



Libra Electronic Cylinder

2016_01_11 rev.3.3 UK

ISEO[®]
UN MONDO PIÙ SICURO
www.iseo.com

Libra Electronic Cylinder

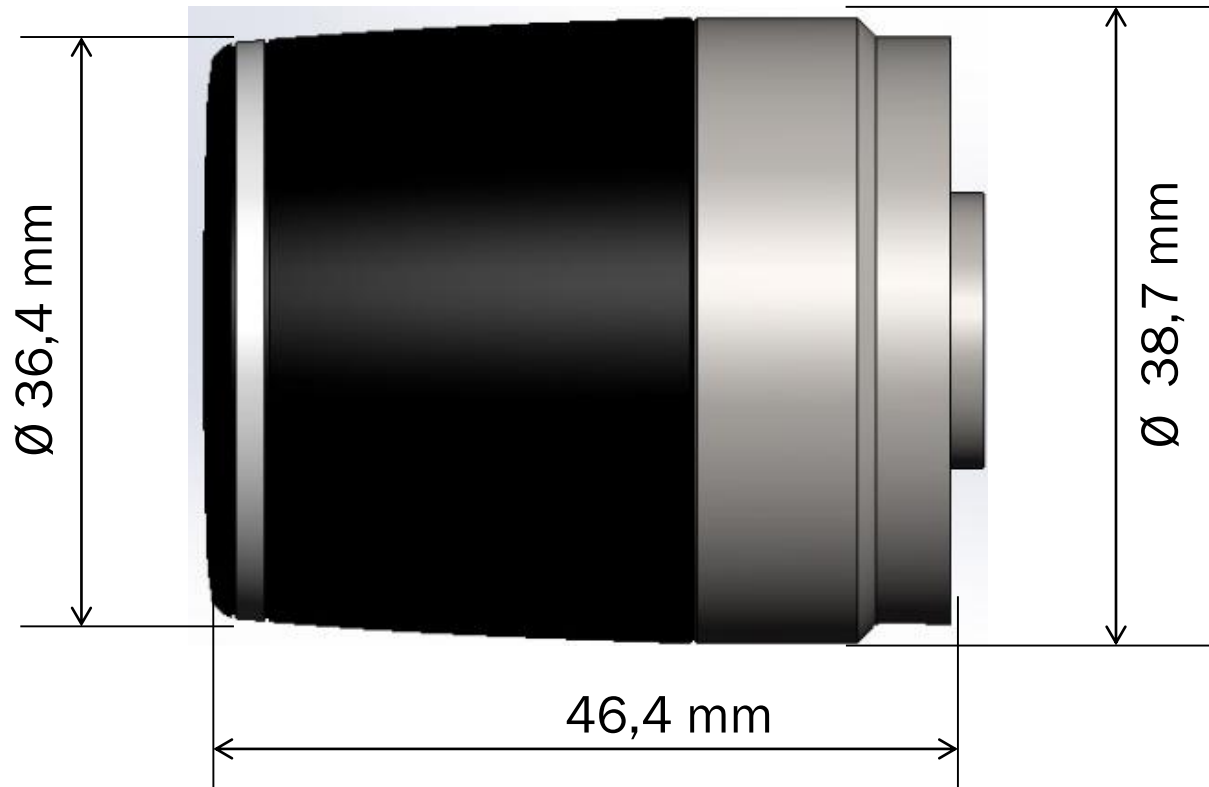
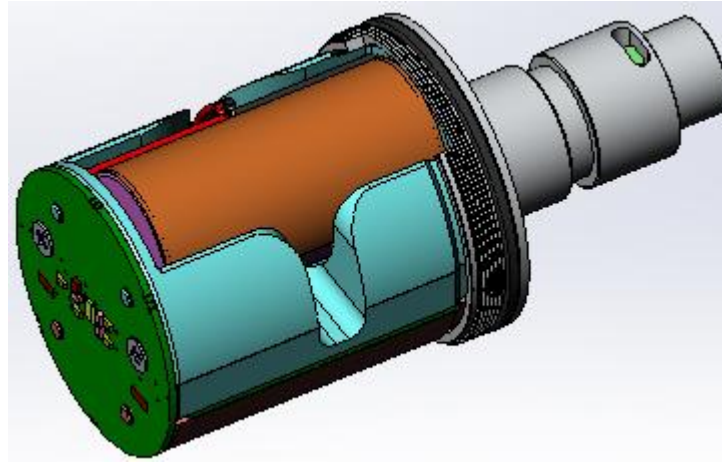
- Stand-alone battery operated access control device
- Cost effective solution for door access management
- Ultra easy and quick installation: no wiring required
- Compatible with most mechanical mortice locks with European Profile cylinder hole (EN1303)
- Heavy Duty version with drilling protection and IP66/IP67/IP69
- High modularity design :
 - reduction of components in stock
 - fast reaction to market requests



Libra Electronic Cylinder



It all fits inside the Knob !



Technology and Innovation

Eco Compatible Technology

- Built with environmentally responsible materials
- Highly recyclable accordingly ISO 14001

Awards winner

- **Design**
 - **ADI Design Index 2013 Award**
Selected from Industrial Design Association
 - Selected for “Compasso D’oro ADI 2014”
- **Patents**
 - 4 Patents of industrial invention

Made in Italy

- Designed , developed and manufactured in Italy



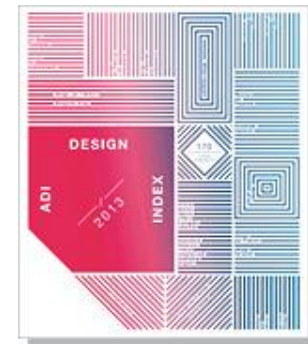
ADI Design Index 2013 Award

Selection criteria and thematic areas.

The products selected taking into account the originality, the functional and typological innovation, the production processes adopted, the materials used and the formal synthesis reached.

Particular attention is paid to products that express respect for the environment, public and social value, care for the usability, the interaction and the concept of “design for all”.

<http://www.adidesignindex.com>



ADI

ADI ASSOCIAZIONE
PER IL DISEGNO
INDUSTRIALE



Technogym



Finstral



Effepi



Oikos



Ducati



Fiat



Garmont



ADI DESIGN INDEX

ISEO Zero1

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Finishes, colors and logos

The electronic knob is composed by a metal and a composite material parts.

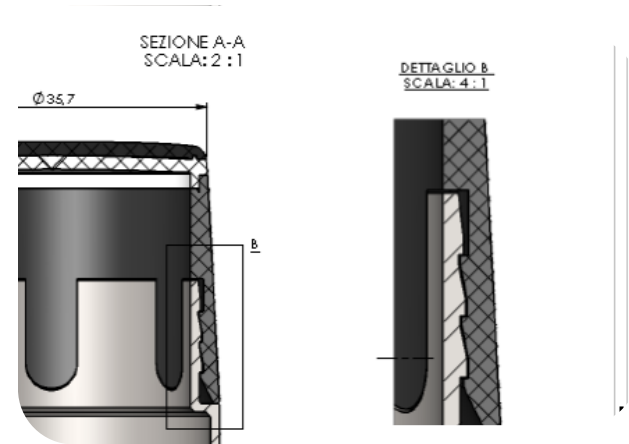
The metal part is available in 4 finishes:

- Stainless Steel;
- Polished chrome;
- Satin brass;
- Polished brass.

The high resistance composite material part is available in 2 colors;

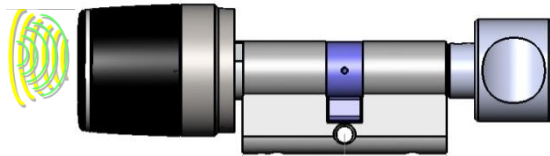
- Glossy Black;
- Glossy White.

The logo in the cover can be modified assuring an easy versioning for OEM versions.

