

# Electromagnetic Locking Solutions



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# Z4 and Z8 Single Series Non Monitored Electromagnetic Lock

## General Description

The Single Series Electromagnetic Locks operate with holding forces from 250kg up to 580kg. Covering a range of applications the Z4 and Z8 Electromagnets are ideal for applications from Standard doors through to high use commercial swing doors.

With fixing options including wood, aluminium and steel constructions, as well as glass door applications, the range caters to most electromagnetic needs.

## Key Features

- Fail-safe: unlocks when power is removed
- Easy installation: suitable for both new and retrofit usage
- High holding force: refer to the technical data overleaf
- Self-alignment: armature plate pivots to accommodate door drop
- Silent operation: no humming or buzzing
- Dual voltage: site selectable 12 or 24 Vdc
- Instantaneous Release: smart electronics on the Z Series Electromagnets eliminate residual magnetism

## Applications

- Aluminium doors
- Glass doors
- IT Storage rooms
- Access control
- Surface mount for inswing and outswing doors



Z4 Electromagnetic Lock - Non Monitored



Z8 Electromagnetic Lock - Non Monitored

## Standards and Compliance



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005 (Part 1: Fire resistant door sets)

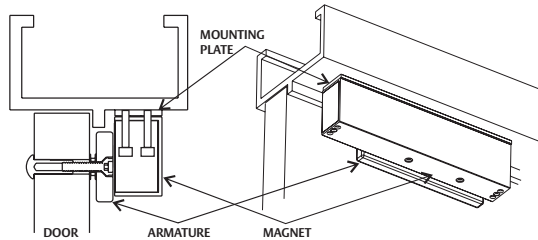


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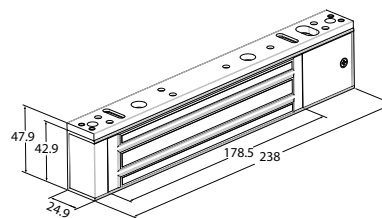


C-Tick Certified

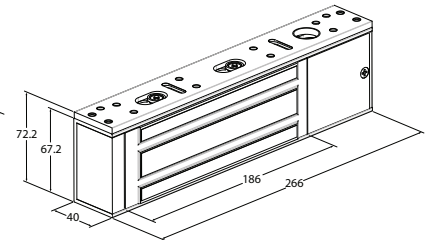
# Z4 and Z8 Single Series Non Monitored Electromagnetic Lock



Typical Install for Z4 & Z8 out swinging doors.



Z4 Electromagnetic Lock



Z8 Electromagnetic Lock

## Single Series Technical Information

	Z4 Magnet	Z8 Magnet
<b>Holding Force</b>	250kg – 280kg	550kg – 580kg
<b>Dimensions*</b>	(L)238 x (H)48 x (D)27 mm	(L)266 x (H)72 x (D)40 mm
<b>Voltage</b>	12Vdc/ 24Vdc ±10%	12Vdc/ 24Vdc ±10%
<b>Current</b>	450mA @ (12Vdc) 225mA @ (24Vdc)	512mA @ (12Vdc) 256mA @ (24Vdc)
<b>Monitoring</b>	None	None
<b>Operating Temperature</b>	-10 to 55 Degrees	-10 to 55 Degrees
<b>Operating Humidity</b>	0 - 95%	0 - 95%

## Specification Statement

Holding force is measured directly between armature and magnet, holding force on the door may vary depending on the leverage created. The Single Series Electromagnetic Lock should be constructed in an aluminium case with heavy duty electromagnet. The range only operates in fail safe mode and relies on a secondary lock or battery backup system. In some cases the magnet armature plate pivots to accommodate door drop. The lock needs to be equipped with “smart electronics” that have zero residual magnetism, (instantaneous release). This is crucial for correct operation.

## Ordering Information

Product Description	Part Number
Z4 Electromagnet - Non Monitored	770300-000T
Z8 Electromagnet - Non Monitored	770600-000T
<b>Accessories</b>	
Z2 L and Z Brackets	770150-901
Z4 L and Z Brackets	770300-901
Z 8 L and Z Brackets	770600-901
Z4 Glass Door Brackets	770300-905
Z8 Glass Door Brackets	770600-905
Z4 PC BOARD (NON-MONITORED)	770300-914

# Z4 and Z8 Single Series Monitored Electromagnetic Lock

## General Description

The Single Series Electromagnetic Locks operate with holding forces from 250kg up to 580kg. Covering a range of applications the Z4 and Z8 Electromagnets are ideal for applications from Standard doors through to high use commercial swing doors.

