

# TW 236 PE B3.9

**Clear Floor Two Post Lift** 

twinbusch.de



INSTALLATION, OPERATION AND MAINTENANCE MANUAL



Please read this entire manual carefully before installation or operation of the lift. Follow the instructions strictly.

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# Twin Busch GmbH

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#### IMPORTANT SAFETY INSTRUCTIONS

#### 1.1 Important notices

Twin Busch will offer one year quality warranty for the whole machine, during which any quality problem will be properly solved to the user's satisfaction. However, we will not take any responsibility for whatever bad consequence resulted from improper installation and operation, overload running or unqualified ground condition.

This 2-posts lift is specially designed for lifting motor vehicles that weighs within its outmost lifting capacity. Users are not allowed to use it for any other purposes. Otherwise, we, as well as our sales agency, will not bear any responsibility for accidents or damages of the lift. Make sure to pay careful attention to the label of the lifting capacity attached on the lift and never try to lift cars with its weight beyond.

Read this manual carefully before operating the machine so as to avoid economic loss or personnel casualty incurred by wrong operation. Without our professional advice, users are not permitted to make any modification to the control unit or whatever mechanical unit.

#### 1.2 Qualified personnel

- 1.2.1 Only qualified staff, who have been properly trained, can operate the lift.
- 1.2.2 Electrical connection must be done by a qualified electrician.
- 1.2.3 People who are not concerned are not allowed in the lifting area.

#### 1.3 Danger notices

- 1.3.1 Do not install the lift on any asphalt surface.
- 1.3.2 Read and understand all safety warnings before operating the lift.
- 1.3.3 The lift, if is not specially designed upon customer's request, is not fit for outdoor use.
- 1.3.4 Keep hands and feet away from any moving parts. Keep feet clear of the lift when lowering.
- 1.3.5 Only these qualified people, who have been properly trained, can operate the lift.
- 1.3.6 Do not wear unfit clothes such as large clothes with flounces, tires, etc, which could be caught by moving parts of the lift.
- 1.3.7 To prevent evitable incidents, surrounding areas of the lift must be tidy and with nothing unconcerned.
- 1.3.8 The lift is simply designed to lift the entire body of vehicles, with its maximum weight within the lifting capacity.
- 1.3.9 Always insure the safety latches are engaged before any attempt to work near or under the vehicle.
- 1.3.10 Make sure to place the lifting pads to the positions as suggested by vehicle makers and when gradually lift the vehicle to the desired height, operators should be certain that the vehicle will not slant, roll-over or slide in lifting process.
- 1.3.11 Check at any time the parts of the lift to ensure the agility of moving parts and the performance of synchronization. Ensure regular maintenance and if anything abnormal occurs, stop using the lift immediately and contact our dealers for help.
- 1.3.12 Lower the lift to its lowest position and do remember to cut off the power source when service finishes.
- 1.3.13 Do not modify any parts of the lift without manufacturer's consult.
- 1.3.14 The lift is only to be operated in a dry indoor area.
- 1.3.15 If the lift is going to be left unused for a long time, users are required to:
  - a. Disconnect the power source;
  - b. Empty the oil tank;
  - c. Lubricate the moving parts with hydraulic oil.

#### 1.4 Training

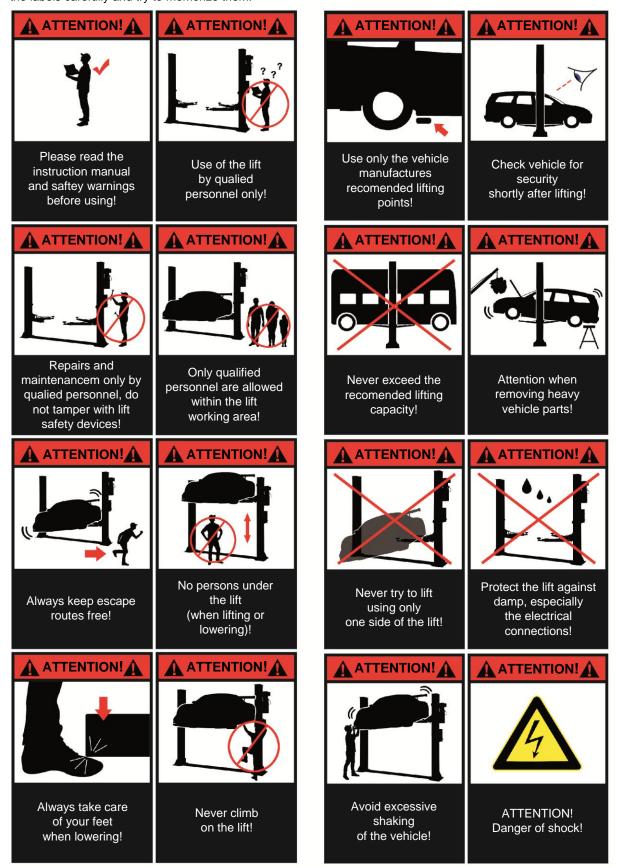
Only qualified people, who have been properly trained, can operate the lift. We are quite willing to provide professional training for the users when necessary.

Attention: For environment protection, please dispose the disused oil in a proper way.



#### 1.5 Warning signs

All safety warning signs attached on the machine are for the purpose of drawing the user's attention to safety operation. The labels must be kept clean and need to be replaced when they are worn-out or have dropped. Read the explanations of the labels carefully and try to memorize them.





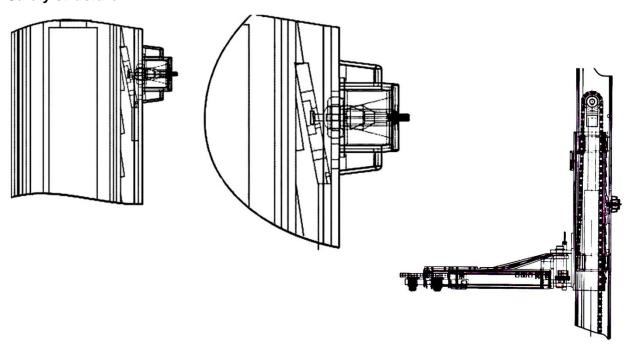
### **OVERVIEW OF THE LIFT**

#### 2.1 General descriptions

This two- post lift is composed of posts, carriages, lifting arms, cylinders and motor unit, etc.

