

International registered trademark n. 804888



# COUGAR

#### **REVERSIBLE ELECTROMECHANICAL OPERATOR FOR SWING GATE**



#### **INSTALLATION MANUAL** and Security Information

SEA S.p.A. Zona industriale 64020 S. ATTO Teramo - (ITALY) Tel. +39 0861 588341 r.a. Fax +39 0861 588344 www.seateam.com seacom@seateam.com

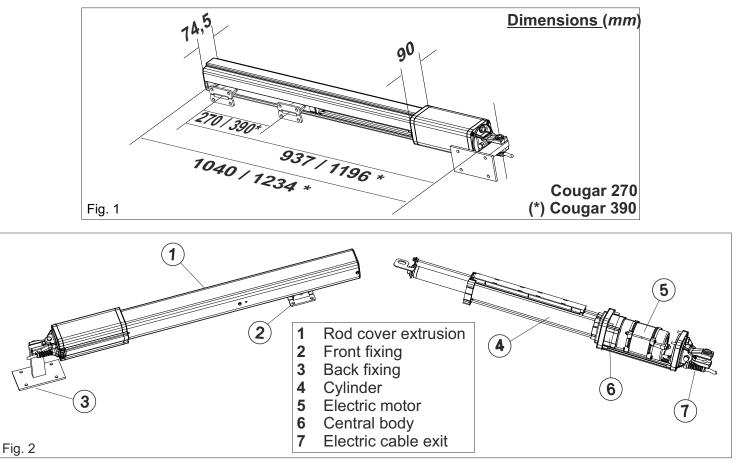


## FEATURES AND SPECIFICATIONS

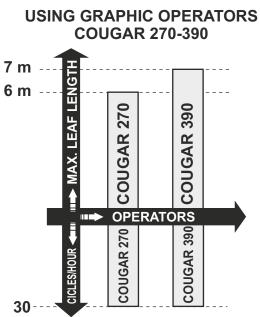
**COUGAR** is a high quality reversible electromechanical operator, in oil bath, for condominium and residential use, for gates with leaves lengths of max 6 m.

COUGAR is not provided with torque setting.

The slowdown and the torque setting can be adjusted by using the electronic control unit. <u>COUGAR</u> requires an electric lock in closing and in case of windy areas, it is also necessary to predispose an electric lock in opening. For the European laws and directives actually in force it is strongly recommended to use the Position Gate (device for the reading of the gate position), for reverse in case of obstacle.



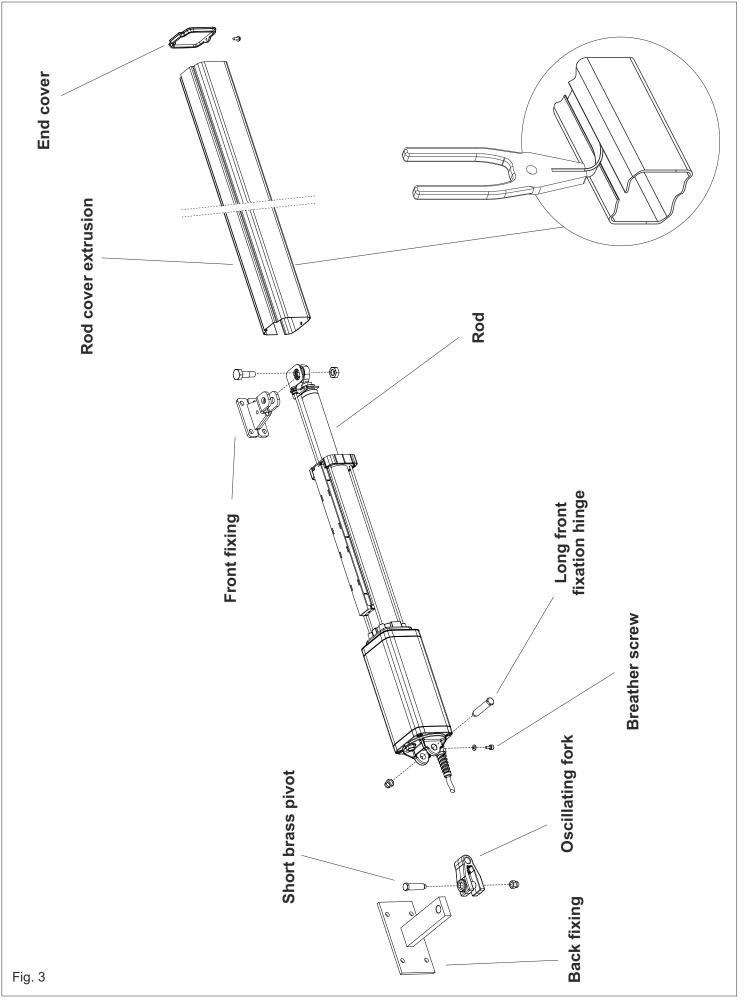
<b>TECHNICAL FEATURES</b>	COUGAR 270	COUGAR 390	
Power supply	230V~ (±5%) 50/60 Hz		
Power	300W		
Absorbed current	1,	6 A	
Stroke	270 mm	390mm	
Rod speed	0,85 cm/s		
Cycles hour (at a temp. of 20°C)	30		
Operating temperatures	-30°C ∦ +60°C ∦		
Thermal protection	130°C		
Max Thrust	600 daN		
Capacitor	6,3 µF		
Weight	7,5 Kg	8,3 Kg	
Protection class	lp55		
Max leaf lenght	6 m	7 m	
Leaf opening degree	90° - 125°		



