

## **SATURN**

**400-600-1000-2000 (230V-115V)**

**1500 24V (230V-115V)**

**1200 24V FAST**

**500 SUPER FAST 24V (230V)**

## **BOXER**

**1000 - 2000**

**2000 Threephase**

### **MOTOR REDUCERS FOR SLIDING GATES**



**MANUALE D'INSTALLAZIONE**  
ed informazioni sulla sicurezza

**INSTALLATION MANUAL**  
and Security Information

**SEA S.p.A.**

Zona industriale Sant'Atto - 64020 Teramo - (ITALY)

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[www.seateam.com](http://www.seateam.com)

[seacom@seateam.com](mailto:seacom@seateam.com)

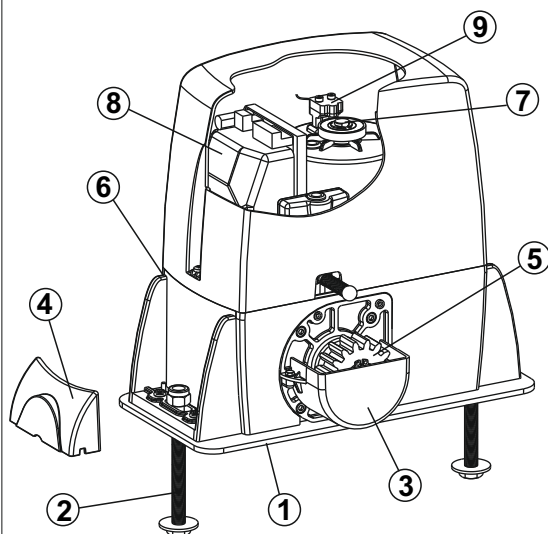
## GENERAL FEATURES

The **SATURN** and the **BOXER** are motor reducers designed for the automation of sliding gates with **grease** lubrication or in **oil bath**, depending on the versions.

The irreversibility of the motor reducers allows a perfect and safe gate closing, and makes the installation of an electric lock unnecessary. In case of electric power cut, the lock device placed on the front part of the motor reducer allows the manual opening and closing. The operators are equipped with an electronic clutch device and **adjustable mechanical clutch (if present)**, which provides an adjustment of the thrust on the gate, furthermore the **electronic inversion system (optional)** through **encoder** makes out of the Saturn and Boxer motor reducers a safe and reliable operators allowing in a simple way to respect the laws in force in the country where the product will be installed.

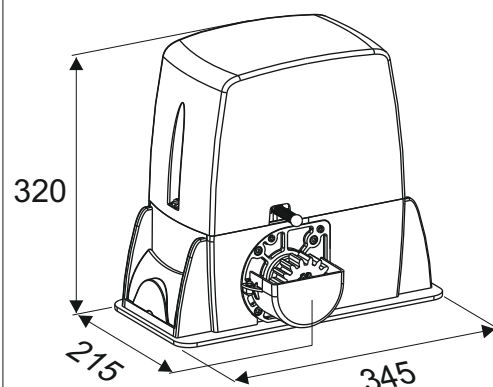
### MAIN COMPONENTS

Example: Saturn

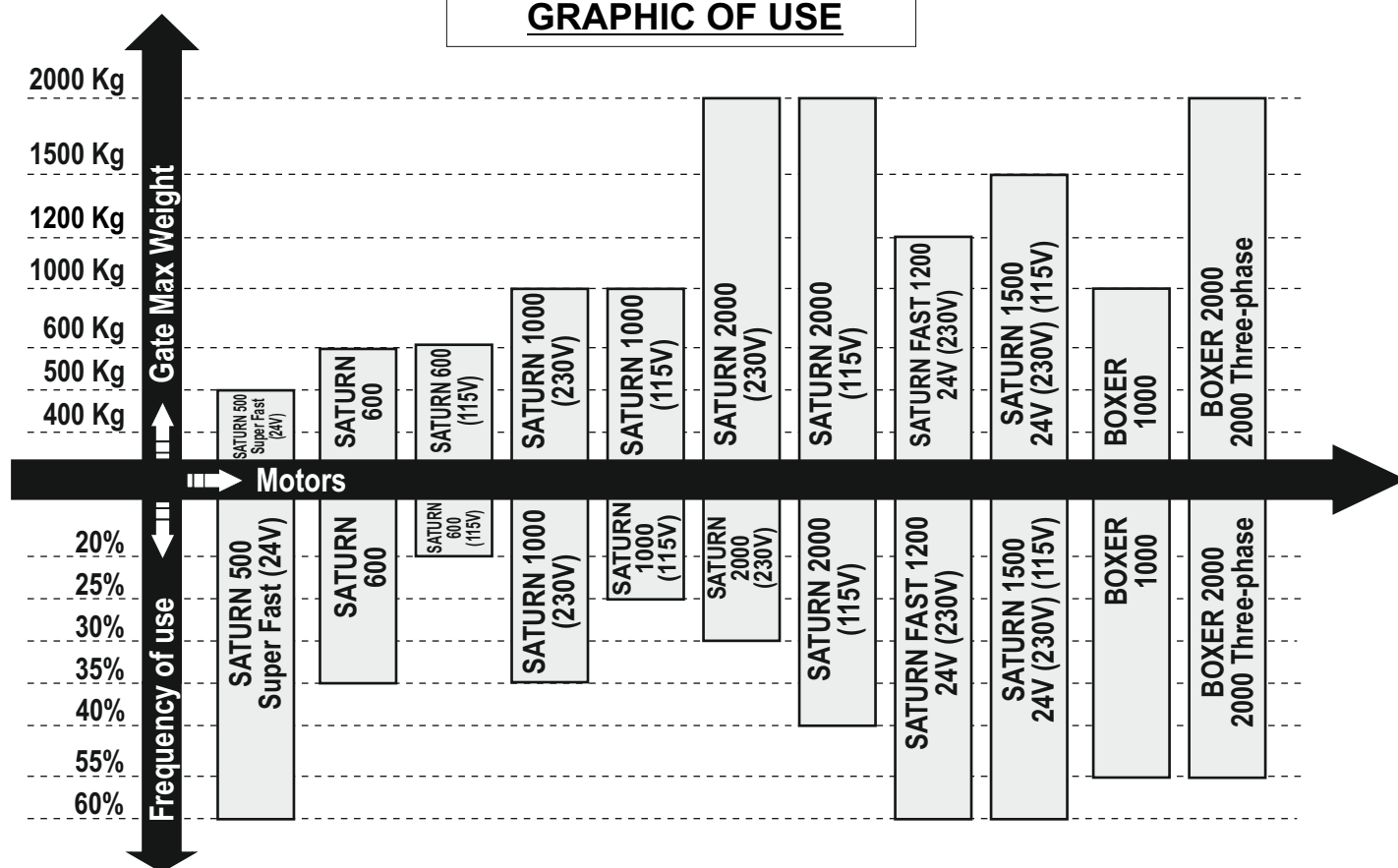


- 1 Adjustable foundation plate
- 2 Anchor bolts
- 3 Pinion protection
- 4 Adjusting screws cover
- 5 Pinion
- 6 Reducer release lever
- 7 Screw for mechanical clutch adjustment (Where present)
- 8 Electronic unit
- 9 Magnetic encoder (Where present)

