SALTO XS4 Escutcheon |
networked electronic locking systems:

Smart, secure and innovative, XS4 Electronic handle
sets need no hard wiring and provide a truly wire-free
networked electronic locking solution with a great range
of features.

ANSI ESCUTCHEON
Ax6

SALTO
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XS4
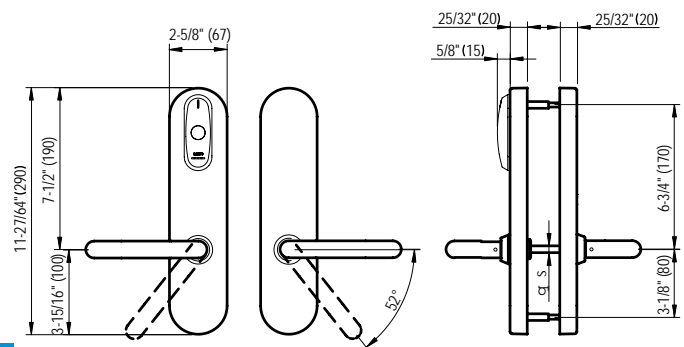by S A L T O

NETWORKED ELECTRONIC ESCUTCHEONS
XS4
FOR ANSI MORTISE LOCKS
-
The SALTO XS4-60 wide body version for ANSI mortise locks is specially designed to be compatible with most ANSI mortise locks and tubular latches. It is specially designed for use on busy, high traffic doors that need additional strength.

XS4 A60: WIDE BODY VERSION

A60 XS4 WIDE BODY VERSION

MAIN FEATURES:

- Fully integrated with the SALTO XS4 platform.
- Virtual network capable through SALTO Virtual Network technology.
- ID technologies available: i-Button, DESFire, DESFire EV1, Mifare, Mifare plus, Mifare Ultralight C, Inside Picopass, LEGIC Prime, LEGIC Advant, HID iClass©, SKIDATA and Bluetooth.
- Available in wireless version for wireless real-time control.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- Body and escutcheon made of steel.
- Compatible with ANSI mortise locks and tubular latches.
- Mechanical override with audit trail facility available.
- Electronic privacy function through thumb turn or button on the inside.
- AMOK version available for offline lockdowns.
- IP56 compliant (external escutcheon).
- ANSI/BHMA A156.25 Grade 1 compliant for heavy commercial, institutional and industrial use.*
- Fire resistant UL listed (3 hours steel doors).

MECHANICAL FEATURES:
- Dimensions: 290mm x 67mm x 20mm.
- Weight: 1.5kg.
- Handle turning hangle: 52°.
- Door thickness compatible: 30mm to 115mm.
- Distance from the handle to the cylinder: 61mm, 62mm or 63mm.
- Handle clutch mechanism.
- Inside always allows free egress (anti panic in combination with lock).
- Concealed fixing screws for greater security and improved aesthetics.
- Body and escutcheon made of steel.
- Handle fixed by Steady Fix system (patented).
- Handles compatible: 16mm Ø, 18mm Ø.
- High security through high resistance anti-drill plates to protect wires and reader area and additional extreme protection through hardened axes and floating steel balls in the handle area.

MORTISE LOCK & CYLINDER COMPATIBILITY:
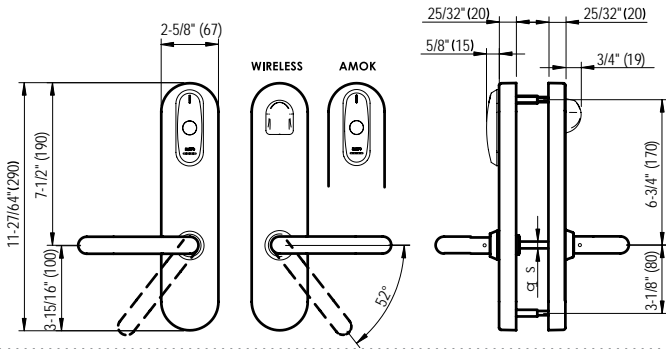- ANSI Mortice locks.
- Some tubular latches.

SQUARED SPINDLE COMPATIBILITY:
- 7mm, 8mm.
- 7 mm split, 8mm split.