The lift is driven by an electro-hydraulic system. The gear pump delivers hydraulic oil to oil cylinders and pushes the piston upwards. The piston drives the chain to raise the carriage and the lifting arms. During lifting process, the safety teeth will automatically and firmly bite with the safety rod in the posts. Therefore, no slipping will happen in case the hydraulic system beaks down.

### Safety structure:

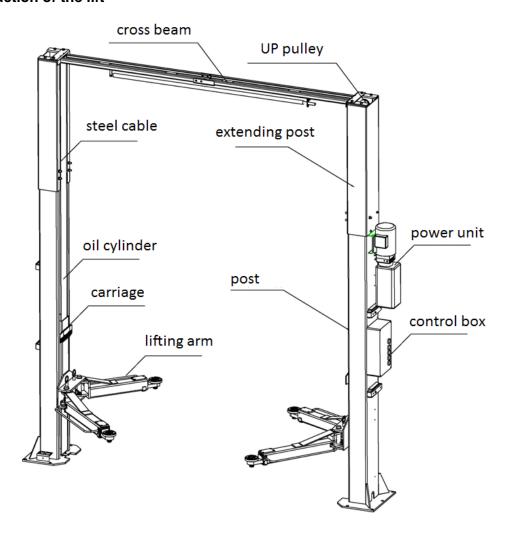


#### 2.2 Technical data

Model	Lifting capacity	Lifting time	Lifting height	Height	Width	Width between posts
TW 236 PE B3.9	3600 kg	50 Sec	1900 mm	3900 mm	3436 mm	2850 mm



### 2.3 Construction of the lift





#### INSTALLATION INSTRUCTIONS

#### 3.1 Preparations before installation

#### 3.1.1 Tools and equipment needed

- ✓ Appropriate lifting equipment
- ✓ Anti-abrasion hydraulic oil.
- ✓ Rotary Hammer Drill with 3/4" drill bit.
- ✓ Chalk and tape measure, magnetic plump, 8 metersΦ15 level pipe.
- ✓ Sockets and open wrenches, a set of inside hex wrenches, cross and straight screw drivers.
- ✓ Hammer, 4pounds, sharp nose pliers, Ф17,Ф19,Ф22 socket spanners ∘

#### 3.1.2 List for parts checking - Annex 1 (Packing list)

Unfold the package and check if any parts missed as per Annex 1. Do not hesitate to contact us in case any parts missed, but if you do not contact us and insist installing upon the lack of some parts, Twin Busch as well as our dealers will not bear any responsibility for this and will charge for any parts subsequently demanded by the buyer.

#### 3.1.3 Ground conditions

The lift should be fixed on a smooth and solid concrete ground with its strength more than 3000psi, tolerance of flatness less than 5mm and minimum thickness of 200mm. In addition, newly built concrete ground must undergo more than 28days' cure and reinforcement.

#### 3.2 Precautions for installation

- 3.2.1 Make sure the two posts stand paralleled and are vertical to the ground. No slanting.
- 3.2.2 Joints of oil hose and steel cable must be firmly connected in order to avoid the looseness of steel cable and oil leakage
- 3.2.3 All bolts should be firmly screwed up.
- 3.2.4 Do not place any vehicle on the lift in the case of trial running.

#### 3.3 Installation

To make it easiler for you clients we have prepared a video that shows you how to perform the installation step by step. This can be found on our internet site or on youtube.

#### 3.4 Items to be checked after installation

S/N	Check items	YES	NO
1	Are the posts vertical to the floor?		
2	Are the two posts paralleled?		
3	Is the oil hose well connected?		
4	Is the steel cable well connected?		
5	Are all lifting arms well fixed?		
6	Are electrical connections right?		
7	Are the rest joints firmly screwed?		
8	Are all items need lubricating added with grease?		



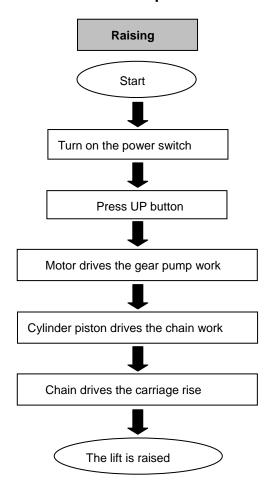
### **OPERATION INSTRUCTIONS**

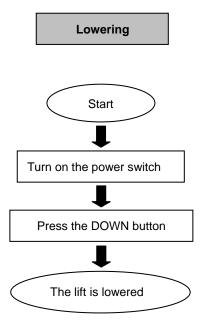
#### 4.1 Precautions

- 4.1.1 Check all the joints of oil hose. Only when there is no leakage, the lift can start work.
- 4.1.2 The lift, if its safety device malfunctions, shall not be used.
- 4.1.3 The machine shall not lift or lower an automobile if its center of gravity is not positioned midway of the lifting arms.

  Otherwise Twin Busch as well as our dealers will not bear any responsibility for any consequence resulted thereby.
- 4.1.4 Operators and other personnel concerned should stand in a safety area during lifting and lowering process.
- 4.1.5 When lifting arms rise to the desired height, switch off the power at once to prevent any mal-operation done by unconcerned people.
- 4.1.6 Make sure the safety lock of the lift is engaged before start working under the vehicle and no people under the vehicle during lifting and lowering process.

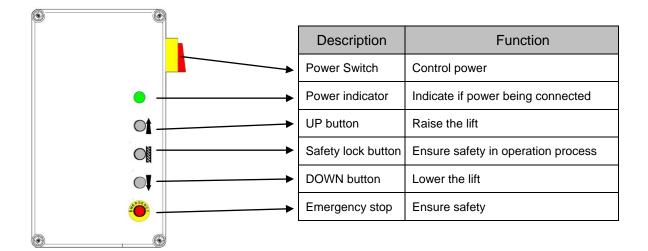
# 4.2 Flow chart for operation







#### 4.3 Operation instructions



#### Raise the lift

- 1. Make sure that you have read and understood the operation manual before operation.
- 2. Park the vehicle between two posts.
- 3. Adjust lifting arms until they reach the supporting positions of the vehicle and make sure the gravity of vehicle located midway of four lifting arms.
- 4. Switch on and insure to operate as per requirements on the nameplate attached.
- 5. Press the"UP"button on the control box until pads of lifting arms touched the prop-position of vehicle.
- 6. Keep on raising the vehicle to let it have a bit clearance from the ground and check again its stability.
- 7. Raise the vehicle to the desired height, check it is safe or not, press the "Safety Lock" button on the control panel to have the safety lock engaged, turn off the power and then perform maintenance or repair work underneath.

