Hydraulic Car Lift With Cover
‘Invisible’ solution to access to the parking levels.
Load capacity: max. 2,500 kg, wheel load 625 kg
Optional Load capacity: max. 3,000 kg, wheel load 750 kg

ADVANTAGES
• The system provides access to the parking garage by protecting the visual texture of living spaces.
• The entrance room which is required by conventional lifts is not necessary.
• The lift cover surface can be used actively in your daily life.
• Suitable for outdoor installation and usable as goods lifts.

If an entrance room cannot be built due to architectural and city planning requirements, Parkolay PHP 222C offers an excellent solution to access the parking floors. The system utilizes a cover for closing the top of the pit that can be paved according to the different architectural preferences. The monitor installed inside the cabinet allows the user to follow the cover movements and to control it through the hold-to-run feature.
**System Measurements**

**Structural Forces**

- $F_1 = 45$ kN
- $F_3 = 5$ kN
- $F_4 = 15$ kN
- $F_1 = 45$ kN
- $F_2 = 7.5$ kN
- $F_4 = 15$ kN

---

**Technical data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Dimensions</th>
<th>Standard</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform length</td>
<td>A</td>
<td>520</td>
<td>590</td>
</tr>
<tr>
<td>Pit length</td>
<td>B</td>
<td>530</td>
<td>600</td>
</tr>
<tr>
<td>Platform width</td>
<td>C</td>
<td>250</td>
<td>270</td>
</tr>
<tr>
<td>Pit width</td>
<td>D</td>
<td>300</td>
<td>320</td>
</tr>
<tr>
<td>Pit depth</td>
<td>E</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Lifting height</td>
<td>F</td>
<td>&lt; 1190</td>
<td>&lt; 2190</td>
</tr>
<tr>
<td>Access height</td>
<td>G</td>
<td>210</td>
<td>210</td>
</tr>
<tr>
<td>Cover ledge</td>
<td>H</td>
<td>245</td>
<td>245</td>
</tr>
<tr>
<td>Cover load</td>
<td>L</td>
<td>&lt; 3.000 kg</td>
<td>&lt; 3.000 kg</td>
</tr>
<tr>
<td>Paving capacity</td>
<td>P</td>
<td>&lt; 100 kg/m²</td>
<td>&lt; 100 kg/m²</td>
</tr>
<tr>
<td>Car dimensions Weight</td>
<td>L</td>
<td>&lt; 2.500 kg</td>
<td>&lt; 3.000 kg</td>
</tr>
<tr>
<td>Length</td>
<td>CL</td>
<td>A-10</td>
<td>A-10</td>
</tr>
<tr>
<td>Width</td>
<td>CW</td>
<td>C-40</td>
<td>C-40</td>
</tr>
</tbody>
</table>

**Technical features**

- Motor power $(kW)$: 11, 15
- Raising speed $V$ $(m/s)$: 0.10, 0.15
- Lowering speed $V$ $(m/s)$: 0.15, 0.15

You may contact the manufacturer for different dimension requirements.

The manufacturer reserves the right to change specified features.

---

**Machinery Directive 2006/42/EC**
**Implementations To Be Provided by Customer**

1. **COVER COATING**
   - Car lifts, with a roof covering, that disappear into the ground becoming invisible. Roof covering can be paved (standard load capacity: max. 100 kg/m²) according to the different architectural designs and visual preferences. Many materials can be applied on paving, such as grass, stone, glass wood etc.
   - *You may contact the manufacturer if you need more capacity for paving weight.*

2. **DRAINAGE CHANNEL**
   - 120x120 L profiles and drain outlet pipes, which are illustrated in yellow and blue must be provided by the customer.
   - *You may contact the manufacturer for detailed information.*

3. **SWITCH CABINET**
   - Due to the building regulations, the energy provision must be provided by an switch cabinet with the generator support in accordance with local authorities and employer’s standards.
   - *You may contact the manufacturer for detailed information.*

**Options and Extra Equipments**

2. **DOUBLE SPEED**
   - According to the 2006/42 / EC directive, the driver can use the control panel from inside the cabinet if the speed is less than 0.15m/sec. Optionally, it can be controlled from outside the cab for higher speed.

3. **SAFETY RAILING**
   - Additional safety railing may be applied in front of the platform if needed.

4. **SAFETY BRAKE**
   - If the lift reaches an unexpected overspeed for any reason or the steel ropes are broken, the safety brakes are activated and prevent uncontrolled movement.

5. **UNINTERRUPTIBLE POWER SUPPLY / UPS**
   - When the power supply is disconnected due to any possible reason, the UPS allows the platform to be transported to lower floor and the door to be opened automatically for the vehicle to exit the system.

6. **REMOTE ACCESS**
   - Optionally, remote access to the main control board via internet can be provided.

7. **INTERCOM OR TELEPHONE**
   - Optionally, intercom or telephone can be included to provide communication within the platform.
System Components and Functions

1. **TRAFFIC LIGHT**
   - **Yellow**: Busy platform
   - **Yellow Flash**: Platform comes with car
   - **Green**: Platform is empty and ready to use
   - **Green Flash**: Platform comes empty
   - **Red**: Platform out of service

2. **REMOTE CONTROL**
   - You may call the platform to ground floor with remote control.
   - Cover movement can be directed manually with hold to run principle, only by control panel which located on entrance level.