**Note**: The frequency of use is valid only for the first hour at 20°C room temperature. **Note**: in non-automatic logic, use operators without lock.



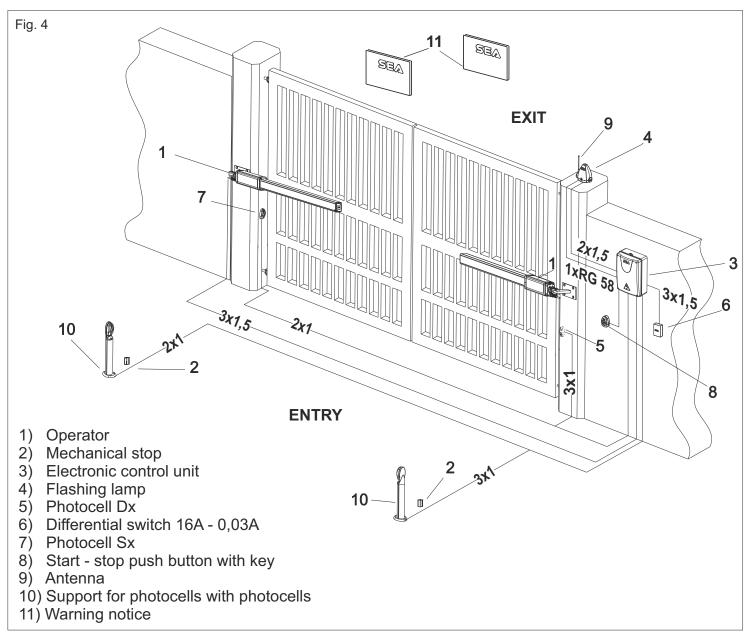
English



15

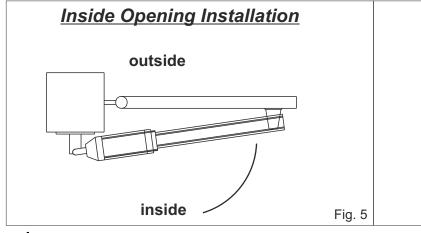


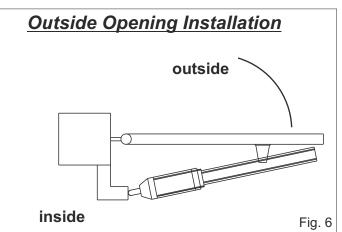
## **STANDARD INSTALLATION**



## **TYPE OF INSTALLATION**

It is possible to install the operators with the opening towards the inside (Fig. 5) or towards the outside (Fig. 6)



