

As a manufacturer of safety components, Cobianchi Lifteile AG is responsible for the design and production of Cobianchi safety gears (down, PC250E) and braking devices (up, PC250U)
 These operating instructions have been drawn up to make it easier for the frame manufacturers and assemblers to produce, market and maintain our safety gears and brake systems.

The standard versions PC250E and PC250U are documented in this operating manual. If your installation differs from the version described here, please contact your technical office or the relevant design department

Below you will find important instructions, whose compliance will contribute to faultless installation and operation in all cases.

These operating instructions must be accompanied by the following drawings:

Drawing No.	BRAKE TYPE	Elevation, floor plan, side elevation
250E-BA01-1	PC250E, PC250U	Assembly drawing FV with Pos. No.

This manual consists of some text pages (depending on the language) as well drawings. We can easily offer client-specific or semi-client-specific solutions at advantageous prices. The safety gears and braking devices may be installed at the top or bottom of the cab, taking into account the position of the connecting shaft. The siphon is applied to the feed siphon (Pos. 14). The required force is 60Nm. 16) check against the brake shoe return systems (Pos. 18) Adjust to the limits of the enclosure (Pos 15) is performed via the teeth on the feed lifter (Pos 14). In the end position these notches are no longer engaged. For detailed information please refer to our technical documentation

any deviation from the test method procedures described here and any other relevant information.

Prior to installation

The safety gear or braking device consists of two adjusted and sealed safety gear heads Technical specifications refer to the application of artificial brine. The serial numbers are stamped on all heads These numbers must correspond to the serial number on the adhesive labels, the enclosed nameplate and the factory number of the system. If this is not the case, there is a mix-up and consultation with the purchasing department, your own warehouse or directly with the manufacturer must be made

Loosen the transportation safety mechanisms (clamps on the moving machine parts)! 20, connecting rods between the gusset plates (Pos. All protective packing must be removed before installation.

1. Assembly

1.1. Installation and alignment of the interception heads

As standard, the interception heads are supplied fully assembled and adjusted with four gusset plates (Pos. 5). Backing plates (Pos 6), siphon axis (Pos 1 and 2), stop and release sleeve (Pos. Sensors and limit switches 7) are mounted on the governor rope side with internal connecting shaft

The gusset plates (Pos. 5) must be screwed to the frame with sufficient M20 screws. The brake is activated during a braking process via the gusset plates (Pos. 5) the torque acting on the frame structure must be safely absorbed. The screw connections must not allow the necessary lateral displacement of the housings (Pos. 9) on the mounting surfaces (pos. 4) do not impair

The guide rail must be positioned exactly between the gusset plates (Pos. 5) in order to ensure that the necessary lateral displacement of the enclosures (Pos. 9) on the mounting surfaces (pos. 4) is adequate When the safety gear is engaged, no enclosure (Pos. 15) a gusset plate (Pos. 5) touch.

The enclosures (Pos. 15) are settled by means of deposits (Pos. 17) kept in a neutral position. Contact surface between a rail and the wheel of a railway vehicle 17) the enclosures must move smoothly on the mounting axes (Pos. .4) can be moved. If this is not the case, the installation must be checked and corrected accordingly (bracing of the connection traverse-junction plate).

1.2. Assembly Connecting shaft between the interception heads

The connecting shafts are not included in the scope of delivery of Cobianchi Lifteile AG.

With an *internal connecting shaft*, the shaped steel tube $\varnothing 50 \times 5$ mm according to DIN 2391, cut to the appropriate length (gauge -358 mm), must be fitted with the flanks (Pos. 8) to be welded. The flanks (Pos. 8) must be connected to the release shaft (Pos. 12) be screwed on.

With an *internal connecting shaft*, the shaped steel tube $\varnothing 50 \times 5$ mm according to DIN 2391, cut to the appropriate length (gauge -490 mm), must be fitted with the flanks (Pos. BE WELDED).

After mounting the connecting shaft, check that the linkage can be turned easily by hand The feed jacks (Pos. 14) the two interception heads must engage simultaneously on both guide rails In the case of very large stub masses, it may be necessary to additionally support the connecting shaft due to deflection (floating bearing).

