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# Escape Hardware

for Specifiers, Architectural Ironmongers & Door Hardware Specialists



Includes an update on  
Electrically Controlled  
Panic Exit Systems  
(prEN13633 & prEN13637)



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## Important note

All drawings shown in this brochure are for illustrative purposes only. Warranty information, installation instructions and templates are available to download at [www.relcross.co.uk](http://www.relcross.co.uk)

# Introduction to the range

escapehardware

## Solutions

UK Building Regulations, through their Approved Documents, demand minimum performance requirements from door sets and general door hardware including escape hardware. Consequently, Axis, along with our partners at Von Duprin Inc., has developed and introduced innovative solutions with many attractive design features - providing a range of escape hardware that meets or surpasses the requirements and objectives of specifiers and end users alike.

## Escape Hardware

Axis, always closely associated with the Von Duprin brand of escape hardware, offers a selection from their extensive range encompassing a wide variety of locking arrangements to suit all single action escape doors - with accessories allowing the inclusion of mechanical and electrical features controlling all aspects of both access and egress at the door set.

The range comprises three series of devices functioning at various levels and addressing varying requirements dictated by the door's function, location, design & construction and frequency of use.

- Series **REL.22** exit devices ... the economical alternative, incorporating modern touch bar styling for all types of doors. Available in 'rim' latch and 'surface' vertical rod styles



- Series **REL.98/99** exit devices ... Our flagship device incorporating modern touch bar styling for heavy traffic applications. Available in 'rim' latch and 'surface' vertical rod styles



- Series **REL.33A/35A** exit devices ... The 'narrow stile' device, incorporating modern touch bar styling for heavy traffic applications. Available in 'rim' latch and 'surface' vertical rod styles



Each series of product type has its own section within the brochure complete with all necessary certification, dimensional and application details.

## Compatibility from a Complete Package

Hardware products selected for a particular door are very often selected from different sources. This is a perfectly acceptable practice provided it is remembered that, where any two items have to work together, they must be compatible. If they are not, the system will be very likely to fail and the problem of having to establish supplier responsibility will be immense. Axis offers a complete range of compatible hardware items from which a properly matched successful door control package can be selected with total confidence.

## Performance, Strength & Versatility

The Axis range of escape hardware materials has been chosen not just because it will outlast and outperform anything available on the market but also because it can be used successfully with other building management systems.

## The Changing Market Quality & Reliability

The UK market for escape hardware changed almost overnight when Axis introduced the Von Duprin range of escape hardware in the early 1980s. Specifiers found they could select an escape device that not only met minimum safety standards but also:

- withstood very heavy traffic over long periods
- was aesthetically pleasing
- provided an exceptionally high level of security
- was totally reliable

These qualities apply equally to the expanded range of Von Duprin escape hardware & associated products available from Axis in the 21st century.

We build our products to meet the needs of both life safety and security. Our policy has been always to maintain a quality level second to none worldwide. Our escape hardware devices are installed in some of the worst and most heavily vandalized council estates in the UK's inner cities and continue to perform repeatedly - sometimes up to several hundred times a day.

## Don't touch that exit device!

When considering modifying an installed panic exit device first be sure you understand why it is there and what effect any changes you make will have on certification compliance, life safety and security.

An installed exit device often becomes a target when a building owner wants to modify a door's function to provide additional perimeter security. For example, a business may be losing stock (through shoplifting or general theft) or employee work time via unauthorized use of an escape door.

A potential danger arises when a locksmith or security installer is called in to add additional locks and possibly even to remove the existing exit device. In many cases the result of the modification is a violation of the life safety requirements outlined in Approved Document to Part 'M' of the Building Regulations for England & Wales (Revised March 2005).

The primary purpose of an exit device is to protect life safety by providing free egress to all occupants of a building or room. Axis devices are designed for easy use, even in the dark. The independent testing laboratories that test them require that they be relatively easy to operate, so they can be used by small children and physically impaired adults.

## Technical & Specification Services

Axis offers a free technical specification and advisory service to assist you in the correct choice of escape hardware equipment. We keep substantial stocks of most products. Our team of trained specifiers will discuss problems, offer guidance, make recommendations and, most importantly, help on site if difficulties should occur.

## Product Portfolio

Axis has developed a range of solutions to rival any currently available on the UK market. We employ professional technical consultants capable of supporting some of the most sophisticated (and often simple) solutions. Our range of escape hardware is summarized in this brochure.

Tel: 01604 212500  
Fax 01604 212495

### Certification, Legislation & the Door Hardware Specialist

In recent years legislation concerning the design of the built environment, with particular reference to fire & life safety and disabled access, has placed the onus for correct specification squarely on the shoulders of the hardware specialist. Axis Limited welcomes legislation designed to promote safety and ease of access and has developed a range of solutions, with full certification, to satisfy the requirements of *the Equality Act and Approved Document M (ADM04)*.

The Disability Discrimination Act 1995 was replaced by the Equality Act on 1 October 2010. The new Equality Act consolidates 116 different pieces of equality legislation, 35 acts of parliament, 52 statutory instruments, numerous Codes of Practice and 16 EC Directives and Recommendations including the Disability Discrimination Act 1995.

The introduction of the Equality Act, in reality, changes very little for specifiers with regards to doors and building access which still falls under the auspices of BS8300 and Approved Document M. In 2009 a revised version of the Code of Practice for BS8300 was published offering guidance on specifying architectural ironmongery and doors.

#### Current relevant legislation is outlined in the following:

*The Equality Act 2010.*

*The Code of Practice BS 8300:2001 "Design of buildings and their approaches to meet the needs of disabled people" (Revised 2005).*

*BS EN 1125:1997 (Incorporating Amendment No. 1 and Corrigendum No. 1) "Building hardware - Panic exit devices operated by a horizontal bar— Requirements and test methods".*

*BS EN 179:1998 "Building hardware - Emergency exit devices operated by a lever handle or push pad - Requirements and test methods".*

*Approved Document to Part 'M' of the Building Regulations for England & Wales (Revised March 2005).*

#### Who are the issuing bodies?

*Equality Act*— an act of parliament.

*BS 8300:2001*— a code of practice written by the British Standards Institution.

*BS EN 1125:1997*— an EC Directive adopted by BSI.

*BS EN 179:1998*— an EC Directive adopted by BSI.

*Approved Doc. M*— issued as part of the building regulations by the government department - Communities & Local Government or CLG.

#### Negotiating the Minefield

This brochure is aimed at guiding the user towards a correct specification of escape hardware in the safe knowledge that the equipment listed is, where appropriate, previously tested and is certified fit for purpose. All the products included herein are marked accordingly and the limitations for their use are clearly explained.

It is not our intention that this brochure be used as a design guide to the Equality Act, Approved Doc M or any other government sponsored publication. Where specific detailed guidance is required then we shall be pleased to advise or, in situations where we feel it is necessary, refer you to the appropriate professional body.



### Fire Certification - Fire & Smoke Control Doors

According to BS EN 1125 & BS EN 179 (See opposite) two grades of fire behaviour are identified for exit devices manufactured to these standards:

Grade 0: Not suitable for use on fire/smoke door assemblies.

Grade 1: Suitable for use on fire/smoke door assemblies, subject to satisfactory assessment of the contribution of the panic/exit device to the fire resistance of specified fire/smoke assemblies.

Such assessment is outside the scope of both BS EN 1125 & BS EN 179 (see EN 1634-1:2000).

EN 1634-1:2000 Fire resistance tests for door and shutter assemblies. Fire doors and shutters. Adopted by BS in April 2000.

### CE Certification



Where the supply of door hardware to fire resisting, smoke control and escape doors is concerned, compliance with the *Construction Products Directive 1989 and Construction Products Regulations 1991 is mandatory*. The recognizable way to demonstrate compliance is to include CE marked hardware where relevant EC directives exist.

**Under European and UK law, all Escape Hardware must comply with the Construction Products Regulations Act. Products bearing the CE mark show that they satisfy the requirements of the Act, and their performance has been ratified by the appointed authorities.**

Certified Axis products are marked clearly in this brochure with the recognizable CE logo.

### Electrically Controlled Panic Exit Systems - An Update

The proposed new European standards **prEN13633** and **prEN13637** are currently in draft form. The full versions of these European standards (subject to approval of the formal vote) will be available late 2009 with CE marking permissible during 2010.

Should you have any specific questions relating to the contents of the draft standards and the implications for the products shown in this brochure please call the Sales Office.

### Other Publications & Guidelines

Axis Limited recommends visiting the *Centre for Accessible Environments'* website at [www.cae.org.uk](http://www.cae.org.uk).

CAE's popular and leading design guides offer practical and valuable guidance for access auditors and those seeking information on how to meet their duties under the Disability Discrimination Act 1995 (the Equality Act wef 1st October 2010).

A series of design guides has been published jointly with RIBA Publishing; these include *Designing for Accessibility* (the best selling design guide based on *BS 8300:2001* and the 2004 edition of the *Approved Document M*), the *Access Audit Handbook* (a multimedia planning tool for auditing the accessibility of buildings and services) and the *Specifiers' Handbooks for Inclusive Design* series (prepared to assist designers, specifiers, building owners & occupiers, building managers and facilities managers to understand key design aspects and characteristics of specific architectural elements).

## Responsible Specification & Conformity

### Applying the Relevant Certification

Every new build or retrofitted item of escape hardware must comply with European safety legislation.

There are two standards relating to exit devices:

#### ■ BS EN 1125 - Panic Exit Devices

Doors at exits in public buildings, places of entertainment, shops & stores etc. should be fitted with panic devices operated by a horizontal bar. The emphasis for products installed in this type of situation is primarily on safety rather than security



#### ■ BS EN 179 - Emergency Exit Devices

This standard covers devices used at doors where users are familiar with the emergency exit and the operation of its hardware. Familiarity means that a panic situation is unlikely to develop. Therefore, lever or paddle handle devices may be used



#### To summarize -

When specifying hardware for escape doors in public buildings (such as schools, hospitals etc.) and larger places of employment, the recommendations detailed in the standard BS EN 1125 should be applied. A panic application provides (for the public) -

- 'Safe and effective escape through the doorway with minimum effort and without prior knowledge of operation'

...via an operating device covering the width of the door, e.g. a cross bar or touch bar device.

When specifying for smaller buildings, where users can be instructed specifically on the operation of door hardware at escape doors, the recommendations detailed in the standard BS EN 179 should be applied. An emergency application provides (for those familiar with the escape drill) -

- 'Safe and effective escape through the doorway with minimum effort and with prior knowledge of operation'

...via an operating device requiring only a single point of operation, e.g. paddle handles or levers.

### General Recommendations

Exit devices save lives! Specifying hardware for doors on escape routes and final escape doors is one of the most important aspects of any Als schedule. A full understanding of the client's desire for safety and security is a basic requirement and must be established at the outset.

This catalogue details, in the main, those devices available from Axis that fall into the category: BS EN 1125 - Panic Exit Devices.

If there is any doubt about the conditions relating to building occupancy, it is recommended that devices covered by BS EN 1125 are specified.

- Devices for use on pairs of doors should have been specifically tested and approved for that purpose
- Low projection exit devices should be used where there is restricted width for escape, or where the exit doors cannot open beyond 90°
- Care should be taken that hinges and any seals are correctly fitted so that the escape doors are able to open freely once the exit device is operated
- A regular programme of maintenance should be undertaken to ensure that the correct operational performance is maintained for the life of the building
- No 'additional' security devices should ever be fitted to escape route doors unless specifically approved by Fire and Building Control Officers

### Additional Recommendations for Devices at Fire Compartmentation Doors

The specified exit device (and any accessories) should have demonstrated its ability to be suitable for the intended purpose, by inclusion in satisfactory fire tests to BS476:22 or BS EN 1634-1, on the type of timber or steel door set and configuration in which it is proposed to be used. This evidence should be provided by an approved third party certification or testing body.

- Devices for use on pairs of doors should have been specifically fire tested on an appropriate double door set assembly and approved for that purpose
- The exit device should not include any dogging mechanism unless its use is proven by fire test evidence on self-closing unlatched fire doors

All escape hardware detailed in this catalogue has been type-tested successfully for conformity to all of the requirements of BS EN 1125, including the additional requirement for fire door use. Regular audit testing is undertaken. Test Reports and Certificates are available upon request.

### The Effect of Building and Door Design on Correct Specification

#### General Rules

Building use, traffic profiles and escape door locations will affect safety and security requirements and therefore lock selection.

All escape hardware shown in this brochure is designed for conventional single action outward opening doors. For both single door and double door applications, rim type exit devices are usual and are easy to install and maintain. Rim devices allow straight-forward adjustment should doors warp or frames move as the building settles.

#### Safety or Security

Escape doors are usually sited away from public areas and, if not properly secured, can be vulnerable to attack from unauthorized users. Combining the need for security with the overriding necessity to offer escape can be a headache for building managers, particularly when the exit is remote and the device does not relock reliably.



Our devices offer a combination of high security against external attack, easy escape and reliable automatic relocking - every time.

#### Perimeter Escape Doors

Perimeter escape doors, in just about all applications, demand a certain minimum level of security from the chosen exit device. The simplest, most secure exit device application is an exit-only (EO) door, such as at the rear of a retail store. This type of exit device has no external trim or provision for keyed override. The obvious disadvantage of this type of specification is that authorized users cannot gain access from the outside.