With fixing options including wood, aluminium and steel constructions, as well as glass door applications, the range caters to most electromagnetic needs.

## Key Features

- Fail-safe: unlocks when power is removed
- Easy installation: suitable for both new and retrofit usage
- High holding force: refer to the technical data overleaf
- Self-alignment: armature plate pivots to accommodate door drop
- Silent operation: no humming or buzzing
- Dual voltage: site selectable 12 or 24 Vdc
- Monitoring: Reed Switch monitoring on all models. Hall-Effect monitoring on Z4 and Z8 models.
- Instantaneous release: smart electronics on the Z Series Electromagnets eliminate residual magnetism

## Monitoring

### Hall / Bond Monitoring

This indicates that the lock is powered and that the armature plate is in position and magnetically bonded (it monitors if the magnet is locked)

### Reed switch monitoring

An integrated reed switch monitors the door position separately (it monitors the position of the door)

## Applications

- Aluminium doors
- Glass doors
- IT Storage rooms
- Access control
- Surface mount for inswing and outswing doors



## Standards and Compliance



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005 (Part 1: Fire resistant door sets)

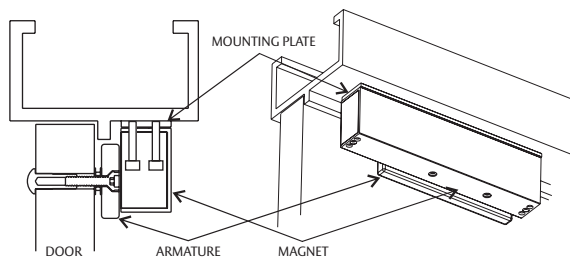


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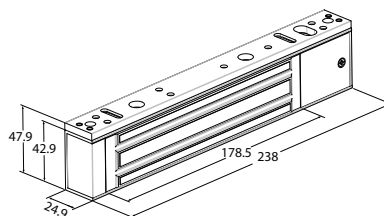


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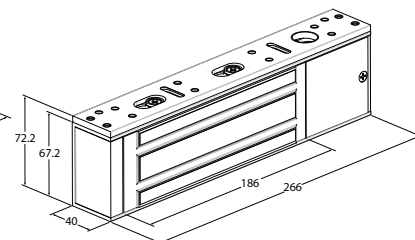
# Z4 and Z8 Single Series Monitored Electromagnetic Lock



Typical Install for Z4 & Z8 out swinging doors.



Z4 Electromagnetic Lock



Z8 Electromagnetic Lock

## Single Series Technical Information

	Z4 Magnet	Z8 Magnet
<b>Holding Force</b>	250kg – 280kg	550kg – 580kg
<b>Dimensions*</b>	(L)238 x (H)48 x (D)27 mm	(L)266 x (H)72 x (D)40 mm
<b>Voltage</b>	12Vdc/ 24Vdc ±10%	12Vdc/ 24Vdc ±10%
<b>Current</b>	450mA @ (12Vdc) 225mA @ (24Vdc)	512mA @ (12Vdc) 256mA @ (24Vdc)
<b>Monitoring</b>	Hall-Effect/Bond sensing & Reed Switch	Hall-Effect/Bond sensing & Reed Switch
<b>Operating Temperature</b>	-10 to 55 Degrees	-10 to 55 Degrees
<b>Operating Humidity</b>	0 - 95%	0 - 95%

## Specification Statement

Holding force is measured directly between armature and magnet, holding force on the door may vary depending on the leverage created. The Single Series Electromagnetic Lock should be constructed in an aluminium case with heavy duty electromagnet. The range only operates in fail safe mode and relies on a secondary lock or battery backup system. In some cases the magnet armature plate pivots to accommodate door drop. The lock needs to be equipped with “smart electronics” that have zero residual magnetism, (instantaneous release). This is crucial for correct operation.