### DIMENSIONS (mm)



### GRAPHIC OF USE



## TECHNICAL FEATURES

TECHNICAL DATA	SATURN 600 - 1000 - 2000 (230V)			SATURN 600 - 1000 - 2000 (115V)		
	SATURN 600	SATURN 1000	SATURN 2000	SATURN 600	SATURN 1000	SATURN 2000
Power supply	230V~ ± 5% - 50/60 Hz			115V~ ± 5% - 50/60 Hz		
Power	320W	350W	600W	400W	500W	
Absorbed current	1,5 A	1,7 A	1,8 A	3,2 A	5,0 A	
Motor capacitor	16 µF	20 µF	25 µF	50 µF	70 µF	
Working frequency	55%			20%	25%	40%
Working Temperature	-20°C ↕ +55°C ↕			-20°C ↕ +55°C ↕		
Thermoprotection	150°C			150°C		
Weight	12,5 Kg	13 Kg	14,5 Kg	12 Kg	13 Kg	14,5 Kg
Anticrushing clutch	Electronic/Mechanical			Electronic		Electr./Mech.
Protection degree	IP55			IP55		
Pinion Z16 (Z20) speed	0,15 (0,18) m/s			0,15 (0,18) m/s		
Maximum torque	30 Nm	55 Nm	70 Nm	50 Nm	55 Nm	70 Nm
Gate maximum weight	600 Kg	1000 Kg	2000 Kg	600 Kg	1000 Kg	2000 Kg
Gate maximum length	6 m	10 m		6 m	10 m	
Mechanical clutch	If foreseen by the model			No		Si
Limit switch	Inductive or Mechanical or Magnetic			Inductive or Mechanical		

TECHNICAL DATA	SATURN 500 SUPER FAST 24V (230V)	SATURN 1200 FAST 24V (230V)	SATURN 1500 24V (230V)	SATURN 1500 24V (115V)
Power supply	230V~ ± 5% - 50/60 Hz			115V~ ± 5% - 50/60 Hz
Motor	24V ==			
Absorbed power	100W			
Working frequency	60%			
Working Temperature	-20°C ↕ +55°C ↕			
Weight	14,3 Kg			
Anticrushing clutch	Electronic			
Protection degree	Ip55			
Pinion speed	0,40 m/s Max (Z20)	0,32 m/s Max (Z16)	0,25 m/s Max (Z13)	
Maximum torque	0 - 45 Nm	0 - 60 Nm	0 - 65 Nm	
Gate max. weight	500 Kg	1200 Kg	1500 Kg	
Gate maximum length	10 m			
Limit switch	Mechanical/Inductive			

TECHNICAL DATA	BOXER 1000	BOXER 2000	BOXER 2000 Three-phase
Power supply	230V~ ± 5% - 50/60 Hz		230V/380V (±5%) 50/60Hz
Power	350W	600W	400W
Absorbed current	1,7 A	1,8 A	1,0 A
Motor capacitor	20 µF	25µF	-
Working frequency	70%		50%
Working Temperature	-20°C ↕ +55°C ↕		
Thermoprotection	150°C		-
Weight	14 Kg	15 Kg	
Anticrushing clutch	Electronic / Mechanical		Mechanical
Protection degree	IP55		
Pinion Z16 (Z20) speed	0,15 (0,18) m/s		
Maximum torque	55 Nm	70 Nm	
Gate maximum weight	1000 Kg	2000 Kg	
Gate maximum length	10 m		
Mechanical clutch	If foreseen by the model		
Limit switch	Inductive or Mechanical		

### NOTE

The frequency of use is valid only for the first hour at 20°C room temperature

# INSTALLATION PROCEDURE

## 1. GATE ARRANGEMENT

Before starting with the installation check if all the gate parts (fixed and mobile) have a strong and as less as possible deformable structure, also make sure that :

- a) The leaf is rigid and compact;
- b) The inferior slideway is perfectly straight, horizontal and without any obstacles which could obstruct the gate sliding;
- c) The inferior sliding wheels are equipped with greasable or water tightened bearings;
- d) The superior slideway has been produced and placed so that the gate is in a perfect vertical position;
- e) Mechanical stops of the leaf are always installed in order to avoid possible derailment of it.

## 2. FOUNDATION PLATE ANCHORAGE

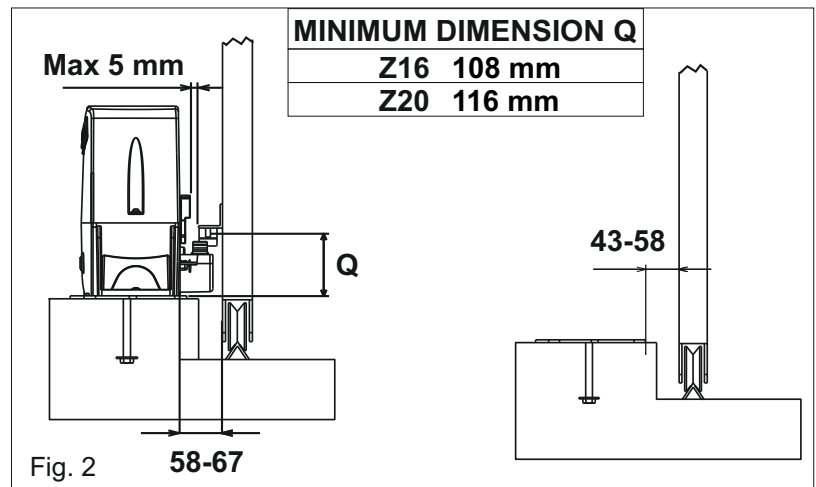
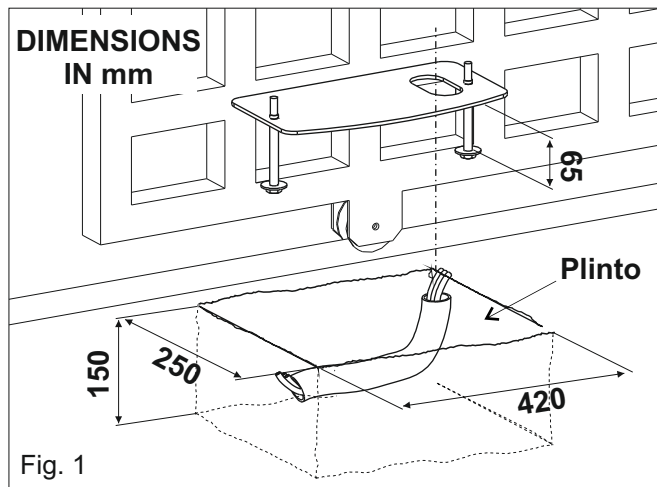
To install the foundation plate it is necessary to:

**2.1.** Prepare a concret basement with the dimensions shown in Fig. 1 where the foundation plate and the anchor bolts will be concreted.

**NOTE:** It is recommended, gate structure permitting, to lift the foundation plate about 50mm from the ground, in order to avoid eventual water stagnation.

**2.2.** Before cementing the plate insert a flexible plastic duct of at least 30 mm in diameter into the special hole of the plate

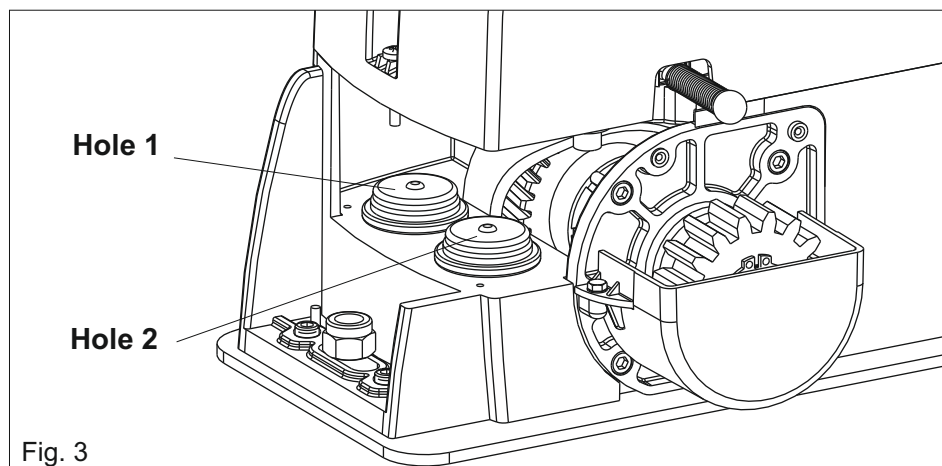
**2.3.** Before concreting in the plate, make sure that it is perfectly leveled and that the distance of 58-67 mm as shown in Fig. 2 is respected



## 3. CABLES PASSAGE ARRANGEMENT

Saturn and Boxer are provided with two different holes for electric cables passage.

