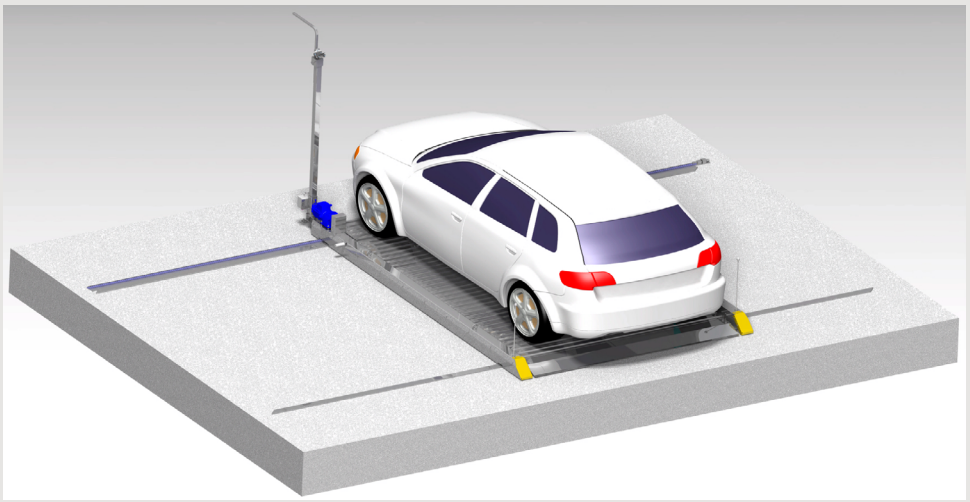
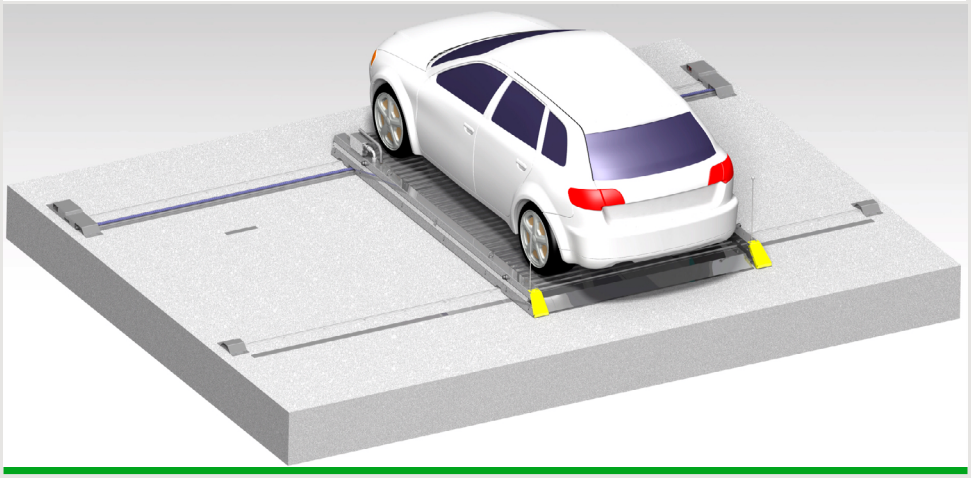
Level Park
PARKING SYSTEMS
SERBIA

PRODUCT DATA

Dimensions, technical data and specifications





CR

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Parkboard CR(CR-K) crosswise shifting

Dimensions
Tolerances for space requirements +3 0 (1)

Top edge finished floor
Tolerances for the evenness of the carriageway must be strictly complied with in accordance with DIN No. 18202, chart 3, line 3.

Suitable for
Standard passenger cars:
Limousine, Station Wagon, SUV, Van according to clearance and maximum surface load.

Type	LP	B	Car width
CR-210	182	210	max. 180
CR-220	192	220	max. 190
CR-236	208	236	max. 206
CR-248	220	248	max. 218
CR-258	230	258	max. 228
CR-268	240	268	max. 238
CR-278	250	278	max. 248
CR-288	260	288	max. 258

	Standard	Reinforced (2)
lenght (cm)	max. 500	max. 500
weight (kg)	max. 2000	max. 2600
wheel load (kg)	max. 500	max. 650

A safety clearance of 30 cm must be maintained between the front or rear bumpers of vehicles on parkboards and any fixed parts of the surroundings or other vehicles in accordance with DIN EN 14010. At a max. vehicle length of 500 cm, this means a length dimension of 560 cm between the columns. The length dimension of 560 cm can only then be shortened if the max. vehicle or parking place length is reduced or light barriers are used. The operating console must be mounted in such a way that the operator can see the entire system during operation and the motion sequences can be observed and monitored.

