SEA®
Sistemi Elettronici
di Apertura Porte e Cancelli
International registered trademark n. 804888

Italiano

ATTUATORE OLEODINAMICO PER CANCELLI A BATTENTE

HALF TANK

MANUALE D`INSTALLAZIONE
ed informazioni sulla sicurezza

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CARATTERISTICHE E SPECIFICHE

Il prodotto **HALF TANK 100** e **HALF TANK 200** è un attuatore oleodinamico di grande qualità per uso condominiale per cancelli con ante di lunghezza max rispettivamente 6 m. e 7 m. con l'elettroserratura.
Disponibile nelle seguenti versioni:
AC *(con blocco in apertura e chiusura)*
SC *(con blocco solo in chiusura)*
SA *(con blocco solo in apertura)*
SB *(senza blocco)*

Il blocco viene garantito sulle ante con una lunghezza inferiore a 1,80 m. per l'Half Tank 100 mentre viene garantito fino a 2,20 m. per l'Half Tank 200. Per ante con lunghezza superiore rispettivamente a 1,80 m. e 2,20 m. è consigliato, in tutte le versioni, l'uso di una elettro-serratura.
Il Prodotto Half Tank 100 e 200 sono forniti di valvole by-pass per la regolazione della forza sia in apertura che in chiusura. Il rallentamento è regolabile elettronicamente in apertura e chiusura con la centralina GATE 2. Per le norme e direttive vigenti oggi in Europa è fortemente consigliato l'uso del Safety Gate (dispositivo per la lettura della posizione del cancello), necessario per permettere l'inversione dell'anta in caso di ostacolo.

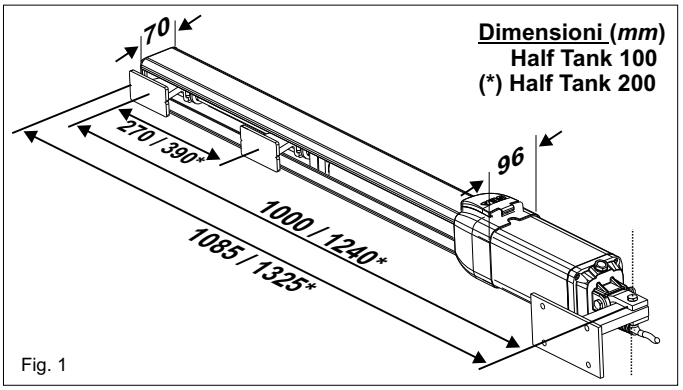
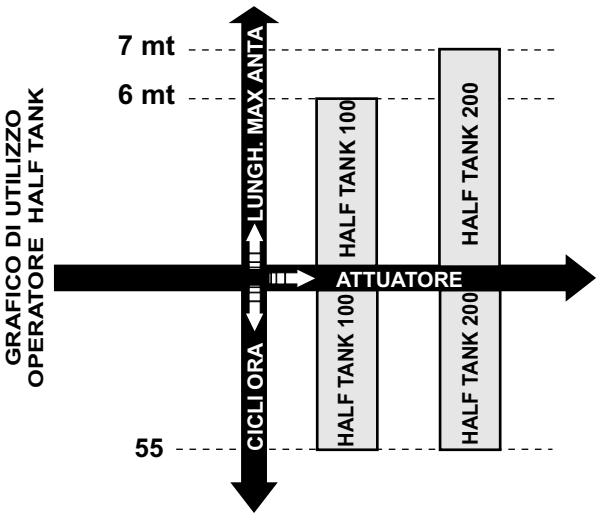
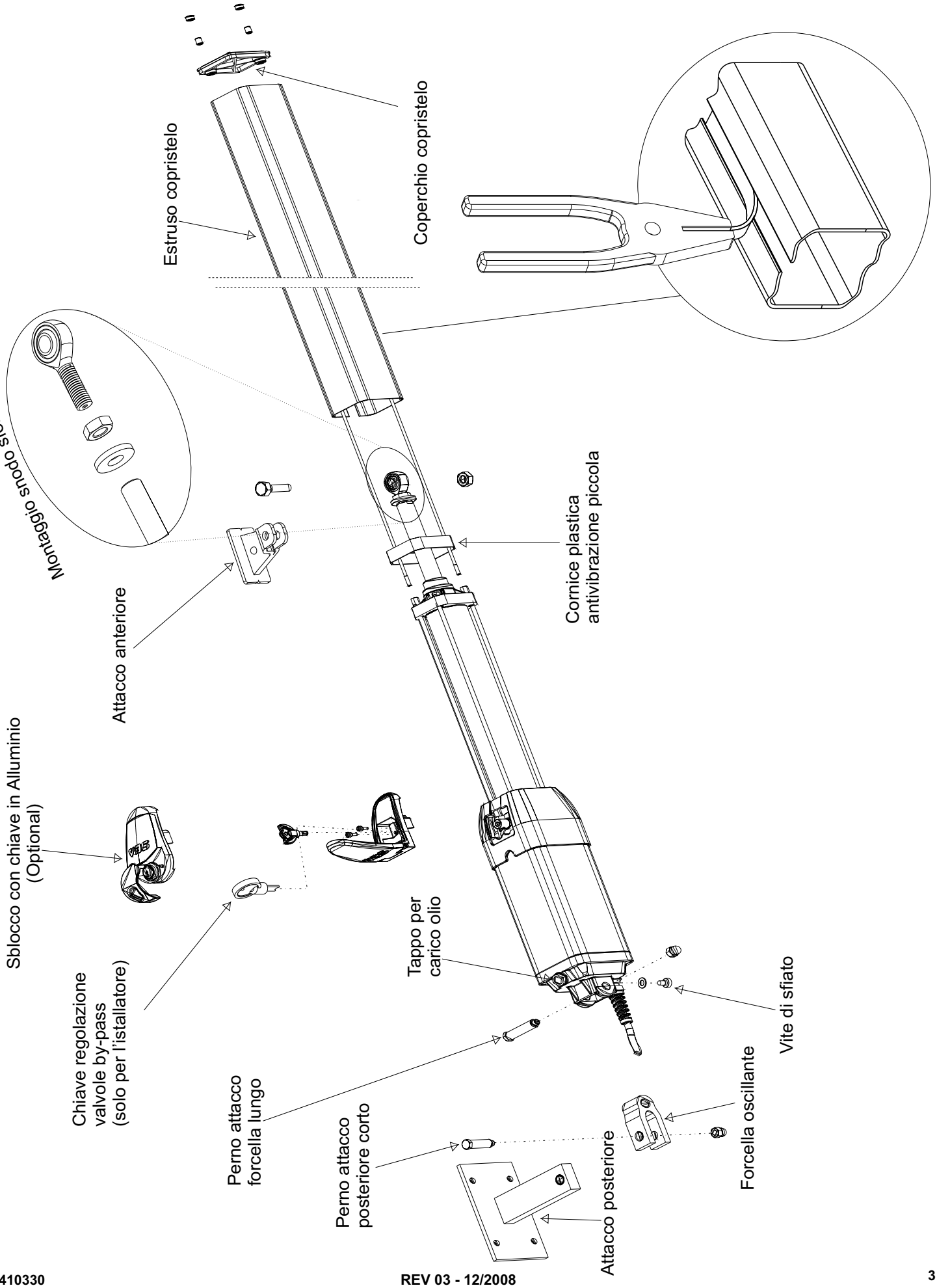


Fig. 1

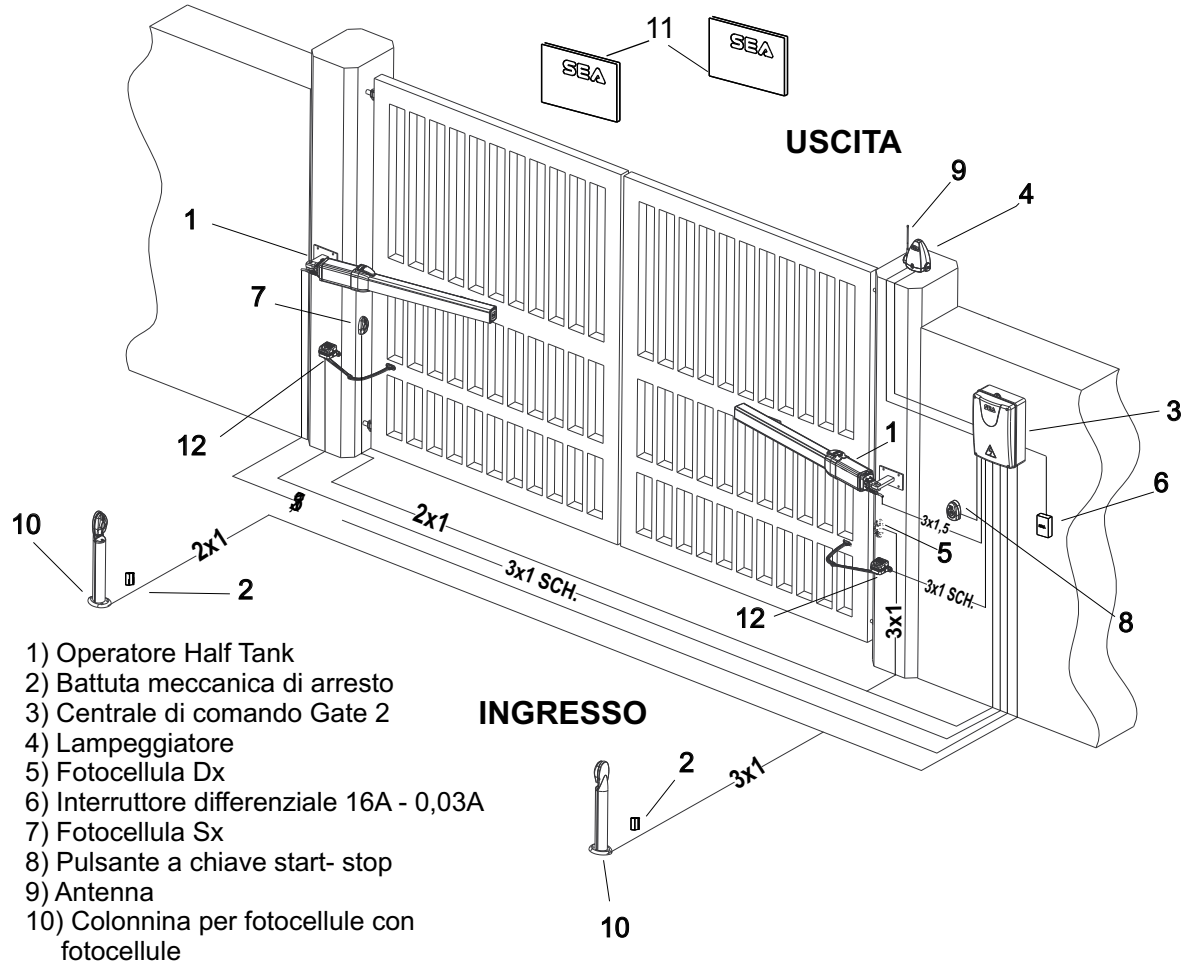
Fig. 2

CARATTERISTICHE TECNICHE	*HALF TANK 100*	*HALF TANK 200*
Alimentazione	230 V (±5%) 50/60 Hz	
Potenza	220 W	
Corrente assorbita	1 A	
Corsa dello stelo	270 mm	390 mm
Cicli/ora (temp. di 20°C)	55	
Max pressione di lavoro	40 bar	30 bar
Temperatura di lavoro	-40°C +60°C	
Termo-protezione motore	130°C	
Max Spinta	640 daN	470 da N
Condensatore	12,5uF	
Peso	11,4 Kg	13,6 Kg
Grado di protezione	Ip55	
Lunghezza max. dell'anta	6 mt	7 mt
Gradi di apertura anta	90° - 125°	




Coperchio copristelo
Estruso copristelo
Montaggio snodo sferico
Attacco anteriore
Cornice plastica
antivibrazione piccola
Sblocco con chiave in Alluminio
(Optional)
Chiave regolazione
valvole by-pass
(solo per l'installatore)
Tappo per
carico olio
Vite di sfiato
Perno attacco
forcella lungo
Perno attacco
posteriore corto
Forcella oscillante
Attacco posteriore

INSTALLAZIONE TIPICA



1) Operatore Half Tank
2) Battuta meccanica di arresto
3) Centrale di comando Gate 2
4) Lampeggiatore
5) Fotocellula Dx
6) Interruttore differenziale 16A - 0,03A
7) Fotocellula Sx
8) Pulsante a chiave start- stop
9) Antenna
10) Colonnina per fotocellule con fotocellule
11) Cartelli di avvertimento
12) Safety Gate

TIPO DI INSTALLAZIONE

E' possibile installare il Half Tank con l'apertura verso l'interno (Fig. 14) o verso l'esterno (Fig. 15).

Installazione interna

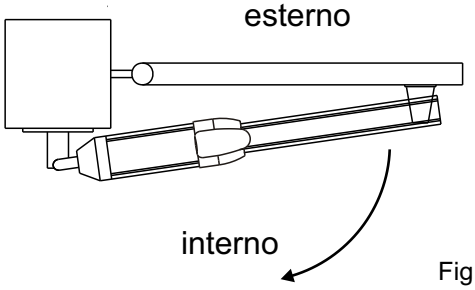


Fig. 4

Installazione esterna

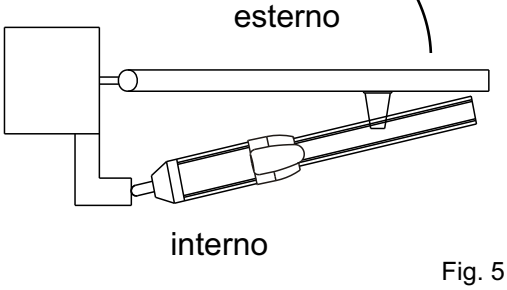


Fig. 5

Installare l'operatore sempre all'interno della proprietà

INSTALLAZIONE INTERNA

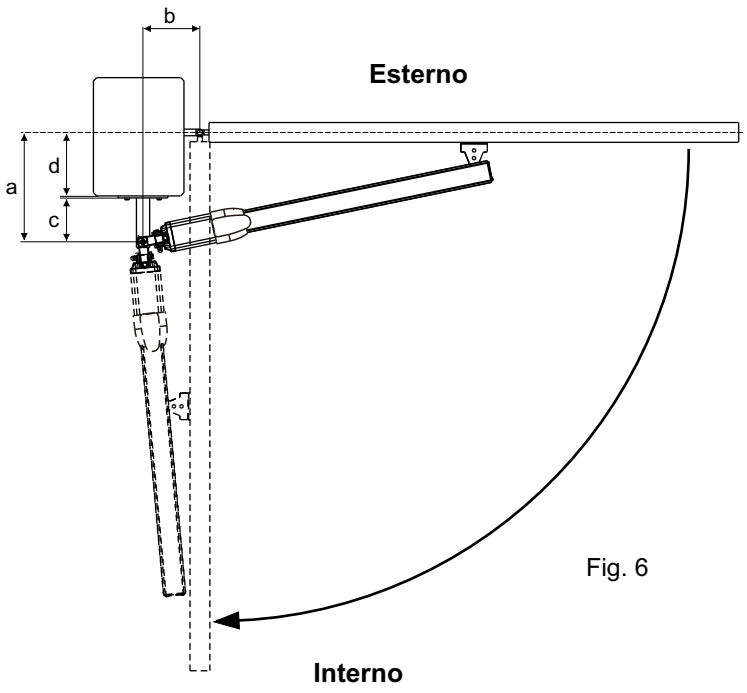


Fig. 6

Corsa totale 270 mm - corsa max suggerita 250 mm

a (mm)	b (mm)	d max (mm)	Massimo Angolo di apertura	Corsa stelo max **(mm)**	Corsa stelo per 90°**(mm)**
100	115	50	**110°**	**250**	**215**
100	150	50	**90°**	**250**	
105	110	55	**110°**	**245**	**215**
105	145	55	**90°**	**250**	
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°**	**250**	
145	95	95	**100°**	**255**	**242**
145	105	95	**90°**	**250**	
150	100	100	**90°**	**250**	
155	85	105	**96°**	**250**	**242**
160	90	110	**90°**	**253**	
170	75	120	**92°**	**250**	
180	65	130	**92°**	**250**	

Per ottenere 110° con d > 55 mm bisogna fare una nicchia nel cancello.

INSTALLAZIONE INTERNA

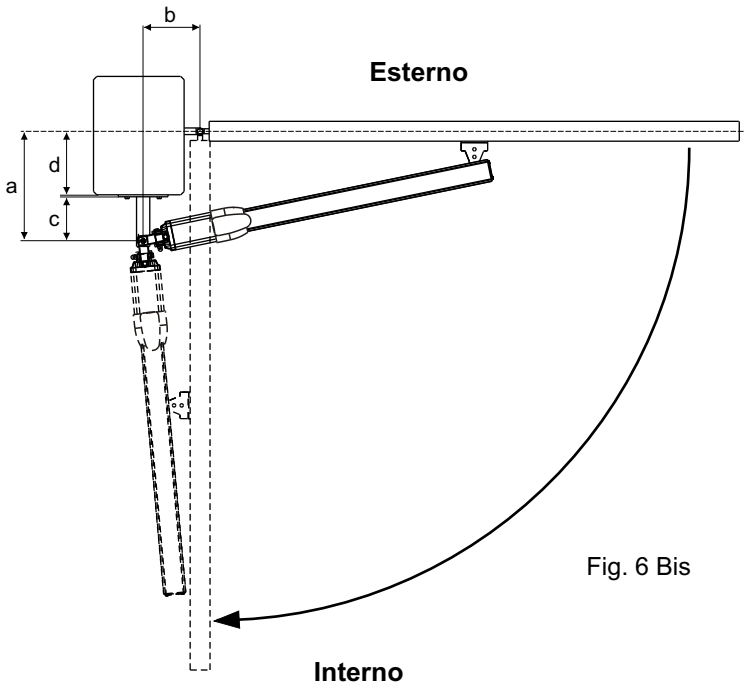


Fig. 6 Bis

Corsa totale 390 mm - corsa max suggerita 370 mm

a (mm)	b (mm)	d max (mm)	Massimo Angolo di apertura	Corsa stelo max **(mm)**	Corsa stelo per 90°**(mm)**
125	170	75	**125°**	**368**	**295**
130	170	80	**125°**	**372**	**300**
140	235	90	**90°**	**370**	
145	165	95	**120°**	**372**	**310**
145	230	95	**90°**	**370**	
160	210	110	**90°**	**370**	
175	195	120	**90°**	**370**	
185	145	130	**110°**	**370**	**330**
185	190	130	**90°**	**370**	
195	140	140	**110°**	**371**	**355**
195	175	140	**90°**	**370**	
240	110	185	**100°**	**370**	**355**
240	125	185	**90°**	**370**	
250	105	195	**95°**	**370**	**360**
250	115	195	**90°**	**370**	
260	95	205	**95°**	**369**	**365**
260	100	205	**90°**	**370**	
270	90	215	**90°**	**370**	
280	80	230	**90°**	**370**	
295	65	245	**90°**	**369**	

Per ottenere 125° con d > 55 mm bisogna fare una nicchia nel cancello.

INSTALLAZIONE ESTERNA

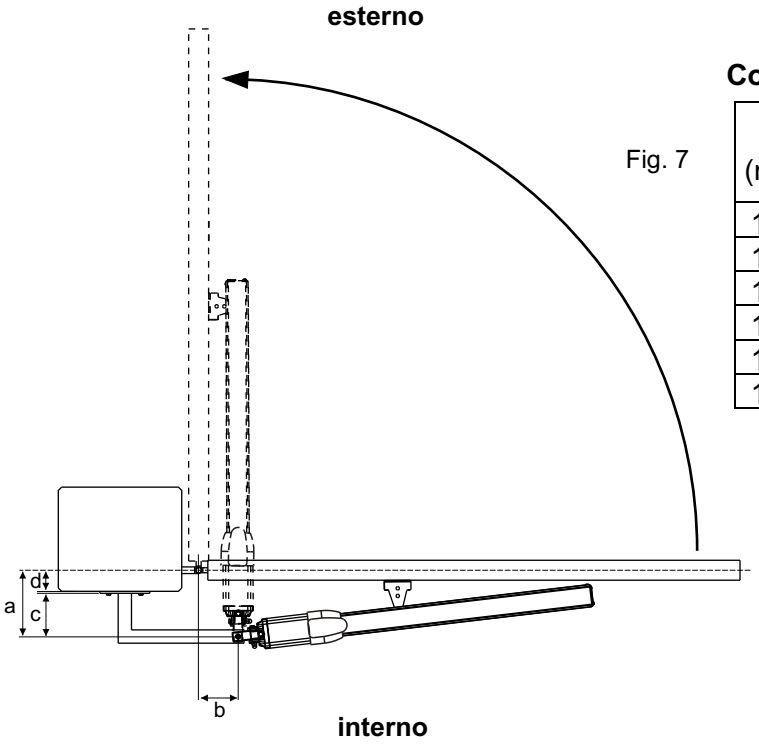


Fig. 7

Corsa totale 270 mm - corsa max suggerita 250 mm

a (mm)	b (mm)	Massimo Angolo di apertura	Corsa stelo max **(mm)**	Corsa stelo per 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**	

INSTALLAZIONE ESTERNA

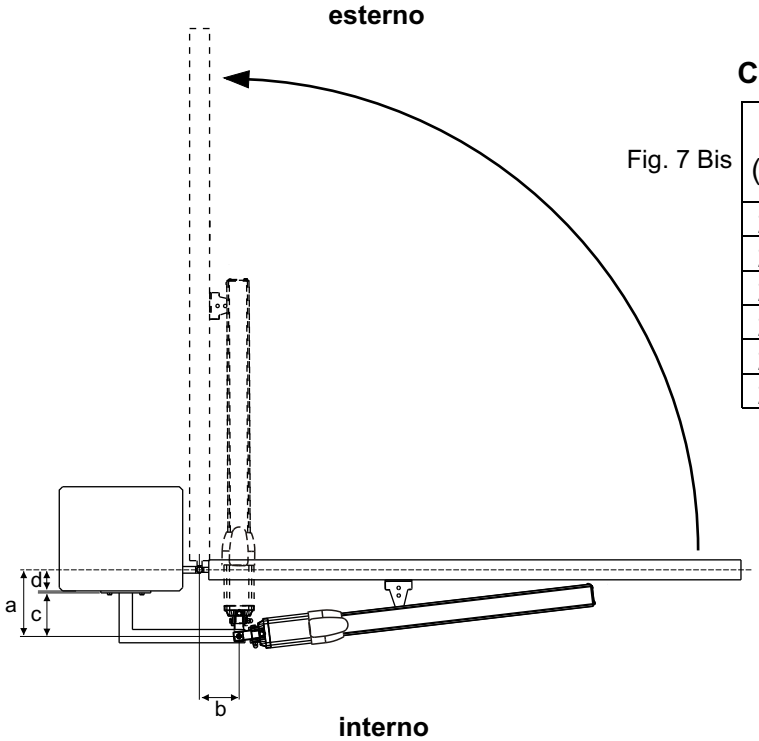


Fig. 7 Bis

Corsa totale 390 mm - corsa max suggerita 370 mm

a (mm)	b (mm)	Massimo Angolo di apertura	Corsa stelo max **(mm)**	Corsa stelo per 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**	

INSTALLAZIONE FORCELLA OSCILLANTE

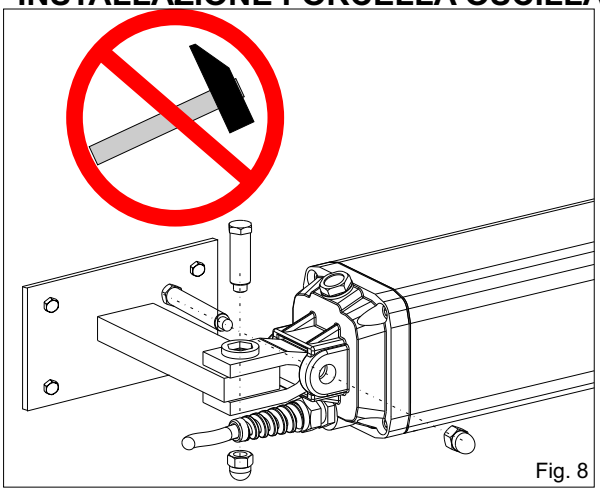


Fig. 8

PRELIMINARI

-Aprire con cura l'imballo, facendo attenzione a non perdere dei componenti riportati a fig.3

-Fissare la forcella oscillante come in fig.9

Attenzione: **non utilizzare il martello** per l'inserimento del perno di ottone corto; l'inserimento del perno sulla forcella e staffa deve avvenire con la semplice pressione delle mani

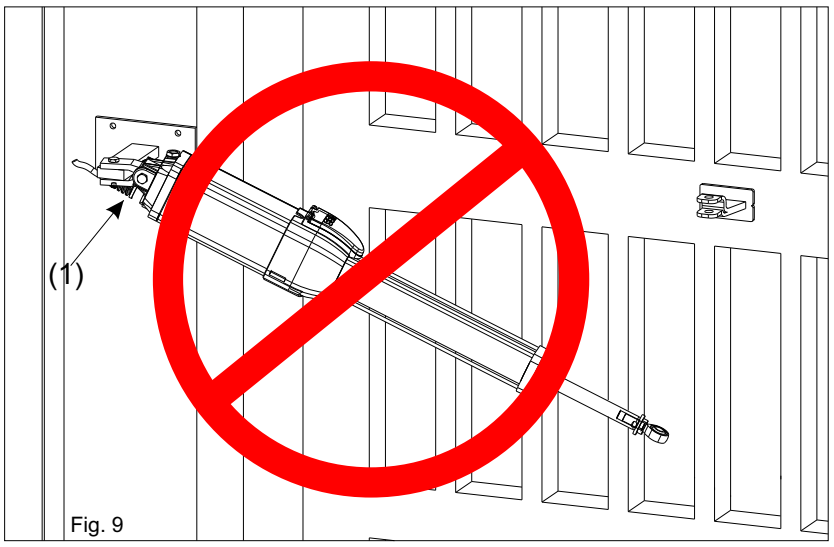


Fig. 9

Attenzione:

Non inclinare l'operatore oleodinamico oltre l'angolazione permessa dalla forcella oscillante (1), pena la possibile rottura della stessa.

INSTALLAZIONE ATTACCO POSTERIORE

In base alla scelta del tipo di apertura (interna o esterna) e in base scelta della rotazione massima dell'anta (vedi pag. 5), la staffa deve essere prima tagliata rispettando la quota "a" di pag.5 e poi saldata come in fig.10.

Il supporto deve essere posizionato in modo che l'operatore risulti perfettamente orizzontale (Fig. 10 ,Fig.12).

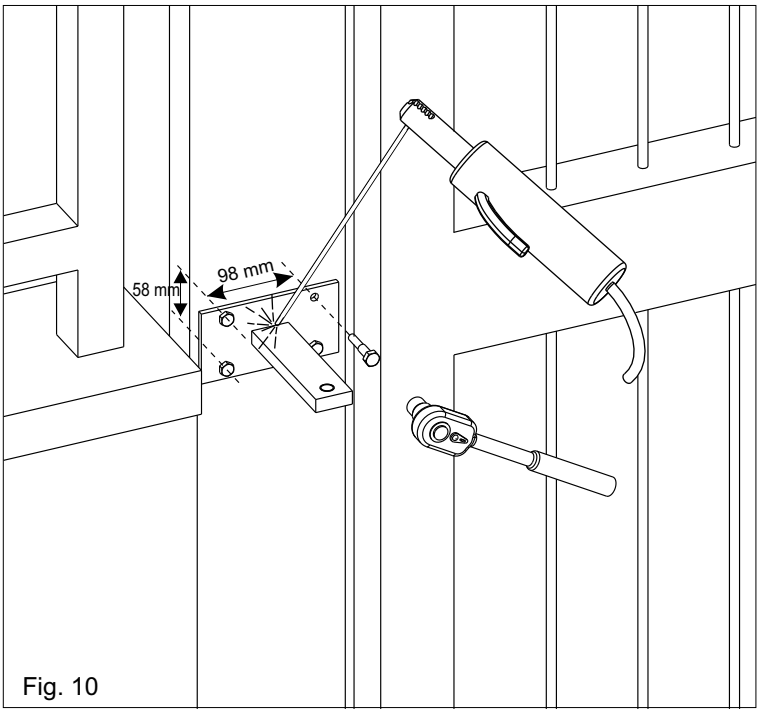


Fig. 10

Attacco posteriore regolabile (con viti)
(Accessorio su richiesta)

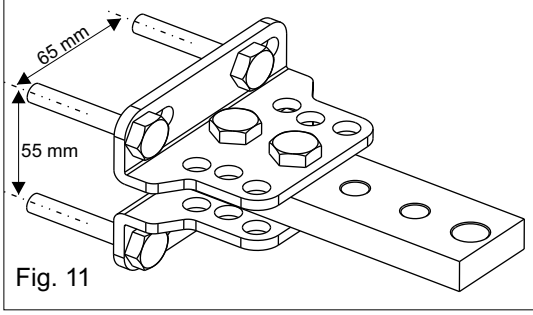


Fig. 11

POSIZIONAMENTO DELL'ATTACCO ANTERIORE

Una volta fissato l'operatore sull'attacco posteriore portare l'anta del cancello in posizione di chiusura ed eseguire le seguenti operazioni:

1) Sbloccare l'operatore (come in Fig. 23 di pag. 11)
2)Tirare fuori completamente lo Stelo cromato, **poi riportarlo indietro di minimo 1 cm**
3) Fissare lo stelo sul attacco anteriore (Fig. 13)
4) Posizionare l'operatore in modo che risulti perfettamente orizzontale e quindi segnare la posizione dell'attacco anteriore (Fig. 12)
Attenzione: evitare di saldare l'attacco anteriore con lo stelo dell'operatore oleodinamico già fissato; i residui (schizzi) di saldatura potrebbero compromettere la cromatura dello stelo.

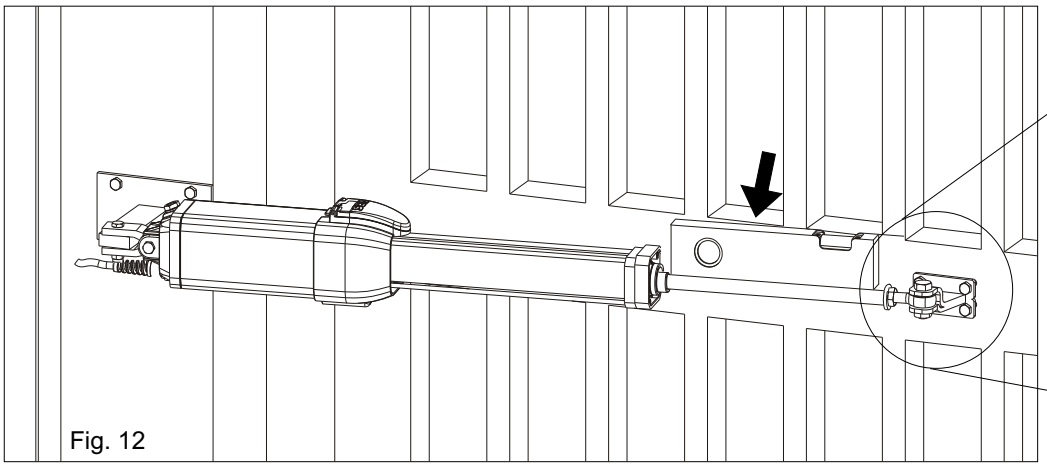


Fig. 12

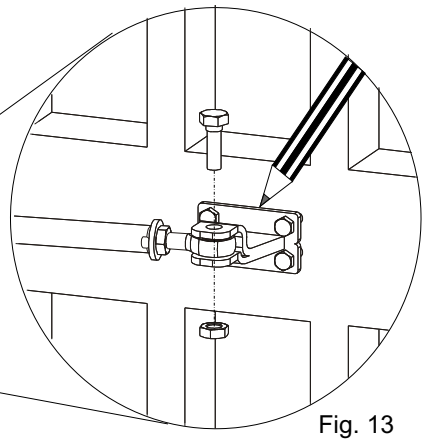


Fig. 13

SALDATURA DELL'ATTACCO ANTERIORE AL CANCELLO

L'attacco anteriore deve essere posizionato in maniera tale che l"operatore risulti perfettamente orizzontale.

L'attacco anteriore in base alla natura del cancello (legno, ferro, alluminio) può essere sia saldato che avvitato.

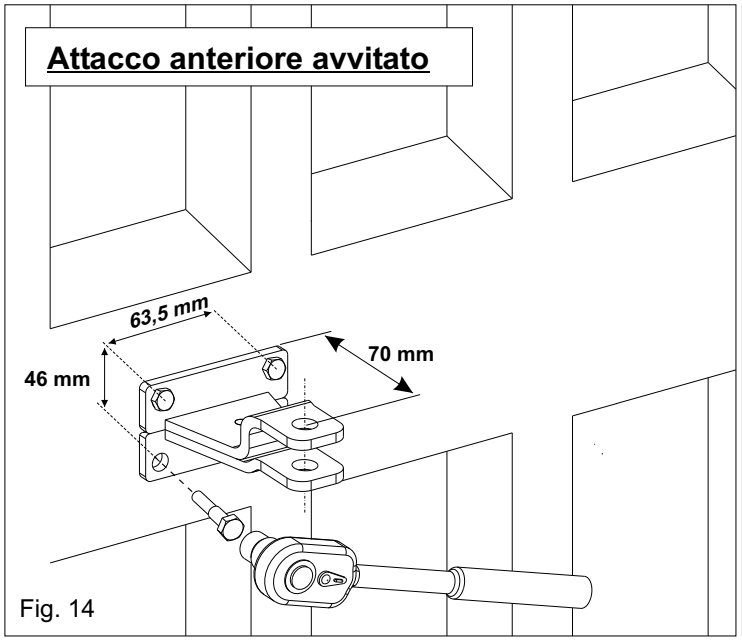


Fig. 14

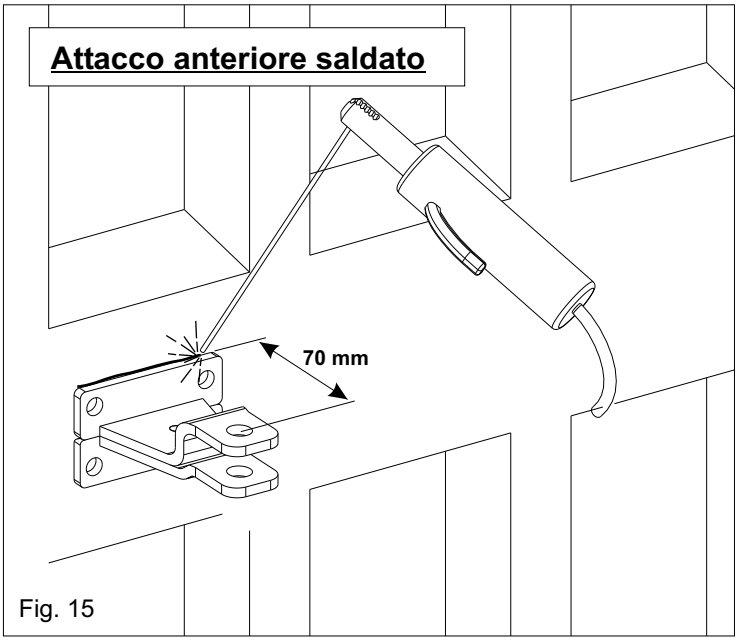


Fig. 15

INSTALLAZIONE DELLE BATTUTE FINE CORSA (Accessorio a richiesta)

-Sbloccare l'unità (come in Fig. 23 di pagina 10)
- Fare fuoriuscire stelo di 3/4 della sua corsa
-Mettere le battute di fine corsa sulla flangia anteriore dell'unità con i due tiranti (dei tre in totale presenti sulla battuta) che stanno in parallelo al cancello (Fig. 16)
- Fissare le battute con le viti incluse nella confezione.
- a questo punto agganciare lo stelo all'attacco anteriore
-Per regolare la battuta in apertura agire su disco 1, ed in chiusura su disco 2.

Attenzione : il montaggio della battuta meccanica non comporta una diminuzione della corsa dello stelo

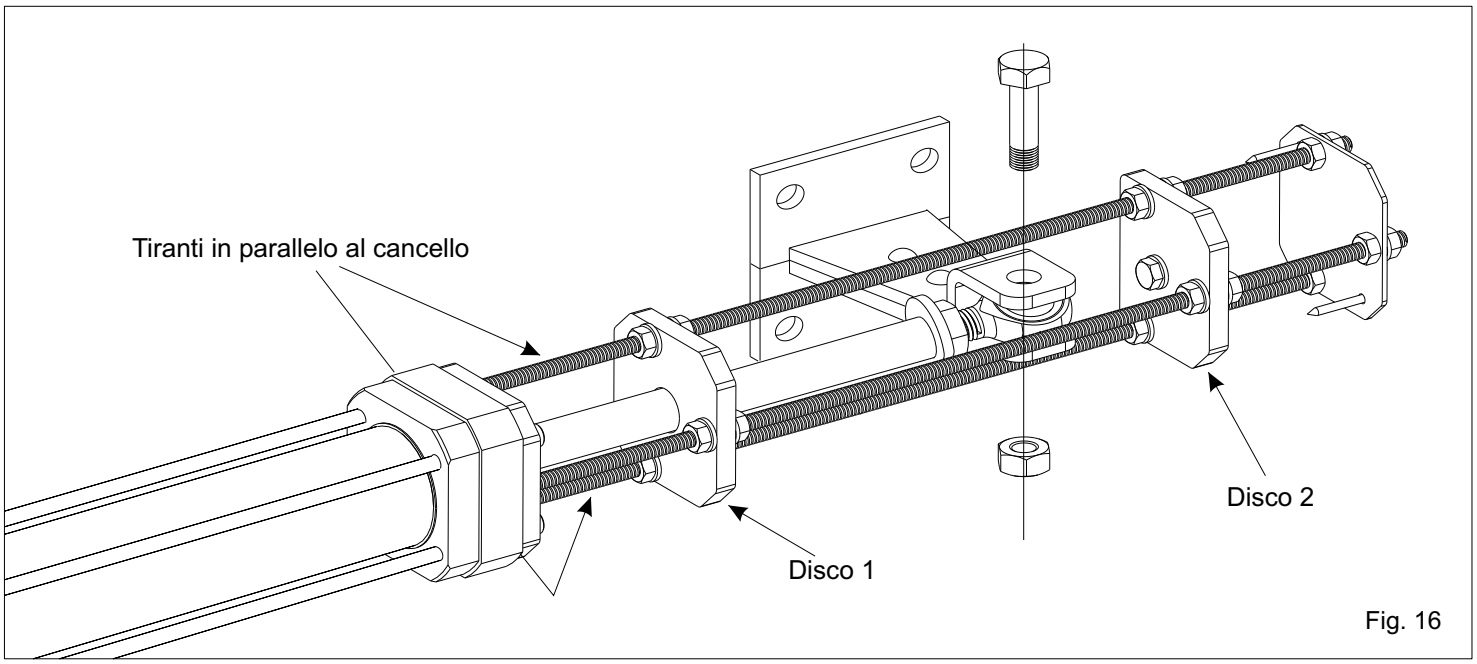


Fig. 16

VITE DI SFIATO

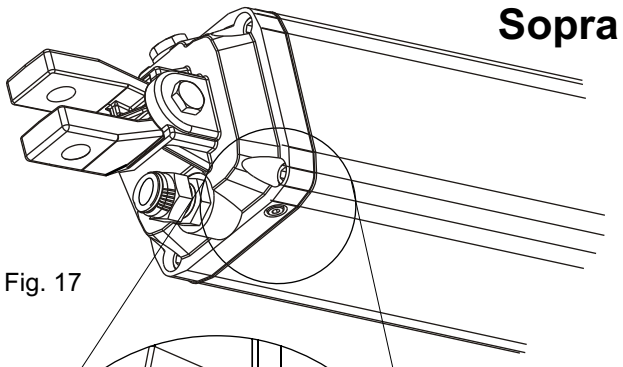


Fig. 17

ATTENZIONE

E' obbligatorio togliere le viti di sfiato ad installazione terminata.

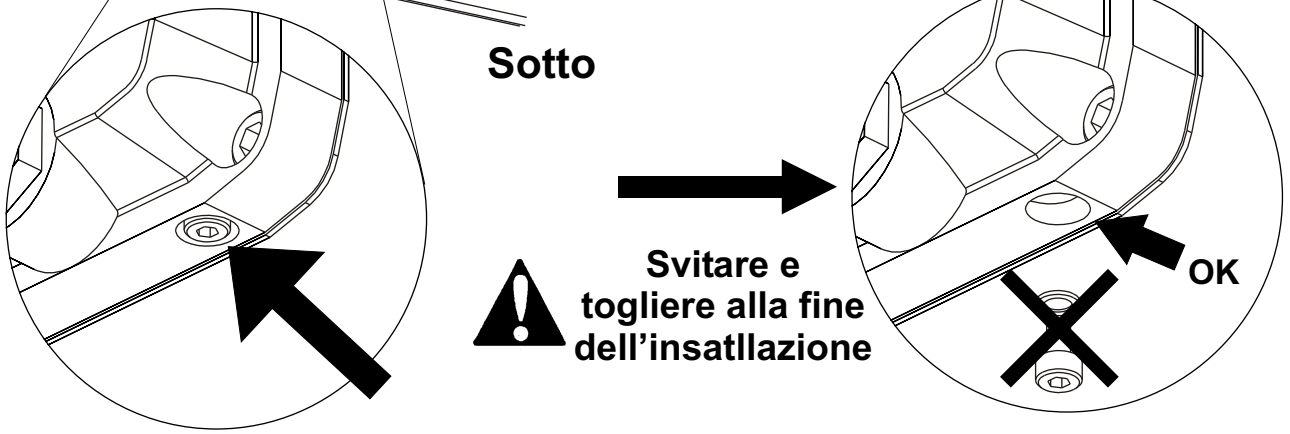


Fig. 18

INSTALLAZIONE DELLA PROTEZIONE DELLO STELO CROMATO

Verificare di aver inserito la cornice in plastica antivibrazione (**A**) prima d'inserire l'estruso copristelo (Fig. 19)

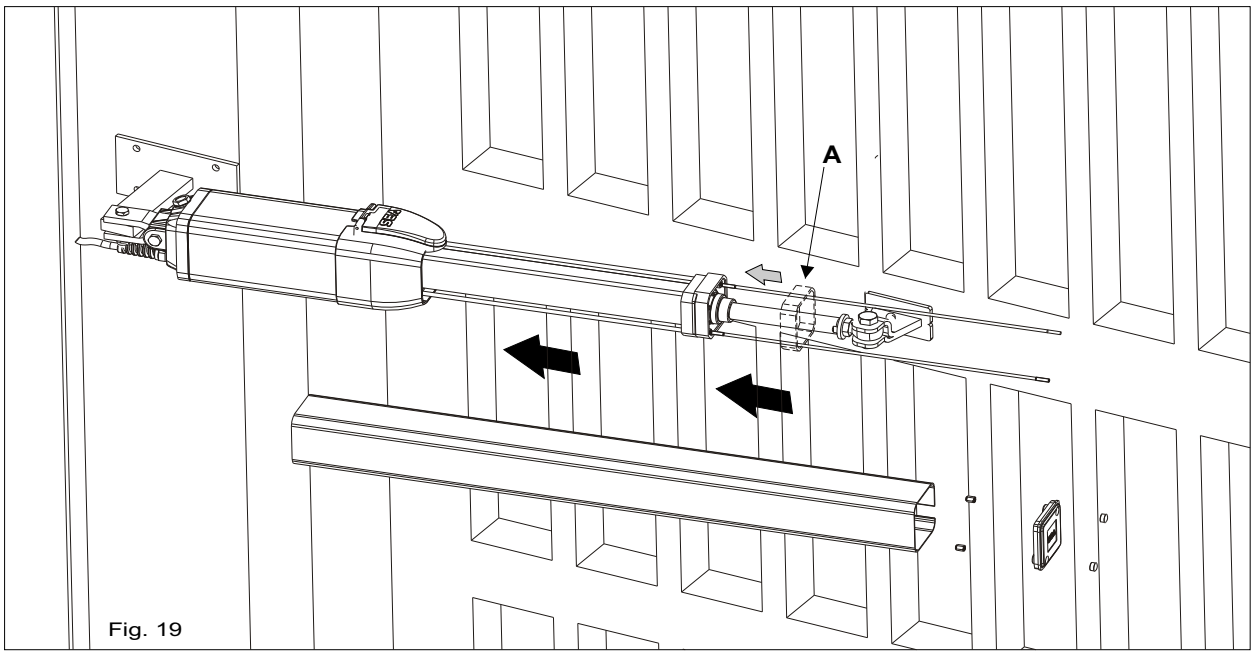


Fig. 19

REGOLAZIONE COPPIA (By-Pass Valvole)

In caso di prima istallazione il coperchio dello sblocco non deve ancora essere inserito così come il copri by-pass. In questo caso fare riferimento alle fig. 20 e fig.22
In caso di regolazione valvole by-pass, eseguita in un secondo momento, a causa, ad esempio di manutenzione periodica o altro togliere la vite che blocca il copri by-pass (fig. 21), togliere il copri by-pass e regolare quindi la pressione delle valvole by-pass con l'apposita chiave data in dotazione solo all'istallatore(Fig. 22).

