## Operating Instructions for PC 12TE, PC 12TD

As a manufacturer of safety equipment, the Cobianchi Liftteile AG company is responsible for the design and manufacture of the Cobianchi brake safety gear devices.

In order to make the production, the commissioning and the maintenance of our brake safety gear devices easier for the manufacturers of the framework and for the installation companies, these Operating Instructions have been established

In the following you will find important remarks, which if properly observed will contribute to an impeccable installation and operation.

The following drawings must be enclosed with these Operating Instructions:

No. BA 12TE - 01 Installation drawing Output: 15.05.01
No. BA 12TE 25-Z Connection tube, retraction spring Output: 15.05.01
No. BA 12TD - 01 Installation drawing Output: 15.05.01
No. BA 12TD 25-Z Retraction spring system, connection tube Output: 15.05.01

These Operating Instructions consist of some pages of text (depending on the language) and 4drawings and are applicable for standard installations. Customer-specific solutions can call for deviating installation sequences. The brake safety gear devices can be installed on top of - or underneath the cage/cabin taking into account different installation widths. The lifter engagement as a rule takes place at the upper wedges. Enclosed are the drawings for the standard installation on top of the cabin/cage with lifter engagement from above.

## Subject to deviations from the executions described here.

## To be observed prior to the installation:

The brake safety gear device consists of four safety gear heads, which are arranged in tandem. On all safety gear heads, the respective serial numbers are burnt in. These numbers have to coincide with the serial number on the affixed - as well as with that on the enclosed nameplate and must be able to be attributed to the manufacturing number of the installation. If this is not the case, then a mistake has been made and it is necessary to refer back to the purchasing department, your own stores department or directly to the manufacturer.

#### Installation of the Safety Gear Heads

The installation of the safety gear heads into the corner (gusset) plates in any case has to be carried out by Cobianchi AG by means of 8 holding shafts. The equipment is always supplied with corner (gusset) plates. Pay attention, that the brake wedges are on the same rail side as the controller rope engagement. Verify, that the designations "up" (on top) and "down" (underneath) on the wedge guide plate correspond to the actual situation. Verify the easy running of the housings on the holding shafts. Turn the adjusting screw engaging between the holding shafts back on the braking shoe side, until the housing is supported on the suspension bracket (corner (gusset) plate. After the fixing screws of the shafts have been tightened, push the housing against the pressure spring and release it again. The housing must easily slide back to its original position on the holding shafts by the force of the spring pressure.

### Installation of the Supporting Plates

Screw the supporting plates items 1 a/b to the corner (gusset) plates with hexagon head screws M12 x 25. Arrangement in accordance with drawing No. NA 12TE - 01 and NA 12TD - 01.

#### Installation of the Triggering Shaft

Pull the square section connecting tubes DA 06-Z with stop bushings DA 17-Z (on the control rope side) and DA 28-Z (on the safety gear switch side) loosely into the supporting plate and make the screw connection with the cut-to-length and welded to a counter-flank item 7 connection tube  $d = 50 \times 5$  mm, which is supplied by the customer (not within the scope of supply of Cobianchi AG).

## Installation of the Lifter and of the Retracting Spring

#### A) Type PC 12TE

Place the lifter onto the connection tube DA 05-Z and fix on the wedge with the pre-installed suspension screw. Position the stop release bushing with the pre-assembled safety gear switch, tighten all grub screws and lock then with lock nuts. Hook the retraction spring to the safety gear frame and verify, that the wedges are held slightly below the centre in the neutral position.

#### B) Type PC 12TD

Place the lifter onto the connection tube DA 05-Z while at the same time installing the retraction spring DA 07-Z1/2 and fix on the wedge on the pre-installed suspension screw. Position the stop release bushing with the pre-assembled safety gear switch, tighten all grub screws and lock then with lock nuts. Pre-tension the pressure springs by approximately 30 - 40 mm, so that the wedges are held in the centre or slightly below the centre in the neutral position.