The systems provided are consistent with DIN EN 14010, the VDMA 15423 spec. and the EC Machinery Directive 2006/42/EC.

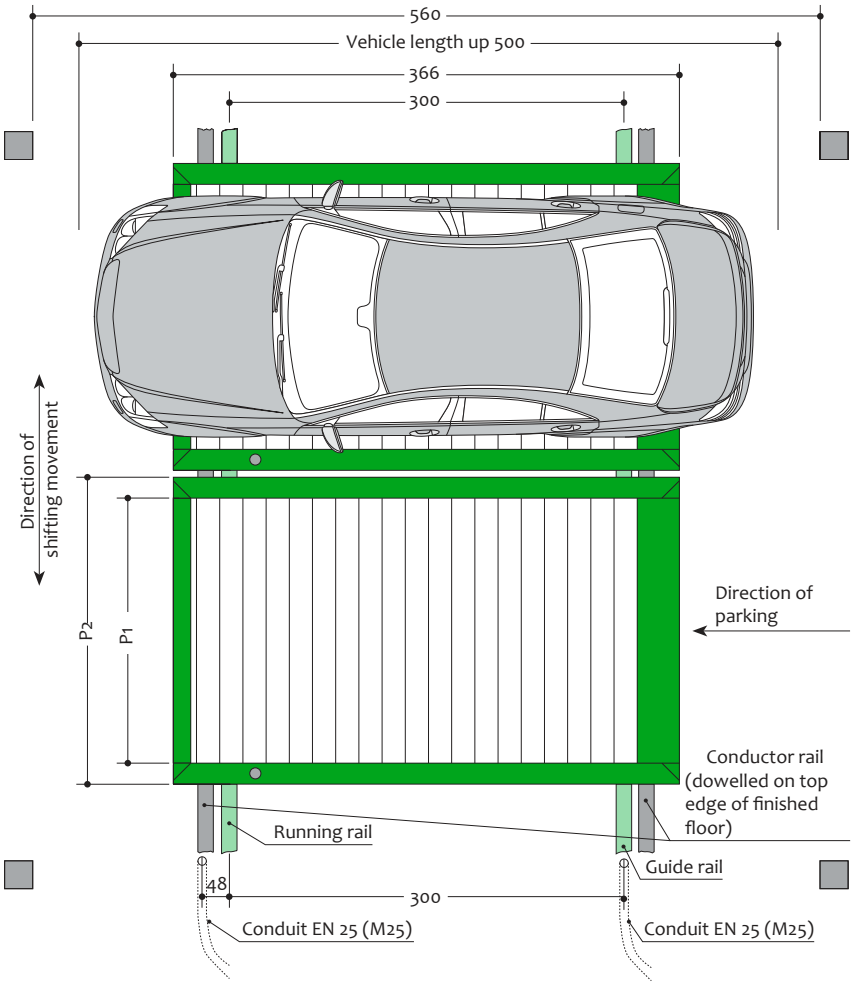
Max. load per parking space in kg.

Upweighting over 2000 kg possible with surcharge.

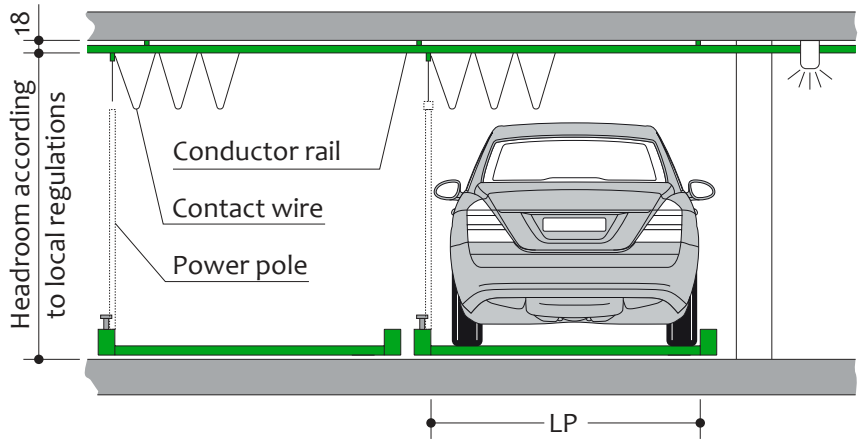
Specification

- Crosswise shifting
- Versions:
  - Power supply via busbar on the ground **CR DC**
  - Power supply via ceiling tow cable **CR AC**
- **CR - Standard version = 2000 kg**
- **CR-K - Reinforced version (possible with surcharge) = 2600 kg** (2)