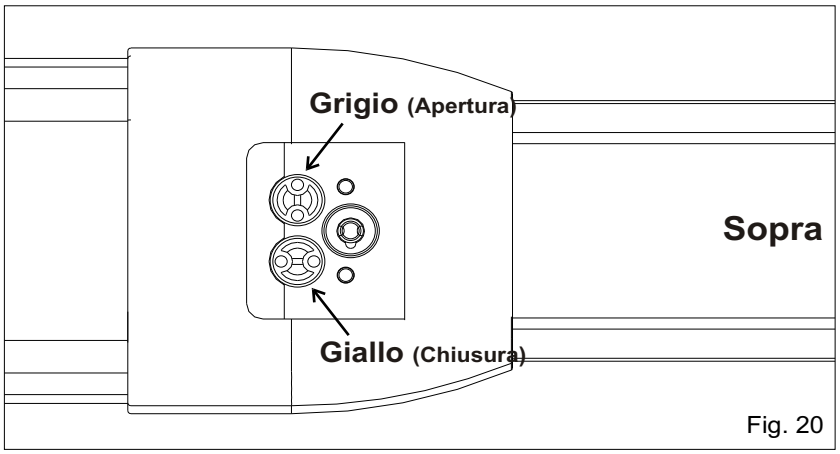


Fig. 20

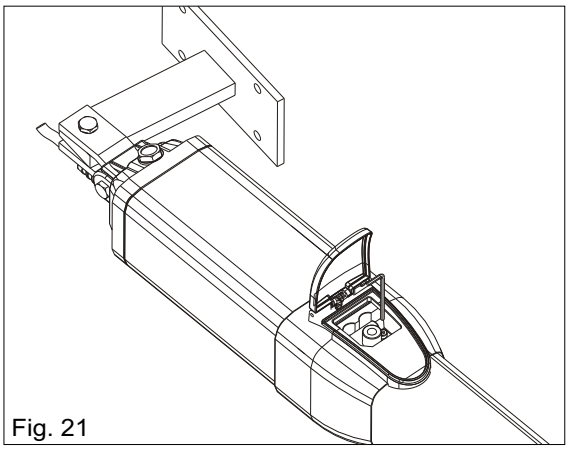
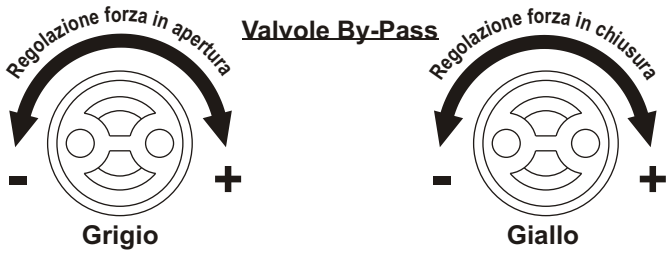


Fig. 21



Regolare la forza del cancello in apertura e in chiusura in modo da rispettare il diagramma delle forze (presente nella norma En12453); la forza di spinta comunque non deve mai essere superiore ai 15KgF.

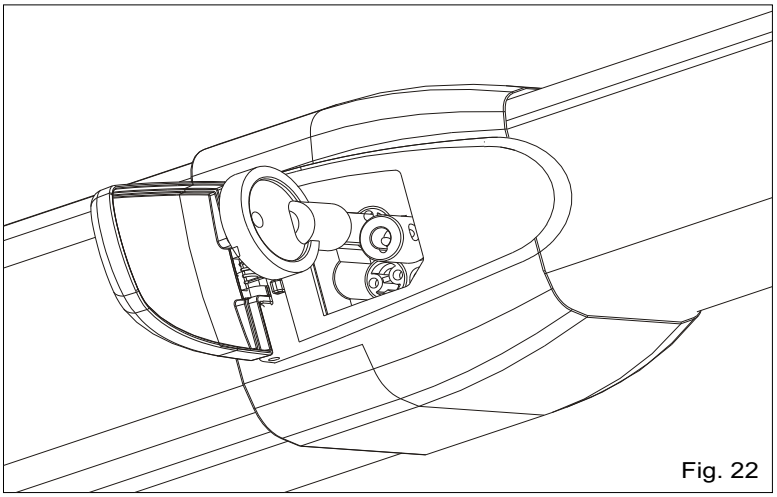


Fig. 22

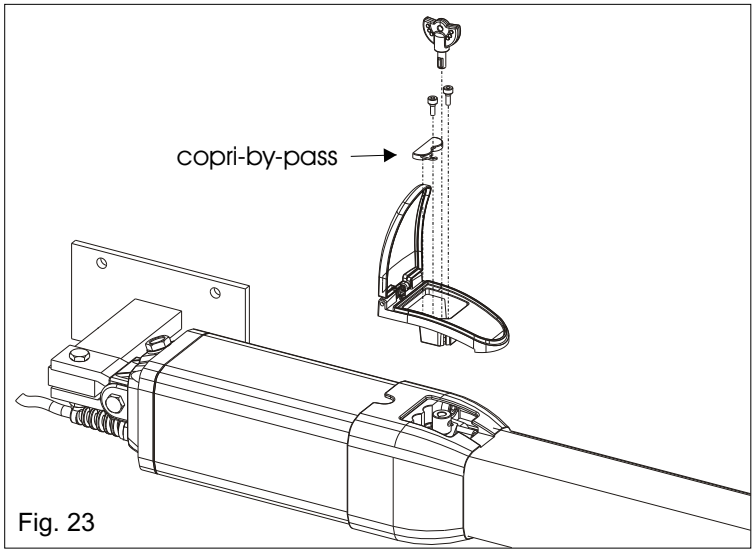


Fig. 23

MONTAGGIO SBLOCCO IN PLASTICA

ATTENZIONE: Il montaggio dello sblocco in plastica deve avvenire nel modo indicato in figura 23 **solo e soltanto dopo aver terminato tutte le operazioni di istallazione montaggio del copristelo e di taratura delle valvole bypass.**

MONTAGGIO SBLOCCO IN ALLUMINIO CON CHIAVE (accessorio su richiesta)

ATTENZIONE: Il montaggio dello sblocco in alluminio deve avvenire nel modo indicato in figura 24 solo e soltanto dopo aver terminato tutte le operazioni di istallazione montaggio del copristelo e di taratura delle valvole by-pass.
La chiave di sblocco viene custodita all'interno del coperchio dello sblocco in alluminio (vedi fig. 25)

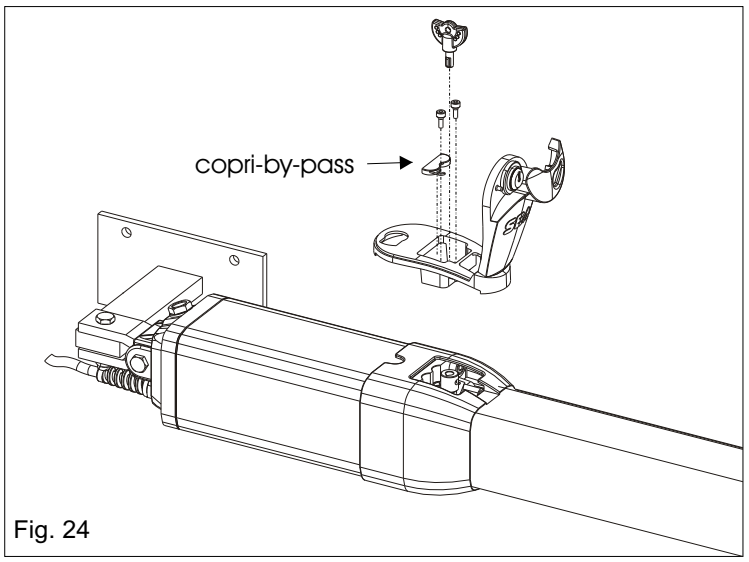


Fig. 24

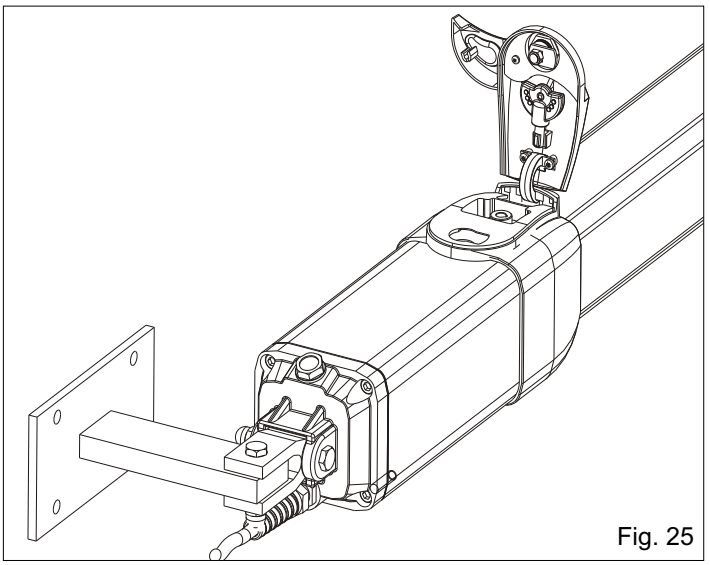


Fig. 25

MONTAGGIO SBLOCCO ESTERNO (accessorio su richiesta)

ATTENZIONE: Il montaggio dello sblocco esterno deve avvenire nel modo indicato nelle figure 26 e 27. Per maggiori dettaglio fare riferimento all'istruzione di montaggio presente nel Kit di montaggio sblocco esterno per Half Tank.

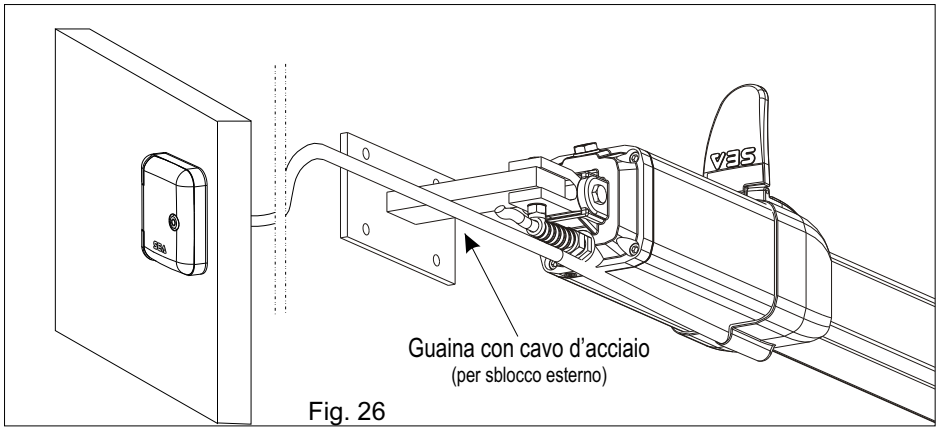


Fig. 26

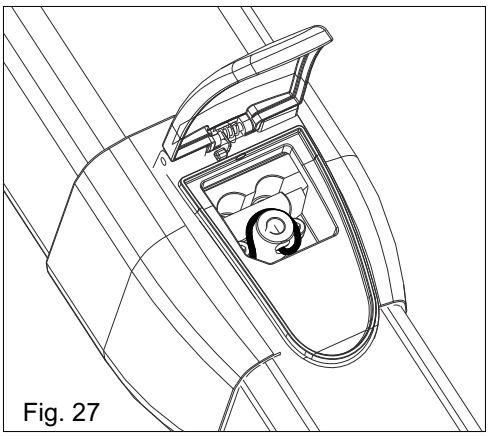


Fig. 27

SISTEMA DI SBLOCCO

Per sbloccare operare come segue:
-Inserire la chiavetta e ruotarla in senso antiorario di 180 gradi (Fig.28).

Per bloccare nuovamente l'Attuatore operare come segue:
-Inserire la chiavetta e ruotarla in senso orario fino alla chiusura (Fig.28).

Attenzione: effettuare lo sblocco sempre in assenza di alimentazione

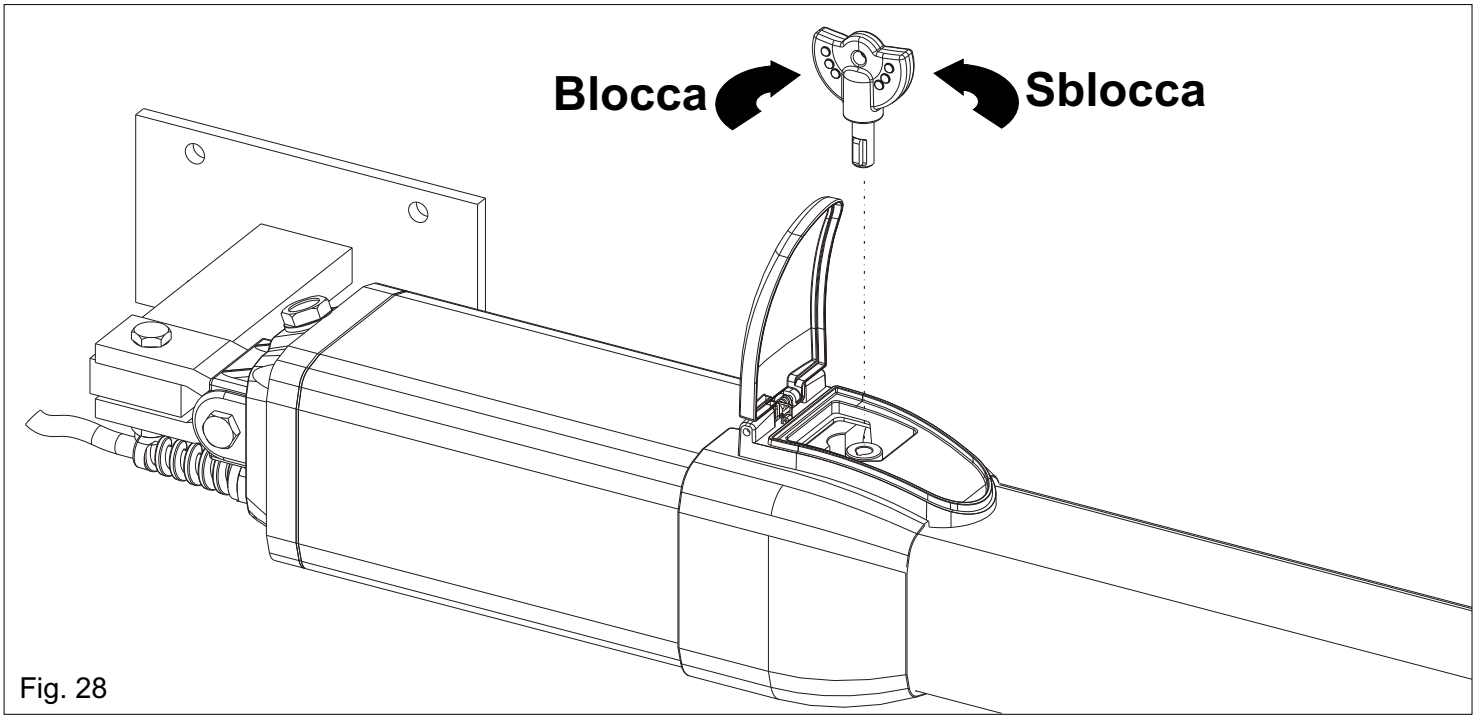


Fig. 28

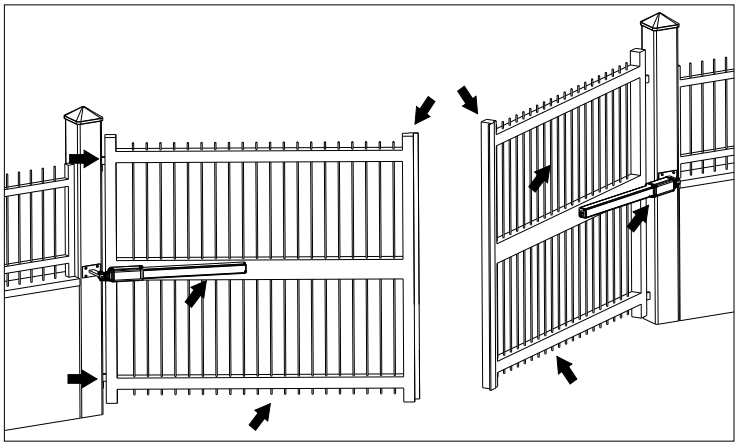
MANUTENZIONE PERIODICA

1) Controllare la robustezza e la stabilità del cancello, in particolar modo i punti di appoggio e/o rotazione del cancello (cardini).	Annuale
2) Controllare il livello dell'olio negli operatori oleodinamici/in bagno d'olio (Tappo posizionato sul coperchio posteriore dell'Half Tank)	Annuale
3) Sostituire l'olio idraulico con l'olio raccomandato dalla casa madre	4 Anni
4) Controllare la funzionalità dello sblocco	Annuale
5) Controllare la funzionalità delle valvole by-pass	Annuale
6) Controllare ed ingrassare i perni di fissaggio	Annuale
7) Controllare l'integrità dei cavi di collegamento	Annuale
8) Controllare la funzionalità e le condizioni delle battute di fine corsa in apertura e chiusura (ove è presente l'accessorio Battuta meccanica	Annuale
9) Controllare il buono stato di tutti gli apparati che sono soggetti a sforzo (attacco posteriore, forcella ocillante e attacco anteriore.)	Annuale
10) Controllare l'operatività di tutti gli accessori, in particolar modo la funzionalità di tutti i dispositivi di sicurezza e del Safety Gate.	Annuale
11) **Dopo aver eseguito le operazioni di Manutenzione Periodica è necessario ripetere il collaudo e la messa in servizio dell'automazione**	Annuale

Tutte le operazioni di cui sopra devono essere effettuate esclusivamente da un installatore autorizzato

ESAME DEI RISCHI

I punti indicati con le freccette in fig. 38 sono potenzialmente pericolosi. L'installatore deve effettuare un'esame approfondito dei rischi per prevenire: schiacciamenti, trascinamenti, tagli, agganciamenti, intrappolamenti e garantire un"installazione sicura per uomini, animali e cose.



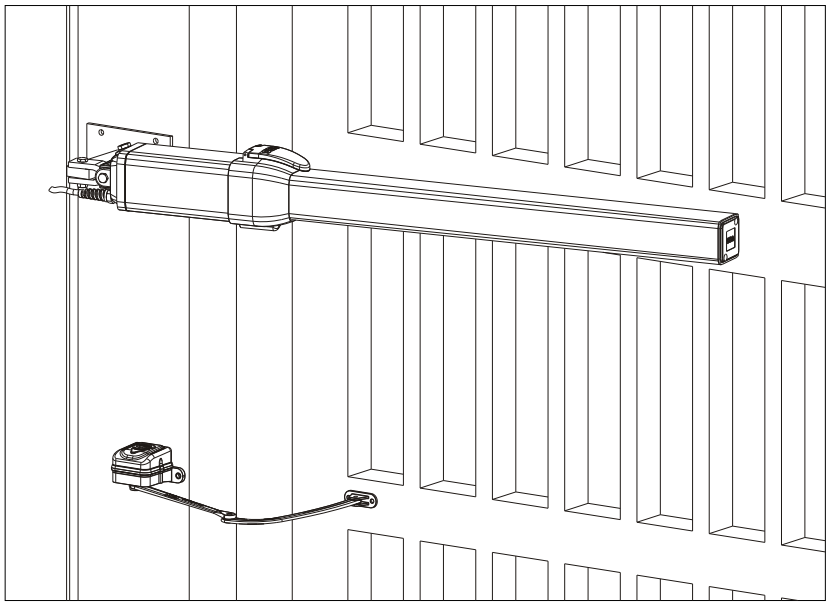
In caso di malintesi che potrebbero sorgere, si consiglia di consultare il distributore di zona oppure di chiamarci. Queste instruzioni sono parte integrale del dispositivo e devono essere conservate in un posto ben conosciuto. L'installatore deve attenersi rigorosamente alle instruzioni. I prodotti della SEA s.r.l. devono essere usati esclusivamente per l'automazione di porte, cancelli ed ante. Qualsiasi iniziativa presa senza esplicita autorizzazione della SEA s.r.l. distoglie quest'ulitma da qualsiasi responsabilita'. L'installatore deve fornire note d'avvertimento per ulteriori rischi non valutabili. La SEA s.r.l. nel suo continuo scopo di migliorare i prodotti, ha diritto di effettuare qualsiasi modifica senza obligo di avvisare i propri clienti. Cio' non obbliga la Sea s.r.l di migliorare la produzione passata. La SEA srl non puo' essere ritenuta responsabile per qualsiasi danno o incidente causato da prodotti rotti, se si tratta di danni o incidenti dovuti alla non osservanza di quanto riportato nelle presenti instruzioni. La garanzia non è valida e la responsibilita' del manufattore si annulla se sono stati usati pezzi di ricambio non originali della SEA srl. L'installazione elettrica deve essere effettuata da un tecnico professionista che rilasciera' la relativa documentazione, come richiesto dalle leggi in vigore. Tenere lontano dalla portata dei bambini il materiale d'imballo come buste di plastica, polistirolo, chiodi etc., essendo potenziali fonti di pericolo.

COLLAUDO INIZIALE E MESSA IN SERVIZIO

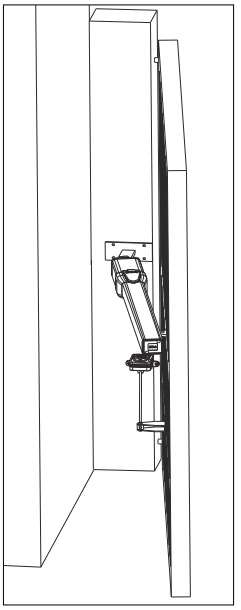
Dopo aver completato le operazioni necessarie, per una corretta istallazione del prodotto HALFTANK, descritte nel presente manuale e aver valutato tutti i rischi residui che possono insorgere in qualsiasi istallazione, **è necessario collaudare l'automazione per garantire la massima sicurezza** ed in particolare garantire il rispetto di quanto previsto dalle leggi e dalle norme del settore. In particolare il collaudo deve essere eseguito seguendo la **norma EN12445** che stabilisce i metodi di prova per la verifica degli automatismi per cancelli nel rispetto dei limiti imposti dalla **norma EN 12453**.

SAFETY GATE

Per una corretta e sicura istallazione è fortemente consigliato l'istallazione del Safety Gate, che **permette il soddisfacimento del diagramma delle forze presente nella norma EN 12453** e quindi del collaudo e della messa in servizio di tutta l'istallazione.



NOTA: in caso di istallazione come in figura a destra è possibile utilizzare il Safety Gate con asticella dritta (risolvendo così il problema dell'ingombro del braccetto (grafico a sinistra))



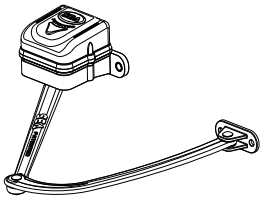
ACCESSORI PER HALF TANK

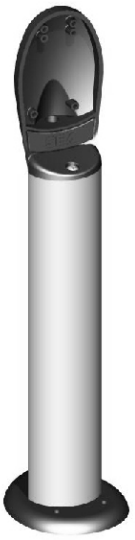

PULSANTE A CHIAVE

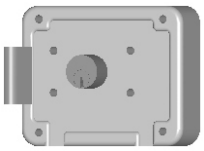

FOTOCELLULE


RICEVENTE RADIO

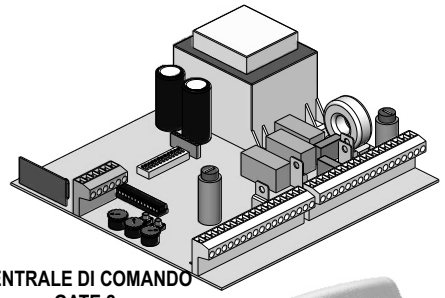

RADIOCOMANDO


SAFETY GATE

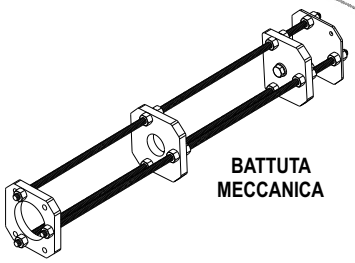

COLONNINA
PER FOTOCELLULE


ELETTROSERRATURA


LETTORE
DI SPIRA
MAGNETICA
ESTERNO


CENTRALE DI COMANDO
GATE 2


LAMPEGGIATORE


BATTUTA
MECCANICA


KIT SBLOCCO ESTERNO

DICHIARAZIONE DI CONFORMITÁ

La SEA dichiara sotto la propria responsabilità che il prodotto

Half Tank in tutte le sue versioni

risponde ai requisiti essenziali previsti dalle seguenti direttive europee e successive modifiche (laddove applicabili):
98/37/CE (Direttiva Macchine)
89/336/CEE (Direttiva Compatibilità Elettromagnetica)
73/23/CEE (Direttiva Bassa Tensione)

AVVERTENZE :
L'installazione elettrica e la scelta della logica di funzionamento devono essere in accordo con le normative vigenti. Prevedere in ogni caso un interruttore differenziale da 16A e soglia 0,030A. Tenere separati i cavi di potenza (motori, alimentazioni) da quelli di comando (pulsanti, fotocellule, radio ecc.). Per evitare interferenze è preferibile prevedere ed utilizzare due guaine separate.

DESTINAZIONE D'USO:
Il Prodotto Half Tank in tutte le sue versioni è stato progettato per essere utilizzato unicamente per l'automazione di cancelli a battente.

RICAMBI:
Le richieste per parti di ricambio devono pervenire presso:
SEA s.r.l. - Zona Ind.le, 64020 S.ATTO - Teramo - Italia

SICUREZZA E COMPATIBILITÀ AMBIENTALE:
Non disperdere nell'ambiente i materiali di imballaggio del prodotto e/o circuiti.

La movimentazione del prodotto deve essere eseguita con mezzi idonei.

GARANZIA
La garanzia del prodotto HALF TANK è di 36 mesi dalla data stampata sul prodotto. Quest'ultimo sarà riconosciuto in garanzia se non presenta danneggiamenti dovuti ad un uso improprio o a qualsiasi modifica o manomissione.

MESSA FUORI SERVIZIO E MANUTENZIONE:
La disinstallazione e/o messa fuori servizio e/o manutenzione del prodotto Half Tank deve essere eseguita solo ed esclusivamente da personale autorizzato ed esperto.

N.B. IL COSTRUTTORE NON PUÒ CONSIDERARSI RESPONSABILE PER EVENTUALI DANNI CAUSATI DA USI IMPROPRI, ERRONEI ED IRRAGIONEVOLI.

La SEA si riserva il diritto di apportare le modifiche o variazioni che ritenesse opportune ai propri prodotti e/o al presente manuale senza alcun obbligo di preavviso.

CONDIZIONI DI VENDITA

EFFICACIA DELLE PRESENTI CONDIZIONI GENERALI DI VENDITA: Le presenti condizioni generali di vendita si applicano a tutti gli ordini indirizzati a SEA s.r.l. Tutte le vendite fatte da SEA ai clienti sono regolate secondo le presenti condizioni di vendita che costituiscono parte integrante del contratto di vendita ed annullano ogni clausola contraria o pattuizioni particolari presenti nell' ordine o in altro documento proveniente dall' acquirente (cliente)

AVVERTENZE GENERALI Gli impianti di automazioni porte e cancelli vanno realizzati esclusivamente con componenti SEA, salvo accordi specifici. L'inosservanza delle norme di sicurezza vigenti (Norm. EUROPEE EN 12453 - EN 12445 e altro) e di buona tecnica esclude la SEA da ogni responsabilità. La SEA non risponde del mancato rispetto della corretta e sicura installazione secondo le norme.

1) PROPOSTA D'ORDINE La proposta d'ordine si intenderà accettata solo dopo la sua approvazione da parte della SEA. Conseguenza della sua sottoscrizione, l'acquirente sarà vincolato alla stipula di un contratto d'acquisto, secondo quanto contenuto nella stessa proposta d'ordine e nelle presenti condizioni di vendita. Viceversa, la mancata comunicazione all'acquirente dell'approvazione della proposta d'ordine, non comporta la sua automatica accettazione da parte della SEA.

2) VALIDITÀ OFFERTA Le offerte proposte dalla SEA o dalla sua struttura commerciale periferica, avranno una validità di 30 giorni solari, salvo diversa comunicazione in merito.

3) PREZZI I prezzi della proposta d'ordine sono quelli del listino in vigore alla data della redazione della stessa. Gli sconti applicati dalla struttura commerciale periferica della SEA si intenderanno validi solo dopo la loro accettazione da parte della SEA. I prezzi si intendono per merce resa franco ns. stabilimento in Teramo, esclusi IVA ed imballaggi speciali. La SEA si riserva il diritto di modificare in qualsiasi momento il listino, dando opportuno preavviso alla rete di vendita.

4) PAGAMENTI Le forme di pagamento ammesse sono quelle comunicate o accettate di volta in volta dalla SEA. Il tasso di interesse sul ritardo da pagamento è del 1,5% mensile e comunque non oltre il tasso massimo legalmente consentito.

5) CONSEGNA La consegna avverrà indicativamente ma non tassativamente entro 30 giorni lavorativi dalla data di ricezione dell'ordine, salvo diverse comunicazioni in merito. Il trasporto degli articoli venduti sarà effettuato a spese ed a rischio dell'acquirente. La SEA si libera dall'obbligo della consegna rimettendo la merce al vettore, sia esso scelto dalla SEA oppure dall'acquirente. Eventuali smarrimenti e/o danneggiamenti della merce dovuti al trasporto, sono a carico dell'acquirente.

6) RECLAMI Eventuali reclami e/o contestazioni dovranno pervenire alla SEA entro 8 giorni solari dalla ricezione della merce, supportati da idonei documenti provanti la loro veridicità.

7) FORNITURA L'ordine in oggetto viene assunto da SEA senza alcun impegno e subordinatamente alle possibilità di approvvigionamento delle materie prime occorrenti alla produzione; eventuali mancate esecuzioni totali o parziali non possono dar luogo a reclami e riserve per danni. La fornitura SEA è strettamente limitata alla sola merce di sua produzione, esclusi il montaggio, l'installazione ed il collaudo. La SEA declina pertanto ogni responsabilità per danni che dovessero derivare, anche a terzi, dall'inosservanza delle norme di sicurezza e della buona regola d'arte nelle fasi dell'installazione e dell'impiego dei prodotti venduti.

8) GARANZIA

SILVER: Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 24 mesi dalla data di fabbricazione riportata sull'operatore.

GOLD: Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 36 mesi dalla data di fabbricazione riportata sull'operatore.

PLATINUM: Le parti meccaniche degli operatori rientranti in tale categoria sono garantite per 36 mesi dalla data di fabbricazione riportata sull'operatore. La garanzia di base (36 mesi) sarà estesa per ulteriori 24 mesi (fino ad un totale di 60 mesi) qualora venga acquistato il certificato di garanzie che dovrà essere compilato e rispedito alla SEA s.r.l. entro 60 giorni dall'acquisto. L'elettronica e le centrali di comando sono garantite per 24 mesi dalla data di fabbricazione. Nell'eventualità di difettosità del prodotto, la SEA si impegna alla sua sostituzione gratuita oppure alla sua riparazione, previa restituzione al proprio centro di riparazione. La definizione di stato di garanzia è ad insindacabile giudizio della SEA. I pezzi sostitutivi restano di proprietà della SEA. In modo vincolante, il materiale dell'acquirente ritenuto in garanzia deve essere spedito al centro di riparazione della SEA in porto franco e sarà rispedito dalla SEA in porto assegnato. La garanzia non si estende alla manodopera eventualmente accorsa. I difetti riconosciuti non produrranno alcuna responsabilità e/o richiesta di danni, di qualsiasi natura essi siano, da parte dell'acquirente nei riguardi della SEA. La garanzia non è in ogni caso riconosciuta qualora sia stata apportata alla merce qualsivoglia modifica, oppure vi sia stato un uso improprio, oppure si sia in presenza di una qualsivoglia sua manomissione o di un montaggio non corretto, oppure se sia stata rimossa l'etichetta apposta dal produttore comprensiva del marchio SEA registrato n° 804888. La garanzia non è inoltre valida nel caso la merce SEA sia stata in parte o in toto accoppiata a componenti meccanici e/o elettronici non originali, ed in particolare in assenza di una specifica autorizzazione in merito, ed inoltre nel caso in cui l'acquirente non sia in regola con i pagamenti. La garanzia non comprende danni derivati dal trasporto, materiale di consumo, avarie dovute al mancato rispetto delle specifiche prestazionali dei prodotti indicate nel listino. Non è riconosciuto alcun indennizzo durante il tempo di riparazione e/o sostituzione della merce in garanzia. La SEA declina ogni responsabilità per danni a cose o persone derivanti dall'inosservanza delle norme di sicurezza e della non conforme installazione o dall'impiego errato dei prodotti venduti. La riparazione dei prodotti in garanzia e fuori garanzia è subordinata al rispetto delle procedure comunicate da SEA.

9) RISERVATO DOMINIO Sulla merce venduta è valida la clausola del riservato dominio, della quale la SEA deciderà autonomamente se avvalersi o meno, in virtù della quale l'acquirente acquisisce la proprietà della merce, solo dopo che il suo pagamento sia stato completamente effettuato.

10) FORO COMPETENTE Per qualsiasi controversia avente per oggetto l'applicazione di questo contratto, viene eletto competente il Foro di Teramo. La lingua valida nell' interpretazione di cataloghi, manuali di installazione, condizioni di vendita o altro è quella italiana. La SEA si riserva la facoltà di apportare modifiche tecniche atte a migliorare i propri prodotti, presenti o meno in questo Listino, in qualsiasi momento senza preavviso. La SEA declina ogni responsabilità derivante da possibili inesattezze contenute nel presente listino, derivanti da errori di stampa e/o trascrizione. Il presente Listino annulla e sostituisce quelli precedenti. L'acquirente ai sensi della legge 196/2003 (codice privacy) acconsente all'inserimento dei propri dati personali derivanti dal presente contratto negli archivi informatici e cartacei della SEA s.r.l. al loro trattamento per motivi commerciali ed amministrativi.

Diritti di proprietà industriale: il cliente, con l'acquisto, accetta le presenti condizioni di vendita e riconosce in capo a SEA la titolarità esclusiva del marchio internazionale SEA registrato n. 804888 apposto sulle etichette dei prodotti e/o sui manuali e/o su ogni altra documentazione, e si impegna ad utilizzare il medesimo nella propria attività di rivendita e/o installazione secondo modalità che non ne riducano in alcun modo i diritti, a non rimuovere, sostituire o alterare marchi o altri segni distintivi di qualsiasi genere apposti ai prodotti. E' vietata ogni forma di riproduzione o utilizzo del marchio SEA e di ogni altro segno distintivo presente sui prodotti, salvo autorizzazione scritta di SEA srl.

SEA®
Sistemi elettronici
di Aperture Porte e Cancelli

English

HYDRAULIC SWING GATE OPERATOR

HALF TANK

INSTALLATION MANUAL
and security information

SEA S.r.l.
Zona Ind. S.Atto 64020 TERAMO Italy
Tel. +39.0861.588341 - Fax+39.0861.588344

e-mail: seacom@seateam.com
WEB SITE : www.seateam.com

CHARACTERISTICS AND SPECIFICATIONS

The HALF TANK 100 and **HALF TANK 200** products are two high quality hydraulic operators for condominium use for leaf lengths up to respectively 6 and 7 meters with electric lock.
Available in the following versions:
AC *(with lock in opening and closing)*
SC *(with lock only in closing)*
SA *(with lock only in opening)*
SB *(without lock)*

Hydraulic locking is guaranteed on gates with length up to 1.80 m with the Half Tank 100 operator while for lengths up to 2.20 m use the Half Tank 200. An electric lock should be used for leaves (in all versions) exceeding those lengths.
Both products Half Tank 100 and 200 are provided with by pass valves for the force adjustment in both opening and closing. The slowdown in opening and closing is electronically carried out by the GATE 2 conrol unit. Following the ruels and normatives valid in the European countries it is strongly recommended to use a Safety Gate. (Device for the reading of the exact gate position), necessary for the inversion of the leaf in case of obstacles.

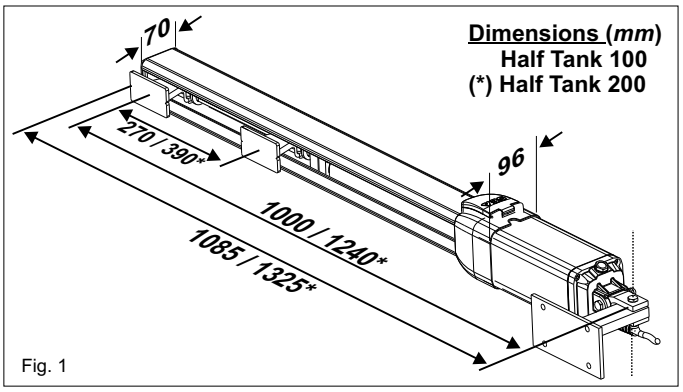
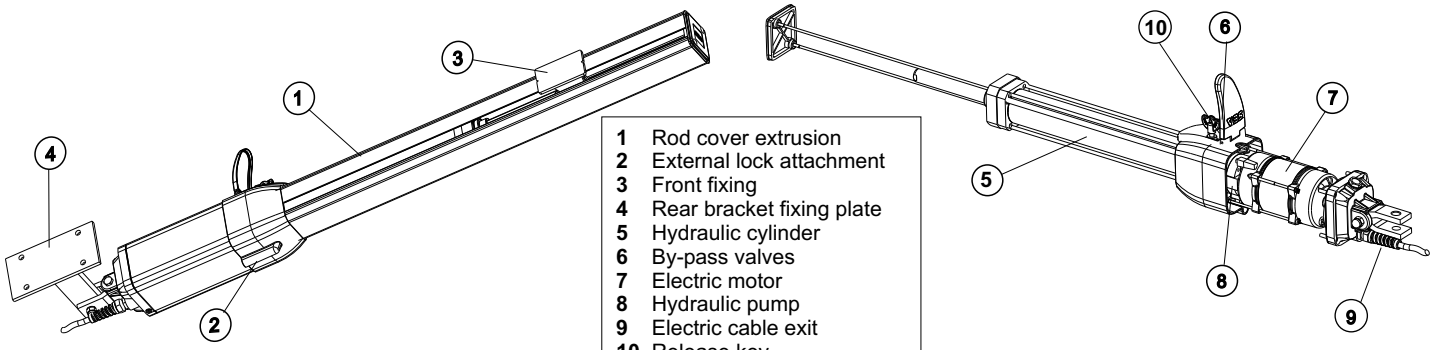


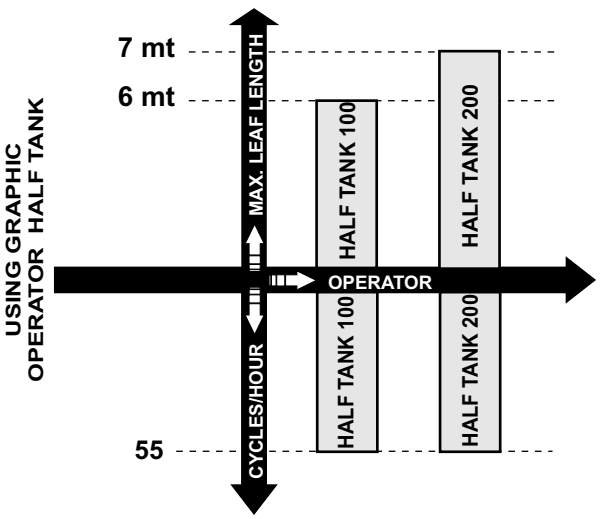
Fig. 1

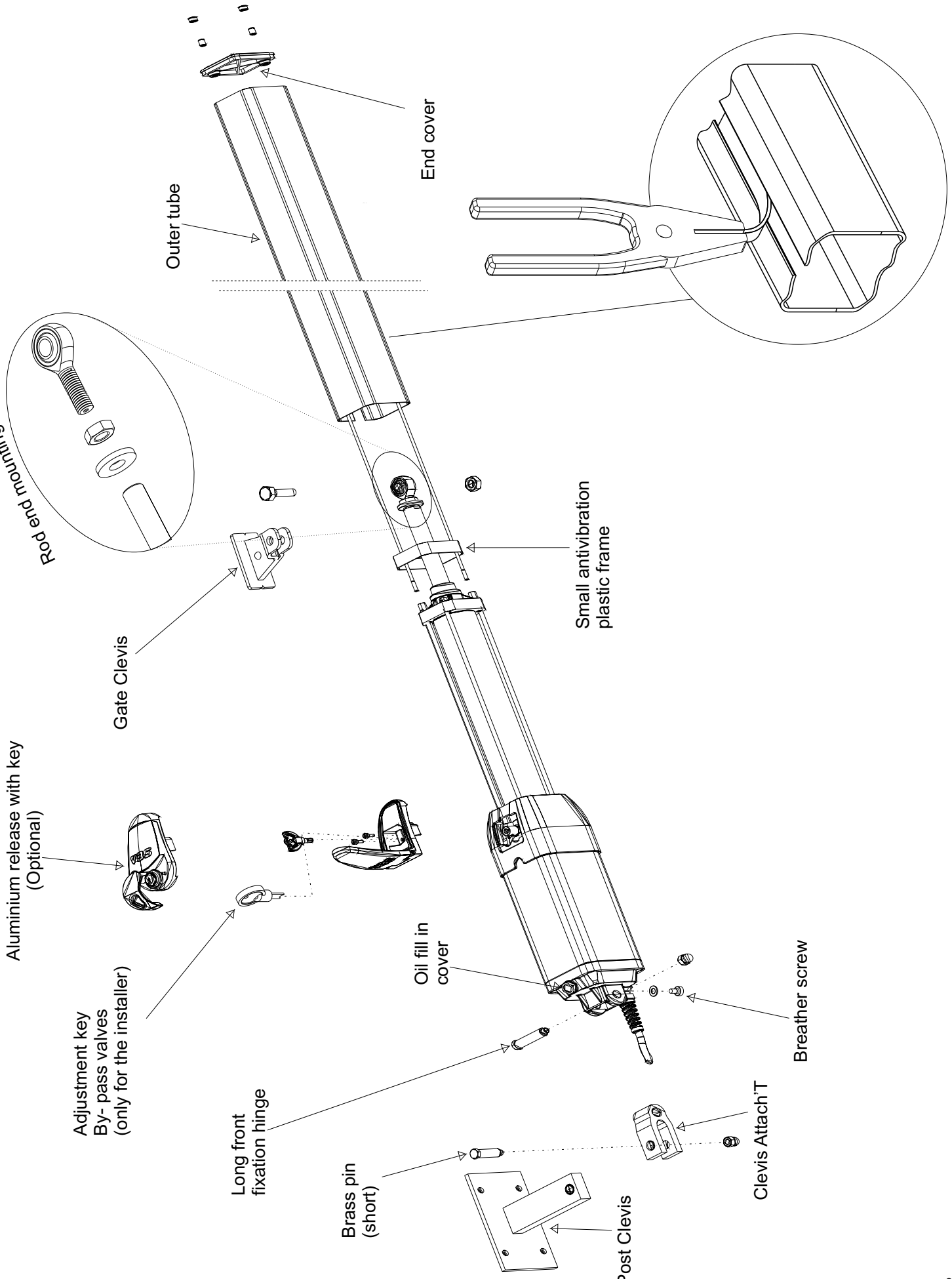
Fig. 2



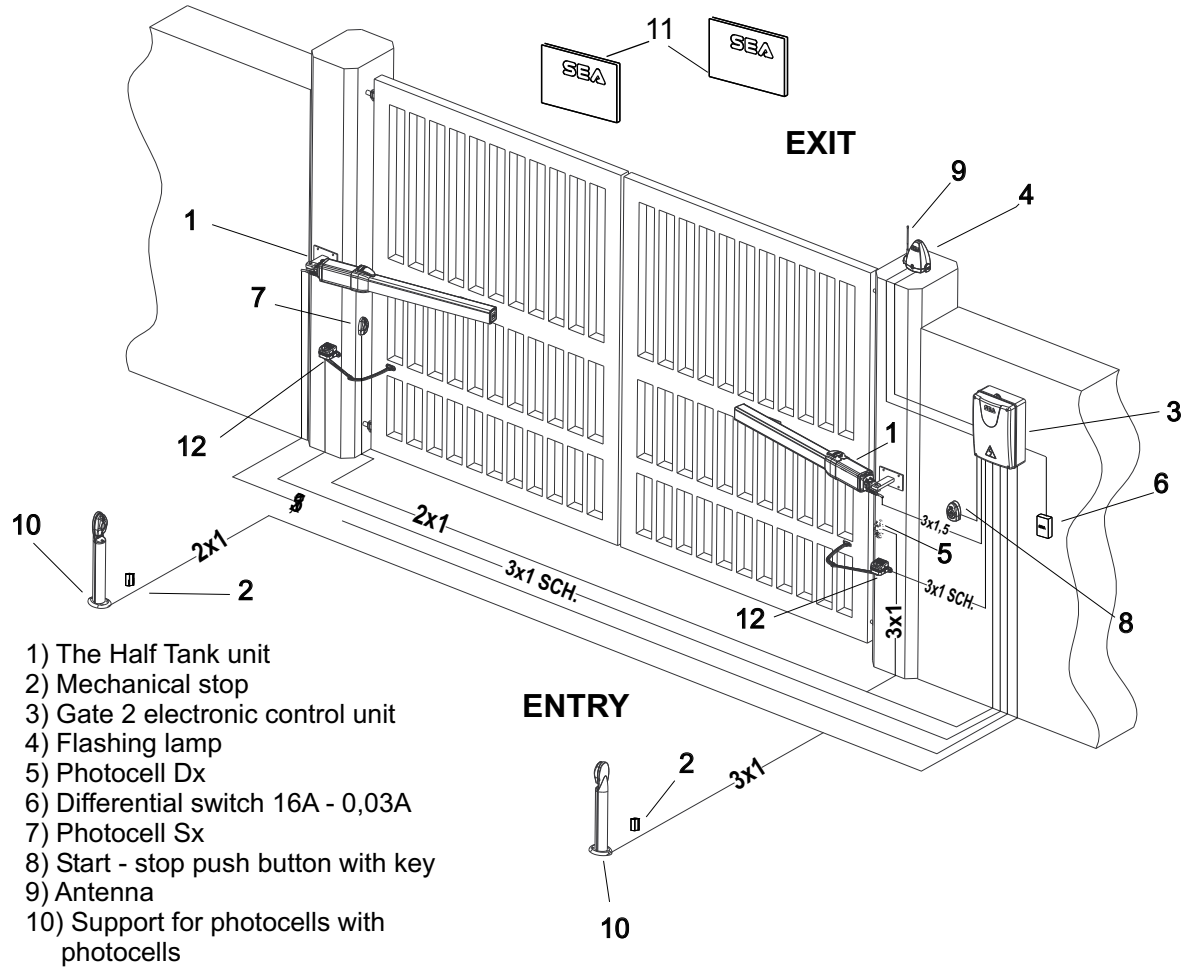
1 Rod cover extrusion
2 External lock attachment
3 Front fixing
4 Rear bracket fixing plate
5 Hydraulic cylinder
6 By-pass valves
7 Electric motor
8 Hydraulic pump
9 Electric cable exit
10 Release key

TECHNICAL DATA	*HALF TANK 100*	*HALF TANK 200*
Power supply	230 V (±5%) 50/60 Hz	
Force	220 W	
Absorbed current	1 A	
Stroke	270 mm	390 mm
Cycle/hour (temp. of 20°C)	55	
Max working pressure	40 bar	30 bar
Operating temperature	-40°C +60°C	
Motor thermal protection	130°C	
Max. thrust	640 daN	470 da N
Capacity	12,5uF	
Weight	11,4 Kg	13,6 Kg
Protection	Ip55	
Max. Leaf length	6 mt	7 mt
Leaf opening degree	90° - 125°	




End cover
Outer tube
Rod end mounting
Gate Clevis
Small antivibration plastic frame
Aluminium release with key (Optional)
Adjustment key By- pass valves (only for the installer)
Oil fill in cover
Breather screw
Long front fixation hinge
Brass pin (short)
Clevis Attach'T
Post Clevis

STANDARD INSTALLATION



1) The Half Tank unit
2) Mechanical stop
3) Gate 2 electronic control unit
4) Flashing lamp
5) Photocell Dx
6) Differential switch 16A - 0,03A
7) Photocell Sx
8) Start - stop push button with key
9) Antenna
10) Support for photocells with photocells
11) Warning notice
12) Safety Gate

INSTALLATION TYPE

It is possible to install the Half Tank with the opening towards the inside (Fig. 14) or towards the outside (Fig. 15).

