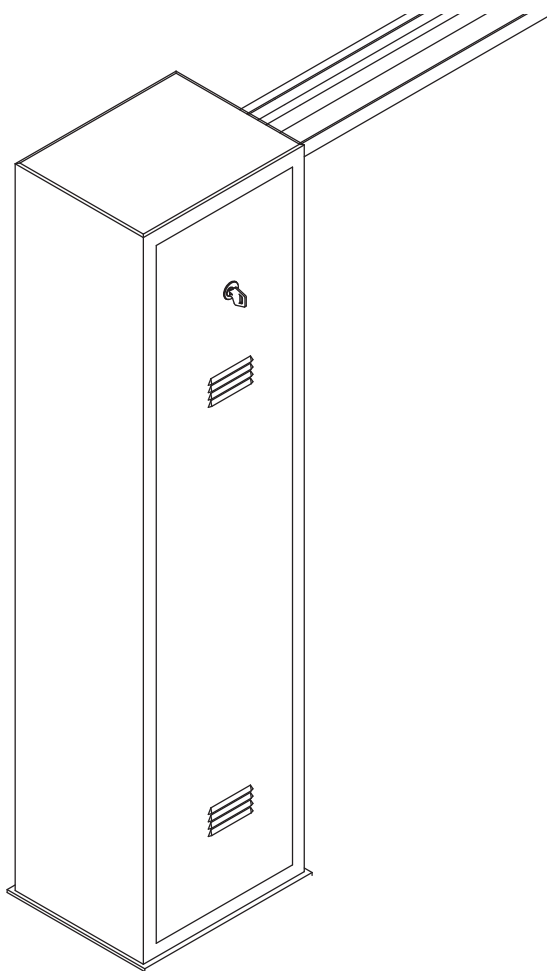


L8542219  
Rev. 01/06/05

# BENINCA®

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

## VE.250



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**

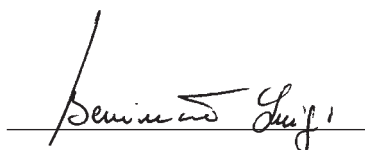
Fabbricante: **Automatismi Benincà SpA.**  
Indirizzo: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Dichiara che: l'automazione per barriere stradali modello **VE.250.**

- 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**

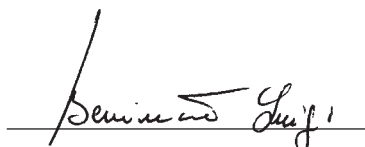
Manufacturer: **Automatismi Benincà SpA.**  
Address: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Herewith declares that: the operator for road gates model **VE.250.**

- 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	VE.250
Alimentazione	<b>Feed</b>	Versorgung	<b>Alimentation</b>	Alimentación	Zasilanie	<b>230V</b>
Alimentazione motore	<b>Motor feed</b>	Motorspeisung	<b>Alimentation moteur</b>	Alimentación del motor	Zasilanie silnika	<b>24V</b>
Potenza motore	<b>Motor power</b>	Motorleistung	<b>Puissance moteur</b>	Potencia del motor	Moc silnika	<b>70W</b>
Assorbimento motore	<b>Motor consumption</b>	Motorstromaufnahme	<b>Absorption moteur</b>	Absorción motor	Pobór mocy silnika	<b>4,5A</b>
Coppia	<b>Torque</b>	Drehmoment	<b>Couple</b>	Par	Moment obrotowy	<b>100Nm</b>
Grado di protezione	<b>Degree of protection</b>	Schutzart	<b>Indice de protection</b>	Grado de protección	Stopień ochrony	<b>IP24</b>
Intermittenza lavoro	<b>Jogging</b>	Betriebsintervall	<b>Intermittence travail</b>	Intermitencia de trabajo	Cykliczność pracy	<b>*</b>
Classe di isolamento	<b>Insulation class</b>	Isolierklasse	<b>Classe d'isolement</b>	Clase de aislamiento	Klasa izolacji	<b>Y</b>
Temp. funzionamento	<b>Operating temp.</b>	Betriebstemperatur	<b>Temp. fonctionnement</b>	Temp. de funcionamiento	Temp. podczas pracy	<b>-20°C/+70°C</b>
Tempo apertura	<b>Opening time</b>	Öffnungszeit	<b>Temps d'ouverture</b>	Tiempo de apertura	Czas otwierania	<b>2s</b>
Lubrificazione	<b>Lubrication</b>	Schmierung	<b>Lubrification</b>	Lubricación	Smarowanie	<b>**</b>
Rumorosità	<b>Noise level</b>	Geräusentwicklung	<b>Bruit</b>	Ruido	Max. halas	<b>&lt;70dB (A)</b>
Peso	<b>Weight</b>	Gewicht	<b>Poids</b>	Peso	Ciężar	<b>40 kg</b>

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

\*\* *Grasso permanente - Permanent grease - Permanentfett - Graisse permanente - Grasa permanente - Smar trwałe*

