

SYSTEMS AND SOLUTIONS
FOR THE ENERGY TRANSFORMATION INDUSTRY
SAFETY INTERLOCKS



Sectorial Catalogue

english edition 54



LOCKSMITH INDUSTRY



LA INDUSTRIA DE LA CERRAJERÍA

Sectorial Catalogue

LOCKING SYSTEMS

Elements designed and developed to lock industrial equipment and devices under the standards of quality ISO 9001:2015

Spanish leader in industrial lock manufacturing

TALLERES AGA, S.A. • C/ Notario Etxagibel, 6 • 20500 Mondragón, Gipuzkoa. Spain
Telf. 943 79 09 22 • Fax. 943 79 09 76
www.aga.es

QUALITY

ALL OUR EFFORTS IS FOCUSED ON THE INTEGRAL SATISFACTION OF THE CLIENT. THEREFORE, WE HAVE A QUALITY MANAGEMENT SYSTEM ACCORDING TO **ISO 9001** THAT GUARANTEES OUR MANUFACTURING AND SALE PROCESS.

OTHER CATALOGS

AGA serves a multi-sector market as a result of its high specialization achieved over the years and the development of multiple projects. Many of them today are part of the **large collection of articles** that we present in the different sectorial catalogs that we have.

- Catalogs:



TOTAL FLEXIBILITY

There are many products offered in our catalogs, but there are many more specialized products that we make as well as our customised adaptations to our standard items. Notably...

- We have no minimum order, allowing you to optimize your purchase.
- We guarantee the replacement of any item and its components for 10 years after the withdrawal of the product.
- The ability to customize your items.
- Service “exclusive key” and “exclusive code” with AGA which ensures that only you have the program.

SAFETY INTERLOCKS ARE SECURITY DEVICES THAT ARE APPLIED TO TWO OR MORE MOBILE PARTS PREVENTING OR ALLOWING THE MOVEMENT OF ONE WHEN THE OTHERS ARE LOCKED IN A PREDETERMINED POSITION. THIS ALLOWS ONLY DEFINED SECUENCES TO MAKE THE PROTECTION OF PERSONNEL AND FACILITIES, SAFEGUARDING AGAINST THE RISK OF ACCIDENTS OR ERRONEOUS MANOEUVRES.

FEATURES

Locks made of easy machining materials such as brass and stainless steel, high quality AISI 303 and 304. Under the rules of **RohS**.

ENVIRONMENTAL CONDITIONS

- **10 years of operation** under normal conditions referred to IEC 60947 / IEC 62271.
- **Salt spray:** ISO9227 / 240h (Test passed with 500h).
- **H2S-SO2 spray:** IEC60068-2-42 for SO2 and H2S IEC60068-2-43 / 21 days = 0.5 ppm °C, T° = + 25°C, Rel.Hum = 75%.
- **Vibrations:** IEC 60068-2-6 / 2-13.2 Hz / +/-1mm / 13.2-100Hz / 0,7g.
- **Condensation moist heat:** IEC60068-2-30 / 6 cycles (12h + 12h), T °: 25 °C / 55 °C, Rel Hum.. = 95% (test duration 6 days).
- **Cold Storage:** IEC 60068-2-1/-55°C / 16h.
- **Storage temperature range:** -55°C / +85°C.
- **Storage, dry heat:** IEC 60068-2-2 / 85°C / 16h.
- **Operating temperature range:** -25°C / +70°C.

MECHANICAL OPERATING CONDITIONS

- **Loaded mechanical endurance:** 15.000 cycles with an opposite torque of 0,07Nm. With opposition 14daN, you can remove the key.
- **Resistant to torsion and function at high and low temperature:** >=6,5Nm in opposition to rotation and in a range of -5 °C / + 55 °C; Maximum angular deformation between the tongue and body support cylinder 5°30' / Maximum angular deformation between the tongue support and cylinder body after the test.
- **Resistant to key torsion:** 5 Nm. The head of the key breaks at 6,5 Nm and the lock continues to work.
- **Resistant to tongue on nuts:** M22x1,25 (body): 10Nm (breaks at 48Nm) / M17x1 (cam support): 2,5Nm (breaks at 9Nm).
- **IP Grade:** IP40 / IEC 60694 5.13.1.
- **Mechanical / degree IK impacts:** IK08 / IEC 60694 5.13.3 / IEC 62262/5 impacts of 5 Joules in direction of the axis 5 perpendicular to the axis vertically and 5 horizontally perpendicular to the axis direction.
- **Resistant to free fall:** 600-68-32-2 IEC / 1m high against the concrete floor / 3 falls in unfavorable positions and lock continues to operate.
- **Insertion and removal of key:** The key can be removed and inserted back even if a torque of 0,07Nm exist.
- **Mechanical resistance of locking bolt or latch:** IEC 609473 / Exerting 60daN against bolt-strike, neither lock box nor bolt – strike break.
- **Resistant to pulling force:** By exercising 14daN force, the cylinder is not separated from the lock box.



CAM LOCKS

10 LAUA series: 1101, 1122, 1125, 1123, 1102



13 BOROBIL series: 7101, 7125, 7102



BOLT LOCKS

18 LAUA series: 1223, 1295, 1225, 1201, 1202, 1226, 1227, 1208

23 BOROBIL series: 7223, 7295, 7201, 7202, 7226, 7227, 7208



ACCESS LOCKING

30 LAUA series: 1328, 1329, 1394, 1395

32 BOROBIL series: 7328, 7329, 7394, 7365



KEY MANAGEMENT

36 LAUA series: 1403, ...

37 BOROBIL series: 7403, ...

SOLENOID CONTROLLED LOCKS



40 LAUA series: 1500, 1501...



41 BOROBIL series: 7500, 7501...



MISCELLANEOUS

44 Miscellaneous: 1601, 8228, 823



KEYS

48 LAUA series: AGA 13, AGA 16



49 BOROBIL series: AGA 7 T



CAM LOCKS

LAUA series
BOROBIL series

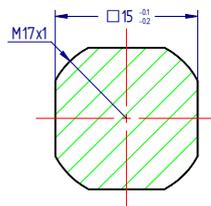
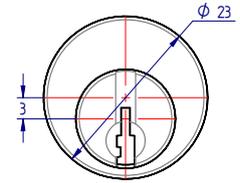
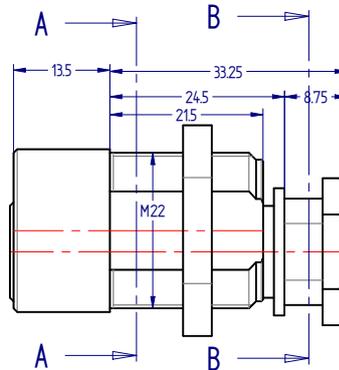
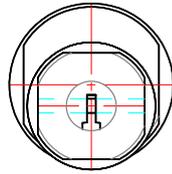


1101

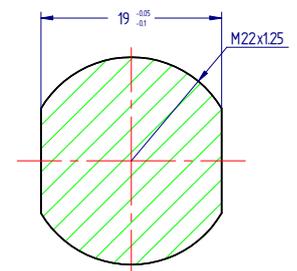
CAM LOCKS LAUA series

Key operated mechanical interlock, encoded to combine with other safety locks. Suitable for fitting a cam.

ROTATION	CODE
90° D	UP1101C9D0
90° I	UP1101C9I0



SECCION B-B
2:1



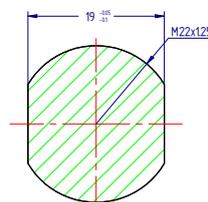
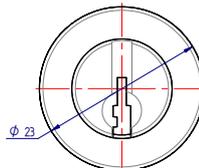
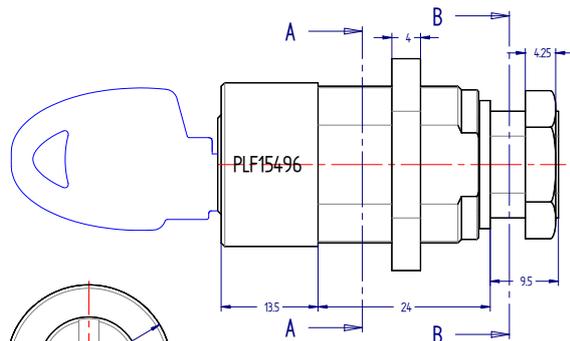
SECCION A-A
2:1

1122

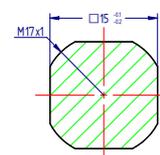
CAM LOCKS LAUA series

Key operated mechanical interlock, CENTERED, encoded to combine with other safety locks. Suitable for fitting a cam.

ROTATION	CODE
90° D	UP1122C9D0
90° I	UP1122C9I0



SECCION A-A



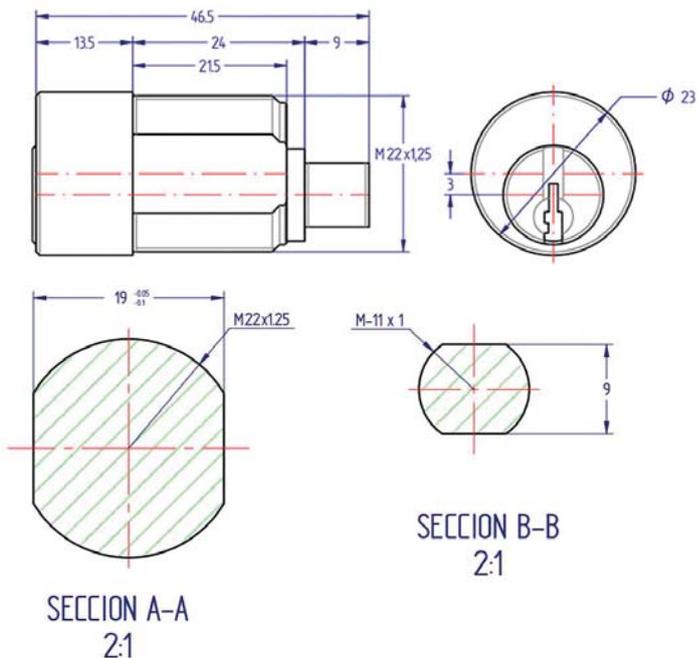
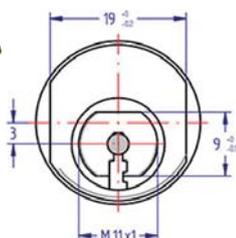
SECCION B-B

1125

CAM LOCKS LAUA series

Key operated mechanical interlock, encoded to combine with other safety locks. Suitable for fitting a cam.