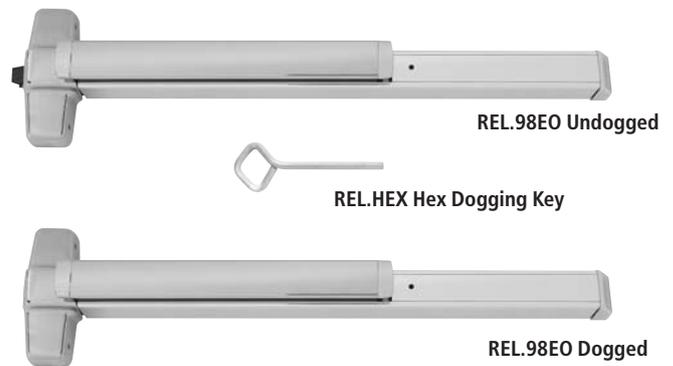
A suitable alternative application may be a 'night latch' function, providing access for those authorized users in possession of a key. Where pairs of escape doors exist it is usual for access to be provided for one leaf only

Where access control is desirable for a larger number of users then a little more sophistication is called for. The **EL Electric Latch Retraction** feature (common to both the **REL.33A/35A** and the **REL.98/99** Series) provides controlled access through escape doors via a remote unlocking feature. **EL** devices are 'free from fixings' hence, safe egress is always available (See page 22).

#### Entrance/Lobby Doors & Fire Compartmentation Doors

Typically, doors in entrance/lobby situations are not fire compartmentation doors and dogging (See page 24) is permitted. Once the first authorized user has accessed the area, all the devices may be 'dogged' mechanically if desired.

In certain entrance/lobby situations, where security is a high priority, electrified latch retraction could be incorporated. In this case doors can be 'dogged' electrically at predetermined times (using a zonal timer) and relocked remotely in the same manner. Thus maintaining security at critical times whilst ensuring all occupants have immediate and safe egress.



In some situations it may be desirable to include exit devices on internal fire compartmentation doors. Certification issues may arise and careful consideration must be given to the direction of escape, the provision of 'dogging' facilities, external trim and electrified options such as the **EL 'Electric Latch Retraction'** feature (See page 22) or the **E 'Electrified Trim'** feature. Consult the sales office.

#### Escape Hardware & Door Closers

Escape should be fast and unhindered. The provision of conventional hydraulically controlled door closers on escape doors may be desirable from a door control and security point of view. However, careful consideration should be given to the negative effect the inclusion of this type of hardware may have at perimeter doors.



Unavoidably, additional effort is required to open doors against resistance from a spring. Where access control is not a consideration Axis recommends that a suitable door holder (rather than a door closer) is specified (see Door Controls Brochure - pages 34-35 & 44-45).

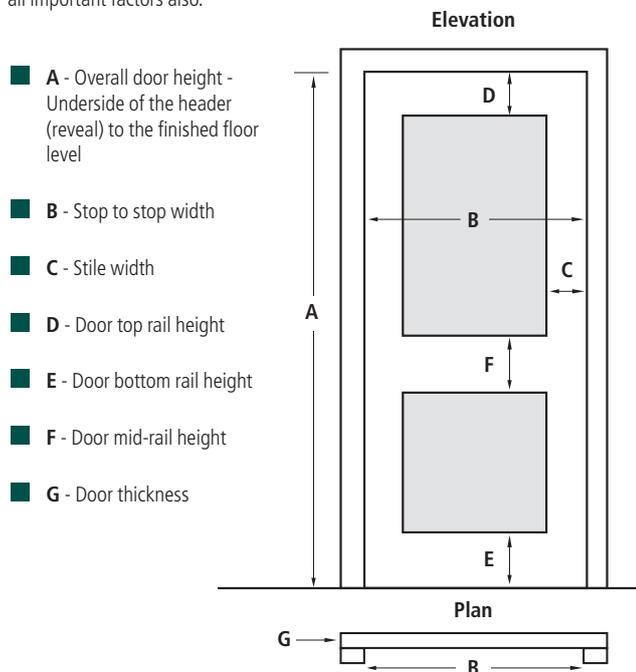
## The Effect of Building and Door Design on Correct Specification

### Specifying & Installing Exit Devices REL.22, REL.33A/35A & REL.98/99 Series Templates & Layout

When specifying rim exit devices it is necessary to take note of the overall sail area of the door leaf (on the inside face or push side) when the door is closed. In other words the dimension from the underside of the header (the reveal) to the finished floor level\* and the stop to stop dimension in the lateral plain.

\* Required for surface mounted vertical rod devices only

Available stile widths, top & bottom rail dimensions and the door thickness are all important factors also.



### Specifying to Suit the Stop to Stop Width

All standard size exit devices (with hex key dogging) suit doors to 914mm wide (i.e. the stop to stop width). They can be cut down to suit doors as narrow as 640mm for REL.22 series, 640mm for REL.33A/35A series and 640mm for REL.98/99 series when used with the REL.299 roller strike. These minimum dimensions must be revised to 762mm for EL devices.

Minimum dimensions may be revised when 'dogging' device options are not included. For narrow stop to stop applications consult the sales office for definitive guidance.

Optional (larger) devices suit doors with stop to stop widths to 1220mm and can be cut down to suit doors as narrow as 914mm.

### Specifying to Suit the Door Height

All standard surface mounted vertical rod devices suit doors to 2134mm with the possibility of extending this height to 3048mm using one extension rod at 914mm. Shorter extension rods @ 305mm are available. All standard top and bottom rods and extension rods may be cut to suit specific door heights.

Extended one-piece top rods are available for REL.33A/35A and REL.98/99 series surface mounted vertical rod devices accommodating doors to 2438mm.

### Specifying to Suit the Stile Width



REL.22 Series Rim Device (Standard installations) -  
Minimum stile width 89mm



REL.98/99 Series Rim Device (Standard installations) -  
Minimum stile width 89mm



REL.33A/35A Series Rim Device (Standard installations) -  
Minimum stile width 44mm

Minimum stile width dimensions refer to the visible stile width once the door is closed. Stop widths and strike locations affect the available stile width. If in doubt consult the Sales Office.

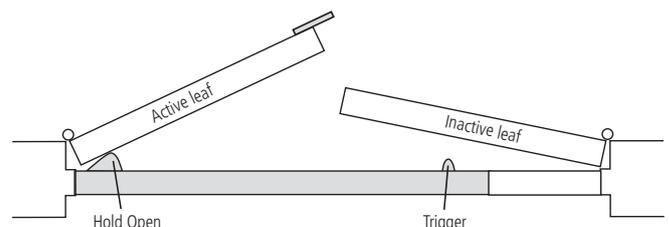
### Specifying to Suit the Door Arrangement

On single door applications Axis provides single point rim latch devices, double point surface mounted vertical rod devices and three point rim latch/vertical rod combination devices. The greater the number of locking points then the greater the level of security.

Pairs of doors will require at least one double point surface mounted vertical rod device. The combination of devices used is dictated by the design of the meeting stiles.

Pairs of doors with plain meeting stiles accommodate two vertical rod devices. Rebated pairs of doors and doors with an overlapping astragal (or lock protector) will accommodate a surface mounted vertical rod device on the inactive or fixed (first closing) leaf with a rim latch device on the active leaf.

When pairs of doors have a rebated design or an overlapping astragal it is imperative that only one leaf (i.e. the inactive or fixed (first closing)) leaf utilizes a surface mounted vertical rod device, since both leaves must operate freely and independently. Use of the exit device on the inactive leaf must effect movement of that door leaf past the astragal or rebate on the active leaf (as illustrated).



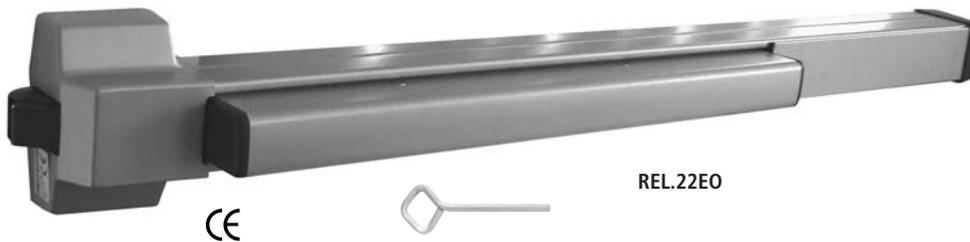
On this application, particularly in some Access Control situations, a coordinator is recommended to hold the active door open until the inactive door closes (see Door Controls Brochure - pages 36 & 37).

### REL.22 Rim Exit Device

#### Characteristics

Specifically designed for use in areas where frequent abusive treatment can be expected. The **REL.22 Series** is constructed from heavy gauge rolled steel section with the proven heavy duty touch bar mechanism that has been used so successfully in all architectural grade Von Duprin touch bar devices.

**UK Fire Certification** in accordance with EN 1634-1:2000 (timber)  
WFR No. C132276 120Mins BS EN 1125:1997



REL.22EO

#### Standard Features & Benefits

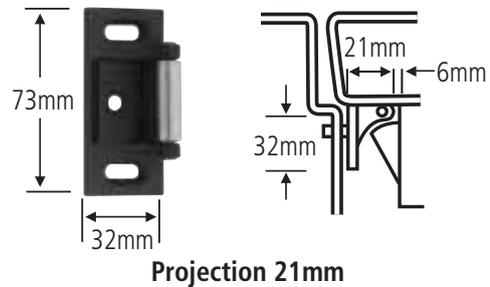
- **Device Functions** - Ships ready for all functions; EO, DT, NL, TP, & L (See page 9)
- **Universal** - Non-handed, suits LH & RH doors
- **Device Lengths** - Standard device suits doors to 914mm, optional device suits doors to 1220mm
- **Finishes** - SP28 (689) Sprayed Silver, SP313 (695) Sprayed Dark Bronze
- **Strikes** - Ships with standard **REL.299** roller strike, optional strikes are available to suit alternative frame details (consult the sales office for details)
- **Dogging Feature** - Hex key dogging keeps the latch bolt held back for free swinging operation, **LD** Less Dogging is available to special order
- **Electric Options\*** -
  - REL.LX Latchbolt Monitor Switch
  - REL.RX Touch Bar Monitor Switch
  - REL.RX2 Double Touch Bar Monitor Switch
  - REL.ALK Alarm Exit Kit
  - \*(See page 23)
- **Fasteners** - Includes fixings for both metal and timber doors 19mm < 57mm thick with sex bolts available to special order - **REL.425** for bolt through fixings (See opposite page)
- **Latch Bolt** - Easy action friction free deadlocking latches cannot be depressed from the outside - 19mm throw

#### Recommendations for Installing & Fixing

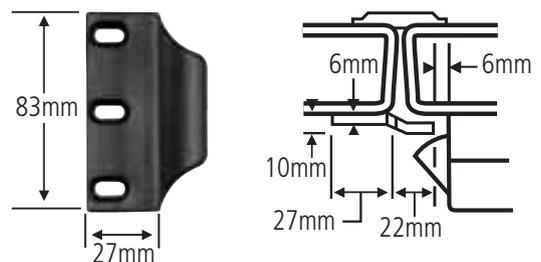
In accordance with **BS EN 1125:1997** Annexe A (informative) the device should be installed with the touch bar normally at a height between 900mm and 1100mm from the finished floor level when the door is in the secure position. Where it is known that the majority of the occupants of the premises will be young children, it is acceptable to reduce the fixing height accordingly.

#### Strikes for REL.22 Rim Exit Devices

**REL.299** Standard Roller Strike with 21mm projection, used with conventional frames where the door stile width >121mm permits the necessary back set.



**REL.1609** Optional Strike used on doors with flush frames or fixed to the inactive (or second closing) leaf of a rebated pair of doors.



### REL.22 Rim Exit Device Standard Trim

	Exit Only	Dummy Trim Pull when Device is Dogged	Night Latch Key Retracts Latch Bolt	Night Latch Key Retracts Latch Bolt Optional Pull Required
				
Product Description	REL.22EO	REL.22DT	REL.22NL	REL.22NL-OP
Trim Description	-	REL.210DT	REL.210NL	REL.110NL
Escutcheon Plate Size	-	137mm x 121mm x 2mm	137mm x 121mm x 2mm	-
Projection	-	42mm	42mm	-
Cylinder Type	-	-	Rim - REL.20-022	Rim - REL.20-022
Optional REL.425 Sex Bolt Qty for Device	6	2	2	6

	Thumb Piece Key Locks & Unlocks Trim	Lever Key Locks & Unlocks Trim	Night Latch Key Retracts Latch Bolt
			
Product Description	REL.22TP	REL.22L	REL.22NL(230)
Trim Description	REL.230TP	REL.230L	REL.230NL
Escutcheon Plate Size	76mm x 306mm x 2mm	76mm x 162mm x 24mm	76mm x 306mm x 2mm
Projection	51mm	67mm	51mm
Cylinder Type	Mortice - REL.20-001.114	Mortice - REL.20-001.114	Rim - REL.20-022
Optional REL.425 Sex Bolt Qty for Device	2	2	6

**REL.20-022C.626**  
C Section Rim Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



**REL.20-001C.626**  
C Section Mortice Cylinder -  
Satin Chrome. Supplied with  
2 keys normally



#### Important Note

Cylinders must be ordered separately for all trims where appropriate.

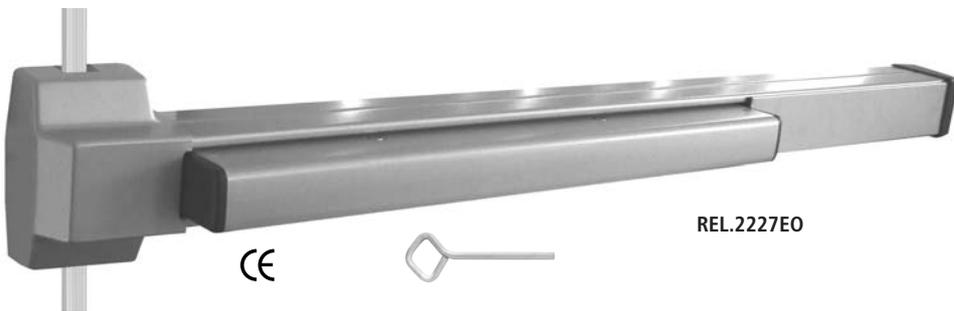
The REL.210DT/210NL/230TP/230NL have heavy gauge 2.4mm steel escutcheons.

