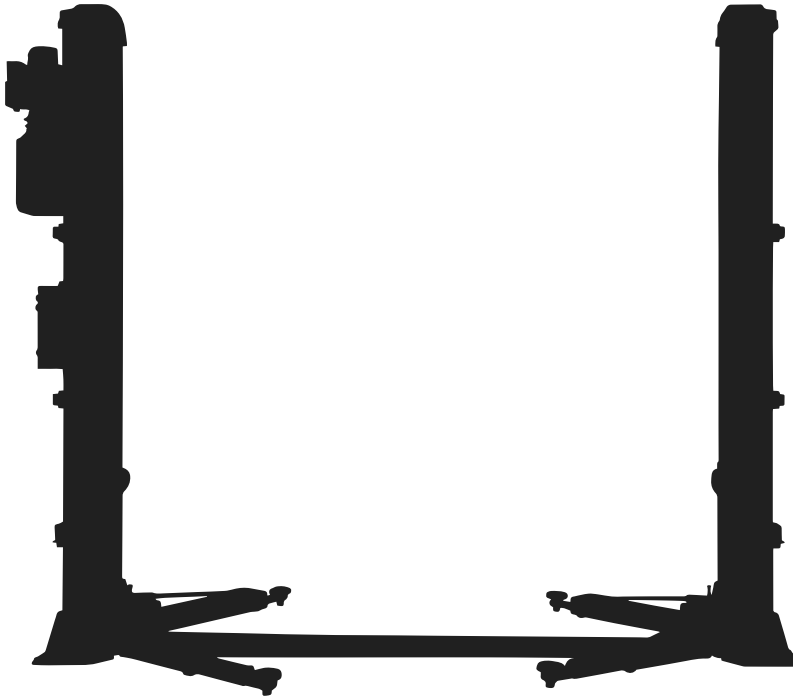
Falco



TYPE
VL35F230 - VL35F400

Please read this manual carefully before using the lift bridge.

Manual 052024V1

Index

Storing the user manual

For proper use of the manual, we recommend a few things:

- Keep the user manual near the lift in an accessible place.
- Keep the user manual in a place where it is not damp.
- Use the user manual in a normal way without damaging it.
- Any use of the lift by operators who are not familiar with the instructions and procedures described in this user manual is strictly prohibited.

This user manual is part of the lift and should therefore be kept carefully with the lift. When the lift bridge changes hands, the user manual should be delivered with it.

NLD 1. Symbolen label

ENG 1. Symbols label

NLD Lees en begrijp de gebruikershandleiding voordat u de hefbrug gebruikt.

ENG Read and understand the user manual before using the lift.

NLD Hef het voertuig alleen op de door de fabrikant aangegeven hefpunten.

ENG Lift the vehicle only at the lifting points specified by the manufacturer.

NLD Maak gebruik van de dubbele spindel om goed contact te maken, gebruik indien nodig ook de extra hoogte adapters.

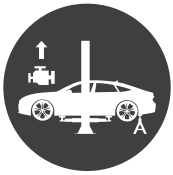
ENG Use the double spindle to make good contact, also use the extra height adapters if necessary.

NLD Alleen bevoegd personeel mag de hefbrug gebruiken.

ENG Only authorised personnel should use the lift bridge.

NLD Houd altijd uw aandacht op het voertuig en de hefbrug wanneer deze in werking is.

ENG Always keep your attention on the vehicle and the lift when it is in operation.



NLD Ondersteun het voertuig tijdens het verwijderen van onderdelen.

ENG Support the vehicle while removing parts.

1. Symbolen label
1. Symbols label

NLD Klim nooit op de brug of het voertuig.

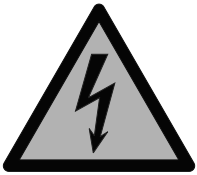
ENG Never climb on the bridge or vehicle.

NLD Het is ten strengste verboden om veiligheidsinstellingen te wijzigen of aanpassingen te maken aan de hefbrug.

ENG It is strictly forbidden to change safety settings or make adjustments to the lift bridge.

NLD Kom niet onder de hefbrug als deze in werking is.

ENG Do not get under the lift when it is in operation.



NLD Pas op! Hoog voltage, elektrocutiegevaar.

ENG Caution! High voltage, danger of electrocution.

NLD Pas op! Klemgevaar voor handen

ENG Caution! Clamping hazard for hands

NLD Pas op! Houd uw voeten op afstand tijdens het zakken vanwege het gevaar van pletten.

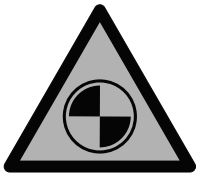
ENG Caution! Keep your feet away during lowering due to the danger of crushing.

1. Symbolen label

1. Symbols label

NLD Pas op! Houd bij het plaatsen van de hefbrug rekening met de maximale hefhoogte inclusief auto en de plafondhoogte.

ENG Caution! When positioning the lift bridge, take into account the maximum lifting height including car and ceiling height.



NLD Plaats het zwaartepunt van het voertuig altijd tussen de kolommen.

ENG Always place the centre of gravity of the vehicle between the columns.

NLD Overschrijd nooit de maximale capaciteit van de hefbrug.

ENG Never exceed the maximum capacity of the lift bridge.

NLD Hef het voertuig ongeveer 30 cm en controleer de stabiliteit.

ENG Lift the vehicle about 30 cm and check stability.

NLD Vermijd overmatige beweging van voertuigen in geheven positie.

ENG Avoid excessive movement of vehicles in raised position.

NLD Houd vluchtroutes vrij zodat het werkgebied in geval van noodsituaties veilig verlaten kan worden.

ENG Keep escape routes clear so that the work area can be safely left in case of emergencies.

1. Symbolen label
1. Symbols label

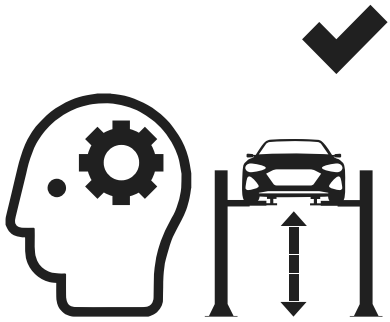
⚠ NLD Zorg ervoor dat er geen objecten onder het voertuig staan voordat het zakt.

ENG Make sure there are no objects under the vehicle before it lowers.

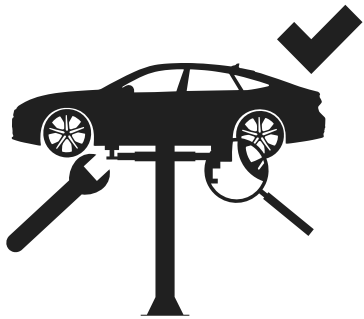
X NLD Probeer nooit het voertuig slechts aan één kant op te heffen.

ENG Never try to lift the vehicle only on one side.

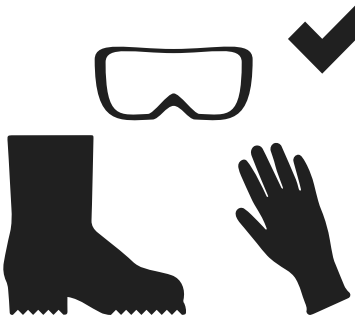
2. Safety in pictures



Only experienced persons should use the lift bridge.



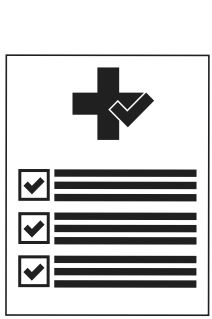
Use the lift bridge to lift vehicles to carry out inspection, maintenance, and repair work.



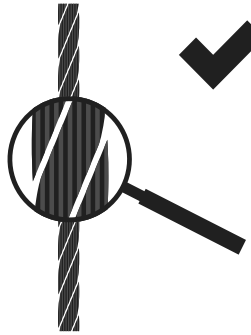
Always wear safety shoes when working with the bridge, as well as PPE appropriate to the work being carried out on the vehicle.

ENG

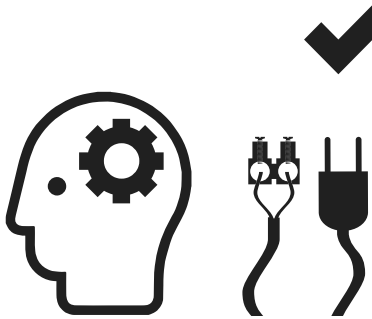
Prevent accidents, keep the workplace clean and tidy.



Always use the lift bridge according to the manufacturer's instructions.

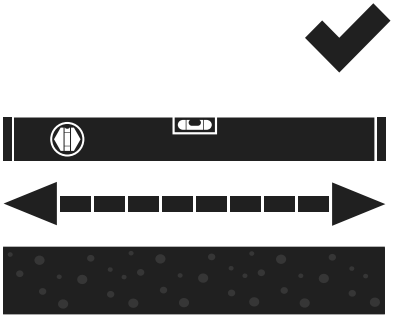


Check cabling and piping, repair damage or defects before using the lift.

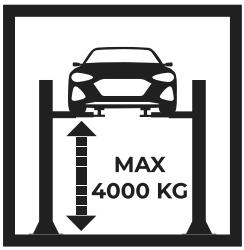


Electrical connections must only be made by persons trained and experienced for this purpose.

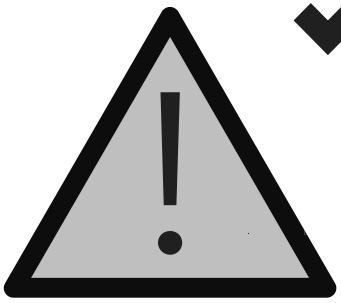
Make sure the car's engine is off, it is in gear and on the parking brake.