## Ordering Information

Product Description	Part Number
Z4 Electromagnet - Monitored	770300-012T
Z8 Electromagnet - Monitored	770600-012T
<b>Accessories</b>	
Z2 L and Z Brackets	770150-901
Z4 L and Z Brackets	770300-901
Z 8 L and Z Brackets	770600-901
Z4 Glass Door Brackets	770300-905
Z8 Glass Door Brackets	770600-905
Z4 PC BOARD (MONITORED)	770300-915
Z8 PC BOARD (NON-MONITORED)	770600-013
Z4 Armature Bracket Monitored	770300-910
Z8 Armature Bracket Monitored	770300-911

# Z4 and Z8 Double Series Non Monitored Electromagnetic Lock



Z4 Double Electromagnetic Lock - Non Monitored



Z8 Double Electromagnetic Lock - Non Monitored

## General Description

The Double Series Electromagnetic Locks operate with holding forces from 500kg up to 1160kg. Covering a range of applications these magnets are ideal for applications from access ways through to high use commercial swing doors. With fixing options including wood, aluminium and steel constructions, as well as glass door applications, the range caters to most electromagnetic needs.

## Key Features

- Fail-safe: unlocks when power is removed
- Easy installation: suitable for both new and retrofit usage
- High holding force: refer to the technical data overleaf
- Self-alignment: armature plate pivots to accommodate door drop
- Silent operation: no humming or buzzing
- Dual voltage: site selectable 12 or 24 Vdc
- Instantaneous release: smart electronics on the electromagnets eliminate residual magnetism.

## Applications

- Aluminium doors
- Double swing doors
- Access control
- Surface mount for inswing and outswing doors

## Standards and Compliance



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005 (Part 1: Fire resistant door sets)

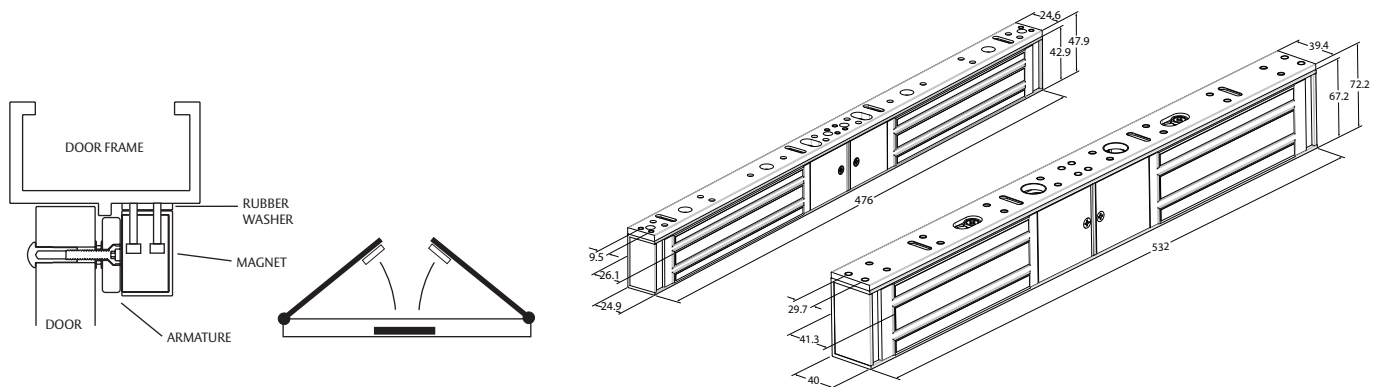


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# Z4 and Z8 Double Series Non Monitored Electromagnetic Lock



Typical Install for Z4 & Z8 out swinging doors.

Z4 Electromagnetic Lock

Z8 Electromagnetic Lock

Double Series Non Monitored		
	Z4 Magnet	Z8 Magnet
Holding Force	500kg – 560kg	1100kg – 1160kg
Dimensions*	(L)476 x (H)48 x (D)27 mm	(L)532 x (H)72 x (D)40 mm
Voltage	12Vdc/ 24Vdc ±10%	12Vdc/ 24Vdc ±10%
Current	900mA @ 12Vdc 450mA @ 24Vdc	1024mA @ 12Vdc 512mA @ (12Vdc)
Monitoring	None	None
Operating Temperature	-10 to 55 Degrees	-10 to 55 Degrees
Operating Humidity	0 - 95%	0 - 95%

## Specification Statement

Holding force is measured directly between armature and magnet, holding force on the door may vary depending on the leverage created. The Double Series Electromagnetic Lock should be constructed in an aluminium case with heavy duty electromagnet. The range only operates in fail safe mode and relies on a secondary lock or battery backup system. The lock needs to be equipped with “smart electronics” that have zero residual magnetism, (instantaneous release). This is crucial for correct operation.