#### Lower the lift

- 1. Switch on.
- 2. Press the "DOWN" button on the control box. Meanwhile the lifting arms automatically go upwards about 5CM to release the safety lock. Then lifting arms start lowering.
- 3. After lifting arms lower to the lowest position, pull them out from under the vehicle and clear up all the obstacles.
- 4. Drive the vehicle away.



# **TROUBLE SHOOTING**

**ATTENTION:** If the problem can not be fixed by yourself, please do not hesitate to contact us for help. We will offer our service at the earliest time possible. By the way, problems can be judged and solved much faster if more details or pictures could be provided.

TROUBLES	CAUSE	SOLUTION	
Abnamalasias	Abrasion exists on insider surface of the posts.	Grease the inside of the post.	
Abnormal noise	Trash in the post.	Clear the trash	
	The wire connection is loose.	Check and make a good connection.	
Motor does not run	The motor is blown.	Replace it.	
and will not rise	The limit switch is damaged or the wire connection	Connect it or adjust or replace the limit	
	is loose.	switch.	
	The motor run reversely.	Check the wire connection.	
	Overflow valve is loose or jammed.	Clean or adjust it.	
Motor runs but will	The gear pump is damaged.	Replace it.	
not raise	Oil level is too low.	Add oil.	
	The oil hose became loose or dropped off.	Tighten it.	
	The cushion valve became loose or jammed.	Clean or adjusts it.	
	The oil hose leaks.	Check or replace it.	
Carriages go down	The oil cylinder is not tightened.	Replace the seal.	
slowly after	The single valve leaks.  Clean or replace it.		
being raised	E-magnetic valve fails to work well.	Clean or replace it.	
	Steel cable is loose or not with same tightness	Check and adjust the tightness.	
	The oil filter is jammed.	Clean or replace it.	
	Oil level is too low.	Add oil.	
Dejaja a tan alaw	The overflow valve is not adjusted to the right position.	Adjust it.	
Raising too slow	The hydraulic oil is too hot (above 45°).	Change the oil.	
	The seal of the cylinder is abraded.	Replace the seal.	
	Inside surface of the posts is not well greased.	Add grease.	
	The throttle valve jammed.	Clean or replace.	
Lowering too slow	The hydraulic oil is dirty.	Change the oil.	
Lowering too slow	The anti-surge valve jammed.	Clean it.	
	The oil hose jammed.	Replace it.	
The steel cable is abraded	No grease when installation or out of lifetime	Replace it.	

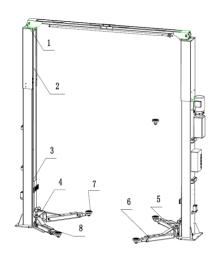


#### **MAINTENANCE**

Easy and low cost routine maintenance can ensure the lift work normally and safely. Following are requirements for routine maintenance. Frequency of routine maintenance is determined by working condition and frequency.

The following parts need lubrication.

٥.					
S/N	Name				
1	UP pulley				
2	Steel cable				
3	Slider				
4	Shaft				
5	Arm lock				
6	Lifting arm				
7	Lifting tray				
8	DOWN pulley				



#### 6.1 Daily Check

The user must perform daily check. Daily check of safety lock system in very important – the discovery of device failure before action could save time and prevent great loss, injury or casualty.

- · Before operation, judge whether the safety locks are engaged by sound.
- · Check whether oil hose well connected and whether it leaks or not.
- · Check the connections of chain and steel cable and check the power unit.
- · Check whether expansion bolts are firmly screwed.
- · Check if arm lock works well or not.

#### 6.2 Weekly Check

- Check the flexibility of moving parts.
- · Check the working conditions of safety parts.
- Check the amount of oil left in the oil tank. Oil is enough if the carriage can be raised to highest position.
   Otherwise, oil is insufficient.
- · Check whether expansion bolt s firmly screwed.

#### 6.3 Monthly Check

- · Check whether expansion bolts are firmly screwed.
- · Check the tightness of the hydraulic system and screw firm the joints if it leaks.
- · Check the lubrication and abrasion circumstance of axial pins, carriages, lifting arms and other related parts and replace in time with new ones if they failed to work well.
- · Check the lubrication and abrasion circumstance of steel cable.

#### 6.4 Yearly Check

- · Empty the oil tank and check the quality of hydraulic oil.
- · Wash and clean the oil filter.

If the above maintenance suggestions are strictly followed, the lift will always keep in a good working condition and meanwhile accidents could be avoided to a large extent.



