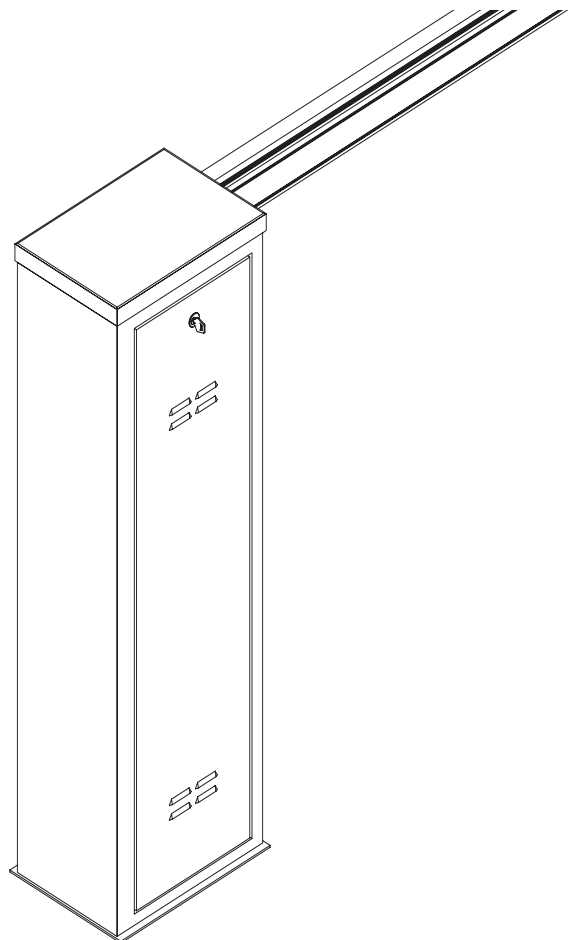


BENINCA®

BARRIERE STRADALI
ROAD BARRIERS
STRASSENSCHRANKEN
BARRIÈRES LEVANTES
BARRERAS DE CARRETERAS
SZLABANY DROGOWE

LADY



Libro istruzioni e catalogo ricambi

Operating instructions and spare parts catalogue

Betriebsanleitung und Ersatzteilliste

Livret d'instructions et catalogue des pieces de rechange

Manual de instrucciones y catálogo de recambios

Książeczka z instrukcjami i katalog części wymiennych



UNIONE NAZIONALE COSTRUTTORI
AUTOMATISMI PER CANCELLI, PORTE
SERRANDE ED AFFINI

Dichiarazione CE di conformità per macchine
(Direttiva 98/37 CE, Allegato II, parte B)
Divieto di messa in servizio

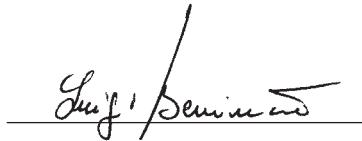
Fabbricante: **Automatismi Benincà SpA**
Indirizzo: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Dichiara che: l'automazione per barriere stradali modello **LADY**.

- è costruita per essere incorporata in una macchina o per essere assemblata con altri macchinari per costituire una macchina considerata dalla Direttiva 98/37 CE, come modificata;
- non è dunque conforme in tutti i punti alle disposizioni di questa Direttiva;
- è conforme alle condizioni delle seguenti altre Direttive CE:
Direttiva bassa tensione 73/23/CEE, 93/68/CEE.
Direttiva compatibilità elettromagnetica 89/336/CEE, 93/68/CEE.

e inoltre dichiara che non è consentito mettere in servizio il macchinario fino a che la macchina in cui sarà incorporata o di cui diverrà componente sia stata identificata e ne sia stata dichiarata la conformità alle condizioni della Direttiva 98/37 CE e alla legislazione nazionale che la traspone, vale a dire fino a che il macchinario di cui alla presente dichiarazione non formi un complesso unico con la macchina finale.

Benincà Luigi, Responsabile legale.
Sandrigo, 05/10/2005.



Declaration by the manufacturer
(Directive 98/37/EEC, Art. 4.2 and Annex II, sub B)
Divieto di messa in servizio

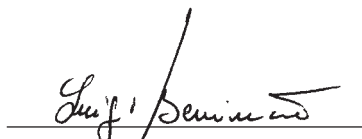
Manufacturer: **Automatismi Benincà SpA**
Address: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Herewith declares that: the operator for road gates model **LADY**.

- is intended to be incorporated into machinery or to be assembled with other machinery to constitute machinery covered by Directive 98/37 EEC, as amended;
- does therefore not in every respect comply with the provisions of this Directive;
- does comply with the provisions of the following other EEC Directives:
Direttiva bassa tensione 73/23/CEE, 93/68/CEE.
Direttiva compatibilità elettromagnetica 89/336/CEE, 93/68/CEE.

and furthermore declares that it is not allowed to put the machinery into service until the machinery into which it is to be incorporated or of which it is to be a component has been found and declared to be in conformity with the provisions of Directive 98/37/EEC and with national implementing legislation, i.e. as a whole, including the machinery referred to in this declaration.

Benincà Luigi, Responsabile legale.
Sandrigo, 05/10/2005.



Dati tecnici	Technical data	Technische Daten	Données technique	Datos técnicos	Dane techniczne	LADY
Alimentazione	Feed	Versorgung	Alimentation	Alimentación	Zasilanie	230 Vac
Alimentazione motore	Motor feed	Motorspeisung	Alimentation moteur	Alimentación del motor	Zasilanie silnika	24 Vdc
Assorbimento motore	Motor consumption	Motorstromaufnahme	Absorption moteur	Absorción motor	Pobór mocy silnika	1,6 A
Coppia	Torque	Drehmoment	Couple	Par	Moment obrotowy	205 Nm
Grado di protezione	Degree of protection	Schutzart	Indice de protection	Grado de protección	Stopień ochrony	IP44
Intermittenza lavoro	Jogging	Betriebsintervall	Intermittence travail	Intermitencia de trabajo	Cykliczność pracy	*
Temp. funzionamento	Operating temp.	Betriebstemperatur	Temp. fonctionnement	Temp. de funcionamiento	Temp. podczas pracy	-20°C/+50°C
Tempo apertura	Opening time	Öffnungszeit	Temps d'ouverture	Tiempo de apertura	Czas otwierania	**
Lubrificazione	Lubrication	Schmierung	Lubrification	Lubricación	Smarowanie	***
Rumorosità	Noise level	Geräusentwicklung	Bruit	Ruido	Max. halas	<70dB (A)
Peso	Weight	Gewicht	Poids	Peso	Ciężar	52 kg

* *Usa intensivo - Intensive use - Intensive Nutzung - Usage intensif - Uso intensivo - Użytkowanie intensywne*

** *Vedi tabella A - See table A - Siehe Tabelle A - Voir tableau A - Ver cuadro A - Zobacz tabelę A*

*** *Grasso permanente - Permanent grease - Permanentfett - Graisse permanente - Grasa permanente - Smar trwały*

TAB A		
Alimentazione motore Motor feed Motorspeisung Alimentation moteur Alimentación del motor Zasilanie silnika	Tempo di apertura Opening time Öffnungszeit Temps d'ouverture Tiempo de apertura Czas otwierania (s)	Tempo di chiusura Closing time Schließenzeit Temps de fermeture Tiempo de cierre Czas zamknięcia (s)
26 Vdc	3	4
23 Vdc	4	5
18 Vdc	5	6