It's very important to make the low - tension 230V~ cables pass through one hole and and the very low safety tension cables 24V through the other one (Fig. 3)

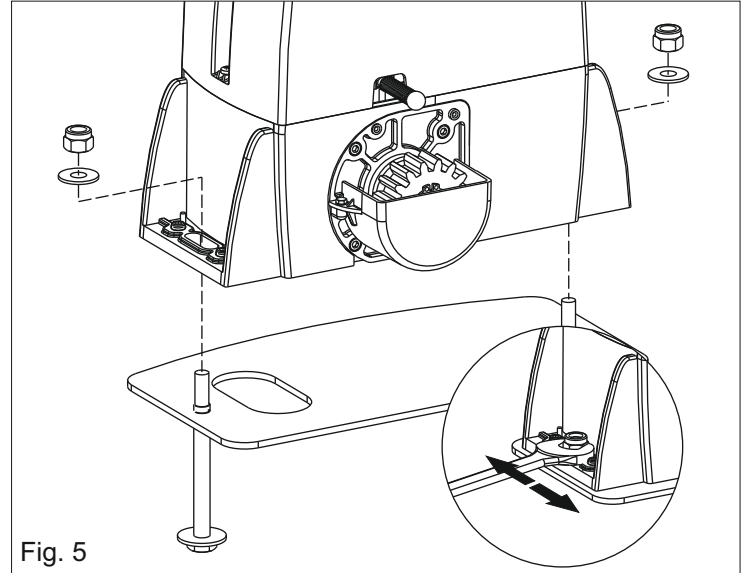
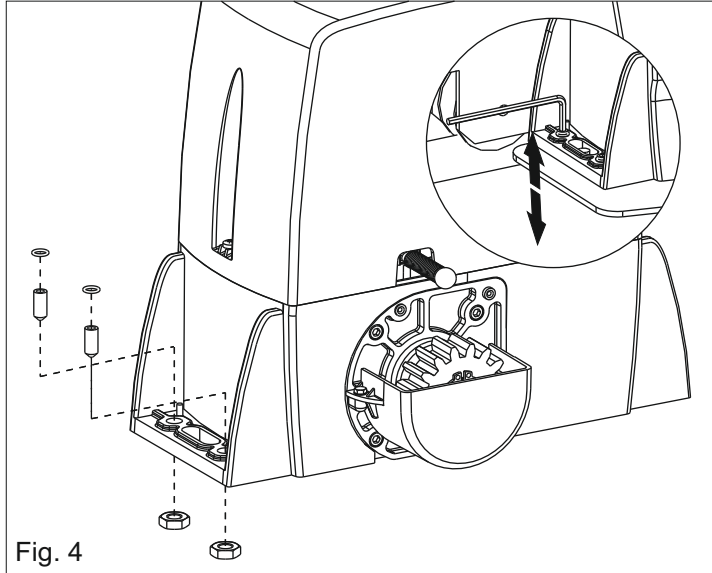


## 4. FITTING OF THE MOTOR REDUCER

**4.1.** Insert the 4 grains into the special holes, in order to adjust the motor reducer height on the plate (Fig. 4)  
**At the end of installation check if the 4 grub screws are well gripped on the foundation plate**

**4.2.** Fix the motor reducer to the foundation plate with the 2 included nuts, adjusting the side position (Fig. 5) so to respect the shown quota in (Fig. 2)

**4.3. IMPORTANT:** Remove the closing loading oil cap (red) and substitute it with that supplied apart provided with the airhole (black)



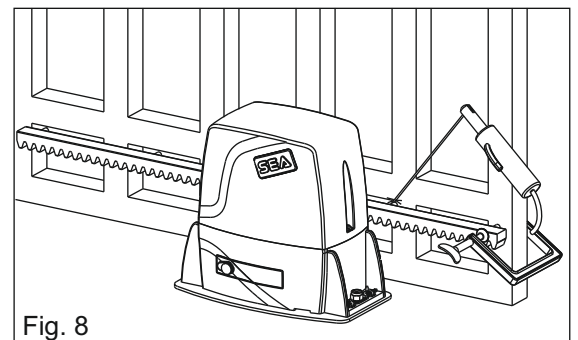
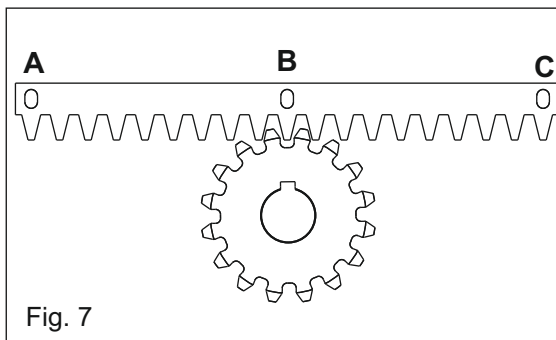
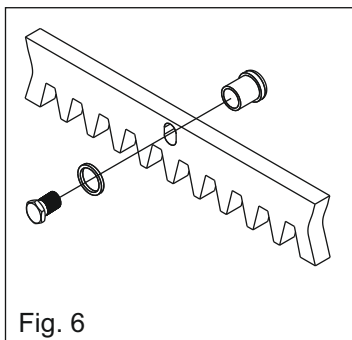
## 5. GEAR RACK MOUNTING

**5.1.** Release the motor and open the leaf completely;

**5.2.** Fix on each gear rack element the support pawls with the appropriate lock screws, make sure to put them in the upper part of the hole (Fig. 6);

**5.3.** Lean the gear rack element on the toothed pinion of the motor in parallel to the ground sideway of the gate, as shown in Fig. 7 and electrically weld the central pawl B to the gate structure (Fig. 8).

Manually move the gate until pawl C is placed corresponding to the pinion and fix it through electric welding. Repeat the same procedure for pawl A after having placed it corresponding to the pinion;



**5.4.** Make sure that all the gear rack elements are perfectly aligned and placed correctly (teeth in phase). It's suggested to place two aligned elements in front of a third one as shown in Fig.9;

**5.5.** Repeat the above described operation for all the remaining gear rack elements which have to be installed;

**5.6.** To avoid that the door weights down on the pinion (Fig.10) lift up the whole rack about 1,5 mm.

**Warning:** Keep a gap of about 0,5 mm between pinion tooth and gear rack tooth;

**5.7.** Make sure that the gear rack works at the center of the pinion along all rack elements, if necessary, adjust the length of the spacers

