Setting New Standards in Automatic Gate & Door Technology

Gate & Door Controls Catalogue

- Waterproof FOB remotes
- Automatic Sliding Gate
- Automatic Swing Gate
- Gate & Door Controls
- Gate Accessories
  and more...

AUTOMATIC GATE KITS & ACCESSORIES
SECURING GATES SINCE 1978
www.elsema.com
Since 1978 we have been in research and development of automatic sliding gates, swing gates and industrial roller doors. We are passionate about our work and products supplying innovative solutions to the gate and door automation industry.

The complete production cycle is done by Elsema – from concept, design, testing, assembly, packaging to final quality checks.

Our team strives to put customer service first and use intelligent solutions for our products. We are here for our customers, real people answer the phones and we have specialised engineers who give technical support.

**1 Year Warranty**

Elsema’s 1 year warranty is a clear statement to its customers that the highest possible standard has been used in sourcing components, manufacturing and design of its products. The 1 year warranty applies to products designed and manufactured by Elsema and which are detailed in this catalogue.

Our exclusive lifetime support on components and technical advice guarantees that we are there to service the product long after the sale. The lifetime support on components is for 12 years after the purchase date.

For detailed information visit [www.elsema.com/automatic-gates](http://www.elsema.com/automatic-gates)
PRODUCT SPOTLIGHT

Waterproof Keyring remote controls

Sliding gate motor kits
Page 6

Articulated arm swing gate motor kit
Page 14

Swinging gate motor kits
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Motor control cards
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All our motor kits use Eclipse® Operating System
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For detailed information visit [www.elsema.com/automatic-gates](http://www.elsema.com/automatic-gates)
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Gate Controller Selection Guide

Start

Do you require solar gate controller?

Yes

No

Do you have Double or Single motors?

Double

What is the Motor Voltage rating?

12V & 24V

240V 1-PHASE

MC

Page 32

Page 36

MC240

MCi-VSD

Page 38

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Single

What is the Motor Voltage rating?

12V & 24V

240V 1-PHASE

MC

MCS

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MC240

240S1

240S2

240S3E

240S4E

MCi-VSD

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Single / Double, 12V & 24V

Solar24

Solar12

For detailed information visit www.elsema.com/automatic-gates
# Quick Selection Guide

## Swing Gate Motor

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<th>Domestic / Commercial</th>
<th>Domestic / Commercial</th>
<th>Industrial</th>
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<tbody>
<tr>
<td><strong>Part Number</strong></td>
<td>iS270</td>
<td>iS250</td>
<td>iS300</td>
<td>iS400</td>
<td>iS330</td>
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<td><strong>Input Supply</strong></td>
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<td>240 Volts AC</td>
<td>240 Volts AC</td>
<td>240 Volts AC</td>
<td>240 Volts AC</td>
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<tr>
<td><strong>Motor Voltage</strong></td>
<td>24 Volts DC</td>
<td>24 Volts DC</td>
<td>24 Volts DC</td>
<td>24 Volts DC</td>
<td>240 Volts AC</td>
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<tr>
<td><strong>Soft Start Soft Stop</strong></td>
<td>User Adjustable</td>
<td>User Adjustable</td>
<td>User Adjustable</td>
<td>User Adjustable</td>
<td>User Adjustable</td>
</tr>
<tr>
<td><strong>Maximum Gate Size / Weight</strong></td>
<td>2.5 metres / 250Kg</td>
<td>2.5 metres / 300Kg</td>
<td>3 metres / 400Kg</td>
<td>4.5 metres / 450Kg</td>
<td>6 metres / 600Kg 4 metres / 800Kg</td>
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<tr>
<td><strong>Motor Type</strong></td>
<td>Articulated Arm</td>
<td>Worm Drive</td>
<td>Worm Drive</td>
<td>Worm Drive</td>
<td>Hydraulic</td>
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<tr>
<td><strong>Solar / Battery Backup Option</strong></td>
<td>Single panel and dual battery</td>
<td>Single panel and dual battery</td>
<td>Single panel and dual battery</td>
<td>Single panel and dual battery</td>
<td>Uninterruptible Power Supply (UPS)</td>
</tr>
<tr>
<td><strong>Day &amp; Night Sensor</strong></td>
<td>User Adjustable</td>
<td>User Adjustable</td>
<td>User Adjustable</td>
<td>User Adjustable</td>
<td>User Adjustable</td>
</tr>
</tbody>
</table>

[www.elsema.com](http://www.elsema.com)
iS600 Kit
Domestic Sliding Gates up to 600kg

AXIOM SERIES
SLIDING GATE OPENER

- Cost effective solution for domestic sliding gate
- Self learning using intelligent positioning technology
- High capacity Lithium-ion battery backup optional
- Easy installation with Eclipse® control card
- All metal gearbox for longer life
- Suitable for gates up to 600kg on level ground
- Contactless limit switch
- Soft start and soft stop
- Designed by Elsema in Australia

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
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<td>Power supply</td>
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<tr>
<td>Motor voltage</td>
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<tr>
<td>Max gate weight</td>
<td>600kg on level ground</td>
</tr>
<tr>
<td>Max absorbed power</td>
<td>80 Watts</td>
</tr>
<tr>
<td>Nominal thrust</td>
<td>220N</td>
</tr>
<tr>
<td>Nominal input current</td>
<td>2 Amps</td>
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<tr>
<td>Motor speed</td>
<td>15 metres per minute</td>
</tr>
<tr>
<td>Duty cycle</td>
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<td>Operating temperature</td>
<td>-20°C - +50°C</td>
</tr>
</tbody>
</table>

For detailed information visit www.elsema.com/automatic-gates
Kit contents

- iS600 sliding gate motor
- 3 x Keyring remotes with frequency hopping
- Long range reflector type photo electric beam
- 4 x Steel reinforced Nylon Gear Racks GR-4
- Control card with Eclipse® Operating System

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>iS600</td>
<td>Standard iS600 Kit</td>
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<tr>
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<td>iS600 Kit with Li-ion Backup battery pack</td>
</tr>
<tr>
<td>iS600Solar24</td>
<td>iS600 Kit with Solar charger and Backup battery pack</td>
</tr>
</tbody>
</table>

Optional Accessories

- **PentaCODE® Keypad**: Wireless keypad compatible with Penta series of receivers
- **GSM Gate Opener**: Open your gate with your mobile phone for free!
- **Magnetic Lock**: 12 or 24 Volts DC, Waterproof, 270kg or 650kg
- **PentaFOB® Programmer**: Add, edit or delete or backup individual PentaFOB® remotes
- **Vehicle Detector**: 12, 24 or 240 Volts, 1 or 2 loops, Medium or high sensitivity
- **Flashing Lights**: 12 or 24 Volts DC, Red, Blue & Amber, 90 Flashes / min
iS900 Kit
Domestic / Light Commercial Gates up to 900kg

AXIOM SERIES
SLIDING GATE OPENER

- Self learning using intelligent positioning technology
- High capacity Lithium-ion battery backup optional
- Easy installation with Eclipse® control card
- Powerful 120 Watt motor for faster speed
- All metal gearbox for longer life
- Suitable for gates up to 900kg on level ground
- Contactless limit switch
- Soft start and soft stop
- Designed by Elsema in Australia

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Power supply</th>
<th>240 Volts AC</th>
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<td>Operating temperature</td>
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</tbody>
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For detailed information visit www.elsema.com/automatic-gates
Kit contents

- iS900 sliding gate motor
- 3 x Keyring remotes with frequency hopping
- Long range reflector type photo electric beam
- 4 x Steel reinforced Nylon Gear Racks GR-4
- Control card with Eclipse® Operating System

Ordering Code

<table>
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<th>DESCRIPTION</th>
<th>Passport Code</th>
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<tbody>
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<td>Standard iS900 Kit</td>
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<tr>
<td>iS900B</td>
<td>iS900 Kit with Li-ion Backup battery pack</td>
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</table>

Optional Accessories

- **PentaCODE® Keypad**
  - Wireless keypad compatible with Penta series of receivers
- **PentaFOB® Programmer**
  - Add, edit or delete or backup individual PentaFOB® remotes
- **GSM Gate Opener**
  - Open your gate with your mobile phone for free!
- **Vehicle Detector**
  - 12, 24 or 240 Volts
  - 1 or 2 loops
  - Medium or high sensitivity
- **Magnetic Lock**
  - 12 or 24 Volts DC
  - Waterproof
  - 270kg or 650kg
- **Flashing Lights**
  - 12 or 24 Volts DC
  - Red, Blue & Amber
  - 90 Flashes/min
iS600 Solar 24
Domestic Solar Sliding Gates up to 600kg

AXIOM SERIES
SLIDING GATE OPENER

- Ultra-fast Maximum Power Point Tracking (MPPT)
- High capacity Lithium-ion battery
- Bluetooth Smart built-in
- Real-time battery charging data
- Self learning using intelligent positioning technology
- Easy installation with Eclipse® control card
- All metal gearbox for longer life
- Suitable for gates up to 600kg on level ground
- Contactless limit switch
- Soft start and soft stop
- Designed by Elsema in Australia

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<td>Motor voltage</td>
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<td>Max gate weight</td>
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</tr>
<tr>
<td>Max absorbed power</td>
<td>80 Watts</td>
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<tr>
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<tr>
<td>Nominal input current</td>
<td>2 Amps</td>
</tr>
<tr>
<td>Motor speed</td>
<td>15 metres per minute</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>60% over 12 min</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C - +50°C</td>
</tr>
</tbody>
</table>

For detailed information visit www.elsema.com/automatic-gates

Search for VictronConnect in App store
Kit contents

- iS600 sliding gate motor
- 40W 24V Solar Panel
- 3 x Keyring remotes with frequency hopping
- Long range reflector type photo electric beam
- 4 x Steel reinforced Nylon Gear Racks GR-4
- Control card with Eclipse® Operating System

Description

The solar kit comes complete with a smart ultra-fast MPPT solar charger, Li-Ion battery, a single 24V Solar panel, 3 PentaFOB® remotes, 4 metres of gear rack and a photo electric beam.

The iS600Solar24 kit uses the latest Bluetooth Smart technology with ultra-fast MPPT charging. The mobile phone app shows the battery status in real time, charging current, voltage and the output of the solar panel.

Ultra-fast MPPT charging improves energy harvest by up to 30% compared to PWM chargers. This is a huge advantage as on cloudy days, the sun’s intensity keeps changing. The ultra-fast MPPT solar charger ensures that it extracts the maximum energy from the solar panel.