Make sure the surface is level and firm.



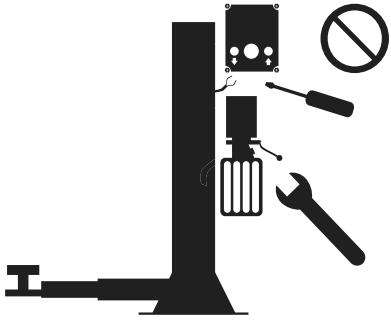
The lift is designed to lift vehicles up to 4000kg in an enclosed space, any other use is prohibited.



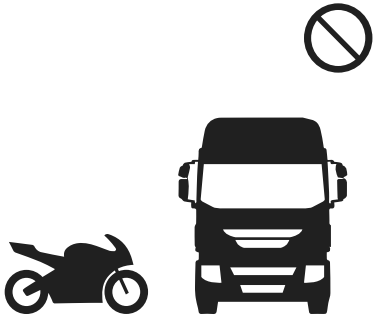
Caution! Ensure that safety devices are functioning when using the lift bridge.

ENG

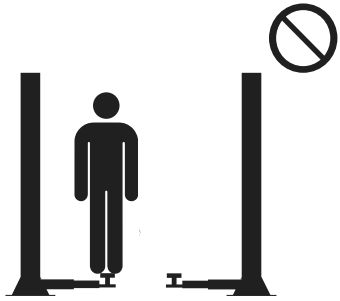
The supplier is not responsible for unauthorised modifications to the lift bridge.



Removing or disconnecting hydraulic, electrical or safety devices is prohibited.

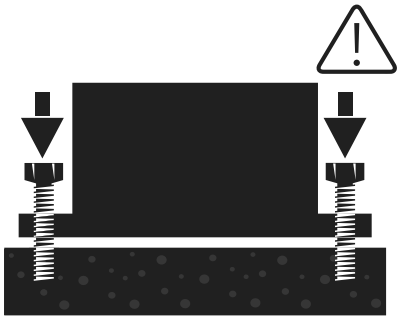


Only lift authorised vehicles without exceeding the maximum lifting capacity.

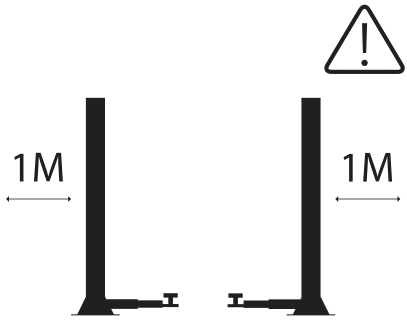


During the lifting and/or lowering process, no persons are allowed near the lift.

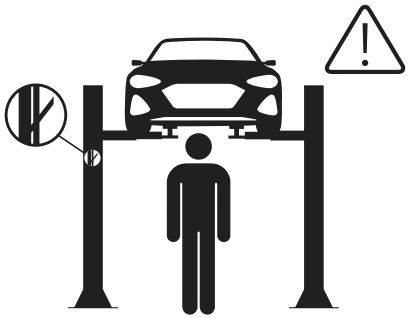
ENG



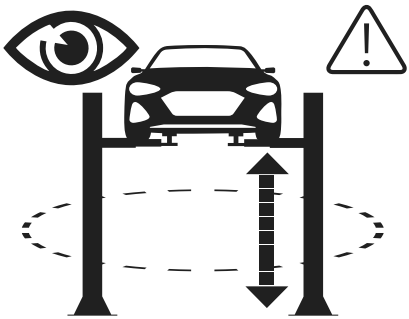
Mount the lift bridge securely on the surface as per the regulations to avoid instability and consequent damage or injury.



Provide a safe area of at least 1 metre around the lift before lifting or lowering the lift.



The operator should only move under the lift bridge when it is locked.



Keep an eye on the space around the lift during lifting and lowering for safety reasons.

3. Safety regulations

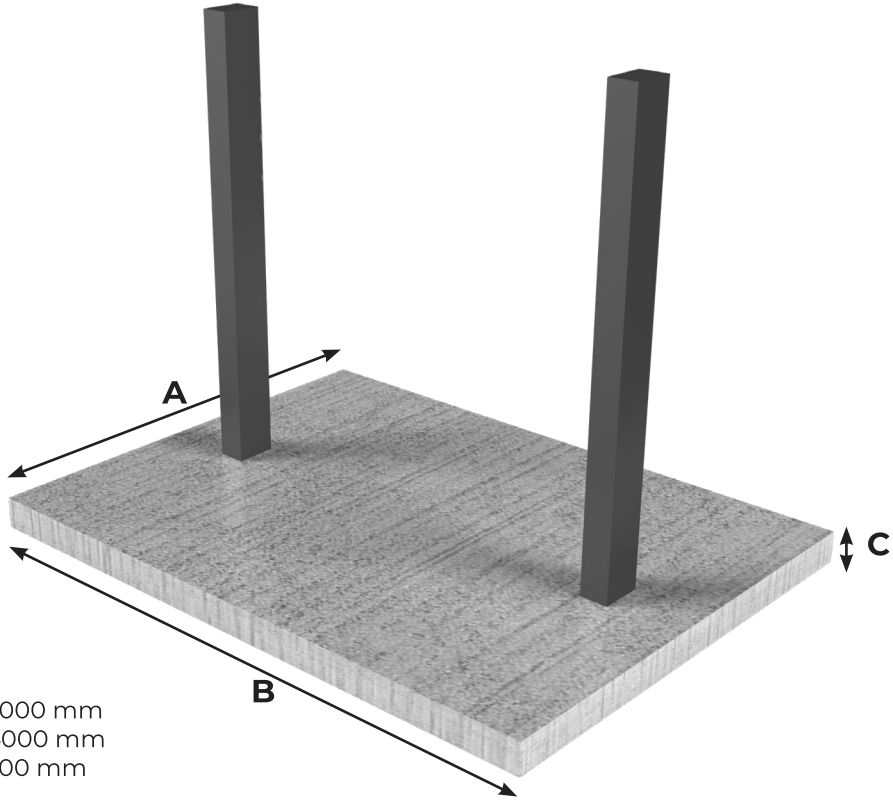
- Use of the bridge should always be within the specifications described in this user manual.
- This user manual is part of the bridge and should therefore be kept carefully with the machine. When the machine changes ownership, the user manual should be supplied with it.
- Only instructed persons should work with the machine.
- Wear the necessary personal protective equipment such as safety shoes, safety glasses and gloves.
- The workplace should be clean, free of oil and grease and tidy to prevent tripping and slipping.
- Fix the machine to the surface by using the holes provided in the unit and follow the instructions in this manual. CAUTION: Failure to mount the bridge properly may result in instability, this may result in serious damage to property, equipment and serious personal injury.
- Before each use, check the bridge, cabling and piping for damage, mechanical deformation, wear and tear. In case of any defect, take bridge out of operation immediately and rectify the defect before the bridge may be used.
- Only authorised persons should make electrical connections.
- The supplier is not responsible for unauthorised modifications to the bridge.
- For the safety of the operator and other persons, a safe area of at least 1 metre should be kept clear around the bridge and vehicle when the bridge is lifting or lowering. The bridge should only be operated from the operator's position for safety reasons.
- The operator should only go under the bridge when it is in the raised position and in the arrested position.
- The operator and the person in charge of maintenance must comply with the accident prevention rules and regulations in force in the country where the lift is installed.
- They should also pay attention to the following;
- Both removing and disconnecting hydraulic, electrical or safety devices are prohibited.
- Carefully follow the safety regulations found on the machine and in the manual.
- Keep an eye on the area around the lift during lifting for safety reasons.
- Make sure the vehicle engine is off, the vehicle is in gear and the handbrake is on.
- Make sure that only authorised vehicles are lifted without exceeding the maximum lifting capacity.
- Make sure no one or the lift is standing during the lifting and/or lowering process.

4. Assembly

Check before installation

1. The installation of the bridge should be carried out by a competent person who is familiar with the dangers and requirements of the bridge.
2. The place where the bridge is installed should have a solid power connection and solid earth wires.
3. Make sure that your power source has a 16A/20A fuse and that a PKZ motor circuit breaker is present in case of power supply, use a cable with a minimum conductor thickness of 2.5 mm^2 as connection lead.
4. The concrete floor on which the bridge is placed should meet the requirements below.

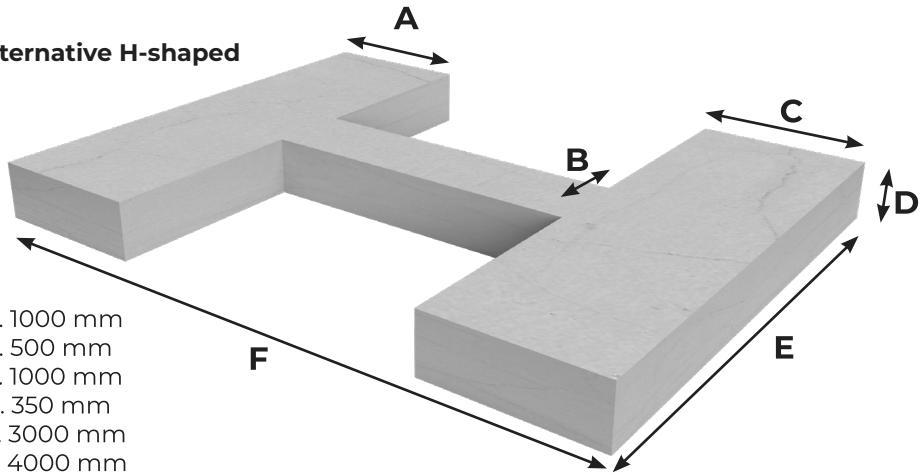
The foundation of the lift bridge must meet the following requirements:
The concrete should be at least of strength class C20-25 (250kg/cm^2).
The area of the foundation should be at least 4000mm long x 3000mm wide x 200mm thick, see drawing.
Newly poured concrete should cure for 28 days.