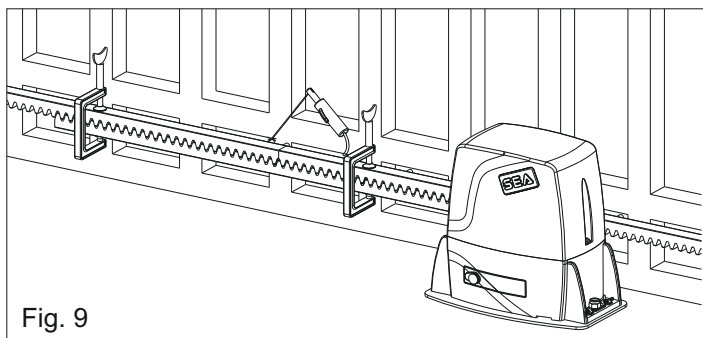


Fig. 9

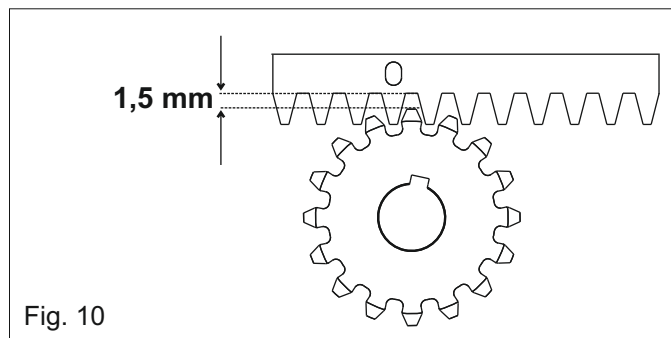


Fig. 10

## 6. LIMIT SWITCH ADJUSTMENT

**6.1.** In order to install and adjust the limit switch in opening, follow the below mentioned instructions (Fig. 11):

- Take the gate to complete opening,
- Place the small plate on the gear rack so that the limit switch is (small lever in case of mechanical limit switch (Fig. 12); small pointers placed on the upper part in case of inductive limit switch (Fig. 13)) in correspondence of point X which is placed 50 mm from the folded side of the small plate (Fig. 14) and fix it with the delivered screws (Fig. 15 - Fig.16)

**6.2.** In order to install and adjust the limit switch in closing, follow the below mentioned instructions (Fig. 11):

- Take the gate to complete closing
- Place the small plate on the gear rack so that the limit switch is in correspondence of point X which is placed 50 mm from the folded side of the small plate (Fig. 14) and fix it with the delivered screws (Fig. 15 - Fig.16)

**NOTE:** By adjusting the trimmer for braking placed on the electronic control unit, it is possible to make the gate stop on the desired position