1.3. Mounting support plates and lifters

If not already pre-assembled, the support plates (Pos. 5) be screwed on. Stop- Release sleeve (Pos. 1b) and position siphon axis (Pos. 1 and 2) slide in. The role of the limit switch (Pos. 7) must be inserted in the recess of the release sleeve (Pos. 1b) present. Subsequently, lifters (Pos. 1 and 2) with the screw (Pos. 3) on the feed lifter (Pos. 1b) and position siphon axis (Pos. 1 and 2) are fixed. The purpose of this test is to verify that the mechanical components have been correctly installed (Pos. 14) are in neutral position (safety gear fully open) and lifter (Pos. 1 and 2) and support plate (Pos. 6) are parallel when viewed from above. Then tighten all screws and lock nuts. Now check that the lifters (Pos. 1 and 2) move freely up and down Before attaching the return spring (Pos. 10) Check by hand on the safety gear (pre-tension spring 5 - 10 mm) whether the engagement lever system **moves smoothly** .

1.4. Type plate

Before attaching the enclosed type plate to a clearly visible part of the frame, the intended surface must be cleaned and completely dry. The adhesive surface of the type plate must not be touched extensively. Press firmly after sticking on.

1.5. Information sign rail oil

Each safety gear or braking device is supplied with a green warning sticker. This must be installed in a clearly visible place (e.g. on rail oilers).

Recommended oil: HLP oils according to DIN 51524, part 2, or comparable oils, viscosity ISO VG 68-150

2. Connection and adjustment

Limit switch (230 V, 4 A) (Pos. 7) wire and check function.

Controller rope with rope end connections of the rope lock set (Pos. 9) with lifter (Pos. 1 and 2) are connected.

The necessary release force on the jack for engaging the safety gear is max. 250 - 300 N. It must be ensured that the tractive force generated in the governor rope from the tripped overspeed governor is at least twice the force required for engaging the safety gear (but at least 300 N).

3. Commissioning

Attention: To be observed before the first attempt at catching:

The running surfaces of the guideways must always be cleaned of dirt, rust protection and any paint Cold cleaners or brake disc cleaners are best suited for this.

The HLP oils recommended in accordance with the green adhesive (DIN 51524, part 2, viscosity ISO VG 68-150) should be used as rail oil.

The safety gear must be checked according to EN81-20 (6.3 ff.) before initial operation.

4. Maintenance (according to EN 13015:2001+A1:2008 (Annex A, points A.1 and A.2))

If the safety gears or braking devices are correctly installed, maintenance is limited to the inspection of:

4.1. Condition of the rails:

according to the above commissioning instructions

4.2. Trip linkage:

Synchronous response of the feeders (Pos. 14), backlash-free connection of the connecting shaft, free and smooth movement of the lifters in the corresponding direction