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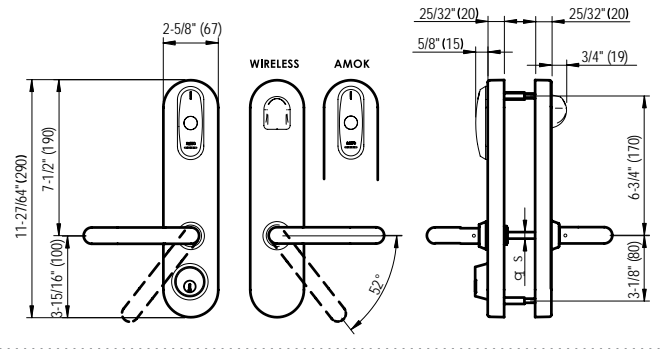
XS4 A60: MODELS AVAILABLE
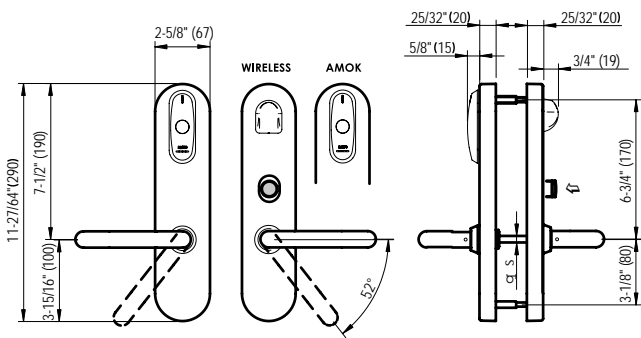
MODEL 50:
- 2 handles any type.

MODEL 60:
- 2 handles any type.
- Built in mechanical override with audit.
  (Ax660 reference: Mortise cylinder 1 1/8").
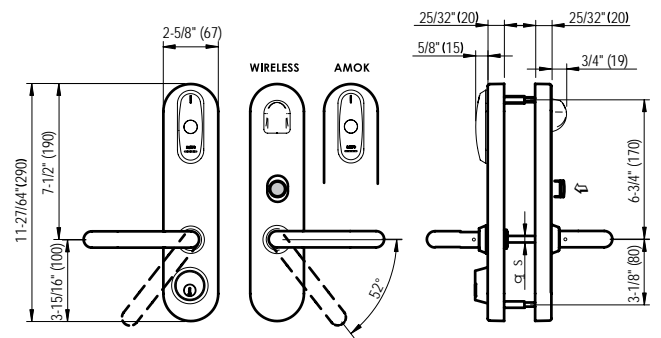

MODEL 56:
- 2 handles any type.
- Electronic "do not disturb" system (Not available in self-programmable).
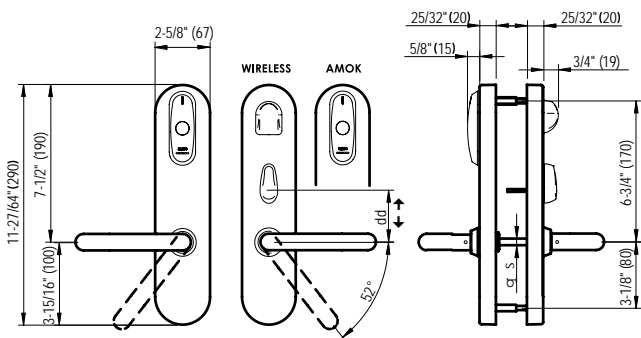

MODEL 66:
- 2 handles any type.
- Electronic "do not disturb" system (Not available in self-programmable).
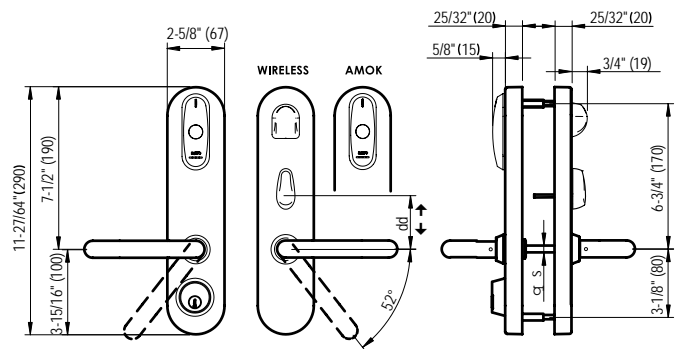- Built in mechanical override with audit. (Mortise cylinder 1 1/8").