A. 3000 mm
B. 4000 mm
C. 200 mm

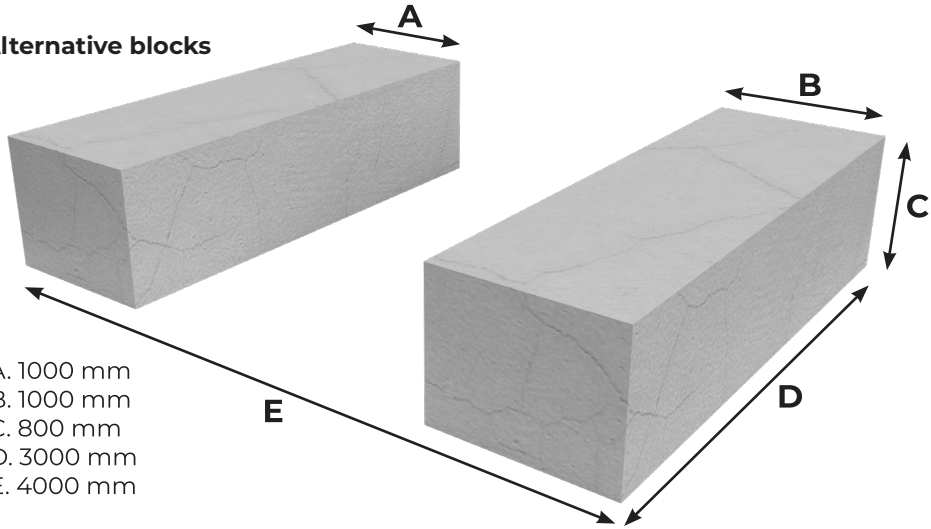
Partial foundation requirements:
If it is decided to pour a partial foundation, it should meet the requirements shown in the drawings below, which assume a concrete strength of C20-25.

Alternative H-shaped



A. 1000 mm
B. 500 mm
C. 1000 mm
D. 350 mm
E. 3000 mm
F. 4000 mm

Alternative blocks



A. 1000 mm
B. 1000 mm
C. 800 mm
D. 3000 mm
E. 4000 mm

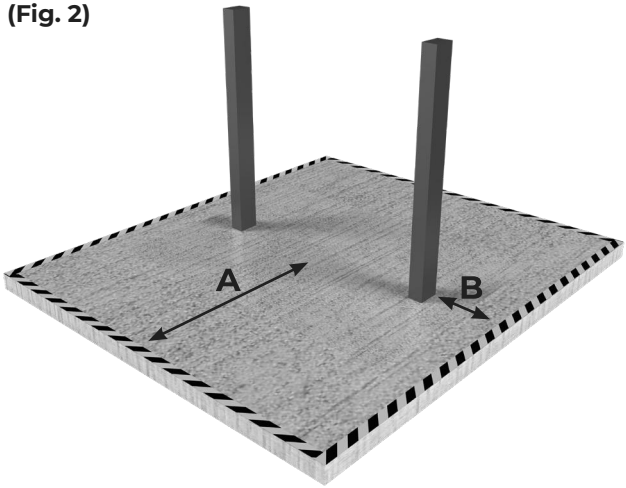
Unpack
The bridge is delivered as follows: 1 box with the control unit, 1 box with the hydraulic pump, 2 caps for on top of the columns, 12 M18*160mm anchor bolts (loose), 8 weld clamps (loose) and the two columns, this contains the rest of the parts.

1. First, remove the plastic from the two columns and then take all the parts from the upper column.
2. Now support the top column with a forklift truck or using lifting straps and a hoist. When doing this, make sure you support the column on the

bottom side, this is where the column is top-heavy. Place a cloth or piece of cardboard over the forklift spoons to prevent damage.
3. Now loosen the bolts attaching the column to the brackets and then lift the column out of the brackets. Carefully lay the column down on the spot where it will later be placed.
4. Repeat steps 2 and 3 for the lower column.

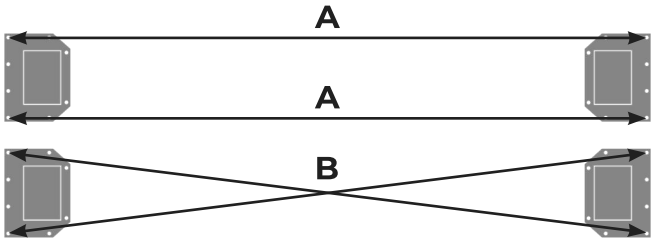
Placing the columns
Once the concrete has cured, check the floor for cracks and unevenness. Setting out the dimensions (fig.3) and drilling the holes should only be done by a professional fitter, taking into account the safety zone (see fig.2). It should be ensured that the columns are perpendicular to the floor, then if necessary use iron shims and concrete to fill any gaps between the base plate and floor. Use M18*160mm anchor bolts to secure the base plate also this should only be done by a professional fitter, the bolts should be able to handle a tensile force of 3000kg each, in addition the use of chemical anchors is recommended. Mark the safety zone around the bridge.

Safety zone (Fig. 2)



A. 3000 mm
B. 1000 mm

Distance between columns (Fig. 3)



A. 3345 mm
B. Make sure the diagonals are equal.

Assembling the magnetic coils

The magnet coils of column B (page 23) have yet to be assembled.

1. Turn the magnetic coil (1, fig.4a) in the column.
2. Now loosen the Allen bolt (1, fig.4b) and loosen the arresting pawl (2, fig.4b).
3. Hook the shaft of the solenoid valve (3, fig.4b) into the arresting pawl (2,fig.4b).
4. Replace the halt pawl and secure it with the plate and socket-head screw.

Fig. 4a

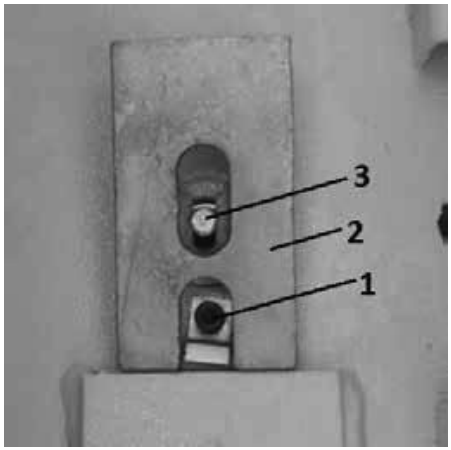


Fig. 4b

Mounting the steel cables

1. Two steel cables are supplied with the bridge, these should be mounted.
2. Lift both lifting bodies to the lowest position of the arrester.
3. Remove the steel cables from the column and loosen the nuts on the side where the steel cable is attached until they are at the end of the threads, do not twist them off completely!
4. There is a straight side on both lower pulleys, make sure it is down (fig.5), then feed the wire rope through.
5. Feed the steel cables through as shown in fig.6a and 6b.
6. Attach the wire ropes to the lifting bodies with the nuts and tension the ropes using the nuts, then secure them properly.

