

Operating Instructions

ELS 1-10-5

Serial-N°:

70774

Date:

2007-07

These operating instructions are a component part of the lifting machine. They must be made available at all times for the operators information. The operating instructions are to be delivered on sale of the machine.

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1 Safety

1.1 Safety Hints in these Instruction



Draws attention to the fact that disregard for these instructions could lead to serious or even deadly consequences.



Draws attention to the fact that disregard of these instructions could under certain circumstances lead to injuries.



Indicates that disregard of these instructions could lead to the damage of the machine or goods on the machine.



Work that is indicated by this symbol must be carried out by a competent tradesman (electrician or industry fitter).

1.2 Dangers of this machine

This machine is equipped with safety devices and is put through safety and quality control tests but there is a threat of danger by incorrect operation and misuse

- for the operator or other people in the vicinity
- for the machine and goods

The danger zone is contained within the outer limits of the machine.

All personnel concerned with the

- Installation
- Setting Up
- Operation
- Maintenance
- Repair

of the machine must have read and fully understood the operating instructions.

1.3 Regulatory Application

Applications

- Lifting of weights until maximum load.
- Working on the raised platform
- Hand Forklifts - Transporting of loads in the **lowered** position.

Prohibited

- Lifting and transportation of personnel (with the exception of lifting tables intended for this purpose on the basis of certain preparations and safety provisions)
- Setting up and operation of machines in the open.
Exception - machines specially constructed for this purpose
- Alterations and rebuilds of the machine.

Positioning of the load

- Load should not overhang the platform
- Unintentional shifting of the load should be prevented

1.4 Danger through accessories

When the following -

- Rollers
- Conveyer Belts
- other transport facilities

are used the safety devices on the machine must not be made in operational through their use.

The danger zone is enlarged through the use of accessories

1.5 Emissions

See dimension sheet in appendix.

Operating Instructions

1.6 Source of Danger

Mechanic	Where?	Scissors arms Scissors arms / underframe
	What?	Crush and shear points
	Danger!	Loss of limbs /life
Hydraulic	Where?	Hydraulic components e.g. hoses
	What?	Because of damage oil could be sprayed out under high pressure
	Danger!	Burns and contamination to the eyes
Foot Pump	Where?	Operating pedals , Lifting / Lowering
	What?	Slipping off pedal
	Danger!	Injury to the leg
Current	Where?	Current carrying components
	What?	Touch
	Danger!	Life threatening



Work on the electrical and hydraulic components should only be carried out by a competent tradesman!



Never

- remove
- alter
- take out of service the safety facilities

Always secure that the machine is out of service when -

- Setting up
- The alteration of the employment requirements
- The alteration of the operating procedure
- Maintenance
- Servicing
- Repair

Operating Instructions

1.7 Qualified Operators

The operator must

- be over 18 years old
- be instructed in the operation of the machine
- have proved to the firm that he is capable of operating the machine
- have clear and written instructions from the firm to operate the machine
- have read and understood the operating instructions
- must observe the operating instructions

1.8 Personal Safety Equipment

For the operating of the machine

- Safety shoes

For cleaning / maintenance / repair

- Safety shoes
- Work gloves
- Face protection

1.9 Safety Measures in the Work Place

- Secure positioning of the machine
- Avoid crush and shear zones between the machine and it's surroundings
- Ensure that the workplace remains clean and clear of obstacles

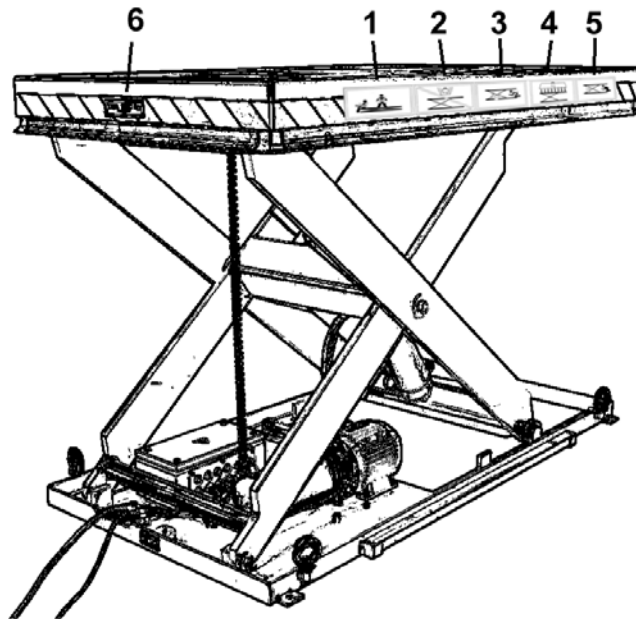
1.10 Conduct In An Emergency

Footpump	E - Hydraulic
Release the pump / lower pedal immediately	Release the raise / lower push-button immediately
	Switch of at the mains / remove the plug
Secure against further By raised load support the load carrying component	

Operating Instructions

1.11 Picture Symbols

Safety and Operational hints on the Lifting Table



1

2

3

4

5

- 1 **Prohibited:** Stepping on / Lifting of personnel!
(with the exception of lifting tables intended for this purpose on the basis of certain preparations and safety provisions)
- 2 Accumulation of weight **forbidden!**
- 3 **Prohibited:** Staying / Grasping under an unsecured table!
- 4 Load must be evenly distributed (**surface load!**)
- 5 Lower the table onto the inspection support when carrying out repair and maintenance work alone!

6



You will find the maximum permissible load at the appendix of these instruction.

2 Safety Facilities.

2.1 Inspection Support.

The **unloaded** machine should be lowered onto the inspection support before all repair and maintenance work! (see section 7)

2.2 Aperture restriction in cylinder inlet

Restricts the oil flow by the rupture of a hydraulic hose

2.3 Lowering Brake Valve (when on hand)

Fixed adjusted limitation of the oil flow (lowering speed)

2.4 One Way Flow Restriction Valve (when on hand)

Adjustable restriction of the oil flow (lowering speed)

Attention : adjustment is dependent on load !

2.5 Folding Screen (when on hand)

Prevents grasping under the raised table.

2.6 Securing Device On Wheels (transportable machines only)

The securing device (brake) prevents the unintentional movement of the machine.

2.7 Contact Frame (when on hand)

The contact frame stops the lowering of the table when it comes in contact with an obstacle. Raise the table with the "raise" button and remove the obstacle then complete the lowering process

3 Taking into use.

For technical details see dimension sheet in appendix

3.1 Setting up / Assembly / Connecting Up.



(230 V / 400 V)

During installation of the lifting table, it is important that the base frame (when on hand) in the area of the fixed bearings and the runner wheels is adequately supported with appropriate packing plates.

Failure to comply with this instruction will result in loss of machine-warranty!

- Before taking into use it will be necessary to remove the crane parts (when on hand), which tighten the under frame together with the top frame.
- Position the machine on a firm level underground
- The machine should be adjusted so that it is level
- Bolt the machine onto the concrete floor
- When the machine is to be connected into the factory ring main,
 - connect in a lockable mains switch to prevent unauthorised use
 - This should only be performed by an electrician



- **Danger of stumbling because of cable.**
- **Damage to cable, e.g. because of falling objects (tools etc.)**
- **It is forbidden to wind the cables around mechanical components**

Every feed wire must be secured by 16 A.

- **Have you read the operating instructions and above all the safety points and above all understood them?**

Then you can take the machine into use

3.2 Taking into use.

- Produce the electrical connection (put the plug in)
- Check the motor rotation (by three phase 400V)
 - Control by use of the red arrow on the motor casing
 - when incorrect alter by changing the phases in the plug (electrician only)
- Now you can take the machine into use.



An adequate and safe connection of the earth cable to the workpiece must be guaranteed when using a lifting table as a welding station.

4 Operation



- No personnel should be within the danger zone when raising or lowering the table
- Observe the picture symbols on the lifting machine



Short, jerky raising and lowering is forbidden .
The machine then begins to oscillate and damage to the machine could be a result .

- Operate the machine with the remote cable push button control (dead mans operation)
- Observe the lettering (picture symbols)

4.1 Lifting



4.2 Lowering



4.3 Adjusting the lowering speed (when on hand)



Never grasp the table during the raising or lowering process.



The lowering speed of the lifting device must not exceed 150 mm/s.

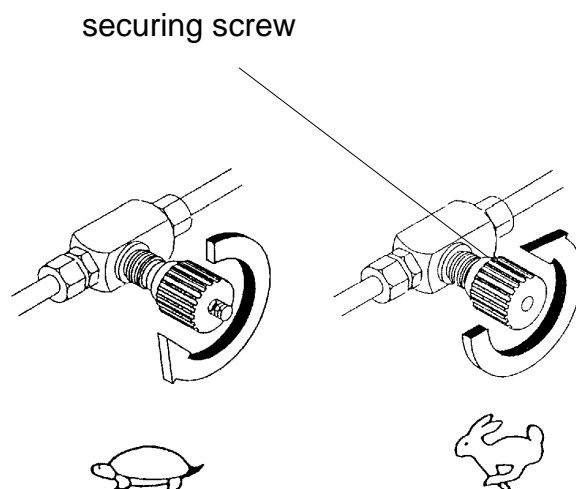
The recommended lowering speed is 50 mm/s.

Note: It is not possible to use the maximum lowering speed allowed with some units due to their design.

An adjustment of the lowering speed should not be necessary (adjusted at works). Should an adjustment be necessary e.g. through replacement of the flow control valve, then the following should be observed.

The one-way flow control valve can be found on the pressure outlet of the hydraulic pump.

- raise load
- loosen securing screw
- adjust valve as required



- tighten the securing screw
- lower the load
- measure the lowering rate with a stopwatch
- if necessary repeat the above procedure

4.4 Adjustment of the lifting end-stop switch (when on hand)



Never grasp the table during the raising or lowering process.

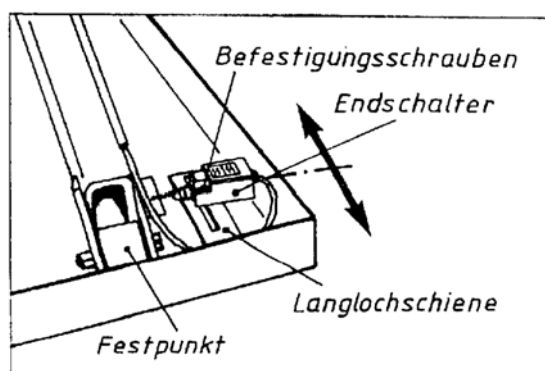


Select the contact point of the electrical switch so, that the roller does not come into contact with the mechanical end-stop.

The end-stop switch is there to limit the lifting of the table. The switch can usually be found on the fixed pivot end of the table. This position can change in the case of a special construction table.

The end-stop switch is adjusted by shifting it's position in the slotted rail.

- Loosen fixing screws
- Adjust switching position
- Tighten fixing screws
- Check adjustment
- If necessary repeat the above procedure until correct.



Befestigungsschraube = fixing screw
Endschalter = End-stop switch
Langlochschiene = Slotted rail
Festpunkt = Fixed pivot

5 Taking out of use.

machine with	for: maintenance -cleaning -inspection -repair -battery charging	for: end of work
footpump	-remove load -put inspection strut into position -lower onto inspection strut	lower machine
fold up the foot pedal		
12 V	- remove load - put inspection strut into position - lower onto inspection strut	lower machine
battery main switch into "off" position		
230 V 400 V	- remove load - put inspection strut into position - lower onto inspection strut	lower machine
remove mains plug and or mains switch "off"		

6 Inspection.

6.1 Inspection before the first use



The machine is tested by the manufacturer before delivery

Machines that are delivered not ready for use should be inspected by a qualified person in the following aspects ;

- correct construction
- correctness for use

6.2 Regular testing



Regular testing of machines at intervals of at the longest one year should be carried out by a qualified person.

- use the check list on the following page
- make a photo copy of the list
- note top right on the check list
 - Lfd N° (check list number)
 - machine type
 - serial number
- cross each point when it is in order
- put the machine back into use only when each point has been crossed
- when completed put the check list into the appendix of these operating instructions

6.3 Check List

Lfd.-Nr°:

Machine Type:

Serial-N.°:

Mechanical

- Cylinder pins secure
- All lever pins secure
- Inspection strut in order (when on hand)
- Wheel brakes in order (when on hand)
- Machine clean
- Stickers intact and readable
- Welded construction undamaged
- Machine holds the load in the maximum raised position for at least 10 minutes
- Protective folding screen undamaged (when on hand)
- All bolted connections tight

Hydraulic

- No leaks in the hydraulic system
- Oil level correct
- No damage to the hoses (see 7.5)
- Lowering speed correctly adjusted
- Flow control valve secured (when on hand)

Electric

- Cable connections tight
- Cables secured
- No damage to cables
- Contact rail in order (when on hand)
- Battery is clean and in order (when on hand)
- All functions inspected without query

Inspection date, Inspector (signature)

7 Inspection / Service



Work should only be carried out on the lifting table when it is **unloaded** and the issued inspection strut is in it's designated position.

The inspection strut can be found on or near the under frame.

Operation:

- The ***unloaded*** scissor lift should be fully raised
- position the strut in the lower pocket.
- hold the strut in a vertical position and lower the scissor lift.

Ensuring that the strut is in it's correct position!

Should it not be possible to raise the scissor lift using it's own drive, then the platform should be raised using some suitable means (hydraulic jack or crane). The platform should be raised from the fixed pivot end.

It should be noted that a vacuum is produced in the cylinders when the scissor lift is raised using an external method and that they do not support the scissor lift hydraulically (on a column of oil).

The scissor lift should be raised from the inspection strut using it's own hydraulic drive (or an external hydraulic drive) when service work is completed to ensure that the cylinders support the weight of the scissor lift.



LIFE THREATENING DANGER

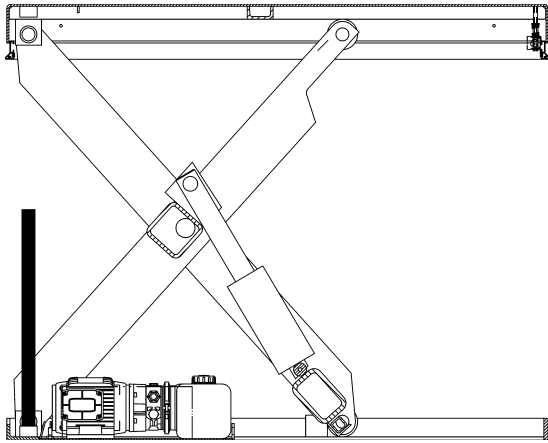
The inspection struts should never be removed (by hammer blow or cutting) before the lifting table has been raised from the service position using it's hydraulic drive. An uncontrolled lowering of the scissor lift and platform could be the result.

The inspection strut can be removed:

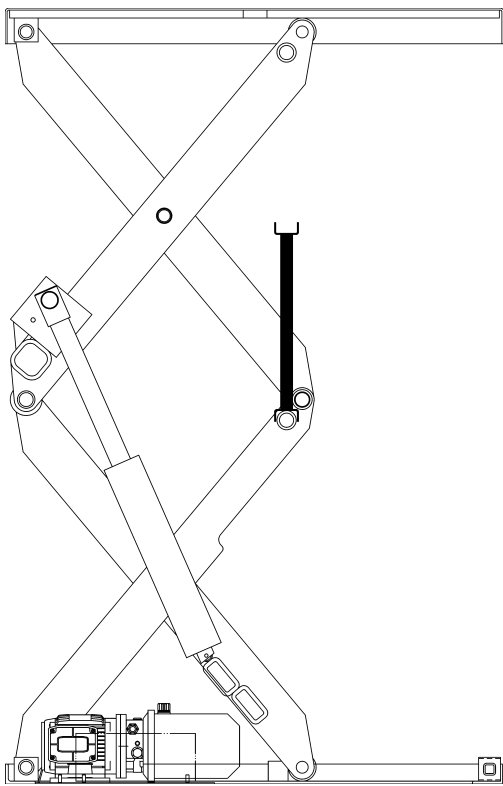
- by first raising the scissor lift a short distance.
- then remove the strut and return it to it's stowed position.

The operator should under no circumstances be positioned within the lifting table when performing this task.

Possible methods of using the inspection strut



Dia. 1: Inspection strut between upper and lower frame.



Dia. 2: Inspection strut between scissor arms.

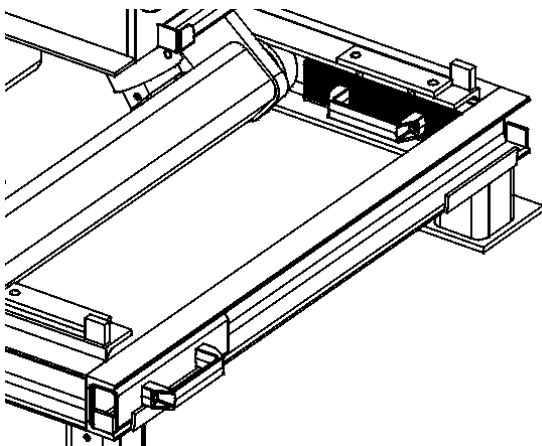


Abb. 3: Inspection strut between roller and frame.

Operating Instructions

7.1 Maintenance Plan

What?	When?	Description
Cleaning	When necessary	7.2
Check Bushes	Every 250 hours	7.3
Check oil level top up	Yearly	7.6
Hydraulic oil change	-----	7.7
Inspect oil hoses	Yearly	7.9

7.2 Cleaning



Secure that the machine is out of use

Clean

- your machine regularly
- especially the stickers (picture symbols) on the machine. (when the stickers are no longer readable please order new ones, order number see spare parts lists)
- working areas of the rollers

7.3 Mechanical

The machine is delivered with maintenance free bushes. Therefore the bushes only have to be checked regularly (250 working hours) for wear.

7.4 Maintenance of the hydraulics



Hydraulic oil can cause irritation and skin rashes. Avoid prolonged skin contact and wash the skin thoroughly after contact.

**Wear protective clothing!
(see chapter 1.8)**



Protect the environment:

The handling and disposal of mineral oils is covered by laws. Dispose of old oil at an authorised disposal unit. Information can be found from the responsible authority. Be careful not to spill any hydraulic oil. Make precautions to catch any spilt oil (oil resistant covers, drip tray etc.)

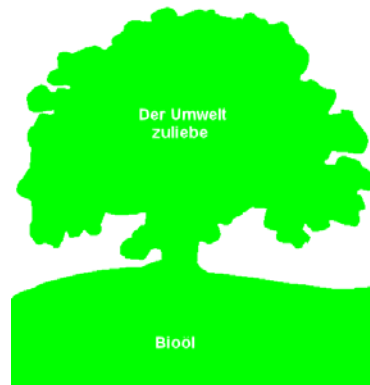
**This machine is filled with
bio-oil on synthetic base**

This oil is not mixable with water.

**The biological removable hydraulic-oil
is mixable with mineral-oil, but then it
will loosen his biological removability.**

The following or equivalent can be used

Total Biohydran TMP 46 → in this machine
BP Biohyd SE 46
Fuchs Plantohyd 46S
Esso Hydraulicoil HE 46
Total Equivis UVS 46
Shell Naturell HF-E 46

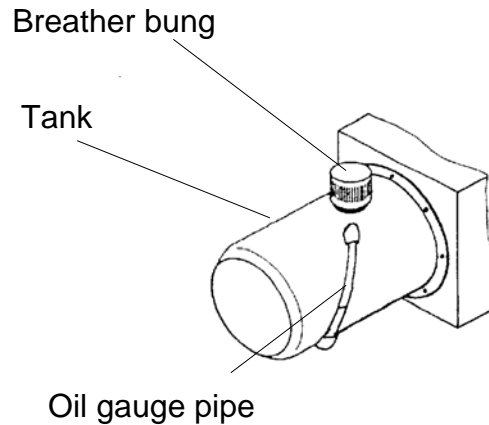


7.5 Oil Change Intervals

The oil must be changed after the first 50 working hours, thereafter at intervals of 500 hours or at the latest every 2 years

7.6 Checking the oil level.

- Raise the table into its uppermost position.
- Read the position in the oil gauge pipe
- The level must be at least in the lower quarter of the pipe
- When necessary top-up the oil



7.7 Oil Change



- Lower the table without load onto its inspection strut.
- Position a drip tray under the hydraulic cylinder
- Loosen the hose on the cylinder and lay into the drip tray
- Operate the pump (raise) until no more oil is discharged from the hose
- Reconnect the hose
- Remove the breather bung from the tank
- Fill up with oil
- For volumes see dimension sheet in appendix
- Replace the breather bung
- Bleed the hydraulic system

7.8 Bleeding the hydraulic system



- Lower the table without a load onto the inspection strut.
- Loosen the bleed screws on the cylinder one or two turns.
- **When no bleed screws are on hand the cylinders are so constructed as to bleed themselves.**
- Operate the pump (raise) until oil is discharged from the bleed screws without air bubbles.
- Check the oil level.
- Top up when necessary.

7.9 Control of the hydraulic hoses



A yearly check on the hydraulic hoses for a safe working condition is stipulated. The check must be carried out by a qualified tradesman.

Control the following

- Can the following damage be observed on the outer mantel of the hose rips, kinks, cuts, unbending, abrasions or splitting?
- Are there any deformities in the hose when under or not under pressure?
- Are there any leaks between the hoses and the fittings? Is the hose coming out of the fitting?
- When there is any damage the hose should be changed.
- Depending on the requirements the hoses should be changed at the latest after six years.

8 Fault Finding



Work on the electrical and hydraulic components should only be carried out by a competent tradesman!

Observe the safety instructions

8.1 Electric motor does not run

Cause	Cure
Current supply broken	Check: <ul style="list-style-type: none"> • Feed line • Fuse • Circuit breaker
Motor is faulty	Exchange hydraulic pump

8.2 Lifting machine does not lift

Cause	Cure
Table is overloaded	Reduce load
Motor is faulty	Exchange hydraulic pump
Leaks in the hydraulic system	See 8.3
Pump does not produce pressure	Exchange hydraulic pump
Motor rotates in the wrong direction	Check the motor rotation (by three phase 400V) <ul style="list-style-type: none"> - Control by use of the red arrow on the motor casing - when incorrect alter by changing the phases in the plug (electrician only)

8.3 Oil loss

Cause	Cure
Leaks in the hydraulic system	<ul style="list-style-type: none"> • re-tighten fittings • replace cylinder seals • exchange cylinder • exchange hoses

Operating Instructions

8.4 Lifting machine does not reach maximum height

Cause	Cure
Oil level too low (see point 8.3)	<ul style="list-style-type: none">• top-up oil

8.5 Lifting machine will not (completely) lower

Cause	Cure
Machine is blocked by inspection strut	Raise table and remove inspection strut
Obstructions (dirt) in the rollers working surfaces	Clean working surfaces
Contact board has been activated by an obstacle	Raise table, remove obstacle and test the function of the contact board
Contact board switch is defect	Exchange switch
Magnet lowering valve defect	Exchange valve
The neutral is incorrectly or not connected (only 230 V / 400 V)	Check feed

8.6 The contact board does **not** stop the table sinking

Cause	Cure
Contact board is defect (e.g. bent)	Exchange contact board
The fixing screws of the contact board switch are loose	re-tighten screws and align contact board switch
Contact board switch is defect	Exchange switch
Contact board switch cable is defect	Replace cable

Operating Instructions

8.7 Lifting machine sinks strongly by placement of load

Cause	Cure
Air in hydraulic system	<ul style="list-style-type: none">• Bleed hydraulic system• Drive table repeatedly (2-3 sec) against the mechanical end-stop
Hydraulic feed hose too long (only tables whose pump is outside the table)	<ul style="list-style-type: none">• Hoses of more than 3m from table to pump should be avoided

9 General

9.1 Transport Damage

All deliveries are to be insured by the customer. We must turn down any possible claims concerning transport responsibility. Our responsibility is restricted to the hand - over of the machine in brand-new condition to the shipping agent. Should you discover any damage to the machine, do not use it and contact the shipping agent concerning the damage.

9.2 Warranty

Every machine is covered by a 12 months warranty against material faults and incorrect assembly. The warranty covers all parts that are returned post free within twelve months for inspection. The parts will then be inspected by us to determine whether the parts were damaged under normal use. The warranty will be declared void if the parts are found to have been overloaded, handled incorrectly or that replacement parts have been assembled incorrectly.

9.3 Ordering of spare parts

Please give the following details when ordering;

Type:
Load:
Year of construction:
Serial Number:
Part description:
Order Number:

The address for ordering is to be found on the cover of this operating instructions.

10 Appendix

Technische Daten (Technical ratings)

ELS 1-10-5

Mechanik / Mechanics

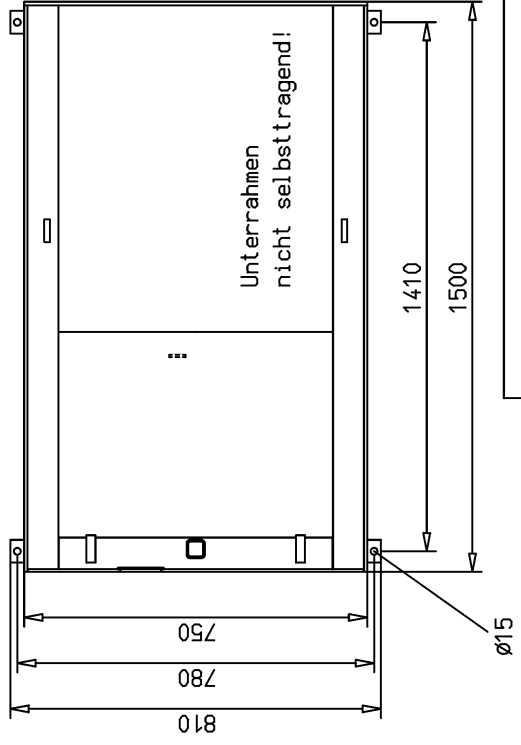
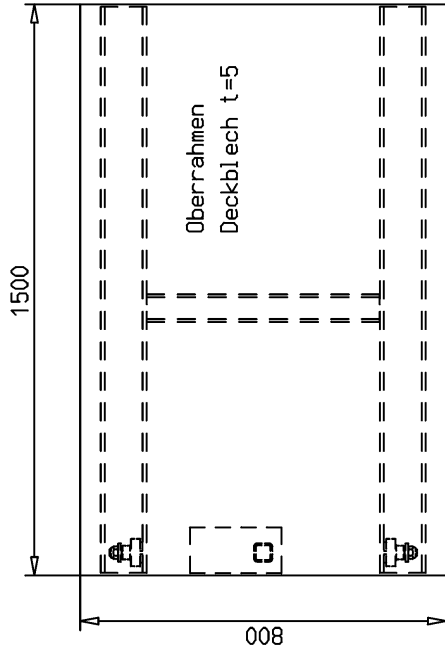
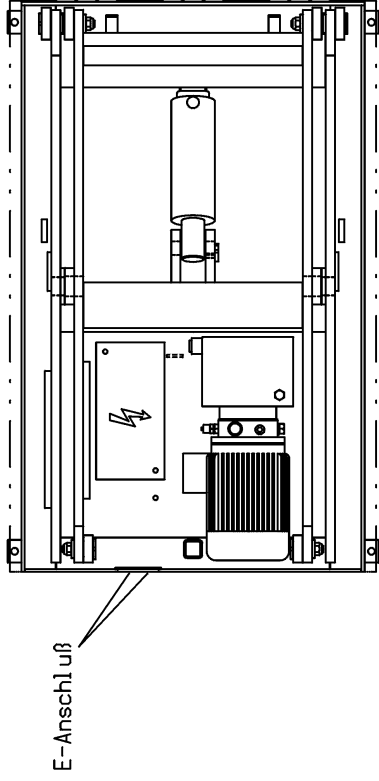
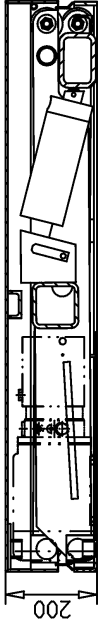
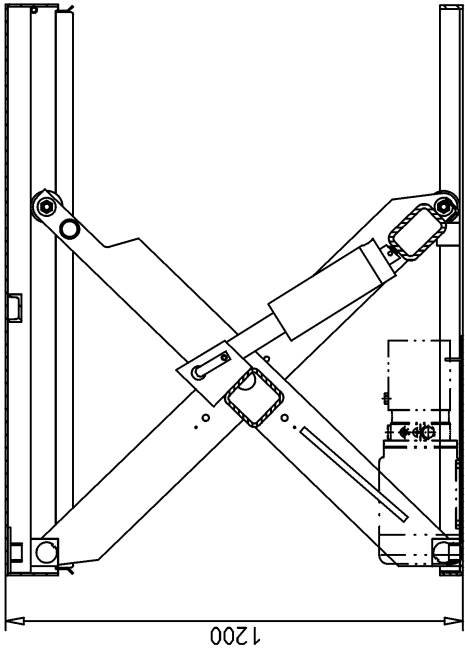
Traglast (maxload):	1000 kg
Belastungsart (nature of load):.....	Flächenlast / surface load
Bauhöhe (building height):	200 mm
Nutzhub (effective stroke):	1000 mm
Tischplatte Maße (platform):	5 x 1500 x 800 mm Glattblech / plain sheet
Unterrahmen (bottom frame):.....	1500 x 750 mm
Hubzeit belastet (lifting time, loaded):.....	ca. 13 sec.
Senkzeit belastet (sinking time, loaded):.....	ca. 12 sec.
Gewicht (weight):.....	ca. 290 kg

Elektrik / Electric

Leistung Hydraulikaggregat (power):	2,3 kW
Stromaufnahme (current consumption):	5,5 A
Schutzart (enclosure):	IP 55
Betriebsspannung (operating voltage):	400 V
Steuerspannung (control voltage):	230 V
Steuerung (control system):	Totmann, Handtaster (3m) Deadman, hand switch (3m)

Hydraulik / Hydraulic

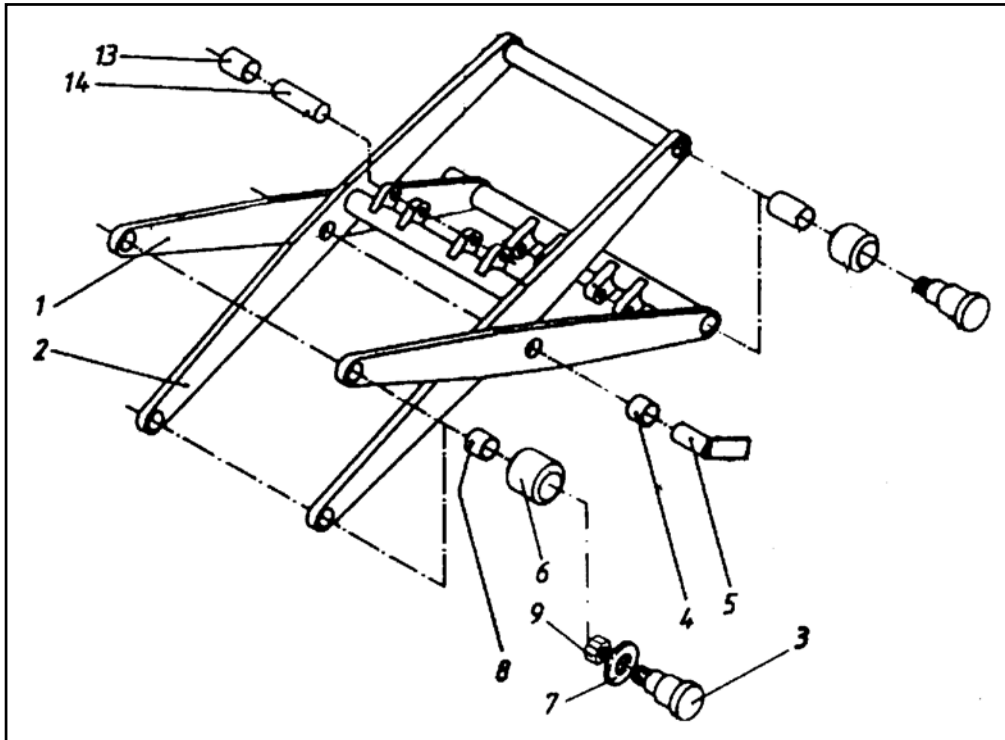
Betriebsdruck (working pressure):	max. 180 bar
Anordnung Aggregat (positioning of drive unit):.....	innerhalb / inside
Ölfüllmenge (oil filling):	2 l
Ölsorte (kind of hydraulic oil):.....	Bioöl / biooil
Hydraulikzylinder (hydraulic cylinder):.....	1 x Ø 80 x 250 mm Hub / stroke



Maßblatt ELS 1-10-5

Stückliste

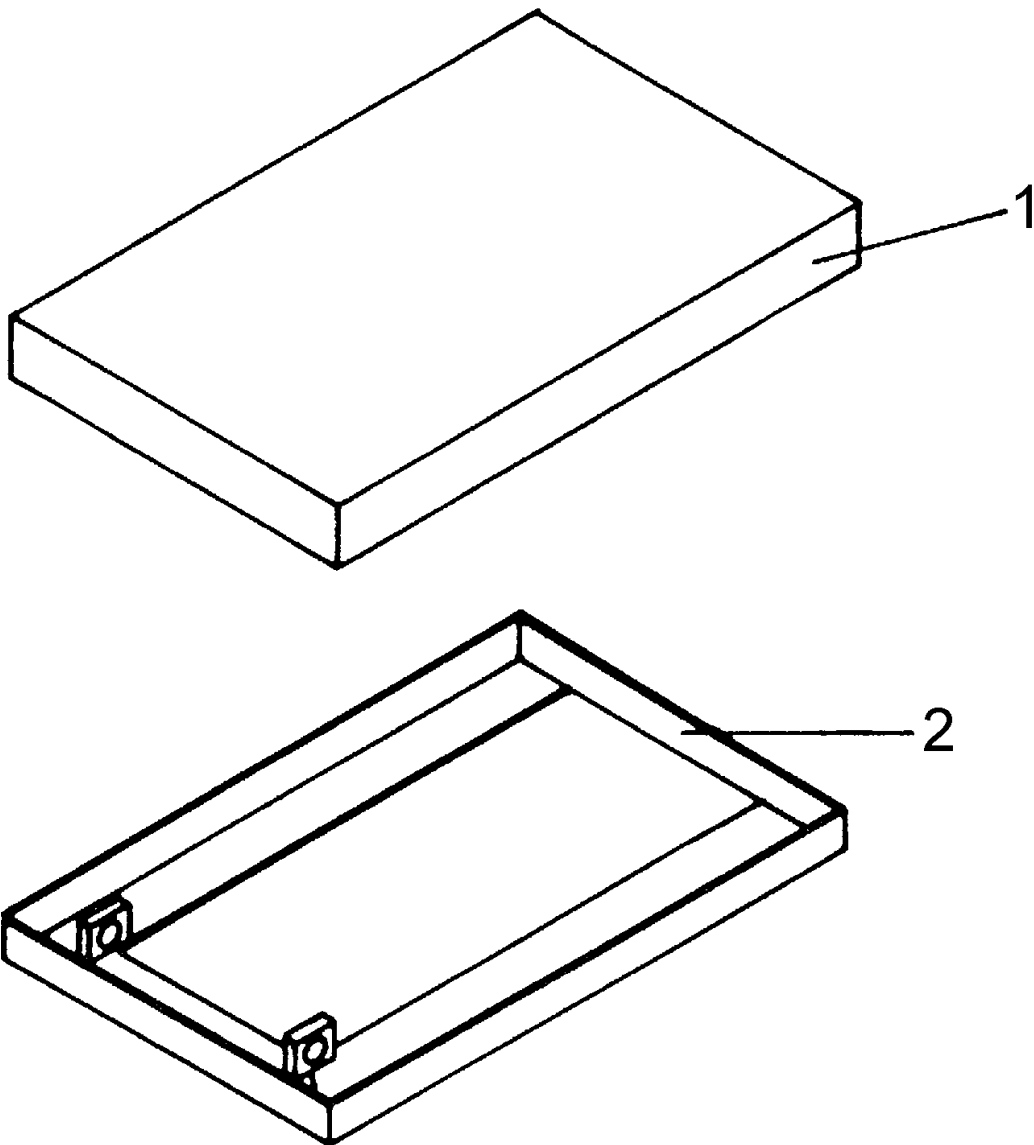
Mechanische Bauteile



Pos.	Stückzahl	Benennung	Best.-Nr.	Bemerkung
1	1	Schere, außen	50.11.272	
2	1	Schere, innen	50.11.222	
3	8	Fest- und Laufrollenbolzen	10.16.160	Ø 45 x 70
5	4	Passscheibe	10.40.510	DIN 988-35x45x1
4	2	Buchse	10.02.294	GSM 4044-30
4	2	Buchse	10.02.283	GFM 4044-40 mit Bund
5	1	Scherenachse	55.57.231	DIN 668-S235JRG2K-40x621
5	2	Scheibe	12.40.137	ISO 7094-16-100HV
5	2	Federring	12.40.440	DIN 128-A16-FSt
5	2	6kt.-Schraube	12.53.041	ISO 4017-M16x35-8.8
6	4	Laufrolle mont.	42.99.474	
6a	4	Laufrolle	12.09.690	Ø 70 x 20
6b	4	Buchse	10.02.287	GSM 3539-20
7	8	Scheibe	12.40.136	17 DIN 7349-St
8	4	Buchse	10.02.287	GSM 3539-20
9	8	Sicherungsmutter	12.55.109	DIN 985-M16-10
13	2	Buchse	10.02.294	GSM 4044-30
14	1	Zylinderbolzen	50.82.064	Ø 40 x 110
14	1	6kt.-Schraube	12.51.081	ISO 4017-M10x30-8.8
14	1	Federring	12.40.425	DIN 128-A10-FSt
14	1	6kt.-Schraube	12.50.281	ISO 4014-M8x80-8.8
14	1	Sicherungsmutter	12.55.042	DIN 985-M8-8

Stückliste

Mechanische Bauteile



Pos.	Stückzahl	Benennung	Best.-Nr.	Bemerkung
1	1	Oberrahmen	50.02.556	1500 x 800 mm
2	1	Unterrahmen	50.02.375	1500 x 750 mm
	1	Inspektionsstütze	56.67.295	

Kontaktleiste

Art.-Nr.

12.55.038 (L=25 mm)

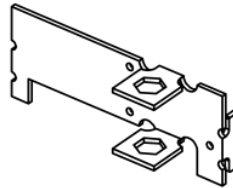
12.55.039 (L=40 mm)



12.23.028



12.15.539



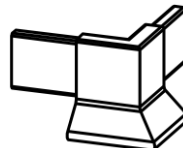
12.16.521



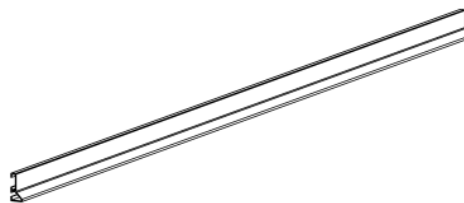
12.23.503



10.28.084

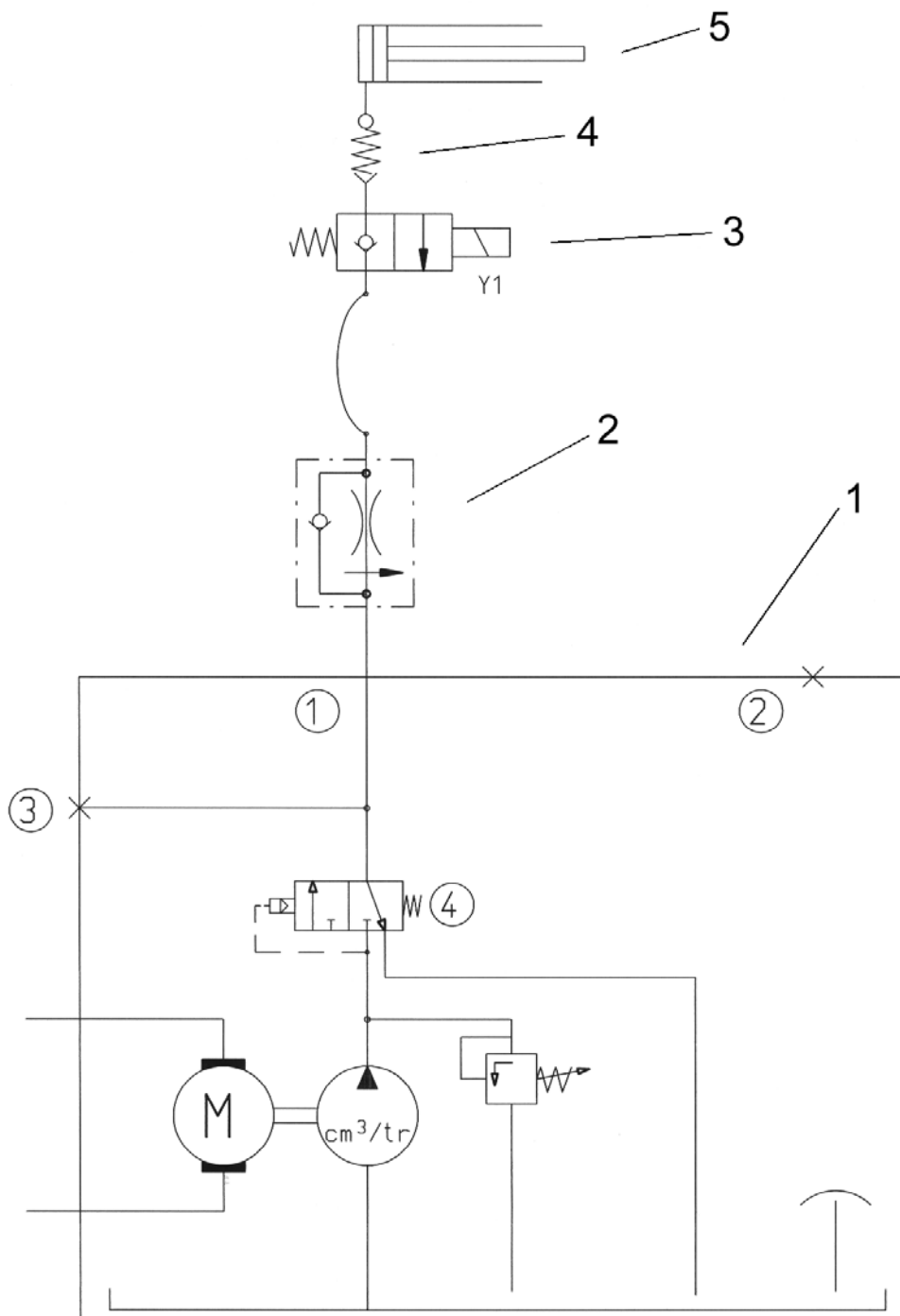


19.27.661



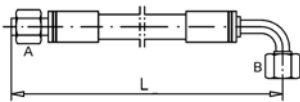
Stückliste

Hydraulische Bauteile



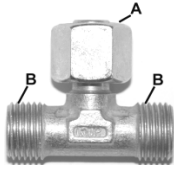
Pos.	Stückzahl	Benennung	Best.-Nr.	Bemerkung
1	1	Hydraulikaggregat	11.19.386	2,3kW/400V/50Hz
2	1	Senkbremsventil	12.19.436	8,5 l/min
3	1	2/2-Wegemagnetventil	10.19.463	SV 98-2006 230 V AC
4	1	Leitungsbruchsicherung	10.19.292	3/8"
5	1	Hydraulikzylinder	11.19.084	Ø 80 x 250 mm Hub
5a	1	Dichtungssatz für Zylinder	50.97.091	Ø 80 mm

Hydraulikbauteile



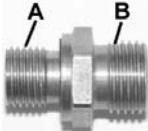
Stück	Art.-Nr.	L = mm	DN	A	B
1	10.19.103	1050	8	M 16x1,5-SW 19	M 16x1,5-SW 19

Einstellbare T-Verschraubung



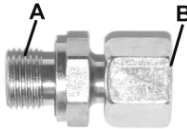
Stück	Art.-Nr.	Baureihe	DN	A	B
1	12.19.240	L	8	M 16x1,5	M 16x1,5

Gerade Einschraub-Verschraubung



Stück	Art.-Nr.	Baureihe	DN	A	B
1	12.19.265	L	8	1/4"	M 16x1,5
1	12.19.267	L	8	M 14x1,5	M 16x1,5

Gerader Einschraubstutzen



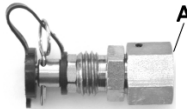
Stück	Art.-Nr.	Baureihe	DN	A	B
1	12.19.235	L	8	1/4"	M 16x1,5
1	12.19.258	L	8	3/8"	M 16x1,5

Winkel-Schwenkverschraubung



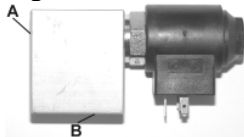
Stück	Art.-Nr.	Baureihe	DN	A	B
2	12.19.261	L	8	3/8"	M 16x1,5

Steckkupplung (Messanschluss)



Stück	Art.-Nr.	Baureihe	DN	A
1	12.19.434	L	8	M 16x1,5

Magnetventil



Stück	Art.-Nr.	A	B	Bemerkung
1	10.19.463	1/4"	1/4"	SV98-2006 / 230V, 19 W, 0,1 A

Senkbremsventil

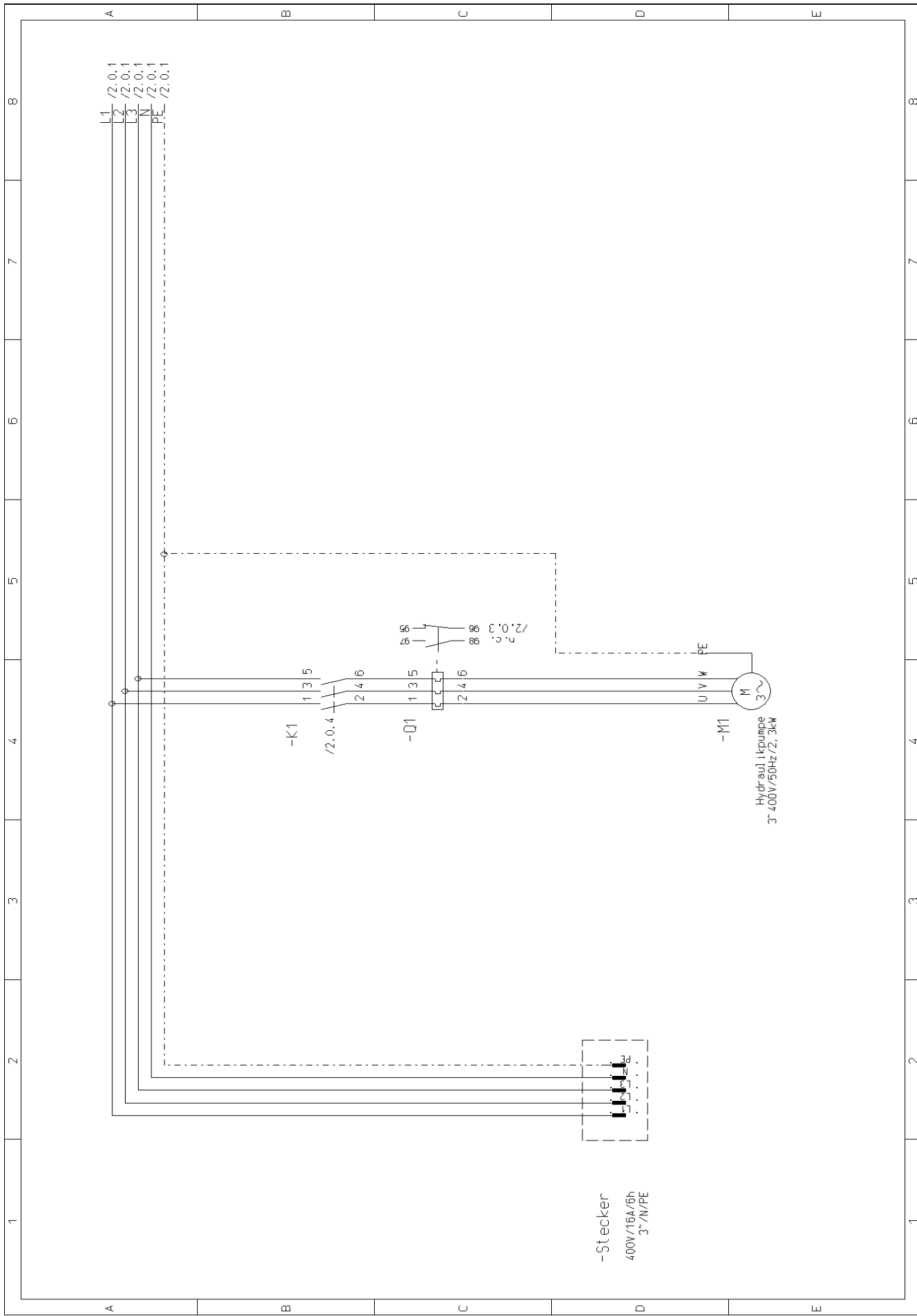


Stück	Art.-Nr.	A	B	Bemerkung
1	12.19.436	3/8"	3/8"	8,5 l/min

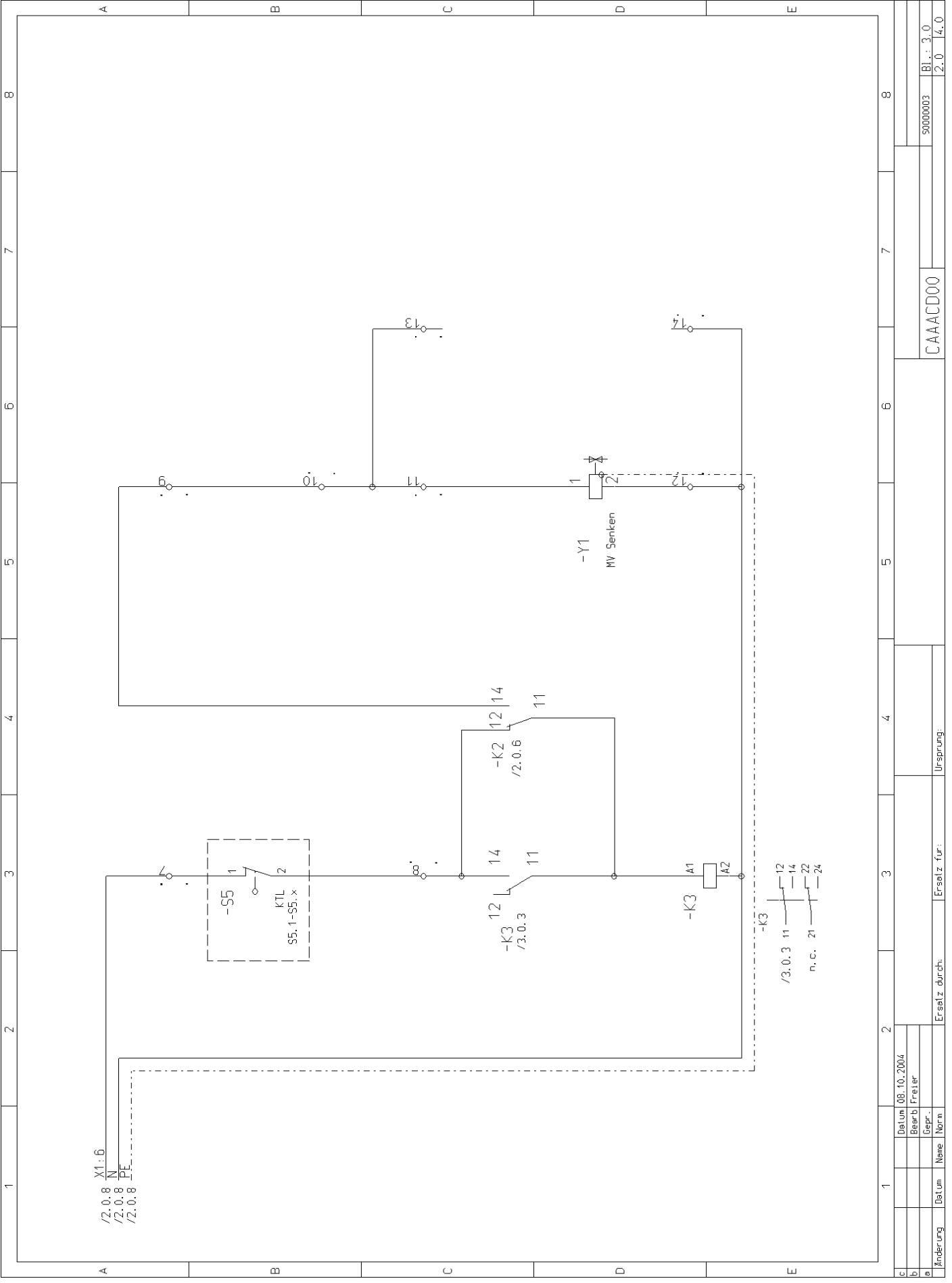
Leitungsbruchsicherung



Stück	Art.-Nr.	A	Spaltmaß	Bemerkung
1	10.19.292	3/8"		



1		2		3		4		5		6		7		8	
A		B		C		D		E							
c		Datum	08.10.2004												
b		Besb.	Freier												
e		Gepr.													
		Name													
Änderung		Datum		Ersatz durch:		Ersatz für:		Ursprung:							
										CAAACD00		50000001		Bl.: 1,0	
														2,0	



Änderung		Datum		Name		Ersatz durch		Ersatz für		Ursprung			
c		Datum	08.10.2004	Besb	Freier					CAAACD00			
b		Gepr.		Gepr.						50000003			
e		Norm		Norm						Bl.: 3,0			
										2,0		4,0	

Haftschilder

Art.-Nr.

10.33.334



10.33.358



10.33.242



10.33.237



EC Declaration of Conformity

Conforming to:
EC-Directives – Machines 98/37/EG, appendix II A
EC-Directives – Electromagnetic compatibility 89/336/EWG,
EC-Directives – „Low voltage“ 73/23/EWG

We: **Gruse Maschinenbau GmbH & Co. KG**
Dibbetweg 32
31855 Aerzen
Germany

declare in general responsibility, that the product

ELS 1-10-5,

covered by this declaration confirms to the Health and Safety rules laid down by the directives above.

The following Norms were used for the proper implementation of the EC Directives on Health and Safety:

- DIN EN ISO 12100-1 (2003)
- DIN EN ISO 12100-2 (2003)
- DIN EN 294 (1992)
- DIN EN 349 (1993)
- BGR 500 (2004)
- DIN EN 1570 (1998)
- DIN EN 1570/A1 (2004)
- DIN EN 60204-1 (1997)
- BGV A3 (1997)
- DIN EN 61000-6-2 (2001)
- DIN EN 61000-6-4 (2001)

Gruse Maschinenbau GmbH & Co. KG



F. Kraft

2007-10-19