ROTATION	CODE
90° D	UP1125C9DO
90° I	UP1125C9IO
180° D	UP1125C1DO
180° I	UP1125C1IO

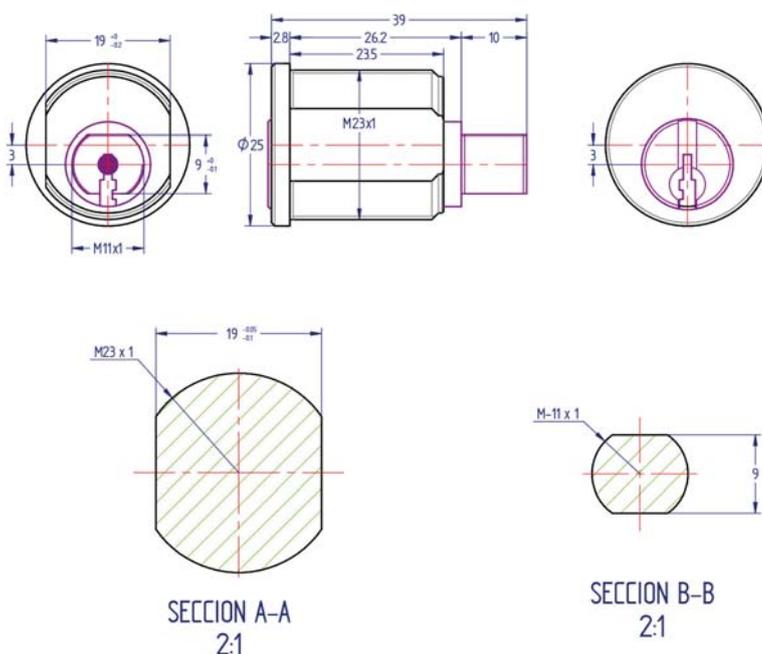


1123

CAM LOCKS LAUA series

Chrome-plated brass cylinder for manoeuvres M23. With rear housing for tongue.

ROTATION	CODE
90° D	UP1123C9DO
90° I	UP1123C9IO

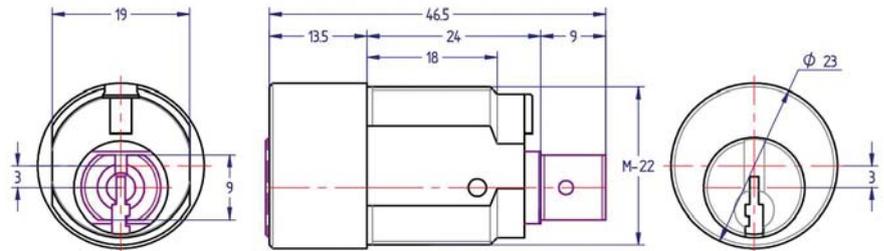


1102

CAM LOCKS LAUA series

Chrome-plated brass cylinder for manoeuvres.
Adaptable in terms of rear housing and rotation.

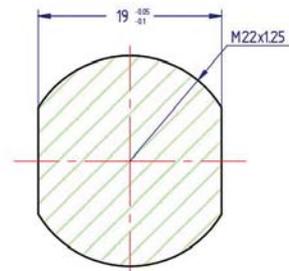
ROTATION	CODE
90°D / 90°I / 180°D / 180°I	UP1102C000



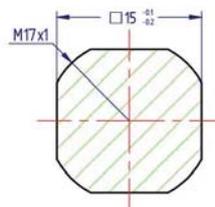
Laua 1101 series



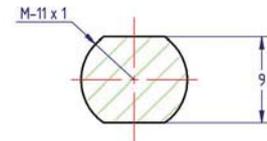
Laua 1125 series



SECCION A-A
2:1

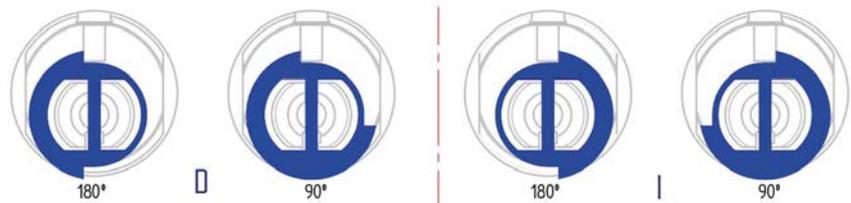


SECCION B-B
2:1



SECCION B-B
2:1

MONTAJE LEVA DE GIRO

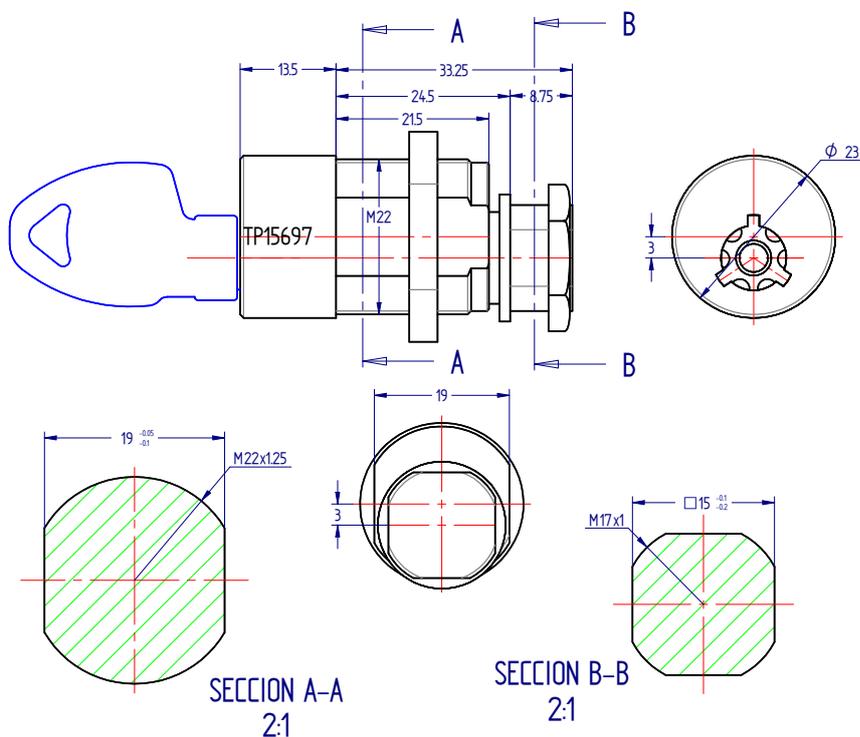


7101

CAM LOCKS *BOROBIL* series

Key operated mechanical interlock, encoded to combine with other safety locks. Suitable for fitting a cam.

ROTATION	CODE
90° D	UT7101C9D0
90° I	UT7101C9I0

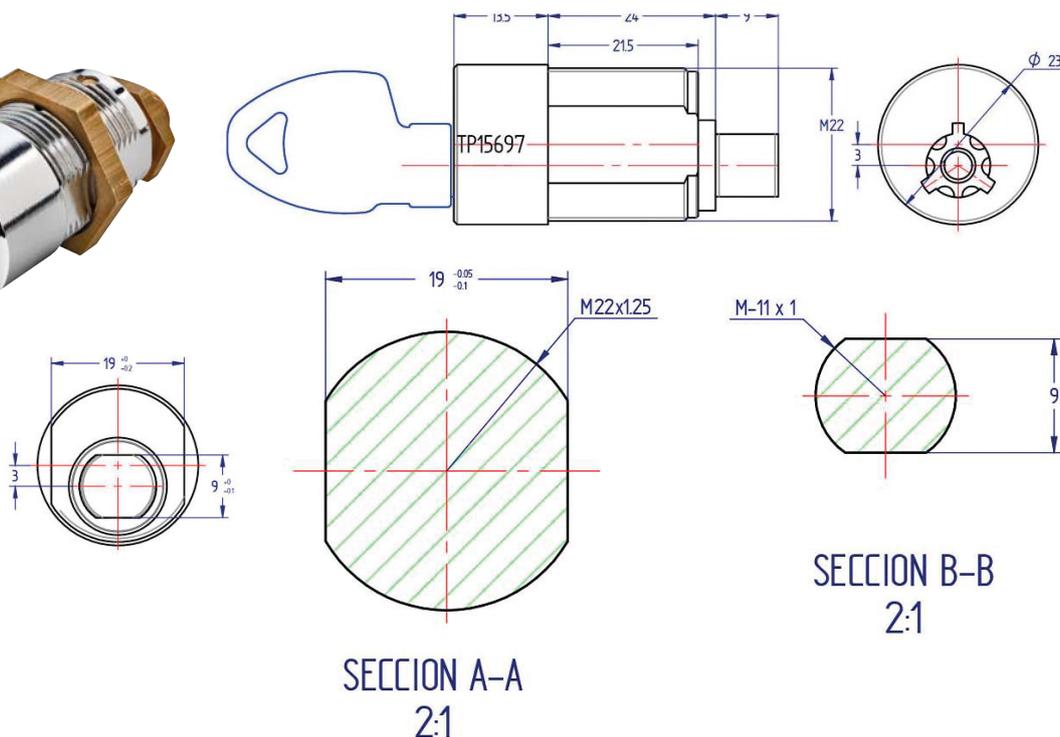


7125

CAM LOCKS *BOROBIL* series

Key operated mechanical interlock, encoded to combine with other safety locks. Suitable for fitting a cam.