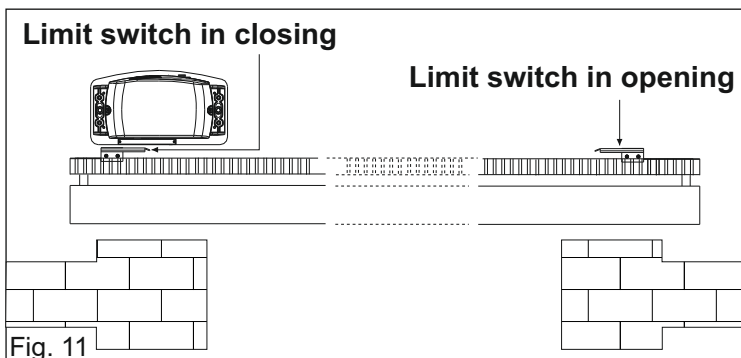


Fig. 11

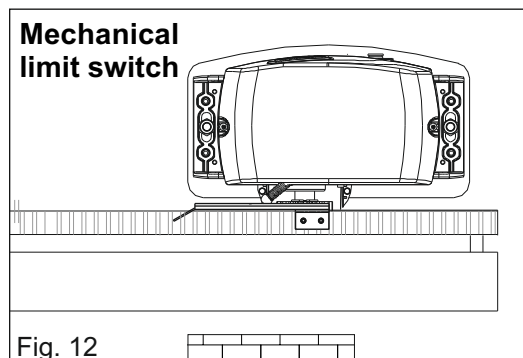


Fig. 12

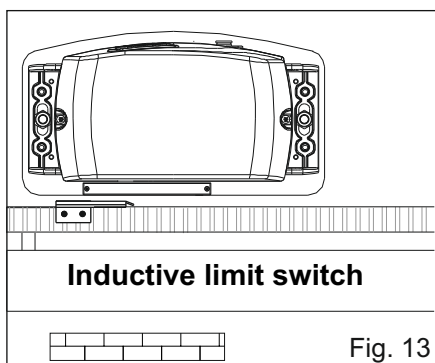


Fig. 13

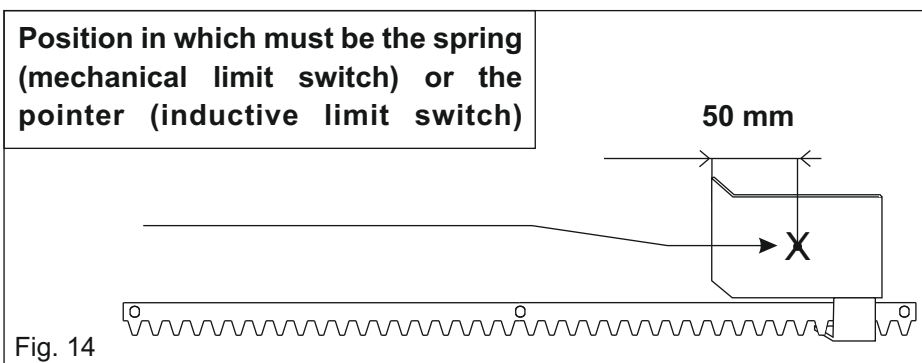


Fig. 14

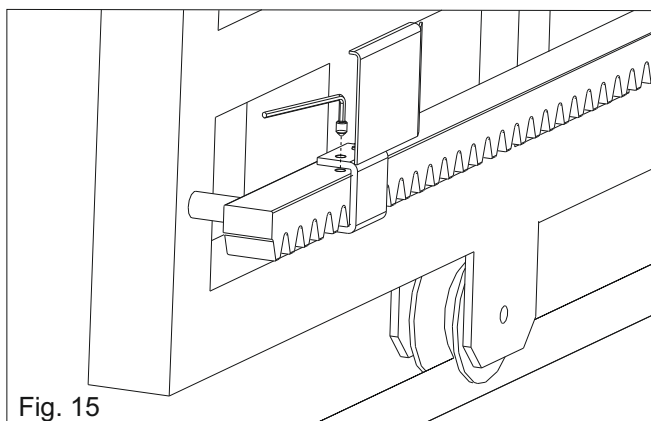


Fig. 15

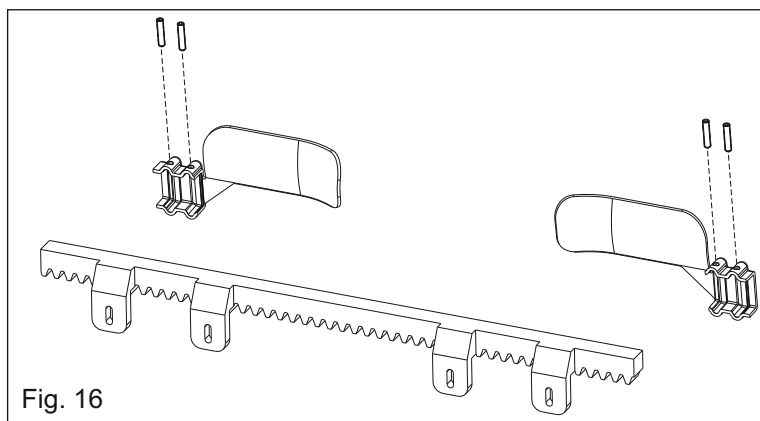


Fig. 16

## 7. MAGNETIC LIMIT-SWITCH ADJUSTMENT

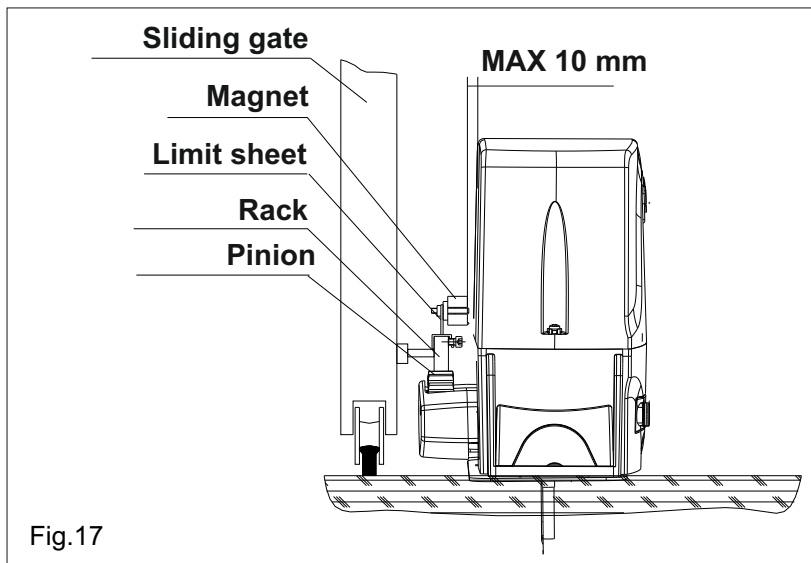


Fig. 17

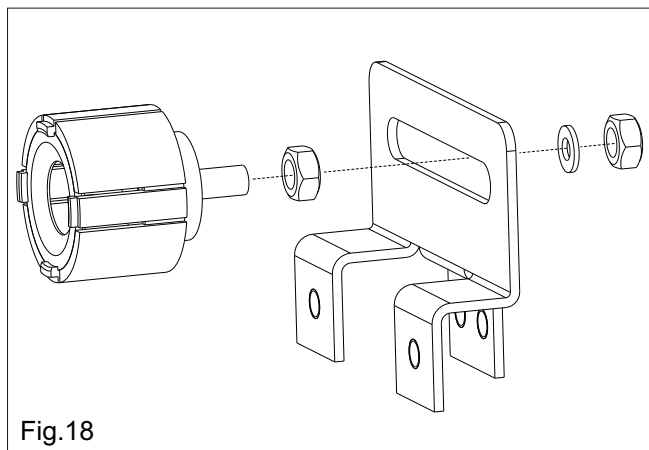
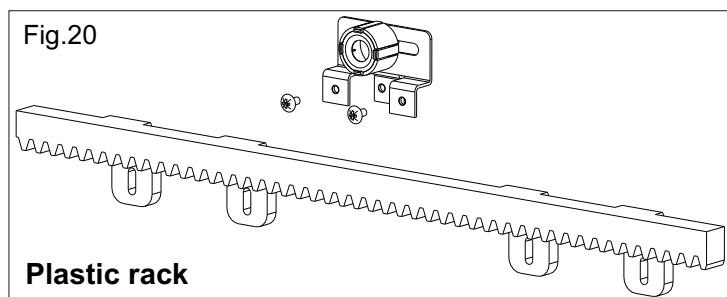
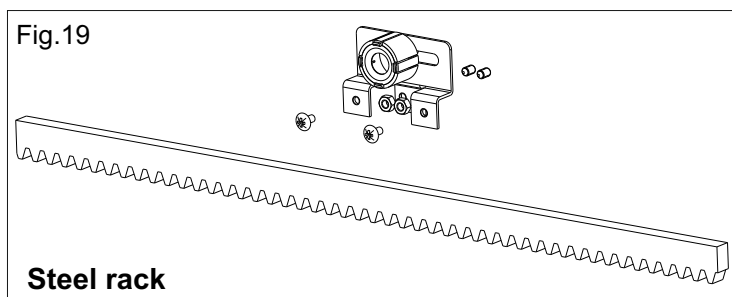


Fig. 18



## 8. GROUNDING (Fig. 21 - Fig. 22)

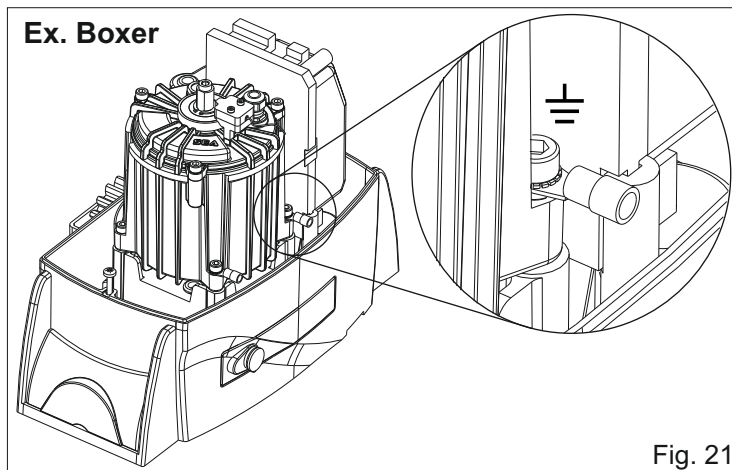


Fig. 21

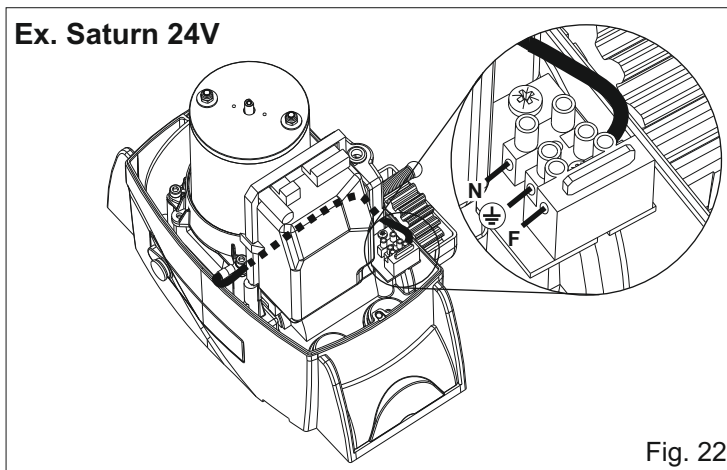


Fig. 22

## 9. CLUTCH ADJUSTMENT (Where present)

### 9.1. Switch off electric power

9.2. In order to adjust the clutch, act on the scrub screw "A" (Fig. 23) as follows:

- **Turning clockwise** = less clutch sensibility / more thrust force
- **Turning counter-clockwise** = more clutch sensibility / less thrust force

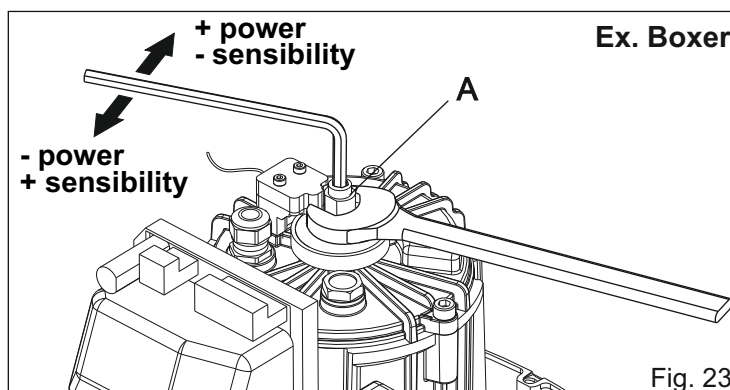
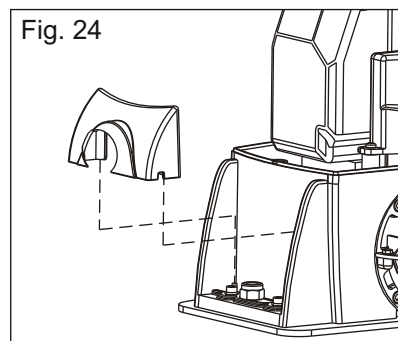


