

**Instructions for Fitting, Operating and Maintenance**  
Hinge gate operator

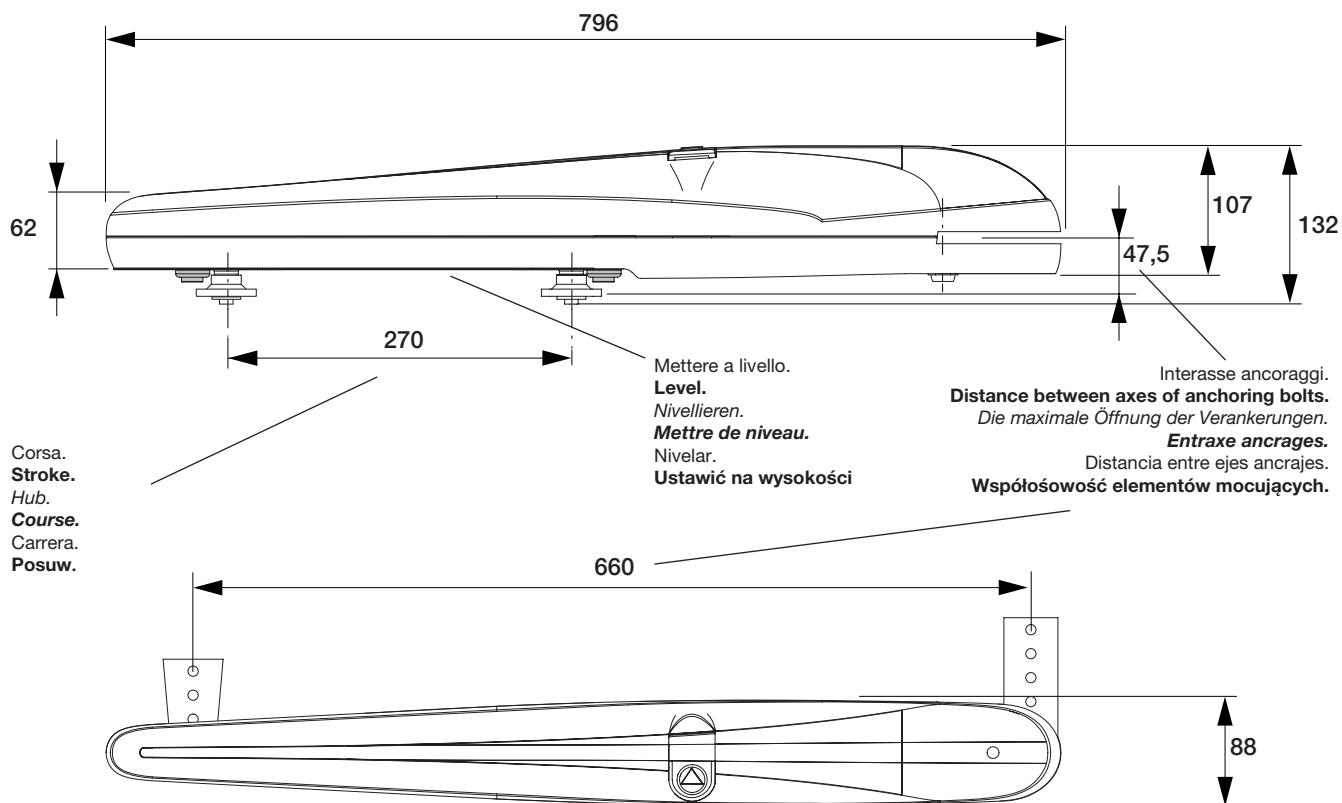
**DX324**



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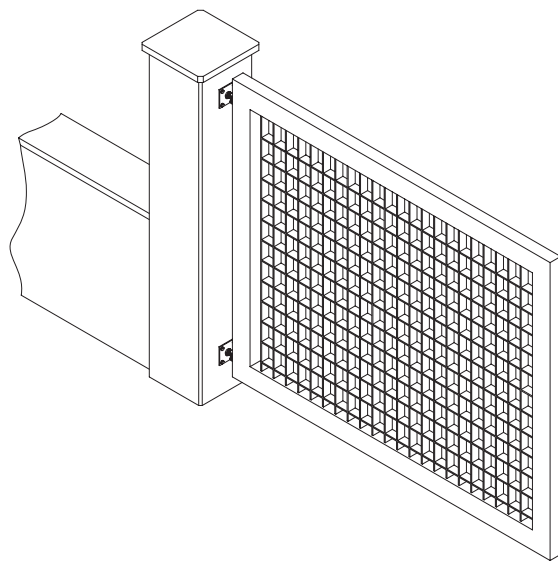
Dimensioni d'ingombro / **Overall dimensions** / *Abmessungen*  
**Dimensions d'encombrement** / Dimensiones exteriores / **Wymiary gabarytowe**