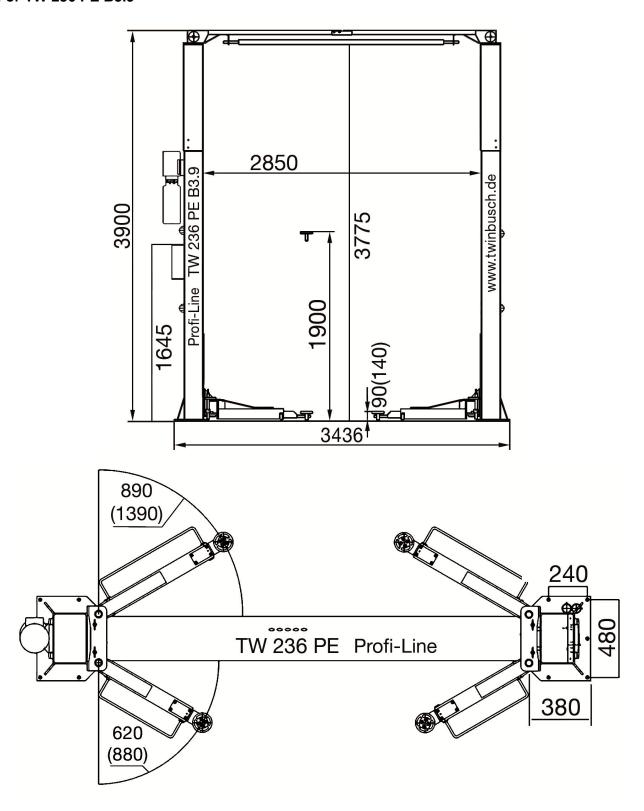
# **ANNEX**

Annex 1, Packing List for the whole lift

S/N	Material #	Name	Drawing#	Qty	Property
1		Power-side post	FL-8214E-A1	1	Assembly
2		Post	FL-8214E-A2	1	Assembly
3		Carriage	FL-8214E-A3	2	Assembly
4		Power unit		1	Assembly
5		Oil cylinder	FL-8224-A4-B3	2	Assembly
6		Control box		1	Assembly
7		Electromagnet package	FL-8224E-A1-B4	1	Assembly
8		Steel cable	FL-8214-A6	2	Assembly
9		Long arm	FL-8224-A7		Assembly
10		Extending post	FL-8214-A1-B2	2	Powder-coating
11		Cross beam (in)	FL-8214-A3-B1	1	Powder-coating
12		Cross beam (out)	FL-8214-A3-B2	1	Powder-coating
13		Short lifting arm	TE-235E-A20	1	Assembly
14		Roof protection bar	FL-8214-A3-B7	1	Powder-coating
The ca	rton includes th	e following			
15		Lifting tray	FL-8224-A7-B3	4	Assembly
16		Long fender	FL-8224-A7-B4	2	Assembly
17		Short fender	FL-8224-A18-B4	2	Assembly
19		Shaft	FL-8224-A12	4	Zinc-plating
20		Safety locking plate	FL-8224E-A1-B2	4	Zinc-plating
21		Electromagnet protection cover	FL-8224E-A1-B5	4	ABS
22		Positioning block	FL-8224E-A1-B3	4	Zinc-plating
23		Hose protection cover	FL-8224E-A1-B8	7	Powder-coating
24		Chain protection cloth	FL-8214-A7	2	Assembly
25		Rod of chain protection cloth	FL-8224-A13	4	Zinc-plating
26		Rubber oil hose L=500	FL-8214-A4-B1	1	Assembly
27		Protection rubber pad	FL-8224-A3-B7	2	Rubber
28		Hex head full swivel screw	M8*35	4	Standard
29		Hex head full swivel screw	M14*30	1	Standard
30		Hex head full swivel screw	M14*25	16	Standard
31		Hex head full swivel screw	M8*12	5	Standard
32		Hex socket button head screw	M8*35	8	Standard
33		Cross socket cap head screw	M6*10	24	Standard
34		Cross socket cap head screw	M6*30	14	Standard
35		Cross socket cap head screw	M6*8	10	Standard
36		Cross socket cap head screw	M6*16	4	Standard
37		Cross socket flat head screw	M8*16	4	Standard
38		Flat washer	Ф6	9	Standard
39		Flat washer	Ф8	4	Standard
40		Flat washer	Ф14	21	Standard
41		Spring washer	Ф8	4	Standard
42		Spring washer	Ф14	21	Standard
43		Hex nut	M6	8	Standard
44		Hex nut	M8	4	Standard
45		Hex nut	M14	21	Standard
46		Circlip	Ф38	4	Standard
47		Expansion bolt	M18*160	10	Standard

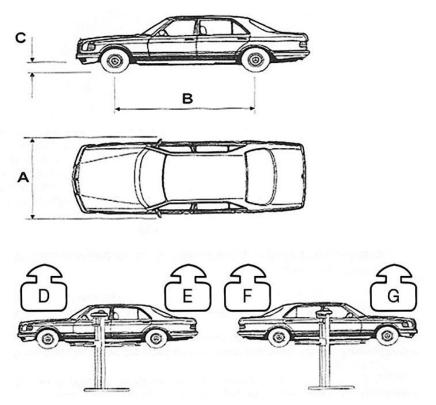


# Annex 2, Overall diagram For TW 236 PE B3.9



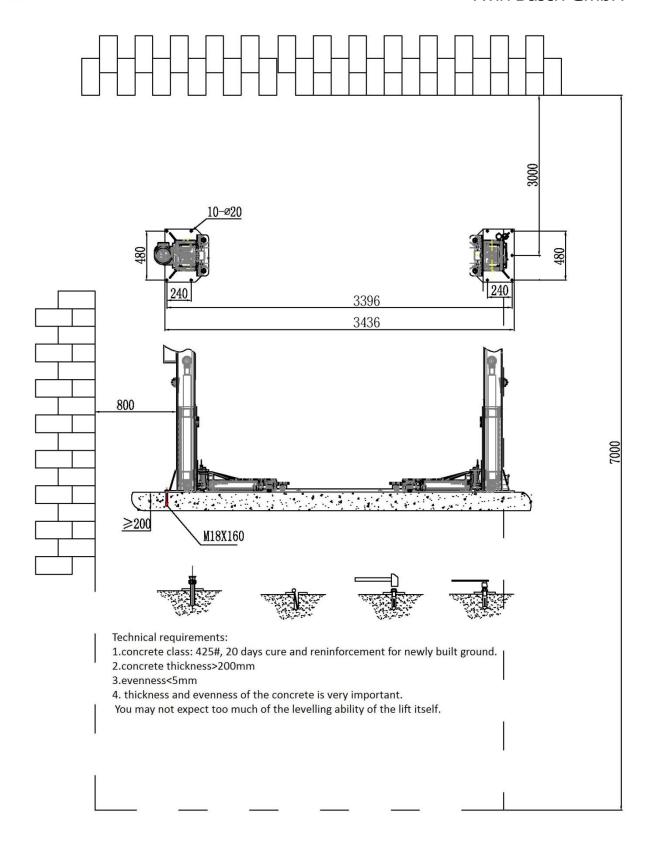






Modell	А	В	С	D	Е	F	G
Modell	(mm)	(mm)	(mm)	(kg)	(kg)	(kg)	(kg)
TW 236 PE B3.9	2400	2900	100	2100	1500	2100	1500