I tempi indicati comprendono i rallentamenti

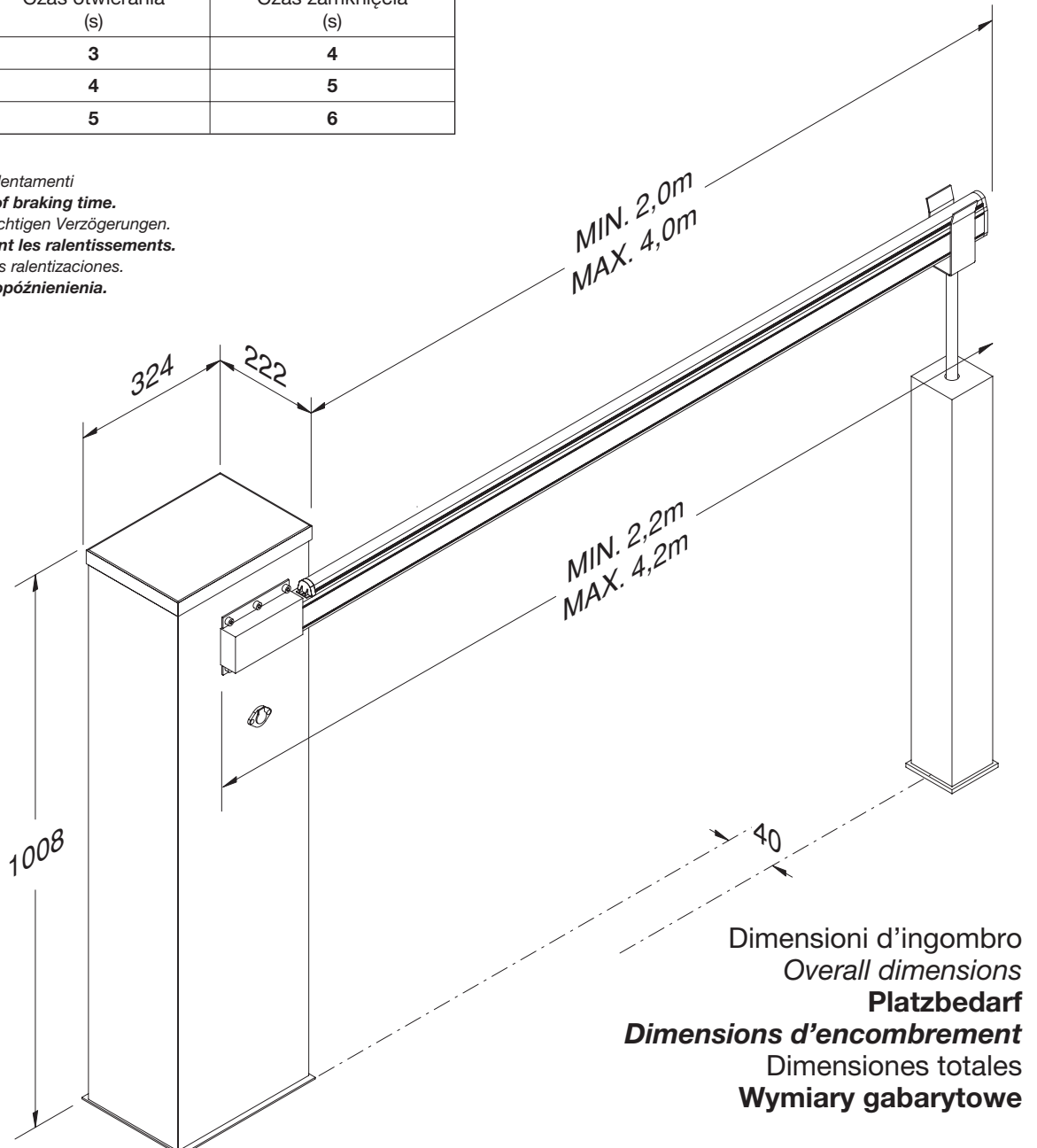
The indicated time is inclusive of braking time.

Die angegebenen Zeiten berücksichtigen Verzögerungen.

Les temps indiqués comprennent les ralentissements.

Los tiempos indicados incluyen las ralentizaciones.

Czas podany łącznie z czasem opóźnienia.



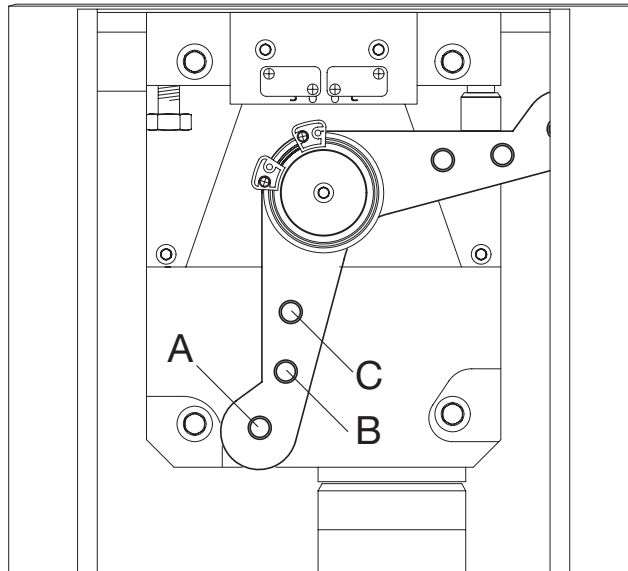


Fig.1

TAB.1	LADY/LADY.I				
	Lunghezza asta (m) - Bar length (m) - Stangenlänge (m) Longueur lisse (m) - Largura del asta (m) - Długość ramienia (m)				
Accessori utilizzabili Verwendbares Zubehör Accesorios utilizables Stosowane akcesoria	2,2	2,7	3,2	3,7	4,2
NA	C	C	C	B	A
LADY.P(1)	C	C	B	B	A
LADY.P(2)	C	C	B	B	A
VE.RAST	C	B	B	A	
LADY.P(1) + VE.RAST	C	B	B	A	
LADY.P(1) + VE.AM	C	B	B	A	A
LADY.P(2) + VE.AM	C	B	B	A	
LADY.P(1) + VE.RAST + VE.AM	C	B	A		
SC.RES	C	B	B	A	
LADY.P (1) + SC.RES	C	B	A	A	
SC.RES + VE.AM	C	B	A	A	
LADY.P(1)+ SC.RES + VE.AM	C	B	A		

Legenda

NA Nessun accessorio
LADY.P(1) Profilo di protezione (solo superiore).
LADY.P(2) Profili di protezione (superiore e inferiore).
VE.RAST Rastrelliera in alluminio.
VE.AM Appoggio mobile per asta.
SC.RES Bordo sensibile resistivo (conforme all'allegato 4 della Direttiva Macchine).

Attenzione:

L'installazione della **VE.RAST** pregiudica l'uso della **SC.RES** e viceversa.
 L'installazione del kit luci **LADY.L** non influenza il bilanciamento dell'asta

Key

NA No accessories
LADY.P(1) Protection profile (only upper).
LADY.P(2) Protection profiles (upper and lower).
VE.RAST Aluminium skirt.
VE.AM Mobile support for bar.
SC.RES Sensitive resistive edge (complying with annex 4 of the Machines Directive).

Attention:

The installation of the **VE.RAST** interferes with the use of the **SC.RES** and vice versa.
 The installation of the **LADY.L** lights kit does not influence the balancing of the bar

Legende

NA Kein Zubehör
LADY.P(1) Schutzprofil (nur oben).
LADY.P(2) Schutzprofile (oben und unten).
VE.RAST Unterfahrsperrung aus Aluminium.
VE.AM Bewegliche Stangenauflage.
SC.RES Resistive Kontakteiste (gemäß Anlage 4 der Maschinenrichtlinie).

Achtung:

Die Installation der **VE.RAST** beeinträchtigt den Einsatz der **SC.RES** und umgekehrt.
 Die Installation des Beleuchtungskits **LADY.L** beeinflusst nicht die Auswuchtung der Stange

Légende

NA Aucun accessoire
LADY.P(1) Profil de protection (supérieur).
LADY.P(2) Profils de protection (supérieur et inférieur).
VE.RAST Filet de lisse en aluminium.
VE.AM Appui mobile pour bar.
SC.RES Barre palpéuse (bord sensible de sécurité à variation de résistance conforme à l'annexe 4 de la Directive Machines).

Attention:

L'installation de la **VE.RAST** empêche l'emploi de la **SC.RES** et vice-versa. L'installation du kit lumières **LADY.L** n'influence pas l'équilibrage de la lisse

Legenda

NA Ningún accesorio
LADY.P(1) Perfil de protección (sólo superior).
LADY.P(2) Perfiles de protección (superior e inferior).
VE.RAST Faldilla en aluminio.
VE.AM Apoyo móvil para asta.
SC.RES Bordo sensible resistivo (conforme al anexo 4 de la Directiva Máquinas).

Atención:

Si se instala el **VE.RAST** no se podrá utilizar el **SC.RES**, y viceversa.
 La instalación del kit luces **LADY.L** no afecta al equilibrado del asta

Opis

NA Bez akcesoriów
LADY.P(1) Odbojnica ochronna (tylko górna).
LADY.P(2) Odbojnice ochronne (górną i dolną).
VE.RAST Drabinka aluminiowa.
VE.AM Słupek podpierający ramię, ruchomy.
SC.RES Obrzeże czujnikowe rezystywne (zgodnie z wytycznymi załącznika 4 do Dyrektywy dla Maszyn).

Uwaga:

Instalacja drabinki **VE.RAST** uniemożliwia stosowanie obrzeża **SC.RES** i odwrotnie. Instalacja zestawu świateł **LADY.L** nie wpływa na wyważenie ramienia szlabanu

Dado M12 UNI 5588.
Nut M12 UNI 5588.
Mutter M12 UNI 5588.
Ecrou M12 UNI 5588.
Tuerca M12 UNI 5588.
Nakrętka M12 UNI 5588

Rosetta Ø13x24 UNI 6592.
Washer Ø13x24 UNI 6592.
Unterlegscheibe Ø13x24 UNI 6592.
Rondelle Ø13x24 UNI 6592.
Arandela Ø13x24 UNI 6592.
Podkładka Ø 13x24 UNI 6592

Mettere in piano la piastra tramite livella
Lay the plate flat using a spirit level
Die Platte mit Hilfe einer Wasserwaage gerade ausrichten

Mette la plaque de niveau avec un niveau à bulle
Nivelar horizontalmente la placa con el nivel
Wypoziomować płytę za pomocą poziomicy.