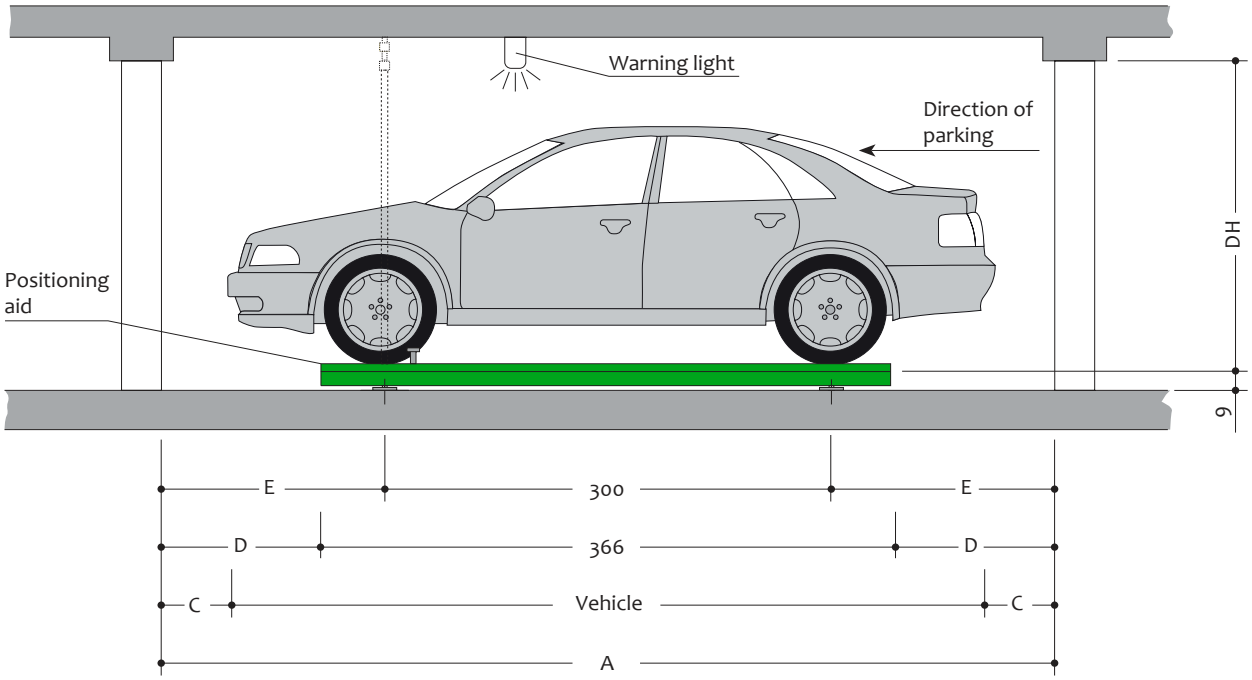
Power supply via busbar on the ground



Power supply via contact wire on the ceiling



Dimensions

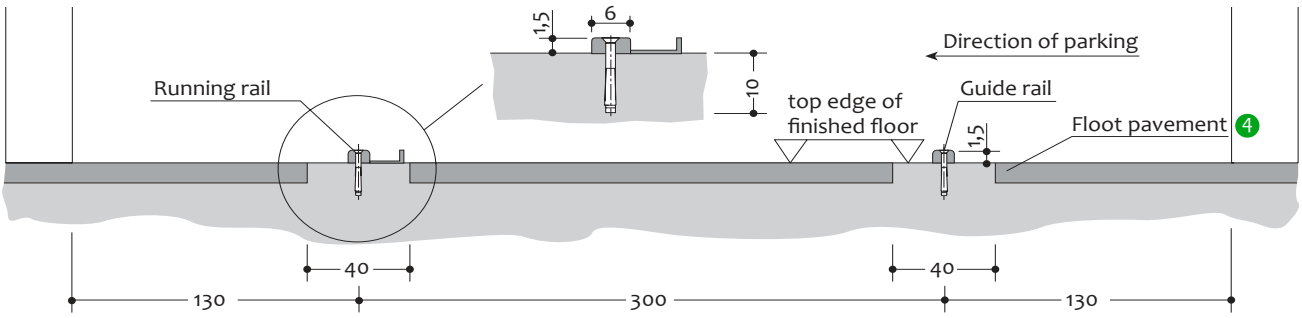


A	Vehicle	C	D	E	Please note the following on parking space	DH
560	500	30	97	130	Parking space and parkboard conform to regulations and DIN EN 14010	acc. to local requirements
530	500	15	82	115	Where the unit is equipped with light barriers, parking space and pallet also confor to the above	acc. to local requirements
< 530	< 500	15	< 82	<115	Light barrier is essential. Parking space does not conform to regulations. Note that length of vehicle is restricted!	acc. to local requirements