Dimensioni d'ingombro

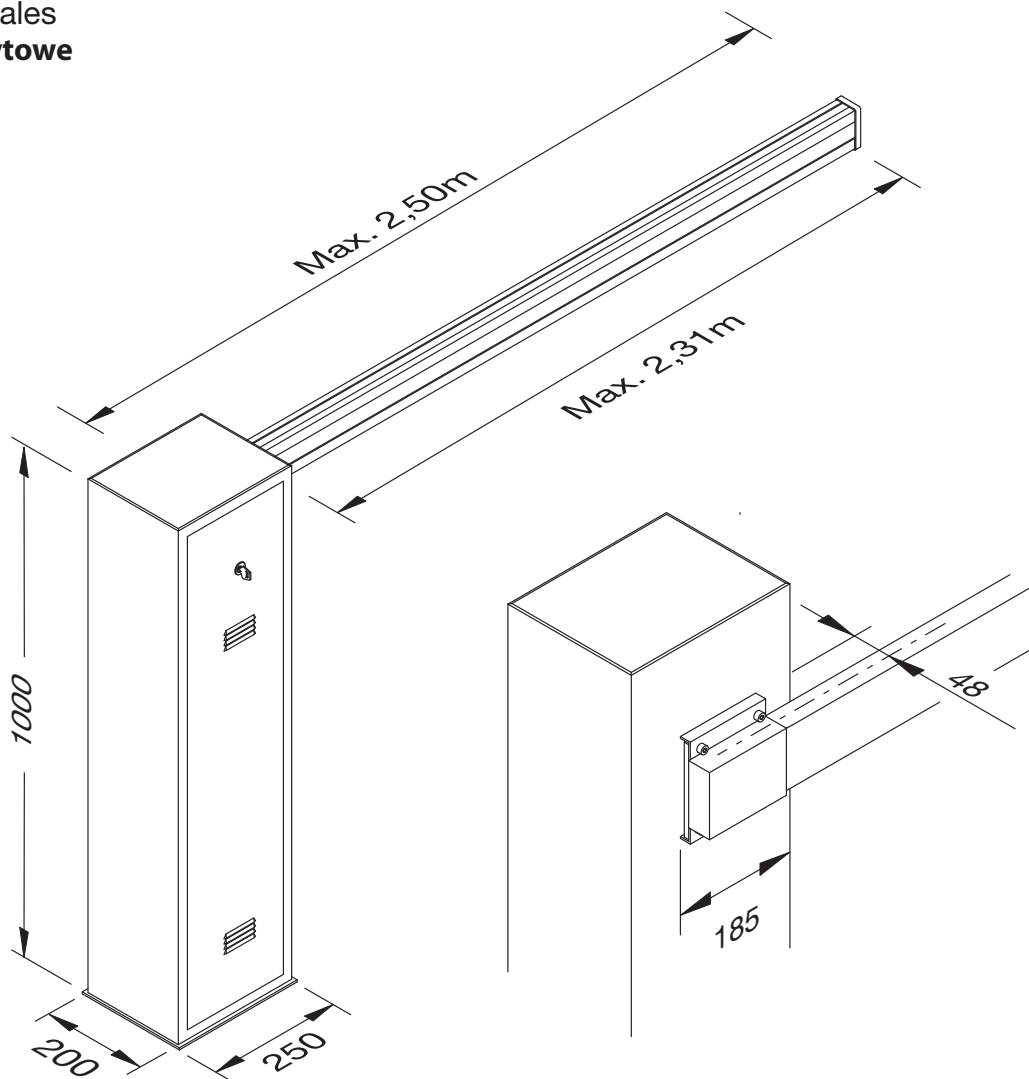
Overall dimensions

Platzbedarf

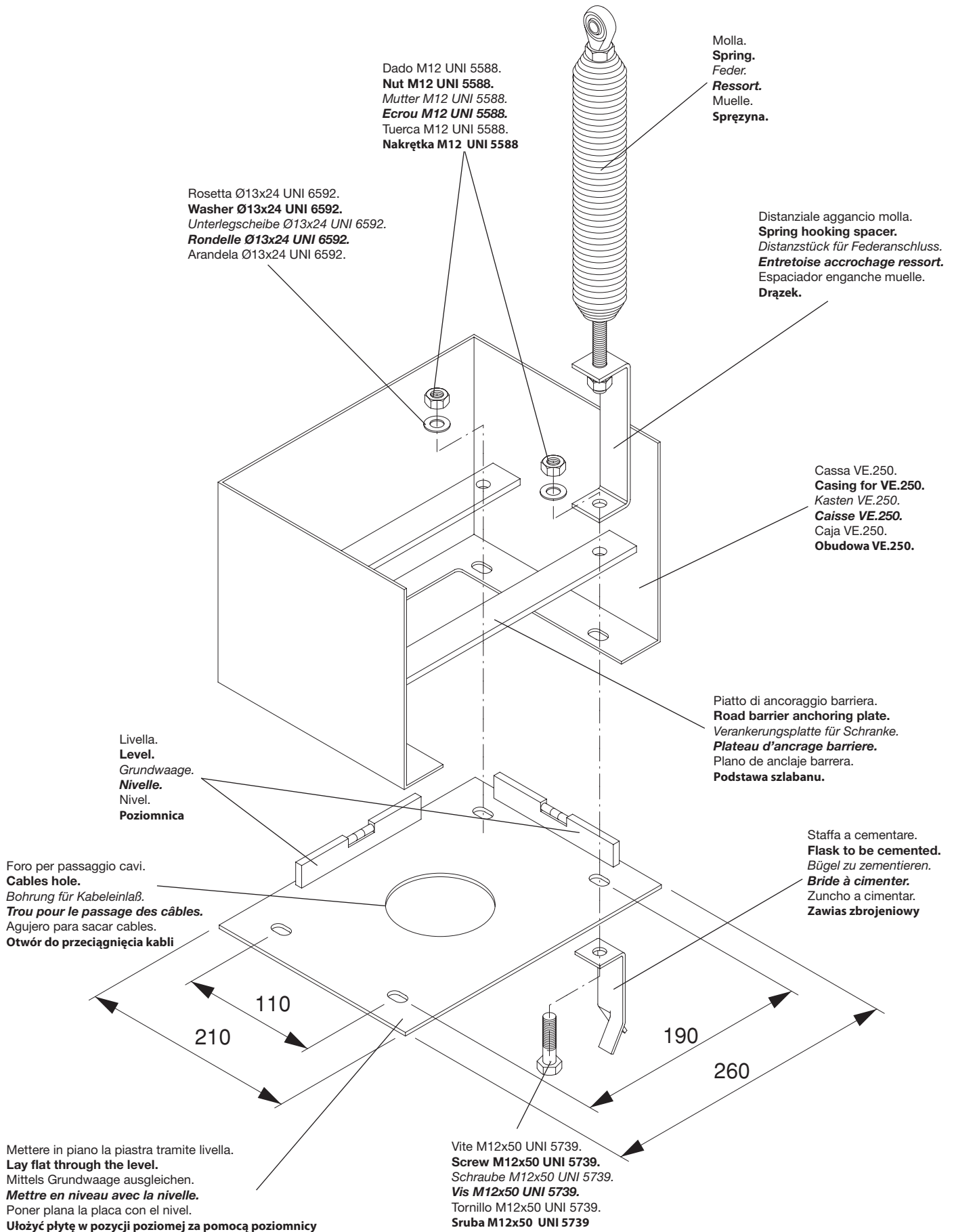
Dimensions d'encombrement

Dimensiones totales

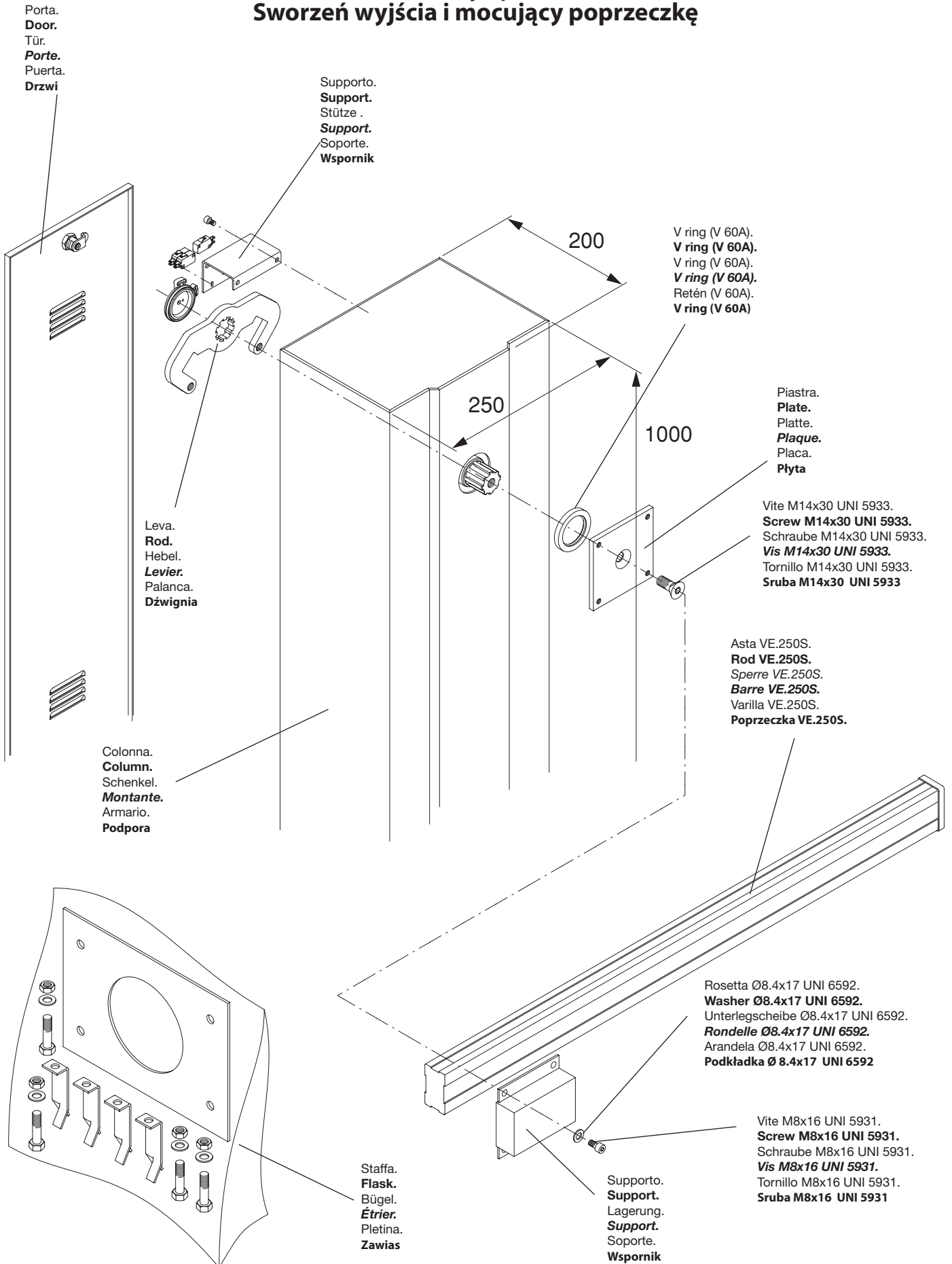
Wymiary gabarytowe



Posa della piastra di fondazione  
**Foundation plate positioning**  
*Montage der Fundamentplatte*  
**Mise en place de la plaque de fondation**  
 Posicionamiento de la placa de alimentación  
**Ułożenie płyty fundamentowej**



Perno d'uscita e fissaggio asta  
**Outlet journal and rod fixing**  
*Ausgangszapfen und Sperrenbefestigung*  
**Pivot de sortie et fixation de la barre**  
 Perno de salida y fijación del asta  
**Sworzeń wyjścia i mocujący poprzeczkę**



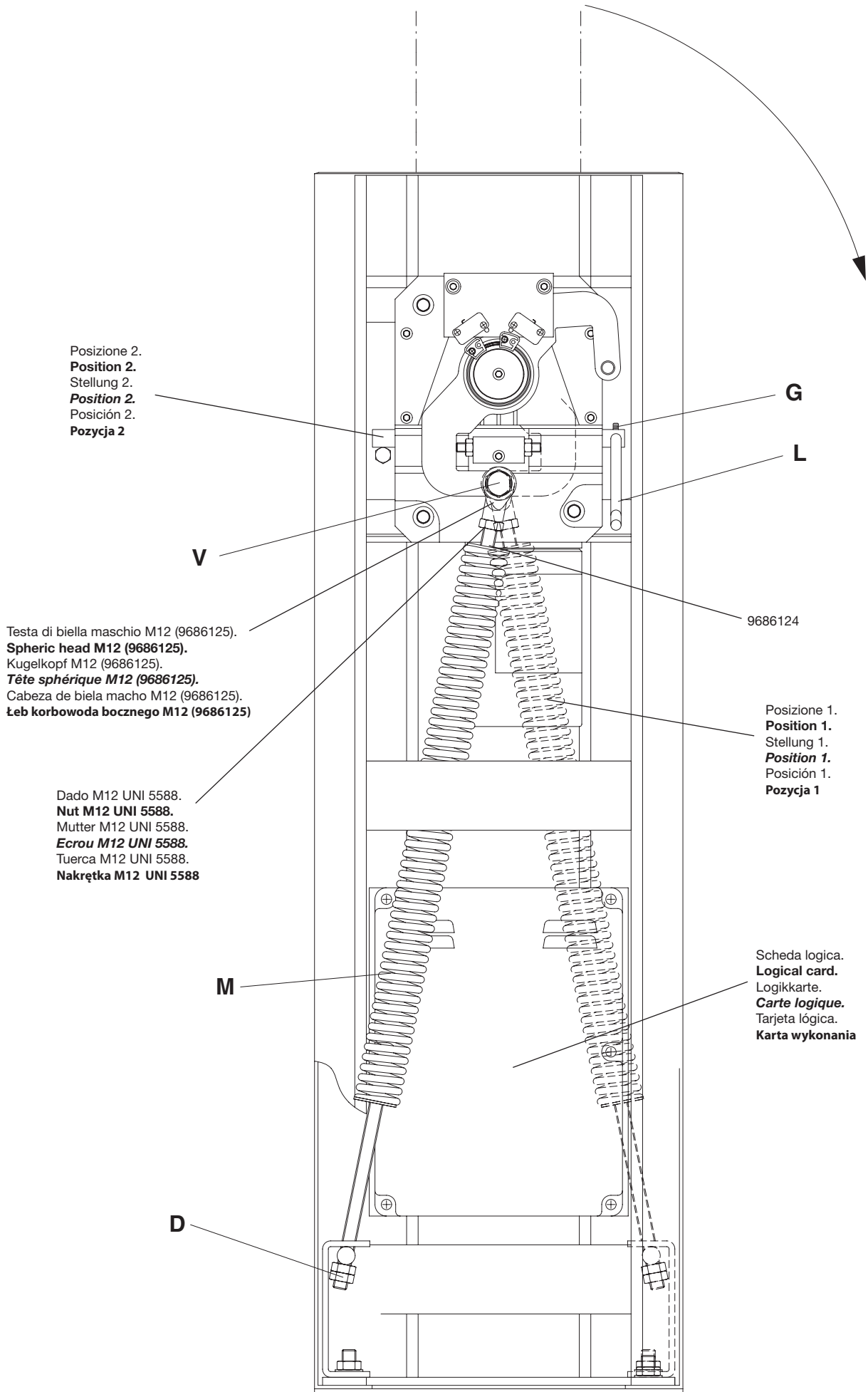


Fig.1

Bandierine azionamento micro.  
**Micro operation flag.**  
 Fähnchen zum Betätigen des Mikroschalters.  
**Pavillons d'actionnement micros.**  
 Balancines accionamiento micro.  
**Chorągiewki sygnalizujące uruchomienie mikro**

Fermo meccanico apertura.  
**Mechanical stop for opening.**  
 Mech. Halt Öffnung.  
**Arrêt mécanique ouverture.**  
 Tope mecánico apertura.  
**Mechanism zatrzymujący otwieranie**

Fermo meccanico chiusura.  
**Mechanical stop for closing.**  
 Mech. Halt Schließung.  
**Arrêt mécanique fermeture.**  
 Tope mecánico cierre.  
**Mechanism zatrzymujący zamykanie**

Leva di sblocco.  
**Release lever.**  
 Freigabehebel.  
**Levier de déblocage.**  
 Palanca de desbloqueo.  
**Dźwignia odsprężająca**

Sblocca.  
**Unblock.**  
 Freigabe.  
**Déblocage.**  
 Desbloqueo.  
**Odblokowanie**

Molla concorrente.  
**Return spring.**  
 Entgegengesetzte Feder.  
**Contre ressort.**  
 Muelle compensador.  
**Sprężyna równoważąca**

Con il motoriduttore sbloccato:

- l'asta tende a chiudere?  
 tensionare la molla avvitando il dado D.
- l'asta tende ad aprire?  
 scaricare la molla svitando il dado D.

**With the ratio motor released:**

- does the rod try to close?  
**Tension the spring by tightening the nut D.**
- does the rod try to open?  
**Release the spring by unscrewing the nut D.**

Bei freigegebenem Getriebemotor:

- neigt die Stange zum Schließen?  
 Feder durch Anschrauben der Mutter D spannen.
- neigt die Stange zum Öffnen?  
 Feder durch Abschrauben der Mutter D entladen.

**Avec le moto réducteur débloqué :**

- **la barre tend à se fermer ?  
 tendre le ressort en vissant l'écrou D.**
- **la barre tend à s'ouvrir  
 décharger le ressort en dévissant l'écrou D.**

Con el motor desbloqueado:

- el asta tiende a cerrar?  
 tensar el muelle enroscando las tuercas D.
- el asta tiende a abrir?  
 destensar el muelle desenroscando las tuercas D.

**Z siłownikiem odsprężonym:**

- **Poprzeczka wykazuje tendencję zamykania?  
 naprężyć sprężynę przez nakręcenie nakrętki D**
- **Poprzeczka wykazuje tendencję otwierania?  
 zluźnić sprężynę odkręcając nakrętkę D**

Scheda logica.  
**Logical card.**  
 Logikkarte.  
**Carte logique.**  
 Tarjeta lógica.  
**Karta wykonania**

D

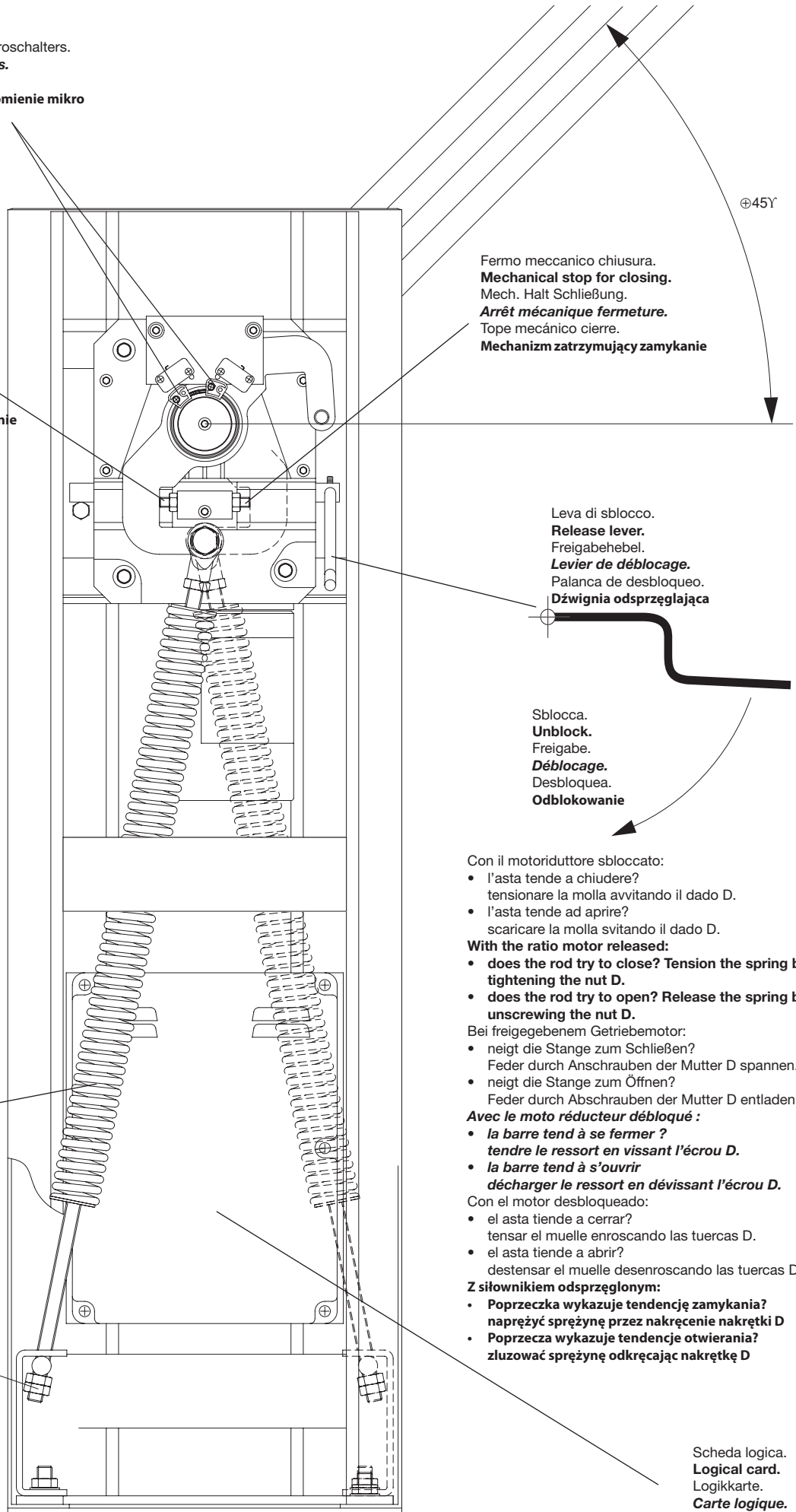
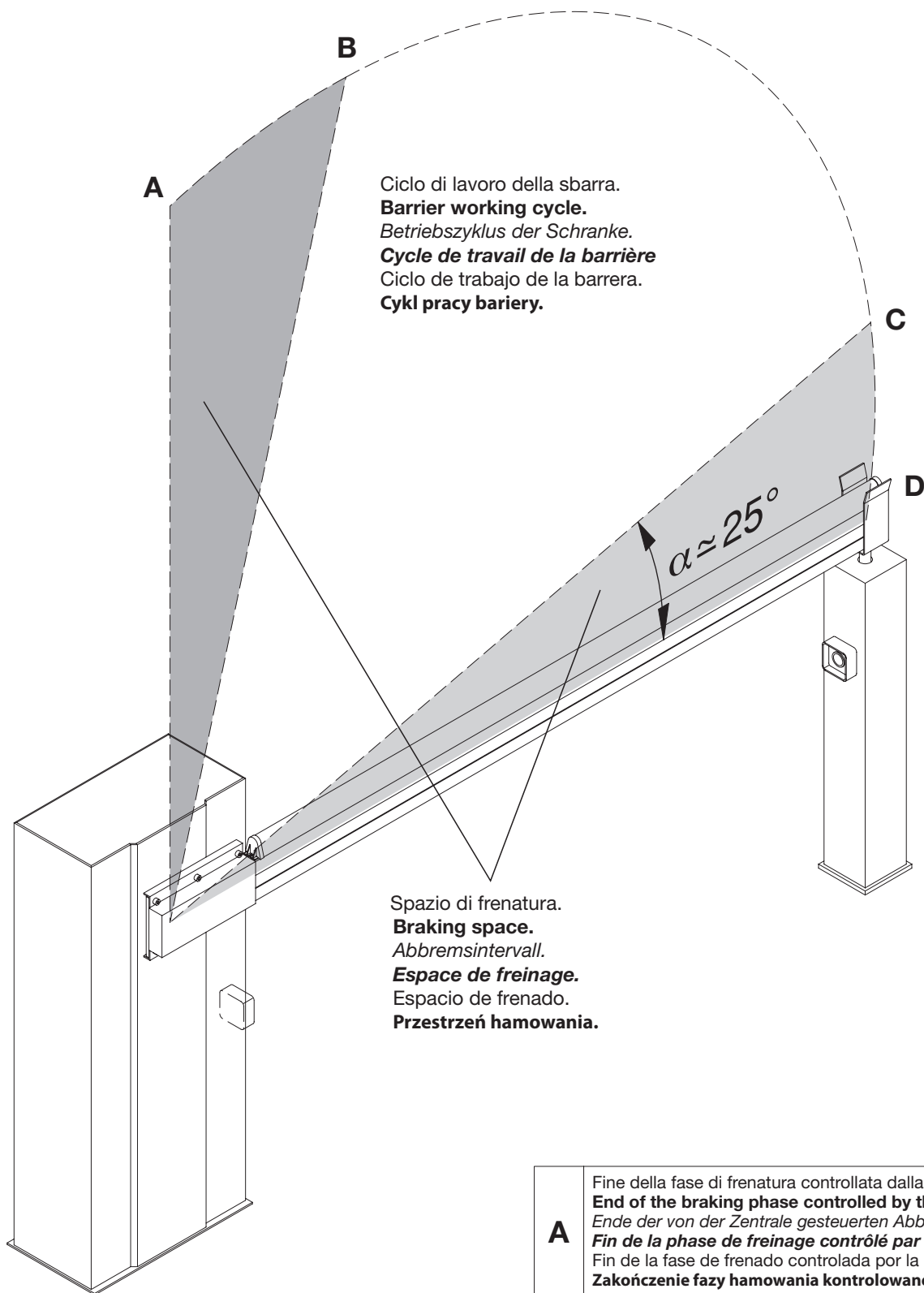


