

**SALTO**  
inspired access

SALTO GEO Global Electronic Opening



# TOTAL UNDERSTANDING

SALTO GEO a 360° wire-free locking solution

## A NEW DIMENSION OF ACCESS TECHNOLOGY

**The new SALTO GEO (Global Electronic Opening) Cylinder is smart, intuitive and designed to be used with almost any type of door.**

Installing SALTO GEO is simple, easy and quick. It enables you to convert almost any door into a fully featured access controlled door giving you total control at all times over who is able to access what, where and when.

SALTO GEO also means no more problems with master key management. With SALTO's Data-On-Card and wireless real-time on-line technology, users can manage access credentials and add, restrict or delete access privileges on the fly.

And thanks to its open architecture design, you can also use SALTO GEO to connect with an existing security system to create a fully integrated platform, delivering increased efficiency, cost savings and complete access control flexibility.



1. WORLD WIDE UNDERSTANDING
2. FLEXIBLE UNDERSTANDING
3. APPLICATION UNDERSTANDING
4. TECHNOLOGICAL UNDERSTANDING
5. COMPLETE UNDERSTANDING
6. DETAILED UNDERSTANDING



**SALTO GEO understands your needs, your building, your technology, how it needs to work, how flexible it needs to be. It is a powerful new dimension in wire-free access control technology that's easy to install in any kind of door.**

**SALTO GEO, part of our 360° wire-free solutions platform.**

## WORLD WIDE UNDERSTANDING

SALTO Systems are global leaders in advanced battery powered wireless access control solutions, and are the access option of choice on over 900,000 doors in over

### 70 countries.

We know that different countries and markets require different solutions.

That's why we've risen to the challenge of developing a new dimension in access control technology using the latest micro electronics engineering techniques.

SALTO has designed a solution based on European standards, UK standards, US standards, Nordic standards and Asian standards.

The comprehensive product range includes half cylinders, thumbturn cylinders, double cylinders, mortise cylinders, external cylinders, RIM cylinders and padlocks offering the widest possible range for all types of applications.

SALTO GEO is a global solution, so whether you're in **Europe, America, Scandinavia, the Middle East, Asia, Australia or Africa** we have the solution you need.





**G9S1 -**  
SALTO GEO  
Scandinavian  
external cylinder



**G9B1 -**  
SALTO GEO  
US RIM cylinder



**G9S3 -**  
SALTO GEO  
Scandinavian security cylinder



**G9U1 -**  
SALTO GEO  
UK half cylinder



**G9U2 -**  
SALTO GEO  
UK cylinder  
with inside thumbturn



**G9M1 -**  
SALTO GEO  
Mortise cylinder



**G9K1 -**  
SALTO GEO  
UK RIM cylinder



**G9E3 -**  
SALTO GEO  
European double cylinder



**G9A1 -**  
SALTO GEO  
Australian oval cylinder



**G9E2 -**  
SALTO GEO  
European cylinder  
with inside thumbturn



**G9E1 -**  
SALTO GEO  
European half cylinder





## FLEXIBLE UNDERSTANDING

**Doors come in all types of shapes and sizes and they're made from many different materials including wood, metal, composites and glass.**

But SALTO GEO is modular, flexible and easy to install in any kind of door. It's been specially designed and developed for use with doors where normal escutcheons cannot be fitted or are not allowed i.e. antique doors, certain types of fire doors, some types of multipoint locking systems etc.

**So whatever you want to control: a standard door, a glass door, an aluminium door, a steel door, a lift or elevator, a car park barrier or gate, entry to a data centre, access to a server cabinet, the security of a container or anything else SALTO GEO is the answer.**



Switch solutions



Server and rack solutions



Elevator solutions



Padlock solutions



### Cylinder with inside thumbturn

This SALTO GEO cylinder is one of the most versatile products on the market. It is available in a wide range of sizes making it the ideal choice for

### Half cylinder

SALTO half cylinder, is available in European and UK standards. It is suitable for use in any application where the locking system just needs to be opened from the outside.

Its special design enables it to be used not just with conventional doors, but also with electric switches, elevator panels, server racks and more.



wooden, steel and narrow profile doors that need to be locked from the inside.

Available in European and UK standards.



### Double Cylinder

SALTO double cylinder is a masterpiece of micro engineering. In just one device users can control both entrance and exit functions on a single door, and it can also be configured to include an antipass back function if required.