MODEL 58
- 2 handles any type.
- Inside thumbturn.

MODEL 68
- 2 handles any type.
- Inside thumbturn.
- Built in mechanical override with audit. (Mortise cylinder 1 1/8").

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NETWORKED ELECTRONIC ESCUTCHEONS
XS4 WITH KEYPAD
FOR ANSI MORTISE LOCKS
-
The XS4 electronic lock with keypad is a brand new product that increases security and control as it offers the choice of two forms of authentication to grant access. You can use your credential, your credential plus PIN (Personal Identification Number) or just your PIN to gain access. It is also available in a wireless version for online real-time control.

XS4 A60: WIDE BODY VERSION

A60 XS4 WIDE BODY VERSION Ax6-K
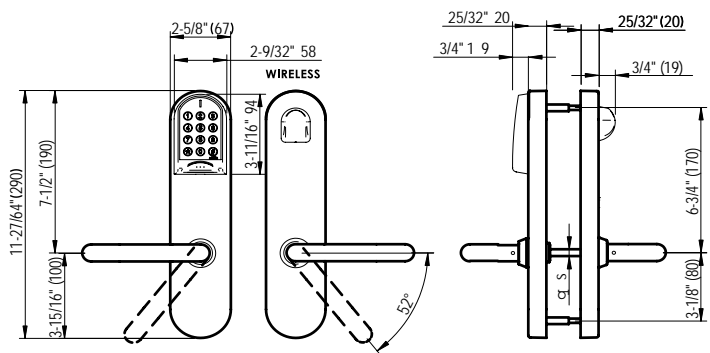
KEYPAD OPTIONS

KEYPAD CODE: The lock itself has an access code used for user authentication.
Every user that goes through that door knows the keypad code.
When two users share the same office or room, they are the only ones that know the keypad code of the room. Keypad code can be updated remotely through SALTO Wireless system. Several calendars can be programmed every day, giving the ability to use the passage mode type opening during the day, and dual authentication only at night. Up to 8-digit KEYPAD code.

PIN CODE: Personal Identification Number.

Each user has their own personal code. In student dorms, where extra security and dual authentication (both presenting the card and typing in the PIN code) are needed.
Up to 8-digit PIN Code

MAIN FEATURES:

- Fully integrated with the SALTO XS4 platform.
- Virtual network capable through SALTO Virtual Network technology.
- ID technologies available: i-Button, DESFire, DESFire EV1, Mifare, Mifare plus, Mifare Ultralight C, Inside Picopass, LEGIC Prime, LEGIC Advant, HID iClass©, SKIDATA.
- Available in wireless version for wireless real-time control.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- Body and escutcheon made of steel.
- Compatible with ANSI mortise locks and tubular latches.
- Mechanical override with audit trail facility available.
- Electronic privacy function through thumb turn or button on the inside.

MECHANICAL ASPECTS:
- Dimensions: 290mm x 67mm x 20mm.
- Weight: 1.5kg.
- Handle turning hangle: 52°.
- Door thickness compatible: 30mm to 115mm.
- Distance from the handle to the cylinder: 61mm, 62mm or 63mm.
- Handle clutch mechanism.
- Inside always allows free egress (anti panic in combination with lock).
- Concealed fixing screws for greater security and improved aesthetics.
- Body and escutcheon made of steel.
- Handle fixed by Steady Fix system (patented).
- Handles compatible: 16mm Ø, 18mm Ø.
- High security through high resistance anti-drill plates to protect wires and reader area and additional extreme protection through hardened axes and floating steel balls in the handle area.

MORTISE LOCK & CYLINDER COMPATIBILITY:
- ANSI Mortice locks.
- Some tubular latches.

SQUARED SPINDLES COMPATIBILITY:
- 7mm, 8mm.
- 7 mm split, 8mm split.