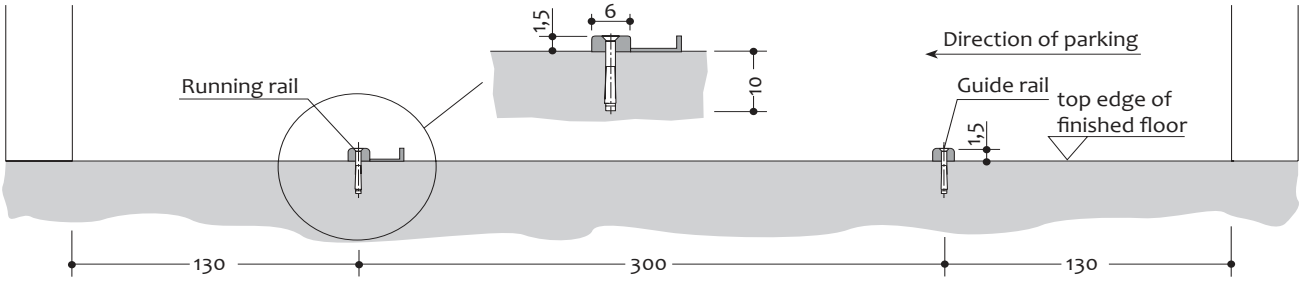
Recess/Rail system

Dependent upon the structural conditions of the garage, several different options are available for installation of the rails. Rail load by moving traffic load:
– For surface load 2000 kg: 6,5 kN per wheel
– For surface load 2600 kg: 8 kN per wheel

Laying on strip foundation 3



Laying on finished floor 3



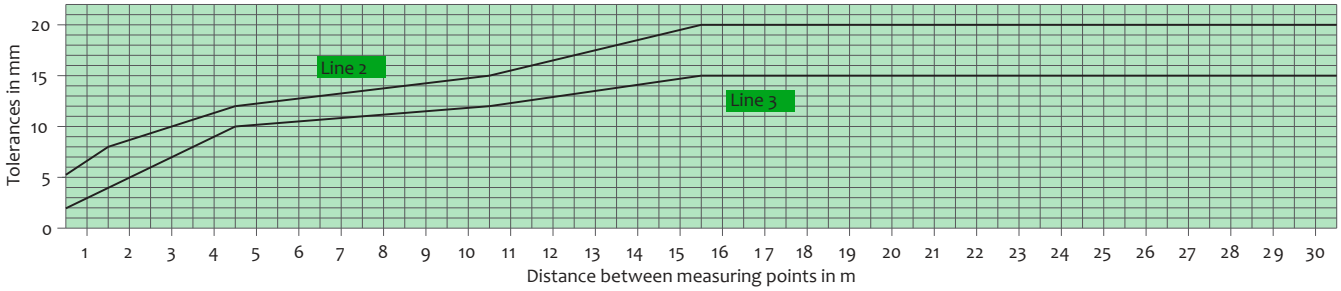
3 Tolerances for the evenness of the carriageway must be strictly complied with in accordance with DIN No. 18202, chart 3, line 3. No expansion joints are permitted within the area of the rail system.

4 We do not recommend mastic asphalt.

Evenness and Tolerances (abstract from DIN 18 202, table 3)

The distance between the lower flange of the parkboards and the garage ground must therefore not exceed 2 cm. To adhere to the safety regulations and DIN EN 14 010 recommendations and to get the necessary even ground, the tolerances of evennessto DIN 18202, table 3, line 3, must not be exceeded. Therefore exact levelling of the ground by the client is essential.

