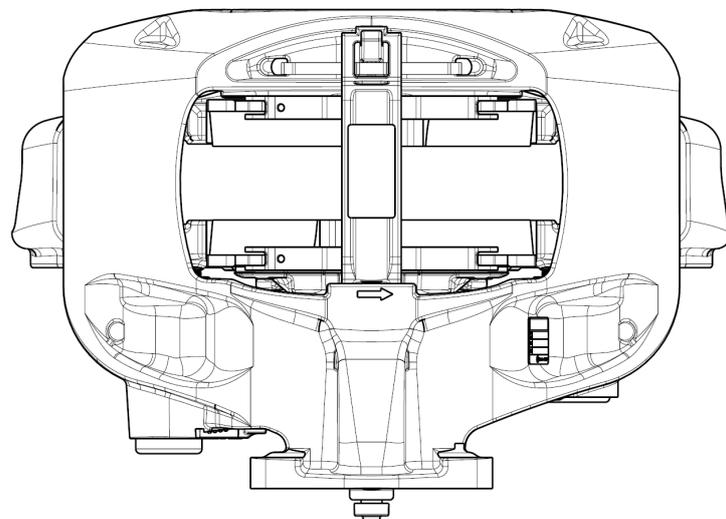
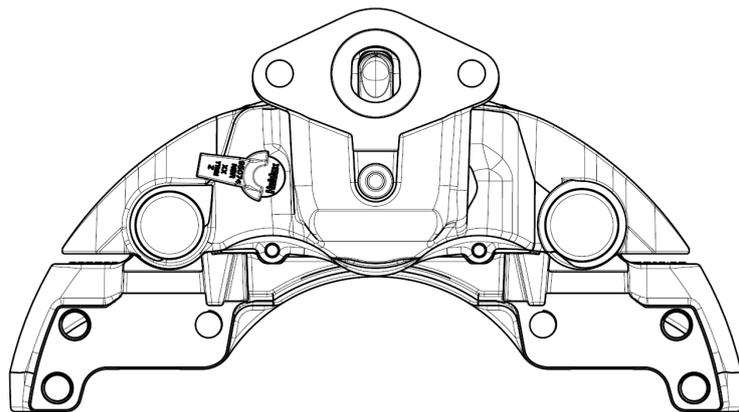
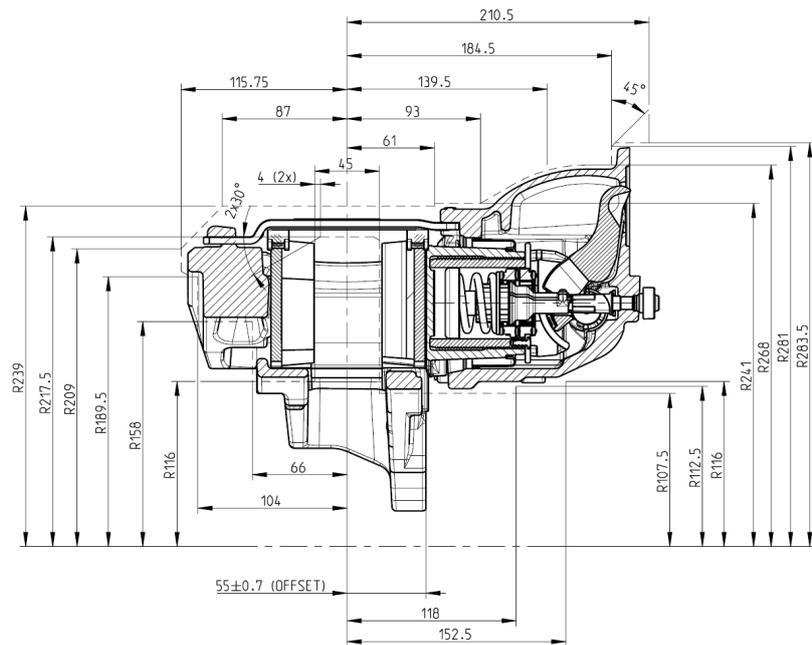
The Haldex ModuLT disc brake is designed to provide high performance coupled with durability, low weight and a minimum number of wearing parts. The ModuLT enhances a floating monobloc calliper and an integrated adjustment unit, which automatically compensates for brake pad wear. The disc brake is actuated by the brake chamber onto the mechanism lever, which presses the inner brake pad against the disc. This then causes the calliper to slide laterally, so that the outer brake pad also comes in contact with the disc. The calliper moves on two stainless, lubrication free, slide pins.



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# Design and function

## Installation drawing



## Modul DBT22LT

The DBT22LT is a disc brake intended for a 430 mm disc. Maximum rated brake torque is 20 kNm. The brake can be used for various applications subject to installation approval.

### Characteristic Data

- › Design rated max brake torque 20 kNm
- › For wheel size 22.5"
- › Max operation force 11 kN
- › Friction radius 173 mm
- › Max brake cylinder stroke 65 mm
- › Nominal brake ratio 15.4 : 1
- › Mechanical efficiency > 93 %
- › Running clearance (min-max) 0.7 - 1.1mm
- › Weight of complete disc brake unit, including pads < 32 kg

### Disc

- › External diameter of brake disc 430 mm
- › Total thickness when new 45 mm
- › Residual thickness worn out 37 mm

### Pad

- › Total thickness 30 mm
- › Backplate thickness 7.5 mm
- › Pad surface area (both pads) 318 cm<sup>2</sup>
- › Pad wear volume (both pads) 636 cm<sup>3</sup>

### Options

- › Pad Wear Indicator (PWI)
- › Carrier hole pattern

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