The REL.230L has a cast aluminium 19mm escutcheon with #06 style lever furnished standard. The #03 style lever is available to special order - handing of the lever is field reversible.

### REL.2227 Surface Mounted Vertical Rod Device

#### Characteristics

Specifically designed for use in areas where frequent abusive treatment can be expected. The **REL.22 Series** is constructed from heavy gauge rolled steel section with the proven heavy duty touch bar mechanism that has been used so successfully in all architectural grade Von Duprin touch bar devices.



REL.2227EO

#### Standard Features & Benefits

- **Device Functions** - Ships ready for all functions; EO, DT, NL, TP, & L (See page 11)
- **Universal** - Non-handed, suits LH & RH doors
- **Device Lengths** - Standard device suits doors to 914mm, optional device suits doors to 1220mm
- **Door Height** - Standard door height accommodated - 2134mm, extension rods are available for doors to 3048mm. Extension Rod Lengths - 305mm & 914mm
- **Finishes** - SP28 (689) Sprayed Silver, SP313 (695) Sprayed Dark Bronze
- **Strikes** - Ships with standard **REL.299** roller strike, bottom strikes **REL.248L-4** and **REL.304L**. Optional strikes are available to suit alternative frame details (consult the sales office for details)
- **Dogging Feature** - Hex key dogging keeps the latch bolts held back for free swinging operation, **LD** Less Dogging is available to special order
- **Electric Options\*** -
 

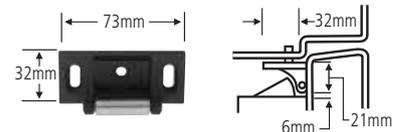
<b>REL.LX</b>	Latchbolt Monitor Switch
<b>REL.RX</b>	Touch Bar Monitor Switch
<b>REL.RX2</b>	Double Touch Bar Monitor Switch
<b>REL.ALK</b>	Alarm Exit Kit
	*(See page 23)
- **Fasteners** - Includes fixings for both metal and timber doors 19mm < 57mm thick with sex bolts furnished standard for top and bottom latches
- **Latch Bolt** - Deadlocking anti-friction top & bottom bolts with 16mm throw

#### UK Fire Certification

in accordance with EN 1634-1:2000 (timber)  
WFRC No. C132276 120Mins BS EN 1125:1997

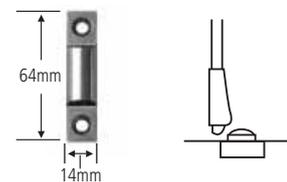
#### Strikes for REL.2227 Surface Mounted Vertical Rod Devices

**REL.299** Top Roller Strike with 21mm projection, used with conventional frames where a reveal >32mm exists.



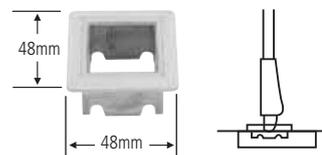
Projection 21mm

**REL.248L-4** Bottom Strike for use with flat top thresholds. Since the strike projects by 10mm care should be taken to ensure installation does not pose a trip hazard



Projection 10mm

**REL.304L** Optional Bottom Strike for use where a mortice installation is desired.



Mortice 21mm

#### Please note -

Both the **REL.248L-4** & **REL.304L** Bottom Strikes are supplied as standard with all surface mounted vertical rod devices.

#### Recommendations for Installing & Fixing

In accordance with **BS EN 1125:1997** Annexe A (informative) the device should be installed with the touch bar normally at a height between 900mm and 1100mm from the finished floor level when the door is in the secure position. Where it is known that the majority of the occupants of the premises will be young children, it is acceptable to reduce the fixing height accordingly.

### REL.2227 Surface Mounted Vertical Rod Device Standard Trim

	Exit Only	Dummy Trim Pull when Device is Dogged	Night Latch Key Retracts Latch Bolts	Night Latch Key Retracts Latch Bolts Optional Pull Required
				
<b>Product Description</b>	<b>REL.2227EO</b>	<b>REL.2227DT</b>	<b>REL.2227NL</b>	<b>REL.2227NL-OP</b>
<b>Trim Description</b>	-	<b>REL.210DT</b>	<b>REL.210NL</b>	<b>REL.110NL</b>
<b>Escutcheon Plate Size</b>	-	137mm x 121mm x 2mm	137mm x 121mm x 2mm	-
<b>Projection</b>	-	42mm	42mm	-
<b>Cylinder Type</b>	-	-	Rim - <b>REL.20-022</b> <small>Requires large key bow for easy operation</small>	Rim - <b>REL.20-022</b> <small>Requires large key bow for easy operation</small>
<b>Optional REL.425 Sex Bolt Qty for Device</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>6</b>

	Thumb Piece Key Locks & Unlocks Trim	Lever Key Locks & Unlocks Trim	Night Latch Key Retracts Latch Bolts
			
<b>Product Description</b>	<b>REL.2227TP</b>	<b>REL.2227L</b>	<b>REL.2227NL(230)</b>
<b>Trim Description</b>	<b>REL.230TP</b>	<b>REL.230L</b>	<b>REL.230NL</b>
<b>Escutcheon Plate Size</b>	76mm x 306mm x 2mm	76mm x 162mm x 24mm	76mm x 306mm x 2mm
<b>Projection</b>	51mm	67mm	51mm
<b>Cylinder Type</b>	Mortice - <b>REL.20-001.114</b>	Mortice - <b>REL.20-001.114</b>	Rim - <b>REL.20-022</b> <small>Requires large key bow for easy operation</small>
<b>Optional REL.425 Sex Bolt Qty for Device</b>	<b>2</b>	<b>2</b>	<b>6</b>

**REL.20-022C.626**  
C Section Rim Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



**REL.20-001C.626**  
C Section Mortice Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



#### Important Note

Cylinders must be ordered separately for all trims where appropriate.

The REL.210DT/210NL/230TP/230NL have heavy gauge 2.4mm steel escutcheons.

The REL.230L has a cast aluminium 19mm escutcheon with #06 style lever furnished standard. The #03 style lever is available to special order - handing of the lever is field reversible.

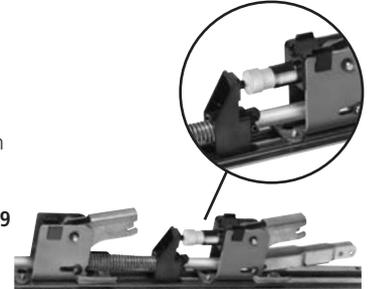
## REL.98/99 Rim Exit Device

### Characteristics

Our flagship range of architectural grade escape devices includes the **REL.98** Series with its smooth mechanism case and the established **REL.99** Series with its familiar grooved design. The two styles are mechanically and dimensionally identical and provide a wide selection of additional features to suit many applications.

### The Quiet One®

A fluid dampener decelerates the touch bar on its return stroke and eliminates most noise associated with exit device operations. Furnished on all **REL.98/99** Series Exit Devices



REL.99EO

**UK Fire Certification**  
in accordance with  
EN 1634-1:2000 (timber)  
WFRC No. C132276 120Mins  
BS EN 1125:1997

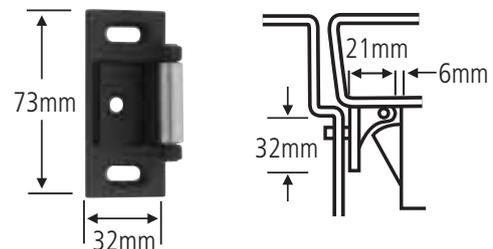
### Standard Features & Benefits

- **Device Functions** - Ships ready for functions; EO, DT & NL. For TP, K & L (See page 13) remove the NL drive screw from the reverse of the device
- **Universal** - Non-handed, suits LH & RH doors except when SD (Special Dogging) & -2 (Double Cylinder) features are included (See page 24)
- **Device Lengths** - Standard device suits doors to 914mm, optional device suits doors to 1220mm
- **Finishes** - US28 (628) Anodized Aluminium. Alternative plated finishes are available to special order (consult the sales office for details)
- **Strikes** - Ships with standard **REL.299** roller strike, optional strikes are available to suit alternative frame details (consult the sales office for details)
- **Dogging Feature** - Hex key dogging keeps the latch bolt held back for free swinging operation. Options available to special order - **CD** Cylinder Dogging, **SD** Special Dogging & **LD** Less Dogging (See page 24)
- **Electric Options\*** -
 

<b>REL.LX</b>	Latchbolt Monitor Switch
<b>REL.RX</b>	Touch Bar Monitor Switch
<b>REL.RX2</b>	Double Touch Bar Monitor Switch
<b>REL.ALK</b>	Alarm Exit Kit
<b>EL</b>	Electric Latch Retraction
<b>PN</b>	Pneumatic Latch Retraction
<b>CX</b>	Chexit Delayed Exit
	*(See pages 22 & 23)
- **Fasteners** - Includes fixings for both metal and timber doors 19mm < 57mm thick with sex bolts available to special order - **REL.425** for bolt through fixings (See opposite page)
- **Latch Bolt** - Easy action friction free deadlocking latches cannot be depressed from the outside - 19mm throw

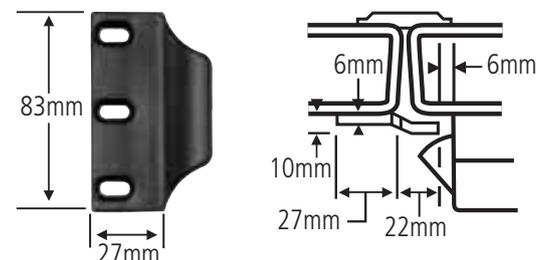
### Strikes for REL.98/99 Rim Exit Devices

**REL.299** Standard Roller Strike with 21mm projection, used with conventional frames where the door stile width >121mm permits the necessary back set.



Projection 21mm

**REL.1609** Optional Strike used on doors with flush frames or fixed to the inactive (or second closing) leaf of a rebated pair of doors.



### Recommendations for Installing & Fixing

In accordance with **BS EN 1125:1997** Annexe A (informative) the device should be installed with the touch bar normally at a height between 900mm and 1100mm from the finished floor level when the door is in the secure position. Where it is known that the majority of the occupants of the premises will be young children, it is acceptable to reduce the fixing height accordingly.

### REL.98/99 Rim Exit Device Standard Trim

	Exit Only	Dummy Trim Pull when Device is Dogged	Night Latch Key Retracts Latch Bolt	Night Latch Key Retracts Latch Bolt Optional Pull Required
				
<b>Product Description</b>	REL.98EO REL.99EO	REL.98DT REL.99DT	REL.98NL REL.99NL	REL.98NL-OP REL.99NL-OP
<b>Trim Description</b>	-	REL.990DT	REL.990NL-R/V	REL.110NL
<b>Escutcheon Plate Size</b>	-	76mm x 360mm x 2mm	76mm x 360mm x 2mm	-
<b>Projection</b>	-	51mm	51mm	-
<b>Cylinder Type</b>	-	-	Rim - REL.20-022	Rim - REL.20-022
<b>Optional REL.425 Sex Bolt Qty for Device</b>	6	2	2	6

	Thumb Piece Key Locks & Unlocks Trim	Knob Key Locks & Unlocks Trim	Lever Key Locks & Unlocks Trim
			
<b>Product Description</b>	REL.98TP REL.99TP	REL.98K REL.99K	REL.98L REL.99L
<b>Trim Description</b>	REL.990TP	REL.991K	REL.996L-R/V
<b>Escutcheon Plate Size</b>	70mm x 273mm x 21mm	70mm x 273mm x 21mm	70mm x 273mm x 21mm
<b>Projection</b>	51mm	83mm	73mm
<b>Cylinder Type</b>	Rim - REL.20-022	Rim - REL.20-022	Rim - REL.20-022
<b>Optional REL.425 Sex Bolt Qty for Device</b>	2	2	2

**REL.20-022C.626**  
C Section Rim Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



#### Important Note

Cylinders must be ordered  
separately for all trims where  
appropriate.

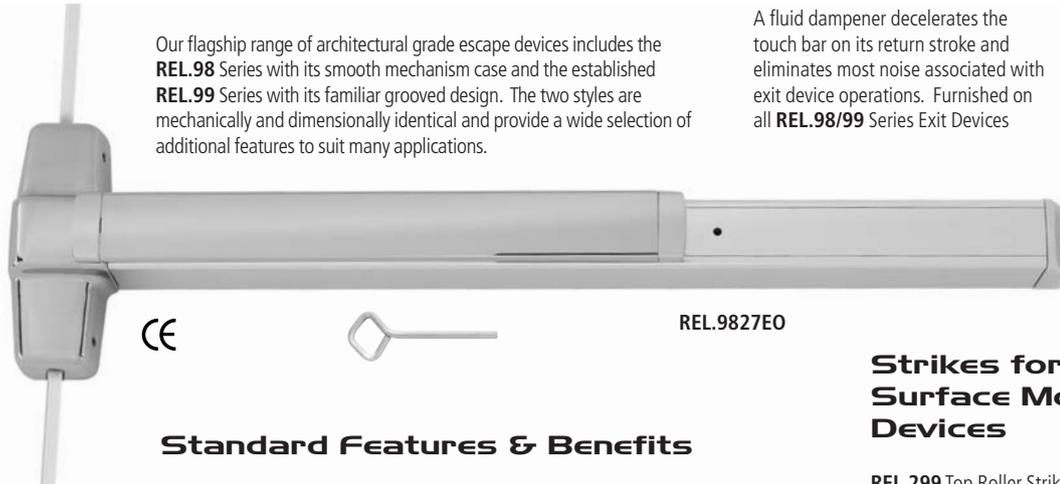
#### Trim Operation Options

For all cylinder operated trims shown here the key locks and unlocks the lever or knob, in turn the lever or knob retracts the latch - referred to as the **classroom function**.  
For a true night latch function specify the trim with the suffix **.NL** e.g. **REL.996L.NL** - the key retracts the latch - referred to as the **storeroom function**.