Make sure, that no excessive torsion is present within the connection tube. In case of large gauge values, the connection shaft has to be reinforced, resp., supported on a bearing in its centre, in order to prevent any bending (sagging).

#### Checks A - H: After this procedure, the following must be the case:

A. The wedges have to be held at the centre or slightly below the centre of the brake safety gear device by the spring in the neutral position.

If this is not the case: Check the position of the safety gear shaft.

- B. The lifters and the supporting plates have to be parallel when viewed from above. If this is not the case: Align them.
- C. The supporting plates have to be at an angle of 90 degrees to the rail. If this is not the case: Align them.
- D. The lifters must be able to be moved up and down freely (no contact with the suspension brackets). If this is not the case: Align them, if so required change/adapt/flex-off the suspension brackets.
- E. The two lifter ends must be situated respectively behind the guide plate at the wedges without making contact.

If this is not the case: Align them, installation of the brake safety gear device => check the location bores of the shafts.

- F. When gearing, it must be possible that the lifter ends can run in next to the pressure spring of the roller plate without making contact.
  If this is not the case: (Check?) the distance lateral from the centre of the rail to the centre of the point of rotation of the connection shaft and the vertical distance from the centre of the brake safety gear device to the centre of the connection shaft.
- G. When actuating the lifter on the controller side, the opposite lifter also has to move simultaneously (no play in the connection shaft to lever) and must be able to be moved downwards, resp., upwards by the same distance (tolerance: 5 mm).
  If this is not the case: Check the linkage as mentioned and in addition check, whether the distance from the braking surface of the fixed braking shoe to the guide rail running surface is the same in case of both safety gear heads. If so required, centre them once more, until both wedge packages can be moved by the same amount in the direction of the safety gear position.
- Following the gear test, the wedges must be brought back into their original position again by the two retraction spring systems.
   If this is not the case: Check whether the triggering shaft is difficult to move or whether one of the points listed here has not been complied with.

#### Name Plate

Before the enclosed nameplate is affixed, the surface foreseen for this (traverse) has to be cleaned of dust and grease and has to be completely dry. The adhesive surface of the nameplate must not be touched on a large surface area. After positioning it. Press it on hard.

## Information Plate in case of Oiled Rails

With every brake safety gear device to be used with oiled rails, a yellow information sticker is enclosed. This has to be affixed in an easily visible location (e.g., on the rail oiler). Recommended oil: Unalloyed mineral oil without any high-pressure additives, viscosity ISO 100 - 150.

#### Connection

Connect the rope to the lifter at the controller rope engagement point with an end of rope connection (hook and eye set for ropes).

Wire the safety gear switch (230 V, 4 A) and check it for correct functioning.

#### Adjustment

Centering the safety gear heads: Turn the lateral adjusting screw to the right until the distance from the braking surface of the wedge to the rail is the same a from the baking surface of the brake shoe to the rail (approximately 2 mm from the braking shoe to the rail, depending on the setting).

Verify, that the safety gear switch in case of a rotation of the lifter is actuated in both directions. If so required, correct the position of the stop triggering bushing item 5b (adjust it).

Verify, that the releasing linkage operates without any play and easily and that the two safety gear heads are brought into the gear position simultaneously.

Carry out the checks A - H

#### Commissioning

Attention: to be observed prior to the first safety gear test:

#### Carry out the checks A - H.

In all cases, the rust-protection coating has to be removed from the rails (usually a film with oily or greasy and sticky feeling).

Most suitable for this purpose are cold cleaning agents or brake disc cleaning agents. This cleaning operation <u>always</u> has to be carried out independent of the type of rail surface (planed/ drawn, dry/oiled, new building or conversion of an existing installation).

If in the case of conversions of existing installations there still is an actual rust-protection coating on the rails (frequently grey, green or red), then this varnish has to be completely removed.

In case of oiled rails, only a ordinary machine oil of the viscosity grade ISO 100 - 150 must be used, without any active ingredients added lubricating oil in accordance with DIN 51517, part 1). Because lubricating oils for gearboxes, engines or hydraulic devices frequently contain high-pressure additives, they are not suitable for this application (note the enclosed information sticker).