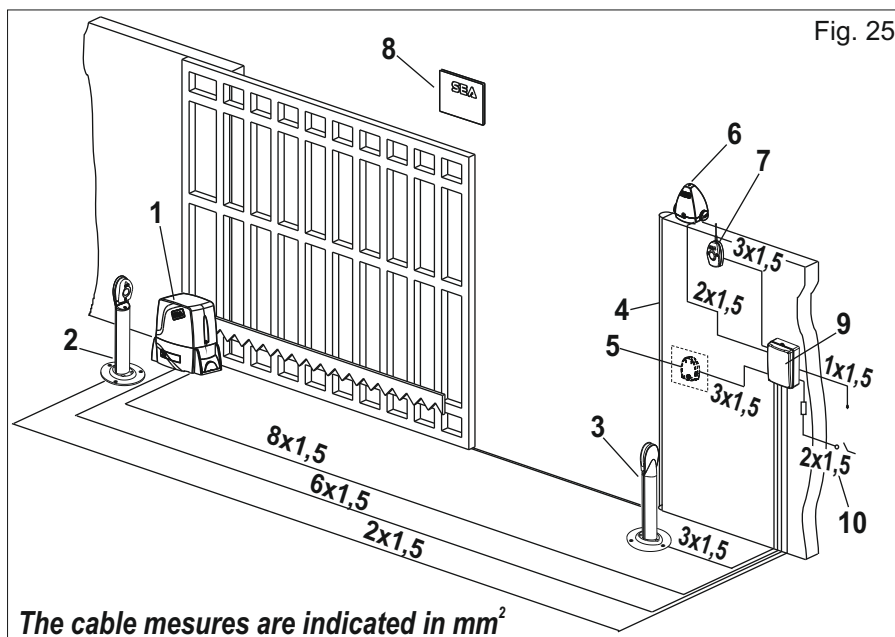
Fig. 23

## 10. SCREW COVER MOUNTING

At the end of the mechanical installation and after having executed all the required adjustments, mount the two screw covers on the operator as shown in Fig. 24.



## 11. ELECTRIC CONNECTIONS OF THE INSTALLATION (Fig. 25)



- Fig. 25
- 1) Saturn - Boxer
  - 2) Photocell Sx
  - 3) Photocell Dx
  - 4) Mechanical safety edge
  - 5) Key push button
  - 6) Flasher
  - 7) Receiver
  - 8) Warning notice
  - 9) Junction box
  - 10) Differential 16A - 30mA

*Ex. 230V version with integrated electronic control unit*

**Page for both installer and user**

## 12. RELEASE SYSTEM FOR SATURN AND BOXER

### 12.1. In order to release do as follows:

- Open the lock cover, insert the key and rotate it 90° clockwise (Fig. 26)
- Pull the release lever until it stops, about 90° approximately (Fig. 27)

**Note: when you pull the release lever, the electronic control unit receives a stop impulse thanks to a micro-switch placed inside**

### 12.2. In order to relock do as follows:

- Push the release lever to complete closing.
- Rotate the key counter-clockwise and extract it.
- Close the protective lock cover.

Once the lock has been restored the electronic control unit reactivates

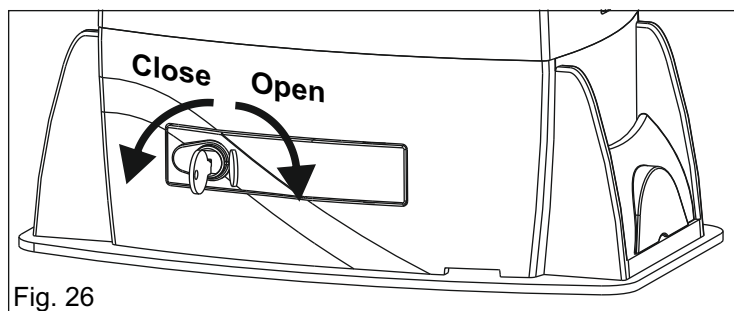


Fig. 26

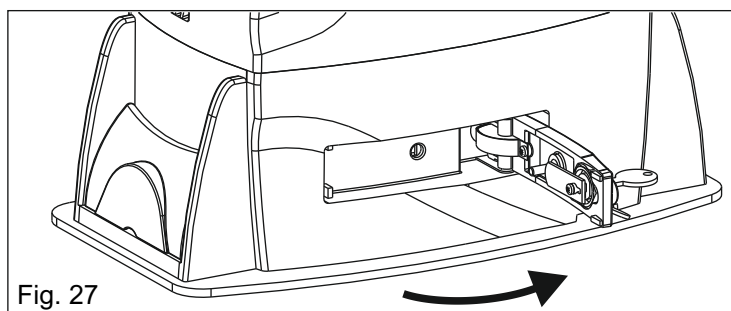


Fig. 27

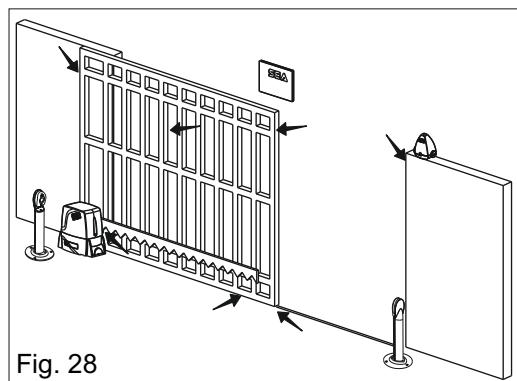


Page for both installer and user

**PERIODIC MAINTENANCE**

Check the oil level (where present) (Use the oil level rod)	Annual
Change oil	4 years
Check the release functionality	Annual
Check the clutch functionality (where present)	Annual
Check the distance between pinion and gear rack (1.5 mm)	Annual
Check the usury status of pinion and gear rack	Annual
Check the fixing screws	Annual
Check the connection cables integrity	Annual
Check limit switch functionality and status in opening and closing and the related small plates	Annual

All the above described operations must be done exclusively by an authorized installer



**RISK EXAMINATION**

The points indicated by arrows in Fig. 28 are potentially dangerous. The installer must take a thorough risk examination to prevent crushing, conveying, cutting, grasping, trapping so as to guarantee a safe installation for people, animals and things. As for misunderstandings that may arise refer to area distributor or call our help desk. These instructions are part of the device and must be kept in a well known place. The installer shall follow the provided instructions thoroughly. SEA S.p.A. products must only be used for the automation of doors, gates and wings. Any initiative taken without SEA S.p.A. explicit authorization will preserve the manufacture from whatsoever responsibility. The installer shall provide warning notices on not assessable further risks. SEA S.p.A. in its relentless aim to improve the production, is allowed to make whatsoever adjustment without giving notice. This does not oblige SEA S.p.A. to up-grade the past productions. SEA S.p.A. can not be deemed responsible for any damage or accident caused by product breaking, being

damages or accident due to a failure to comply with the instructions herein. The guarantee will be void and the manufacturer responsibility will be nullified if SEA S.p.A. original spare parts are not being used. The electric installation shall be carried out by a professional technician who will release documentation as requested by the laws in force. Packaging materials such as plastic bags, foam polystyrene, nails etc. must be kept out of children's reach as dangers may arise

**WARNINGS**

The electrical installation and the operation logics must comply with current regulations. Keep the power cables (motors, power supply) separated from the control cables (push-buttons, photocells, radio, etc.). Separate conduits should be used to prevent noise issues. **Note: Use "cable-glands" and/or "pipes/sheatings" close to the control panel box so to protect the interconnection cables against pulling efforts**

**INTENDED USE**

The operator has been designed exclusively for the automation of barriers.