ROTATION	CODE
90° D	UT7125C9D0
90° I	UT7125C9I0



7102

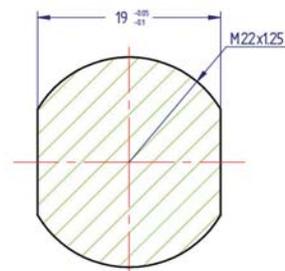
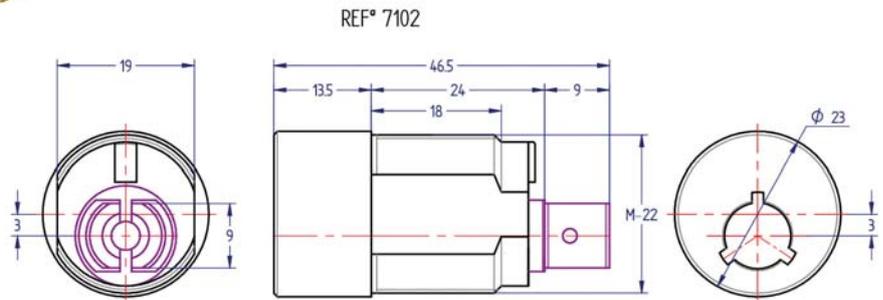
CAM LOCKS *BOROBIL* series

Chrome-plated brass cylinder for manoeuvres.
Adaptable in terms of rear housing and rotation.

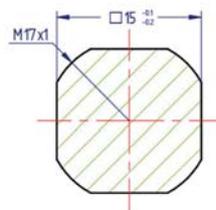
ROTATION	CODE
90° D / 90° I /	UT7102C000
180° D / 180° I	



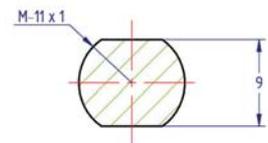
Borobil 7101 series Borobil 7125 series



SECCION A-A
2:1

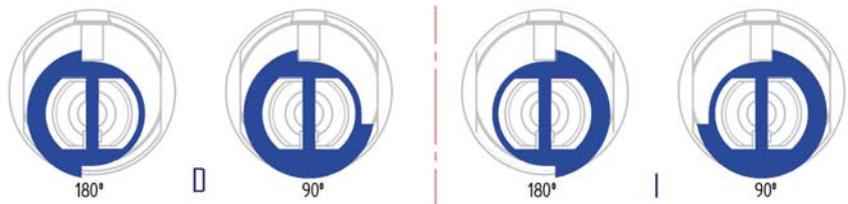


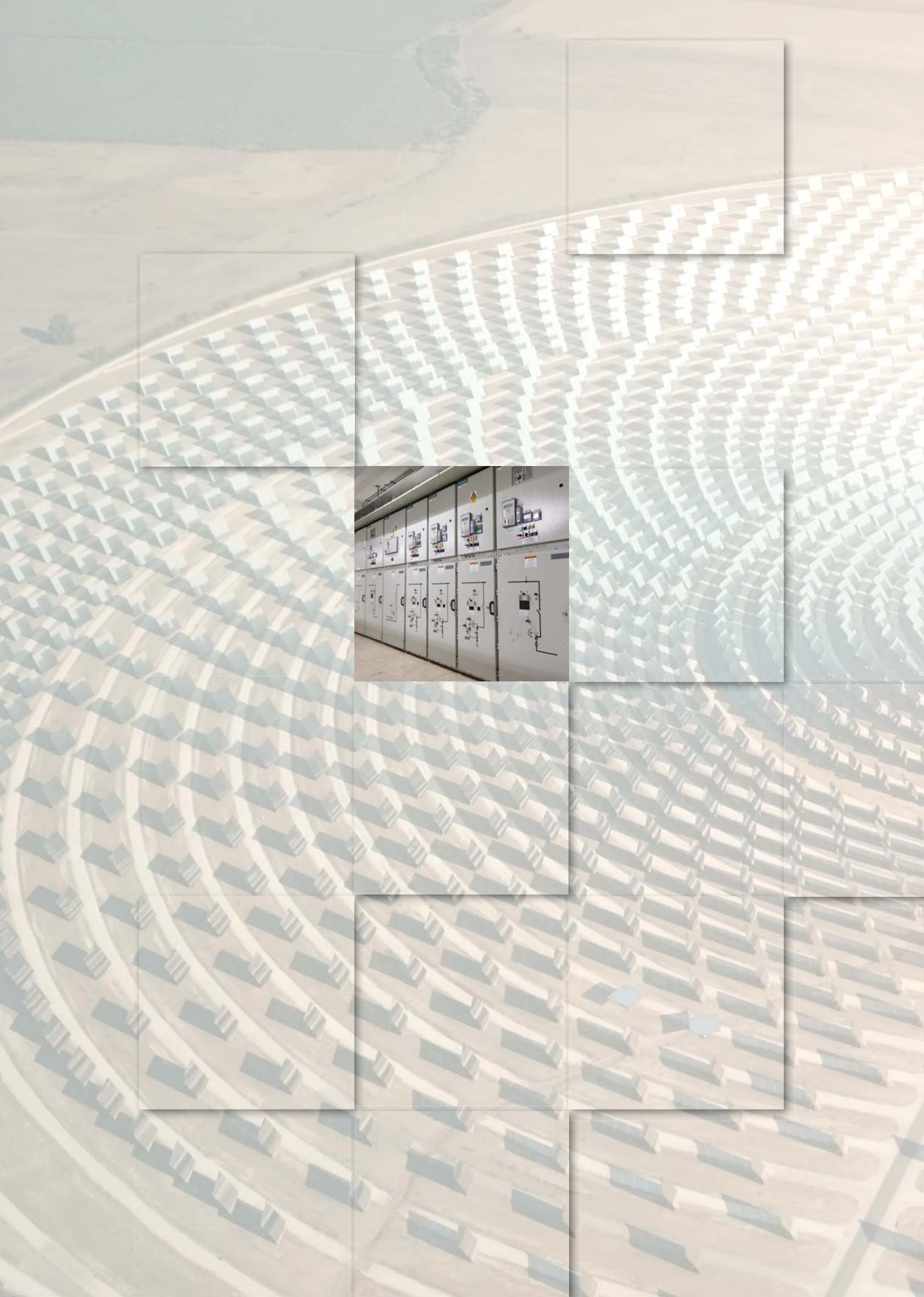
SECCION B-B
2:1



SECCION B-B
2:1

MONTAJE LEVA DE GIRO





BOLT LOCKS

LAUA series
BOROBIL series



1225

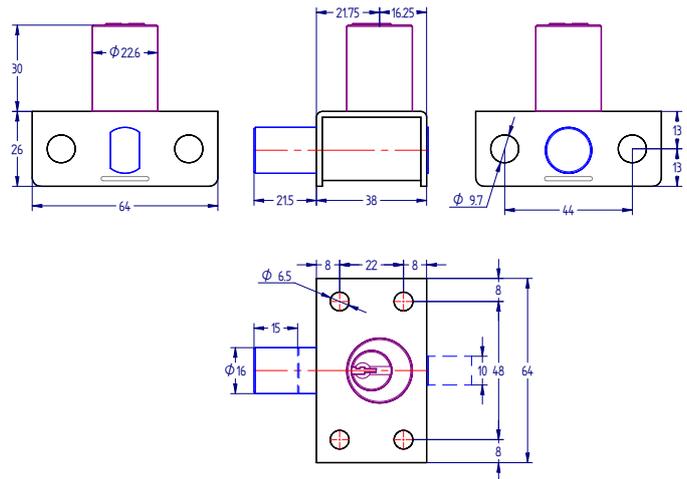
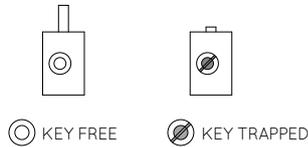
BOLT LOCKS LAUA series

Lock with bolt for access control, disconnectors, earthing switches, etc. The position of the bolt (extended or retracted) is related to the position of the key (free or locked). The key can only be removed in one of the positions. When the bolt is retracted, it protrudes from the rear of the lock.



MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	21,5	15	NO	UP1225I0F0

STANDARD MANOEUVRE



1201

BOLT LOCKS LAUA series

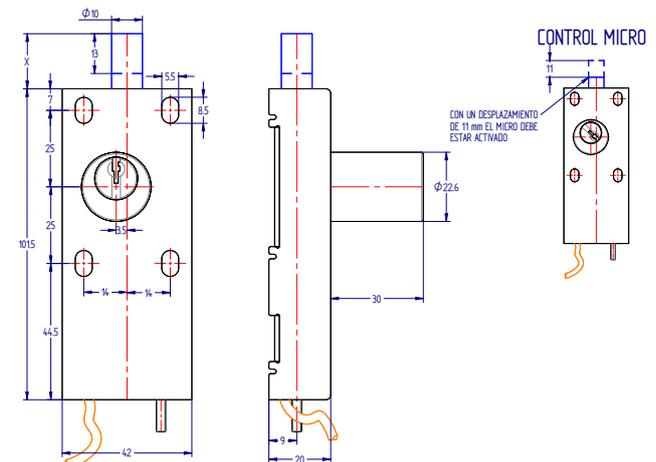
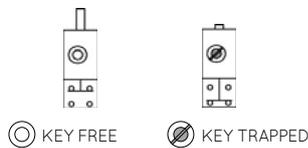
Lock for double manoeuvre, encoded to combine with other safety locks. Bolt works in both positions, extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. When bolt is retracted the switch is activated.



MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UP1201I0F0
STANDARD	35	13	NO	UP1201I0F01
REVERSE	18	13	NO	UP1201I0D0
REVERSE	35	13	NO	UP1201I0D01

STANDARD MANOEUVRE

REVERSE MANOEUVRE



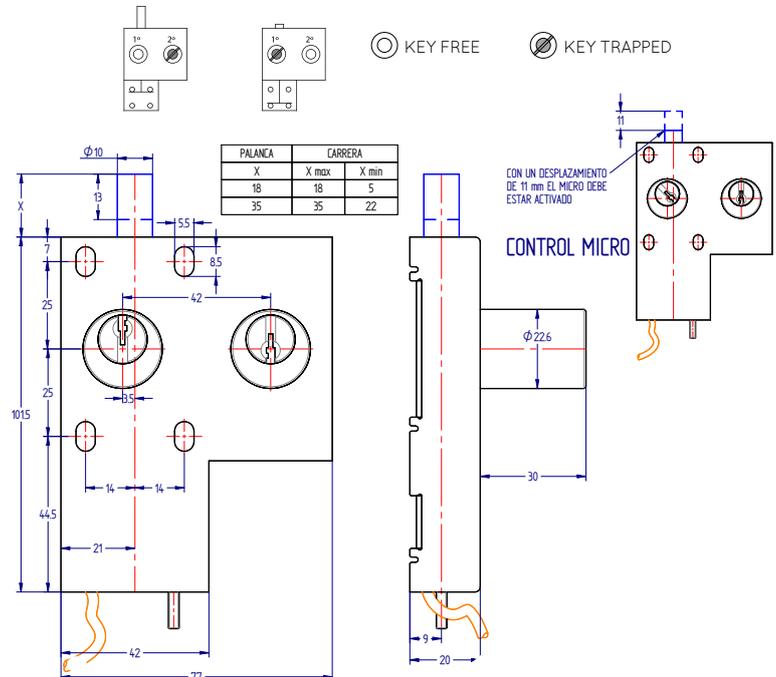
1202

BOLT LOCKS LAUA series

Lock for double manoeuvre, encoded to combine with other safety locks. Bolt works in both positions, extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. When bolt is retracted the switch is activated. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.

MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UP1202I0F0
STANDARD	35	13	NO	UP1202I0F01

STANDARD MANOEUVRE



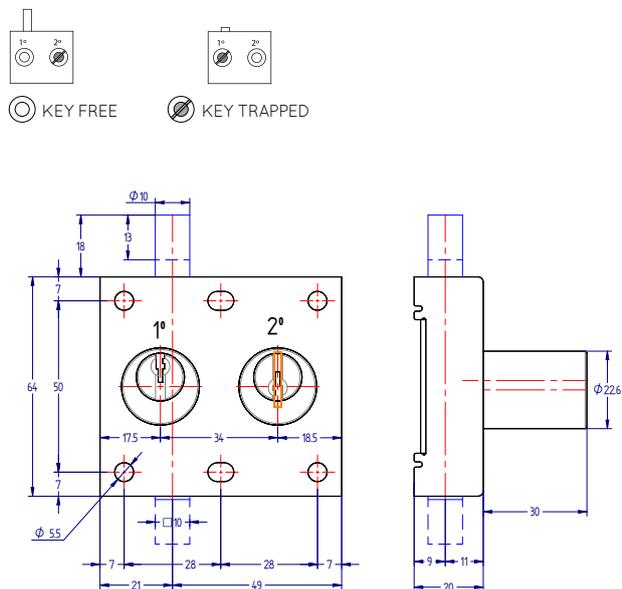
1226

BOLT LOCKS LAUA series

Lock for double manoeuvre, encoded to combine with other safety locks. Bolt works in both positions, extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.

MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UP1226I0F0
STANDARD	35	13	NO	UP1226I0F01

STANDARD MANOEUVRE



1227

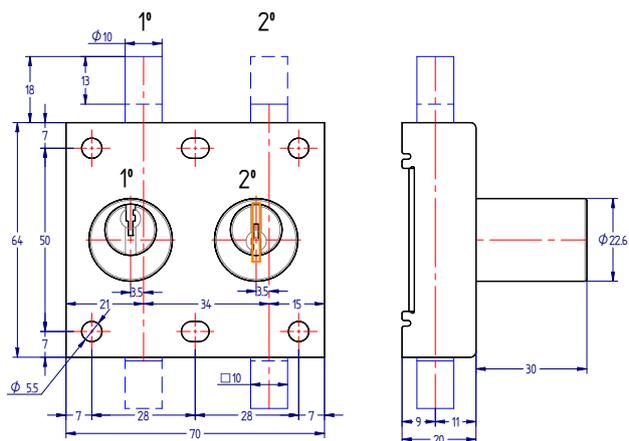
BOLT LOCKS LAUA series

Lock for double manoeuvre, encoded to combine with other safety locks. Bolts work in both positions, extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.



MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UP122710F0
STANDARD	35	13	NO	UP122710F01

STANDARD MANOEUVRE



1208

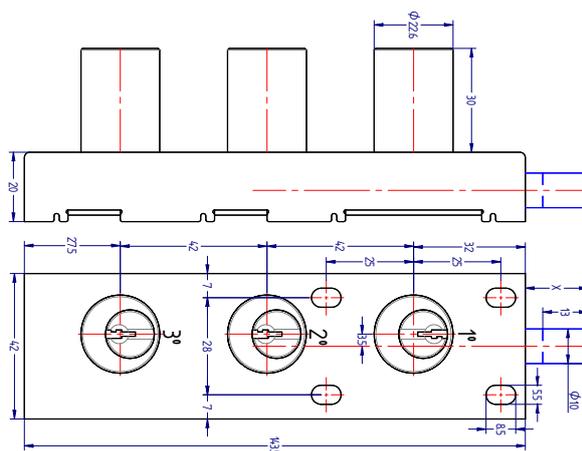
BOLT LOCKS LAUA series

Lock for simple manoeuvre, encoded to combine with other safety locks. Bolt works only in extended position. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. To start the sequence in standard manoeuvre, the key in the second and in the third locks have to be trapped.



MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UP120810F0
STANDARD	35	13	NO	UP120810F01

STANDARD MANOEUVRE



7223

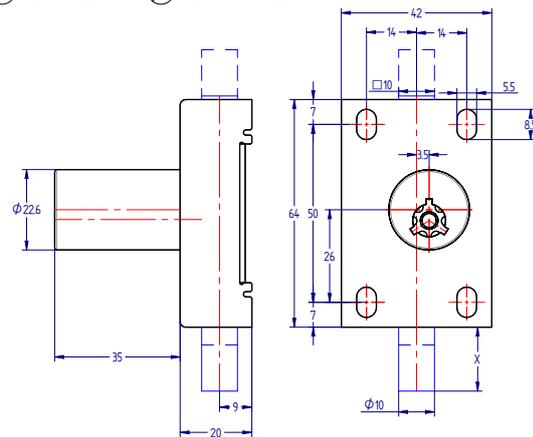
Lock for double manoeuvre, encoded to combine with other safety locks. Bolt works in both positions, extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked.



BOLT LOCKS BOROBIL series

MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UT7223I0F0
STANDARD	35	13	NO	UT7223I0F01
REVERSE	18	13	NO	UT7223I0D0
REVERSE	35	13	NO	UT7223I0D01

STANDARD MANOEUVRE **REVERSE MANOEUVRE**



7295

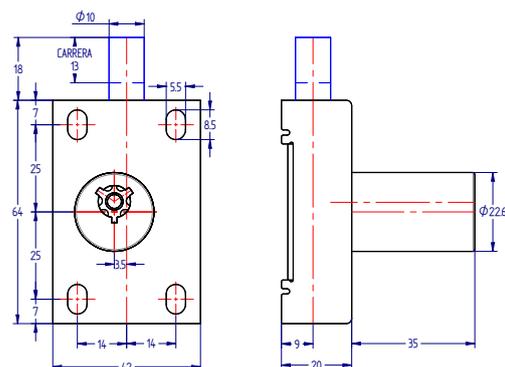
Lock for simple manoeuvre, encoded to combine with other safety locks. Bolt works only in extended position. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked.



BOLT LOCKS BOROBIL series

MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UT7295I0F0
STANDARD	35	13	NO	UT7295I0F01
REVERSE	18	13	NO	UT7295I0D0
REVERSE	35	13	NO	UT7295I0D01

STANDARD MANOEUVRE **REVERSE MANOEUVRE**



7201

Lock for double manoeuvre, encoded to combine with other safety locks. Bolt works in both positions, extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. When bolt is retracted the switch is activated.



