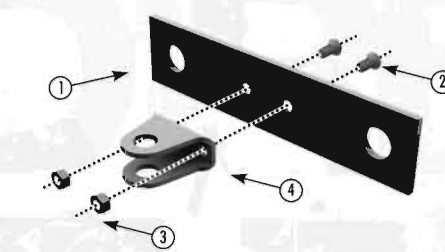


OPTIONAL EQUIPMENT

Gate adaptor kit (optional) VECGAK00V1

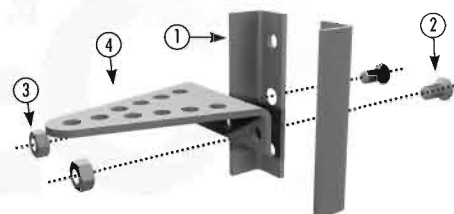
This kit is used when a need arises to spread the load absorbed by the gate bracket over a wider area of the gate surface. The Spreader Plate can be welded between bars or onto an existing beam. This should be used when the gate is made up of thin-section material, and is highly recommended for all light-industrial installations



Item	Description
1	Gate-bracket spreader plate
2	M6x12 Countersunk screw
3	M6 Hexnuts
4	Gate-bracket (supplied with gate operator)

Wall adaptor kit (optional) VECWAK00V1

The Wall-Adaptor Plate spreads the load of the wall-bracket over four holes vertically. This kit can be used with either the standard-, or high security-wall-brackets.

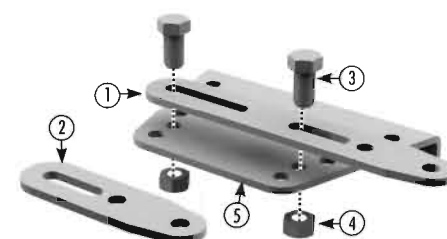


Item	Description
1	Wall-adaptor plate
2	M10x25 Countersunk screw
3	M10 Hexnuts
4	Wall-bracket (supplied with gate operator)

Vector Mechano kit (optional) VECMAK00V1

This kit has been designed to make the Vector easier to install, and to also give the installer more flexibility during the installation.

The securing plates in this kit have been designed to secure to either the standard-, or high security-wall-brackets. The position of the holes in the securing plate ensures maximum flexibility in selecting the most appropriate mounting point for the operator.

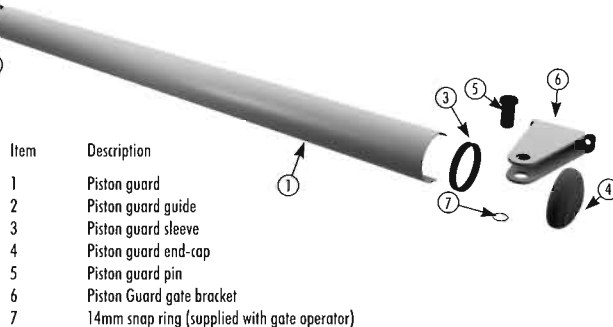


Item	Description
1	Vector securing plate (long)
2	Vector securing plate (short)
3	M10x20mm Bolt
4	M10 Hexnut
5	High security-wall-bracket (not supplied)

Piston guard kit (optional) VEC4PG00V1/ VEC5PG00V1

The Piston Guard is for instances where one needs the piston shielded, whether from the elements or to conceal the moving parts. It is ideal for environments where snow or ice could freeze onto the moving piston.

The piston guard is a clip-on assembly, which is easily attached to the standard operator. It does however require the fitting of a piston guard gate bracket to give it clearance and a guard pin to enable the pin to fit inside the envelope of the guard.