### REL.9827/9927 Surface Mounted Vertical Rod Device

#### Characteristics

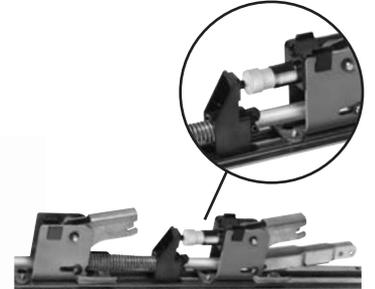
Our flagship range of architectural grade escape devices includes the **REL.98** Series with its smooth mechanism case and the established **REL.99** Series with its familiar grooved design. The two styles are mechanically and dimensionally identical and provide a wide selection of additional features to suit many applications.



REL.9827EO

#### The Quiet One®

A fluid dampener decelerates the touch bar on its return stroke and eliminates most noise associated with exit device operations. Furnished on all **REL.98/99** Series Exit Devices



**UK Fire Certification**  
in accordance with  
EN 1634-1:2000 (timber)  
WFRC No. C132276 120Mins  
BS EN 1125:1997

#### Standard Features & Benefits

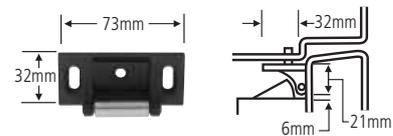
- **Device Functions** - Ships ready for functions; EO, DT & NL. For TP, K & L (See page 15) remove the NL drive screw from the reverse of the device
- **Universal** - Non-handed, suits LH & RH doors except when SD (Special Dogging) & -2 (Double Cylinder) features are included (See page 24)
- **Device Lengths** - Standard device suits doors to 914mm, optional device suits doors to 1220mm
- **Door Height** - Standard door height accommodated - 2134mm, extension rods are available for doors to 3048mm. Extension Rod Lengths - 305mm & 914mm
- **Finishes** - US28 (628) Anodized Aluminium. Alternative plated finishes are available to special order (consult the sales office for details)
- **Strikes** - Ships with standard **REL.299** roller strike, bottom strikes **REL.248L-4** and **REL.304L**. Optional strikes are available to suit alternative frame details (consult the sales office for details)
- **Dogging Feature** - Hex key dogging keeps the latch bolts held back for free swinging operation. Options available to special order - **CD** Cylinder Dogging, **SD** Special Dogging & **LD** Less Dogging (See page 24)
- **Electric Options\*** -
 

<b>REL.LX</b>	Latchbolt Monitor Switch
<b>REL.RX</b>	Touch Bar Monitor Switch
<b>REL.RX2</b>	Double Touch Bar Monitor Switch
<b>REL.ALK</b>	Alarm Exit Kit
<b>EL</b>	Electric Latch Retraction
<b>PN</b>	Pneumatic Latch Retraction
<b>CX</b>	Chexit Delayed Exit

\*(See pages 22 & 23)
- **Fasteners** - Includes fixings for both metal and timber doors 19mm < 57mm thick with sex bolts furnished standard for top and bottom latches
- **Latch Bolt** - Deadlocking anti-friction top & bottom bolts with 16mm throw

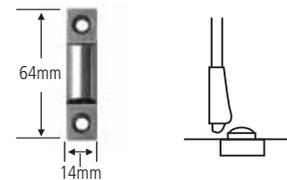
#### Strikes for REL.9827/9927 Surface Mounted Vertical Rod Devices

**REL.299** Top Roller Strike with 21mm projection, used with conventional frames where a reveal >32mm exists.



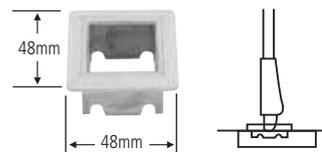
Projection 21mm

**REL.248L-4** Bottom Strike for use with flat top thresholds. Since the strike projects by 10mm care should be taken to ensure installation does not pose a trip hazard



Projection 10mm

**REL.304L** Optional Bottom Strike for use where a mortice installation is desired.



Mortice 21mm

**Please note -**

Both the **REL.248L-4** & **REL.304L** Bottom Strikes are supplied as standard with all surface mounted vertical rod devices.

#### Recommendations for Installing & Fixing

Refer to the statement on page 12 (**REL.98/99** Rim Exit Device).

### REL.9827/9927 Surface Mounted Vertical Rod Device Standard Trim

	Exit Only	Dummy Trim Pull when Device is Dogged	Night Latch Key Retracts Latch Bolts	Night Latch Key Retracts Latch Bolts Optional Pull Required
				
<b>Product Description</b>	REL.9827EO REL.9927EO	REL.9827DT REL.9927DT	REL.9827NL REL.9927NL	REL.9827NL-OP REL.9927NL-OP
<b>Trim Description</b>	-	REL.990DT	REL.990NL-R/V	REL.110NL
<b>Escutcheon Plate Size</b>	-	76mm x 360mm x 2mm	76mm x 360mm x 2mm	-
<b>Projection</b>	-	51mm	51mm	-
<b>Cylinder Type</b>	-	-	Rim - REL.20-022 <small>Requires large key bow for easy operation</small>	Rim - REL.20-022 <small>Requires large key bow for easy operation</small>
<b>Optional REL.425 Sex Bolt Qty for Device</b>	6	2	2	6

	Thumb Piece Key Locks & Unlocks Trim	Knob Key Locks & Unlocks Trim	Lever Key Locks & Unlocks Trim
			
<b>Product Description</b>	REL.9827TP REL.9927TP	REL.9827K REL.9927K	REL.9827L REL.9927 L
<b>Trim Description</b>	REL.990TP	REL.991K	REL.996L-R/V
<b>Escutcheon Plate Size</b>	70mm x 273mm x 21mm	70mm x 273mm x 21mm	70mm x 273mm x 21mm
<b>Projection</b>	51mm	83mm	73mm
<b>Cylinder Type</b>	Rim - REL.20-022	Rim - REL.20-022	Rim - REL.20-022
<b>Optional REL.425 Sex Bolt Qty for Device</b>	2	2	2

**REL.20-022C.626**  
C Section Rim Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



#### Important Note

Cylinders must be ordered  
separately for all trims where  
appropriate.

#### Trim Operation Options

For all cylinder operated trims shown here the key locks and unlocks the lever or knob, in turn the lever or knob retracts the latch - referred to as the **classroom function**.  
For a true night latch function specify the trim with the suffix **.NL** e.g. **REL.996L.NL** - the key retracts the latch - referred to as the **storeroom function**.

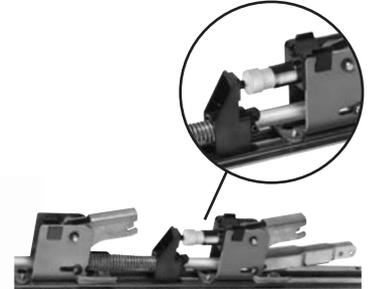
## REL.9857/9957 Three Point Latching Device

### Characteristics

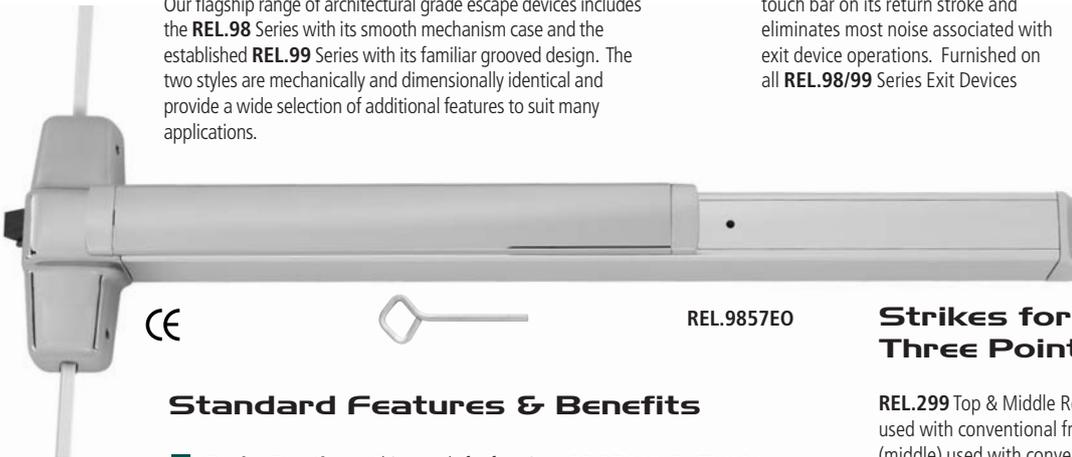
Our flagship range of architectural grade escape devices includes the **REL.98** Series with its smooth mechanism case and the established **REL.99** Series with its familiar grooved design. The two styles are mechanically and dimensionally identical and provide a wide selection of additional features to suit many applications.

### The Quiet One®

A fluid dampener decelerates the touch bar on its return stroke and eliminates most noise associated with exit device operations. Furnished on all **REL.98/99** Series Exit Devices



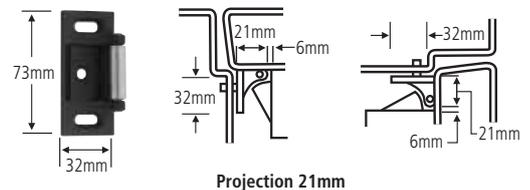
**UK Fire Certification**  
in accordance with  
EN 1634-1:2000 (timber)  
WFRC No. C132276 120Mins  
BS EN 1125:1997



REL.9857E0

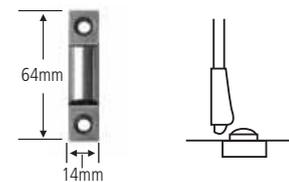
### Strikes for REL.9857/9957 Three Point Latching Devices

**REL.299** Top & Middle Roller Strike with 21mm projection (top), used with conventional frames where a reveal >32mm exists, (middle) used with conventional frames where the door stile width > 121mm permits the necessary back set.



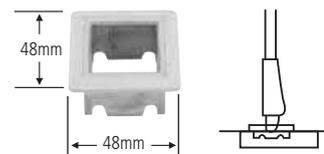
Projection 21mm

**REL.248L-4** Bottom Strike for use with flat top thresholds. Since the strike projects by 10mm care should be taken to ensure installation does not pose a trip hazard



Projection 10mm

**REL.304L** Optional Bottom Strike for use where a mortice installation is desired.



Mortice 21mm

### Standard Features & Benefits

- **Device Functions** - Ships ready for functions; EO, DT & NL. For TP, K & L (See page 17) remove the NL drive screw from the reverse of the device
- **Universal** - Non-handed, suits LH & RH doors except when SD (Special Dogging) & -2 (Double Cylinder) features are included (See page 24)
- **Device Lengths** - Standard device suits doors to 914mm, optional device suits doors to 1220mm
- **Door Height** - Standard door height accommodated - 2134mm, extension rods are available for doors to 3048mm. Extension Rod Lengths - 305mm & 914mm
- **Finishes** - US28 (628) Anodized Aluminium. Alternative plated finishes are available to special order (consult the sales office for details)
- **Strikes** - Ships with standard **REL.299** roller strike (x2), bottom strikes **REL.248L-4** and **REL.304L**. Optional strikes are available to suit alternative frame details (consult the sales office for details)
- **Dogging Feature** - Hex key dogging keeps the latch bolt held back for free swinging operation. Options available to special order - **CD** Cylinder Dogging, **SD** Special Dogging & **LD** Less Dogging (See page 24)
- **Electric Options\*** -
 

<b>REL.LX</b>	Latchbolt Monitor Switch
<b>REL.RX</b>	Touch Bar Monitor Switch
<b>REL.RX2</b>	Double Touch Bar Monitor Switch
<b>REL.ALK</b>	Alarm Exit Kit
<b>EL</b>	Electric Latch Retraction
<b>PN</b>	Pneumatic Latch Retraction
<b>CX</b>	Chexit Delayed Exit

\*(See pages 22 & 23)
- **Fasteners** - Includes fixings for both metal and timber doors 19mm < 57mm thick with sex bolts furnished standard for top and bottom latches
- **Latch Bolt** - Deadlocking anti-friction middle, top & bottom bolts with 19mm / 16mm throw

### Please note -

Both the **REL.248L-4** & **REL.304L** Bottom Strikes are supplied as standard with all surface mounted vertical rod devices.

### Recommendations for Installing & Fixing

Refer to the statement on page 12 (**REL.98/99** Rim Exit Device).

### REL.9857/9957 Three Point Latching Device Standard Trim

	Exit Only	Dummy Trim Pull when Device is Dogged	Night Latch Key Retracts Latch Bolts	Night Latch Key Retracts Latch Bolts Optional Pull Required
				
<b>Product Description</b>	REL.9857EO REL.9957EO	REL.9857DT REL.9957DT	REL.9857NL REL.9957NL	REL.9857NL-OP REL.9957NL-OP
<b>Trim Description</b>	-	REL.990DT	REL.990NL-R/V	REL.110NL
<b>Escutcheon Plate Size</b>	-	76mm x 360mm x 2mm	76mm x 360mm x 2mm	-
<b>Projection</b>	-	51mm	51mm	-
<b>Cylinder Type</b>	-	-	Rim - REL.20-022 <small>Requires large key bow for easy operation</small>	Rim - REL.20-022 <small>Requires large key bow for easy operation</small>
<b>Optional REL.425 Sex Bolt Qty for Device</b>	6	2	2	6

	Thumb Piece Key Locks & Unlocks Trim	Knob Key Locks & Unlocks Trim	Lever Key Locks & Unlocks Trim
			
<b>Product Description</b>	REL.9857TP REL.9957TP	REL.9857K REL.9957K	REL.9857L REL.9957 L
<b>Trim Description</b>	REL.990TP	REL.991K	REL.996L-R/V
<b>Escutcheon Plate Size</b>	70mm x 273mm x 21mm	70mm x 273mm x 21mm	70mm x 273mm x 21mm
<b>Projection</b>	51mm	83mm	73mm
<b>Cylinder Type</b>	Rim - REL.20-022	Rim - REL.20-022	Rim - REL.20-022
<b>Optional REL.425 Sex Bolt Qty for Device</b>	2	2	2

**REL.20-022C.626**  
C Section Rim Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



#### Important Note

Cylinders must be ordered  
separately for all trims where  
appropriate.

