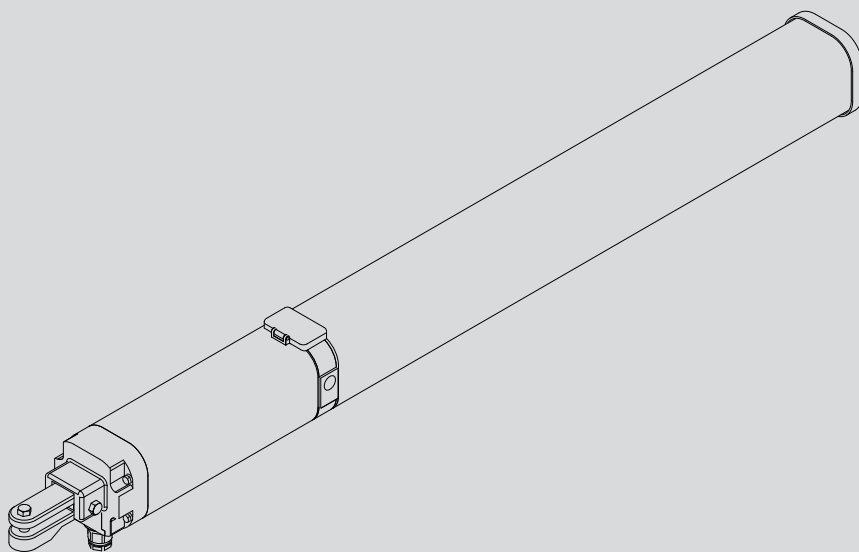




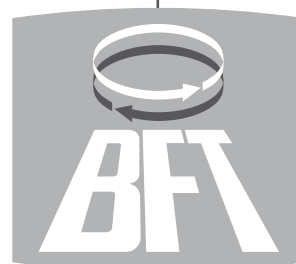
D811702.00100\_01 27-10-09

AUTOMAZIONI A PISTONE PER CANCELLI A BATTENTE  
PISTON AUTOMATIONS FOR SWING GATES  
AUTOMATIONS A PISTON POUR PORTAILS BATTANTS  
HYDRAULISCHER DREHTORANTRIEB  
AUTOMATIZACIONES A PISTON PARA PORTONES CON BATIENTE  
AUTOMATISERINGSSYSTEMEN MET ZUIGER VOOR VLEUGELPOORTEN



ISTRUZIONI DI INSTALLAZIONE  
INSTALLATION MANUAL  
INSTRUCTIONS D'INSTALLATION  
MONTAGEANLEITUNG  
INSTRUCCIONES DE INSTALACION  
INSTALLATIEVOORSCHRIFTEN

LUX BT 2B  
LUX GBT 2B



AZIENDA CON SISTEMA DI GESTIONE  
INTEGRATO CERTIFICATO DA DNV  
= UNI EN ISO 9001:2000 =  
UNI EN ISO 14001:2004

**DICHIARAZIONE DI CONFORMITÀ / DECLARATION OF CONFORMITY / DÉCLARATION DE CONFORMITÉ / KONFORMITÄTSERKLÄRUNG / DECLARACIÓN DE CONFORMIDAD / VERKLARING VAN OVEREENSTEMMING/DECLARAÇÃO DE CONFORMIDADE / ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ / DEKLARACJA ZGODNOŚCI / ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ / PROHLÁŠENÍ O SHODĚ / UYGUNLUK BEYANNAMES**  
(Dir. 98/37/EEC allegato / annex / on annexe / anlage / adjunto / ficheiro / bijlage / συνημμένο / załącznik / приложение / příloha / ek II B)

Fabrizante / Manufacturer / Fabricant / Hersteller / Fabricante / Fabrikant /  
Fabricante/ Κατασκευαστής / Producent / Изготовитель / výrobce / Üretici:

BFT S.p.a.

Indirizzo / Address / Adresse / Adresse / Dirección / Adres / Endereço / Διεύθυνση / Adres /  
Адрес / Adresa / Adres:

Via Lago di Vico 44  
36015 - Schio  
VICENZA - ITALY

Dichiara sotto la propria responsabilità che il prodotto: / Declares under its own responsibility that the following product: / Déclare sous sa propre responsabilité que le produit: / Erklärt auf eigene Verantwortung, daß das Produkt: / Declara, bajo su propia responsabilidad, que el producto: / Verklaart onder haar verantwoordelijkheid dat het product / Declara, sob a sua responsabilidade, que o produto / Δηλώνει υπεύθυνα ότι το προϊόν / Oświadcza na własną odpowiedzialność, że produkt / Заявляет под свою ответственность, что изделие / Prohlašuje na vlastní odpovědnost, že výrobek / Kendi sorumluluğu altında aşağıdaki ürünü:

Motoriduttore per cancelli a battente mod. / Gearmotor for swing gates mod. / Motoréducteur pour portails battants mod. /  
Getriebemotor für Drehtore Modell / Motorreductor para cancelas con batiente mod. / Reductiemotor voor vleugelporten model /  
Motoredutor para portões de batente mod. / Ηλεκτροκινητήρας για ανοιγόμενες καγκελόπορτες μοντέλο / Silnik z reduktorem do  
gram skrzydłowych model / Редукторный двигатель для створчатых ворот модель / Převodový motor pro brány s křídly model /  
...modeli kanatlı bahçe giriş kapıları için motor redüktörü

## LUX BT 2B, LUX G BT 2B

È costruito per essere incorporato in un macchinario che verrà identificato come macchina ai sensi della DIRETTIVA MACCHINE. / Has been produced to be incorporated into a machinery, which will be identified as a machine according to the MACHINERY DIRECTIVE. / A été construit pour l'incorporation successive dans un équipement qui sera identifié comme machine conformément à la DIRECTIVE MACHINES. / Dafür konstruiert wurde, in ein Gerät eingebaut zu werden, das als Maschine im Sinne der MASCHINEN-DIREKTIVE identifiziert wird. / Ha sido construido para ser incorporado en una maquinaria, que se identificará como máquina de conformidad con la DIRECTIVA MÁQUINAS. / Gebouwd is om deel uit te maken van een inrichting die wordt geïdentificeerd als machine volgens de MACHINERICHTLIJN. / Foi construído para ser incorporado numa maquinaria, que será identificada como máquina em conformidade com a DIRECTIVA MÁQUINAS / Έχει κατασκευαστεί για να ενσωματωθεί σε ένα μηχάνημα που θα προσδιοριστεί ως μηχανήμα σύμφωνα με την ΟΔΗΓΙΑ ΜΗΧΑΝΗΜΑΤΩΝ / Został wyprodukowany z przeznaczeniem do montażu w urządzeniu, które zostanie określone jako maszyna w myśl DYREKTYWY MASZYNOWEJ / Изготовлен для встраивания в оборудование, которое будет определено как «машина» в соответствии с ДИРЕКТИВОЙ ПО МАШИНАМ / Je vyroben pro montáž do strojního zařízení, které bude označeno jako stroj podle SMĚRNICE O STROJNÍCH ZAŘÍZENÍCH. / MAKINE DİREKTİF'inin hükümleri uyarınca makine olarak tanımlanacak bir makine grubuna entegre edilmek için üretilmiş olduğunu

È conforme ai requisiti essenziali di sicurezza delle Direttive: / It also complies with the main safety requirements of the following Directives: / Est conforme aux exigences essentielles de sécurité des Directives: / Es entspricht den grundlegenden Sicherheitsbedingungen der Direktiven: / Es conforme a los requisitos esenciales de seguridad de las Directivas: / Conform is met de fundamentele veiligheidsvereisten van de volgende Richtlijnen / Está conforme aos requisitos essenciais de segurança das Directivas / Συμμορφωθεί στις βασικές απαιτήσεις ασφαλείας των Οδηγιών / Jest zgodny z podstawowymi wymogami bezpieczeństwa Dyrektyw / Соответствует основным требованиям по безопасности Директив / Vyhovuje hlavním bezpečnostním požadavkům směrnice / Aşağıdaki direktiflerin temel güvenlik şartlarına uygun olduğunu beyan eder:

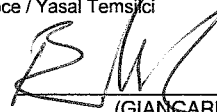
BASSA TENSIONE / LOW VOLTAGE / BASSE TENSION / NIEDERSPANNUNG / BAJA TENSION / BAIXA TENSÃO /  
LAAGSPANNING / ΧΑΜΗΛΗΣ ΤΑΣΗΣ / NISKIE NAPIĘCIE / НИЗКОЕ НАПРЯЖЕНИЕ / BEZPEČNOST ELEKTRICKÝCH  
ZAŘÍZENÍ NÍZKÉHO NAPĚTÍ / ALÇAK GERİLİM 2006/95/CEE (EN60335-1 (\*02), EN60335-2-103) (e modifiche successive / and  
subsequent amendments / et modifications successives / und ihren nachfolgende Änderungen / e modificações sucessivas / y  
modificaciones sucesivas / en daaropvolgende wijzigingen / και επόμενες τροποποιήσεις / z późniejszymi zmianami / c  
последующими изменениями / s pozdějšími změnami / ve sonraki deęişiklikler).

COMPATIBILITÀ ELETTROMAGNETICA / ELECROMAGNETIC COMPATIBILITY / COMPATIBILITÉ ÉLECTROMAGNÉTIQUE /  
ELEKTROMAGNETISCHE KOMPATIBILITÄT / COMPATIBILIDAD ELECTROMAGNETICA / COMPATIBILIDADE  
ELECTROMAGNÉTICA / ELEKTROMAGNETISCHE COMPATIBILITEIT / ΗΛΕΚΤΡΟΜΑΓΝΗΤΙΚΗΣ ΣΥΜΒΑΤΟΤΗΤΑΣ /  
KOMPATYBILNOŚĆ ELEKTROMAGNETYCZNA / ЭЛЕКТРОМАГНИТНАЯ СОВМЕСТИМОСТЬ / ELEKTROMAGNETICKÁ  
KOMPATIBILITA / ELEKTROMANYETİK UYUMLULUK 2004/108/CEE (EN61000-6-2, EN61000-6-3) (e modifiche successive /  
and subsequent amendments / et modifications successives / und ihren nachfolgende Änderungen / e modificações sucessivas / y  
modificaciones sucesivas / en daaropvolgende wijzigingen / και επόμενες τροποποιήσεις / z późniejszymi zmianami / c  
последующими изменениями / s pozdějšími změnami / ve sonraki deęişiklikler).

