

CARGO FLOOR INSTRUCTIONS FOR USE

We would like to introduce to you the right operation of our Cargo Floor system with the help of the following data and we also want to point out to you the steps that you can take to solve malfunctions.

Please read and follow our instructions carefully so that the Cargo Floor system will give you reliable and trouble free service for many years.

If the Cargo Floor system does not operate at all (or properly) after following the instructions, please do not hesitate to contact your nearest agent, who will with no doubt assist you in solving the problem.

Please pay particular attention to the contents of the “WARNINGS” and “IMPORTANT INSTRUCTIONS” sections on pages 2 & 3!

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GB INSTRUCTIONS FOR USE SL-2

WARNINGS

- The Cargo Floor system may only be operated, if there is an user manual present in the local language of the original owner of the Cargo Floor system
- Moving parts must be shielded!
- Verify the loading and unloading directions of the floor before using the system
- All persons must remain at a distance of at least 10 metres whilst the Cargo Floor is in operation
- After use the system must always be returned to the non-energized "0" position
- The pump and electrical installation must always be switched-off when working on the system; in addition, the hoses and/or pipelines between the pump and the Cargo Floor should also be disconnected.
- Check the oil level after when the work on the system is done.
- **Guarantee** shall only be given with the prior consent of Cargo Floor B.V.! With guarantee requests always fill in and send a guarantee request form to Cargo Floor B.V. beforehand. You can simply fill in a request for guarantee on our website: www.cargofloor.nl/download.

In the event of an EMERGENCY, operation of the Cargo Floor system can be halted as follows:

- ◆ By pressing the stop button on the wired remote control unit;
- ◆ By turning all switches to position "0";
- ◆ By putting the handle of the control valve in the middle position (only B and A control);
- ◆ Turning off the pump;
- ◆ Turning off the main switch of the power supply;
- ◆ Turning off the motor of the electro-hydraulic aggregate;

The WARNING STICKER is attached to the outside of the control cabinet. See page 4.

<p>NL</p>  <p>D</p>  <p>GB</p> 	<p>Belangrijke aanwijzing voordat het Cargo Floor-systeem in gebruik mag worden genomen:</p> <ul style="list-style-type: none"> - altijd eerst de bedieningshandleiding raadplegen. - altijd eerst de gewenste transport richting bepalen en controleren. - Personen moeten altijd tenminste 10 meter afstand houden van een werkend Cargo Floor systeem. - Na gebruik altijd het Cargo Floor systeem in de niet geactiveerde neutrale (0) posities terugzetten - Bij onderhoudswerkzaamheden; alles uitschakelen en de hydrauliek loskoppelen <p>Wichtige Anweisung vor der Inbetriebnahme des Cargo Floor Systems:</p> <ul style="list-style-type: none"> - Immer erst die Bedienungsanleitung lesen. - Zuerst immer die gewünschte Transportrichtung bestimmen und kontrollieren. - Vom aktivierten Cargo Floor System müssen Personen mindestens 10 Meter Abstand halten. - Nach dem Einsatz das Cargo Floor System in die nicht aktivierten, neutralen Null-Stellungen (0) zurücksetzen. - Bei Wartungsarbeiten, alles ausschalten und die Hydraulik abkuppeln <p>Important tips before the Cargo Floor system can be put into operation:</p> <ul style="list-style-type: none"> - Always consult the operation manual first. - Always determine and check the direction of transport. - People must always maintain a distance of at least 10 metres from a working Cargo Floor system. - After use, always switch the Cargo Floor system back to the non-activated neutral (0) position. - By maintenance work, switch off everything and disconnect the Hydraulics. <p> CARGO FLOOR® HORIZONTAL LOADING-/UNLOADING SYSTEM</p> <p>S.006</p>	<p>F</p>  <p>I</p>  <p>E</p>  <p>Indications importantes avant de pouvoir utiliser le système Cargo Floor:</p> <ul style="list-style-type: none"> - Commencez toujours par consulter le manuel d'utilisation. - Commencez toujours par déterminer et contrôler la direction de transport souhaitée. - Tenez-vous toujours à au moins 10 mètres de distance d'un système Cargo Floor en fonctionnement. - Après utilisation, remettez toujours le système Cargo Floor en position neutre (0) non activée - Pour tous travaux de maintenance, tout déconnecter et débrancher l'hydraulique <p>Prima di mettere in funzione il sistema Cargo Floor, prendere nota delle seguenti indicazioni importanti:</p> <ul style="list-style-type: none"> - Consultare sempre prima il manuale operativo.. - Stabilire sempre prima la direzione di trasporto desiderata e controllare. - Quando il sistema Cargo Floor è in funzione, le persone devono sempre mantenere una distanza di almeno 10 metri - Dopo l'uso, riportare sempre il sistema Cargo Floor nella posizione neutra (0). - In caso di manutenzione, spegnere il sistema e scollegare l'impianto idraulico <p>Instrucciones importantes a seguir antes de poner en funcionamiento el sistema Cargo Floor:</p> <ul style="list-style-type: none"> - Siempre consulte primero el manual de instrucciones. - Siempre determine y controle primero el sentido de transporte deseado. - Cuidar de que las personas siempre se mantengan a por lo menos 10 metros de distancia de un sistema Cargo Floor en movimiento. - Una vez concluida la operación, siempre retorne el sistema Cargo Floor a las posiciones neutrales no activadas (0) - Por trabajos de mantenimiento, apagar todo y desconectar los hidráulicos. <p> →  → </p> <p>www.cargofloor.nl</p>
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IMPORTANT INSTRUCTIONS

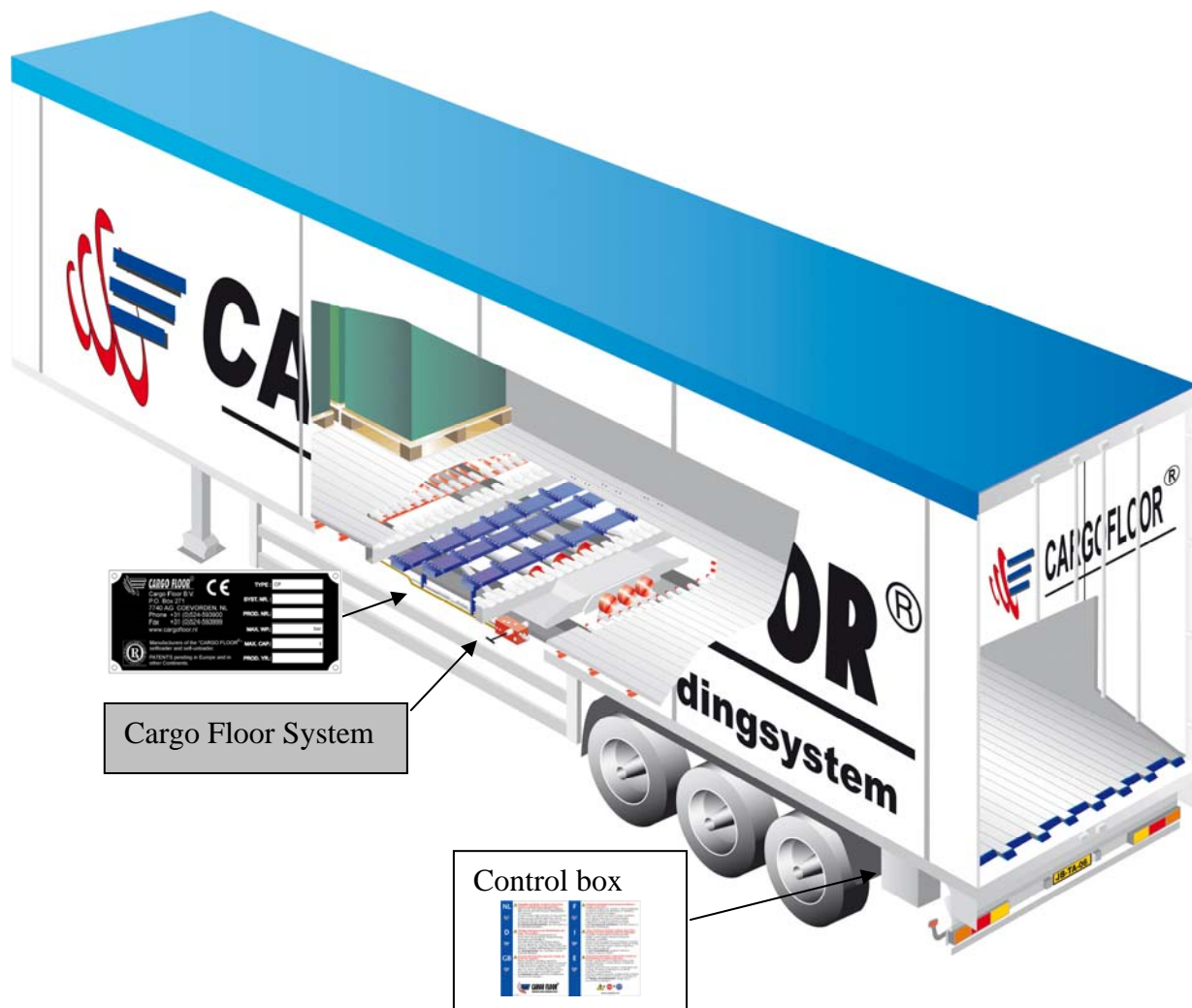
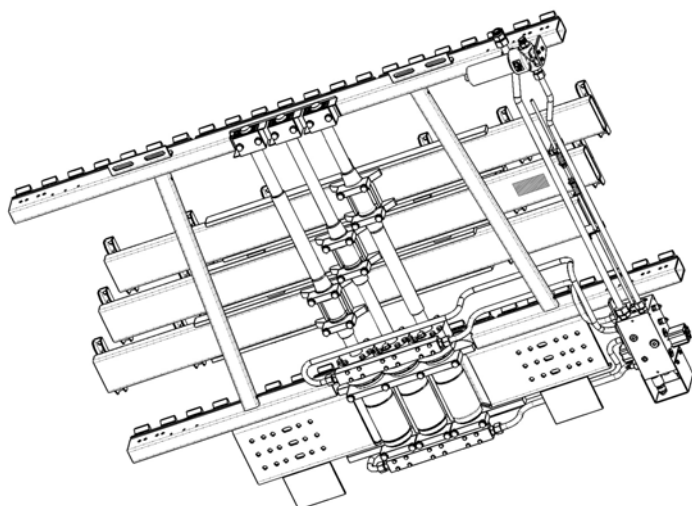
- Avoid letting dirt and water get into the hydraulic system when disconnecting the connectors or when topping up/cleaning the oil tank.
- Adjust the work speed when, for example, heavy massive products are being loaded or unloaded with which the system needs the maximum power, so as to avoid overloading. (See page 17.)
- It is not permitted to exceed the maximum operational pressure (see page 17).
- Avoid loading and unloading sharp objects such as glass without a protective roll-up cover mechanism. This causes unnecessary wear of the seal/floorprofiles. If you would like to transport such materials safely, we advise you to use a protective roll-up cover mechanism.
- Never exceed the maximum number of strokes per minute when using the full stroke (see page 17). A greater number of strokes causes enormous forces in the system and chassis, and causes a lot of heat to be generated in the hydraulic system.
- When loading and unloading packed goods it is important that a good equal weight distribution is realized on the floor. If this is not the case there is the possibility that the goods won't move. When using pallets, if necessary, place a wooden plank (of about 300 x 18 x 2350 mm) multiplex underneath.