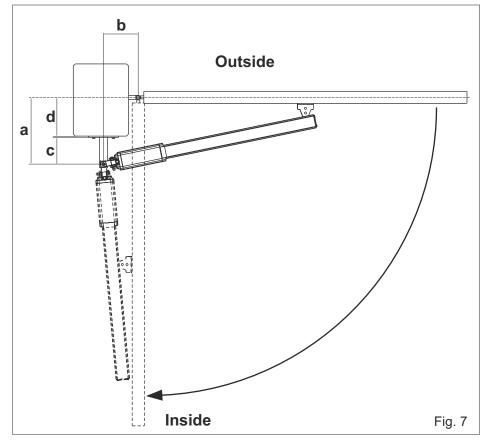


English

Install the operator always inside your property



## **INSIDE OPENING INSTALLATION**



#### NOTES:

English

- To obtain 110° with d > 55 mm it is necessary to make a niche in the gate

- To obtain 125° with d > 55 mm it is necessary to make a niche in the gate

#### **COUGAR 270**

Total stroke 270 mm - max suggested stroke 250 mm

#### **COUGAR 390**

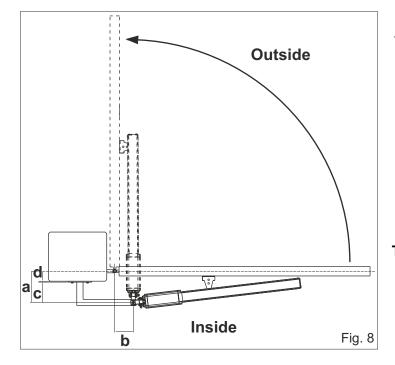
Total stroke 390 mm - max suggested stroke 370 mm

a (mm)	b (mm)	d max (mm)	Max opening angle	Max stroke (mm)	Stroke for 90° (mm)
100	115	50	110°	250	215
100	150	50	90°	2	50
105	110	55	110°	245	215
105	145	55	90°	2	50
120	105	70	106°	250	225
120	130	70	90°	250	
125	125	75	90°	250	
140	95	90	100°	250	235
140	110	90	90°	2	50
145	95	95	100°	255	242
145	105	95	90°	2:	50
150	100	100	90°	250	
155	85	105	96°	250	242
160	90	110	90°	2	53
170	75	120	92°	250	
180	65	130	92°	2:	

a (mm)	b (mm)	d max (mm)	Max opening angle	Max stroke (mm)	Stroke for 90° (mm)
125	170	75	125°	368	295
130	170	80	125°	372	300
140	235	90	90°	37	70
145	165	95	120°	372	310
145	230	95	90°	37	70
160	210	110	90°	37	70
175	195	120	90°	37	70
185	145	130	110°	370	330
185	190	130	90°	37	70
195	140	140	110°	371	355
195	175	140	90°	37	70
240	110	185	100°	370	355
240	125	185	90°	37	70
250	105	195	95°	370	360
250	115	195	90°	37	70
260	95	205	95°	369	365
260	100	205	90°	37	70
270	90	215	90°	37	70
280	80	230	90°	37	70
295	65	245	90°	36	69



### **OUTSIDE OPENING INSTALLATION**



<u>COUGAR 270</u>

Total stroke 270 mm - max suggested stroke 250 mm

English

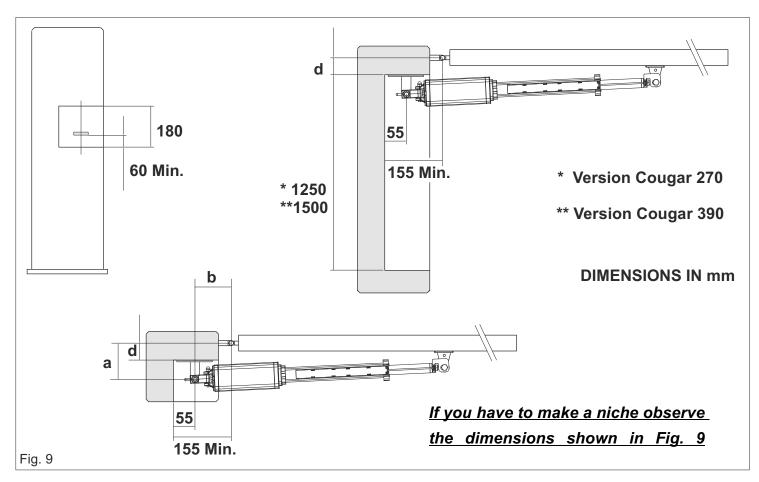
a (mm)	b (mm)	Max opening angle	Max stroke (mm)	Stroke for 90° (mm)
150	90	95°	250	240
160	90	90°	250	
165	80	95°	249	243
175	80	90°	250	
180	70	90°	250	
180	65	90°	241	