Ordering Code

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<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
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<td>iS600 Kit with Smart Solar Charger, Li-Ion battery backup and a 24 Volt solar panel</td>
</tr>
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iS1200LV, iS1200 & iS2000
High Speed Commercial Gates

SLIDING GATE OPENERS

- High speed operator, faster than 20 metres per minute
- All metal gearbox for longer life
- Easy installation with Eclipse® control card
- Designed and made in Australia
- Battery backup (Optional)
- Soft start and soft stop
- Easy installation

Vandal proof antenna for optimum operating range and 3 x PentaFOB® included in the kit.

TECHNICAL DATA

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<th>iS1200</th>
<th>iS2000</th>
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<td>240 Volts AC</td>
<td>240 Volts AC</td>
</tr>
<tr>
<td>Motor voltage</td>
<td>24 Volts DC</td>
<td>240 Volts 3 Phase</td>
<td>240 Volts 3 Phase</td>
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<tr>
<td>Max gate weight</td>
<td>500kg on level ground</td>
<td>1,000kg on level ground</td>
<td>2,000kg on level ground</td>
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<tr>
<td>Max absorbed power</td>
<td>120 Watts</td>
<td>250 Watts</td>
<td>750 Watts</td>
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<td>Nominal input current</td>
<td>3 Amps</td>
<td>3 Amps</td>
<td>10 Amps</td>
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<td>Motor speed</td>
<td>22 metres per minute</td>
<td>27 metres per minute</td>
<td>38 metres per minute</td>
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<tr>
<td>Duty cycle</td>
<td>60%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Backup battery</td>
<td>2 x 2.6Ah Battery</td>
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<td>-</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C - +50°C</td>
<td>-20°C - +50°C</td>
<td>-20°C - +50°C</td>
</tr>
</tbody>
</table>

For detailed information visit www.elsema.com/automatic-gates
Dimensions

**iS1200LV/iS1200**

**iS2000**

Accessories *(Sold separately)*

- Pre-made vehicle detection loops. Direct burial or saw cut
- Long range reflector type photo electric beam
- Safety Bump Strip
- Nylon Gear Racks GR-4

Optional Accessories

- **PentaCODE® Keypad**  
  Wireless keypad compatible with Penta series of receivers

- **GSM Gate Opener**  
  Open your gate with your mobile phone for free!

- **Magnetic Lock**  
  - 12 or 24 Volts DC
  - Waterproof
  - 270kg or 650kg

- **PentaFOB® Programmer**  
  Add, edit or delete or backup individual PentaFOB® remotes

- **Vehicle Detector**  
  - 12, 24 or 240 Volts
  - 1 or 2 loops
  - Medium or high sensitivity

- **Flashing Lights**  
  - 12 or 24 Volts DC
  - Red, Blue & Amber
  - 90 Flashes / min

Gate and Door Technology since 1978
iS270 Kit
Articulated arm gate operator

SWING GATE OPENERS

TECHNICAL DATA

<table>
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<td>Motor voltage</td>
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<tr>
<td>Max gate weight</td>
<td>250kg</td>
</tr>
<tr>
<td>Peak thrust</td>
<td>2500N</td>
</tr>
<tr>
<td>Nominal input current</td>
<td>4.2 Amps</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>20%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C - +50°C</td>
</tr>
</tbody>
</table>

- Uses Elsema’s MC card with Eclipse® operating system
- Cost effective solution for automation of swing gates
- Wide range of positional adjustment
- Easily adjustable limit switches
- Battery backup (iS270 E1.2)
- Waterproof cover design
- Soft start and soft stop
- Easy installation

For detailed information visit www.elsema.com/automatic-gates
Typical installation

Kit contents

Built-in Eclipse® control card
iS270D dual swing motors
3 x Keyring remotes with frequency hopping
Long range reflector type photo electric beam

Dimensions

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>iS270D</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS270</td>
<td>Single swing motor kit</td>
</tr>
<tr>
<td>E1.2</td>
<td>*Optional battery backup kit</td>
</tr>
</tbody>
</table>

Optional Accessories

PentaCODE® Keypad
Wireless keypad compatible with Penta series of receivers

GSM Gate Opener
Open your gate with your mobile phone for free!

PentaFOB® Programmer
Add, edit or delete or backup individual PentaFOB® remotes

Vehicle Detector
12, 24 or 240 Volts
1 or 2 loops
Medium or high sensitivity

Locking Actuator
12 Volts DC
50mm Stroke
20mm Stainless Steel Pin

Flashering Lights
12 or 24 Volts DC
Red, Blue & Amber
90 Flashes \ min
SOLAR SWING GATE OPENERS

- Uses Elsema’s MC card with Eclipse® operating system
- Cost effective solution for automation of swing gates
- Bluetooth Smart built-in
- Real-time battery charging data
- Self learning using intelligent positioning technology
- Adjustable limit switches
- Waterproof cover design
- Soft start and soft stop
- Easy installation

TECHNICAL DATA

<table>
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<tbody>
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<td>Max gate weight</td>
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<td>Peak thrust</td>
<td>2500N</td>
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<tr>
<td>Nominal input current</td>
<td>4.2 Amps</td>
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<tr>
<td>Duty cycle</td>
<td>20%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C to +50°C</td>
</tr>
</tbody>
</table>

Search for VictronConnect in App store

For detailed information visit www.elsema.com/automatic-gates
Typical installation

Kit contents

- Control card, Solar panel, Battery & Regulator with MPPT
- iS270D dual swing motors
- 3 x Keyring remotes with frequency hopping
- Long range reflector type photo electric beam

Dimensions

- Easily adjustable limits

Ordering Code

<table>
<thead>
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<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>iS270DSolar</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS270Solar</td>
<td>Single swing motor kit</td>
</tr>
</tbody>
</table>

Single 24V, 40Watt Solar panel included in the kit
For detailed information visit www.elsema.com/automatic-gates

iS250 Kit

24 Volt motor, Suitable for gates up to 2.5 metres and 300kg

SWING GATE OPENERS

- Cost effective solution for automation of swing gates
- Uses Elsema’s MC card with Eclipse® operating system
- Die-cast Aluminium motor cover for great durability
- Mechanical stopper built in the motor for added protection. No stoppers required on your driveway
- Battery backup (iS250 E7)
- Waterproof cover design
- Soft start and soft stop
- Easy installation

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<td>Power supply</td>
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</tr>
<tr>
<td>Motor voltage</td>
<td>24 Volts DC</td>
</tr>
<tr>
<td>Max gate weight</td>
<td>300kg</td>
</tr>
<tr>
<td>Max gate length</td>
<td>2.5 metres</td>
</tr>
<tr>
<td>Peak thrust</td>
<td>3000N</td>
</tr>
<tr>
<td>Operation stroke</td>
<td>500mm</td>
</tr>
<tr>
<td>Typical gate opening time</td>
<td>15-20sec</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>20%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C~50°C</td>
</tr>
</tbody>
</table>
Typical installation

Kit contents

1. Intelligent control box with built-in receiver.
2. iS250D dual swing motors with built-in stopper.
3. 3 x Keyring remotes with frequency hopping.
4. Long range reflector type photo electric beam.

Dimensions

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>iS250D</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS250</td>
<td>Single swing motor kit</td>
</tr>
<tr>
<td>E7</td>
<td>*Optional battery backup kit</td>
</tr>
</tbody>
</table>

*Please specify battery backup option when ordering

Optional Accessories

- **PentaCODE® Keypad**: Wireless keypad compatible with Penta series of receivers
- **GSM Gate Opener**: Open your gate with your mobile phone for free!
- **Backup Batteries**: 24 Volt, 7Ah rechargeable lead acid battery
- **Vehicle Detector**: 12, 24 or 240 Volts, 1 or 2 loops, Medium or high sensitivity
- **Locking Actuator**: 12 or 24 Volts DC, 20mm Stainless Steel Pin
- **Flashing Lights**: 12 or 24 Volts DC, Red, Blue & Amber, 90 Flashes \ min
For detailed information visit www.elsema.com/automatic-gates

SOLAR SWING GATE OPENERS

- Cost effective solution for automation of swing gates
- Uses Elsema’s MC card with Eclipse® operating system
- Bluetooth Smart built-in
- Real-time battery charging data
- Mechanical stopper built in the motor for added protection. No stoppers required on your driveway
- Waterproof cover design
- Soft start and soft stop
- Easy installation

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Motor voltage</td>
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<tr>
<td>Max gate weight</td>
<td>300kg</td>
</tr>
<tr>
<td>Max gate length</td>
<td>2.5 metres</td>
</tr>
<tr>
<td>Peak thrust</td>
<td>3000N</td>
</tr>
<tr>
<td>Operation stroke</td>
<td>500mm</td>
</tr>
<tr>
<td>Typical gate opening time</td>
<td>15-20sec</td>
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<td>Duty cycle</td>
<td>20%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C~50°C</td>
</tr>
</tbody>
</table>

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STRONG AND DURABLE MOTOR FOR SWING GATES
Typical installation

Kit contents

Dimensions

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>iS250DSolar</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS250Solar</td>
<td>Single swing motor kit</td>
</tr>
</tbody>
</table>

Single 24V, 40Watt Solar panel included in the kit
iS300 Kit

24 Volt motor, Suitable for gates up to 3 metres and 300kg

SWING GATE OPENERS

- Uses Elsema’s MC card with Eclipse® operating system
- Ultra quiet operation yet powerful
- Die-cast Aluminium motor cover for great durability
- Mechanical stopper built in the motor for added protection. No stoppers required on your driveway
- Battery backup (iS300D E7)
- Waterproof cover design
- Soft start and soft stop
- Easy installation

Technological features:
- Die-cast aluminum cover. Maximum protection against environment
- Easy manual release located on the top side of the motor
- Strong and reliable worm shaft with ø 18mm spherical section
- NO MECHANICAL STOPPERS REQUIRED
- SELF LEARNING
- SAVING YOU TIME AND MONEY

24 VOLTS HEAVY DUTY GEAR MOTOR

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>240 Volts AC</td>
</tr>
<tr>
<td>Motor voltage</td>
<td>24 Volts DC</td>
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<tr>
<td>Max gate weight</td>
<td>300kg</td>
</tr>
<tr>
<td>Max gate length</td>
<td>3 metres</td>
</tr>
<tr>
<td>Peak thrust</td>
<td>3000N</td>
</tr>
<tr>
<td>Operation stroke</td>
<td>350mm</td>
</tr>
<tr>
<td>Typical gate opening time</td>
<td>10-15sec</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>20%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C~50°C</td>
</tr>
</tbody>
</table>

For detailed information visit www.elsema.com/automatic-gates
Typical installation

Kit contents

Intelligent control box with built-in receiver

iS300D dual swing motors with built-in stopper

3 x Keyring remotes with frequency hopping

Long range reflector type photo electric beam

Dimensions

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>IS300D</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS300</td>
<td>Single swing motor kit</td>
</tr>
<tr>
<td>E7</td>
<td>*Optional battery backup kit</td>
</tr>
</tbody>
</table>

*Please specify battery backup option when ordering

Optional Accessories

PentaCODE® Keypad

Wireless keypad compatible with Penta series of receivers

Backup Batteries

24 Volt, 7Ah rechargeable lead acid battery

GSM Gate Opener

Open your gate with your mobile phone for free!

