



I N T R O D U C I N G

Twiflex VCS

Hydraulically-Released
Caliper Brakes for
Elevators and Escalators

Elevator Applications

- Caliper Brakes

Twiflex is a world leader in the design and manufacture of caliper brakes.

As part of Altra Industrial Motion - the world's largest manufacturer of industrial clutches and brakes - Twiflex holds the position of being the brake of choice for the most demanding applications.

Caliper braking system for high rise buildings and heavy duty escalators

What do the world's tallest building, the world's deepest mineshaft, and some of the world's busiest subway systems have in common? They all use elevators or escalators enhanced with Twiflex caliper brake technology.

- For elevators, protects against ascending overspeed and unintended movement
- For escalators, ensures stoppage in a smooth and safe manner when experiencing power or other system failure
- Braking force from 20 kN to 60 kN
- Highly modular - greater braking torques achievable with use of multiple brakes
- Particular strength with long, heavy-duty escalators
- Hydraulic power supply units also available
- Overexcitation (dual voltage) or single voltage



An Altra Industrial Motion Company



VCS Series Disc Brakes

Hydraulically-Released Caliper Brakes

Application

The VCS Series (modular) disc brake has been specifically designed for both static holding and dynamic (emergency) stopping duty. The braking force is applied by springs located in each module and released by hydraulic pressure. The rate of application and release can be controlled. Depending on the spring pack selected, a maximum braking force of 60kN can be achieved per brake unit. VCS brakes can be used on a wide variety of industrial and marine applications including conveyor drives, hoisting drums, rolling mills, winches, process lines, and cranes.

Description

The VCS Caliper is comprised of two modules located on either side of a mounting plate which could be made to accommodate brake discs of 20mm and over. Each module consists of a spring pack to provide the clamping/braking force. The minimum disc diameter is 500 mm. A flange mounted version of the caliper is available for special applications.

Special Features

- Modular construction for easy maintenance and assembly
- Rugged design and corrosion protection for reliable service in challenging operational environments
- Low Pad Pressures
Pad Area = 296.8 cm² (2 Pads)
- Designed for dynamic use with infinite fatigue and exceeding mining standards on stressed parts
- Easy setup and adjustment to precisely tailor to wide ranging operational requirements
- Suitable for "soft braking"
- Wide choice of designs based on standard components
- Backed by a global network of dealers
- Air gap adjustment from rear
- Monitoring sensors for brake on/off and pad adjustment are available

VCS MK4 Spring/Floating Module

Caliper Type	Braking Force kN	Release Pressure bar	Max Retraction Pressure bar	Air Gap in. (mm)
VCS70	60	131	160	.067 (1.7)
VCS60	50	113	148	.079 (2)
VCS50	40	94	131	.079 (2)
VCS40	30	75	113	.079 (2)
VCS30	20	54	94	.079 (2)