

The Twiflex VCS disc brake caliper comprises of two similar halves or hydraulic modules and is used with a brake disc thickness from 20mm. The caliper modules are mounted each side of a central mounting plate of the same thickness as the brake disc.

Each module has a variable number of disc springs to produce a braking force in the range of 14kN up to 60kN. Braking force is also dependent on the pad/disc air gap.

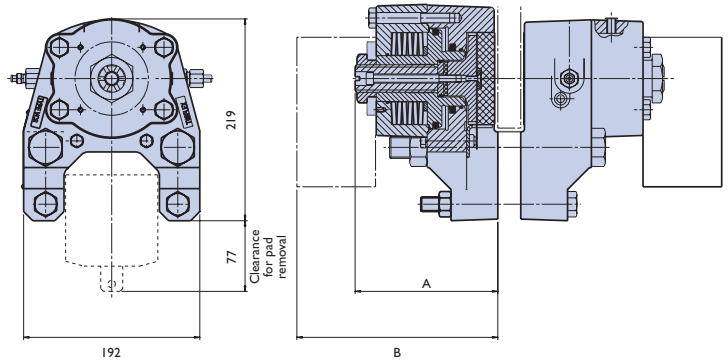
Normally one or two brakes will be used per disc, but the number may be increased, depending on disc size. The brake units can be positioned at any angle around the periphery of the disc.

A range of Brake Discs is available from Twiflex.

Minimum disc diameter for the VCS caliper is 500mm.

Twiflex Disc Brakes must be used with Twiflex asbestos free brake pads.

Contact Twiflex for installation details.



	A	B
<b>Long</b>	184	247
<b>Standard</b>	152	215

Caliper Type	Disc/Pad Air Gap mm	Braking Force kN	Hydraulic Pressure for Full Retraction bar
<b>VCS72L</b>	2	62	162
<b>VCS60L</b>	2	50	138
<b>VCS55L</b>	2.5	43	106
<b>VCS50L</b>	2.5	37	94
<b>VCS40L</b>	3.5	30	77
<b>VCS40S</b>	2	31	77
<b>VCS25S</b>	3.5	20	54
<b>VCS22S</b>	3.5	14	44

Maximum Retraction Pressure 162 bar

Weight of caliper (2 modules) - 46kg

Volume displacement per 1mm stroke at both pads = 14ml

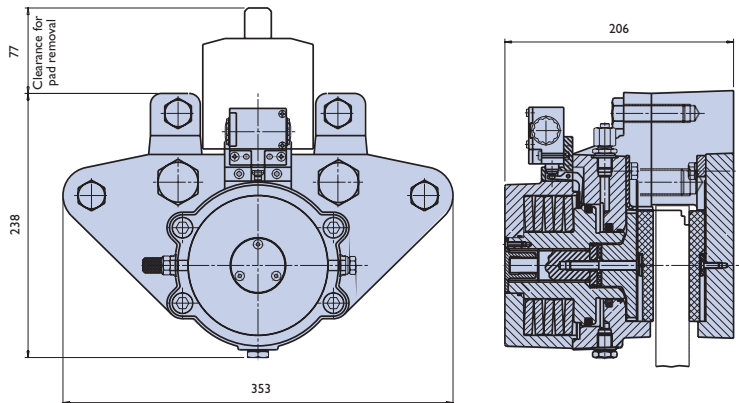
▼ VCS -FL

A version of this brake, known as the VCS-FL, is available for use where space is limited and when the brake disc has excessive lateral movement. Only one brake module is used with a reactive pad plate.

Contact Twiflex for installation details.

**Note:**

Spring fatigue life is a function of the caliper rating.



The ratings shown in the table are based on fully bedded and conditioned brake pads with nominal friction coefficient  $\mu = 0.4$ .

Braking Torque (kNm) = Braking Force (kN) x Effective Disc Radius (m)

Where Effective Disc Radius (m) = Actual Disc Radius - 0.054m