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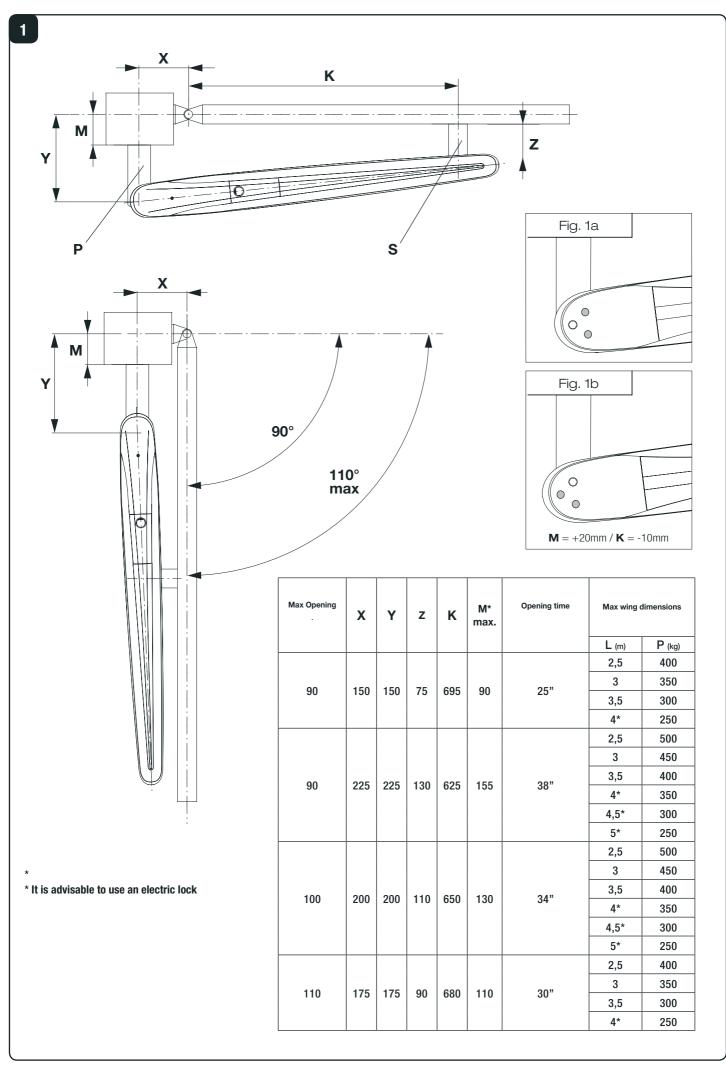
Sentinel BOB50 Linear Swing Gate Operator v03/23