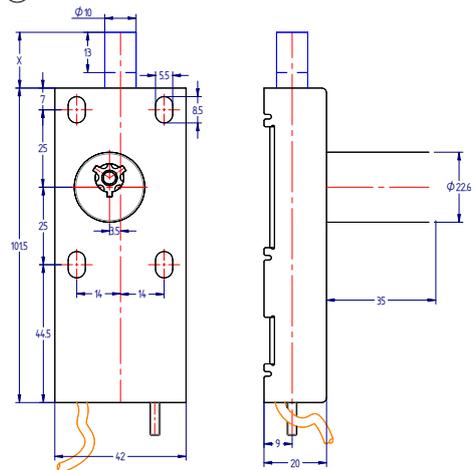
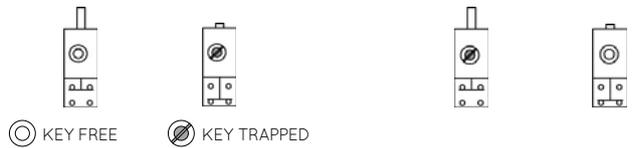
BOLT LOCKS BOROBIL series

MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	

STANDARD	18	13	NO	UT720110F0
STANDARD	35	13	NO	UT720110F01
REVERSE	18	13	NO	UT720110D0
REVERSE	35	13	NO	UT720110D01

STANDARD MANOEUVRE

REVERSE MANOEUVRE



7202

Lock for double manoeuvre, encoded to combine with other safety locks. Bolt works in both positions, extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. When bolt is retracted the switch is activated. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.

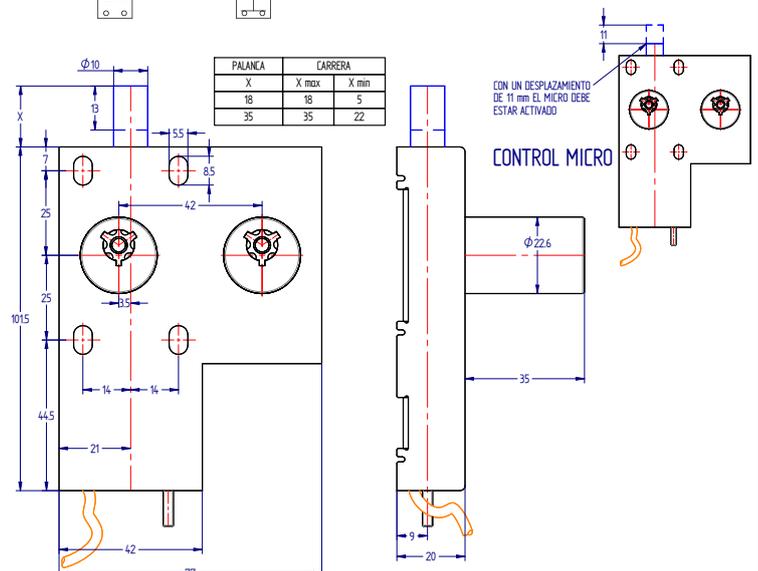


BOLT LOCKS BOROBIL series

MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	

STANDARD	18	13	NO	UT720210F0
STANDARD	35	13	NO	UT720210F01

STANDARD MANOEUVRE



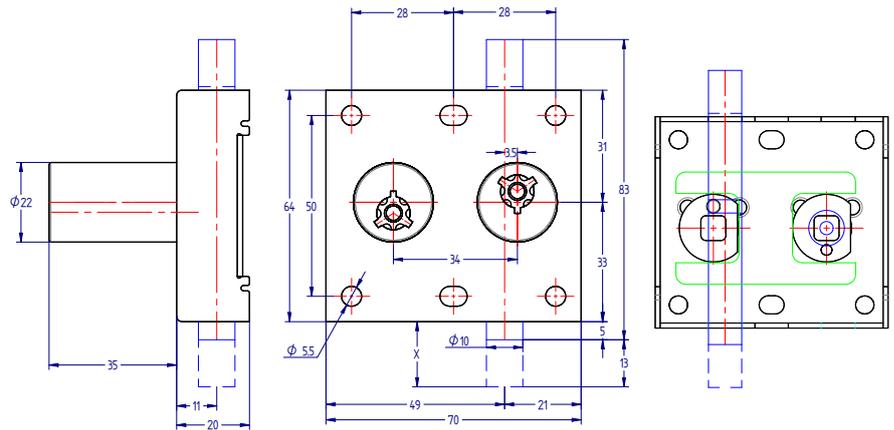
7226

Lock for double manoeuvre, encoded to combine with other safety locks. Bolt works in both positions, extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.

BOLT LOCKS BOROBIL series

MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UT722610F0
STANDARD	35	13	NO	UT722610F01

STANDARD MANOEUVRE



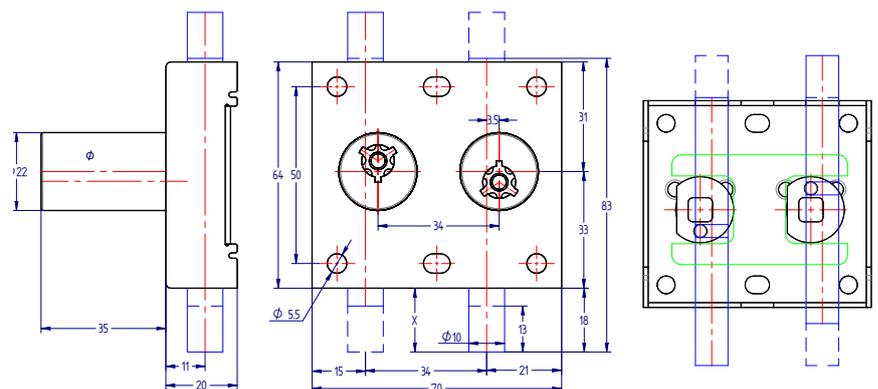
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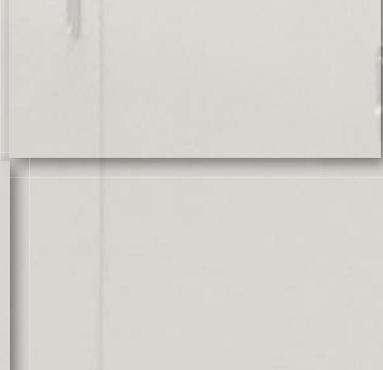
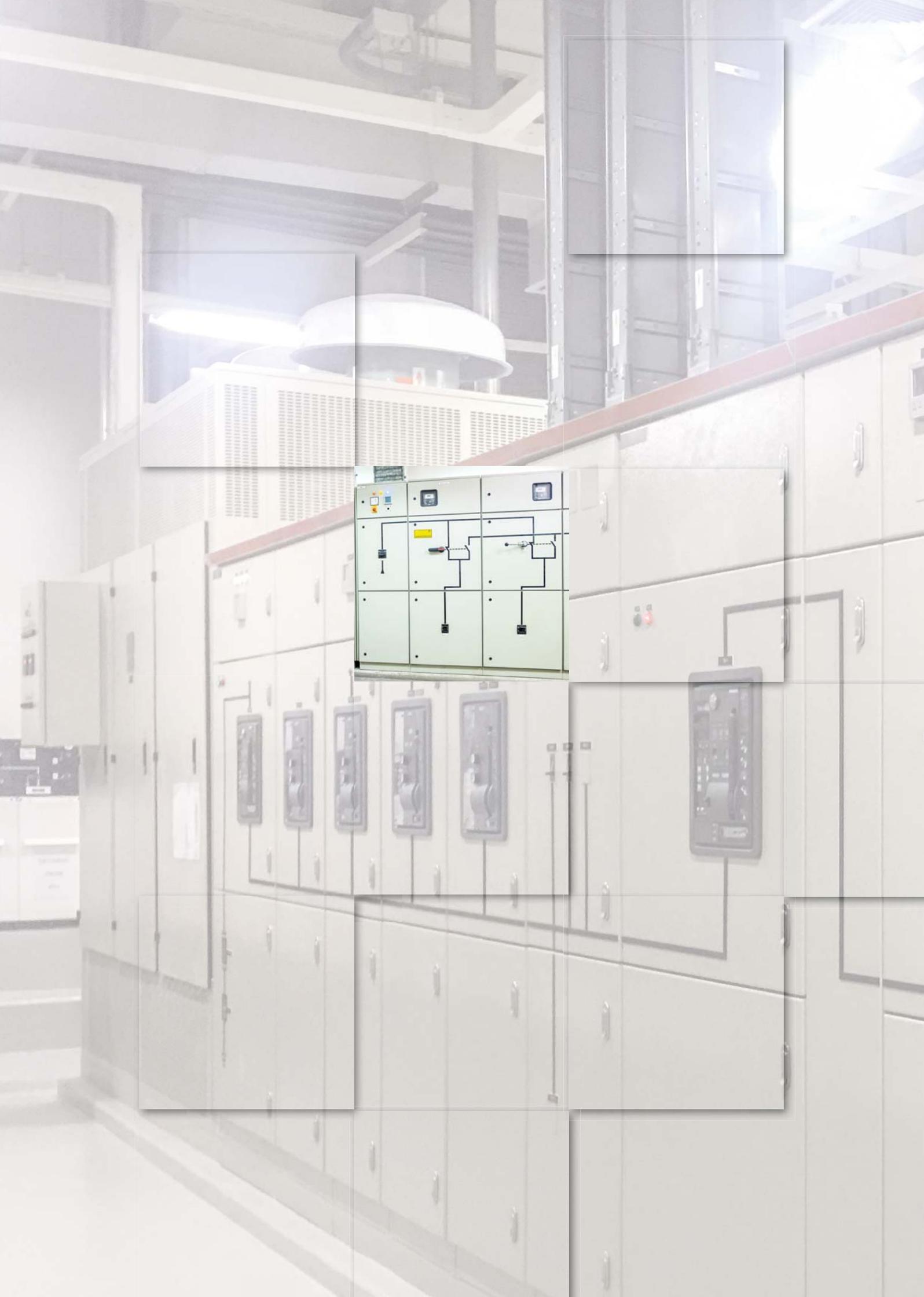
Lock for double manoeuvre, encoded to combine with other safety locks. Bolts work in both positions extended and retracted. Key is free when bolt is extended. When bolt is retracted, key is trapped and the mechanism is locked. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.