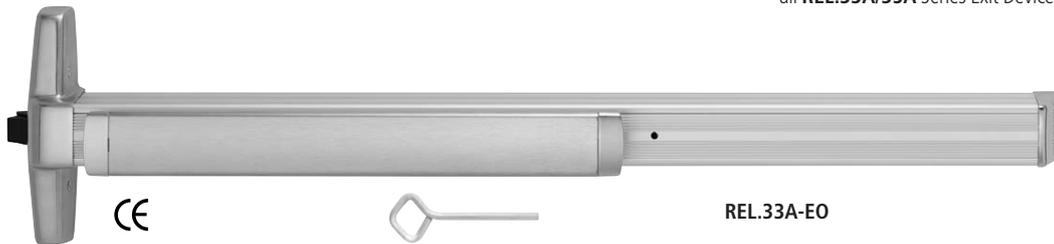
#### Trim Operation Options

For all cylinder operated trims shown here the key locks and unlocks the lever or knob, in turn the lever or knob retracts the latch - referred to as the **classroom function**.  
For a true night latch function specify the trim with the suffix **.NL** e.g. **REL.996L.NL** - the key retracts the latch - referred to as the **storeroom function**.

### REL.33A/35A Rim Exit Device

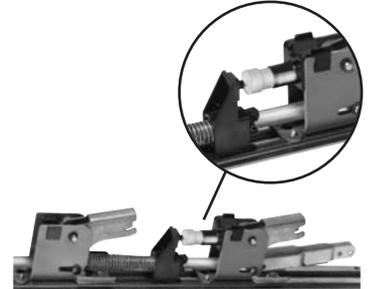
#### Characteristics

This range of architectural grade escape devices includes the **REL.35A** Series with its smooth mechanism case and the established **REL.33A** Series with its familiar grooved design. The two styles are mechanically and dimensionally identical and provide a solution specifically for **narrow stile applications** down to 44mm.



#### The Quiet One®

A fluid dampener decelerates the touch bar on its return stroke and eliminates most noise associated with exit device operations. Furnished on all **REL.33A/35A** Series Exit Devices



**UK Fire Certification**  
in accordance with  
EN 1634-1:2000 (timber)  
WFRC No. C132276 120Mins  
BS EN 1125:1997

#### Standard Features & Benefits

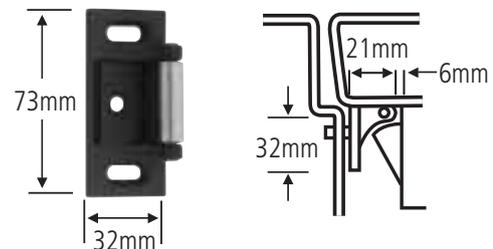
- **Device Functions** - Ships ready for functions; EO, DT, NL, L, L-BE, & T (See page 19)
- **Universal** - Non-handed, suits LH & RH doors
- **Device Lengths** - Standard device suits doors to 914mm, optional device suits doors to 1220mm
- **Finishes** - US28 (628) Anodized Aluminium. Alternative plated finishes are available to special order (consult the sales office for details)
- **Strikes** - Ships with standard **REL.299** roller strike, optional strikes are available to suit alternative frame details (consult the sales office for details)
- **Dogging Feature** - Hex key dogging keeps the latch bolt held back for free swinging operation. Options available to special order - **CD** Cylinder Dogging & **LD** Less Dogging (See page 24)
- **Electric Options\* -**

<b>REL.LX</b>	Latchbolt Monitor Switch
<b>REL.RX</b>	Touch Bar Monitor Switch
<b>REL.RX2</b>	Double Touch Bar Monitor Switch
<b>REL.ALK</b>	Alarm Exit Kit
<b>EL</b>	Electric Latch Retraction
<b>PN</b>	Pneumatic Latch Retraction

\*(See pages 22 & 23)
- **Fasteners** - Includes fixings for both metal and timber doors 19mm < 57mm thick with sex bolts available to special order - **REL.425** for bolt through fixings (See opposite page)
- **Latch Bolt** - Easy action friction free deadlocking latches cannot be depressed from the outside - with 19mm throw

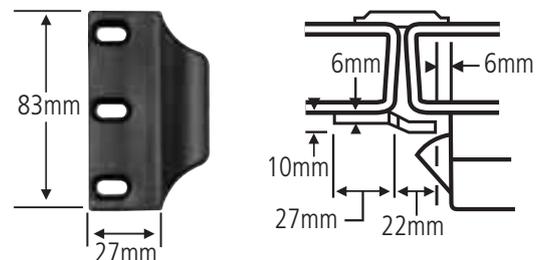
#### Strikes for REL.33A/35A Rim Exit Devices

**REL.299** Optional Roller Strike with 21mm projection, used with conventional frames where the door stile width >70mm permits the necessary back set.



Projection 21mm

**REL.1609** Optional Strike used on doors with flush frames or fixed to the inactive (or second closing) leaf of a rebated pair of doors.



#### Recommendations for Installing & Fixing

In accordance with **BS EN 1125:1997** Annexe A (informative) the device should be installed with the touch bar normally at a height between 900mm and 1100mm from the finished floor level when the door is in the secure position. Where it is known that the majority of the occupants of the premises will be young children, it is acceptable to reduce the fixing height accordingly.

### REL.33A/35A Rim Exit Device Standard Trim

	Exit Only	Dummy Trim Pull when Device is Dogged	Night Latch Key Retracts Latch Bolt	Night Latch Key Retracts Latch Bolt Optional Pull Required
				
Product Description	REL.33A-EO REL.35A-EO	REL.33A-DT REL.35A-DT	REL.33A-NL REL.35A-NL	REL.33A-NL-OP REL.35A-NL-OP
Trim Description	-	REL.386DT	REL.386NL	REL.388
Base Size	-	190mm x 41mm	190mm x 41mm	190mm x 43mm
Grip Size	-	216mm x 110mm	216mm x 110mm	-
Projection	-	62mm	62mm	25mm
Cylinder Type	-	-	Rim - REL.20-022	Rim - REL.20-022

	Lever Key Locks & Unlocks Trim	Lever Blank Escutcheon Always Operable (No Cylinder)	Thumbturn Key Locks & Unlocks Trim
			
Product Description	REL.33A-L REL.35A-L	REL.33A-L-BE REL.35A-L-BE	REL.33A-T REL.35A-T
Trim Description	REL.360L	REL.360L-BE	REL.360T
Base Size	190mm x 43mm x 22mm	190mm x 43mm x 22mm	190mm x 43mm x 22mm
Grip Size	-	-	-
Projection	76mm	76mm	46mm
Cylinder Type	Mortice - REL.20-001.114	-	Mortice - REL.20-001.114

**REL.20-022C.626**  
C Section Rim Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



**REL.20-001C.626**  
C Section Mortice Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



#### Important Note

Cylinders must be ordered separately for all trims where appropriate.

#### Trim Operation Options

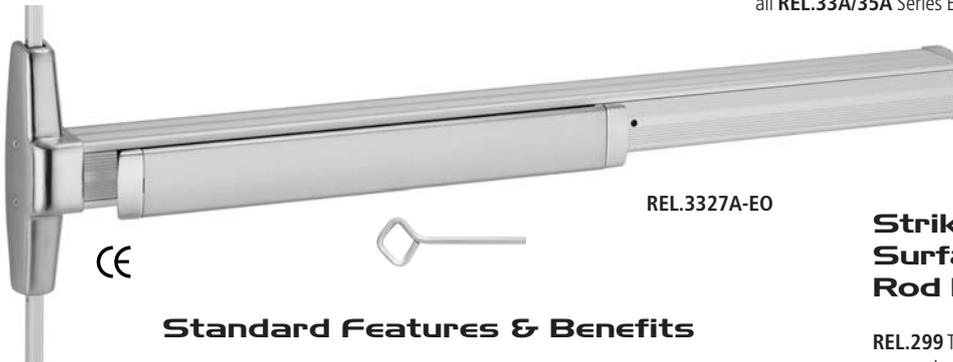
For all cylinder operated trims shown here the key locks and unlocks the lever/thumbturn, in turn the lever or thumbturn retracts the latch - referred to as the **classroom function**. This function uses the 'dogged' mortice cylinder straight cam (See page 25).

For a true night latch function use the 'undogged' mortice cylinder straight cam - the key retracts the latch - referred to as the **storeroom function** (See page 25).

## REL.3327A/3527A Surface Mounted Vertical Rod Device

### Characteristics

This range of architectural grade escape devices includes the **REL.35A** Series with its smooth mechanism case and the established **REL.33A** Series with its familiar grooved design. The two styles are mechanically and dimensionally identical and provide a solution specifically for **narrow stile applications** down to 44mm.



REL.3327A-EO

### Standard Features & Benefits

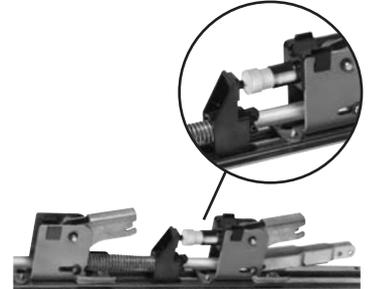
- **Device Functions** - Ships ready for functions; EO, DT & NL, L, L-BE & T (See page 21)
- **Universal** - Non-handed, suits LH & RH doors
- **Device Lengths** - Standard device suits doors to 914mm, optional device suits doors to 1220mm
- **Door Height** - Standard door height accommodated - 2134mm, extension rods are available for doors to 3048mm. Extension Rod Lengths - 305mm & 914mm
- **Finishes** - US28 (628) Anodized Aluminium. Alternative plated finishes are available to special order (consult the sales office for details)
- **Strikes** - Ships with standard **REL.299** roller strike, bottom strikes **REL.248L-4** and **REL.304L**. Optional strikes are available to suit alternative frame details (consult the sales office for details)
- **Dogging Feature** - Hex key dogging keeps the latch bolts held back for free swinging operation. Options available to special order - **CD** Cylinder Dogging & **LD** Less Dogging (See page 24)
- **Electric Options\*** -
 

<b>REL.LX</b>	Latchbolt Monitor Switch
<b>REL.RX</b>	Touch Bar Monitor Switch
<b>REL.RX2</b>	Double Touch Bar Monitor Switch
<b>REL.ALK</b>	Alarm Exit Kit
<b>EL</b>	Electric Latch Retraction
<b>PN</b>	Pneumatic Latch Retraction

\*(See pages 22 & 23)
- **Fasteners** - Includes fixings for both metal and timber doors 19mm < 57mm thick with sex bolts furnished standard for top and bottom latches
- **Latch Bolt** - Deadlocking anti-friction top & bottom bolts with 16mm throw

### The Quiet One®

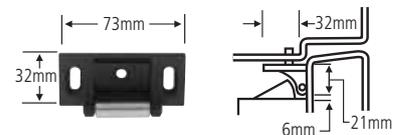
A fluid dampener decelerates the touch bar on its return stroke and eliminates most noise associated with exit device operations. Furnished on all **REL.33A/35A** Series Exit Devices



**UK Fire Certification**  
in accordance with  
EN 1634-1:2000 (timber)  
WFRC No. C132276 120Mins  
BS EN 1125:1997

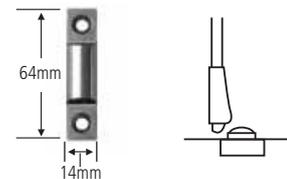
### Strikes for REL.3327A/3527A Surface Mounted Vertical Rod Devices

**REL.299** Top Roller Strike with 21mm projection, used with conventional frames where a reveal >32mm exists.



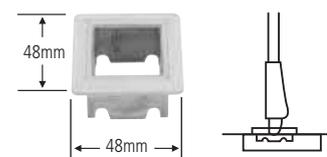
Projection 21mm

**REL.248L-4** Bottom Strike for use with flat top thresholds. Since the strike projects by 10mm care should be taken to ensure installation does not pose a trip hazard



Projection 10mm

**REL.304L** Optional Bottom Strike for use where a mortice installation is desired.



Mortice 21mm

#### Please note -

Both the **REL.248L-4** & **REL.304L** Bottom Strikes are supplied as standard with all surface mounted vertical rod devices.

### Recommendations for Installing & Fixing

Refer to the statement on page 12 (**REL.98/99** Rim Exit Device).

### REL.3327A/3527A Surface Mounted Vertical Rod Device Standard Trim

	Exit Only	Dummy Trim Pull when Device is Dogged	Night Latch Key Retracts Latch Bolts	Night Latch Key Retracts Latch Bolts Optional Pull Required
				
<b>Product Description</b>	REL.3327A-EO REL.3527A-EO	REL.3327A-DT REL.3527A-DT	REL.3327A-NL REL.3527A-NL	REL.3327A-NL-OP REL.3527A-NL-OP
<b>Trim Description</b>	-	REL.386DT	REL.386NL	REL.388
<b>Base Size</b>	-	190mm x 41mm	190mm x 41mm	190mm x 43mm
<b>Grip Size</b>	-	216mm x 110mm	216mm x 110mm	-
<b>Projection</b>	-	62mm	62mm	25mm
<b>Cylinder Type</b>	-	-	Rim - REL.20-022 <small>Requires large key bow for easy operation</small>	Rim - REL.20-022 <small>Requires large key bow for easy operation</small>

	Lever Key Locks & Unlocks Trim	Lever Blank Escutcheon Always Operable (No Cylinder)	Thumbturn Key Locks & Unlocks Trim
			
<b>Product Description</b>	REL.3327A-L REL.3527A-L	REL.3327A-L-BE REL.3527A-L-BE	REL.3327A-T REL.3527A-T
<b>Trim Description</b>	REL.360L	REL.360L-BE	REL.360T
<b>Base Size</b>	190mm x 43mm x 22mm	190mm x 43mm x 22mm	190mm x 43mm x 22mm
<b>Grip Size</b>	-	-	-
<b>Projection</b>	76mm	76mm	46mm
<b>Cylinder Type</b>	Mortice - REL.20-001.114	-	Mortice - REL.20-001.114

**REL.20-022C.626**  
C Section Rim Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



**REL.20-001C.626**  
C Section Mortice Cylinder -  
Satin Chrome. Supplied with  
2 keys normally.



#### Important Note

Cylinders must be ordered  
separately for all trims where  
appropriate.