## Speed Limiter / tension weight

#### We recommend:

- 1. Controller diameter 300 mm, groove hardened, reinforced execution.
- 2. Controller rope: Diameter 8 mm.
- 3. Tension weight 120 kg on, measured on center of divertor pulley.

#### Maintenance

If the safety brake gear devices have been correctly installed, then the maintenance is limited to the checking of: The condition of the rails: In accordance with the Commissioning Instructions above.

#### Triggering linkage:

Synchronous response of both safety gear heads, connection without any play through the triggering shaft, free movement of the lifters possible in both directions. Checks A - H.

#### Retracting spring:

Present, hooked in, under pre-tension.

#### Safety gear heads:

Centred, clean.

#### Guideways of the cabin/cage:

In an impeccable condition, not widened.

#### Holder shafts:

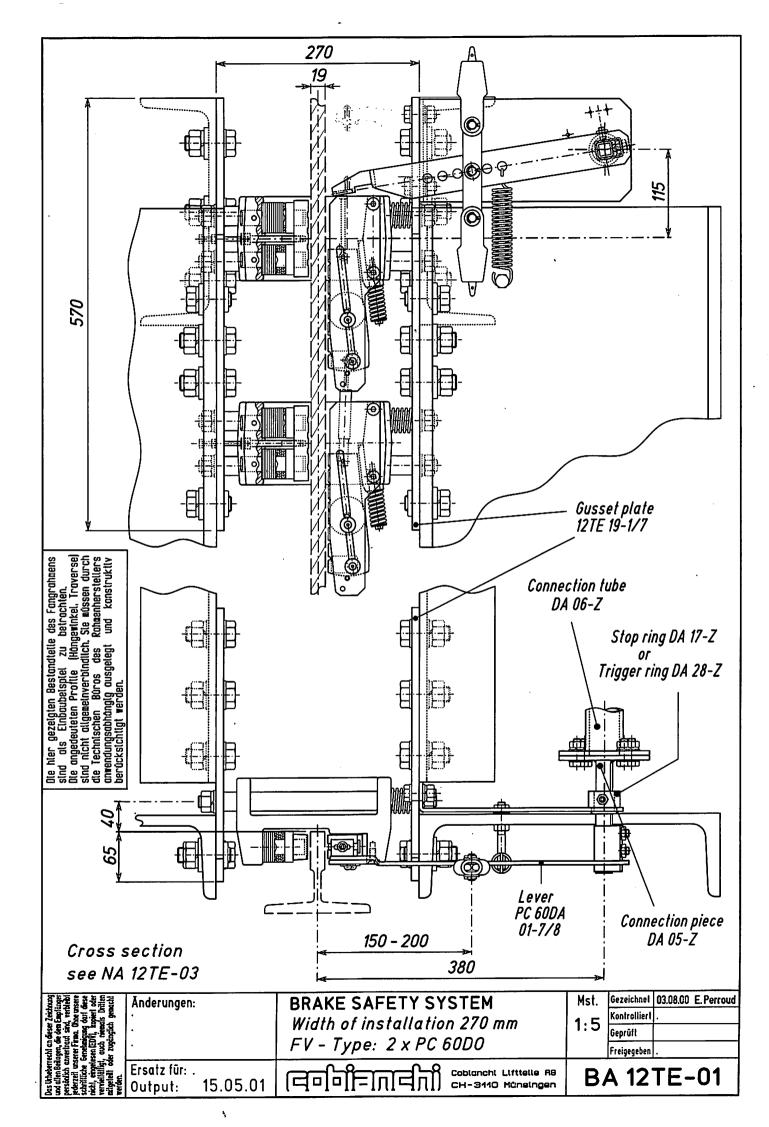
Freely movable housings on the holder shafts, if not: Lubricate with oil / grease.