IDENTIFICATION TAG

 CARGO FLOOR® Cargo Floor B.V. P.O. Box 271 7740 AG COEVORDEN, NL Phone +31 (0)524-593900 Fax +31 (0)524-593999 www.cargofloor.nl  Manufacturers of the "CARGO FLOOR®" self-loader and self-unloader PATENTS pending in Europe and in other Continents.	TYPE:	CF
	SYST. NR.:	
	PROD. NR.:	
	MAX. WP.:	bar
	MAX. CAP.:	1
	PROD. YR.:	

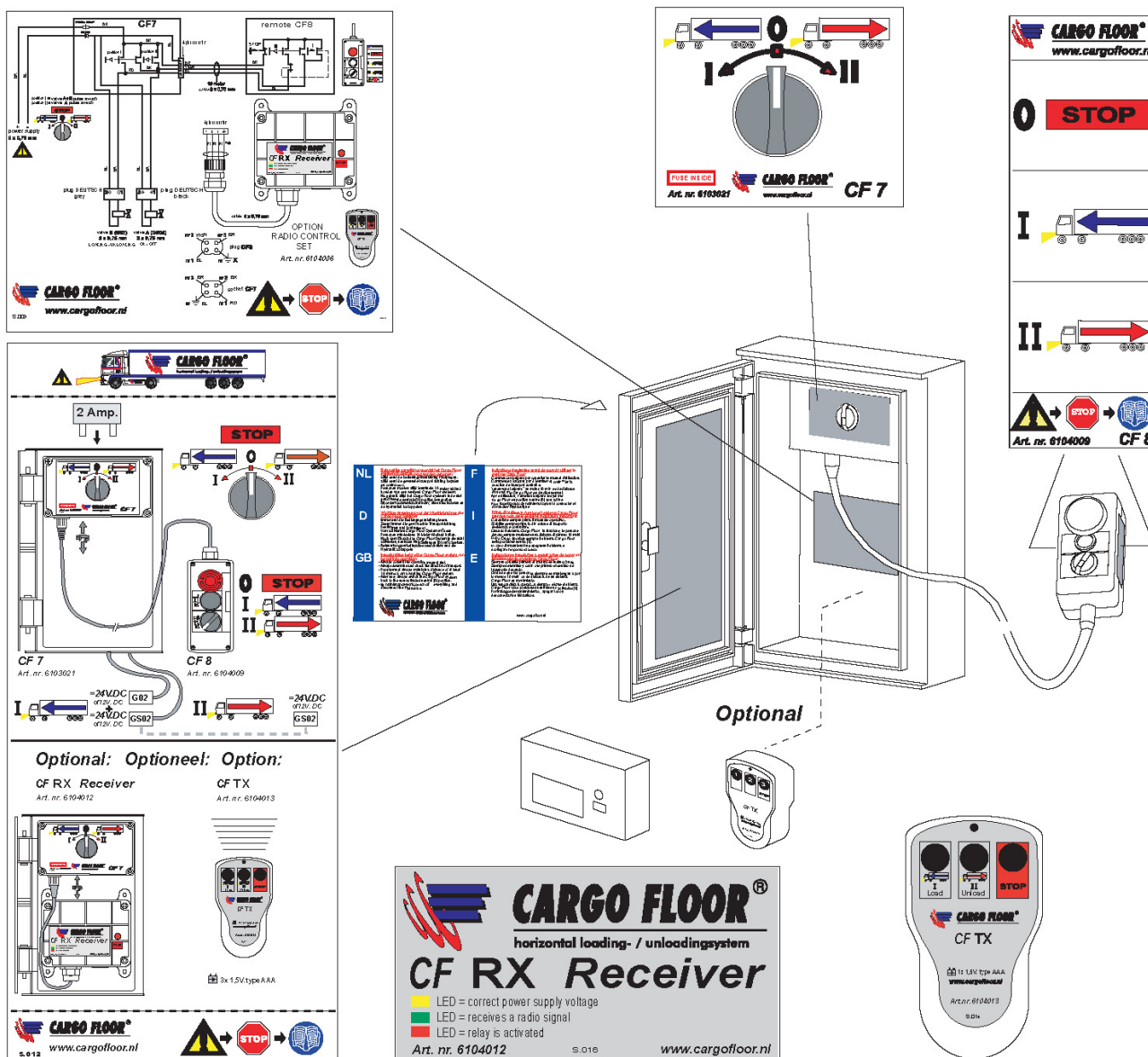
MEANINGS OF THE FIELDS:

TYPE	:	System type
SYST. NR.	:	Serial number
PROD. NR.	:	Production number
MAX. WP.	:	Maximum workload
MAX. CAP.	:	Maximum load
PROD. YR.	:	Production year



STICKERS "E" -CONTROL

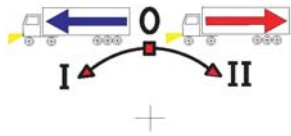
These stickers, which are supplied with the Cargo Floor systems, should be applied to the vehicle, in the neighbourhood of the described operation.



FUNCTION OF “E”-CONTROL SWITCHES

CF 7 SWITCH (EMERGENCY CONTROL)

The CF 7 switch is the permanent switch which is mounted on the frame/vehicle and has 3 switch positions with the following functions:



Pos I = loading

is activated when you turn the rotary switch to the left.

Pos 0 = stop

the rotary switch automatically returns to this position when the switch is released.

Pos II = unloading

is activated when you turn the rotary switch to the right.



In the interest of safety this switch is fitted with an automatic spring-back for positions I and II, so that it always returns to the central “0” position. This is necessary to prevent conflict situations arising when using the CF 8 remote control.

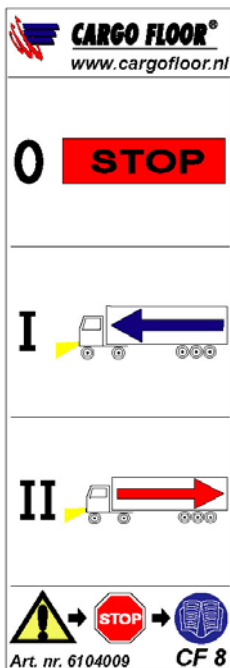
Mounted below the CF 7 switch, is a connector to which the CF 8 switch or the RX RECEIVER can be connected without the need for any adjustments.

Normally, the CF 7 switch should only be used if the CF 8 switch is defective.

If, after the initial assembly, the switch does not work it is probably because the connections for the + (brown) and the – (blue) have been swapped around. The supply cable contains a blocking diode which prevents damages arising from the + and - from being connected in reverse.

A 2 Amp fuse has been mounted in the CF 7 switch. Never mount a fuse over 3A, this can cause damage to the electrical installation

CF 8 SWITCH (MAIN CONTROL)



The standard supplied remote control CF 8, with 10 m. of cable, is used for the day-to-day control of the system.

The CF8 switch is fitted with the following control buttons:

Red button: the stop button. Press the button to stop activate it, and deactivate it by turning it;

Middle (push)button. Pushing this button starts the system loading (pos. I). When this button is released the system stops.
The user must keep this button pushed in during loading, for safety purpose;

Lowest (rotary) switch. This is a rotary switch with two positions. Activating this switch starts the system unloading (pos. II). When this switch is deactivated the system stops.

Before a new function can be switched on the previous function must be cancelled.

The CF 8 switch has a plug connector, which can be inserted into the connector of the CF 7 switch and screwed tight.

To disconnect this, the duct must be unscrewed, after which the plug can be pulled out. Normally, this plug should always be connected to the connector.

OPTIONAL

A radio controlled remote control is available as an option.

This incorporates:



CF RX Receiver which has a plug connector which can be inserted into the connector of the CF 7 switch and screwed tight. To disconnect this the duct must be unscrewed, after which the plug can be pulled out. Normally, this plug should always be connected to the connector.

Red stop button

On the receiver RX a red stop button is mounted, by pushing this button you can stop the system in case of emergency. By pushing it again the system will be activated again. Do take care, with reference to the accessibility, that when using a remote control, the door of the switching box CF7 is opened so the red stop button can be operated.

CF TX Remote Control, this has 3 buttons, which work as follows:



Button one (loading). By pushing this button the system will load, by releasing it the system will stop (or you push to stop the big stop button).

Button two (unloading). By pushing this button the system will unload, by pushing it again the system will stop (or you push to stop the big stop button).

Button three. With this button you stop the system.

The switching positions I-0-II (applicable to all switches) energize the following solenoids (provided that they have been connected correctly):

- **Position II (unloading):** only the solenoid of valve A (GS02) is energized. A voltage of 24 VDC (12 VDC) is supplied to the solenoid
- **Position I (loading):** the solenoids of both valve A (GS02) and valve B (G02) are energized. A voltage of 24 VDC (12 VDC) is supplied to both solenoids
- **Position 0:** stop, the solenoids are not energized

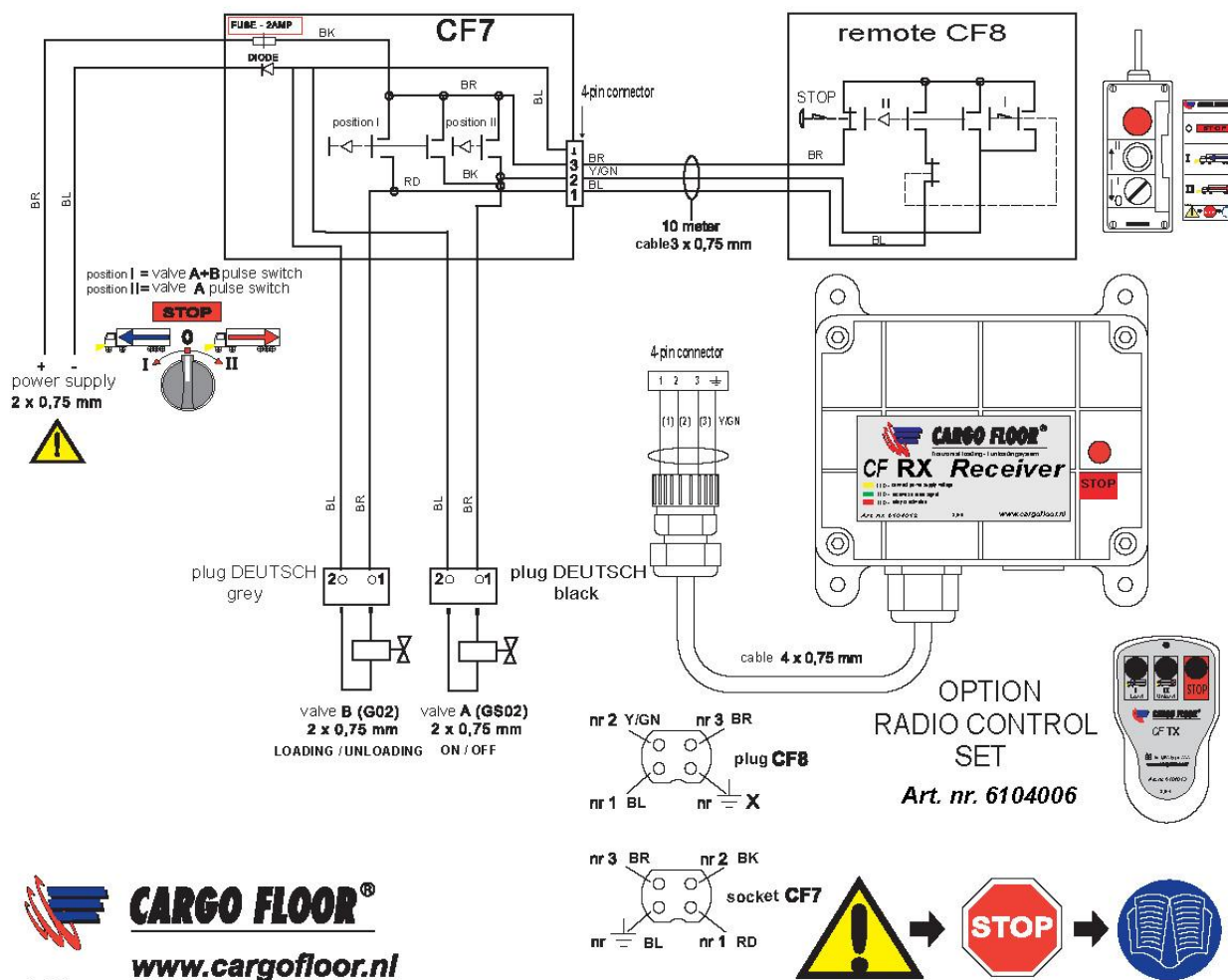
IMPORTANT

Before starting to load or unload you must check the following:

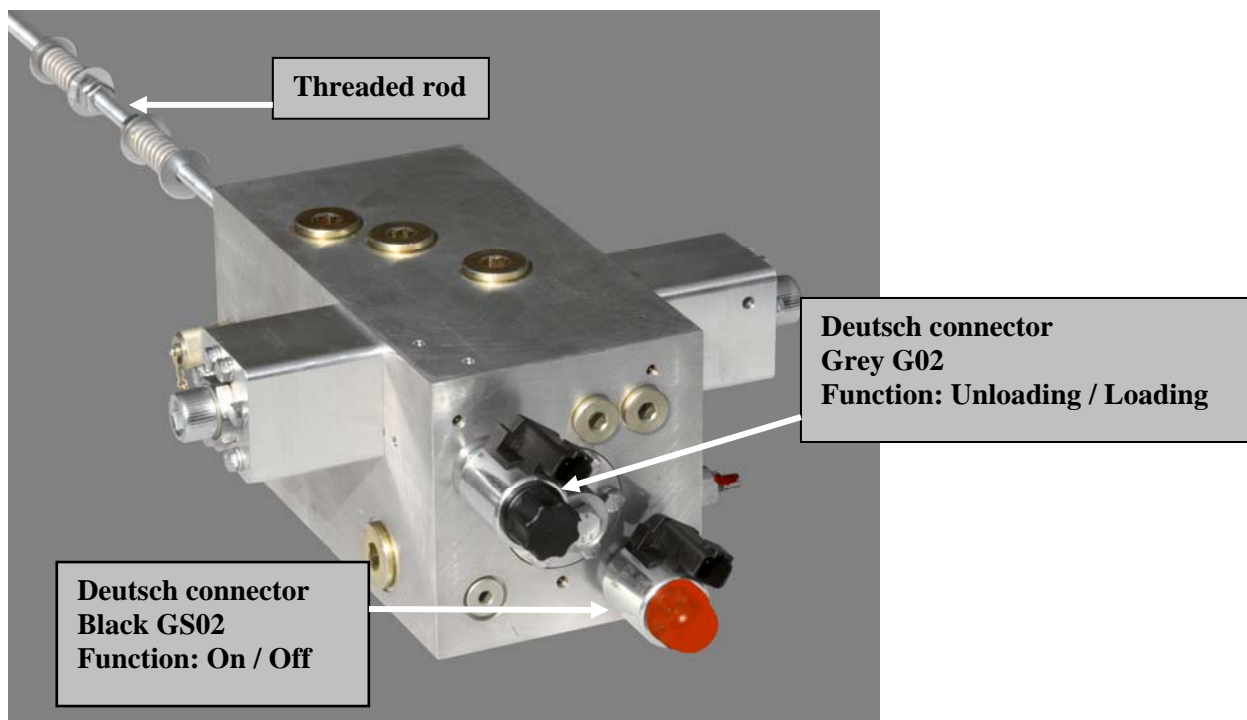
- there must be no people in the vicinity of the system;
- there must not be anything to obstruct the transport of the product (are the doors open?);
- bear in mind which action you want the system to carry out: Loading or Unloading? Immediately check, and continue to check, whether the system is transporting the product in the correct direction.
When loading pay special attention to ensure that the product is not pressed up against the bulkhead.
- Turn on the pump;
- Turn on the light and check that there is a supply of power.
- Keep your distance from the vehicle and operate it by means of the remote control CF 8 or the CF RX.

In the event of malfunctions in the electrical system, the standard manual operation mode can be used to activate the On/Off functions. See page 21. **When using this manual control you must always ensure that it is switched back to the original NON-ACTIVATED condition after use.**

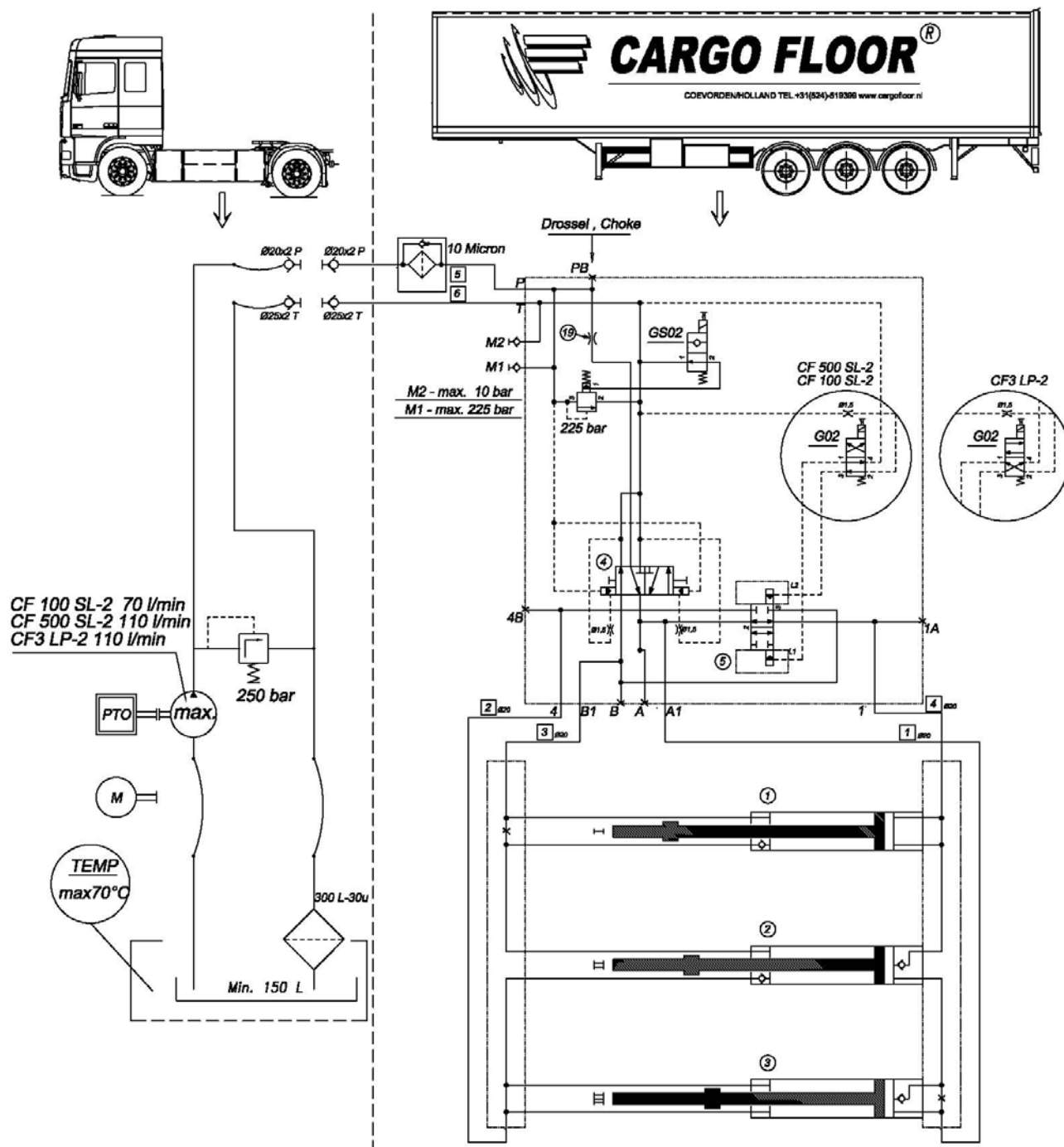
ELECTRICAL CIRCUIT DIAGRAM “E”-CONTROL



CONTROL VALVE “E”-CONTROL

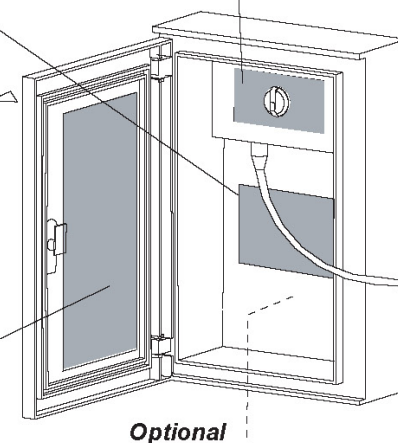
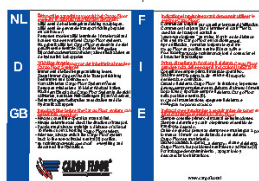
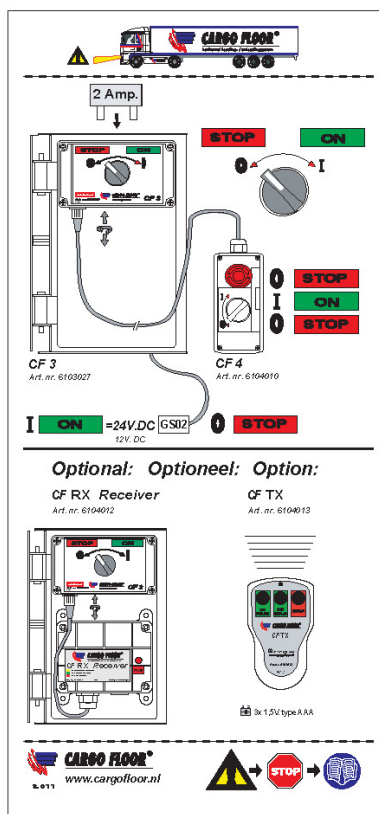
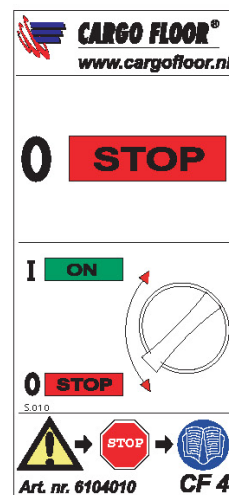
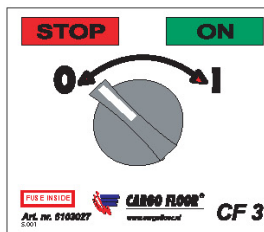
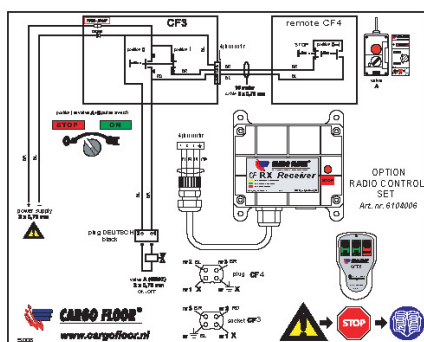


HYDRAULIC CIRCUIT DIAGRAM “E”-CONTROL

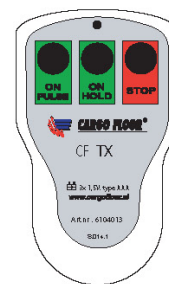


STICKERS "B"-CONTROL

These stickers, which are supplied with the Cargo Floor systems, should be applied to the vehicle, in the neighbourhood of the described operation.



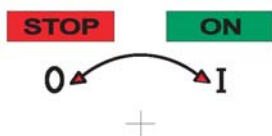
Optional



FUNCTION OF “B”-CONTROL SWITCHES

CF 3 SWITCH (EMERGENCY CONTROL)

The CF 3 switch is the permanent switch which is mounted on the frame/vehicle and has 2 switch positions with the following functions:



Pos 0 = stop. The rotary switch automatically returns to this position when the switch is released.

Pos II = on. Is activated when you turn the rotary switch to the right.



In the interest of safety this switch is fitted with an automatic spring-back for position I, so that it always returns to “0” position. This is necessary to prevent conflict situations arising when using the CF 4 remote control.

Mounted below the CF 3 switch, is a connector to which the CF 4 switch or the RX RECEIVER can be connected without the need for any adjustments.

Normally, the CF 3 switch should only be used if the CF 4 switch is defective.

If, after the initial assembly, the switch does not work it is probably because the connections for the + (brown) and the – (blue) have been swapped around. The supply cable contains a blocking diode which prevents damages arising from the + and - from being connected in reverse.

A 2 Amp fuse has been mounted in the CF 3 switch. Never mount a fuse over 3A, this can cause damage to the electrical installation

CF 4 SWITCH (MAIN CONTROL)



The standard supplied remote control CF 4, with 10 m. of cable, is used for the day-to-day control of the system.

The CF 4 switch has the following buttons:



Red button: the stop button. This is activated by pushing it in and deactivated by turning it;



Lowest (rotary) switch. This is a rotary switch with two positions. Activating this switch starts the system unloading (pos. I). When this switch is deactivated the system stops.

Before a new function can be switched on the previous function must be cancelled.



The CF 4 switch has a plug connector, which can be inserted into the connector of the CF 3 switch and screwed tight.

To disconnect this, the duct must be unscrewed, after which the plug can be pulled out. Normally, this plug should always be connected to the connector.

OPTIONAL

A radio controlled remote control is available as an option.



This incorporates:

CF RX Receiver which has a plug connector which can be inserted into the connector of the CF 3 switch and screwed tight.

To disconnect this the duct must be unscrewed, after which the plug can be pulled out. Normally, this plug should always be connected to the connector.

CF TX Remote Control



Fitted with three control buttons with the following functions:

Button one (on ON PULSE as pulse contact). By pushing this button the system will be activated, by releasing it the system will deactivate (or you push to stop the stop button).

Button two (aan/ON HOLD as hold contact). By pushing this button the system will be activated, by pushing it again the system will deactivate (or you push to stop the stop button).

Button three. With this button you stop the system.

The switching positions 0-II (applicable to all switches) energize the following solenoid (provided that they have been connected correctly):

- **Position I (On):** only the solenoid of valve A (GS02) is energized.
- **Position 0 (Stop):** no solenoids may be energized.

LOADING – UNLOADING FUNCTION

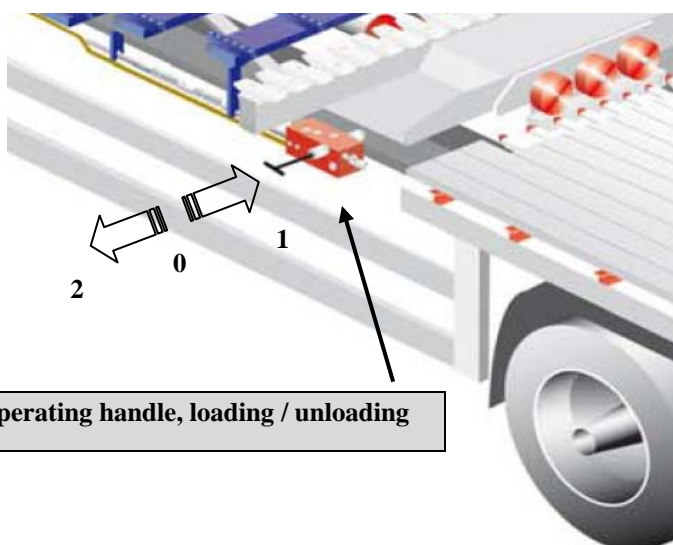
The loading or unloading modes can be selected using the handle located under the trailer, see the illustration.

The position of the handle:

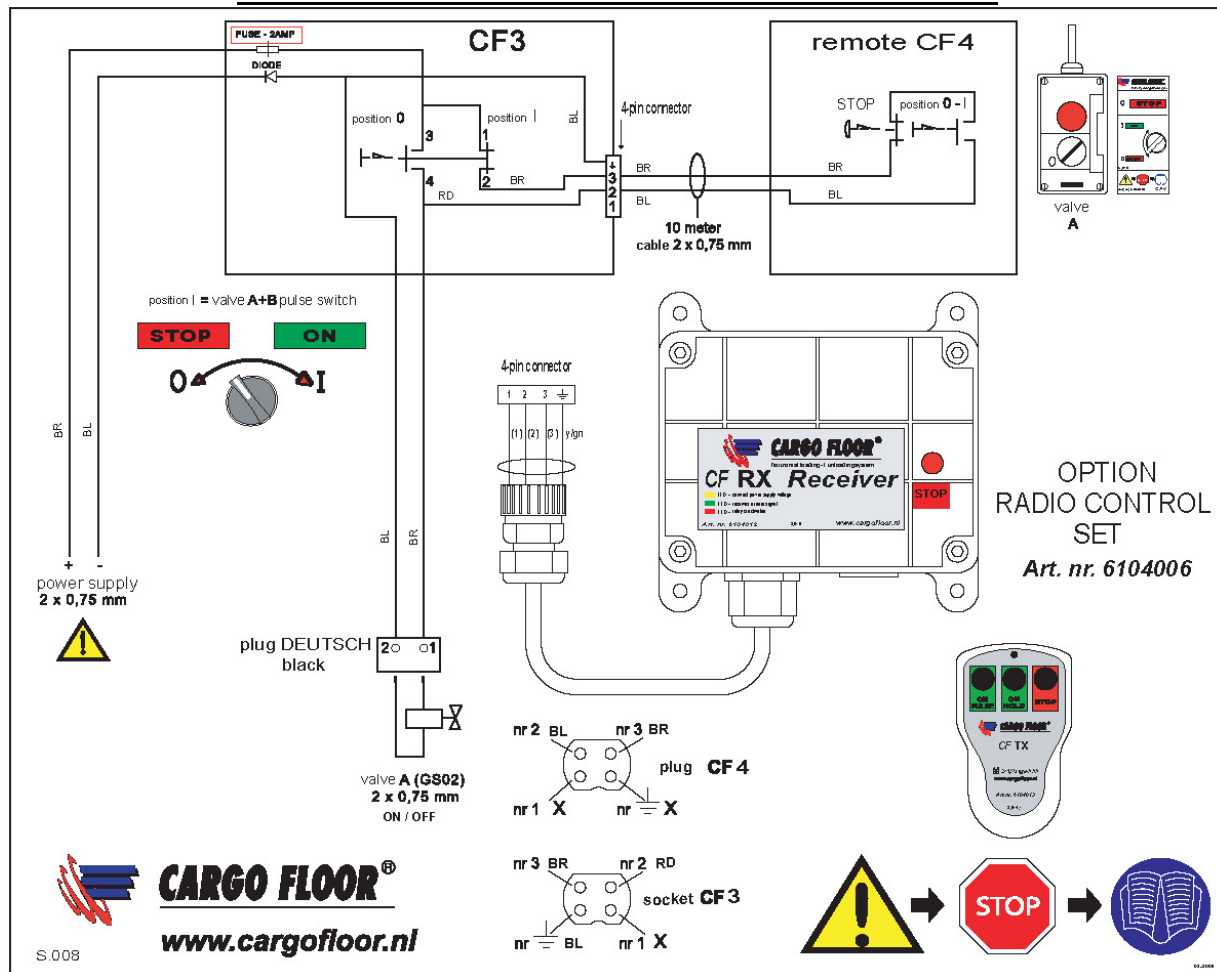
0 handle in the middle position; floor is stationary

1 handle pushed in; floor will unload

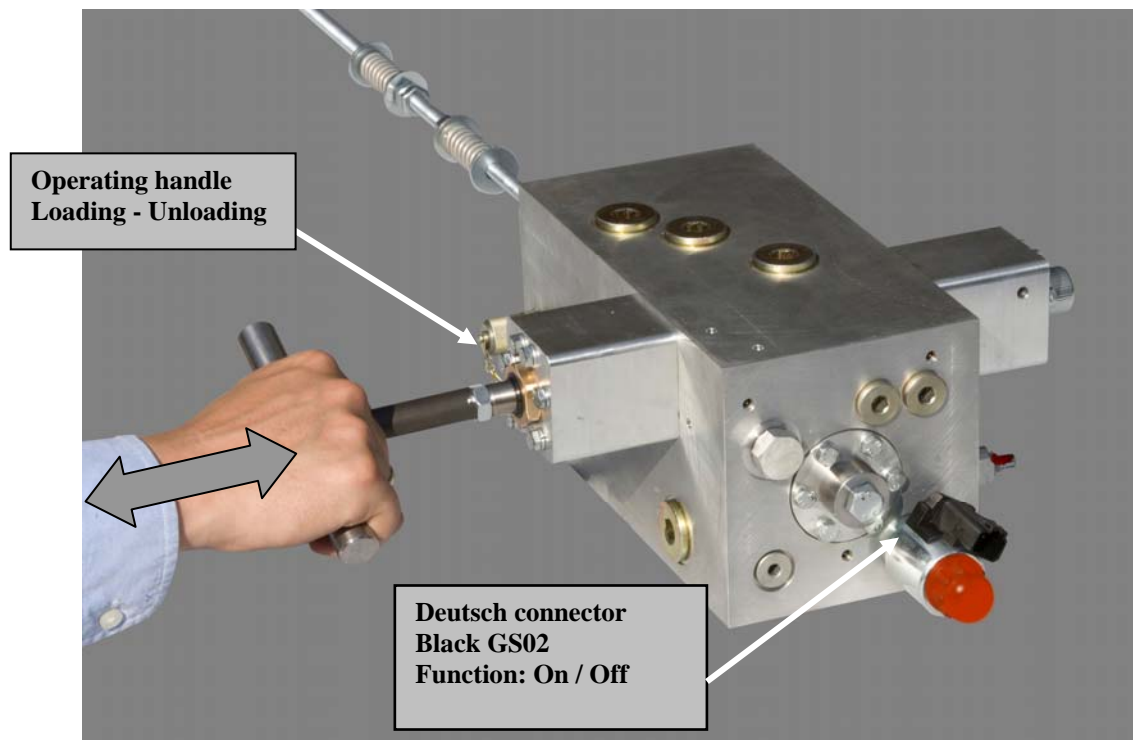
2 handle pulled out; floor will load



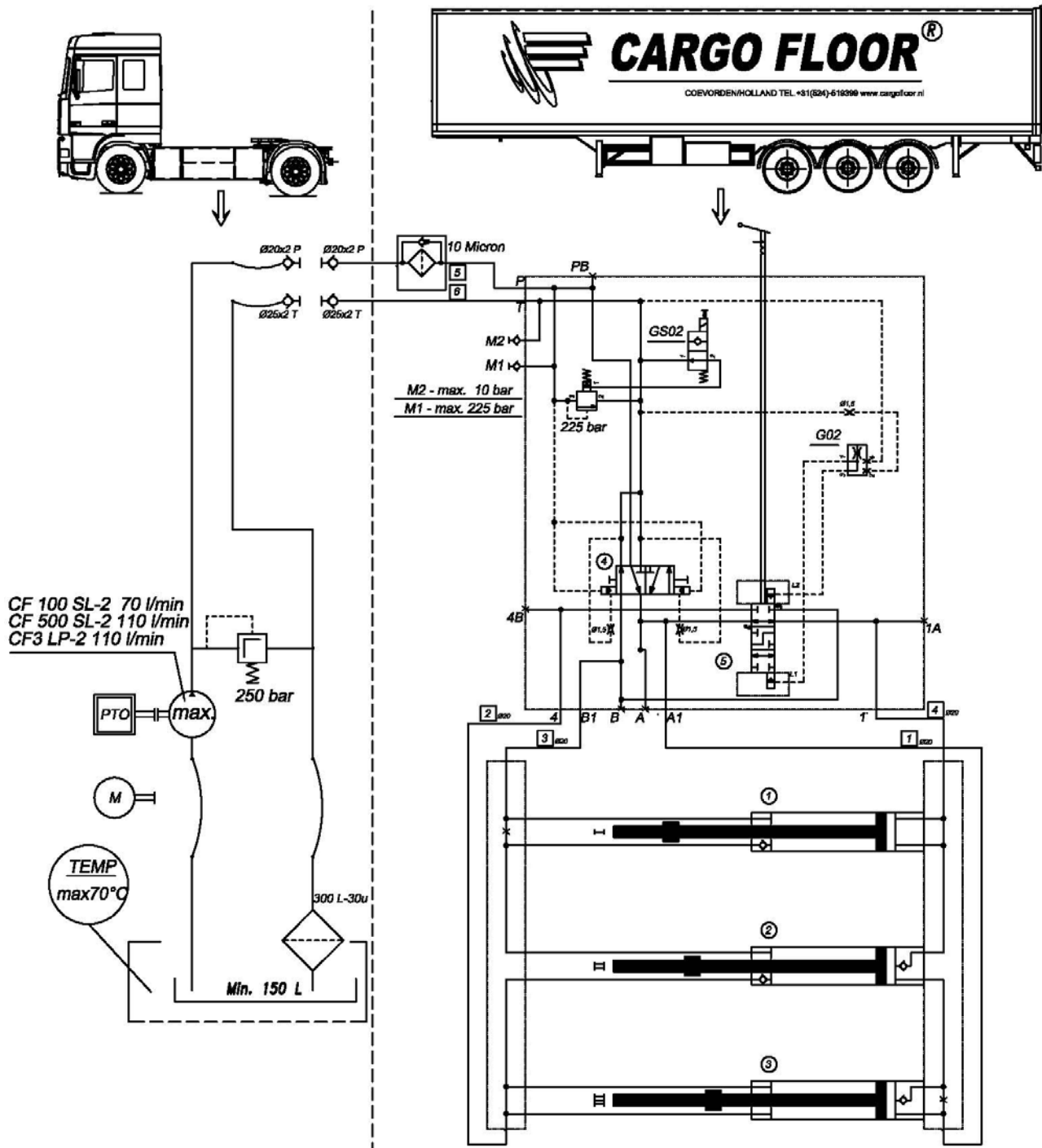
ELECTRICAL CIRCUIT DIAGRAM "B"-CONTROL



CONTROLE VALVE "B"-OPERATION



HYDRAULIC CIRCUIT DIAGRAM “B”-CONTROL



CONTROL OPTIONS “A”-CONTROL

Units fitted with A-controls do not include a separate on/off switch for the Cargo Floor system; the floor will begin to move once the Pump/PTO is switched on. The direction in which the floor moves will depend on the position of the operation valve mounted under the trailer.

LOADING – UNLOADING FUNCTION

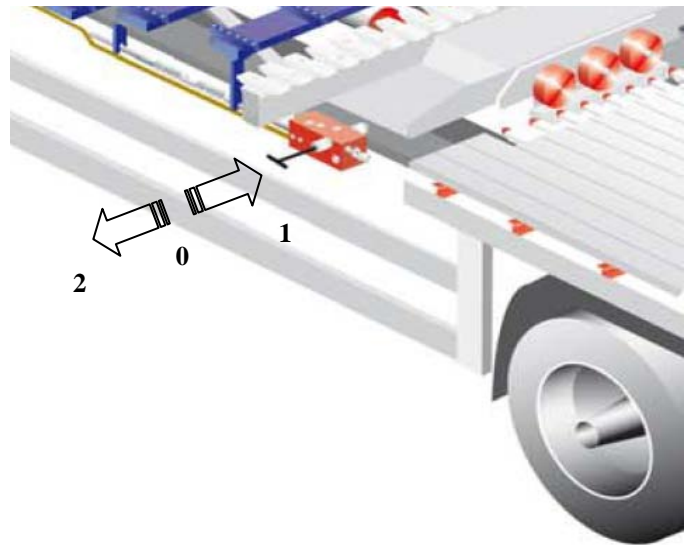
The loading or unloading modes can be selected using the handle located under the trailer, see the illustration.

The position of the handle:

0 handle in the middle position; floor is stationary

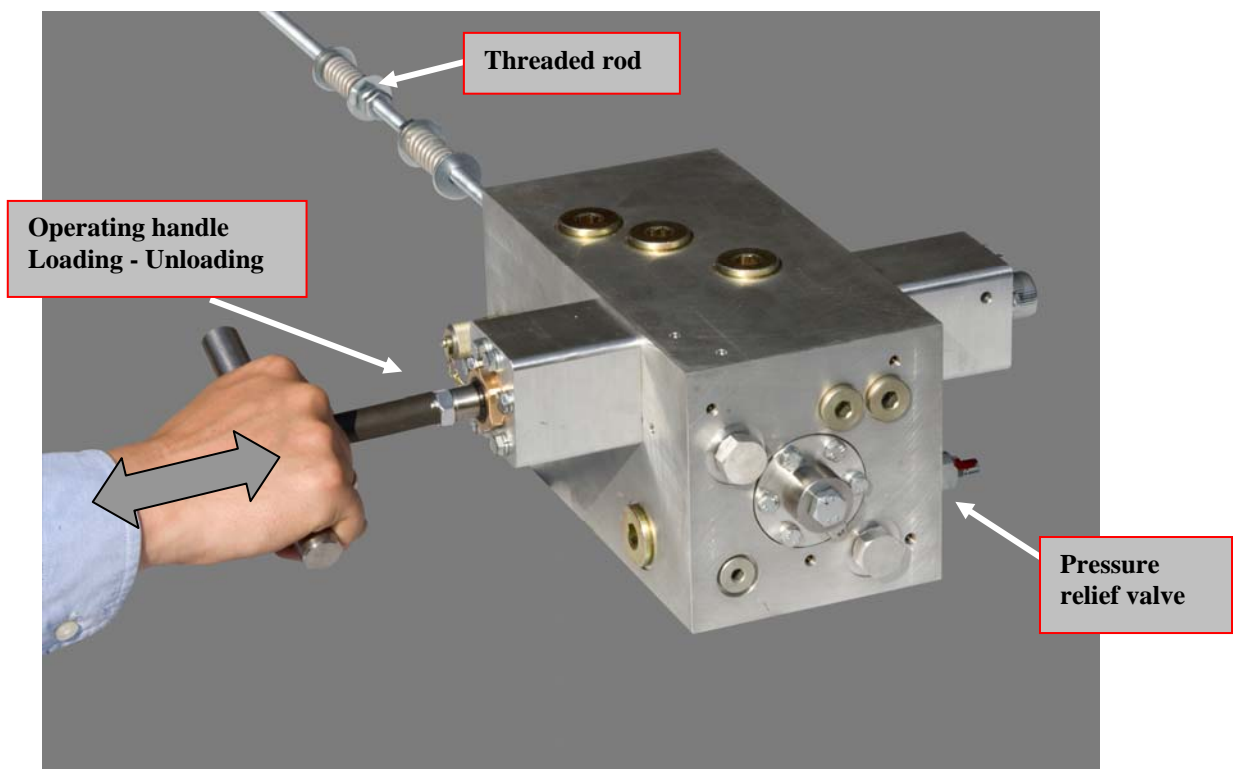
1 handle pushed in; floor will unload

2 handle pulled out; floor will load

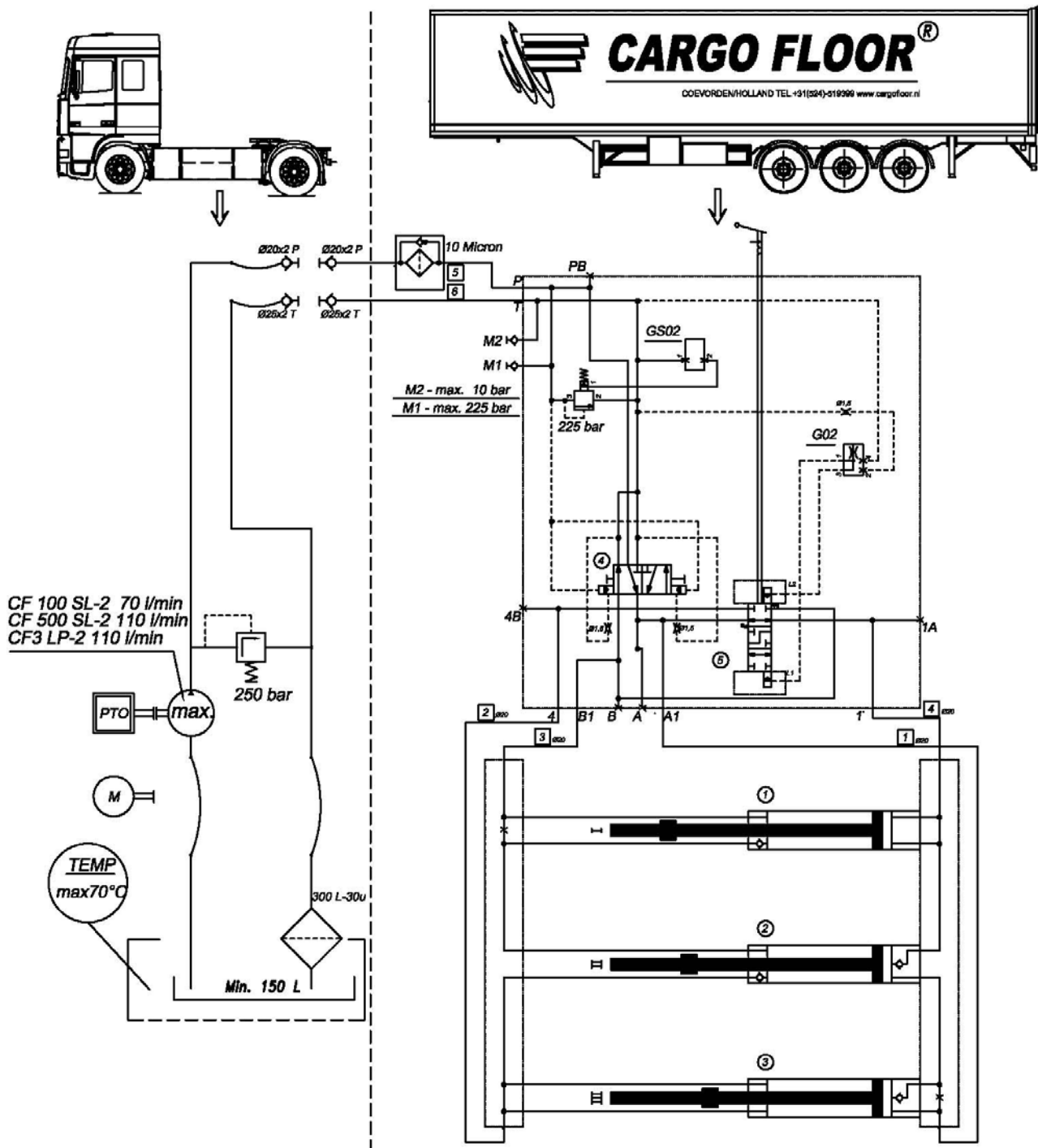


WARNING ! SWITCHING ON THE PUMP/PTO WILL START THE FLOOR MOVING!

CONTROL VALVE “A”-CONTROL



HYDRAULIC CIRCUIT DIAGRAM "A"-CONTROL



CARGO FLOOR TECHNICAL SPECIFICATIONS

- System operation** : completely hydraulic, with three double-action cylinders.
System control : completely hydraulic mechanical.
Operation control : fully automatic loading – stop – unloading or
manually loading – unloading electrically on – off
(option A/B control)

	CF500 SL-2(i)	CF100 SL-2(i)	CF500 SL-2 Power Speed	CF3 LP-2 (leak proof)
Bore (mm)	100	80	100	125
Piston rod diameter (mm)	45	35	45	60
Stroke (mm)	200	150	200	150
Cylinder volume (ltr.)	2.82	1.36	2.82	3.26
Oil volume per cycle (ltr.)	8.46	4.09	8.46	9.77
Over pressure valve threshold, max. operational pressure (bar)	225	175	225	150
Strokes per minute with advised pump capacity	13	17	21	11
Speed (mtr. / min) with advised pump capacity	2.6	2.6	4.2	1.7
Advised pump capacity:				
Flow (ltr./min)	110	70	180	110
Pressure (bar)	250	200	250	175
Max. pump capacity:				
Flow (ltr./min)	130	80	200	170
Pressure (bar)	250	200	250	175
Speed at maximum pump capacity (mtr. / min.)	3.1	2.9	4.7	2.6

- Control valves** : 24V DC
Throughput variation : Completely variable speed by use of oil flow determined by the revs of the motor or by various pumps. Pay attention to the diameter of the choke, see page 20.
- Drive** : use of the PTO/pump on the truck; an electro-hydraulic aggregate or an hydraulic aggregate with an external combustion engine.
- Filter** : pressure filter type: high-pressure 10 micron (part number 7372005).
Pressure piping : Ø 20 x 2 feed through 16 mm
Return piping : Ø 25 x 2,5 feed through 20 mm
Oil ISO VG 32 b.v. : Shell Tellus T32 or ESSO Univas 32 (or equivalent).
Only use biological oil after agreement by Cargo Floor
Biological oil : A biological oil of the type synthetic ester (HEES) can be used as standard with the Cargo Floor system. **We advise you not to use other types of biological oil.**
Oil temperature : max. 70 ° C

Floor

Aluminium floor profiles : - plank length negotiable
- floor thickness 3, 6, 8, 10, HDI 8/18 mm. HD 8/20 mm; Semi Leak Proof.
- profile width 111,9 mm / double seal profile 114,8 mm
- moving floor width standard 2.355 mm for an inner width of 2.500 mm

Extrusion alloy : high quality Aluminium-alloy, weldable, very wear-proof and tensile

Guiding : The aluminium floor profiles are borne by wear-free plastic guides (TWISTER) or by plastic guide cams.

Guide bearing surface : the total bearing surface of each guide (TWISTER) is 87 cm²
Total bearing surface of each guiding block of the plastic cam guide is 60 cm². Total guide surface area is determined by the total number of guides, which can be varied as required.

Under floor : Steel as well as aluminium. The plastic guiding can be provided with square tubes 25x25x2 or the plastic cam guides can be mounted directly on the under floor.

OPTIONS:

- (i) module for connecting to Blackbox
- Variable stroke from 10 mm to 200 mm
- Can be connected to PLC
- Solenoids 12 V or 220 V (24 V=standard)
- Steel floor parts, steel clad floor parts
- Floor width and length in consultation, can be any width required
- Aluminium end caps for floor profiles
- Completely smooth profiles are available for special products. Floor thickness 6, 8 and 10 mm.
- Protective roll-up cover;
- Wireless remote control with on/off and/or loading/unloading functions (part number 6104006);
- Cargo Floor in combination with other loading/unloading systems
- Stationary applications in all versions
- Extra plastic guides.
- Electro- / hydraulic aggregates
- Diesel hydraulic aggregates
- Multiple bulkheads for partial loads
- Termically zincd subframe
- Lacquered preserved moving cross members

PUMP SPECIFICATIONS

The pump unit used to power the Cargo Floor system must comply with the following specifications:

NOTE! Verify which unit is fitted!

	CF500 SL-2	CF100 SL-2	CF500 SL-2 Power Speed	CF3 LP-2
Pump capacity (in ltr./min)	110	70	180	110
Max. pressure (bar)	250	200	250	175

Oil tank, contents of min. 150 ltr. provided with:

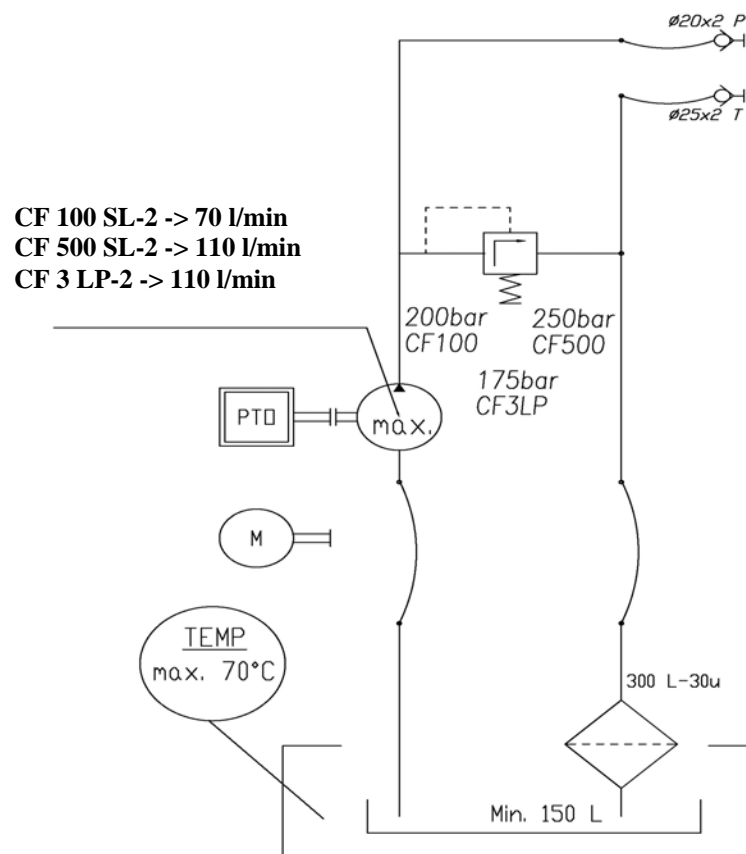
- return filter (30 micron) 300 ltr/min.
- tank cover
- oil level glass
- draining tap
- filling cap

Pipes complying with the following requirements:

- pressure line min. 20 x 2 mm
- return line min. 25 x 2,5 mm
- quick-detachable couplings (suitable for 110 l/min.).

The pump volume determines the transport speed;

The pressure determines the force applied to the system.

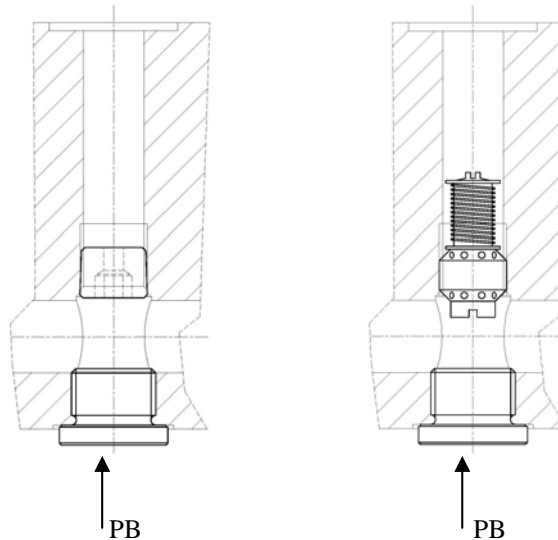
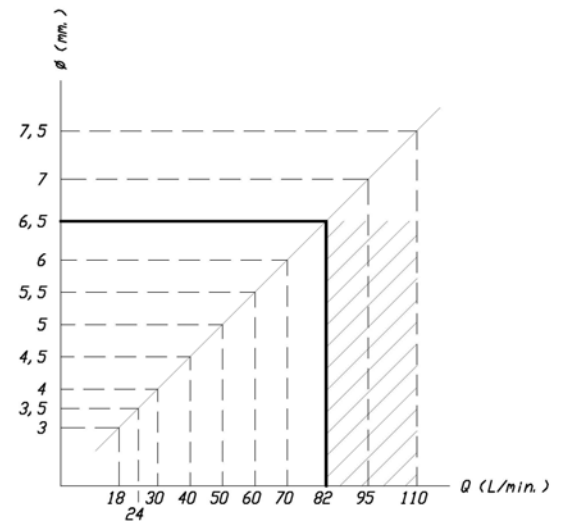


Choke:

There is a choke mounted as standard in the PB channel of the control valve. This allows the control valve to function correctly. This choke is suitable for an oil flow level of 80 to 110 litres per minute. The function of the control block can be affected by a deviation from this oil flow level. The oil flow diagram shows which level of oil flow is required by which opening. Adjustment of this is possible by simply changing the diameter of the choke.

Known consequences of a wrong choke diameter are:

- Oil flow too low: load/unload valve not switching, floor does not get into loading state, or will not leave loading state;
- Oil flow too high: noise in system, high heat dissipation and capacity loss.



Flow independent choke

As an option a flow independent choke can be supplied (Article number 7370106). The standard mounted choke can simply be changed with these. You remove the cap out of channel PB (Allen key 12 mm) at the bottom of the control valve. After this you screw the choke out of the channel with allen key 12 mm. Screw the new (flow independent) choke in the channel and fasten these by hand (about 50 Nm.). Screw the cap back into channel PB (allen key 12 mm.) and fasten these by hand (about 50 Nm). Let the floor run (loading and unloading) in order to check if everything is functioning well and no leakage occurs. The flow independent choke has a flow range of 20-110 ltr./min. and is suitable for a maximal work pressure of 225 bar.

For both types of chokes applies: connecting the pressure and return wrongly will result in a malfunctioning of the system.

B- control

An other possibility to be independent from a variable oil flow is using a B-control. With this the loading/unloading direction is determined by a handle.

Transforming the E control to a B control (or the other way around) can simply be done with a so called transformation set (set from E to B: part number 7170039).

EMERGENCY CONTROL

In the event of a malfunction in the electrical system the electric valve can still be operated by activating the cartridge fitted for that purpose (manual control, see photo).

MAKE SURE THAT THE DOORS ARE OPEN!

When using this manual control you must always ensure that it switched back to the original, NON-ACTIVATED condition after use.

Activation of the emergency control on:

Turn in (clockwise) the red button on top of the GS02 solenoid till the stop (first remove the yellow security clip and put it back in place after the action).

Deactivation of the emergency controls:

Turn out (counter clockwise) the red button on top of the GS02 solenoid until the click.



Activation of the emergency control loading (floor will only be able to load):

Screw the black cap off (pay attention to the O ring).

Turn out (counter clockwise) the screw under the cap of the G02 till the stop.

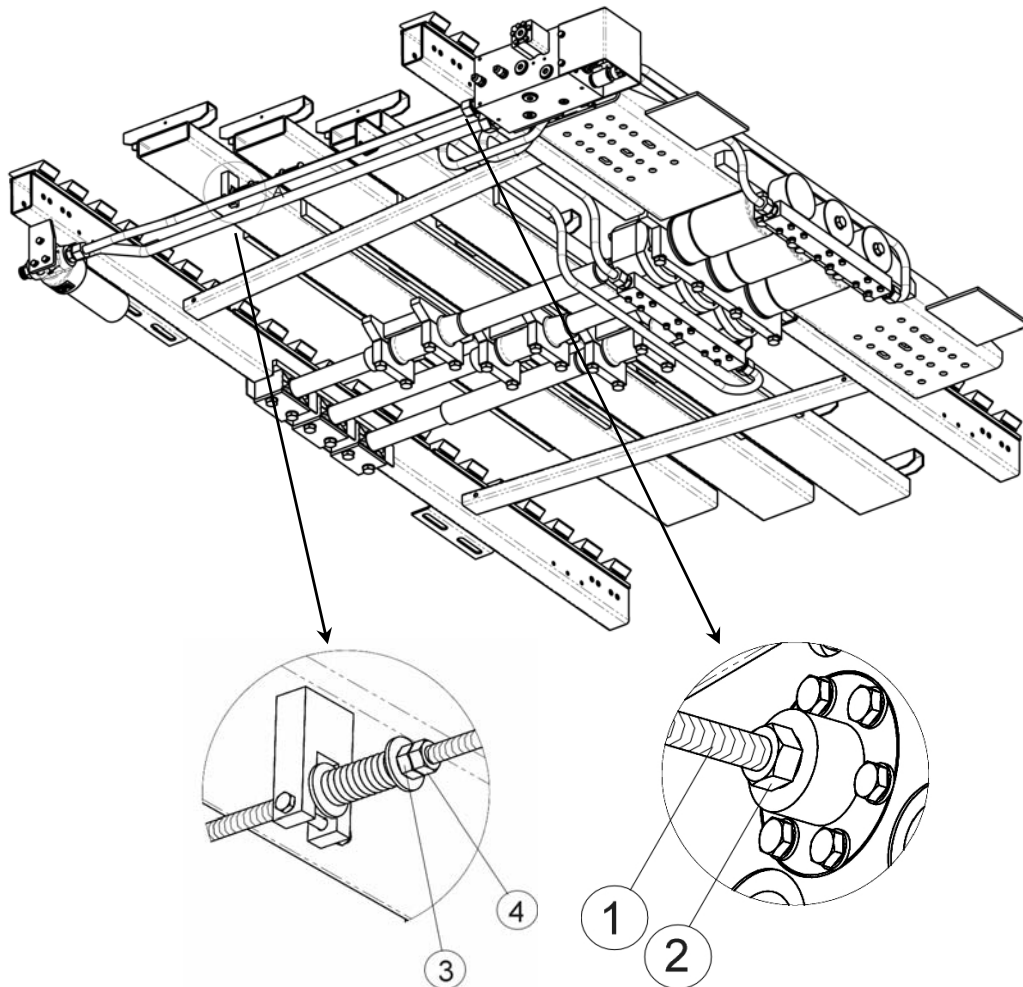
Deactivation of the emergency control loading:

Turn in (clockwise) the screw under the cap of the G02 till the stop.

Screw the black cap back on (pay attention to mounting the O ring).



ADJUSTMENT OF THE THREADED ROD OF THE STEERING VALVE



The Cargo Floor systems are already adjusted and tested when you take them over. You therefore do not need to adjust them anymore, but in certain circumstances (moved combination valve) it may be necessary to check the adjustment.

The pump and electrical installation must always be switched-off when working on the system; in addition, the hoses and/or pipelines between the pump and the Cargo Floor should also be disconnected. Check the oil level after when the work on the system is done.

Necessary tools:

- 2x spanner 17;
- High viscosity oil;
- Copper grease;
- Steel brush.

Check that the wire rod is fastened securely to the steering valve, stroke exactly 12 mm. If not, then screw the wire rod (1) as far as possible into the plunger and secure this with the contra nut (2) (spanner size 17). Loosen nuts (3 and 4, spanner size 17) and move these about 3 cm in the direction of the steering valve. Now switch the pump on. The system will stop now at the point where the command lip no longer operates the switchover valve. Switch off the pump.

Now push the wire rod (1) in until the spacer ring touches the switchover valve. Tighten nuts (3 and 4) so that the spring is fully pushed in, and secure them by tightening them against one another. Repeat this procedure for the other side.

N.B. It is worthwhile spreading some copper grease on the wire rod (1).

MAINTENANCE INSTRUCTIONS

Check after receipt of the new trailer:

Check the join between the aluminium floor profiles and the Cargo Floor-system. If there is play then either tighten the bolts. Check this a couple of days after receipt of the trailer, after 10 loads / unloads and after one month.

Specifications of the screws:

M12 x 30 countersunk screws with hexagon socket, class 10.9, galvanized. DIN 7991.

The is torque 100 – 140 Nm.

Regular checks:

To ensure that your Cargo Floor system operates reliably and has a long life, it is important that you regularly perform careful checks on the following aspects:

- The quality of the oil; this must be cleaned regularly (check every ½ year)
- Replace the filter element every year;
- Change the oil every 2 years, or more frequently if required;
- The level of oil in the tank. In order to prevent heat developing it is required to have at least 100 liters of oil in the tank. Out of practical experiences (high flow, frequently loading and unloading) we advise you to have at least 150 liters of oil available. Use a good quality, hydraulic oil in accordance with the ISO VG 32 norm.

Check and, if necessary clean the following components:

- Floor profiles: are they still fixed, tighten screws/bolts or replace if necessary!
- Check the ducts and joints of all hydraulic components, and adjust if necessary!
- Oil tank;
By taking the lid off the tank, you can remove any remains (condensation, dirt etc.) from the bottom.
- Return-/pressure filter
By removing the filter lid/ chamber you can check the filter element, or after about one year replace it.
- Check the seal between the two fixated floor profiles and the moving profiles. If a margin exist in between, then adjust the fixated floor profiles, in order for the sealing to be optimal and leakage via the side walls is prevented.

This is all necessary to avoid internal wear (of the pump/cylinders etc., for example).

New filter parts are available at your system builder. For the right type we refer you to our “exploded views” which you can find on our website: www.cargofloor.nl/download.

We want to emphasize that the minimal costs of replacing dirty parts or oil do not match the costs and discomfort that can proceed out of this.

- Adjusting the threaded rod of the steering valve;
It is important that the steering valve is correctly adjusted and that the switchover moment occurs according to the procedures. See page 22.

Cleaning the floor parts with a steam cleaner is also part of the regular preventative maintenance.

TROUBLESHOOTING

In the event of the failure of the Cargo Floor system to operate (in the correct manner) when used in accordance with the operating instructions carry out the following checks:

malfunction	cause	remedy
1. floor does not move in either the loading or unloading direction	No hydraulic pressure	<ol style="list-style-type: none"> 1. Switch on PTO / pump 2. Check quick-detachable couplings between tractor unit and trailer; where relevant, lock in position
2. floor does not move in either the loading or unloading direction; the hydraulic system is at working pressure	No power supply	<ol style="list-style-type: none"> 1. Switch on lights 2. Switch on control cabinet 3. Measure power supply to control cabinet
3. no power supply to the control cabinet; the lights are switched on	Break in cable, contact points corroded, system connected wrongly	Trace the cause of the electrical malfunction in the circuit between the control cabinet and the trailer lighting. See 6 and 7 also.
4. floor does not move in either the loading or unloading direction; the hydraulic system is at working pressure, and power is supplied to the control cabinet	Blocked quick-detachable coupling – note, also the return line!	Check the quick-detachable couplings, and unblock if necessary
4a. floor does not move in either the loading or unloading direction; the hydraulic system is at working pressure, and power is supplied to the control cabinet	Hydraulic oil released via the pressure relief valve fitted to either the tractor unit or the system	Check whether oil is released via the pressure relief valve fitted to either the tractor unit or the trailer. This can be determined from the hissing sound made by the valve.
4b. pressure relief valve on the tractor unit is activated	System does not achieve working pressure	<ol style="list-style-type: none"> 1. If a tipping valve is fitted, is it in the correct position? 2. Measure the pressure at the pump, have the pressure adjusted if necessary.
4c. pressure relief valve on the semi-trailer switches	Measure the pressure at measurement point M1, pressure (above) 225 bar	<ol style="list-style-type: none"> 1. Check the setting of the threaded rod 2. Capacity of the system is insufficient to move the load.
4d. capacity of the system is insufficient to move the load	<ol style="list-style-type: none"> 1 frost 2 overloaded 3 floor is dirty 	<ol style="list-style-type: none"> 1. Thaw 2. Remove part of the load 3. Clean the floor once the load has been removed
5. floor does not move in either the loading or unloading direction; the hydraulic system is at working pressure	Measure pressure at M1 Pressure = 0-10 bar	<ol style="list-style-type: none"> 1. Move threaded rod backwards and forwards 2. GS02 on/off cartridge does not switch Activate the emergency control.

malfunction	cause	remedy
6. GS02 on/off cartridge does not switch	No power	<ol style="list-style-type: none"> 1. Check power supply 2. Check voltage across solenoid Activate the emergency control.
7. GS02 on/off cartridge does not switch	Solenoid inoperable <ol style="list-style-type: none"> 1. Corroded contacts 2. Solenoid defective 3. Breach in the cable 	<ol style="list-style-type: none"> 1. Clean contacts 2. Use emergency control, see Emergency control section 3. If the loading function is not used, then swap the solenoids for GS02 and G02; note the plugs must also be swapped
8. floor moves in loading direction when either loading or unloading is selected	Emergency control G02 is in the loading position, the extreme position	Deactivate the emergency control.
9. floor moves in the loading direction when loading is selected, but does not move when unloading is selected	Plugs are connected the wrong way round on the solenoids	Reverse the plugs
10. floor does not move when loading is selected, but does move when unloading is selected	See point 6 or point 7	See point 6 or point 7. <ol style="list-style-type: none"> 1. Check the flow, see page 19.
11. all three floor groups simultaneously move backwards and forwards under high pressure when unloading is selected	Capacity of the system is insufficient to move the load.	See point 4d <ol style="list-style-type: none"> 1. Thaw 2. Remove part of the load 3. Clean the floor once the load has been removed
12. all three floor groups move correctly when unloading is selected, the individual groups move slowly whereby group 2 and 3 move together	Capacity of the system is insufficient to move the load.	See point 4d <ol style="list-style-type: none"> 1. Thaw 2. Remove part of the load 3. Clean the floor once the load has been removed
13. other malfunction	-	Contact your body builder; make sure you have the system number available when you do so

GUARANTEE CONDITIONS

Guarantee shall only be given with the prior consent of Cargo Floor B.V.! With guarantee requests always fill in and send a guarantee request form to Cargo Floor B.V. beforehand. You can fill in a request for guarantee simply on our website: www.cargofloor.nl/download.

The guarantee conditions, as specified in the most recent Cargo Floor general terms and conditions for supply and payment, deposited under number 1436 by the Registrar of Commerce and Manufacturing (Kamer van Koophandel en Fabrieken) in Meppel, are applicable in unabbreviated form. On request available.

A short extract of these conditions follows:

A guarantee period of 12 months (starting directly after installation) applies for all Cargo Floor system materials supplied by us. In the case of malfunction and/or manufacturing faults we are only responsible for the costless supply of replacement parts, if:

- The Cargo Floor system is installed by your trailer builder according to our installation procedures.
- Our maintenance and control procedures have been followed.
- In the case of a malfunction, the system builder, or Cargo Floor have been informed

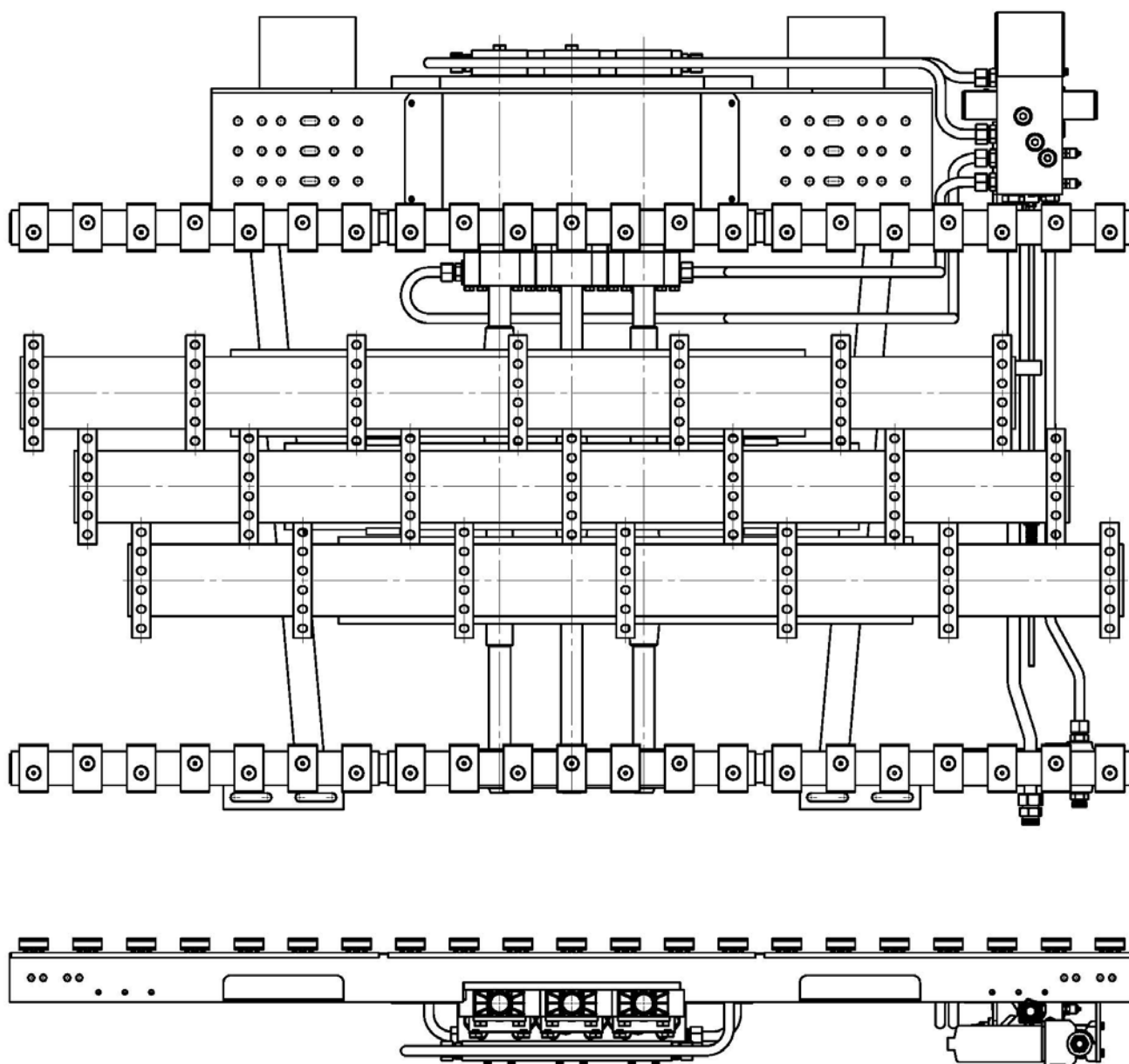
The following components are not covered by the guarantee:

- Malfunction of equipment, or caused by equipment, which was not supplied by Cargo Floor.
- Malfunction caused by the use of dirty oil, or oil of the wrong type.
- Malfunction caused by overheated oil, T. max. ≤ 70 °C.
- Malfunction caused by overloading or injudicious use.
- Malfunction caused by repair work, which is carried out by third parties.
- Filter elements and components, which are subject to wear-and-tear.
- Defects in electrical components due to incorrect connection and/or incorrect voltage levels.
- Resulting damages

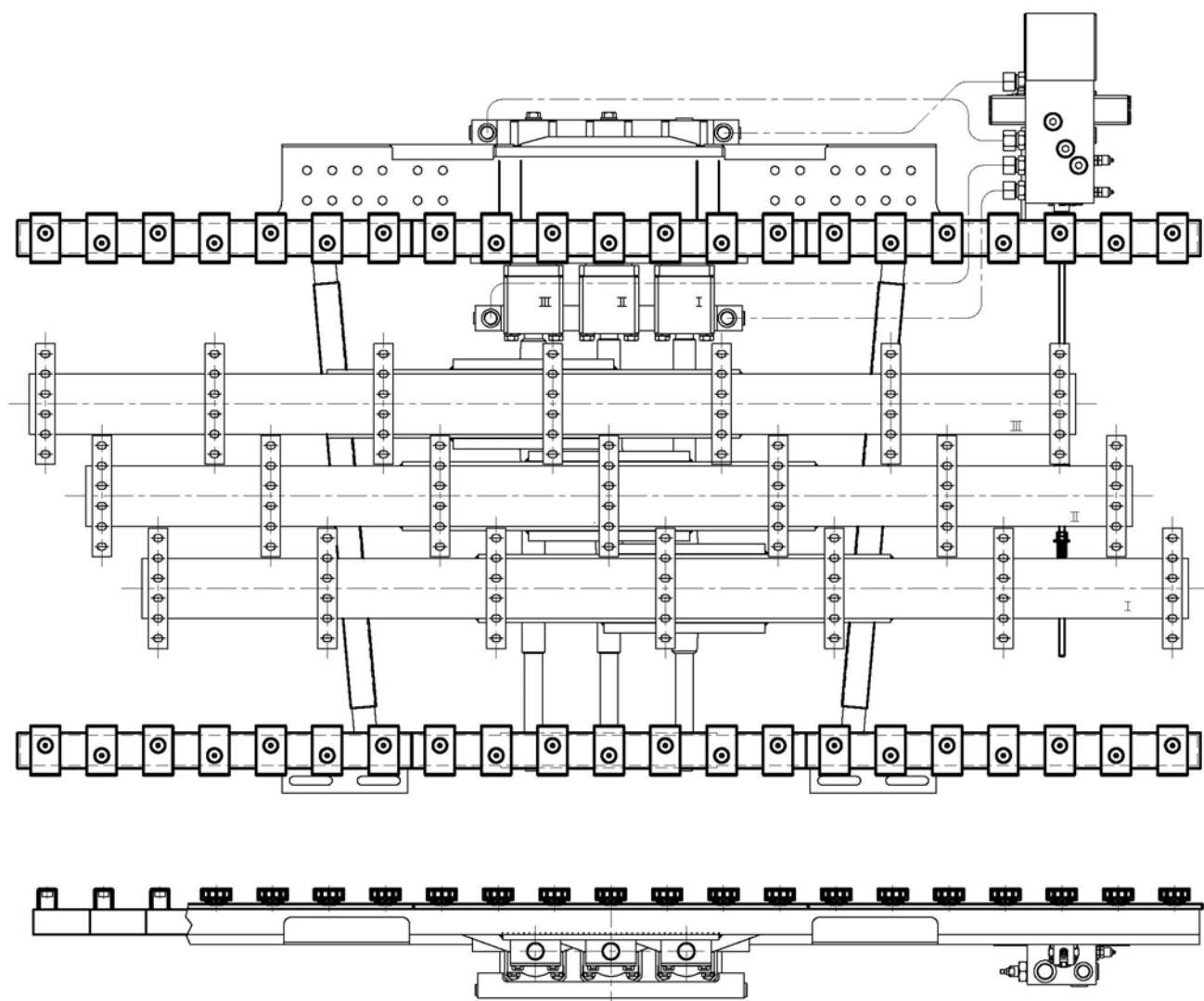
The guarantee is void if:

- The system is used for purposes, which have not been recommended by Cargo Floor
- The Cargo Floor system has not constructed correctly by your trailer builder, insofar as this has a negative influence on the operation of the system.

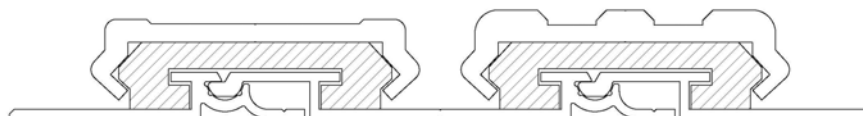
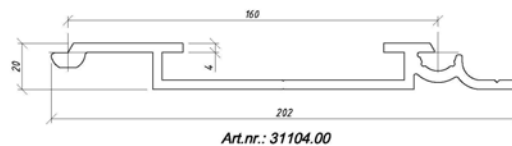
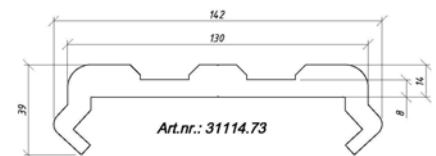
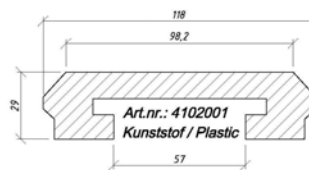
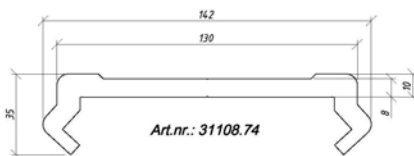
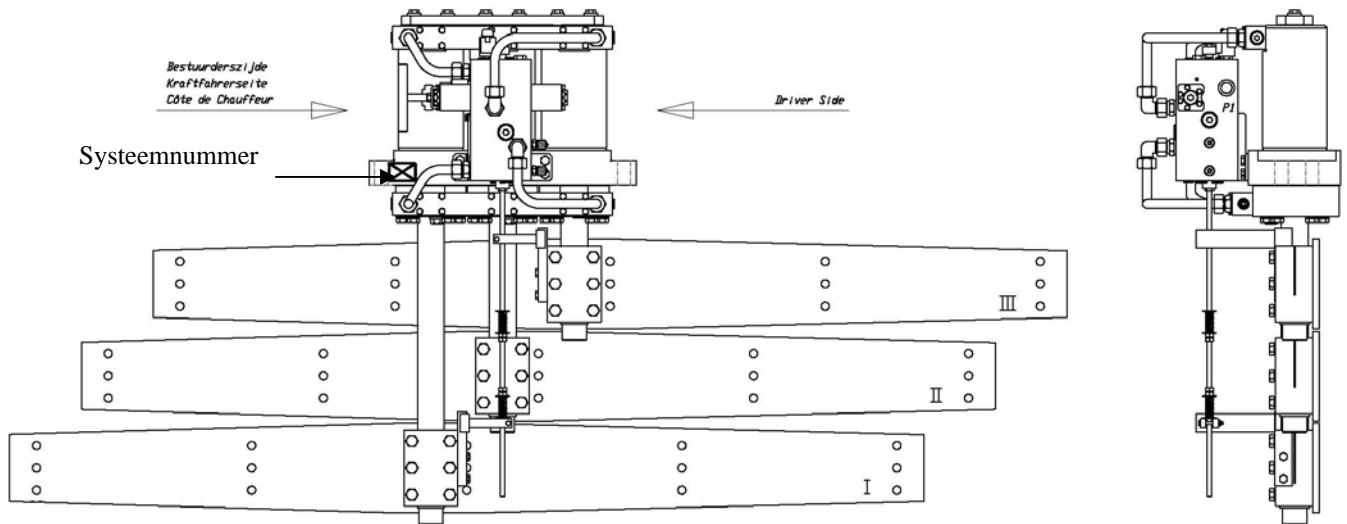
CF500 SL-2



CF100 SL-2

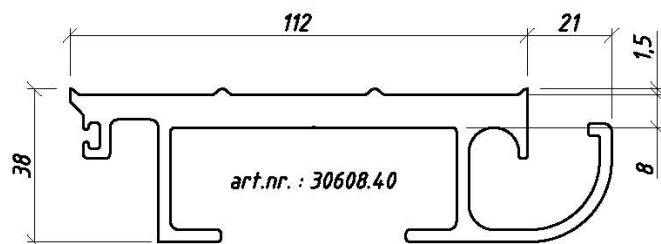
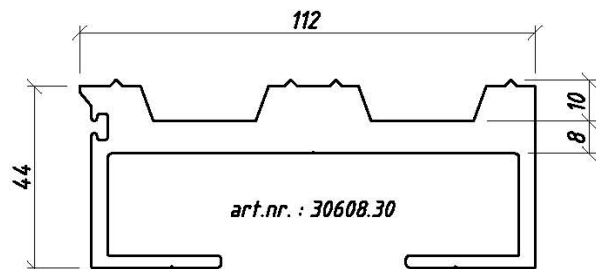
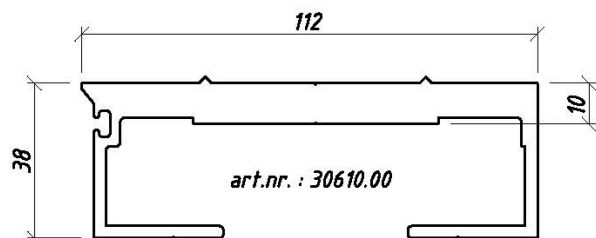
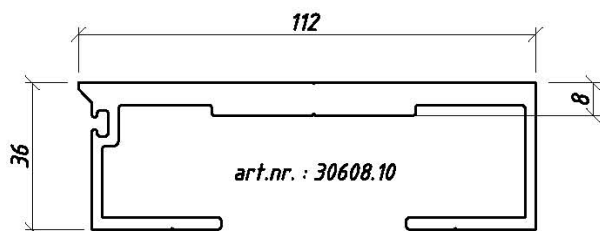
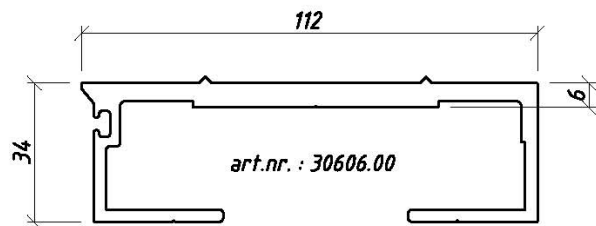


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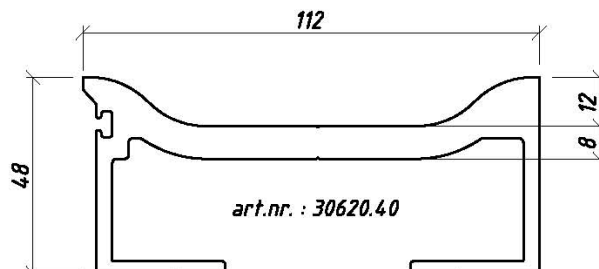
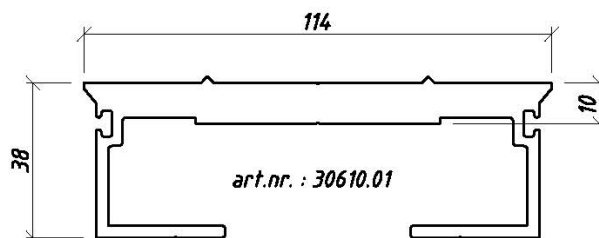
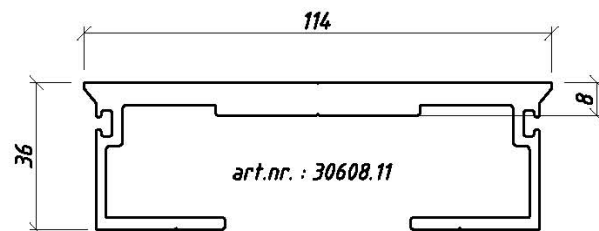
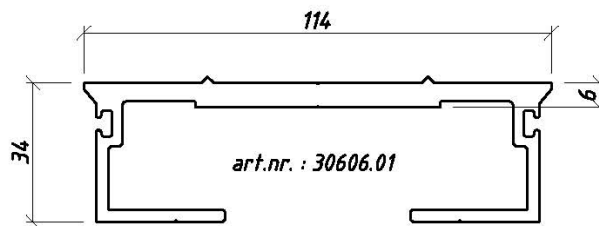


PROFILES TYPES

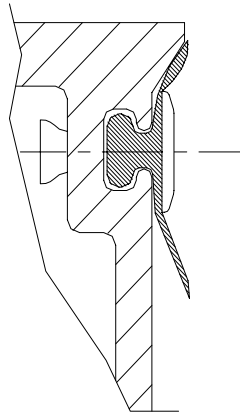
Standard



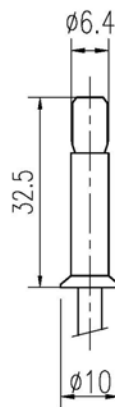
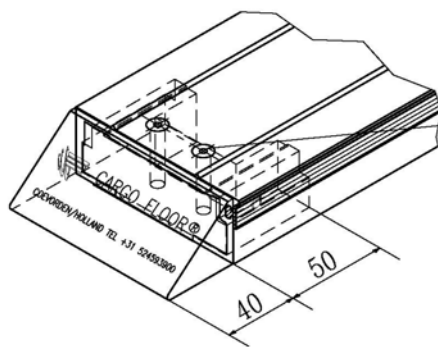
Side



ATTACHMENT OF FLOOR PROFILES, SEALS AND END CAPS



Plastic end cap



Aluminium end cap