Si dichiara inoltre che è vietata la messa in servizio del prodotto, prima che la macchina in cui sarà incorporato, sia stata dichiarata conforme alle disposizioni della DIRETTIVA MACCHINE. / We also declare that it is forbidden to start the product before the machinery into which it will be incorporated is declared in compliance with the prescriptions of the MACHINERY DIRECTIVE. / Nous déclarons en outre que la mise en service du produit est interdite, avant que la machine où il sera incorporé n'ait été déclarée conforme aux dispositions de la DIRECTIVE MACHINES. / Es wird außerdem erklärt, daß die Inbetriebnahme des Produkts verboten ist, solange die Maschine, in die es eingebaut wird, nicht als mit den Vorschriften der MASCHINEN-DIREKTIVE konform erklärt wurde. / Se declara, además, que está prohibido instalar el producto antes de que la máquina en la que se incorporará haya sido declarada conforme a las disposiciones de la DIRECTIVA MÁQUINAS / Verder verklaren wij dat de inbedrijfstelling van het product verboden is, voordat de machine waarin het zal worden opgenomen, conform wordt verklaard aan de beschikkingen van de MACHINERICHTLIJN / Declaramos, além disso, que é proibido instalar o produto, antes que a máquina em que será incorporada, tenha sido declarada conforme às disposições da DIRECTIVA MÁQUINAS / Δηλώνουμε επίσης ότι απαγορεύεται η θέση σε λειτουργία του προϊόντος, πριν το μηχάνημα στο οποίο θα ενσωματωθεί, δηλωθεί ότι συμμορφωθεί στις διατάξεις της ΟΔΗΓΙΑΣ ΜΗΧΑΝΗΜΑΤΩΝ / Oświadczaamy ponadto, że zabronione jest uruchamianie produktu zanim maszyna, w której zostanie on zamontowany zostanie zadeklarowana jako jako zgodna z zapisami DYREKTYWY MASZYNOWEJ / Помимо этого, мы заявляем, что запрещается ввод в эксплуатацию изделия до тех пор, пока не будет заявлено, что машина, в которую оно будет встроено, соответствует предписаниям ДИРЕКТИВЫ ПО МАШИНАМ. / Kromě toho prohlašujeme, že uvedení výrobku do provozu je zakázáno, dokud stroj, do kterého bude zabudován, nebude mít prohlášení o shodě s předpisy SMĚRNICE O STROJNÍCH ZAŘÍZENÍCH. / Ayrıca ürünü entegre edileceği makinenin, MAKİNE DİREKTİF'inin hükümlerine uygunluğu beyan edildikten önce, ürünü hizmete alınmasını yasak olduğu beyan edilir

SCHIO, 21/10/2009

Il Rappresentante Legale / The legal Representative/Le Représentant  
Légal / Der gesetzliche Vertreter / El Representante Legal / De Wettelijk  
Vertegenwoordiger / O Representante legal / Ο Νόμιμος Εκπρόσωπος /  
Przedstawiciel Prawny / Юридический представитель / Zákonny  
zástupce / Yasal Temsilci



(GIANCARLO BONOLLO)

# INSTALLAZIONE VELOCE-QUICK INSTALLATION-INSTALLATION RAPIDE SCHNELLINSTALLATION-INSTALACIÓN RÁPIDA - SNELLE INSTALLATIE

ITALIANO

ENGLISH

FRANÇAIS

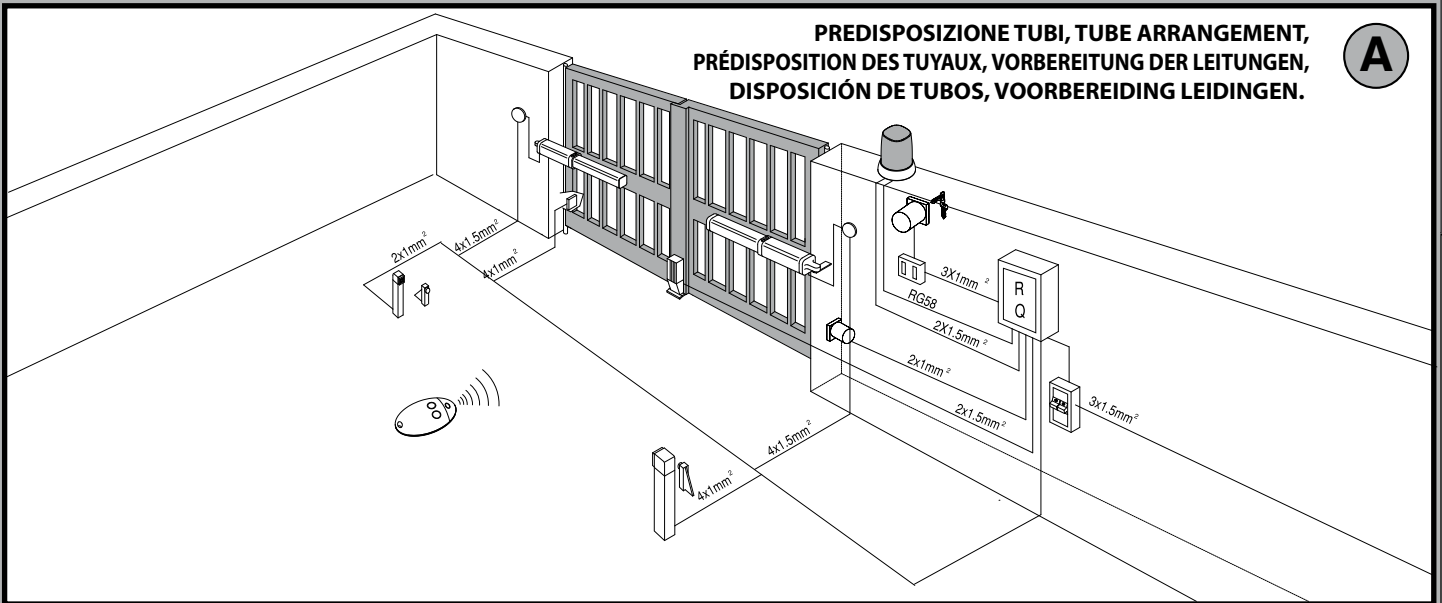
DEUTSCH

ESPAÑOL

NEDERLANDS

## PREDISPOSIZIONE TUBI, TUBE ARRANGEMENT, PRÉDISPOSITION DES TUYAUX, VORBEREITUNG DER LEITUNGEN, DISPOSICIÓN DE TUBOS, VOORBEREIDING LEIDINGEN.

**A**



## QUOTE D'INSTALLAZIONE ANCORAGGI AL PILASTRO. PILLAR FASTENINGS INSTALLATION DISTANCES. COTES D'INSTALLATION DES ANCRAGES SUR LE PILIER. INSTALLATIONSQUOTEN VERANKERUNGEN AN PFEILER. COTAS DE INSTALACIÓN ANCLAJES AL PILAR. INSTALLATIEAFSTANDEN VERANKERINGEN MET PIJLER

**B**

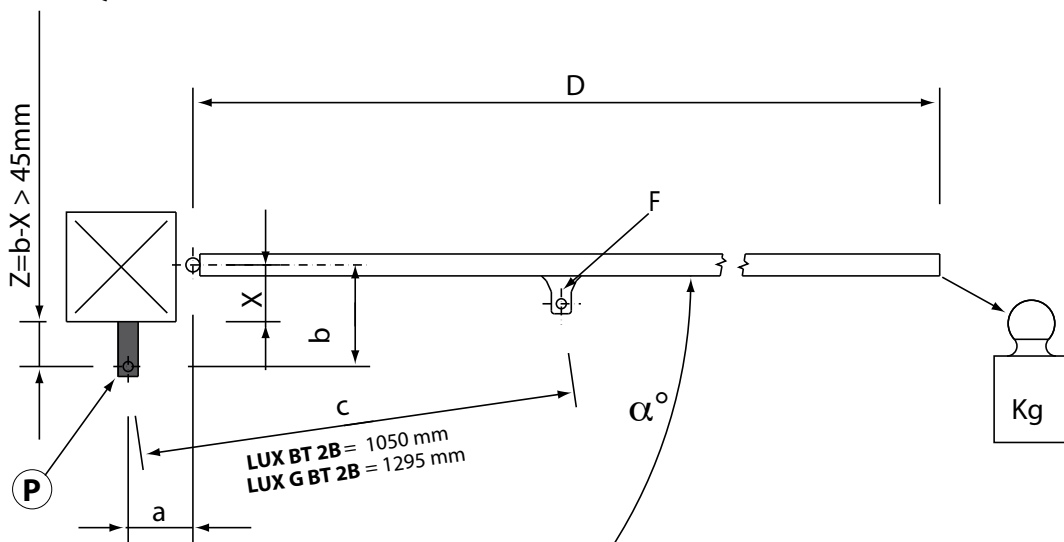
LUX BT 2B									mm
b/a	90	100	110	125	135	145	155	165	175
90					113	105	100	95	92
100					107	101	96	92	89
110				<b>106</b>	102	96	92	89	
125				100	95	90	87		
135			98	95	90				
145		94	96	90					
155		94	92						
165	90	93	87						
175	92	87							α°

LUX G BT 2B										mm
b/a	115	135	155	175	195	215	235	255	275	295
115				117	120	108	101	96	92	
135				118	111	102	96	91		
155		103	108	115	104	96	91	87		
175		103	108	106	97	91	87			
195		101	106	97	90					
215		100	99	90						
235	95	101	90							
255	94	89								
275	88									
295										α°

**!** Tabella riferita a un cancello di spessore 80 mm. Tables refer to an 80mm-thick gate. Tableau intéressant un portail de 80 mm d'épaisseur. Tabellen bezogen auf ein Tor mit einer Stärke von 80 mm. Tablas referidas a una cancela de 80 mm de espesor. Tabellen met betrekking op een hek met dikte van 80 mm.