Inside Opening Installation

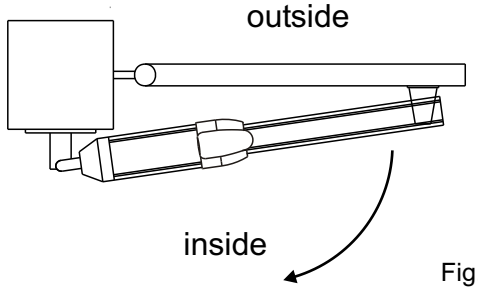


Fig. 4

Outside Opening Installation

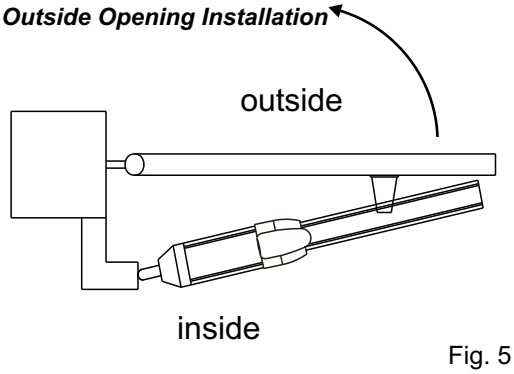


Fig. 5

Install the operator always on the inside of the property

INSIDE OPENING INSTALLATION

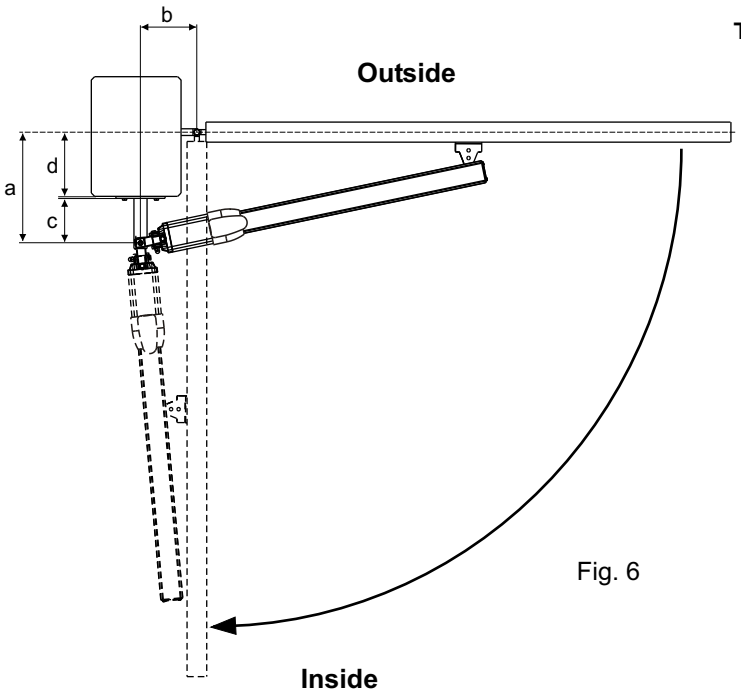


Fig. 6

Total stroke 270 mm - max. recommended stroke 250 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°**	**250**	
105	110	55	**110°**	**245**	**215**
105	145	55	**90°**	**250**	
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°**	**250**	
145	95	95	**100°**	**255**	**242**
145	105	95	**90°**	**250**	
150	100	100	**90°**	**250**	
155	85	105	**96°**	**250**	**242**
160	90	110	**90°**	**253**	
170	75	120	**92°**	**250**	
180	65	130	**92°**	**250**	

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

INSIDE OPENING INSTALLATION

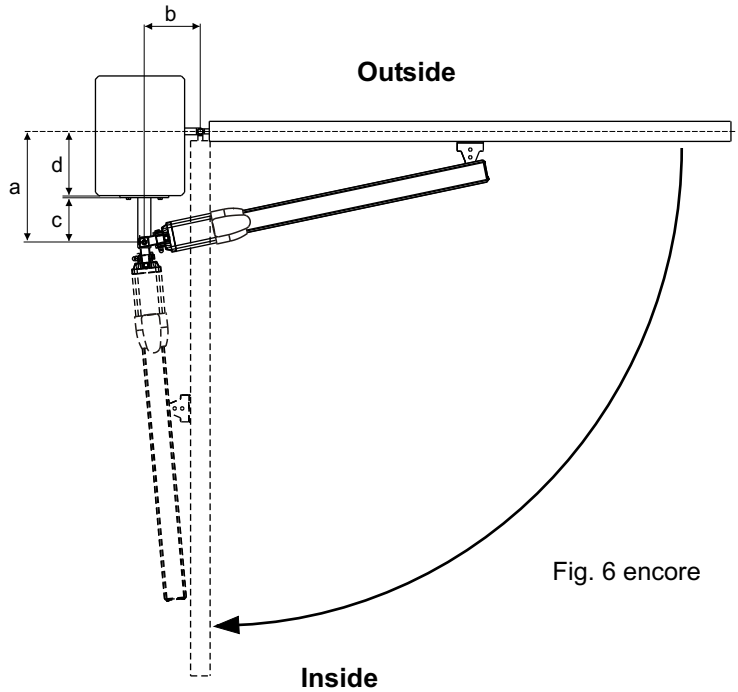


Fig. 6 encore

Total stroke 390 mm - max. recommended stroke 370 mm

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

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

OUTSIDE OPENING INSTALLATION

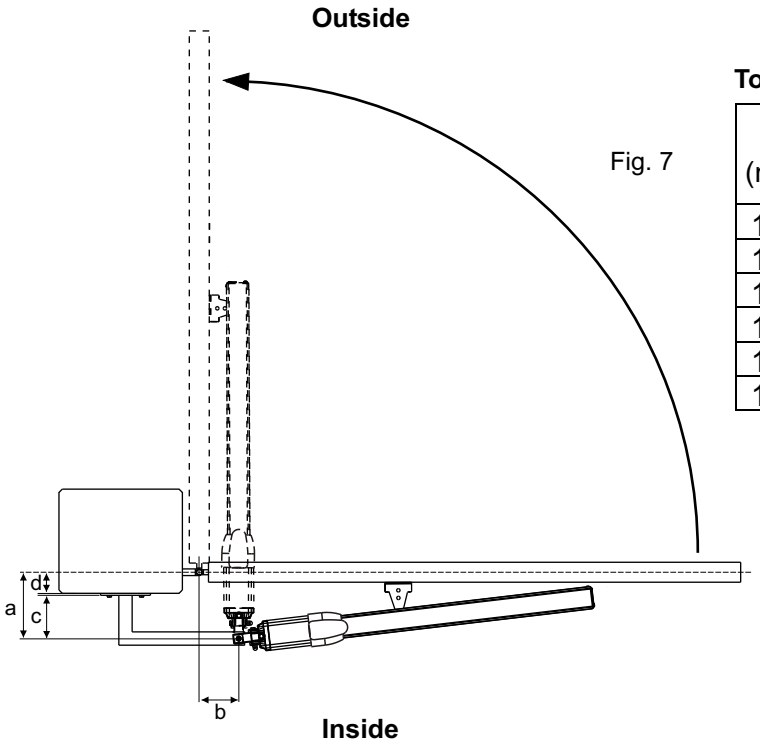


Fig. 7

Total stroke 270 mm - max. recommended stroke 250 mm

a (mm)	b (mm)	Max. Opening Angle	Stroke max **(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**	

OUTSIDE OPENING INSTALLATION

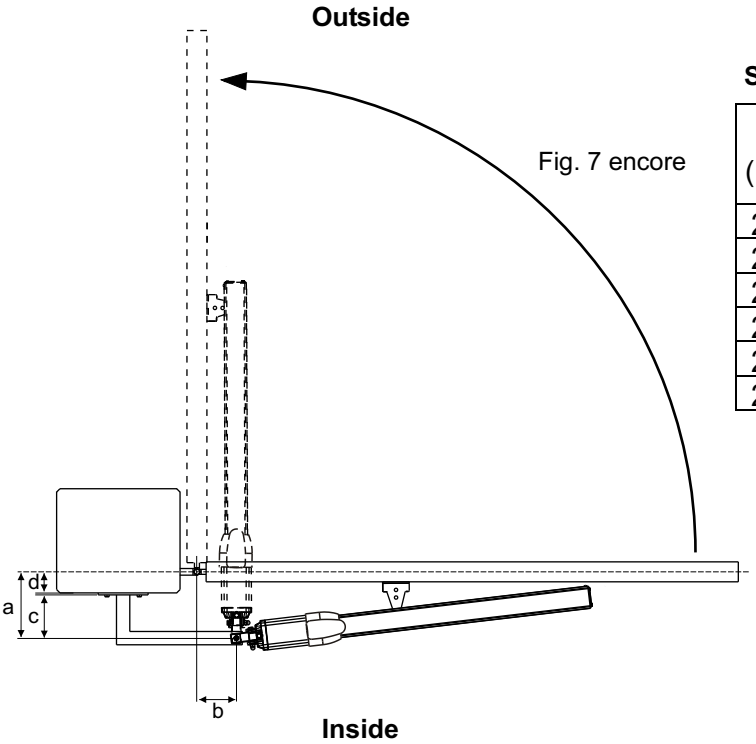


Fig. 7 encore

Stroke 390 mm - max. recommended 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**	

OSCILLATING FORK INSTALLATION

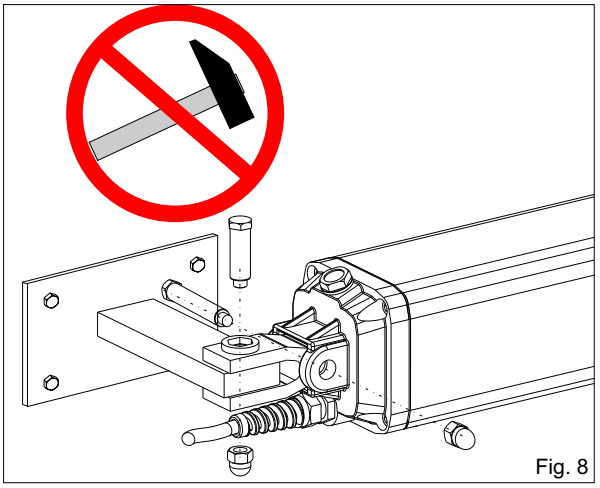


Fig. 8

PRELIMINARY
-Open the package carefully, paying attention to not lose the parts reported in fig.3
-Fix the oscillating fork as in fig.9

Attention: **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.

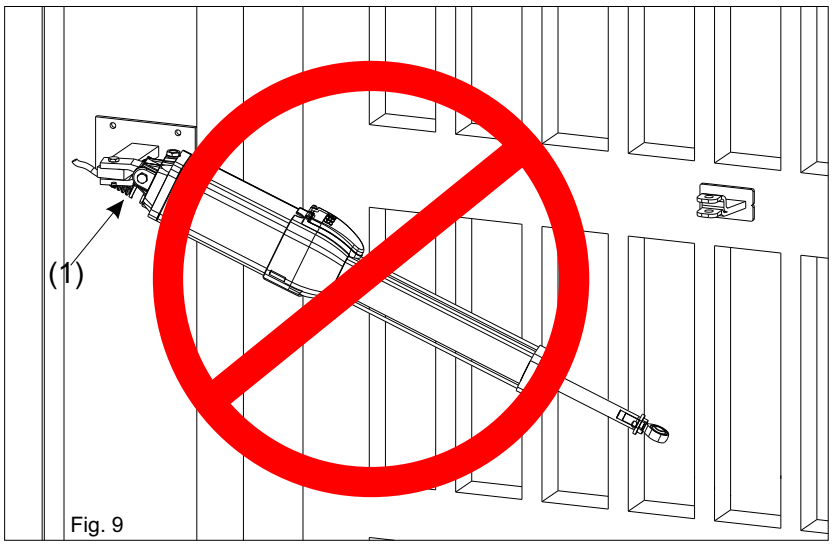


Fig. 9

Attention
Do not incline the hydraulic operator further then the allowed angle from the oscillating fork (1), could cause the braking of it (1)

BACK FIXATION MOUNTING

According to the chosen opening type (inside or outside) and according to the chosen max. rotation of the leaf (see page 5) the bracket must be first cut respecting the mesurment “a” on pag.5 and than welded as in fig.10.

The support must be positioned so that the operator is in perfect horizontal position (Fig. 10 ,Fig.12).

Adjustable back fixation (with screw)
(Accessories on request)

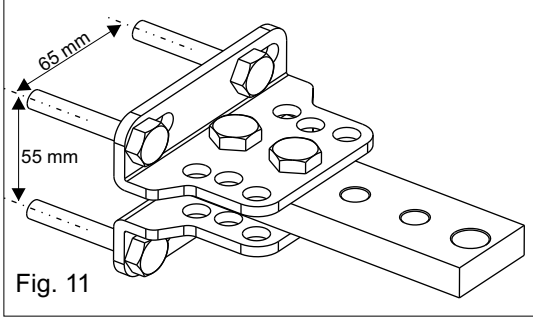


Fig. 11

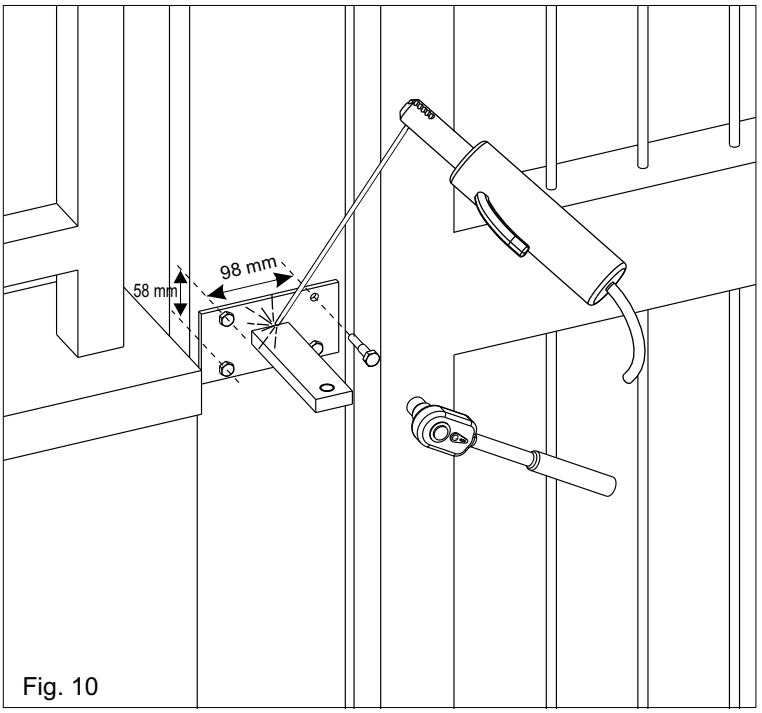


Fig. 10

POSITIONING OF THE FRONT FIXATION

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

1) Release the operator (as in Fig. 23 of page 11)
2) Pull out completely the chromium plated rod, **afterwards bring it back about 1 cm**
3) Fix the rod on the front fixation (Fig. 13)
4) Position the operator perfectly horizontal and mark the position of the front fixation (Fig. 12)

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

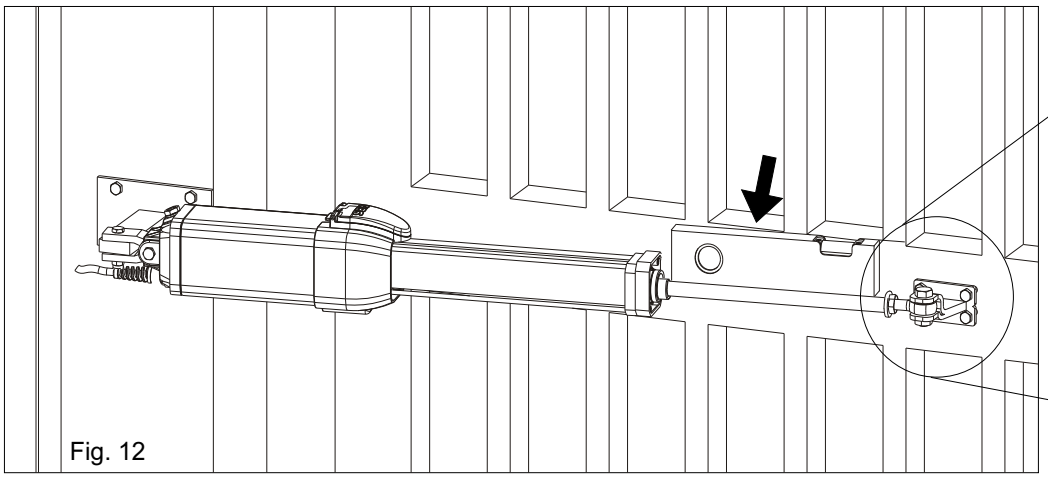


Fig. 12

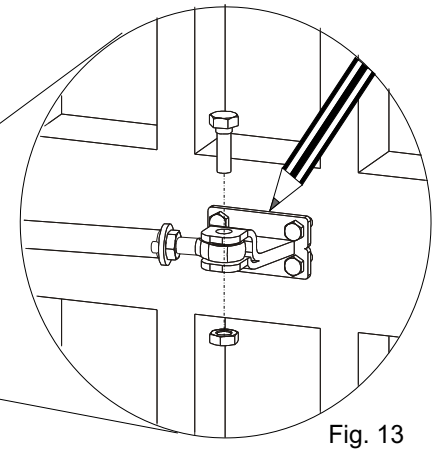


Fig. 13

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 the gate (wood, iron, aluminium) the front fixation can be welded or screwed

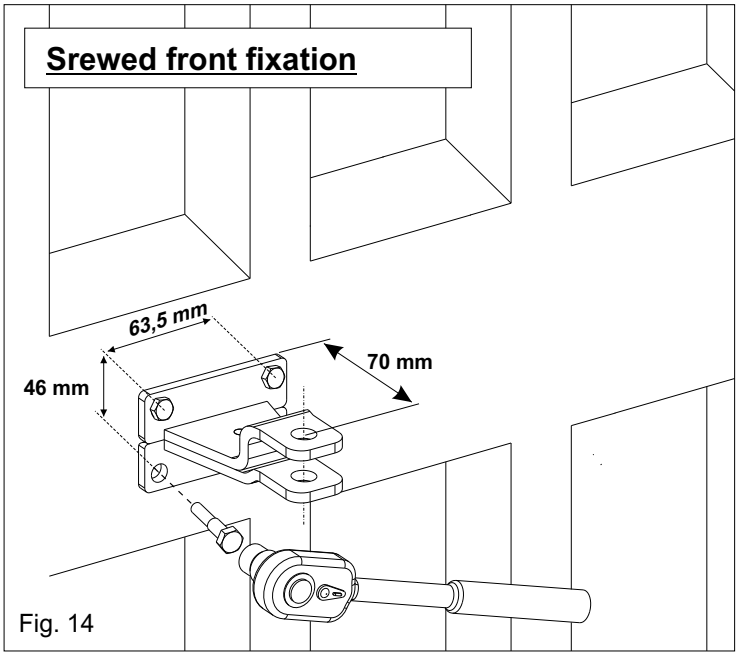


Fig. 14

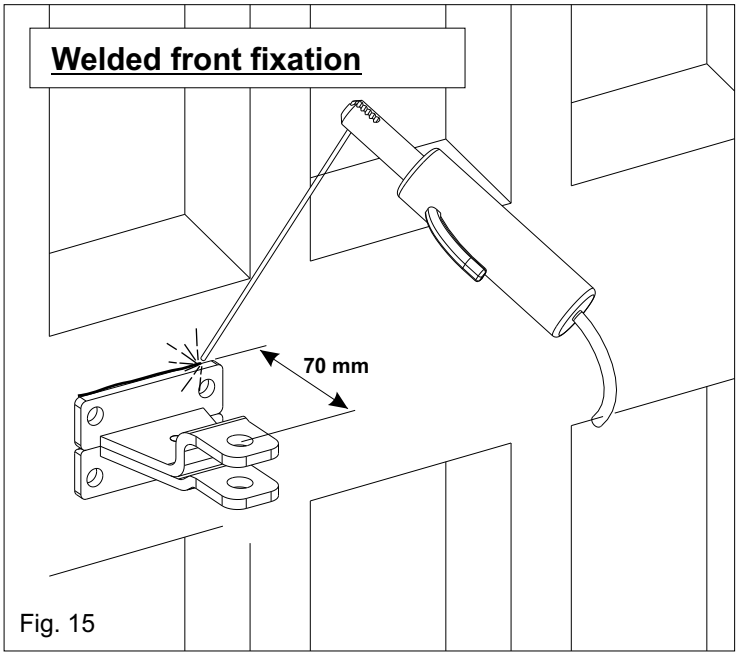


Fig. 15

INSTALLATION OF THE MECHANICAL LIMIT SWITCH STOPS (Accessories on request)

- Release the unit (as in Fig. 23 of page 10)
- Let the rod come out about 3/4 of its run
- Put the limit switch stops on the front flange of the unit with the two rods (of the three which are present on the stop) which are in parallel to the gate (Fig. 16)
- Fix the stop with the two included screws .

At this point hook the rod on the front fixation

- To adjust the stop in opening act on disc, and in closing on disc 2.

Attention : the mounting of the mechanical stop does not cause the reduction of the stroke

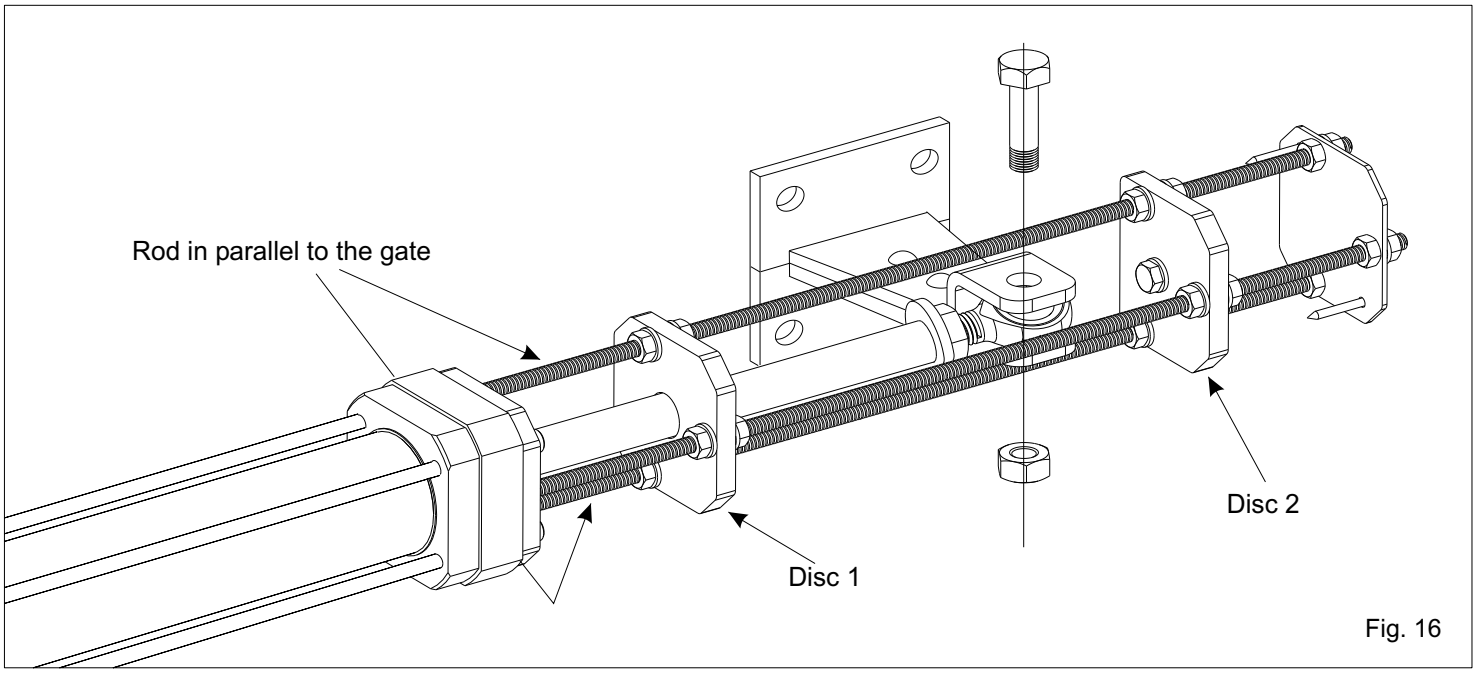


Fig. 16

BREATHER SCREW

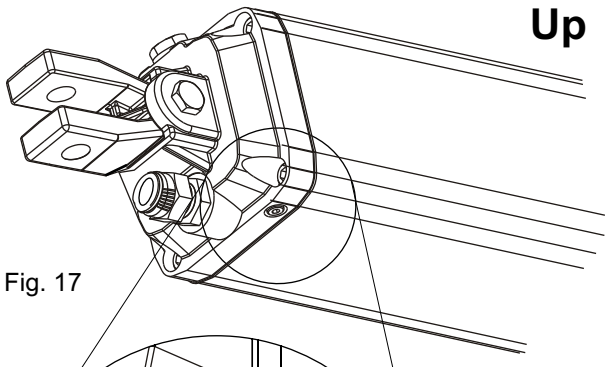


Fig. 17

VERY IMPORTANT
Take off the breather screw (lower part of the operator) after installation

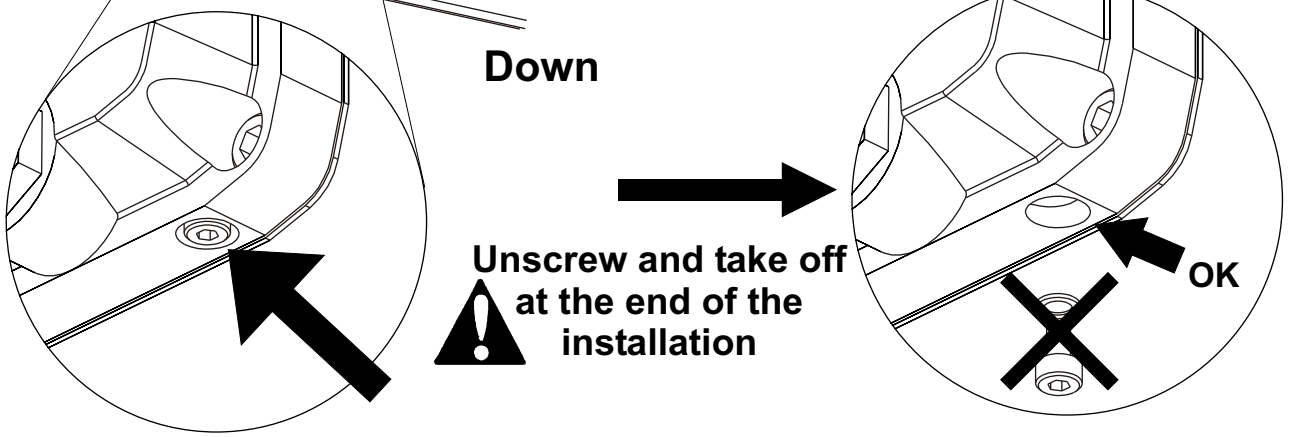


Fig. 18

INSTALLATION OF THE CHROMIUM-PLATED ROD PROTECTION

Make sure to have inserted the antivibration plastic frame (**A**) before inserting the rod cover extrusion (Fig. 19)

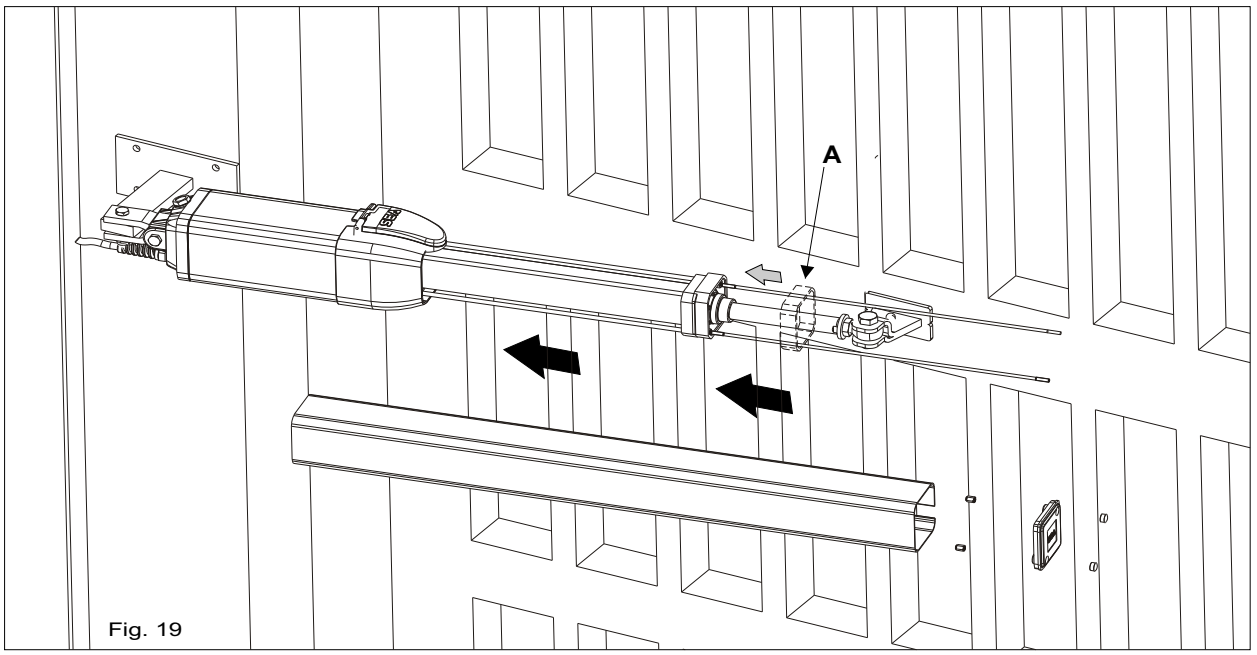


Fig. 19

TORQUE ADJUSTMENT (By-Pass Valves)

In case of first installation both, the cover of the release and the cover of the by pass valves must not yet be inserted. In this case refer to fig. 20 and fig.22. Should the by-pass valves adjustment be made in a second moment, because of periodical maintenance or other, take off the screw which locks the by-pass cover (fig. 21), take off the by-pass cover and adjust the pressure of the by-pass valves with the special key given to the installer free of charge (Fig. 22).

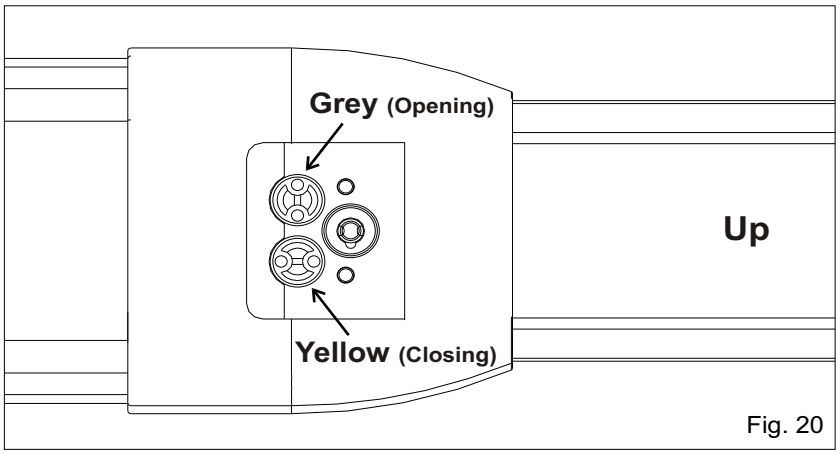


Fig. 20

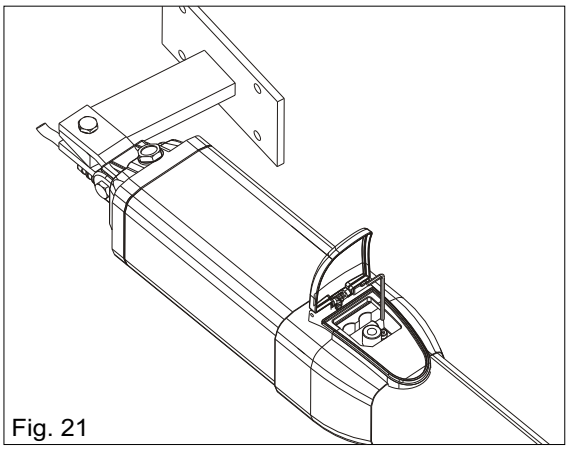
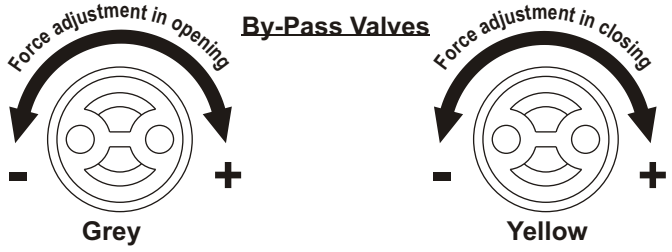


Fig. 21



Regulate the opening and closing forces of the gate respecting the force diagram (included in the En12453 normative); the thrust force however must not be superior then 15KgF.

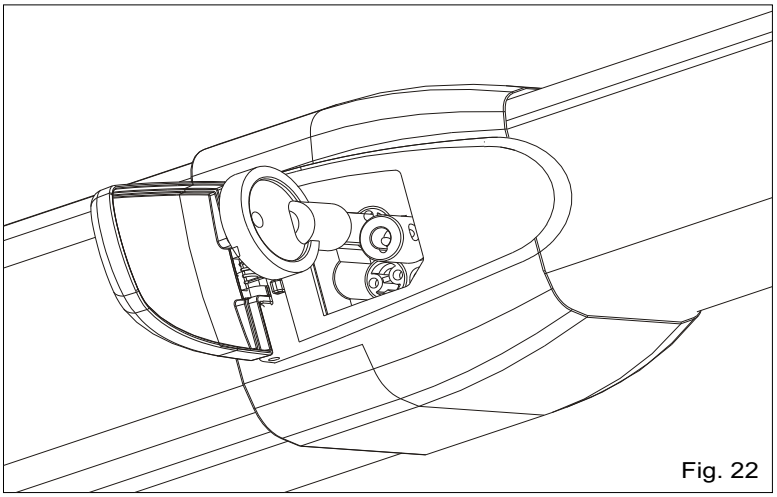


Fig. 22

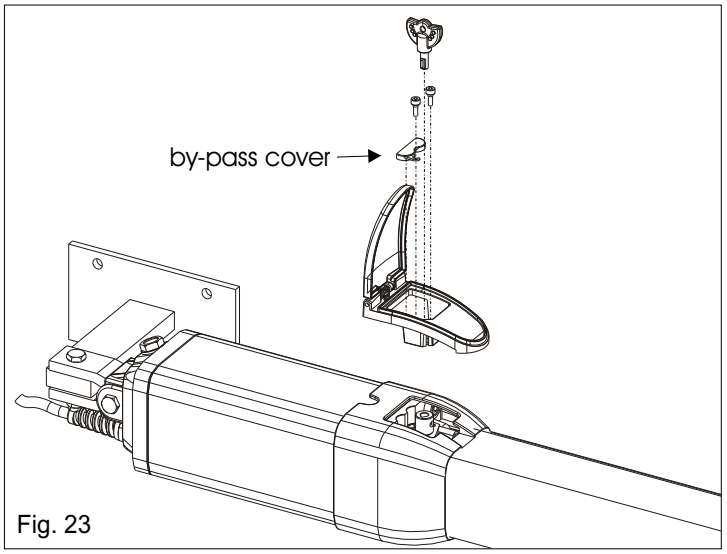


Fig. 23

PLASTIC RELEASE MOUNTING

ATTENTION: the mounting of the plastic release must be effectuated as shown in fig. 23 **only and exsclusively after havingfinished all the instalaltion operations, mounting of the rod cover and calibration of the by-pass valves.**

ALUMINIUM RELEASE WITH KEY MOUNTING (accessory on request)

ATTENTION: The mounting of the aluminium release must be executed as shown in figure 24 only and exclusively after having finished all installation operations, the rod cover mounting and the calibration of the by pass valves.

The release key is kept in the inside of the aluminium release cover (see fig. 25)

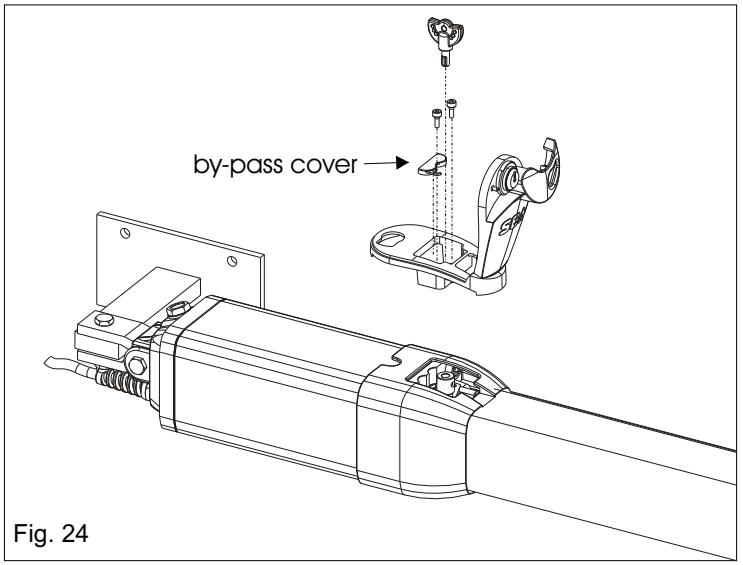


Fig. 24

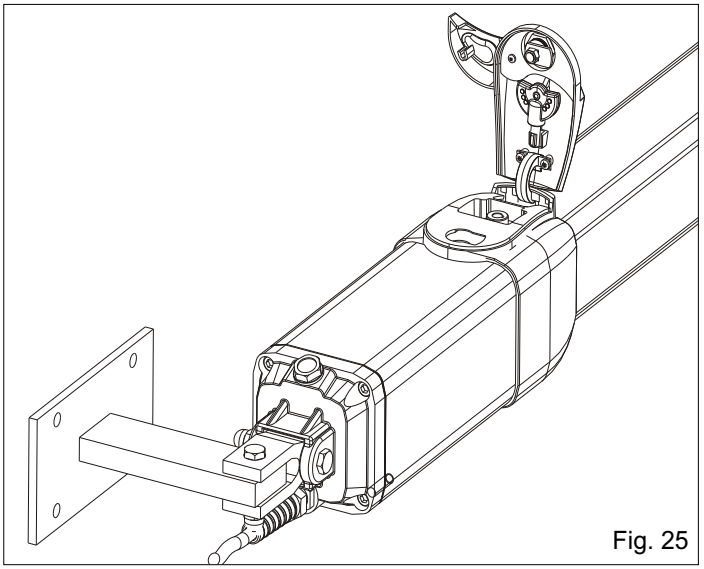


Fig. 25

EXTERNAL RELEASE MOUNTING (accessory on request**)**

ATTENTION: The mounting of the external release must be executed as shown in the figures 26 and 27. For more details refer to the mounting instructions in the external release mounting Kit for Half Tank.

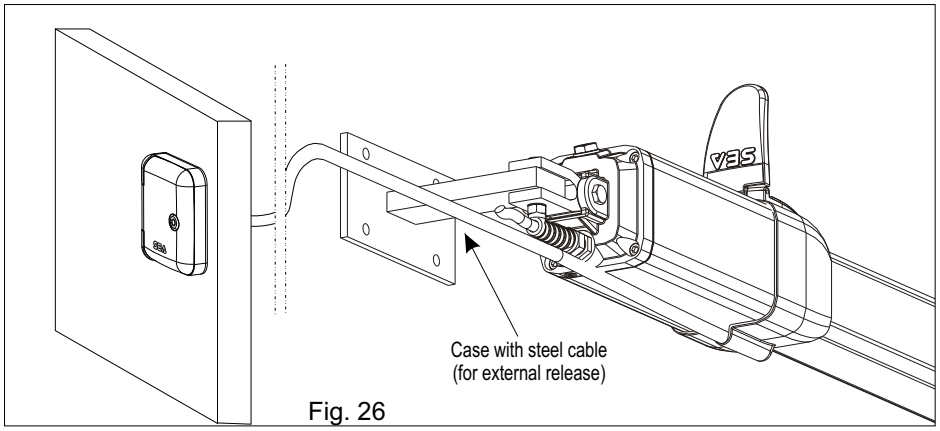


Fig. 26

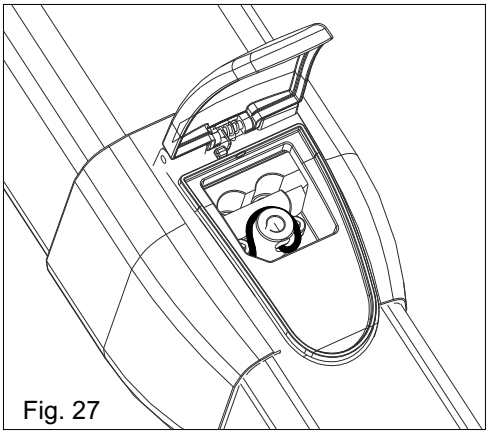


Fig. 27

RELEASE SYSTEM

To release operate as follows:
-Insert the key and turn it about 180° anti-clockwise (Fig.28).

To relock the operator do as follows:
-Insert the key and turn it clockwise until it stops (Fig.28).

Attention: To release cut current supply

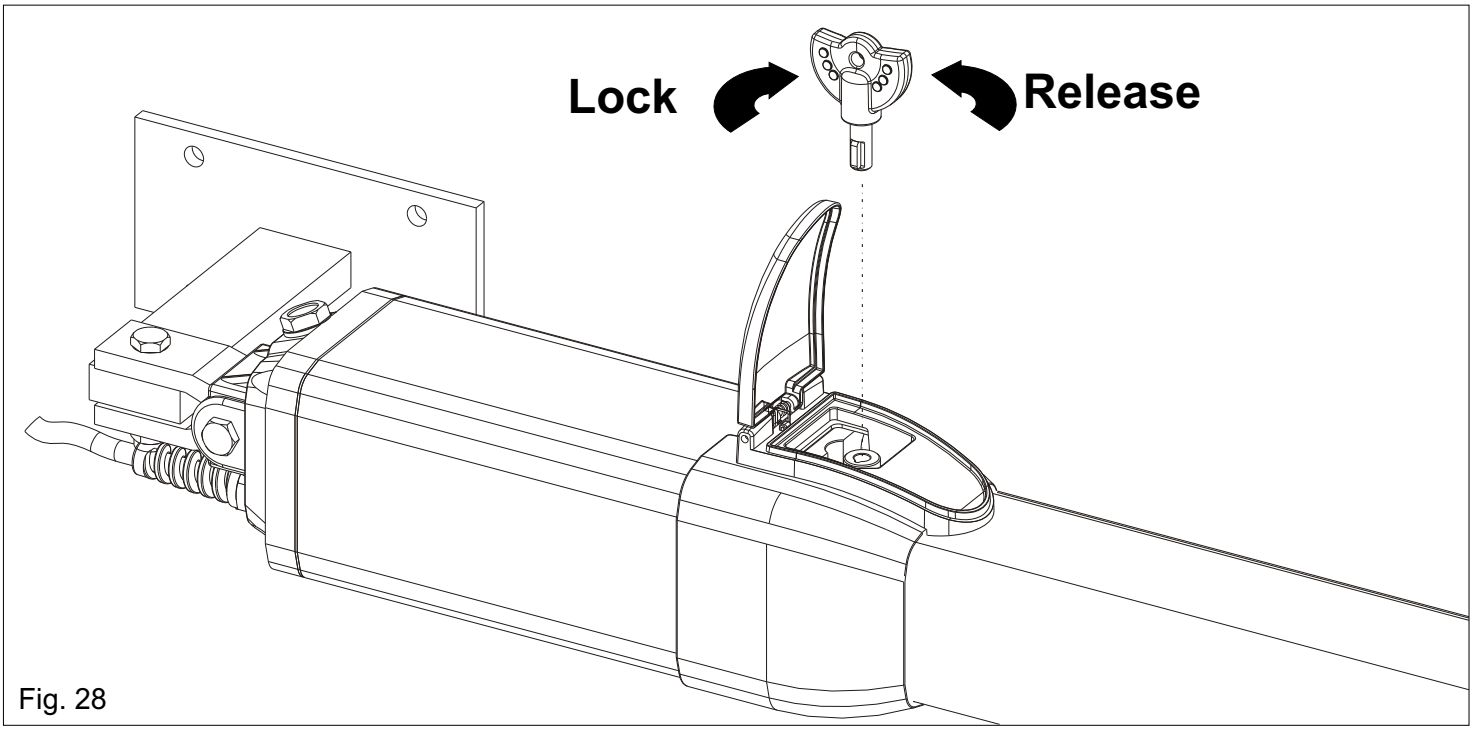


Fig. 28

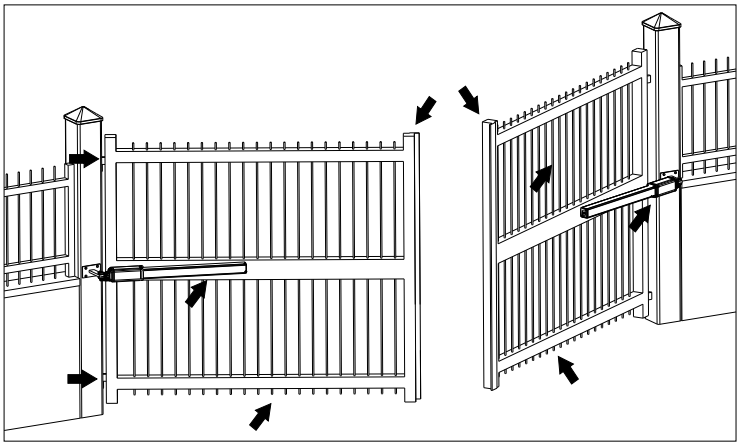
PERIODICAL MAINTENANCE

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

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

RISK EXAMINATION

The points indicated by arrows in Fig. 38 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.