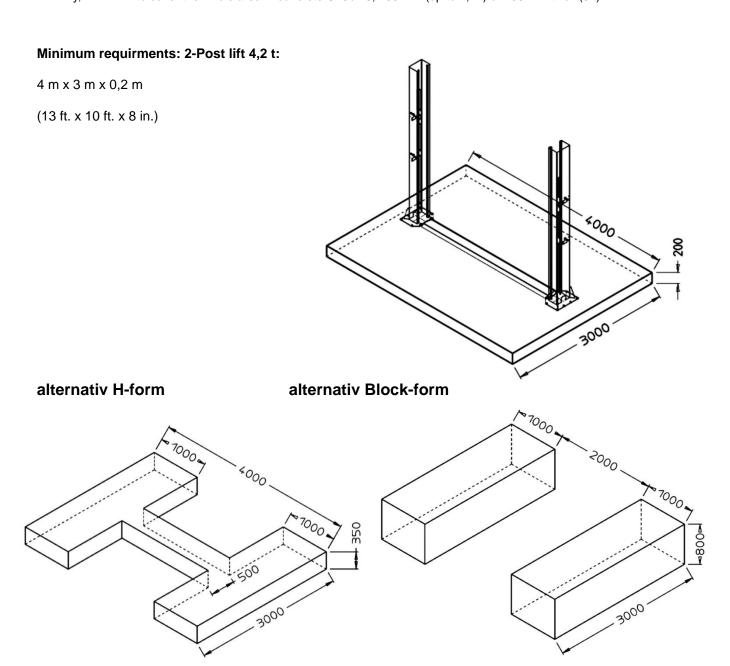
#### Annex 3, Floor plan

#### Requirements for the concrete floor:

- Concrete C20 / 25 according to DIN 1045-2 (Previously known as DIN 1045 concrete B25).
- Horizontal, accuracy of flatness smaller than 5 mm (0.2").
- New concrete must dry for 28 days.

#### Foundation dimensions:

- Ideally, it's better to cover the whole area in concrete C20 / 25, 200 mm (up to 4,2 t) or 250 mm thick (5 t).





#### Other requirements:

- The surrounding ground must be suitable for the load, for example, no sand asphalt, etc..
- If in doubt, the foundation should always be checked by a structural engineer.

#### In case of frost, please note the following:

In cases of freezing the concrete should have exposure class XF4.

Thus, the following minimum requirements for the concrete in frost conditions:

Exposure class XF4
Maximum w / c: 0.45

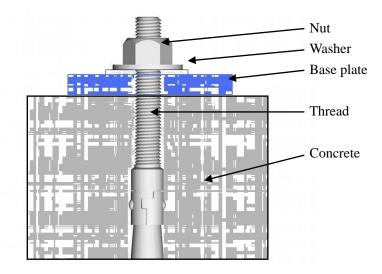
Minimum compressive strength: C30 / 37 (instead of C20 / 25)

Minimum cement content 340 kg / m³
Minimum air content: 4.0%

It must however be noted that the lifting platforms not for use outdoors

The main switch corresponds to IP54, but remaining electrical parts, Motors and limit switches are designed to a maximum of IP44.

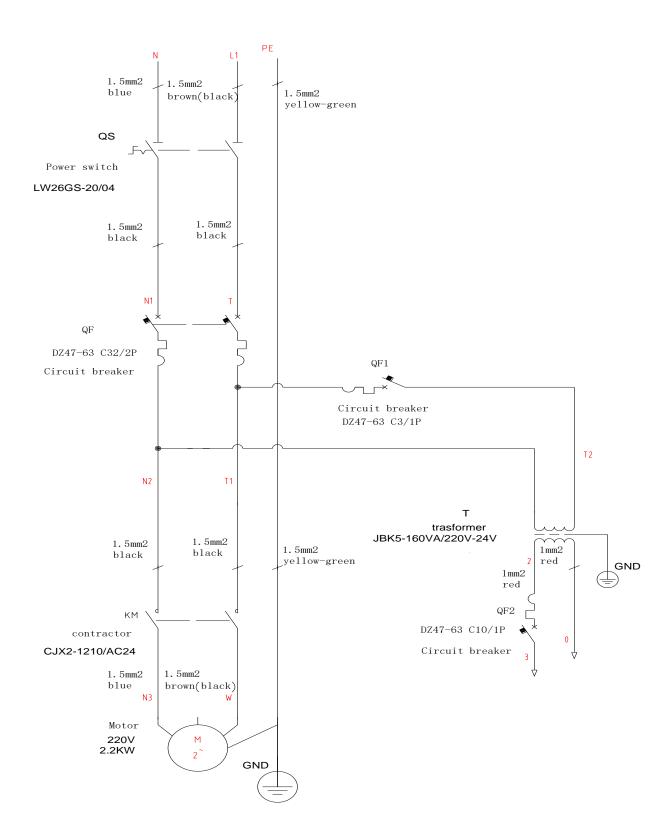
#### **Expansion bolts**



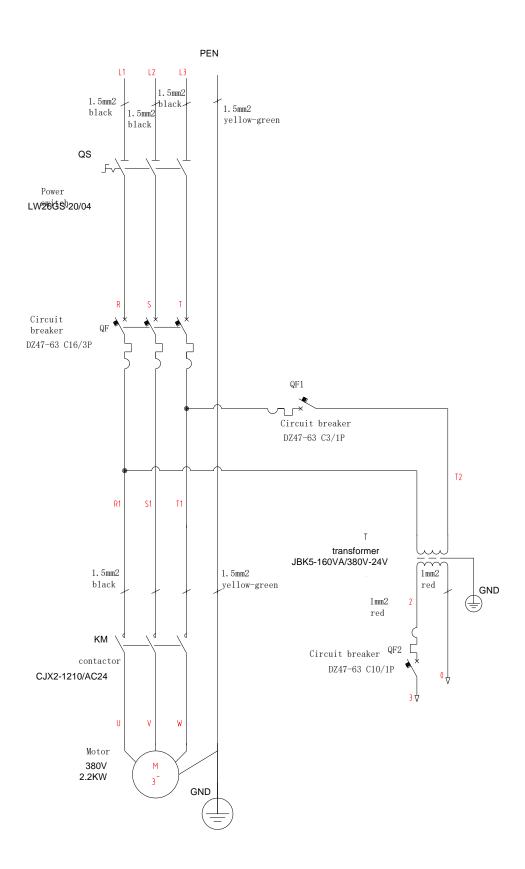
Expansion bolts should be tightened to 120 Nm.



