## UK PRISONS AND COURTHOUSES

## CHUBB LOCKS, HANDCUFFS, KEYS

# Prisons have to change locks after losing keys



A Prison Service spokesman said that it was rare that prisons had to change all their locks

Jeremy Wright, a new Conservative justice minister, said that the prisons had to have all their locks replaced over the past two years as misplaced or stolen keys caused security scares.

The Ministry of Justice declined to say which ones were affected, but there have been a number of reported incidents involving missing keys.

Inmates at Birmingham Prison had to be locked in their cells for almost a full day last year, after a set of keys fitting every cell door disappeared shortly after it was taken over by the private security firm G4S.

On another occasion last year, Wakefield Prison was on high alert, after a guard mistakenly took keys home.

Robert Oxley, campaign manager of the TaxPayers Alliance, said the "huge bill to taxpayers could have been avoided if staff had simply been more careful".

"It's difficult to trust the authorities charged with locking up dangerous offenders when they can't even keep hold of the keys to the joint," he said.

"Many of us misplace keys but when they are what's keeping inmates off the streets taxpayers have a right to expect far more care and attention."

Andrew Neilson, a director of the Howard League for Penal Reform, also criticised the expense. "With budgets dwindling year on year, the Prison Service can ill–afford spending hundreds of thousands of pounds on changing the locks in our jails," he said.

"Prisons are overcrowded, the staff who work there are overstretched, and this is money that could be better spent on alternatives to custody, such as community sentences."

Mr Wright disclosed the security scares in answer to a question in Parliament by Sadiq Khan, the shadow justice secretary.

A Prison Service spokesman said that it was rare that prisons had to change all their locks. "Security across the prison estate is an absolute priority, which is why we have robust systems in place to investigate and manage any lock which we believe has been compromised," he said.

"Re–locks are a rare occurrence and it's often possible to replace just a small number of locks and keys, rather than for the entire prison.

"We are always looking for ways to further improve security – that's why we have measures in place to prevent keys from being mistakenly taken outside prisons."

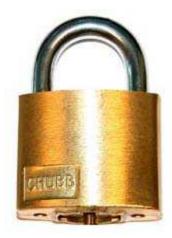
 $\pounds$ 330,000 The cost of changing all the locks at four prisons after keys were found to have been misplaced or stolen.

## **Court Houses**

Public buildings providing an internal secured area for detaining defendants.

By their very nature, criminal court houses provide a public environment within which to evaluate the culpability of suspects who come to trial. Given that defendants need to be detained within the building immediately prior to proceedings this means that there is a need for an highly secure area within the confines of the court building itself.

Traditionally, the  $3G_{317}$  pass lock has been used to provide secure perimeter locking of the custody area and the  $3R_{47}$  cell lock provides a suitable level of security for the cell doors themselves. The  $1K_{52}$  escort handcuffs have long been the number one choice for securing prisoners in transit.



## 1K42

Description: OPEN SHACKLE PADLOCK

## <u>Purpose</u>

High quality padlock secured by athe unique 10 disk Ava mechanism, designed to offer millions of key variations. Provides a high level of protection against picking and manipulation.

# **Features**

Hard wearing, solid brass body Hardened steel shackle locked at both ends. Locked by unique 10 disk Ava mechanism. Unique key design makes it difficult to sight read. Millions of key variations. Key retention mechanism prevents key from being removed whilst padlock is unlocked. This padlock can be master keyed with other 10 disk Ava locks.

# Performance

Tests performed and passed :

Impact force test Pull test Shear attack Torque attack Drill attack Hacksaw attack

## Dimensions

Overall height - 64mm Case height - 40mm Case width - 57mm Case depth - 23mm Shackle height - 24mm Shackle circumference - 8mm Shackle width (internal) - 22mm

Additional information

Supplied with 2 keys as standard

When purchasing more than one lock each one can have their own individual key code or share the same code.

Also available master keyed (this allows each padlock to have its own key code and for one master key which will open all locks).



# 1K11

Description: DROP FORGED CLOSED SHACKLE PADLOCK

<u>Purpose</u>

A tough, drop forged, solid steel padlock providing excellent protection against padsaw, drill and torque attack.

Features

Closed shackle design. Extremely hard drop forged, steel body. 6 lever mechanism offering many thousands of key variations. Case hardened shackle with anti-drill pivot. Brass key. Superior resistance against padsaw, drill and torque attack.

Performance

Tests performed and passed :

Impact force test Pull test Shear attack Torque attack Drill attack Hacksaw attack

## **Dimensions**

Height - 95mm Width - 64mm Depth - 27mm Shackle housing (internal) - 17mm Shackle circumference - 13mm Aperture (lock closed) - 17mm

# Additional information

Supplied with 3 keys as standard.

When purchasing more than one lock they can each have their own individual key code or share the same code.

Available master keyed (this allows each padlock to have its own key code and one master key which will open all locks).



**1K21** Description: 5-LEVER CLOSED SHACKLE PADLOCK

<u>Purpose</u>

A tough 5 lever padlock providing superior resistance against cutting.

Features

Closed shackle design Constructed with a laminated steel body Joined by shouldered recessed rivets 5 lever steel mechanism Case hardened shackle Superior resistance against cutting Off centre keyhole to prevent entry of conventional keys Hardened brass key

#### **Performance**

Tests performed and passed:

Impact force test Pull test Shear attack Torque attack Drill attack Hacksaw attack

Dimensions

Body height - 100mm Body width - 70mm Body depth - 27mm Shackle circumference - 13mm Aperture (when closed) - 17mm

## Additional information

Supplied with 2 keys as standard

When purchasing more than one lock they can each have their own individual key code or share the same code.

Available master keyed (this allows each padlock to have its own key code and one master key which will open all locks).



## 1K57

Description: SLIDING SHACKLE HERCULES PADLOCK

# <u>Purpose</u>

A robust high security padlock with aperture on the inside to engulf the staple of a padbar.

# Features

Body constructed from heavy case hardened carbon steel. High resistance to force, torque, drill and cutting attacks. Toughened steel vertical sliding shackle. Shackle completely concealed when locked, making direct attack impossible. Available with a choice of 3 locking systems: Ava 10 disc/ Biaxial/ 6 pin Key retention mechanism prevents key from being removed whilst the padlock is unlocked. Body is zinc plated to provide corrosion resistance. This padlock can be master keyed. Suitable for use with 7B018 padbar.

# Performance

Tests perfromed and passed:

Impact force test Pull test Shear attack Torque attack Drill attack Hacksaw attack

**Dimensions** 

Body length - 107mm Body width - 70mm Body height - 49mm

Additional information

To be used in conjunction with 7B018 padbar

Supplied with 2 keys as standard

When purchasing more than one lock they can each have their own individual key code or share the same code.

Available master keyed (this allows each padlock to have its own key code and one master key which will open all locks).



# 7**B018**

Description: IRON PADBAR WITH SOLID STEEL STAPLE

## <u>Purpose</u>

A high grade malleable iron padbar with a hardened steel staple for securing large double doors.

## **Features**

Constructed from high grade malleable iron. High resistance to force, torque and drill attacks. Both staple and padbar flaps are secured with high tensile strength clutch head screws. Heavy duty steel thrust pads to resist unauthorised removal. Can be mounted vertically or horizontally. Recommended to be used with CLCS 1K57 Hercules padlock for maximum security.

## Performance

Tests performed and passed:

Impact force test Pull test Shear attack Torque attack Hacksaw attack

## **Dimensions**

Overall length - 275mm Overall width - 80mm Plate thickness - 14mm Staple plate length - 128mm Hinge plate length - 147mm Overall staple depth - 61mm



## 3M222

Description: HEAVY DUTY MORTICED HOOKBOLT LOCK - SINGLE ACTION

# <u>Purpose</u>

To provide secure deadlocking of sliding doors or gates where a superior level of security is necessary. This lock is specifically designed for very high use applications; typically securing perimeter, internal doors and main access routes.

The 3M222 magnetic lock affords a higher level of security due to the inability to sight read keys. The magnetic key code is impossible to read or duplicate using normal human senses alone or duplicate with standard workshop equipment.

## **Overview**

The 3M222 is a mortice hookbolt of robust construction based on the Chubb Locks Custodial Services small mortice footprint.

Twin locking laminated and hardened hooks are used to provide positive engagement in the frame with maximum strength.

The lock provides a single throw only, however, the lock can be configured to work from the following key types: master key only, servant key only or pass key only.

The lock is operable from both sides and the escutcheon is designed to allow only the correct key profile being inserted into the lock.

Secure locking is achieved as follows:

*Locking* is achieved by inserting the designated key into the keyhole and turning the key through 900 in an anti-clockwise direction.

The anchor bolt is then extended by turning the handle which will expand the reinforced hooks to their fully thrown position.

*Unlocking* is achieved by inserting the designated key into the keyhole and turning the key through 900 in an anti-clockwise direction.

The anchor bolt is then withdrawn by turning the handle which will retract the reinforced hooks to their rest position.

# **Features**

Laminated and hardened hooks to resist cutting.

Reinforcing bolts to resist forced attack.

Unique magnetic locking system.

Locking arrangement designed to provide extended product life.

Reinforcing plates to provide added strength.

Anti-tamper device to prevent unauthorised removal.

Escutcheon designed to give positive key alignment.

Security fixings to prevent unauthorised removal.

# Performance

Lock tested to a minimum of 500,000 key operations. Handle and follower assembly tested to 1,000,000 operations. Saw attack 10 minutes. End load 13.5 KN. Pull load 13.5 KN.

## Additional features

Suitable for external and internal use. Range of fixings including reinforcing plates and locking plates. Available in alternative furniture finishes on request. Can be keyed with 3G222 Deadbolt. Gate boxes for steel door applications recommended. Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request.

## Materials and finishes

Lock case - carbon steel electro-plated. Anchor bolt – stainless steel and carbon steel composite. Hook bolts – hardened steel. Escutcheons – brass. Keys – brass. Locking barrels – brass and stainless steel.

**Dimensions and Weights** 

Lockcase Depth 171.5mm Lockcase Length 114.2mm Lockcase Width 21.5mm

Weight (lock only) 6.5Kg

TOTAL RANGE The lock is not handed, however for use on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation



#### 3G222 Mk3

Description: HEAVY DUTY MAGNETIC MORTICED DEADLOCK - SINGLE ACTION

#### <u>Purpose</u>

To provide secure deadlocking of swinging doors or gates where a superior level of security is necessary. This lock is specifically designed for very high use applications; typically securing internal doors and main access routes.

The 3G222 magnetic lock affords a higher level of security due to the inability to sight read keys. The magnetic key code is impossible to read or duplicate using normal human senses alone or duplicate with standard workshop equipment.

## **Overview**

The 3G222 Mark 3 is a mortice deadlock of robust construction based on the Chubb Locks Custodial Services small mortice footprint.