Fig.2



Ciclo di lavoro della sbarra.  
**Barrier working cycle.**  
*Betriebszyklus der Schranke.*  
**Cycle de travail de la barrière**  
 Ciclo de trabajo de la barrera.  
**Cykl pracy bariery.**

Spazio di frenatura.  
**Braking space.**  
*Abbremsintervall.*  
**Espace de freinage.**  
 Espacio de frenado.  
**Przestrzeń hamowania.**

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

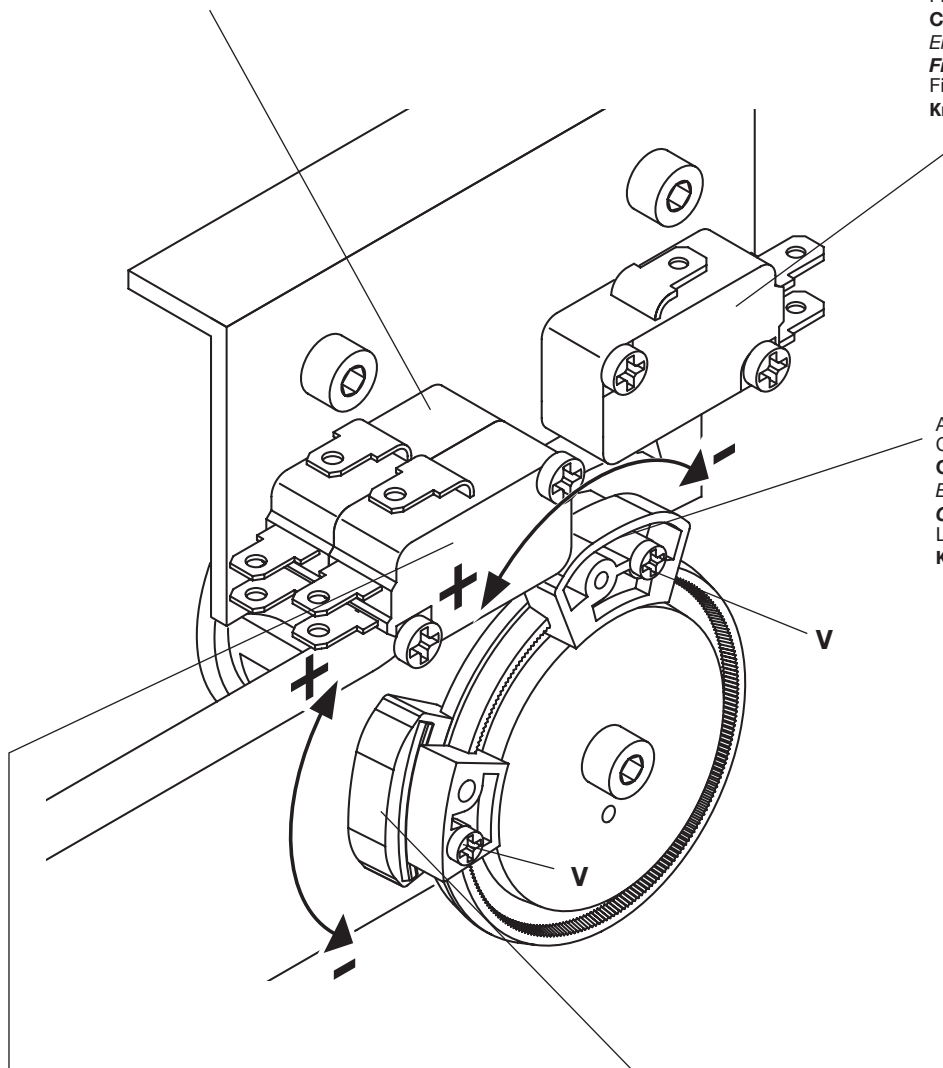
Fig.3



Finecorsa di rallentamento SWC1 (C)  
**Slowing limit stop SWC1(C)**  
*Verlangsamungs-Endschalter SWC1 (C)*  
**Fin de course de ralentissement SWC1 (C)**  
 Fin de carrera de deceleración SWC1 (C)  
**Krańcówka na zwalnianie SWC1 (C)**

<b>+</b>	Anticipa l'azione di rallentamento. <b>Anticipate the slowing action.</b> <i>Vorverlegung der Verlangsamungs.</i> <b>Anticipe l'action de ralentissement.</b> Anticipa la acción de deceleración. <b>Przyspiesza zwalnianie .</b>
<b>-</b>	Posticipa l'azione di rallentamento. <b>Delay the slowing action.</b> <i>Nachverlegung der Verlangsamungs.</i> <b>Retarde l'action de ralentissement.</b> Retarda la acción de deceleración. <b>Opóźnia zwalnianie .</b>

Finecorsa di chiusura SWC2 (D)  
**Closing limit stop SWC2 (D)**  
*Endschalter Schließen SWC2 (D)*  
**Fin de course de fermeture SWC2 (D)**  
 Fin de carrera de cierre SWC2 (D)  
**Krańcówka zamknięcia SWC2 (D)**



**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**

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

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

Fig.4

## Introduction

Thank you for choosing our **VE.250** road gate. All items in the wide Benincà production range are the result of twenty-years' experience in the automatism sector and of continuous research for new materials and advanced technologies. We are, therefore, in the position to offer highly reliable products that due to their power, effectiveness and useful life, fully satisfy the final user's requirements. All our products are manufactured to the existing standard and are covered by warranty. Possible injury to people or accidents caused by defects in construction are covered by a civil liability policy drawn up with one of the major insurance companies.

## General features

The **VE.250** road gates, stout in construction and simply but nicely designed, are suitable to be used intensively and continuously thanks to their 24Vdc motor. Installation is easy as well as the transformation from right to left and viceversa. With its simple manual release it is also ready to accept buffer batteries which permit the gate running also in case there is no electricity.