Fig. 5

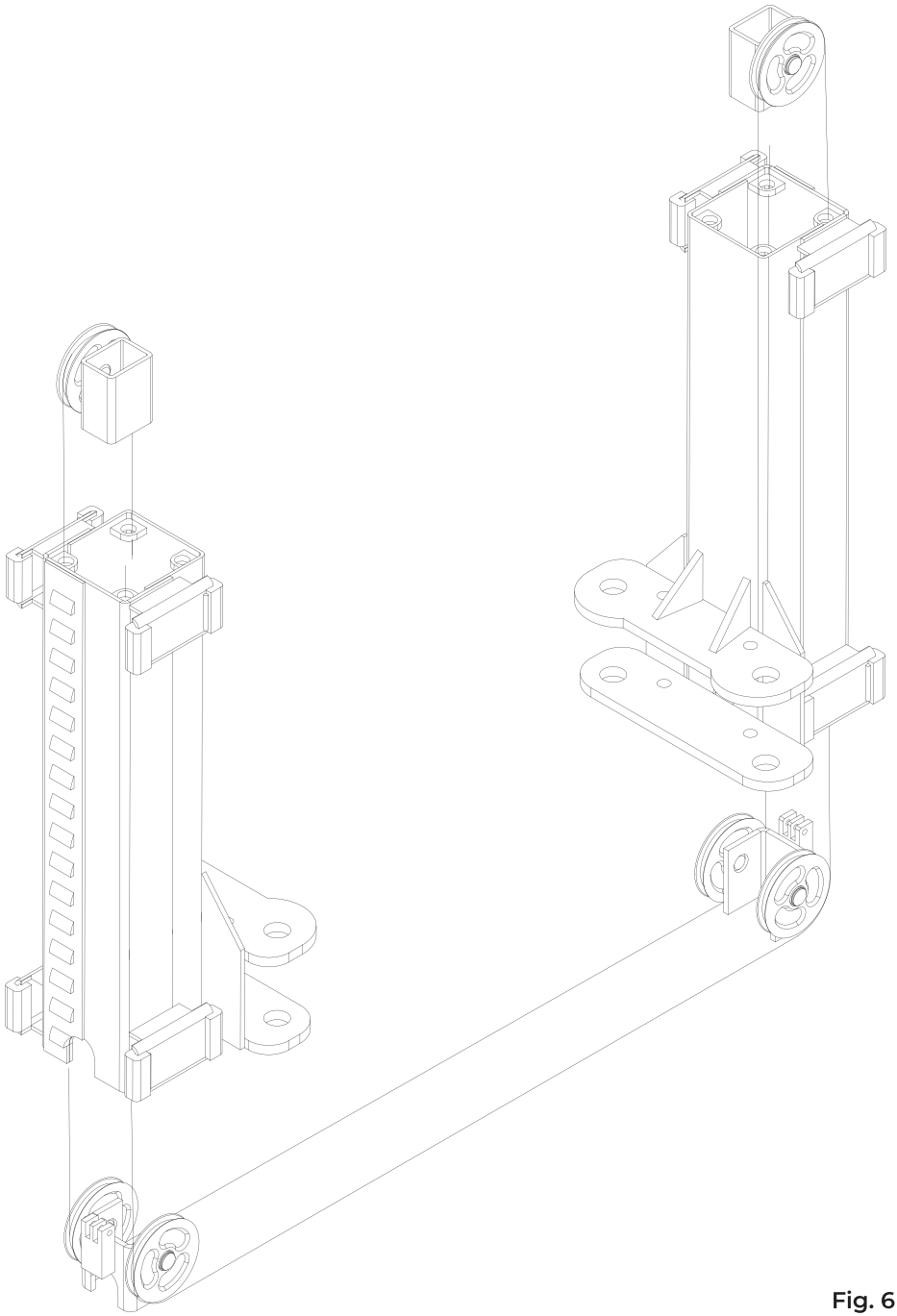


Fig. 6

Installing the hydraulic pump

1. Place the hydraulic pump against the square plate (1, fig.7) on column A (page 23).
2. Fix the pump to the column with the M8*20mm bolts, washers and nuts (fig.8).

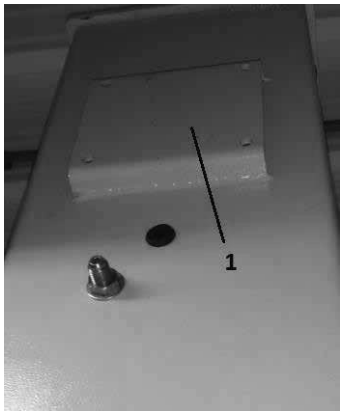


Fig. 7

Fig. 8

Connecting the power supply

CAUTION: Have all electrical components connected by a professional electrician, damage caused by incorrect connection is not covered by the warranty.

1. Place the control panel against column A and secure the unit with the four bolts that come with the control unit.
2. Inside the column, you will find a cable where four wires come out, blue, red, green, and brown. Insert this cable out through the hole above the unit. Now loosen the one of the glands on top of the unit and feed the cable through here. After this, retighten the cable gland.
3. Connect the blue cable to position 15 (1, fig 10), the red cable to position 17 (2, fig 10), the green cable to position 19 (3, fig 10), and the brown cable to position 21 (4, fig 10). These cables are from the lower limit switch.
4. Now feed all the outgoing cables from the control unit through the hole above the unit into the column. Now insert all cables through the slot (1, fig.11a) upwards, the shortest cable goes through the hole of the solenoid valve (2, fig.11a) together with another cable, this one comes from below and should also be connected to the solenoid coil.

Fig. 10

5. Now connect both cables to the solenoid coil, couple one of the red wires together with a black wire from the solenoid valve and then do the same with a blue wire (fig.11b), now connect the wires using the welding terminals (fig.11c).

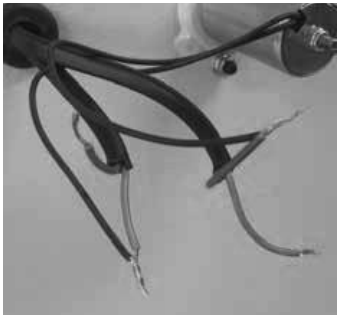


Fig. 11a **Fig. 11b** **Fig. 11c**

6. Feed the two long signal cables and the power cable up through the slot, of the two signal cables, one is for the upper limit switch and the other for the hydraulic pump solenoid valve. The cable going to the limit switch is connected in the control unit at position 5 and 3, the cable from the pump solenoid valve is connected at position 17 and 8.
7. Before connecting the cables, check which cable belongs to which one, do this carefully.
8. Now connect the limit switch, remove the black cap and the rubber, now place first the rubber and then the cap over the signal cable. Pinch two cable lugs (not included on the wire ends and now screw the wires in place at the positions shown in fig.12b.
9. Now attach the limit switch to the inside of the column using the 2 M6*10mm bolts (fig.12c).

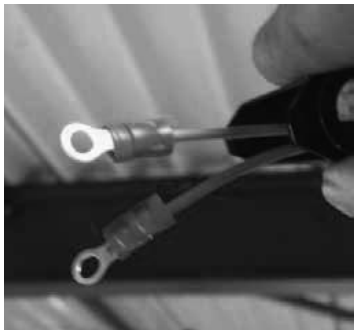


Fig. 12a **Fig. 12b** **Fig. 12c**

10. Then connect the power cable to the hydraulic pump. Feed the cable out from inside the column. Then unscrew the cap of the pump and unscrew the two cables leading out of the pump, after this unscrew the swivel and remove the cable, now feed the power cable through.
11. 230V: Now screw all wires (1,2 &3, fig.13) in place, as connected in figure 13a, now tighten the cable gland again and replace the cap. 400V: Now screw down all wires to the spot, as connected in figure 13b, now tighten the cable gland again and replace the cap.

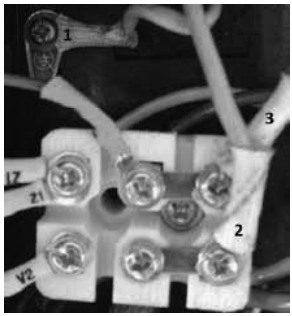


Fig. 13a

Fig. 13b

12. After connecting the power supply to the pump, the solenoid valve can be connected. Check that the cable with red and blue wire is connected to positions 17 and 8 in the control unit, see step 4.
13. Loosen the nut securing the solenoid valve to the pump and remove the solenoid valve from the pump. Now loosen bolt 1 (fig.14a) and remove the plastic cover from the solenoid switch.
14. Now unscrew the two clamping bolts (1, fig.14b) remove the two blue wires, unscrew the cable gland and remove the cable with the two blue wires.
15. Place the cable gland and cap over the cable with the red and blue wires and connect the wires to the solenoid valve using the clamp bolts as shown in figure 14c.
16. Now reattach the solenoid valve cap with bolt 1 (fig.14a), tighten the swivel and place the solenoid valve over the bolt against the pump and tighten it again with the nut.

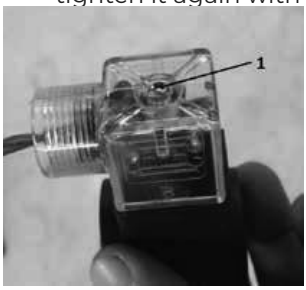


Fig. 14a

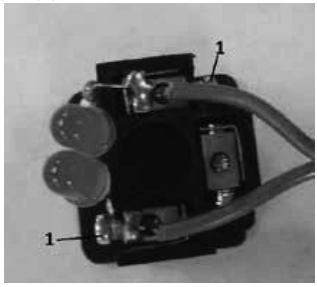


Fig. 14b

Fig. 14c

17. Now bring the solenoid valve cable from the column with the pump to the other side. Guide the cable through the pre-drilled hole to the inside of the column and bring it up through the cable duct. Now connect both cables to the solenoid coil, connect one of the red wires together with a black wire from the solenoid valve and then do the same with a blue wire , now connect the wires using the welding terminals . Now connect both wires to the solenoid coil, connect one of the red wires together with a black wire from the solenoid valve and then do the same with a blue wire (fig.11b), now connect the wires by means of the welding clamps (fig.11c).

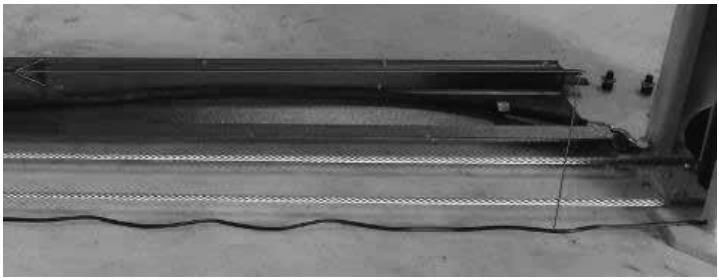


Fig. 15c

Assembling the base plate

1. Now snap the long hydraulic line (35, page 23) into the base plate along its entire length (fig.16).
2. Now turn the bottom plate over and lay it over the steel cables on the columns.
3. Fasten the bottom plate to the columns with the 4 M12 bolts, spring washers and washers.