BOLT LOCKS BOROBIL series

MANOEUVRE	BOLT			CODE
	Length	Throw	Thread	
STANDARD	18	13	NO	UT722710F0
STANDARD	35	13	NO	UT722710F01

STANDARD MANOEUVRE





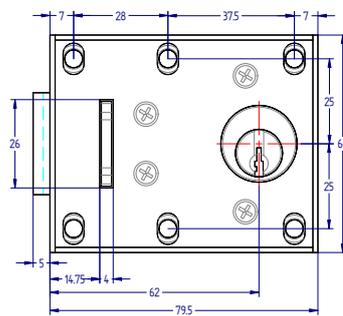
ACCESS LOCKING

LAUA series
BOROBIL series



1328

Lock for access to a cell. Encoded to combine with other safety locks. When the door is open, the key is trapped.



ACCESS LOCKING LAUA series

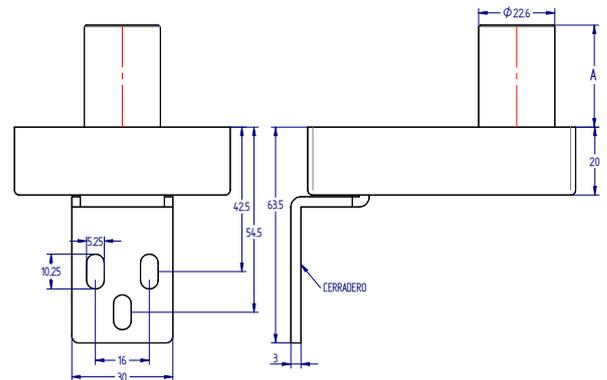
MANOEUVRE	CYLINDER DIMENSION	CODE
STANDARD	Ø 23×30	UP1328I000
STANDARD	Ø 23×40	UP1328I400

STANDARD MANOEUVRE



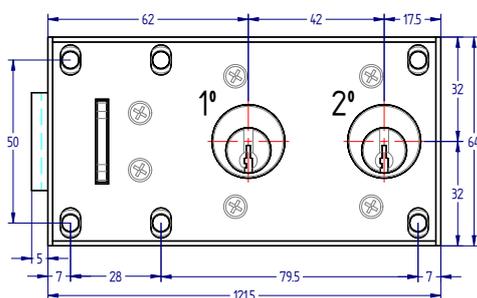
○ KEY FREE

⊘ KEY TRAPPED



1329

Lock for access to a cell. Encoded to combine with other safety locks. When the door is open, the key is trapped. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.



ACCESS LOCKING LAUA series

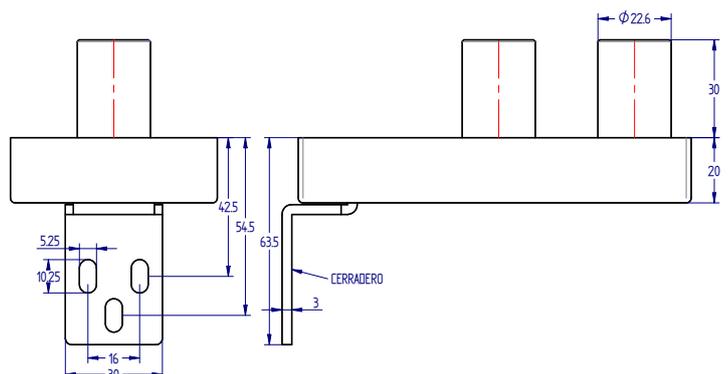
MANOEUVRE	CYLINDER DIMENSION	CODE
STANDARD	Ø 23×30	UP1329I000

STANDARD MANOEUVRE



○ KEY FREE

⊘ KEY TRAPPED



1394

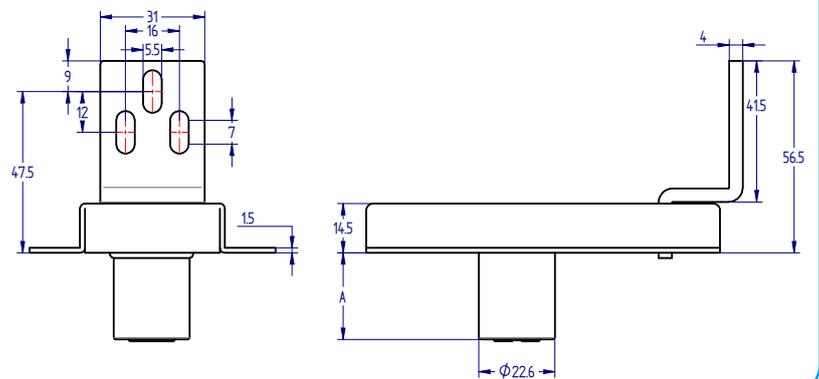
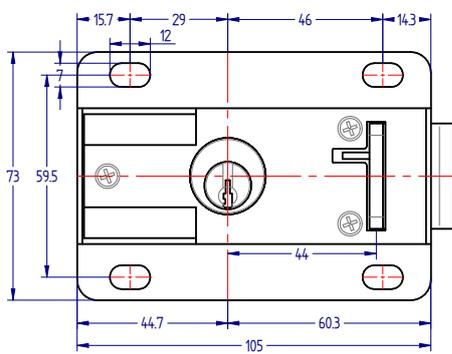
ACCESS LOCKING LAUA series

Lock for access to a cell. Encoded to combine with other safety locks. When the door is open, the key is trapped.

MANOEUVRE	CYLINDER DIMENSION	CODE
STANDARD	Ø 23×25,5	UPI394I000
STANDARD	Ø 23×40,5	UPI394I400



STANDARD MANOEUVRE



1395

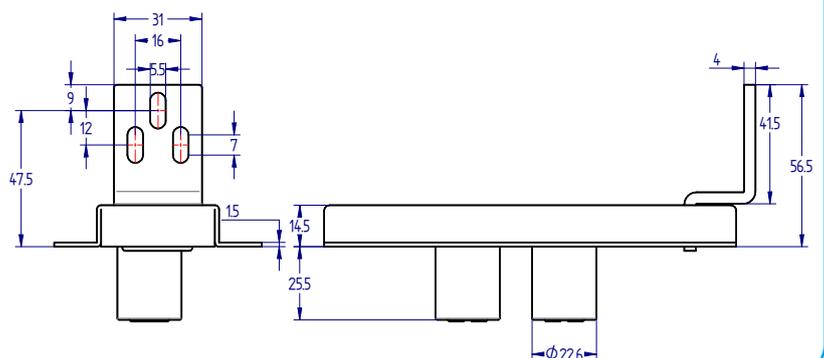
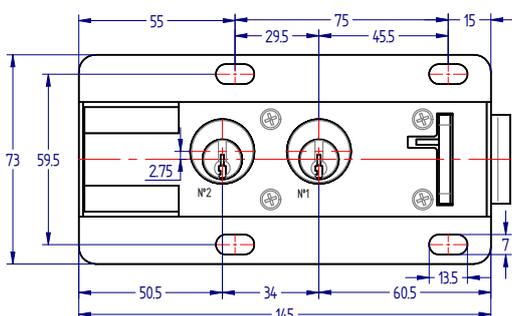
ACCESS LOCKING LAUA series

Lock for access to a cell. Encoded to combine with other safety locks. When the door is open, the key is trapped. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.

MANOEUVRE	CYLINDER DIMENSION	CODE
STANDARD	Ø 23×25,5	UPI395I000



STANDARD MANOEUVRE



7328

Lock for access to a cell. Encoded to combine with other safety locks. When the door is open, the key is trapped.

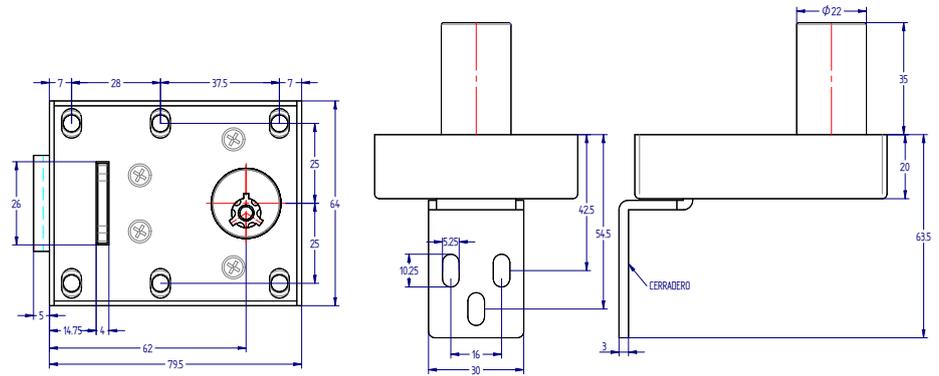
ACCESS LOCKING *BOROBIL series*

MANOEUVRE	CYLINDER DIMENSION	CODE
STANDARD	Ø 23 x35	UT7328I000

STANDARD MANOEUVRE



○ KEY FREE ⊗ KEY TRAPPED



7329

Lock for access to a cell. Encoded to combine with other safety locks. When the door is open, the key is trapped. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.