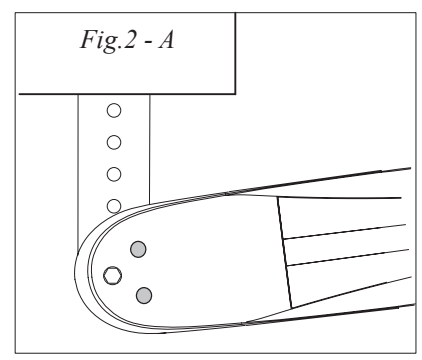
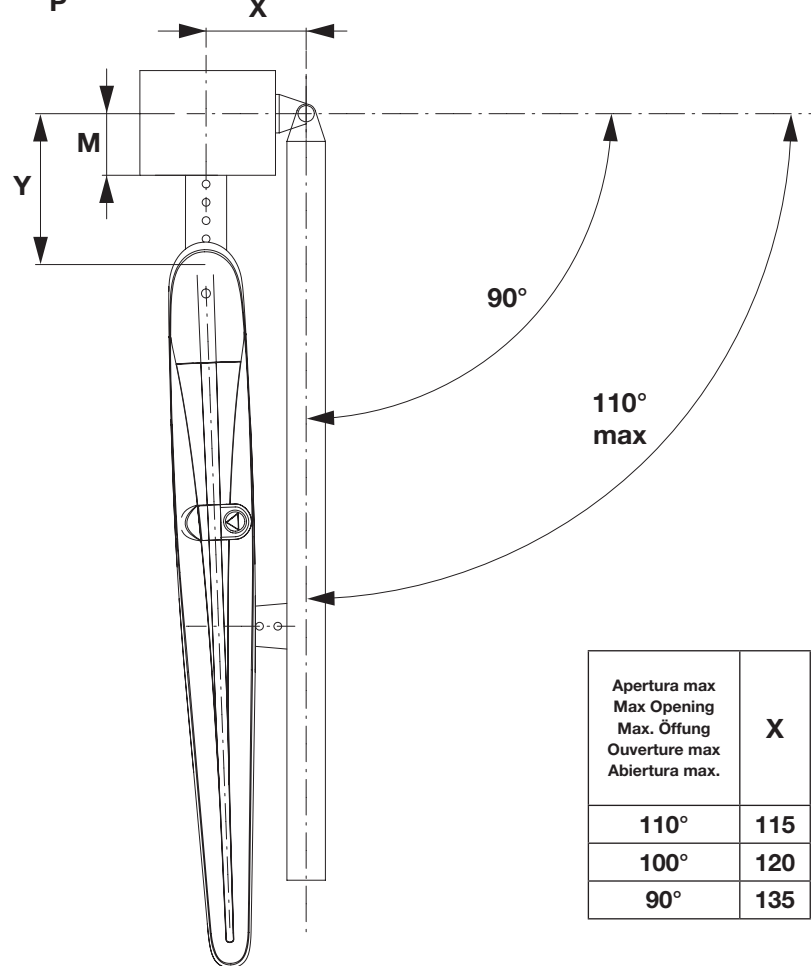
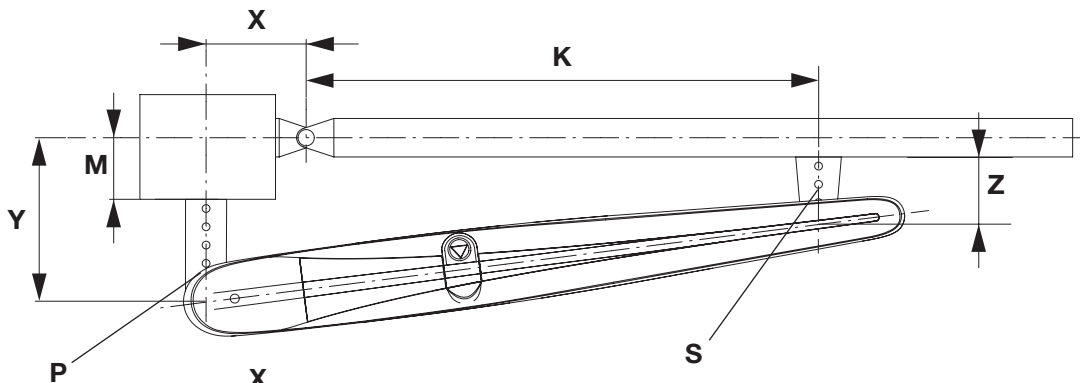
**Lunghezza max. anta / Max. wing length / Max. Flügellänge**  
**Longueur max. porte / Longitud máx. hoja / Dł. max skrzydła bramy**