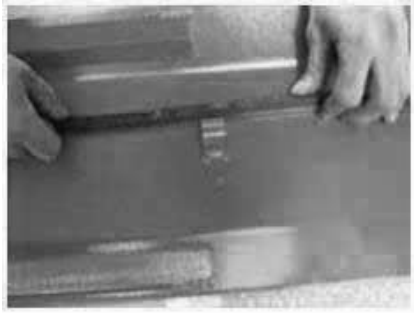


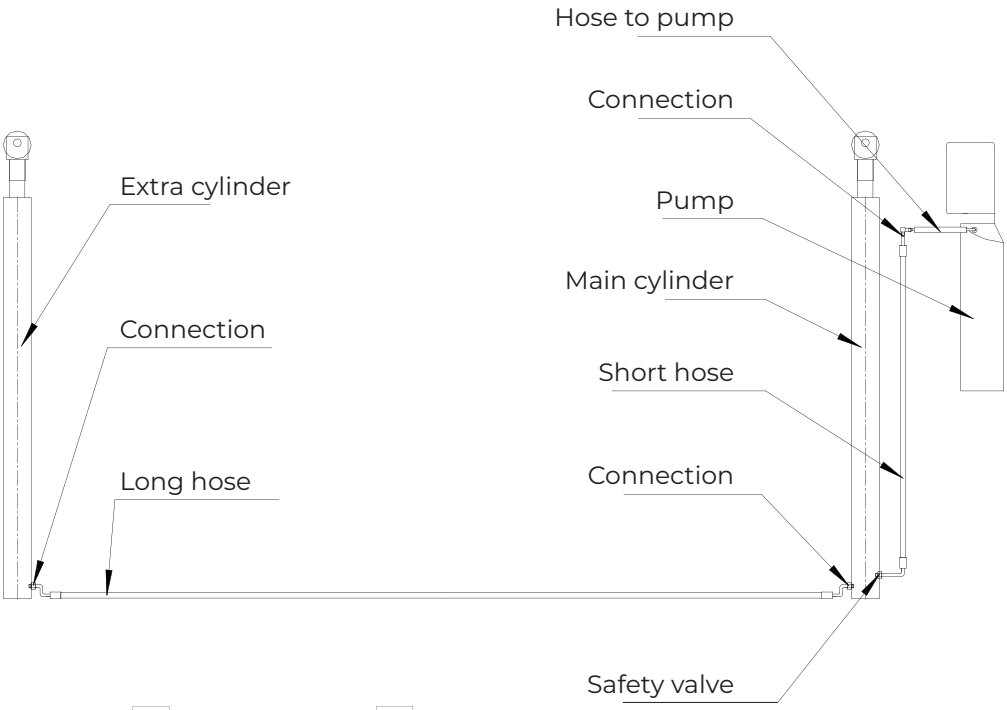
Fig. 16

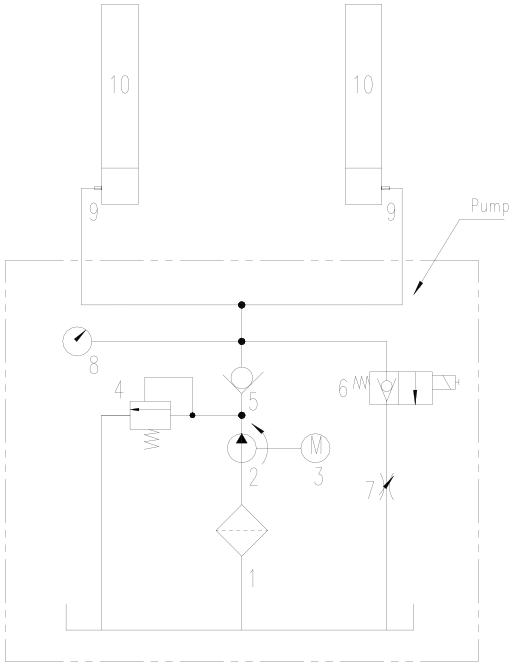
Connecting the hydraulic lines

1. First connect the short hydraulic hose from the pump to the cylinder (fig.17a).
2. Now connect the long hydraulic stroke to the cylinders on both sides (fig.17b).
3. See fig.17c and 17d for a schematic representation of the hydraulic system.

Fig. 17a

Fig. 17b





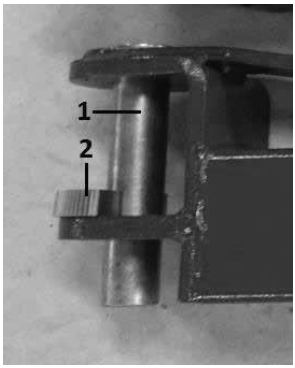
1. Filter
2. Gear pump
3. Motor
4. Transfer valve
5. Check valve
6. Solenoid valve
7. Flow control valve
8. Pressure gauge
9. Explosion-proof valve
10. Master cylinder
11. Secondary cylinder

Fig. 17c

Assembling the telescopic arms

LET OP! De brug dient in de laagste stand te staan, dan zijn de arreteringen vrij. Houdt er bij het monteren van de armen rekening mee dat de 2-delige telescooparm de voorkant van de auto moet ondersteunen.

1. Remove the pin (1, fig.18) from the arm.
2. Lubricate the pin and gearing of the arrester (2, fig.18) with EP40 multi-vet, also lubricate the gearing of the arrester in the column with some multivet.
3. Place the arm in the recess of the lifting body and make sure the ring (fig.18a) is fitted between the lifting arm and align the holes.
4. Feed the pin through.
5. Now insert the rubber pad, remove the spring ring with spring ring pliers, insert the rubber pad. Replace the spring ring when the bridge is in raised position.
6. Repeat steps 1 to 5 for the other arms



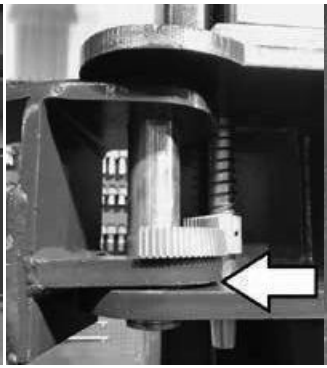


Fig. 18 **Fig. 18a**

Fitting the flexible cover for the columns

1. Loosen the nuts and washers of the flexible cover.
2. Insert the two threaded ends through the two holes at the top of the column and secure them with the washers and nuts.
3. Feed the flexible seal through the slot in the lifting body (fig.19a).
4. Attach the flexible seal to the column using the springs (fig. 19b).

Fig. 19a **Fig. 19b**

Assembling the remaining parts
1. Fit the rubber door guards against the lift body with the M6 socket head bolts.
2. Fit the caps on top of both columns.
3. Fit the magnetic coil guards with the M6*16mm crosshead bolts.

5. Preparing for use

Filling and bleeding the hydraulic system
1. Before filling the hydraulic system, the arms of the bridge should be in the lowest position.
2. Fill the reservoir with 9 litres of hydraulic oil, use only Falco CH46V hydraulic oil.
3. Now connect the bridge to the electrical supply.
4. Now press the lift button on the control panel (see chapter 5, Operation), venting is automatic. Lift the bridge all the way up and then lower it all the way down again.
5. After bleeding, top up the oil to the MAX mark, the bridge should be in the lowest position again.

Testing the bridge
Pre-testing
1. First check that all connections of nuts and bolts are tight.
2. Check that all buttons function smoothly, when the button is released, it should return to position immediately.
3. Check that all hydraulic lines are tight and sealed.
4. Check that there are no leaks in the hydraulic system.
5. Check that the electrical supply meets the requirements of the bridge and that it is properly earthed.

No-load testing
1. Check that the direction of rotation of the motor matches the direction of rotation indicated on the gear pump.
2. Check that all arresting valves are functioning by pressing the Lock button (see section 5, Operation).
3. Check that both lifting bodies are in sync.
4. Check the tension of the steel cables.
5. Check that the cylinders are centrally located in the column.
6. Check that the lifting bodies move up and down smoothly.
7. Check the hydraulic system for leaks.
8. Fully raise and lower the bridge twice.

Testing with load
If everything is working properly without load, the bridge can be tested with load, place a vehicle on the bridge.
1. Gradually raise the vehicle, first to about 1m.
2. Check every working part of the lift and adjust parts if necessary.
3. If everything goes normally, lift the vehicle to the maximum height.
4. Fully lift and lower the bridge twice.

6. Operation

The 2-column lift can be used to lift vehicles up to a maximum weight of 3500kg, allowing maintenance and repairs to be carried out on the vehicle.

Preparation
Now place the car in the centre of the two columns so that the centre of gravity is level with the two columns and place the telescopic arms under the undercarriage. Make sure the weight of the vehicle is evenly distributed before lifting the car. Before lifting the vehicle, turn up the rubber pads until they are against the supports of the vehicle. You should support the vehicle under the vehicle manufacturer's specified lifting points, place them in the centre of the rubber pads so that the support area is perfectly centred. Note! The manufacturer may prescribe an adapter, so please read the vehicle manual before lifting!

Lifting
When the power is connected, turn the power main switch (1, fig.20) from the '0' position to '1', the green light will now come on. Then press the Lift button (2, fig.20) and lift the car. When the car is lifted 100-150mm off the ground, release the button and stop lifting. Move the car to make sure it rests firmly and stably on the rubber supports. Then press the Lift button again and raise the car to the desired position.

Fig. 20

Stop
Release the Lift button, the lift will now remain stationary.

Lock
Press and hold the Park button (4, fig.20) for a few seconds. When the lifting bodies are locked, the button can be released. Caution! The bridge should always be locked before any work can be done on the vehicle!

Lower
Press the Bag button (3, fig.20), the bridge first rises slightly, then the arresting device unlocks and the magnetic valve of the pump then opens the hydraulic cylinders. The lowering of the bridge is delayed for 1 to 2 seconds by the magnetic valve, at the same time the engine stops. The vehicle now lowers to the foot protection position.

Lowering from the safe height to the lowest position
The bridge lowers, due to its own weight and the vehicle to the safe height. Check that there are no persons or objects in the safe area around the lift. Now press the Park button (4, fig.20) until the lift is fully lowered, you will hear a beeping sound and the red light on the control unit will come on. The bridge now lowers to its lowest position.