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XS4 A60-K: MODELS AVAILABLE

MODEL 50-K:
- 2 handles any type.
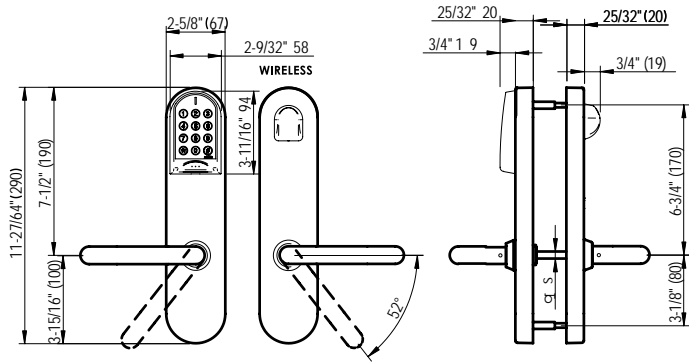
MODEL 60-K:
- 2 handles any type.
- Built in mechanical override with audit. (Mortise cylinder 1 1/8¨).
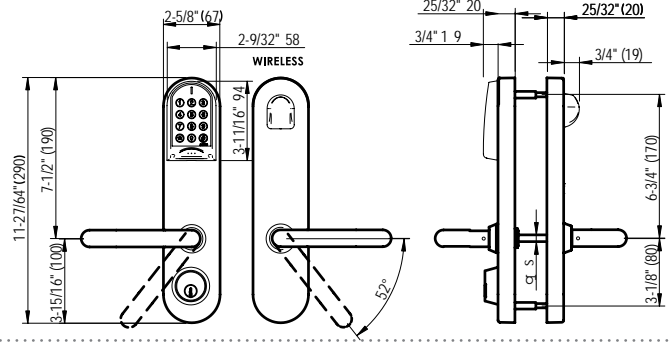
MODEL 56-K:
- 2 handles any type.
- Electronic "do not disturb" system (Not available in self-programmable).
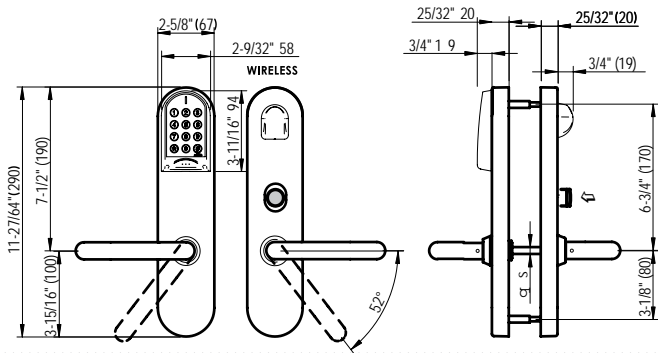
MODEL 66-K:
- 2 handles any type.
- Electronic "do not disturb" system (Not available in self-programmable).
- Built in mechanical override with audit. (Mortise cylinder 1 1/8¨).
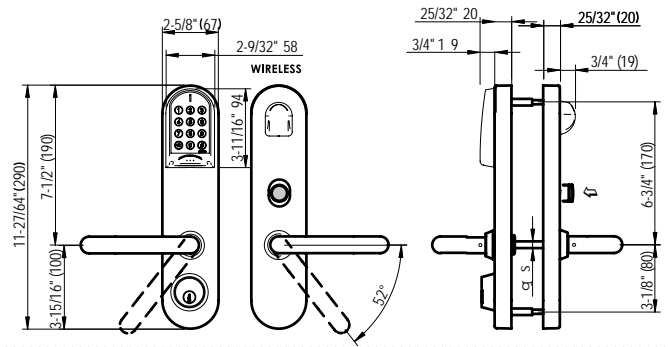
MODEL 58 -K:
- 2 handles any type.
- Inside thumbturn.

MODEL 68-K:
- 2 handles any type.
- Inside thumbturn.
- Built in mechanical override with audit. (Mortise cylinder 1 1/8¨).

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ELECTRONIC MAIN FEATURES AND BENEFITS:

- Simple offline installation is possible on any type of door, including those with narrow frames.
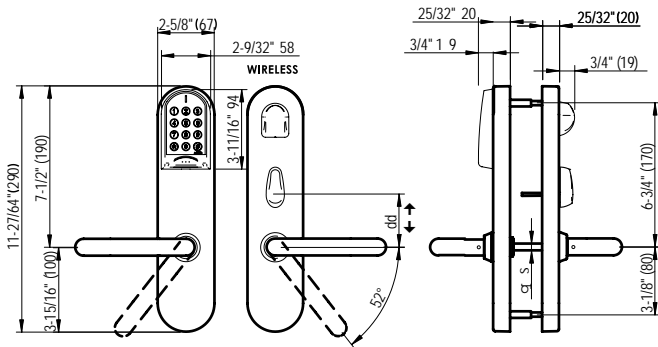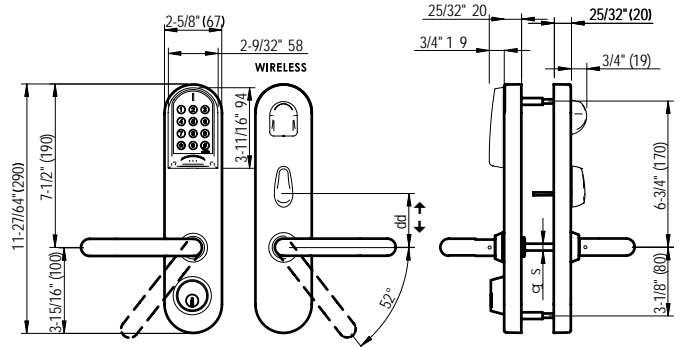- Virtual network capable through SALTO Virtual Network technology.
- Wireless real-time online capabilities through the SALTO wireless network*.
- Door status detector to monitor intrusions or door left open status (wireless escutcheons only).
- User on card audit trailing capability for audit trailing via the SALTO Virtual Network (SVN).
- Contactless versions compatible with ISO 14443A, ISO 14443B and ISO 15693 (Vicinity) and covering a wide range of mainstream RFID brands such as DESFire, DESFireEV1, Mifare, Mifare plus, Ultralight C, LEGIC, HID iClass©, Inside Picopass and SKIDATA allowing Multi-application with third party systems using one card.
- SALTO 9000 contactless range is compatible with NFC (Near Field Communication) technology which allows NFC enabled cell phones to act as contactless data carriers to open and control SALTO access controlled doors.
- All communications between the carrier and the electronic lock are encrypted and secured.
- Choice of 40mm narrow or 67mm wide body handle set.
- Covers door thicknesses of between 30-115mm.
- Compatible with Mortise locks with axes distances of 47 to 110mm.
- The lock can always be opened from the inside (a single action panic feature works in conjunction with the relevant mortise lock).
- Available in 7mm, 7mm split, 8mm, 8mm split, 9mm (DIN 18273 certified), 9mm split and 7.6 mm split spindle versions.

- High security protection via high resistance, hardened anti-drill plates to protect wiring and reader area. Additional protection provided by hardened axes and floating steel balls in the handle area.
- Concealed fixing screws for greater security and improved aesthetics.
- Low battery power indication monitored through the SALTO Virtual Network (SVN) as low battery status information is written onto carriers and passed to the software. Also readings can be taken at the lock and passed to the software via PPD connection.
- Emergency opening via portable programming device (PPD).
- Non volatile memory (memory is not deleted, even if power fails).
- Office mode ("passage" setting) available for leaving doors in free access mode.
- Available with mechanical cylinder cut outs for key override or access lock outs.
- Mechanical override with audit trail facility in some models.
- Firmware upgrade through PPD.
- DDA (Disability Discrimination Act) compliant (depending on handle type).

*depending on the model

AVAILABLE LOCK MODES:

- **STANDARD:** Locked at all times.
- **OFFICE:** Free passage ability.
- **TIMED OFFICE:** Free passage with automatic locking.
- **AUTOMATIC OPENING:** 8 pairs of "hands free" timed lock and unlocks per day with holidays.
- **AUTOMATIC OPENING + OFFICE.**

- **TOGGLE:** Present card to lock, present card to unlock.
- **TIME TOGGLE:** present card to lock, present card to unlock depending on schedules.
- **AMOK:** Local lockdown of the escutcheon for emergency situations.

ACCESS CONTROL FEATURES:

	SELF ROGRAMMABLE	ROM	SVN (R&W)	Wireless
Maximum number of users per door	1000	1000	4,000,000	4,000,000
Maximum number of doors per system	-	16,000	64,000	64,000
Maximum events on lock audit	-	650	1000	1000
Timezones	-	30	256	256
Timeperiods	-	20	256	256
Calendars in system	-	42	256	256
User groups	-	unlimited	unlimited	unlimited
Zones in System	-	unlimited	unlimited	unlimited
Management software	Programing key & user key sets	Pro Access ROM	Pro Access HAMS (available SQL)	Pro Access HAMS (available SQL)

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SALTO WIRELESS SYSTEM: INFRASTRUCTURE

The SALTO XS4 wireless online solution delivers real-time high level security with all the convenience of battery-operated access control. The SALTO Wireless system is compatible with most common RFID technologies. This makes integration easy and in most cases users can continue using existing cards for their applications.