**SPARE PARTS**

The spare parts orders must be sent to: **SEA S.p.A. - 64100, Sant'Atto - TERAMO - ITALY - [www.seateam.com](http://www.seateam.com)**

**SAFETY AND RESPECT FOR THE ENVIRONMENT**

We recommend not to spoil the environment with product and circuit packing material.

**STORAGE**

STORAGE TEMPERATURE			
T <sub>min</sub>	T <sub>max</sub>	Humidity <sub>min</sub>	Humidity <sub>max</sub>
-30°C	+60°C	5% without condensation	90% without condensation

The product must be handled using suitable means.

**LONG-TERM STOP AND MAINTENANCE**

The disassembly and/or stop and /or maintenance of the automation system must be carried out by skilled and expert technicians.

**GUARANTEE LIMITS**

For the guarantee see the sales conditions on the official SEA price list.

**NOTE: THE MANUFACTURER SHALL NOT SHOULD ANY RESPONSIBILITIES IN CASE OF DAMAGE CAUSED BY INAPPROPRIATE, WRONG OR CARELESS USE.**

*SEA reserves the right to make all the necessary changes and modifications of the products or manuals without giving prior notice*

## Dichiarazione di conformità *Declaration of Conformity*

La SEA S.p.A. dichiara sotto la propria responsabilità e, se applicabile, del suo rappresentante autorizzato che, con l'installazione degli adeguati dispositivi di sicurezza e di filtraggio disturbi, i prodotti:

*SEA S.p.A. declares under its proper responsibility and, if applicable, under the responsibility of its authorised representative that, by installing the appropriate safety equipment and noise filtering, the products:*

Descrizione / <i>Description</i>	Modello / <i>Model</i>	Marca / <i>Trademark</i>
Motoriduttore <b>Saturn 600/1000/2000</b> <i>Motor reducer Saturn 600/1000/2000</i> (e tutti i suoi derivati / <i>and all its by-products</i> )	12400210/5 - 12400100/5 - 12400040/5 12400210/5 - 12400100/5 - 12400040/5	SEA SEA
Motoriduttore <b>Saturn 1400 Oil 24V</b> <i>Motor reducer Saturn 1400 Oil 24V</i> (e tutti i suoi derivati / <i>and all its by-products</i> )	12400030/3 12400030/3	SEA SEA
<b>Boxer 600/1000/2000</b> <i>Boxer 600/1000/2000</i> (e tutti i suoi derivati / <i>and all its by-products</i> )	12405300 -12405000/5 - 12405200/5 12405300 - 12405000/5 - 12405200/5	SEA SEA

sono costruiti per essere incorporati in una macchina o per essere assemblati con altri macchinari per costruire una macchina ai sensi della Direttiva 2006/42/CE

*are built to be integrated into a machine or to be assembled with other machinery to create a machine under the provisions of Directive 2006/42/CE*

sono conformi ai requisiti essenziali di sicurezza relativi ai prodotti entro il campo di applicabilità delle Direttive Comunitarie 2014/35/UE e 2014/30/UE

*are conforming to the essential safety requirements related to the products within the field of applicability of the Community Directives 2014/35/UE and 2014/30/UE*

**COSTRUTTORE o RAPPRESENTANTE AUTORIZZATO:**  
**MANUFACTURER or AUTHORISED REPRESENTATIVE:**

**SEA S.p.A.**

DIREZIONE E STABILIMENTO:

Zona industriale 64020 S.ATTO Teramo - (ITALY)

Tel. +39 0861 588341 r.a. Fax +39 0861 588344

Http://www.seateam.com

Luogo, data di emissione

*Place, date of issue*

Teramo, 11/10/2018

L'Amministratore  
The Administrator  
Ennio Di Saverio



# CERTIFICATO DI ESTENSIONE GARANZIA CERTIFICATE OF WARRANTY EXTENTION

*n.* \_\_\_\_\_

## PRODOTTO/ PRODUCT

- Modello/*Model* \_\_\_\_\_  
- Matricola n. /*Serial Number* \_\_\_\_\_  
- Data di acquisto/*Date of order* \_\_\_\_\_  
- Data di installazione/*Date of installation* \_\_\_\_\_

Centrale/ <i>Control unit</i>	SEA <input type="checkbox"/>	Altri/ <i>Others</i>	<input type="checkbox"/>
Fotocelle/ <i>Photocells</i>	SEA <input type="checkbox"/>	Altri/ <i>Others</i>	<input type="checkbox"/>
RX - TX	SEA <input type="checkbox"/>	Altri/ <i>Others</i>	<input type="checkbox"/>
Altri accessori / <i>Other accessories</i>	SEA <input type="checkbox"/>	Altri/ <i>Others</i>	<input type="checkbox"/>

## UTENTE/*Customer*

Nome e Cognome \_\_\_\_\_  
*First Name and Family Name* \_\_\_\_\_  
Indirizzo/*Address* \_\_\_\_\_  
\_\_\_\_\_

## INSTALLATORE/*Installer*

Ragione sociale/*Company Name* \_\_\_\_\_  
Nome e Cognome/*First and Family Name* \_\_\_\_\_  
Indirizzo/*Address* \_\_\_\_\_

## INSTALLATORE/INSTALLER

Firma per il trattamento dei dati personali ai sensi del Regolamento UE 679/2016  
Agreement to the GDPR EU Regulation No. 679/2016

Copia da restituire  
*Copy to be returned*

Firma e Timbro  
*Sign and Stamp* \_\_\_\_\_

N.B: L'estensione della garanzia legale di 12 mesi a 24 mesi e 36 mesi è valida solo se il presente modulo viene rispedito per posta o fax a SEA S.p.A. entro 15gg dalla data di acquisto. Allegare relativa fattura d'acquisto.

Note: The extension of the legal standard warranty of 12 months to 24 months and to 36 months, is valid only if the present form is returned by mail or fax to SEA S.p.A within 15days from the date of purchase. Attach customer invoice.



**SEA**<sup>®</sup>  
Sistemi Elettronici  
di Apertura Porte e Cancelli  
International registered trademark n. 804888

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## TERMS OF SALES

**EFFICACY OF THE FOLLOWING TERMS OF SALE:** the following general terms of sale shall be applied to all orders sent to SEA S.p.A. All sales made by SEA to all costumers are made under the prescription of this terms of sales which are integral part of sale contract and cancel and substitute all apposed clauses or specific negotiations present in order document received from the buyer.

**GENERAL NOTICE** The systems must be assembled exclusively with SEA components, unless specific agreements apply. Non-compliance with the applicable safety standards (European Standards EM12453 – EM 12445) and with good installation practice releases SEA from any responsibilities. SEA shall not be held responsible for any failure to execute a correct and safe installation under the above mentioned standards.

**1) PROPOSED ORDER** The proposed order shall be accepted only prior SEA approval of it. By signing the proposed order, the Buyer shall be bound to enter a purchase agreement, according to the specifications stated in the proposed order.

On the other hand, failure to notify the Buyer of said approval must not be construed as automatic acceptance on the part of SEA.

**2) PERIOD OF THE OFFER** The offer proposed by SEA or by its branch sales department shall be valid for 30 solar days, unless otherwise notified.

**3) PRICING** The prices in the proposed order are quoted from the Price List which is valid on the date the order was issued. The discounts granted by the branch sales department of SEA shall apply only prior to acceptance on the part of SEA. The prices are for merchandise delivered ex-works from the SEA establishment in Teramo, not including VAT and special packaging. SEA reserves the right to change at any time this price list, providing timely notice to the sales network. The special sales conditions with extra discount on quantity basis (Qx, Qx1, Qx2, Qx3 formula) is reserved to official distributors under SEA management written agreement.