Points of attention during operation
- No one should be in the safety zone when lifting and lowering the bridge.
- When the vehicle is at the desired height, the bridge should be locked. Only when the bridge is locked should mechanics start working on the

vehicle.
- Before lowering the vehicle, clear the entire work floor under the vehicle.
- Check every part of the moving parts every week, lubricate the lifting bodies and check that all moving parts are well lubricated and in the correct position.
- Lower the bridge completely and check the oil in the oil tank. Make sure the oil tank is filled almost to MAX.
- If you cannot solve a problem, contact your Falco sales outlet.

7. Safety device

Automatic locking mechanism
Each column is equipped with two magnetic arrestors, consisting of a Magnetic Coil(1), Metal Shaft(2), Column(3), Arresting Pawl(4),Adjusting Nut(5) and Lifting Body(6) (see Figure 21).

Function arrest mechanism
During lifting and parking there is no tension on the Magnetic Coil (1), the Arreteerpal (4)protrudes into the column. In this position, the protruding surfaces on the Lifting Body (6) will snag on the Arreteerpal (4) during downward movement, thus locking the bridge. When lifting, the protruding surfaces move smoothly along the Arreteer pawl (4).
During lowering, tension is exerted on the Magnetic Coil (1), this causes the Metal Shaft (2) and the Arreteer Pawl (4) to retract (Fig.22). The protruding surfaces of the Lifting Body (6) can now move along the Arreteerpal (4) without snagging. The bridge can now lower smoothly to the desired height.

Adjusting the locking mechanisme
LET OP! Controleer voor ieder gebruik van de brug of de arretering goed functioneert, het niet opvolgen van deze instructies kan schade aan materialen of ernstig lichamelijk letsel tot gevolg hebben!
- If the arresting pawl does not drop in unpowered far enough, it cannot lock the lift body, which can cause the bridge to keep lowering. You can adjust this by turning the adjusting nut (5) at the back of the valve counterclockwise. Make sure the adjusting screw is secured again after each adjustment!
- If the locking pawl does not retract far enough, it will continue to lock the lifting body, preventing the bridge from lowering. You can adjust this by turning the adjusting screw at the back of the valve clockwise. Make sure the adjusting screw is secured again after each adjustment!

Foot-safe height protection
When the bridge lowers, it remains suspended at 30cm, which is the foot-safe height. After this, one should lower the bridge using the Park button. This safety feature prevents one's foot from getting trapped under the vehicle or the arms of the bridge. When the bridge lowers the last bit, a loud beep sounds to warn people that the bridge is now lowering to its lowest point.

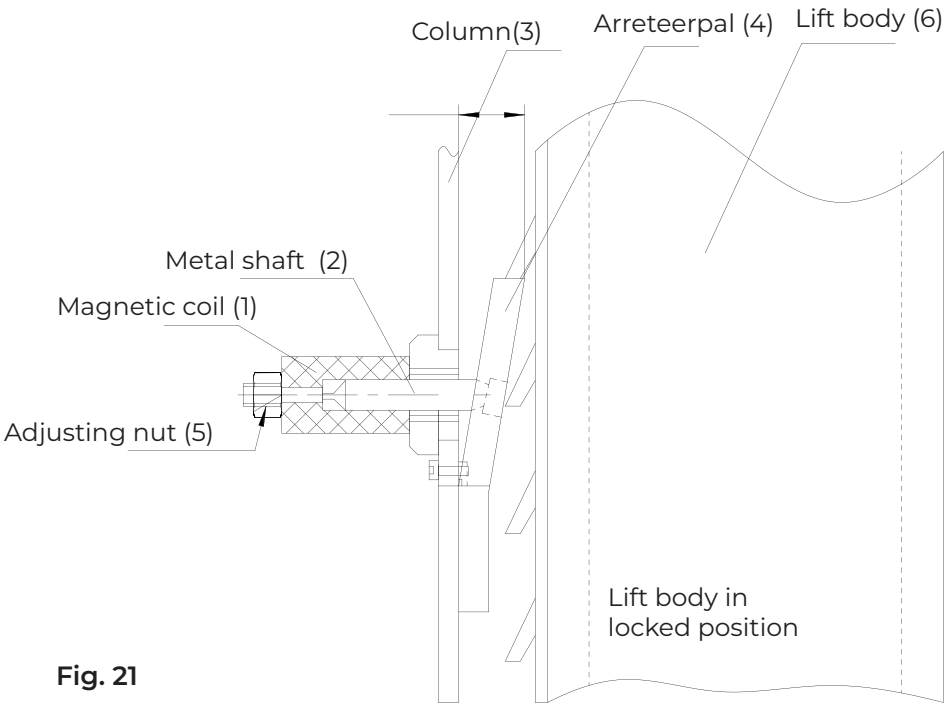

Column(3)
Arreteerpal (4)
Lift body (6)
Metal shaft (2)
Magnetic coil (1)
Adjusting nut (5)
Lift body in
locked position

Fig. 21

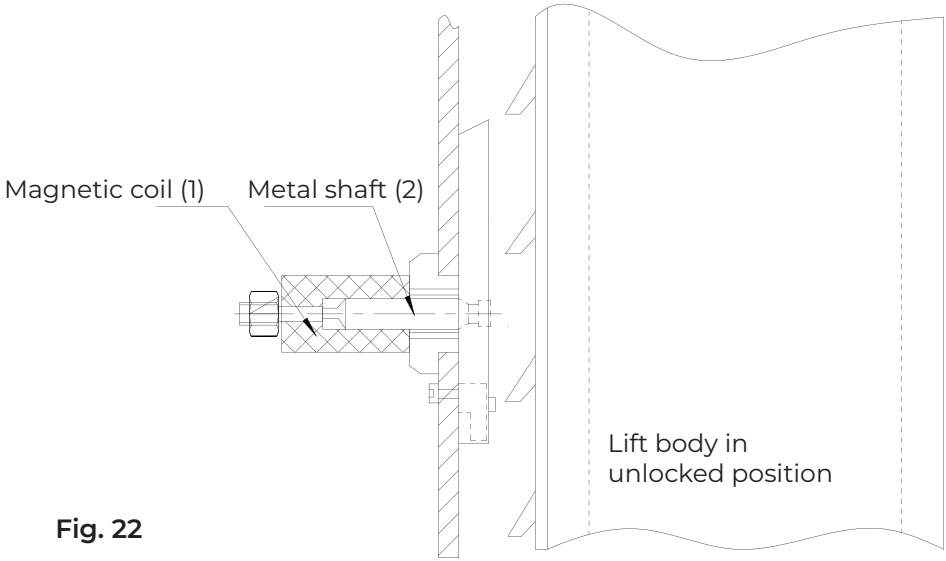

Magnetic coil (1)
Metal shaft (2)
Lift body in
unlocked position

Fig. 22

8. Maintenance

The bridge should be wiped regularly with a damp cloth to keep it clean. Before wiping it, set the main switch to the 0 position so that there is no voltage on the bridge. The working area around the bridge should be wiped clean. If large piles of dirt accumulate, it will accelerate the bridge wear process, significantly reducing the life of the bridge.

General checks

- Check the bridge's safety devices at the beginning of each working day. The halters should be functioning properly, the halt pawl should be in position. The lift body should show no signs of wear, cracking and/or deformation. If you discover a defect, the bridge should be taken out of service immediately until the defective part is repaired or replaced by a professional mechanic.
- Check daily that there is no play in the chains, this could cause them to hit the cylinder, also check the attachment of the chains to the columns.
- Check daily that the steel cables are properly attached/secured and that they are properly tensioned.

Maintenance of the hydraulic system
Cleaning and oil change

3 Months after commissioning, you should drain the oil from the hydraulic system and refill the system with new oil. After that, you should do this once every six months, clean the hydraulic system and replace the oil.

Replacing gaskets

If you discover an oil leak, give the machine a thorough inspection. If the leakage is due to wear of one or more gaskets, replace them immediately.

Inspection

NOTE: The lift bridge must meet the requirements/inspection listed below.

- Upon commissioning, check that the manual and EC declaration of conformity are complete including maintenance schedule and inspection certificate.
- The bridge should be inspected every 12 months according to national standards by an authorized company and/or a specialized person.
- Valkenpower bv reserves the right to perform any inspection required by law.
- An accurate inspection for change due to impact on corrosion, cracking, deformation should take place every month with intensive use.