The mechanical deadbolt provides a throw of 20mm. The lock provides deadlocking operated by a unique key profile to the single action range of locks and will not operate double action lock variants. The lock is operable from both sides and the escutcheon is designed to allow only the correct key profile being inserted into the lock.

Secure locking is achieved as follows:

*Locking* is achieved by inserting the pass key into the keyhole and turning the key through 90<sup>1</sup>/<sub>4</sub> in an anti-clockwise direction. The bolt is then thrown by turning the handle to its fully extended position.

*Unlocking* is achieved by inserting the pass key into the keyhole and turning through 90<sup>1</sup>/4 in an anti-clockwise direction. The bolt is then withdrawn by turning the handle.

#### **Features**

Steel deadbolt, with carbide anti-cutting rollers and 20mm throw.

Unique magnetic locking system.

Locking arrangement designed to provide extended product life.

Reinforcing plates to provide added strength.

Anti-tamper device to prevent unauthorised removal.

Dedicated key profile operates single action magnetic locks only.

Escutcheon designed to give positive key alignment.

Security fixings to prevent unauthorised removal.

## Performance

Lock tested to a minimum of 500,000 key operations. Handle and follower assembly tested to 1,000,000 operations.

#### Additional features

Suitable for external and internal use. Range of fixings including reinforcing plates and locking plates. Available in alternative furniture finishes on request. Can be keyed with 3M222 Hook Bolt. Gate boxes for steel door applications recommended. Rebate kit available for wooden door applications. Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request.

## Materials and finishes

Lock case - carbon steel electro-plated. Bolt – carbon steel electro plated. Escutcheons – brass Keys – brass Locking barrels – brass and stainless steel.

**Dimensions and Weights** 

Lockcase Depth (total) 171.5mm Lockcase Length 114.2mm Lockcase Width 21.5mm

Weight (lock only) 6.25kg

TOTAL RANGE The lock is not handed, however for use on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation.



3G222 Mk2

Description: HEAVY DUTY MAGNETIC MORTICED DEADLOCK - DOUBLE ACTION

Purpose

To provide secure deadlocking of swinging doors or gates where a superior level of security is necessary. This lock is specifically designed for very high use applications; typically securing perimeter doors and main access routes.

The 3G222 magnetic lock affords a higher level of security due to the inability to sight read keys. The magnetic key code is impossible to read or duplicate using normal human senses alone or duplicate with standard workshop equipment.

## **Overview**

The 3G222 Mark 2 is a mortice deadlock of robust construction based on the Chubb Locks Custodial Services small mortice footprint.

The mechanical deadbolt provides an overall throw of 40mm which comprises an initial throw of 20mm and a second throw of a further 20mm.

The lock provides two independent bolt throws where each throw is operated by a unique key. The keys are designed so that neither key will perform the function of the other key.

The lock is operable from both sides with separate key holes for each key type. The escutcheon is designed to prevent the wrong key being inserted into the lock.

Secure locking is achieved as follows:

# Servant Key – Operates first throw only.

*Locking* is achieved by inserting the servant key into the upper keyhole and turning the key through 90° in an anti-clockwise direction. The bolt is then extended to the first position by turning the handle.

*Unlocking* is achieved by inserting the servant key into the upper keyhole and turning through 90° in an anti-clockwise direction. The bolt is then withdrawn by turning the handle.

Note: the Servant key will not operate the second (master) throw.

## Master Key – Operates second throw only.

*Locking* is achieved by inserting the master key into the lower keyhole and turning the key through 90° in an anti-clockwise direction. The bolt is then extended to the second position by turning the handle.

*Unlocking* is achieved by inserting the master key into the lower keyhole and turning the key through 90° in an anti-clockwise direction. The bolt is then withdrawn by turning the handle to enable operation under the servant key.

Note: The master key will not operate the first (servant) throw.

Features

Steel deadbolt, with carbide anti-cutting rollers and 40mm throw. Unique magnetic locking system. Independent Servant and Master actions. Locking arrangement designed to provide extended product life. Reinforcing plates to provide added strength. Anti-tamper device to prevent unauthorised removal. Dedicated key profiles operates double action magnetic locks only. Escutcheon designed to give positive key alignment. Security fixings to prevent unauthorised removal.

## Performance

Lock tested to a minimum of 500,000 key operations. Handle and follower assembly tested to 1,000,000 operations. Saw attack 12 hours End load 9 KN Side Load 13.5KN

## Additional features

Suitable for external and internal use. Range of fixings including reinforcing plates and locking plates. Available in alternative furniture finishes on request. Can be keyed with 3M222 Hook Bolt Gate boxes for steel door applications recommended. Rebate kit available for wooden door applications Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request. Servant key action only, version available on request.

## Materials and finishes

Lock case - carbon steel electro-plated. Bolt – carbon steel electro plated. Escutcheons – brass Keys – brass Locking barrels – brass and stainless steel.

## Dimensions and Weights

Lockcase Depth (total) 171.5mm Lockcase Length 114.2mm Lockcase Width 21.5mm

Weight (lock only) 6.25kg

TOTAL RANGE The lock is not handed, however for use on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# **1K70** Description: SECURE ARREST HANDCUFFS

# <u>Purpose</u>

The 1K70 is a lightweight easy-to-apply handcuff, designed principally for arrest purposes, but having greater security than is usual for this type.

## **Features**

Case assembly, shackles, swivels, chain-links and ratchet mechanism (latched on first notch) capable of withstanding a steady pull of 2200M, applied in any feasible manner for a period of 30 seconds, without detriment to security, and without preventing use. (NIJ requirement).

Cheek plates strong enough to resist the 'spreading' load resulting from a torque of 23Nm, applied to a forcing bit of 3.2 x 37.0mm cross-section, without loss of security. (NIJ requirement).

Automatic ratchet action to latch handcuffs in a restraining position the instant they are applied.

Additional deadlocking facility to improve security of locking and prevent further tightening.

3 lever, 4 lift locking mechanism (operated by key affording at least 25 usable differs) needed to remove deadlocking as well as release ratchet.

Small gap between ratchet arm and case to frustrate attempts to 'pick' the ratchet.

Two-piece locking pawls to further frustrate attempts to pick the ratchet.

Case fixing rivets partially counter-sunk to prevent heads being ground off by rubbing against an abrasive surface.

Guide on swinging arm to prevent it being bent or distorted away from the teeth on the ratchet.

Short connecting chain to inhibit arm movement and prevent access to pockets etc.

Round chain links to prevent possible breakage by inserting one link inside another and forcing.

# Additional Features

Lockable range of wrist hole sizes, 155-225mm circumference (NOTE: NIJ requirement 165-200mm circumference) with a minimum fixed opening of 58mm to accommodate large wrists, even if covered by clothing, etc.

Swinging arm capable to turn through 360i (when no obstruction is in the way) to enable handcuffs to be carried in closed position for compactness and convenience, but ensuring that they are always ready for an arrest without having to use the key.

Deadlocking applied by means of thumb-slide on back of handcuff body – again it is not necessary to use the key except to unlock.

Lightweight (approximately 350gms) for ease of use and convenience in carrying them about.

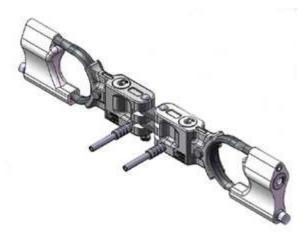
Materials and finishes capable of withstanding exposure to a 5% salt spray for a period of 12 hours at 35 degrees C without detriment to security or performance. (NIJ requirement).

# Materials and Finishes

Body castings - LM24 aluminium pressure die-casting, glass bead blasted and clear lacquered. Ratchet Arm - Mild steel fine blank, nickel plated. Deadlocking runner - Mazak 3 pressure die-casting, nickel plated. Levers - Hard brass (natural finish); phosphor bronze springs. Ratchet Pawl - Mild steel, case-hardened 600-700 VPN to a depth of 0.05-0.125. Stainless steel spring. Chain Links, swivels and pins - Mild steel, nickel plated. Ratchet Arm Spacer - Mild steel, zinc plated. Keys - high tensile brass stampings. Rivets : Ratchet pivot - steel, Others - Aluminium.

## Performance

The handcuffs were submitted to a nominated American Testing Laboratory for evaluation against NIJ 0307.01 March 1982. Testing took place 2<sup>nd</sup> August 1989. The samples passed all strength and salt spray conditions.



## 1K58

Description: MULTI-LINK ESCORT HANDCUFFS

#### <u>Purpose</u>

To securely restrain prisoners under escort

by a) linking 2-wrists together

and/or b) linking a series of cuffs together by means of a tethering mechanism.

#### Overview

The basic wrist locking unit consists of a steel shackle sliding in a cast aluminium body similar to an open shackle padlock. When fully extended, the shackle can be made to hinge back to provide access for the wrist. Locking is achieved by rotating the magazine of an Abloy Protec mechanism which drives ball bearings into recesses in the shackles. The tethering mechanism works by inserting a plunger into a separate spring loaded Abloy Protec mechanism which automatically locks the plunger in place. A key is used to release the plunger.

All locking mechanisms are key retaining in the unlocked condition. In use, shackles are closed onto the wrist, the key turned (anti-clockwise) and removed. Release is the reverse of the above procedure. Tethers are automatically locked when the tethering plunger is inserted into the plunger aperture(s). Release of the tether can only be achieved by using a key as described above.

#### **Features**

Abloy Protec mechanism affording a very high number of differs and keys unique to this application. Note: The key blank profile is not available on the commercial market.

False notching and common internal profile on sliders to deter manipulative attack.

Key retaining mechanism to ensure that handcuffs cannot be left unlocked with key removed.

Magazine retaining cap designed to be irremovable short of destroying the body.

Deadlocking action and two-point locking on each shackle ensures that each product can withstand a minimum force of 5.0kN.

Confusing key profile to deter attempts to sight-read the combination.

## Additional Features

3 position shackle(s) to accommodate wide range of wrist sizes (see section 7).

Three sizes of loose inserts (available as optional extras) to further reduce the opening for very small wrists. Reductions in normal diameter as follows:-

No. 1 = 19.0mm

No. 2 = 14.5mm

No. 3 = 10.0mm

Smooth finish and absence of sharp corners (particularly around wrist holes) to ensure that handcuffs do not cause injuries, even after long periods of restraint.

Identification mark on key to denote whether 9 or 10 slider mechanism. NOTE: Key designed to enter one way round only.