## Ordering Information

Product Description	Part Number
Z4 Double Electromagnet – Non Monitored	770300-100T
Z8 Double Electromagnet – Non Monitored	770600-100T
<b>Accessories</b>	
Z4D L and Z Brackets	770300-902
Z8D L and Z Brackets	770600-902
Z4 Glass Door Brackets	770300-905
Z8 Glass Door Brackets	770600-905
Z4 Armature Bracket non Monitored	770300-909
Z8 Armature Bracket non Monitored	770600-956
Z4 Screw Kit	770300-913
Z8 Screw Kit	770600-950
Z4 PC BOARD (NON-MONITORED)	770300-914

# Z4 and Z8 Double Series Monitored Electromagnetic Lock



Z4 Double Electromagnetic Lock - Monitored



Z8 Double Electromagnetic Lock - Monitored

## General Description

The Double Series Electromagnetic Locks operate with holding forces from 500kg up to 1160kg. Covering a range of applications these magnets are ideal for applications from access ways through to high use commercial swing doors. With fixing options including wood, aluminium and steel constructions, as well as glass door applications, the range caters to most electromagnetic needs.

## Key Features

- Fail-safe: unlocks when power is removed
- Easy installation: suitable for both new and retrofit usage
- High holding force: refer to the technical data overleaf
- Self-alignment: armature plate pivots to accommodate door drop
- Silent operation: no humming or buzzing
- Dual voltage: site selectable 12 or 24 Vdc
- Monitoring: Hall-Effect and Reed Switch monitoring on all models
- Instantaneous release: Smart electronics on the Z Series electromagnets eliminate residual magnetism.

## Applications

- Aluminium doors
- Double swing doors
- Access control
- Surface mount for inswing and outswing doors

## Monitoring

### Hall / Bond Monitoring

This indicates that the lock is powered and that the armature plate is in position and magnetically bonded (it monitors if the magnet is locked)

### Reed Switch Monitoring

An integrated reed switch monitors the door position separately (it monitors the position of the door)

## Standards and Compliance



Successfully fire rated up to 4hrs on fire door assemblies in accordance with AS1905.1. 2005 (Part 1: Fire resistant door sets)



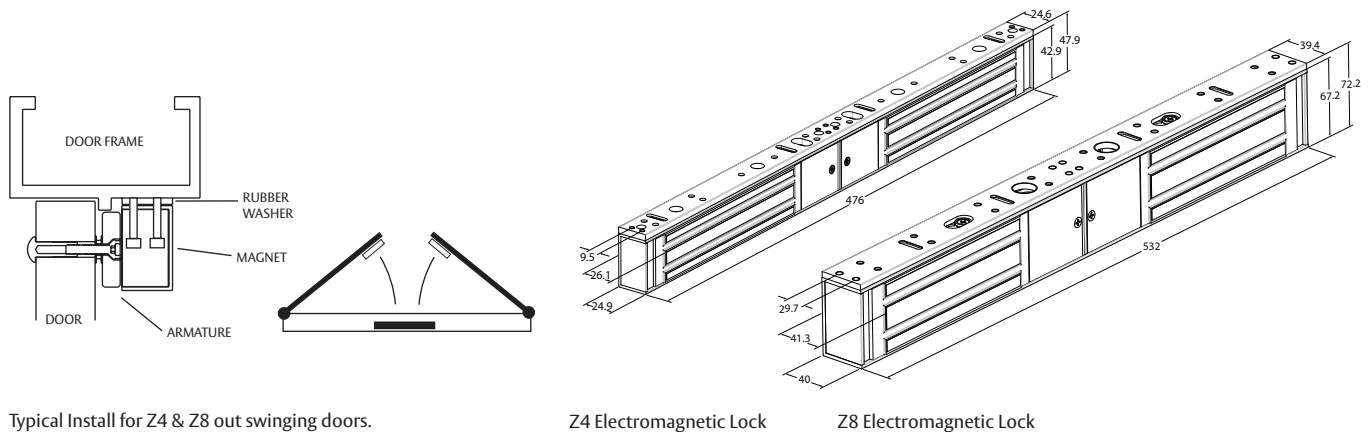
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# Z4 and Z8 Double Series Monitored Electromagnetic Lock



Typical Install for Z4 & Z8 out swinging doors.