Item	Description
1	Piston guard
2	Piston guard guide
3	Piston guard sleeve
4	Piston guard end-cap
5	Piston guard pin
6	Piston Guard gate bracket
7	14mm snap ring (supplied with gate operator)

High security kit (optional) VECHSK00V1

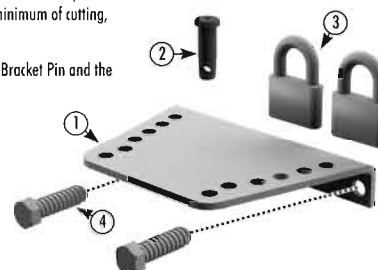
The High Security Kit provides one with the means to ensure optimal security of your home by adding strength to the installation.

The High Security Wall Bracket enables the installer to spread the load of the cyclic repetition of the gate opening over a wider wall area, along with providing more static strength against attempted forced entries.

The Long Securing Plate enables the installer to position the operator according to the installation tables easily with a minimum of cutting, grinding and welding.

A padlock should be fitted through both the Gate Bracket Pin and the Wall bracket Pin for additional security.

Item	Description
1	Wall bracket (high security)
2	High security gate bracket pin
3	Padlock
4	Wall anchors (not supplied)



SPECIFICATIONS

Operator V400/V500

Power Configurations :	7Ah, 12V, CP84SM (Light Industrial)	7Ah, 12V, CP84E (Domestic)
Nominal Input Voltage:	12V DC	12V DC
DC Current Draw (Max):	15A	15A
Extension/retraction (no load):	27mm/sec	27mm/sec
Max. Output Force:	3000N (300kgf)	3000N (300kgf)
Max. Operations (day):	200	100
Max. Number of continuous Operations:	Unlimited	Unlimited
Typical Gate Opening/ Closing Time:	V400: < 14 Sec V500: < 17 Sec	V400: < 14 Sec V500: < 17 Sec
Operating Temp. Range:	-20°C to +60°C	-20°C to +60°C
Housing Protection:	IP55	IP55
Mass of Operator:	V400-5.5kg V500-5.9kg	V400-5.5kg V500-5.9kg

Allowable Gate Mass

Maximum allowable gate mass for V400 operator:						
Gate swing angle	Up to 1.5m	Up to 2m	Up to 2.5m	Up to 3m (#1)	Up to 3.5m (#1)	Up to 4m (#1)
90°	500kg	500kg	500kg	360kg	260kg	200kg
100°	500kg	500kg	388kg	160kg	190kg	150kg
110°	500kg	306kg	198kg	130kg		
120°	180kg	100kg	65kg			
Maximum allowable gate mass for V500 operator:						
Gate swing angle	Up to 1.5m	Up to 2m	Up to 2.5m	Up to 3m (#1)	Up to 3.5m (#1)	Up to 4m (#1)
90°	750kg	750kg	750kg	550kg	410kg	310kg
100°	750kg	750kg	600kg	420kg	310kg	230kg
110°	750kg	500kg	320kg	220kg		
120°	310kg	170kg	110kg			

(#1 - an electric lock must be fitted to secure gate in closed position)

Power Supply

	7Ah, 12V, CP84SM (Light Industrial)	7Ah, 12V, CP84E (Domestic)
Nominal Input Voltage :	220v AC ± 10% @ 50Hz	220v AC ± 10% @ 50Hz
AC Current Draw (Max) :	170mA	60mA
Temperature Range :	-20°C to +60°C	-20°C to +60°C
Max. Continuous Charging Current :	2.5A @ 13.8V	0.8A @ 13.8V

Power Supply, Wall Box and Control Card Assembly

	7Ah, 12V, CP84SM (Light Industrial)	7Ah, 12V, CP84E (Domestic)
Boxed Shipping Weight (Excluding Batteries) :	2.7kg	2.7kg
Protection Level :	IP55	IP55

Control Card:

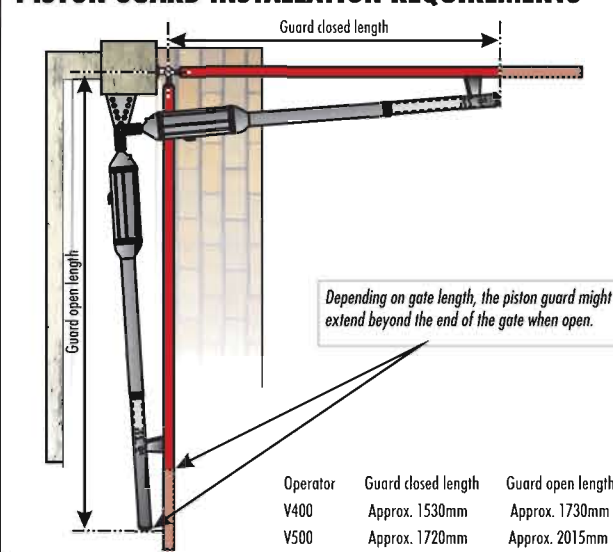
	12V Single or Double
Max. Motor Current Per Channel :	15A (fused)
Max. Input Voltage :	18V DC
Standby Current Draw :	48mA
Max. Solenoid Current Draw :	2A DC
Max aux output current:	3A (PTC)
Collision Detection :	Current Sense & Redundant Optical
Position & trajectory:	Redundant Optical
Temperature Range :	-20°C To +60°C

Wind loading

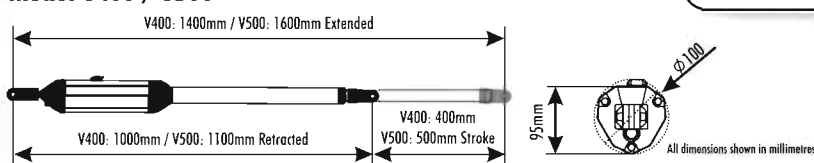
Operator	Gate 2.5m long x 1.8 high With 25% coverage	Gate 2.5m long x 1.8 high with 100% coverage
	Basic geometry *2	Best geometry *2
V400	48km/h	99km/h
V500	65km/h	116km/h

(*2 - The installed position of the operator determines the mechanical advantage that the operator has on the gate. See installation manual for more details.)

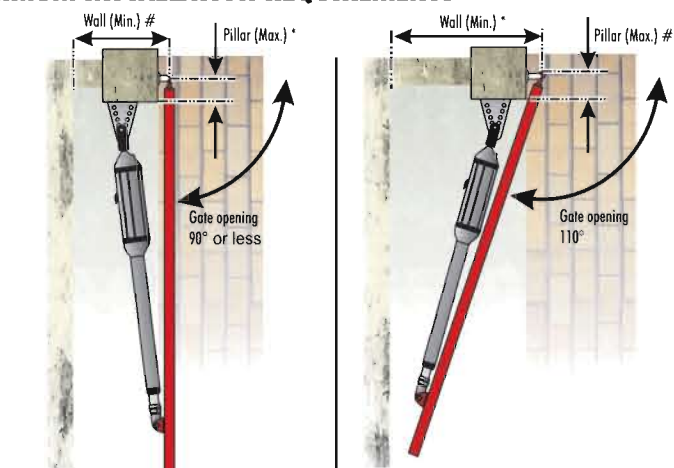
PISTON GUARD INSTALLATION REQUIREMENTS



Model V400 / V500



MINIMUM INSTALLATION REQUIREMENTS



Gate opening 90° or less

Operator	Wall (Min.) #	Pillar (Max.) *
V400	150mm	250mm
V500	150mm	335mm

(Tables are based on gates shorter than 2.5m.)

- For gates 2.5m to 3.0m long, reduce the maximum pillar thickness by 20mm.
- For gates 3.0m to 3.5m long, reduce the maximum pillar thickness by 40mm.
- For gates 3.5m to 4.0m long, reduce the maximum pillar thickness by 60mm.

* - The typical minimum wall clearance required to fit the operator.
* - The maximum allowable pillar thickness on which to fit the operator.

Gate opening 110°

Operator	Wall (Min.) #	Pillar (Max.) *
V400	150mm	145mm
V500	150mm	210mm

E&OE Centurion Systems (Pty) Ltd reserves the right to change products or specifications without prior notice.

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Call 0860-CENTURION

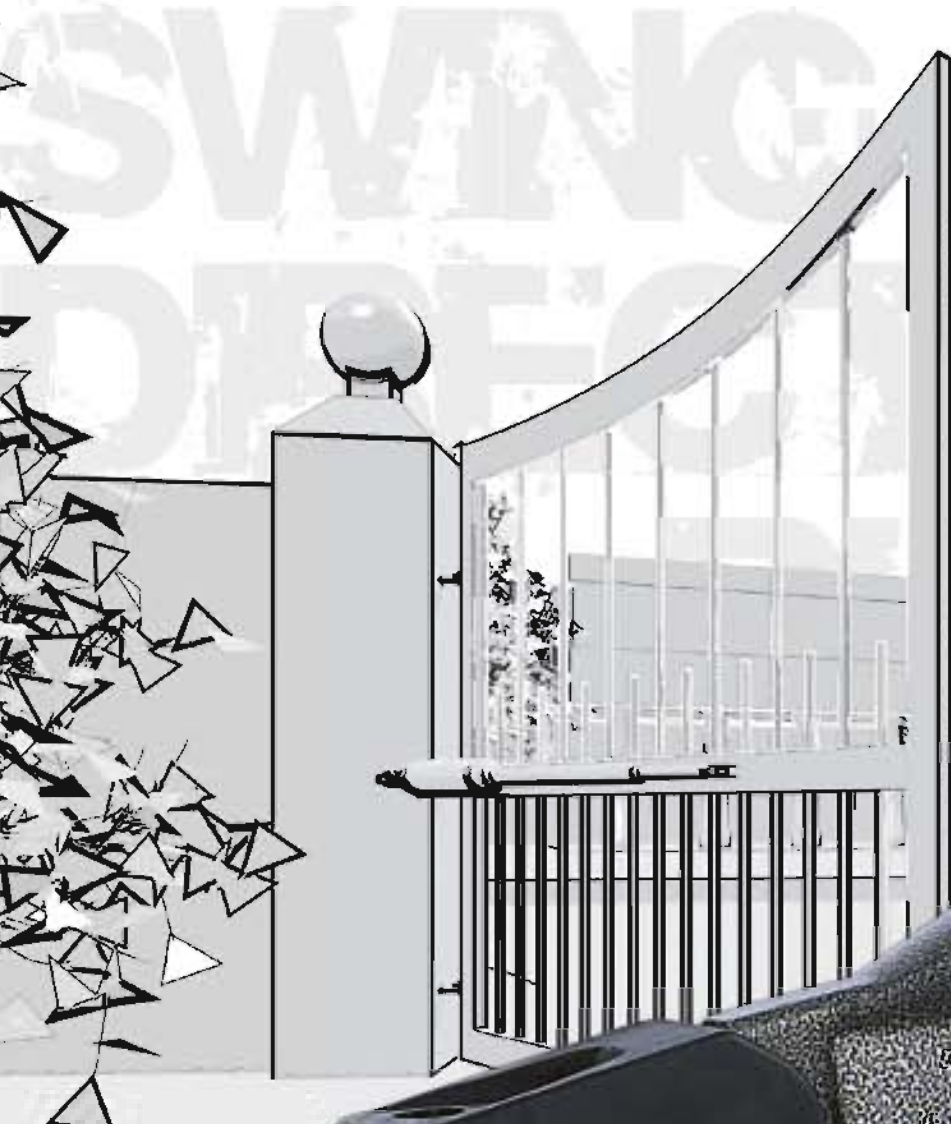
0860-236-887(Sharecall number applicable when dialed from within South Africa only)



www.centsys.co.za



VECTOR
Swings Gates
Precisely!



CONTROLLER FEATURES

- Separate weatherproof housing for dual-channel controller, battery and charger.
- Easily programmable controller using LCD user interface.
- Removable connectors on controller for easy maintenance.
- Fully sealed plastic housing for controller to prevent ingress of dirt and insects.
- Selectable automatic closing with adjustable time and pushbutton override.
- Programmable leaf-delay on master gate.
- Positive close mode .

OPTIONAL AUXILIARIES

- Pedestrian opening (adjustable opening and auto-close time).
- Remote gate-status indicator (gate position, power failure, low battery, multiple collision detection and light status indication) .
- Courtesy / Pillar light timer (adjustable time).
- Opening and closing safety beam inputs.
- Holiday lock-out.
- Free-exit facility.
- Solenoid or magnetic lock release.

SAFE BATTERY BACK-UP

With only a low-voltage battery supply powering the VECTOR operator, the system is totally safe from risks such as electrocution, and has the added benefit of providing power-failure protection. The added efficiency of the operator results in an exceptional number of uses even off a low-capacity battery in the event of mains-loss.

SENSITIVE ANTI-CRUSHING CONTROL

The VECTOR controller accurately monitors any obstructions to the movement of the gate to ensure ultra-safe operation against crushing and end-user peace of mind.

SECURE KEY RELEASE

The manual override is operated by an easily accessible key-lock. To reduce the ingress of dust and dirt into the lock mechanism, the lock is shielded by a plastic cover



When specifying a piston guard the recommended gateleaf width should be no less than:
Vector 400 – 1730mm
Vector 500 – 2015mm

*PISTON GUARD OPTIONAL EXTRA

The VECTOR automation system is the all-round winner for swing gates. It's linear operating principle with internal position control makes the system quick and easy to install. Its revolutionary mechanical design ensures a swift, powerful and reliable operator for the majority of domestic and light industrial gates. The low-voltage motor provides safe operation and battery back-up. The advanced controller is feature-rich and the set-up and commissioning is child's play.

VECTOR - Swings gates precisely!

LOW PROFILE IN-LINE DESIGN

The VECTOR has a low profile design with in-line construction of the motor, gearbox and actuating piston. This enhances the aesthetic appearance of the operator allowing it to blend in as unobtrusively as possible with the design of the gate.

EASY TO INSTALL

The fully integrated linear action operator with no complicated linkages makes the installation of the system very quick and easy. Added to this, the internal position-control mechanism simplifies the installation even further, as the gates no longer require end-of-travel end-stops*. Combined with different optional mounting bracket kits, VECTOR can be fitted to almost any swing gate pillar.

HIGH PUSH FORCE

The high torque DC motor operating through an efficient planetary gearbox delivers a potent 300kg of push force . The VECTOR is capable of reliably operating swing gates in the majority of domestic and light industrial applications.

**Inward swinging gates only*

REVOLUTIONARY BRAKE

The revolutionary centrifugal brake developed for the VECTOR ensures secure locking of the operator when the gate is both open and closed.

INTERNAL LIMITS

Its double-redundant opto-electronic internal limit system guarantees very reliable operation and precise control of the movement of the gate.

FULL SPEED CONTROL

The VECTOR electronics with "QUADRA-DRIVE" speed control maintains a smooth and quiet starting and stopping of the gate, thereby reducing the operating stresses and extending the life of both the operator and the gate.

SWIFT OPERATION

The mechanical gearing of the VECTOR combined with its leading-edge speed system maintains rapid and controlled opening and closing of the gate for greater convenience and security.

ALL WEATHER CONSTRUCTION

All external components of the operator are manufactured from stainless steel, epoxy coated aluminium or engineering polymers, to guarantee a robust and durable unit in both inland and coastal environments.

EASY TO USE

The VECTOR controller combined with its Liquid Crystal Display (LCD) provides a very intuitive and easy to use menu-system for programming, not only the initial set-up, but all features available on the system. Offering an extensive range of useful features the controller is exceptionally versatile and has the ability to adapt the system to suit the requirements of almost every user.