## Materials and Finishes

Shackle (castings), shackle ends - Mild steel, chrome plated Handcuff body, tether body and hinge - Aluminium, anodised black Magazine caps - Mild steel, nickel plated Magazine, sliders and keys - Mild steel, nickel plated Locking balls - Phosphor bronze Locking plunger - Mild steel, zinc plated and passivated Loose insert - Aluminium, anodised black Tether plunger - Stainless steel

## Dimensions and weights

Maximum height - 77mm Maximum width - 55mm Maximum width (folded) - 28mm Maximum length - 382mm Maximum length (folded) - 176mm Wrist hole sizes - 53 x 79mm (max), 53 x 63mm (mid), 53 x 57mm (min) (Major and minor axis dimensions of approx eliptical shape formed)

47mm dia = No. 3 insert 47 x 43mm = No.2 insert 47 x 38mm = No.1 insert

Weight (excluding keys) - 1000gms (est)

Cell Locks

Heavy duty locks specifically designed to secure cell doors:

3R47 - HEAVY DUTY MORTICE LATCH LOCK

3F51 - HEAVY DUTY MORTICED ELECTRO-MECHANICAL CELL LOCK

3F11/3F12 - 24V DC MOTORISED MORTICE LOCK

3F56 - HEAVY DUTY MORTICED MECHANICAL SLAM ACTION CELL LOCK

3L215 - MORTICED ELECTRO-MECHANICAL PRISON LOCK

3L217 - ELECTRO-MECHANICAL CELL LOCK DOOR IN FRAME SENSOR

4L55/6 - MECHANICAL SLAM ACTION CELL LOCK

4L65 - MECHANICAL CELL LOCK

4L65P - MECHANICAL CELL LOCK WITH PRIVACY FACILITY

4L78 - ELECTRO-MECHANICAL CELL LOCK



**4L78** Description: ELECTRO-MECHANICAL CELL LOCK

<u>Purpose</u>

To provide secure locking of swinging cell doors using third party security management systems (SMS) or conventional key control.

#### Overview

The 4L78 is a surface mounted lock of robust construction based on the Chubb Lock Custodial Services standard cell lock footprint.

The main bolt is a sprung latch providing a throw of 25mm, secure locking is achieved by two independent methods:

*Electrical Mode*. Locking/unlocking by 24 Volt DC controlled sequence from an external source (SMS). Bolt withdrawal by handle, which should also be used when closing the door.

*Manual Mode*. Locking/unlocking achieved using conventional (mechanical key). Bolt withdrawal by handle, which should also be used when closing the door. Key operates from corridor side only.

*Manual Override*. In the event of power or communication failure an override key is used to disable electric locking function.

The lock will operate if slammed to shut, however, CLCS recommend that in normal operation the handle is used to withdraw the bolt when closing.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel.

Steel main bolt, with carbide anti-cutting rollers, and 25mm throw.

Unique dual solenoid electric locking latch.

Independent 7-lever locking mechanism.

Factory restricted key section.

Lock provides status monitoring of critical functions and tamper.

5 bolt secure fixing.

Integral baffle arrangements to resist manipulation and interference via the keyhole.

## Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations.

Handle mechanism tested to a minimum of 300,000 bolt operations.

Solenoid locking unit tested to a minimum of 1,000,000 cycles.

Solenoid arrangement designed to operate at +/-10% of 24V DC regulated supply.

Nominal operating current 500mA.

Saw attack 12 hours.

End load 9KN.

Side Load 13.5KN.

## Additional features

Can be configured to provide cell side furniture to be used where remote release is desirable. Range of fixings including backplates, stud fixings, locking plate and keeps. External handle designed to shear under excessive load to prevent damage to internal lock mechanism. Interchangeable mechanical inner locking unit to enable re-coding. This lock is not available under a master key system.

## Materials and finishes

Lock case - carbon steel electro-plated and powder coated exterior. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze.

#### **Dimensions and Weights**

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 25mm Bolt Depth 45mm Bolt Thickness 22mm

Weight (lock only) 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# **4L55/56** Description: MECHANICAL SLAM ACTION CELL LOCK

# <u>Purpose</u>

To provide secure locking of swinging cell doors, under conventional key control where automatic deadlocking is a requirement.

## **Overview**

The lock can be either flush (4L55) or surface (4L56) mounted and is of robust construction based on the Chubb Lock Custodial Services standard cell lock footprint. The main bolt is automatically extended providing a throw of 32mm and deadlocked on closure of door.

# Secure locking is achieved as follows:

Unlocking is achieved by a partial turn of the key which lifts the internal blocking mechanism enabling the withdrawal of the main bolt by the handle. The bolt is then retained automatically when fully retracted and door is out of frame.

Locking is achieved automatically; on closure of the door the brass snib bolt is depressed on contact with the strike plate mounted to the frame this then releases the main bolt. Deadlocking occurs when the main bolt is fully extended allowing the internal blocking mechanism to engage.

The lock has an external visual indicator mechanism, which enables staff to verify the status of the lock. When the indicator is horizontal the lock is secure any other state is insecure.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel. Steel main bolt, with carbide and anti-cutting rollers and 32mm throw. Brass quick acting stud release mechanism. External visual locking status indication. Independent 7-lever locking mechanism. Factory restricted key section. 5 bolt secure fixing. Integral baffle arrangements to resist interference via the keyhole. Escutcheon designed to give positive key alignment.

#### Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 100,000 bolt operations. Stud release mechanism tested to a minimum of 100,000 operations. Saw attack 12 hours End load 25 KN.

#### Additional Features

Range of Anti-Ligature furniture options available. Range of fixings including backplates, stud fixings, locking plate and keeps. Available in alternative paint / furniture finishes on request. External handle designed to shear under excessive load to prevent damage to internal lock mechanism. Interchangeable mechanical inner locking unit to enable re-coding.

#### Materials and finishes

Lock case - carbon steel electro-plated and powder coated exterior. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze.

#### **Dimensions and Weights**

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 32mm Bolt Depth 45mm Bolt Thickness 22mm

Weight (lock only) 4L55 10.5Kg Weight (lock only) 4L56 12.4Kg TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# 4L65P

# Description: MECHANICAL CELL LOCK WITH PRIVACY FACILITY

## <u>Purpose</u>

To provide secure locking of prison cell doors, with facility for 'Privacy' locking under control of inmate.

## **Overview**

The 4L65P can be either surface or flush mounted and is of robust construction based on the Chubb Lock Custodial Services standard cell lock footprint. The main bolt is an un-sprung rectangular deadbolt providing of throw of 32mm.

*Staff Key*. Locking/unlocking is achieved by a full turn of the key allowing the handle to throw or withdraw the bolt. When the key is withdrawn the main bolt can be left in two positions fully thrown (i.e secure when door in frame) or bolt fully withdrawn and locked back.

Withdrawal of the main bolt will automatically withdraw the prisoner's 'privacy' bolt if thrown. *Privacy Key*. The 'Privacy' bolt can be locked/unlocked from outside by a pin tumbler cylinder or from inside by a cylindrical knob.

Note: Locks can be prepared to accept customer's choice of cylinder, details of which need to be supplied prior to ordering.

## Features

Solid Case Technology; Lock case machined from single piece carbon steel. Steel main bolt, with carbide anti-cutting rollers and 32mm throw. External visual locking status indication. Independent 7-lever locking mechanism. Factory restricted key sections. 5 bolt secure fixing. Integral baffle arrangements to resist interference via the keyhole. Privacy facility using secondary mechanism. Internal knob with clutch mechanism to ensure staff always have control of lock Escutcheon designed to give positive key alignment.

## Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 100,000 bolt operations.

## Additional features

Range of furniture options available.

Range of fixings including backplates, stud fixings, locking plate and keeps. External handle designed to shear under excessive load to prevent damage to internal lock mechanism.

Interchangeable mechanical inner locking unit to enable re-coding. Can be configured to differ, to pass or under a master key scheme.

## Materials and finishes

Lock case - carbon steel electro-plated and powder coated exterior. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze. Inside knob Stainless Steel.

## **Dimensions and Weights**

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 25mm Bolt Depth 45mm Bolt Thickness 22mm

Weight (lock only) 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# **4L65** Description: MECHANICAL CELL LOCK

# <u>Purpose</u>

To provide secure locking of swinging cell doors, under conventional key control where a lock back facility is a requirement

# <u>Overview</u>

The 4L65 can be either surface or flush mounted and is of robust construction based on the Chubb Lock Custodial Services standard cell lock footprint. The main bolt is an un-sprung rectangular deadbolt providing of throw of 32mm.

Secure locking is achieved as follows:

Staff Key. Locking/unlocking is achieved by a full turn of the key allowing the handle to throw or withdraw the bolt. When the key is withdrawn the main bolt can be left in two positions fully thrown (i.e secure when door in frame) or bolt fully withdrawn and locked back.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel. Steel main bolt, with carbide anti-cutting rollers, and 32mm throw. External visual locking status indication. Independent 7-lever locking mechanism. Factory restricted key section. 5 bolt secure fixing. Integral baffle arrangements to resist interference via the keyhole. Escutcheon designed to give positive key alignment.

#### Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 100,000 bolt operations.

## Additional features

Range of furniture options available.

Range of fixings including backplates, stud fixings, locking plate and keeps. External handle designed to shear under excessive load to prevent damage to internal lock mechanism. Interchangeable mechanical inner locking unit to enable re-coding.

Can be configured to differ, to pass or under a master key scheme.

## Materials and finishes

Lock case - carbon steel electro-plated and powder coated exterior. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze.

#### **Dimensions and Weights**

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 25mm Bolt Depth 45mm Bolt Thickness 22mm

Weight (lock only) 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# **4L78** Description: ELECTRO-MECHANICAL CELL LOCK

## Purpose

To provide secure locking of swinging cell doors using third party security management systems (SMS) or conventional key control.

## **Overview**

The 4L78 is a surface mounted lock of robust construction based on the Chubb Lock Custodial Services standard cell lock footprint.

The main bolt is a sprung latch providing a throw of **25**mm, secure locking is achieved by two independent methods:

*Electrical Mode*. Locking/unlocking by 24 Volt DC controlled sequence from an external source (SMS). Bolt withdrawal by handle, which should also be used when closing the door.

Manual Mode. Locking/unlocking achieved using conventional (mechanical key). Bolt

withdrawal by handle, which should also be used

when closing the door. Key operates from corridor side only.

*Manual Override*. In the event of power or communication failure an override key is used to disable electric locking function.

The lock will operate if slammed to shut, however, CLCS recommend that in normal operation the handle is used to withdraw the bolt when closing.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel. Steel main bolt, with carbide anti-cutting rollers, and 25mm throw. Unique dual solenoid electric locking latch. Independent 7-lever locking mechanism. Factory restricted key section. Lock provides status monitoring of critical functions and tamper. 5 bolt secure fixing. Integral baffle arrangements to resist manipulation and interference via the keyhole.

## Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 300,000 bolt operations. Solenoid locking unit tested to a minimum of 1,000,000 cycles. Solenoid arrangement designed to operate at +/-10% of 24V DC regulated supply. Nominal operating current 500mA. Saw attack 12 hours. End load 9KN. Side Load 13.5KN.

## Additional features

Can be configured to provide cell side furniture to be used where remote release is desirable.

Range of fixings including backplates, stud fixings, locking plate and keeps. External handle designed to shear under excessive load to prevent damage to internal lock mechanism.

Interchangeable mechanical inner locking unit to enable re-coding.