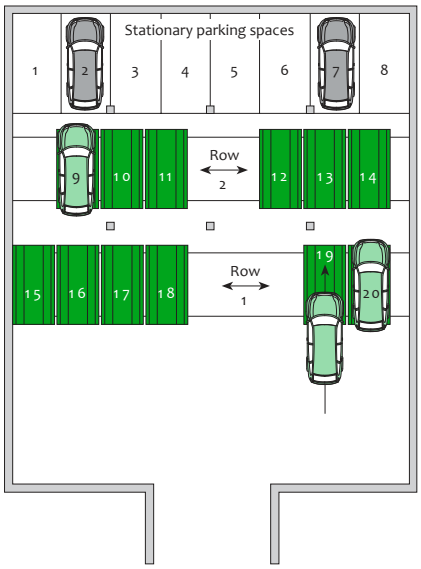
Column	1	2	3	4	5	6
Line	Reference	Vertical measurement as limits in mm with measuring points distances in m to (5)				
		0,1	1	4	10	15
2	Unfinished to surface of covers, subconcrete and subsoils for higher demands, e.g. as foundation for cast plaster floor, industrial soils, paving tiles and slab stone paving, compound floor paving. Finished surfaces for minor purposes, e.g. warehouses, cellar.	0,1	1	4	10	15
3	Finished grounds, e.g. floor pavement serving as foundation for coverings. Coverings, tile coverings, PVC flooring and glued coverings.	0,1	1	4	10	15



(5) Intermediate values are to be taken out the diagram and must be rounded-off to mm.

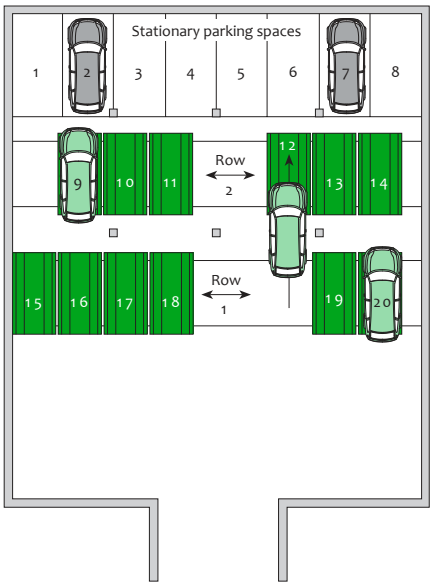
Function

Dependent upon the size of the parking system, the desired parking space is selected either via operating panel or push buttons. The carriageway will then automatically be opened towards the selected parking space. During the shifting process flashing warning lights will come up. The control system is set in such a way that a selected mechanical parking space may always be driven onto so that the driver's door may readily be opened into the carriageway made available (see parking process No. 1 and 2).



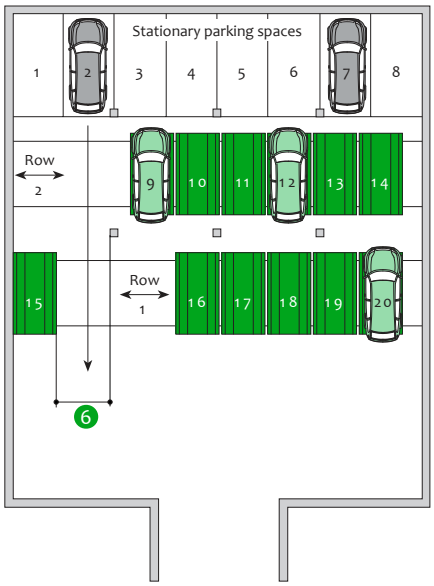
Parking process no. 1

For entering parking space No. 19, row 1, driver selects parking space No. 19. Row 1 shifts in such a way that the parkboard can comfortably be parked on and the driver may get out of the vehicle.



Parking process no. 2

In order to park on parking space 12, row 2, driver selects space No. 12 on operating panel. Rows 1 and 2 will shift in such a way that the parkboard may comfortably be parked on.



Parking process no. 3

For parking on stationary parking space No. 2, driver selects parking space No. 2. Rows 1 and 2 will then open carriageway to space 2 so that moving into and out of the garage can readily be effected.

(6) Observe clearance widths in accordance with local regulations.

Electrical installation

Electrical supply / Control system

The customer must provide a supply line 5 x 2.5 mm2
(3 PH+N+PE) to the main cabinet.
The location of the main cabinet and control panel are specified in the layout plans provided by manufacturer.
Provide conduits EN 25 (M25) with taut wire to bouth sides of the contact line at the floor.
Note: Only available in the version with a tow cable.
After selecting the individual parking spaces on the control panel they are provided automatically.
Warning signals are installed within the shifting area of the parkboards. They start flashing as soon as the system starts.

Drive / Safety

Safety bars on the side are installed as safeguard to avoid crushing injuries when shifting the ParkBoards.
An 0.15 kW motor is used as drive.