4.3. Limit switch:

Function electrical/mechanical, operation guaranteed

4.4. Installation and alignment of the interception heads

centered, clean

4.5. Guided tours of the cabin:

In perfect condition, not extended

4.6. Cleanliness:

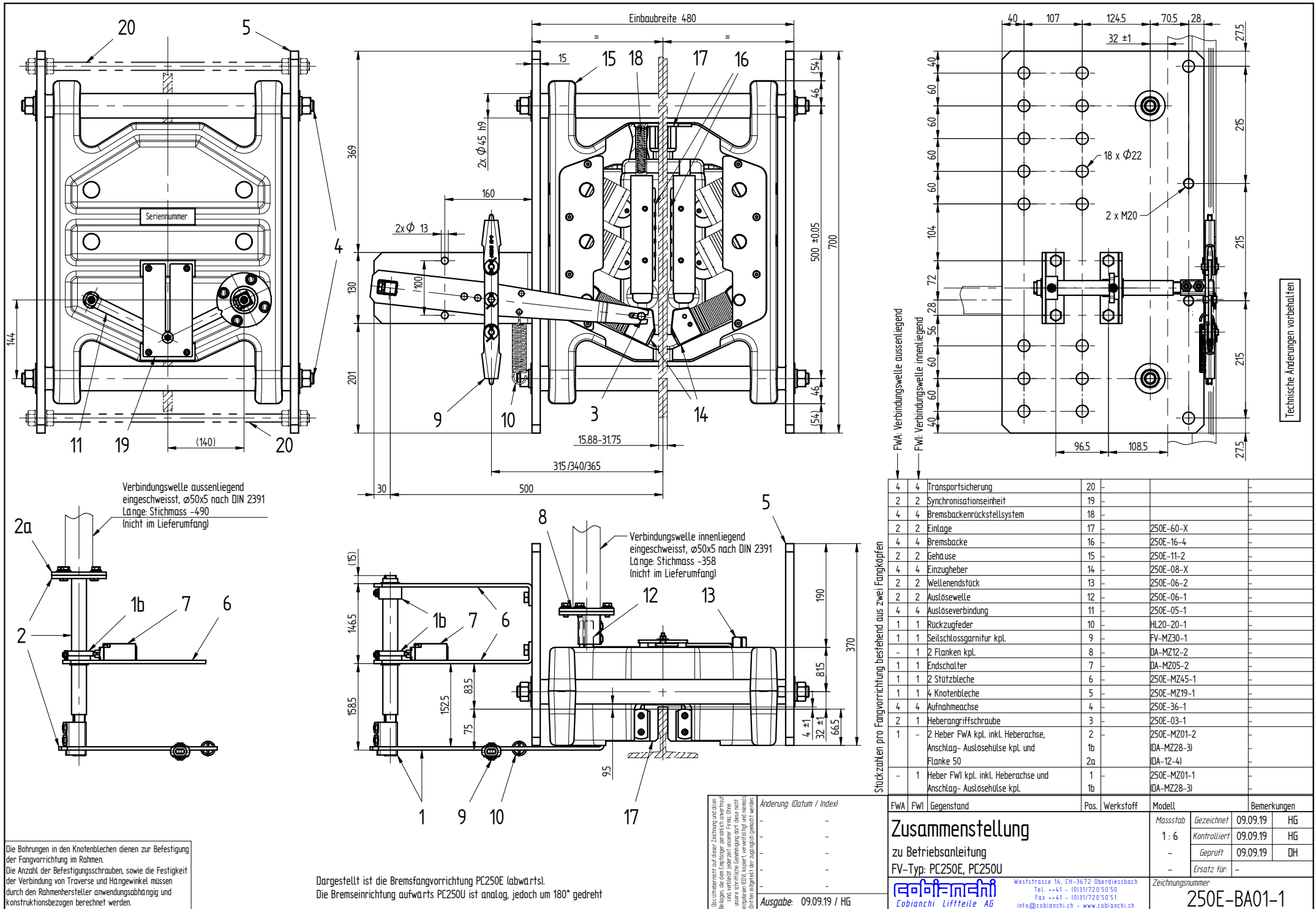
In general, and particularly in the case of construction hoists and conversions, ensure that arrester heads are protected against contamination by plaster, concrete, cement, mortar, gravel or similar building materials. Dirty interception heads must be removed and cleaned.

5. Lifespan

Safety gear interventions with increased tripping speeds of up to 2.63 m/s cause great wear on the brake elements. Failure to comply with these specifications may result in failure of the modules. Before worn brake elements lead to insufficient braking effect, the safety gear must be revised or replaced. At the latest after three catch tests with nominal speeds above 1.6 m/s and 100% or more loading, this must be done after consultation with the manufacturer.

Catch tests must be documented in the logbook (date, type of test, speed, loading, stopping distance, delay, special events, visa, ...).

If these simple instructions are followed, the safety for the lift user as well as for the installer can be considerably increased.



Die Bohrungen in den Knotenblechen dienen zur Befestigung der Fangvorrichtung im Rahmen.
 Die Anzahl der Befestigungsschrauben, sowie die Festigkeit der Verbindung von Traverse und Hangewinkel müssen durch den Rahmenhersteller anwendungsabhängig und konstruktionsbezogen berechnet werden.

Dargestellt ist die Bremsfangvorrichtung PC250E (abwärts).
 Die Bremseinrichtung abwärts PC250U ist analog, jedoch um 180° gedreht

Änderung (Datum / Index)

Massstab

Gezeichnet

Kontrolliert

Geprüft

Ersetzt für

Zeichnungsnummer

250E-BA01-1

Weststrasse 16, CH-3672 Oberdiessbach
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 Fax ++41 - 10317205051
 info@cobianchi.ch - www.cobianchi.ch

Massstab 1:6

Gezeichnet 09.09.19 HG

Kontrolliert 09.09.19 HG

Geprüft 09.09.19 DH

Ersetzt für -

Zeichnungsnummer

250E-BA01-1

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Kontrolliert 09.09.19 HG

Geprüft 09.09.19 DH

Ersetzt für -

Zeichnungsnummer

250E-BA01-1

FWA	FWI	Gegenstand	Pos.	Werkstoff	Modell	Bemerkungen
Zusammenstellung						
zu Betriebsanleitung						
FV-Typ: PC250E, PC250U						
Cobianchi Liffteile AG						
Ausgabe: 09.09.19 / HG						