This lock is not available under a master key system.

#### Materials and finishes

Lock case - carbon steel electro-plated and powder coated exterior. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze.

Dimensions and Weights

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 25mm Bolt Depth 45mm Bolt Thickness 22mm

# Weight (lock only) 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# 3F51

Description: HEAVY DUTY MORTICED ELECTRO-MECHANICAL CELL LOCK

# <u>Purpose</u>

To provide secure locking of swinging cell doors using third party security management systems (SMS) or conventional key control. The lock can be configured to provide a softer aesthetic apppearance without reducing security.

# **Overview**

>The 3F51 is a mortice lock of robust construction based on the Chubb Locks Custodial Services large mortice footprint. The main bolt is a sprung latch providing a throw of 25mm, secure locking is achieved by two independent methods:

**Electrical Mode:** Lovcking/unlocking by 24 volt DC controlled sequence from an external source (SMS). Bolt withdrawl by handle, which should also be used when closing the door.

**Manual Mode:** Locking/unlocking achieved using conventional (mechanical) key. Bolt withdrawl by handle, which should also be used when closing the door. Key operates from corridor side only.

**Manual Override:** In the event of power or communication failure an override key is used to disable electric locking function.

The lock will operate if slammed to shut, however, CLCS recommend that in normal operation the handle is used to withdraw the bolt when closing.

## Features

Solid Case Technology - lock case machined from single piece carbon steel. Steel main bolt, with carbide anti-cutting rollers and 25mm throw. Unique dual solenoid electric locking latch. Independent 7-lever locking mechanism. Factory restricted key section. Lock provides status monitoring of critical functions and tamper. Integral baffle arrangements to resist manipulation and interference via the keyhole.

# Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 300,000 bolt operations. Solenoid locking unit trested to a minimum of 1,000,000 cycles. Solenoid arrangement designed to operate at +/- 10% of 24v DC regulated supply. Nominal operating current 500mA.

# Additional Features

Can be configured to provide cell side furniture to be used where remote release is desirable. Range of fixings include backplates, stud fixings, locking plate and keeps.

External handle designed to shear under excessive load to prevent damage to internal lock mechanism.

Interchangeable mechanical inner locking unti to enable re-coding.

Gate boxes for steel door application recommended.

This lock is not available under a master key system.

# Materials and Finishes

Lock case - carbon steel electro-plated. Main bolt - carbon steel electro plated. Main bolt follwer - high tensile brass. Keys - hardened steel. Levers and springs - Brass/phosphor bronze.

# <u>Total Range</u>

The lock is available in left or right handed variants and can be fitted to steel or wooden doors. For wooden door applications CLCS recommend a minimum door thickness of 54mm.

Fully dimensional customer drawings are available on request to assist with door preparation.



## 3F11/3F12

Description: 24V DC MOTORISED MORTICE LOCK

3F11 - Keyed one side

3F12 - Keyed both sides

## <u>Purpose</u>

For maximum security swinging doors or gates that can be unlocked from a remote location or by means of mechanical key operation. Mortice mounted.

**Overview** 

Unlocking

*Electric Operation* - Remote switch activates the locking solenoid and the locking deadbolt is withdrawn by the motor. When fully withdrawn the locking deadbolt is latched in position ready for the relocking operation.

*Mechanical Operation* - Locking mechanism is operated by a mechanical key that lifts the locking solenoid and withdraws the locking deadbolt. When fully withdrawn the locking deadbolt is latched in position ready for the relocking operation.

Locking

The lock automatically deadlocks when the door/gate is closed.

## **Features**

Mechanical operation can always be used in the event of a power failure, regardless of the starting position of the locking deadbolt.

High torque motor and gear combination.

Right hand and left hand versions available.

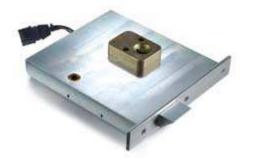
Locking deadbolt and solenoid bolt position monitoring and indication.

5-lever mechanical lock.

Internal baffle plates to prevent blocking or manipulation of the locking mechanism. Escutcheon mounted lock status LED.

#### Technical Data

24 Volt DC motor. 32mm throw square ended locking deadbolt. Locking deadbolt size - 22.2mm x 44.45mm Minimum door thickness required - 54mm Approximate lock case sizes (not including forend) 210mm (H) x 290mm (L) x 30mm (TK)



# **3R63** Description: ELECTRO-MECHANICAL MORTICE LOCK

## <u>Purpose</u>

To provide secure locking of swinging passage / control doors using third party security management systems (SMS) or conventional key control. Designed to enable key and electric operation from both sides of the door. This lock is specifically designed for very high use applications; typically securing perimeter doors and main access routes.

## Overview

The 3R63 is a mortice lock of robust construction based on the Chubb Locks Custodial Services large mortice footprint. The main bolt is a sprung latch providing a throw of 25mm, secure locking is achieved by two independent methods:

**Electrical Mode**. Locking/unlocking by 24 Volt DC controlled sequence from an external source (SMS). Bolt withdrawal by handle, which should also be used when closing the door. **Manual Mode**. Locking/unlocking achieved using conventional (mechanical key). Bolt withdrawal by handle, which should also be used when closing the door.

**Manual Override**. In the event of power or communication failure an override key is used to disable electric locking function.

The lock will operate if slammed to shut, however, CLCS recommend that in normal operation the handle is used to withdraw the bolt when closing.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel block. Steel main bolt, with carbide anti-cutting rollers and 25mm throw. Unique dual solenoid electric locking latch. Independent 8-lever locking mechanism. Lock provides status monitoring of critical functions and tamper. Integral baffle arrangements to resist manipulation and interference via the keyhole. Dedicated key profile operates 3R63 group of locks only.

## Performance

Mechanical locking mechanism tested to a minimum of 300,000 operations. Handle mechanism tested to a minimum of 1,000,000 bolt operations. Solenoid locking unit tested to a minimum of 1,000,000 cycles. Solenoid arrangement designed to operate at +/-10% of 24V DC regulated supply. Nominal operating current 500mA.

## Additional features

Supplied with "T" Handle as standard. Range of fixings including reinforcing plates and locking plates. Gate boxes for steel door applications recommended. Interchangeable mechanical inner locking unit to enable re-coding. This lock is not available under a master key system. Escutcheon trim plates supplied for wooden door variants as standard.

## Materials and finishes

Lock case - carbon steel electro-plated. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Escutcheons – silica brass. Levers and springs – Brass / phosphor Bronze.

#### Dimensions and Weights

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 25mm Bolt Depth 45mm Bolt Thickness 22mm Weight (lock only) 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# 3G112 Mk3

# Description: HEAVY DUTY MORTICED DEADLOCK - SINGLE ACTION

## <u>Purpose</u>

To provide secure deadlocking of swinging doors or gates. This lock is specifically designed for very high use applications; typically securing internal doors and main access routes.

## **Overview**

The 3G112 Mark 3 is a mortice deadlock of robust construction based on the Chubb Locks Custodial Services small mortice footprint. The mechanical deadbolt provides a throw of 19mm.

The lock provides deadlocking operated by a unique key profile to the Mark 3 range of locks and will not operate Mark 1 or Mark 2 lock variants.

The lock is operable from both sides and the escutcheon is designed to allow only the correct key profile to be inserted into the lock.

Secure locking is achieved as follows:

**Pass Key**. *Locking* is achieved by inserting the key into the dished keyhole and rotating fully in a clockwise direction, this action will fully extend the bolt.

*Unlocking* is achieved by inserting the key into the dished keyhole and rotating fully in an anticlockwise direction, this action will fully withdraw the bolt.

#### **Features**

Composite deadbolt, with carbide anti-cutting rollers and 19mm throw. 12 lever highly durable mechanism. Low friction key journals. Lever arrangement designed to provide extended product life. Dedicated key profiles operates Mark 3 group of locks only. Escutcheon designed to give positive key alignment. Security fixings to prevent unauthorised removal.

#### Performance

Lock tested to a minimum of 500,000 key operations. Saw attack 12 hours. End load 9 KN. Side Load 13.5 KN.

## Additional features

Suitable for external and internal use. Range of fixings including reinforcing plates and locking plates. Available in alternative furniture finishes on request. Can be keyed with 3M56 Mark 3 Hook Bolt. Lock interchangeable with 3G317. Gate boxes for steel door applications recommended. Escutcheon trim plates supplied for wooden door variants as standard. Rebate kit available for wooden door applications. Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request.

## Materials and finishes

Lock case - carbon steel electro-plated. Bolt – stainless steel and brass composite. Escutcheons – silica brass. Keys – hardened steel. Levers and springs – brass / phosphor bronze.

#### **Dimensions and Weights**

Lockcase Depth (total) 171.5mm Lockcase Length 114.2mm Lockcase Width 21.0mm Weight (lock only) 2.1kg

TOTAL RANGE The lock is not handed, however for use on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation.



## 1K52 Description: ESCORT HANDCUFFS

## <u>Purpose</u>

To securely restrain prisoners under escort by linking two wrists together.

## **Overview**

The basic wrist locking unit (1K56) consist of a steel shackle sliding in a cast aluminium body similar to an open shackle padlock. When fully extended, the shackle can be made to hinge back to provide access for the wrist. Locking is achieved by rotating the magazine of a conventional AVA mechanism which drives ball bearings into recesses in the shackles. The more familiar double handcuff (1K52) comprises of two such units attached through chain links and a swivel link to provide flexibility of movement.

Handcuff units are key retaining in the unlocked condition. In use, shackles are closed onto the wrist, the key turned (anti-clockwise) and removed. Release is the reverse of the above procedure.

## Features

9 or 10 slider AVA mechanism affording a very high number of differs and keys unique to this application viz:-

The standard version has nine sliders and a shorter than standard length bit; the special 'H' version has 10 sliders on a standard bit length, but with one thinned down wing – neither blank being available on the commercial market.

NOTE: 'H' version identified by step in conical recess of magazine cap.

False notching and common internal profile on sliders to deter manipulative attack.

Key retaining mechanism to ensure that handcuffs cannot be left unlocked with key removed

Magazine retaining cap designed to be irremovable short of destroying the body.

Deadlocking action and two-point locking on each shackle ensures that each product can withstand a minimum force of 5.0kN.

Confusing key profile to deter attempts to sight-read the combination.

#### Additional Features

3 position shackle(s) to accommodate wide range of wrist sizes.

Three sizes off loose inserts (available as optional extras) to further reduce the opening for very small wrists. Reductions in normal diameter as follows:-

No. 1 - 19.0mm No. 2 - 14.5mm No.3 - 10.0mm

Smooth finish and absence of sharp corners (particularly around wrist holes) to ensure that handcuffs do not cause injuries, even after long periods of restraint.

Identification mark on key ('0' for 10 slider; '9' for 9 slider) which should face towards grubscrew in base when entering key to ensure correct alignment.

NOTE: Key designed to enter one way round only.