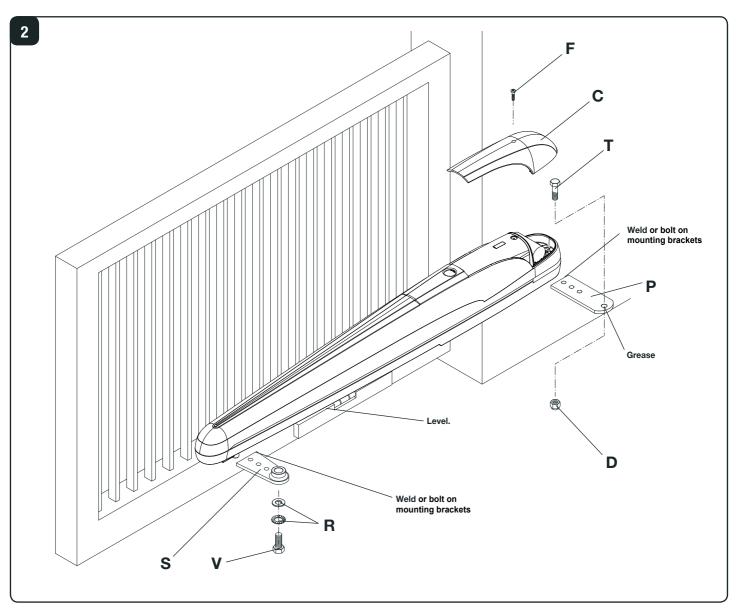
Installation Instructions

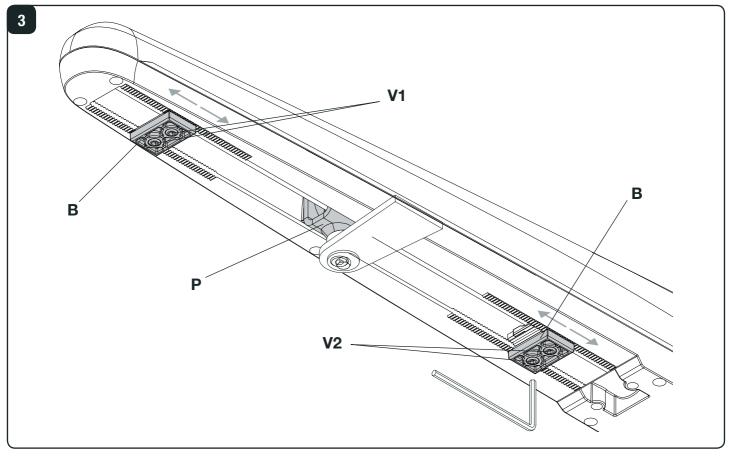


Please read these instructions fully before installing

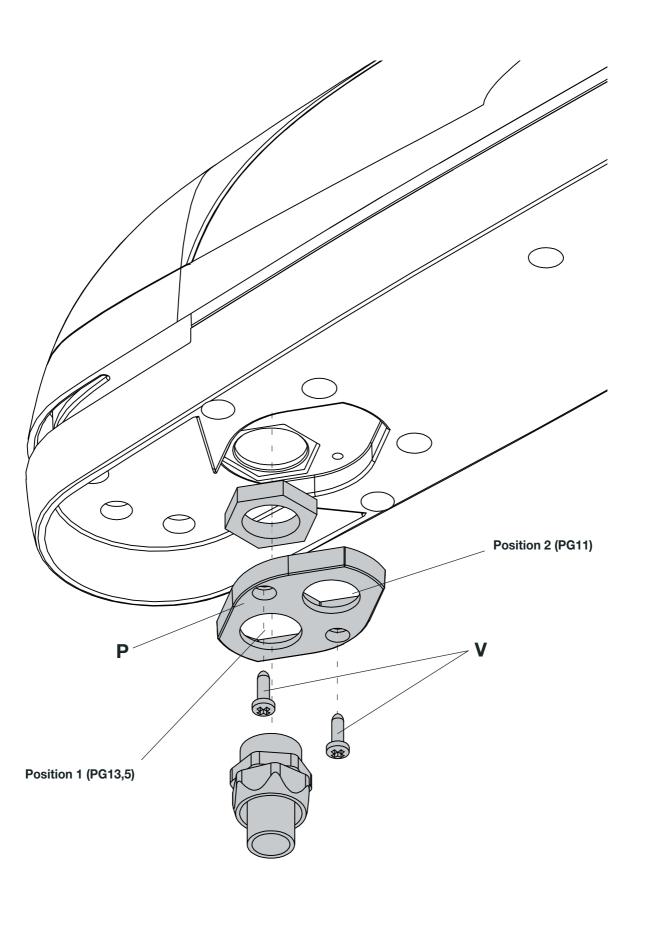
Overall dimensions 455 / 485 / 520

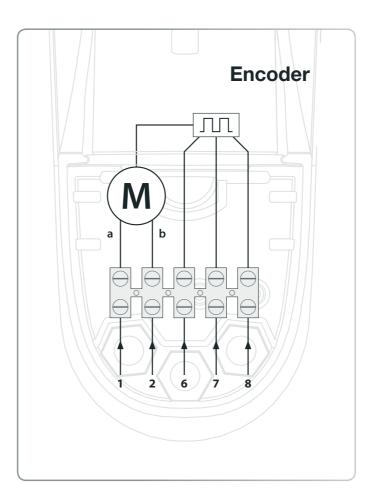






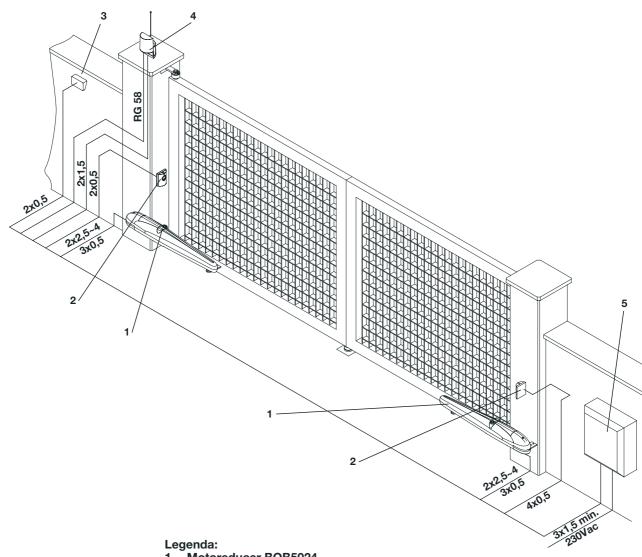






1	M+
2	M-
3	СОМ
4	FC0
5	FCC
6	ENCODER signal
7	ENCODER positive
8	ENCODER negative
a	Black wire
b	Red wire

Wire diagram



- Motoreducer BOB5024
- Photo-electric cells FTC/FTM
- Key selector CH/TO.KEY (external) 3 or digital keyboard Flash-light LAMPI24
- Electronic board BRAIN24.

The power cables must be kept separated from the auxiliary cables. For cable length lower than 5m, use a cable 2x2.5sqmm. For cable length from 5 to 10 m use a cable 2x4sqmm. Cables longer than 10m are not recommended to connect control unit and motor.

EC Declaration of Conformity

Manufacturer: Automatismi Benincà SpA.

Address: Via Capitello, 45 - 36066 Sandrigo (VI) - Italia

Herewith declares that: the operator for hinged gates model **BOB5024** / **BOB5024E**.

is complying with provisions set forth by the following other EC Directive:

- DIRECTIVE 2004/108/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 December 2004, on the harmonisation of the laws of Member States relating to electromagnetic compatibility and which cancels Directive 89/336/EEC, according to the following harmonised regulations: EN 61000-6-2:2005, EN 61000-6-3:2007.

Benincà Luigi, Legal responsible. Sandrigo, 10/06/2010.

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 524 / BOB 524E 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.

How to install the automatic system

Calculate the height of the system from the ground (it is advisable to define a position as much centred as possible with respect to the main door and in correspondence with a strong cross girder). Weld the plate P, following measures in Fig. 1.

With the door closed, weld bracket S to a cross beam of the main door or other element with equal strength, according to measures shown in Fig. 1. Keep in mind that, when carrying out this operation, the actuator should not be totally in a stroke end position.

Remove the cover C by loosening the screw F. Then fix the actuator to the plate P by means of the screw T and the nut D (Fig. 2). Lock the actuator to plate S by means of screw V and washer R.

The holes in the acturator (Fig. 1a-1b) help to keep to the optimum installation measures.

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.3):

- 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.

In the BOB 524 version, two limit micro-switches are provided fixed to the mechanical stoppers.

The micro-switches trigger slightly in advance with respect to the mechanical stop.

Connections

- 1) The special plate P (Fig. 4) 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) BOB 524: carry out the wiring by referring to the wire diagram shown in Fig 5a.
- 3) BOB 524E: carry out the wiring by referring to wire diagram shown in Fig 5b.
- 4) It is <u>mandatory</u> to provide for ground by using the special GND terminal.

