

Twiflex V-Series Disc Brakes for the Elevator Market



Elevator Applications

- Modular Disc Brakes



HYDRAULICALLY RELEASED CALIPER BRAKES FOR ELEVATORS

Hydraulically Released Brakes

The Twiflex V-Series range of caliper braking systems are design for applications within high-rise/high-speed elevator drives and long-travel/mass-transit duty escalators.

- For passenger elevators, they protect against ascending overspeed and unintended movement
- For escalators, they ensure smooth and safe deceleration in the event of power failure or other emergency stop event
- Braking force for spring applied units extends from 17 kN to 119, and beyond
- The modular designs accommodate all disc size options - greater braking torques achievable with multiple units
- Floating versions of each design minimize space-claim and accept large axial disc movements
- Standard and custom hydraulic power supply units available
- 'Soft braking' controllers enhance passenger comfort and safety, achieving consistent deceleration rates regardless of load variation

www.twiflex.com

TWIFLEX
A REGAL REYNOLD BRAND

VCS MK3

Caliper Type	Braking Force kN	Release Pressure bar	Minimum Pressure for Full Retraction bar	Air Gap in. (mm)
VCS62	62	127	159	.079 (2.0)
VCS50	50	101	135	.079 (2.0)
VCS47	47	95	110	.079 (2.0)
VCS41	41	84	99	.079 (2.0)
VCS33	33	68	78	.079 (2.0)
VCS30	30	62	76	.079 (2.0)
VCS23	23	46	54	.079 (2.0)
VCS17	17	35	43	.079 (2.0)



VCSD

Caliper Type	Braking Force kN	Release Pressure bar	Minimum Pressure for Full Retraction bar	Air Gap in. (mm)
VCSD60	61	124	138	.079 (2.0)
VCSD50	46	94	100	.079 (2.0)
VCSD40	39	80	88	.079 (2.0)
VCSD30	29	59	65	.079 (2.0)
VCSD25	25	52	56	.079 (2.0)
VCSD20	21	44	49	.079 (2.0)
VCSD15	16	32	35	.079 (2.0)
VCSD10	11	22	24	.079 (2.0)

Hydraulically Released Brakes

Application

The V-Series (modular) disc brake range is designed for both static holding and dynamic (emergency) stopping duty. Braking force is applied by springs located in each module and released by hydraulic pressure. Depending on the individual brake model and rating selected a maximum braking force of 119kN can be achieved per brake unit. Should higher forces be needed, multiple calipers or larger units (VSD, VMS) may be used.

Description

Standard calipers comprising two spring modules are usually mounted each side of a supporting bracket. 'Floating' calipers comprising a single module and reactive half, may be introduced when the available space envelope is limited or to accommodate axial disc movement. Should high power dissipation be required, large-pad versions increase the units' heat capacity. While the VCS brake's unique compact design makes it more suited to static holding, both the VCSD and VKSD are specifically rated for high cyclic duty applications.

Special Features

- Modular construction for ease of installation and maintenance – no special tools required
- Industry proven compact and rugged designs for reliable service
- Easily integrated with Twiflex HPU's and 'soft braking' control systems
- Special finishes and custom designs on request
- Multiple status monitoring and wear sensor options

VKSD

Caliper Type	Braking Force kN	Release Pressure bar	Minimum Pressure for Full Retraction bar	Air Gap in. (mm)
VKSD119	119	124	138	.079 (2.0)
VKSD112	112	116	131	.079 (2.0)
VKSD104	104	108	124	.079 (2.0)
VKSD96	96	100	116	.079 (2.0)
VKSD88	88	92	108	.079 (2.0)
VKSD80	80	83	100	.079 (2.0)
VKSD71	71	75	92	.079 (2.0)
VKSD62	62	65	83	.079 (2.0)