#### Materials and Finishes

Shackle (castings), shackle ends and links - Mild steel Swivel link - Malleable iron All chrome plated on assembly NOTE: 1K56 assemblies comprise just shackles and ends Handcuff body - Diecast aluminium, anodised and spray painted matt black Magazine caps - Mild steel, nickel plated Magazine, sliders and keys - Brass Locking balls - Phosphor bronze Locking plunger - Mild steel, zinc plated and passivated Loose insert - Diecast aluminium, spray painted matt black

#### Dimensions and weights

Body width - 77mm Body height - 66mm Body thickness - 28mm Wrist hole sizes - 53 x 79mm (max extension), 53 x 63mm (mid), 53 x 57mm (min) (Major and minor axis dimensions of approx eliptical shape formed) 47mm dia = No. 3 insert 47 x 43mm = No.2 insert 47 x 38mm = No.1 insert

Weight (excluding keys):

1K52 = 625gms 1K56 = 285gms



## 3G222 Mk3

Description: HEAVY DUTY MAGNETIC MORTICED DEADLOCK - SINGLE ACTION

#### <u>Purpose</u>

To provide secure deadlocking of swinging doors or gates where a superior level of security is necessary. This lock is specifically designed for very high use applications; typically securing internal doors and main access routes.

The 3G222 magnetic lock affords a higher level of security due to the inability to sight read keys. The magnetic key code is impossible to read or duplicate using normal human senses alone or duplicate with standard workshop equipment.

#### **Overview**

The 3G222 Mark 3 is a mortice deadlock of robust construction based on the Chubb Locks Custodial Services small mortice footprint.

The mechanical deadbolt provides a throw of 20mm. The lock provides deadlocking operated by a unique key profile to the single action range of locks and will not operate double action lock variants. The lock is operable from both sides and the escutcheon is designed to allow only the correct key profile being inserted into the lock.

Secure locking is achieved as follows:

*Locking* is achieved by inserting the pass key into the keyhole and turning the key through 90<sup>1</sup>/<sub>4</sub> in an anti-clockwise direction. The bolt is then thrown by turning the handle to its fully extended position.

*Unlocking* is achieved by inserting the pass key into the keyhole and turning through 90<sup>1</sup>/4 in an anti-clockwise direction. The bolt is then withdrawn by turning the handle.

## **Features**

Steel deadbolt, with carbide anti-cutting rollers and 20mm throw.

Unique magnetic locking system.

Locking arrangement designed to provide extended product life.

Reinforcing plates to provide added strength.

Anti-tamper device to prevent unauthorised removal.

Dedicated key profile operates single action magnetic locks only.

Escutcheon designed to give positive key alignment.

Security fixings to prevent unauthorised removal.

## Performance

Lock tested to a minimum of 500,000 key operations. Handle and follower assembly tested to 1,000,000 operations.

## Additional features

Suitable for external and internal use. Range of fixings including reinforcing plates and locking plates. Available in alternative furniture finishes on request. Can be keyed with 3M222 Hook Bolt. Gate boxes for steel door applications recommended. Rebate kit available for wooden door applications. Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request.

## Materials and finishes

Lock case - carbon steel electro-plated. Bolt – carbon steel electro plated. Escutcheons – brass Keys – brass Locking barrels – brass and stainless steel.

**Dimensions and Weights** 

Lockcase Depth (total) 171.5mm Lockcase Length 114.2mm Lockcase Width 21.5mm

Weight (lock only) 6.25kg

TOTAL RANGE The lock is not handed, however for use on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation.



## 3M56 Mk3

Description: HEAVY DUTY MORTICED HOOKBOLT LOCK - DOUBLE ACTION

#### Purpose

To provide secure deadlocking of sliding doors or gates where an enhanced level of security is necessary. This lock is specifically designed for very high use applications; typically securing internal doors and main access routes.

#### Overview

The 3M56 Mark 3 is a mortice hookbolt of robust construction based on the Chubb Locks Custodial Services small mortice footprint.

Twin locking laminated and hardened hooks are used to provide positive engagement in the frame with maximum strength.

The lock provides deadlocking operated by a unique key profile to the Mark 3 range of locks and will not operate Mark 1 or Mark 2 lock variants. The lock is operable from both sides and the escutcheon is designed to allow only the correct key profile being inserted into the lock.

Secure locking is achieved as follows:

**Pass Key**. *Locking* is achieved by inserting the pass key into the dished keyhole and rotating fully in a clockwise direction, this action will extend the anchor bolt to expand the reinforced hooks to their fully thrown position.

*Unlocking* is achieved by inserting the pass key into the dished keyhole and rotating fully in an anti-clockwise direction, this action will withdraw the anchor bolt and retract the reinforced hooks to their rest position.

## **Features**

Laminated and hardened hooks to resist cutting. Reinforcing bolts to resist forced attack. 12 lever highly durable mechanism. Low friction key journals. Lever arrangement designed to provide extended product life. Dedicated key profiles operates Mark 3 group of locks only. Escutcheon designed to give positive key alignment. Security fixings to prevent unauthorised removal.

## Performance

Lock tested to a minimum of 500,000 key operations.

## Additional features

Suitable for external and internal use. Specially designed forend and fascia locking plates. Available in alternative furniture finishes on request. Can be keyed with 3G112 Mark 3 Deadbolt. Gate boxes for steel door applications recommended. Escutcheon trim plates supplied for wooden door variants as standard. Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request.

## Materials and finishes

Lock case - carbon steel electro-plated. Anchor bolt – stainless steel and carbon steel composite. Hook bolts – hardened steel. Escutcheons – silica brass. Keys – hardened steel. Levers and springs – brass / phosphor bronze.

**Dimensions and Weights** 

Lockcase Depth(total) 171.5mm Lockcase Height 114.2mm Lockcase Width 21.0mm

Weight (lock only) 2.1Kg

TOTAL RANGE The lock is not handed, however for use on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation.



#### 3M222

Description: HEAVY DUTY MORTICED HOOKBOLT LOCK - SINGLE ACTION

## <u>Purpose</u>

To provide secure deadlocking of sliding doors or gates where a superior level of security is necessary. This lock is specifically designed for very high use applications; typically securing perimeter, internal doors and main access routes.

The 3M222 magnetic lock affords a higher level of security due to the inability to sight read keys. The magnetic key code is impossible to read or duplicate using normal human senses alone or duplicate with standard workshop equipment.

## **Overview**

The 3M222 is a mortice hookbolt of robust construction based on the Chubb Locks Custodial Services small mortice footprint.

Twin locking laminated and hardened hooks are used to provide positive engagement in the frame with maximum strength.

The lock provides a single throw only, however, the lock can be configured to work from the following key types: master key only, servant key only or pass key only.

The lock is operable from both sides and the escutcheon is designed to allow only the correct key profile being inserted into the lock.

Secure locking is achieved as follows:

*Locking* is achieved by inserting the designated key into the keyhole and turning the key through 900 in an anti-clockwise direction.

The anchor bolt is then extended by turning the handle which will expand the reinforced hooks to their fully thrown position.

*Unlocking* is achieved by inserting the designated key into the keyhole and turning the key through 900 in an anti-clockwise direction.

The anchor bolt is then withdrawn by turning the handle which will retract the reinforced hooks to their rest position.

## Features

Laminated and hardened hooks to resist cutting.

Reinforcing bolts to resist forced attack.

Unique magnetic locking system.

Locking arrangement designed to provide extended product life.

Reinforcing plates to provide added strength.

Anti-tamper device to prevent unauthorised removal.

Escutcheon designed to give positive key alignment.

Security fixings to prevent unauthorised removal.

## Performance

Lock tested to a minimum of 500,000 key operations. Handle and follower assembly tested to 1,000,000 operations. Saw attack 10 minutes. End load 13.5 KN. Pull load 13.5 KN.

## Additional features

Suitable for external and internal use. Range of fixings including reinforcing plates and locking plates. Available in alternative furniture finishes on request. Can be keyed with 3G222 Deadbolt. Gate boxes for steel door applications recommended. Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request.

#### Materials and finishes

Lock case - carbon steel electro-plated. Anchor bolt – stainless steel and carbon steel composite. Hook bolts – hardened steel. Escutcheons – brass. Keys – brass. Locking barrels – brass and stainless steel.

#### **Dimensions and Weights**

Lockcase Depth 171.5mm Lockcase Length 114.2mm Lockcase Width 21.5mm

Weight (lock only) 6.5Kg

TOTAL RANGE The lock is not handed, however for use on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation



**3A63** Description: ELECTRONIC PASS LOCK

## <u>Purpose</u>

To provide secure locking of swinging passage / control doors controlled by ATLAS® LCMS software or conventional key control. Designed to enable operation from both sides of the door

using either an electronic token or conventional key. This lock is specifically designed for very high use applications; typically securing perimeter doors and main access routes.

#### **Overview**

The 3A63 is a mortice lock of robust construction based on the Chubb Locks Custodial Services large mortice footprint. The main bolt is a sprung latch providing a throw of 25mm, secure locking is achieved by two independent methods:

## Electronic Mode

Locking/unlocking by controlled sequence from ATLAS® LCMS system after mutual authentication of token at the lock or via control room input. Bolt withdrawl by handle, which should also be used when closing the door.

#### Manual Mode

Locking/unlocking achieved using conventional (mechanical) key. Bolt withdrawl by handle, which should also be used when closing the door.

## Manual Override

In the event of power or communication failure an override key is used to lift the electronic locking unit.

The lock will operate if slammed to shut, however CLCS recommend that in normal operation the handle is used to withdraw the bolt when closing.

3A63 lock is an intelligent lock and has a built in lock PCB with memory. The lock does not rely on continuous communication with the main server to operate as it will store the latest set of access permissions issued by the server.

#### **Features**

Solid Case Technology; Lock case machined from single piece carbon steel block.

Steel main bolt, with carbide anti-cutting rollers and 25mm throw.

Unique dual solenoid electric locking latch.

Independent 8-lever locking mechanism.

Lock provides status monitoring of critical functions and tamper.

Integral baffle arrangements to resist manipulation and interference via the keyhole.

Dedicated key profile operates 3R63 group of locks only.

#### Performance

Mechanical locking mechanism tested to a minimum of 300,000 operations.

Handle mechanism tested to a minimum of 1,000,000 bolt operations

Solenoid locking unit tested to a minimum of 1,000,000 cycles.

Solenoid arrangement designed to operate at +/-10% of 24V DC regulated supply.

Nominal operating current 500mA.

#### Additional Features

Supplied with 'T' Handle as standard.

Range of fixings including reinforcing plates and locking plates.

Gate boxes for steel door applications recommended.

Interchangeable mechanical inner locking unit to enable re-coding.

This lock is not available under a master key system.

Escutcheon trim plates supplied for wooden door variants as standard.

Materials and Finishes

Lock case - carbon steel electro-plated.

Main bolt - carbon steel electro-plated.

Main bolt follower high tensile brass.