Vehicle Detector

- 12, 24 or 240 Volts
- 1 or 2 loops
- Medium or high sensitivity

Flashlight Lights

- 12 or 24 Volts DC
- Red, Blue & Amber
- 90 Flashes / min

Locking Actuator

- 12 Volts DC
- 50mm Stroke
- 20mm Stainless Steel Pin
24 Volt motor, Suitable for gates up to 3 metres and 300kg

SOLAR SWING GATE OPENERS

- Uses Elsema’s MC card with Eclipse® operating system
- Ultra quiet operation yet powerful
- Die-cast Aluminium motor cover for great durability
- Bluetooth Smart built-in
- Real-time battery charging data
- Mechanical stopper built in the motor for added protection. No stoppers required on your driveway
- Waterproof cover design
- Soft start and soft stop
- Easy installation

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<td>Max gate weight</td>
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<tr>
<td>Max gate length</td>
<td>3 metres</td>
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<tr>
<td>Peak thrust</td>
<td>3000N</td>
</tr>
<tr>
<td>Operation stroke</td>
<td>350mm</td>
</tr>
<tr>
<td>Typical gate opening time</td>
<td>10-15sec</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>20%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C~50°C</td>
</tr>
</tbody>
</table>

For detailed information visit www.elsema.com/automatic-gates

Search for VictronConnect in App store
Typical installation

Kit contents

Control card, Solar panel, Battery & Regulator with MPPT

iS300D dual swing motors with built-in stopper

3 x Keyring remotes with frequency hopping

Long range reflector type photo electric beam

Dimensions

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>iS300DSolar</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS300Solar</td>
<td>Single swing motor kit</td>
</tr>
</tbody>
</table>

Single 24V, 40Watt Solar panel included in the kit
24 Volt motor, Suitable for gates up to 4.5 metres and 450kg

**SWING GATE OPENERS**

- Uses Elsema’s MC card with Eclipse® operating system
- Ultra quite operation yet powerful
- Die-cast Aluminium motor cover for great durability
- Easily adjustable limit switches
- Battery backup option (iS400D E7)
- Waterproof cover design
- Soft start and soft stop
- Easy installation

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor voltage</td>
<td>24 Volts DC</td>
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<tr>
<td>Max gate weight</td>
<td>450kg</td>
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<tr>
<td>Max gate length</td>
<td>4.5 metres</td>
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<td>Peak thrust</td>
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<td>Operation stroke</td>
<td>450mm</td>
</tr>
<tr>
<td>Typical gate opening time</td>
<td>10-15sec</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>20%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C~50°C</td>
</tr>
</tbody>
</table>

For detailed information visit www.elsema.com/automatic-gates
Typical installation

Kit contents

Intelligent control box with built-in receiver
iS400D dual swing motors with limit switch
3 x Keyring remotes with frequency hopping
Long range reflector type photo electric beam

Dimensions

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>iS400D</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS400</td>
<td>Single swing motor kit</td>
</tr>
<tr>
<td>E7</td>
<td>*Optional battery backup kit</td>
</tr>
</tbody>
</table>

*Please specify battery backup option when ordering

Optional Accessories

**PentaCODE® Keypad**
Wireless keypad compatible with Penta series of receivers

**GSM Gate Opener**
Open your gate with your mobile phone for free!

**Backup Batteries**
24 Volt, 7Ah rechargeable lead acid battery

**Vehicle Detector**
- 12, 24 or 240 Volts
- 1 or 2 loops
- Medium or high sensitivity

**Locking Actuator**
- 12 Volts DC
- 50mm Stroke
- 20mm Stainless Steel Pin

**Flashing Lights**
- 12 or 24 Volts DC
- Red, Blue & Amber
- 90 Flashes / min
iS400 Solar Kit
24 Volt motor, Suitable for gates up to 4.5 metres and 450kg

SOLAR SWING GATE OPENERS

- Uses Elsema’s MC card with Eclipse® operating system
- Ultra quiet operation yet powerful
- Die-cast Aluminium motor cover for great durability
- Bluetooth Smart built-in
- Real-time battery charging data
- Limit switch. Ideal for solar applications
- Waterproof cover design
- Soft start and soft stop
- Easy installation

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor voltage</td>
<td>24 Volts DC</td>
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<tr>
<td>Max gate weight</td>
<td>450kg</td>
</tr>
<tr>
<td>Max gate length</td>
<td>4.5 metres</td>
</tr>
<tr>
<td>Peak thrust</td>
<td>4500N</td>
</tr>
<tr>
<td>Operation stroke</td>
<td>450mm</td>
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<tr>
<td>Typical gate opening time</td>
<td>10-15sec</td>
</tr>
<tr>
<td>Duty cycle</td>
<td>20%</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C~50°C</td>
</tr>
</tbody>
</table>

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For detailed information visit www.elsema.com/automatic-gates
Typical installation

Kit contents

- Control card, Solar panel, Battery & Regulator with MPPT
- iS400D dual swing motors with limit switch
- 3 x Keyring remotes with frequency hopping
- Long range reflector type photo electric beam

Dimensions

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>iS400DSolar</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS400Solar</td>
<td>Single swing motor kit</td>
</tr>
</tbody>
</table>
iS330 Kit

240 Volt motor, Suitable for gates up to 6 metres and 600kg

SWING GATE OPENERS

- Easy to setup using, Eclipse® Operating System (EOS)
- Powerful hydraulic motors
- Die-cast Aluminium motor cover for great durability
- Mechanical stopper built in the motor for added protection.
- Anti-crash adjustment
- Waterproof cover design
- Anti-wind adjustment
- Soft start and soft stop
- Easy installation

Die-cast aluminum cover. Maximum protection against environment

Manual release in case of power shut down.

Strong and reliable. Easy installation

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>240 Volts AC</td>
</tr>
<tr>
<td>Motor voltage</td>
<td>240 Volts AC</td>
</tr>
<tr>
<td>Max gate weight</td>
<td>600kg</td>
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<tr>
<td>Max gate length</td>
<td>6 metres</td>
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<tr>
<td>Max pressure</td>
<td>50bar</td>
</tr>
<tr>
<td>Opening cycle</td>
<td>34sec</td>
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<tr>
<td>Closing cycle</td>
<td>40sec</td>
</tr>
<tr>
<td>Compression</td>
<td>795kg</td>
</tr>
<tr>
<td>Traction</td>
<td>638kg</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C~50°C</td>
</tr>
</tbody>
</table>

For detailed information visit www.elsema.com/automatic-gates
Typical installation

Kit contents

- Intelligent control box with Eclipse operating system
- iS330 dual swing hydraulic motors
- 3 x Keyring remotes with frequency hopping
- Long range reflector type photo electric beam

Dimensions

Ordering Code

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>iS330D</td>
<td>Dual swing motor kit</td>
</tr>
<tr>
<td>iS330</td>
<td>Single swing motor kit</td>
</tr>
</tbody>
</table>

Optional Accessories

- **PentaCODE® Keypad**: Wireless keypad compatible with Penta series of receivers
- **GSM Gate Opener**: Open your gate with your mobile phone for free!
- **Locking Actuator**:
  - 12 Volts DC
  - 50mm Stroke
  - 20mm Stainless Steel Pin
- **Vehicle Detector**:
  - 12, 24 or 240 Volts
  - 1 or 2 loops
  - Medium or high sensitivity
- **Flashing Lights**:
  - 12 or 24 Volts DC
  - Red, Blue & Amber
  - 90 Flashes \ min
DESCRIPTION

Are you ready for the next Eclipse? Elsema’s MC controller is not just the next generation but the industry game changer. We wanted to create a controller that is simple to use and does just about any feature required in the gate and door industry. The MC is not just the next generation but the “Next Transformation” in the gate and door industry creating an Eclipse over previously developed motor controllers. This new intelligent motor controller is the best match for your automatic gate or door motors.

The intelligent controller was built from the ground up, based on customer feedback and using today’s technology. With its rich functions, consumer friendly price and with the focus during development being ease of use and setup makes this controller the ultimate board to control your motors.

Elsema’s easy options to add remote controls or any type of photoelectric beams makes for a very user friendly approach, while avoiding the lock down approach to accessories.

The control cards are available with an IP66 rated plastic enclosure for outdoor installations, backup batteries with charger or the card only. The MC is also suitable for solar gates as it has very low standby current.

FEATURES

- Suitable for swing and sliding gates
- Double or single motor operation
- 24 or 12 Volt DC motor operation
- Motor soft start and soft stop
- Speed and force adjustment
- Large 4-line LCD to indicate controllers status and setup instructions
- 1-Touch control for easy setup
- Auto profiling using latest intelligent technology
- Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- Supports limit switch inputs or mechanical stops
- Adjustable auto close, obstruction load and pedestrian access
- Adjustable lock and courtesy light outputs
- Variable photoelectric safety beam functions
- Energy saving mode to reduce running costs
- 12 and 24 Volt DC Output to power accessories
- Service counters, password protection, holiday mode and many more features
- Built-in 12 and 24 Volt battery charger for backup batteries
- Low standby current making it ideal for solar gates

TECHNICAL DATA

- Small Size 140mm x 130mm (Card only)
- Suitable for motors up to 12 Amps running current
- Low standby current
- Can be used with or without limit switches
- Test buttons for control inputs

For detailed technical data visit www.elsema.com/automatic-gates/mcv1
Day and night sensor (DNS) option can be used to auto close the gate at night, turn on the courtesy light or lights on your gates during the night and many more features which require a day and night detection.

Ordering code for the day and night sensor is DNS.
**DESCRIPTION**

The Motor Controller Single (MCS) is not just the next generation but the industry game changer. We wanted to create a controller that is simple to use and does just about any feature required in the gate and door industry. The MCS is not just the next generation but the “Next Transformation” in the gate and door industry creating an Eclipse over previously developed motor controllers.