### US Mortise cylinder

This SALTO GEO cylinder is designed for use in the US market, and for use on projects where American products such as panic bars and ANSI mortise locks etc are installed.



### RIM cylinder

Available in US and UK standards, the RIM cylinder is a perfect choice for all those applications that require a RIM lock.



### Oval cylinder

Available in Australian and Scandinavian versions, this cylinder brings the best of SALTO technology to those doors that need this specific kind of locking system.



## APPLICATION UNDERSTANDING

SALTO GEO enables users to select the level of performance they need to match their individual requirements.

For residential applications, the Self-Programmable system is ideal as it can manage a small number of doors and users – from just a single door and user - without the need of a computer.

The SALTO ROM System is designed for medium level users and is controlled through simple and intuitive software, making it easy to manage user schedules, calendars, groups, time zones etc.

For large buildings such as schools, colleges, universities, hospitals, public and commercial buildings and airports the

SALTO Data-On-Card system is the answer.

The SALTO Data-On-Card system is powerful, flexible, capable and cost effective. It can manage many thousands or even millions of individual doors and users if necessary, enabling users to be removed and added instantly, access rights to be modified quickly and easily, audit trail events to be retrieved from the lock remotely and much, much more.

For users that need an advanced electronic locking system with instant control, SALTO has developed the SALTO Wireless on-line real-time system.



### SELF-PROGRAMMABLE SYSTEM

- No computer needed.
- Enables users to eliminate key cards without compromising security.
- Ideal for residential applications.



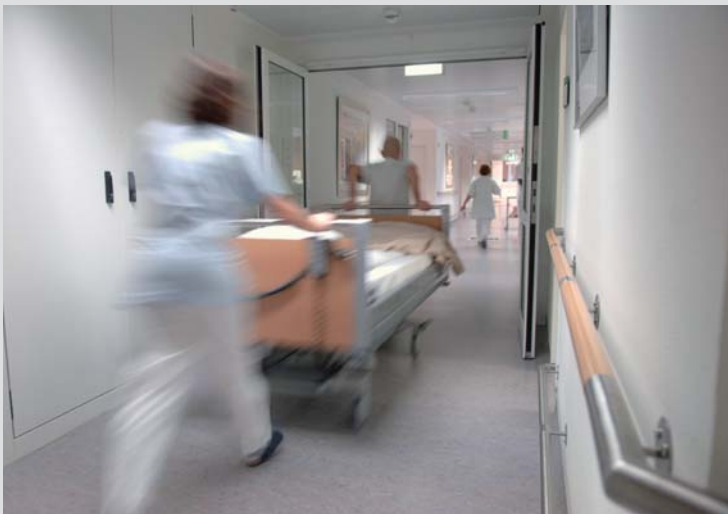
### ROM SYSTEM

- Managed through computer.
- Control calendars, schedules, user groups, time zones and more.
- Enables users to eliminate key cards without compromising security.
- Ideal for small businesses or small buildings, with a small number of users.



### DATA-ON-CARD SYSTEM

- Managed through computer.
- Control calendars, schedules, user groups, time zones and more.
- Enables users to eliminate key cards without compromising security, update key cards on the fly, collect audit trail events from the locks, receive updates on lock battery status and much, much more.
- Ideal for any kind of property.



### WIRELESS SYSTEM

- Managed through computer
- Control calendars, schedules, user groups, time zones and more.
- Enables users in real-time to eliminate key cards without compromising security, update key cards, collect audit trail events from the locks, receive updates on lock battery status and much, much more.
- Ideal for any kind of property where real time high performance control is needed.

**SALTO wireless on-line technology uses RF communications to link the electronic cylinders and locks to the controlling server in real time. It enables users to control their on-line stand alone doors in real-time, monitor door status with immediate notification if the door has been left open or an unauthorised entry attempted, cancel keys instantly, change the setup of cylinders and locks and so on.**

**A huge range of benefits all achieved with no need to hard wire any door, simply the SALTO state-of-the-art, energy efficient, cost effective and reliable wire-free Wireless on-line real-time system.**

## TECHNOLOGICAL UNDERSTANDING



MIFARE DESFire



### RFID TECHNOLOGY - SVN DATA-ON-CARD BACK UP

RFID (Radio Frequency Identification) and NFC (Near Field Communications) are both R&W (read and write) technologies so to ensure access is never compromised at SALTO we always incorporate our patented Data-On-Card SVN™ (SALTO Virtual Network) technology into our locks as standard.

This allows stand-alone cylinders and locks to upload, store and download the latest access information as people use their RFID cards in the property. The cancelled key list can be updated, key cards can be cancelled and audit trail reports can be downloaded in both wire free or wireless environments depending on the locks selected. All of which gives the building owner and /or operator additional security and operating benefits compared to standard locking systems.





## RFID CONTACTLESS TECHNOLOGY

Radio frequency identification (RFID) is a generic term used to describe a system that transmits the identity of an object such as a key card wirelessly, using radio waves. The advantage of RFID in high traffic areas such as schools, universities, airports, hospitals and many other environments is that it is convenient. A user simply presents their 'key' card to unlock a door, rather than swiping a magnetic stripe card and because there is no contact between the card and the reader, there is less wear and tear, and therefore less maintenance.

SALTO offers a wide range of RFID cards all based on ISO standards.

These include Mifare, Mifare plus, DESfire, DESfire EV1, Legic advant 4000 and HID iClass. All are extremely secure thanks to built in encryption and protection and they cannot be cloned. RFID cards are also more reliable as the cards cannot be demagnetised (unlike a magstripe card) and are hard wearing, water and weather resistant and can be re-used as many times as you need making them very cost effective.



## MULTI-APPLICATION SMART CARDS

Perhaps the greatest appeal of RFID or smart card technology is its ability to combine multiple applications into one dynamic card. Such cards simplify life for end-users by consolidating multiple cards for access control, time and attendance, cashless payment etc on to a single card.

This means the user can enjoy access to multiple services such as vending machines, time and attendance terminals, photocopiers, computer control systems, POS terminals and so on all with one multi-application card. And because these cards deliver such highly personalised applications their perceived value is much higher, helping to increase the productivity and the convenience of the building.



## NFC CONTACTLESS TECHNOLOGY

NFC (Near Field Communications) is a new technology that everyone will soon be using. It is an extension of the RFID technology found in proximity smart cards and operates at 13.56MHz over a range of a few centimetres.

NFC enabled smart phones will emulate proximity Mifare cards turning the phone into a multi-application device. The aim of NFC is to allow contactless transactions and connectivity in a fully interoperable way and make life easier and more convenient for consumers around the world by making it simpler to make transactions and exchange digital content.

Its principal application is intended mainly for use in mobile phones as a smart payment device where it will act as a debit/credit payment card but plenty of other uses are possible including applications in the fields of hospitality, transport, ticketing, access control, car parking, loyalty, coupons, service discovery (tag reading), mobile marketing and social networking.

NFC extends the ability of contactless card technology. It will enable users to share business cards, make transactions and payments, access information from smart posters or provide credentials for access control systems with a simple touch. And as many companies currently use contactless ID cards to control access to their facilities, NFC should be able to reduce the cost of card issuance and management and thus deliver tangible cost savings to operators and users.

## COMPLETE UNDERSTANDING

SALTO GEO is not just an electronic cylinder; it's a new dimension in stand alone access control technology and part of the comprehensive SALTO access control platform.

Our state-of-the-art system enables users to turn any door into a fully featured access control door without compromising comfort, convenience, security or control. It eliminates the need to replace locks if key security is breached due to the loss or theft of key cards and allows key cards and locks to be simply and quickly updated, restricted or deleted remotely.

So whether you want to secure and control main entrance doors, main gates, internal doors, glass doors, emergency exits, elevators, locker rooms or car park barriers; or need designer locks and handles, special colours and finishes to match specific design schemes you can have it - managed by some of the most powerful and reliable software available including Windows and SQL packages capable of monitoring over 4 million on-line users. With SALTO you can do it all.

### PANIC BAR DEVICES

SALTO has developed a complete program to control emergency exits equipped with panic bar devices.

- EN1125 certified\*.
- Compatible with more than 40 panic bars.
- Solution for mortise panic bars and RIM panic bars.
- Available in wireless on-line versions\*.



### WALL READERS FOR ELEVATORS AND MECHANICAL GATES

For those doors that need to be powered, including elevators, gates, barriers, shutters, speed gates, automatic door openers, and doors equipped with electric strikes etc.

- SALTO Virtual Network updating points, to update or cancel user's cards, collect audit trail data, and report the battery status of stand alone devices.
- Vandal proof\*
- IP based connection for on-line versions.
- Permits special functions: antipass back, roll call, lock down, limited occupancy, automatic enrolment, and connection to relay extension boards.



### LOCKER LOCKS

SALTO Locker locks provide the opportunity to implement locker management into the same platform using the same credential.

- Small size.
- Can be fitted into any kind of locker, even those with steel doors.
- User friendly operation.
- Different operational modes include free assignment, fixed locker assignment or family option.



\* Depending on the model.

- SALTO Virtual Network capabilities.



#### **AELEMENT THE STYLISH ELECTRONIC LOCK WITH WIRELESS DNA**

SALTO AELEMENT is a technical gem that architects will love thanks to its style, and the high performance of its access control technology.

- Compatible with European and ANSI standards.
- Smallest reader on the market with a double injection finish.
- Can be combined with almost any kind of handle, even designer handles.
- Wireless ready, can be switched in seconds from off-line stand alone to wireless on line just by plugging in its wireless antenna, with no need to replace any hardware.



#### **ELECTRONIC LOCKS**

For those doors that need to have more functions or additional locking options, SALTO also has a wide range of Electronic escutcheons.

- 8 different opening modes.
- Different standards: European, heavy duty European, Scandinavian, heavy duty Scandinavian, ANSI, Glass door lock escutcheons, security models, double reader escutcheons etc.
- SALTO Virtual Network capabilities.
- Can be wireless on-line to provide real time on-line communication with the server.

*Wireless*  
real-time access control



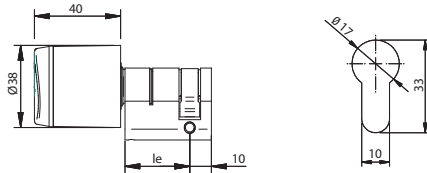
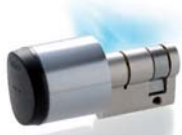
#### **SOFTWARE**

SALTO software is strong and powerful, but is simple and easy to use.

- Based on SQL database and available in a windows service version.
- Can control up to 4 million users and 64 000 doors in a single system.
- Hotel software with PMS compatibilities.
- Multi-workstation and LAN/WAN capabilities.
- Department operator version available.
- Integration interface provides compatibility with third party systems.
- Flexible and secure.

## DETAILED UNDERSTANDING

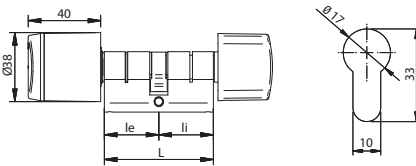
### G9E1 - SALTO GEO European half cylinder



#### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- Available for distances from 30. up to 50mm.
- 1 Lithium standard battery CR2.

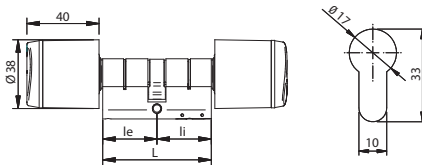
### G9E2 - SALTO GEO European cylinder with inside thumbturn



#### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- Available for distances from 60. up to 150mm.
- Special model for glass doors.
- 1 Lithium standard battery CR2.

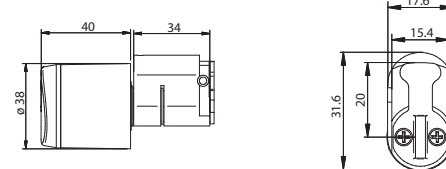
### G9E3 - SALTO GEO European double cylinder



#### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- Available for distances from 60. up to 150mm.
- 1 Lithium standard battery CR2.

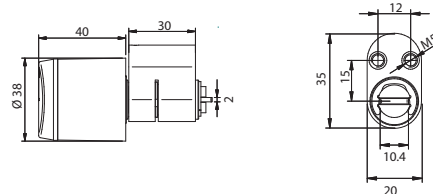
### G9A1 - SALTO GEO Australian oval cylinder



#### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- Australian oval cylinder profile, 34mm distance.
- 1 Lithium standard battery CR2.

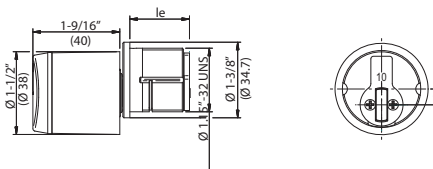
### G9S1 - SALTO GEO Scandinavian external cylinder



#### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- Scandinavian external profile cylinder.
- 1 Lithium standard battery CR2.

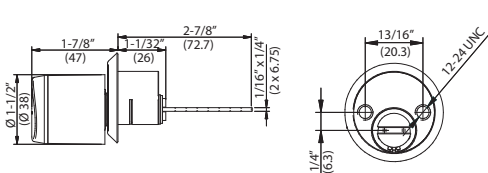
### G9M1 - SALTO GEO Mortise cylinder



#### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- 29. up to 50mm. (1-1/8" up to 1").
- 1 Lithium standard battery CR2.

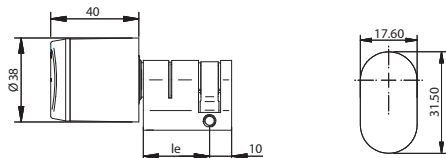
### G9B1 - SALTO GEO US RIM cylinder



#### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- US RIM cylinder profile for Rim locks.
- 1 Lithium standard battery CR2.

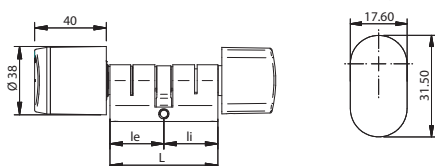
## G9U1 - SALTO GEO UK half cylinder



### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- Available for distances from 30. up to 50mm.
- 1 Lithium standard battery CR2.

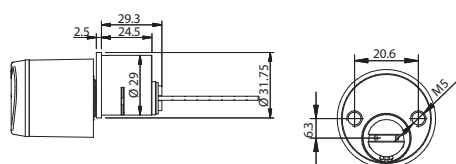
## G9U2 - SALTO GEO UK cylinder with inside thumbturn



### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- Available for distances from 40. up to 150mm.
- 1 Lithium standard battery CR2.

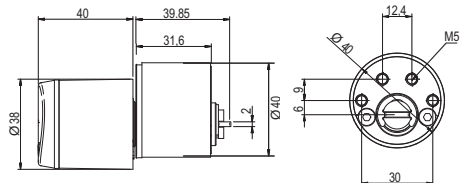
## G9K1 - SALTO GEO UK RIM cylinder



### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- 1 Lithium standard battery CR2.

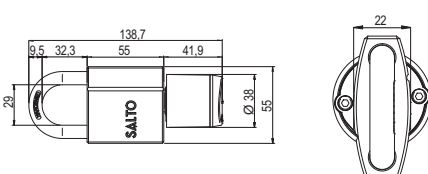
## G9S3 - SALTO GEO security Scandinavian external cylinder



### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- Scandinavian security cylinder for Scandinavian mortise locks.
- 1 Lithium standard battery CR2.

## G9P1 - SALTO GEO Padlock



### Technical features:

- Available in 4 different finishes: satin chrome, polished chrome, PVD polished brass and PVD satin brass.
- 1 Lithium standard battery CR2.

## GENERAL INFO

### Access control features:

- Maximum number of users per door: 4 million.
- Maximum number of doors in a system: 64,000.
- Maximum events on lock audit: 1000.
- Time zones: 256.
- Time periods: 256.
- Calendars in system: 256.
- Zones in system: 1024.
- User groups: unlimited.

### Available lock modes:

- Standard (locked at all times).
- Automatic opening (8 pairs of "hands free" timed lock and unlocks per day with holidays).
- Toggle (present card to lock, present card to unlock).
- Time toggle (present card to lock, present card to unlock depending on schedules).

### Main features and benefits:

- Fully integrated with the SALTO XS4 platform.
- Virtual network capable through SALTO Virtual Network technology.
- Choice of ID carriers: iButton, Mifare, DESfire, Legic, HID iClass.
- NFC compatible on contactless versions.
- All communications between the carrier and the GEO cylinder are encrypted and secure.
- Optical signalling through light ring. Dual colour green/red to indicate access authorisation
- High security via high resistance, hardened anti-drill protection.
- Concealed fixing screws for greater security and improved aesthetics.
- Emergency opening by means of portable programming device (PPD).

Since its inception in 2001, SALTO Systems has grown to be the market leader in state-of-the-art electronic access control systems.

Recognising the need for a new access control concept, SALTO has developed a wide range of innovative products such as the SALTO Virtual Network and XS4 access control platform, while our electronic escutcheons, wall readers and on-line and off-line control units now control security access for a growing range of end users from Airports to Hospitals, Banks to Government Buildings and Universities to Hotels.

At SALTO we are determined to remain the best at what we do - both now and in the future. We never forget you have a choice, and we are committed to providing uncompromising standards of excellence both in our access control products and in our service to you, our customers.

Technology is only useful if it improves people's lives. Our access control systems aim to do just that. So if you need a better, more efficient way to secure and control your building, take a look at SALTO. Jump!



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inspired access

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