

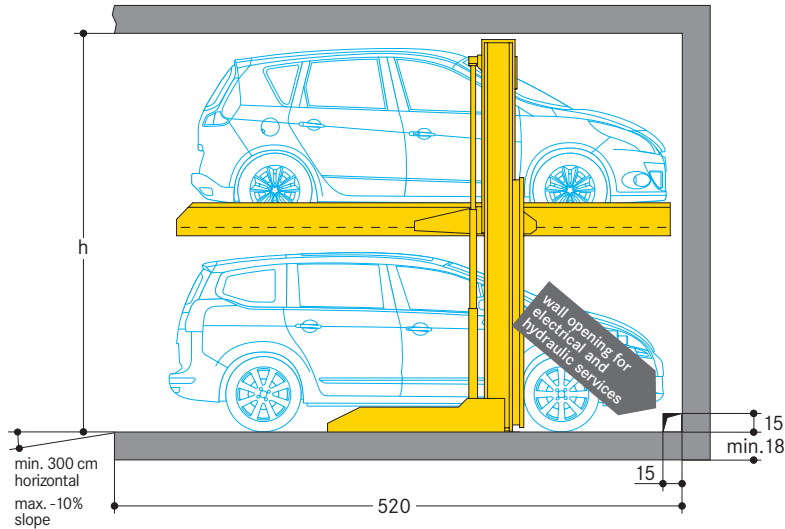
Dependent parking

For permanent user only!

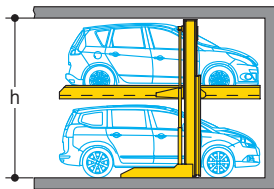
In case of short time user (e.g. for office-, hotel-, commercial building) only possible on lower platform and only if technically adjusted, ask WÖHR! Or with attendant or valet parking both levels are possible for short time user.

Load per platform:
max. 2000 kg
(load per wheel
max. 500 kg).

Dimensions in cm

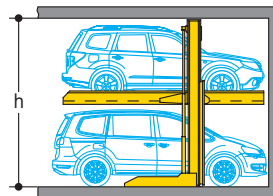


Standard type 411-170



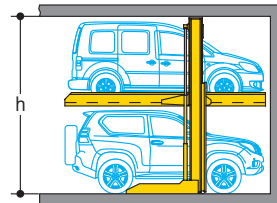
h (single unit)	360	340
car height upper level	170	150
car height lower level	170	170

Comfort type 411-180



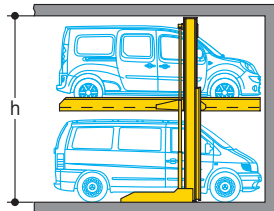
h (single unit)	380	350
car height upper level	180	150
car height lower level	180	180

Comfort type 411-190



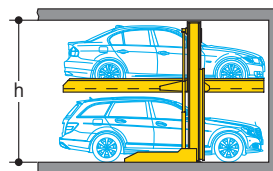
h (single unit)	400	360
car height upper level	190	150
car height lower level	190	190

Comfort type 411-200



h (single unit)	420	370
car height upper level	200	150
car height lower level	200	200

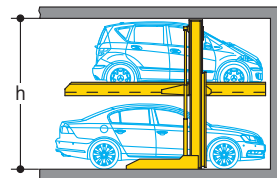
Compact type 411-150



h (single unit)	320	
car height upper level	150	
car height lower level	150	

Please attend to restricted car- and platform distance height

Compact type 411-160



h (single unit)	340	330
car height upper level	160	150
car height lower level	160	160

Please attend to restricted car- and platform distance height

Width dimensions single unit (2 cars)

space required B	gives clear platform width
265	230
275	240
285	250
295	260
305	270

Notes

- Clear platform width of 250 cm for car widths of 190 cm. For large touring sedans we recommend a clear platform width of at least 260–270 cm.
- According to ISO 3864 the floor has to be marked with 10 cm wide yellow-black stripes at a distance of 50 cm from the platform edge by the purchaser (see "statics and construction requirements" on page 2).
- The lowering speed of an empty platform is considerably lower than a loaded one.
- It is not possible to have channels or undercuts and/or concrete haunches along the floor-to-wall joints. In the event that channels or undercuts are necessary, the system width needs to be reduced or the installation width needs to be wider.
- The manufacturer reserves the right to construction or model modifications and/or alterations. Furthermore, the right to any subsequent part modification and/or variations and amendments in procedures and standards due to technical and engineering progresses in the art or due to environmental regulation changes, are also hereby reserved.

Electrical datas

Item	Performance	Quantity	Designation	Position	Frequency
1	by customer	1 unit	electric meter	in the feed cable	
2	by customer	1 unit	fuse or automatic circuit breaker 3 x 16 A slow blow acc. to DIN VDE 0100 p. 430	in the feed cable	1 per power pack
3	by customer	as locally required	acc. to local power supply regulations 3 Ph + N + PE*	feed cable to main switch	1 per power pack
4	by customer	each 10 m	equipotential bonding safety lead-out connection	corner pit floor/rear wall	
5	by customer	1 unit	equipotential bonding safety compliant to the DIN EN 60204 standard	from the lead-out connection to the system	1 per Parklift
6	by customer	1 unit	marked main switch, lockable to prevent unauthorized switching on	above operating device	1 per power pack
7	by customer	10 m	PVC control cable with marked strands and protective conductor 5 x 1,5 ²	from main switch to hydraulic power pack	1 per power pack

Items 8–16 are included in WÖHR's scope of delivery unless otherwise specified in the offer/order.

* DIN VDE 0100 part 410 + 430 (not under permanent load) 3PH+N+PE (three-phase current) Note: Where a door is used to close the garage, the manufacturer of the door must be consulted before the electric cable is laid.