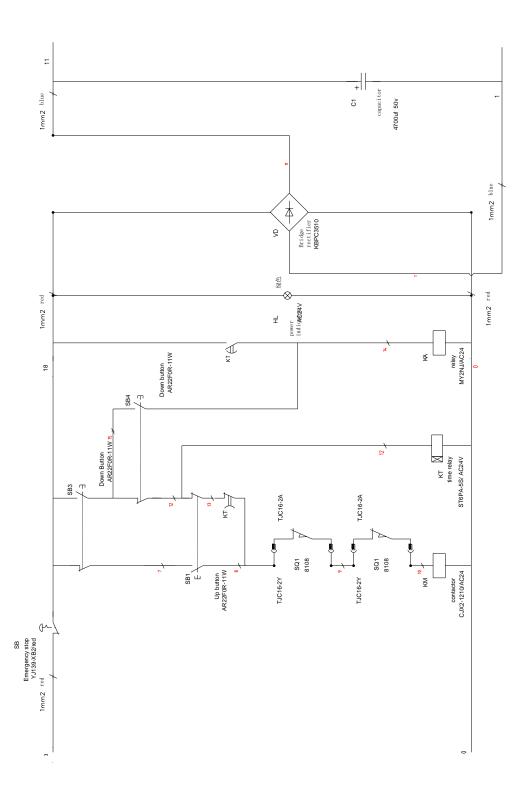
# Annex 4, Wiring diagram Single phase



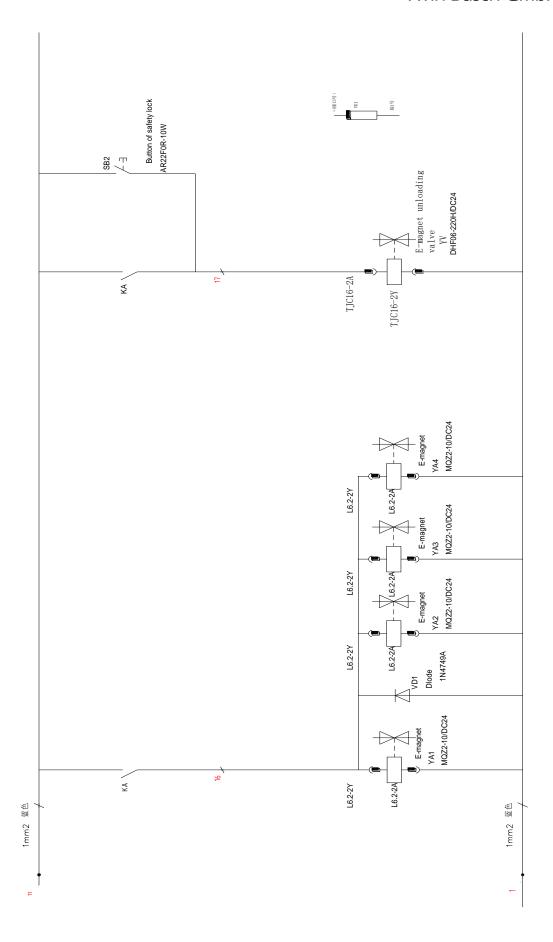
# Three phase



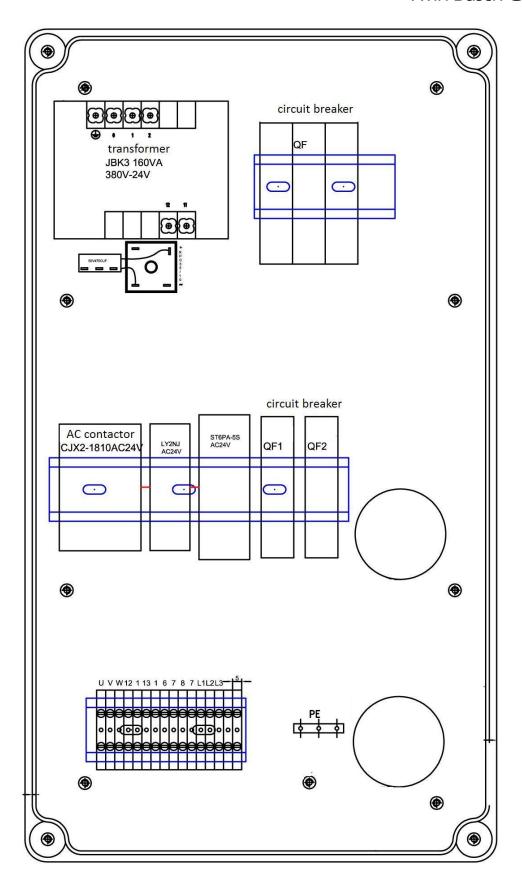






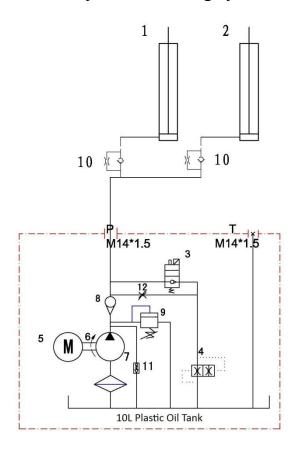




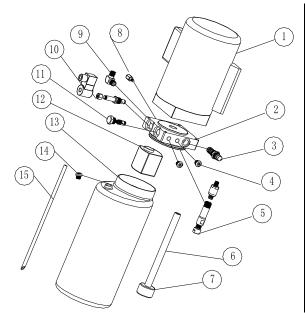




# Annex 5, Hydraulic working system



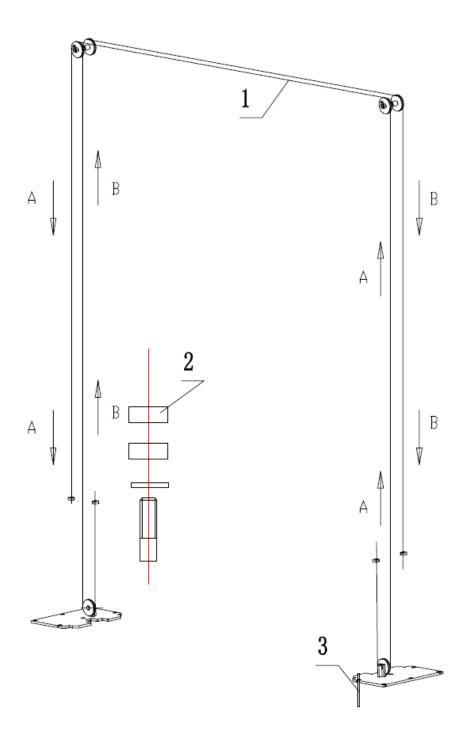
- 1. Driving cylinder
- 2. Assistant cylinder
- 3. Electro-unloading valve
- 4. Lowering throttle valve
- 5. Motor
- 6. Coupling
- 7. Gear pump
- 8. Single-way valve
- 9. Overflow valve
- 10. Anti-surge valve11. Cushion valve
- 12. Emergent unloading valve



S/N	Name	Qty
1	Motor	1
2	Hydraulic block	1
3	Overflow valve	1
4	Removable plug	2
5	Cushion valve	1
6	Oil absorbing pipe	1
7	Oil filter	1
8	Throttle valve	1
9	Oil pipe tie-in	1
10	E-magnetic unloading valve	1
11	One-way valve	1
12	Gear pump	1
13	Plastic oil tank	1
14	Oil tank cover	1
15	Oil back pipe	1

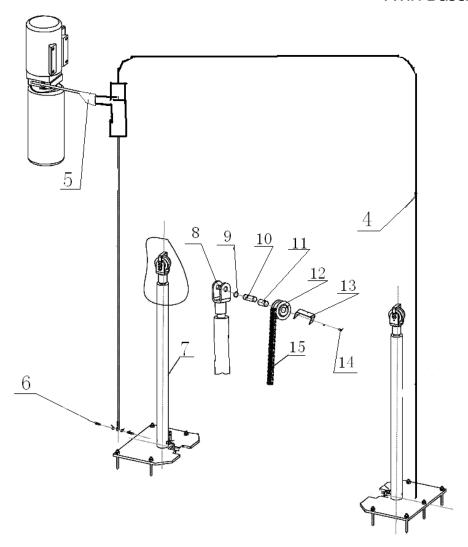


# Annex 6, Separated drawings for the lift



S/N	Material #	Name	Drawing#/Spec.	Qty	Property	Note
1		Steel cable L=10870mm	FL-8214-A6	2	Assembly	
2		Hex nut M16	GB/T610-2000	8	Standard	
3		Expansion bolt M18*180		10	Standard	

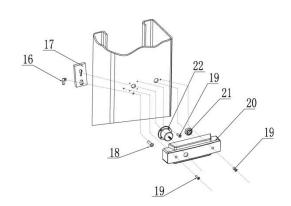




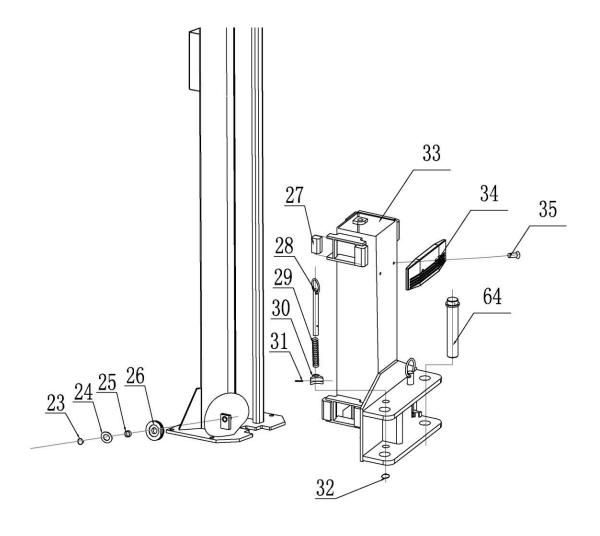
S/N	Material #	Name	Drawing#/Spec.	Qty	Property	Note
4		Oil Hose L=8500		1	Assembly	
5		Short oil hose L=500		1		
6		Connector		1		