#### Trim Operation Options

For all cylinder operated trims shown here the key locks and unlocks the lever/thumbturn, in turn the lever or thumbturn retracts the latch - referred to as the **classroom function**. This function uses the 'dogged' mortice cylinder straight cam (See page 25).

For a true night latch function use the 'undogged' mortice cylinder straight cam - the key retracts the latch - referred to as the **storeroom function** (See page 25).

### Electromechanical and Pneumatic Control

#### REL.EL Electric Latch Retraction - Available on REL.98/99/33A & 35A Series Devices Only

The **EL Electric Latch Retraction** feature provides controlled access through escape doors (via a remote unlocking feature) usually found on the perimeter of a building. **EL** devices are 'free from fixings' hence, safe egress is always available.

This feature is available on rim exit devices, surface mounted vertical rod devices and three point latching devices. See page 31 for device combinations.



#### Operation

The latch bolt is retracted via any type of reader, switch or push button; changing the status of an exit only or latched door to a push-pull operation. A powerful continuous duty solenoid retracts the latch bolt for momentary unlocking, or for extended periods of time, in lieu of manual dogging.

**EL** devices are particularly useful in systems incorporating requirements for time controlled access where escape is of paramount consideration.

Complete systems will always require a power transfer unit to transfer power from the frame to the door and a custom built power supply unit (See below).

#### Where To Use the EL Device

Ideal for locking main entrances to high rise blocks of flats (and similar installations) where they can be released by a signal from the intercom system. In short, any heavily vandalized area where the number of daily operations is very high.

#### Electrical Specification

<b>Solenoid</b> (Continuous Duty)	- 24Vdc
<b>Current Inrush</b> (300 milliseconds)	- 16 amperes
<b>Current Holding</b> (REL.33A/35A and REL.98/99)	- 300mA

#### How to specify or order

Use the prefix **EL**. For example **REL.EL9927E0.US28**

#### Power Options

Use only **REL.ELPS0** 24Vdc 16 Amp Power Supply or **REL.ELPS0BB** 24Vdc 16 Amp Power Supply with **battery back-up**.

Power supplies incorporate an **Entry Relay** to interface with any access control system. Details of the access control system will be required at the order stage.

#### How to specify or order

<b>REL.ELPS0</b>	- Enc. size 325mmH x 255mmW x 90mmD
<b>REL.ELPS0BB</b>	- Enc. size 325mmH x 255mmW x 90mmD

#### REL.PN Pneumatic Controlled Exit Devices - Available on REL.98/99 Series Devices Only

The **PN Pneumatic Control** feature provides controlled access through escape doors (via a remote unlocking feature) Usually found on the perimeter of a building. **PN** devices are 'free from fixings' hence, safe egress is always available.

This feature is available on rim exit devices, surface mounted vertical rod devices and three point latching devices. See page 31 for device combinations.

#### Operation

The **PN** feature includes a special actuating linkage giving the option of mechanically or pneumatically dogging the exit device. If manual hex-key dogging is required, specify **HD-PN**. Dogging the device, whether mechanically or pneumatically, makes the device function as a push/pull unit and reduces the wear on its moving parts.

Standard cylinder dogging is not available with this option. Specify **SD-PN** Special Centre Case Cylinder Dogging (See page 24).

When activated pneumatically, the latch bolt(s) of the exit device retract for up to 1.5 seconds.

#### Where to use the PN Controlled Exit Device

Designed for use in situations where there is a requirement to combine life safety with security in hazardous areas where electrically operated devices would not be permitted normally.



#### PN Controlled Exit Devices - Air flow requirements

Axis compressors are capable of providing pressures up to 120 psi. Axis controllers operate at between 80 psi minimum to 100 psi maximum. Regulated air output, from 50 to 80 psi, is required for **PN** devices.

For more information on compressors, controllers and other pneumatic accessories please refer to the Door Controls Brochure pages 12 & 13.

#### REL.EPT & REL.PNT-1

##### REL.EPT (For EL Devices)

This Electric Power Transfer unit provides a means of transferring electrical power from a door frame to the edge of a swinging door. The units are completely concealed when the door is in the closed position, and are suited ideally for installations involving potential abuse or heavy traffic.



##### REL.PNT-1 (For PN Devices)

Available for pneumatic latch retraction exit devices. Appearance and dimensions are identical to **REL.EPT** models.

See Access Control Brochure page 27 for more detail.

### Alarmed and Monitored Control

#### Chexit® Controlled Exit Devices Available on REL.98/99 Series Devices Only

REL.CX98 and REL.CX99 are designed for use in situations where there is a requirement to combine life safety with security.

#### Operation

This device will keep an escape door secured for a 15 second period in normal operational situations but will (when wired into the fire alarm system) release the door immediately in an emergency situation. All controls, auxiliary locking, local alarm and remote signalling output are self-contained in the Chexit® assembly - providing safe, secure and easy to install door control hardware.



REL.CX99EO

#### Where to use the Chexit® Device

Ideal for highly controlled areas such as those found in airports, hospitals, computer rooms, retail stores, libraries and similar facilities.

#### Electrical Specification

<b>Solenoid</b> (Continuous Duty)	– 24Vdc
<b>Current Inrush</b> (300 milliseconds)	– 16 amperes
<b>Current Holding</b> (REL.CX98/CX99)	– 400mA
<b>External Alarm</b> Contact	– 1 ampere

Fire alarm, external inhibit and door position inputs are set up for normally closed contacts.

#### Main Features (Order of Events)

**Nuisance Alarm** – When set, the touch bar must be pressed for a minimum of 2 seconds before the Chexit goes into alarm mode. However, any movement of the touch bar will trigger a local audible alarm (>6db at 850mm) which will cease if the touch bar is released before 2 seconds has expired.

**Request to Exit Switch** – Detects when someone attempts to exit. Applying less than 7 kilos pressure to the touch bar will cause this switch to start an irreversible alarm cycle (but see above also).

**Remote Alarm** – A set of relay contacts close when the device is in irreversible alarm mode. These contacts can be used to trigger horns, lamps, cameras or any other indicative device.

**Key Switch** – Used to arm, disarm or reset the device.

**Indicator Lamp** – Lamp off indicates disarmed. Slow flashing indicates armed. A fast flashing indicates alarm triggered.

**Fire Alarm Input** – This input disables the Chexit immediately upon a fire alarm.

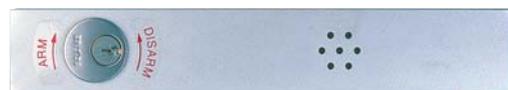
**Specifying to Suit Door Arrangement** – Chexit devices can be used safely on any escape door. Single doors or pairs of doors (plain and rebated meeting stiles). See page 31 for device combinations.

#### Chexit Power Options

As Electric Latch Retraction Devices - EL (See page 22).

#### REL.ALK Exit Alarm Kits Available on REL.22/98/99/33A & 35A Series Devices

The REL.ALK Battery Alarm Kit is a simple yet effective way to monitor the use of an exit (escape) device. The REL.ALK is a 'bolt on' solution that will not interfere with the ability of the escape device to act as a fail safe means of egress.



#### Operation

The REL.ALK contains an internal horn which is activated, if the device is armed (See below), when the touch bar is depressed. The horn sounds to provide an audible means of signalling the opening has been violated.

REL.ALK devices incorporate a key switch, used to arm and disarm the device. The key switch uses a REL.20-001C.626 C Section 32mm Mortice Cylinder.



REL.ALKs are available with a choice of two switch kits - REL.LX & REL.RX - (See below).

#### REL.ALK Power Options

The power source is a 9 volt transistor battery and each device is provided with one battery.

#### REL.RX/LX Escape Device Monitoring

**RX** (request to exit) signal switch feature is used to signal the use of an opening from the push side. When the push pad is depressed, the switch is activated. These devices are equipped with an internal SPDT switch that monitors the touch bar only.



REL.RX

**LX** (latch bolt monitoring) signal switch monitors both egress and access of an opening. When the latch bolt is retracted, the switch is activated. These devices are equipped with an internal SPDT switch that monitors the latch bolt position.



REL.LX

#### Correct Specification

<b>REL.RX</b>	– Escape Device Monitoring
<b>REL.LX</b>	– Escape Device Monitoring
<b>Switch rating</b>	– 500mA @ 24Vac/dc resistive

### Miscellaneous Features

#### REL.CD Cylinder Dogging - Available on REL.98/99/33A & 35A Series Devices Only

The default specification on all devices is **HD** - Hex Key Dogging. However, where restricted/authorized dogging is important it may be appropriate to introduce a controlled cylinder dogging facility at the specification stage.

**CD** Cylinder Dogging is available on all devices except the **REL.22** series and replaces the standard **HD** - Hex Key Dogging.



**CD** Cylinder Dogging employs normally the **REL.20-001C.626** C Section Mortice Cylinder - Satin Chrome. The cylinder is equipped with a straight cam and can be set up by Axis prior to despatch.

Both the cylinder dogging and hex key dogging features, when engaged, hold the touch bar and the latch/latches retracted.

#### How to specify or order

Use the prefix **CD**. For example - **REL.CD99E0.US28**  
For field conversions a cylinder dogging conversion kit is available.  
To order specify **REL.CDK** Cylinder Dogging Kit.

#### REL.SD Special Centre Case Cylinder Dogging Available on REL.98/99 Series Devices Only

The **SD** principle is similar to the **CD** principle described above and is used in certain circumstances where additional features such as use of the **ALK** Alarm Kit option means that the cylinder dogging location must be moved - ensuring the touch bar remains operable whilst the latch/latches are retracted.



REL.SD98E0.ALK

**SD** Special Centre Case Cylinder Dogging is available only on the **REL.99** series and replaces the standard **HD** - Hex Key Dogging.

**SD** dogging employs normally the **REL.20-001C.626** C Section Mortice Cylinder - Satin Chrome. The cylinder is equipped with a straight cam and can be set up by Axis prior to despatch.

#### How to specify or order

Use the prefix **SD**. For example - **REL.SD9927E0.US28**

#### REL.LD Less Dogging Available on REL.22/98/99/33A & 35A Series Devices

The default specification on all devices is **HD** - Hex Key Dogging. Where permanent external security is important it may be appropriate to remove the dogging facility at the specification stage.

Less Dogging is available on all devices shown in this brochure.

#### How to specify or order

Use the prefix **LD**. For example - **REL.LD22E0.US28**

#### Double Cylinder -2 - Available on REL.98/99 Series Devices Only

The **Double Cylinder** option features an inside key cylinder which locks or unlocks the outside trim and an outside key cylinder which retracts the latch bolt only (NL function).



REL.98K-2

Available with the **TP, K** or **L** trims (See page 13 for example), the system requires 2 off **REL.20-022C.626** C Section Rim Cylinders.

#### REL.PL Pullman Latch - Available on REL.22/98/99/33A & 35A Series Devices

Although all Von Duprin latches are based on the 'Pullman' design, where **REL.PL** is specified standard deadlocking latches are replaced with traditional 'Pullman' style latches. **REL.PL** Pullman latches are always extended and are used commonly in conjunction with electric strikes. This type of mechanism was originally designed for use on railway carriage doors where strength and safety are of primary importance.

All Von Duprin latches allow almost friction free relocking with an anti-rattle feature - invaluable on exposed exit doors.

#### REL.DTB Dummy Touch Bar Available on REL.22/98 & 99 Series Devices

Equipped with a functional touch bar this device is effectively a switch only and accommodates the **REL.RX** Switch.



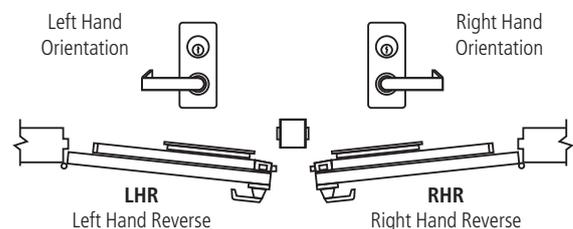
REL.DTB.99

Used to control a secondary electronic device, such as an electromagnetic lock, it does not include any mechanical functioning latch.

#### How to specify or order

- REL.DTB.22.US28** - Dummy Touch Bar with RXS1 Switch
- REL.DTB.98.US28** - Dummy Touch Bar with RXS1 Switch
- REL.DTB.99.US28** - Dummy Touch Bar with RXS1 Switch

### Door Handing



Outside

### Miscellaneous Features

#### REL.RG-27 Vertical Rod & Latch Guard

Available on REL.22/98/99/33A & 35A Series Surface Vertical Rod Devices

Vertical rod and latch guards protect the bottom rods of exit devices from malicious damage or accidental damage caused by the passage of trolleys and similar traffic through open doors. Where bottom rods become damaged, exit devices will not function correctly and may affect safe evacuation during emergency situations.