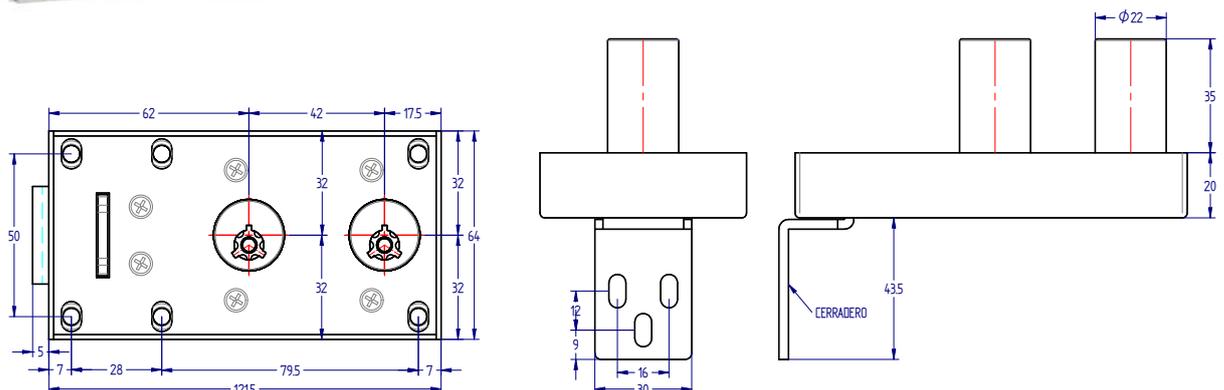
ACCESS LOCKING *BOROBIL series*

MANOEUVRE	CYLINDER DIMENSION	CODE
STANDARD	Ø 23x35	UT7329I000

STANDARD MANOEUVRE



○ KEY FREE ⊗ KEY TRAPPED



7394

ACCESS LOCKING *BOROBIL series*

Lock for access to a cell. Encoded to combine with other safety locks. When the door is open, the key is trapped.

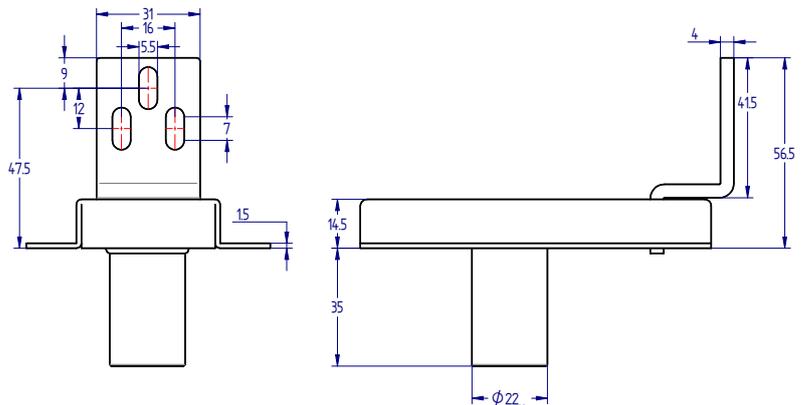
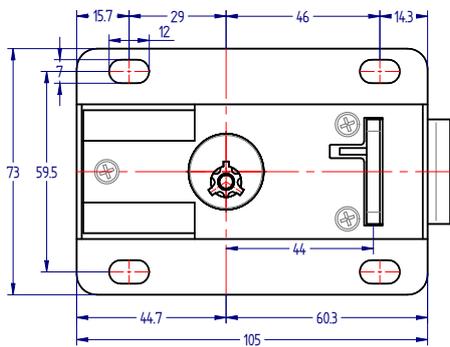
MANOEUVRE	CYLINDER DIMENSION	CODE
STANDARD	Ø23×35	UT7394I000

STANDARD MANOEUVRE



○ KEY FREE

⊘ KEY TRAPPED



7395

ACCESS LOCKING *BOROBIL series*

Lock for access to a cell. Encoded to combine with other safety locks. When the door is open, the key is trapped. To start the sequence in standard manoeuvre, the key in the second lock has to be trapped.

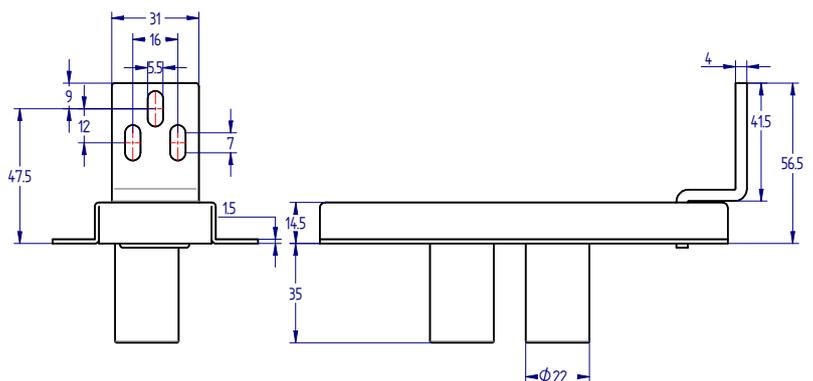
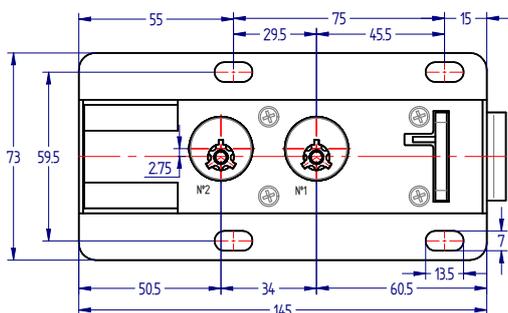
MANOEUVRE	CYLINDER DIMENSION	CODE
STANDARD	Ø 23x35	UT7395I000

STANDARD MANOEUVRE



○ KEY FREE

⊘ KEY TRAPPED





KEY MANAGEMENT

LAUA series
BOROBIL series



1403... 140X

Key interchanging box with 3 cylinders, 1 free key maintains 2 keys trapped.

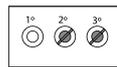


**+ CYLINDERS
+ MANOEUVRES
OTHER SIZES**

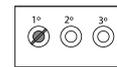
KEY MANAGEMENT LAUA series

REF	MANOEUVRE	N° OF CYLINDERS	A	CODE
1403	STANDARD	3	118	UP1403I000
1404	STANDARD	4	152	UP1404I000
1405	STANDARD	5	186	UP1405I000
⋮				
140X	STANDARD	X	(X-1)x34+50	UP140XI000

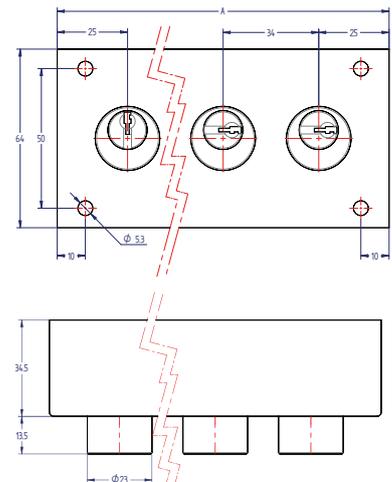
STANDARD MANOEUVRE



POSITION ACCORDING TO PLAN
Key 1st free
Remaining dams



POSITION AFTER MANOEUVRE
Key 1st dam
Rest free



7403.... 740X

Key interchanging box with 3 cylinders; 1 free key maintains 2 keys trapped.

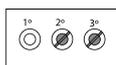


**+ CYLINDERS
+ MANOEUVRES
OTHER SIZES**

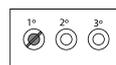
KEY MANAGEMENT *BOROBIL series*

REF	MANOEUVRE	N° OF CYLINDERS	A	CODE
7403	STANDARD	3	118	UT7403I000
7404	STANDARD	4	152	UT7404I000
7405	STANDARD	5	186	UT7405I000
⋮				
740X	STANDARD	X	(X-1)x34+50	UT740XI000

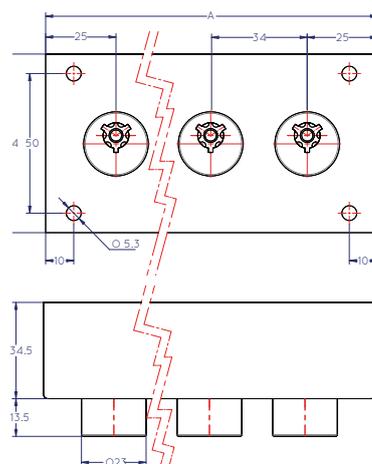
STANDARD MANOEUVRE



POSITION ACCORDING TO PLAN
Key 1st free
Remaining dams



POSITION AFTER MANOEUVRE
Key 1st dam
Rest free





SOLENOID CONTROLLED LOCKS

LAUA series
BOROBIL series

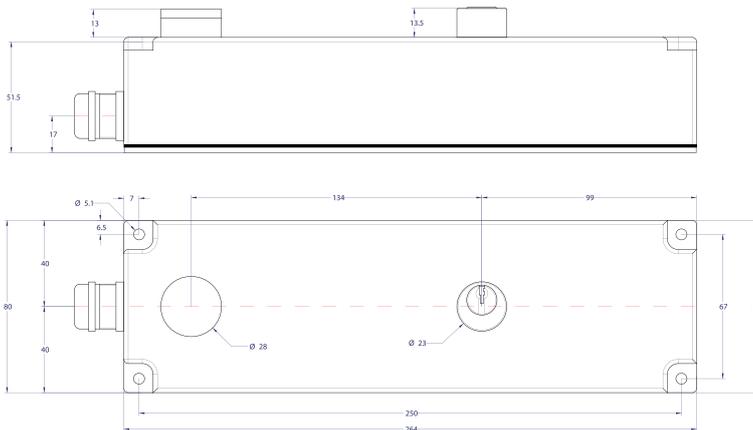


1500

SOLENOID CONTROLLED LOCKS *LAUA series*

Electro mechanical lock controlled by a solenoid which allow the standard manouvre (solenoid energised = key free).