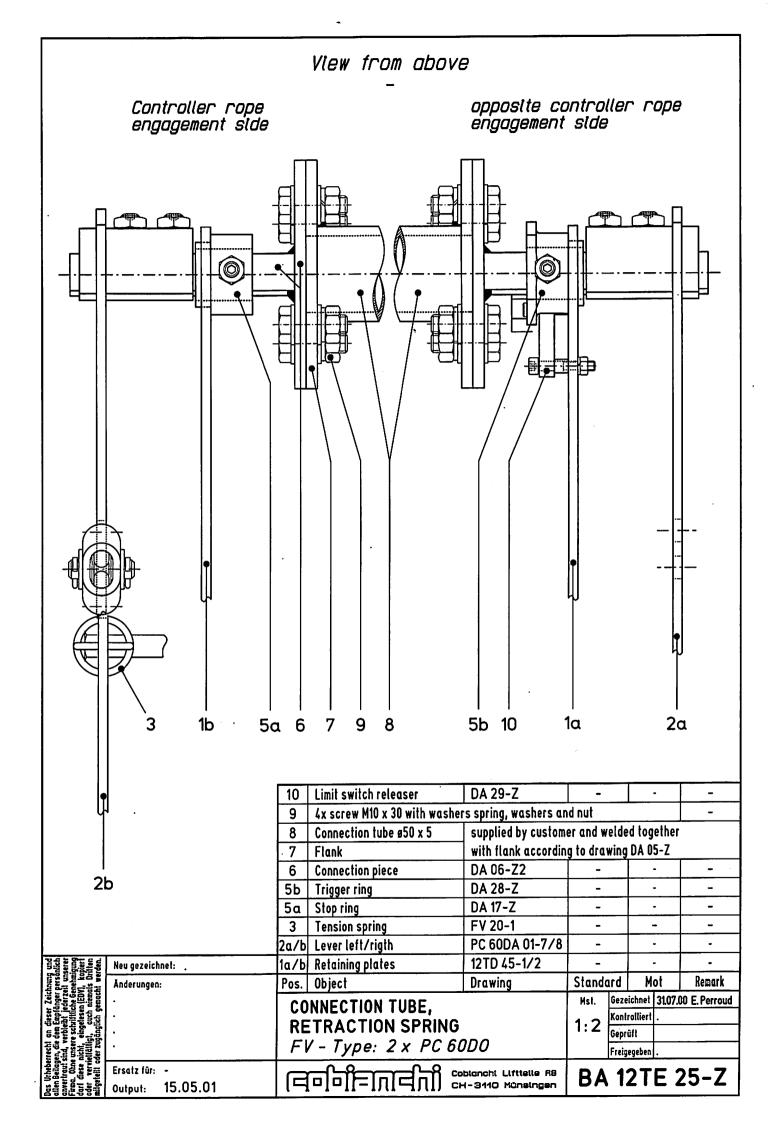
#### Cleanness:

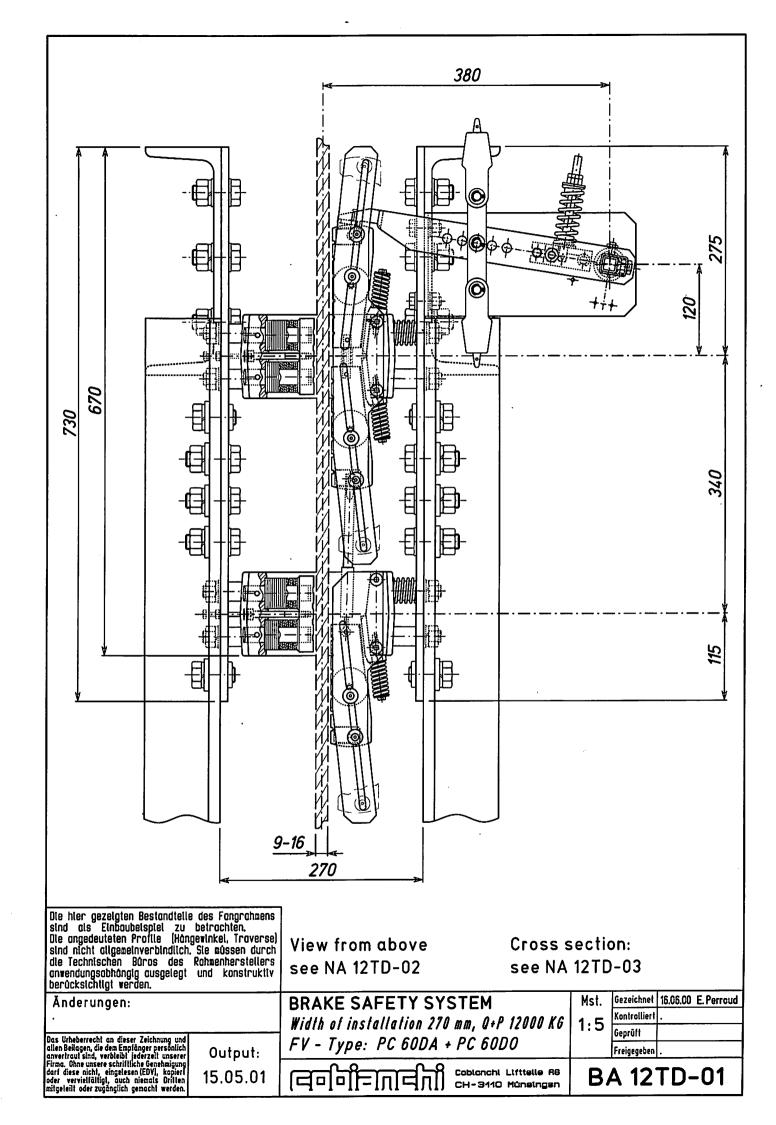
In general and in particular in the case of building elevators and conversions of existing installations:

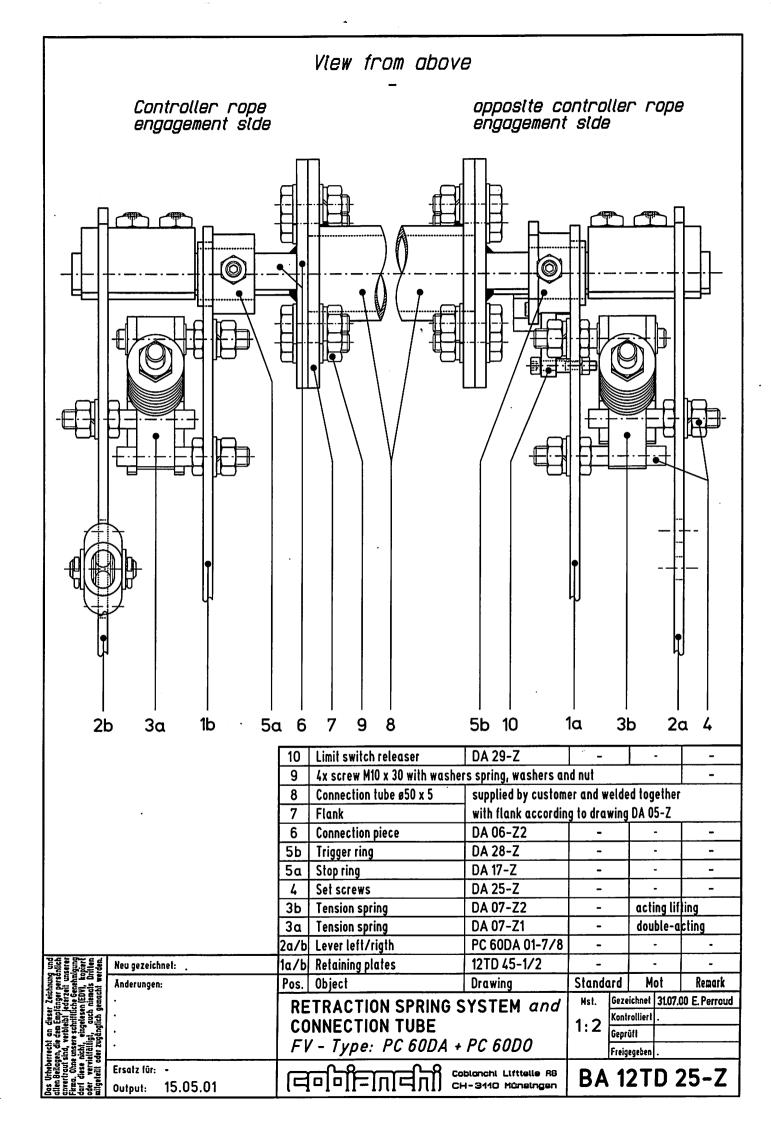
Make sure, that the safety gear heads are protected against contamination with gypsum, concrete, cement, mortar or similar building materials. Dirty safety gear heads have to be dismantled and cleaned.