3. **CONTROL PANEL WITH KEY SWITCH**
   - The platform can be called through the control panels which located on each floor and can be directed to the desired floor from entrance level.
   - Since the system operates with the hold to run principle, it is necessary to keep the control button depressed during the cover movement.
   - The authorized user key and the emergency stop button of control panels on each floor ensure safe operation.

4. **SIDE WALL PANELS OF CABINET**
   - On both sides of the platform there are polycarbon panels which are as high as the cabinet is.

5. **SURFACE OF PLATFORM**
   - Due to the use of diamond pattern of galvanized metal sheet, the platform has a non-skid surface.
   - Optionally, aluminum metal sheet can be preferred.

6. **FRONT AND BACK OPTIC SENSORS**
   - There are optical sensors on the platform that control the position of the vehicle's front and rear.

7. **FLASHER AND BUZZER**
   - The flasher and buzzer on the system alert the driver until the vehicle is properly positioned.

8. **CONTROL MONITOR WITH CAMERA**
   - In order to observe the environmental safety around the platform, the driver keeps the button pressed during the movement of the cover and monitors the operation from the screen.
System Components and Functions

9. **DOORS ON THE FLOOR**
   Doors at each parking floor provide a safe entry into the system. The door opens automatically when the platform reaches the floor. Before the movement of the lift, the door should be closed by the driver.

10. **FLOOR TRAFFIC LIGHT**
    Yellow: Busy Platform
    Yellow Flash: Platform comes with car
    Green: Platform is empty and ready to use
    Green Flash: Platform comes empty
    Red: Platform out of service

11. **FLOOR CONTROL PANEL WITH KEY SWITCH**
    Call and emergency buttons are located on the control panel.

12. **MAIN CONTROL CABINET**
    Enough space should be allocated on the wall for the 80x140cm main control board.

13. **HYDRAULIC POWER UNIT**
    The space required to place the hydraulic power unit must be allocated by the customer.
    Dimension: 150x150cm
    Required Power: Standard 11kW - Optional 15kW

14. **COVER LEDGE**
    There should be no obstacles up to 245cm above the cover.

15. **GROUND FLOOR PROTECTION**
    Optical sensors are used around the system to provide security at the entrance floor.

16. **MUSHROOM SENSORS**
    Mushroom sensors, located at the four corners of the system, provide safety observation between the cover and the pit.

17. **CROSS SENSORS**
    Cross sensors ensure the safety on the cover. Sensor installation and protection barriers are implemented in accordance with CE standards.

18. **PERIMETRIC SENSORS**
    A: Protective Barrier h120cm Perimetric
    B: Photoelectric Sensors

“Parking with pleasure...”
The general planning/supply of the garage with the building structure, statics, tolerances, free spaces, wall cutting, drainage, noise protection, fire demands, electricity, grounding, driveway, illumination, ventilation, marking fences and others has to be arranged according to local requirements by the customer and must be in accordance with the delivery/requests of the manufacturer.

**Corrosion protection and Prevention**

Besides the maintenance, the systems have to be cleaned regularly. This applies to the systems’ platforms and all parts being exposed to corrosive substances, e.g. salt water, dirt, car fluids, sand, etc. Garages also have to be ventilated and desaturated, The base plates have to be dewatered and dry.

**Fire safety**

Designing fire safety in the proposed garage or area must comply with the local/regional regulations. The compliance must be managed by customer. Depending on the location and the fire department there might be very different and specific requirements. The customer should inform the supplier about regulations in advance.

**Dewatering**

Dewatering involves controlling water in the system area with the possibility of pumping it out of a water collecting pump sump. Water may occur from snow on the car, leaking shell, ground water, wet cleaning etc. It can be solved by a drainage system 10/2 cm with pump sump (50 x 50 x 20 cm). There should be no water in the lift pit.

**Car development**

The size and weight of the new generation of cars have been increased due to the extra equipment, which means that the weight of upper middle class cars oftenly exceed 2000 kg. Parallelly to that, the manufacturer offers a standard 2500 kg lifting capacity and 625 kg wheel load. Optionally, the 3000 kg lifting capacity / 750 kg wheel load can be provided for heavier cars.

**Sound insulation**

EN 14366 : 2004

“Sound insulation in buildings”. According to the German norm a value of 30 dB(A) is allowed in living quarters. This can be fulfilled through the noise protection option applied according to the supplier’s offer. Sound insulation of building R\text{w} = 57 dB. Surrounding walls/ceilings (e.g. monolithic and rigid) of parking should be made of min m’ = 300/400 kg/m². The adjacent critical building element should be min m’ = 580 kg/m². User noises are created by individual users. These can be from driving up/down the platforms, slamming of vehicle doors, motor and brake noises. They are not subject to the limit. "Increased sound insulation" is made on special offer and discussion. This option requires more space allocation.

**MINIMUM DIMENSIONS & TOLERANCES**

All shown dimensions are minimum. Tolerances according to VOB part C (DIN 18330 and 18331) and the DIN 18202 have to be considered additionally. Tolerances for space requirements are +3 cm/0 cm. Dimensions are expressed in cm.

**ENVIRONMENTAL RANGE**

Temperature range –10 to +40° C. Relative humidity 50% at maximum outside temperature of +40° C.

**LIGHTING**

Customer must provide sufficient lighting in the parking garage and shaft of the lift according to the regulations.

**CE AND CONFORMITY**

The systems correspond to the EC Machinery Directive 2006/42/EC.

**RIGHTS TO CHANGE**

The manufacturer reserves the right to make changes and/or improvements in model & dimensions without prior notice.