#### **COUGAR 390**

Total stroke 390 mm - max suggested stroke 370 mm

a (mm)	b (mm)	Max opening angle	Max stroke (mm)	Stroke for 90° (mm)	
250	100	100°	356	342	
255	95	95°	345	336	
265	95	95°	342	335	
270	90	90°	330		
275	90	90°	325		
275	90	90°	319		

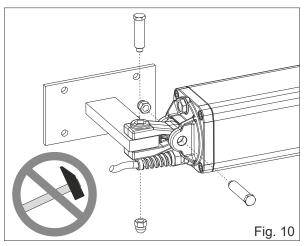
### **INSTALLATION ON MASONRY PILLARS MAKING A NICHE**





English

## **OSCILLATING FORK INSTALLATION**

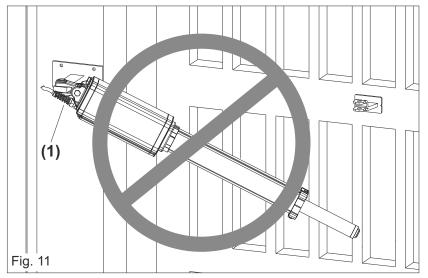


#### PRELIMINARY

- Open the package carefully, paying attention to not lose the parts reported in Fig. 3

- Fix the oscillating fork as in Fig. 10

<u>Attention:</u> do not use the hammer to insert the short brass pivot; the insertion of the pivot into the fork and bracket must be made simply by hand pressure



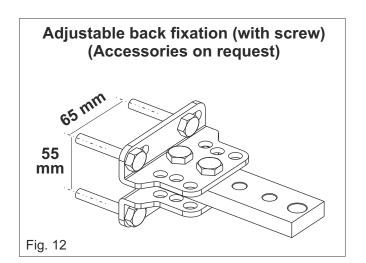
#### Attention:

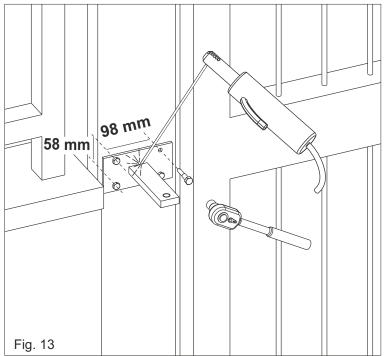
Do not incline the operator further then the allowed angle from the oscillating fork (1), this could cause its breaking

## **BACK FIXATION MOUNTING**

According to the chosen opening type (inside or outside) and according to the chosen max. rotation of the leaf (see pages 17 - 18) the bracket must be first cut respecting the measurement "**a**" on pages 17-18 and than welded as in Fig. 13

The support must be positioned so that the operator is in perfect horizontal position (Fig. 13 - 14)





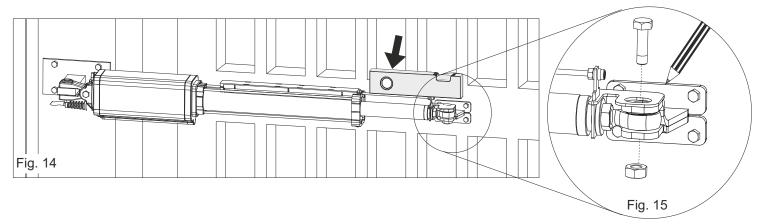


### **POSITIONING OF THE FRONT FIXATION**

Once the operator has been mounted on the back fixation close the leaf and do as follows:

- 1) Pull out completely the chromium plated rod, afterwards bring it back about 1 cm
- 2) Fix the rod on the front fixation (Fig. 15)
- 3) Position the operator perfectly horizontal and mark the position of the front fixation (Fig. 14 and Fig. 15)