If these simple instructions are followed, then the safety for the user of the elevator as well as for the installation company can be significantly increased.





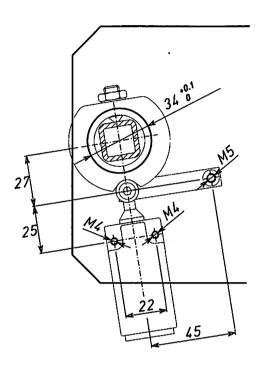




# Technische Neuerung von Endschalteranbau an Stützblech

Anbau mit geänderter Auslösehülse

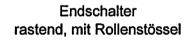
## Alt

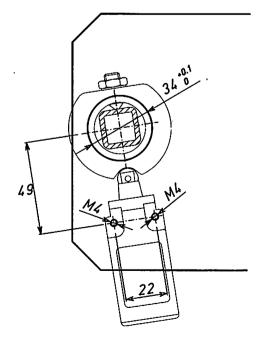


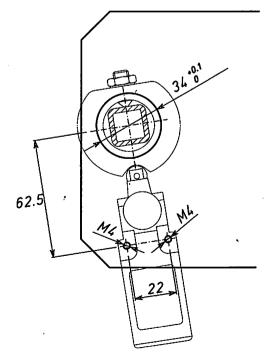
## Neu

ab Kalenderwoche 24/02

Endschalter nicht rastend, mit Rollenstössel







EU-Konformitätserklärung für Sicherheitsbauteile EU-Declaration of conformity for safety components Déclaration de conformité EU pour les composants de sécurité Dichiarazione di conformità EU per i componenti di sicurezza

Hersteller / Manufacturer: Fabricant / Produttore:

Cobianchi Liftteile AG Weststrasse 16

CH-3672 Oberdiessbach

Beschreibung / Funktion: Bremsfangsystem PC12TD gegen Übergeschwindigkeit abwärts kombiniert mit

Bremseinrichtung aufwärts wirkend

**Description / Function:** 

Progressive safety gear system PC12TD, acting in downwards direction with braking

device as part of the protection device against overspeed in upwards direction

**Préscription / Fonction:** 

Systèm parachute à prise amortié PC12TD contre vitesse excessive vers en bas avec

dispositive protégeant la cabine qui monte contre une vitesse excessive

Descrizione / Funzione:

Sistema paracadute a presa progressivo PC12TD contro velocità eccessivo verso in

basso con dispositivo contro velocità eccessivo verso in alto

Typ / Type / Type / Tipo:

bestehend / consisting / inclus / incluso:

**PC60DA & PC60DO** 

Seriennummer: Serial number: Numero de série: Numero di fabricazione: Siehe Typenschild und Gravur auf Fangkopf see typ plate and engraving on each safety head

gardez plaque de fabrication et gravure

vedi sulla targhetta e incisione

Baujahr / Year of manufacture:

Année de construction / Anno di fabricazione:

Siehe Typenschild / visible on type plate

visible sur plaque de caracteristique / vedi targhetta

Harmonisierte Normen / Harmonized standards:

Normes harmonisées / Norme armonizzate :

EN 81-20/50: 2014

Richtlinie / Directive / Directive / Direttiva:

2014 / 33 / EU

Benannte Stelle der Baumusterprüfung: Notified Body carried out EC certificate: Organisme agrée / Organismo autorizzato: TÜV-SÜD Industrie Service GmbH Westendstrasse 199

D-80686 München

Kennnummer / Identification number:

numéro d'identification / numero di identificazione:

0036

Bescheinigung Nr. / EC certificate nr.: No. d'attestation / no. di certificato:

**EU-SG 506** 

(1xPC60DA & 1xPC60DO)

Q-Systemüberprüfung erfolgt durch:

Quality production check / System de qualité verifié:

Organismo per controllo sistema:

TÜV-SÜD Industrie Service GmbH

Westendstrasse 199 D-80686 München

Kennnummer / Identification number:

Numéro d'identification / Numero di identificazione:

0036

Ausgabedatum / Date of issue / Publié / Rilasciato:

Oberdiessbach, 05.04,2016

Bestätigt / Confirmed / Confirmée / Confermato:

COBIANCHI LIFTTEILE AG

Zentralsekretariat i. A. Katja Schmid Entwicklung i. A. Dominik Helfer

Daufe



EU-Konformitätserklärung für Sicherheitsbauteile EU-Declaration of conformity for safety components Déclaration de conformité EU pour les composants de sécurité Dichiarazione di conformità EU per i componenti di sicurezza

Hersteller / Manufacturer: Fabricant / Produttore:

Cobianchi Liftteile AG Weststrasse 16

CH-3672 Oberdiessbach

**Description / Function:** Préscription / Fonction:

Beschreibung / Funktion: Bremsfangsystem PC12TE gegen Übergeschwindigkeit abwärts wirkend Progressive safety gear system PC12TE, acting in downwards direction

**Descrizione / Funzione:** 

Systèm parachute à prise amortié PC12TE contre vitesse excessive vers en bas Sistema paracadute a presa progressivo PC12TE contro velocità eccessivo verso in

Typ / Type / Type / Tipo:

PC12TE

bestehend / consisting / inclus / incluso:

**PC60DO & PC60DO** 

Seriennummer: Serial number: Numero de série: Numero di fabricazione: Siehe Typenschild und Gravur auf Fangkopf see typ plate and engraving on each safety head

gardez plaque de fabrication et gravure

vedi sulla targhetta e incisione

Baujahr / Year of manufacture:

Année de construction / Anno di fabricazione:

Siehe Typenschild / visible on type plate

visible sur plaque de caracteristique / vedi targhetta

Harmonisierte Normen / Harmonized standards: Normes harmonisées / Norme armonizzate :

EN 81-20/50: 2014

Richtlinie / Directive / Directive / Direttiva:

2014 / 33 / EU

Benannte Stelle der Baumusterprüfung: Notified Body carried out EC certificate: Organisme agrée / Organismo autorizzato: TÜV-SÜD Industrie Service GmbH

Westendstrasse 199 D-80686 München

Kennnummer / Identification number:

numéro d'identification / numero di identificazione:

0036

Bescheinigung Nr. / EC certificate nr.: No. d'attestation / no. di certificato:

**EU-SG 506** (2xPC60DO)

Q-Systemüberprüfung erfolgt durch:

Quality production check / System de qualité verifié:

Organismo per controllo sistema:

TÜV-SÜD Industrie Service GmbH

Westendstrasse 199 D-80686 München

Kennnummer / Identification number:

Numéro d'identification / Numero di identificazione:

0036

Ausgabedatum / Date of issue / Publié / Rilasciato: Oberdiessbach, 05.04.2016

Bestätigt / Confirmed / Confirmée / Confermato:

**COBIANCHI LIFTTEILE AG** 

Zentralsekretariat i. A. Katja Schmid Entwicklung i. A. Dominik Helfer

1) Falfe

Shuul