Livella.
Spirit level
Wasserwaage
Niveau
Nivel
Poziomnica

320

222

135

200

Foro per passaggio cavi
Hole for passing cables
Loch für Kabeldurchgang
Trou pour passage des câbles
Orificio para el paso de cables
Otwór do przepuszczania kabli.

Vite M12x50 UNI 5739.
Screw M12x50 UNI 5739.
Schraube M12x50 UNI 5739.
Vis M12x50 UNI 5739.
Tornillo M12x50 UNI 5739.
Sruba M12x50 UNI 5739

Staffa a cementare
Cementing-in bracket
Bügel zum Einbetonieren
Patte à sceller
Estribo a cimentar.
Kotwa do zabetonowania.

Piastra di fondazione
Foundation plate
Fundamentplatte
Plaque de fondation
Placa de cimentación
Płyta montażowa.

Fig.2

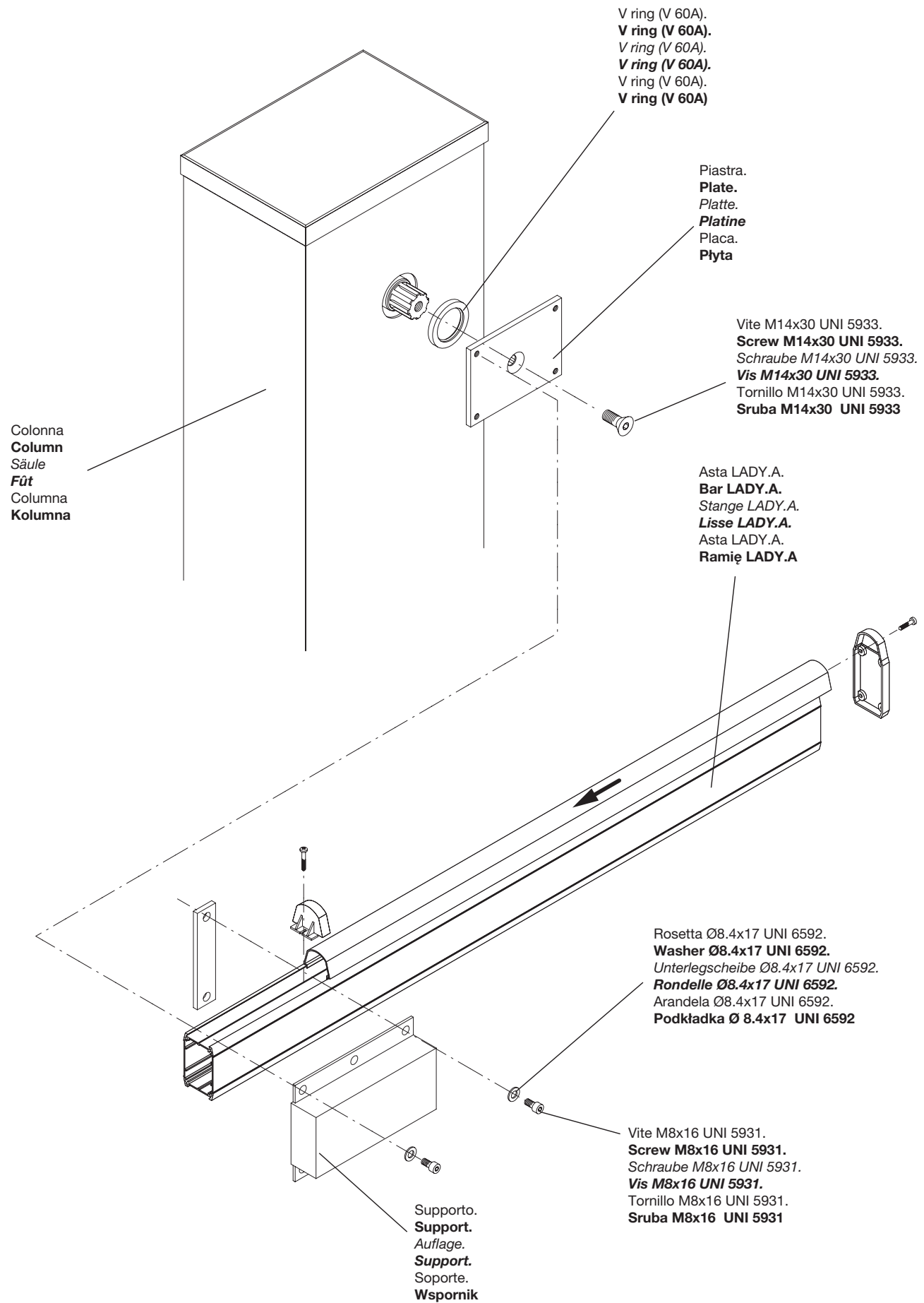


Fig.3

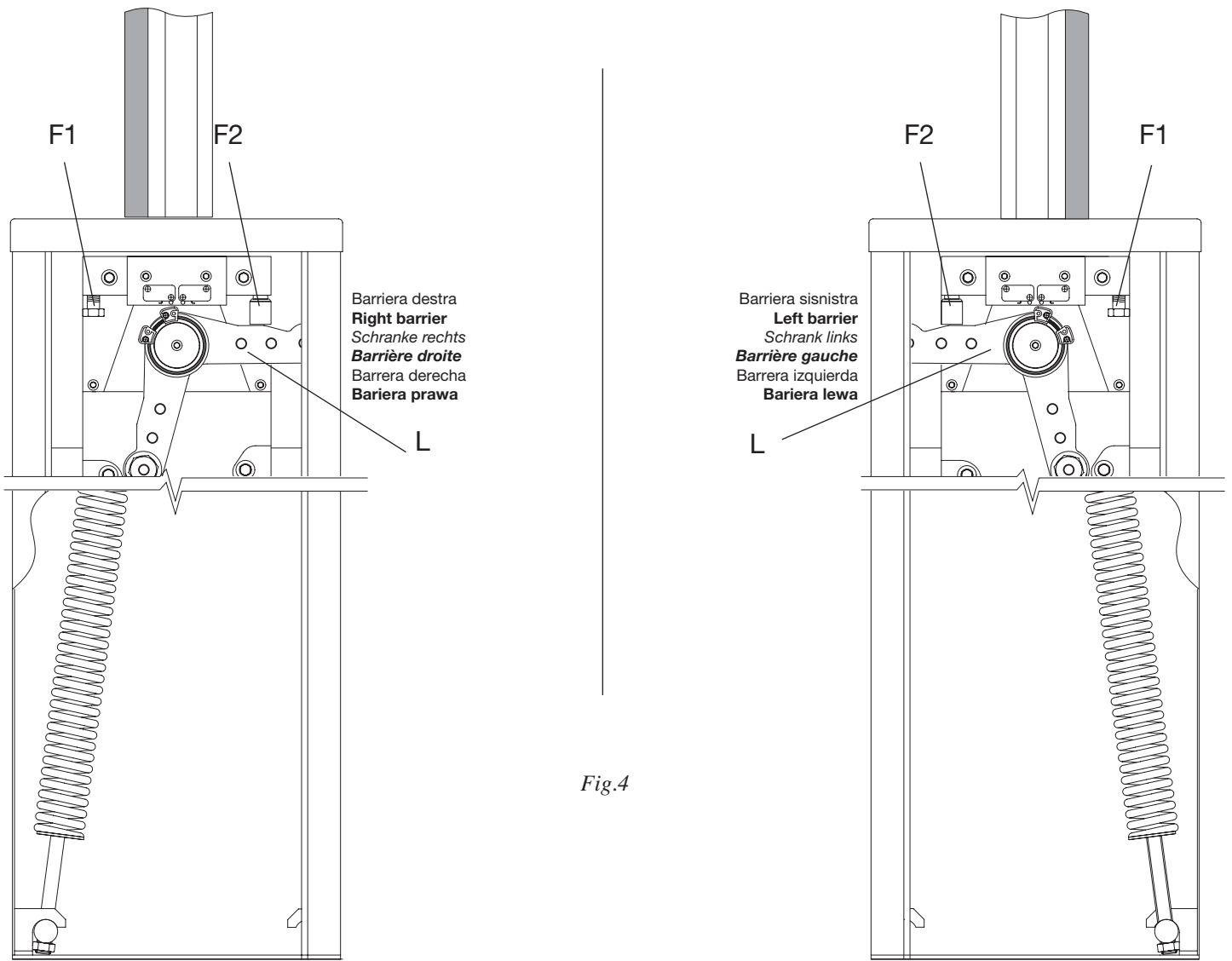


Fig.4

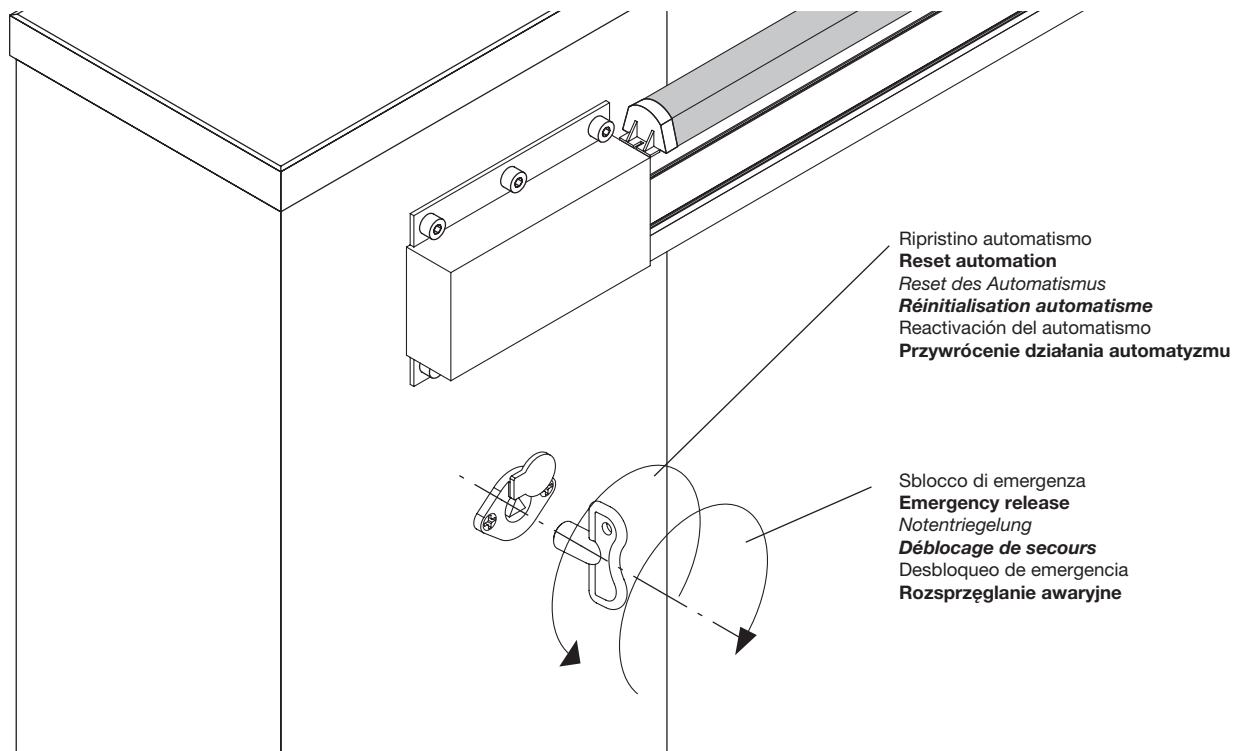
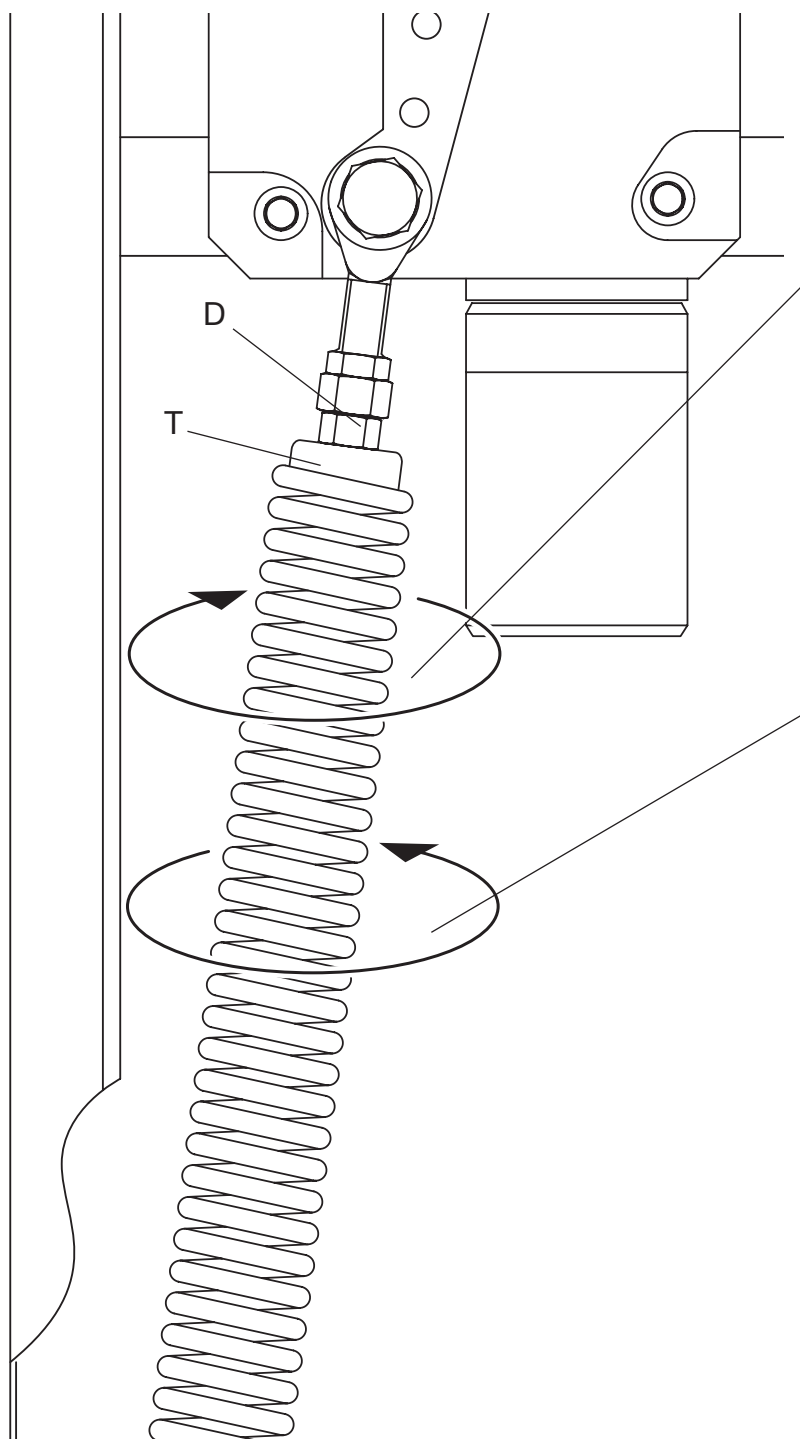


Fig.5



Con motoriduttore sbloccato:
With geared motor released:
 Bei entriegeltem Getriebemotor:
Avec l'opérateur débloqué :
 Con motorreductor desbloqueado:
Z motoreduktorem odblokowanym:

Se l'asta tende a chiudere, aumentare la tensione della molla (distendere la molla con rotazione oraria)

If the bar tends to close, increase the spring tension (extend the spring by turning clockwise)

Wenn die Stange dazu neigt, zu schließen, die Spannung der Feder erhöhen (durch Drehen im Uhrzeigersinn entspannen)

Si la lisse a tendance à s'abaisser, augmenter la tension du ressort (détendre le ressort en tournant dans le sens des aiguilles d'une montre)

Si el asta tiende a cerrarse, aumentar la tensión del muelle (descomprimir el muelle girándolo a la derecha)

Jeśli ramię szlabanu ma tendencję do zamykania się, należy zwiększyć napięcie sprężyny (rozkuźnić sprężynę przez pokręcanie zgodnie z ruchem wskazówek zegara)

Se l'asta tende ad aprire, diminuire la tensione della molla (comprimere la molla con rotazione antioraria)

If the bar tends to open, decrease the spring tension (compress the spring by turning anti-clockwise)