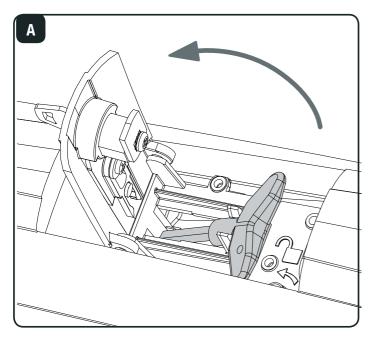
WARNING

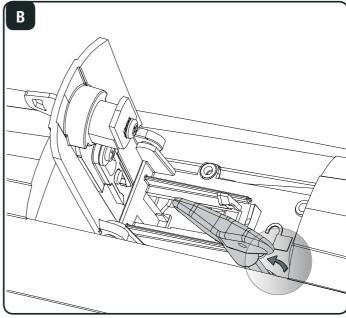
The insurance policy, which covers any damages or injuries caused by manufacture faults, requires that the installation comply with regulations in force and Benincà original accessories be used.

TECHNICAL DATA	BOB5024 BOB5024E
Power supply	24Vdc
Absorbed rating	120 W
Absorbed current	6 A
Thrust	2000 N
Jogging	intensive
Protection degree	IP44
Operating temperature	-20°C / +70°C
Door leaf max. weight	500 kg
Useful stroke: - with 2 mechanical stoppers - with 1 mechanical stopper - without mechanical stoppers	455 mm 485 mm 520 mm
Translation speed	0,8 m/min
Noise level	<70 dB
Lubrication	Permanent grease
Weight	11,6 kg

User's handbook for the user

BOB5024





Safety rules

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

Manual and emergency operation

In the event of power failure or fault, to manually open and close the door/gate, proceed as follows:

- open the protection door of the release device (Fig. A);
- introduce the special release key supplied and turn it by 90°, as shown by the arrow on the removable cover highlighted in Figure B:
- now the door can be opened/closed by hand;
- to reset the automatic operation, move the release key to the initial position;
- •remove the release lever and close the protection 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

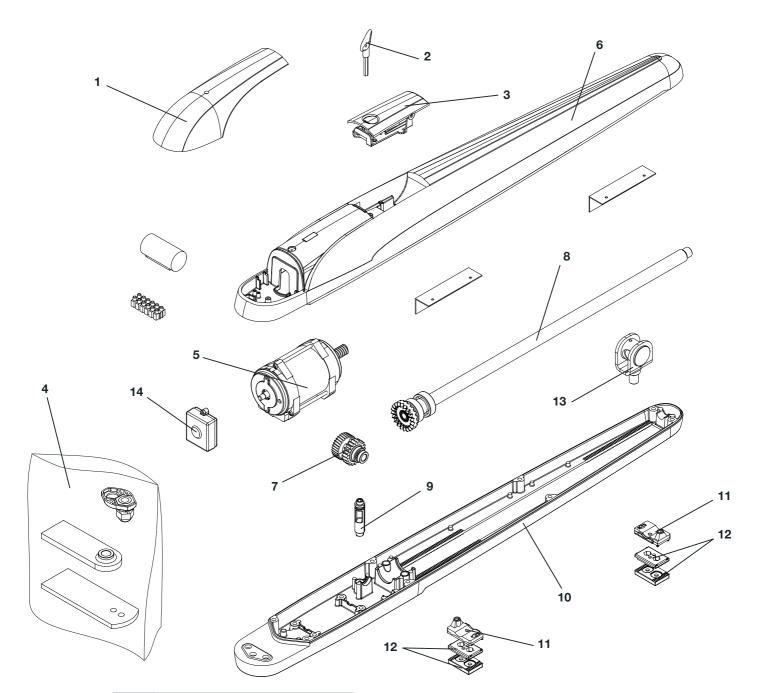
As indicated by the symbol shown, it is forbidden to dispose this product as normal urban waste as some parts might be harmful for environment and human health, if they are disposed of incorrectly. Therefore, the device should be disposed in special collection platforms or given back to the reseller 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.



n°	Description	Cod.
1	Plastic cover	9686630
2	Release lever	9686631
3	Unblock. group	9686632
4	Blister	9686633
5	Motor	9686643
6	Upper cover	9686635
7	Gear	9686636
8	Worm screw	9686637
9	Lock with pin	9686638
10	Lower cover	9686639
11	Limit stop (Only BOB 524)	9686640
12	Locks	9686641
13	Wormscrew supp.	9686642
14	Encoder (Only BOB 524E)	9686516

BOB5024 / BOB5024E