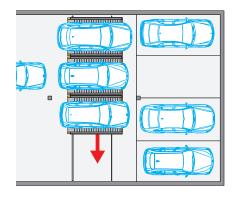
## **Data Sheet**

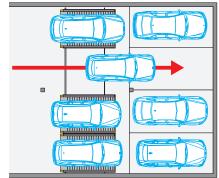
# **WÖHR PARKING PLATFORM 501**



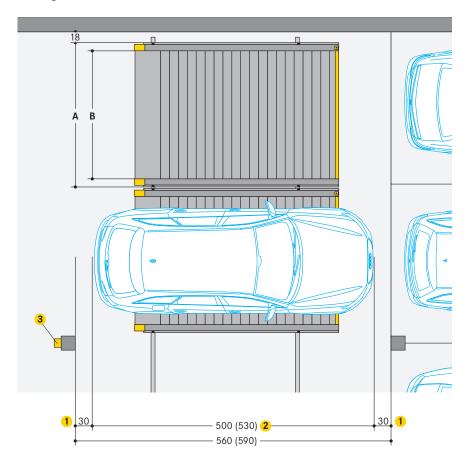
### Electric rail on the ceiling

- Laterally shifting parking platforms
- Platform load options:
  - max. 2000 kg, load per wheel 500 kg
     max. 2600 kg, load per wheel 650 kg
- Every parking platform is given its own electric rail





### Length and width measurements



Parking Platform A	Clear platform width B
226	197
236	207
246	217
256	227
266	237
276	247
286	257

Platform width of at least 217 cm is recommended.

- 1 30 cm safety clearance as per DIN EN 14010:
  - between the front or rear bumper of a car parked on the parking platform
  - between fixed parts of the surroundings or another car
- 2 Car length 500 cm = length measurement 560 cm Car length 530 cm = length measurement 590 cm The length measurement can only be reduced if the max. car parking space is shortened or a light barrier is used
- 3 Operation device

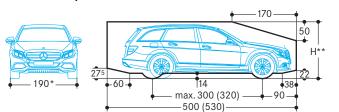
#### Note

The entire system and its movement sequences must be visible from the operation device.

### Dimensions

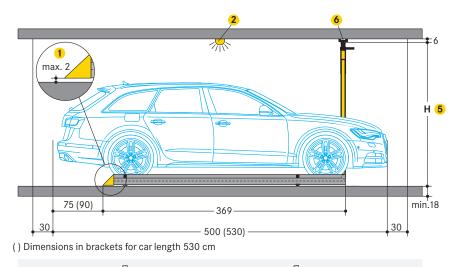
- all dimensions specified are the minimum, finished dimensions
- tolerances must be taken into consideration
- the evenness of the floor has priority as per DIN 18202
- all dimensions are given in cm

### Clearance profile



- maximum lane + tyre width with platform width 217 cm
- for the maximum height of the car, please observe the structural

### Electric rail on the ceiling



1 Safety clearance as per DIN EN 14010

2 Flashing light

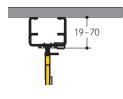
Wheel stop

Running rail

Clear height according to local regulations (height current collector adjustable from 201 to 227 cm)

Electric rail

height 6 cm if ceiling is higher adjustable console (19 to 70 cm) at extra cost





### Track and floor details (electric rail on the ceiling)

Track loading due to a moving traffic load:
- PARKING PLATFORM 501-2,0:

- max. 7,5 kN per track roller
- PARKING PLATFORM 501-2,6: max. 7,6 kN per track roller

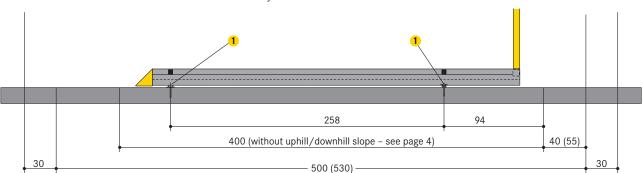
- Installation of the running rails:

   meter markers are to be permanently attached by the customer

   do not use cast asphalt!
- after bringing in the screed, the track rails are secured with wooden screws and
- plastic dowels level as per DIN 18202, table 3, line 3 no expansion gaps or building separation gaps are permitted in the area of the track system

For any subsequent installation of the parking platforms, in the parking area, an additional screed is to be taken into account by the customer, depending on the floor evenness. The measures are decided after a levelling.

1 Running rail



### Evenness and tolerances

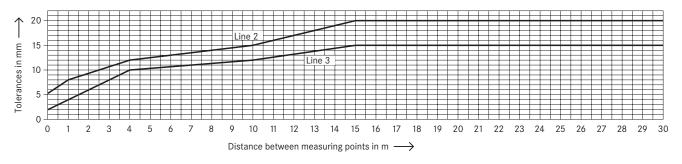
According to DIN EN 14010, the safety clearance between the outer lower edges of the parking platforms and the garage floor must not exceed 2 cm.