Lunghezza anta <b>Door leaf width</b> Flügellänge <b>Longueur porte</b> Longitud hoja <b>Dł. skrzydła</b> (m)	Peso anta <b>Door leaf weight</b> Türflügelgewicht <b>Poids porte</b> Peso hoja <b>Ciężar skrzydła</b> (kg)
1	300
1,5	250
2	215
2,1	200
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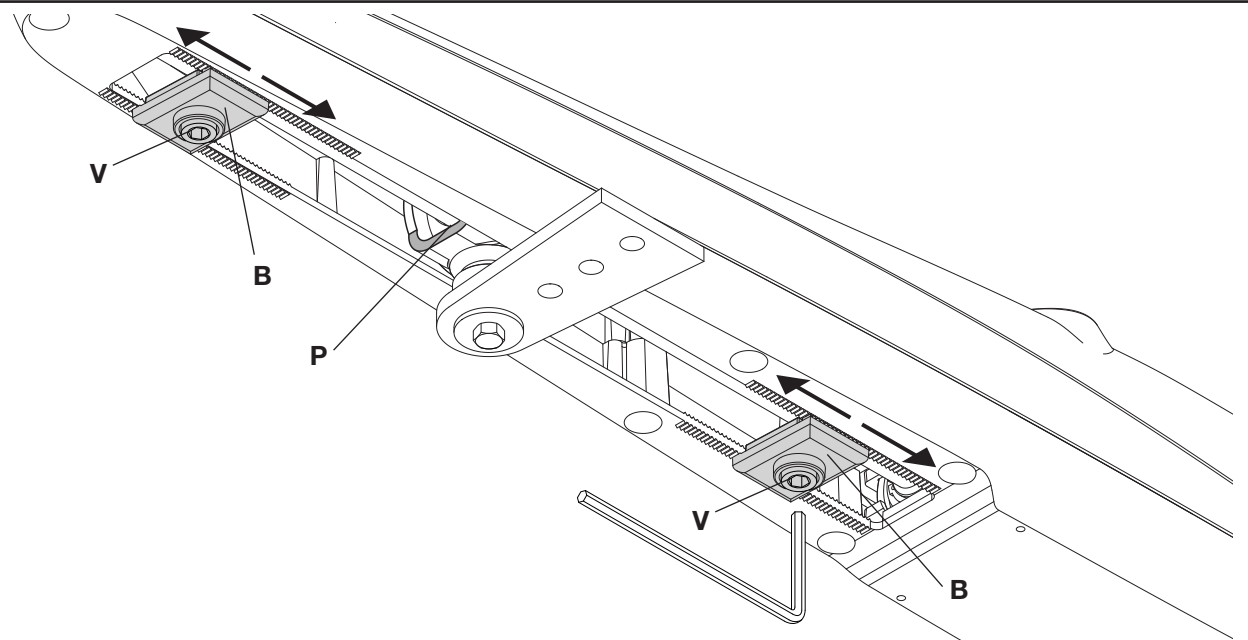
Arresto in apertura.  
**Stop when opening.**  
 Endanschlag zur Öffnung.  
**Arrêt en ouverture.**  
 Tope en apertura.  
**Chwytnak blokujący podczas**  
**otwierania.**

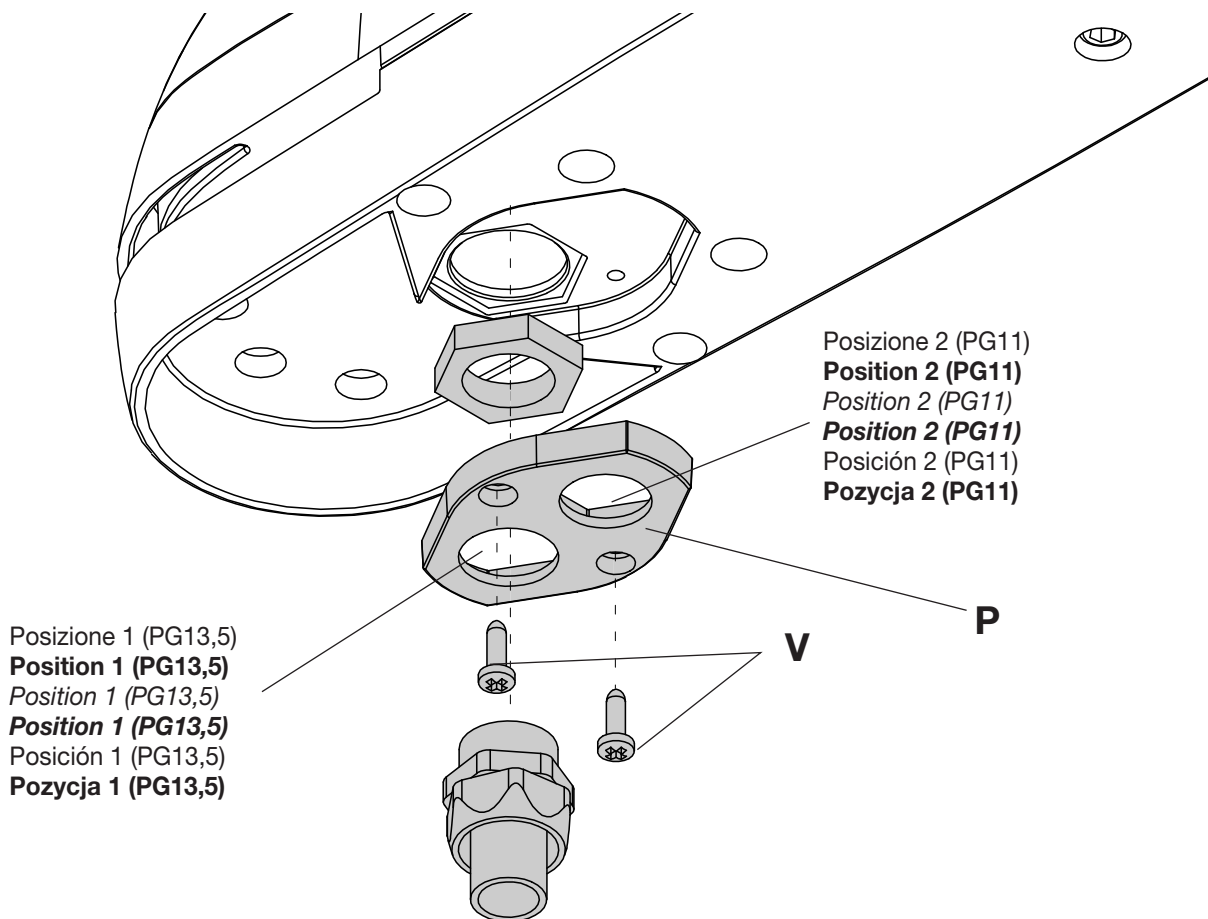
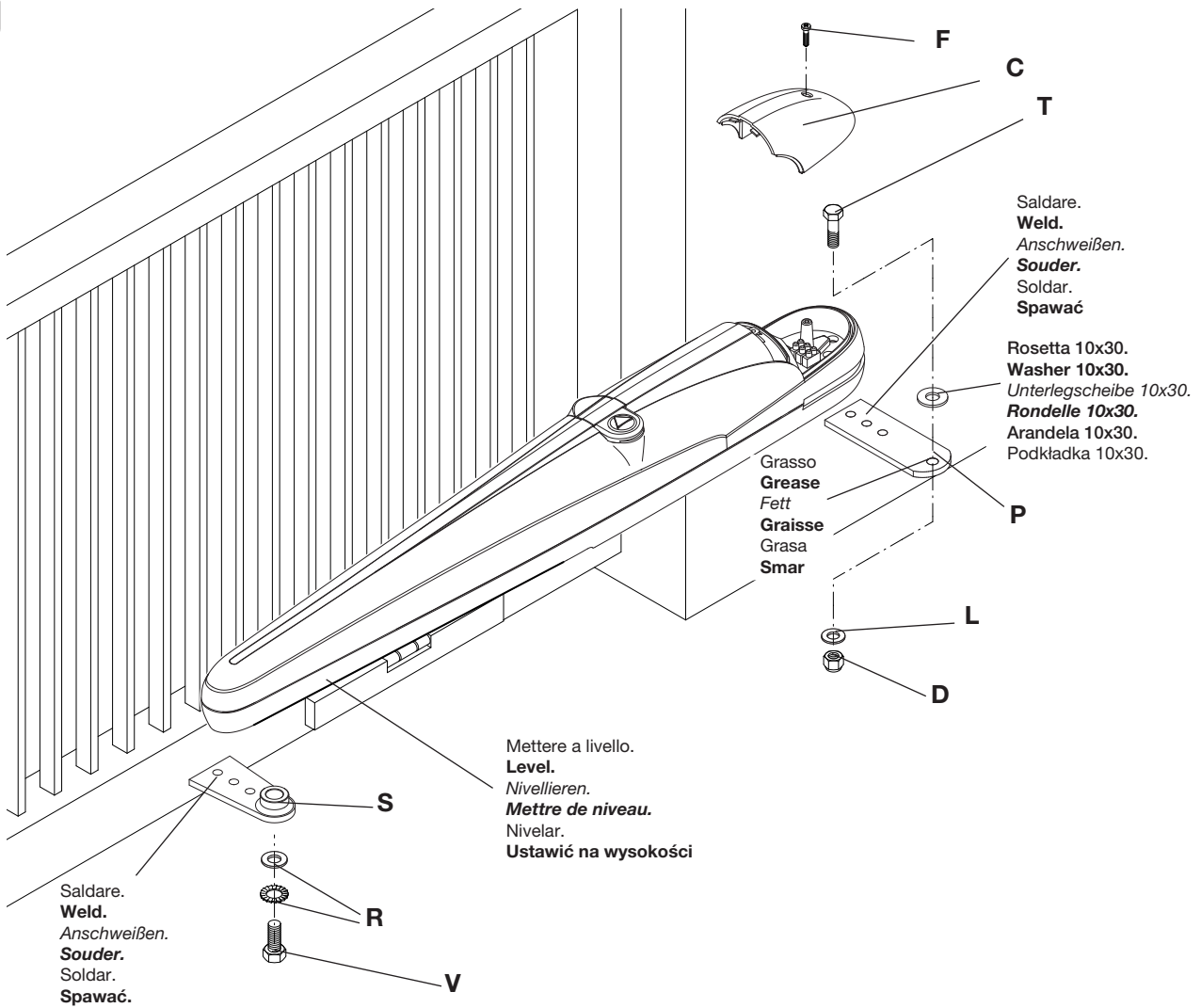


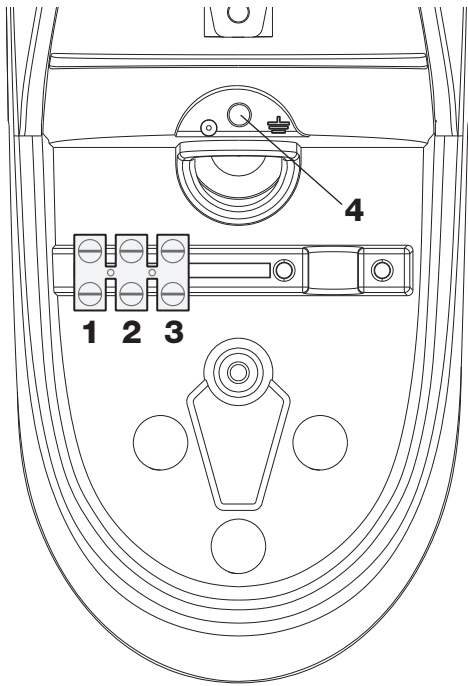
Arresto in chiusura.  
**Stop when closing.**  
 Endanschlag zur Schließung.  
**Arrêt en fermeture.**  
 Tope de cierre.  
**Chwytnak blokujący podczas**  
**zamykania.**



Apertura max Max Opening Max. Öffung Ouverture max Abertura max.	X	Y	Z	K	M* max.	Tempo apertura Opening time Öffungszeit Temps d'ouverture Tiempo de abertura Prędkość kątowna (90°)
110°	115	105	80	545	50	15"
100°	120	120	80	540	70	16"
90°	135	135	80	525	80	19"

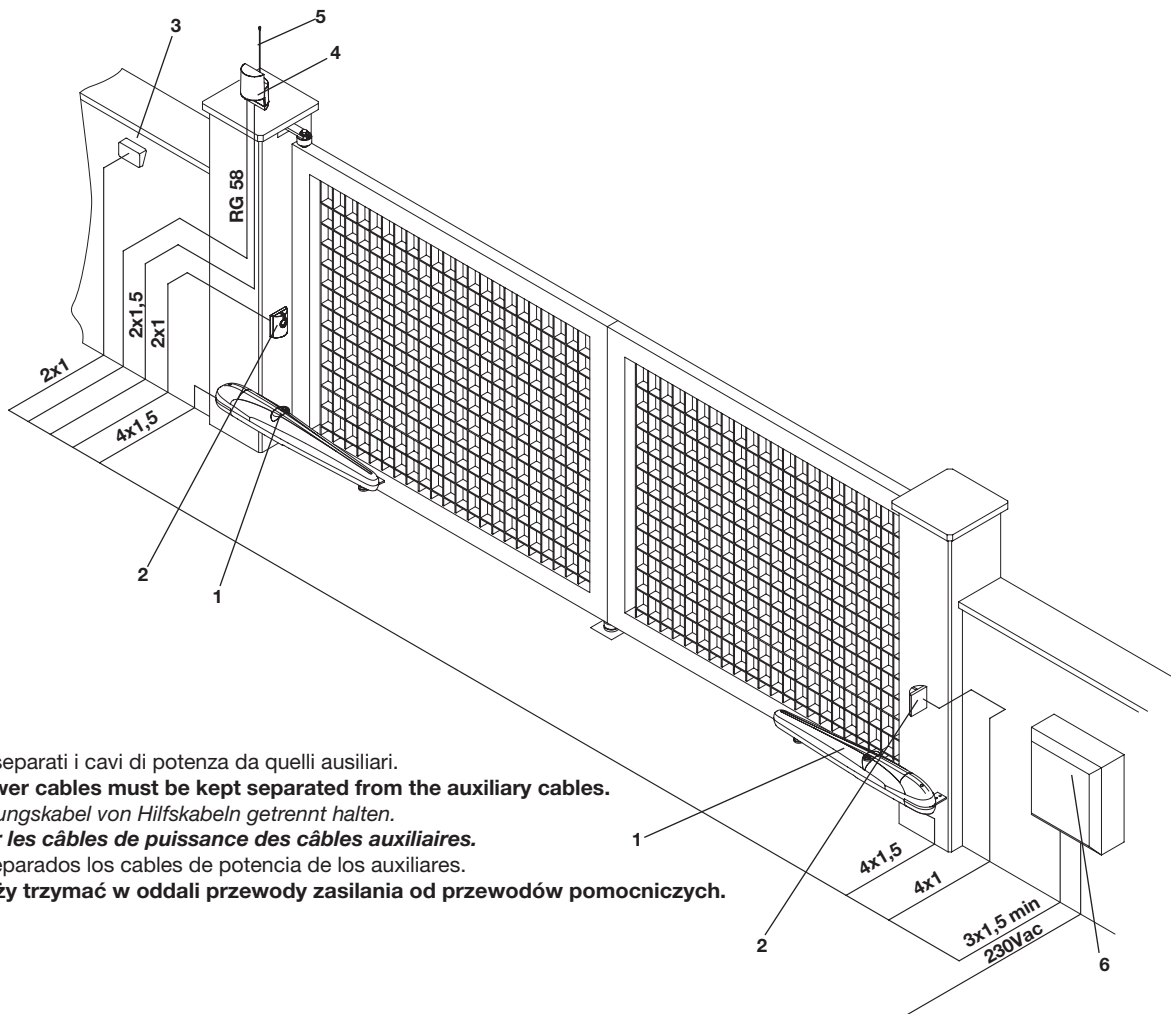






1	Marcia motore e condensatore.	Motor gear and capacitor.	<i>Motorgang und kondensator.</i>	<i>Marche moteur et condensateur.</i>	Marcha motor y condensador.	Bieg silnika i praca kondensatora
2	COM	COM	<i>COM</i>	<i>COM</i>	COM	COM
3	Marcia motore e condensatore.	Motor gear and capacitor.	<i>Motorgang und kondensator.</i>	<i>Marche moteur et condensateur.</i>	Marcha motor y condensador.	Bieg silnika i praca kondensatora
4	GND	GND	<i>GND</i>	<i>GND</i>	GND	GND

Collegamenti elettrici / **Wire diagram** / *Elektrische Anschlüsse*  
**Branchements électriques** / Conexiones eléctricas / **Połączenia elektryczne**



N.B.: Tenere separati i cavi di potenza da quelli ausiliari.

**N.B.: The power cables must be kept separated from the auxiliary cables.**

*Wichtig: Leistungskabel von Hilfskabeln getrennt halten.*

**N.B.: Séparer les câbles de puissance des câbles auxiliaires.**

N.B.: Tener separados los cables de potencia de los auxiliares.

**Uwaga: należy trzymać w oddali przewody zasilania od przewodów pomocniczych.**

**Legenda:**

- 1 Motoriduttore
- 2 Fotocellule
- 3 Selettore a chiave (da esterno) o tastiera digitale
- 4 Lampeggiante
- 5 Antenna
- 6 Centrale elettronica.

**Legenda:**

- 1 Motoreducer**
- 2 Photo-electric cells**
- 3 Key selector (external) or digital keyboard**
- 4 Flash-light**
- 5 Antenna**
- 6 Electronic board.**

*Zeichenerklärung:*

- 1 *Getriebemotor*
- 2 *Fotozelle*
- 3 *Schlüssel-Selektor (außenliegend) oder Digital-Tastatur*
- 4 *Blinker*
- 5 *Antenne*
- 6 *Elektroschrank.*

**Légende:**

- 1 Moteur-réducteur**
- 2 Photocellule**
- 3 Selecteur à clé (d'extérieur) ou clavier digital**
- 4 Clignotant**
- 5 Antenne**
- 6 Centrale électronique.**

**Leyenda:**

- 1 Motorreductor
- 2 Fotocélulas
- 3 Selectores a llave (de superficie).
- 4 Relampagueador.
- 5 Antena
- 6 Central electrónica.

**Objaśnienia:**

- 1 Siłownik**
- 2 Fotokomórki**
- 3 Przełącznik kluczowy (zewnętrzny) lub panel z przyciskami**
- 4 Światło migające**
- 5 Antena**
- 6 Centralka elektroniczna.**

# WARNING

The product shall not be used for purposes or in ways other than those for which the product is intended for and as described in this manual. Incorrect uses can damage the product and cause injuries and damages.

The company shall not be deemed responsible for the non-compliance with a good manufacture technique of gates as well as for any deformation, which might occur during use.

Keep this manual for further use.

Qualified personnel, in compliance with regulations in force, shall install the system.

Packaging must be kept out of reach of children, as it can be hazardous. For disposal, packaging must be divided the various types of waste (e.g. carton board, polystyrene) in compliance with regulations in force.

The installer must supply all information on the automatic, manual and emergency operation of the automatic system and supply the end user with instructions for use.



An omnipolar switch/section switch with remote contact opening equal to, or higher than 3mm must be provided on the power supply mains.. Make sure that before wiring an adequate differential switch and an overcurrent protection is provided.

Pursuant to safety regulations in force, some types of installation require that the gate connection be earthed.

During installation, maintenance and repair, cut off power supply before accessing to live parts.

Descriptions and figures in this manual are not binding. While leaving the essential characteristics of the product unchanged, the manufacturer reserves the right to modify the same under the technical, design or commercial point of view without necessarily update this manual.

## Introduction

- Before installing the system, read the instruction herein.
- It is mandatory not to use the BOB item for applications different from those indicated in the instructions herein.
- Supply the end user with instructions for using this system.
- The end user should receive special instruction manual.
- All Benincà items are covered by an insurance policy for damages and injuries caused by manufacture faults. It is however required that the machine bear the CE marking and original Benincà parts be used.

## General information

To ensure a good operation of these automatic devices, the gate to be automated should meet the following requirements:

- good strength and stiffness.
- hinges should have a minimum backlash and allow for smooth and regular manual operations.
- when closed, the gate leaves should correctly overlap for their entire height.

As the actuator is not supplied with electromagnetic limit switches, it is indispensable to provide mechanical stops on closing and opening on the gate that is to be automated (fig.1)

## Fitting the automatic system

Stabilise the height of the automatic system above ground level (it should be as central as possible with respect to the gate and corresponding to a sturdy cross piece).

Then weld the plate P respecting the distances in fig. 2.

When the gate is closing, weld the bracket S respecting the distance in fig. 2, onto a cross piece of the gate or another suitably robust element; bear in mind that in this condition the actuator must not be completely at the end of travel.

Remove the protective cover C unscrewing the screw F, then fix the actuator to the plate P with the screw T, the washer L and the nut D (fig. 3).

Lastly block the actuator on the plate S with the screw V and the washer R.

The holes in the actuator (fig.2A) help you respect the optimum installation distances.

The adjustable fixing brackets, available on request, allow a wider possibility of adapting the actuator to the different installation conditions, also avoiding cutting and welding the brackets supplied.

## How to adjust the mechanical stoppers

The actuator is provided with adjustable mechanical stoppers in the opening and closing phases. The system is adjusted by suitably positioning the "Open" and "Close" mechanical locks, as shown hereunder (Fig.2):

- 1) Unlock the automatic system by using the special

release lever, as shown in the instructions for the user (page 21-22).

- 2) Close the door/gate leaf.
- 3) Loosen screws V1 and move the "Close" lock until it reaches the pivot P, then tighten screws V1.
- 4) Open the door/gate leaf.
- 5) Loosen screws V2 and move the "Open" lock until it reaches the pivot P, then tighten screws V2.
- 6) Reset the automatic operating mode.

## Connections

- 1) The special plate P (Fig. 5) allows for using a link for sheath or cable gland PG11, or PG13,5. Once the type of cable gland is applied to the plate, fix the latter to the adaptor cover by means of screws V.
- 2) It is mandatory to provide for ground by using the special GND terminal.

## WARNING

The insurance policy, which covers any damages or injuries caused by manufacture faults, requires that the installation comply with regulations in force and Benincà original accessories be used.

TECHNICAL DATA	DX324
Power supply	230Vac 50/60Hz
Absorbed current	1,5 A
Thrust	1800 N
Jogging	30%
Protection degree	IP44
Operating temperature	-20°C / +50°C
Capacitor	9 µF
Useful stroke: - with 2 stoppers - without stoppers	270 mm 325 mm
Noise level	<70 dB
Lubrication	Permanent grease
Weight	8,2 kg



# 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 manoeuvre

In the event of a power cut or breakdown, proceed as follows to operate the wings manually (refer to figures A,B,C):

- Open the protective door of the release mechanism (fig. A).
- Insert the special release key supplied and turn it through 90°, as indicated in fig. B for a right actuator or as indicated in fig. C for a left actuator.
- It is now possible to open/close the wing manually.
- To restore automatic operation, return the release key to its initial position.
- Remove the release lever and close the protective door.

## 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



As indicated by the symbol shown, it is forbidden to dispose this product as normal urban waste as some parts might be harmful for environment and human health, if they are disposed of incorrectly. Therefore, the device should be disposed in special collection platforms or given back to the reseller if a new and similar device is purchased. An incorrect disposal of the device will result in fines applied to the user, as provided for by regulations in force.

## 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.

Fig.A

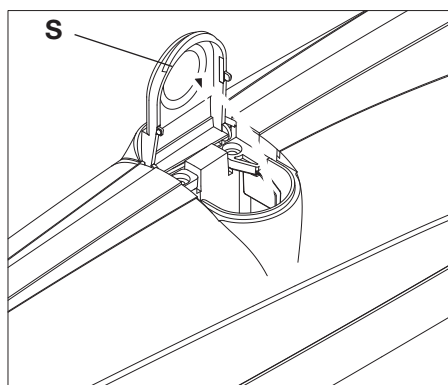


Fig.B

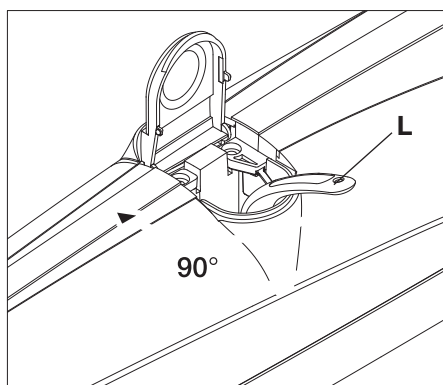
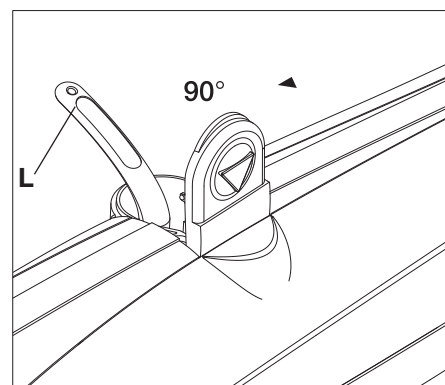
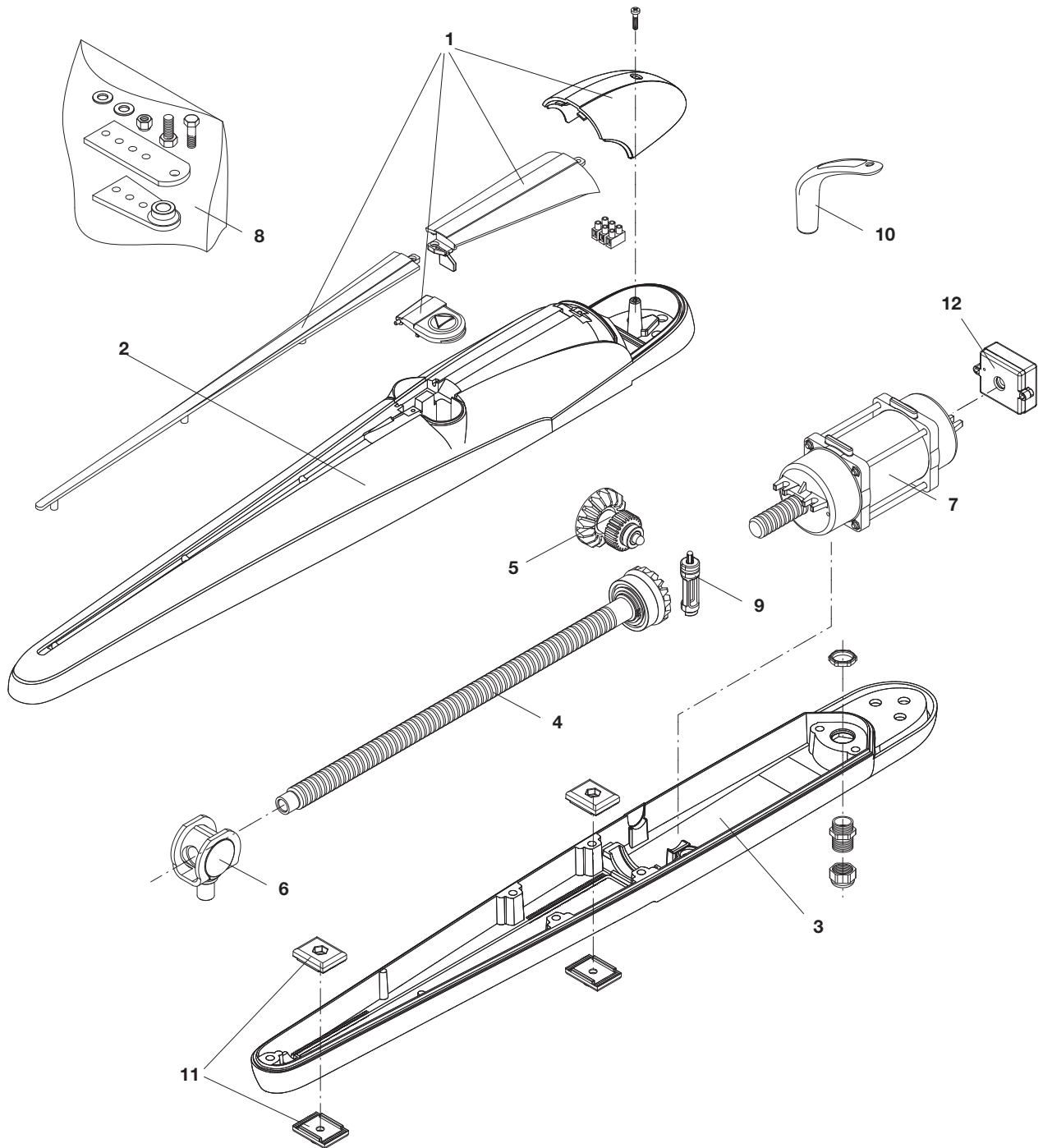


Fig.C





instructions for fitting, operating and maintenance  
Hinge gate operator

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