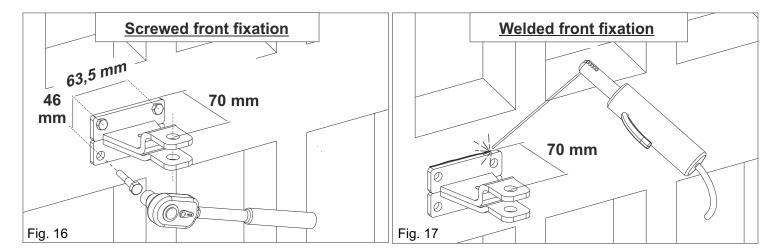
Attention: Avoid the welding of the front fixation to the rod of the operator already fixed as the welding residual (squirt) could ruin the chromium -plating of the rod



## **WELDING OF THE FRONT FIXATION TO THE GATE**

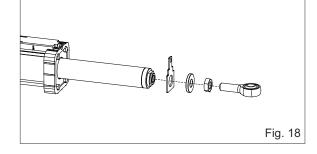
Mount the front fixation so that it guarantees the perfectly horizontal position of the operator

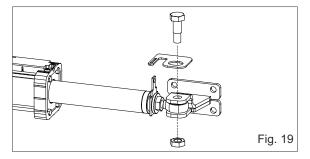
Depending on the type of gate (wood, iron, aluminium) the front fixation can be welded or screwed



### **BALL JOINT AND PLATE MOUNTING**

Mount the ball joint as shown in Fig.18. Mount the plate as shown in Fig.19.



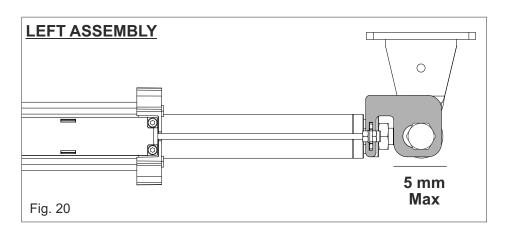


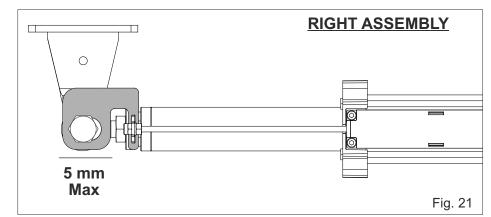
English



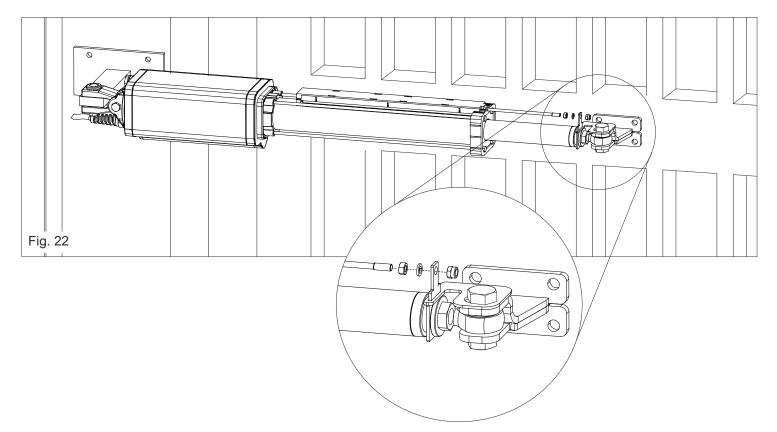
### **BALL JOINT ADJUSTMENT**

Adjust the ball joint as shown in Fig. 20 and Fig. 21





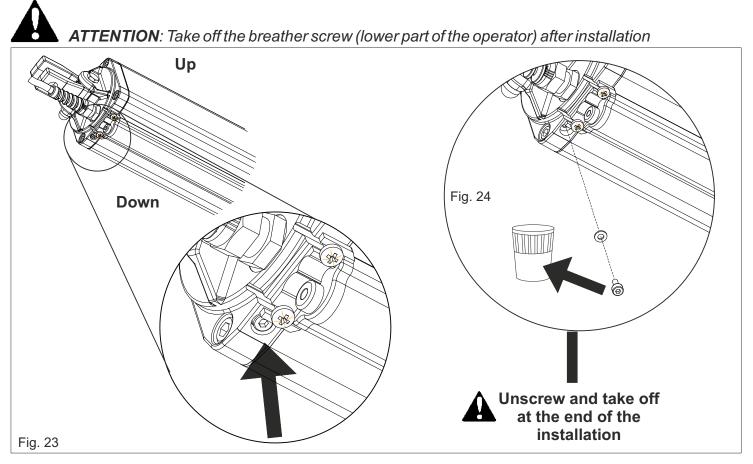
### **ENCODER INSTALLATION**





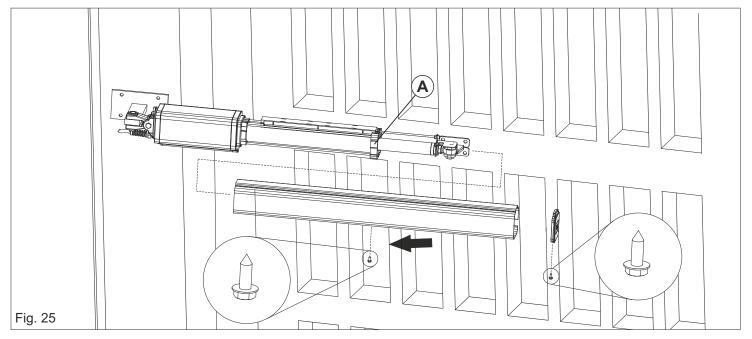
### **BREATHER SCREW**

English



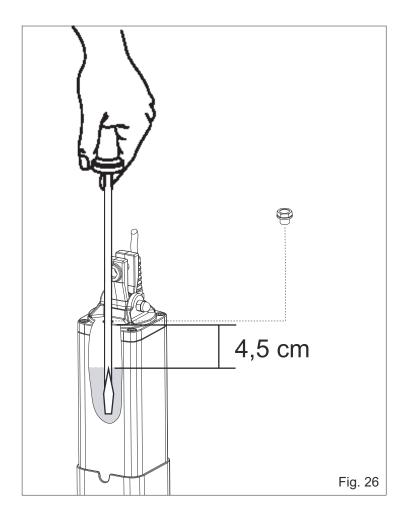
## INSTALLATION OF THE CHROMIUM-PLATED ROD PROTECTION

Make sure to have inserted the antivibration plastic frame (A) before inserting the rod cover extrusion (Fig. 25)

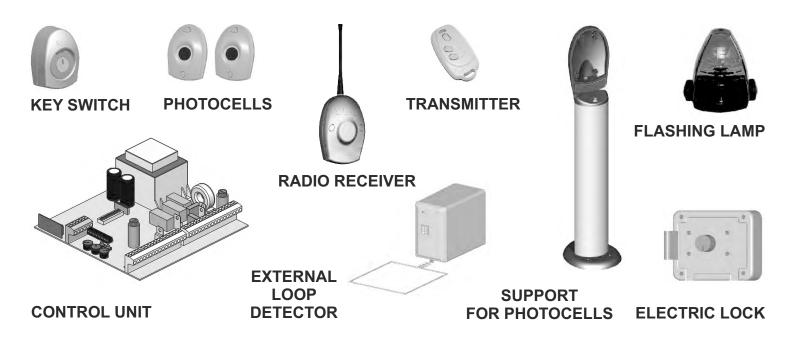




## **OIL LEVEL MEASUREMENT**



### **ACCESSORIES**







#### To the attention of users and technicians

## **PERIODICAL MAINTENANCE**

10	After having executed the periodical maintenance it is neccessary to repeat the tests and the first power up of the automation	Annual
9	Check the functionality of all the accessories especially the function of all security devices and Position Gate	Annual
8	Check the good status of all the apparatus which are subject to efforts (back fixation, oscillating fork and front fixation)	Annual
7	Check the function and the conditions of the mechanical stops in opening and closing (where the mechanical stop accessory is present)	Annual
6	Check the integrity of the connecting cables.	Annual
5	Check and grease the fixation pivots	Annual
4	Check the torque functionality in opening and closing	Annual
3	Replace the oil with that recommended by the producer	4 years
2	Check the oil level in oil-bath operators (cap on the back cover of the operator)	Annual
1	Check the robustness and the stability of the gate; particularly the leaning and/or rotation points of the gate (hinges)	Annual

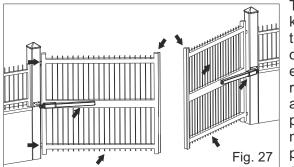
All the above mentioned operations must be executed by an authorised installer only



#### To the attention of users and technicians

#### **RISK EXAMINATION**

The points indicated by arrows in Fig. 27 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.

#### INITIAL CHECK AND PUTTING IN SERVICE

After having completed all necessary operations, for the correct installation of the products, described in the present manual and after having valued all resting risks which could arise in whatever installation <u>is necessary to test the</u> <u>automations to guarantee the max. security</u> and in particular way to guarantee the respect of what foreseen by the law and the normatives in force. In particular the test must be executed following the EN12445 ruel which establishes the testing methods for the testing of the gate operators respecting the established limits by the EN 12453 law.

#### SAFETY PRECAUTIONS

All electrical installation work should conform to current regulations. A *16A - 0,030A* differential switch must be incorporated into the source of the gate main electrical supply and the entire system must be properly earth bonded. Remember to separate mains (230/120V) carrying cables from low voltage control cables

#### **INTENDED USE**

The Cougar in all its versions has been planned to be used exclusively for the automation of swing gates

#### **SPARE PARTS**

To obtain spare parts contact: SEAS.p.A. ZONA Ind.le, 64020 S.ATTO Teramo Italia

#### SAFETY AND ENVIRONMENTAL COMPATIBILITY

Please dispose of the product and circuit packing materials in a responsible and appropriate way. When being transported this product must be properly packaged and handled with care

#### MAINTENANCE AND DECOMMISSION

The decommission and maintenance of these unities must be carried out by specialised and authorised personnel only

#### LIMIT OF GUARANTEE

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

# NOTE: THE MANUFACTURER CAN NOT BE DEEMED RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED BY IMPROPER USE OF THIS PRODUCT

SEA reserves the right to do changes or variations that may be necessary to its products with no obligation to notice



### **TERMS OF SALES**

**EFFICACY OF THE FOLLOWING TERMS OF SALE:** the following general terms of sale shall be applied to all orders sent to SEAS.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. Noncompliance 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 expressively clauses under numbers: 4) PAYMENTS - 8) GUARANTEE - 10) COMPETENT COURT OF LOW

## **CERTIFICATO DI ESTENSIONE GARANZIA CERTIFICATE OF WARRANTY EXTENTION**

		п.	
<b>PRODOTTO/ PRODUCT</b>			
- Modello/ <i>Model</i>			
- Matricola n. /Serial Number			
- Data di acquisto/Date of order			
- Data di installazione/Date of installa	ition		
Centrale/Control unit	SEA 🗆	Altri/ <i>Others</i>	
Fotocellule/Photocells	SEA 🗆	Altri/Others	
RX - TX	SEA 🗆	Altri/ <i>Others</i>	
Altri accessori /Other accessories	SEA 🗆	Altri/Others	
UTENTE/Customer			
Nome e Cognome			
First Name and Family Name			
Indirizzo/Address			
INSTALLATORE/Installer			
Ragione sociale/ <i>Company Name</i> Nome e Cognome/ <i>First and Family N</i>	ama		
Indirizzo/Addrass	ume		
Indirizzo/Address			
INSTALLATORE/INSTALLER			
Firma per il trattamento dei dati perso	nali ai sensi del F	Regolamento UE 679/20	16
Agreement to the GDPR EU Regulation		Copia da restitu	

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 S.p.A. - Zona Industriale San Atto- 64020 Teramo (Italy) Phone +39 0861 588341- Fax +39 0861588344 www.seateam.com - info@seateam.com

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### 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.



#### 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 responsability and, if applicable, under the responsability of its authorised representative that, by installing the appropriate safety equipment and noise filtering, the products:

Descrizione / Description	Modello / <i>Model</i>	Marca / Trademark
COUGAR 270 OIL S (e tutti i suoi derivati / and all its by-products)	11305500	SEA
COUGAR 390 OIL S (e tutti i suoi derivati / and all its by-products)	11305605	SEA
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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

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> SEA S.p.A. DIREZIONE E STABILIMENTO: Zona industriale 64020 S.ATTO Teramo - (ITALY) Tel. +39 0861 588341 r.a. Fax +39 0861 588344

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#### www.seateam.com

seacom@seateam.com