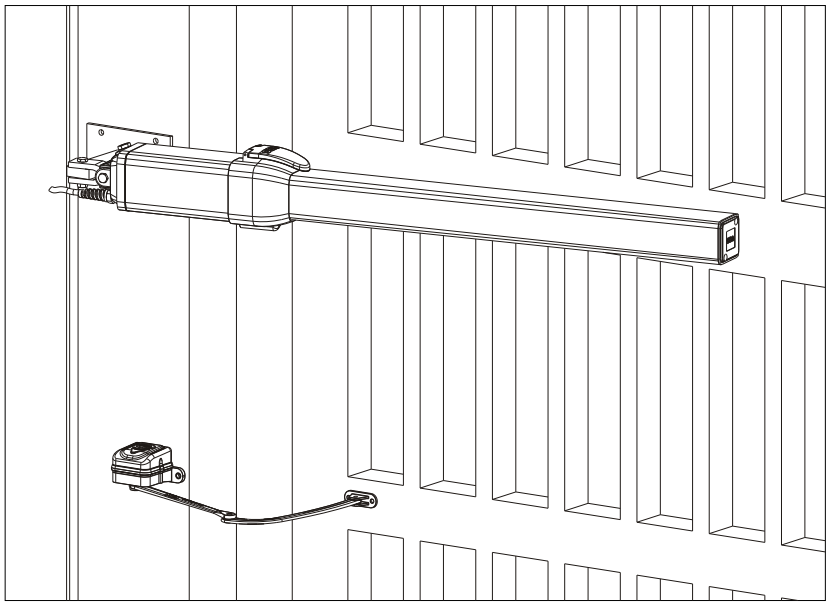
As for misunderstandings that may arise refer to area distributor or call our help desk. These instructions are part of the device and must be kept in a well known place. The installer shall follow the provided instructions thoroughly. SEA S.r.l products must only be used for the automation of doors, gates and wings. Any initiative taken without SEA S.r.l. explicit authorization will preserve the manufacture from whatsoever responsibility. The installer shall provide warning notices on not assessable further risks. SEA S.r.l. in its relentless aim to improve the production, is allowed to make whatsoever adjustment without giving notice. This does not oblige SEA S.r.l. to up-grade the past productions. SEA S.r.l. 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.r.l 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

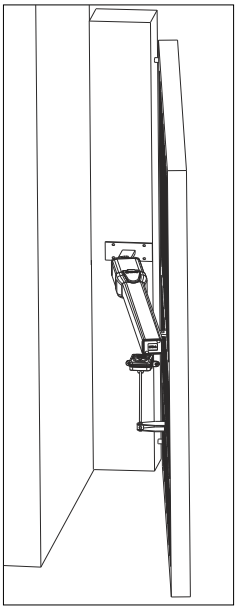
After having completed all necessary operations, for the correct installation of the product HALFTANK, described in the present manual and after having valued all resting risks which could arise in whatever installation **is necessary to test the automation to guarantee the max. security** and in particular 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 GATE

For a correct and safe installation it is strongly recommended to install the Safety Gate, **which allows the fulfilment of the force diagram included in the EN 12453** ruel and the testing of the putting in service and of the whole installation.



NOTE: In case of installations as shown in the figure on the right it is possible to use the Safety Gate with a straight rod (solving the dimensions problem of the arm, see drawing on the left)



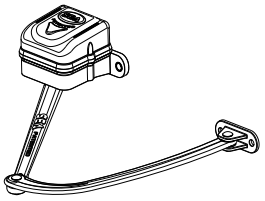
ACCESSORIES **FOR HALF TANK**

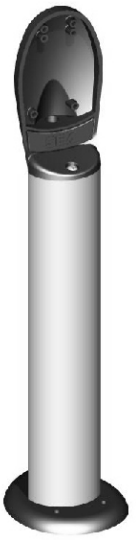

KEY SWITCH

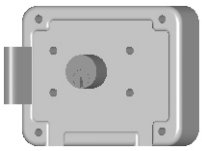

PHOTOCELLS

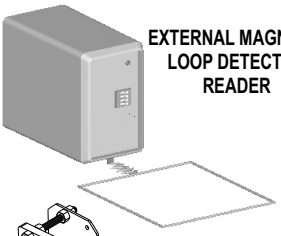

RADIO RECEIVER

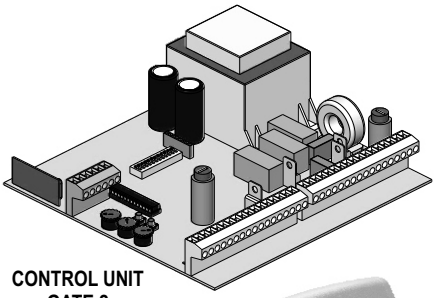

RADIO TRANSMITTER


SAFETY GATE

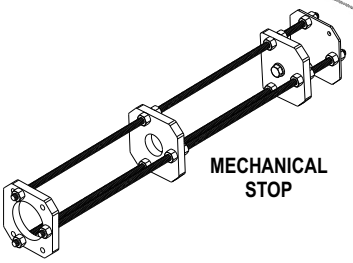

SUPPORT
FOR PHOTOCELLS


ELECTRIC LOCK


EXTERNAL MAGNETIC
LOOP DETECTOR
READER


CONTROL UNIT
GATE 2


WARNING LAMP


MECHANICAL
STOP


EXTERNAL RELEASE KIT

CONFORMITY DECLARATION

SEA declares under its own responsablity that the product

Half Tank in all its versions

conforms to the following European ruels and succesive modifications (where applicable):
98/37/CE (Machine directive)
89/336/CEE (Electromagnetic compatibility directive)
73/23/CEE (Low tension directive)

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 (230/115 V) carrying cables from low voltage control cables.

INTENDED USE
The Half Tank in all his versions has been planned to be used exclusively for the automation of swing gates

SPARE PARTS
To obtain spare parts contact:
SEA s.r.l. 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 this unit must be carried out by specialised and authorised personnel only.

LIMIT OF GUARANTEE
The Half Tank is guaranteed for a period of 36 months. The guarantee period starts from the date printed on the unit. The Half Tank guarantee will be void if the operator has been incorrectly installed, not used for the purpose intended, tampered or modified in any way. The validity of this guarantee only extends to the original purchaser of the unit.

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 SALE

EFFICACY OF THE FOLLOWING TERMS OF SALE: The following general terms of sale shall be applied to all orders sent to SEA srl. All sales made by SEA to all customers are made under the prescription of this terms of sales which are integral part of the sale contract and cancel and substitute all opposed clauses or specific negotiations present in the order or in other documents received from the buyer.

GENERAL NOTICE The gate automation systems must be assembled exclusively with SEA components, unless specific agreements apply. Non-compliance with the applicable safety standards (European Standards EN 12453 EN12445 and others) 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 and always under those Terms of sale. 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.

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 noncompliance of safety standards and good practice during installation and use of the purchased products.

8) WARRANTY.

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.r.l. within 30 days from the purchase date. 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 installation, or if the product label of the manufacturer with the registered SEA trademark n° 804888 has been removed . 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 repairs of products in warranty and out of warranty is accepted only if the procedure of SEA are fully respected by the customer.

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 acquires the property of the goods only after full payment of the invoice.

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. The official language for the interpretation of the catalogue, the manuals, the terms of sale and any other is the italian language. SEA reserves the faculty to make technical changes to improve its own products, which are and are not included 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: with the purchase, the buyer accepts in full the present Terms of Sale and recognizes that SEA has the exclusive legal ownership of the registered SEA International trademark n° 804888 which is attached on each products label, and/or on manuals, packaging and/or in any other documentation, and he will commit himself to use it in its marketing and/or installation activity in a way which does not reduce the value of these rights; he won't also remove, replace or modify the trademark or any other particularity from the products. Any kind of replication or use of SEA brand is forbidden as well as of any change of sings-brands on the products,unless preventive and expressed authorization by SEA.

SEA®
Sistemi elettronici
di Aperture Porte e Cancelli

Français

OPERATEUR HYDRAULIQUE POUR PORTES A BATTANTES

HALF TANK

MANUEL D`INSTALLATION
et informations sur la sécurité

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CARACTERISTIQUES ET SPECIFICATIONS

Les produits **HALF TANK 100** et **HALF TANK 200** sont des opérateurs hydrauliques de haute qualité pour usage collectif pour portails avec vantaux de respectivement max. 6 et 7 m avec électroserrure.
Disponible dans le suviantes versions:
AC *(avec verrouillage en ouverture et fermeture)*
SC *(avec verrouillage seulement en fermeture)*
SA *(avec verrouillage seulement en ouverture)*
SB *(sans verrouillage)*

L'opérateur Half Tank 100 garantit le verrouillage pour vantaux jusqu'à 1,80 m pendant qu'il est garantit jusqu'à 2.20 m avec le Half Tank 200. Pour longueurs supérieures, il faut adopter les électroserrures.
Les produits Half Tank 100 et 200 sont equipés avec valves by-pass pour le réglage de la force soit il en ouverture qu'on fermeture. Le ralentissement est réglable électroniquement en ouverture et on fermeture avec l'armoire GATE 2. Pour ce qui concerne les lois et les directifs en vigueur aujourd'hui en Europe il est fortement conseillé d'utiliser le Safety Gate (dispositif de lecture de la postion du portail), lequel est nécessaire pour permettre l'inversion du vantail en cas d'obstacle.

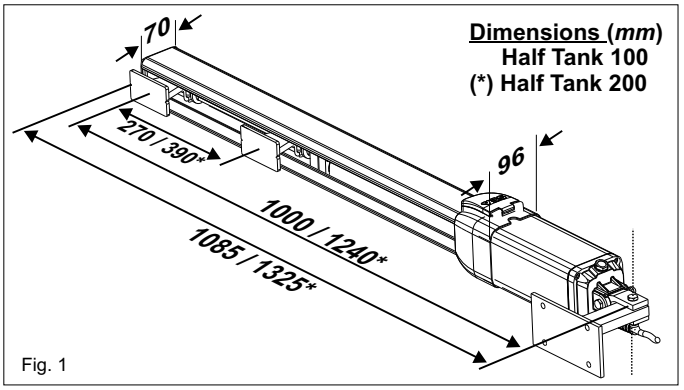
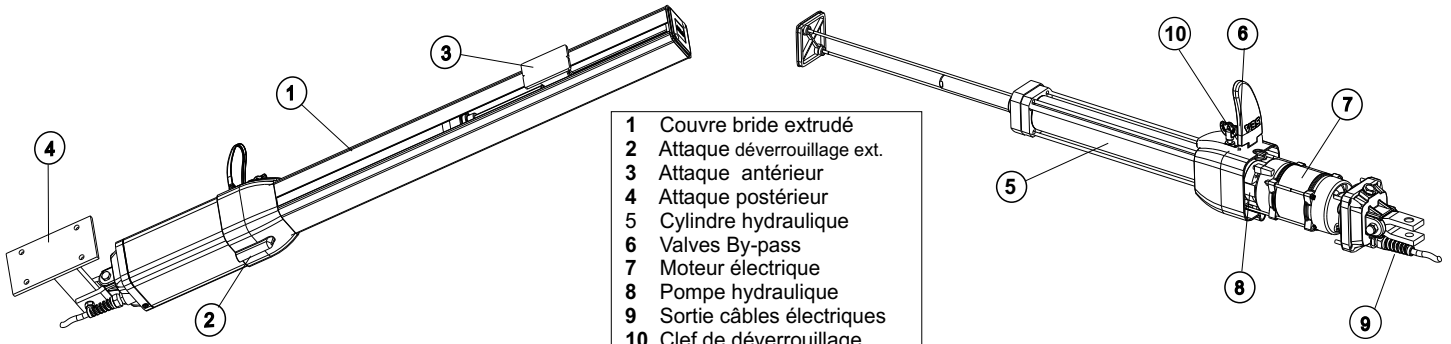


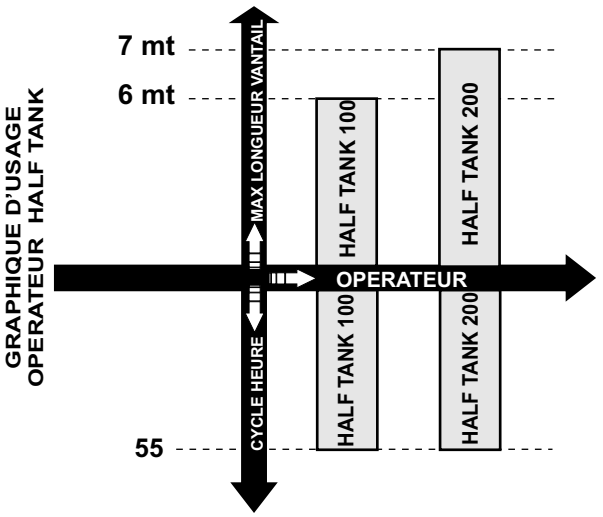
Fig. 1

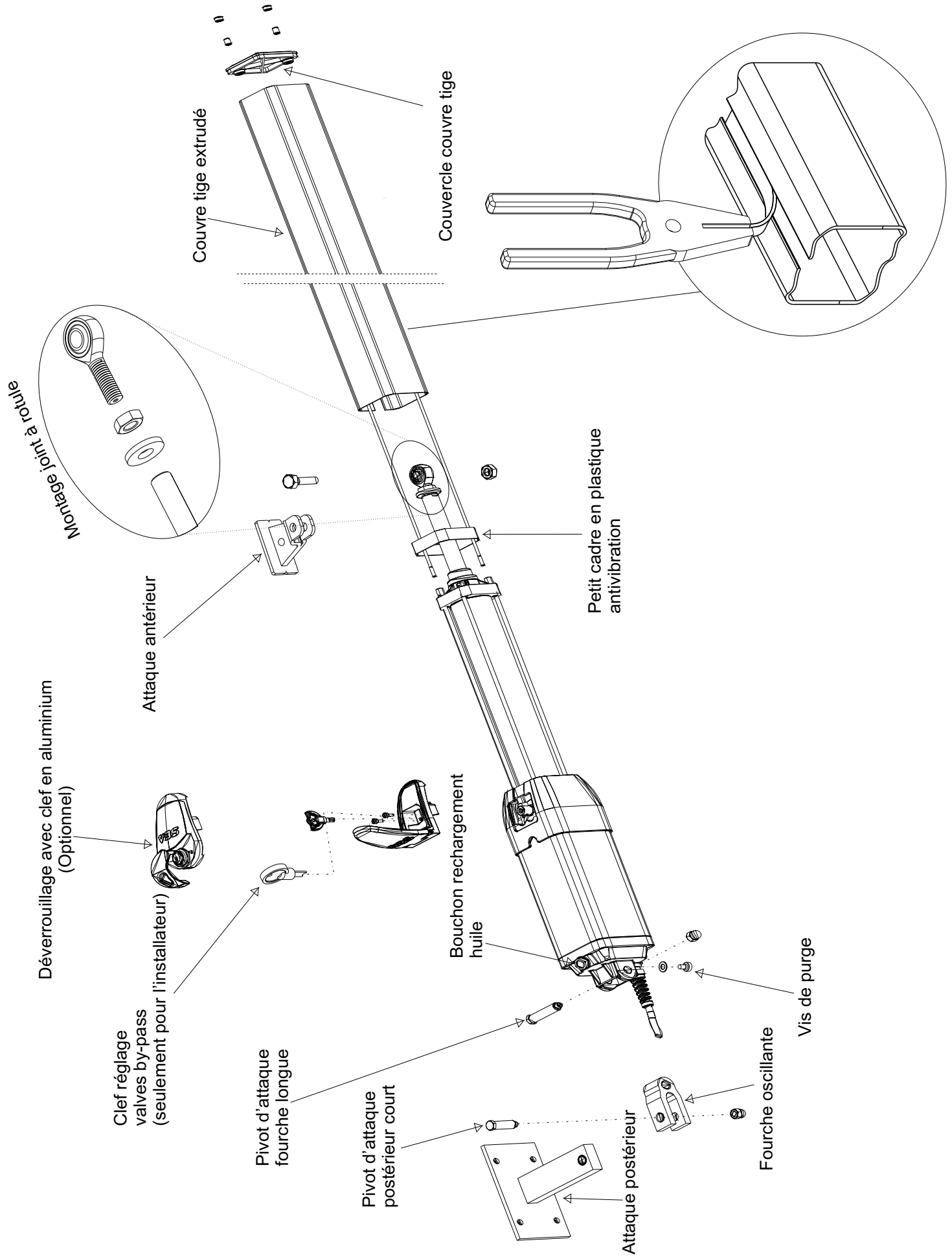
Fig. 2



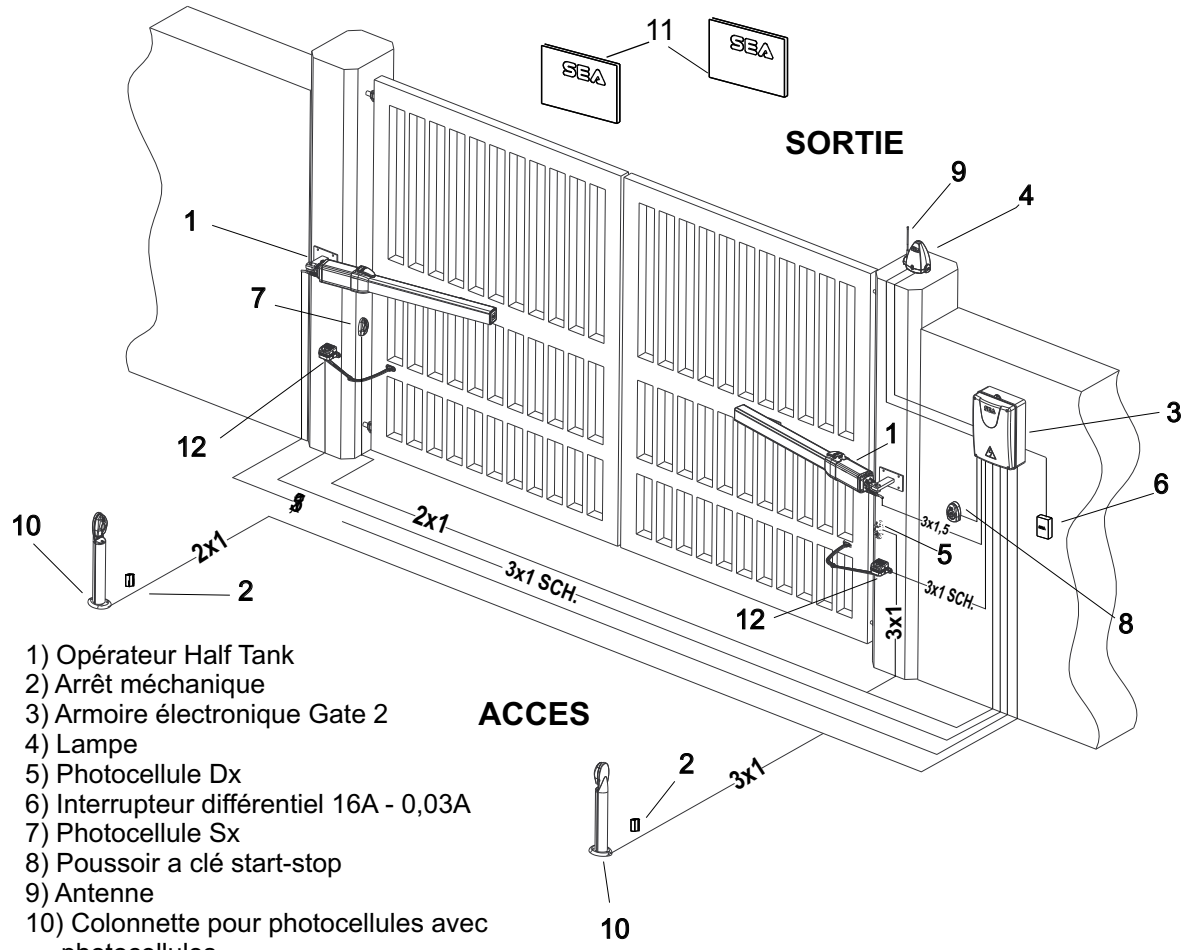
1 Couvre bride extrudé
2 Attaque déverrouillage ext.
3 Attaque antérieur
4 Attaque postérieur
5 Cylindre hydraulique
6 Valves By-pass
7 Moteur électrique
8 Pompe hydraulique
9 Sortie câbles électriques
10 Clef de déverrouillage

CARACTERISTIQUES TECHNIQUES	*HALF TANK 100*	*HALF TANK 200*
Alimentation	230 V (±5%) 50/60 Hz	
Puissance	220 W	
Courant absorbé	1 A	
Course de la tige	270 mm	390 mm
Cycle/heure (temp. 20°C)	55	
Max pression d'exercise	40 bar	30 bar
Temperature d'exercise	-40°C +60°C	
Protection thermique moteur	130°C	
Max. Poussée	640 daN	470 da N
Condensateur	12,5uF	
Poids	11,4 Kg	13,6 Kg
Dégré de protection	Ip55	
Max. Longueur du vantail	6 mt	7 mt
Degré d'ouverture vantail	90° - 125°	




Couvre tige extrudé
Couvercle couvre tige
Montage joint à rotule
Attaque antérieur
Petit cadre en plastique antivibration
Déverrouillage avec clef en aluminium (Optionnel)
Clef réglage valves by-pass (seulement pour l'installateur)
Bouchon rechargement huile
Vis de purge
Pivot d'attaque fourche longue
Pivot d'attaque postérieur court
Attaque postérieur
Fourche oscillante

INSTALLATION TYPE



1) Opérateur Half Tank
2) Arrêt méchanique
3) Armoire électronique Gate 2
4) Lampe
5) Photocellule Dx
6) Interrupteur différentiel 16A - 0,03A
7) Photocellule Sx
8) Poussoir a clé start-stop
9) Antenne
10) Colonnette pour photocellules avec photocellules
11) Tableaux avertissement
12) Safety Gate

TYPE D'INSTALLATION

Il est possible d'installer le Half Tank avec l'ouverture vers l'intérieur (Fig. 14) ou vers l'extérieur (Fig. 15).

Installation intérieure

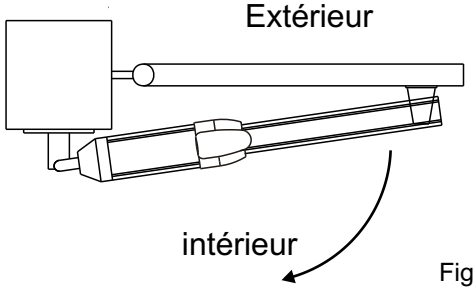


Fig. 4

Installation extérieure

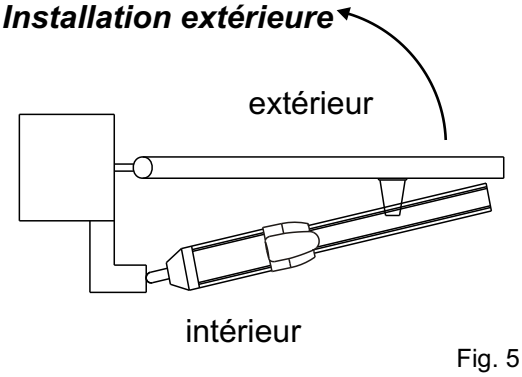


Fig. 5

Installer l'opérateur toujours à l'intérieur de la propriété

INSTALLATION INTERIEURE

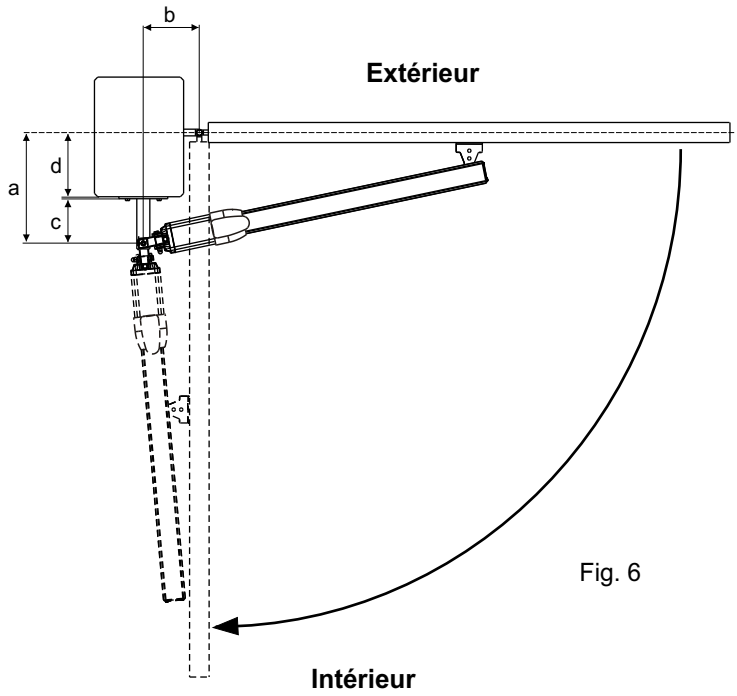


Fig. 6

Course totale 270 mm - course max conseillé 250 mm

a (mm)	b (mm)	d max (mm)	Max. Angle D'ouverture	Course tige max **(mm)**	Course tige pour 90°**(mm)**
100	115	50	**110°**	**250**	**215**
100	150	50	**90°**	**250**	
105	110	55	**110°**	**245**	**215**
105	145	55	**90°**	**250**	
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°**	**250**	
145	95	95	**100°**	**255**	**242**
145	105	95	**90°**	**250**	
150	100	100	**90°**	**250**	
155	85	105	**96°**	**250**	**242**
160	90	110	**90°**	**253**	
170	75	120	**92°**	**250**	
180	65	130	**92°**	**250**	

Pour obtenir 110° avec d > 55 mm il faut faire une niche dans le portail.

INSTALLATION INTERIEURE

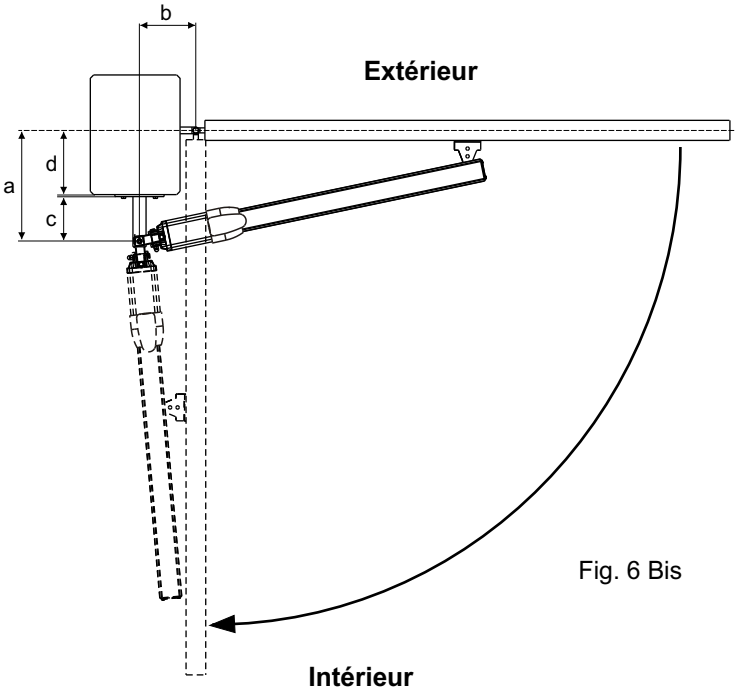


Fig. 6 Bis

Course totale 390 mm - course max conseillée 370 mm

a (mm)	b (mm)	d max (mm)	Max. Angle d'ouverture	Course tige max **(mm)**	Course tige pour 90°**(mm)**
125	170	75	**125°**	**368**	**295**
130	170	80	**125°**	**372**	**300**
140	235	90	**90°**	**370**	
145	165	95	**120°**	**372**	**310**
145	230	95	**90°**	**370**	
160	210	110	**90°**	**370**	
175	195	120	**90°**	**370**	
185	145	130	**110°**	**370**	**330**
185	190	130	**90°**	**370**	
195	140	140	**110°**	**371**	**355**
195	175	140	**90°**	**370**	
240	110	185	**100°**	**370**	**355**
240	125	185	**90°**	**370**	
250	105	195	**95°**	**370**	**360**
250	115	195	**90°**	**370**	
260	95	205	**95°**	**369**	**365**
260	100	205	**90°**	**370**	
270	90	215	**90°**	**370**	
280	80	230	**90°**	**370**	
295	65	245	**90°**	**369**	

Pour obtenir 125° avec d > 55 mm il faut faire une niche dans le portail.

INSTALLATION EXTERIEURE

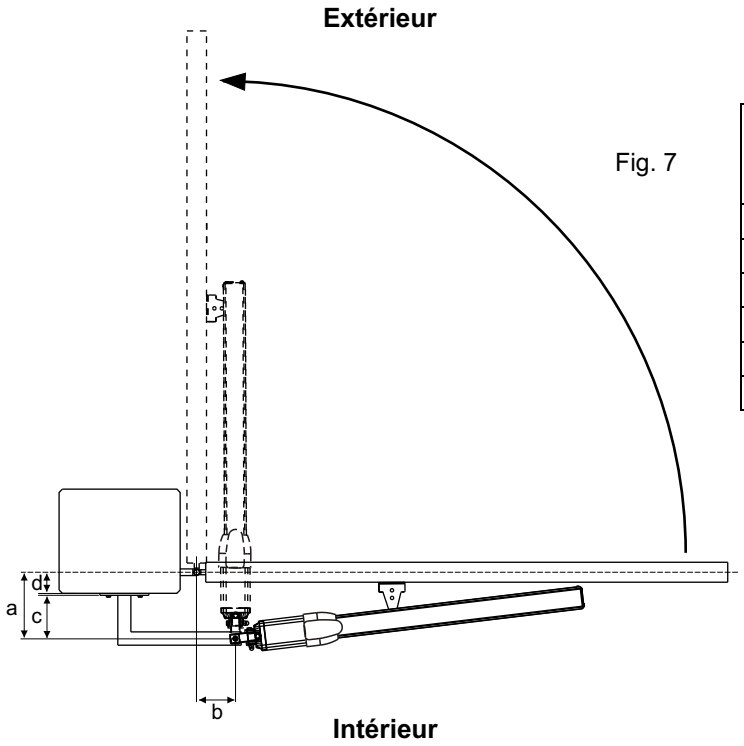


Fig. 7

Course totale 270 mm - course max conseillée 250 mm

a (mm)	b (mm)	Max. Angle d'ouverture	Course tige max **(mm)**	Course tige pour 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**	

INSTALLATION EXTERIEURE

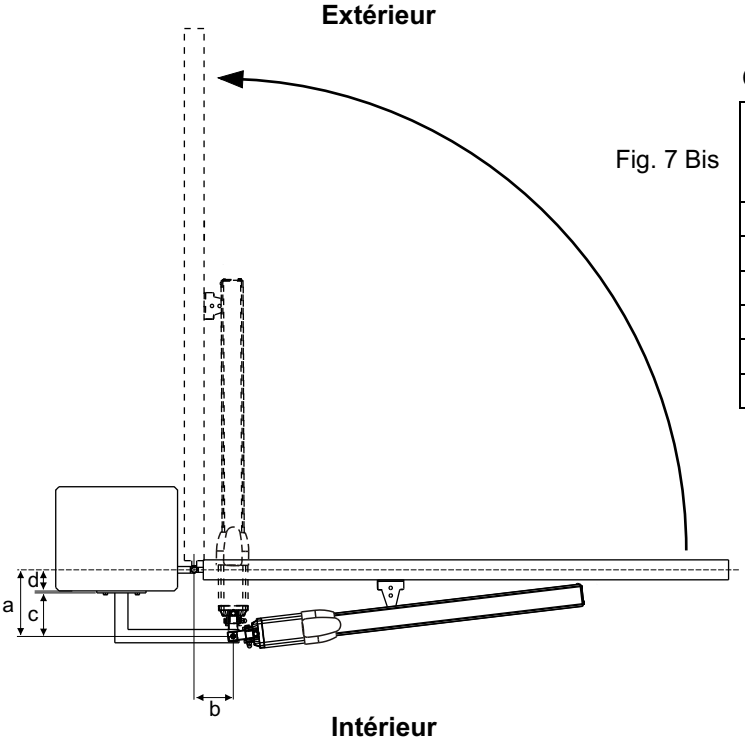


Fig. 7 Bis

Course totale 390 mm - course max conseillée 370 mm

a (mm)	b (mm)	Max. Angle d'ouverture	Course tige max **(mm)**	Course tige pour 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 FOURCHE OSCILLANTE

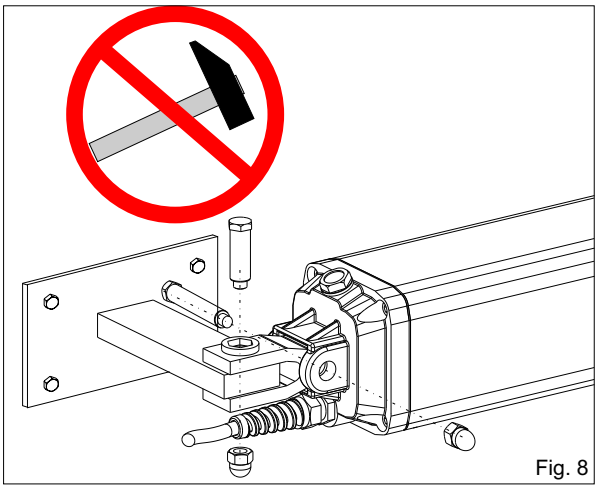


Fig. 8

PRELIMINAIRES

-Ouvrir soigneusement l'emballage, faisant attention de ne pas perdre les composants reportés dans fig. 3.
-Fixer la fourche oscillante comme dans fig.9

Attention: **ne pas utiliser le marteau** pour insérer le pivot en laiton court; insérer le pivot dans la fourche et dans la bride avec la simple pression des mains

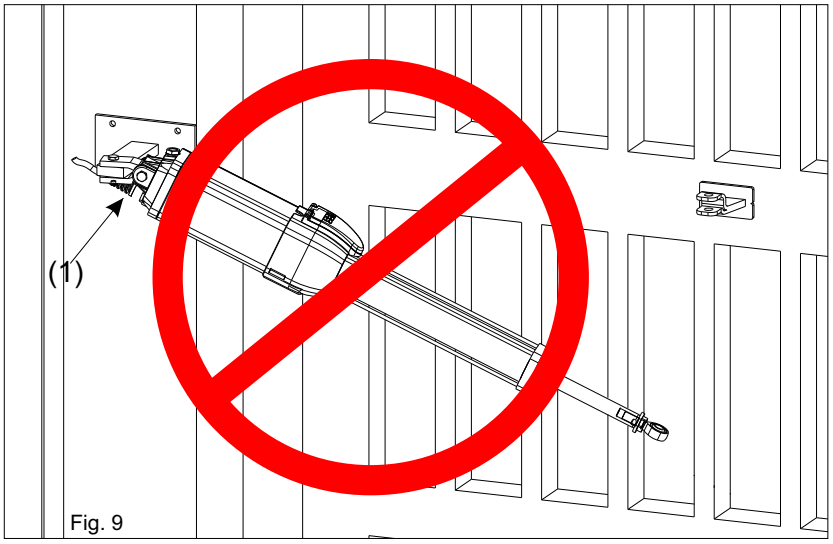


Fig. 9

Attention:
Ne pas incliner l'opérateur hydraulique outre l'angle permi par la fourche oscillante (1), risque de rupture de la même.

INSTALLATION ATTAQUE POSTERIEUR

Selon le type d'ouverture (intérieure ou extérieure) et la rotation maxie du vantail choisie (voir pag.5), il faut couper (en avant) la bride en respectant le quota "a" de pag. 5 et après souder comme dans fig. 10.

Le support doit être positionné de façon que l'opérateur est parfaitement horizontal (Fig. 10 ,Fig.12).

Attaque postérieur réglable (avec vis)
(Accessoire sur demande)

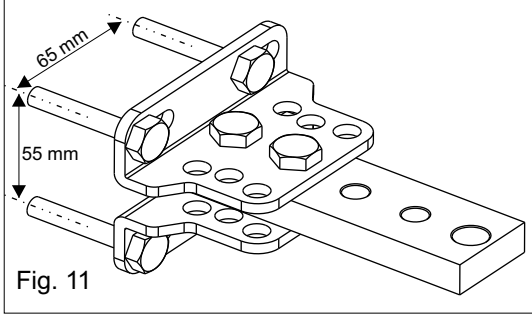


Fig. 11

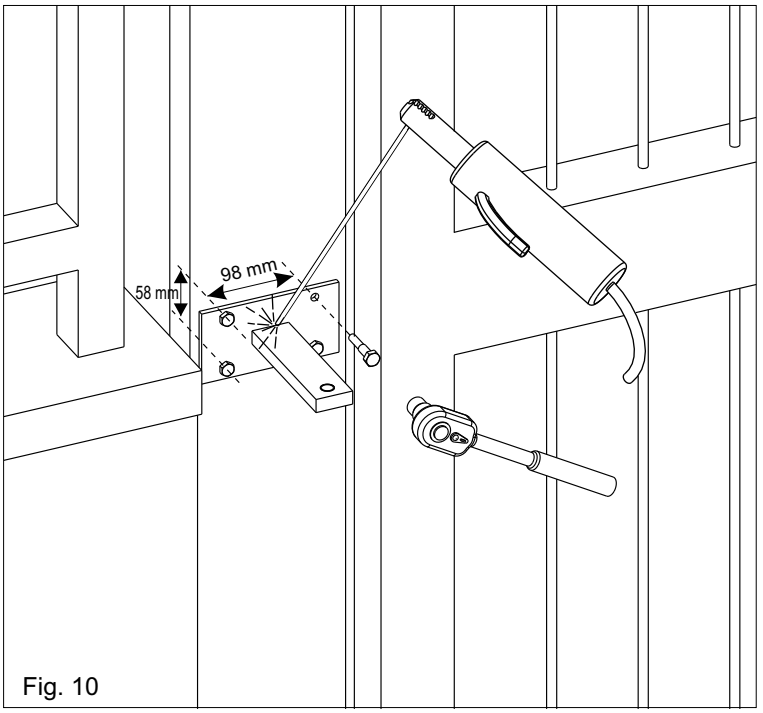


Fig. 10

POSITIONNEMENT ATTAQUE ANTERIEUR

Après avoir fixé l'opérateur sur l'attaque postérieur fermer le vantail et exécuter le suivantes opérations:

1) Déverrouiller l'opérateur (comme dans Fig. 23 pag. 11)
2)Sortir complètement la tige chromée, **après la rentrer d'au moins 1 cm**.
3) Fixer la tige sur l'attaque antérieur (Fig. 13)
4) Positionner l'opérateur de façon parfaitement horizontal donc marquer la position de l'attaque antérieur (Fig. 12)
Attention: éviter de souder l'attaque antérieur avec la tige de l'opérateur hydraulique déjà fixée: Les déchets de soudure pourraient compromettre le chromage de la tige.

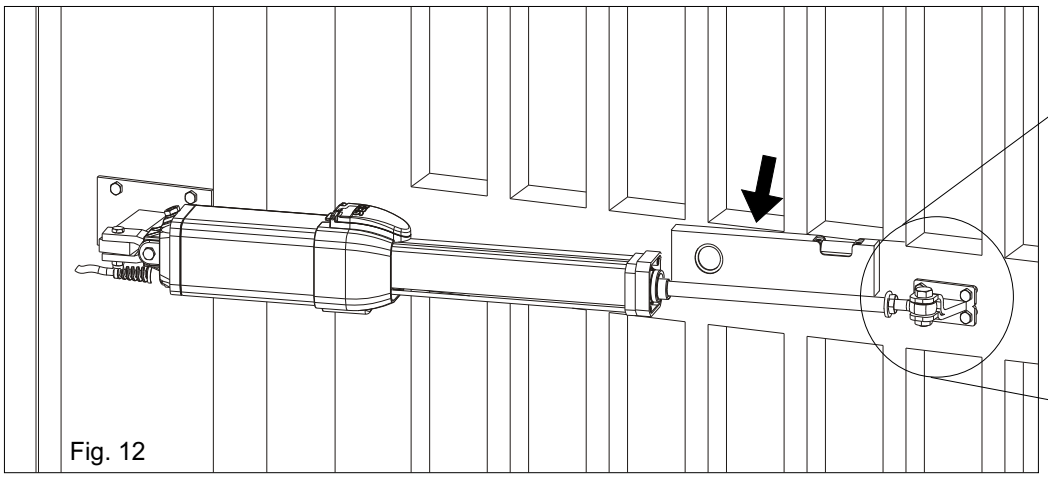


Fig. 12

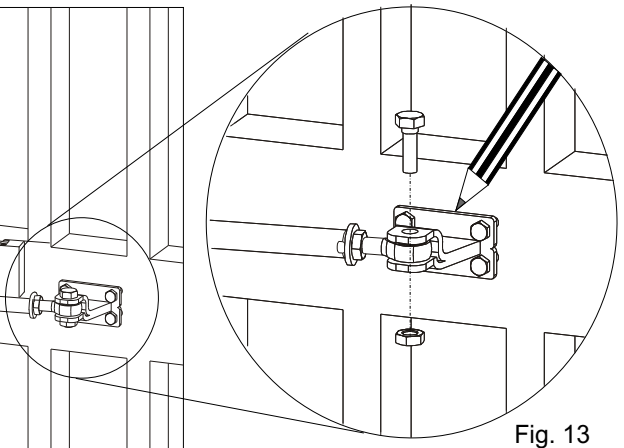


Fig. 13

SOUDURE DE L'ATTAQUE ANTERIEUR AU PORTAIL

L'attaque antérieur doit être positionné parfaitement horizontal.

Selon la nature du portail (bois, fer, aluminium) l'attaque antérieur peut être soudé ou vissé.

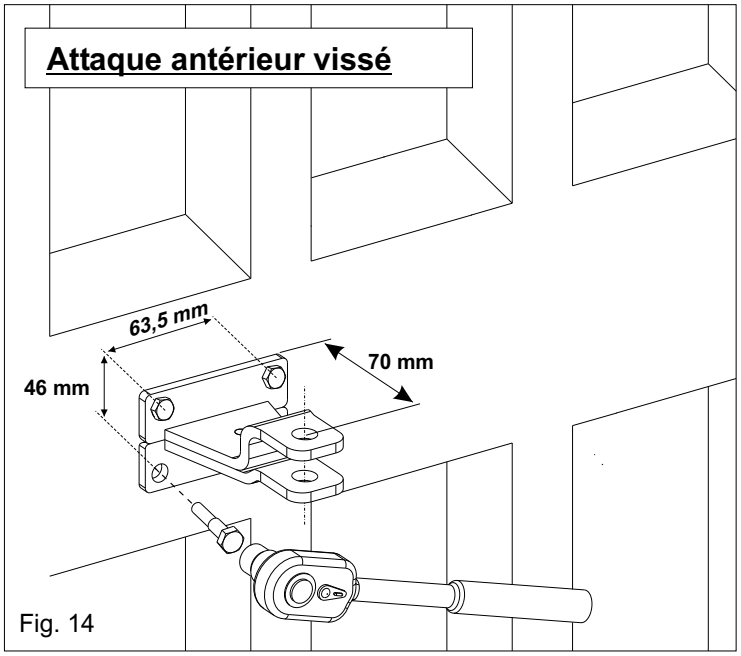


Fig. 14

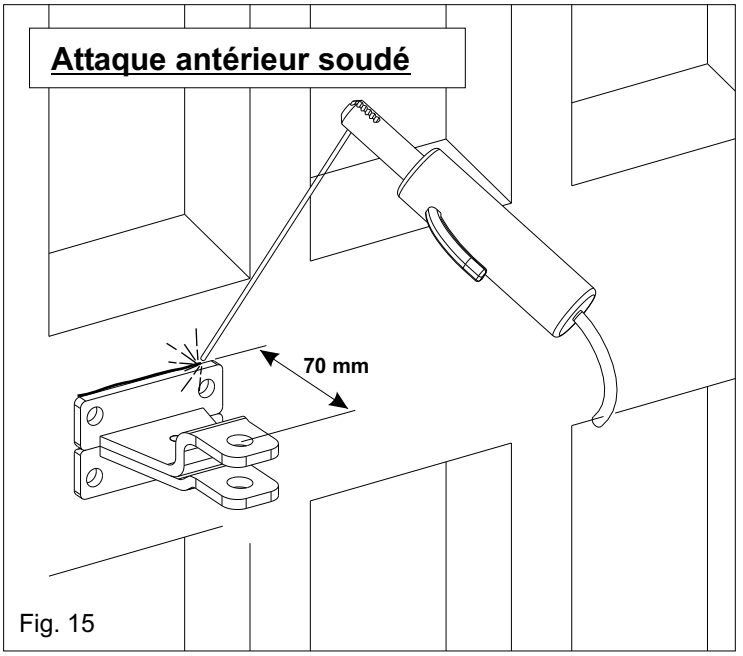


Fig. 15

INSTALLATION DES FEUILLURES FIN DE COURSE (Accéssories sur demande)

- Déverrouiller (comme dans Fig. 23 page 10)
- Faire sortir la tige de 3/4 de son course
- Mettre les feuillures de fin de course sur la bride antérieure de l'ensemble avec les deux tirants (des trois présents sur la feuillure) qui se trouvent en parallèle au portail (Fig. 16)
- Fixer les feuillures avec les vis inclus dans l'emballage.
- A ce point accrocher la tige à l'attaque antérieur
- Régler la feuillure en ouverture sur le disque 1 et celle-ci en fermeture sur le disque 2.

Attention : le montage des feuillures mécaniques ne cause pas la diminution de la course de la tige

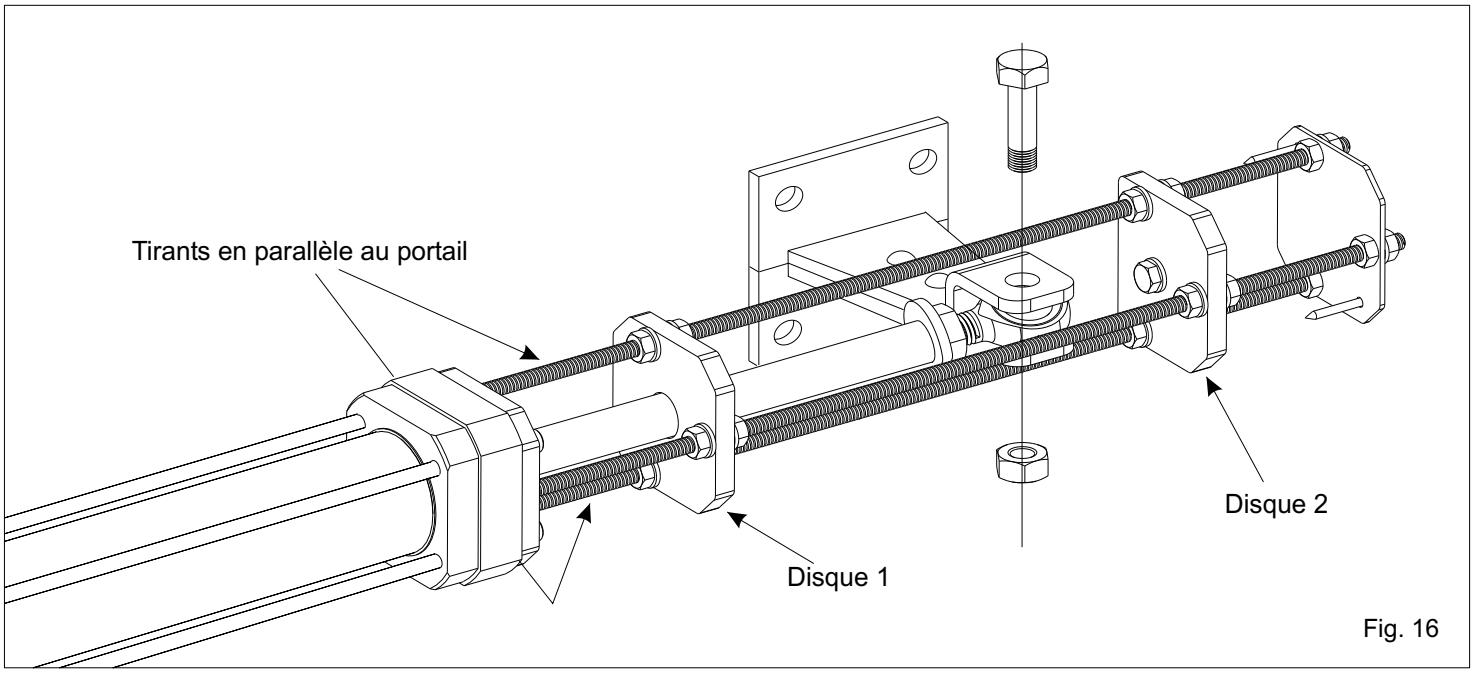


Fig. 16

VIS DE PURGE

Partie supérieure

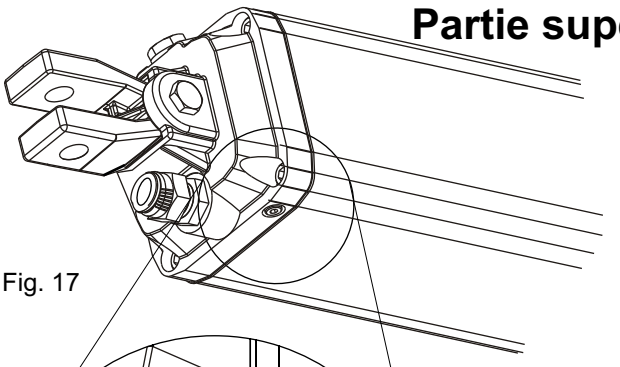


Fig. 17

ATTENTION

Enlever les vis de purge à installation terminée.

Partie inférieure

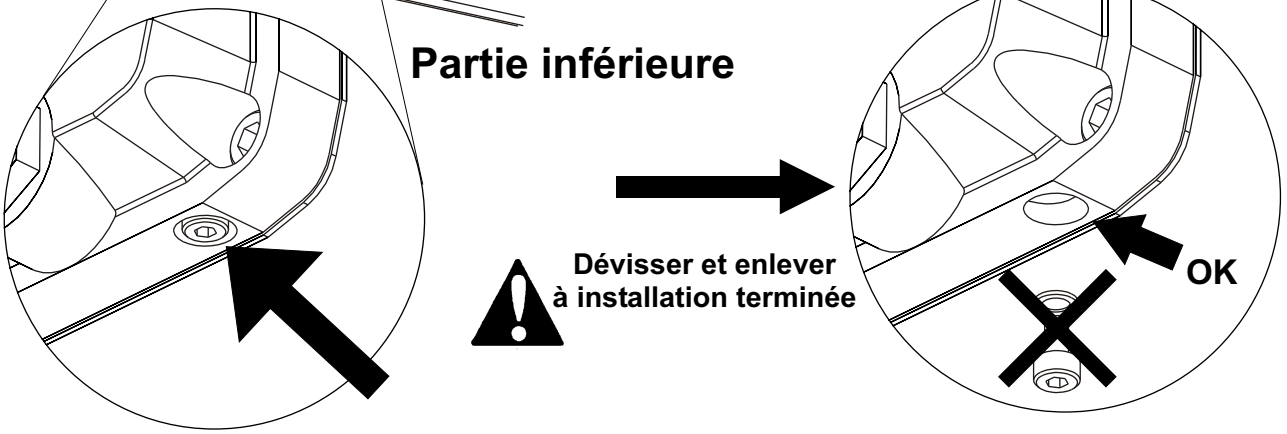


Fig. 18

INSTALLATION DE LA PROTECTION DE LA TIGE CHROMEE

S'assurer d'avoir inséré le quadre en plastique anti-vibration (**A**) avant d'insérer le couvre tige extrusé (Fig. 19).

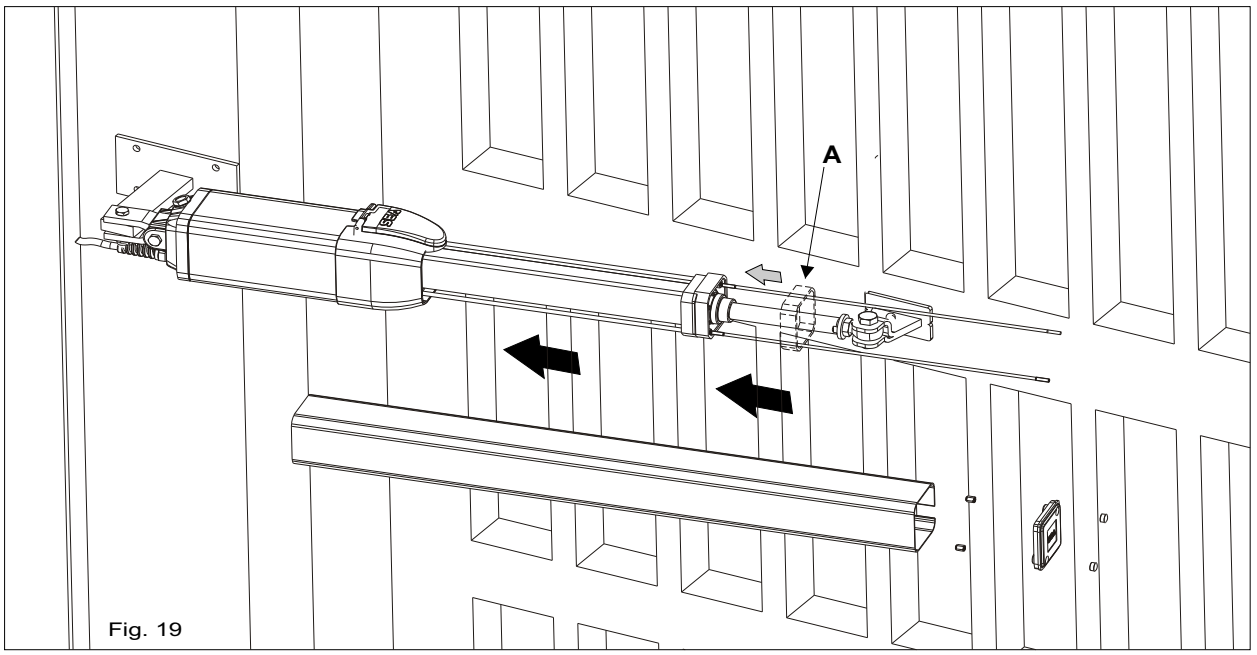


Fig. 19

REGLAGE COUPLE (Valves By-Pass Valves)

A la première installation il ne faut pas encore insérer le couvercle du déverrouillage et le couvercle by-pass. Dans ce cas là faire référence aux fig. 20 et 22.
En cas de réglage des valves by-pass, (exécuté en second lieu) à cause des entretiens périodiques ou d'autre il faut enlever la vis que bloque le couvre by-pass (fig. 21), enlever le couvre by-pass et régler donc la pression des valves by-pass avec la clef spéciale (Fig. 22) on dotation seulement pour l'installateur.

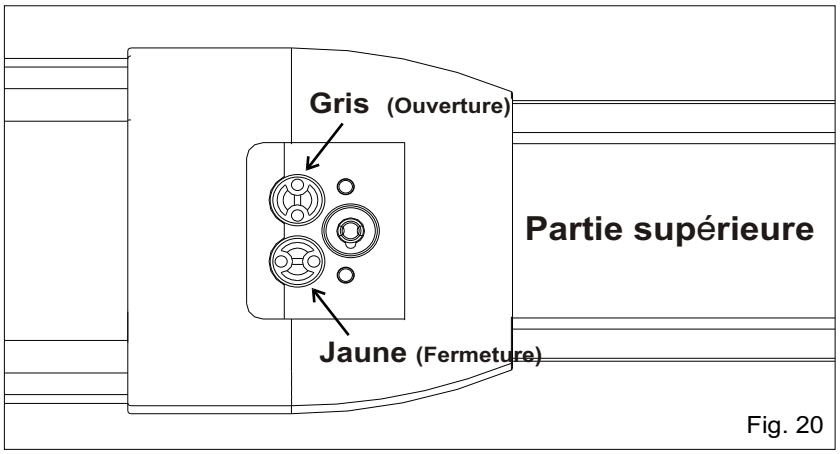


Fig. 20

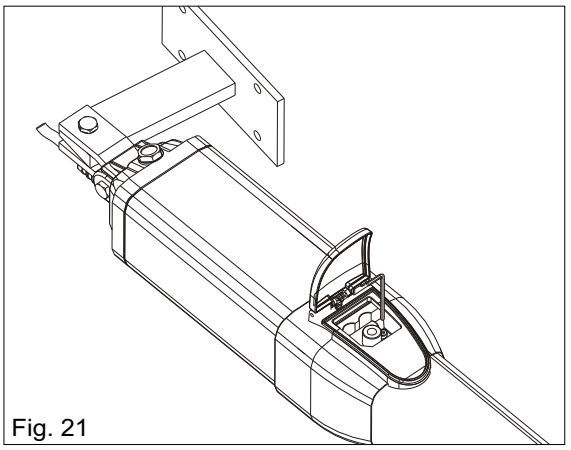
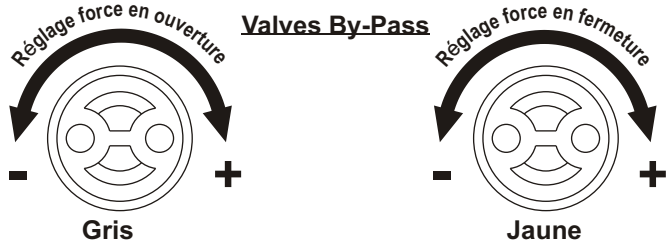


Fig. 21



Régler la force du portail en ouverture et en fermeture respectant le diagramme de la force (présente dans la norme EN 12453); la force de poussée ne doit jamais dépasser les 15KgF.

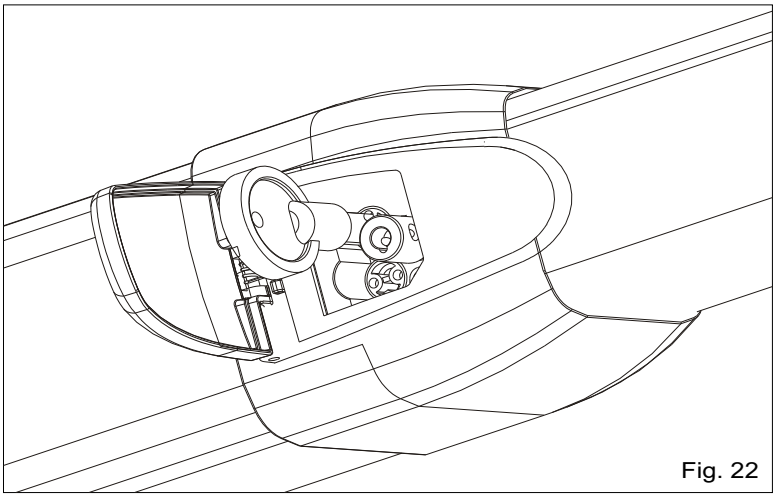


Fig. 22

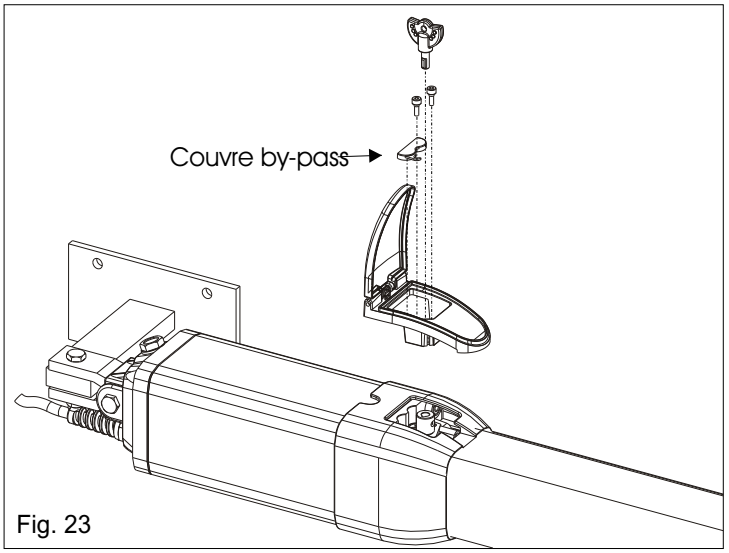


Fig. 23

MONTAGE DU DEVERROUILLAGE EN PLASTIQUE

ATTENTION: Le montage du déverrouillage en plastique doit être effecuté comme indiqué dans fig. 23 **seul et uniquement après avoir terminés toutes les opérations d'installation, le montage du couvre tige et le tarage des valves by-pass.**

MONTAGE DU DEVERROUILLAGE EN ALUMINIUM AVEC CLEF (accessoire sur demande)

ATTENTION: Le montage du déverrouillage en aluminium doit être effectué comme indique dans fig. 24 seul et uniquement après avoir terminé toutes les opérations d'installation et montage du couvre tige et du tarage des valves by-pass.
La clef de déverrouillage se trouve à l'interne du couvercle du déverrouillage en aluminium (voir fig.25)

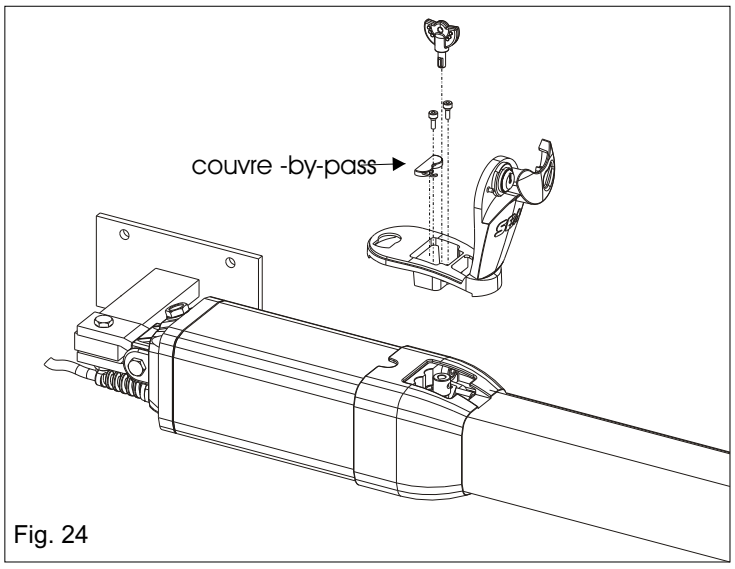


Fig. 24

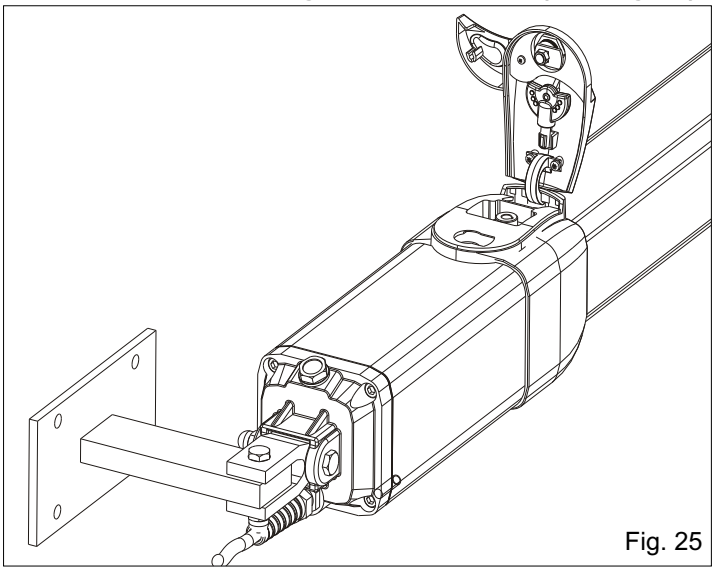


Fig. 25

MONTAGE DU DEVERROUILLAGE EXTERIEUR (accessoire sur demande)

ATTENTION: Il faut exécuter le montage du déverrouillage extérieur comme indiqué dans les fig. 26 et 27. Pour plusieurs détails faire référence aux instructions de montage dans le "Kit Montage Déverrouillage Extérieur" pour Half Tank.

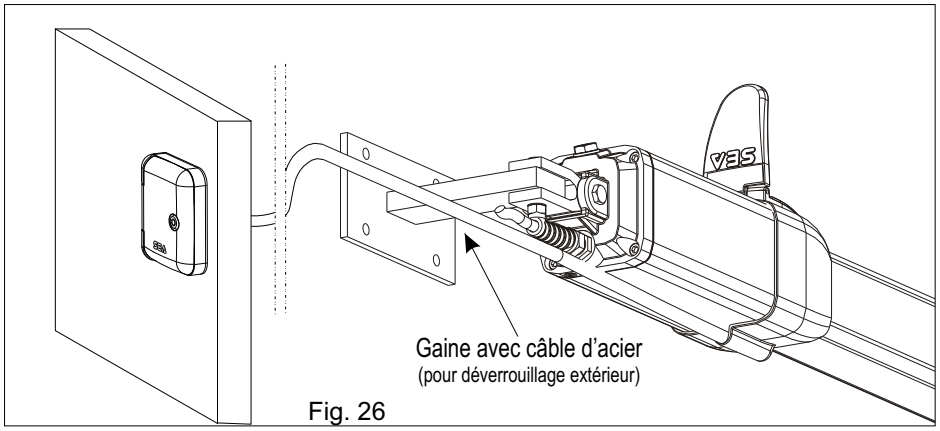


Fig. 26

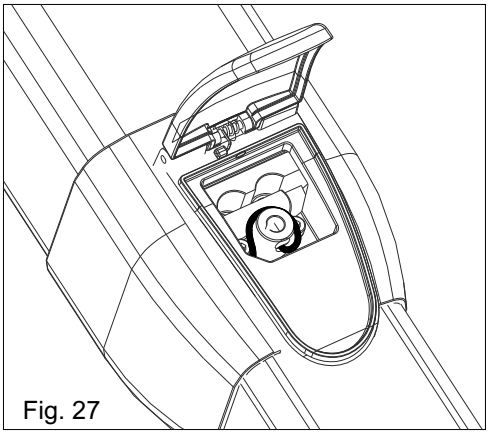


Fig. 27

SYSTEME DE DEVERROUILLAGE

Pour déverrouiller opérer comme suit:
-Insérer la clef et la tourner de 180 ° en sens anti-horaire (Fig.28).

Pour bloquer de nouveau l'opérateur opérer comme suit:
-Insérer la clef et la tourner en sens horaire jusqu'à son arrêt (Fig.28).

Attention: Effecuter le déverrouillage toujours avec énergie électrique déclenchée.

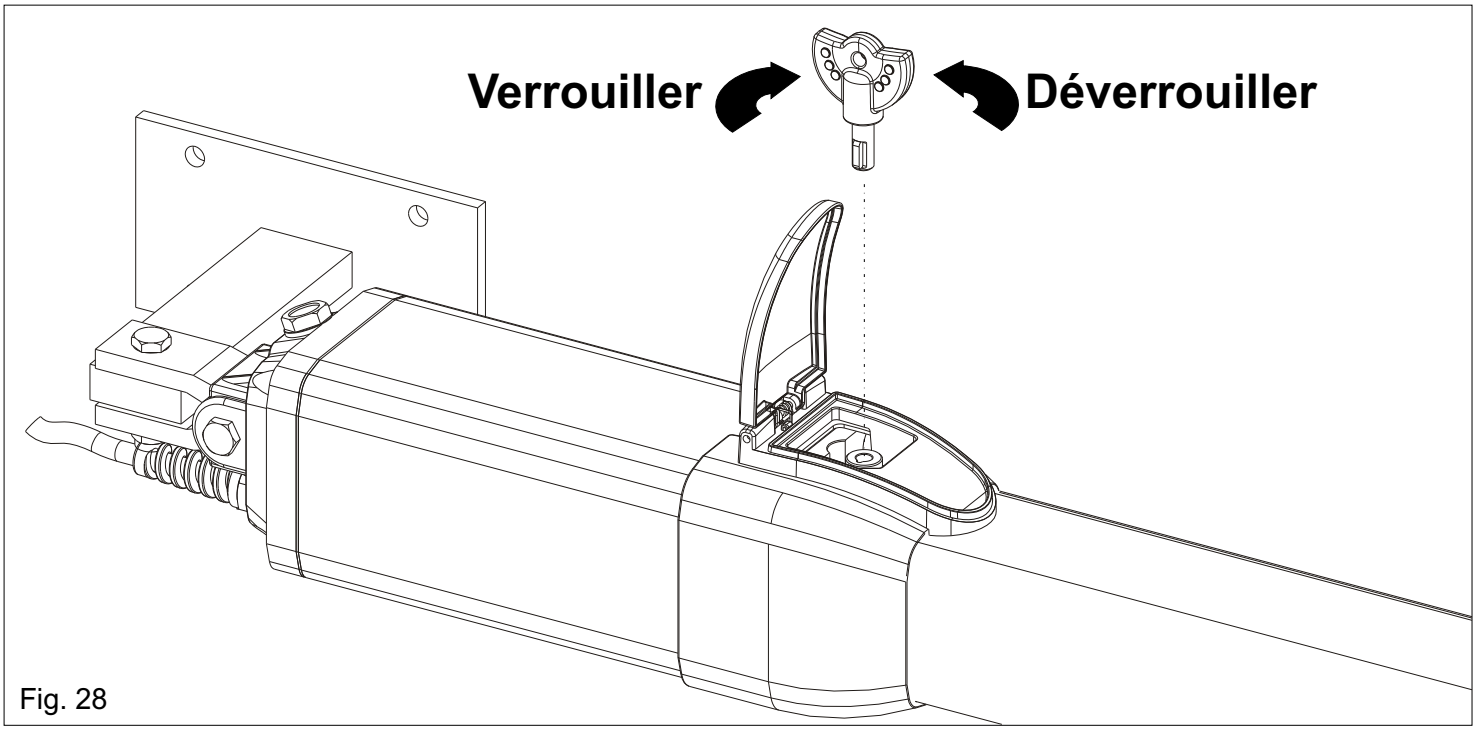


Fig. 28

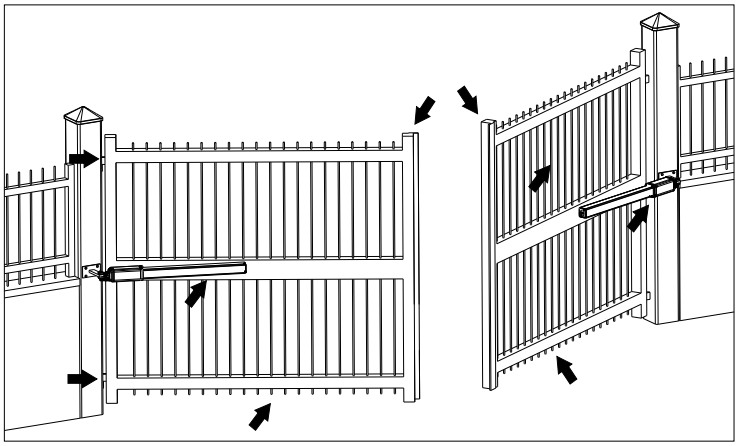
ENTRETIEN PERIODIQUE

1) Contrôler la robustesse et la stabilité du portail, en particulier les points d'appui et/ou de rotation du portail (gonds).	Annuel
2) Contrôler le niveau de l'huile dans les opérateurs hydrauliques/en bain d'huile (Bouchon positionné sur le couvercle postérieur de l'Half Tank)	Annuel
3) Remplacer l'huile hydraulique avec l'huile recommandée par la maison mère	4 Ans
4) Contrôler le fonctionnement du déverrouillage	Annuel
5) Contrôler le fonctionnement des valves by-pass	Annuel
6) Contrôler et graisser les pivots de fixage	Annuel
7) Contrôler l'intégrité des câbles de connexion	Annuel
8) Contrôler le fonctionnement et les conditions des feuillures des fins de course en ouverture et fermeture (là où il y a la feuillure méccanique)	Annuel
9) Contrôler le bon état de tous les appareils qui sont sujet à éfforts (attaque postérieur, fourche oscillante et attaque antérieur.)	Annuel
10) Contrôler le bon fonctionnement de tous les accéssoires, en particulier des tous les dispositifs de sécurité et du Safety Gate.	Annuel
11) **Après avoir exécuté les opérations "d'Entretien Périodique" il faut répéter l'essai et la mise en service de l'automatisme.**	Annuel

Toutes les opérations au dessus doivent être exécutées uniquement par un installateur autorisé.

EXAMIN DES RISQUE

Les points dans fig. 38 indiqués par les fléches sont potentiellement dangereux. L'installateur doit exécuter un examin approprié des risques pour prévenir : écrasements, trainements, cisaillements, accrochements et blocages et pour garantir une installation sure pour hommes, choses et animaux.Si vous n'avez pas compris ce manuel ou pour récevoir plusieures informations, veuillez contacter le distributeur de votre pays o notre service téléphonique. Ces instructions font partie intégrale du produit et doivent être gardées dans un lieu connu. L'installateur doit respecter scrupuleusement les instructions. Les produits SEA doivent être utilisés seul et uniquement pour l'automatisation de portes, portails et vantaux. Quelconque initiative pris sans explicite autorisation de SEA s.r.l. la detourne de toute les responsabilités. L'installateur doit fournir un panneau d'avertissement à propos des risques résiduel pas évaluables. La SEA s.r.l. dans le constant engagement d'amélioration de ses produits, a le droit d'effectuer n'importe quelle modification sans devoir préaviser ses clients. Ce-ci n'engage pas la SEA s.r.l. D'ameliorer les avantes production. La SEA srl décline toutes les responsabilités par suite de dommages ou accidents causé par produits cassés, s'il s'agit de dommages ou accidents provoqués à cause de l'inobservance des présentes instructions. La manquée utilisation des pièces de rechange originales SEA invalide la garantie et frappe de nullité la responsabilité du constructeur. L'installation électrique doit etre effectuée par un technicien professionnel qui délivre la documentation relative, comme demander par les lois en vigueur. Tenir loin des enfants le matériel d'emballage comme sachets en plastique polystyrène, clous etc. étant des sources de péril potentiel.

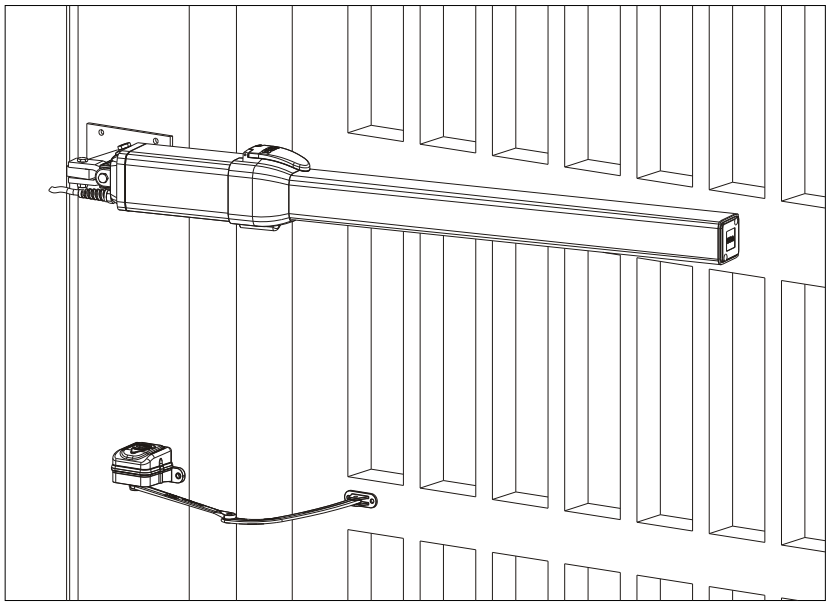


VERIFICATION INITIALE ET MISE EN SERVICE

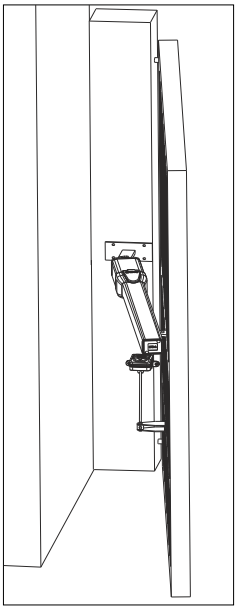
Après avoir installée correctement (selon le présent manuel) le produit HALFTANK, et après avoir évalué tous les risques résidus que peuvent venir dans quelconque installation, **il faut vérifier l'automatisme pour garantir la max. sécurité** en respectant les lois et les normes du secteur. La vérification doit être effectuée selon la norme **EN 12445** contenant les méthodes de preuve pour la vérification des automatismes pour portails respectant les limites fromulées dans la norme **EN 12453**.

SAFETY GATE

Pour une correcte et sûre installation il est fortement conseillé d'installer un Safety Gate, **que permet de satisfaire le diagramme des forces, présent dans la norme EN 12453** et cependent de vérifier et de mettre en service l'installation.



NOTA: En cas d'installation comme dans la figure sur la droite il est possible d'utiliser le Safety Gate avec une baguette droite (résoudant comme ça le problème d'encombrement du petit bras (graphique à la gauche).



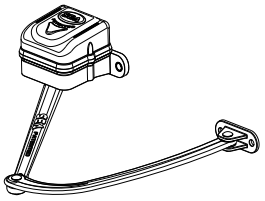
ACCESSOIRES POUR HALF TANK

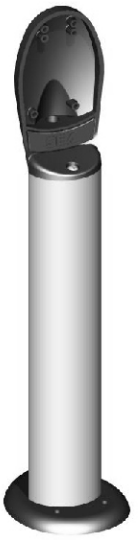

POUSSOIR A CLEF

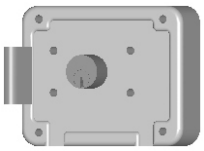

PHOTOCELLULE


RECEPTEUR RADIO

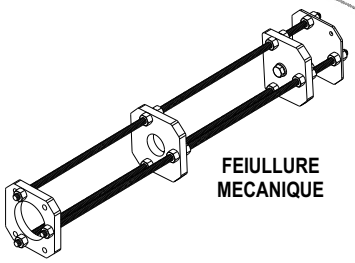

EMETTEUR RADIO

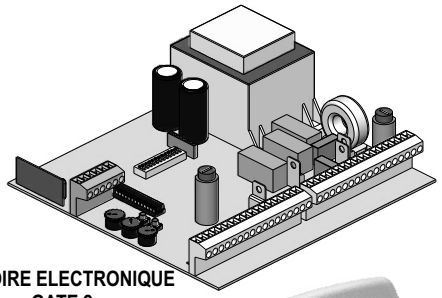

SAFETY GATE


COLONNETTE
POUR PHOTOCELLULES


ELCTROSERRURE


LECTEUR
DE SPIRE
MAGNETIQUE
EXTERNE


FEIULLURE
MECANIQUE


ARMOIRE ELECTRONIQUE
GATE 2


CLIGNOTEUR


KIT DEVERROUILLAGE EXTERNE

DECLARATION DE CONFORMITE

SEA déclare sous sa propre responsabilité que le produit

Half Tank dans toutes ses versions

Réponde aux conditions requises essentielles prévues par les suviantes directives européennes et les modifications succesives (là où applicable):
98/37/CE (Directives Machines)
89/336/CEE (Directive Compatibilité Elettromagnetique)
73/23/CEE (Directive Basse Tension)

AVERTISSEMENT :
L'installation électrique et la choix de la logique de fonctionnement doivent respecter les normatives en vigueur. Il faut prévoir dans tous les cas un interrupteur différentiel de 16A et souille 0,030A. Tenir séparés les câbles de puissance (moteurs, alimentation) et les câbles des accessoires (poussoirs, photocellules, radio etc.) Pour éviter des interférences il est conseillé de prévoir et d'utiliser deux gaines séparées.

USAGE
Le Half Tank peut être utilisé uniquement pour l'automatisation de portails à battants.

PIÈCES DE RECHANGE
Adresser les demandes de pièces de rechange à :
SEA S.r.l. Zona Industriale S.Atto Teramo Italie

SÉCURITÉ ET COMPATIBILITÉ ENVIRONNEMENT
Ne pas disperser dans l'environnement le matériel d'emballage du produit et/ou des circuits.
Le déplacement du produit doit être effectué avec des moyens appropriés

GARANTIE
La garantie de l'opérateur Half Tank est de 36 mois à partir de la date imprimée sur le produit. Le moteur sera reconnu en garantie s'il ne présente pas des dommages causés par l'usage impropre ou par n'importe quelle modification ou manumission.

MISE HORS SERVICE ET ENTRETIEN
Le démontage et/ou mise hors service et/ou entretien de l'opérateur Half Tank doit être exécuté seul et exclusivement par le personnel autorisé et expert.

N.B. Le constructeur ne peut pas être considéré responsable des dommages éventuels à cause des usages impropres, erronnés et irraisonnables.

SEA se réserve le droit d'effectuer (si nécessaire) des modifications ou variations aux propres produits et/ou au présente manuel sans aucune obligation de préavis.

SEA®
Sistemi elettronici
di Aperture Porte e Cancelli

Español

ACTUADOR OLEODINAMICO PARA CANCELAS BATIENTES

HALF TANK

MANUAL DE INSTALACION
e informaciones sobre la seguridad

SEA S.r.l.
Zona Ind. S.Atto 64020 TERAMO Italy
Tel. +39.0861.588341 - Fax+39.0861.588344

e-mail: seacom@seateam.com
WEB SITE : www.seateam.com

CARACTERISTICAS Y ESPECIFICAS el producto **HALF TANK 100** y **HALF TANK 200** es un actuador oleodinamico de gran calidad para uso condominial para cancelas con antas de longitud max respectivamente 6 m. Y 7 m. Con electrocerradura. Disponible en las siguientes versiones:

AC *(con bloqueo en apertura y cierre)*
SC *(con bloqueo solo en cierre)*
SA *(con bloqueo solo en apertura)*
SB *(sin bloqueo)*

El bloqueo viene garantizado en las antas con longitud inferior a 1,80 m. para l'Half Tank 100 mientras viene garantizado hasta 2,20 m. Para Half Tank 200. Para antas con longitud superior respectivamente a 1,80 m. y 2,20 m. Es aconsejado , en todas las versiones , el uso de una electrocerradura. El producto Half Tank 100 y 200poseen de las valvulas by-pass para la regulacion de la fuerza ya sea en apertura como en cierre. La frenadaes regulable electronicamente en apertura y cierre con la tarjeta GATE 2. Para las normas y directivas vigentes hoy en Europa es fuertemente aconsejado el uso del Safety Gate (dispositivo para la lectura de la posicion de la cancela), necesario para permitir la inversion del anta en caso de obstaculo

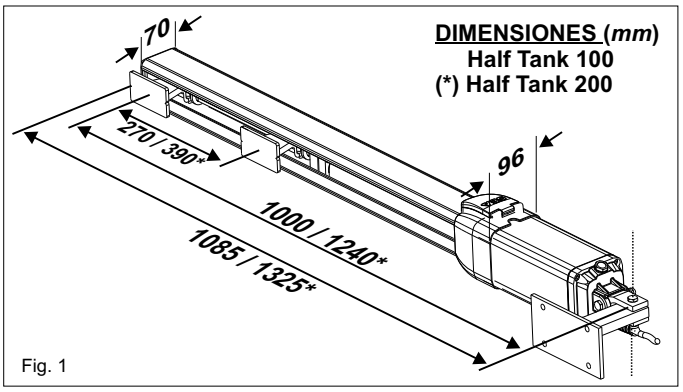
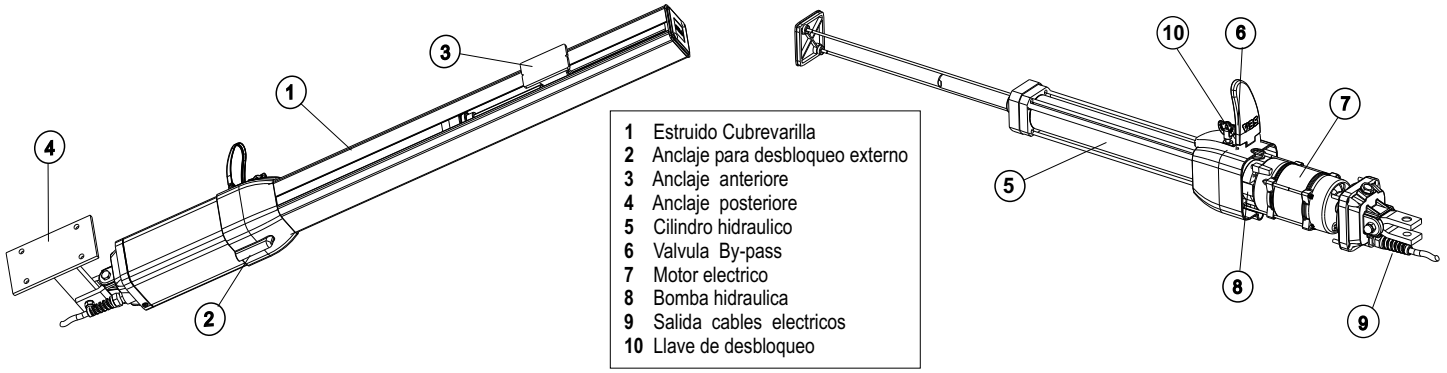
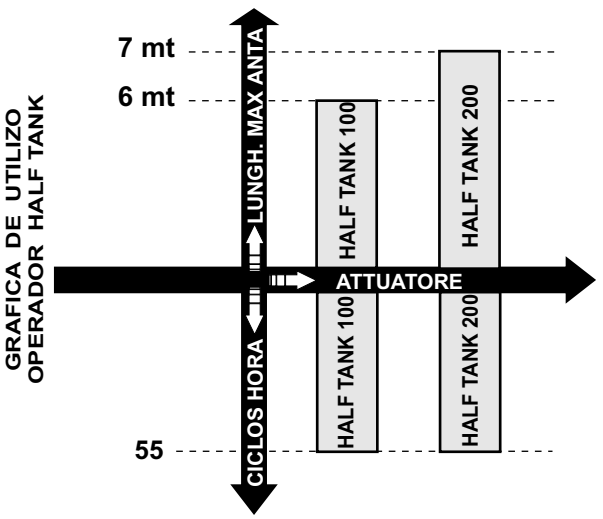


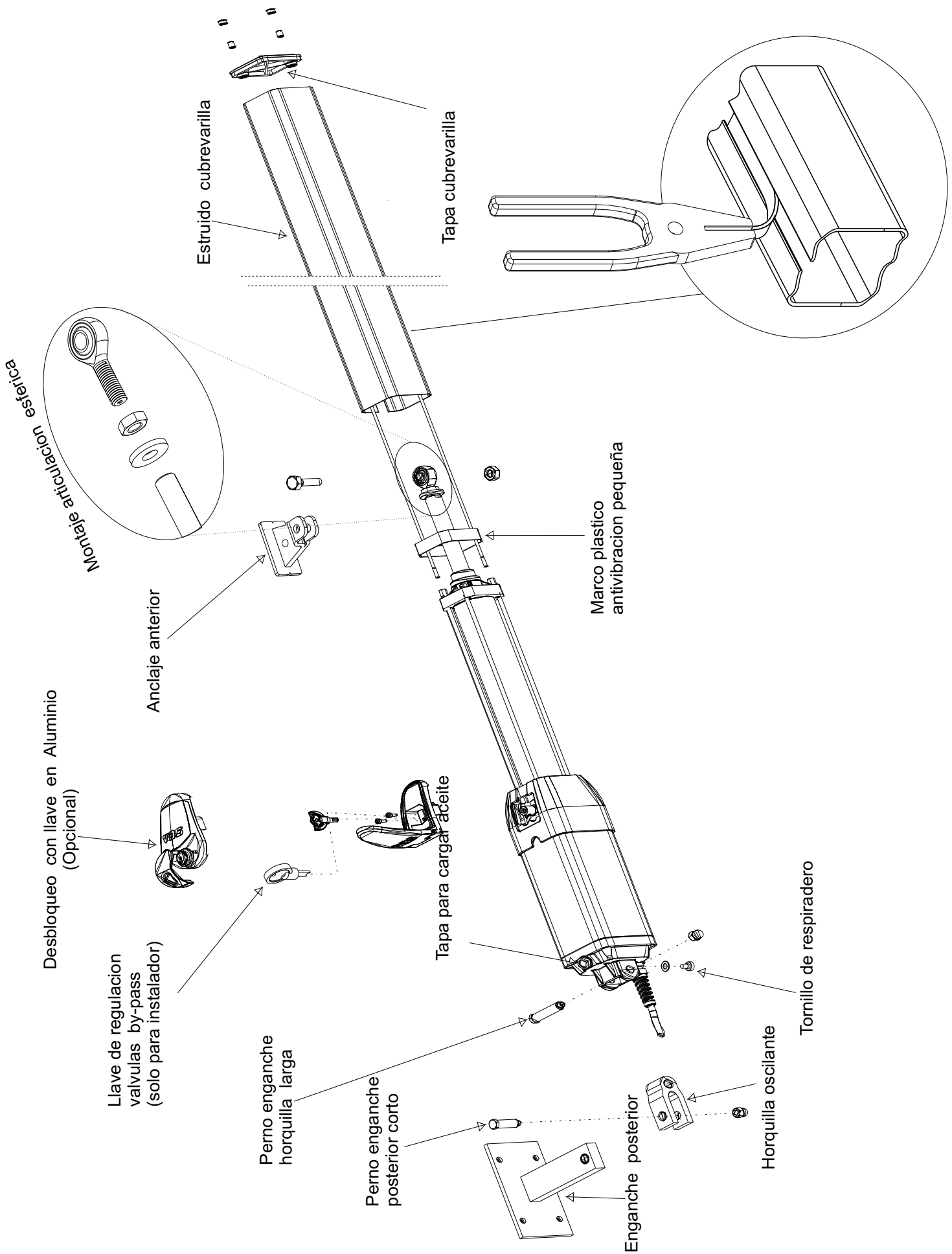
Fig. 1

Fig. 2

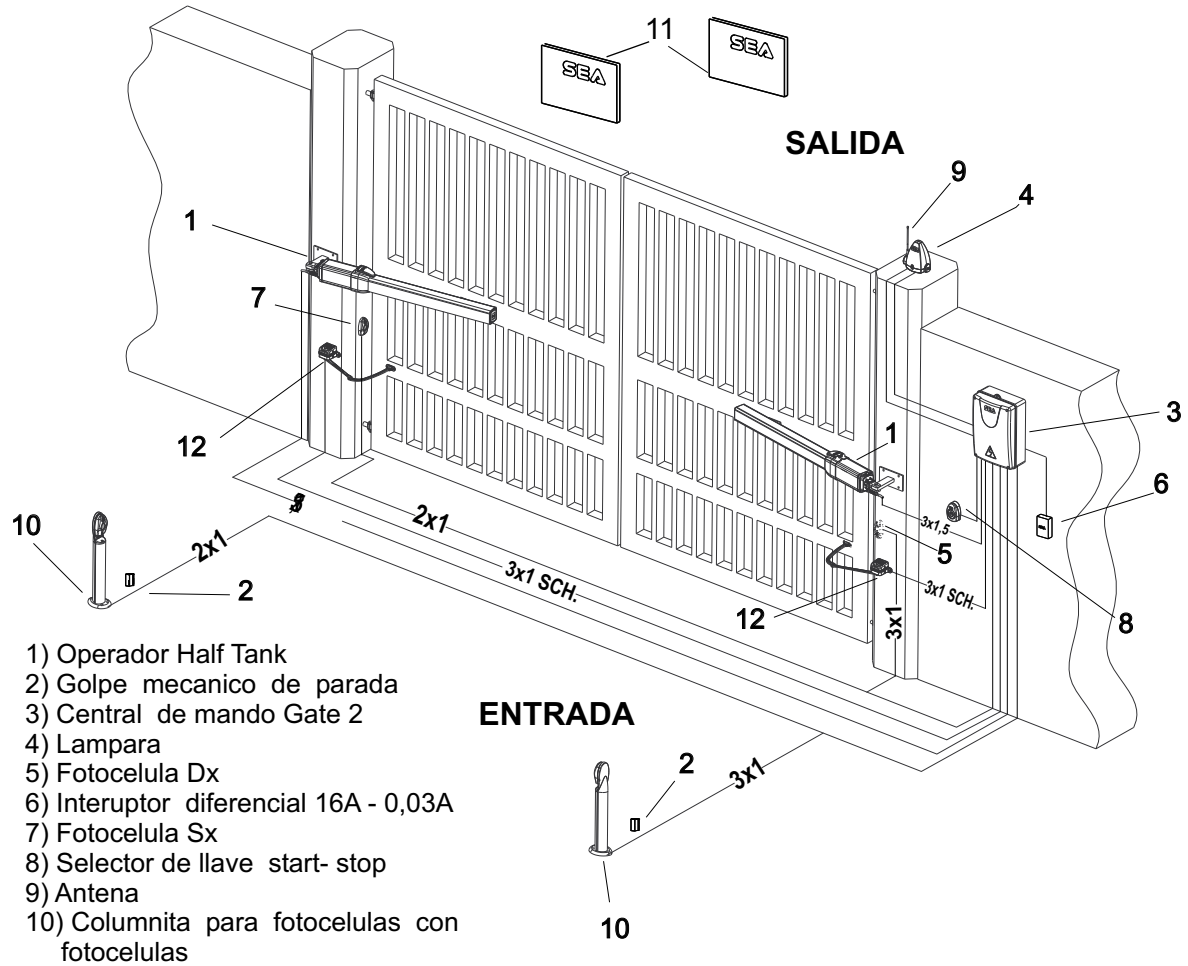


CARACTERISTICAS TECNICAS	*HALF TANK 100*	*HALF TANK 200*
Alimentacion	230 V (±5%) 50/60 Hz	
Potencia	220 W	
Corriente absorvida	1 A	
Carrera de la varilla	270 mm	390 mm
Ciclos/hora (temp. de 20°C)	55	
Max presion de trabajo	40 bar	30 bar
Temperatura de trabajo	-40°C +60°C	
Termo-proteccion motor	130°C	
Max empuje	640 daN	470 da N
Condensador	12,5uF	
Peso	11,4 Kg	13,6 Kg
Grado de proteccion	Ip55	
Longitud max. Del anta	6 mt	7 mt
Grados de apertura del anta	90° - 125°	




Estruido cubrevarilla
Tapa cubrevarilla
Montaje articulacion esferica
Anclaje anterior
Marco plastico
antivibracion pequeña
Desbloqueo con llave en Aluminio
(Opcional)
Tapa para carga aceite
Llave de regulacion
valvulas by-pass
(solo para instalador)
Perno enganche
horquilla larga
Perno enganche
posterior corto
Enganche posterior
Horquilla oscilante
Tornillo de respiradero

INSTALACION TIPICA



1) Operador Half Tank
2) Golpe mecanico de parada
3) Central de mando Gate 2
4) Lampara
5) Fotocelula Dx
6) Interuptor diferencial 16A - 0,03A
7) Fotocelula Sx
8) Selector de llave start- stop
9) Antena
10) Columnita para fotocelulas con fotocelulas
11) Cartel de aviso
12) Safety Gate

TIPO DE INSTALACION

Es posible instalar el Half Tank con la apertura hacia el interno (Fig. 14) o hacia el externo (Fig. 15).

Instalacion interna

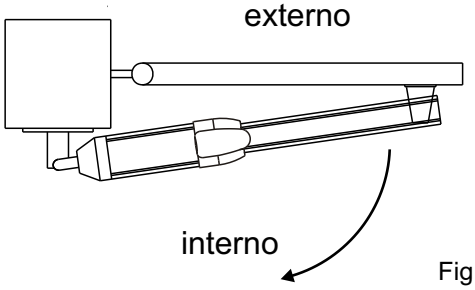


Fig. 4

Instalacion externa

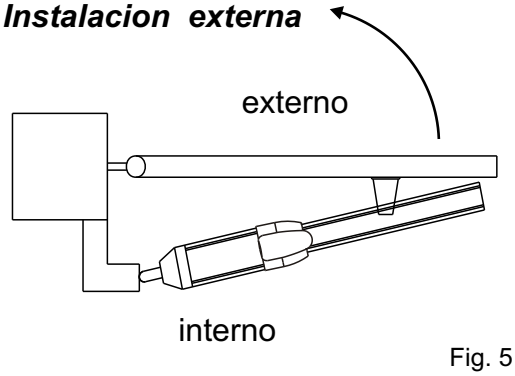


Fig. 5

Instalar el operador siempre al interno de la propiedad

INSTALACION INTERNA

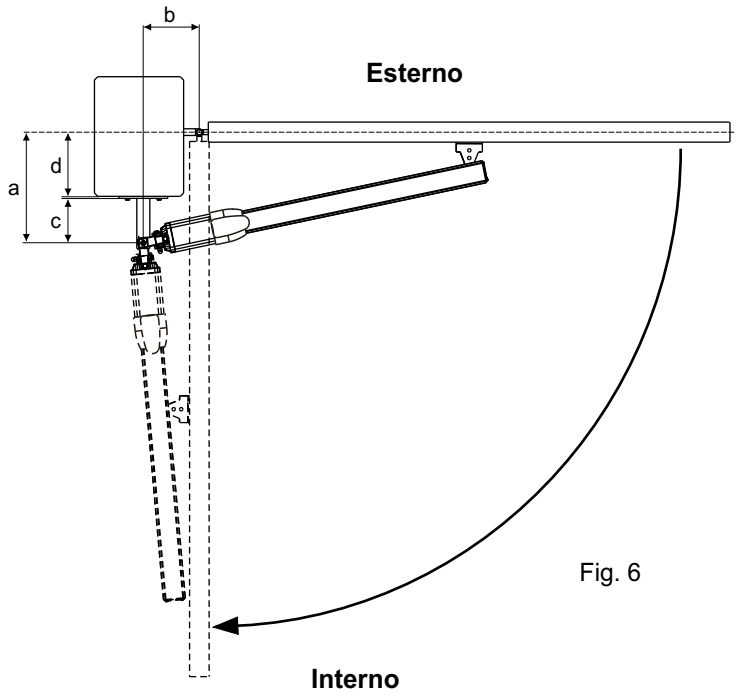


Fig. 6

Carrera total 270 mm - carrera max sugerida 250 mm

a (mm)	b (mm)	d max (mm)	Maximo Angulo de apertura	Carrera varrilla max **(mm)**	Carrera de la varilla para 90°**(mm)**
100	115	50	**110°**	**250**	**215**
100	150	50	**90°**	**250**	
105	110	55	**110°**	**245**	**215**
105	145	55	**90°**	**250**	
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°**	**250**	
145	95	95	**100°**	**255**	**242**
145	105	95	**90°**	**250**	
150	100	100	**90°**	**250**	
155	85	105	**96°**	**250**	**242**
160	90	110	**90°**	**253**	
170	75	120	**92°**	**250**	
180	65	130	**92°**	**250**	

Para obtener 110° con d > 55 mm se necesita hacer un nencaje en la cancela.

INSTALACION INTERNA

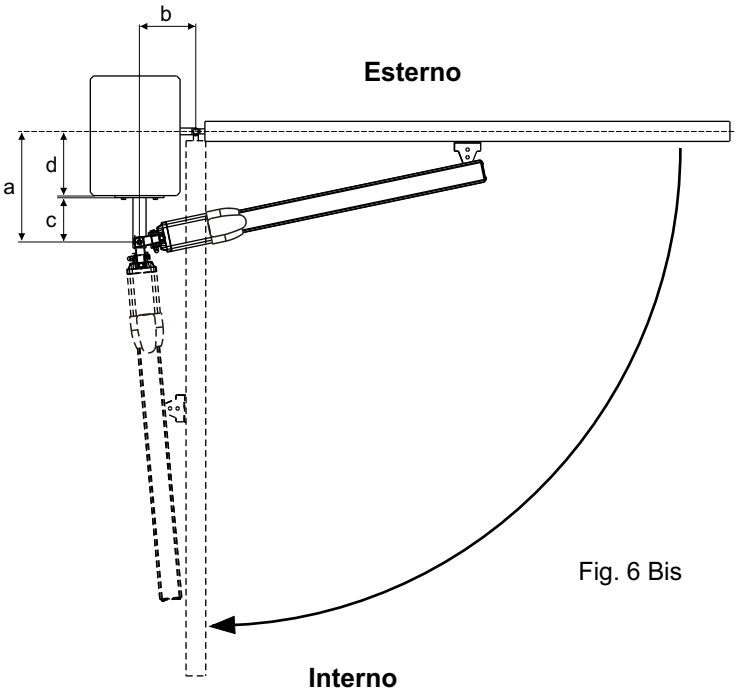


Fig. 6 Bis

Carrera tota 390 mm - carrera max sugerida 370 mm

a (mm)	b (mm)	d max (mm)	Maxiimo Angulo de apertura	Carrera de la varilla max **(mm)**	Carrera de la varilla para 90°**(mm)**
125	170	75	**125°**	**368**	**295**
130	170	80	**125°**	**372**	**300**
140	235	90	**90°**	**370**	
145	165	95	**120°**	**372**	**310**
145	230	95	**90°**	**370**	
160	210	110	**90°**	**370**	
175	195	120	**90°**	**370**	
185	145	130	**110°**	**370**	**330**
185	190	130	**90°**	**370**	
195	140	140	**110°**	**371**	**355**
195	175	140	**90°**	**370**	
240	110	185	**100°**	**370**	**355**
240	125	185	**90°**	**370**	
250	105	195	**95°**	**370**	**360**
250	115	195	**90°**	**370**	
260	95	205	**95°**	**369**	**365**
260	100	205	**90°**	**370**	
270	90	215	**90°**	**370**	
280	80	230	**90°**	**370**	
295	65	245	**90°**	**369**	

Para obtener 125° con d > 55 mm hace falta hacer un encaje en la cancela

INSTALACION EXTERNA

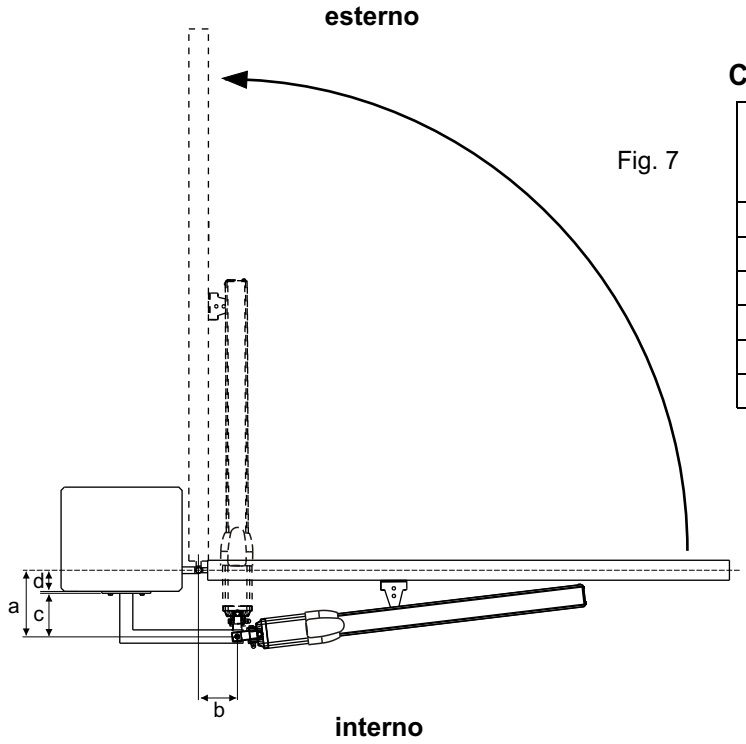


Fig. 7

Carrera total 270 mm - carrera max sugerida 250 mm

a (mm)	b (mm)	Maximo Angulo de apertura	Carrera varilla max **(mm)**	Carrera varilla para 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**	

INSTALACION EXTERNA

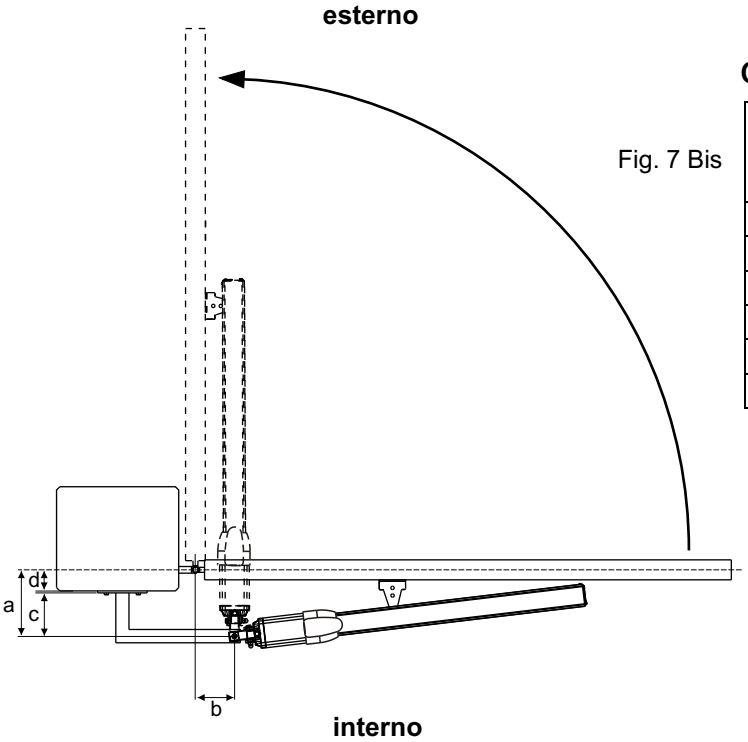


Fig. 7 Bis

Carrera total 390 mm - carrera max sugerida 370 mm

a (mm)	b (mm)	Maximo Angulo de apertura	Carrera varilla max **(mm)**	Carrera varilla para 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**	

INSTALACION HORQUILLA OSCILANTE

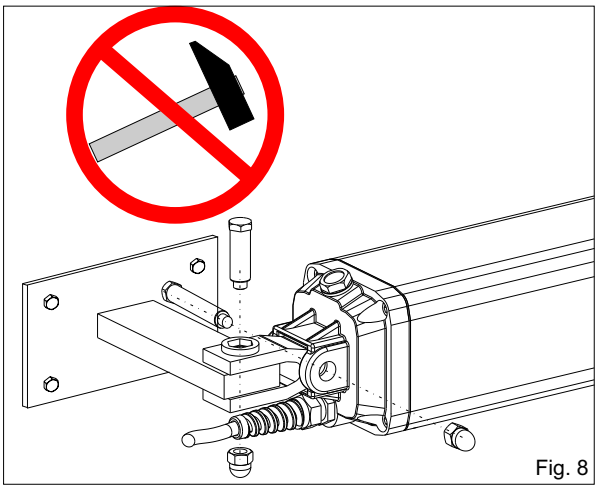


Fig. 8

PRELIMINARES
-Abrir con cuidado el embalaje , haciendo atencion a no perder los componentes que estan aparcen en fig.3
-Fijar la horquilla oscilante como en fig.9

Atencion: **no utilizar el martillo** para insertar el perno de laton corto; el inserimento del perno en la horquilla y enganche de llevarse a cabo con la simple presion de las manos.

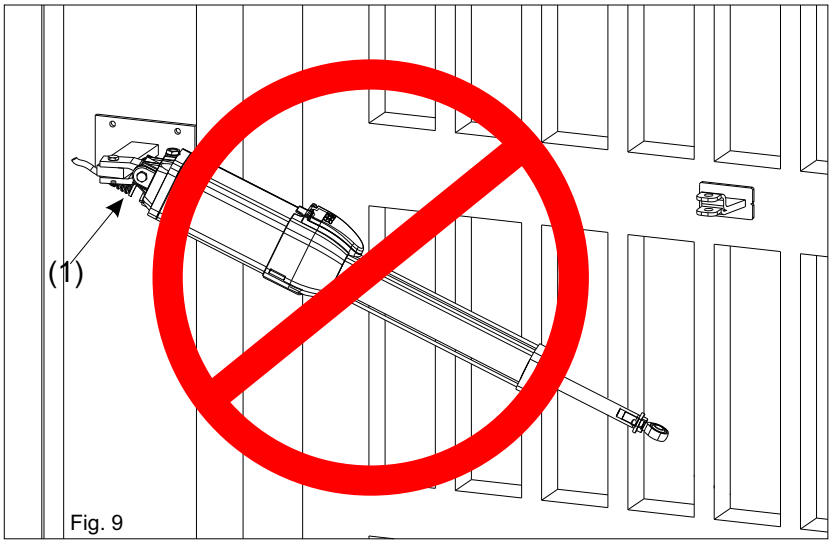


Fig. 9

Atencion:
No inclinar el operador oleodinamico mas alla de la angulacion permitida de la horquilla oscilante (1), pudiera darse la posible ruptura de la misma.

INSTALACION ENGANCHE ANTERIOR
en base a la seleccion del tipo de apertura (interna o externa) y en base a la seleccion de la rotacion maxima del anta (ver pag. 5), el enganche debe ser primeramente cortado respetando la quota “a” de pag.5 y despues soldada como en fig.10.

El soporte debe ser posicionado en modo que el operador resulte perfectamente horizontal (Fig. 10 ,Fig.12).

Enganche posterior regulable
(con toenillos) (Accessorios bajo pedido)

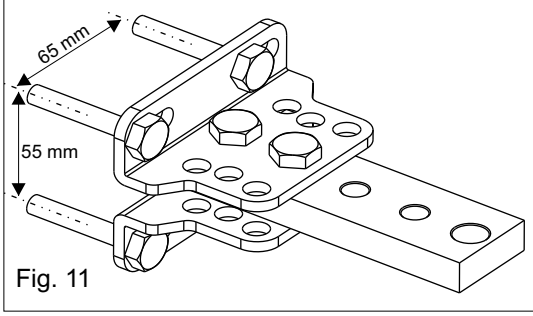


Fig. 11

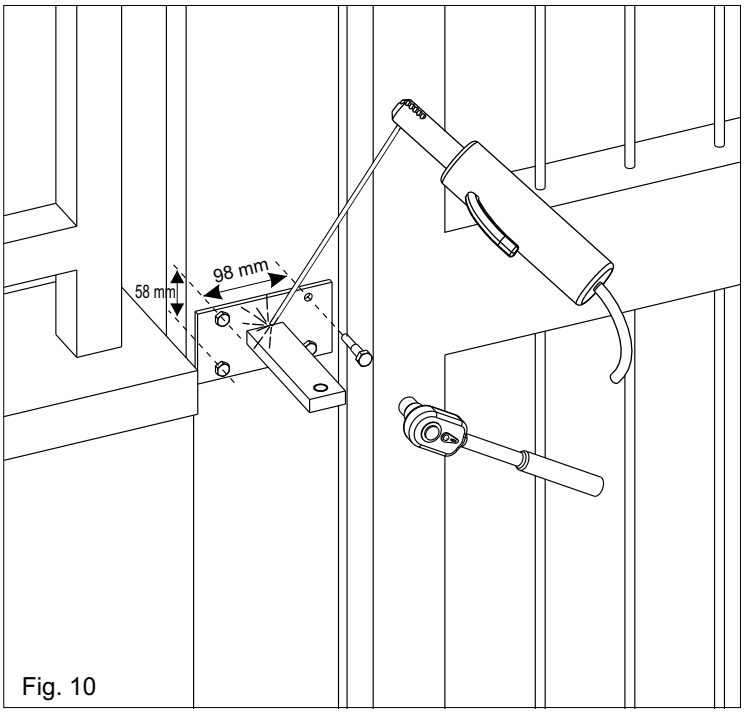


Fig. 10

POSICIONAMIENTO DEL ENGANCHE ANTERIOR

Una vez fijado el operador en el enganche posterior llevar el anta de la cancela en posicion de cierre y efectuar las siguientes operaciones:

1) Desbloquear el operador (como en Fig. 23 de pag. 11)
2) Jalar hacia fuera completamente la varilla cromada,de minimo **1 cm**
3) Fijar la varilla en el enganche anterior (Fig. 13)
4) Posicionar el operador en modo que resulte prefectamnete horizontal y por tanto señalar la posiciondel enganche anterior (Fig. 12)

Atencion : evitar de soldar el enganche anterior con la varilla del operador oleodinamico ya fijado; los residuos (salpicaduras) de soldadura podria comprometer la cromadura de la carrera.

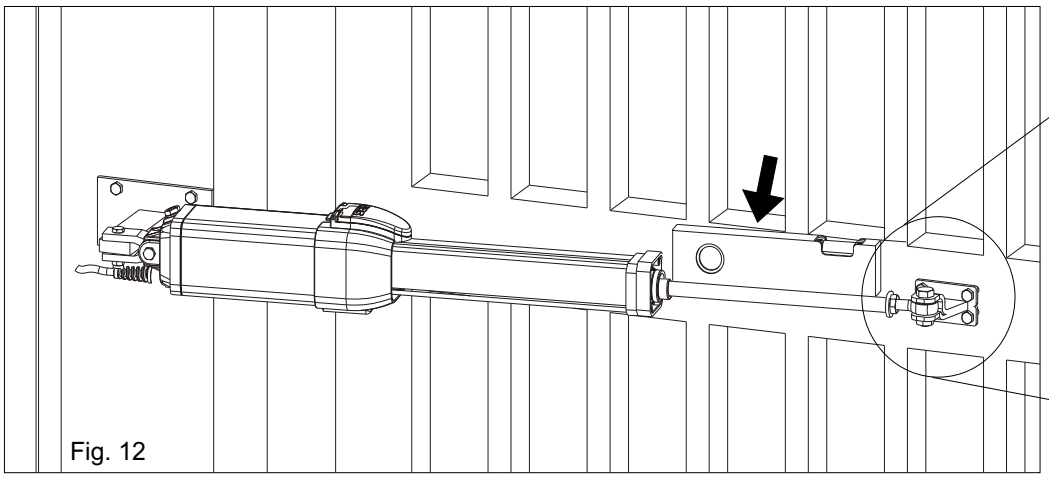


Fig. 12

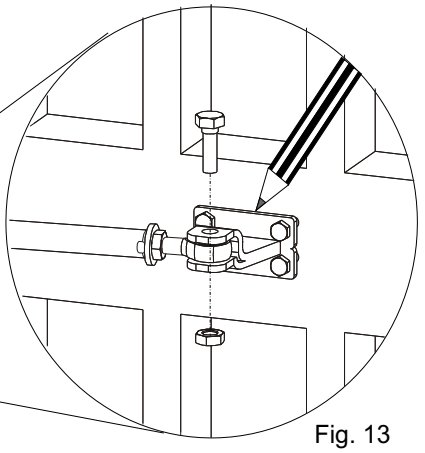


Fig. 13

SOLDADURA DEL ENGANCHE ANTERIOR DE LA CANCELA

El enganche anterior *debe ser posicionado de manera talque el operador resulte perfectamente horizontal.*

El enganche anterior en base a la naturaleza de la cancela (madera , hierro, aluminio) puede ser sol.dado que atornillado.

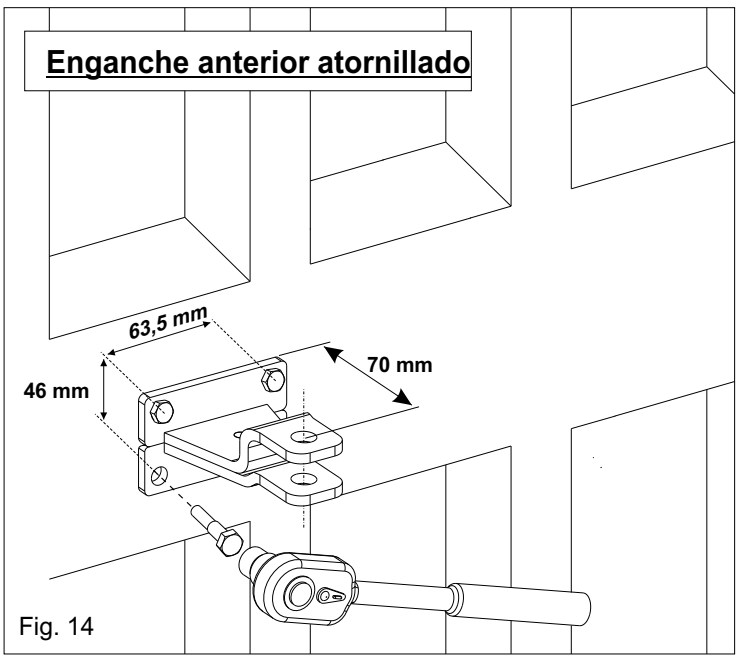


Fig. 14

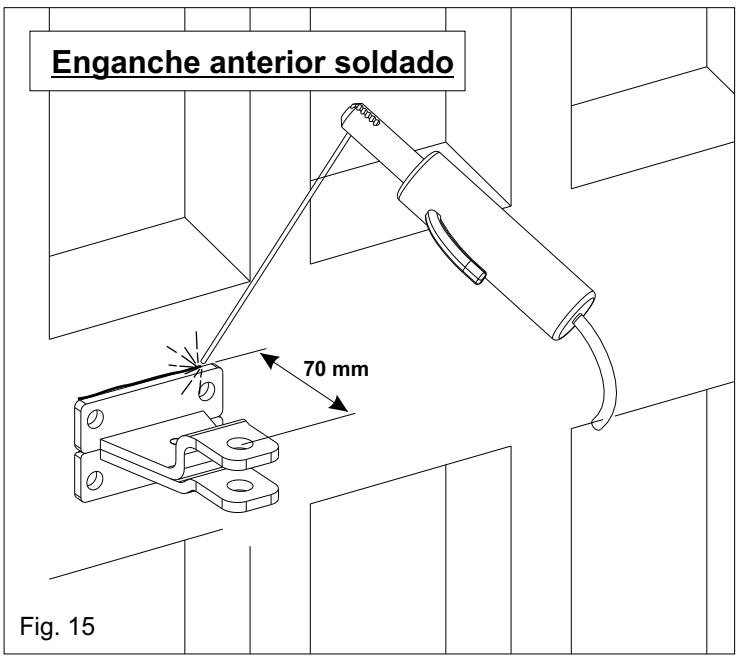


Fig. 15

INSTALACION DEL GOLPE FINAL DE CARRERA (Accessorio bajo pedido)

-Desbloquear la unidad (como en Fig. 23 de pagina 10)
- Hacer salir la carrera de 3/4 de su carrera.
-Colocar el golpe de final de carrera sobre la platina anterior de la unidad con los dos tirantes (de los tres en total presentes en el golpe)que estan en paralelo a la cancela(Fig. 16)
- Fijar los golpes con los tornillos incluidos en la confeccion.
- a este punto enganchar la carrera a el enganche anterior.
-Para regular el golpe en apertura accionar sobre el disco 1, y en cierre sobre el disco 2.

Atencion : el montaje del golpe mecanico no comporta una disminucion de la carrera de la varilla.

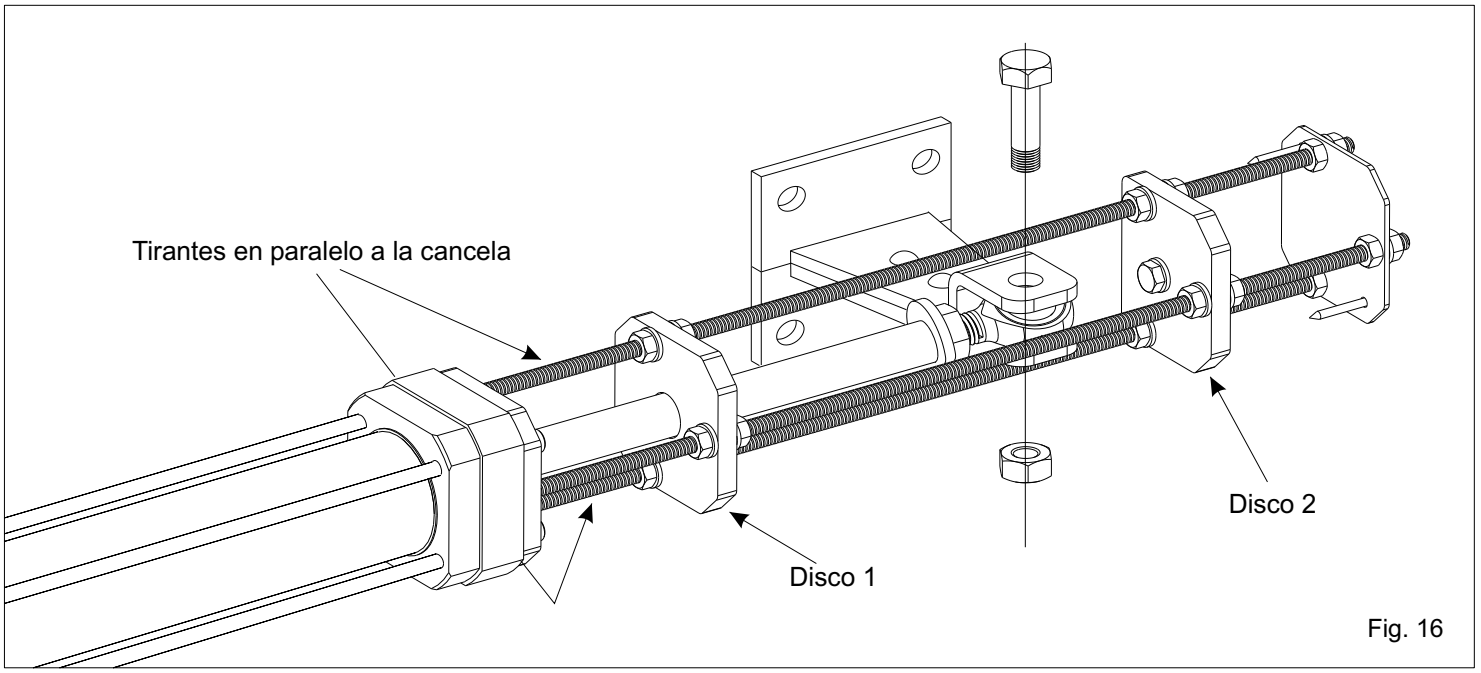


Fig. 16

TORNILLO DE RESPIRADERO

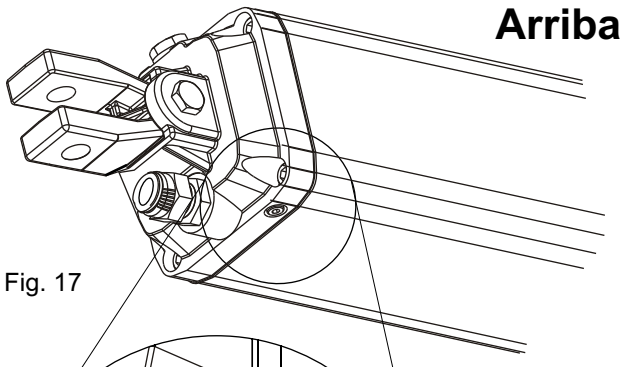


Fig. 17

ATENCION
Es obligatorio quitar el tornillo a instalacion terminada.

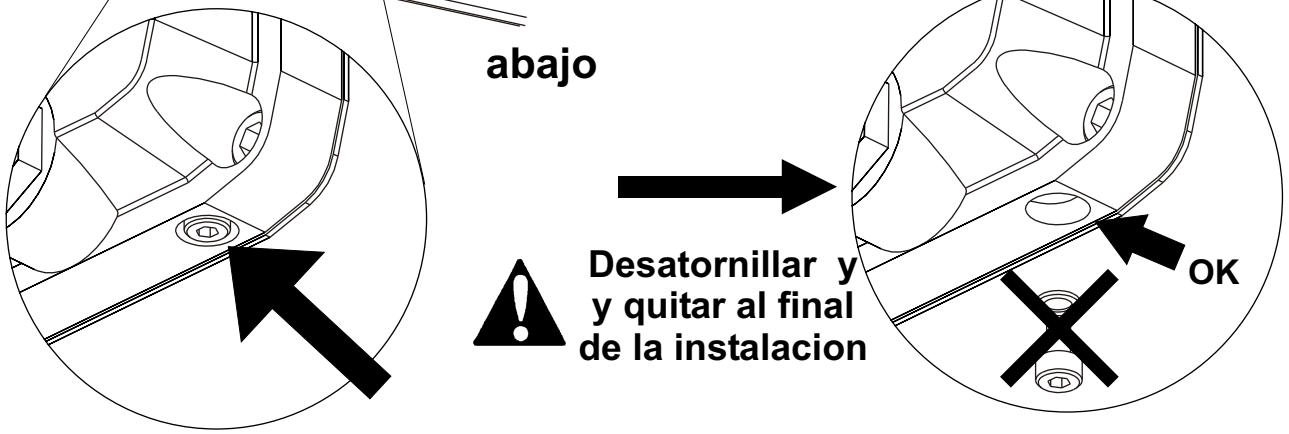


Fig. 18

Instalacion de la proteccion de la varilla cromada

Verificar de haber insertado el marco en plastica antivibracion (**A**) antes de insertar el estruso cubrevarilla (Fig. 19)

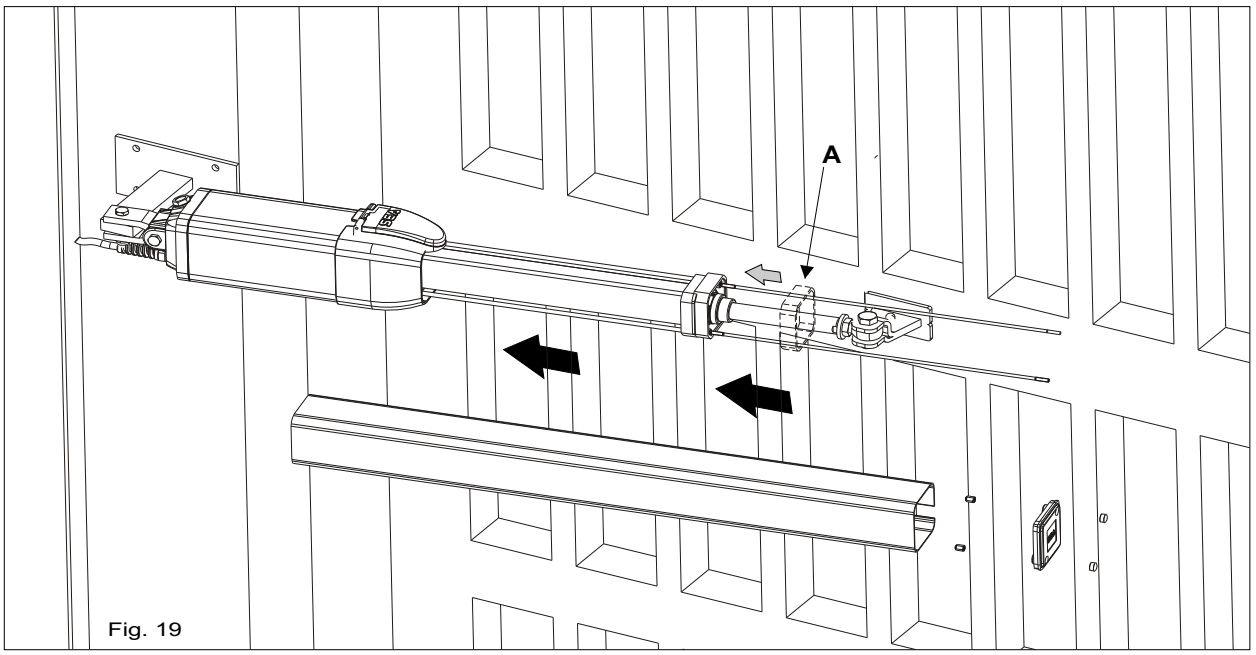


Fig. 19

REGULACION DE LA CUPLA (By-Pass Valvole)

En caso de primera instalacion la tapa del desbloqueo no debe todavia ser insertado asi come el cubre by-pass. Ineste caso hacer referencia a la fig. 20 y fig.22

En caso de regulacion de valvole by-pass, efectuada en un secondo momento, a causa, por ejemplo de mantenimiento periodico u otra quitar el tornillo que bloquea el cubre by-pass (fig. 21), quitar el cubre by-pass y regular por tanto la presion de las valvulas by-pass con la apropiada llave que se da en dotacion solo al instalador (Fig. 22).

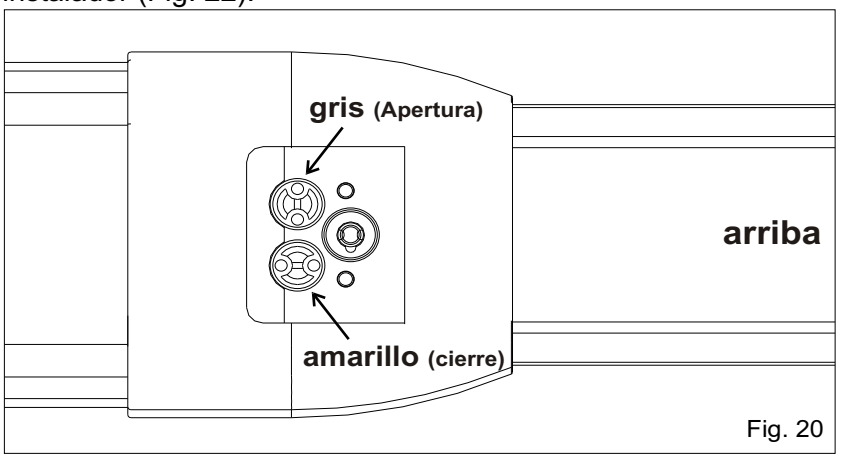


Fig. 20

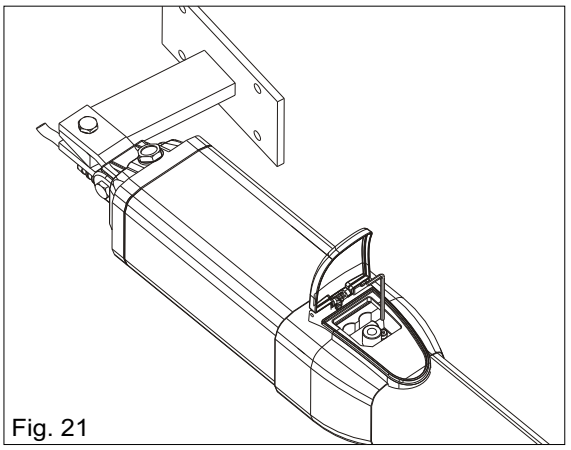
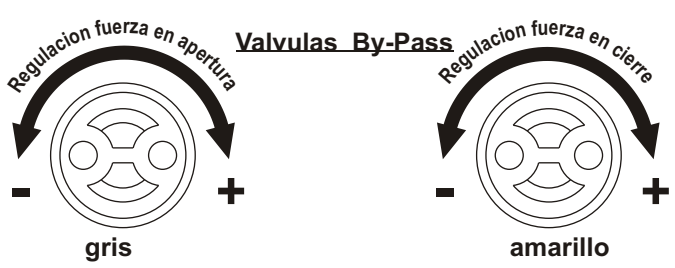


Fig. 21



Regular la fuerza de la cancela en apertura y en cierre in modo de respetar el diagrama de las fuerzas (presente en la norma En12453); la fuerza de empuje de cualquier modo no debe ser jamas superior a los 15KgF.

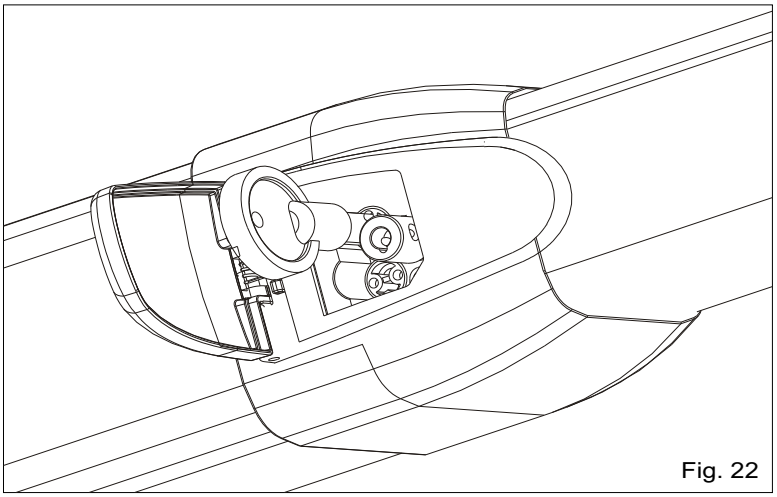


Fig. 22

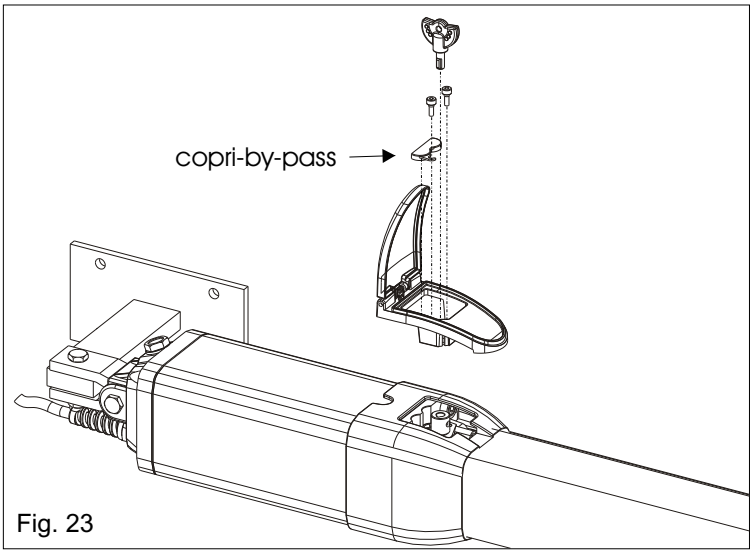


Fig. 23

MONTAJE DE DESBLOQUEO EN PLASTICA
ATENCION :el montaje del desbloqueo en plastica debe ser efectuado en el modo indicado en la figura 23 **solo y solo si despeus de haber terminado todas las operaciones de instalacion montaje del cubre varilla y de regulacion de las valvulas by pass.**

MONTAJE DE DESBLOQUEO EN ALUMI NIO CON LLAVE (accessorio bajo pedido)
ATENCION : el montaje del debloqueo en aluminiodebe ser efectuado en el emodo indicado en la figura 24 solamente despues de haber terminado todas las operaciones de instalacion de montaje del cubre varilla y de la regulacion de las valvulas by pass.
La llave de desbloqueo viene custodiada al interno de la tapa del desbloqueo en aluminio (vedi fig. 25)

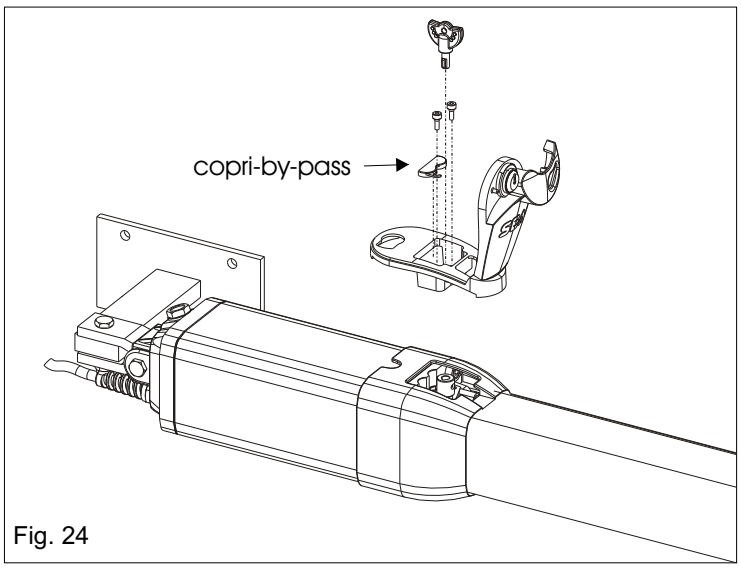


Fig. 24

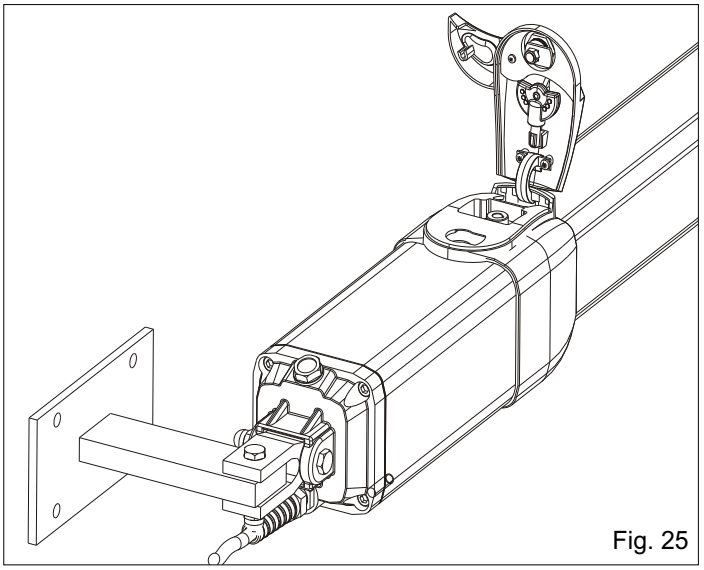


Fig. 25

MONTAJE DE DESBLOQUEO EXTERNO (accessorio bajo pedido)

ATENCION: el monyaje de desbloqueo externo debe ser efectuado en el modo indicado en la figura 26 y 27.para mayores detalles hacer referencia a las instrucciones de montaje presentes en el Kit de montaje desbloqueo externo para Half Tank.

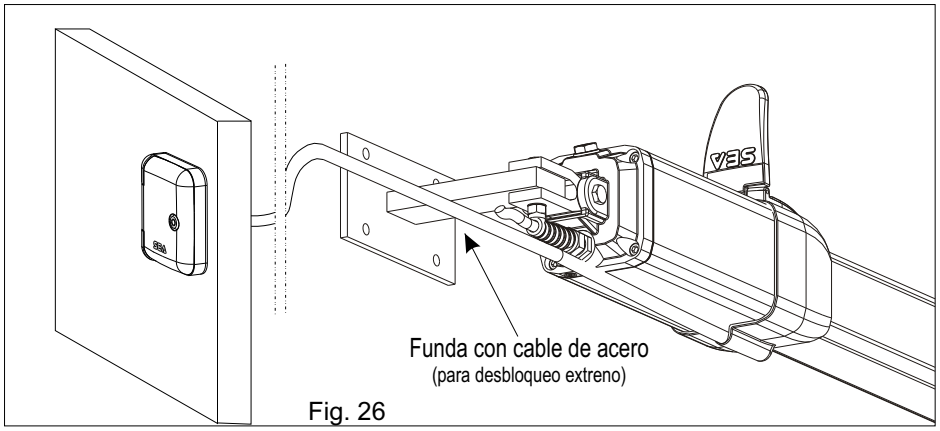


Fig. 26

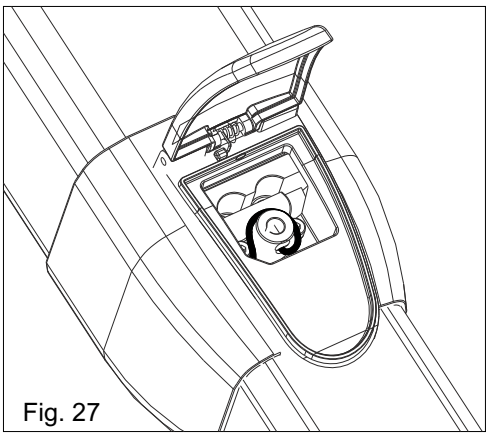


Fig. 27

SISTEMA DE DESBLOQUEO

Para desbloquear operar como sigue:
-Insertar la llave y rotarla en sentido antihorario de 180 grados (Fig.28).

Para desbloquear nuevamente el actuador operar como sigue:
-Insertar la llave y rotarla en sentido horario hasta el cierre (Fig.28).

Atencion : efectuar el desbloqueo siempre en ausencia de alimentacion

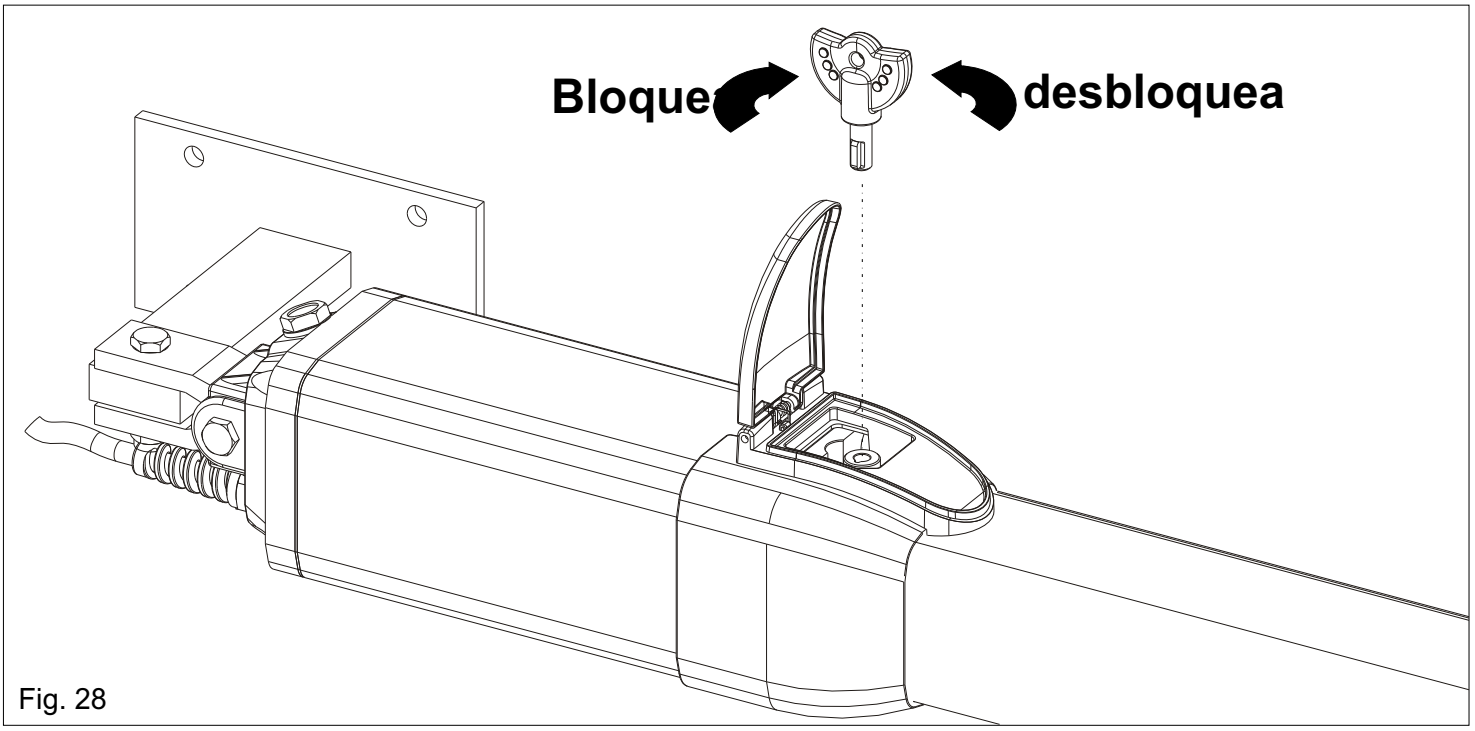


Fig. 28

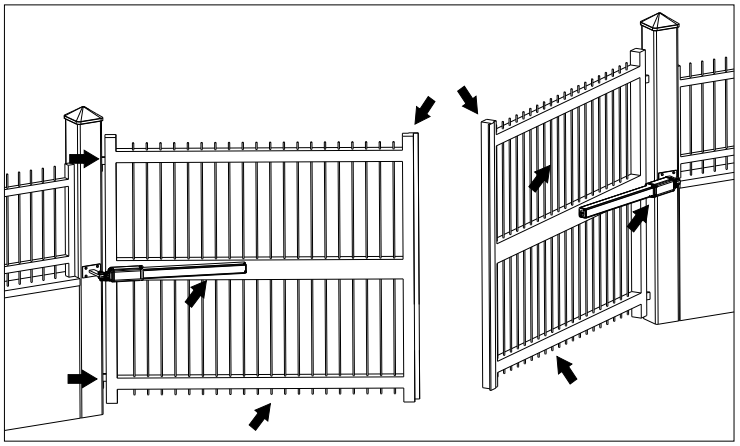
MANTENIMIENTO PERIODICO

1) Controlar la robustez y estabilidad ela cancela , in particolar modo i punti di appoggio e/o rotazione del cancello (cardini).	Anual
2) Controlar el nivel de aceite en los operadores oleodinamicos/ en baño de aceite (Tapa posicionada sobre la cubierta posterior del Half Tank)	Anual
3) Sustituir el aceite hidraulico con el aceite recomendado por la casa madre	4 Años
4) Controlar la funcionalidad del desbloqueo	Anual
5) Controlar la funcionalidad de las valvulas by-pass	Anual
6) Controlar y engrasar los pernos de fijacion	Anual
7) Controlar la integridad de los cables de conexion	Anual
8) Controlar la funcionalidad y las condiciones de los golpesde final de carrera en apertura y cierre (donde este presente el accesorio de golpe mecanico)	Anual
9) Controlar el buen estado de todos los aparatos sujetos a esfuerzo (enganche posterior, horquilla oscillante y enganche anterior.)	Anual
10) Controlar la operatividad de todos los accesorios , en particular modo la funcionalidad de todos los dispositivos de seguridad y del Safety Gate.	Anual
11) **Despues de haber efectuado las operaciones de Mantenimiento Periodico es necesario repetir la prueba y puesta en servicio del automatismo**	Anual

Todas las operaciones de aqui arriba deben ser efectuadas exclusivamente por un instalador autorizado.

EXAMENES DE RIESGO

Los puntos indicados con las flechas en fig. 38 son potencialmente peligrosos. El instalador debe efectuar un examen profundo de los riesgos para prevenir :aplastamientos, arrastramientos, cortes, enganches , atrapamientos y garantizar una instalacion segura a hombres, animales o cosas.



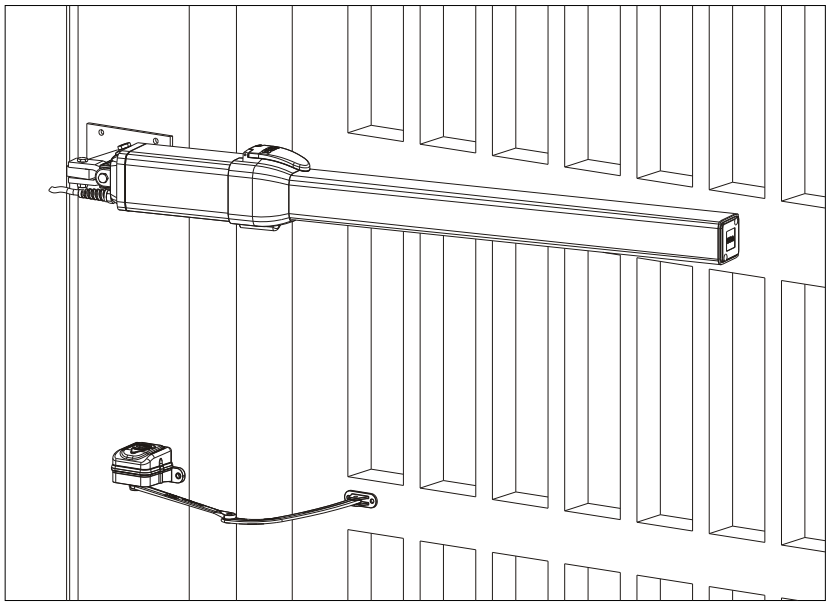
En caso de malentendidos que pudiesen surgir , seaconseja de consultar el distribuidor de zona o tambien de llamarnos . Estas instrucciones son parte integral del dispositivo y deben ser conservadas en un lugar bien conocido. El instalador debe atenerse rigurosamente a las instrucciones . Los productos de la SEA s.r.l. deben ser usados exclusivamente para el automatismo de puertas ,cancelas y antas. Cualquier iniciativa tomada sin explicita autorizacion de la SEA s.r.l. disuade a esta ultima de cualquier responsabilidad . El instalador debe proveer notas de advertimientos para ulteriores riesgos non evaluables . La SEA s.r.l. En su continua finalidad de mejorar los productos, tiene derecho de efectuar cualquier modificacion sin obligo de avisar a los propios clientes .Esto no obliga a la Sea s.r.l de mejorar la produccion pasada. La SEA srl no puede ser retenida responsable por cualquier daño o incidente causado de productos rotos ,si se trata de daños o incidentes debido a la no observancia de cuanto reportado en las siguientes instrucciones . La garantia no es valida y la responsabilidad del productor sianula si han sido utilizados piezas de recambio no originales de la SEA srl. La instalacion electrica debe ser efectuada por un tecnico profesional que dejara la relativa documentacion, como solicitado por la ley en vigor. Tener lejos del alcance de los niños de empaques como bolsas plasticas, anime, clavos etc., Siendo potenciales fuentes de peligro..

PRUEBA INICIAL Y PUESTA EN SERVICIO

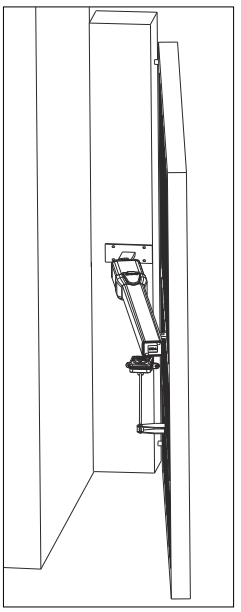
Despues de haber completado las operaciones necesarias, para una correcta instalacion del producto HALFTANK, descritas en el presente manual y haber evaluado todos lo riesgos residuos que puedan surgir en cualquier instalacion , **es necesario probar el automatismo para garantizar la maxima seguridad** y en particular garantizar el respeto por cuanto previsto en las leyes y d e las normas del sector. En particular la prueba debe ser efectuada siguiendo la **norma EN12445** que establece los metodos de prueba para la verificacion de los automatismos para cancelas en el respeto de los limites impuestos por la **norma EN 12453**.

SAFETY GATE

Para una correcta y segura instalalacion es aconsejado la instalacion del Safety Gate, **que permite satisfacer satisfacer el diagrama de las fuerzas presentes en la norma EN 12453** y por tanto de la prueba y puesta en servicio de toda la instalacion .



NOTA: en caso de instalacion como en la figura a la derecha es posible utilizar el Safety Gate con astica erguida (resolviendo asi el problema del engombro del brazito (grafico de izquierda))



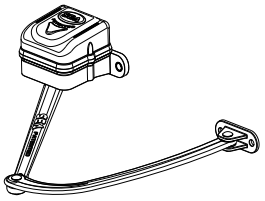
ACCESSORIOS PARA HALF TANK

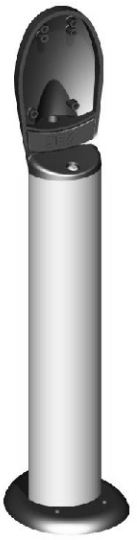

SELECTOR DE LLAVE

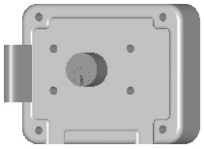

FOTOCELULAS


RECEPTOR DE RADIO

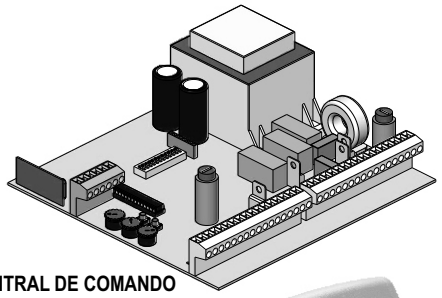

MANDO A DISTANCIA


SAFETY GATE

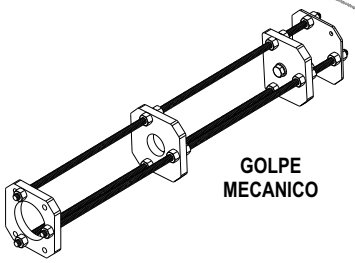

COLUMNA
PARA FOTOCELULA


ELECTROCERRADURA


LECTOR
DE ESPIRA
MAGNETICA
EXTERNO


CENTRAL DE COMANDO
GATE 2


LAMPARA


GOLPE
MECANICO


KIT DESBLOQUEO EXTERNO

DECLARACION DE CONFORMIDAD

La SEA declara bajo la propia responsabilidad que el producto

Half Tank en todas las versiones
Responde a los requisitos esenciales previstos porlas siguientes dierctivas europeas y sucesivas modificaciones (donde son aplicables):
98/37/CE (Directiva maquinas)
89/336/CEE (Directiva compatibilidad electromagnetica)
73/23/CEE (Directiva Baja Tension)
ADVERTENCIA :
La instalacion electrica y seleccion de las logica de funcionamento deben ser deacuerdo con las normativas vigentes . Preveer en cada caso un interruptor diferencial de 16A y umbral 0,030A. Tener separados los cables de potencia (motor, alimentacion) de aquello de comando (pulsantes, fotocelulas, radio etc.). Para evitar interferencias es preferible preveer y utilizar dos fundas separadas
DESTINACION DE USO:
El producto Half Tank en todas sus versiones ha sido proyectado para ser utilizado unicamente para el automatismo de puertas batientes.
REPUESTOS:
Las solicitudes de partes de recambio de la SEA deben ser efectuadas a:
SEA s.r.l. - Zona Ind.le, 64020 S.ATTO - Teramo - Italia
SEGURIDAD Y COMPATIBILIDAD AMBIENTAL:
No desperdiciar en el ambiente los materiales de embalajedel producto y/ o circuitos.

La movimentacion del producto debe ser efectuada con medios idoneos.

GARANTIA
La garantia del producto HALF TANK es de 36 meses a partir de la fecha impresa sobre el producto. Este ultimo sera reconocido en garantia si no presenta daños debidoa un uso inpropio o cualquier modificacion o mal manejo.
PUESTA FUERA DE SERVICIO Y MANTENIMIENTO
La desinstalacion y /o puesta fuera de servicio y/o mantenimiento del producto Half Tank debe ser efectuada solo y exclusivamnete por personal autorizado y experto.

N.B. EL CONSTRUCTOR NO PUEDE CONSIDERARSE RESPONSABLE POR EVENTUALES DAñOS CAUSADOS POR USOS INPROPIOS, ERRONEOS E IRRACIONALES.

La SEA se reserva el derecho de aportar las modificaciones o variaciones que retengan oportunasa los porpios productos y/o al presente manual sin algun obligo de preaviso.

SEA®
Sistemi elettronici
di Aperture Porte e Cancelli

Deutsch

ÖLDRUCKANTRIEBE FÜR SCHWINGTORE

HALF TANK

INSTALLIERUNGSHANDBUCH
und Sicherheitsinformationen

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EIGENSCHAFTEN UND BESCHREIBUNG

HALF TANK 100 und **HALF TANK 200** sind hochqualitative Öldruckantriebe für Mehrfamilienhäuser, für Flügellängen bis zu respektiven 6 und 7 m mit Elektroschloss.
AC *(mit Blockierung in Öffnung und Schliessung)*
SC *(mit Blockierung nur in Schliessung)*
SA *(mit Blockierung nur in Öffnung)*
SB *(ohne Blockierung)*

Die Blockierung ist mit dem Half Tank 100 auf Flügellängen unter 1.80m und mit dem Half Tank 200 auf Flügellängen bis 2,20m gewährleistet. Auf allen Flügeln die länger als 1.80 und 2.20m sind, muss in allen Ausführungen, ein Elektroschloss montiert werden.
Die Produkte Half Tank 100 und 200 sind mit Bypass Schrauben für die Krafteinstellung, sowohl in Öffnung, wie in Schliessung ausgestattet. Die Verzögerung ist in Öffnung und in Schliessung elektronisch auf der GATE 2 Steuerung einstellbar. Aufgrund der in Europa geltenden Richtlinien und Normen wird es strengstens empfohlen ein Safety Gate zu benutzten (Vorrichtung zur Aufnahme der Torpostion), das für die Flügelreversierung bei Hindernis notwendig ist.

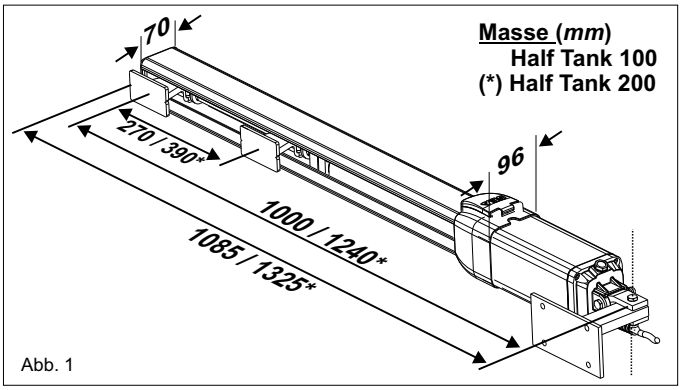
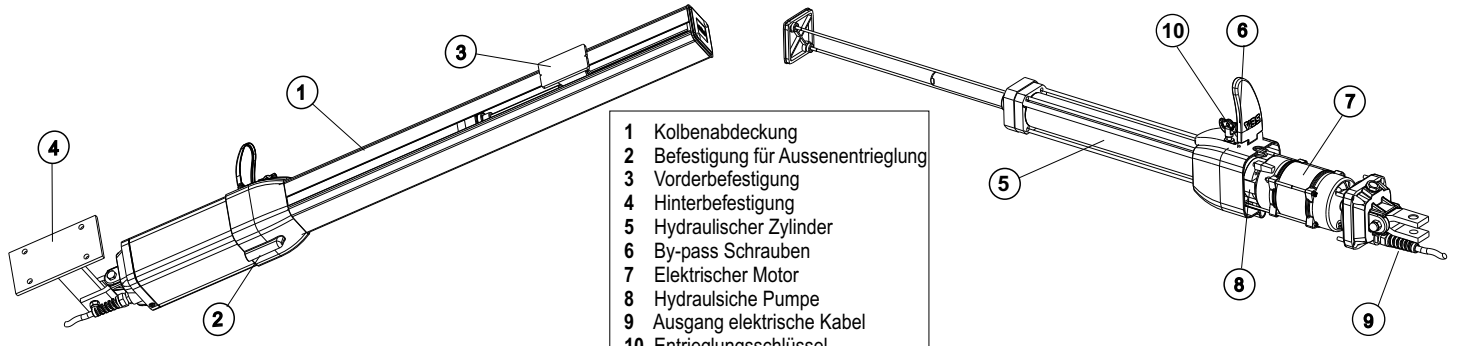
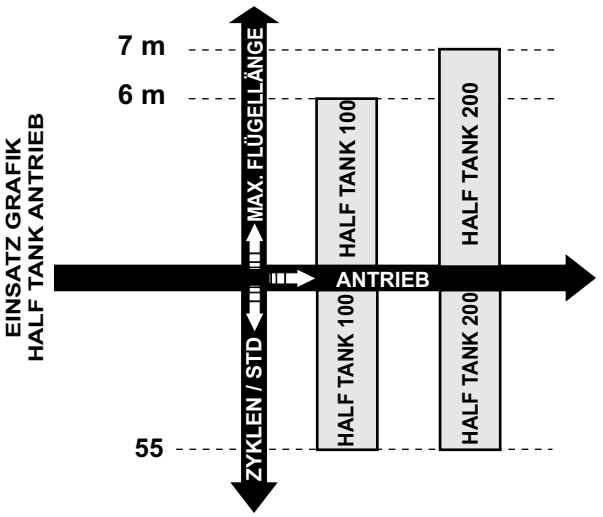


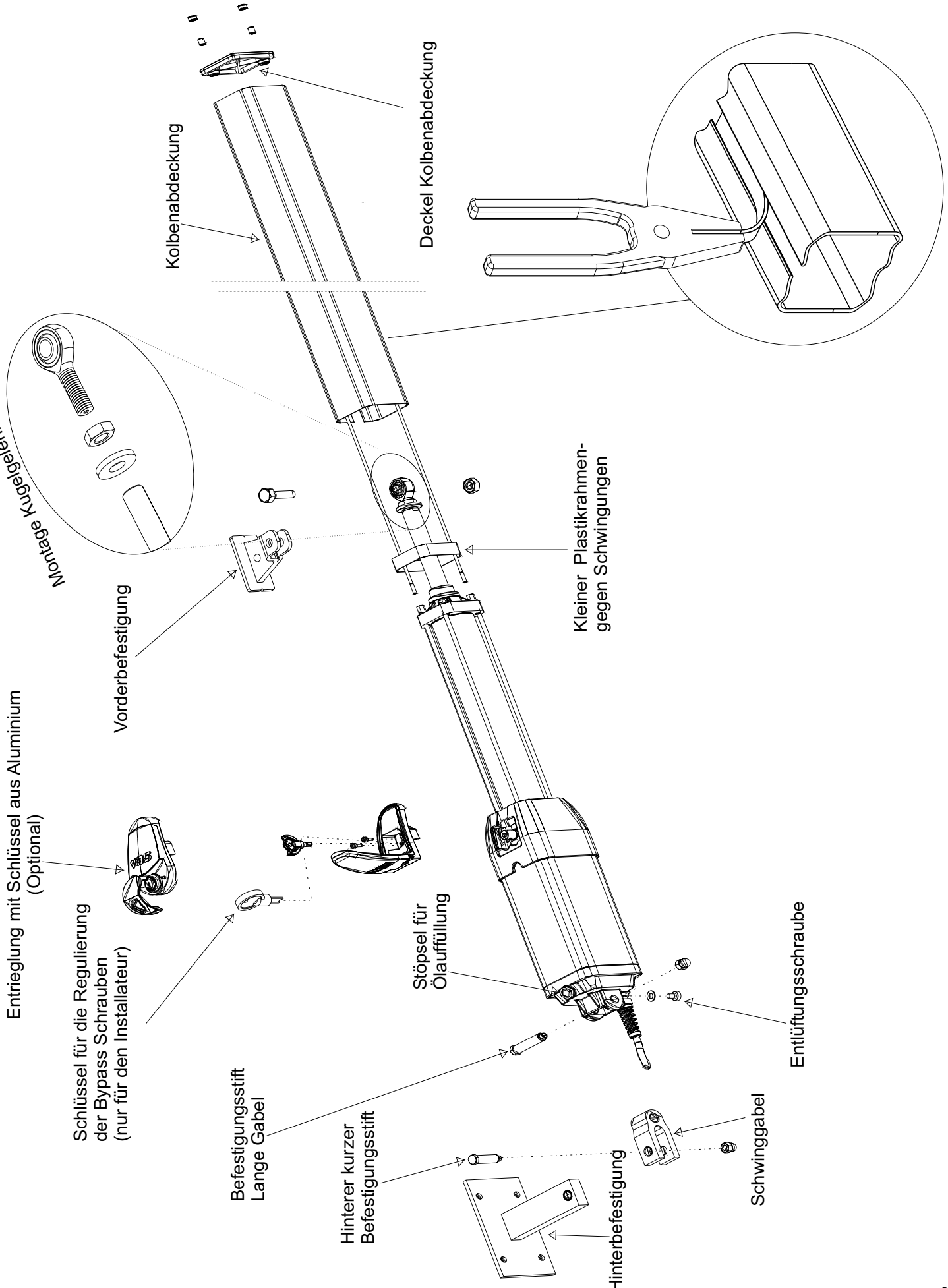
Abb. 1

Abb. 2

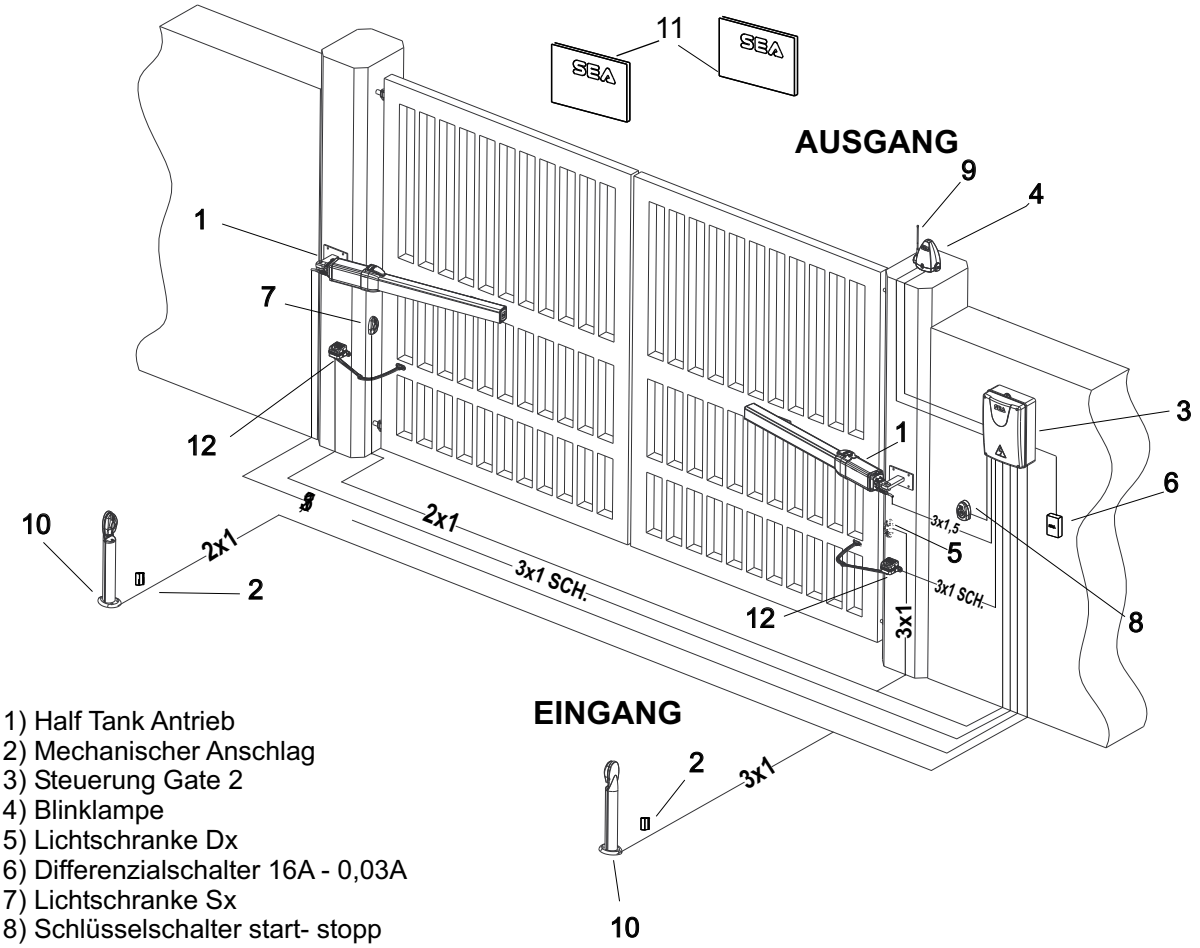


TECHNISCHE DATEN	*HALF TANK 100*	*HALF TANK 200*
Speisung	230 V (±5%) 50/60 Hz	
Kraft	220 W	
Stromverbrauch	1 A	
Kolbenlauf	270 mm	390 mm
Zyklen/Std (Temp.20°C)	55	
Max. Betriebsdruck	40 bar	30 bar
Betriebstemperatur	-40°C +60°C	
Motor Thermoschutz	130°C	
Max Schubkraft	640 daN	470 da N
Kondensator	12,5uF	
Gewicht	11,4 Kg	13,6 Kg
Schutzgrad	Ip55	
Max. Flügellänge	6 mt	7 mt
Öffnungsgrad Flügel	90° - 125°	




Kolbenabdeckung
Deckel Kolbenabdeckung
Montage Kugelgelenk
Vorderbefestigung
Kleiner Plastikrahmen-
gegen Schwingungen
Entrieglung mit Schlüssel aus Aluminium
(Optional)
Schlüssel für die Regulierung
der Bypass Schrauben
(nur für den Installateur)
Stöpsel für
Ölauffüllung
Entlüftungsschraube
Befestigungsstift
Lange Gabel
Hinterer kurzer
Befestigungsstift
Schwinggabel
Hinterbefestigung

TYPINSTALLIERUNG



1) Half Tank Antrieb
2) Mechanischer Anschlag
3) Steuerung Gate 2
4) Blinklampe
5) Lichtschranke Dx
6) Differenzialschalter 16A - 0,03A
7) Lichtschranke Sx
8) Schlüsselschalter start- stopp
9) Antenne
10) Säule für Lichtschranke mit Lichtschranke
11) Warnschilder
12) Safety Gate

INSTALLIERUNGSTYP

Es ist möglich den Half Tank Antrieb mit Öffnungsrichtung nach Innen (Abb. 14) oder nach Aussen zu installieren (Abb.15)

Installation Öffnung nach Innen

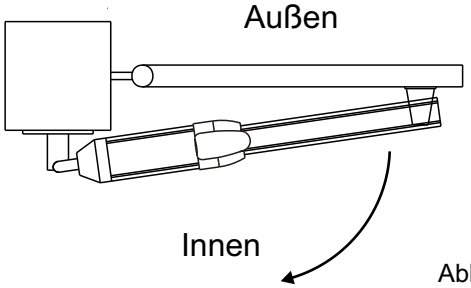


Abb. 4

Installation Öffnung nach Außen

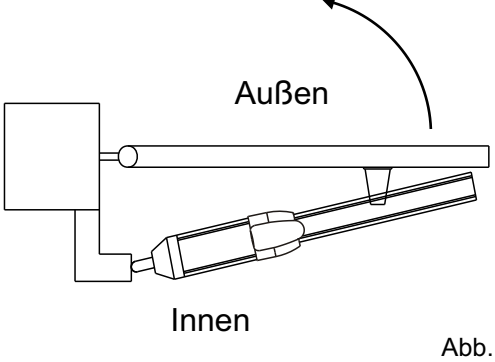


Abb. 5

Den Antrieb immer auf der Torinnenseite installieren (Grundstückseite)

INSTALLIERUNG ÖFFNUNG NACH INNEN

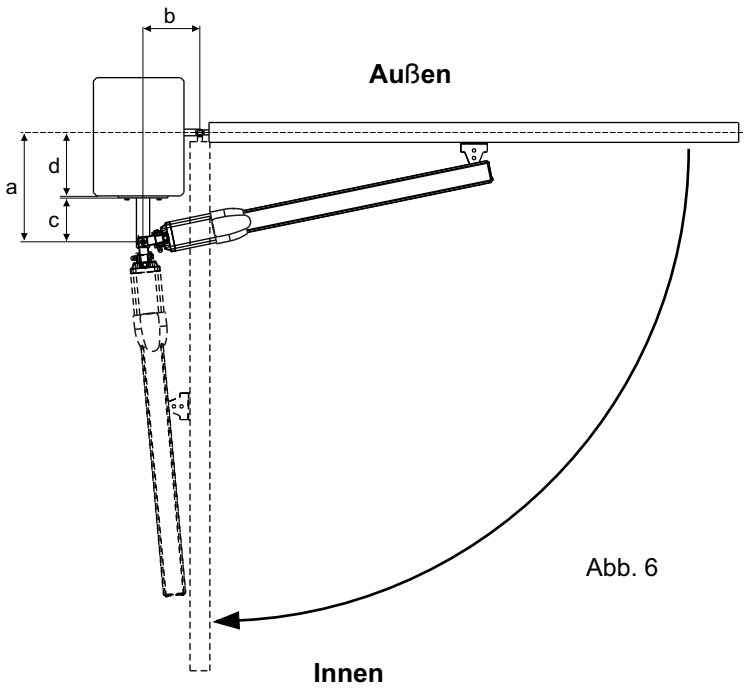


Abb. 6

Totale Laufl. 270 mm- Max. empfohlene Laufl. 250 mm

a (mm)	b (mm)	d max (mm)	Max. Öffnungs-Winkel	Max.Kolben-lauf **(mm)**	Kolbenlauf für 90°**(mm)**
100	115	50	**110°**	**250**	**215**
100	150	50	**90°**	**250**	
105	110	55	**110°**	**245**	**215**
105	145	55	**90°**	**250**	
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°**	**250**	
145	95	95	**100°**	**255**	**242**
145	105	95	**90°**	**250**	
150	100	100	**90°**	**250**	
155	85	105	**96°**	**250**	**242**
160	90	110	**90°**	**253**	
170	75	120	**92°**	**250**	
180	65	130	**92°**	**250**	

Um mit d > 55 mm 110° zu erhalten muss eine Nische im Tor hergestellt werden.

INSTALLATION ÖFFNUNG NACH INNEN

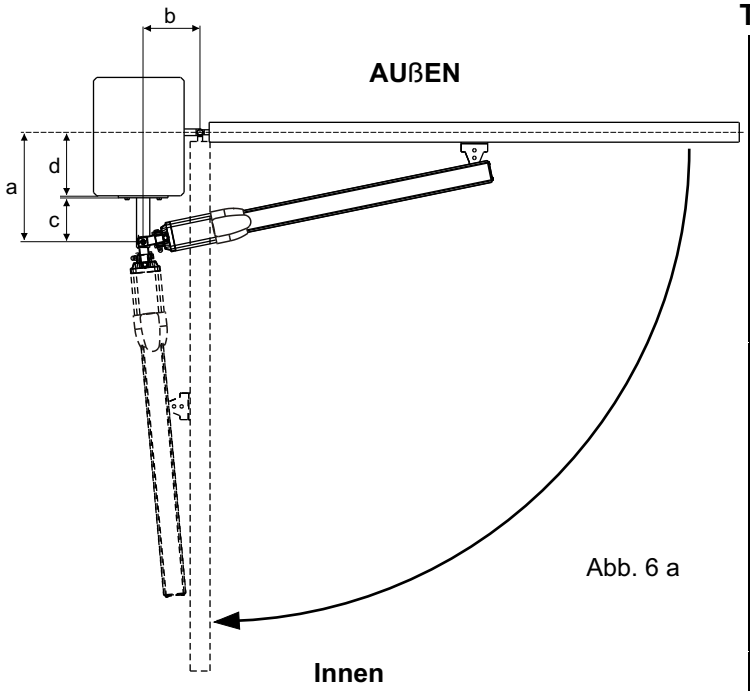


Abb. 6 a

Totale Laufl. 390 mm- Max. empfohlene Laufl. 370 mm

a (mm)	b (mm)	d max (mm)	Max. Öffnungs-Winkel	Max. Kolben-lauf **(mm)**	Kolbenlauf für 90°**(mm)**
125	170	75	**125°**	**368**	**295**
130	170	80	**125°**	**372**	**300**
140	235	90	**90°**	**370**	
145	165	95	**120°**	**372**	**310**
145	230	95	**90°**	**370**	
160	210	110	**90°**	**370**	
175	195	120	**90°**	**370**	
185	145	130	**110°**	**370**	**330**
185	190	130	**90°**	**370**	
195	140	140	**110°**	**371**	**355**
195	175	140	**90°**	**370**	
240	110	185	**100°**	**370**	**355**
240	125	185	**90°**	**370**	
250	105	195	**95°**	**370**	**360**
250	115	195	**90°**	**370**	
260	95	205	**95°**	**369**	**365**
260	100	205	**90°**	**370**	
270	90	215	**90°**	**370**	
280	80	230	**90°**	**370**	
295	65	245	**90°**	**369**	

Um mit d > 55 mm 125° zu erhalten muss eine Nische im Tor hergestellt werden.

INSTALLATION ÖFFNUNG NACH AUßSSEN

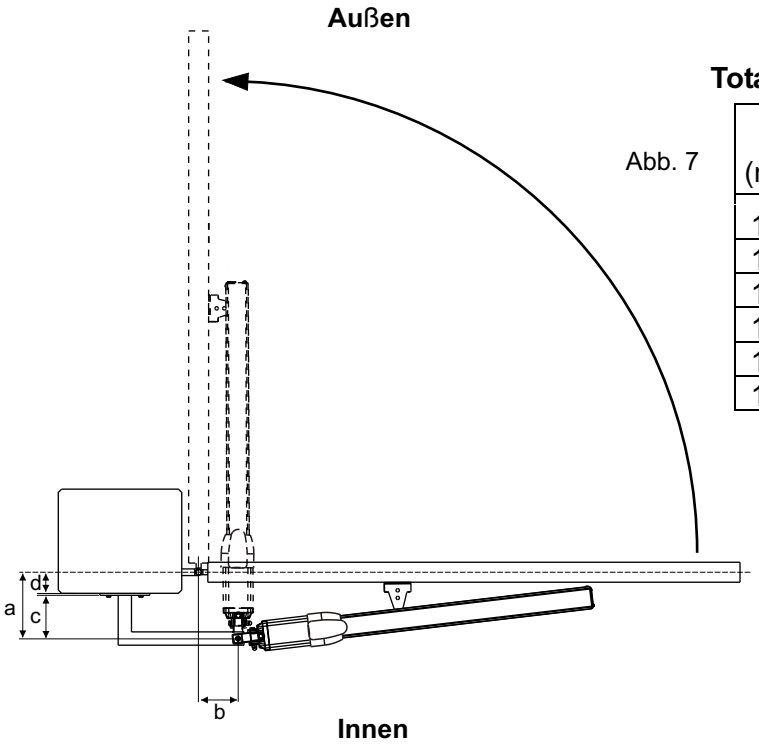


Abb. 7

Totale Laufl. 270 mm- Max. Empfohlene Laufl. 250 mm

a (mm)	b (mm)	Max. Offnungs-Winkel	Max. Kolben-lauf **(mm)**	Kolbenlauf für 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**	

INSTALLATION ÖFFNUNG NACH AUSSEN

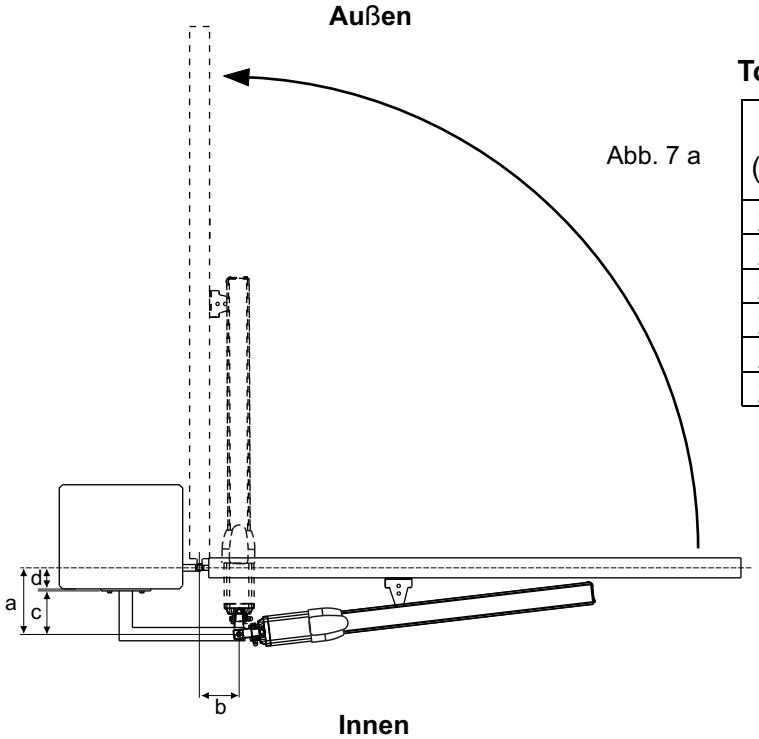


Abb. 7 a

Totale Laufl. 390 mm- Max. empfohlene Laufl. 370 mm

a (mm)	b (mm)	Max. Öffnungs-Winkel	Max.Kolben-lauf **(mm)**	Kolbenlauf für 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 SCHWINGGABEL

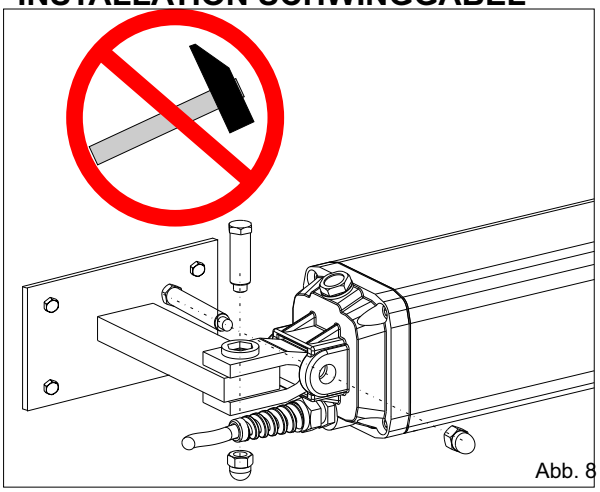


Abb. 8

VORWORT

-Vorsichtig die Verpackung öffnen und darauf achten, dass keines der Bauteile, die unter Abb. 3 aufgeführt sind, verloren geht.

-Die Schwinggabel wie in Abb. 9 befestigen.

Achtung: Den kurzen Messingstift nicht mit dem Hammer in die Gabel und den Bügel einführen, sondern einfach mit der Hand hineindrücken.

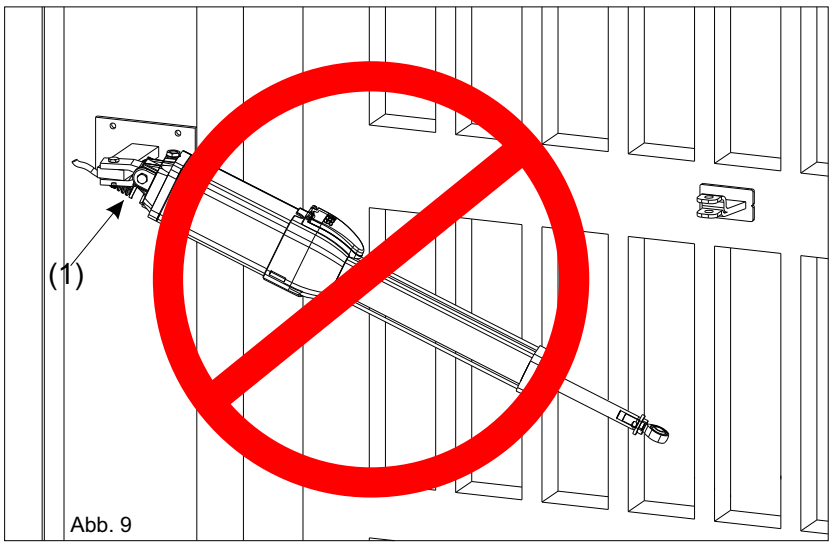


Abb. 9

ACHTUNG:

Den hydraulischen Antrieb nicht über den erlaubten Winkel der Schwinggabel (1) beugen, sie könnte dabei brechen.

MONTAGE HINTERBEFESTIGUNG

Entsprechend dem ausgewählten Öffnungstyp (nach Aussen oder nach Innen) und je nach ausgewählter Rotation des Flügels (siehe Seite 5), muss der Bügel zuerst entsprechend der Quote “a” auf Seite 5 geschnitten und danach, wie in Abb. 10 festgeschweisst werden.

Die Stütze muss so positioniert werden, dass sich der Antrieb in horizontaler Position befindet. (Abb. 10 , Abb.12).

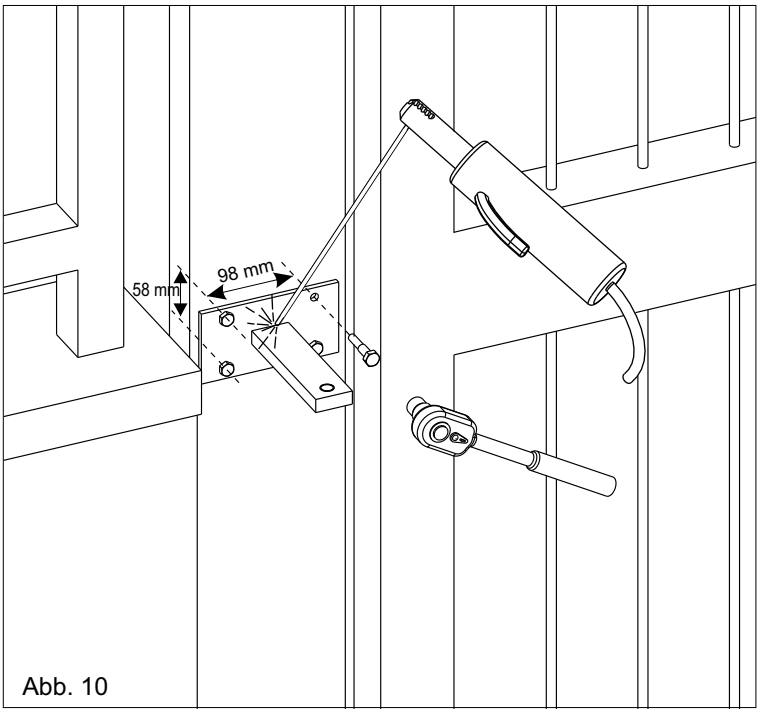


Abb. 10

Regulierbare Hinterbefestigung (mit Schrauben) (Zubehör auf Anfrage)

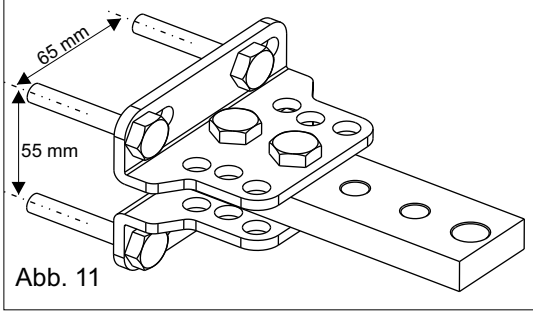


Abb. 11

POSITIONIERUNG der VORDERBEFESTIGUNG

Nachdem der Antrieb auf der Hinterbefestigung angebracht wurde den Torflügel schliessen und wie folgt vorgehen.

1) Den Antrieb entriegeln (wie in Abb. 23 auf Seite 11)
2) Den verchromten Kolben komplett herausziehen, danach um **mindestens 1 cm wieder zurück drücken**.
3) Den Kolben auf der Vorderbefestigung anbringen (Abb. 13)
4) Den Antrieb horizontal platzieren und die Position der Vorderbefestigung markieren (Abb.12).

Achtung: die Vorderbefestigung nicht mit bereits befestigtem hydraulischen Antrieb festschweissen, eventuelle Schweisssspritzer könnten dessen Verchormung beschädigen.

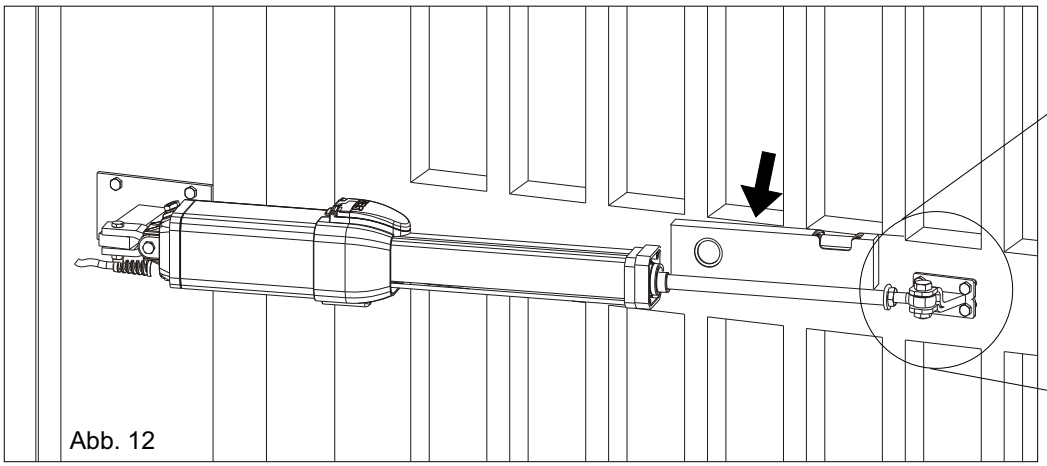


Abb. 12

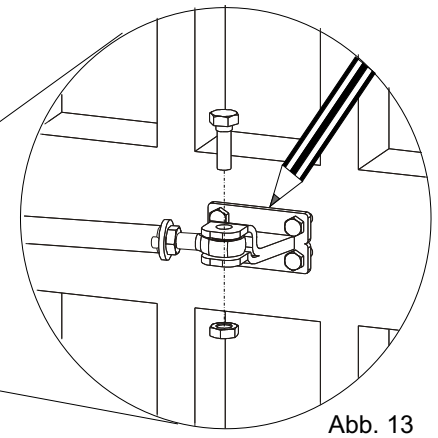


Abb. 13

SCHWEISSUNG DER VORDERBEFESTIGUNG AN DAS TOR

Die Hinterbefestigung muss so positioniert werden, dass sich der Antrieb in horizontaler Position befindet.

Die Vorderbefestigung kann entsprechend der Torstruktur (Holz, Eisen, Aluminium) entweder festgeschraubt oder festgeschweisst werden.-

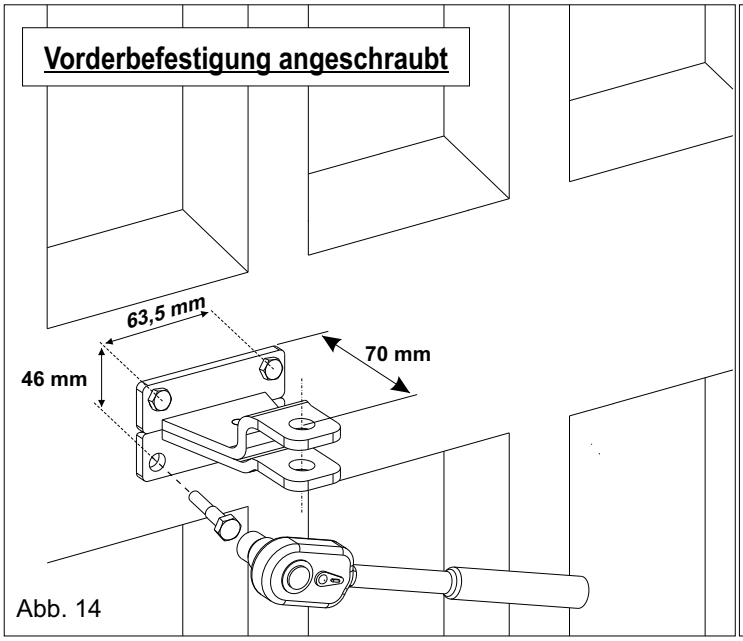


Abb. 14

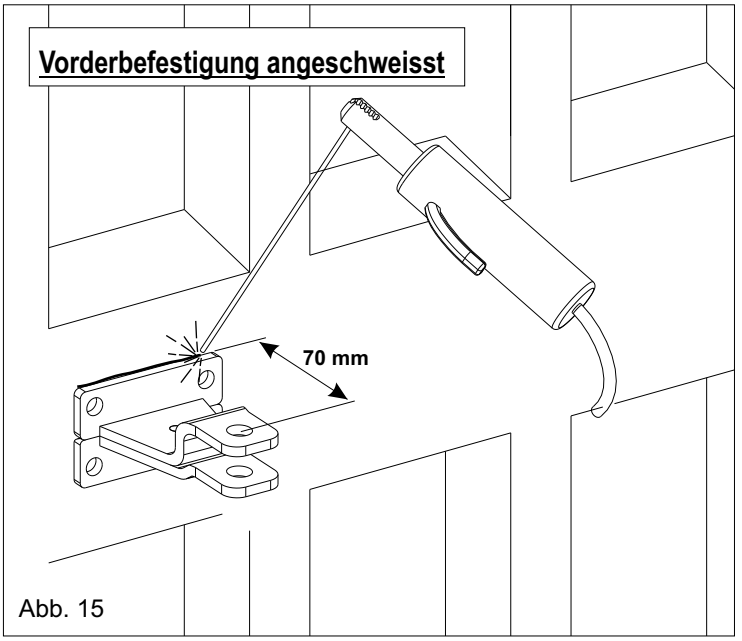


Abb. 15

INSTALLIERUNG DER ENDSCHALTERANSCHLÄGE (Zubehör auf Anfrage)

- Die Einheit entriegeln (wie in Abb.23 auf Seite 11)
- Den Kolben 3/4 aus seinem Lauf herauskommen lassen
- Den Endschalteranschlag mit zwei der drei Zugstangen, die sich auf dem Vorderflansch befinden und paralell zum Tor stehen anbringen (Abb. 16)
- Die Anschläge mit den mitgelieferten Schrauben befestigen.
- Nun den Kolben an der Vorderbefestigung einhängen
- Den Anschlag in Öffnung auf Scheibe 1 und in Schliessung auf Scheibe 2 regulieren.

Achtung: Durch die Montage des mechanischen Anschlags wird der Kolbenlauf nicht verringert.

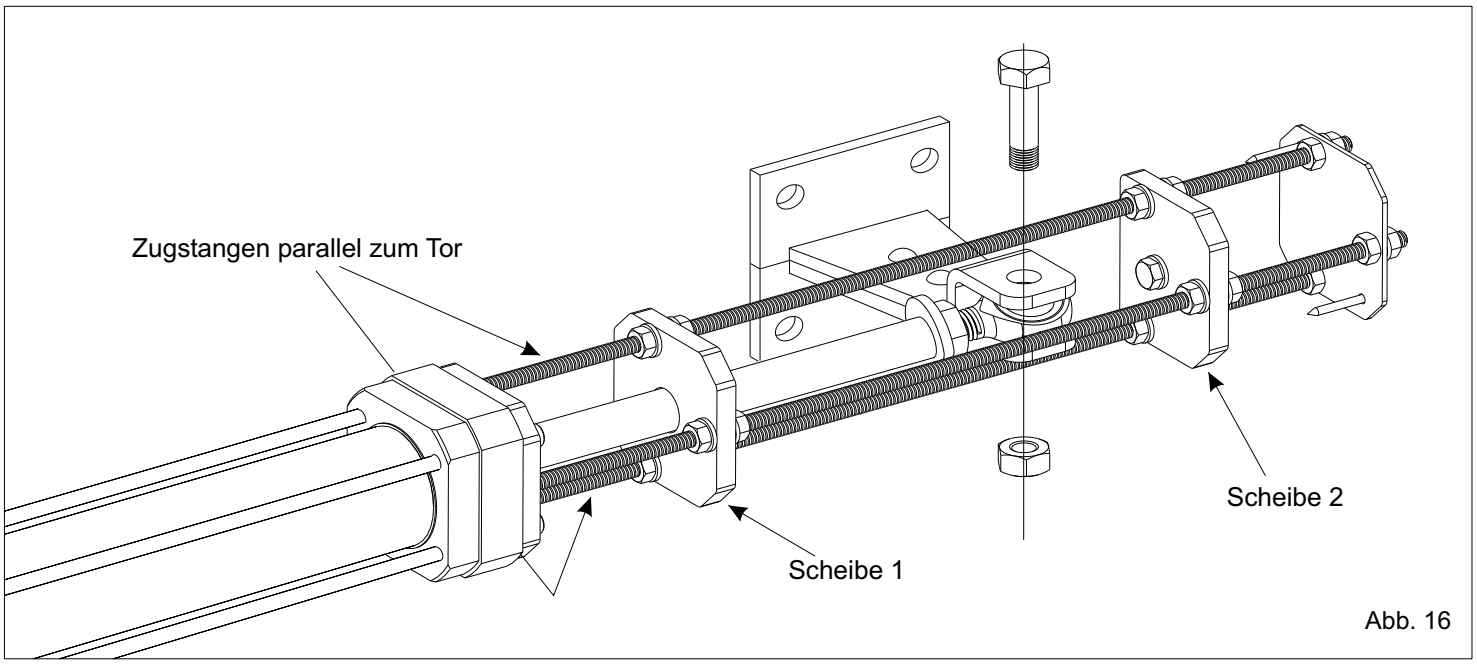


Abb. 16

ENTLÜFTUNGSSCHRAUBE

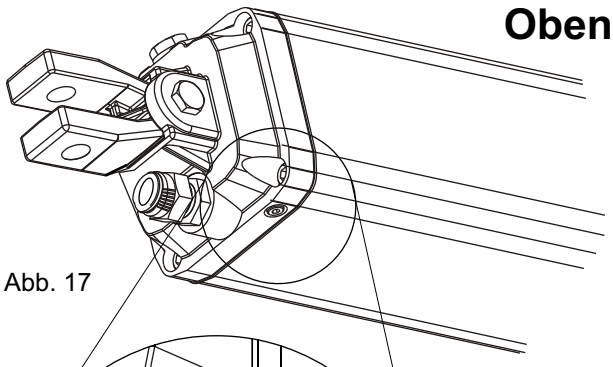


Abb. 17

ACHTUNG!
Am Ende der Installierung müssen die Entlüftungsschrauben entfernt werden

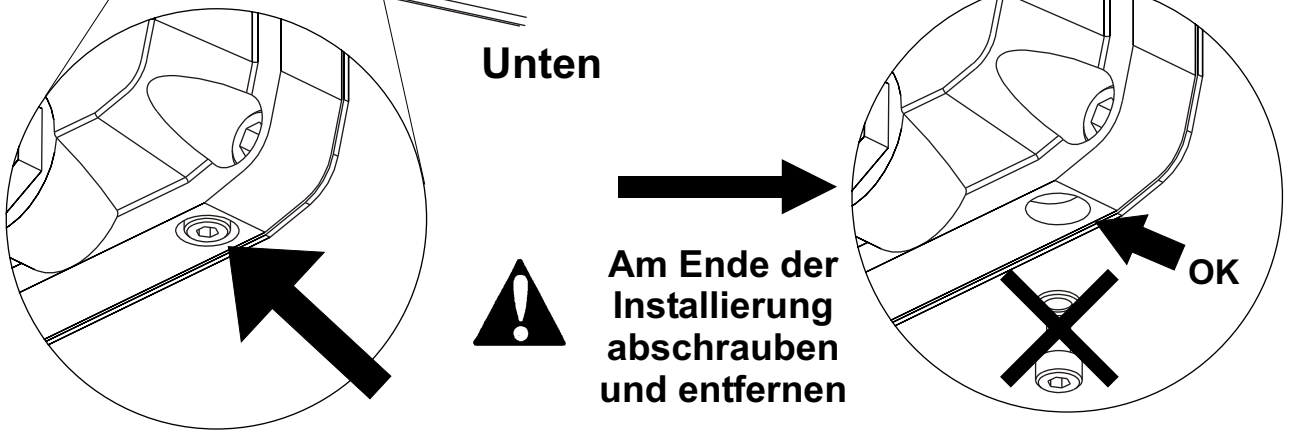


Abb. 18

INSTALLIERUNG DER VERCHROMTEN KOLBENABDECKUNG

Vor Installierung der Kolbenabdeckung (Abb. 19), muss der Antivibrationsrahmen aus Plastik eingeführt werden (A)

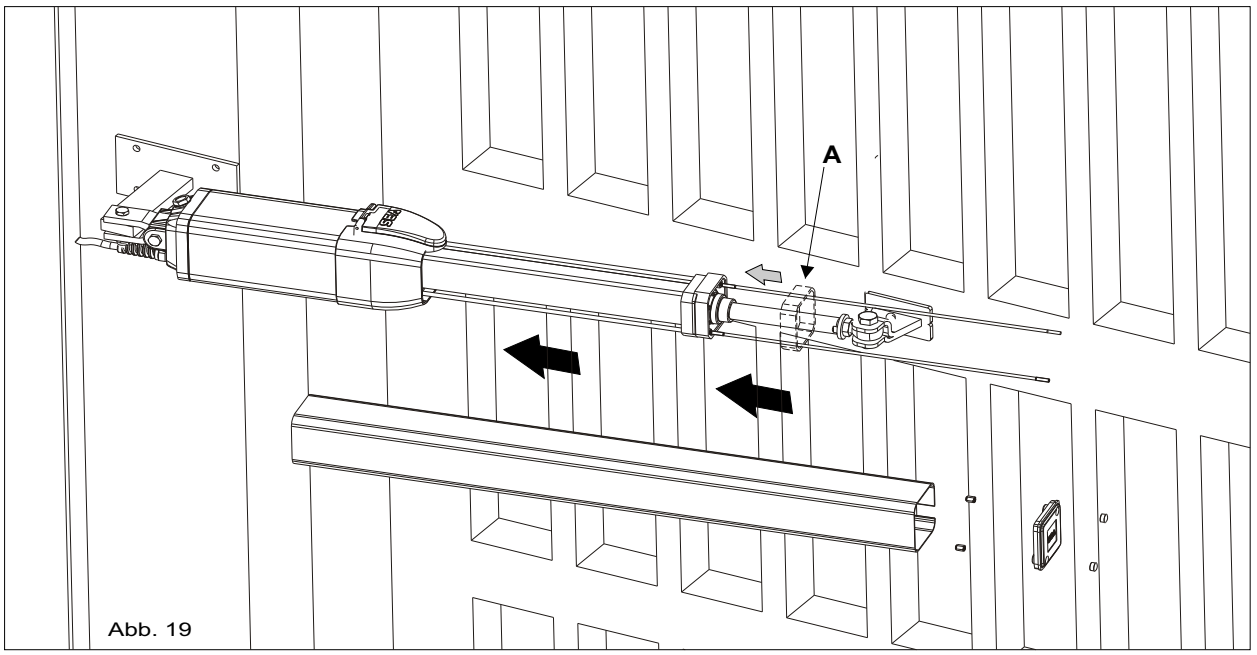


Abb. 19

EINSTELLUNG DREHMOMENT (By-Pass Schrauben)

Bei einer Erstinstallierung darf der Entrieglungsdeckel, sowie die Bypass Abdeckung nicht sofort wieder eingesetzt werden. In diesem Fall siehe Abb. 20 und 22.
Sollte die Bypass Schraubeneinstellung zu einem anderen Zeitpunkt durchgeführt werden, auf Grund von, z.B. periodischer Wartung oder anderem, muss die Schraube, die die Bypassabdeckung blockiert, entfernt werden (Abb.21), dann die Bypass Abdeckung abndehmen und schliesslich den Druck der Bypass Ventile mit Hilfe des (nur für den Installateur) mitgelieferten Schlüssels einstellen. (Abb.22)

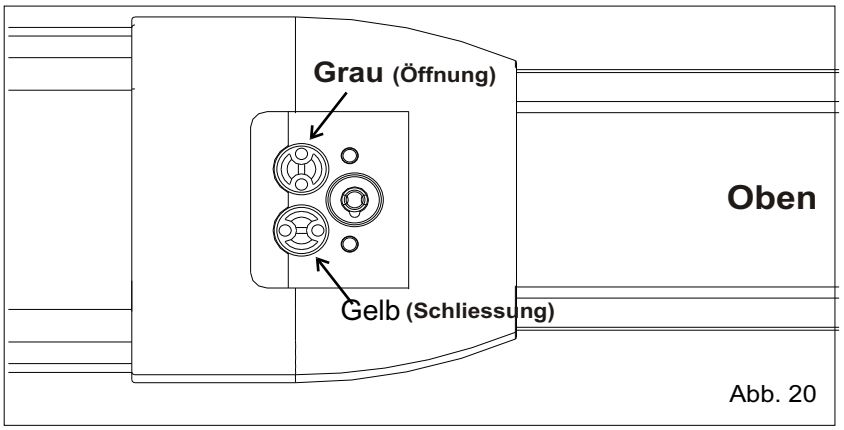


Abb. 20

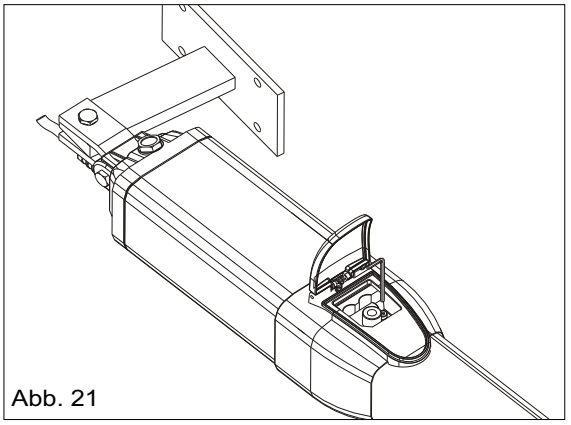
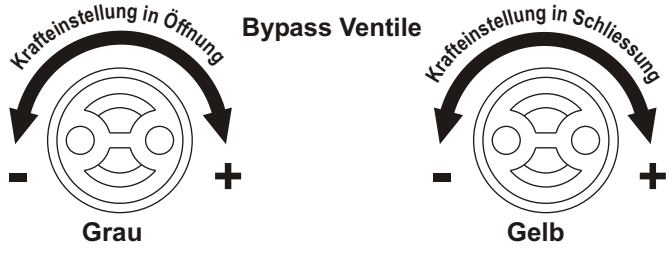


Abb. 21



Die Krafteinstellung des Tores in Öffnung und in Schliessung so einstellen, dass das Kraftdiagramm (in der Richtlinie En12453 enthalten) respekitert wird; die Schubkraft darf auf keinen Fall höher als 15KgF sein.

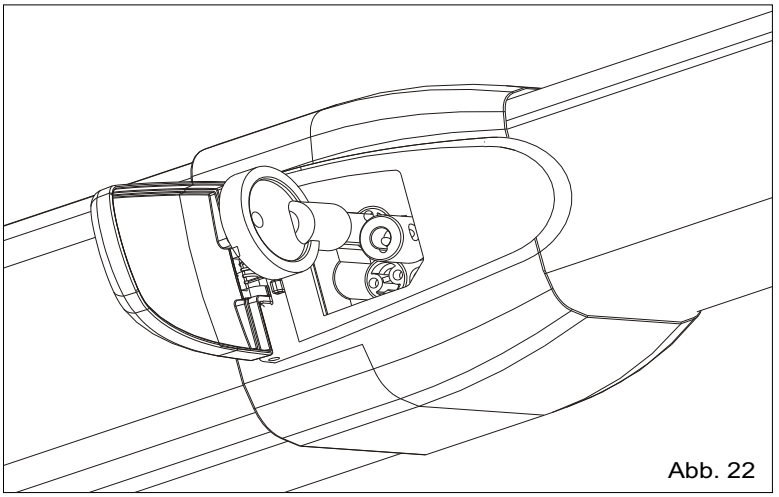


Abb. 22

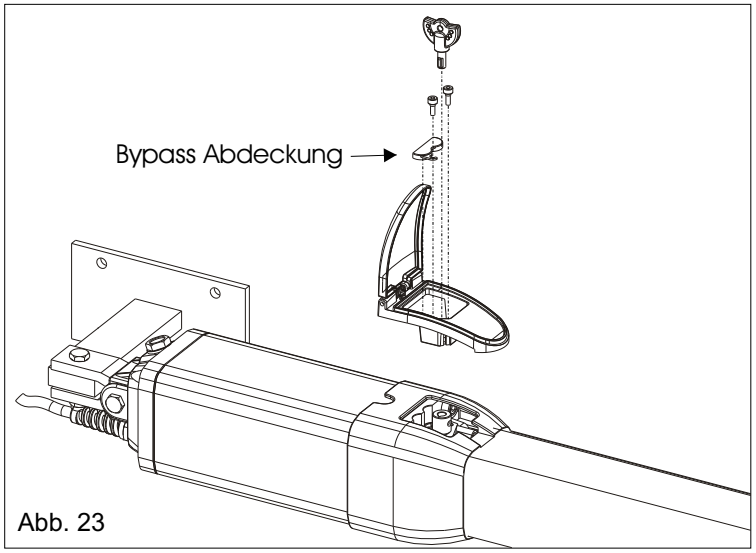


Abb. 23

MONTAGE PLASTIKENTRIEGLUNG

ACHTUNG: Erst nach Beendigung aller Installierungsarbeiten, Montage der Kolbenabdeckung und Eichung der Bypass Schrauben kann die Montage der Plastikentrieglung (wie in Abb. 23) durchgeführt werden.

MONTAGE ALUMINIUMENTRIEGLUNG MIT SCHLÜSSEL (Zubehör auf Anfrage)

ACHTUNG: Erst nach Beendigung aller Installierungsarbeiten, Montage der Kolbenabdeckung und Eichung der Bypass Schrauben kann die Montage der Aluminiumentrieglung (wie in Abb. 24)durchgeführt werden.
Der Entrieglungsschlüssel wird im Innern der Aluminiumentrieglungsabdeckung aufbewahrt. (Abb. 25)

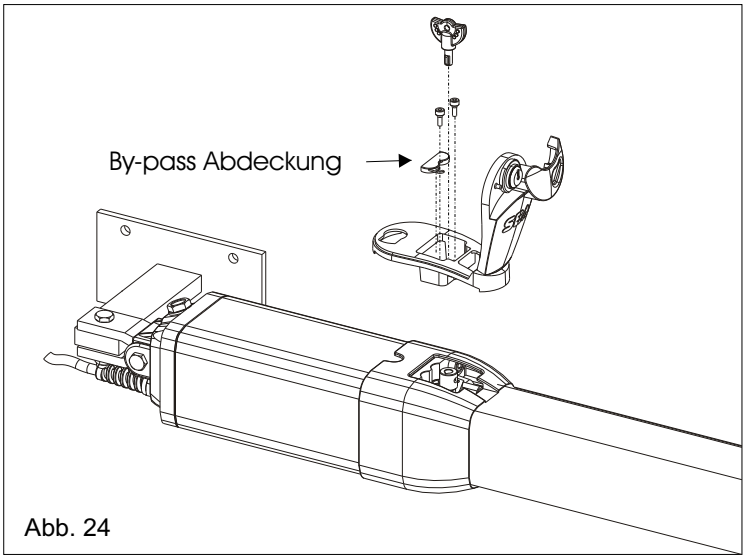


Abb. 24

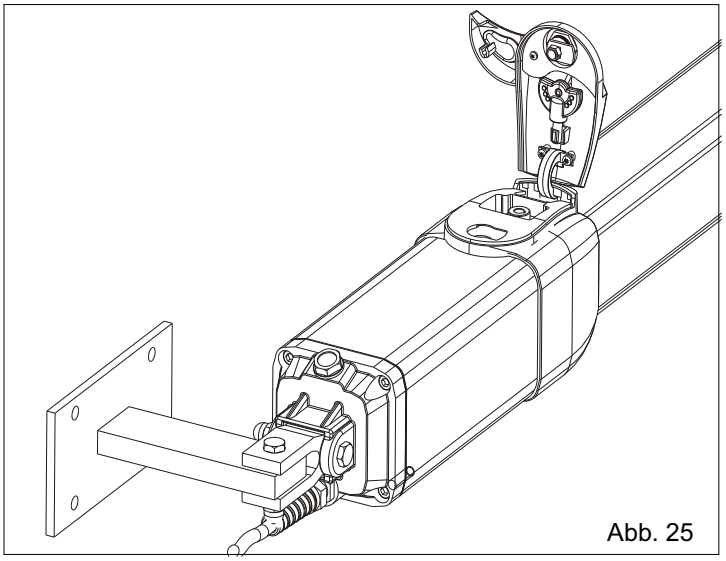


Abb. 25

MONTAGE AUSEENENTRIEGLUNG (Zubehör auf Anfrage)

ACHTUNG: Die Montage der Aussenentrieglung muss, wie in Abb. 26 und 27 angegeben, durchgeführt werden. Für mehr Information im Montageanleitungshandbuch (im Montagekit der Aussenentrieglung für Half Tank beigepackt) nachschlagen.

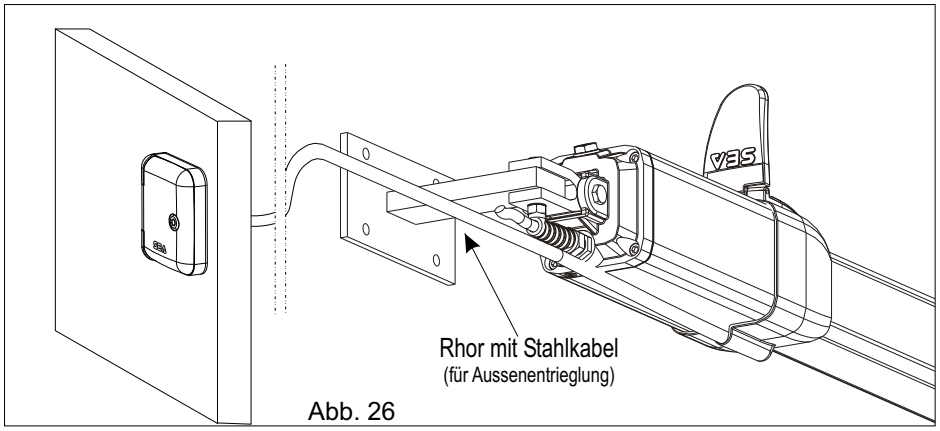


Abb. 26

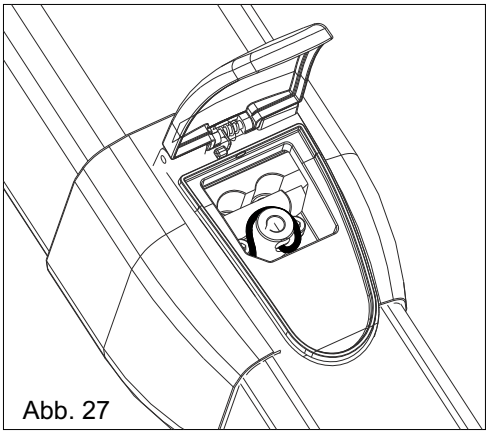


Abb. 27

ENTRIEGLUNGSSYSTEM

Um den Antrieb zu entriegeln wie folgt vorgehen:
-Den Schlüssel einführen und gegen den Uhrzeigersinn um 180° drehen (Abb. 28)

Um den Antrieb erneut zu blockieren wie folgt vorgehen:
-Den Schlüssel einführen und im Uhrzeigersinn bis zur Schliessung drehen (Abb.28).

Achtung : Vor der Entriegelung immer die Stromzufuhr unterbrechen

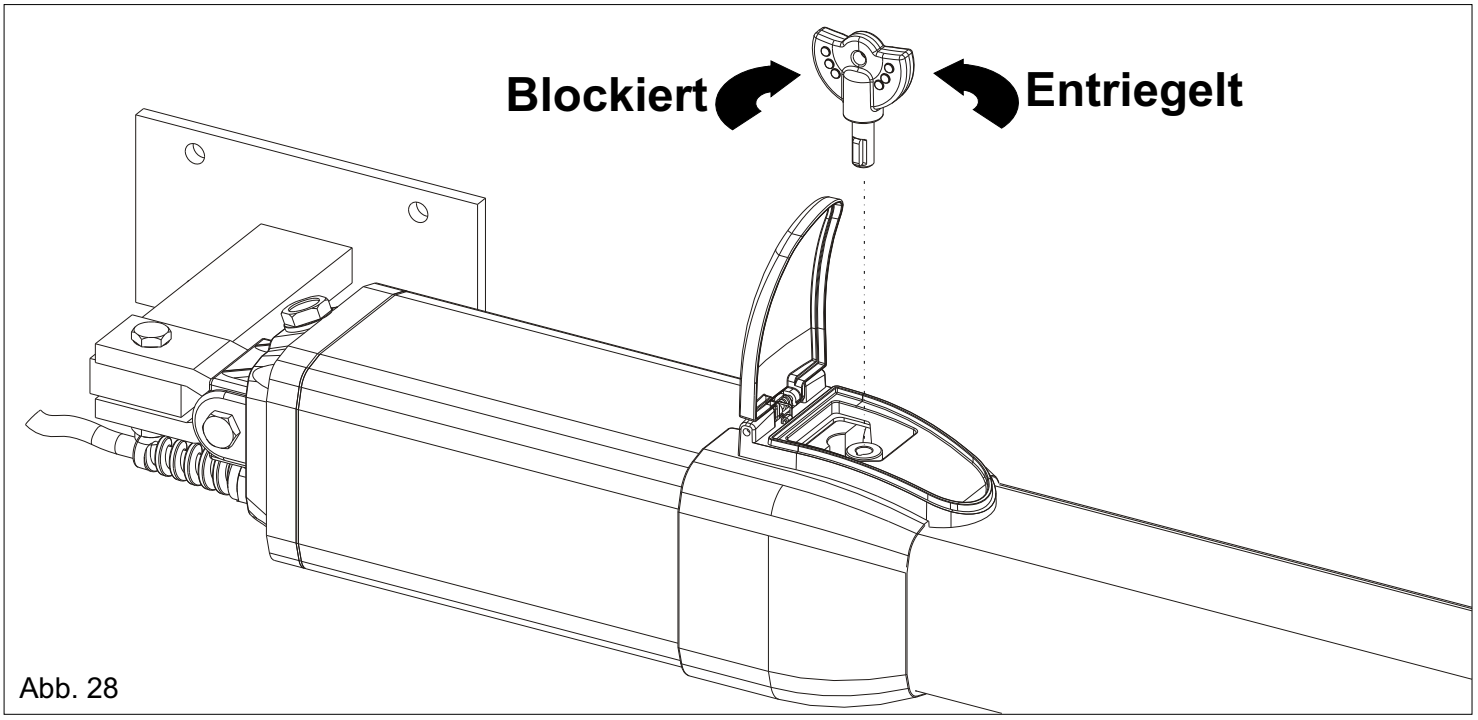


Abb. 28

PERIODISCHE WARTUNG

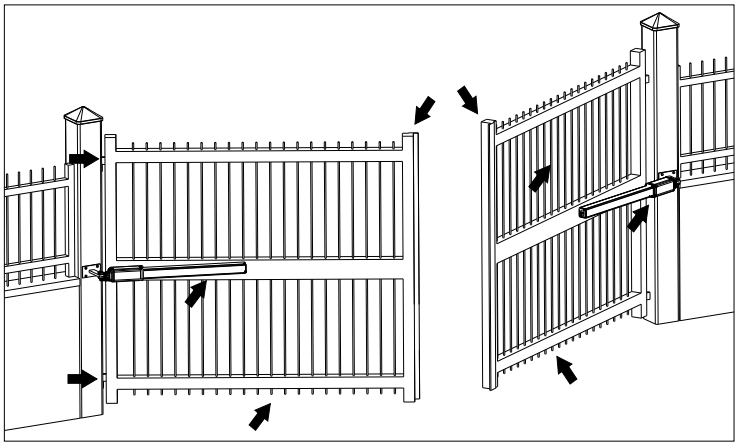
1) Die Robustheit und die Stabilität des Tores, besonders die Stützpunkte und/oder die Rotation des Tores (Angeln) kontrollieren.	Jährlich
2) Den Ölstand der hydraulischen/im Ölbad Antriebe überprüfen (Stöpsel auf der Hinterabdeckung des Half Tank)	Jährlich
3) Das hydraulische Öl mit dem vom Hersteller empfohlen Öl auswechseln	4 Jahre
4) Die Funktionstüchtigkeit der Entrieglung kontrollieren	Jährlich
5) Die Funktionstüchtigkeit der Bypass Ventile kontrollieren	Jährlich
6) Die Befestigungsstifte kontrollieren und schmieren	Jährlich
7) Die Unversehrtheit der Verbindungskabel kontrollieren	Jährlich
8) Die Funktionstüchtigkeit und den Zustand der Endschalteranschläge in Öffnung und Schliessung kontrollieren (dort wo mechanische Anschläg montiert sind)	Jährlich
9) Sicherstellen, dass alle Teile, die besonders stark belastet werden (Hinterbefestigung, Schwinggabel und Vorderbefestigung) in einem einwandtfreien Zustand sind.	Jährlich
10) Die Funktionstüchtigkeit aller Zubehöre, besonders die aller Sicherheitsvorrichtungen und des Safety Gate überprüfen.	Jährlich
11) Nachdem die periodische Wartung durchgeführt wurde, muss dessen Abnahme wiederholt und der Antrieb in Betrieb gestetzt werden.	Jährlich

Die hier oben angegegenen Arbeiten, müssen von einem autorisierten Installateur durchgeführt werden.

12. GEFAHRENANALYSE

Die in Abb. 38 mit Pfeilen gekennzeichneten Punkte sind potentiell gefährlich. Der Installateur muss eine gründliche Prüfung der Risiken vornehmen, um Quetschungen, Mitreissen, Schnitte, Verhakungen und Fallen vorzubeugen und um eine für Menschen, Tiere und Dinge sichere Installation zu gewährleisten.

Bei Unklarheiten, wenden sie sich bitte an den Gebietshändler oder rufen Sie uns an. Diese Anleitungen sind fester Bestandteil des Antriebs und müssen an einem Ihnen bekannten Ort aufbewahrt werden. Der Installateur muss sich strikt an die Anleitungen halten. Die SEA s.r.l Produkte dürfen nur für die Automatisierung von Türen, Toren und Flügel benutzt werden. Sämtliche Inititiativen die ohne ausdrückliche Genehmigung von Seiten der Fa. SEA ergriffen werden, entledigen SEA jeglicher Verantwortung. Der Installateur muss den Kunden über nicht einschätzbare Restrisiken informieren. Mit dem Ziel ihre Produkte ständig zu verbessern, hat SEA das Recht jegliche Art von Änderung durchzuführen, ohne vorher ihre Kunden darüber zu informieren. Dies verpflichtet die Fa. SEA jedoch nicht dazu, ihre vorhergehenden Produktionen zu verbessern. SEA kann nicht für Schäden oder Unfälle verantwortlich gemacht werden, die durch kaputte Produkte entstanden sind oder wenn es sich um Schäden oder Unfälle handelt, die auf die Nichtbeachtung der in diesem Handbuch aufgeführten Anleitung zurückzuführen sind. Die Garantie ist ungültig und die Verantwortung des Herstellers nichtig, wenn nicht SEA Orignalersatzteile verwendet wurden. Die elektrische Installierung muss von einem Elektriker durchgeführt werden, der, entsprechend der geltenden Richtlinien, die notwendigen Unterlagen ausstellt.



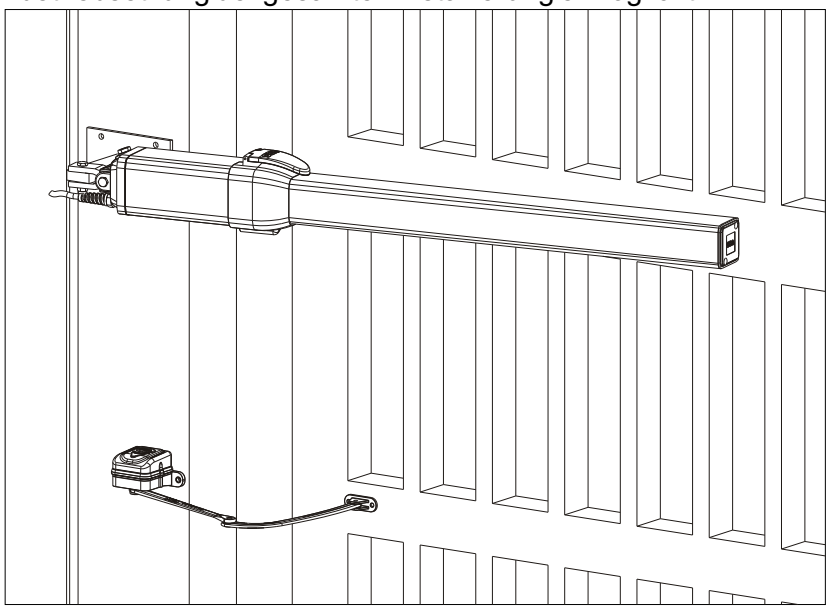
Verpackungsmaterial, wie Plastiktüten, Polystyrol, Nägel, usw. aus der Reichweite von Kindern halten, da sie potentielle Gefahren darstellen.

ANFANGSTEST UND INBETRIEBSETZUNG

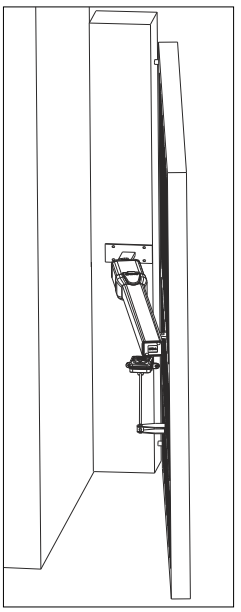
Nachdem der HALF TANK Antrieb, wie in diesem Handbuch beschrieben korrekt installiert wurde und nach Einschätzung aller Restrisiken, die in jeder Installierung aufkommen können, ist es notwendig die Installierung zu testen, um die höchste Sicherheit zu garantieren und um speziell zu gewährleisten, dass die entsprechenden Gesetze und Richtlinien in diesem Sektor respektiert wurden. Der Testlauf muss speziell nach der En12445 Richtlinie durchgeführt werden, die, die Testmethoden zur Überprüfung der Torantriebe unter Einhaltung der von der Richtlinie **EN 12453**. festgesetzen Grenzwerte festlegt.

SAFETY GATE

Für eine korrekte und sichere Installierung wird es strengstens empfohlen ein Safety Gate zu installieren, das, das in der Richtlinie EN 12453 enthaltene Diagramm der Kräfte respektiert und folglich die Abnahme und die Inbetriebsetzung der gesamten Installierung ermöglicht.



ACHTUNG : Im Falle einer Installierung, wie in Abbildung rechts, ist es möglich das Safety Gate mit geradem Bügel zu benutzen (Löst das Problem der Aussmasse des Arms, siehe Abbildung links)



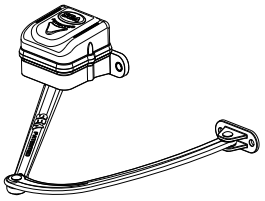
ZUBEHÖR HALF TANK

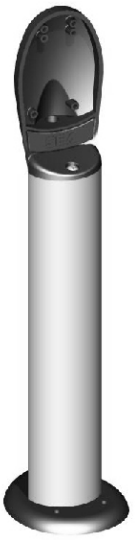

SCHLÜSSELSCHALTER

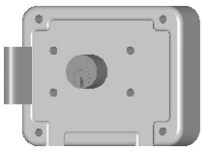

LICHTSCHRANKEN

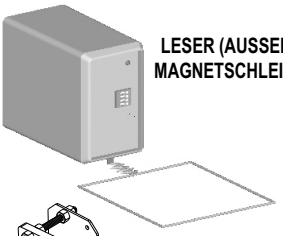

FUNKEMPFÄNGER

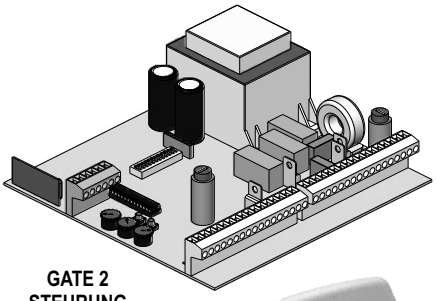

HANDSENDER


SAFETY GATE

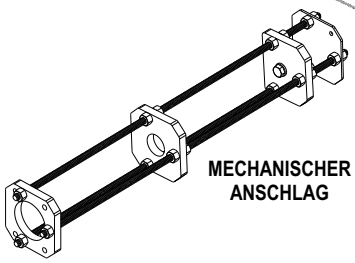

SÄULE FÜR LICHTSCHRANKE


ELEKTROSCHLOSS


LESER (AUSSEN) MAGNETSCHLEIFE


GATE 2 STEURUNG


BLINKLAMPE


MECHANISCHER ANSCHLAG


KIT AUSSENENTRIEGLUNG

KONFORMITÄTSERKLÄRUNG
SEA erklärt unter ihrer eigenen Verantwortung , dass das Produkt

Half Tank in allen seinen Ausführungen

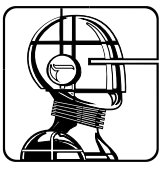
den grundlegenden Anforderungen die von den folgenden europäischen Richtlinien und nachfolgenden Änderungen vorgesehen sind (wo anwendbar) entspricht:
98/37/CE (Maschinenrichtlinie)
89/336/CEE (Elektromagnetische Verträglichkeit)
73/23/CEE (Niederstromrichtlinie)
HINWEIS
Die Installierung der elektrischen Anlage und die Wahl der Betriebslogik sind gemäß den jeweils geltenden gesetzlichen Bestimmungen vorzunehmen. Auf jeden Fall einen Differential-Schutzschalter 16A und Schwellenwert 0,030A vorsehen. Die Stromkabel (Motoren, Stromzufuhr) sind von den Steuerungskabeln (Schalter, Lichtschranken, Funk, etc.) zu trennen. Zur Vermeidung von Störungen, wird empfohlen, zwei getrennte Isolierhülsen zu verwenden.
EINSATZ
Der HALF TANK Antrieb wurde ausschließlich für die Automatisierung von Schwingtoren hergestellt
ERSATZTEILE
Anfragen nach Ersatzteilen bitte an folgende Adresse richten:
SEA s.r.l. Zona Ind.le, 64020 S.ATTO Teramo - Italien
SICHERHEITSBESTIMMUNGEN UND UMWELTVERTRÄGLICHKEIT
Verpackungsmaterial des Produkts und/oder der Schaltkreise umweltgerecht entsorgen.

Das Produkt nur mit dafür geeigneten Transportmitteln transportieren.

GEWÄHRFRIST
Für den HALF TANK Antrieb wird eine Garantie von 36 Monaten gewährt. Maßgebend für die Geltendmachung der Garantieansprüche ist das auf dem Produkt aufgeführte Datum. Die Garantie ist nur dann gültig, wenn das Produkt keine Schäden aufweist, die auf eine unsachgemäße Verwendung oder auf jegliche Art von Änderungen oder Eingriffe zurückzuführen sind. Die Garantie gilt ausschließlich für den ursprünglichen Käufe.
AUSSERBETRIEBSETZUNG UND WARTUNG
Die Disinstallierung und/oder Ausserbetriebsetzung und/oder Wartung des Half Tank Antriebs darf ausschliesslich von einem dazu befugtem Fachmann ausgeführt werden.

HINWEIS: DER HERSTELLER ÜBERNIMMT KEINE HAFTUNG FÜR SCHÄDEN, DIE DURCH EINE UNSACHGEMÄSSE, FEHLERHAFTE UND UNGEEIGNETE VERWENDUNG VERURSACHT WURDEN.

SEA räumt sich das Recht ein, ohne Benachrichtigungspflicht, die für ihre Produkte und/oder dieses Handbuch erforderlichen Änderungen oder Varianten durchzuführen.



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di Apertura Porte e Cancelli
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