Technical data

Range of application

By default, the system can only be used for a fixed number of users. If different users use the system (e.g. short-time parkers in office buildings or hotels) the parking system needs to be adjusted. If required, would you please contact us.

Available documents

- maintenance offer/contract
- declaration of conformity

Corrosion protection

See separate sheet regarding corrosion protection.

Environmental conditions

Environmental conditions for the area of parking systems: Temperature range –10 to +40° C. Relative humidity 50% at a maximum outside temperature of +40° C.

CE Certification

The systems offered correspond to DIN EN 14010 and the EC Machinery Directive 2006/42/EG.

Pallet design

The shifting speed of the ParkBoards is 0.2 m/s (12 m/min), according to DIN EN 14 010.

Emergency operation / Power failure

By locking the motor brake the pallets can be shifted manually.

Noise emission

Ball bearing of the rollers provide a low sound level.

Care

To avoid damages resulting from corrosion, make sure to follow our cleaning and care instructions and to provide good ventilation of your garage.

To be performed by the customer

Numbering of parking spaces

Consecutive numbering of stationary parking spaces and longitudinal shifting parkboards.

Building services

Lighting, ventilation, fire extinguishing and fire alarm systems.

Electrical supply to the control box

Power supply: three phase 230/400 V/50 Hz with neutral and ground wire (other voltage network, voltage or frequency are possible after the technical checking by us).
Main fuse:
3 x fuse 16 A (slow) or circuit breaker 3 x 16 A (trigger characteristic K or C)
The supply line to the main cabinet must be provided by the customer during installation. The functionality can be monitored on site by our fitters together with the electrician. If this cannot be done during installation for some reason for which the customer is responsible, the customer must commission an electrician at their own expense and risk.
Supply line 5 x 2.5 mm2 to the main cabinet, depending on line layout, line length or system size a larger cross sections may be required. DIN VDE 0100 and other relevant local standards must be observed.

Floor / Rails

Flooring structure in accordance with our instructions, please see page 2 and 3 (recesses, rail systems).
Recesses, tolerances for the evenness of the driving lane must adhere to DIN 18202, sheet 3, line 3.
Stuffing of rail system with cement floor for the whole length.Bringing in of floor pavement. Cable duct M25 with taut wire from electric cabinet to rails (only for CR with busbar on ground). Connection of the busbars from both sides.

If the following is not included in the offer, the buyer must provide/pay for:

- Costs for final technical approval by the authorized body
- Main switch

Description

General description

Parking system for parking one vehicle on one parkboard. Dimensions are in accordance with the respective underlying height and width dimensions. Transversely movable parkboards are normally installed in front of a row of stationary parking spaces. They can be shifted sideways in a way that the parking spaces located behind them can always be easily accessed. For parking on the parkboards the parkboards must also be moved sideways. This creates sufficient space for opening driver‘s door, facilitating convenient getting in and out of the vehicle. Parkboards type Automatic can be arranged in several rows, one behind the other. Positioning of the car on the parkboard using a positioning aid.

Dimensions of the parkboards

– See page 1 to 3
– Height in the driving area is approx. 9 cm above finished floor
– Height of the side members is approx. 17 cm

Parkboard consisting of:

– Side members
– Platform base sections (cover plates)
– Low-noise running and guide rollers running on ball bearings
– Access plate
– Positioning aid
– Various small parts, etc.

Drive consisting of:

- Rack and pinion drive with electric motor.

Rail system consisting of:

Two rails mounted to the floor
– The rails protrude approx. 15 mm above finished floor
– The rail located on the entrance side is used as guide rail and ensures safe moving of the parkboards

Electrical equipment consisting of:

- Main cabinet
- Control panel
- Limit switches for positioning
- Flashing warning lights
- Power supply via busbars on the ground
- Power supply via conductor rail with contact wire under the ceiling (at additional charge) - Optional

Control system

General:
– While shifting the parkboards, a warning signal flashes
– Safety bars on the side are installed as safeguard to avoid crushing injuries when shifting the parkboards
– Electric wiring is made from the electric cabinet by the manufacturer
Operation parkboard type Automatic:
– The parking pallets are operated via centrally located control panel
– Once the desired parking space has been selected, via RFID key, the parkboards are shifted automatically
Operation parkboard type Manual:
- The parkboards are operated using a control panel via push-button with hold-to-run control

We reserve the right to change these specifications without notice!

Producer reserves the right in the course of technical progress to use newer or different technologies systems, processes, procedures or standards than those originally offered, if the customer does not incur any disadvantage.