Maintenance

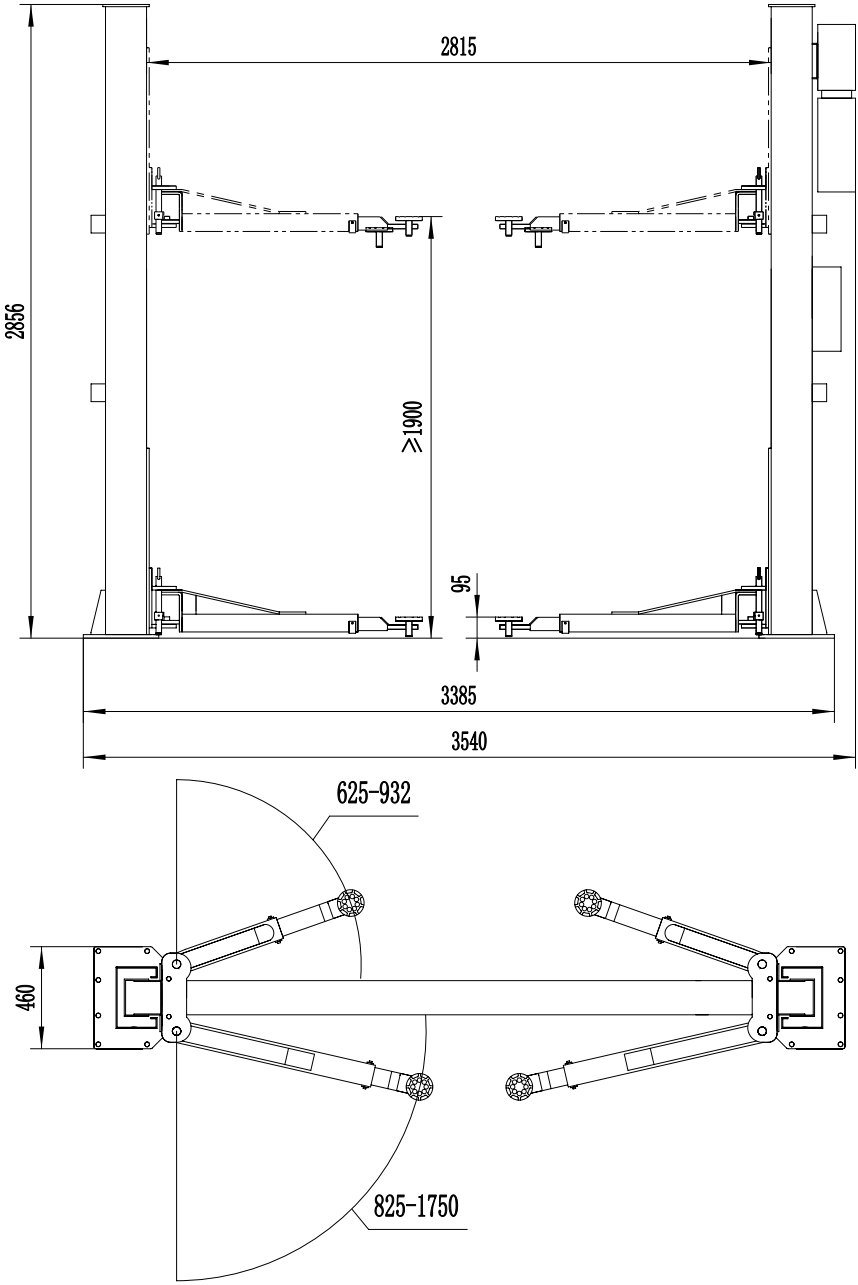
CAUTION! Inspection and maintenance work should be carried out by a specialist mechanic.

- Before each use, check the proper functioning of the 2-column bridge.
- In case of any uncertainties or deformation the 2-column bridge must be taken out of operation immediately.
- Defective parts must be replaced with original Falco parts by a specialist mechanic. Failure to follow these instructions may void the warranty.

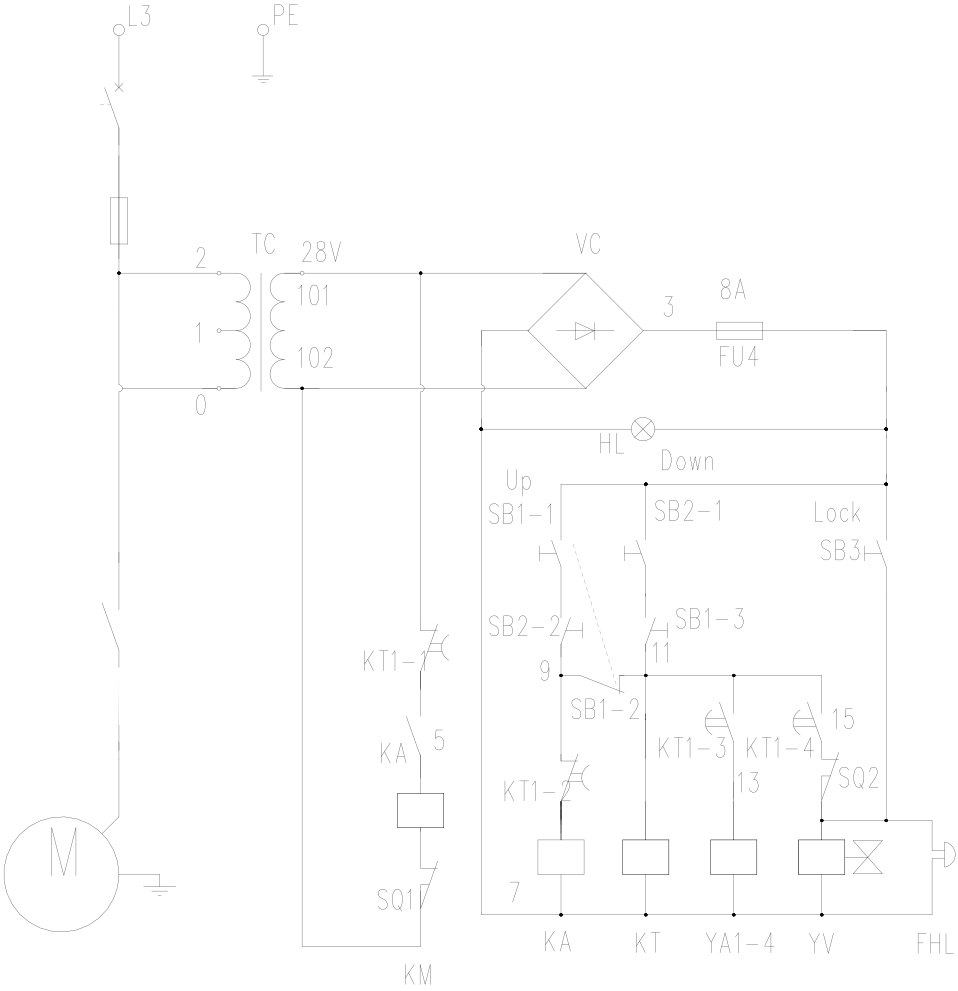
9. Specifications

Model	VL35F230	VL35F400
Maximum lifting capacity (kg)	3500	3500
Minimum lifting height (mm)	100	100
Maximum lifting height (mm)	1850	1850
Lifting time from min. to max. height (s)	<55	<55
Lowering time from max. to min. height (s)	>20	>20
Power generator (kW)	2,2	2,2
Bridge voltage (V)	230	400
Control unit voltage (V)	DC24	DC24
Effective width (mm)	2815	2815
Range of 2-part telescopic	620 - 890	620 - 890
lifting arm (mm)	790 - 1570	790 - 1570
Range of 3-part telescopic	2806	2806
lifting arm (mm)	610	610