This new intelligent motor controller is the best match for your automatic gate or door motors.

The MCS’s Eclipse® Operating System (EOS) is a user friendly menu driven system that uses the 1-touch button to control, setup and run automatic gates, doors and barriers. It uses a large 4-line LCD screen showing live reading of the motor performance and status of all inputs and outputs.

The controller is available with an IP66 rated plastic enclosure with backup batteries, solar gate kits or card only.

**FEATURES**

- Lithium-ion and lead acid battery charger
- Suitable for single swing and sliding gates
- Single motor operation
- Motor soft start and soft stop
- Speed and force adjustment
- Large 4-line LCD to indicate controllers status and setup instructions
- 1-Touch control for easy setup
- Auto profiling using latest intelligent technology
- Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- Supports limit switch inputs or mechanical stops
- Adjustable auto close, obstruction load and pedestrian access
- Adjustable lock and courtesy light outputs
- Variable photoelectric safety beam functions
- Energy saving mode to reduce running costs
- 12 and 24 Volt DC Output to power accessories
- Service counters, password protection, holiday mode and many more features

**TECHNICAL DATA**

- Small Size 90mm x 140mm (Card only)
- Suitable for motors up to 12 Amps running current
- Low standby current
- Can be used with or without limit switches
- Test buttons for control inputs

For detailed technical data visit www.elsema.com/automatic-gates/mcs
CONNECTION DIAGRAM

**POWERED BY ECLIPSE OPERATING SYSTEM**

**AC Supply:** 24VDC 12VDC

**Model:** MCS

**Designed by ELSEMA IN AUSTRALIA**

**AC Supply:** 24/12 Volts AC

**Master Control**

**Output Rated at 250mA**

**Built-in Receiver**

**12 or 24 Volts AC Supply**

**Battery**

**Motor**

**1 Amp Max.**

**Receiver**

Program 2

Program 1

Antenna 1

Shield Antenna 2

**Output 2 Used with Relay 1-12**

**Output 1 NO**

**Output 1 C**

**+12 VDC**

**Output 1 Used for**

Program 2

Program 1

**Antenna 1**

**Shield Antenna 2**

**Output Rated at 250mA**

**Normally Closed User can change**

**Normally Open User can change**

**Normally Closed User can change**

**AC Supply**
MC240 with ECLIPSE®
Controller Card for Double or Single 240 Volt AC Motors
Gate and Door Controller with LCD and Intelligent Technology

FEATURES

- Suitable for swing and sliding gates
- Double or Single motor operation
- Eclipse® Operating System (EOS)
- Day and night sensor (DNS)
- Motor soft start and soft stop
- Speed and force adjustment
- Large 4-line LCD to indicate controllers status and setup instructions
- 1-Touch control for easy setup
- Profiling using latest intelligent technology
- Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- Supports limit switch inputs or mechanical stops
- Adjustable auto close, obstruction load and pedestrian access
- Adjustable lock and courtesy light outputs
- Variable photoelectric safety beam functions
- Energy saving mode to reduce running costs
- 12 Volt DC Output to power accessories
- Service counters, password protection, holiday mode and many more features

DESCRIPTION

The 240 Volt AC Motor Controller (MC240) is not just the next generation but the industry game changer. We wanted to create a controller that is simple to use and does just about any feature required in the gate and door industry. The MC240 is not just the next generation but the “Next Transformation” in the gate and door industry creating an Eclipse over previously developed motor controllers.

This new intelligent motor controller is the best match for your automatic gate or door motors.

The MC240’s Eclipse® Operating System (EOS) is a user friendly menu driven system that uses the 1-touch button to control, setup and run automatic gates, doors and barriers. It uses a large 4-line LCD screen showing live reading of the motor performance and status of all inputs and outputs.

The controller is available with an IP66 rated plastic enclosure or card only.

TECHNICAL DATA

| Small Size 130mm x 140mm (Card only) |
| Suitable for 240Volt AC motors |
| Can be used with or without limit switches |
| Test buttons for control inputs |
| For detailed technical data visit www.elsema.com/automatic-gates/mc240 |
Day and night sensor (DNS) option can be used to auto close the gate at night, turn on the courtesy light or lights on your gates during the night and many more features which require a day and night detection.

Ordering code for the day and night sensor is DNS.
MCi-VSD with ECLIPSE®
Gate and Door Controller with VSD (Variable Speed Drive)

DESCRIPTION
The MCi Controller has been specifically designed to control Variable Speed Drives (VSD). Elsema’s MCi-VSD kit comes with its own Omron VSD for controlling a 3-phase 240 Volt AC motor. There are 4 different kits available for different motor sizes.
The MCi card only version can also be used to control almost all types of VSD’s or even contactors. The relay outputs on the MCi are voltage free contacts, allowing the user to connect it to VSD’s Open, Close & Common inputs (Forward, Reverse & Common). It can also be used to operate coils of open and close contactors.

FEATURES
- Designed for Gate or Door motors run by VSD
- Double or Single motor operation
- Eclipse Operating System (EOS)
- Motor soft start and soft stop
- Instant stop on obstruction
- Large 4-line LCD to indicate controllers status and setup instructions
- 1-Touch control for easy setup
- Profiling using latest intelligent technology
- Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- Adjustable auto close, obstruction load and pedestrian access
- Adjustable lock and courtesy light outputs
- Variable photoelectric safety beam functions
- 12 Volt DC Output to power accessories
- Service counters, password protection, holiday mode and many more features

For detailed technical data visit: www.elsema.com/automatic-gates/mci

<table>
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<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCi-VSD04</td>
<td>Suitable for 0.4kW (1/2hp) motor</td>
</tr>
<tr>
<td>MCi-VSD07</td>
<td>Suitable for 0.75kW (1hp) motor</td>
</tr>
<tr>
<td>MCi-VSD15</td>
<td>Suitable for 1.5kW (2hp) motor</td>
</tr>
<tr>
<td>MCi-VSD22</td>
<td>Suitable for 2.2kW (3hp) motor</td>
</tr>
</tbody>
</table>

Optional external Push Buttons can be installed on request.

Part Number Description

For detailed information visit www.elsema.com/automatic-gates
Variable Speed Drive Output
The Voltage Free outputs are connected to a VSD as shown in the diagram. If 2 VSD's are used, use the VSD 2 output to connect to the second VSD.

Connecting Contactors
Voltage Free outputs for motor 1 and motor 2 can also be used to control low voltage contactors. See connection diagram below.
SOLAR KITS FOR SINGLE & DOUBLE GATE

Solar kits for Single & Double 24 or 12 Volt DC Motors
Single or Double Gate Operation

DESCRIPTION

With solar gate kits there is no need to run mains power down to your gates, the gates are powered by solar energy. Elsema’s 24 Volt solar kit (Solar24SP) comes with a single 24 Volt, 40 watt solar panel and 2 deep cycle 12Ah batteries.

Our kits are assembled and designed in Australia. With the use of a weatherproof case, deep cycle batteries and the intelligent control card, the kits will give you many years of reliable and secure use.

24 Volt Solar Kit
40W Solar panel is included

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Solar24SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery</td>
<td>Deep Cycle 12Ah</td>
</tr>
<tr>
<td>Solar Panel</td>
<td>40 Watts included</td>
</tr>
<tr>
<td>Dimension</td>
<td>340 x 280 x 130 mm</td>
</tr>
</tbody>
</table>

12 Volt Solar Kit
Solar panel is not included

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Solar12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery</td>
<td>Deep Cycle 12Ah</td>
</tr>
<tr>
<td>Solar Panel</td>
<td>Minimum 40 Watts</td>
</tr>
<tr>
<td>Dimension</td>
<td>280 x 280 x 130 mm</td>
</tr>
</tbody>
</table>

Download App to see Real-time battery charging data, battery health, solar panel output, charging history and more.

*Smart charger has been optimised for the batteries which are supplied with it. Do not change any settings!

FREQUENTLY ASKED QUESTIONS

1. Are deep cycle batteries used? For solar gate automation deep cycle batteries must be used.
2. What is the size of the battery? Larger batteries (Higher Ah) will allow more accessories and longer operation before the next charge. This is specified as the Ampere-hour (Ah) of the battery.
3. What is the stand-by current drain of the control card used in the solar kits? The lower the current the better it is since your gates will operate longer with the solar energy. Stand-by currents are usually less than 30mA. Higher stand-by currents will consume more power from your batteries, reducing the solar energy stored.
4. Where was the control card designed? Elsema’s control cards are designed in Australia for the Australian conditions. Most of the other control cards on the market are imported from Asia and Europe and are not suitable for the Australian conditions.
5. What is the size of the solar panel? For gate or door automation a minimum 40 watt panel is recommended. The size will depend on many factors. You can call Elsema’s solar engineer who will guide you to the correct size.
ADC402
Controller Card for Single 24 or 12 Volt DC Motors
Automatic Door Controller for DC Motors

FEATURES

- Suitable for automatic gates and doors
- Automatic detection for 24 or 12 Volt supply for controller and motor
- Separate overload adjustment for open and close up to 9 Amps
- Plug in type terminal blocks for easy wiring and servicing
- Adjustable auto close from 2 to 60 seconds
- Inputs for push button, open only, photoelectric beam and limit switches
- Optional battery backup available

DESCRIPTION

The ADC402 has been used in the gate and door industry in Australia and around the world for over 2 decades. It is one of the most cost effective solutions to automate your gate or door.

In fact, there is no other card in the market that comes close to it when it comes to cost per feature price. It has automatic 12 or 24 volt detection, limit switch inputs, obstruction detection, photoelectric beam input, push button input, wireless receiver input, light output and auto close features – all as standard features.

The size of the card is only 115 x 105mm making it very easy to be integrated into existing cases with limited space.

If you are looking for a card with more advanced features, then the MCS is your solution.

TECHNICAL DATA

- Small Size 115mm x 105mm (Card only)
- 24 or 12 Volts AC supply
- Standby current: 19mA at 12 Volts
- Limit switch and photo beam input can be set as NO or NC (see dipswitch setting)

For detailed technical data visit www.elsema.com/automatic-gates/adc402
Controller for Single 240 or 120 Volt AC Motors up to 1kW
Used on Light Commercial Doors, Garage and Sliding Gates

FEATURES

- Adjustable auto close
- Slow Speed and motor force (torque) adjustment
- External key switch for safety and security (only on 240S2)
- Dead man controls for open and close buttons
- Automatic ground and travel distance calibration
- Photocell, pedestrian and wireless remote control inputs
- Supports NC or NO limit switch inputs or travel timer setup
- Aux relay output to control courtesy lights and other accessories
- 24VDC output to supply external accessories such as loop detectors, swipe cards etc
- Customised models available upon request

DESCRIPTION

The 240S1 and 240S2 are very similar cards except for the card size and the 240S2 has a key switch input. Offering two different sizes allows the cards to be easily installed into existing cases as replacement or upgrade cards. These two cards are one of our best valued cards on the market, selling for a very competitive price, yet still loaded with many features.