**4) PAYMENTS** The accepted forms of payment are each time notified or approved by SEA. The interest rate on delay in payment shall be 1.5% every month but anyway shall not be higher than the max. interest rate legally permitted.

**5) DELIVERY** Delivery shall take place, approximately and not peremptorily, within 30 working days from the date of receipt of the order, unless otherwise notified. Transport of the goods sold shall be at Buyer's cost and risk. SEA shall not bear the costs of delivery giving the goods to the carrier, as chosen either by SEA or by the Buyer. Any loss and/or damage of the goods during transport, are at Buyer's cost.

**6) COMPLAINTS** Any complaints and/or claims shall be sent to SEA within 8 solar days from receipt of the goods, proved by adequate supporting documents as to their truthfulness.

**7) SUPPLY** The concerning order will be accepted by SEA without any engagement and subordinately to the possibility to get it's supplies of raw material which is necessary for the production; Eventual completely or partially unsuccessful executions cannot be reason for complains or reservations for damage. SEA supply is strictly limited to the goods of its manufacturing, not including assembly, installation and testing. SEA, therefore, disclaims any responsibility for damage deriving, also to third parties, from non-compliance of safety standards and good practice during installation and use of the purchased products.

**8) WARRANTY** The standard warranty period is 12 months. This warranty time can be extended by means of expedition of the warranty coupon as follows:

**SILVER:** The mechanical components of the operators belonging to this line are guaranteed for 24 months from the date of manufacturing written on the operator.

**GOLD:** The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator.

**PLATINUM:** The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator. The base warranty (36 months) will be extended for further 24 months (up to a total of 60 months) when it is acquired the certificate of warranty which will be filled in and sent to SEA S.p.A. The electronic devices and the systems of command are guaranteed for 24 months from the date of manufacturing. In case of defective product, SEA undertakes to replace free of charge or to repair the goods provided that they are returned to SEA repair centre. The definition of warranty status is by unquestionable assessment of SEA. The replaced parts shall remain propriety of SEA. Binding upon the parties, the material held in warranty by the Buyer, must be sent back to SEA repair centre with fees prepaid, and shall be dispatched by SEA with carriage forward. The warranty shall not cover any required labour activities.

The recognized defects, whatever their nature, shall not produce any responsibility and/or damage claim on the part of the Buyer against SEA. The guarantee is in no case recognized if changes are made to the goods, or in the case of improper use, or in the case of tampering or improper assembly, or if the label affixed by the manufacturer has been removed including the SEA registered trademark No. 804888. Furthermore, the warranty shall not apply if SEA products are partly or completely coupled with non-original mechanical and/or electronic components, and in particular, without a specific relevant authorization, and if the Buyer is not making regular payments. The warranty shall not cover damage caused by transport, expendable material, faults due to non-conformity with performance specifications of the products shown in the price list. No indemnification is granted during repairing and/or replacing of the goods in warranty. SEA disclaims any responsibility for damage to objects and persons deriving from non-compliance with safety standards, installation instructions or use of sold goods. The repair of products under warranty and out of warranty is subject to compliance with the procedures notified by SEA.

**9) RESERVED DOMAIN** A clause of reserved domain applies to the sold goods; SEA shall decide autonomously whether to make use of it or not, whereby the Buyer purchases propriety of the goods only after full payment of the latter.

**10) COMPETENT COURT OF LAW** In case of disputes arising from the application of the agreement, the competent court of law is the tribunal of Teramo. SEA reserves the faculty to make technical changes to improve its own products, which are not in this price list at any moment and without notice. SEA declines any responsibility due to possible mistakes contained inside the present price list caused by printing and/or copying. The present price list cancels and substitutes the previous ones. The Buyer, according to the law No. 196/2003 (privacy code) consents to put his personal data, deriving from the present contract, in SEA archives and electronic files, and he also gives his consent to their treatment for commercial and administrative purposes.

**Industrial ownership rights:** once the Buyer has recognized that SEA has the exclusive legal ownership of the registered SEA brand num.804888 affixed on product labels and / or on manuals and / or on any other documentation, he will commit himself to use it in a way which does not reduce the value of these rights, he won't also remove, replace or modify brands or any other particularity from the products. Any kind of replication or use of SEA brand is forbidden as well as of any particularity on the products, unless preventive and expressed authorization by SEA.

**In accomplishment with art. 1341 of the Italian Civil Law it will be approved expressly clauses under numbers:**

**4) PAYMENTS - 8) GUARANTEE - 10) COMPETENT COURT OF LAW**

**English GENERAL NOTICE FOR THE INSTALLER AND THE USER**

1. Read carefully these **Instructions** before beginning to install the product. Store these instructions for future reference
2. Don't waste product packaging materials and /or circuits.
3. This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger. SEA S.p.A. declines all liability caused by improper use or different use in respect to the intended one.
4. The mechanical parts must be comply with Directives: Machine Regulation 2006/42/CE and following adjustments), Low Tension (2006/95/CE), electromgnetic Consistency (2004/108/CE) Installation must be done respecting Directives: EN12453 and En12445.
5. Do not install the equipment in an explosive atmosphere.
6. SEA S.p.A. is not responsible for failure to observe Good Techniques in the construction of the locking elements to motorize, or for any deformation that may occur during use.
7. Before attempting any job on the system, cut out electrical power and disconnect the batteries. Be sure that the earthing system is perfectly constructed, and connect it metal parts of the lock.
8. Use of the indicator-light is recommended for every system, as well as a warning sign well-fixed to the frame structure.
9. SEA S.p.A. declines all liability as concerns the automated system's security and efficiency, if components used, are not produced by SEAS.p.A..
10. For maintenance, strictly use original parts by SEA.
11. Do not modify in any way the components of the automated system.
12. The installer shall supply all information concerning system's manual functioning in case of emergency, and shall hand over to the user the warnings handbook supplied with the product.
13. Do not allow children or adults to stay near the product while it is operating. The application cannot be used by children, by people with reduced physical, mental or sensorial capacity, or by people without experience or necessary training. Keep remote controls or other pulse generators away from children, to prevent involuntary activation of the system.
14. Transit through the leaves is allowed only when the gate is fully open.
15. The User must not attempt to repair or to take direct action on the system and must solely contact qualified SEA personnel or SEA service centers. User can apply only the manual function of emergency.
16. The power cables maximum length between the central engine and motors should not be greater than 10 m. Use cables with 2,5 mm<sup>2</sup> section. Use double insulation cable (cable sheath) to the immediate vicinity of the terminals, in particular for the 230V cable. Keep an adequate distance (at least 2.5 mm in air), between the conductors in low voltage (230V) and the conductors in low voltage safety (SELV) or use an appropriate sheath that provides extra insulation having a thickness of 1 mm.



## Automatic Gate Openers

Questo articolo è stato prodotto seguendo rigide procedure di lavorazione ed è stato testato singolarmente al fine di garantire i più alti livelli qualitativi e la vostra soddisfazione. Vi ringraziamo per aver scelto SEA.

This item has been produced following strict production procedures and has been singularly tested for the highest quality levels and for your complete satisfaction.  
Thanks for choosing SEA.

Cet article a été produit suivant des procédures d'usinage strictes et il a singulièrement été testé afin de garantir les plus hauts niveaux de qualité pour votre satisfaction.  
Nous vous remercions d'avoir choisi SEA.

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Le agradecemos por haber escogito SEA.





**SEA**®



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International registered trademark n. 804888

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