Extensive range of escutcheon styles and sizes including Scandinavian and ANSI models. SALTO wireless escutcheons are easy to install and configure.

- Wireless Radio Frequency based on IEEE 802.15.4 at 2,4Ghz.
- AES 128 bits encryption.
- Stand-alone escutcheons can be upgraded to wireless system.
- Battery powered.
- Firmware updated via PPD or online real-time wirelessly through ProAccess SQL or HAMS SQL software.
- Completly integrated with SALTO platform. Works offline with SALTO Virtual Network (SVN) technology if network communication with the computer fails.
- 1000 event audit trail back up if contact with PC is lost.

MAIN FEATURES:

- **REAL-TIME AUDIT TRAIL:** Access granted, access denied, card expired.
- **REAL-TIME DOOR CONTROL:** View door status in real-time.
- **REAL-TIME BATTERY CONTROL:** Monitor battery maintenance by viewing the lock battery status in real-time.
- **KEY MANAGEMENT:** Resolved in real time as the locks receive cancelled key updates as soon as they are generated.

GATEWAY

The SALTO Gateway is the link between the PC and the wireless network, it collects all the information sent by the locks that belong to the gateway.
- Wireless radio frequency based on IEEE 802.15.4 at 2,4Ghz.
- AES 128bits encryption.
- Connection to the LAN Network 10 BASE-T/100 BASE-TX.
- PoE supported IEEE802.3af (12V power adapter optional)
- Can manage several repeaters and many locks.
- IP addressing through web explorer available.
- Firmware update via software through Ethernet connection.

NODE

The SALTO Node is a bridge between the gateway and the wireless network.
- Wireless radio frequency based on IEEE 802.15.4 at 2,4Ghz.
- AES 128bits encryption.
- Connection to the GATEWAY BUS 485.
- Powered by the GATEWAY.
- Can manage several repeaters and many locks.
- Firmware update via software through Ethernet connection.

ID TECHNOLOGIES:

- **MIFARE:** Mifare, Mifare plus, Ultralight C, DESfire, Vicinity. DESfire EV1 and Vicinity cards.
- **LEGIC:** Legic Advant, Legic Prime
- **HID:** HID iClass©
- **i-BUTTON:** ROM - RW

- **PICOPASS**
- **SKIDATA**
- **NFC:** NFC enabled cell phones to act as contactless carriers data updater to open and control SALTO access controlled doors.
- **BLUETOOTH:** Allows users to use their smartphone as their door key.*

RANGE OF RFID CREDENTIALS / KEYS AVAILABLE:

| Contactless RFID Key Cards | Contactless RFID Fobs | Contactless RFID Silicone Bracelet | Contactless RFID Fobs Bracelet | i-Button Key | i-Button Key Bracelet |

MOBILE KEY SOLUTIONS:

MOBILE SVN / NFC:
With mSVN (Mobile SALTO Virtual Network) it´s now possible to update cards remotely. All an end-user needs is an NFC-enabled smartphone to update their DESFire EV1 credential using SALTOs' JustIN mSVN App, thereby incresing the flexibility of an instalation's security.

    MAIN FEATURES:
- **XS4 COMPABILITY:** XS4 Original RFID escutcheon range. Extensive range of escutcheon styles and sizes including Scandinavian, ANSI models and Wireless models (RFID models only).
- **SMARTPHONE:** Android minimum version: 2.3.3
- **SYSTEM REQUIREMENTS:** SALTO ProAccess SPACE.
- **SMART KEY COMPABILITY:** DESFire EV1 (AES – 3DES encryption) (SALTO SAM Card required)
- **BLACK LIST** dissemination that increases security without the need to wire or visit doors.

MOBILE GUEST KEY / BLUETOOOH:
SALTO Bluetooth mobile guest key (JustIN Key app developed by SALTO) communicates securely via the Cloud and enables a user to receive their door key online, anytime and anywhere.

    MAIN FEATURES:
- **XS4 COMPABILITY:** XS4 Original RFID escutcheon range. Extensive range of escutcheon styles and sizes including Scandinavian, ANSI models and Wireless models (RFID models only - no Keypad).
- **SSL:** Secure Socket Layer.
- **AES 128 BIT** encryption opening procedures.
- **SMARTPHONE Compability:** iOS and Android devices.
- **SYSTEM REQUIREMENTS:** SALTO ProAccess SPACE.

* Depending on the model

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MIFARE:

MIFARE DESFire

Mifare RFID contactless technology reads & writes information to contactless smart cards (RFID) compatible with ISO 14.443A, ISO 14.443B and ISO 15.693 standards, and as Mifare, Mifare plus, DESFire, DESFire EV1 technologies. This also allows updating of carriers via SALTO Virtual Network (SVN) technology.

- Fully integrated with the SALTO XS4 platform.
- 13.56MHz contactless RFID identification.
- ISO 14.443A, ISO 14.443B and ISO 15.693, Mifare, DESFire Compatible.
- Near Field Communication (NFC) compatible.
- Available key cards: 1Kbyte, 4Kbytes and 8 Kbytes depending on technology.
- Available carriers: ISO 7810 Cards, fobs, bracelets, stickers, watches…
- Reusable key cards.
- SALTO Virtual Network (SVN) compatible*.
- High security encrypted Proximity cards.
- Multi-application with other systems using the same card with different sectors.
- Customized issuing card through the SALTO Authorization Media software (SAM).
- Waterproof cards which can be customized.
- Upgradable: selfprogrammable, ROM, R&W systems available using the same hardware.

LEGIC Advant:

LEGIC® advant innovation in ID technology

LEGIC Ident systems includes highly integrated LEGIC RF Standard and ISO 15693 and ISO 14443 compliant read/write Chip Sets, Security Modules and Transponder Chips for integration into third party products. A very good option if you already use a Legic transponder system.

- 13.56MHz contact less RFID identification.
- Key card available: 2 kbytes.
- Key shape available: ISO 15693, ISO 14443 and LEGIC RF Cards.
- Reusable key cards.
- SALTO Virtual Network (SVN) compatible.
- Read & Write technology, there's a contact less exchange of information between the card and the reader.
- High security, by using password and encrypted 3DES, DES and Legic encryption.
- Multiaplication with other systems using the same card with different segments..
- Customized issuing card memory through the Legic protocol.
- Water proof cards which can be customized.

HID iCLASS©:

iCLASS by HID

HID iCLASS® contactless technology from HID is R&W identification technology based on 13.56 MHz read/write contactless smart card technology. HID iCLASS® offers enhanced security through encryption. This single-card, contactless solution permits multi-application with others systems, and with the SVN capabilities.

- 13.56MHz contact less RFID identification.
- ISO 14.443B2 standard compliant. ISO 15.693 standard compliant.
- Reusable key cards.
- SALTO Virtual Network (SVN) compatible.
- Read & Write technology, there's a contact less exchange of information between the card and the reader.
- High security, by using password and encrypted Proximity cards.
- Multi-aplication with other systems using the same card through shared pages.
- Customized issuing card through the SALTO Authorization Media software (SAM).
- Waterproof cards which can be customized.
- Upgradable: ROM, R&W systems available using the same hardware.

i-BUTTON:

R W Read & Write by SALTO

The i-Button technology is a robust and ergonomic technology due to the design of the fob and the lock. The XS4 i-Button electronic escutcheons need no hard wiring and provide a modern solution to the problem of lost keys or masterkeys. Compatible with data-on-card technology SALTO Virtual Network (SVN) system that allows you to control all the doors in an entire building or group of buildings from a single PC.

- Access given through contact by electronic i-Button.
- Simple and intuitive use due to the smart design of the i-Button and the electronic lock reader.
- Extremely resistant system, suitable for all kinds of environments.
- 512bytes or 2Kbytes i-Button fobs or bracelets available.
- Reusable keys
- SALTO Virtual Network (SVN) compatible.
- Different types of i-Button fobs or bracelets available.
- High security, by using password and encrypted i-Button fobs.
- i-Buttons can be customized by numeration.
- i-Buttons are waterproof.
- Compatible with SMILE technology and/ or ROM system that allows you to control all the doors. No software or computer is required

PICOPASS:

pico pass®

Picopass is a family of contactless memory chips that support both ISO14443B and ISO 15693 proximity and vicinity protocols. It allows for updating of carriers via SALTO Virtual Net (SVN) technology, is simple to use and offers a range of options including multiapplication with other systems using a Picopass contactless card system.

- 13.56MHz contactless RFID identification.
- ISO 14443B proximity protocols for high speed comunication range of 10 cm. ISO 15693 (Vicinity protocol) to operate at lower speeds over longer ranges.
- SALTO Virtual Network (SVN) compatible.
- High security, by using password and encrypted Proximity cards.
- Multi-application with other systems using the same card through shared pages.
- Customized card issuing through the SALTO Authorization Media software (SAM).

SKIDATA:

SKIDATA™

Flexspace RFID contactless technology from Skidata is R&W identification technology based on ISO 15693 proximity protocol. SALTO's all XS4 E9000 range products already in the field can easily be updated to SKIDATA FLEXSPACE compatibility, serving as building access cards for electronic locks, cylinders and wall readers.

- RFID according to ISO15693, no battery
- SALTO Virtual Network (SVN) compatible.
- 2 permits in Secure FlexSpace +704 bits unsecured FlexSpace; Chip-ID: 01
- Special plastics, waterproof
- Reusable RFID card
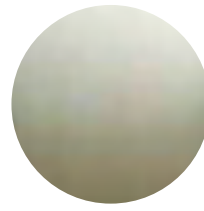- Multi-application with other systems using the same card through shared pages.

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FINISHES:

Satin Stainless Steel **CSB**	Polished Stainless Steel **CPB**	Satin Brass **PMB**	Polished Brass **PPB**	BioCote® Antimicrobial **BCB**	Black Satin Chromiun **NEB**
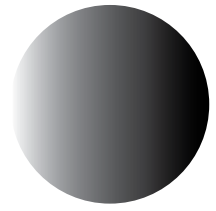
TECHNICAL DATA:

CURRENT REQUIRED:
Models Ex4, Ex5
- 3 alkaline LR03 AAA 1,5V. batteries optional FR03 lithium batteries
Models Ex6
- 3 alkaline LR6 AA 1,5V. batteries optional FR6 - AA1,5V. lithium batteries
- Number of openings:
  - i-Button version: Up to 60,000.
  - Contactless versions: Up to 40.000 depending on the RFID technology.

ENVIRONMENTAL CONDITIONS:
- -20º / 60º.

CERTIFICATIONS:
- Declaration of Comity CE
  Use of radio frequency spectrum
  - ETSI EN 302 291-1 V1.1.1 (2005-07)
  - ETSI EN 302 291-2 V1.1.1 (2005-07)
  Electromagnetic Compatibility
  - ETSI EN 301 489-1 (2011-09)
  - ETSI EN 301 489-3 (2002-08)
  Security requirements
  - EN 60950-1 (2007)
  - Following the provisions of the directive
  Mechanical certifications against vandalisme & fire
  - EN 1634 - 1 90 min. EI90 fire resistant*.
  - UL10C fire resistant*.

IP CERTIFICATIONS: Outdoor Protection Standard
- IP56* MODEL (XS4 standard model)

SOLID PARTICLE RESISTANT	LIQUID INGRESS RESISTANT
Quantity of dust ingress is not sufficient to interfere normal operation.	Water projected (12.5mm nozzle) against the enclosure from any direction for 3 minutes, 100 litres per minute, 100 kN/m² at distance of 3m, has no harmful effects.

SALTO ACCESS CONTROL PLATFORM FEATURES:

SALTO Systems unique new networked escutcheons and cylinders can be used for a huge range of access control applications. It's the first RFID system that can be upgraded at any time.

You choose the level of security control you need. From a simple self-programmable system that needs no computer to manage it, through a highly capable mid-range ROM system, and up to the high performance data on card technology SALTO Virtual Network (SVN) system that allows you to control all the doors in an entire building or group of buildings from a single PC. And with the brand new XS4 online battery operated wireless lock system, you can experience real-time access control solutions without the need for wiring.

- Completly integrated into the SALTO Systems platform.

- Enables users to have stand-alone electronic cylinders, stand-alone electronic locks, stand-alone electronic glass door locks, emergency exit devices, locker locks and IP based online readers, all in the same system with SALTO Virtual Network capabilities, making it possible to update user card access plans easily.

- Stand-alone escutcheons can be upgraded to wireless system.

- Battery-powered.

- Easy to install, use and maintain.

* Depending on the model

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Technical specifications - XS4 Electronic Escutcheons