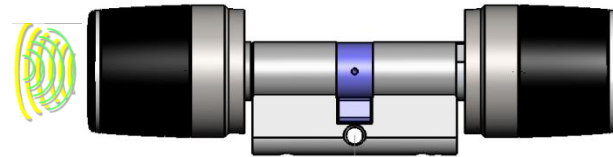


Configurations

- **Standard** : Double Knob with external reader

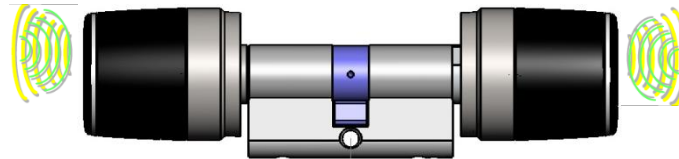


Standard

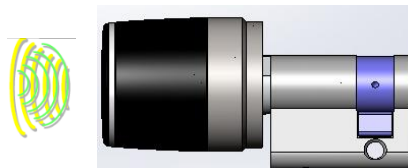


Premium

- **Double**: Double Knob with external and internal reader



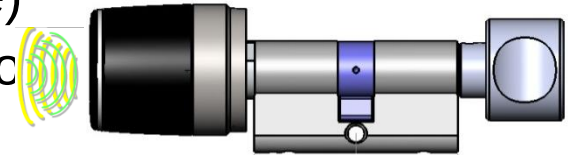
- **Half** : Single Knob (half cylinder) external reader



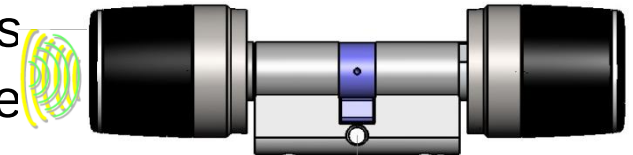
Libra Standard

Double knob with external reader only (mechanic knob inside)

In this configuration one side of the door (usually the external one) is controlled by the electronic cylinder while in the other part (inside) there is a mechanical knob always engaged to the cylinder cam.



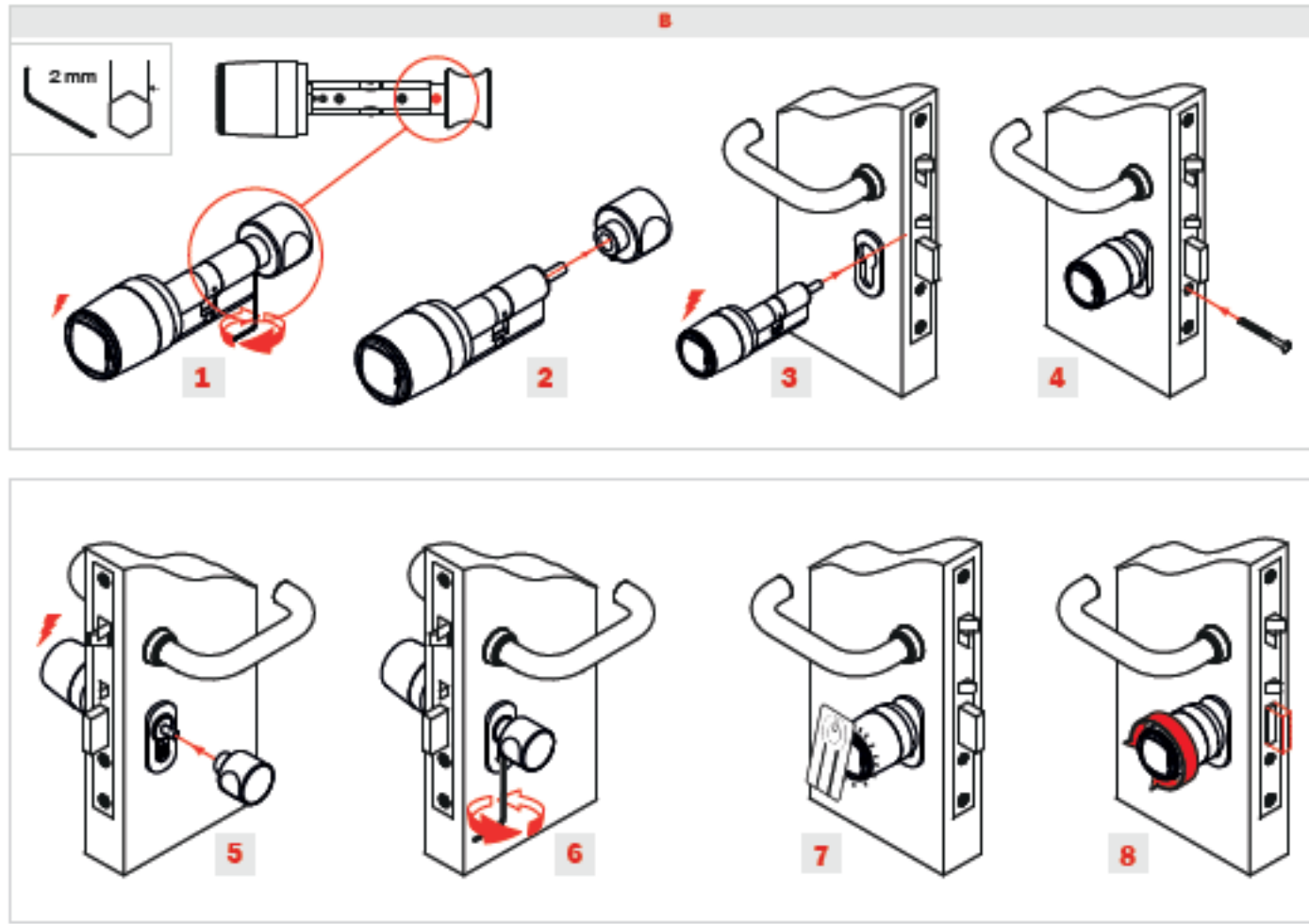
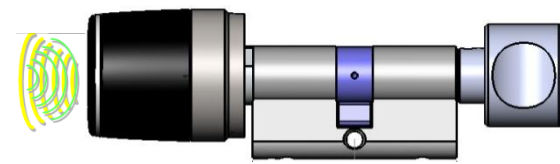
The electronic side knob usually rotate freely and only when authorized by the electronic it is connected with the cylinder cam, so being able to operate the lockcase.



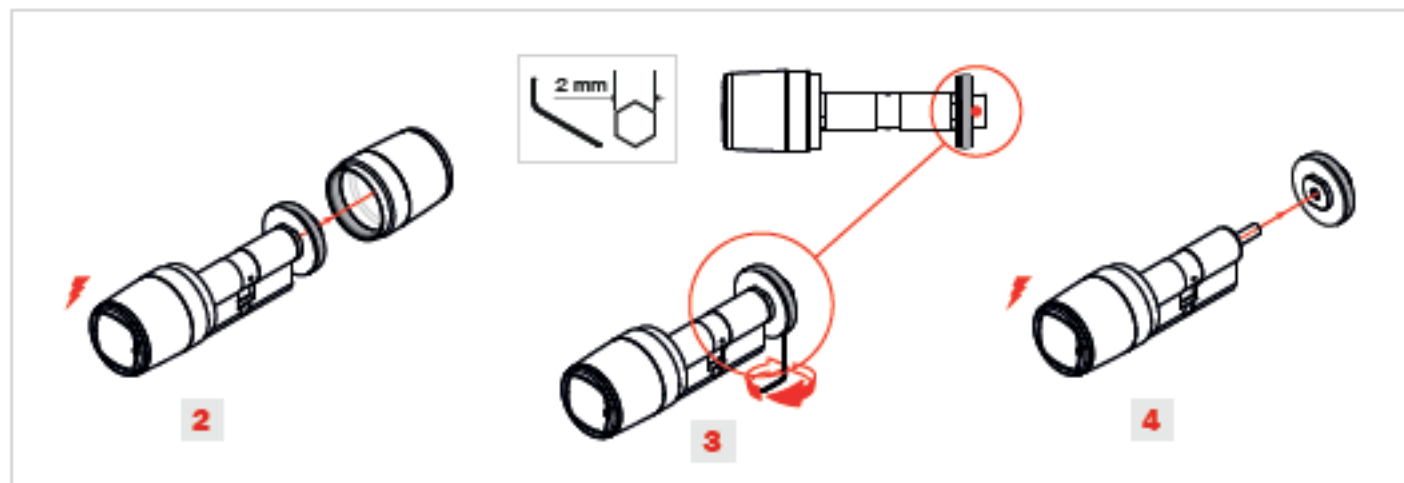
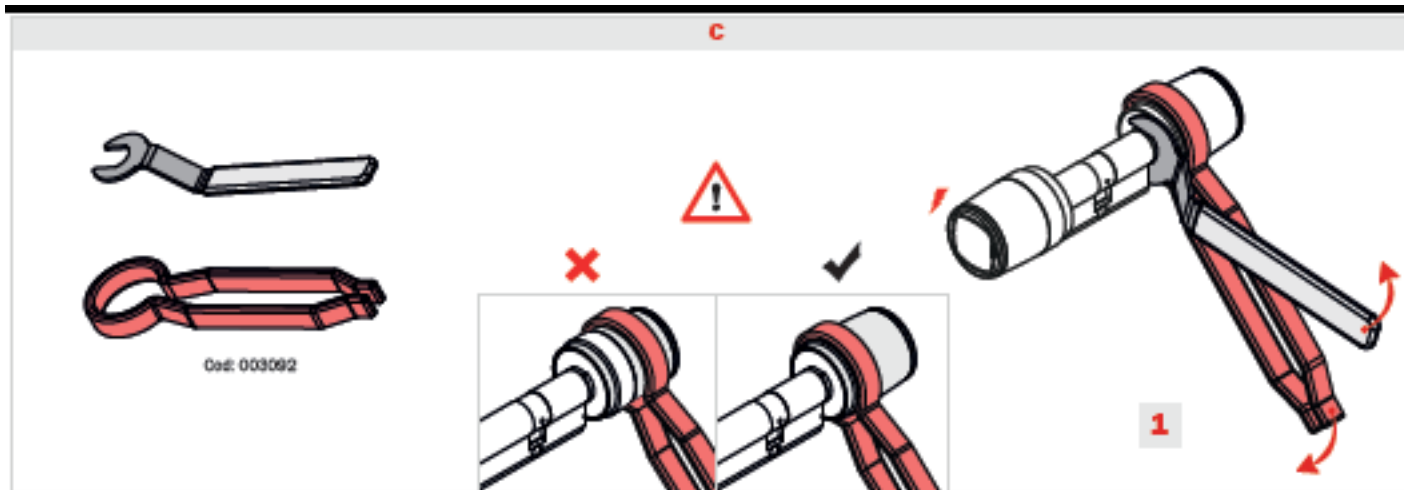
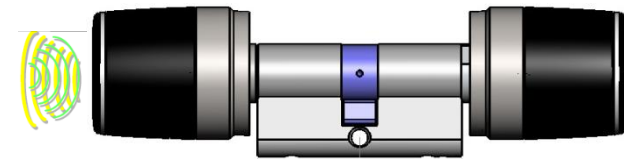
The inside mechanical knob is available in 2 versions:

- 1) Standard (small mechanic knob);
- 2) Premium (same dimensions and aesthetic of the electronic knob).

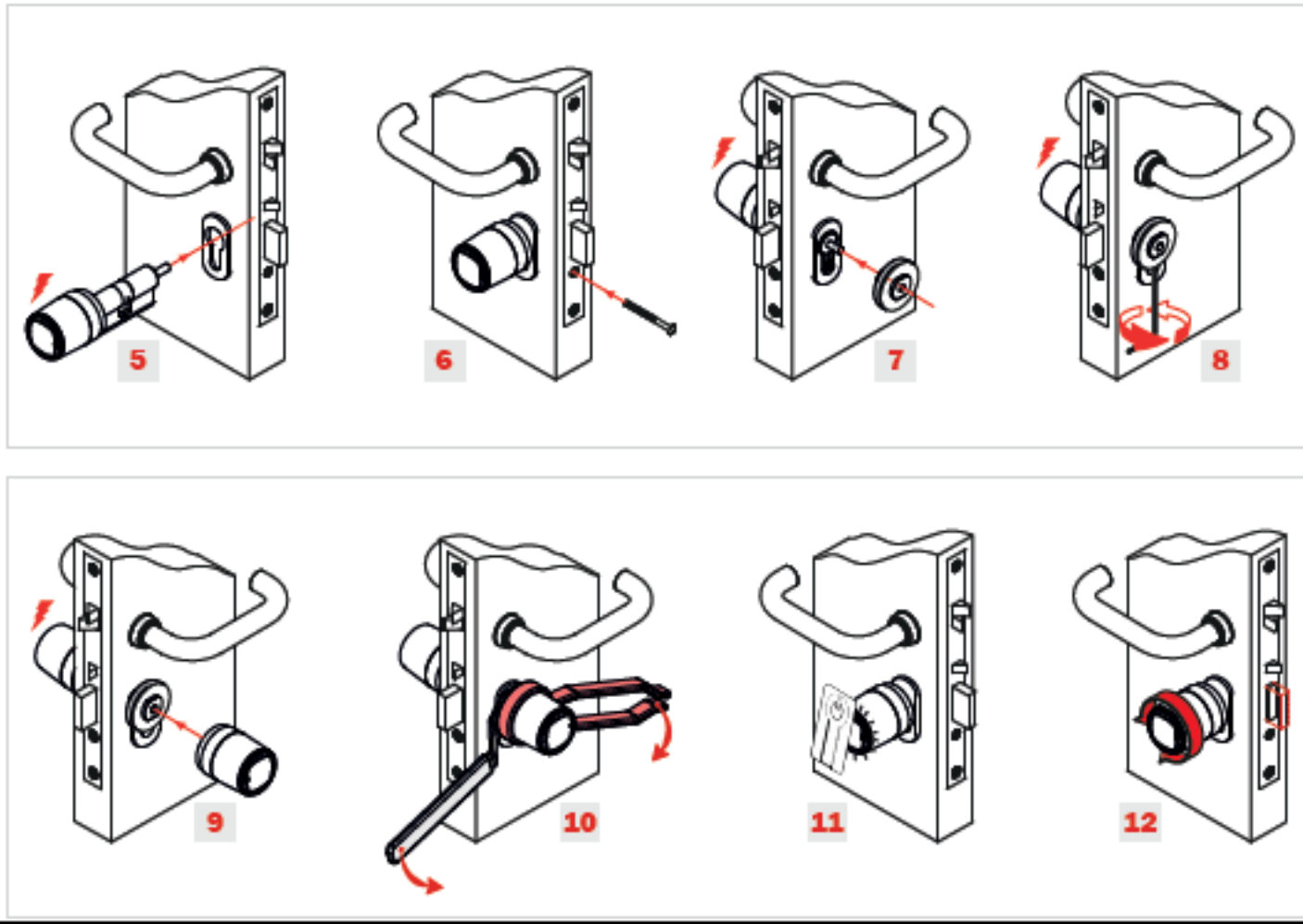
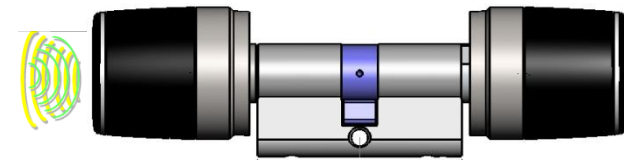
Libra Standard - Installation



Libra Standard – Installation 1/2



Libra Standard – Installation 2/2

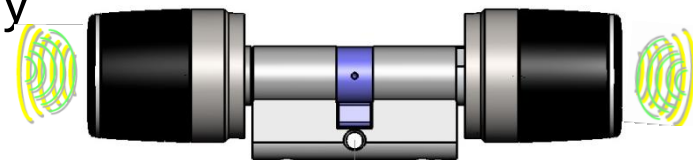


Libra Double

Double knob with external and internal reader

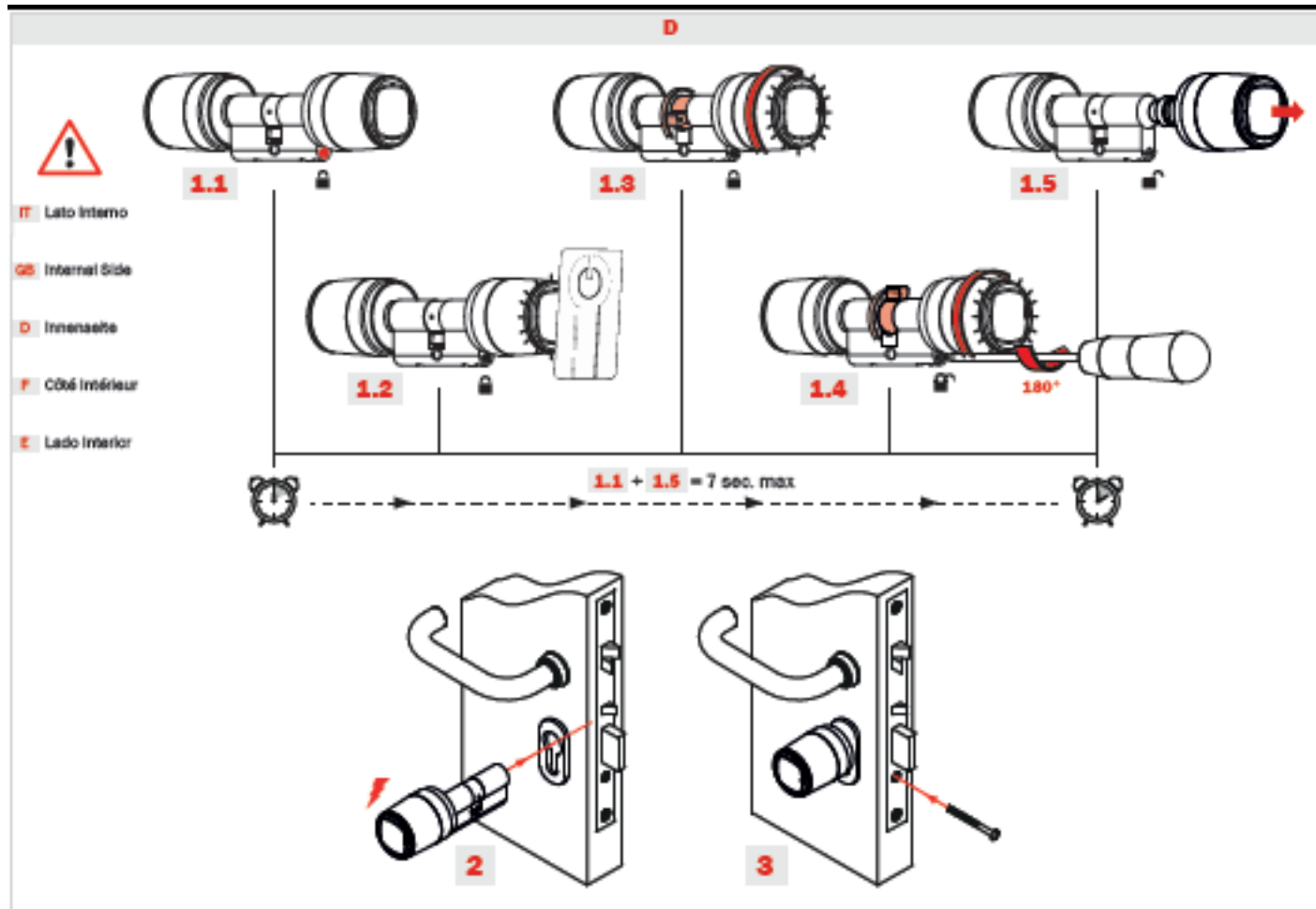
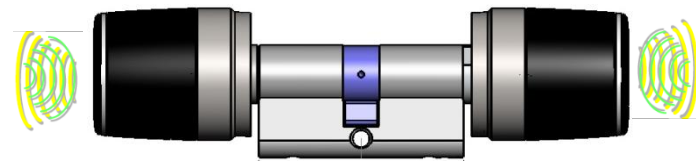
In this configuration both sides of the door are controlled by the electronic cylinder.

The two electronic readers are totally independent one from the other, both physically and logically

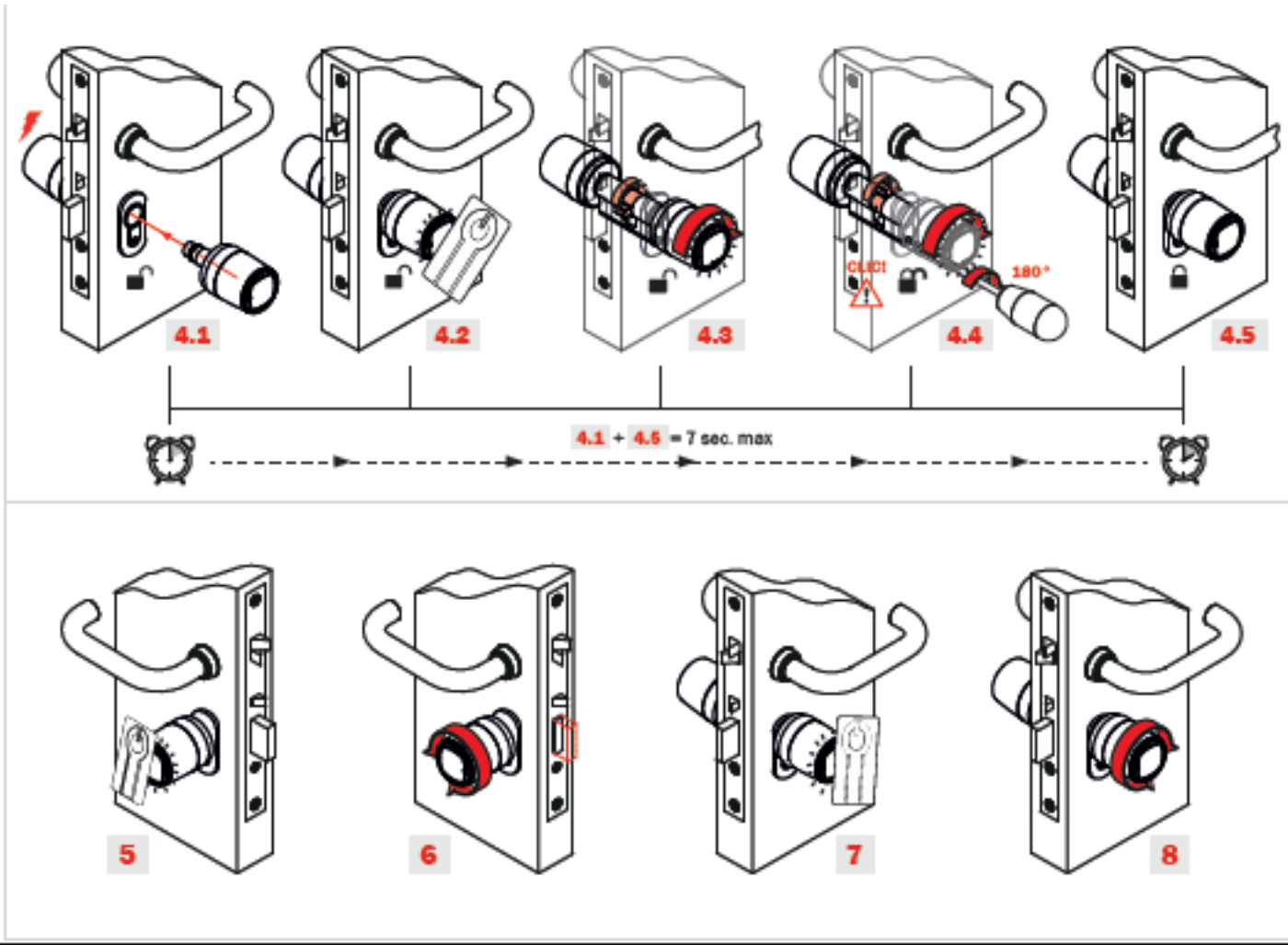
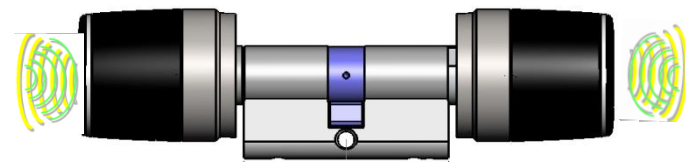


In order to install the cylinder on the lockcase, the knob of one side (named inside) can be dismounted from the mechanical body. The dismounting operation is controlled by the electronic (i.e. it is necessary to have a valid credential to do it) but on this side the system is in some degree less resistant to the burglary than on the other side.

Libra Double - Installation 1/2



Libra Double - Installation 2/2



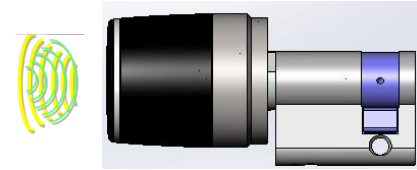
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Libra Half

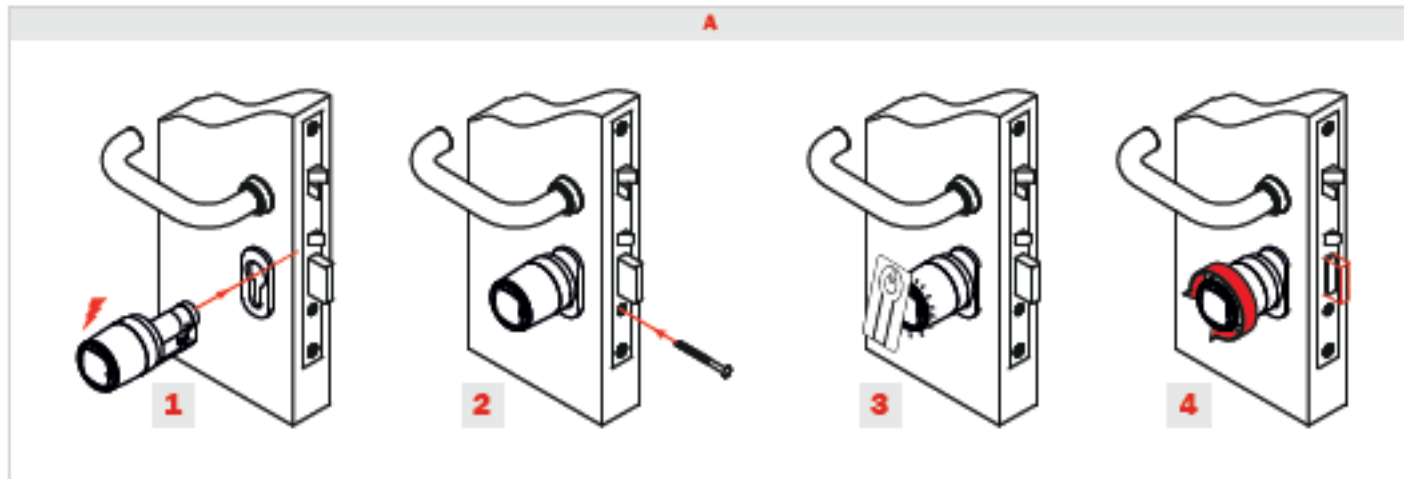
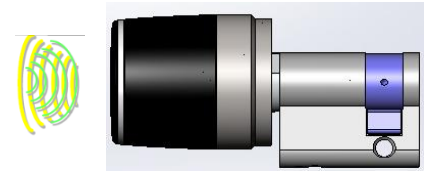
Single knob (half cylinder) with external reader only

Only one electronic knob is mounted on a single knob cylinder (half cylinder).



The electronic side knob usually rotate freely and only when authorized by the electronic it is connected with the cylinder cam, so being able to operate the lockcase.

Libra Half - Installation

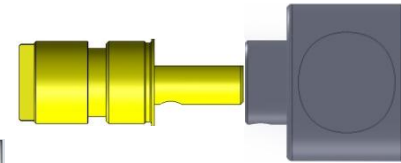
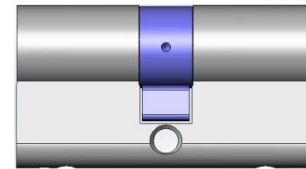
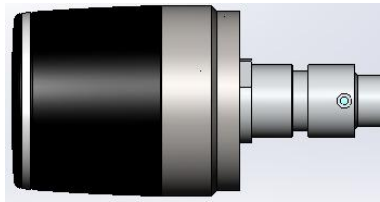


Patented Modular Design

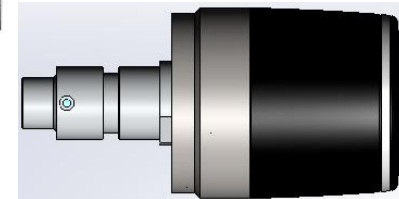
The **patented unique configuration** of the Iseo electronic cylinder assure a full modularity.

The cylinder is composed by 3 parts:

- An external knob (Electronic);
- An internal knob:
 - Mechanic with rotor;
 - Electronic.
- A cylinder stator (pure mechanical).



or

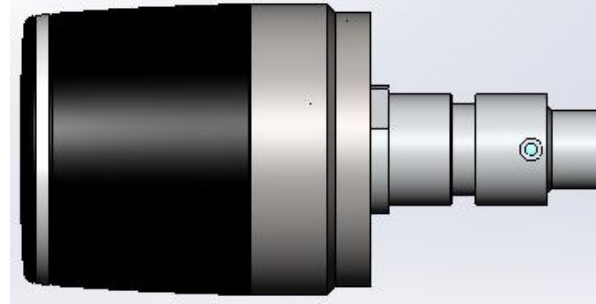


The assembly of the 3 parts is very easy and quick and the free combinations of the components allows the construction of the various configurations starting from a limited number of components.

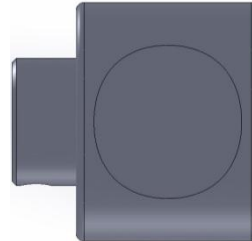
Result: **less components on stock, more flexibility and quick reaction to customers requests.**

Knob Modules

- Electronic Knob;



- Mechanic knob (standard);

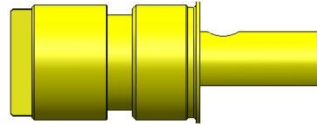


- Mechanic knob (premium);

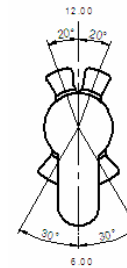


Body Modules Standard version

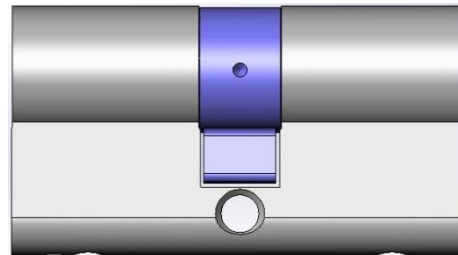
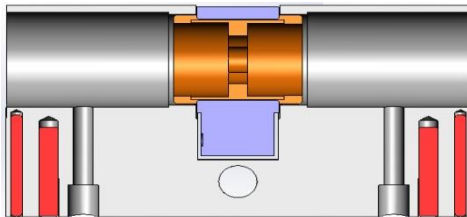
- Mechanic rotor;



- Mechanic rotor (panic version);



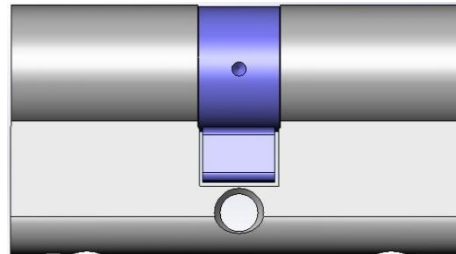
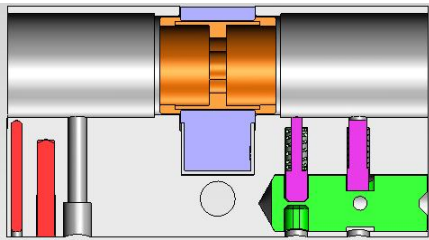
- Cylinder body (stator) for standard versions
Standard (in different lengths *);



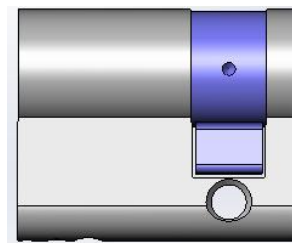
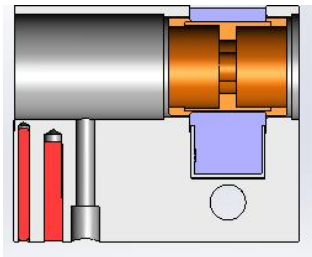
(*) the body is symmetric, so for example a 30-50 body can be used to build both the 30-50 and the 50-30 cylinders.

Body Modules for Double and Half

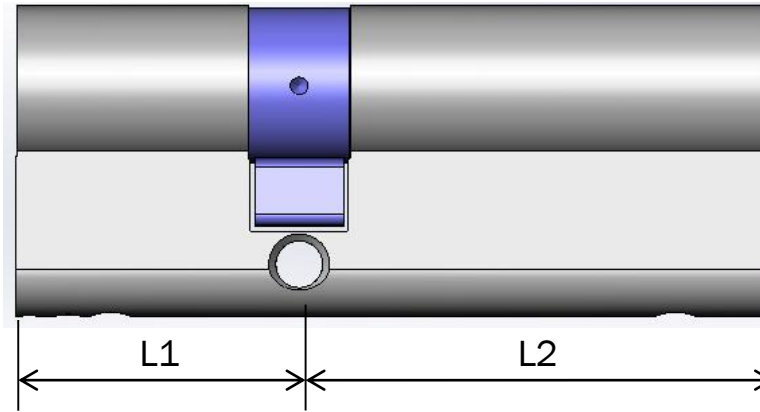
- Cylinder body for Double electronic version (in different lengths).



- Cylinder body (stator) for Half Cylinder (in different lengths)



Cylinder Dimensions – Standard and Double



L1	L2
L2	L1
30,2	30,2
30,2	35,2
30,2	40,2
30,2	45,2
30,2	50,2
30,2	55,2
30,2	60,2
30,2	65,2
30,2	70,2
30,2	75,2
30,2	80,2
30,2	85,2
30,2	90,2

L1	L2
L2	L1
35,2	35,2
35,2	40,2
35,2	45,2
35,2	50,2
35,2	55,2
35,2	60,2
35,2	65,2
35,2	70,2
35,2	75,2
35,2	80,2
35,2	85,2

L1	L2
L2	L1
40,2	40,2
40,2	45,2
40,2	50,2
40,2	55,2
40,2	60,2
40,2	65,2
40,2	70,2
40,2	75,2
40,2	80,2

L1	L2
L2	L1
45,2	45,2
45,2	50,2
45,2	55,2
45,2	60,2
45,2	65,2
45,2	70,2
45,2	75,2

L1	L2
L2	L1
50,2	50,2
50,2	55,2
50,2	60,2
50,2	65,2
50,2	70,2

L1	L2
L2	L1
55,2	55,2
55,2	60,2
55,2	65,2

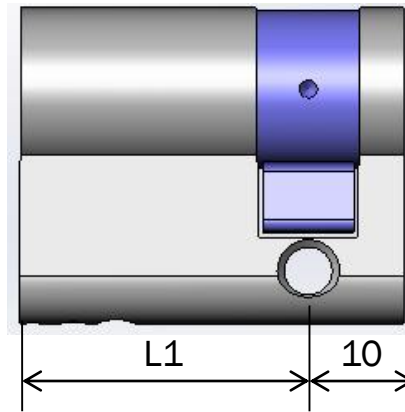
L1	L2
L2	L1
60,2	60,2

Standard length maximum 120 mm

Lengths up to 140 mm available on request

Cylinder Dimensions

L1	
30,2	10
35,2	10
40,2	10
45,2	10
50,2	10
55,2	10
60,2	10
65,2	10
70,2	10
75,2	10
80,2	10
85,2	10
90,2	10



Maximum length 100 mm

Libra Functions

Reader RFID Multistandard 13.56Mhz

- ISO 14443A (Mifare);
- ISO 14443B
- NFC (Card Emulation and Peer-to-Peer)

Signals

- Visual: LED Red and Green visible at 360° (ring)
- Acoustic: Buzzer.

Reader Wakeup by Card

Patented System providing user convenience, extended battery life, immunity from environmental conditions. It can be waked up by:

- RFID cards;
- Portable phones.

Hold Open mode (Office function)

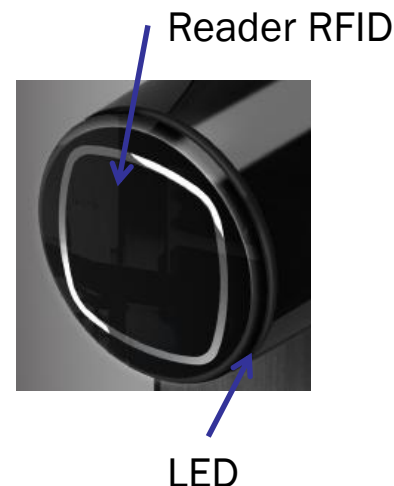
The clutch mechanism is able to put the electronic trim in permanently open also in sleep mode (no power consumption).

The office function can be activated in two ways:

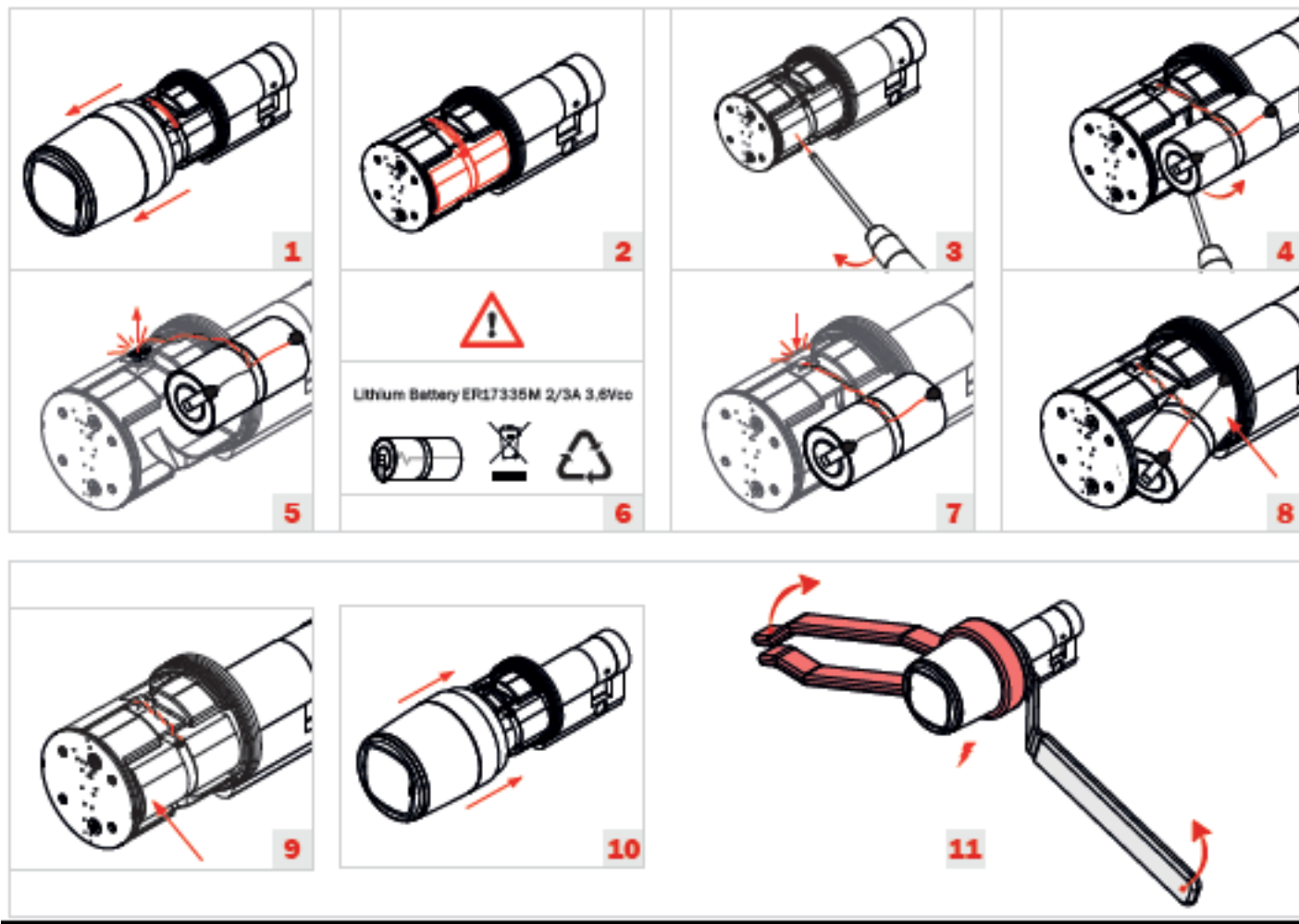
- by the user with a special card or sequence of cards;
- by the cylinder itself based on memorized timetables

Software updates

The firmware is downloadable without opening the cover via the RFID reader.



Battery Compartment



The battery is placed inside the electronic knob and can be accessed dismounting the knob cover using a special tool.

No need to open the door.

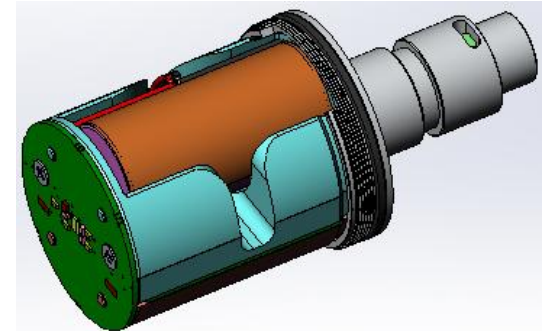
The battery have a cable with a polarized connector to assure the proper connection in every case.

Battery Life

- Single Lithium battery 2/3 AA (3.6V)
- Battery life 5 years or 50.000 openings (*)

The electronic cylinder has a multilevel battery charge detection to allow a proper and in advance alert to change the battery.

(*) operations can vary depending on time usage and on operational temperature



Libra Heavy Duty Version

The **Heavy Duty** version is suitable for outdoors installations where is requested:

- a high protection to the environment (rain, snow, temperature,...);
- the maximum protection against burglary attack

	Standard	Heavy Duty		
IP Protection Class	IP 54	IP 66	IP 67	IP 69
Programmed breaking points	Yes	Yes		
Drilling protection over cylinder core	Yes	Yes		
Drilling protection over cylinder Body	No (Drilling protecton Pin not mounted)	Yes		
Knob pulling protection	Yes	Yes		
Activation Motor and mechanism <u>mechanically</u> protected	Yes	Yes		
Activation Motor and mechanism <u>electronically</u> protected	Yes	Yes		

IP Protection Class

- **IP66**
(Dustproof) +
(Protection against big waves from any directions = 100 lt/min – 3 minutes)
- **IP67**
(Dustproof) +
(Protection against ingress of water when soaked in water of 1m deep for 30 minutes)
- **IP69**
(Dustproof) +
(Protection against water with high pressure, Steam Jet cleaning - 100 bar 80C°)

Libra Heavy Duty



Product Standard: EN15684:2012

Classification :

Category of Use (1)

Durability (4-6)

Fire/smoke resistance (0-B)

Environmental resistance (0-4)

Mechanical code variation (A-F)

Electronic code variation(A-F)

System management (0-3)

Attack Resistance (0-2)

grade 1

grade 6

grade 0

grade 4

N.A.

grade F (1.000.000.000
with challenge encryption)

grade 3 (time zones and
audit trail)

grade 2

Product Certifications:

VDS class BZ+ (C target)

Planned in 2016

ZERTIFIKAT
Certificate

ISEO Serrature S.p.A.
Via S. Girolamo, 13
I-25055 Pisogne (BS)

wird für das Produkt/ for the product

Mechatronischer Schließzylinder/
Mechatronic lock cylinder
DIN EN 15684:2013-01

1	6	0	4	A	F	0/3 ^{*1)}	2
---	---	---	---	---	---	--------------------	---

Elektronische Schlüssel/ Electronic keys

1	6	0	4	A	F	0/3 ^{*1)}	2
---	---	---	---	---	---	--------------------	---

^{*1)} "0" Simply version "3" Off-line version

mit der Produktbezeichnung/ with the product name

LIBRA HEAVY DUTY

in der Ausführung/ in the version

Simply version und/ and Off-line version

gefertigt in der Fertigungsstätte/ manufactured in the production plant

ISEO Serrature S.p.A.
Via S. Girolamo, 13
I-25055 Pisogne (BS)

die Konformität mit dem Zertifizierungsprogramm Z0005 PIV CERT bestätigt
und das Recht zum Führen des PIV CERT Zeichens/
is in conformity with the certification program Z0005 PIV CERT and that the product is entitled to bear the symbol

in Verbindung mit der Registernummer **49V02** erteilt/
in conjunction with the registration number 49V02

PIV CERT Zertifizierungsvereinigung/
PIV CERT Association of certification
Wallstraße 41, D-42551 Velbert

Diesem Zertifikat liegt der Prüfbericht Nr. 49V02/12 und 49V02/14
des PIV zugrunde.
Detaillierte Prüfung: 01/2014, Die Gültigkeit endet 01/2021.
This certificate is based on the test report no. 49V02/12 and 49V02/14 by PIV.
First issue 01/2014, End of validity 01/2021.

DAKKS
Deutscher
Akademischer
Kontrollrat
für die
Zertifizierung

O. Tröckel, Dipl.-Ing. (FH)
Leiter der Zertifizierungsstelle
Director of the Certification Office
06. Januar/ January 2016

PIV CERT Zertifizierungsvereinigung · Wallstraße 41 · 42551 Velbert

Other Standards Compliance

Environmental resistance (*)

- Temperature range:
 - Operation -20° to 70°
 - Storage -25° to 70°
- Humidity:
 - Max 95% non condensation
- Dump Heat, cyclic test:
 - +55° , 6 cycles
- Corrosion resistance: EN1670:2007
 - class 4 (salt chamber 240 hours)
- Protection by enclosures: EN60259/A1:2000
 - IP54 (standard)
 - IP66 (Heavy Duty version)

(*) to be confirmed after tests completion

ELECTRONIC CYLINDER

PANIC Version

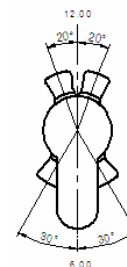
The **Panic** version is necessary for installation where the cylinder have to work in connection with special locks with panic function.

These lock, mainly diffused in the German market, require that the cylinder cam stay in a fixed position when not working in order to operate properly.

This request is not a problem with the mechanical cylinders which can extract the key only with the cam in a fixed position, while is not guarantee by the standard version of the electronic cylinder in which the cam can stay free in any position.

The Panic version of the Libra Cylinder have a special mechanism which move the cam to a defined position (vertical low) when in free mode.

This Panic Function is available in both the **DK1R** and **SK1R** versions



ELECTRONIC CYLINDER

LIBRA SMART

The **SMART** version is equipped with a **Low Power Blue Tooth 4.0 (BT4.0)** module which allows the connection:

- to any Smart Ready phone (with BT4.0 interface);
- in a radio network with Iseo Access Points.

The BT4.0 module can be installed in any standard Libra cylinder thanks to the connector and the plastic cover available in all the hardware versions.

This means that existing Libra cylinders can be **upgraded** to the Smart version adding the BT4.0 module. This upgrade operation can be done only by Iseo technicians and in laboratory, so not directly on the door.

Thanks to the low consumption of the BT4.0 module and to the firmware optimization the impact of the BT radio on the battery life is very limited and the battery life reduction is less than 20%(*)



(*) laboratory measurement, to be confirmed by next beta-tests on field.

ELECTRONIC CYLINDER

SPECIAL Versions

The **LIBRA** cylinder in the SK1R configuration (electronic knob outside) is available with several solution for the inside mechanical Knob.

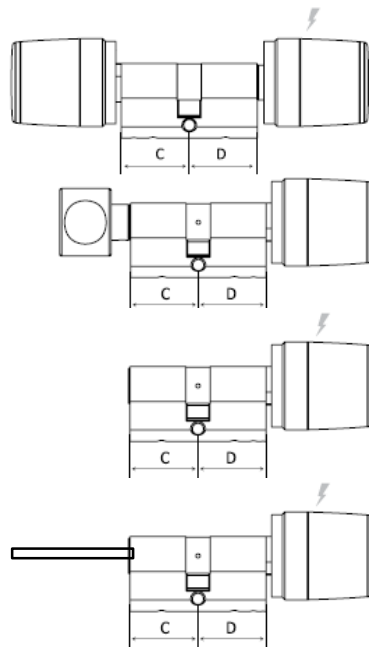
Some of them are standard, some of them are **SPECIAL** so the relevant delivery time should be checked case by case.

1) PREMIUM KNOB
(*standard*)

2) STANDARD KNOB
(*standard*)

3) DUMMY KNOB
(*special*)

4) PREARRANGED FOR KNOB
(*special*)



ELECTRONIC CYLINDER

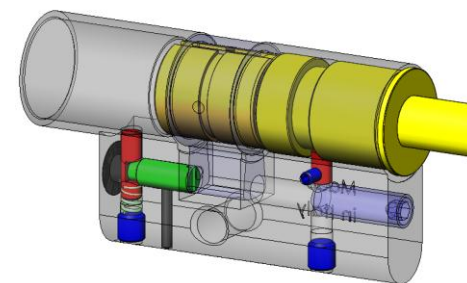
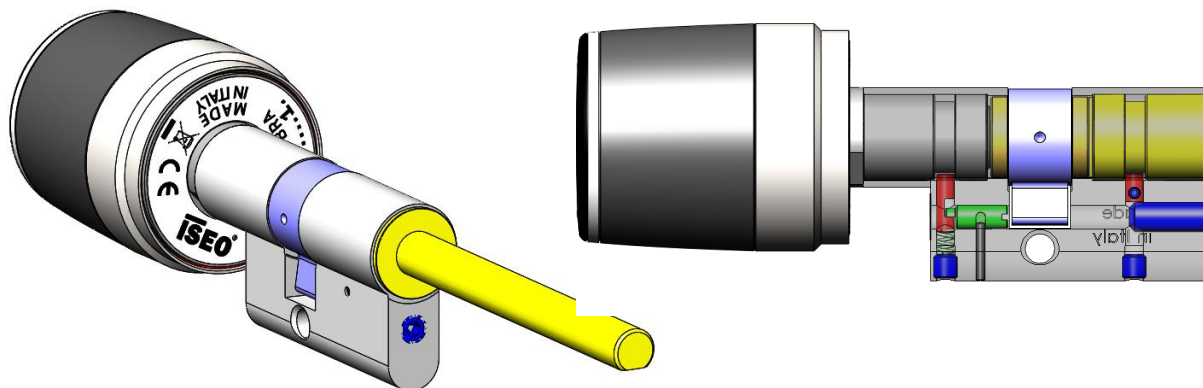
Removable Electronic Knob Version

The **LIBRA** cylinder in the standard version has the external electronic knob fixed on the body. This can be a limitation when the installation cannot be done from the external side but needs to be done from the internal side, i.e. when we want to install a defender or a security plate.

The Removable Knob version allows to dismount the external knob using a tool from the inside and then mount it in a secure way once the cylinder is already inst

The removable Knob version will be available in two versions:

- with standard neck;
- with longer neck (+10mm).



ISEO Zero1

ELECTRONIC
SOLUTIONS

Code plan

[illegible]Removable external knob (IP66 HD) - **4** —

Internal Dummy Knob - C -

Prearranged for Knob 75 mm(6D0) - 6 -

Finishes

90

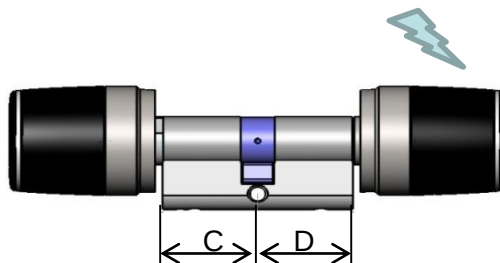
Maximum length 120 mm

14 - Polished Brass - White

- **5** - ARGO software

- 2 - RADIO BT4.0

- **P** - PANIC FUNCTION



Libra Dummy-knob

ELECTRONIC CYLINDER WITH RFID READER AND KNOB-DUMMY ON INTERNAL SIDE.

Multistandard RFID Reader (ISO14443A/ISO14443B/NFC 13,56MHz)

on outside NO knob on Internal side. Maximal body length 120 mm

European profile and DIN cam. 6 finishes available.

Internal usage (IP54) and external usage (IP66 Heavy Duty) versions.

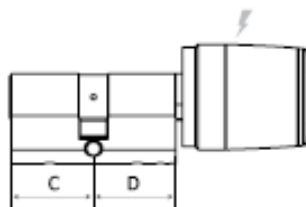
Removable external knob (IP66 Heavy Duty) version.**

Panic function version.**

Bluetooth BT4.0 Radio version (Libra Smart).

"SIMPLY", "OFF-LINE" or "ARGO" software.

Package: 1 cylinder, cylinder fixing screw M5 L=85 mm, 2 mm hex key, instruction sheet



Coding

8	2	K	X	C	X	X	X	X	X	X	X	
External usage version (IP66 Heavy Duty) 1				DIMENSION C		DIMENSION D		FINISHES				☐ Standard
Internal usage version (IP54) 2				30		30						P PANIC function
Removable external knob (IP66 Heavy Duty) 4				35		35						
				40		40						
				45		45						1 Software SIMPLY
				50		50						2 Software OFFLINE
				55		55						5 Software ARGO
				60		60						
				65		65						1 NO Radio
				70		70						2 BT4.0 Radio (Smart)
				75		75						
				80		80						25 Inox - Black
				85		85						K5 Polished Chrome - Black
				90		90						S5 Satin brass - Black
												L5 Polished Brass - Black
												K4 Polished Chrome - White
												L4 Polished Brass - White

Libra Double

ELECTRONIC CYLINDER WITH DOUBLE RFID READER

Multistandard RFID Readers (ISO14443A/ISO14443B/NFC 13,56MHz) on external side and Internal side.

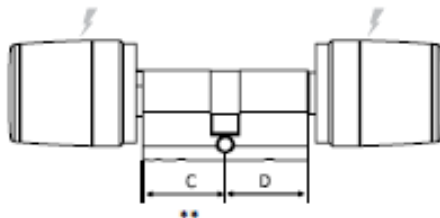
Maximal body length 120 mm. European profile and DIN cam.

6 finishes available. Internal usage (IP54) and external usage (IP66 Heavy Duty) versions.

BlueTooth BT4.0 Radio version (Libra Smart).

"SIMPLY", "OFF-LINE" or "ARGO" software.

Package: 1 cylinder, cylinder fixing screw M5 L= 85 mm, 2 mm hex key, instruction sheet.



Coding

8	2	K	X	E	X	X	X	X	X	X
External usage version (IP66 Heavy Duty)		1			DIMENSION		DIMENSION		FINISHES	
Internal usage version (IP54)		2			C		D			
					30		30			
					35		35			
					40		40			
					45		45			
					50		50			
					55		55			
					60		60			
					65		65			
					70		70			
					75		75			
					80		80			
					85		85			
					90		90			
					L max 120 mm*					

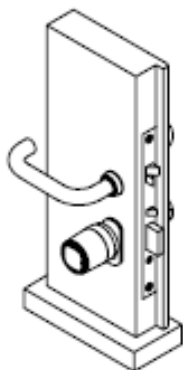


DEMO KIT ARGO SOFTWARE VERSION.

Electronic cylinder with RFID reader and Premium mechanical knob.
Covers in various finishes. Standard mechanical knob.
ARGO system Cards Set.
Assembly/disassembly wrench and plier.
Demo Kit instruction sheet.

1 003044

Code plan



DEMO KIT ARGO ON WOODEN STAND

Electronic cylinder Libra Standard mounted on
mechanical mortise lockcase.
Handle and box for easy transportation
ARGO system Cards Set.
Package: 1 demo display, 1 demo cards set

Polished Chrome - Black

1 FXKLIBRAK5SA

Polished brass - Black

1 FXKLIBRAL5SA

For "Common Accessories" please see the section "Electric Locks" on pages 18 and 19