The electrical components supplied by the manufacturer must be connected in accordance with the appropriate wiring diagram and local regulations. German VDE electrical requirements must be adhered to, in order to validate the TÜV tested circuit.

The electrical supply to the power pack(s) must be provided prior to or during installation to

enable our fitters to complete their work satisfactorily and to check the correct functioning of the units.

In compliance with the DIN EN 60204 standard provisions, all systems must be connected directly on site with an earthed equipotential bonding. The lead-out connection must be at a 10 m distance!

Noise protection

Basis is the German DIN 4109 "Noise protection in buildings".

With the following conditions required 30 dB (A) in rooms can be provided:

- noise protection package from our accessory
- insulation figure of the construction of min. $R'_w = 57$ dB
- walls which are bordering the parking systems must be done as single wall and deflection resistant with min. $m^3 = 300$ kg/m²

- solid ceiling above the parking systems with min. $m^3 = 400$ kg/m²

At differing constructional conditions additional sound absorbing measures are to be provided by the customer.

The best results are reached by separated sole plates from the construction.

Increased noise protection:

If increased noise protection must be provided planning has to be confirmed on a project basis by WÖHR.

Temperature

The installation is designed to operate between +5°C and +40°C. Atmospheric Humidity: 50% at +40°C. If the local circumstances differ from the above please contact WÖHR.

Hydraulic power packs

For the accommodation of the hydraulic power packs an additional space is required which will be determined during the verifications of the drawings, e.g. in a wall recess.

Dimensions

All dimensions shown are minimum. Construction tolerances must be taken into consideration. All dimensions in cm.

Conformity test

All our systems are checked according to EC machinery directive 2006/42/EC and EN 14010.

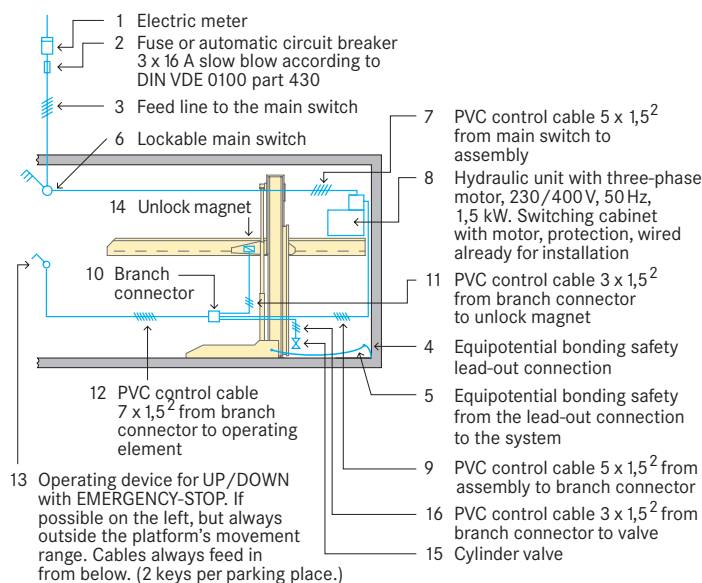
Railings

If walkways are arranged directly to the side or behind the systems, railings have to be provided acc. EN ISO 13857 by client acc. to local requirements, height min. 200cm.

Fire safety

Each and every fire safety requirement and all possible mandatory item(s) and equipment(s) (fire extinguishing systems and fire alarm systems, etc.) are to be provided by the customer.

Installation diagram



Maintenance

WÖHR and our foreign partners have an assembly and customer network. Annual maintenance is performed at conclusion of a maintenance contract.

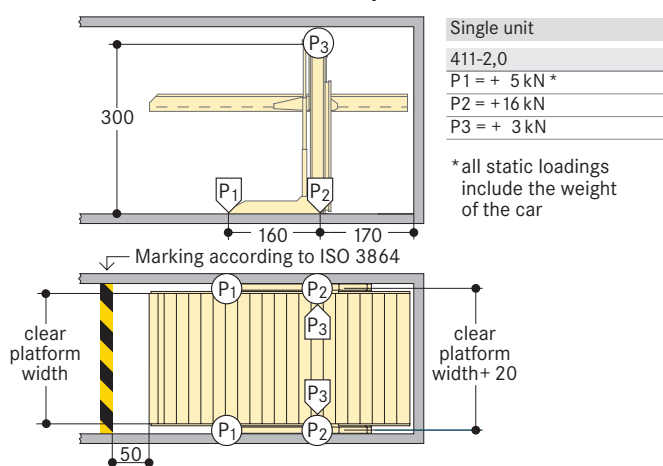
Protection against corrosion

Independent of a maintenance workings has to be carried out acc. to WÖHR Cleaning and Maintenance Instruction regularly.

Clean up galvanized parts and platforms of dirt and road salt as well as other pollution (corrosion danger)!

Pit must be always ventilated and deaired well.

Statics and construction requirements



The units will be fixed on the anchor points with heavy duty anchor bolts to a depth of approx. 10–12cm.

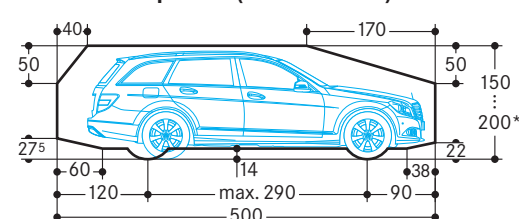
Base plate thickness minimum 18 cm! Concrete quality according to the static requirements of the building, but for the dowel fastening we require a concrete quality of min. C20/25.

Special foundations are required with asphalt floors or paving-stones.

Notes

In case of lower cars with spoilers, contact Company WÖHR or local agent (see "clearance profile").

Clearance profile (standard car)



* The total car height includes roof rail and antenna fixture must not exceed the mentioned max. height dimension.