Keys - Hardened Steel

Escutcheons - silica brass

Levers and springs - Brass / phosphor Bronze.

**Dimensions and weights** 

Case Height - 206mm Case Length - 229mm Case Thickness - 29mm Bolt Throw - 25mm Bolt Depth - 45mm Bolt Thickness - 22mm

## Weight (lock only) - 12.4kg

## <u>Total Range</u>

The lock is available in left or right hand variants and can be fitted to steel or wooden doors. **NOTE:** Supplied as standard to suit maximum door thickness of 54mm. For door thickness above 54mm please contact CLCS for options available.

Fully dimensioned customer drawings are available on request to assist with door preparation.



## Secure Hospitals

Being sympathetic to the surroundings is a fundamental factor in securing modern institutions.

CLCS continue to work with clients whose requirements differ slightly from the normal custodial environment. In an increasing number of new projects, end users whose desired levels of security are not as high as others are demanding more in the overall look of the locks and the way in which they blend in with the surroundings. Rather than focusing solely on the suitability of the product from a security perspective our design and development team work closely to, wherever possible, preserve the aesthetics of the environment.

In a recent new build project in northern England the brief was to provide the most suitable lock with the most sympathetic finish, to blend in with the surroundings whilst ensuring the right levels of security.

Commonly used locks for bedrooms include, but are not limited to, the 3F56, 3G112 Mk2 & 3G112 Mk3. The 3R63 and 3A63 locks are also popular choices, along with the 1K52 handcuffs.



## **3G317** Description: HEAVY DUTY MORTICED MULTI-LEVEL DEADBOLT

## <u>Purpose</u>

To provide secure deadlocking of swinging doors or gates where a greater range of keying options is desirable. This lock is designed for high usage applications and is also suitable for specialised applications such as explosive containers and armouries.

## **Overview**

The 3G317 is a mortice deadlock of robust construction based on the Chubb Locks Custodial Services small mortice footprint. The mechanical deadbolt can be supplied with single throw of 20mm or a double throw of 40mm. The lock can be supplied with key operation from both sides or from one side only.

Unlocking / Locking is achieved by turning the key fully which extends and withdraws the deadbolt. The lock can be configured to operate under a number of key control arrangements which are as follows:

*Single key – single throw deadlock*. Keyed to differ or to pass.

*Master keyed – single throw deadlock*. Keyed to differ or to pass in groups under a common master key.

*Twin keyed, double throw, double action deadlock*. Servant key operates first throw only and master key operates second throw only.

Master key locks out unauthorised use of servant key when second throw is operated. *Twin keyed, double throw, double action deadlock*. Servant key operates first throw only and master key operates both first and second throw. Master key locks out unauthorised use of servant key when second throw is operated.

## Features

Carbon steel deadbolt, with carbide anti-cutting rollers and 40mm maximum throw.

7 lever manipulation resistant CLCS detainer mechanism.

Independent Servant and Master actions available.

Precision machined and hardened bolt thrower. Dedicated key profile operates 3G317 range of locks only. Escutcheon designed to give positive key alignment. Security fixings to prevent unauthorised removal.

#### Performance

Lock tested to a minimum of 500,000 key operations. Saw attack 30 minutes End load 9 KN Side Load 13.5 KN

#### Additional features

Suitable for external and internal use. Range of fixings including reinforcing plates and locking plates. Available in alternative furniture finishes on request. Cannot be keyed with any other locks in the CLCS range. Key designed to enable quick and easy re-alignment of displaced throwers. Lock interchangeable with 3G112 Gate boxes for steel door applications recommended. Escutcheon trim plates supplied for wooden door variants as standard. Rebate kit available for wooden door applications Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request.

#### Materials and finishes

Lock case - carbon steel electro-plated. Bolt – carbon steel electro-plated. Escutcheons – silica brass Keys – hardened steel Levers and springs – brass / phosphor bronze.

## **Dimensions and Weights**

Lockcase Depth(total) 171.5mm Lockcase Height 114.2mm Lockcase Width 21.0mm

Weight (lock only) 3.0Kg

TOTAL RANGE The lock is not handed, however for use on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation.



## **3R4**7 Description: HEAVY DUTY MORTICED LATCH

## <u>Purpose</u>

The 3R47 was introduced, at the request of the Home Office Prison Department, with the original intention of providing secure locking of cell doors in Crown, Prison and Magistrates Courts, by means of a lock that is essentially different to those used in UK prisons. In practice, however, it is being used increasingly as a prison cell lock.

## **Overview**

The latchbolt provides an overall throw of 20mm.

The lock offers a number of keying and handle configurations to suit a variety of operational requirements and is fitted with an external visual indicator.

**Single Locking Action** -Keyed to pass or to differ. Locking is achieved by inserting the key into the keyhole and rotating fully. This action will both deadlock the latchbolt and lock the handle in position.

Unlocking is achieved by inserting a key into the keyhole and rotating fully. This action will release the latchbolt and unlock the handle. The latchbolt is then withdrawn using the handle.

## **Double locking action**

Servant Key – Operates single locking action only Locking / Unlocking as above.

Note: the Servant key will not operate the double (master) locking action.

Master Key – Operates double locking action.

*Locking* - providing the servant key has been used to operate the first locking action, the master key can be utilised. By inserting the master key into the keyhole and rotating fully over-locking will be achieved. The servant key will be disabled and unauthorised use of the servant key will be prevented.

*Unlocking* is achieved by inserting the master key into the keyhole and rotating fully, this action will remove the over-locking enabling operation of the servant key.

Note: the lock can be configured to operate the double locking action only or if required to operate both single and double locking actions from a single key.

#### **Features**

Carbon steel latchbolt, with carbide anti-cutting rollers and 20mm throw. 7 lever highly durable mechanism. Configurable to three key options – Single Action, Double Action or Master-Keyed Dedicated key profile operates 3R47 range of locks only. Tamper resistant Aluminium fascia plate with status indicator. Security fixings to prevent unauthorised removal.

## Performance

Lock tested to a minimum of 100,000 key operations. Handle operation tested to 300,000 operations. Latch action tested to 150,000 operations. Saw attack 30 minutes. End load 13.5KN. Side Load 13.5KN. Salt Spray 500 hours BS EN 1670:1998.

## Additional features

Optional inner handle available on request. Suitable for internal use only. Available in alternative furniture finishes on request. Gate boxes for steel door applications recommended.

#### **Dimensions and Weights**

Lockcase Depth 171.5mm Lockcase Length 14.3mm Lockcase Width 21.0mm

## Weight (lock only) 3.0Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. For applications requiring cell side furniture a range of options are available on request.

Lock is suitable for use on all door types, however on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

Fully dimensioned customer drawings are available on request to assist with door preparation

## **ATLAS® - Access Control**

The innovative Advanced Technology Lock Access System is CLCS's most technologically advanced locking system.

It is a high security, computer controlled electronic access system for prisons and other security establishments. The system comprises intelligent electronic locks, micro-chipped keys called Tokens, a computer network with a server - which holds a database of the entire system - and client PC's which are used to operate the set up. This unique and revolutionary system provides complete control of locks and keys as well as reporting and audit trails of all activity within the installation.

Each Lock, Token and User of the system has a unique identity allowing ATLAS® to monitor all activity . Each lock is assigned a list of Tokens that are allowed to open it. In addition to this each Token has time periods set that determine when it will work. This means that even a correct Token can't open a lock outside its designated operating time unless these time periods are overridden by the control room staff.

The ATLAS® Tokens are micro-chipped and have a unique identity to the system which allows an individual Token or group of Tokens to be temporarily or permanently deleted from the system. This will instantly stop them from working in any lock. This prevents the security of the establishment being compromised if a Token is lost.

## Why ATLAS®?

## Security

No risk of key compromise Control room monitors progress of token through locks Constant audit trail of token/lock activity Tokens allocated to specific individuals Control room aware of location of token by means of access trail - safer for officers

Ability to instantly disable locks or tokens from the control room, particularly in the case of exceptional incidents

## <u>Strategy</u>

Opportunity to assign tokens to specific locks, facilitating control, allowing efficient movement of specialist staff such as teachers/medical/religious staff within restricted areas via issue of a token

Ability to assign tokens to operate within specific time periods, within specific locks - matched to shift patterns or other requirements

Audit trail reporting assists Senior Management with planning and development.

Flexibility of the system enables establishment greater control and efficiency, implementing specifically required regimes

## Speed

Much faster to move through the establishment Faster response to alarms

Faster response to incidents via the control room, with the capacity to instantly isolate and lock down specific areas

Faster return to normal status following incidents, as areas can be re-enabled to normal routines remotely.

## Conclusion

The ATLAS® system is the product of over ten years in research and development, in conjunction with establishments and has been successfully operating within establishments for many years. The ATLAS® system has been designed to integrate seamlessly into an environment and to provide officers with increased safety and flexibility; to provide control room officers with remote functionality and to provide establishment management with the optimum level of reporting and statistical material, vital for successful operation.



## 4L65P

## Description: MECHANICAL CELL LOCK WITH PRIVACY FACILITY

## <u>Purpose</u>

To provide secure locking of prison cell doors, with facility for 'Privacy' locking under control of inmate.

## **Overview**

The 4L65P can be either surface or flush mounted and is of robust construction based on the Chubb Lock Custodial Services standard cell lock footprint. The main bolt is an un-sprung rectangular deadbolt providing of throw of 32mm.

*Staff Key*. Locking/unlocking is achieved by a full turn of the key allowing the handle to throw or withdraw the bolt. When the key is withdrawn the main bolt can be left in two positions fully thrown (i.e secure when door in frame) or bolt fully withdrawn and locked back.

Withdrawal of the main bolt will automatically withdraw the prisoner's 'privacy' bolt if thrown. *Privacy Key*. The 'Privacy' bolt can be locked/unlocked from outside by a pin tumbler cylinder or from inside by a cylindrical knob.

Note: Locks can be prepared to accept customer's choice of cylinder, details of which need to be supplied prior to ordering.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel. Steel main bolt, with carbide anti-cutting rollers and 32mm throw. External visual locking status indication. Independent 7-lever locking mechanism. Factory restricted key sections. 5 bolt secure fixing. Integral baffle arrangements to resist interference via the keyhole. Privacy facility using secondary mechanism. Internal knob with clutch mechanism to ensure staff always have control of lock Escutcheon designed to give positive key alignment.

#### Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 100,000 bolt operations.

#### Additional features

Range of furniture options available.

Range of fixings including backplates, stud fixings, locking plate and keeps. External handle designed to shear under excessive load to prevent damage to internal lock mechanism.

Interchangeable mechanical inner locking unit to enable re-coding. Can be configured to differ, to pass or under a master key scheme.

#### Materials and finishes

Lock case - carbon steel electro-plated and powder coated exterior. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze. Inside knob Stainless Steel.