7		Oil cylinder	FL-8224-A4-B2	1	Assembly	
8		Cylinder fixing ring	FL-8224-A4-B9	2	Q235A	
9		Hex head full swivel screw	GB/T894.2-1986	4	Standard	
10		Chain shaft	FL-8224-A4-B11	2	Q235A	
11		Shaft 2548	SF-1	2	Assembly	
12		Chain wheel	FL-8224-A4-B10	2	Assembly	
13		U shape plate	FL-8224-A4-B12	2	Assembly	
14		Anex screw M6*10	GB/T70.1-2000	4	Copper	
15		Chain	LH1234-127LGB/6074-1995	2	Assembly	







S/N	Material #	Name	Drawing#/Spec.	Qty	Property	Note
16		Positioning block	FL-8224E-A1-B3	4	Q235A	
17		Safety locking plate	FL-8224E-A1-B2	4	Q235A	
18		Cross socket cap headed screw	GB/T818-2000	4	Standard	
19		Cross socket cap headed	GB/T818-2000	24	Standard	
20		Electromagnet protection cover	FL-8224E-A1-B5	4	Plastic	
21		Φ20 hose protection ring	FL-8224-A1-B6	4	Rubber	
22		Electromagnet (small)	FL-8224E-A1-B4	4	Assembly	





S/N	Material #	Name	Drawing#/Spec.	Qty	Property	Note
23		Circlip φ25	GB/T894.2-1986	2	Standard	
25		Bearing 2512	SF-1	2	Standard	
26		Down pulley	FL-8224-A1-B2	2	Q235A	
27		Slider	FL-8224-A3-B6	16	Nylon	
28		Pulling rod	FL-8224-A3-B2	4	Welded	
29		Pressure spring	FL-8224-A3-B5	4	Zinc-plating	
30		Teeth block	FL-8224-A3-B4	4	Zinc-plating	
31		Elastic cylindrical pin M5*35	GB/T879.1-2000	4	Standard	
32		Circlip 22		4	Standard	
33		Carriage	FL-8224-A3-B1	2	Welded	
34		Protection rubber pad	FL-8224-A3-B7	2	Rubber	
35		Cross socket flat head screwM8*16		4	Standard	
64		Shaft	FL-8224-A12	4	Welded	