The control cards were built from the ground up, based on customer feedback and using today’s technology. With its rich functions, consumer friendly price and with the focus during development being ease of use and setup makes these 240VAC control cards the ultimate board to control your motors.

TECHNICAL DATA

| Small Size 240S1: 148 x 92 mm. 240S2: 148 x 120 mm |
| Suitable for motors up to 1kW (1.3Hp). For higher rated motors please see 240S3 & 240S4 |
| Can be used with NO or NC limit switches or travel time |
| Test buttons for control inputs |
| For detailed technical data visit www.elsema.com/automatic-gates/240s1 |

120 Volt version available for international markets
CONNECTION DIAGRAM

240S1, Motors up to 1.0kW

240S2, Motors up to 1.0kW
Controller for Single 240 or 120 Volt AC Motors up to 2kW
Used on Light Commercial Doors, Industrial Roller Shutters,
Sectional Doors, Garage and Sliding doors

**FEATURES**

- Adjustable auto close
- Auto-reset thermal protection
- External key switch for safety and security
- Dead man controls for open and close buttons
- Automatic ground and travel distance calibration
- Photocell, pedestrian and wireless remote control inputs
- Supports NC or NO limit switch inputs or travel timer setup
- Aux relay output to control courtesy lights and other accessories
- 24VDC output to supply external accessories such as loop detectors, swipe cards etc
- Customised models available upon request

**DESCRIPTION**

The 240S3E and 240S4E industrial controller uses German designed ABB contactors and thermal overloads to control the 240 VAC motor. The 240S3E is for 240 VAC motors using 3 wires and the 240S4E is for 240 VAC motor using 4 wires.

A toroidal transformer is used to power the control card and contactors.

Using a toroidal transformer offers the following advantages:

- Excellent efficiency and low leakage losses reducing your electricity consumption
- High isolation which protects the electronics from noisy power lines
- Low magnetic field radiation and no acoustic noise enabling the controller to pass EMC and other stringent radiation tests

This is the quality you should demand when using 240 VAC motor controllers.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>240S3E-9.0</td>
<td>240 V</td>
<td>Suitable for 3-wire motors up to 1.5kW (2.0HP)</td>
</tr>
<tr>
<td>240S4E-9.0</td>
<td>240 V</td>
<td>Suitable for 4-wire motors up to 1.5kW (2.0HP)</td>
</tr>
<tr>
<td>240S3E-12</td>
<td>240 V</td>
<td>Suitable for 3-wire motors up to 2.0kW (2.6HP)</td>
</tr>
<tr>
<td>240S4E-12</td>
<td>240 V</td>
<td>Suitable for 4-wire motors up to 2.0kW (2.6HP)</td>
</tr>
</tbody>
</table>

Can be used with NO or NC limit switches
Test buttons for control inputs
Dual interlock for added safety
LEDs indicate when inputs are active. A very handy feature during installation or troubleshooting

For detailed technical data visit www.elsema.com/automatic-gates/240s3

**120 Volt version available for international markets**
Controller for 415VAC 3-Phase Motors up to 1.6kW

3-Phase Motors used on Light Commercial Doors, Industrial Roller Shutters, Sectional Doors, Garage and Sliding Doors

**FEATURES**

- Adjustable auto close
- Auto-reset thermal protection
- External key switch for safety and security
- Dead man controls for open and close buttons
- Automatic ground and travel distance calibration
- Photocell, pedestrian and wireless remote control inputs
- Supports NC or NO limit switch inputs or travel timer setup
- Aux relay output to control courtesy lights and other accessories
- 24VDC output to supply external accessories such as loop detectors, swipe cards etc
- Customised models available upon request

**DESCRIPTION**

The 415S1E industrial controller uses German designed ABB contactors and thermal overloads with phase failure compensation to control the 3-phase motor. The controller uses a dual interlock protection system for extra safety.

Using a toroidal transformer offers the following advantages:

- Excellent efficiency and low leakage losses reducing your electricity consumption
- High isolation which protects the electronics from noisy power lines
- Low magnetic field radiation and no acoustic noise enabling the controller to pass EMC and other stringent radiation tests

This is the quality you should demand when using 3-phase motor controllers.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>415S1E-2.4</td>
<td>Suitable for 3-phase motors up to 1kW (1.3HP)</td>
</tr>
<tr>
<td>415S1E-4.0</td>
<td>Suitable for 3-phase motors up to 1.6kW (2.2HP)</td>
</tr>
</tbody>
</table>

Can be used with NO or NC limit switches
Test buttons for control inputs
Dual interlock for added safety
LEDs indicate when inputs are active. A very handy feature during installation or troubleshooting

For detailed technical data visit www.elsema.com/automatic-gates/415s1

For detailed information visit www.elsema.com/automatic-gates
In installations where neutral is not available, a 415 to 240 VAC transformer is used to power the control card.

Ordering code for the 415 to 240 VAC transformer is **TT415-30**.
**FEATURES**

- Waterproof Keyring transmitters (IP67)
- Option of 1, 2, 4 or 5 channels
- Simultaneously transmits the encrypted code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Complies to AS/NZS 4268, CE and FCC
- Works with all PCR Penta series of receivers

**DESCRIPTION**

The Waterproof PentaFOB® works in conjunction with our standard PentaFOB® remotes and PCR series of receivers. It uses frequency hopping spread spectrum (FHSS). This means that when a button is pressed, it simultaneously transmits the encrypted code on five different frequencies. This makes it impossible for your remote control to be interfered with or jammed.

Available in 1, 2, 4 and 5 button configurations. The keyring retainer is moulded as part of the chassis making for a super sturdy keyring mount.

The PentaFOB® series is an extremely versatile remote control that can be customized through a range of configurations and colours to suit your needs.

**TECHNICAL DATA**

- Over 17 billion encrypted codes
- Operating range of up to 100 metres depending on building structure and receiver antenna
- 18mA (typical) at 3 Volts DC supply during transmission
- Battery life of 2 years with average use
- Frequency Band: 433.100 to 434.700 MHz
- Custom front design available

For detailed technical data visit [www.elsema.com/automatic-gates/waterproof-remote](http://www.elsema.com/automatic-gates/waterproof-remote)
PentaFOB® HANDHELD

433MHz PentaFOB® Transmitter with Raised Buttons

FEATURES

- PentaFOB® remote with 2 raised buttons
- Transmits on 5 different frequencies
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia, for Australia
- Competitive pricing
- Works with all PCR Penta series of receivers

DESCRIPTION

The FOB43302H is a Hand-held remote control in an industrial case. It has large raised buttons which can easily be pressed even while wearing industrial gloves.

The remote comes with a robust rubber boot which protects it in an event of being dropped or accidently knocked against hard surfaces.

FOB43302H is powered by 2 x AA batteries for longer life cycle.

For detailed technical data visit: www.elsema.com/fob43302h

TECHNICAL DATA

- Powered by 2 x AA batteries (included)
- Over 17 billion encrypted codes
- Operating range of up to 100 metres depending on building structure and receiver antenna
- 18mA (typical) at 3 Volts DC supply during transmission
- Dimensions: 125 x 75 x 35 mm
- Operating frequency: 433.100 to 434.700 MHz
- Works with all PCR Penta series of receivers
**PentaFOB® SERIES**

433MHz Keyring Remotes
The next generation of remote controls, superior to normal garage door rolling code remotes

**FEATURES**

- Keyring transmitter with 1, 2, 4 or 5 channels
- Simultaneously transmits the encrypted code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Competitive pricing
- Complies to AS/NZS 4268, CE and FCC
- Works with all PCR Penta series of receivers

**DESCRIPTION**

The PentaFOB® uses frequency hopping spread spectrum (FHSS). This means that when a button is pressed, it simultaneously transmits the encrypted code on five different frequencies. This makes it impossible for your remote control to be interfered with or jammed.

Available in 1, 2, 4 and 5 button configurations. The keyring retainer is moulded as part of the chassis using reinforced nylon making for a super sturdy keyring mount.

The PentaFOB® series is an extremely versatile remote control that can be customized through a range of configurations and colours to suit your needs.

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 17 billion encrypted codes</td>
<td></td>
</tr>
<tr>
<td>Operating range of up to 100 metres depending on building structure and receiver antenna</td>
<td></td>
</tr>
<tr>
<td>18mA (typical) at 3 Volts DC supply during transmission</td>
<td></td>
</tr>
<tr>
<td>Battery life of 2 years with average use</td>
<td></td>
</tr>
<tr>
<td>Frequency Band: 433.100 to 434.700 MHz</td>
<td></td>
</tr>
<tr>
<td>Custom front colours available</td>
<td></td>
</tr>
<tr>
<td>For detailed technical data visit <a href="http://www.elsema.com/automatic-gates/fob">www.elsema.com/automatic-gates/fob</a></td>
<td></td>
</tr>
</tbody>
</table>

For detailed information visit [www.elsema.com/automatic-gates](http://www.elsema.com/automatic-gates)
The keyring retainer in the PentaFOB® is moulded as part of the chassis using reinforced nylon making for a super sturdy keyring mount.

The PentaFOB® is an extremely versatile remote control that can be customized through a range or configurations and colours to suit your needs.

Choose from a range of colour options. Mix and match! If you require a custom Pantone® colour please contact us for more information.
FOB WALL SWITCH
4-Button, Wireless Wall Remote with PentaFOB® Technology

DESCRIPTION

The wireless wall remote can be mounted on the standard single-gang electrical wall box or directly on to the wall. It can wirelessly control lights, automatic gates and garage doors. It transmits a wireless signal to the Penta receiver which switches relays to turn the device On and Off.

No need to run wires from the wall remote to the lights. Just mount the wall remote on the wall and connect Penta receiver to the light. Modern design and ultra-thin profile.

This wireless wall remote uses PentaFOB® technology

For detailed technical data visit: www.elsema.com/automatic-gates/wireless-wall-switch

FEATURES

- Ultra slim and stylish design for wall mount
- Compatible with standard single-gang wall box or just screw directly on to the wall
- Easily replace battery without removing from the wall
- Uses frequency hopping spread spectrum (FHSS)
- Designed in Australia, for Australia
- Competitive pricing
- Works with all PCR Penta series of receivers

TECHNICAL DATA

- Operating range of up to 100 metres depending on building structure and receiver antenna
- Over 17 billion encrypted codes
- 18mA (typical) at 3 Volts DC supply during transmission
- Battery life of 2 years with average use
- Operating frequency: 433.100 to 434.700 MHz
- Works with all PCR Penta series of receivers

For detailed information visit www.elsema.com/automatic-gates
The PentaFOB® programmer can add, edit and delete individual PentaFOB® transmitters from the receiver’s memory. Simply plug-in the USB cable on the back of the programmer and the other end of the cable to the receiver. The programmer will automatically detect the receiver model number and then display the corresponding information. With the easy-to-read 4-line large LCD the setup can be done quickly with clear instructions displayed on the screen.

The programmer has a password feature which allows you to lock the receivers to prevent any unauthorised access to the receiver’s memory.

There is a backup or restore memory chip (FOBchip) included with each programmer. This chip is used to backup or restore the contents of a receiver. When there are 100’s of transmitters programmed to a receiver the installer normally backs up the receiver memory in case the receiver is damaged or lost.

Additional backup chips are sold separately.
PentaCODE® SERIES

PentaCODE® Series 433MHz Keyring Remotes
The next generation of remote controls, superior to normal garage door rolling code remotes

FEATURES

- Keyring transmitter with 1, 2 or 4 channels
- Dual Coding System simultaneously transmits the code on 5 different frequencies, making it impossible for the remote to be interfered with or jammed
- Uses frequency hopping spread spectrum (FHSS)
- One of the most secure remote controls on the market
- Designed in Australia
- Complies to AS/NZS 4268, CE and FCC
- Competitive pricing
- Works with all PCR Penta series of receivers

DESCRIPTION

The PentaCODE® dual coding system gives the installer the option to use the classic 12-way dip switch coding or one of over 17 billion encrypted codes.

With the 12-way dip switch, just match the keyring remotes and the receiver’s dip switch and it’s coded.

With the encrypted code you switch all the 12-way dip switches OFF and the remote and receiver automatically goes into the encrypted coding.

The PentaCODE® remotes, when used in encrypted mode, can be programmed from another working remote.

TECHNICAL DATA

- 12-way dip switch coding or one of over 17 billion encrypted codes
- Option of 1, 2 or 4 buttons
- Operating range of up to 200 metres depending on building structure and receiver antenna
- 18mA (typical) at 12 Volts DC supply during transmission
- Battery life of 1.5 years with average use
- Frequency Band: 433.100 to 434.700 MHz
- Custom print available for front labels

For detailed technical data visit www.elsema.com/automatic-gates/keyfob

For detailed information visit www.elsema.com/automatic-gates
FEATURES

- 4 External inputs
- 12 to 24 Volts AC/DC supply
- 12-way dipswitch or encrypted coding
- Frequency hopping between 433.100 to 434.700 MHz
- Designed in Australia, for Australia
- Competitive pricing
- Works with all PCR Penta series of receivers

DESCRIPTION

The PCK43304W is a 4-channel PentaCODE® transmitter with terminals to connect external normally open contact closures. You can wire in push buttons or easily integrate it into your existing equipment. Inputs can be from any device which has dry contact (voltage free) output. The transmitter can transmit a distance of up to 500m (line of sight). Transmission modes can be easily changed by setting the mode selection dip-switch.

TECHNICAL DATA

Supply: 12.0 - 24 VAC/DC
Current Consumption: 6 uA standby
Inputs: 4 dry contacts, optically isolated (normally open type “NO”)
12-way dip switch coding or one of over 17 billion encrypted codes
Antenna: SMA connection for external antenna
Operating range of up to 500 metres depending on building structure and receiver antenna
Operating frequency: 433.100 to 434.700 MHz

For detailed technical data visit www.elsema.com/pck43304w
PCR SERIES

Penta Series Receivers 433MHz
Receivers to match PentaFOB® and PentaCODE® Series Keyring Remotes

DESCRIPTION

The PentaCODE® dual coding system gives the installer the option to use the classic 12-way dip switch coding or one of over 17 billion encrypted codes.

With the 12-way dip switch, just match the keyring remotes and the receiver’s dip switch and it’s coded. With the encrypted code you switch all the 12-way dip switches OFF and the remote and receiver automatically goes into the encrypted coding.

The receiver is available as a standalone card with relay outputs or as a plug in type with the standard 6-pin connector.

FEATURES

1, 2, 4 or 5 channel versions available
Plug-in type or with relay outputs
Uses frequency hopping spread spectrum (FHSS)
Antenna Diversity for extended range
High sensitivity at 0.316uV (-117dBm)
Relay outputs rated at 10 Amps / 240 Volts AC
One of the most secure remote control systems on the market
Competitive pricing
Designed and tested in Australia
Wiegand Output, PCR433WG

TECHNICAL DATA

Supply PCR43302P: 7 to 36 Volts DC
Supply PCR43302R: 11 to 28 Volts AC or DC (No Case, PCB Only)
Supply PCR43302RE: 11 to 28 Volts AC or DC (With a Weatherproof Case)
12-way dip switch coding or one of over 17 billion encrypted codes.
Option of 1, 2, 4 or 5 Relay Outputs or Wiegand Output
Operating range: Refer to the remote control or transmitter datasheet
Operating frequency: 433.100 to 434.700 MHz

For detailed technical data visit www.elsema.com/prod-pcr
PCR43302R

- **Relay Channel 1**: Relay 1 NO, Relay 1 NC, Relay 1 C
- **Relay Channel 2**: Relay 2 NO, Relay 2 NC, Relay 2 C
- **Antenna Shield**: Ch-1 +ve, Ch-1 NC, Ch-2 -ve
- **Programming button**: Prog 1, Prog 2
- **Programming button**: Code Change
- **Relay**: 12-way dip switch
- **Antenna**: Ch1 / Open, Ch2 / Close
- **12-24 Volts AC/DC Supply**
- **Maximum Switching**: 10 Amps at 240 Volts AC each.

PCR43302P

- **Relay Channel 1**: Relay 1 NO, Relay 1 NC, Relay 1 C
- **Relay Channel 2**: Relay 2 NO, Relay 2 NC, Relay 2 C
- **Antenna Shield**: Ch-1 +ve, Ch-1 NC, Ch-2 -ve
- **Programming button**: Prog 1, Prog 2
- **Programming button**: Code Change
- **Relay**: 12-way dip switch
- **Antenna**: Ch1 / Open, Ch2 / Close
- **12-24 Volts AC/DC Supply**
- **Maximum Switching**: 10 Amps at 240 Volts AC each.
REPEATER / BOOSTER

Repeater for PentaFOB® & PentaCODE® Remotes

FEATURES

- Compatible with “PentaFOB®” and “PentaCODE®” remotes
- Micro USB or external supply
- Unlimited remotes can be programmed
- Highly sensitive receiver input stage
- Crystal controlled for high reliability
- Easy mounting to walls

DESCRIPTION

The Penta Repeater, intelligently repeats the transmission from the PentaFOB® and PentaCODE® remote’s. The repeated signal is with high RF power which can increase the operating range of the remote to 500 metres. The repeater can be powered either by the micro USB connection or 12-24 Volts AC/DC supply.

If multiple repeaters are used for the same application, each repeater can be given different addresses with the digital display.

The repeaters memory can be backed up using the PentaFOB programmer.

TECHNICAL DATA

Supply: 12 to 24 Volts AC or DC or Micro USB
Current Consumption: 25 mA standby
Operating frequency: 433.100 to 434.700 MHz
Useable Transmitters: All Elsema type PCK433 & FOB433 series
Useable Receivers: All Elsema type Penta Receivers
Operating range of up to 500 metres depending on building structure and antenna

For detailed technical data visit www.elsema.com/pctr433

For detailed information visit www.elsema.com/automatic-gates
FEATURES

- Easy to add remote controls to any Wiegand input access control panel
- Remotes are added like cards or RFID tags with no software changes
- Wireless keyless entry offers convenience, security and safety for accessing gates, doors and boom gates
- Wide operating supply voltage and low current consumption
- Easy way to facilitate for handicapped access
- Compatible with PentaCODE® remotes
- Easy to use dipswitch coding

DESCRIPTION

This receiver allows you to add wireless remote controls to your existing access control systems by connecting the PCR433WG receiver to the access system. The remote controls have a range of up to 200 metres (640 feet) and are available with 2 or 4 buttons. The extra buttons can be used as a panic button allowing a single remote to allow access control and panic alarm system.

Remote controls are added as easily as Wiegand cards or RFID tags without any software changes. The ID and facility codes can be matched to the system requirements.

The receiver has a bi-colour LED to act as a status display. Red LED indicates that AC or DC power is "On" and Green LED indicates remote control signal has been received.

TECHNICAL DATA

Supply: 11 to 28 Volts AC or DC

Wiegand Format: 26 bits, other formats available upon request.

Standby: 31mA

Connections: Flying leads 50mm

Operating range of up to 200 metres depending on building structure and receiver antenna

Operating frequency: 433.100 to 434.700 MHz

For detailed technical data visit www.elsema.com/prod-pcr
WIRELESS KEYPAD

Wireless Keypad works with Elsema’s Penta series receivers

FEATUES

- Built-in PentaCODE® transmitter
- Adjustable transmission time
- 2,000 users, PIN length 4 to 8 digits
- Easy programming
- Long operating range
- Supply can be AC or DC
- Keypad has a backlight
- All programming is done from the keypad
- Built in light dependent resistor (LDR) for anti tamper

DESCRIPTION

The PCKeypad is a wireless keypad with a PentaCODE® transmitter built-in. It works with all of Elsema’s PCR series receivers. The installer has the option to use the classic 12-way dip switch coding or one of over 17 billion encrypted codes. (Please refer to the user manual)

The PCKeypad is suitable for mounting either indoor or outdoor under cover. It is housed in a strong vandal proof zinc alloy electroplated case.

The PCKeypad supports up to 2000 users with 4 to 8 digit PIN.

These features make PCKeypad an ideal choice for gate and door access for homes, shops, factories, warehouses, laboratories, banks and prisons.

TECHNICAL DATA

Supply: 12 - 24 Volts DC or 12 - 18 Volts AC
Dimensions: 128 x 82 x 28 mm
Operating Range of up to 50 metres with line of sight
Adjustable Transmission Time : 1-90 seconds

For detailed technical data visit www.elsema.com/automatic-gates/keypad
PHOTOELECTRIC BEAMS

Photoelectric beam for automatic gates and doors

DESCRIPTION

The photoelectric beam works with any Elsema type automatic gate or door controller cards used on sliding, swing or roller doors. It is usually used as a safety device to control automatic gates and doors.

For detailed technical data visit www.elsema.com/automatic-gates/photocell

PE1500

Long Range Retro reflective type photoelectric beam with Polarised Polycarbonate case

<table>
<thead>
<tr>
<th>Type</th>
<th>Polarised retro reflective type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>12-250 Volts AC/DC</td>
</tr>
<tr>
<td>Sensing Range</td>
<td>10 metres</td>
</tr>
</tbody>
</table>

PE24

12-24 Volts AC/DC Through beam type

<table>
<thead>
<tr>
<th>Type</th>
<th>Through beam type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>12-24 Volts AC/DC</td>
</tr>
<tr>
<td>Range</td>
<td>10 metres (Outdoor)</td>
</tr>
<tr>
<td></td>
<td>30 metres (Indoor)</td>
</tr>
</tbody>
</table>
GSM GATE OPENER (4G COMPATIBLE)

Opens automatic gates and doors with a free phone call. Unlimited range

FEATURES

- Up to 999 users
- 4G network compatible
- Built-in battery back-up
- Switches relay with free call from mobile phone
- Digital inputs for sensors or switching
- SMS confirmation of relay switching
- Secure password protected
- Only authorised numbers can operate the G-2025

DESCRIPTION

The G-2025 can have up to 999 authorised numbers and uses the 4G Telstra and Vodafone network for communication (Not compatible with Optus). All you need is to insert a valid SIM card and program phone numbers of all users, using the PC software or through simple SMS text commands. When an authorised user makes a call to the receiver, it rejects the call and activates a relay. Since the call is rejected the user is not charged for the call.

The G-2025 works on 4G network therefore the receiver can be activated from anywhere in the country where 4G mobile network is available. For example you can open your gate or switch on your kitchen lights in Sydney from Melbourne by making a call from your mobile phone and without getting charged.

TECHNICAL DATA

Supply: 12 Volts DC (12 Volts DC power pack included)
Dimensions: 95 x 95 x 35 mm
Authorised numbers easily entered by PC Software
Output relays can switch 3A, 240VAC
For detailed technical data visit www.elsema.com/automatic-gates/g-2025

For detailed information visit www.elsema.com/automatic-gates
LOCKS

Locks for automatic sliding & swinging gates

LOCKING ACTUATOR

DESCRIPTION

Locking actuators should be installed when using hydraulic swing gate operators or any other type of swing gate operators. Elsema’s LA24 Locking actuator has a 50mm stroke and a 20mm stainless steel shaft.

<table>
<thead>
<tr>
<th>Supply</th>
<th>24 Volts DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>50mm</td>
</tr>
<tr>
<td>Dimensions</td>
<td>551 x 112 x 74mm</td>
</tr>
</tbody>
</table>

MAGNETIC LOCKS

DESCRIPTION

Elsema stocks electromagnetic locks for all types of doors and gates. Our models are designed to secure any type of door or gate that closes against a fixed stop. All of our lock components are carefully designed, manufactured and tested to ensure superior quality.

Waterproof Magnetic lock with 270kg holding force

<table>
<thead>
<tr>
<th>Holding force</th>
<th>270kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>Can be 12 or 24 Volts DC</td>
</tr>
<tr>
<td>Dimensions</td>
<td>200 x 44 x 40mm</td>
</tr>
</tbody>
</table>

Waterproof Magnetic lock with 560kg holding force

<table>
<thead>
<tr>
<th>Holding force</th>
<th>560kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>Can be 12 or 24 Volts DC</td>
</tr>
<tr>
<td>Dimensions</td>
<td>220 x 64 x 41mm</td>
</tr>
</tbody>
</table>

For detailed technical data visit www.elsema.com/automatic-gates/magneticlock
VEHICLE LOOP DETECTORS

DESCRIPTION

An inductive loop detector is used to detect motor vehicles. When the motor vehicle drives over the in-ground loop, the detector senses the metal and activates a relay. This relay is connected to the motor controller card to automatically open the gate or door. Elsema sells high and medium sensitivity detectors with 1 or 2 channel relay outputs.

LD40
Sensitivity  High
Supply  12-24 Volts AC/DC
Output  Single relay output

MD2010
Sensitivity  Medium
Supply  12-24 Volts AC/DC
Output  Single relay output

MD12-1
Sensitivity  Medium
Supply  12 Volts DC
Range  Single relay output

MD12-2
Sensitivity  Medium
Supply  12 Volts DC
Output  Double relay output

MD240-1
Sensitivity  Medium
Supply  240 Volts AC
Output  Single relay output

MD240-2
Sensitivity  Medium
Supply  240 Volts AC
Output  Double relay output

For detailed technical data visit www.elsema.com/automatic-gates/loopdetector
DIRECT BURIAL LOOPS

Inductive loops tune to Elsema’s Loop Detectors

DESCRIPTION

Used for installations under concrete, asphalt, pavers, or in gravel roads. The most common installation is the loop tied directly to the rebar before concrete is poured. Wire is designed for a direct burial application.

Unlike loops wrapped through PVC, The Direct Burial Loop does not have an air pocket resulting in fewer repeat service calls due to phantom detections caused by ground vibration.

Our Direct Burial loops are build with Solid 16AWG to create a tough rigid product that won’t fall below the rebar pattern. Installing a Direct Burial loop over rebar is a snap! Simply offset the loop from the rebar pattern and tie it down with the supplied cable ties.

DBL7

<table>
<thead>
<tr>
<th>Application</th>
<th>Domestic</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway width</td>
<td>Up to 3.6m</td>
<td>Up to 3.3m</td>
</tr>
<tr>
<td>Loop Size</td>
<td>1.2 x 2.4m</td>
<td>1.8 x 1.8m</td>
</tr>
</tbody>
</table>

DBL9

<table>
<thead>
<tr>
<th>Application</th>
<th>Domestic</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway width</td>
<td>Up to 4.2m</td>
<td>Up to 3.6m</td>
</tr>
<tr>
<td>Loop Size</td>
<td>1.2 x 3.3m</td>
<td>1.8 x 2.4m</td>
</tr>
</tbody>
</table>

DBL10

<table>
<thead>
<tr>
<th>Application</th>
<th>Domestic</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway width</td>
<td>Up to 4.8m</td>
<td>Up to 4.2m</td>
</tr>
<tr>
<td>Loop Size</td>
<td>1.2 x 3.6m</td>
<td>1.8 x 3.0m</td>
</tr>
</tbody>
</table>

DBL12

<table>
<thead>
<tr>
<th>Application</th>
<th>Domestic</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway width</td>
<td>Up to 6m</td>
<td>Up to 5.4m</td>
</tr>
<tr>
<td>Loop Size</td>
<td>1.2 x 4.8m</td>
<td>1.8 x 4.2m</td>
</tr>
</tbody>
</table>

Install the highest quality loop, save time, and reduce service calls by using a Elsema’s preformed loop.

For detailed technical data visit www.elsema.com/automatic-gates/inductive-loop
SAW-CUT LOOPS
Inductive loops tune to Elsema’s Loop Detectors

DESCRIPTION
Saw-cut loops make installations easy, hassle-free and prevents false detections and detector lock-ups as they are one of the leading reasons why installers must do a repeat service call on brand new gate systems with loops installed. Which is unfortunate because it is a very difficult issue to diagnose, especially if you aren’t considering air pockets as the cause of the problem.

Our saw-cut loops have a custom durable polyethylene outer jacket that protects nylon coated polyethylene insulated 16AWG stranded wire. These Loops have a built-in wing shaped backer-rod that causes the loop to fit snugly in a 3/16” saw-cut groove.

Our unique wire design prevents the installer from having to install backer-rod and creates a seal at the bottom of the groove, allowing the installer to apply sealant to a flat surface and resulting in at least a 30% savings in loop sealant to seal the groove when compared with hand wrapped wires in a ¼” wide groove.

### SCL7

<table>
<thead>
<tr>
<th>Application</th>
<th>Domestic</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway width</td>
<td>Up to 3.6m</td>
<td>Up to 3.3m</td>
</tr>
<tr>
<td>Loop Size</td>
<td>1.2 x 2.4m</td>
<td>1.8 x 1.8m</td>
</tr>
</tbody>
</table>

### SCL9

<table>
<thead>
<tr>
<th>Application</th>
<th>Domestic</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway width</td>
<td>Up to 4.2m</td>
<td>Up to 3.6m</td>
</tr>
<tr>
<td>Loop Size</td>
<td>1.2 x 3.3m</td>
<td>1.8 x 2.4m</td>
</tr>
</tbody>
</table>

### SCL10

<table>
<thead>
<tr>
<th>Application</th>
<th>Domestic</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway width</td>
<td>Up to 4.8m</td>
<td>Up to 4.2m</td>
</tr>
<tr>
<td>Loop Size</td>
<td>1.2 x 3.6m</td>
<td>1.8 x 3.0m</td>
</tr>
</tbody>
</table>

### SCL12

<table>
<thead>
<tr>
<th>Application</th>
<th>Domestic</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driveway width</td>
<td>Up to 6m</td>
<td>Up to 5.4m</td>
</tr>
<tr>
<td>Loop Size</td>
<td>1.2 x 4.8m</td>
<td>1.8 x 4.2m</td>
</tr>
</tbody>
</table>
**DESCRIPTION**

**Loop Goop** (Sealant) is a tough and durable polyurethane resin designed to encapsulate, protect and insulate inductive loops for garage doors, gates, and parking applications. Effectively seals out moisture and provides exceptional chemical resistance to gasoline, motor oil, hydraulic brake fluid and other hydrocarbons. Loop Goop remains strong, flexible and resilient in cold & hot weather. It provides superior adhesion to wires and saw cuts in concrete and asphalt.

**Wedge Tool** allows installers to quickly and easily roll loop wire into the bottom of the saw-cut groove while standing. It is made of smooth and durable PVC that will not nick the loop wire.

The flat and angled wedge tools allow installers to easily push wire down into 135° dog eared corner cuts.

Cutting at the proper depth and width can yield significant savings in loop sealant.

<table>
<thead>
<tr>
<th>Saw cut loop &amp; Loop size</th>
<th>3/16” Groove</th>
<th>1/4” Groove</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 1/4” Depth</td>
<td>1 1/2” Depth</td>
</tr>
<tr>
<td>SCL7 1.2x2.4m or 1.8x1.8m</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>SCL9 1.2x3.3m or 1.8x2.4m</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>SCL10 1.2x3.6m or 1.8x3.0m</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>SCL12 1.2x4.8m or 1.8x4.2m</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>

Recommended

**Caulking Gun**

Part Number: LG-Gun

Saw-Cut Loop Sealant with Flat 3/16” Sealant Tip

Part Number: LG

Wedge Tools

Wedge Tool allows installers to quickly and easily roll loop wire into the bottom of the saw-cut groove.
GEAR RACKS & SAFETY BUMP STRIP

Gear rack for automatic sliding gates

DESCRIPTION
Elsema stocks steel re-enforced, nylon gear racks for automatic sliding gates. These racks are 1 metre long and comes in packs of 4 with mounting screws and brackets. Competitively priced and quality you can trust, they are the best value for money.

SAFETY BUMP STRIP

DESCRIPTION
The Safety bump strip is a safety device and is recommended to be installed on high speed gates. When the bump strip hits a person or an object, it will stop the gate instantly. It will also cushion the impact. Safety bump strip is carefully designed, manufactured and tested to ensure superior quality.

Compatible with Penta series of receivers
Battery operated transmitter included
Stops the gate when compressed

For detailed information visit www.elsema.com/automatic-gates
DESCRIPTION

Flashings lights (also known as warning lights or strobe lights) are used as an indicator for automatic operation of gates and doors. They are ideal for high traffic areas or on commercial gates for added safety. Elsema has different colour lights to suite your application.

### PART NUMBERS

- E80-A
- E80-B
- E80-R
- E80-G

### SERIES E80

<table>
<thead>
<tr>
<th>Supply</th>
<th>12-24 Volts DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashing rate</td>
<td>60-80 flashes per minute</td>
</tr>
</tbody>
</table>

### SERIES E80L

<table>
<thead>
<tr>
<th>Supply</th>
<th>12-24 Volts DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashing rate</td>
<td>60-80 flashes per minute</td>
</tr>
</tbody>
</table>

For detailed technical data visit www.elsema.com/automatic-gates/strobelight
REMOTE CONTROL BATTERIES
Batteries for handheld remotes and backup for automatic gates

DESCRIPTION
Elsema has a range of batteries for all its products. Our range includes batteries for keyring remotes to backup of 24 or 12 volts automatic gates and doors. Backup batteries combined with smart solar chargers and solar panels, provides you with a hassle-free operation 24 hours a day - even during power blackouts.

<table>
<thead>
<tr>
<th>Battery Type</th>
<th>Part Number</th>
<th>Supply</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Volt lithium battery</td>
<td>CR2032</td>
<td>3 Volts</td>
<td>Lithium</td>
</tr>
<tr>
<td>Energizer 12 Volt alkaline battery</td>
<td>A23</td>
<td>12 Volts</td>
<td>Alkaline</td>
</tr>
<tr>
<td>9 Volt carbon battery</td>
<td>6F22</td>
<td>9 Volts</td>
<td>Carbon</td>
</tr>
<tr>
<td>Energizer 9 Volt alkaline battery</td>
<td>6LR61</td>
<td>9 Volts</td>
<td>Alkaline</td>
</tr>
</tbody>
</table>

For detailed technical data visit www.elsema.com/automatic-gates/battery
Deep cycle backup batteries for automatic solar gates

**12 Volt, 2.6Ah rechargeable lead acid battery**

- Part Number: Lab12-2.6
- Supply: 12 Volts, 2.6Ah
- Type: Sealed Lead Acid
- Dimensions: 178 x 35 x 67mm

**12 Volt, 1.2Ah rechargeable lead acid battery**

- Part Number: Lab12-1.2
- Supply: 12 Volts, 1.2Ah
- Type: Sealed Lead Acid
- Dimensions: 97 x 45 x 59mm

**12 Volt, 7.0Ah rechargeable lead acid battery**

- Part Number: Lab12-7.0
- Supply: 12 Volts, 7.0Ah
- Type: Sealed Lead Acid
- Dimensions: 151 x 65 x 98mm

**12 Volt, 15Ah deep cycle battery**

- Part Number: Lab12-15D
- Supply: 12 Volts, 15Ah
- Type: Deep Cycle Battery
- Dimensions: 151 x 101 x 98mm
BATTERY CHARGERS

Battery chargers for solar applications or for AC backup systems

DESCRIPTION

Elsema battery chargers are designed to quickly and effectively charge batteries to its full capacity. They can be used for standalone solar applications or for backup systems with AC supply. The BACH12-1200 and the BACH24-1200 chargers batteries with 1.2 Amps max current while the CMP12 is designed for solar application. The CMP12 automatically detects the system voltage of either 12 or 24 Volts and adjusts its charging voltage accordingly.

1.2 Amps charger with LED indication

<table>
<thead>
<tr>
<th>Part Number</th>
<th>BARCH12-1200 : 12 Volts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charging Current</td>
<td>1.2 Amps</td>
</tr>
<tr>
<td>Part Number</td>
<td>BARCH24-1200 : 24 Volts</td>
</tr>
<tr>
<td>Charging Current</td>
<td></td>
</tr>
</tbody>
</table>

10 Amps solar charger with LED indication

<table>
<thead>
<tr>
<th>Part Number</th>
<th>CMP12 : 12 Volt DC Solar Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charging Current</td>
<td>10 Amps</td>
</tr>
</tbody>
</table>

FEATURES

- Over-load protection
- Short circuit protection
- Reverse polarity protection
- Over charging protection
- Under voltage protection

Should only be used for Solar Application and with Lead Acid Batteries

LED indication

<table>
<thead>
<tr>
<th>LED</th>
<th>Continuous &quot;On&quot;</th>
<th>Blinking</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charge (Green)</td>
<td>Charging</td>
<td>Float mode</td>
<td>Charging has stopped</td>
</tr>
<tr>
<td>Load (Green)</td>
<td>Load is powered</td>
<td>X</td>
<td>Load is not powered</td>
</tr>
<tr>
<td>Battery (3 Red)</td>
<td>Battery level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For detailed technical data visit www.elsema.com/automatic-gates/charger
FEAT URES

- 20 years 80% power guarantee,
  10 years 90% power guarantee
- High efficiency, monocrystalline silicon solar cells
- Uses high transparency 3.2mm tempered low iron glass
- Improved low-light performance
- Anodized aluminum alloy frame

DESCRIPTION

The SP range of solar panels provides you with an eco-friendly power solution for your automatic gate or door applications. These solar panels are ideal for sites without power lines, saving the cost of running power lines to your gates.

Solar panels combined with our intelligent battery charger and suitable battery will supply your gates or doors with free solar energy.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Model</th>
<th>SP5</th>
<th>SP10</th>
<th>SP20</th>
<th>SP40</th>
<th>SP40-24</th>
<th>SP60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Power (Watts)</td>
<td>5 Watts</td>
<td>10 Watts</td>
<td>20 Watts</td>
<td>40 Watts</td>
<td>40 Watts</td>
<td>60 Watts</td>
</tr>
<tr>
<td>V_mp (Volts)</td>
<td>17.8V</td>
<td>17.8V</td>
<td>17.8V</td>
<td>17.8V</td>
<td>35.5V</td>
<td>17.8V</td>
</tr>
<tr>
<td>I_mp (Amps)</td>
<td>0.28 A</td>
<td>0.56 A</td>
<td>1.12 A</td>
<td>2.25 A</td>
<td>1.13 A</td>
<td>3.37 A</td>
</tr>
<tr>
<td>V_sc (Volts)</td>
<td>22.3 V</td>
<td>22.3 V</td>
<td>22.3 V</td>
<td>22.3 V</td>
<td>43.1 V</td>
<td>22.3 V</td>
</tr>
<tr>
<td>I_sc (Amps)</td>
<td>0.30 A</td>
<td>0.61 A</td>
<td>1.21 A</td>
<td>2.43 A</td>
<td>1.85 A</td>
<td>3.64 A</td>
</tr>
<tr>
<td>Dimension (mm)</td>
<td>250 x 185 x 15</td>
<td>415 x 185 x 18</td>
<td>470 x 345 x 25</td>
<td>550 x 505 x 25</td>
<td>670 x 570 x 35</td>
<td>770 x 505 x 30</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>0.5</td>
<td>1.0</td>
<td>2.0</td>
<td>3.5</td>
<td>4.6</td>
<td>5.0</td>
</tr>
</tbody>
</table>
CASES

Cases are all to EN60529 standard with Ingress Protection of IP66. Suitable for temperature range -40 to +80 degrees.

For detailed information visit www.elsema.com/automatic-gates
C1722
Size 170 x 220 x 110 mm

C1722T
Size 170 x 220 x 110 mm
Plastic Latch and Transparent Cover

C1725
Size 175 x 250 x 75 mm

C1725-1
Size 175 x 250 x 100 mm

C1929
Size 190 x 290 x 140 mm

C1929T
Size 190 x 290 x 140 mm
Plastic Latch and Transparent Cover

C2020-S
Size 200 x 200 x 75 mm

C2828
Size 280 x 280 x 130 mm

C3428
Size 340 x 280 x 130 mm

C3428T
Size 340 x 280 x 130 mm
Transparent Cover
**International Protection (IP) Ratings**

IP54 = IP Letter Code _____ IP

1st Digit ___________ 5
2nd Digit ___________ 4

<table>
<thead>
<tr>
<th><strong>1st Digit</strong></th>
<th><strong>Protection from solid objects</strong></th>
<th><strong>2nd Digit</strong></th>
<th><strong>Protection from moisture</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>NON-PROTECTED</td>
<td>0</td>
<td>NON-PROTECTED</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>1</td>
<td>Protected against dripping water</td>
</tr>
<tr>
<td></td>
<td>Protected against solid objects greater than 50mm</td>
<td>2</td>
<td>Protected against dripping water when tilted up to 15(^\circ)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>3</td>
<td>Protected against spraying water</td>
</tr>
<tr>
<td></td>
<td>Protected against solid objects greater than 12mm</td>
<td>4</td>
<td>Protected against splashing water</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>5</td>
<td>Protected against water jets</td>
</tr>
<tr>
<td></td>
<td>Protected against solid objects greater than 2.5mm (\phi)</td>
<td>6</td>
<td>Protected against heavy seas</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>7</td>
<td>Protected against the effects of immersion between 15cm and 1m</td>
</tr>
<tr>
<td></td>
<td>Protected against solid objects greater than 1.0mm (\phi)</td>
<td>8</td>
<td>Protected against long periods of immersion under pressure</td>
</tr>
<tr>
<td>5</td>
<td>Dust protected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Dust tight</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>