#### **Dimensions and Weights**

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 25mm Bolt Depth 45mm Bolt Thickness 22mm

## Weight (lock only) 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



## 3F56

Description: HEAVY DUTY MORTICED MECHANICAL SLAM ACTION CELL LOCK

## <u>Purpose</u>

To provide secure locking of swinging cell doors, under conventional key control where automatic deadlocking is a requirement. The lock can be configured to provide a softer aesthetic apppearance without reducing security.

## **Overview**

The 3F56 is a mortice lock of robust construction based on the Chubb Locks Custodial Services large mortice footprint. The main bolt is automatically extended providing a 32mm throw and deadlocked on closure of the door.

Secure locking is achieved as follows:

*Unlocking* is achieved by a partial turn of the key which lifts the internal blocking mechanism enabling the withdrawal of the main bolt by the handle. The bolt is then retained automatically when fully retracted and door is out of frame.

*Locking* is achieved automatically; on closure of the door the brass snib bolt is depressed on contact with the strike plate mounted to the frame this then releases the main bolt. Deadlocking occurs when the main bolt is fully extended allowing the internal blocking mechanism to engage.

The lock has an external visual indicator mechanism, which enables staff to verify the status of the lock. When the indicator is horizontal the lock is secure any other state is insecure.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel. Steel main bolt, with carbide anti-cutting rollers and 32mm throw. Brass quick acting stud release mechanism. External visual locking status indication. Independent 7-lever locking mechanism. Factory restricted key section. Integral baffle arrangements to resist interference via the keyhole. Escutcheon designed to give positive key alignment.

#### Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 100,000 bolt operations. Stud release mechanism tested to a minimum of 100,000 operations.

#### Additional Features

Range of Anti-Ligature furniture options available. Range of fixings including gatebox, locking plate and keep. Can be keyed to the exisitng 4L range of cell locks. External handle designed to shear under excessive load to prevent damage to internal lock mechanism. Interchangeable mechanical inner locking unit to enable re-coding. Can be configured to differ, to pass or under a master key scheme. Gate boxes for steel door applications recommended.

## Materials and finishes

Lock case - carbon steel electro-plated. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze.

**Dimensions and Weights** 

Bolt Throw 32mm Bolt Depth 45mm Bolt Thickness 22mm

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. For wooden door applications CLCS recommend a minimum door thickness of 54mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



## 3G112 Mk2

Description: HEAVY DUTY MORTICED DEADLOCK – DOUBLE ACTION

#### **Features**

Composite deadbolt, with carbide anti-cutting rollers and 19mm throw. 12 lever highly durable mechanism. Low friction key journals. Lever arrangement designed to provide extended product life. Dedicated key profiles operates Mark 3 group of locks only. Escutcheon designed to give positive key alignment. Security fixings to prevent unauthorised removal.

## Performance

Lock tested to a minimum of 500,000 key operations. Saw attack 12 hours. End load 9KN. Side Load 13.5KN.

## Additional features

Suitable for external and internal use. Range of fixings including reinforcing plates and locking plates. Available in alternative furniture finishes on request. Can be keyed with 3M56 Mark 3 Hook Bolt. Lock interchangeable with 3G317. Gate boxes for steel door applications recommended. Escutcheon trim plates supplied for wooden door variants as standard. Rebate kit available for wooden door applications. Monitored versions available with micro-switch sensing of bolt position. Single sided version available on request.

### Materials and finishes

Lock case - carbon steel electro-plated. Bolt – stainless steel and brass composite. Escutcheons – silica brass. Keys – hardened steel. Levers and springs – brass / phosphor bronze.

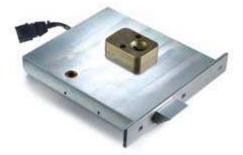
**Dimensions and Weights** 

Lockcase Depth (total) 171.5mm Lockcase Length 114.2mm Lockcase Width 21.0mm

Weight (lock only) 2.1kg

TOTAL RANGE NOTE: CLCS recommend this lock is used in conjunction with a wooden door 54mm thick. Please contact CLCS for guidance if alternative wooden door thicknesses are required.

Fully dimensioned customer drawings are available on request to assist with door preparation.



**3R63** Description: ELECTRO-MECHANICAL MORTICE LOCK

#### Purpose

To provide secure locking of swinging passage / control doors using third party security management systems (SMS) or conventional key control. Designed to enable key and electric operation from both sides of the door. This lock is specifically designed for very high use applications; typically securing perimeter doors and main access routes.

#### **Overview**

The 3R63 is a mortice lock of robust construction based on the Chubb Locks Custodial Services large mortice footprint. The main bolt is a sprung latch providing a throw of 25mm, secure locking is achieved by two independent methods:

**Electrical Mode**. Locking/unlocking by 24 Volt DC controlled sequence from an external source (SMS). Bolt withdrawal by handle, which should also be used when closing the door. **Manual Mode**. Locking/unlocking achieved using conventional (mechanical key). Bolt withdrawal by handle, which should also be used when closing the door.

**Manual Override**. In the event of power or communication failure an override key is used to disable electric locking function.

The lock will operate if slammed to shut, however, CLCS recommend that in normal operation the handle is used to withdraw the bolt when closing.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel block. Steel main bolt, with carbide anti-cutting rollers and 25mm throw. Unique dual solenoid electric locking latch. Independent 8-lever locking mechanism. Lock provides status monitoring of critical functions and tamper. Integral baffle arrangements to resist manipulation and interference via the keyhole. Dedicated key profile operates 3R63 group of locks only.

## Performance

Mechanical locking mechanism tested to a minimum of 300,000 operations. Handle mechanism tested to a minimum of 1,000,000 bolt operations. Solenoid locking unit tested to a minimum of 1,000,000 cycles. Solenoid arrangement designed to operate at +/-10% of 24V DC regulated supply. Nominal operating current 500mA.

## Additional features

Supplied with "T" Handle as standard. Range of fixings including reinforcing plates and locking plates. Gate boxes for steel door applications recommended. Interchangeable mechanical inner locking unit to enable re-coding. This lock is not available under a master key system. Escutcheon trim plates supplied for wooden door variants as standard.

## Materials and finishes

Lock case - carbon steel electro-plated. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Escutcheons – silica brass. Levers and springs – Brass / phosphor Bronze.

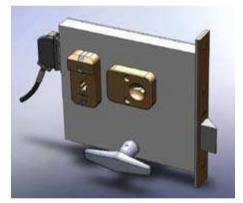
#### **Dimensions and Weights**

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 25mm Bolt Depth 45mm Bolt Thickness 22mm

Weight (lock only) 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# **3A63** Description: ELECTRONIC PASS LOCK

## <u>Purpose</u>

To provide secure locking of swinging passage / control doors controlled by ATLAS® LCMS software or conventional key control. Designed to enable operation from both sides of the door using either an electronic token or conventional key. This lock is specifically designed for very high use applications; typically securing perimeter doors and main access routes.

## **Overview**

The 3A63 is a mortice lock of robust construction based on the Chubb Locks Custodial Services large mortice footprint. The main bolt is a sprung latch providing a throw of 25mm, secure locking is achieved by two independent methods:

#### Electronic Mode

Locking/unlocking by controlled sequence from ATLAS® LCMS system after mutual authentication of token at the lock or via control room input. Bolt withdrawl by handle, which should also be used when closing the door.

#### Manual Mode

Locking/unlocking achieved using conventional (mechanical) key. Bolt withdrawl by handle, which should also be used when closing the door.

#### Manual Override

In the event of power or communication failure an override key is used to lift the electronic locking unit.

The lock will operate if slammed to shut, however CLCS recommend that in normal operation the handle is used to withdraw the bolt when closing.

3A63 lock is an intelligent lock and has a built in lock PCB with memory. The lock does not rely on continuous communication with the main server to operate as it will store the latest set of access permissions issued by the server.

#### **Features**

Solid Case Technology; Lock case machined from single piece carbon steel block.

Steel main bolt, with carbide anti-cutting rollers and 25mm throw.

Unique dual solenoid electric locking latch.

Independent 8-lever locking mechanism.

Lock provides status monitoring of critical functions and tamper.

Integral baffle arrangements to resist manipulation and interference via the keyhole.

Dedicated key profile operates 3R63 group of locks only.

#### Performance

Mechanical locking mechanism tested to a minimum of 300,000 operations.

Handle mechanism tested to a minimum of 1,000,000 bolt operations

Solenoid locking unit tested to a minimum of 1,000,000 cycles.

Solenoid arrangement designed to operate at +/-10% of 24V DC regulated supply.

Nominal operating current 500mA.

Additional Features

Supplied with 'T' Handle as standard.

Range of fixings including reinforcing plates and locking plates.

Gate boxes for steel door applications recommended.

Interchangeable mechanical inner locking unit to enable re-coding.

This lock is not available under a master key system.

Escutcheon trim plates supplied for wooden door variants as standard.

Materials and Finishes

Lock case - carbon steel electro-plated.

Main bolt - carbon steel electro-plated.

Main bolt follower high tensile brass.

Keys - Hardened Steel

Escutcheons - silica brass

Levers and springs - Brass / phosphor Bronze.

**Dimensions and weights** 

Case Height - 206mm Case Length - 229mm Case Thickness - 29mm Bolt Throw - 25mm Bolt Depth - 45mm Bolt Thickness - 22mm

Weight (lock only) - 12.4kg

Total Range

The lock is available in left or right hand variants and can be fitted to steel or wooden doors. **NOTE:** Supplied as standard to suit maximum door thickness of 54mm. For door thickness above 54mm please contact CLCS for options available.

Fully dimensioned customer drawings are available on request to assist with door preparation.



# ATLAS® Compact System Overview

Combined server, client and hub in a single, wall mounted cabinet supporting up to TWENTY locks. The system can be expanded, where necessary, in modules of a further twenty locks.

For larger establishments CLCS would strongly advocate the installation of the full ATLAS® system, which is more suitable for such installations.

## **Features and Benefits**

## Security

High strength Home Office Class I robust locks on all ATLAS® locked doors

Full UPS backup providing minimum three hours operation in the event of power failure

Audit trail of events at all ATLAS® doors

Time drive from GPS clock (can be integrated with other security systems)

Key override enabling full control of site if power and communications are interrupted long term

All locks can be mechanically locked to disable unlocking by electronic means

Automatic re-locking of doors when closed

Visual locking status by LED at each door

Interlocking of perimeter doors

Locking parameters can be programmed and established to suit a specific site or changing needs

Access permissions can be configured by user or location

Keys can be deleted if lost - no security compromise

## Staff Benefits

Cell locks can be operated using one hand

Anti-shut in function to prevent accidentally lock -in

Will not lock out of frame unless anti-shut is selected.

Anti-ligature handle and escutcheon design.

Ergonomically designed handle for light and easy use - attractive yet functional aesthetic design.

## **Locking Functionality**

Airlocks: the 3A63 lock is a Home Office Class I electronic lock which provides a high level of security and attack resistance when compared to the widely used electric strikes. In common with all CLCS electric locks, electric override and mechanical keys are supplied to provide a further layer of redundancy.