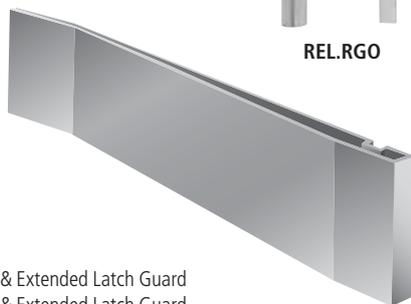
In addition to protecting the vertical rod, the guard provides a smooth, unobstructed surface allowing doors to be opened using the bumpers of a wheelchair. The standard latch guard and the extended (full width) latch guard features a 45° 'ramp'.

#### How to specify or order

- REL.RGO - Rod Guard Only (projects 30mm)
- REL.RG-27 - Rod & Latch Guard



REL.27



REL.RGO

REL.27-914

- REL.RG27-914 - Rod Guard & Extended Latch Guard
- REL.RG27-1220 - Rod Guard & Extended Latch Guard

Rod and latch guards feature all stainless steel construction in a US32D Satin Stainless Steel Finish

### Cylinders

Refer to Trim Pages for Appropriate Cylinder Types

Cylinders are not furnished with devices or trims and must be specified separately when ordering. We use Schlage Lock cylinders in the traditional round rim cylinder and round mortice cylinder designs.

Unless specified otherwise, cylinders of both types are supplied with the standard Schlage 'C' section in 5 pin format. Alternative, more secure sections, such as CE, E & EF are available to special order.

Cylinders can be provided with a number of barrel options, including:

#### Interchangeable Core Cylinders

#### Master Keying & Keyed Alike

Refer to the Sales Office for further information.

#### REL.20-022C.626 C Section Rim Cylinder -

Satin Chrome. Supplied with 2 keys normally

For use with the following trim options:

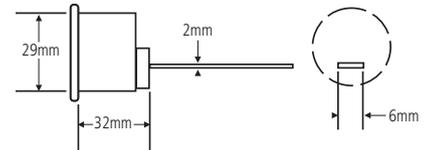
#### REL.22 Series Devices

- REL.210NL
- REL.110NL
- REL.230NL



#### REL.98/99 Series Devices

- REL.990NL-R/V
- REL.110NL
- REL.990TP
- REL.991K
- REL.996L-R/V



#### REL.33A/35A Series Devices

- REL.386NL
- REL.388

#### REL.20-001C.626 C Section Mortice Cylinder -

Satin Chrome. Supplied with 2 keys normally

For use with the following trim options:

#### REL.22 Series Devices

- REL.230TP
- REL.230L

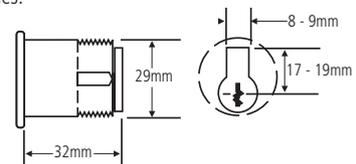
#### REL.33A/35A Series Devices

- REL.360L
- REL.360T



For use with the following Options & Accessories:

- REL.ALK Alarm Kit
- REL.CD Cylinder Dogging
- REL.SD Special Centre Case Cylinder Dogging
- Double Cylinder -2

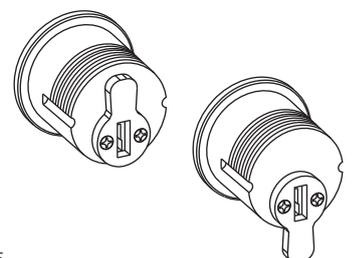


### Mortice Cylinder Cam Arrangements

#### Undogged Cam

(Standard Operations)

For all standard trim functions detailed above.



#### Dogged (Inverted) Cam

For cylinder dogging functions

### Mechanical Access Control At Escape Doors

#### Digital Locks - Basic Principles

Where coded access control is a requirement at escape doors, the introduction of a mechanical digital lock offers an affordable solution.

In these situations authorized users, in possession of a common code, have the facility to open the door from the outside without the use of a key. Locks are prepared accordingly to provide a means of override to just about any escape device.

#### REL.K2100 Keylex Mechanical Digital Lock

Use the **Keylex 2100** on all escape door installations where heavy traffic or extreme use and abuse can be expected. The proven design, with its built-in slipping clutch mechanism, will withstand all but the most violent attacks and can be expected to give many years service if specified and maintained correctly.

REL.99/K2100K



#### Standard Features & Benefits

- **Heavy duty mechanism** - Allows many hundreds of operations per day
- **Entirely mechanical operation** - No electronics or electrical wiring involved
- **Allows code combinations of up to 14 buttons** - Over 16,000 selectable code permutations (recommended 3 to 6 digit codes)
- **Code scramble** - Allows all codes to be entered in any order
- **Slipping clutch mechanism** - Nullifies forced attack or vandalism from the outside
- **Passage function** - Allows free passage from both sides at code users' discretion
- **Brushed stainless steel buttons** - Will not indicate usage
- **Free exit** - Provides escape from the inside, without code entry, regardless of the lock status

#### REL.K2100 Keylex Mechanical Digital Lock - Compatibility

The standard conversion allows use with both the **REL.22** Series and the **REL.98/99** Series of escape devices. It is recommended that operation is restricted to the rim exit device application when using the **REL.K2100K** knob version.

The lever version **REL.K2100L** should always be used with the surface mounted vertical rod and three point latching device options.

#### How to specify or order

- |                            |   |
|----------------------------|---|
| <b>REL.22/K2100K*</b>      | - Rim Exit Device with Knob Trim                      |
| <b>REL.22/K2100L*</b>      | - Rim Exit Device with Lever Trim                     |
| <b>REL.2227/K2100L*</b>    | - Surface Mounted Vertical Rod Device with Lever Trim |
| <b>REL.98/99/K2100K*</b>   | - Rim Exit Device with Knob Trim                      |
| <b>REL.98/99/K2100L*</b>   | - Rim Exit Device with Lever Trim                     |
| <b>REL.98/9927/K2100L*</b> | - Surface Mounted Vertical Rod Device with Lever Trim |
| <b>REL.98/9957/K2100L*</b> | - Three Point Latching Device with Lever Trim         |

\* All Keylex 2100s must be modified by Axis

#### Important Note

Door thicknesses should be advised in all cases.



REL.K2100K

#### Optional Features & Benefits

- **Key override** - Allows key holder access in all instances without prior knowledge of the code
- **Keyed alike** - Allows single key override to multiple locks
- **Lever Operation** - Preferable for use with surface mounted vertical rod devices
- **Flexibility** - The **REL.K2100** can be converted to operate just about any manufacturers' exit device, please consult the Sales Office

#### REL.K2100 Finishes/Materials

Lock body construction is zinc & solid brass. All code buttons are stainless steel. The standard finish is Silver (Satin Chrome effect). An optional Antique Brass finish is available to special order.

**SC** - Silver (Satin Chrome effect) with Stainless Steel Buttons

**AB** - Antique Bronze with Stainless Steel Buttons

### Mechanical Access Control At Escape Doors

#### REL.K700 Keylex Mechanical Digital Lock

Use the **Keylex 700** on all standard duty, high security escape door installations. The 'narrow stile' design, with its built-in slipping clutch mechanism, will suit all stile widths down to 43mm\* and is particularly suited for use with aluminium or hollow metal sections.

\*However, it should be borne in mind that the centre case size of the escape hardware used will also influence the minimum stile width.



REL.K700

REL.22/K700



#### Standard Features & Benefits

- **Standard duty mechanism** - Allows many hundreds of operations per day
- **Entirely mechanical operation** - No electronics or electrical wiring involved
- **Allows code combinations of up to 12 buttons** - Over 4,000 selectable code permutations (recommended 3 to 6 digit codes)
- **Code scramble** - Allows all codes to be entered in any order
- **Slipping clutch mechanism** - Nullifies forced attack or vandalism from the outside
- **Brushed stainless steel buttons** - Will not indicate usage
- **Free exit** - Provides escape from the inside, without code entry, regardless of the lock status

#### REL.K700 Finishes/Materials

Lock body construction is cast zinc. All code buttons are stainless steel. The standard finish is SC (Silver). An optional DB (Dark Bronze) finish is available from stock.

SC - Silver with Stainless Steel Buttons

DB - Dark Bronze with Stainless Steel Buttons

#### Important Note

Door thicknesses should be advised in all cases.

#### Keylex with Briton 560 Push Bar & Briton 570 Touch Bar Range

Conveniently, the **REL.K700** drives both the **560** Push Bar series & **570** Touch Bar series of devices without any modification to the orientation or size of the spindle.



560 Series

These devices are modular panic exit solutions offering a combination of security and safety. The basic device is a single point locking push bar or touch bar. Additional modular locking kits mean these units offer increased flexibility and adaptability to suit individual requirements.



570 Series

Combination with the **Keylex 700** mechanical locking trim provides a secure trim with a strong lever operation, capable of retracting multi point 'Pullman' type latches.

#### REL.K700 Keylex Mechanical Digital Lock- Compatibility

The standard conversion allows use with both the **REL.22** Series and the **REL.98/99** Series of escape devices. Additionally, this lock is compatible with all versions of the **Briton 560** Push Bar & **Briton 570** Touch Bar Range.

The standard lever operation lends itself to use with rim exit devices (single latch operation), surface mounted vertical rod and multi point latching escape device options.

#### How to specify or order

- |                          |                                       |
|--------------------------|---------------------------------------|
| <b>REL.22/K700*</b>      | - Rim Exit Device                     |
| <b>REL.2227/K700*</b>    | - Surface Mounted Vertical Rod Device |
| <b>REL.98/99/K700*</b>   | - Rim Exit Device                     |
| <b>REL.98/9927/K700*</b> | - Surface Mounted Vertical Rod Device |
| <b>REL.98/9957/K700*</b> | - Three Point Latching Device         |
| <b>REL.561/K700</b>      | - One Point Locking                   |
| <b>REL.562-V/K700</b>    | - Two/Three Point Locking             |
| <b>REL.562-S/K700</b>    | - Three Point Locking (Side Pullmans) |
| <b>REL.571/K700</b>      | - One Point Locking                   |
| <b>REL.572-V/K700</b>    | - Two/Three Point Locking             |
| <b>REL.572S/K700</b>     | - Three Point Locking (Side Pullmans) |

\* All Keylex 700s must be modified by Axis

## Mechanical Access Control At Escape Doors

### REL.K700 Keylex Mechanical Digital Lock -

**Adams Rite 4591 Paddle Handle & Adams Rite 4720 Mortice Dead Latch**

#### 4591 Paddle Handle

The **4591 Paddle Handle** is designed for simple push or pull operation as an alternative to a push bar or touch bar device. The paddle handle controls a mortice dead latch and is compatible with a modified version of the **Keylex 700**.

The push version of the **4591 Paddle Handle**, when used with the **4720 Series Dead Latch** and used in conjunction with the **8460 Ramp Jaw Strike**, conforms to BS EN 179: 1998+A1: 2001 EC Certificate of Conformity number 1121-CPD-AB0011.



4591

### Standard Features & Benefits - (Paddle)

- **Device Functions** - Ships ready for all functions; Push to Left, Push to Right, Pull to Left & Pull to Right
- **Universal** - Non-handed, suits LH & RH doors
- **Escutcheon Size** - 105mm x 34mm x 58.7mm
- **Paddle Size** - 85mm x 125mm for ease of use
- **Finishes** - Escutcheon Black (Zinc Alloy)  
- Paddle Extruded Aluminium (Satin Anodized, Dark Bronze, Black)  
Suits all architectural grade installations
- **Spindle** - Heat treated 6.35mm set on the diamond for 44mm doors

#### How to specify or order

REL.4591/4720/K700\* - Paddle Device

\*All Keylex 700s must be modified by Axis

### REL.K700 Finishes/Materials

Lock body construction is cast zinc. All code buttons are stainless steel. The standard finish is SC (Silver). An optional DB (Dark Bronze) finish is available from stock.

SC - Silver with Stainless Steel Buttons

DB - Dark Bronze with Stainless Steel Buttons

#### 4720 Heavy Duty Dead Latch

This heavy duty dead latch, for use with hollow metal and timber doors offers flexible traffic control and an excellent level of security. The auxiliary bolt feature deadlocks the latch when the door is closed against the strike. Maximum operational door gap is 5mm. The dead latch operates using the **Keylex 700** from the outside with the **4591 Paddle Handle** from the inside.

The latch bolt is reversible and is supplied un-handed unless specified. When used in emergency exit applications with the **4591 Paddle Handle**, the assembly must use the **8460 Ramped Jaw Strike** in order to conform to BS EN 179+A1: 2001.



REL.4591/4720/K700

### Standard Features & Benefits (Heavy Duty Dead Latch)

- **Overall Case Size** - 202mm x 31.7mm x 54.4mm suits hollow metal and timber door stiles
- **Universal** - Non-handed, suits LH & RH doors (field adjustable)
- **Backset** - 38.1mm suits narrow stile doors
- **Latch Throw** - 12.7mm
- **Auxiliary Bolt** - ZA-27 Zinc, chrome plated with hardened steel internal pins for assured security
- **Operation** - Authorized code entry enables retraction of the latch bolt via the outside lever. Internal paddle handle is always operable
- **Finishes** - Steel with aluminium faceplate suits all architectural grade installations

#### Important Note

Door thicknesses should be advised in all cases. The standard modification suits doors from 44mm to 50mm.

Minimum door thickness is 44mm.

### Electromechanical Access Control At Escape Doors

#### Electric Strikes - Basic Principles

Electric strikes provide remote release of a locked door. They allow the door to be opened without retracting the latch bolt. This is achieved via the release of the electric strike lip (sometimes called the keeper or gate). When the door closes the bevelled latch bolt rides over the lip and falls into the electric strike pocket.

#### REL.6113 Electric Strike - Heavy Duty Rim Mount

##### Application

For use with rim mounted escape hardware on single door applications.