MANOEUVRE	VOLTAGE	CODE
STANDARD	110 Vdc	UP150010710



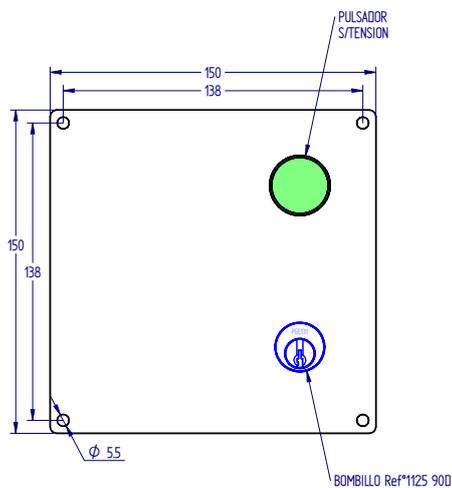
**+ CYLINDERS
OTHER SIZES**

1501

SOLENOID CONTROLLED LOCKS *LAUA series*

Electro mechanical lock controlled by a solenoid which allow the standard manouvre (solenoid energised = key free). The state of the lock is controlled by a switch.

MANOEUVRE	VOLTAGE	CODE
STANDARD	110 Vdc	UP150110710



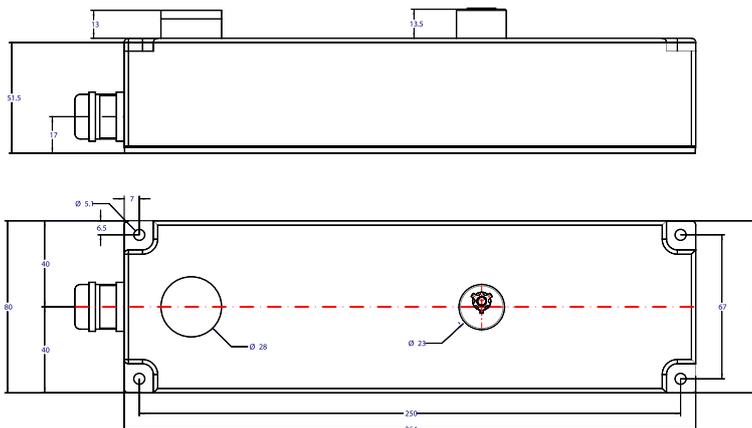
**+ CYLINDERS
OTHER SIZES**

7500

SOLENOID CONTROLLED LOCKS *BOROBIL series*

Electro mechanical lock controlled by a solenoid which allow the standard manoeuvre (solenoid energised = key free).

MANOEUVRE	VOLTAGE	CODE
STANDARD	110 Vdc	UT750010710



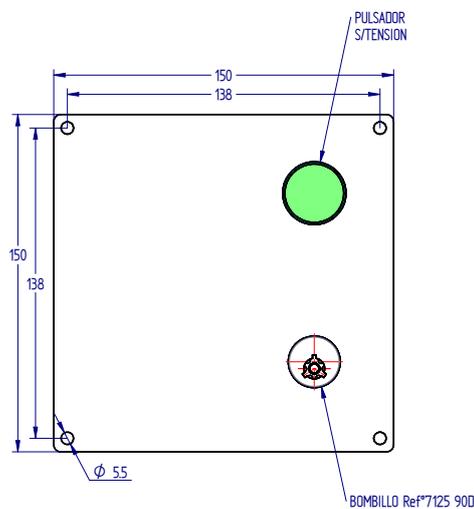
**+ CYLINDERS
OTHER SIZES**

7501

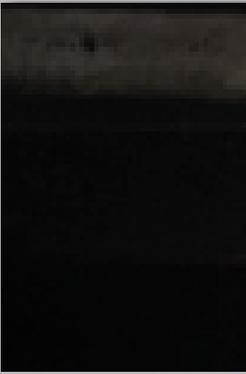
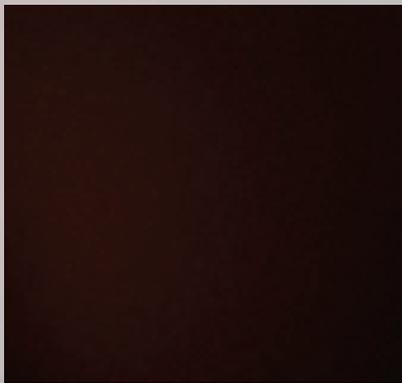
SOLENOID CONTROLLED LOCKS *BOROBIL series*

Electro mechanical lock controlled by a solenoid which allow the standard manoeuvre (solenoid energised = key free). The state of the lock is controlled by a switch.

MANOEUVRE	VOLTAGE	CODE
STANDARD	110 Vdc	UT750110710



**+ CYLINDERS
OTHER SIZES**



MISCELLANEOUS

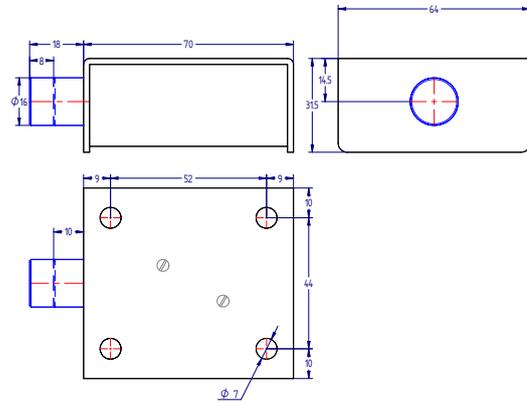


823

MISCELLANEOUS *Electromagnet closure*

Electromagnetic locking bolt for access control, disconnectors, earthing switches, etc., activated by a coil. When the coil is energised, the bolt is retracted.

MANOEUVRE	CODE
125 Vdc coil	UV823003
230 Vac coil	UV823004
110 Vdc coil	UV823007





KEYS

LAUA series
BOROBIL series

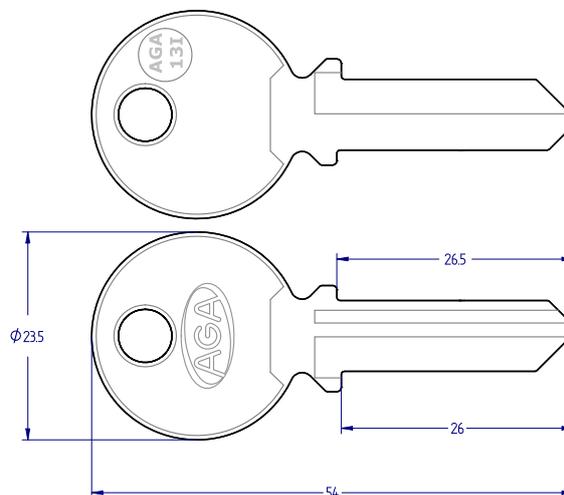


AGA 13

KEYS LAUA series

Standard flat brass key.

CODE	YPAG13Y2A100
MATERIAL	BRASS
N° OF COMBINATIONS	93.600
WEIGHT	12 grs.

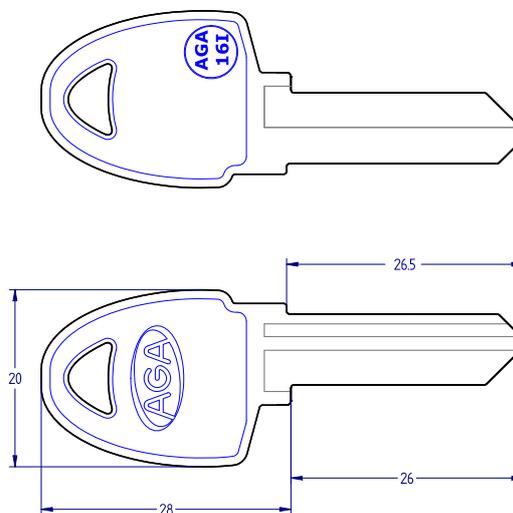
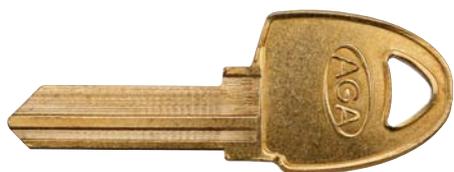


AGA 16

KEYS LAUA series

Standard flat brass key.

CODE	YPAG16Y2A100
MATERIAL	BRASS
N° OF COMBINATIONS	93.600
WEIGHT	10 grs.

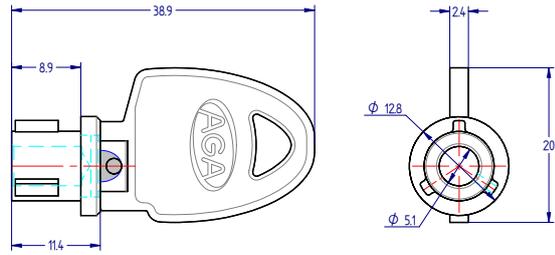


AGA 7 T

KEYS *BOROBIL series*

Tubular brass key.

CODE	YTAG07Y2A300
MATERIAL	BRASS
N° OF COMBINATIONS	97.081
WEIGHT	14 grs.





LOCKSMITH INDUSTRY

www.aga.es



LOCKSMITH INDUSTRY

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