In order to comply with the requirement and to obtain the necessary floor level, the tolerances of the evenness of the finished floor cannot be exceeded according to DIN 18202, table 3, line 3. Therefore, exact levelling of the floor by the customer is essential.

### Abstract from DIN 18202, table 3

Column	1	2	3	4	5	6
			Vertical measurements as limits in mm with measuring points distances in m to*			
Line	Reference	0,1	1	4	10	15
2	Unfinished to surface of covers, subconcrete and subsoils for higher demands, e.g. as foundation for cast plaster floor, industrial soils, paving tiles and slabstone paving, compund floor paving. Finished surfaces for minor purposes, e.g. warehouses, cellars.		8	12	15	20
3	Finished grounds, e.g. floor pavement serving as foundation for coverings. Coverings, tile coverings, PVC flooring and glued coverings.	2	4	10	12	15

<sup>\*</sup> Intermediate values are to be taken out the diagram and must be rounded-off to mm.



### Measuring points: finished floor (electric rail on the ceiling)

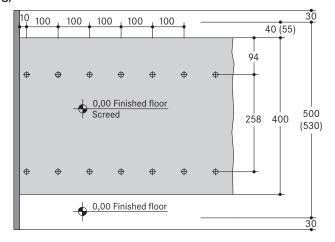
The evenness of a surface is tested by gauge measurements between two measuring points on the surface irrespective of its position and inclination.

When inspected by WÖHR only a random test is made in areas which appear to be uneven.  $\,$ 

For the uniform verification of the evenness of the floor surface, the measuring points are defined as surveying and control points.

### For the finished floor:

- Measuring points in the longitudinal distance of 100 cm for checking the unevenness as per DIN 18202, table 3, line 3 and / or as per diagram
- () Dimensions in brackets for car length 530 cm

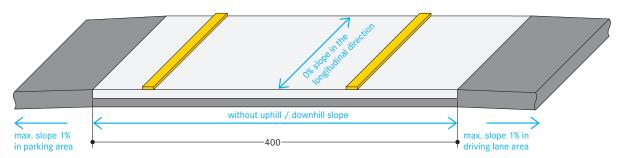


## Drainage

As per the requirements of DIN EN 14010 and the accident prevention regulations, the distance between the lower edge of the parking platform and finished floor is max.  $2\,\mathrm{cm}$ .

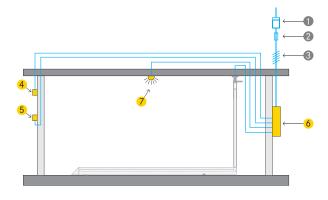
Sloping in the parking area is prohibited.

For water drainage, the areas outside the parking platform area are to be provided with a slope of max. 1%.



### Electrical specifications (electric rail on the ceiling)

### Installation diagram



Cabling preparation to be performed by the customer:

- up to the main switch to be in place prior to starting the installation operations
- connection to the main switch during installation
- system functional check testing can be performed by WÖHR together with the electrician provided by the customer
- if requested at a later date, functional check testing can be performed by WÖHR at extra-cost

### To be performed by the customer

Item	Quantity	Description	Position	Recurrence
0	1 piece	power meter	in the feed cable	1 x per control
2	1 piece	fuse protection or automatic circuit breaker compliant to DIN VDE 0100 part 430: 3 x 16 A slow blow	in the feed cable	1 x per control
3	based on site conditions	compliant to local power supply regulations 3 phases + N + PE* 230/400 V, 50 Hz	feed cables to main switch	1 x per control

 $<sup>^{\</sup>star}$  DIN VDE 0100 sections 410 and 430 (no permanent load) 3 phases + N+ PE (three phase current)

### Scope of delivery by WÖHR (unless otherwise specified)

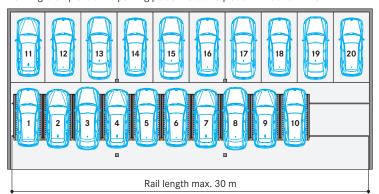
Item	Description	
4	Lockable main switch	
5	Operation device	
6	Control unit (position must be defined object-dependently) Space demand (height x width x depth):  - 1 to 8 parking platforms: 800 x 1000 x 210 mm  - per 8 further parking platforms: 600 x 400 x 210 mm	
7	Flashing light	
Without position numbers: total cabling of the system		

### Arrangement possibilities and parking place numbering (with 2 rows)

Different numbering of parking places is possible at extra cost (software changes are necessary).

### 2 rows one behind the other (up to 30 m rail length)

Planning example with 10 parking platforms with a platform width of 217 cm:



Row 2: conventional parking places

Row 1: Parking Platform 501

No light barriers are required for rails up to a length of 30 m.

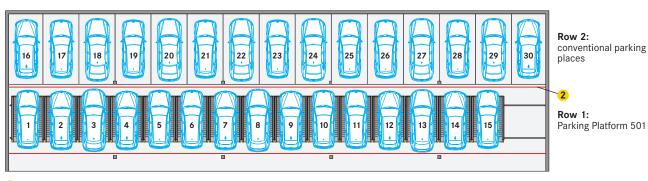
The number of possible parking platforms depends on the platform width (see table). The final number of parking platforms may vary depending on the requirements and the design of the building (e.g. width of the pillars, etc.).

Parking Platform A 1	Clear platform width B 1	Number of Parking Platforms
226	197	11
236	207	11
246	217	10
256	227	9
266	237	9
276	247	8
286	257	8

1 See graphic on page 1

### 2 rows one behind the other (over 30 m rail length)

WÖHR recommends: max. 15 parking platforms per row



2 If the rail length is more than 30 m, light barriers compliant to DIN EN 14010 must be provided.

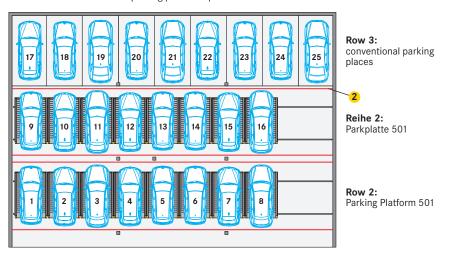
© WÖHR Autoparksysteme GmbH

### Arrangement possibilities and parking place numbering (with 3 and 4 rows)

Different numbering of parking places is possible at extra cost (software changes are necessary).

## 3 rows one behind the other

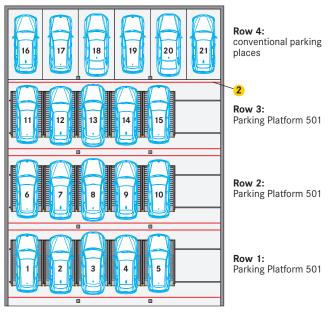
WÖHR recommends: max. 8 parking platforms per row



2 Light barriers must be provided for multi-row arrangements compliant to DIN EN 14010.

## 4 rows one behind the other

WÖHR recommends: max. 5 parking platforms per row



2 Light barriers must be provided for multi-row arrangements compliant to DIN EN 14010.

### Notes and directions

#### Scope of application

- suitable for residential buildings, office buildings and business premises
- only for long-term users that have been instructed on how to use the system

### Operation

- number of parking platforms through RFID
- parking platforms are moved in such a way that access to the selected parking space is freely accessible
- on the left side of the parking space there is about 60-80 cm space for getting in and out
- getting in and out area can also be provided on the right side

#### **Temperature**

- system operating range: +5° to +40°C
- humidity: 50% at +40°C
- in the event of changes to system conditions please consult with WÖHR accordingly

### Lighting

sufficient lighting of the driving aisle and of the parking places must be performed by the customer

### Noise emission

low running noise due to ball bearing rollers

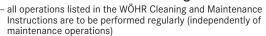
#### Fire safety

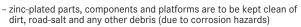
- all fire safety requirements and all mandatory equipment (fire extinguisher and fire alarm systems, etc.) must be performed by the customer

#### Maintenance

- WÖHR and all the WÖHR partners abroad provide an installation and customer service network
- regular, annual maintenance is provided subject to the stipulation of a maintenance agreement

### Prevention of corrosion damage





- always keep the garage well ventilated and deaerated

### Conformity examination (TÜV)





voluntary conformity assessment by the TÜV SÜD

The parking systems are compliant to: - EC Machinery Directive 2006/42/EC

#### DIN EN 14010

### **Surface protection**

- please consider the information on surface protection!



### **Tender specification**

- please consider the specifications!



### **Parking Place-Profile**

- please consider the product information Parking Place-Profile!



### Electromobility

- please consider the product information E-charging!
- depending on the position of the charging point on the



electric vehicle, collision points with protruding plugs and charging cables can occur

### **Product liability**

WÖHR assumes no liability for any damage resulting from crushing hazards if the floor implementation notes and the flatness tolerances are exceeded. The distance between the lower edge of the parking platform and the floor must be max. 2 cm.

#### **Construction formalities**

- the documentation necessary for construction permit applications is provided by WÖHR on demand

### Construction alterations and/or modifications

- the right to construction or model modifications and/or variations is hereby reserved
- the right to any subsequent part modification and/or variation and amendments in procedures and standards due to technical and engineering progresses or due to environmental regulation changes is also hereby reserved