Z4 Electromagnetic Lock

Z8 Electromagnetic Lock

## Double Series Monitored Technical Information

	Z4 Magnet	Z8 Magnet
Holding Force	500kg – 560kg	1100kg – 1160kg
Dimensions	(L)476 x (H)48 x (D)27 mm	(L)532 x (H)72 x (D)40 mm
Voltage	12Vdc/ 24Vdc ±10%	12Vdc/ 24Vdc ±10%
Current	900mA @ 12Vdc 450mA @ 24Vdc	1024mA @ 12Vdc 512mA @ (12Vdc)
Monitoring	Hall Effect / Bond sensing and Reed Switch	Hall Effect / Bond sensing and Reed Switch
Operating Temperature	-10 to 55 Degrees	-10 to 55 Degrees
Operating Humidity	0 - 95%	0 - 95%

## Specification Statement

The Double Series Electromagnetic Lock should be constructed in an aluminium base with heavy duty electromagnet. The range only operates in fail safe mode and relies on a secondary lock or battery backup system. The lock needs to be equipped with “smart electronics” that have zero residual magnetism, (instantaneous release). This is crucial for correct operation.

## Ordering Information

Product Description	Part Number
Z4 Double Electromagnet – Monitored	770300-112T
Z8 Double Electromagnet – Monitored	770600-112T
<b>Accessories</b>	
Z4D L and Z Brackets	770300-902
Z8D and Z Brackets	770600-902
Z4 Glass Door Brackets	770300-905
Z8 Glass Door Brackets	770600-905
Z4 Armature Bracket Monitored	770300-910
Z8 Armature Bracket Monitored	770600-955
Z4 Screw Kit	770300-913
Z8 Screw Kit	770600-950
Z4 PC BOARD (MONITORED)	770300-915
Z8 PC BOARD (MONITORED)	770600-013

# Z4 Recessed Electromagnetic Locks

## General Description

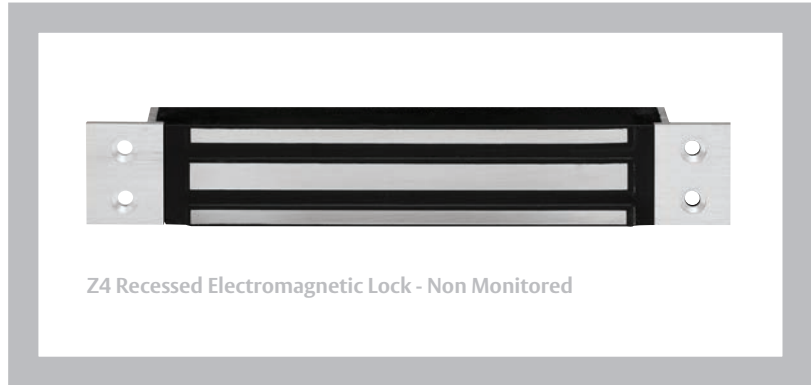
The Z4 Recessed Electromagnetic Locks operate with holding forces up to 280kg. Covering a range of applications these magnets are ideal for situations where the magnet needs to be recessed such as swing and sliding doors. With fixing options including wood, aluminium and steel constructions, the range caters to most needs. The Electromagnets are available in both Monitored and Non Monitored models, using Hall-Effect monitoring on some models. These electromagnetic locks are CSIRO approved for use on fire doors and are characterised by their high quality, and proven reliability in both fire and security applications.

## Key Features

- Fail-safe: unlocks when power is removed
- Easy installation: suitable for both new and retrofit usage
- High holding force: refer to the technical data overleaf
- Self-alignment: armature plate pivots to accommodate door drop
- Silent operation: no humming or buzzing
- Dual voltage: site selectable 12 or 24 Vdc
- Monitored versions: Hall-Effect status monitoring available on some models

## Applications

- Various sliding door applications

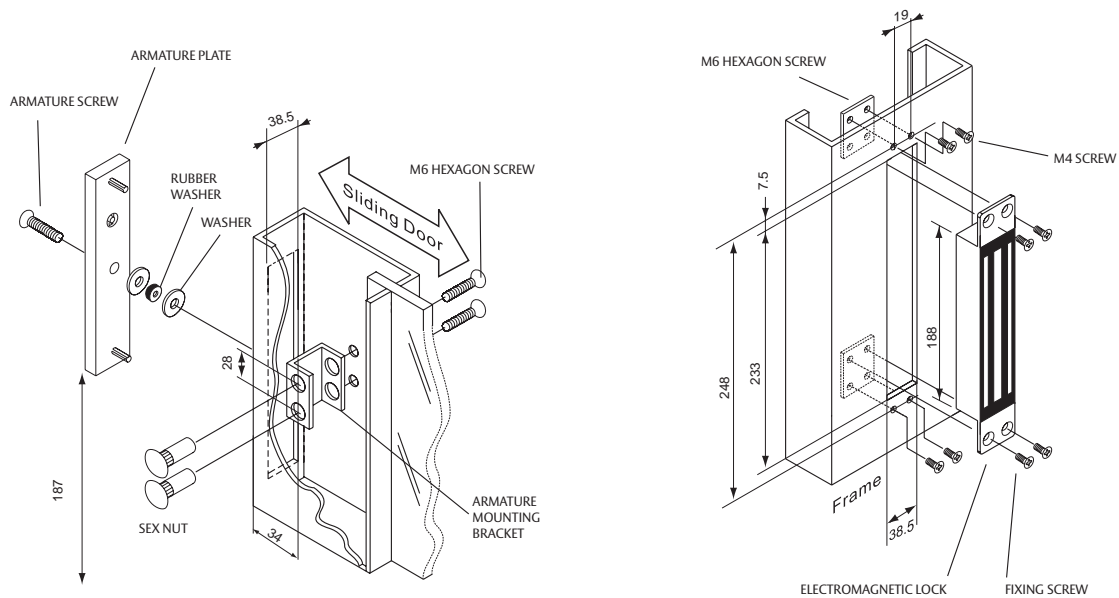


## Standards and Compliance

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# Z4 Recessed Electromagnetic Locks



## Z4 Recessed Series Technical Information

	Z4 Magnet Non Monitored	Z4 Magnet Monitored
<b>Holding Force</b>	250kg – 280kg	250kg – 280kg
<b>Dimensions</b>	(L)182 x (H)42 x (D)23 mm	(L)182 x (H)42 x (D)23 mm
<b>Voltage</b>	12Vdc/ 24Vdc ±10%	12Vdc/ 24Vdc ±10%
<b>Current</b>	450mA @ 12Vdc 225mA @ 24Vdc	450mA @ 12Vdc 225mA @ 24Vdc
<b>Monitoring</b>	None	Hall Effect / Bond sensing
<b>Operating Temperature</b>	-10 to 55 Degrees	-10 to 55 Degrees
<b>Operating Humidity</b>	0 - 95%	0 - 95%

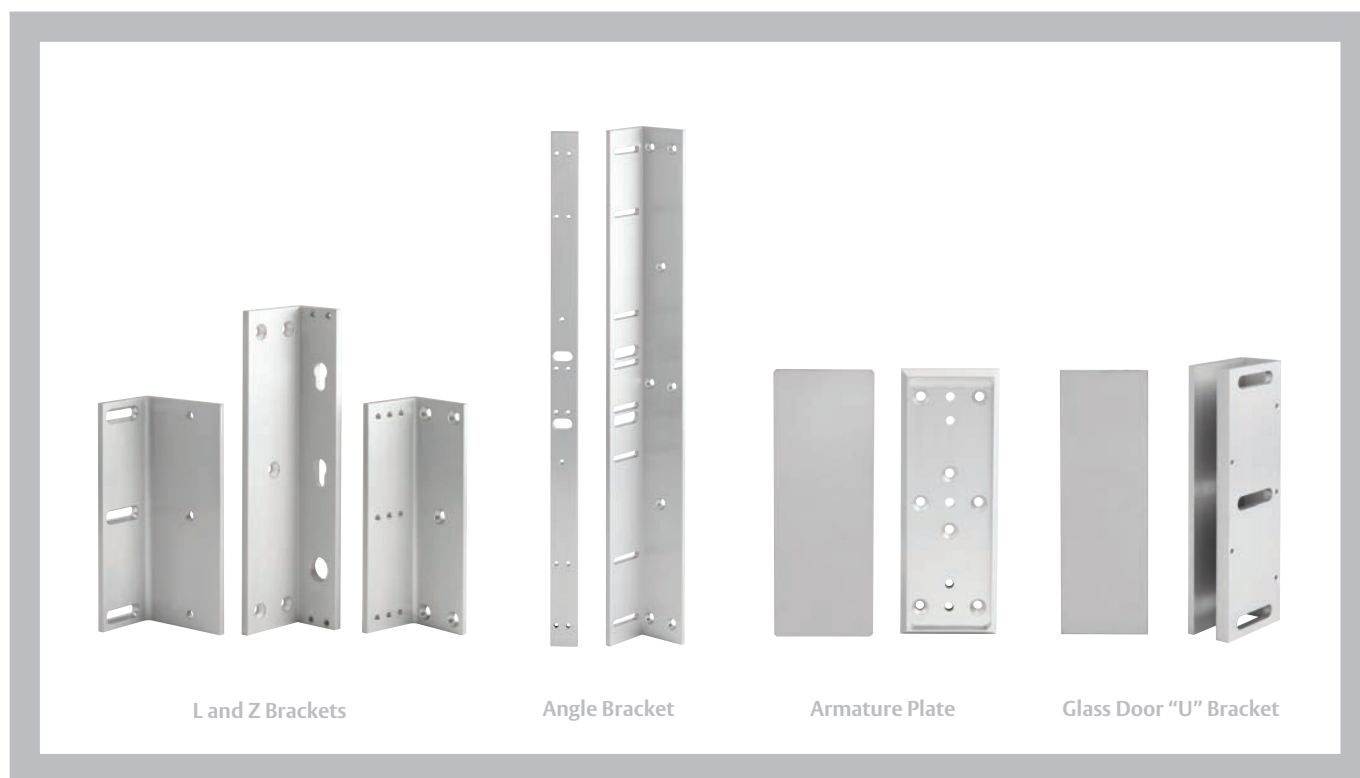
### Specification Statement

The Recessed Series Electromagnetic Lock should be constructed in an aluminium case with heavy duty electromagnet. The range only operates in fail safe mode and relies on a secondary lock or battery backup system.

### Ordering Information

Product Description	Part Number
Z4 Recessed Electromagnet – Non Monitored	770300-200
Z4 Recessed Electromagnet – Monitored	770300-210

# Electromagnetic Lock Accessories



L and Z Brackets

Angle Bracket

Armature Plate

Glass Door "U" Bracket

## General Description

The Trimec Electromagnetic lock range offers a number of accessory options. These accessories allow the electromagnetic locks to be used in a number of different applications and can be adjusted and suited to each situation. This allows the installer to configure the door as required allowing user specific features such as open in / open out selection or glass door applications. Trimec's Electromagnetic Lock accessories meet or exceed local and international standards, providing safe and secure locking.

## Key Features

- Adjustable fixing positions
- Cast aluminium construction
- Meet and exceed International and local standards

## Applications

- Open in/Open out doors
- Glass door security
- Double doors security
- Sliding door security

## Ordering Information

Product Description	Part Number
<b>L and Z Brackets</b>	
Z2	770150-901
Z4	770300-901
Z4 Double	770300-902
Z8	770600-901
Z8 Double	770600-902
<b>Adjustable Angle Bracket</b>	
Z4	770300-903
Z4 Double	770300-904
Z8	770600-903
Z8 Double	770600-904
<b>Glass Door Armature Plate</b>	
Z4	770300-908
Z8	770600-908
<b>Glass Door "U" Bracket</b>	
Z4	770300-905
Z8	770600-905
<b>Armature and Mounting Brackets</b>	
Z2 Armature Plate	770150-020
Z2 Single Mounting Plate	770150-030
Z4 Armature Plate	770300-909
Z4 Armature Plate Monitored	770300-910
Z4 Single Mounting Plate	770300-911
Z4 Double Mounting Plate	770300-912
Z8 Armature Plate	770600-956
Z8 Armature Plate Monitored	770600-955
Z8 Double Mounting Plate	770600-951
Z8 Single Mounting Plate	770600-952





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ASSA ABLOY is represented in all major regions, in both mature and emerging markets, with leading positions in Australia, Europe and North America.

As the world's leading lock group, ASSA ABLOY offers a more complete product range of door opening solutions than any other company on the market.

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