## Right-left gate pre-arrangement

A road gate is called right when looking at it from the door side, it engages the way on the right side; viceversa it is called left.

Fig. 1 represents a right gate; to transform it into left proceed as follows:

- make sure the spring M is released (positioned as per fig.).
- remove the spring and fix it in position 1 through the screw V and the nuts D
- untighten the grain G and move the lever L and the grain G to position 2.

## Balancing (fig. 2)

For a good road gate operation it is important that the rod is well balanced through the spring action, and to check it, proceed as follows:

- release mechanically the road gate through the release lever.
  - start closing the rod and leave it; the rod will have to be positioned at about 45°.
- Repeat the operation by moving the rod towards the opening position.

If the balancing is not within the limits above mentioned act on the spring load through the nut D.

## Movements and work times (fig. 3)

### 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.

## Regulating the limit stop cams (fig. 4)

The regulation of the limit stop cams allows:

### Cam A

Anticipate or delay the start of the slowing phase in opening (Fig.3- point "B").

### Cam C

Regulate with precision the stopping point in closing (Fig.3 - point "D").

Note: Before activating the closing limit stop (Fig.4 - D), the cam C starts the slowing phase, activating the slowing limit stop (Fig.4 - C).

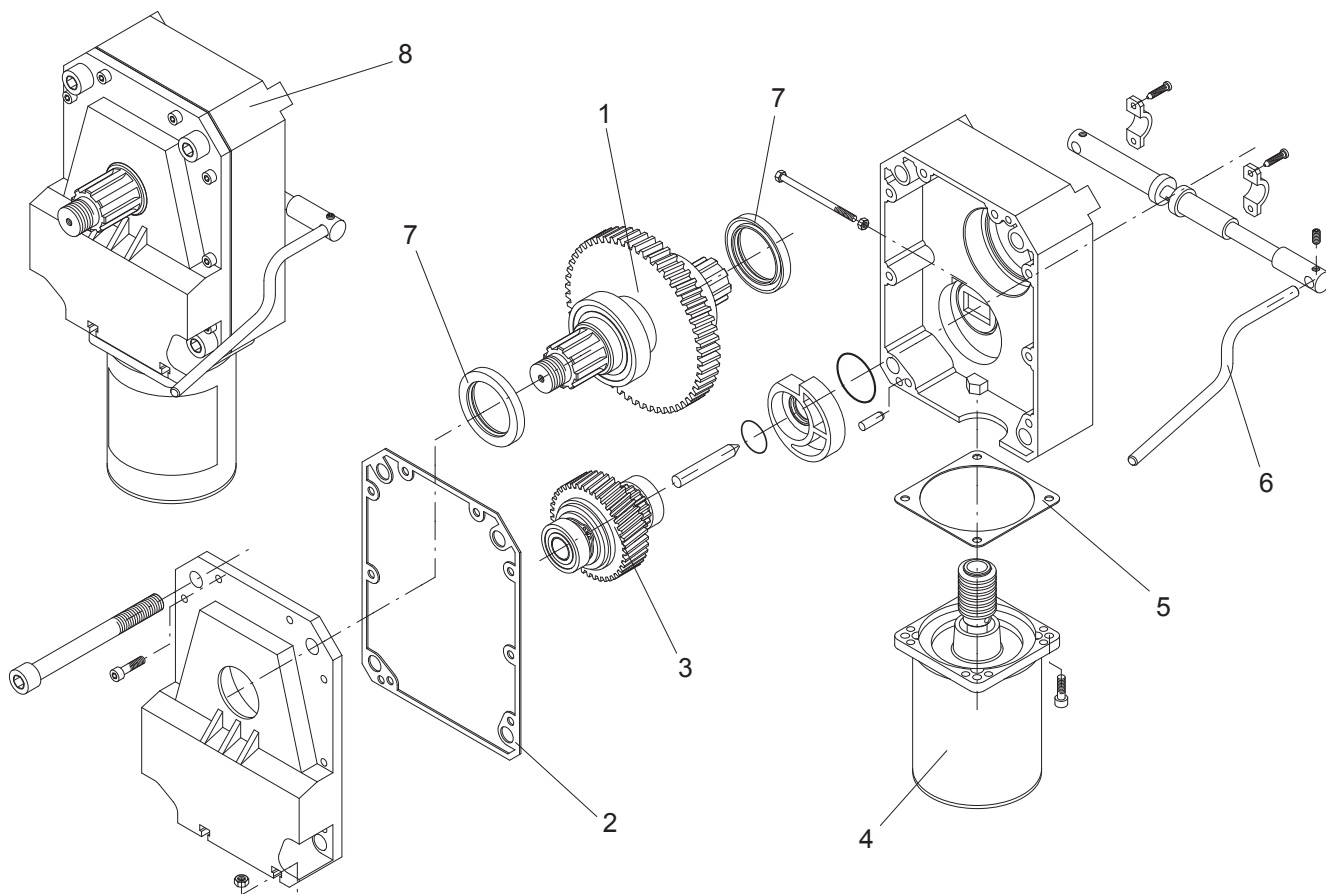
With reference to Fig.4:

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

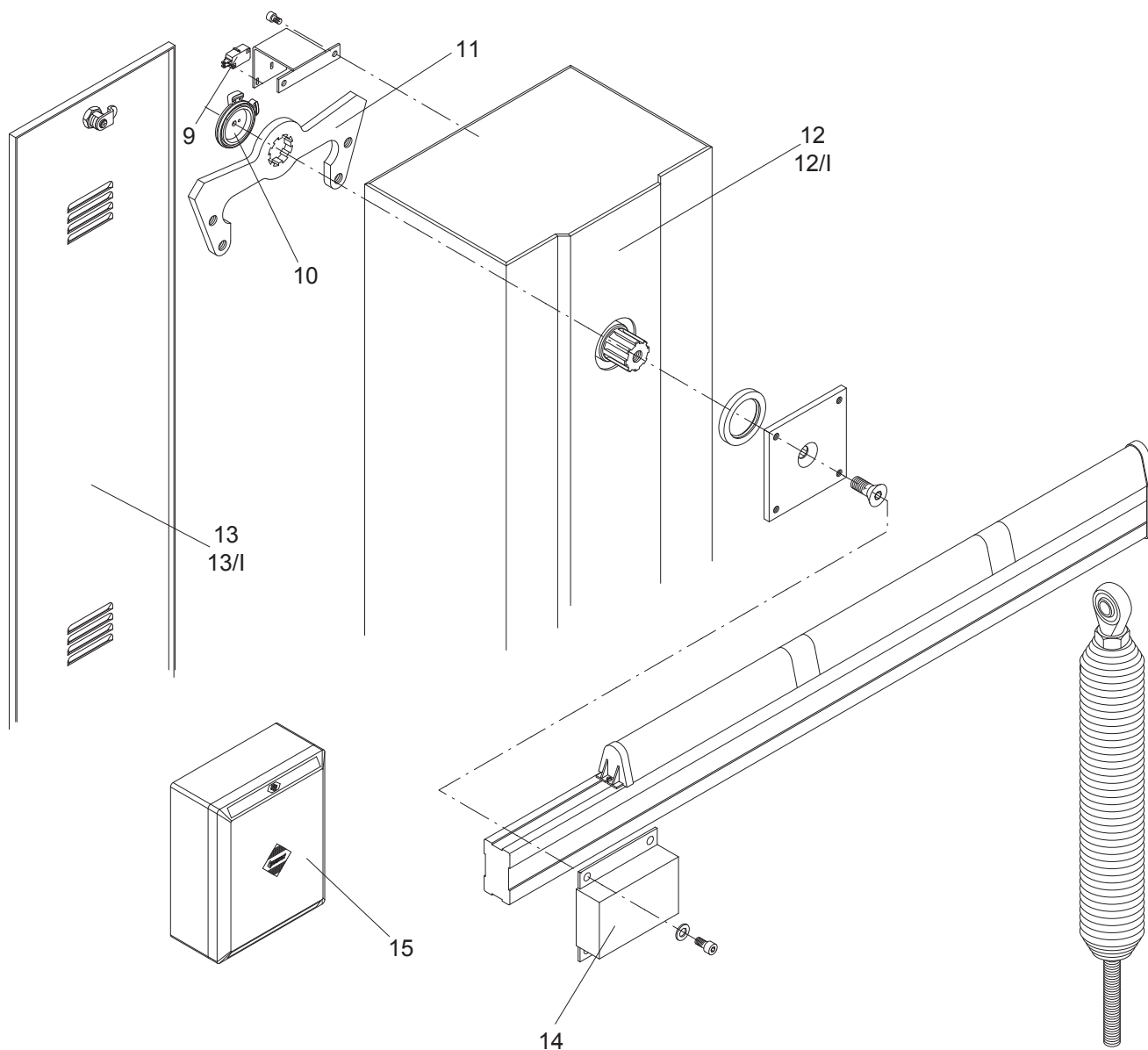
**If necessary, it is possible to transform a right-hand barrier into a left-hand one. In the control unit, invert the motor connections and the limit stops SWC 2 (closing limit stops) and SWC 1 (closing slowing limit stop).**

## CAUTION

The civil liability policy, which covers possible injuries to people or accidents caused by defects in construction, requires the system to be to existing standard and to use original Benincà accessories.



Pos.	Denominazione - Description - Bezeichnung - Dénomination - Denominación - Określenie						Cod.
1	Albero sup. ing.	<b>Gear shaft</b>	<i>Welle</i>	<b>Arbre</b>	Eje soporte	Wał	9686110
2	Guarnizione	<b>Gasket</b>	<i>Dichtung</i>	<b>Guarniture</b>	Junta	Uszczelka	9686112
3	Ingranaggio	<b>Gear and pin</b>	<i>Zahnrad + Stift</i>	<b>Engrenage</b>	Engranaje	Koło zębate	9686970
4	Motore	<b>Motor</b>	<i>Motor</i>	<b>Moteur</b>	Motor	Silnik	9686971
5	Guarnizione	<b>Gasket</b>	<i>Dichtung</i>	<b>Guarniture</b>	Junta	Uszczelka	9686109
6	Prolunga sbloc.	<b>Handle</b>	<i>Handgriff</i>	<b>Manette</b>	Pal. de desbloq.	Przedłużacz	9686108
7	Anello di tenuta	<b>Lip seal</b>	<i>V Ring</i>	<b>Guarniture</b>	Reten	Pierścień uszczel.	9686555
8	Motoriduttore	<b>Motoreducer</b>	<i>Getriebemotor</i>	<b>Moteur-réduct.</b>	Motorreductor	Silnik	9686809



Pos.	Denominazione - Description - Bezeichnung - Dénomination - Denominación - Określenie						Cod.
9	Microinterruttore	<b>Microswitch</b>	<i>Mikroschalter</i>	<b>Microinterrupt.</b>	Microinterruptor	Mikrowyłącznik	9686120
10	Camme	<b>Cams</b>	<i>Nocke</i>	<b>Came</b>	Levas fin. de car.	Krańcówka	9686160
11	Leva	<b>Lever</b>	<i>Hebel</i>	<b>Levier</b>	Palanca	Dźwignia	9686972
12	Colonna	<b>Column</b>	<i>Schenkel</i>	<b>Montante</b>	Caja	Podpora	9686973
12/I	Colonna inox	<b>Column</b>	<i>Schenkel</i>	<b>Montante</b>	Caja inox	Podpora	9686978
13	Porta	<b>Door</b>	<i>Tür</i>	<b>Porte</b>	Puerta	Drzwi	9686974
13/I	Porta inox	<b>Door</b>	<i>Tür</i>	<b>Porte</b>	Puerta inox	Drzwi	9686987
14	Supporto	<b>Support</b>	<i>Lagerung</i>	<b>Support</b>	Soporte asta	Wspornik	9686976
15	Centrale	<b>Elect. gearcase</b>	<i>Schaltanlage</i>	<b>Centrale élect.</b>	Centralita	Centralka elektr.	9686219

**BENINCA<sup>®</sup>**

**AUTOMATISMI BENINCÀ** SpA - Via Capitello, 45 - 36066 Sandrigo (VI) - Tel. 0444 751030 r.a. - Fax 0444 759728

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