10. Dimensions

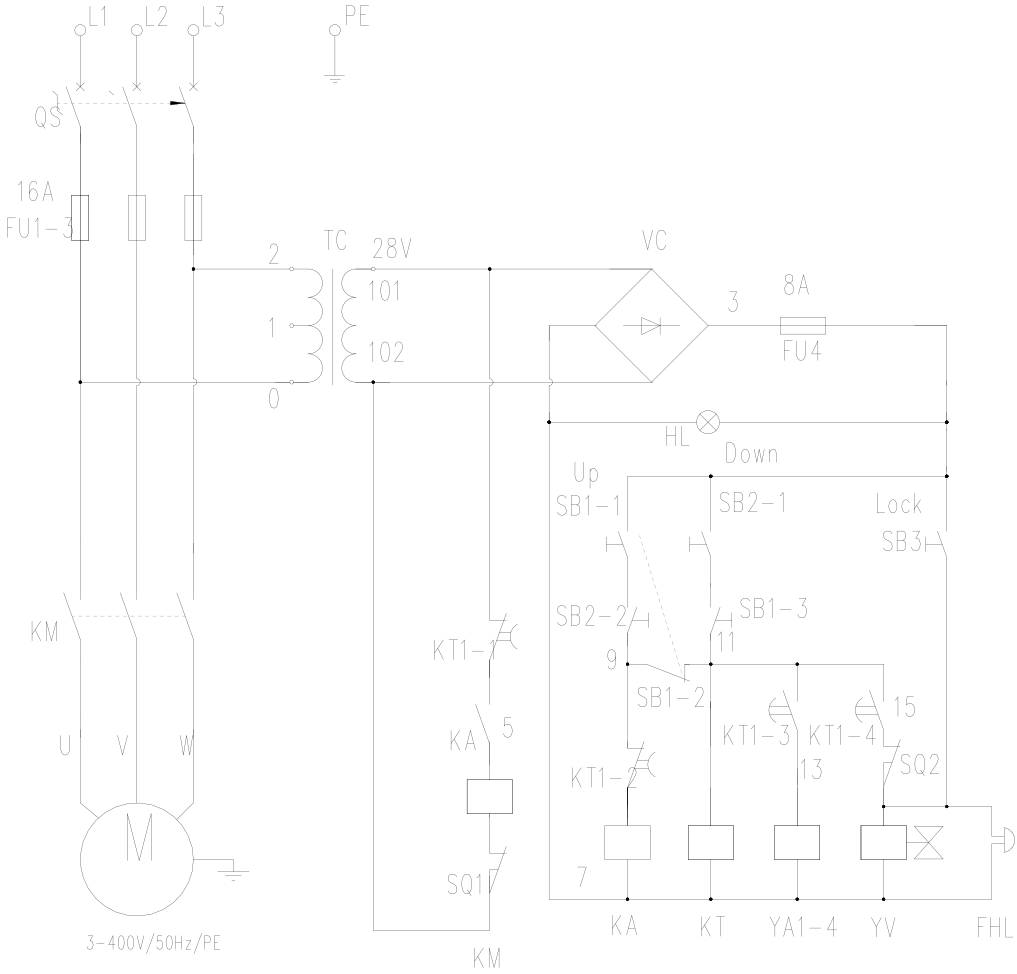


11. Electrical diagram VL35F230



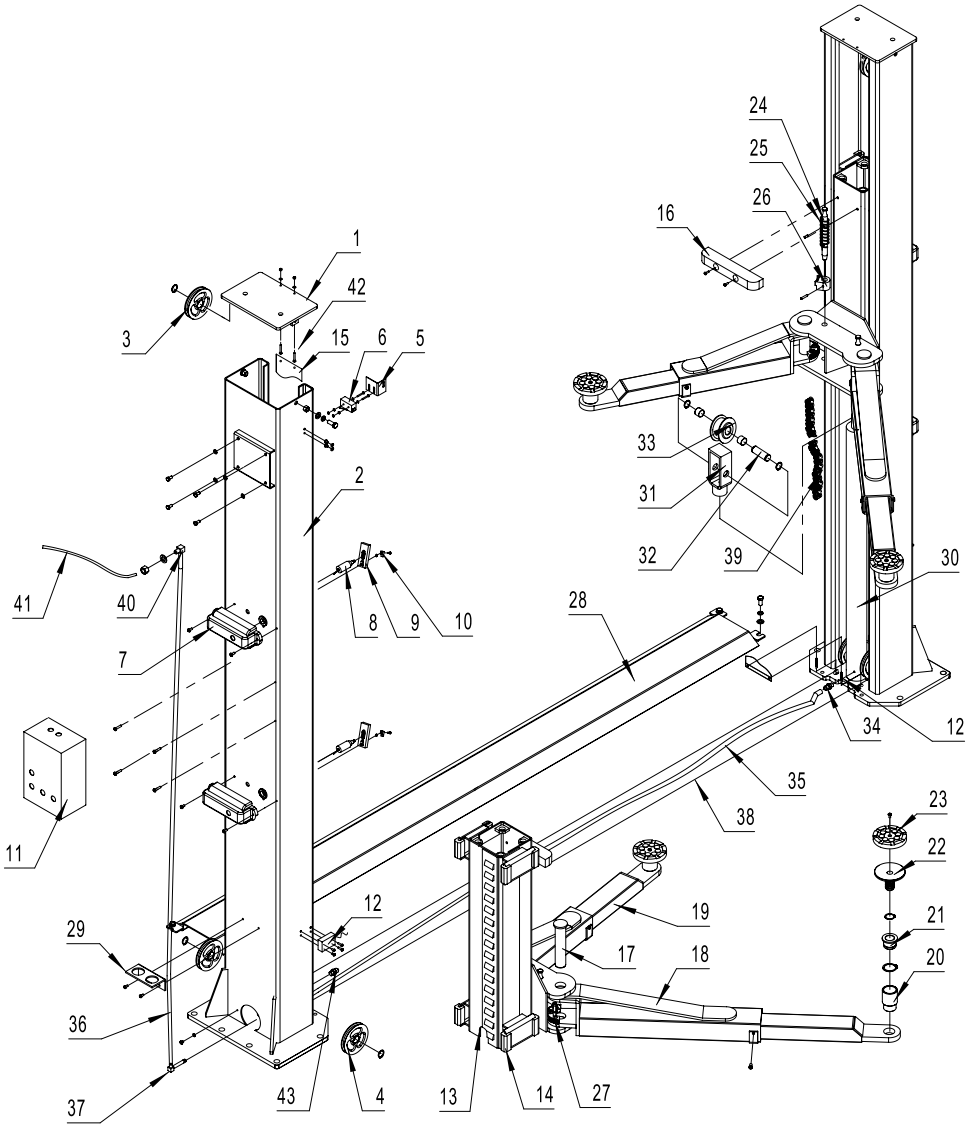
TC	transformer	HL	indicator	SQ	limit switch
VC	bridge	SB	button	YA	magnet
FU	fuse	KT	time relay	YV	release valve
QS	power switch	KM	AC contactor		
KA	middle relay	FHL	buzzer		

12. Electrical diagram VL35F400



TC	transformer	HL	indicator	SQ	limit switch
VC	bridge	SB	button	YA	magnet
FU	fuse	KT	time relay	YV	release valve
QS	power switch	KM	AC contactor		
KA	middle relay	FHL	buzzer		

13. Parts


1
42
3
15
6
5
2
41
40
8
9
10
7
28
24
25
26
16
33
31
32
39
30
34
12
35
38
23
22
21
20
11
12
19
17
18
29
36
37
43
4
13
14
27

1.	PVL35F-001	Top cover for column
2.	PVL35F-002	Main column and supplementary column
3.	PVL35F-003	Rope pulley (Top)
4.	PVL35F-004	Rope pulley (Bottom)
5.	PVL35F-005	Mount of height limit switch
6.	PVL35F-006	Max.height limit switch (Inside column)
7.	PVL35F-007	Cover of solenoid
8.	PVL35F-008	Solenoid
9.	PVL35F-009	Safety lock plate
10.	PVL35F-0010	Safety lock block
11.	PVL35F-0011	24v control box
12.	PVL35F-0012	CE-Stop switch
13.	PVL35F-0013	Carriage
14.	PVL35F-0014	Sliding block
15.	PVL35F-0015	Column guard
16.	PVL35F-0016	Door protector
17.	PVL35F-0017	Pin of lifting arm
18.	PVL35F-0018	Front lifting arms
19.	PVL35F-0019	Rear lifting arms
20.	PVL35F-0020	Height adapter
21.	PVL35F-0021	Lifting adapter
22.	PVL35F-0022	Lifting adapter pallet
23.	PVL35F-0023	Lifting pad
24.	PVL35F-0024	Pin of arm release handle
25.	PVL35F-0025	Spring of arm release handle
26.	PVL35F-0026	Arm lock
27.	PVL35F-0027	Arm gear
28.	PVL35F-0028	Floor-plate assembly
29.	PVL35F-0029	Height adapters holder
30.	PVL35F-0030	Hydraulic cylinder
31.	PVL35F-0031	Chain protector
32.	PVL35F-0032	Shaft of chain pulley
33.	PVL35F-0033	Chain pulley
34.	PVL35F-0034	Throttle valve
35.	PVL35F-0035	Long hydraulic hose
36.	PVL35F-0036	Short hydraulic hose
37.	PVL35F-0037	Throttle valve assembly
38.	PVL35F-0038	Synchronization cable
39.	PVL35F-0039	Drive chain
40.	PVL35F-0040	Right-angle connector
41.	PVL35F-0041	Hose connected to power unit
42.	PVL35F-0042	Hook of column guard
43.	PVL35F-0043	Hose connector

14. Warranty

1. The warranty takes effect on the date indicated on the purchase receipt and is valid for 12 months.
2. The warranty is not transferable without written authorization from your supplier.
3. No warranty claims can be made without the purchase receipt.
4. Warranty applies only if the product is used according to the instructions provided and only for the purpose for which it was designed.
5. No modifications may be made to the product.
6. The warranty does not apply in case of improper use.
7. Any shipping costs are not covered by the warranty provision.
8. Repairs must be made exclusively by Your supplier. Any repair(s) performed by third parties will void the warranty claim.
9. Repairs during the warranty period will not extend the validity. However, a three-month warranty on the repair will be issued should the regular warranty period expire.
10. Any maintenance work to be carried out, described in the instruction manual, should be performed in a timely manner.
11. For warranty, please contact only the point of sale where you purchased the item.

15. Logbook

Name of user: **Address details:**		**Commissioning date:** **Lift Bridge serial number:**	
Date	**Ok**	**Not ok, dismant-ling.**	**Signature**

ENG

EG-verklaring van overeenstemming - Declaration of conformity – EG- Konformitätserklärung - Declaration de conformite - Dichiarazion di conformita- Declaracion de conformidad

Wij, We, Wir, Nous, Noi, La empresa,
Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland,
verklaren geheel onder eigen verantwoordelijkheid dat het product
declare under our sole responsability that the product
erklären in alleiniger Verantwortung, dass das Produkt
déclarons sous notre seule responsabilité que le produit
dichiariamo sotto la nostra responsabilià che il prodotto
declaramos bajo nuestra exclusiva responsabilidad que el producto

Type **Model** **Type** **Type** **Tipo** **Tipo**	**Beschrijving** **Description** **Beschreibung** **Description** **Descrizione** **Descripción**	**Merk** **Brand** **Marke** **Marque** **Marca** **Marca**
VL35F230 VL35F400	2 koloms hefbrug 2 post lift	Falco

Waarop deze verklaring betrekking heeft, in overeenstemming zijn met de volgende normen:
To which this declaration relates is in conformity with the following document:
Auf welches sich diese Erklärung bezieht, den folgenden Normen entspricht:
Auquel se réfère cette déclaration est conforme à le document suivant:
A cui si riferisce dichiarazione, corrisponde ai suguenti documenti:
Al que se refiere la presente declaración, corresponde a los siguientes documentos:

De machinerichtlijn, The Machinery Directive, Die Maschinenrichtlinie, La Directive, La direttiva sulle machine, La Directiva sobre máquinas:
2006/42/EG

Laagspanningsrichtlijn, Low Voltage Directive, Niederspannungsrichtlinie, la Directive Basse Tension, la direttiva bassa tensione, la norma Baja tensión:
2006/95/EG

Norm
NEN-EN 1494

Nederland, Maasbracht, 02-07-2024

Directeur Valkenpower

B.A.H Valkenburg

Serienummer
Serial number:

Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland