Airbase HOVERBOARD®

User manual

Edition: 3/2022

General information

* It is essential that you and any other operator of this product read and understand the content of this manual before installing and using this product !

* In order to avoid operating errors, these manual must be accessible to the staff at all times.

* The Hoverboard should only be used for the purpose as described. Please refer particularly to the instructions of the used stretcher.

* Pictures do not necessarily correspond to the delivered equipment and are not true to scale.

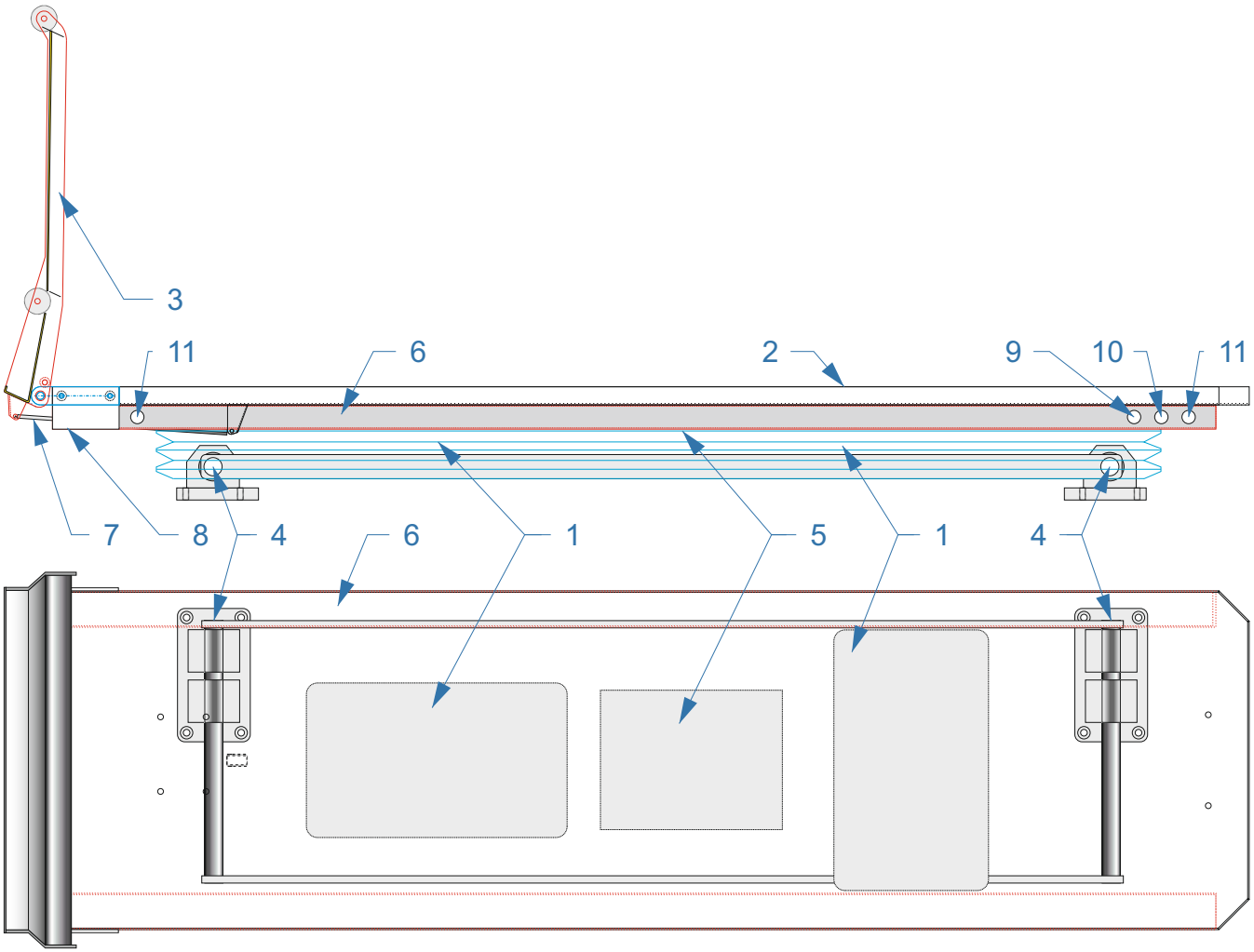
* We take no liability for damages caused by operating errors or incorrect assembly or repair.

* Please pay close attention to the country-related, applicable safety regulations for patient transfer.

* Subject to technical changes.

Specification

1... Pneumatic suspensions with automatic weight adjustment from 40-400 kg/88-880 lbs and hydraulic shock absorbers. Total vertical stroke 170 mm/6.7"
2... Stretcher mounting platform
3... Loading ramp with cylindric castors
4... Lateral movement device with pneumatic release (option), adjustment range 256 mm in 8 positions
5... Switch box, contains: a) Compressor 12V DC, 25A with check valve and integrated thermal overload protector.
b) Relay 12V DC
c) Magnetic valves 12V DC
d) Terminal block
e) Noise insulation
6... Air pressure tank (4 litres) with pressure switch
7... Gas spring
8... Micro switch
9... Blue main switch
10.. Red toggle switch for highest (rigid) position (e.g. for reanimation) (option)
11.. Pushbuttons for pneumatic release of the lateral movement device (option)



Assembly

The Hoverboard may only be installed by qualified personnel (e.g. car technicians or body fitters) and in accordance with the assembly instructions supplied.

The assembly operator is responsible for damages caused by improper assembly !

Technical data

* Standard Hoverboard for assembly of various stretchers according to EN 1865 combined with their original approved fixation.

* Height lowered: 135/160 mm - 5,3/6,3" without/with lateral movement device
  Height when active: 230/255 mm - 9,1/10,0" without/with lateral movement device
  Height for reanimation: 310/335 mm - 12,2/13,2" without/with lateral movement device

* Total length including closed loading ramp ~ 2060 mm - 81"

* Total weight 80/103 kg - 176/227 lbs without/with lateral movement device

* Maximum loading capacity 400 kg / 880 lbs (incl. stretcher)

* Ignition AND main switch ON: Device ready
  Ignition OR main switch OFF: Device® lowered (e.g. for loading)

* Electric connection: Dimension of all wires must be at least 2,5 mm² !

  Brown = ground (wire no. 31)

  Red = permanent positive (for pneumatic release of the lateral movement device) fused in the vehicle with 5A (wire no. 30)

  Orange = ignition positive, fused in the vehicle with 30A (wire no. 15)

Never connect the ignition line together with permanent positive !
This could lead to consequential damages, which are not covered by warranty !

* The valve-control-circuit is internally fused with 5A

* Max. power consumption 25 A at 12 Volt DC

Operation

After successfull assembly and electric connection, start ignition of vehicle and turn on the blue main switch.

The Hoverboard now automatically adjusts to the patient's weight and rises to the level for optimal suspension comfort, the switch (if on the device) lights up blue.

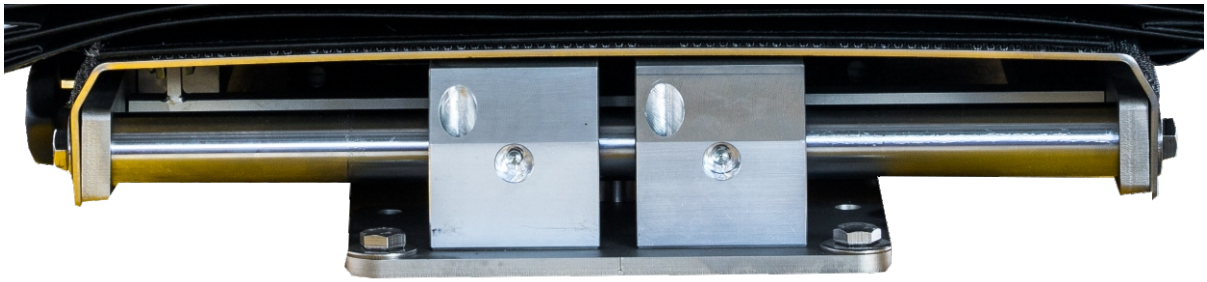
The Hoverboard is all-automatic, i.e. when the supply pressure decreases to 8 bar/115 psi, the compressor starts again for approx. 20 seconds. This allows constant operating pressure.

By switching off the ignition or pressing the main switch again, the Hoverboard lowers automatically for easy and energy-efficient loading and unloading. It also lowers when you open the loading ramp.

Pressing the switch for the optional CPR-position (e.g. for resuscitation) raises the Hoverboard to the highest (fixed) position, the switch (if on the device) lights up red. This function is only active when the main switch is on. By pressing it again, the Hoverboard gently lowers to suspended mode.

ATTENTION:
When lifting to the highest position, the compressor runs continuously for approx. 3 minutes. Multiple lifting in short intervals will overheat the compressor ! The thermal protection switch will turn off the compressor and needs approx. 1 hour to cool down !

By pushing one of the pushbuttons, the lateral movement device (option) will unlock pneumatically. While keeping pushed, you can move the Hoverboard crosswise in 8 positions of 32 mm / 1,25" (total = 256 mm / 10"). Releasing the button means locking in the nearest position. This option also works with ignition off.



Operation

The pneumatic release is supplied by the air tank, which will only be refilled when the main switch is on.
Frequently use while the Hoverboard is switched off leads to temporary malfunction.

In case of malfunction or lack of air pressure you may unlock it by the knobs.

For correct loading and unloading please refer to the instructions of the stretcher.
Please pay attention to the correct locking of the stretcher on the Hoverboard.

CAUTION !

The stretcher should always be held when opening the loading ramp !

Serial number

The serial number is located on the rear right end of the plate and contains the production date.
E.g. serial number **213518** means:
20**21 - 35**th week - **18**th production unit.

Please always quote this number for any complaints or spare parts orders !

Maintenance

One of the many advantages of the Hoverboard-types Airbase, Powerbase, Inbase and Vivibase compared to conventional stretcher tables is that they are not classified as medical devices according to Medical Devices Act (MPG/Germany) and are therefore not required to be checked mandatory every year.

Hoverboards are basically maintenance-free, but we recommend an annual inspection with a functional check, regarding e.g. the Airbase, as part of the maintenance of the stretcher.
This can be managed by one of our certified service partners, whom you find up-to-date on

www.hover.at

You may also contact us directly if you have any questions or problems.

Purification

All Hoverboards are made of high quality stainless steel of the type 1.4301 and are carefully processed in protective atmosphere.

However, „stainless“ does not mean that the material is resistant to all aggressive chemicals, such as e.g. ionized chlorine solutions.
At outside temperatures below -5 ° (23F), calcium chloride is often used as antifreeze solution, which is much more aggressive than the commonly used sodium chloride (“common salt”).

This aggressive solution is brought to the surface of the plate by the wheels of the stretcher and causes surface corrosion as a result.

For a consistently beautiful appearance, it is therefore important to rinse and wipe the surface of the plate daily with clear water during such conditions.

A final impregnation with oil-based stainless steel care products can also help prevent corrosion.

On request, we will be happy to send you a special cleaning and care set.

Disinfection

On the European market, there is such an abundance of disinfectants, solvents and cleaning agents , so that not every single product can be tested.
In addition, the manufacturers are constantly changing and adapting their recipes.

That is why we only use 1.4301 quality for all stainless steel parts, because it means the optimal synthesis of corrosion protection, processability and cost.

The correct (means not too high) concentration of the disinfectant is most important.
Never use disinfectants with chloroacetic acid or other corrosive ingredients !

The bellows is made of polyester fabric with a PVC coating and a PVC support frame. These materials are generally trouble-free, but too high concentrations of disinfectants may cause color damage (bleaching).

The disinfectant also should not remain on the surface anywhere, but should be wiped off after it has acted or also rinsed away with clear water.

Quality

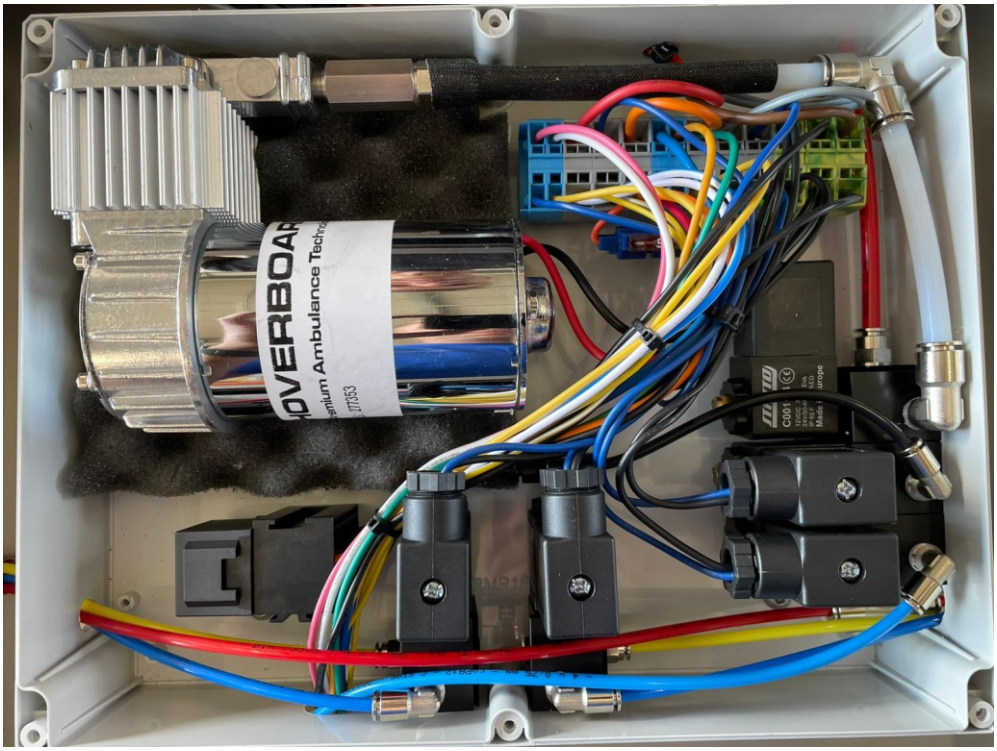
All Hoverboards are tested in accordance with the latest standards by DEKRA in Klettwitz and comply with EN 1789: 2020, EN 1865-5: 2012 and ECE R17 (20 g test).

The exclusive use of components of ISO certified pre-suppliers provides industrial manufacturing quality.

Because of our CIP (Continuos improvement programme) and advancement of our products, your Hoverboard may vary from this description.

In case of malfunctions or questions, please contact our hotline

Phone +43 - 660 - 800 9000
Mail info@hover.at
www.hover.at



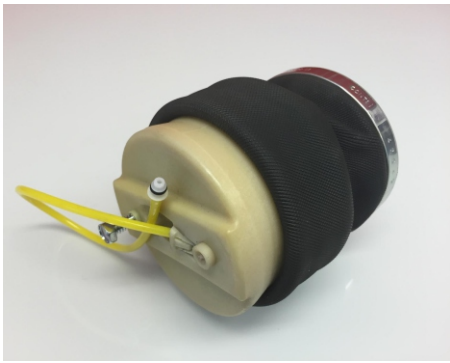
Connection layout

Option lateral movement device (LMD): blue, Option reanimation/CPR: red

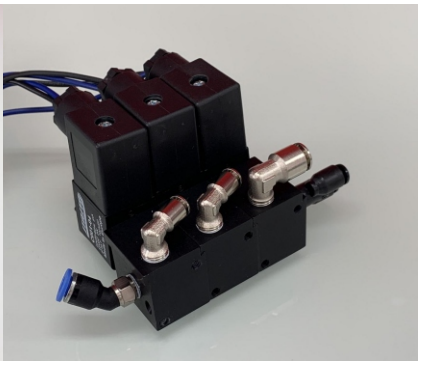
target	colour	cross-section	target	colour/cross-section
toggle switch	black	1,0	main switch	black 1,0
ground (31)	brown	2,5	compressor	black 2,5
mag. valve up	black	1,0	relay (86)	black 1,0
mag. v. LMD	black	1,0	mag. valve 1	black 1,0
mag. check v.	black	1,0	mag. valve 2	black 1,0
micro switch	yellow	1,0	mag. valve 1	blue 1,0
toggle switch	blue	1,0	mag. valve 2	blue 1,0
			relay (85)	green 1,0
pressure switch	grey	1,0	mag. check v.	blue 1,0
pressure switch	grey	1,0		
main switch	green	1,0	micro switch	yellow 1,0
main switch	orange	1,0	fuse 5A	orange 1,0
relay (87)	light blue	2,5	compressor	red 2,5
			relay (30)	orange 2,5
ignition (15)	orange	2,5	fuse 5A	orange 1,0
			LMD switch front	yellow-white 1,0
mag. v. LMD	blue	1,0	LMD switch back	blue-white 1,0
			LMD switch front	yellow-white 1,0
positive (30)	red	2,5	LMD switch back	blue-white 1,0
toggle switch	white	1,0	micro switch	yellow 1,0
toggle switch	violet	1,0	mag. valve up	blue 1,0

Spare parts

Air suspension
30620 > with shock absorber
30621 > without shock absorber

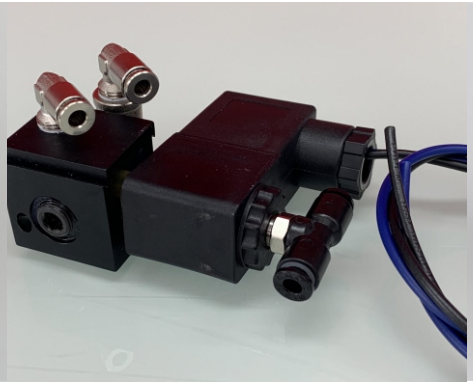


30311 air cushion

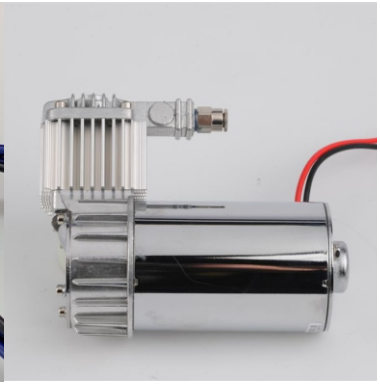


30057 magnetic valve block

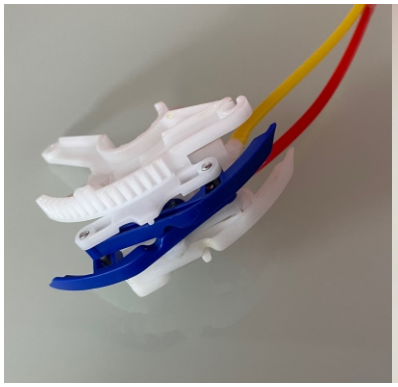
30058 magnetic valve 1



30059 magnetic valve 2



30207 Compressor



30291 Level control valve

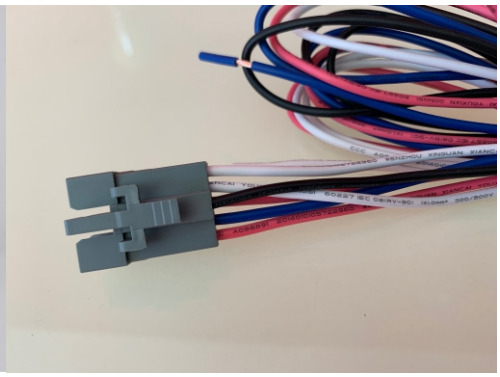
30292 Valve control bow

30271 Air fittings

Spare parts

30302 Adjustable shock absorber

30071 Micro switch

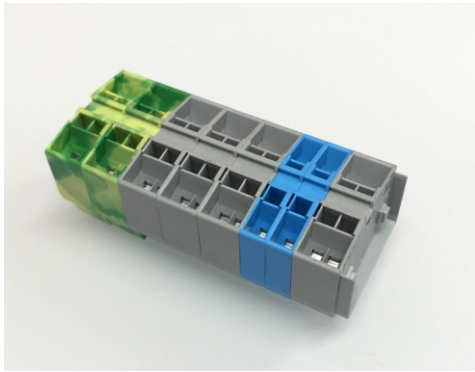


Connector and cable
35020 for main switch
35021 for toggle switch
35022 for front pushbutton
35023 for rear pushbutton

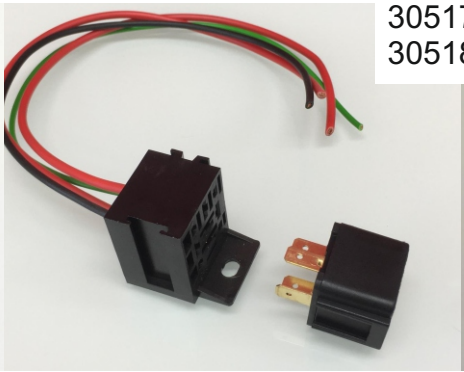
31020 hose connector 4-4-4
31021 hose connector 4-4
31022 hose connector 6-6
31023 hose connector 6-4
31024 hose connector 8-6