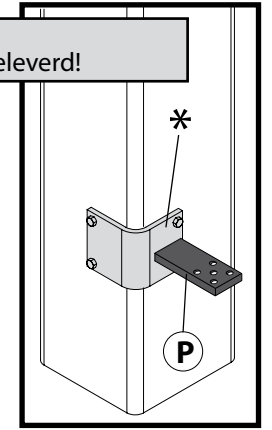
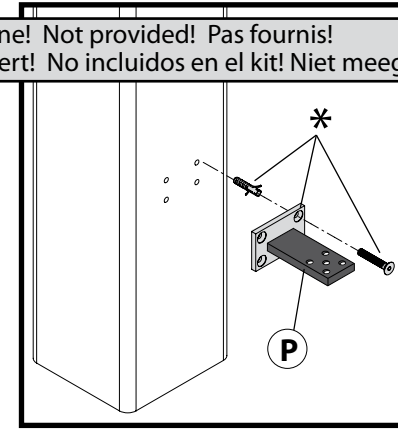
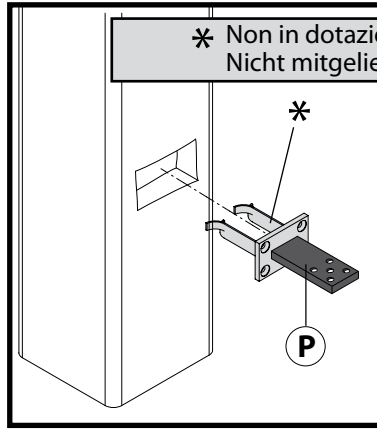
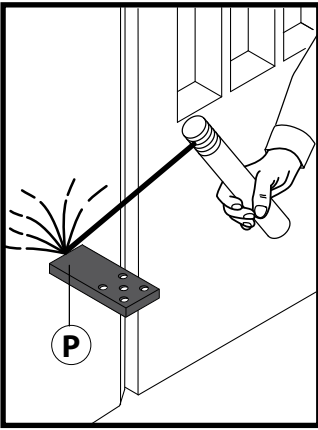
## SCHEMA D'INSTALLAZIONE. INSTALLATION DIAGRAM. SCHÉMA D'INSTALLATION. INSTALLATIONSSCHEMA. ESQUEMA DE INSTALACIÓN. INSTALLATIESCHEMA.

**C**



**ANCORAGGI DEGLI ATTACCHI AL PILASTRO. FASTENING OF FITTINGS TO PILLAR. ANCRAGES DES RACCORDS SUR LE PILIER. VERANKERUNGEN DER ANSCHLÜSSE AM PFEILER. ANLAJES DE LAS FIJACIONES AL PILAR. VERANKERING VAN DE BEVESTIGINGEN AAN DE PIJLER.**

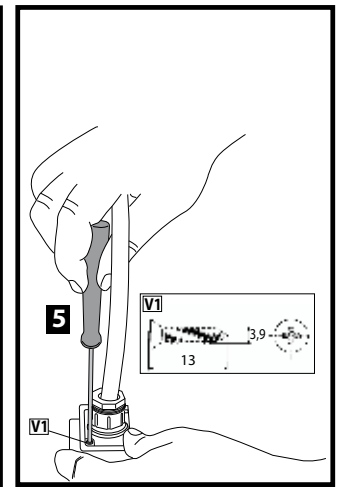
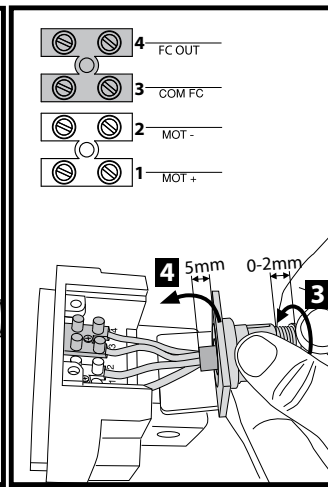
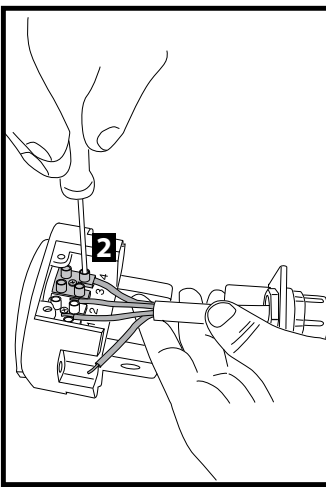
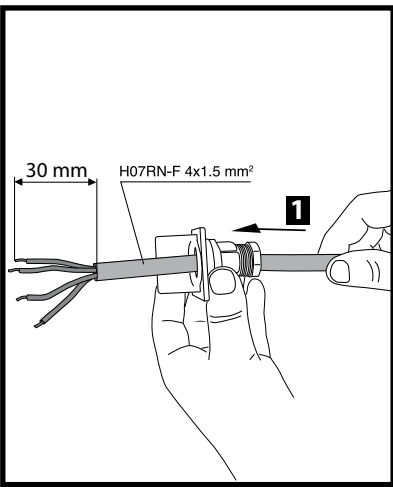
**D**



\* Non in dotazione! Not provided! Pas fournis!  
Nicht mitgeliefert! No incluidos en el kit! Niet meegeleverd!

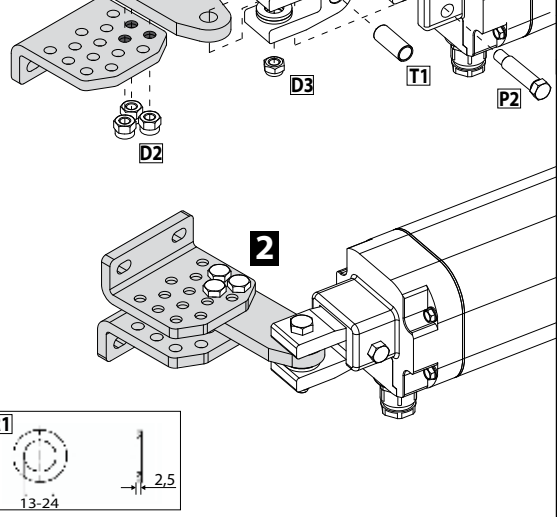
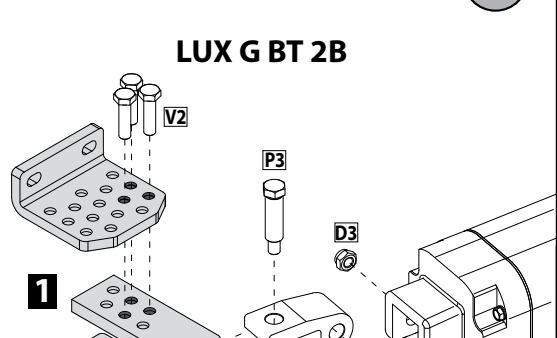
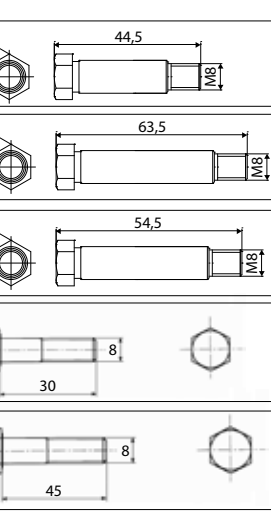
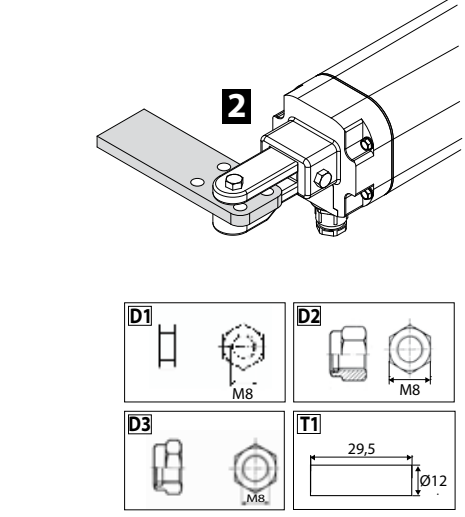
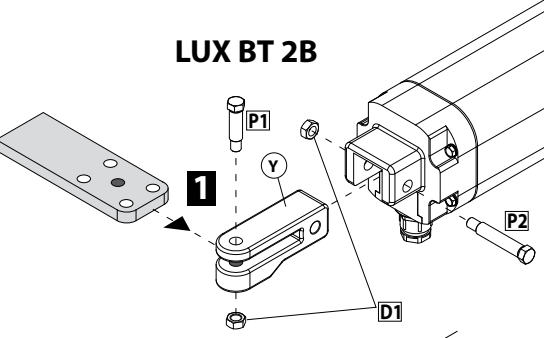
**CAVO DI ALIMENTAZIONE. POWER CABLE. CÂBLE D'ALIMENTATION. NETZKABEL. CABLE DE ALIMENTACIÓN. VOEDINGSKABEL.**

**E**



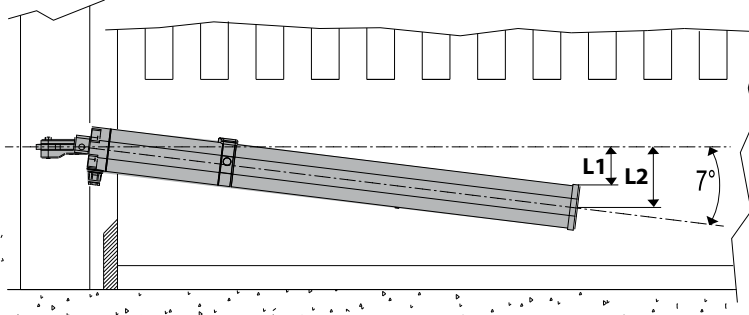
**FISSAGGIO MOTORE SU ANCORAGGIO A PILASTRO. ATTACHING MOTOR TO FASTENING ON PILLAR. FIXATION DU MOTEUR SUR L'ANCRAGE SUR LE PILIER. BEFESTIGUNG DES MOTORS AUF VERANKERUNG AM PFEILER. FIJACIÓN MOTOR EN ANLAJE AL PILAR. BEVESTIGING MOTOR OP VERANKERING MET PIJLER.**

**F**



MASSIMA INCLINAZIONE. MAXIMUM TILT. INCLINAISON MAXIMUM. MAX. NEIGUNG. INCLINACIÓN MÁXIMA. MAXIMUM HELLING.

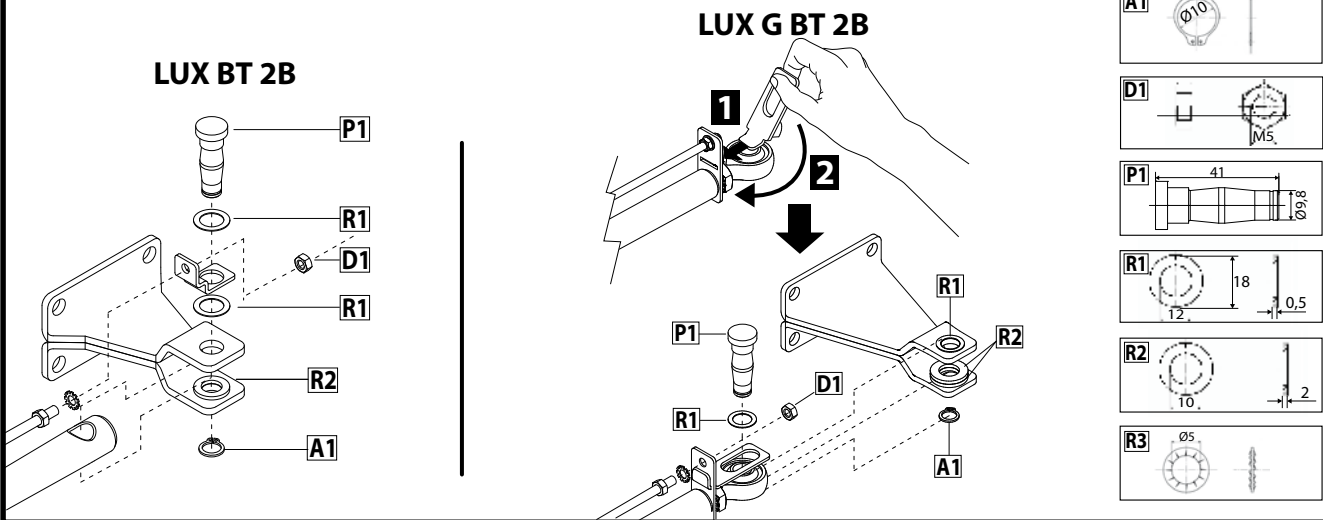
G



	L1	L2
LUX BT 2BT	79	127
LUX G BT 2B	112	159

MONTAGGIO ASTA ENCODER. ENCODER ROD ASSEMBLY. MONTAGE DE LA BARRE ENCODEUR. MONTAGE STANGE ENCODER. MONTAJE DEL MÁSTIL ENCODER. MONTAGE STANG ENCODER.

H

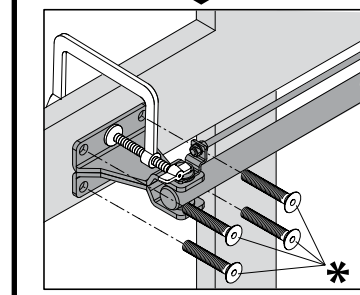
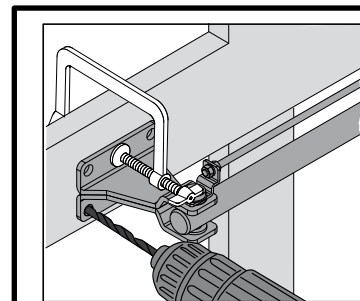
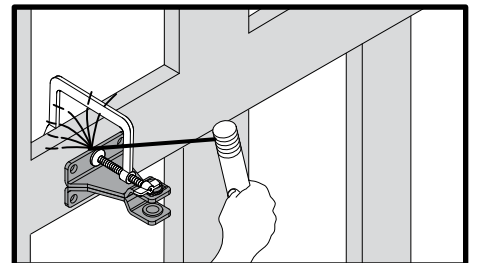
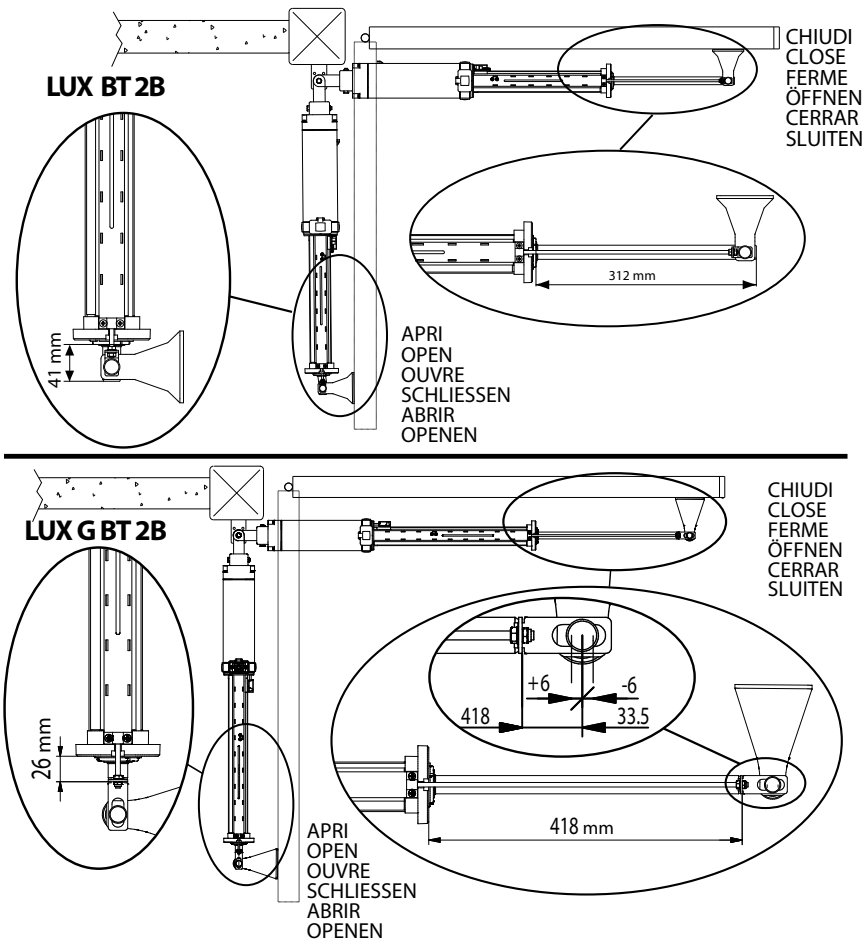


CORRETTA INSTALLAZIONE. CORRECT INSTALLATION. INSTALLATION CORRECTE. RICHTIGE INSTALLATION. INSTALACIÓN CORRECTA. CORRECTE INSTALLATIE.

I

ANCORAGGI DEGLI ATTACCHI ALL'ANTA, FASTENING OF FITTINGS TO LEAF, ANCRAGES DES RACCORDEMENTS SUR LE VANTAIL, VERANKERUNGEN DER ANSCHLÜSSE AM FLÜGEL, ANCLAJES DE LAS FIJACIONES A LA HOJA, VERANKERING VAN DE BEVESTIGINGEN AAN DE VLEUGEL.

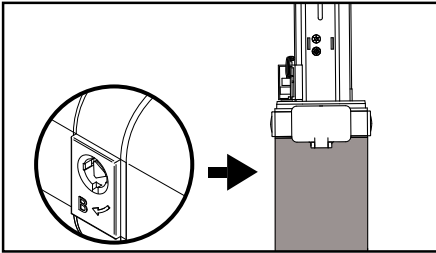
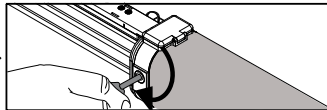
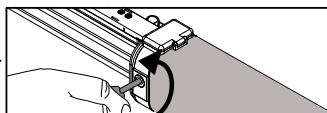
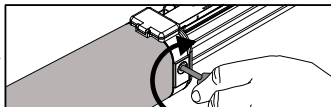
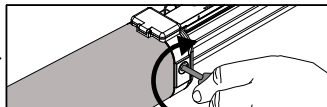
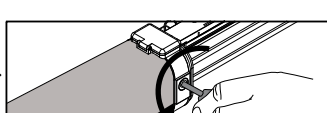
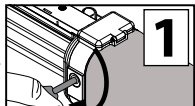
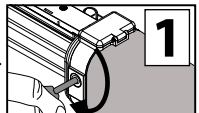
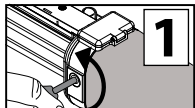
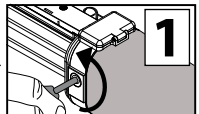
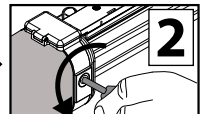
L



\* Non in dotazione! Not provided! Pas fournis! Nicht mitgeliefert! No incluidos en el kit! Niet meegeleverd!

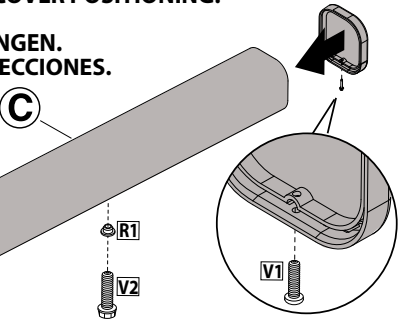
**IMPOSTAZIONE BLOCCHI (da fare dopo la regolazione fincorsa) ,  
 LOCKING SETTINGS (perform after limit switches have been set),  
 CONFIGURATIONS DES VERROUILLAGES (à faire après avoir configuré les fins de course),  
 EINSTELLUNG DER SPERREN (nach der Einstellung der Endschalter),  
 CONFIGURACIÓN DE BLOQUEOS (se debe realizar después de configurar los finales de carrera),  
 INSTELLINGEN BLOKKERINGEN (uit te voeren na de instelling van de aanslag).**

M

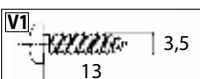
	<p><b>Blocco apertura, Locking open, Verrouillage ouverture, Sperre Öffnung, Bloqueo apertura, Blokkering opening.</b></p> <p><b>NO blocco apertura, NO locking open, PAS de verrouillage ouverture, Einschaltglied Sperre Öffnung, NO bloqueo apertura, GEEN blokkering opening.</b></p>	 <p style="text-align: right; font-weight: bold; font-size: 24px;">1</p>
	<p><b>Blocco chiusura, Locking closed, Verrouillage fermeture, Sperre Schließung, Bloqueo cierre, Blokkering sluiting.</b></p> <p><b>NO blocco chiusura, NO locking closed, PAS de verrouillage fermeture, Einschaltglied Sperre Schließung, NO bloqueo cierre, GEEN blokkering sluiting.</b></p>	 <p style="text-align: right; font-weight: bold; font-size: 24px;">1</p>  <p style="text-align: right; font-weight: bold; font-size: 24px;">2</p>
	<p><b>Blocco apertura + blocco chiusura Locking open + locking closed Verrouillage ouverture + Verrouillage fermeture Sperre Öffnung + Sperre Schließung Bloqueo apertura + Bloqueo cierre Blokkering opening + blokkering sluiting</b></p> <p><b>Senza blocchi, Non-locking, Sans verrouillage, Ohne Sperren, Sin bloqueos, Zonder blokkeringen.</b></p>	 <p style="text-align: right; font-weight: bold; font-size: 24px;">1</p>  <p style="text-align: right; font-weight: bold; font-size: 24px;">2</p>  <p style="text-align: right; font-weight: bold; font-size: 24px;">1</p>  <p style="text-align: right; font-weight: bold; font-size: 24px;">2</p>
3		

**POSIZIONAMENTO COPERTURE. COVER POSITIONING.  
 POSITIONNEMENT DES CARTERS.  
 POSITIONIERUNG DER ABDECKUNGEN.  
 POSICIONAMIENTO DE LAS PROTECCIONES.  
 PLAATSING AFDEKKINGEN.**

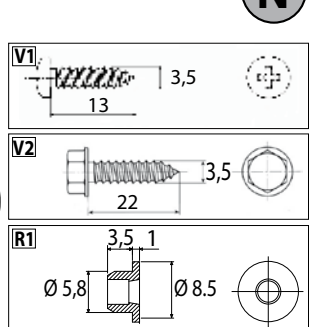
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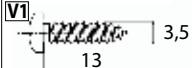

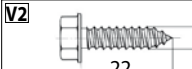

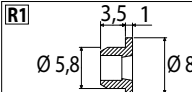

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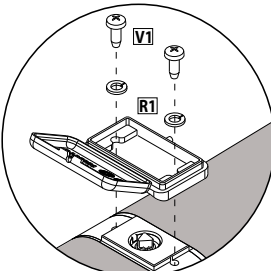


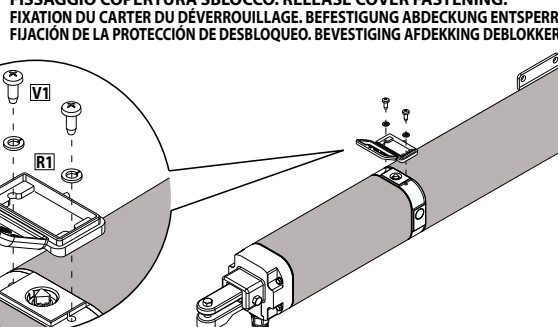
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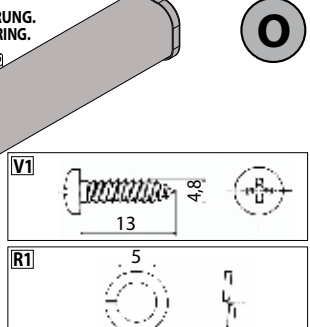
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V2		3,5 22	
R1		3,5 1 Ø 5,8    Ø 8,5	

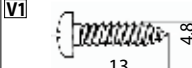
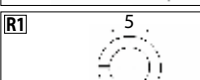
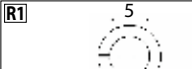

**FISSAGGIO COPERTURA SBLOCCO. RELEASE COVER FASTENING.  
 FIXATION DU CARTER DU DÉVERROUILLAGE. BEFESTIGUNG ABDECKUNG ENTSPERRUNG.  
 FIJACIÓN DE LA PROTECCIÓN DE DESBLOQUEO. BEVESTIGING AFDEKKING DEBLOKKERING.**

O







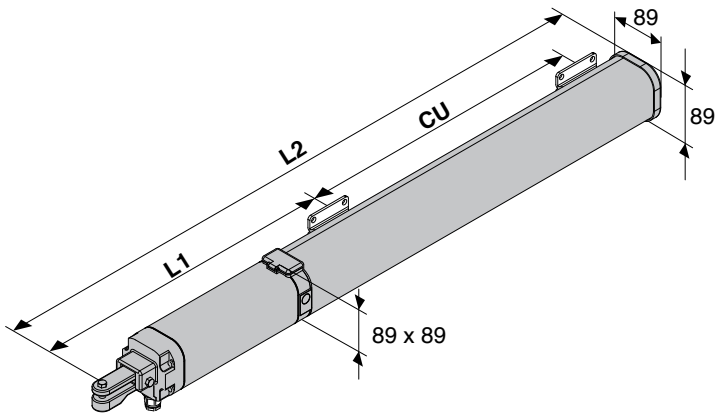
V1		4,8 13	
R1		5	

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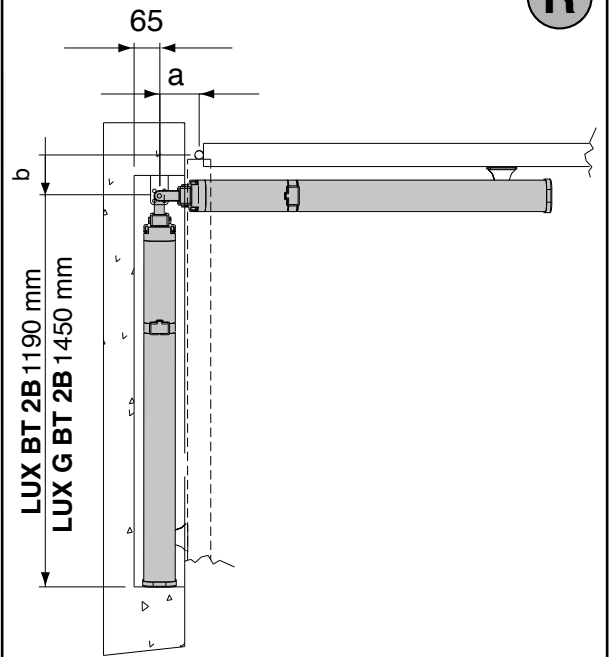


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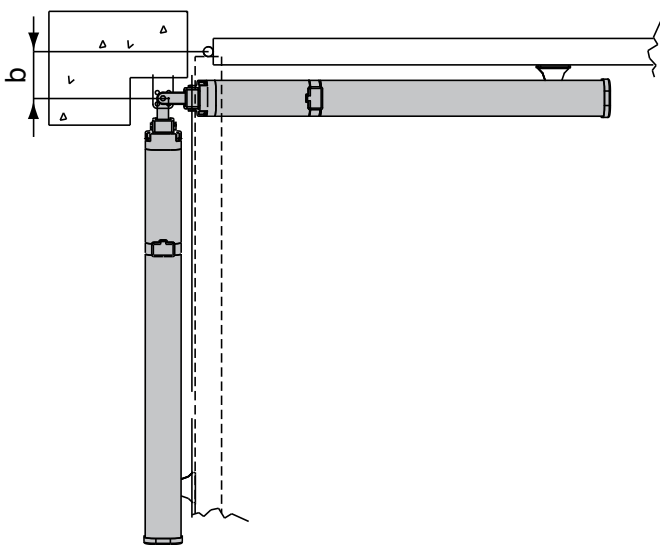
	L1	CU	L2
LUX BT 2B	780	270	1113
LUX G BT 2B	903	392	1352



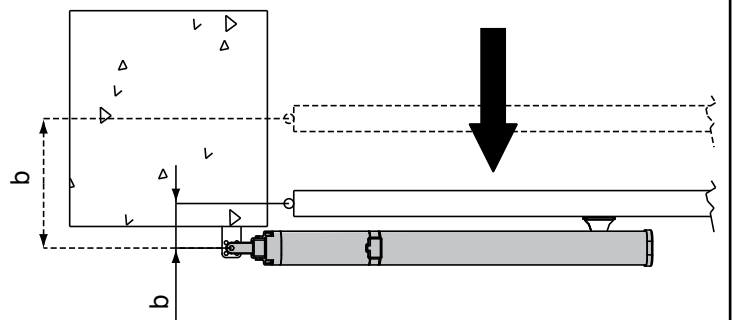
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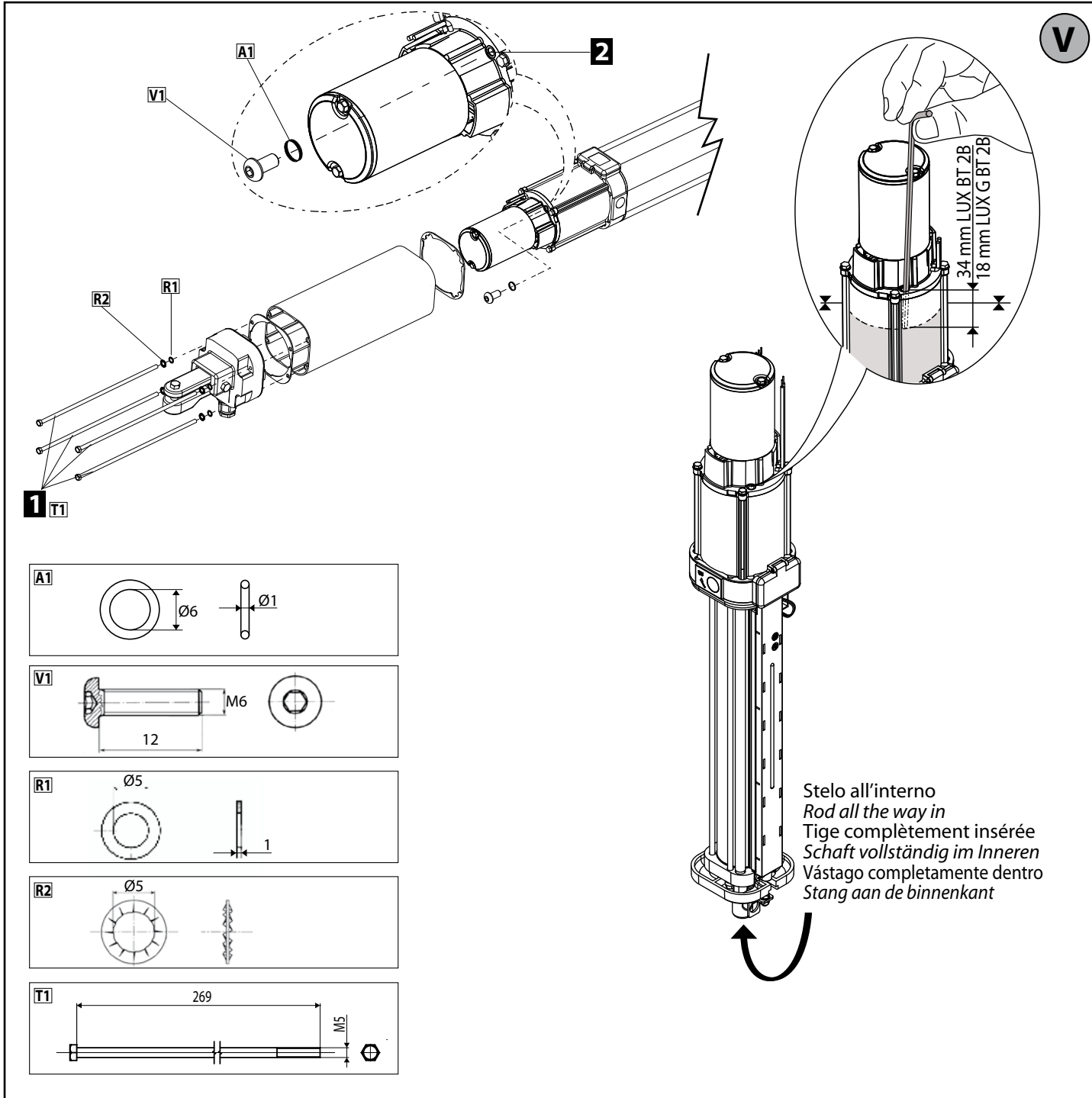
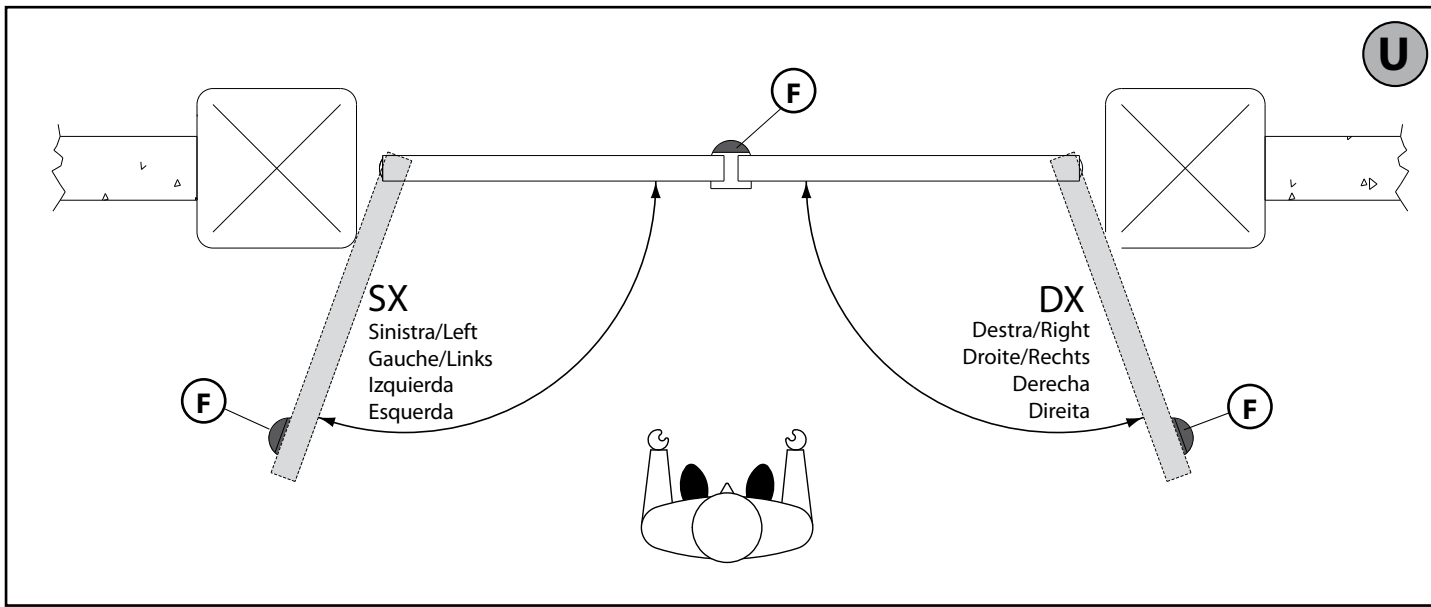
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## GENERAL WARNINGS

**WARNING!** Important safety instructions. Carefully read and comply with the Warnings booklet and Instruction booklet that come with the product as incorrect installation can cause injury to people and animals and damage to property. They contain important information regarding safety, installation, use and maintenance. Keep hold of instructions so that you can attach them to the technical file and keep them handy for future reference.

### 1) GENERAL SAFETY

**WARNING! An incorrect installation or improper use of the product can cause damage to persons, animals or things.**

- The “Warnings” leaflet and “Instruction booklet” supplied with this product should be read carefully as they provide important information about safety, installation, use and maintenance.
- Scrap packing materials (plastic, cardboard, polystyrene etc) according to the provisions set out by current standards. Keep nylon or polystyrene bags out of children’s reach.
- Keep the instructions together with the technical brochure for future reference.
- This product was exclusively designed and manufactured for the use specified in the present documentation. Any other use not specified in this documentation could damage the product and be dangerous.
- The Company declines all responsibility for any consequences resulting from improper use of the product, or use which is different from that expected and specified in the present documentation.
- Do not install the product in explosive atmosphere.
- The motor cannot be installed on panels incorporating doors (unless the motor can be activated when the door is open).
- The units making up the machine and its installation must meet the requirements of the following European Directives: 2004/108/EEC, 2006/95/EEC, 98/37/EEC, 99/05/EEC (and later amendments). For all countries outside the EEC, it is advisable to comply with the above-mentioned standards, in addition to any national standards in force, to achieve a good level of safety.
- The Company declines all responsibility for any consequences resulting from failure to observe Good Technical Practice when constructing closing structures (door, gates etc.), as well as from any deformation which might occur during use.
- The installation must comply with the provisions set out by the following European Directives: 2004/108/EEC, 2006/95/EEC, 98/37/EEC, 99/05/EEC and subsequent amendments.
- Disconnect the electrical power supply before carrying out any work on the installation. Also disconnect any buffer batteries, if fitted.
- Fit an omnipolar or magnetothermal switch on the mains power supply, having a contact opening distance equal to or greater than 3,5 mm.
- Check that a differential switch with a 0.03A threshold is fitted just before the power supply mains.
- Check that earthing is carried out correctly: connect all metal parts for closure (doors, gates etc.) and all system components provided with an earth terminal.
- Fit all the safety devices (photocells, electric edges etc.) which are needed to protect the area from any danger caused by squashing, conveying and shearing, according to and in compliance with the applicable directives and technical standards.
- Position at least one luminous signal indication device (blinker) where it can be easily seen, and fix a Warning sign to the structure.
- The Company declines all responsibility with respect to the automation safety and correct operation when other manufacturer’s components are used.
- Only use original parts for any maintenance or repair operation.
- Do not modify the automation components, unless explicitly authorised by the Company.
- Instruct the product user about the control systems provided and the manual opening operation in case of emergency.
- Do not allow persons or children to remain in the automation operation area.
- Keep radio control or other control devices out of children’s reach, in order to avoid unintentional automation activation.
- This application is not meant for use by people (including children) with impaired mental, physical or sensory capacities, or people who do not have suitable knowledge, unless they are supervised or have been instructed by people who are responsible for their safety.
- The user must avoid any attempt to carry out work or repair on the automation system, and always request the assistance of qualified personnel.
- Anything which is not expressly provided for in the present instructions, is not allowed.
- Installation must be carried out using the safety devices and controls prescribed by the EN 12978 Standard.
- These instructions are also valid for installations with a height above the floor of over 2.5 m.

### WARNINGS

**Correct controller operation is only ensured when the data contained in the present manual are observed. The Company is not to be held responsible for any damage resulting from failure to observe the installation standards and the instructions contained in the present manual.**

**The descriptions and illustrations contained in the present manual are not binding. The Company reserves the right to make any alterations deemed appropriate for the technical, manufacturing and commercial improvement of the product, while leaving the essential product features unchanged, at any time and without undertaking to update the present publication.**

### USE OF AUTOMATION

As automation can be remotely controlled and therefore not within sight, it is essential to frequently check that all safety devices are perfectly efficient.

**WARNING!** In case of any malfunction in the safety devices, take immediate action and require the assistance of a specialised technician.

It is recommended to keep children at a safe distance from the automation field of action.

If the power cord is damaged, it must be replaced by the manufacturer or their technical assistance department or other such qualified person.

### CHECKING INSTALLATION

Before the automated device is finally put into operation, perform the following checks meticulously:

- Make sure all components are fastened securely.
- Check that all safety devices (photocells, pneumatic safety edge, etc.) are working properly.
- Check the emergency operation control device.
- Check opening and closing operations with the control devices applied.
- Check the electronic logic for normal (or personalized) operation in the control panel.

### ADJUSTING OPERATING FORCE

**WARNING:** Check that the force of impact measured at the points provided for by standard EN 12445 is lower than the value laid down by standard EN 12453.

Operating force is adjusted with extreme precision by means of the control unit’s electronic control. Operation at the end of travel is adjusted electronically in the control panel.

To provide good anti-crush safety, the operating force must be slightly greater than that required to move the leaf both to close and to open it. Whatever the case, the force, which is measured at the top outer edge of the leaf, must not exceed the limits laid down by the above-mentioned standards.

### CONTROL

There are various options when it comes to the control system (manual, remote control, access control with magnetic badge, etc.) depending on the installation’s needs and characteristics. See the relevant instructions for the various control system options.

People due to use the automated device must be instructed how to control and use it.

### TROUBLESHOOTING

#### Gearbox malfunctioning

- Use an appropriate instrument to check for voltage across the gearbox motor terminals after giving the opening or closing command. If the motor vibrates but does not rotate, the problem may be:
  - Incorrect wiring (see wiring diagram)
  - If the leaf moves in the wrong direction, swap over the motor’s start connections in the control unit.
- The first command following a mains power outage should be open STOP LEAVES.

### SCRAPPING

Materials must be disposed of in conformity with the current regulations. In case of scrapping, the automation devices do not entail any particular risks or danger. In case of recovered materials, these should be sorted out by type (electrical components, copper, aluminium, plastic etc.).

### DISMANTLING

**WARNING: before opening the door, the spring must be unloaded (vertical boom).** When the automation system is disassembled to be reassembled on another site, proceed as follows:

- Disconnect the power supply and the entire electrical installation.
- Remove the actuator from its fixing base.
- Disassemble all the installation components.
- In the case where some of the components cannot be removed or are damaged, they must be replaced.

## 2) GENERAL INFORMATION

Strong, compact hydraulic piston, available in various versions depending on specific needs and field of use. There are models featuring hydraulic locking and non-locking (reversible) models that need a solenoid lock to keep them in position.

Operating force is adjusted with extreme precision by means of the control unit's electronic control. Operation at the end of travel is adjusted electronically in the control panel.

## 12) CORRECT INSTALLATION Fig. I

Correct installation entails maintaining a rod stroke margin of approx. 5-10 mm to avoid possible trouble with operation.

## 13) FASTENING OF FITTINGS TO LEAF Fig. L

## 14) LOCKING SETTING Fig. M

## 15) COVER POSITIONING Fig. N

## 16) RELEASE COVER FASTENING Fig. O

## 17) MAIN PARTS OF AUTOMATED SYSTEM Fig. P

- M) 24V permanent magnet motor
- P) Lobe pump
- D) Control valve assembly
- C) Cylinder with piston
- E) Linear Encoder

Components provided: fittings attached to pillar and gate - release key - instruction manual.

## 18) TIPS FOR SPECIAL INSTALLATIONS

With the leaf fully open, create a recess to accommodate the operator.

**Fig. R** gives the minimum dimensions of the recess for the various **LUX BT 2B - LUX G BT 2B** models.

If distance "b" is greater than the values given in the installation tables:

- create a recess in the pillar **Fig.S**
- move the leaf so that it is flush with the pillar **Fig.T**.

## 19) LEAF STOPS AT GROUND LEVEL

For the actuator to work properly, it is advisable to use stops "F" to stop the leaves both when they are open and closed, as illustrated in **Fig.U**.

The leaf stops must prevent the actuator rod from reaching the end of its travel.

## 20) TOPPING UP OIL Fig. V.

An oil change is recommended every 5 years.

## 21) MANUAL OPENING (See USER GUIDE -FIG.1-).

## 3) TECHNICAL SPECIFICATIONS

Power supply (*)	24V
Max. power input	300W
Max. pressure	30 bar
Pump delivery rate	1,2 l/min.
Operating force	3000 N
Pulling force	2600 N
Ambient temperature range	- 20°C to 60°C
Impact reaction	electronic clutch (with control panel)
Manual operation	release key
Protection rating	IP 55
Actuator weight	LUX BT 2B: 8,4 kg LUX G BT 2B: 9,3 kg
Overall dimensions	<b>Fig. Q</b>
Oil	Idrolux Winter

(\*) Special supply voltages to order.

Table 1:

MOD.	LUX BT 2B	LUX G BT 2B
<b>LOCKING TYPE</b>	Hydraulic	Hydraulic
<b>ACTUAL TRAVEL TIME</b>	14 sec.	2 0 sec.
<b>LEAF MAX.</b>		
(m)	2	5--2
(Kg)	300	300/800
<b>TRAVEL mm</b>		
usable	270	392
total	290	412

**WARNING: With leaves over 3 metres long, the solenoid lock must be used and locking devices must be opened (Fig. M Ref. 2)**

## 4) TUBE ARRANGEMENT Fig. A

## 5) PILLAR FASTENINGS INSTALLATION DISTANCES Fig. B

## 6) INSTALLATION DIAGRAM Fig. C

- P rear bracket fastening to pillar
- F front fork fastening leaf
- a-b distances for determining bracket "P" fastening point
- C value of fastening centre-to-centre distance (see **Fig. Q**)
- D gate length
- X distance from gate axis to corner of pillar
- Z value always greater than 45 mm (b - X)
- kg max. weight of leaf (**Table 1**)
- α° leaf opening angle

## 7) FASTENING OF FITTINGS TO PILLAR Fig. D

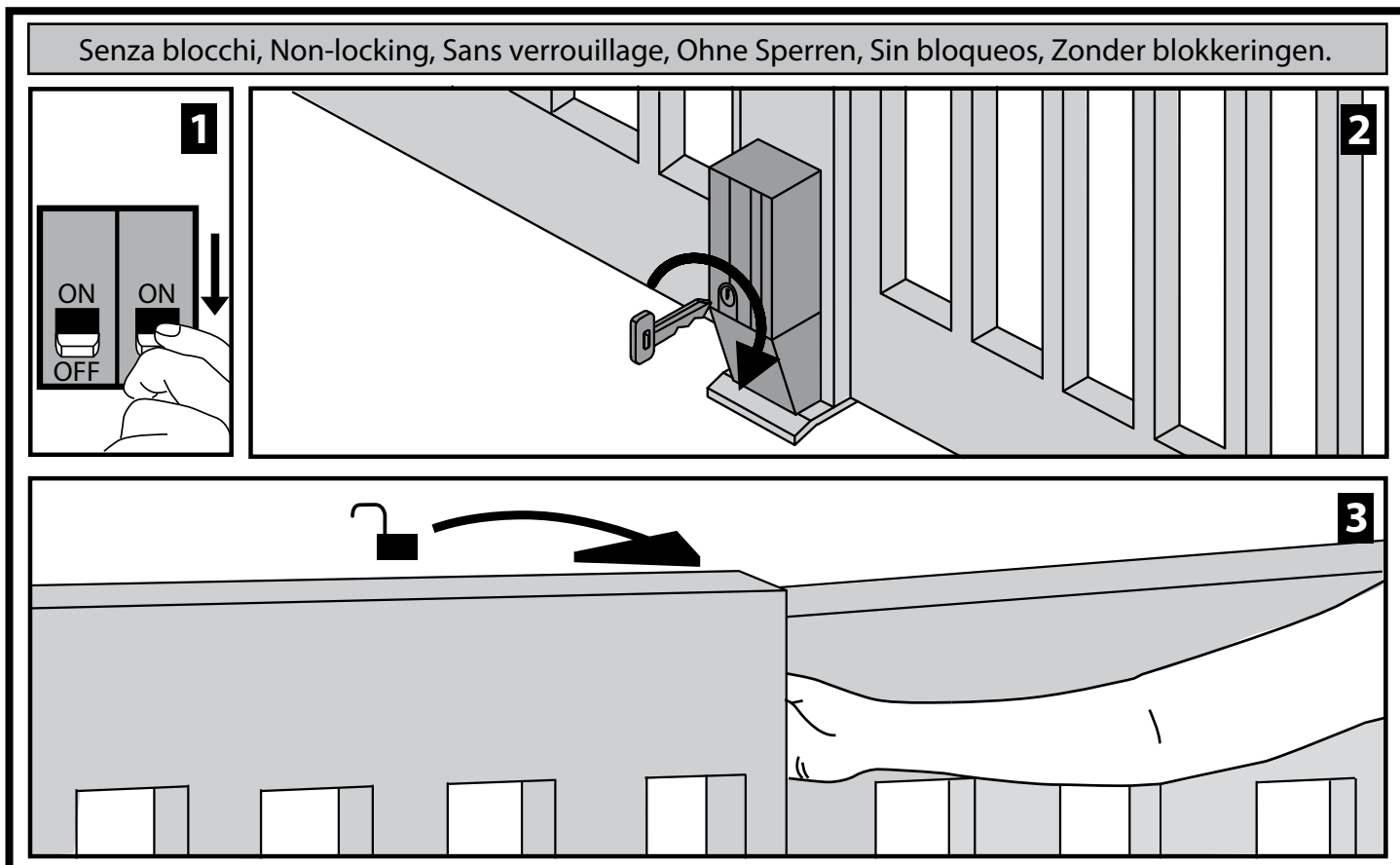
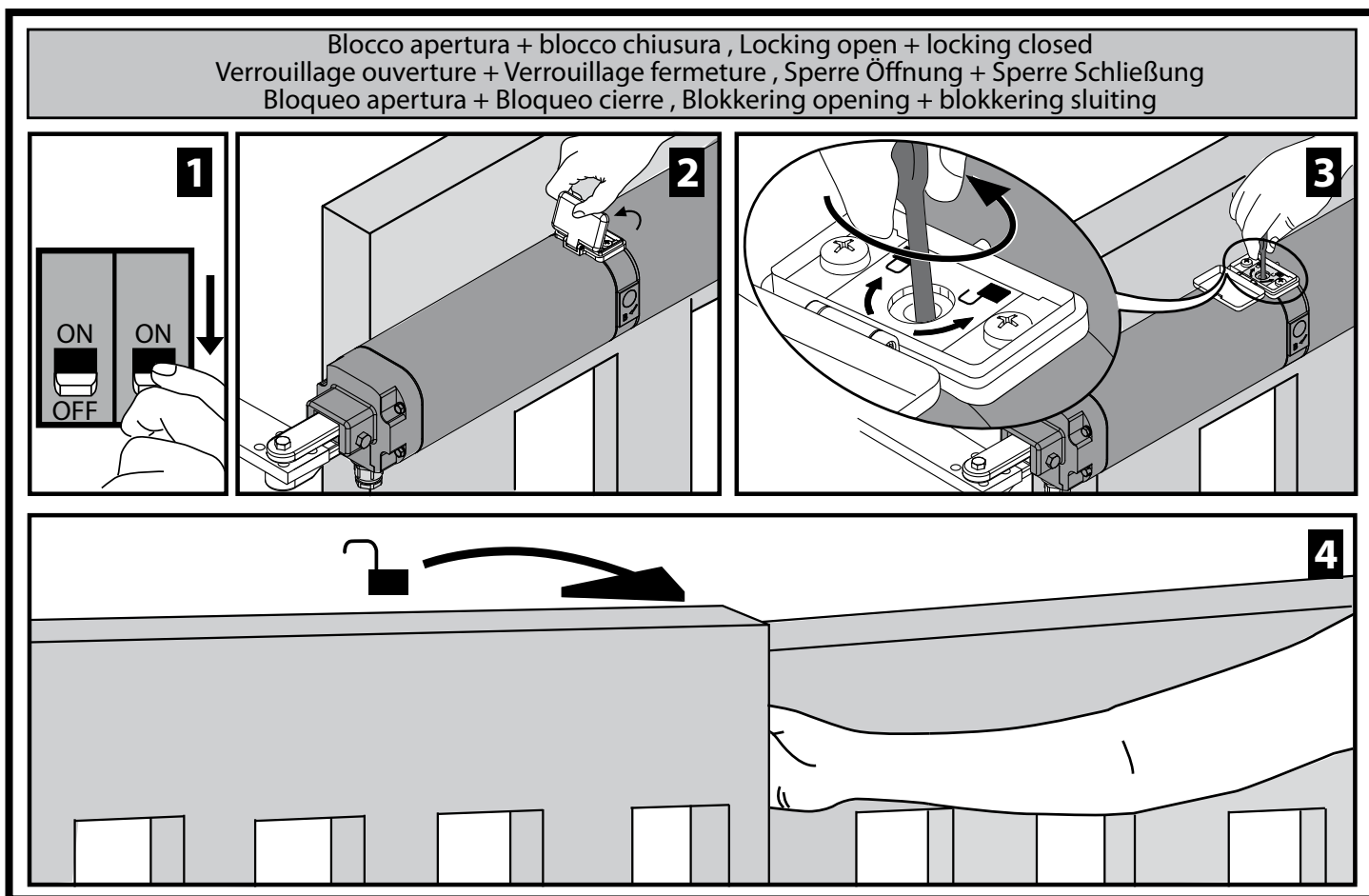
## 8) POWER CABLE Fig. E

## 9) ATTACHING MOTOR TO FASTENING ON PILLAR Fig. F

## 10) MAXIMUM TILT Fig. G

## 11) ENCODER ROD ASSEMBLY Fig. H

**FIG.1** ATTIVAZIONE SBLOCCO DI EMERGENZA / ACTIVATING EMERGENCY RELEASE.  
 ACTIVATION DU DÉVERROUILLAGE D'URGENCE / AKTIVIERUNG NOTFALLENTSPERRUNG.  
 ACTIVACIÓN DEL DESBLOQUEO DE EMERGENCIA / ACTIVERING NOOD-DEBLOKKERING.



## MANUALE D'USO ( I )

Nel ringraziarVi per la preferenza accordata a questo prodotto, la Ditta è certa che da esso otterrete le prestazioni necessarie al Vostro uso. Leggete attentamente l'opuscolo "AVVERTENZE" ed il "LIBRETTO ISTRUZIONI" che accompagnano questo prodotto in quanto forniscono importanti indicazioni riguardanti la sicurezza, l'installazione, l'uso e la manutenzione. Questo prodotto risponde alle norme riconosciute della tecnica e della disposizioni relative alla sicurezza. Confermiamo che è conforme alle seguenti direttive europee: 2004/108/CEE, 2006/95/CEE, 98/37/CEE, 99/05/CEE (e loro modifiche successive).

### 1) SICUREZZA GENERALE

**ATTENZIONE** **Importanti istruzioni di sicurezza. Leggere e seguire attentamente l'opuscolo Avvertenze ed il Libretto istruzioni che accompagnano il prodotto poiché un uso improprio può causare danni a persone, animali o cose. Conservare le istruzioni per consultazioni future.**

Questo prodotto è stato progettato e costruito esclusivamente per l'utilizzo indicato in questa documentazione. Usi non indicati potrebbero essere fonte di danni al prodotto e fonte di pericolo.

- Gli elementi costruttivi della macchina e l'installazione devono essere in accordo con le seguenti Direttive Europee: 2004/108/CE, 2006/95/CE, 98/37/CE, 89/106/CE e loro modifiche successive. Per tutti i Paesi extra CEE, oltre alle norme nazionali vigenti, per un buon livello di sicurezza è opportuno rispettare anche le norme citate.
- La Ditta declina qualsiasi responsabilità derivante da un uso improprio o diverso da quello per cui è destinato ed indicato nella presente documentazione nonché dall'inosservanza della Buona Tecnica nella costruzione delle chiusure (porte, cancelli, ecc.) e dalle deformazioni che potrebbero verificarsi durante l'uso.
- L'automazione, se installata ed utilizzata correttamente, soddisfa il grado di sicurezza richiesto.
- Tuttavia è opportuno osservare alcune regole di comportamento per evitare inconvenienti accidentali:
- Tenere bambini, persone e cose fuori dal raggio d'azione dell'automazione, in particolare durante il funzionamento.
- Quest' applicazione non è destinata all'uso da parte di persone (inclusi i bambini) con ridotte capacità mentali, fisiche e sensoriali, o persone che mancano di conoscenze adeguate, a meno che non siano sotto supervisione o abbiano ricevuto istruzioni d'uso da persone responsabili della loro sicurezza.
- I bambini devono essere controllati affinché non giochino con l'applicazione. Non lasciare radiocomandi o altri dispositivi di comando alla portata dei bambini onde evitare azionamenti involontari.
- Controllare spesso l'impianto, in particolare cavi, molle o supporti per scoprire eventuali sbilanciamenti e segni di usura o danni.
- Per ogni operazione di pulizia esterna o altra manutenzione, togliere l'alimentazione di rete
- Tenere pulite le ottiche delle fotocellule ed i dispositivi di segnalazione luminosa. Controllare che rami ed arbusti non disturbino i dispositivi di sicurezza (fotocellule).
- Non utilizzare l'automatismo se necessita di interventi di riparazione. In caso di malfunzionamento, togliere l'alimentazione, attivare lo sblocco di emergenza per consentire l'accesso e richiedere l'intervento di un tecnico qualificato (installatore professionale).
- Per qualsiasi intervento diretto all'automazione, avvalersi di personale qualificato (installatore professionale).
- Annualmente far controllare l'automazione da personale qualificato.
- Tutto quello che non è espressamente previsto in queste istruzioni, non è permesso.
- Il buon funzionamento dell'operatore è garantito solo se vengono rispettati i dati riportati in questo manuale. La ditta non risponde dei danni causati dall'inosservanza delle norme di installazione e delle indicazioni riportate in questo manuale.
- Le descrizioni e le illustrazioni del presente manuale non sono impegnative. Lasciando inalterate le caratteristiche essenziali del prodotto, la Ditta si riserva di apportare in qualunque momento le modifiche che essa ritiene convenienti per migliorare tecnicamente, costruttivamente e commercialmente il prodotto, senza impegnarsi ad aggiornare la presente pubblicazione.

## USER'S MANUAL (GB)

Thank you for choosing this product. The Firm is confident that its performance will meet your operating needs. Carefully read the "WARNINGS" booklet and "INSTRUCTION BOOKLET" that come with this product as they provide important information regarding safety, installation, use and maintenance. This product meets recognized technical standards and complies with safety provisions. We hereby confirm that it is in conformity with the following European directives: 2004/108/EEC, 2006/95/EEC, 98/37/EEC, 99/05/EEC (and later amendments).

### 1) GENERAL SAFETY

**WARNING** **Important safety instructions. Carefully read and comply with the Warnings booklet and Instruction booklet that come with the product as improper use can cause injury to people and animals and damage to property. Keep hold of instructions for future reference.**

This product has been designed and built solely for the purpose indicated herein. Uses not contemplated herein might result in the product being damaged and could be a source of danger.

- The units making up the machine and its installation must meet the requirements of the following European Directives: 2004/108/EC, 2006/95/EC, 98/37/EC, 89/106/EC and later amendments. For all countries outside the EEC, it is advisable to comply with the standards mentioned, in addition to any national standards in force, to achieve a good level of safety.
- The Firm disclaims all responsibility resulting from improper use or any use other than that for which the product has been designed, as indicated herein, as well as for failure to apply Good Practice in the construction of entry systems (doors, gates, etc.) and for deformation that could occur during use.

If installed and used correctly, the automated system will meet the required level of safety. Nonetheless, it is advisable to observe certain rules of behaviour so that accidental problems can be avoided:

- Keep adults, children and property out of range of the automated system, especially while it is operating.
- This application is not meant for use by people (including children) with impaired mental, physical or sensory capacities, or people who do not have suitable knowledge, unless they are supervised or have been instructed by people who are responsible for their safety.
- Children must be supervised to ensure they do not play with the application. Keep remote controls or other control devices out of reach of children in order to avoid the automated system being operated inadvertently.
- Check the system frequently, especially cables, springs or supports, to detect any loss of balance and signs of wear or damage.
- When cleaning the outside or performing other maintenance work, always cut off mains power.
- Keep the photocells' optics and illuminating indicator devices clean. Check that no branches or shrubs interfere with the safety devices (photocells).
- Do not use the automated system if it is in need of repair. In the event of a malfunction, cut off the power, activate the emergency release to allow access and call in qualified technical personnel (professional installer).
- If the automated system requires work of any kind, employ the services of qualified personnel (professional installer).
- Have the automated system checked by qualified personnel once a year.
- Anything that is not explicitly provided for in these instructions is not allowed.
- The operator's proper operation can only be guaranteed if the information given herein is complied with. The Firm shall not be answerable for damage caused by failure to comply with the installation rules and instructions featured herein.
- Descriptions and illustrations herein are not binding. While we will not alter the product's essential features, the Firm reserves the right, at any time, to make those changes deemed opportune to improve the product from a technical, design or commercial point of view, and will not be required to update this publication accordingly.

## MANUEL D'UTILISATION (F)

Nous vous remercions d'avoir choisi ce produit qui, nous n'en doutons pas, saura vous garantir les performances attendues. Veuillez lire attentivement la brochure AVERTISSEMENTS et le MANUEL D'INSTRUCTION qui accompagnent ce produit car ils contiennent d'importantes informations sur sa sécurité, son montage, son usage et son entretien. Ce produit est conforme aux normes techniques et aux prescriptions de sécurité établies. Nous confirmons qu'il est conforme aux directives européennes suivantes: 2004/108/CEE, 2006/95/CEE, 98/37/CEE (et leurs modifications successives).

### 1) SÉCURITÉ GÉNÉRALE

**ATTENTION** **Instructions de sécurité importantes. Veuillez lire et suivre attentivement la brochure Avertissement et le Manuel d'instructions fournis avec le produit sachant qu'un usage incorrect peut provoquer des préjudices aux personnes, aux animaux ou aux choses. Rangez soigneusement les instructions afin de pouvoir les consulter par la suite.**

Ce produit a été conçu et réalisé exclusivement pour l'usage indiqué dans cette documentation. Tout autre usage risque d'endommager l'appareil et d'être à l'origine de dangers.

- Les éléments qui composent l'appareil doivent être conformes aux Directives Européennes suivantes: 2004/108/CE, 2006/95/CE, 98/37/CE, 89/106/CE et leurs modifications successives. Pour tous les pays n'appartenant pas à la CEE, nous conseillons de respecter aussi les normes citées, outre les règlements nationaux en vigueur, afin de garantir un bon niveau de sécurité.
- L'entreprise décline toute responsabilité dérivant d'un usage incorrect ou différent de celui prévu et indiqué dans la présente documentation, de l'inobservation de la bonne technique dans la construction des fermetures (portes, portails, etc.) et des déformations pouvant apparaître à l'usage. Si l'automatisation est montée et utilisée correctement, elle est conforme au degré de sécurité prescrit. Il est cependant nécessaire de respecter certaines règles de comportement pour éviter tout inconvénient accidentel:
- Tenez les enfants, les personnes et les objets à l'écart du rayon d'action de l'automatisation, en particulier pendant son fonctionnement.
- Cette application n'est pas destinée à être utilisée par des personnes (y compris les enfants) ayant des capacités mentales, physiques et sensorielles réduites, ni par des personnes dépourvues des connaissances nécessaires, à moins d'agir sous la supervision de personnes responsables de leur sécurité ou d'avoir reçues les instructions nécessaires de ces mêmes personnes.
- Les enfants doivent être surveillés car ils ne doivent en aucun cas jouer avec l'application. Rangez les radiocommandes ou les autres dispositifs de commande hors de portée des enfants afin d'éviter tout actionnement involontaire de l'automatisation.
- Contrôlez souvent l'installation, en particulier au niveau des câbles, des ressorts ou des supports pour découvrir les éventuels déséquilibres et signes d'usure ou de dommage.
- Mettez hors tension l'application avant d'accomplir les opérations de nettoyage extérieur ou toute autre opération d'entretien.