- Hollow metal frames
- Timber frames
- Aluminium frames

##### Compatibility

- REL.22EO
- REL.33A-EO
- REL.35A-EO
- REL.98EO
- REL.99EO



Strikes are furnished  
**Fail Secure (FSE)**  
or **Fail Safe (FS)**

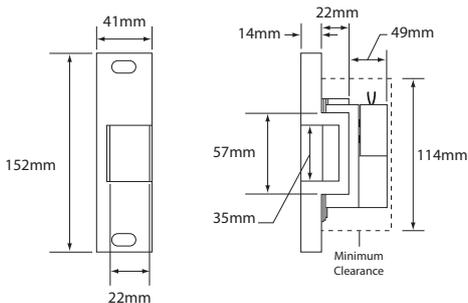
Optional **DS** Dual Signal Switch feature is available  
(see Access Control Brochure - page 26)

##### Electrical Specification

**Solenoid** (Continuous Duty) - 12Vdc  
**Current Holding** (Seated) - 600mA

**Solenoid** (Continuous Duty) - 24Vdc  
**Current Holding** (Seated) - 330mA

##### Dimensions



#### Where To Use The 6000 Series Electric Strike

This easy-to-install electric strike is suitable for heavy duty applications where security on external doors is a requirement.

#### REL.6113.LBG - Extra Heavy Duty Rim Mount

##### Application

For use with rim mounted escape hardware on single door applications where extreme abuse is anticipated.

- Hollow metal frames
- Timber frames
- Aluminium frames

##### Compatibility

- REL.22EO
- REL.33A-EO
- REL.35A-EO
- REL.98EO
- REL.99EO

Strikes are furnished  
**Fail Secure (FSE)**  
or **Fail Safe (FS)**

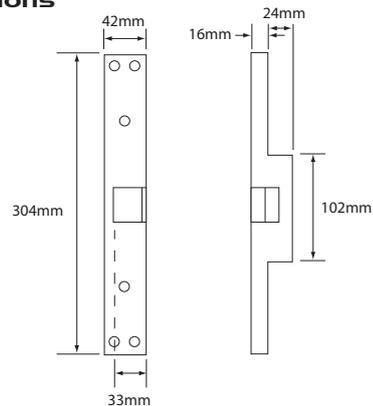
Optional **DS** Dual Signal Switch feature is available  
(see Access Control Brochure - page 26)

##### Electrical Specification

**Solenoid** (Continuous Duty) - 12Vdc  
**Current Holding** (Seated) - 600mA

**Solenoid** (Continuous Duty) - 24Vdc  
**Current Holding** (Seated) - 330mA

##### Dimensions



#### Power Options REL.6113 & REL.6113.LBG

DC regulated power supplies (recommended)

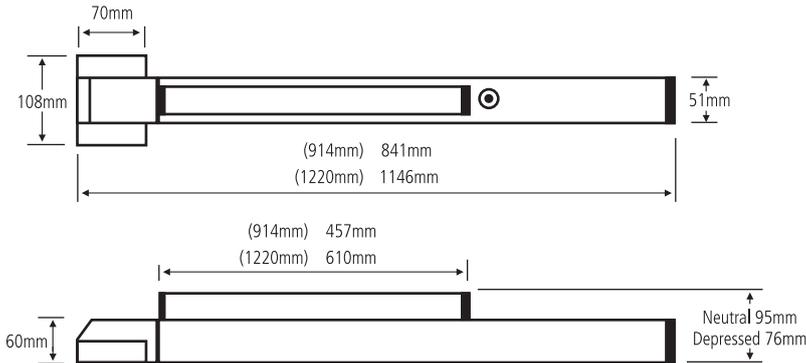
**REL.PS01** 12Vdc 2 Amp Power Supply  
**REL.PS02** 24Vdc 1 Amp Power Supply  
(See Access Control Brochure page 24)

To convert to **AC operation** use **S0-24 Kit**

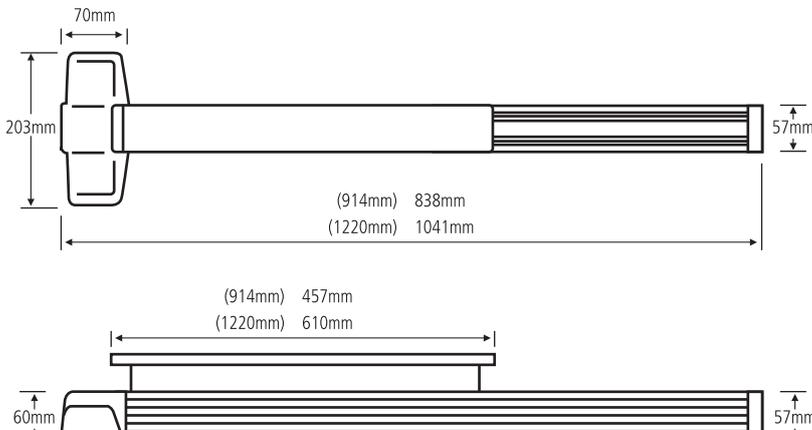


### Dimensions & Door Applications

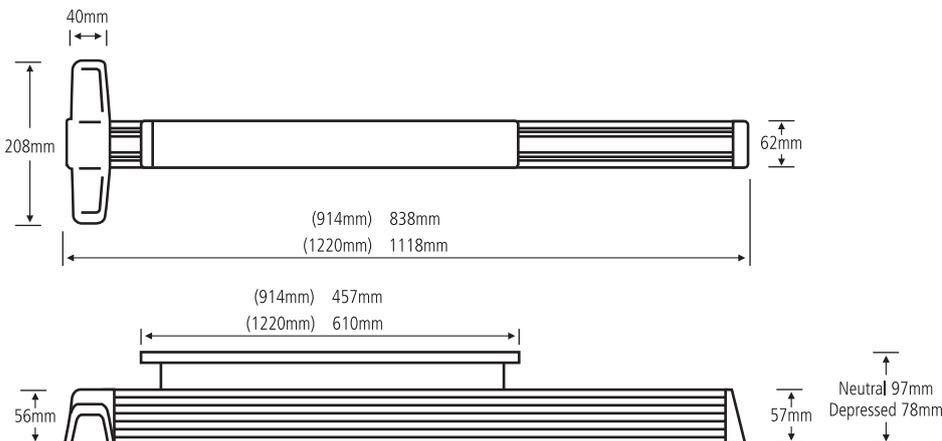
#### REL.22 Series - Mechanism Case Dimensions



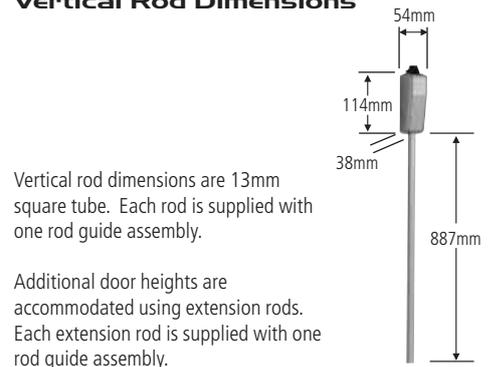
#### REL.98/99 Series - Mechanism Case Dimensions



#### REL.33A/35A Series - Mechanism Case Dimensions



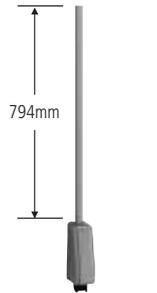
#### REL.22/98/99/33A/35A Series - Vertical Rod Dimensions



Vertical rod dimensions are 13mm square tube. Each rod is supplied with one rod guide assembly.

Additional door heights are accommodated using extension rods. Each extension rod is supplied with one rod guide assembly.

See individual device data sheets for further information.

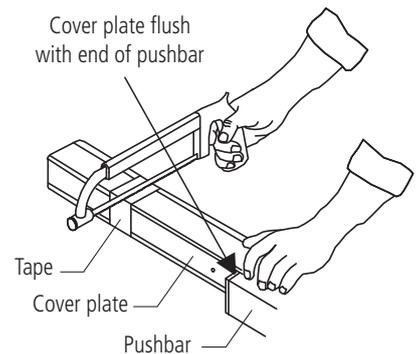


### Cutting the Mechanism

It may be necessary to cut the device mechanism case accordingly to suit the available stop-to-stop dimension.

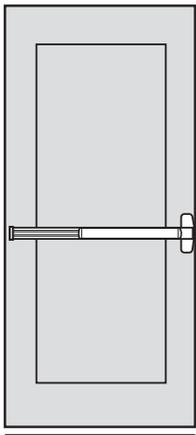
When cutting devices it is important to take into account the end cap dimension and strike projection. Additionally, where features such as **HD**, **CD**, **EL** or **RX** are present, the minimum device length increases.

If in doubt, please consult the sales office. We will be pleased to cut and prepare all devices in house if necessary.



### Dimensions & Door Applications

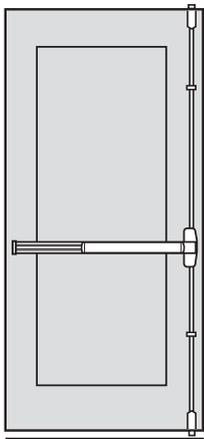
#### Single Door Applications



##### Rim Exit Device

Single point locking - available from all series shown in this brochure.

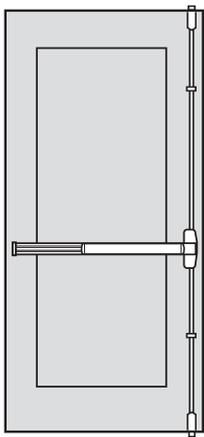
REL.22EO  
REL.33A-EO  
REL.35A-EO  
REL.98EO  
REL.99EO



##### Surface Vertical Rod Device

Two point locking - available from all series shown in this brochure.

REL.2227EO  
REL.3327A-EO  
REL.3527A-EO  
REL.9827EO  
REL.9927EO

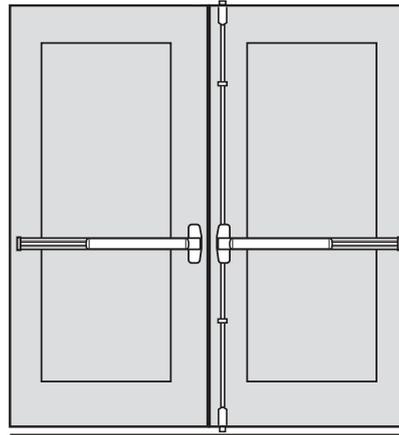


##### Three Point Latching Device

Three point locking - available only as follows:

REL.9857EO  
REL.9957EO

#### Double Door Applications

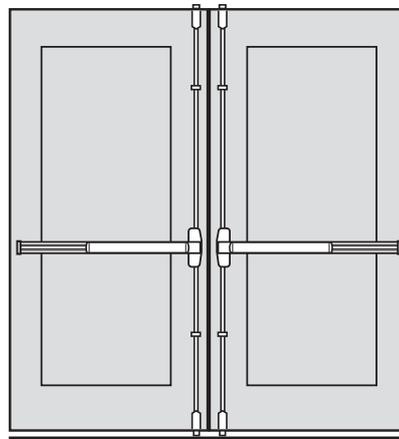


##### Rim Exit/Surface Vertical Rod Device Combination

Used on pairs of doors with **rebated** meeting stiles only - available from all series shown in this brochure.

REL.22EO/REL.2227EO  
REL.33A-EO/REL.3327A-EO  
REL.35A-EO/REL.3527A-EO  
REL.98EO/REL.9827EO  
REL.99EO/REL.9927EO

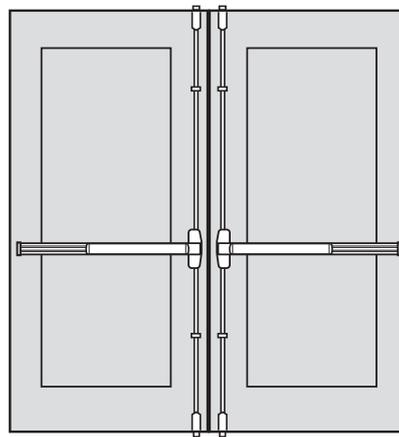
This combination uses the **REL.1609** Strike which must be specified accordingly.



##### Dual Surface Vertical Rod Device Combination

Used on pairs of doors with **plain** meeting stiles only - available from all series shown in this brochure.

REL.2227EO/REL.2227EO  
REL.3327A-EO/REL.3327A-EO  
REL.3527A-EO/REL.3527A-EO  
REL.9827EO/REL.9827EO  
REL.9927EO/REL.9927EO



##### Three Point Latching/Surface Vertical Rod Device Combination

Used on pairs of doors with **plain** meeting stiles - available only as follows:

REL.9857EO/REL.9827EO  
REL.9957EO/REL.9927EO

This combination gives one additional locking point and uses the **REL.1609** Strike which must be specified accordingly. Do not specify this combination on rebated doors or doors with an overlapping astragal.

### nomenclature

	Example	EL	99	27	L	ALK	914	US28	RHR
CD	Cylinder Dogging								
CX	Chexit								
SD	Special Dogging								
E	Electric Locking								
EL	Electric Latch Retraction								
LX	Latch Bolt Monitoring								
PL	Pullman Latch								
PN	Pneumatic Latch Retraction								
RX	Request to Exit								
RX2	Double Request to Exit								
SS	Signal Switch								
22	Series 22								
33A	Series 33 Grooved								
35A	Series 35 Smooth								
98	Series 98 Smooth								
99	Series 99 Grooved								
none	Rim Exit Device								
27	Surface Mounted Vertical Rod Device								
57	Three Point Latching Device								
DT	Dummy Trim								
EO	Exit Only								
K	Knob Trim								
L	Lever Trim								
L-BE	Lever Trim with Blank Escutcheon								
NL	Night Latch Trim								
NL-OP	Night Latch Trim with Optional Trim								
T	Thumb Turn								
TP	Thumb Piece Trim								
2	Double Cylinder								
ALK	Alarm Kit								
914	To suit this door size (mm)								
1220	To suit this door size (mm)								
Finish	US28 (Stock)								
Handing	LHR or RHR								

Escape Hardware - October 2008



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