# Annex 7, Spare parts list

## Spare parts list - for the electrical system

S/N	Material #	Item	Spec.	Qty	Pic	Note
1		Power switch	LW26GS-20/04	1		
2		Button	LAY711BN12	1		
3		Power indicator	AD17-22G-AC24	1	Trent or a	
4		Transformer	JBK3-160VA400V-24V JBK3-160VA230V-24V	1	THE RESERVE OF THE PARTY OF THE	
5		AC contactor	CJX2-1210/AC24	1		
6		Circuit breaker	DZ47-63 C16/3P DZ47-63 C32/2P	1	• • • •	
7		Circuit breaker	DZ47-63 C3/1P	1		



# Twin Busch GmbH

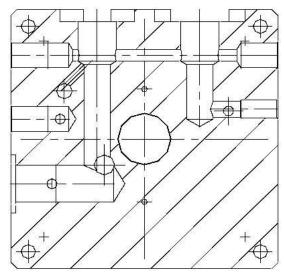
S/N	Material #	Item	Spec.	Qty	Pic	Note
9		Limit switch	TZ8108	1		
11		Emergency stop	Y090-11ZS/red	1	EMG STOP	
12		Bridge rectifier	KBPC5A-35A	1		
13		Capacitor	4700UF/50A	1	2 50 77(2 53.)	
14		Relay	LY2NJ/AC24	1		
15		Relay holder	PTF-08A	1		
16		Time relay	ST6PA-5S/AC24V	1		
17		Time relay holder	PYF-08AE	1		
18		Control box	230*380*135	1		

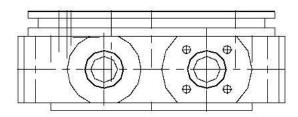
# Spare parts list – for the mechanical system

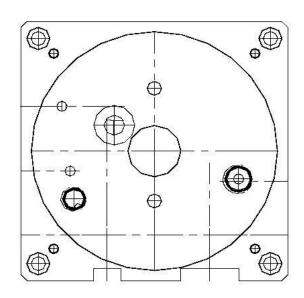
S/N	Material #	Name	Drawing#/Spec.	Qty	Property	Note
1		Slider	FL-8224-A3-B6	16	Nylon 1010	
2		Rubber lifting pad	FL-8224-A7-B3-C4	4	Rubber	
3		O-seal ring	(ID)23.6*3.55	1		
4		Y- seal ring	KD 63*48*10	1		
5		Anti-dust ring	DHS 40*48*5/6.5	1		















# **Space for notes:**



# **Preperation protocol**

The lift type	with the	
serial number:	was built on	
by the company	in	
and was checked for safety	y and function and was put into operation.	
The set up and preparation	n was carried out by the OPERATOR   EXPO	DRT
The safety of the lift was c	hecked by an .	
The operator confirms the install before launching un	installation of the lift, and qualified experts l	nave comfirmed proper
install before launching un	it.	
Date	Owner/ Operator	Signature
Date	Installation expert	Signature
Date	installation expert	Signature
Address Owner/ Operator		
Address Installation experi	t:	
.52		



# **Inspection findings**

Regular/ extraordinary inspection

On the date ofextraordinary and thorough inspectionnd.		
Scope of the audit:		
Outstanding partial inspection:		
The use of this equipment is authorinspected .	rized and the machine and	all features have been
Location/ Date  Operator or agent		Inspectors signature
Taken notes of the defects		
Defect corrected	Date	Signature
Verification	Date	Signature
On the date ofthis inspection these issues were/ v		through re-inspection. During
The use of this equipment is authorinspected.	rized and the machine and	all features have been
Location/ Date		Inspectors signature



# Safety review pursuant to UVV type

Safety inspection before commissioning/ regular checks/ extraordinary (Mark off those that do not apply)

Inspection	Good shape	defective	Re-inspection	Notes
Warning labels/ signs				
Name plate/ ID				
Limit switch function				
Condition of rubber plates				
Function of carrier arm locks				
Supporting structure (cracks etc.)				
Function of safety latches				
All screws tight				
Condition of steel cables				
Condition of covers				
Condition of chain				
Condition of cable pulleys				
Condition of hydraulic lines				
Fluid level of hydraulic unit				
Hydraulic system seals				
Condition of the piston rod				
Condition of electronics				
Function test of the lift				
Foundation condition (cracks)				
Lift Slides/guides in the lift				
column				
Other				
(Check the appropriate box, if re-inspe	ection is nece	ssary mark that b	ox as well!)	

nspected on:						
nspection result:						
Commissioning/ use possible. Resolve issues by						
iignature owner/ operator:						
ignature inspector:						



The company

# Twin Busch GmbH | Amperestr. 1 | D-64625 Bensheim

declares hereby, that the 2-post vehicle lift

TW 236 PE + 236 PE B3.9 | 3600 kg TW 246 PE + 242 PE B3.9 | 4200 kg

serial no.	an busch			
MALES AND				

in the configuration placed on the market by us, meets the relevant safety and health requirements, as required by the following EC directive(s) in it's/their current version(s).

### EC-directive(s)

2006/42/EC Maschinen, 2006/95/EC Niederspannung

# Applied harmonized standards and regulations

EN 1493:2010 Car lifts

EN 60204-1:2006/A1:2009 Safety of machinery - Electrical equipment of machines

#### CE Certificate

N8M 15 04 87411 016 date of issue: 20.04.2015 M6A 15 04 87411 015 place of issue: München technical file no.: 646821 401002

Certification body TÜV Süd Product Service GmbH,

Ridlerstraße 65, D-80339 München

Notified Body Appointment No. 0123

Any alteration to the equipment, improper use or installation void this declaration.

Authorized person to compile technical documentation is: Michael Glade (adress as below)

TWIN BUSCH GmbH Amperestr. 1 · 64825 Benshelm fel. 08251 / 70585-0 · Fax: 70585-29

Authorized signatory: Michaelslade Bensheim, 23.06.15 Qualitätsmanagement

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