30251 fuse holder
30252 fuse 30A
30253 fuse 5A

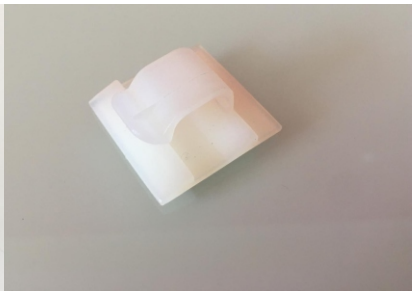
30511 JPT-connector 10 pins f
30512 JPT-connector 10 pins m
30513 JPT-crimp female
30514 JPT-crimp male
30515 JPT-connector 4 pins f
30516 JPT-connector 4 pins m
30517 JPT-connector 2 pins f
30518 JPT-connector 2 pins m



31270 Terminal grey
31271 Terminal green-yellow
31272 Terminal blue



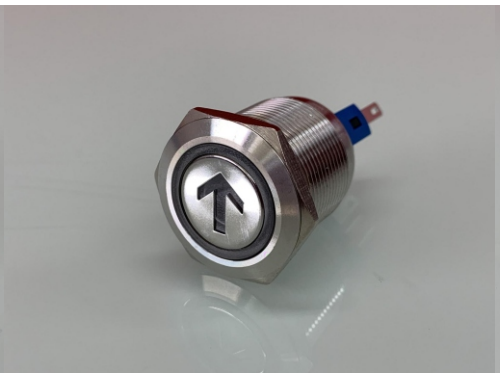
30520 relay
30530 relay holder



31283 cord clip

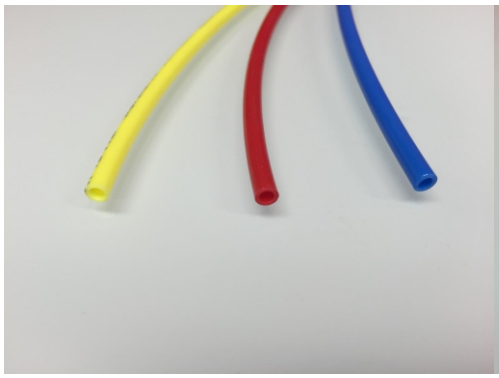
Spare parts

35010 main switch (blue)



35011 toggle switch (red)

35012 LMD pushbutton



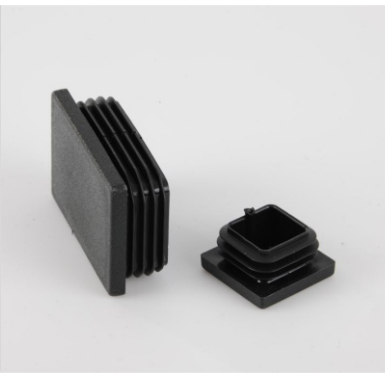
30244 pressure tube 4 mm, red
30245 pressure tube 4 mm, blue
30246 pressure tube 4 mm, yellow
30240 pressure tube 6 mm, red

30248 teflon tube, white
31080 thermal protection-tube

30066 pressure switch, pre-adjusted 8,5 bar

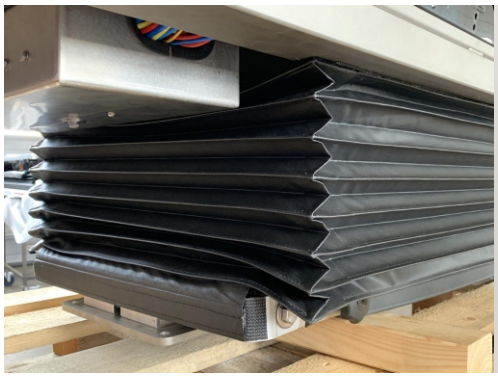
30113 Gas spring 450 N

30121 Castor 587 mm
30122 Castor 610 mm



30361 plug 60 x 40
30352 plug 30 x 40

Spare parts



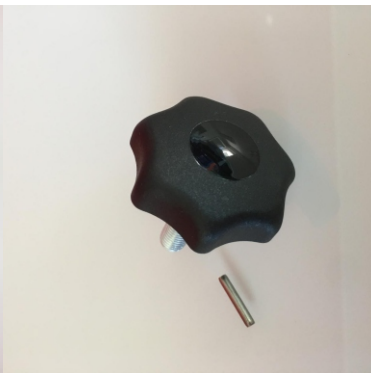
30089 bellows, without lateral movement device
30085 bellows, with lateral movement device

30341 Brass bushing

62002 box for external compressor (without compressor)

31010 LMD pneumatic cylinder

50150 Ramp bracket 30 mm



31040 knob

51030 rear toothcomb
51040 front toothcomb

51062 locking bolt

30541 Stop bolt

62260 Care set for stainless steel