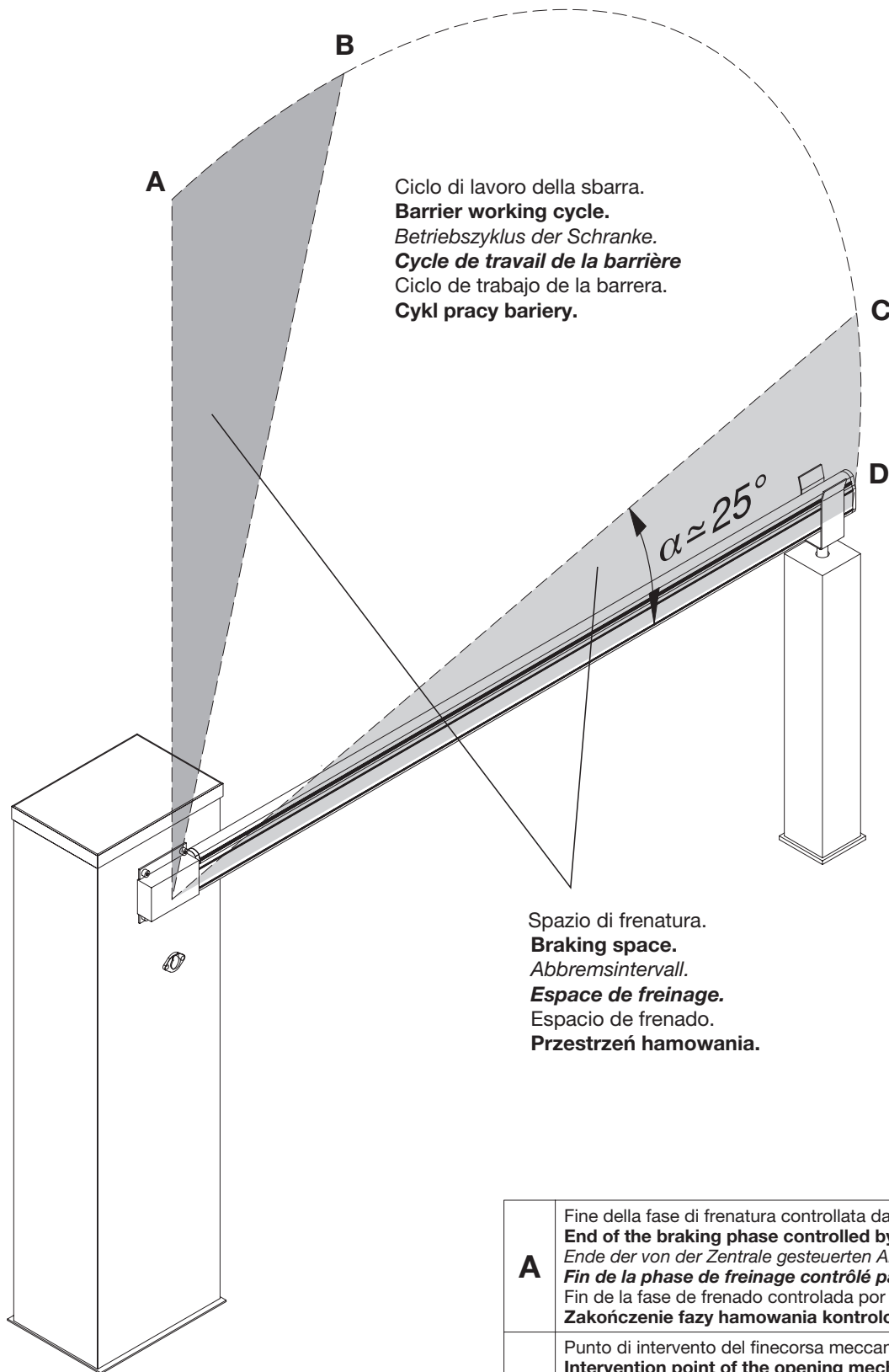
Wenn die Stange dazu neigt, zu öffnen, die Spannung der Feder vermindern (durch Drehen im Gegenuhrzeigersinn komprimieren)

Si la lisse a tendance à se lever, diminuer la tension du ressort (comprimer le ressort en tournant dans le sens inverse des aiguilles d'une montre)

Si el asta tiende a abrirse, disminuir la tensión del muelle (comprimir el muelle girándolo hacia la izquierda)

Jeśli ramię szlabanu ma tendencję do otwierania się, należy zmniejszyć napięcie sprężyny (scisnąć sprężynę poprzez pokręcanie w kierunku odwrotnym do ruchu wskazówek zegara)

Fig.6



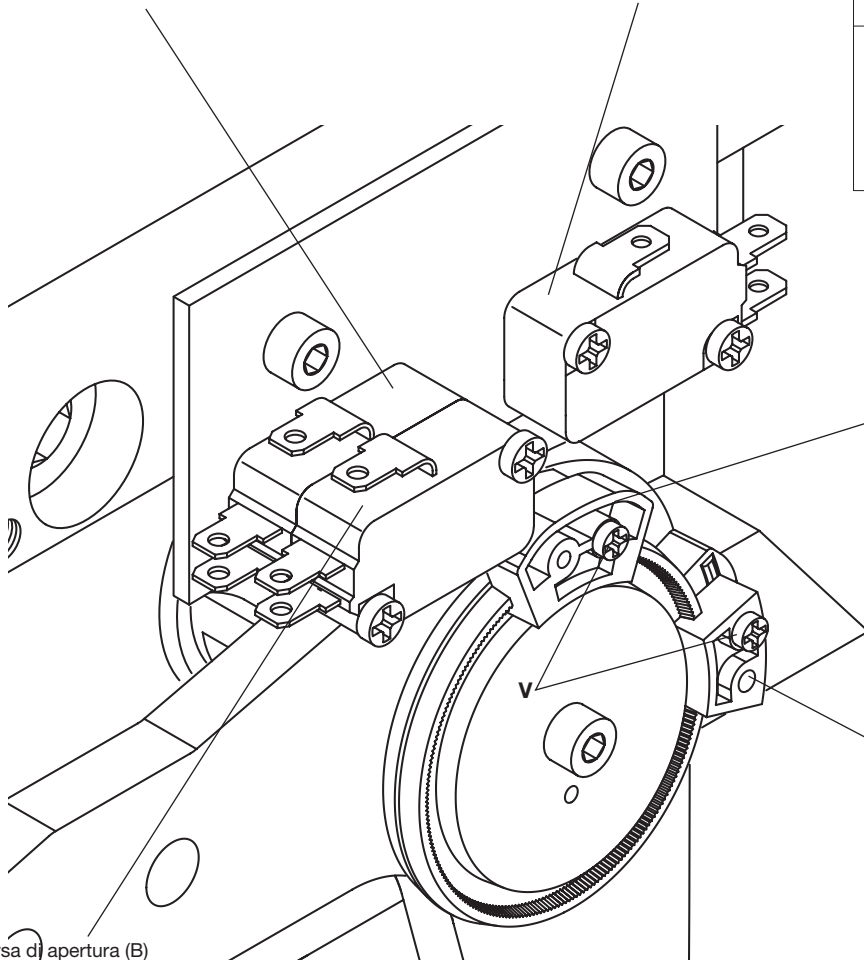
A	Fine della fase di frenatura controllata dalla centrale. End of the braking phase controlled by the control unit. <i>Ende der von der Zentrale gesteuerten Abbremsphase.</i> Fin de la phase de freinage contrôlé par la logique de commande. Fin de la fase de frenado controlada por la centralita. Zakończenie fazy hamowania kontrolowanej przez centralkę.
B	Punto di intervento del finecorsa meccanico in apertura. Intervention point of the opening mechanical limit stop. <i>Auslösepunkt des mechanischen Endschalters beim Öffnen.</i> Point d'intervention du fin de course mécanique en ouverture. Punto de intervención del fin de carrera mecánico en apertura. Punkt włączania się krańcówki mechanicznej otwarcia.
C	Punto di intervento del finecorsa di rallentamento. Intervention point of the slowing limit stop. <i>Auslösepunkt des Verlangsamungs-Endschalters.</i> Point d'intervention du fin de course de ralentissement. Punto de intervención del fin de carrera de deceleración. Punkt włączania się krańcówki na zwalnianie.
D	Punto di intervento del finecorsa meccanico in chiusura. Intervention point of the closing mechanical limit stop. <i>Auslösepunkt des mechanischen Endschalters beim Schließen.</i> Point d'intervention du fin de course mécanique en fermeture. Punto de intervención del fin de carrera mecánico en cierre. Punkt włączania się krańcówki mechanicznej zamknięcia.

Fig.7

Finecorsa di chiusura (D)
Closing limit stop (D)
Endschalter Schließen (D)
Fin de course de fermeture (D)
Fin de carrera de cierre (D)
Krańcówka zamknięcia (D)

Finecorsa di rallentamento (C)
Slowing limit stop (C)
Verlangsamungs-Endschalter (C)
Fin de course de ralentissement (C)
Fin de carrera de deceleración (C)
Krańcówka na zwalnianie (C)

+	Anticipa l'azione frenante. Anticipate the braking action. <i>Vorverlegung der Abbremswirkung.</i> Anticipe l'action freinante. Anticipa la acción frenante. Przyspiesza hamowanie.
-	Posticipa l'azione frenante. Delay the braking action. <i>Nachverlegung der Abbremswirkung.</i> Retarde l'action freinante. Retarda la acción frenante. Opóźnia hamowanie.



A
 Camma finecorsa apertura
Opening limit stop cam
Endschalternocken Öffnen
Came fin de course d'ouverture
 Leva fin de carrera de apertura
Krzywka krańcówki otwarcia

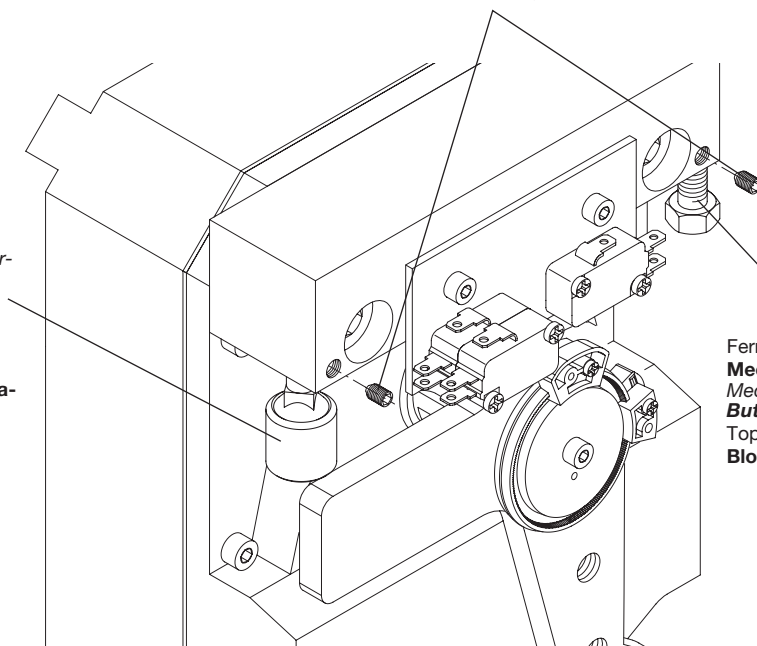
C
 Camma finecorsa rallentamento chiusura
Slowing and closing limit stop cam
Endschalternocken Verlangsamung und Verchluss
Came fin de course ralentissement et fermeture
 Leva fin de carrera de deceleración y cierre
Krzywka krańcówki na zwalnianie i zamknięcia

Finecorsa di apertura (B)
Opening limit stop (B)
Endschalter Öffnen (B)
Fin de course d'ouverture (B)
Fin de carrera de apertura (B)
Krańcówka otwarcia (B)

Fig.8

Grani di bloccaggio
Blocking dowels
Arretierstifte
Goujons de blocage
Tornillos sin cabeza de bloqueo
 Kolki blokujące

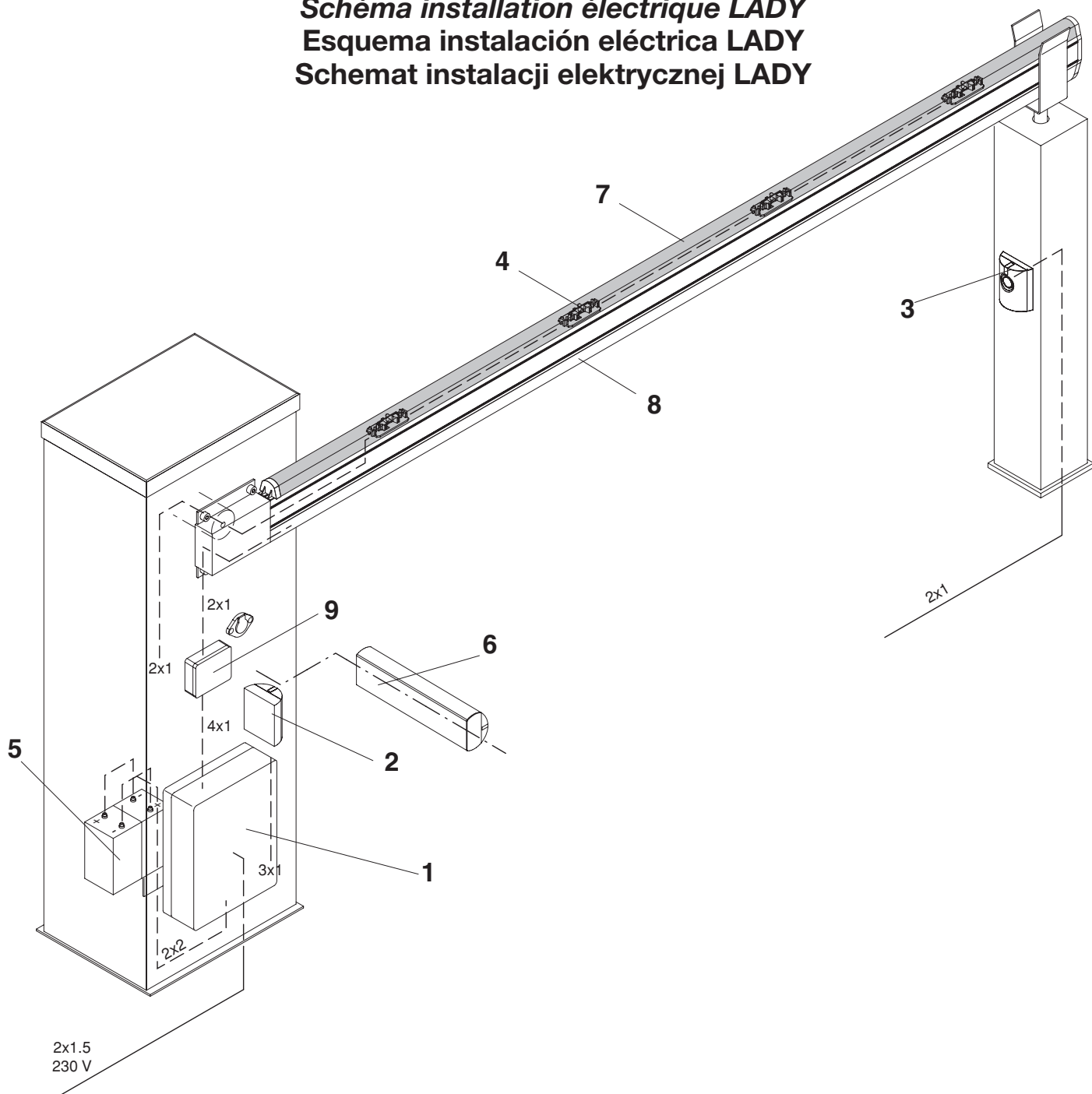
Fermo meccanico ammortizzato in apertura
Damped mechanical stop on opening
Gedämpfte mechanische Feststellvorrichtung beim Öffnen
Butée mécanique amortie en ouverture
 Tope mecánico amortiguado en apertura
Blokada mechaniczna amortyzowana w otwarciu



Fermo meccanico chiusura
Mechanical stop on closing
Mechanische Feststellvorrichtung Schließen
Butée mécanique fermeture
 Tope mecánico de cierre
Blokada mechaniczna zamknięcia

Fig.9

Schema impianto elettrico LADY
Wiring diagram LADY
Schaltplan der Elektroanlage LADY
Schéma installation électrique LADY
Esquema instalación eléctrica LADY
Schemat instalacji elektrycznej LADY



- 1 Centrale di comando DA.24V
- 2 Fotocellula trasmettitore FTC
- 3 Fotocellula ricevente FTC
- 4 Lampeggianti LADY.L
- 5 Bat. a tamp. N° 2-12V-6 Ah collegate in serie
- 6 Colonnina fotocellula per barriera LADY.COL
- 7 Gomma di protezione inferiore/superiore LADY.P
- 8 Costa pneumatica SC.RES
- 9 Circuito SC.E di interfaccia tra SC.RES e DA.24V

- 1 Steuerzentrale DA.24V
- 2 Photozelle Sender FTC
- 3 Photozelle Empfänger FTC
- 4 Blinkleuchten LADY.L
- 5 Pufferbatterie. N° 2-12V-6 Ah in Serie geschaltet
- 6 Photozellensäule für Schranke LADY.COL
- 7 unterer/oberer Schutzgummi LADY.P
- 8 pneumatische Kontaktleiste SC.RES
- 9 SC.E-Kreis als Schnittstelle zwischen SC.RES und DA.24V

- 1 Central de comando DA.24V
- 2 Fotocélula del transmisor FTC
- 3 Fotocélula del receptor FTC
- 4 Lámparas destellantes LADY.L
- 5 Bat. tamp. N° 2-12V-6 Ah conectadas en serie
- 6 Columna fotocélula para barrera LADY.COL
- 7 Goma de protección inferior/superior LADY.P
- 8 Banda neumática SC.RES
- 9 Circuito SC. y de interfaz entre SC.RES y DA.24V

- 1 Control unit DA.24V
- 2 Transmitting photocell FTC
- 3 Receiving photocell FTC
- 4 Blinking lights LADY.L
- 5 N° 2-12V-6 Ah buffer batteries connected in series
- 6 Photocell column for barrier LADY.COL
- 7 Bottom/top rubber protection LADY.P
- 8 Pneumatic edge SC.RES
- 9 SC.E interface circuit between SC.RES and DA.24V

- 1 Logique de commande DA.24V
- 2 Photocellule émetteur FTC
- 3 Photocellule récepteur FTC
- 4 Clignotants LADY.L
- 5 2 Batteries tampon 12V-6 Ah connectées en série
- 6 Colonne photocellule pour barrière LADY.COL
- 7 Profil de protection inférieur/supérieur en caoutchouc LADY.P
- 8 Barre palpeuse SC.RES
- 9 Circuit SC.E d'interface entre SC.RES et DA.24V

- 1 Centralka sterowania DA.24V
- 2 Fotokomórka przekaźnikowa FTC
- 3 Fotokomórka odbiornikowa FTC
- 4 Światła migające LADY.L
- 5 Akum. podtrzym. N° 2-12V-6 Ah połączone szeregowo
- 6 Kolumnienka fotokomórki dla ramienia LADY.COL
- 7 Ochrona gumowa dolna/górna LADY.P
- 8 Skuwka pneumatyczna SC.RES
- 9 Obwód SC.E interfejsu pomiędzy SC.RES i DA.24V

Warnings and advice for installation

Before carrying out any work on the system, disconnect the 230Vac and the buffer batteries (if present).

- The box containing the control unit is secured to barrier case with two screws to avoid damage during transport. Once the barrier has been positioned it possible to remove the screws and to unhook the box from the case so as to facilitate wiring operations and the preparation of the control unit. On completing installation, secure the box to the barrier case again.
- Consult the control unit instructions manual as regards the regulation of the operating times and logic, the connection of the accessories and of the safety devices, etc.

1. General characteristics

Sturdily made but with a sober and pleasing design, LADY road barriers are suitable for intensive use, thanks to their 24Vdc motor. Installation and regulation are easily accomplished. Equipped with a very simple and intuitive manual release, the barrier can be fitted with buffer batteries that allow it to operate even when there is no power supply.

The bar made of painted aluminium is suitable for the application of all the accessories, signalling and safety devices. In the event of contact of the bar with an obstacle, an amperometric sensor interrupts the movement immediately.

2. Positioning the spring and the accessories for use

Depending on the length of the bar and on the type of accessories installed, before putting the spring under tension it is necessary to choose the correct point in which to attach the spring to the lever.

The correct fastening point (“A”, “B” or “C” - Fig.1), must be chosen in table 1, depending on the length of the bar and on the type of accessories you intend to install.

3. Laying the foundation plate (Fig.2)

After having arranged the passage of the cables (power supply, accessories, etc.), put the foundation plate in position, referring to the measurements in fig.2.

4. Fixing the bar (Fig.3)

The bar is fixed to the plate using the support and the screws provided, as illustrated in Fig.3. We recommend installing any accessories for the bar (protective profiles, lights, edge, skirt, etc.) before fixing it to the plate.

5. Preparing the barrier for right or left (Fig.4)

If the opening direction reversion is required, proceed as follows. If it is not necessary, go to the next section:

- Entirely unload the spring by loosening it and unhooking it from the “L” anchoring lever
- with reference to Fig. 4, invert the position of the “F1” and “F2” mechanical stoppers. Before loosening the stoppers, back-off the related locking grains (see section HOW TO ADJUST THE MECHANICAL STOPPERS)
- unlock the geared motor (see “Manual Operation”) insofar as to render the L hooking lever idle.
- according to the length of the road barrier arm and accessories used, choose the correct hooking position, as indicated in paragraph “Positioning of the spring and accessories”.
- hook the spring in the new position. Fig. 4 shows the differences between a right-hand road barrier and a left-hand one.
- **in the control unit, invert the wires of motor, as well as SWC limit switch (closing limit switch) and SWC-R limit switch (closure braking limit switch).**

6. Manual and emergency manoeuvres

In the event of a power cut or of abnormal operation, it is possible to release the bar and move it by hand (Fig. 5).

Using the key provided:

- To release the bar, turn the key in a clockwise direction until you feel a certain resistance.
- To restore the automatic movement of the bar, turn the key in an anti-clockwise direction until it is blocked.

7. Balancing (fig. 6)

For good operation of the barrier it is fundamental for the bar to be suitably balanced by the action of the spring. To check this, proceed as follows:

- Ensure that the spring is fixed to the correct point of the lever (see paragraph 2).

- Mechanically release the barrier using the release key.
- The correctly balanced bar must stay still in whichever point it is positioned:
 - if it tends to open, decrease the tension of the spring
 - if it tends to close, increase the tension of the spring
 The tension of the spring may be regulated by manually screwing (anti-clockwise rotation) or unscrewing (clockwise rotation) the spring itself. Once you have regulated the spring tension, block it, screwing down the nut “D” until it makes contact with the cap T.

8. Movements and work times (fig. 7)

During the closing manoeuvre:

The bar starts from point “A” and arrives at the point “C” of intervention of the slowing limit stop with a speed that may be set by the control unit.

The braking cycle starts from the intervention of the slowing limit stop and concludes exclusively with the intervention of the closing limit stop in point “D”, since the control unit checks when the limit stop “D” is reached and is able to compensate automatically any variations due, for example, to different climatic conditions. The braking angle is fixed and corresponds to about 25°.

During the opening manoeuvre:

The bar starts from point “D” and arrives at the point “B” of intervention of the opening limit stop with a speed that may be set by the central control unit.

The bar covers the braking space when opening in a time defined by the control unit.

The bar then arrives at point A, completing the opening movement.

The regulations of the limit stop cams, of the trimmers and of the dip-switches must be carried out referring to these operating principles.

9. Regulating the limit stop cams

The regulation of the limit stop cams allows:

Cam A Anticipate or delay the start of the slowing phase in opening (Fig.7- point “B”).

Cam C Regulate with precision the stopping point in closing (Fig.7 - point “D”).

Note: Before activating the closing limit stop (Fig.8 - D), the cam C starts the slowing phase, activating the slowing limit stop (Fig.8 - C).

With reference to Fig.8:

- Slacken the cam fixing screw V.
- Bring the opening or closing cam into the desired position.
- Tighten the cam fixing screw V.

10. Regulating the mechanical stops

The inertial movement of the bar after the motor stops is blocked using the adjustable mechanical stops shown in Fig.9.

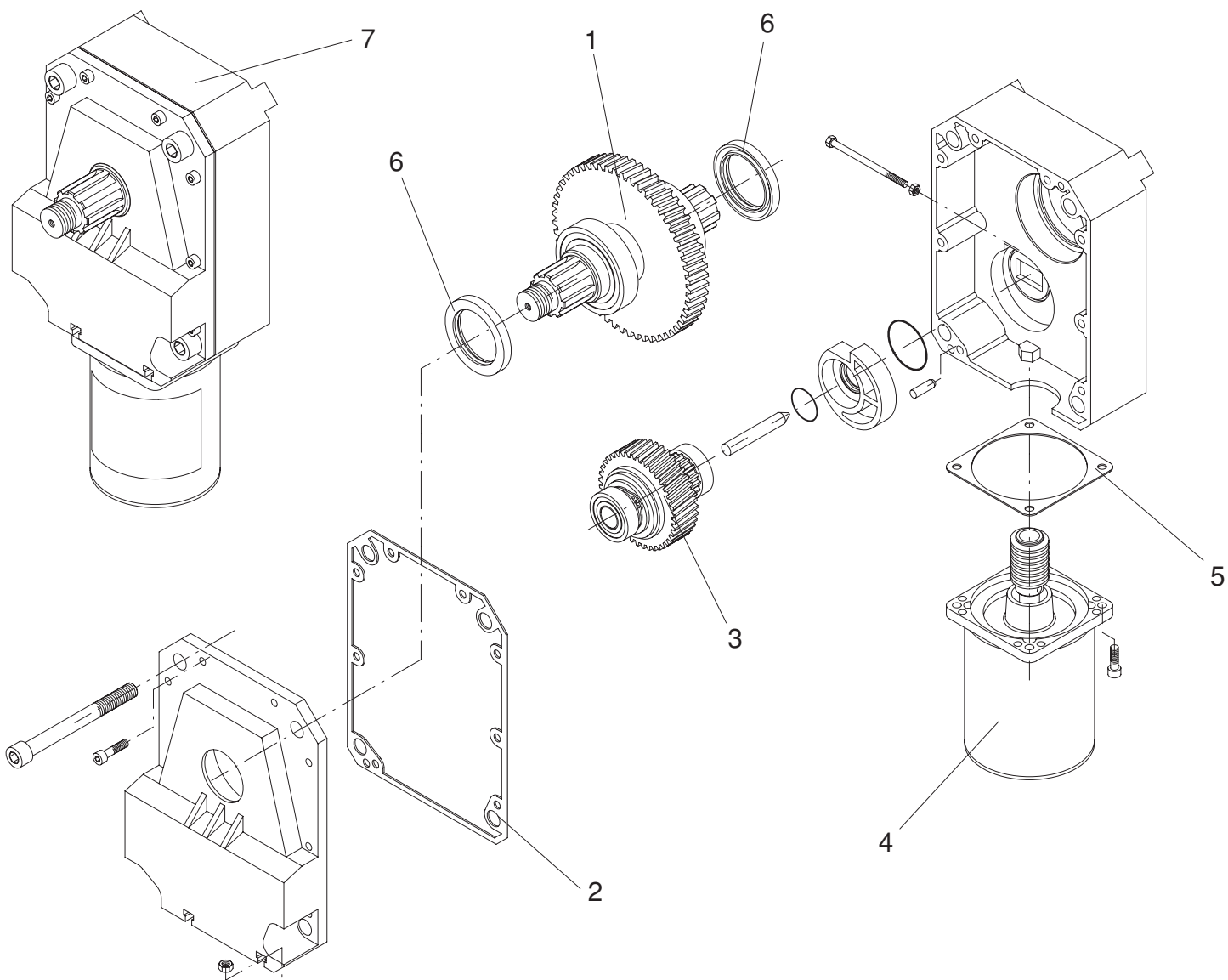
After having regulated the opening/closing limit stop cam, bring the respective closing mechanical stop into contact with the lever. The opening mechanical stop is of the damped type.

With reference to Fig.9:

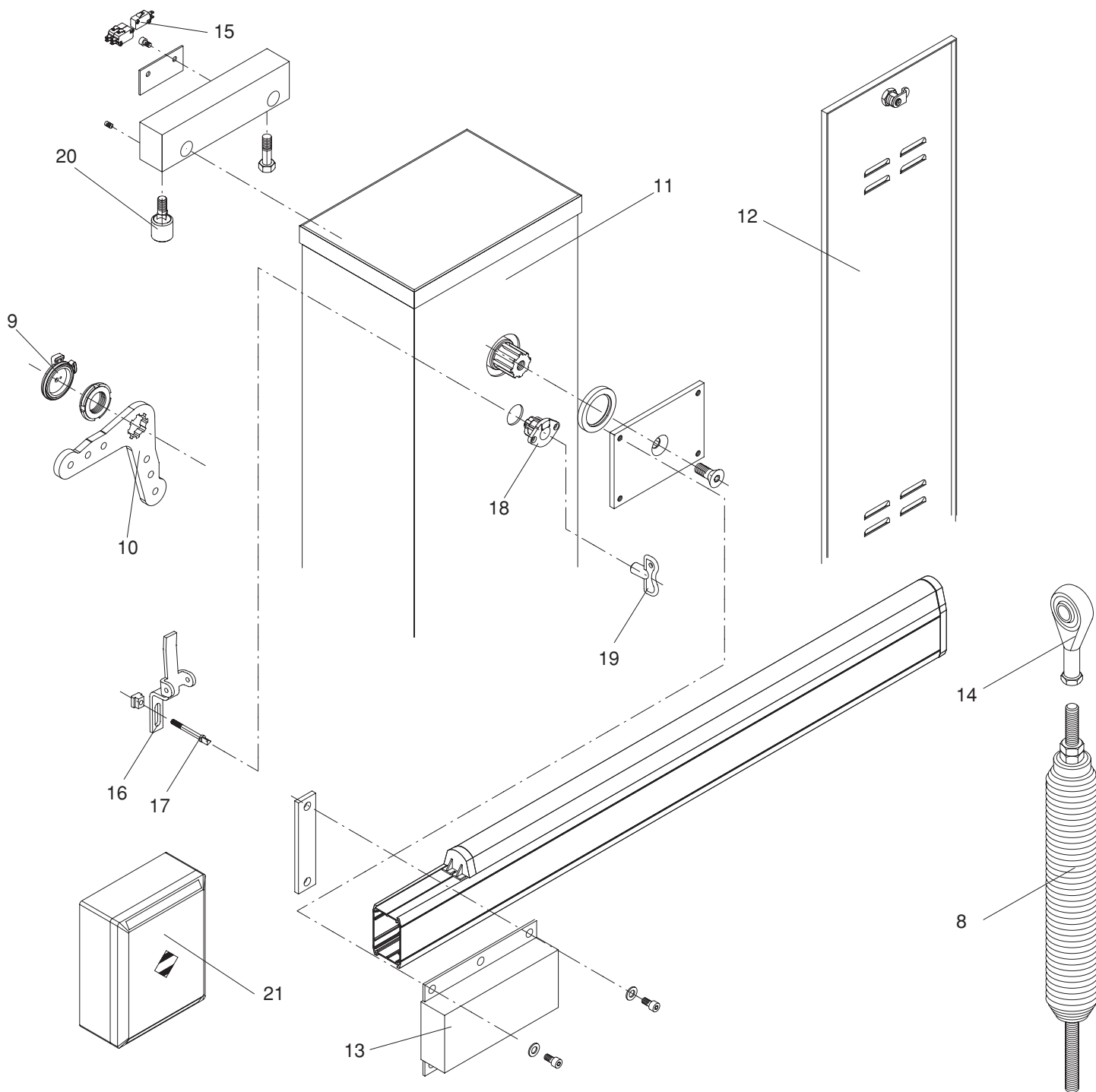
- Slacken the blocking dowel
- Tighten /unscrew the mechanical stop until the desired position of intervention is obtained
- Tighten the blocking dowel

ATTENTION

The third-party liability policy on the products, which covers any damage to persons or things caused by manufacturing defects, requires that the system comply with the regulations in force and that authentic Benincà accessories be used.



Pos.	Denominazione - Description - Bezeichnung - Dénomination - Denominación - Określenie						Cod.
1	Albero supp. ingr.	Gear shaft	<i>Welle Zahnradersupport</i>	Arbre engrenages	Eje de sop. engr.	Wał wsp. przekł.zęb.	9686110
2	Guarnizione	Gasket	<i>Dichtung</i>	Garniture	Junta	Uszczelka	9686112
3	Ingranaggio e piolo	Gear and pin	<i>Zahnrad und Stift</i>	Engrenage et pivot	Engranaje y espiga	Przekładnia zębata i kołek	9686111
4	Motore	Motor	<i>Motor</i>	Moteur	Motor	Silnik	9686107
5	Guarnizione ridut.	Red. unit gasket.	<i>Dichtung Untersetzungs</i>	Garniture réduct.	Junta red.	Uszczelka reduct.	9686109
6	Anello di tenuta	Lip seal	<i>Dichtungsring</i>	Joint d'étanchéité	Arandela de cierre	Pierścień uszczelniający	9686555
7	Motoriduttore	Geared motor	<i>Getriebemotor</i>	Motorréducteur	Motorreductor	Motoreduktor	9686247



Pos.	Denominazione - Description - Bezeichnung - Dénomination - Denominación - Określenie						Cod.
8	Molla	Spring	<i>Feder</i>	Ressort	Muelle	Sprężyna	9686183
9	Gruppo camme FC	Set of limit stop cams	<i>Nockengruppe FC</i>	Groupe cames FC	Grupo de levas FC	Zespół krzywek FC	9686160
10	Leva	Lever	<i>Hebel</i>	Levier	Palanca	Uchwyt	9686248
11	Colonna	Column	<i>Säule</i>	Fût	Columna	Kolumna	9686180
12	Porta	Door	<i>Tür</i>	Porte	Puerta	Drzwiczki	9686181
13	Supporto	Support	<i>Support</i>	Support	Soporte	Wspornik	6986184
14	Testa a snodo	Articulated head	<i>Gelenkkopf</i>	Tête à rotule	Cabeza de unión	Głowa sprężyny przegubowa	9686666
15	Microinteruttore	Microswitch	<i>Mikroschalter</i>	Microinterrupteur	Microinterruptor	Mikrowyłącznik	9686120
16	Leva sblocco	Release lever	<i>Entriegelungshebel</i>	Levier déblocage	Palanca de desbloqueo	Uchwyt rozsprzęglający	9686190
17	Perno sblocco	Release pin	<i>Entriegelungsbolzen</i>	Axe déblocage	Perno de desbloqueo	Sworzeń rozsprzęglający	9686191
18	Flangia Sblocco	Release flange	<i>Entriegelungsflansch</i>	Flasque déblocage	Brida de desbloqueo	Kołnierz rozsprzęglający	9686192
19	Chiave sblocco	Release key	<i>Entriegelungsschlüssel</i>	Clé déblocage	Llave de desbloqueo	Pilot kluczowy rozs.	9686193
20	Fermo meccanico	Mechanical stop	<i>Mech. Feststellvo richtung</i>	Butée mécanique	Tope mecánico	Blokada mechaniczna	9686185
21	Centrale	Control unit	<i>Zentrale</i>	Boîtier logique	Centralita	Centralka	9686911

User's handbook

Safety rules

- Do not stand in the movement area of the gate.
- Do not let children play with controls and near the gate.
- Should operating faults occur, do not attempt to repair the fault but call a qualified technician.

Manual and emergency manoeuvres

In the event of a power cut or of abnormal operation, it is possible to release the bar and move it by hand.

Using the key provided:

- To release the bar, turn the key in a clockwise direction until you feel a certain resistance.
- To restore the automatic movement of the bar, turn the key in an anti-clockwise direction until it is blocked.

Maintenance

- Every month check the good operation of the emergency manual release.
- It is mandatory not to carry out extraordinary maintenance or repairs as accidents may be caused. These operations must be carried out by qualified personnel only.
- The operator is maintenance free but it is necessary to check periodically if the safety devices and the other components of the automation system work properly. Wear and tear of some components could cause dangers.

Waste disposal

If the product must be dismantled, it must be disposed according to regulations in force regarding the differentiated waste disposal and the recycling of components (metals, plastics, electric cables, etc..). For this operation it is advisable to call your installer or a specialised company.

Warning

All Benincá products are covered by insurance policy for any possible damages to objects and persons caused by construction faults under condition that the entire system be marked CE and only Benincá parts be used.