Cell Locks: the new 4A79 lock is based on the existing slam action Home Office Class I cell lock with similar functionality and added intelligence. Based on the Chubb Locks Custodial Services standard cell lock footprint, its basic operation is familiar to custody staff throughout the UK.

The main functional difference is that the lock has built in intelligence to verify access permission. Although the 4A79 is an electronic lock it is designed to be equally robust as the other range of 4L family cell locks produced by Chubb for over 40 years. Features CLCS pioneering solid case technology to create a highly accurate lock case machined from a solid block of steel.

The lock is operated using an electronic token which enables the custody staff to unlock and open the door using one hand. Custody staff recognise this as an important improvement which will help increase operational efficiency within a busy custody suite.

From a safety perspective, the lock cannot be deadlocked "out of frame" this is especially important when custody staff are dealing with an uncooperative detainee. If the lock is accidentally 'fired' before the door is secured, the bolt can be quickly withdrawn without needing to use a key.

The anti-shut in feature is designed to prevent accidentally locking of staff in the cell. This feature can be programmed through the system or invoked using the electronic token.

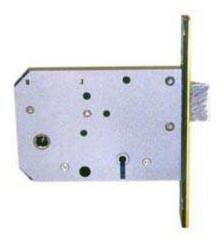
## Integration

As with all ATLAS® systems, integration with third party Security Management Systems (SMS) or Building Management Systems (BMS) can be readily achieved.



Saxony Builds Preventive Detention Facility In Bautzen Title:

Caption: BAUTZEN, GERMANY - DECEMBER 14: A prison officer locks a security door to a corridor at the JVA Bautzen prison on December 14, 2012 in Bautzen, Germany. One of the detention houses at the prison has been marked for transformation into a preventive detention facility with construction due for completion in 2013. A new law passed this year clarifies the ability of the state to transfer convicted criminals who have served their sentences yet are still deemed as potentially dangerous to society to preventive detention facilities. (Photo by Joern Haufe/Getty Images)



## **3R4**7

## Description: HEAVY DUTY MORTICED LATCH

## <u>Purpose</u>

The 3R47 was introduced, at the request of the Home Office Prison Department, with the original intention of providing secure locking of cell doors in Crown, Prison and Magistrates Courts, by means of a lock that is essentially different to those used in UK prisons. In practice, however, it is being used increasingly as a prison cell lock.

## **Overview**

The latchbolt provides an overall throw of 20mm.

The lock offers a number of keying and handle configurations to suit a variety of operational requirements and is fitted with an external visual indicator.

**Single Locking Action** -Keyed to pass or to differ. Locking is achieved by inserting the key into the keyhole and rotating fully. This action will both deadlock the latchbolt and lock the handle in position.

Unlocking is achieved by inserting a key into the keyhole and rotating fully. This action will release the latchbolt and unlock the handle.

The latchbolt is then withdrawn using the handle.

## **Double locking action**

Servant Key – Operates single locking action only Locking / Unlocking as above.

Note: the Servant key will not operate the double (master) locking action.

*Master Key* – Operates double locking action.

*Locking* - providing the servant key has been used to operate the first locking action, the master key can be utilised. By inserting the master

key into the keyhole and rotating fully over-locking will be achieved. The servant key will be disabled and unauthorised use of the servant key will be prevented.

*Unlocking* is achieved by inserting the master key into the keyhole and rotating fully, this action will remove the over-locking enabling operation of the servant key.

Note: the lock can be configured to operate the double locking action only or if required to operate both single and double locking actions from a single key.

#### **Features**

Carbon steel latchbolt, with carbide anti-cutting rollers and 20mm throw. 7 lever highly durable mechanism. Configurable to three key options – Single Action, Double Action or Master-Keyed Dedicated key profile operates 3R47 range of locks only. Tamper resistant Aluminium fascia plate with status indicator. Security fixings to prevent unauthorised removal.

#### Performance

Lock tested to a minimum of 100,000 key operations. Handle operation tested to 300,000 operations. Latch action tested to 150,000 operations. Saw attack 30 minutes. End load 13.5KN. Side Load 13.5KN. Salt Spray 500 hours BS EN 1670:1998.

## Additional features

Optional inner handle available on request. Suitable for internal use only. Available in alternative furniture finishes on request. Gate boxes for steel door applications recommended.

#### **Dimensions and Weights**

Lockcase Depth 171.5mm Lockcase Length 14.3mm Lockcase Width 21.0mm

Weight (lock only) 3.0Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. For applications requiring cell side furniture a range of options are available on request.

Lock is suitable for use on all door types, however on steel doors the short forend version should be ordered and for wooden doors the long forend version is recommended.

Fully dimensioned customer drawings are available on request to assist with door preparation.



## 3F11/3F12

#### Description: 24V DC MOTORISED MORTICE LOCK

3F11 - Keyed one side

3F12 - Keyed both sides

<u>Purpose</u>

For maximum security swinging doors or gates that can be unlocked from a remote location or by means of mechanical key operation. Mortice mounted.

## **Overview**

## Unlocking

*Electric Operation* - Remote switch activates the locking solenoid and the locking deadbolt is withdrawn by the motor. When fully withdrawn the locking deadbolt is latched in position ready for the relocking operation.

*Mechanical Operation* - Locking mechanism is operated by a mechanical key that lifts the locking solenoid and withdraws the locking deadbolt. When fully withdrawn the locking deadbolt is latched in position ready for the relocking operation.

Locking

The lock automatically deadlocks when the door/gate is closed.

#### **Features**

Mechanical operation can always be used in the event of a power failure, regardless of the starting position of the locking deadbolt.

High torque motor and gear combination.

Right hand and left hand versions available.

Locking deadbolt and solenoid bolt position monitoring and indication.

5-lever mechanical lock.

Internal baffle plates to prevent blocking or manipulation of the locking mechanism. Escutcheon mounted lock status LED.

## Technical Data

24 Volt DC motor. 32mm throw square ended locking deadbolt. Locking deadbolt size - 22.2mm x 44.45mm Minimum door thickness required - 54mm Approximate lock case sizes (not including forend) 210mm (H) x 290mm (L) x 30mm (TK)



# **4L55/56** Description: MECHANICAL SLAM ACTION CELL LOCK

## <u>Purpose</u>

To provide secure locking of swinging cell doors, under conventional key control where automatic deadlocking is a requirement.

## <u>Overview</u>

The lock can be either flush (4L55) or surface (4L56) mounted and is of robust construction based on the Chubb Lock Custodial Services standard cell lock footprint. The main bolt is automatically extended providing a throw of 32mm and deadlocked on closure of door.

Secure locking is achieved as follows:

Unlocking is achieved by a partial turn of the key which lifts the internal blocking mechanism enabling the withdrawal of the main bolt by the handle. The bolt is then retained automatically when fully retracted and door is out of frame.

Locking is achieved automatically; on closure of the door the brass snib bolt is depressed on contact with the strike plate mounted to the frame this then releases the main bolt. Deadlocking occurs when the main bolt is fully extended allowing the internal blocking mechanism to engage.

The lock has an external visual indicator mechanism, which enables staff to verify the status of the lock. When the indicator is horizontal the lock is secure any other state is insecure.

## **Features**

Solid Case Technology; Lock case machined from single piece carbon steel. Steel main bolt, with carbide and anti-cutting rollers and 32mm throw. Brass quick acting stud release mechanism. External visual locking status indication. Independent 7-lever locking mechanism. Factory restricted key section. 5 bolt secure fixing. Integral baffle arrangements to resist interference via the keyhole. Escutcheon designed to give positive key alignment.

## Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 100,000 bolt operations. Stud release mechanism tested to a minimum of 100,000 operations. Saw attack 12 hours End load 25 KN.

## Additional Features

Range of Anti-Ligature furniture options available. Range of fixings including backplates, stud fixings, locking plate and keeps. Available in alternative paint / furniture finishes on request. External handle designed to shear under excessive load to prevent damage to internal lock mechanism. Interchangeable mechanical inner locking unit to enable re-coding. <u>Materials and finishes</u>

Lock case - carbon steel electro-plated and powder coated exterior. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze.

**Dimensions and Weights** 

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 32mm Bolt Depth 45mm Bolt Thickness 22mm

Weight (lock only) 4L55 10.5Kg Weight (lock only) 4L56 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.



**4L65** Description: MECHANICAL CELL LOCK

## <u>Purpose</u>

To provide secure locking of swinging cell doors, under conventional key control where a lock back facility is a requirement

## **Overview**

The 4L65 can be either surface or flush mounted and is of robust construction based on the Chubb Lock Custodial Services standard cell lock footprint. The main bolt is an un-sprung rectangular deadbolt providing of throw of 32mm.

Secure locking is achieved as follows:

Staff Key. Locking/unlocking is achieved by a full turn of the key allowing the handle to throw or withdraw the bolt. When the key is withdrawn the main bolt can be left in two positions fully thrown (i.e secure when door in frame) or bolt fully withdrawn and locked back.

## Features

Solid Case Technology; Lock case machined from single piece carbon steel. Steel main bolt, with carbide anti-cutting rollers, and 32mm throw. External visual locking status indication. Independent 7-lever locking mechanism. Factory restricted key section. 5 bolt secure fixing. Integral baffle arrangements to resist interference via the keyhole. Escutcheon designed to give positive key alignment.

#### Performance

Mechanical locking mechanism tested to a minimum of 100,000 operations. Handle mechanism tested to a minimum of 100,000 bolt operations.

## Additional features

Range of furniture options available.

Range of fixings including backplates, stud fixings, locking plate and keeps. External handle designed to shear under excessive load to prevent damage to internal lock mechanism.

Interchangeable mechanical inner locking unit to enable re-coding. Can be configured to differ, to pass or under a master key scheme.

#### Materials and finishes

Lock case - carbon steel electro-plated and powder coated exterior. Main bolt - carbon steel electro-plated. Main bolt follower high tensile brass. Keys – Hardened Steel. Levers and springs – Brass / phosphor Bronze.

#### **Dimensions and Weights**

Case Height 286mm Case Length 267mm Case Thickness 29mm Bolt Throw 25mm Bolt Depth 45mm Bolt Thickness 22mm Weight (lock only) 12.4Kg

TOTAL RANGE The lock is available in left or right hand variants for opening in or opening out doors and can be fitted to steel or wooden doors. A range of backplate stud lengths is available to suit door thicknesses from 25 to 70mm.

Fully dimensioned customer drawings are available on request to assist with door preparation.

## About ASSA ABLOY

ASSA ABLOY Ltd is the UK's largest lock group, providing security solutions across a range of markets

ASSA ABLOY in the UK includes brands such as Yale, UNION, Mul-T-Lock, ASSA and Abloy and offers a wide range of product and service solutions across residential, commercial and high security markets.

To find out more about ASSA ABLOY in the UK please click here.

http://deviating.net/lockpicking/resources.html