

## **Description for Klaus Parking Pallets, Type PE + PH, longitudinally movable**

### **General description:**

Multiparking system for parking 1 or 2 cars with dimensions in accordance to the type sheet published in 12/2004, and the specified height and width. Parking pallets, which can be moved lengthwise are installed in the driving lane of underground garages. These parking pallets make it possible to achieve additional parking spaces in the driving lane, which is generally only used for maneuvering vehicles. The parking pallets can be driven on if vacant, or moved if occupied by a car when accessing parking spaces located in the back. This operation uses dead man's control safety mechanism. Therefore, the operating elements are generally mounted to the opposite supports and the parking pallets and parking spaces arranged by the controller can be seen. Operating instructions are permanently mounted to each operating station in a clearly visible location. These parking pallets are available in the following designs:

Type PE - 1 passenger car

Type PH - 2 passenger cars in a row

### **Structural and mounting parts**

#### **Parking pallet consisting of:**

Sloped steel frames with supported low-noise track and guide rollers, crossbeams, platform profiles (cover plate), positioning aids, small parts, etc. pallet height: approximately 10 cm above finished floor

#### **Drive systems:**

##### **"Floor-mounted drive":**

Base plate mounted to the ground with geared motor, limit switch and housing. The housing also serves as safety mechanism. The load transmission is carried out via a high-tension chain located in a U-profile which is open facing outwards. This chain is looped around two chain wheels and driven by the motor.

##### **"Below-floor drive":**

This drive unit is mounted in a floor recess which must be built by the customer. This drive consists of a geared motor, chain wheels and limit switch, fully mounted in a stable below-floor housing with cover. The load transmission is carried out identically to the "floor-mounted drive".

##### **"Moving drive" (special):**

Drive unit mounted to the parking pallet. Power is supplied via a drag-line cable (or via contact lines in exceptional cases). The load transmission is carried out using a chain, which is inlaid in a special rail (double rail).

#### **Rail system consisting of:**

Profiles mounted to the floor, which must be embedded in concrete by the customer based on our specifications. The guide rails protrude 20 mm above finished floor, thus ensuring safe guiding when shifting the pallets. The rail system can be fastened to the finished floor in exceptional cases and in the event of adequate evenness of the driving lane in the movement area of the parking pallets (see item 4 from the services and facilities).

**Electrical equipment consisting of:**

Operating element with 2 buttons (right/left) and an E-STOP button, control cabinet, blinking lights, various cables with accessories.

**Control system:**

The parking pallets are operated using a push-button with corresponding direction definition in dead man's control. Limit switches stop the parking pallets when the maximum movement distance has been reached. Warning lights blink during movement. The electrical wiring originates in the control cabinet.

**Corrosion protection:**

See separate sheet regarding corrosion protection.

**Generally, this parking system is not suited for short-time parkers (temporary parkers). Please do not hesitate to contact your local KLAUS agency for further assistance.**

**Environmental conditions for the area of multiparking systems:**

**Temperature range –10° to +40°**

**Relative humidity 50 % at a maximum outside temperature of +40°**

**To be provided by the customer:**

1. Supply line 5 x 2.5 mm<sup>2</sup> (3PH+N+PE)
2. 2. Pre-fusing 3 x 10A slow, or safety cutout 3 x 10A, as of a number of 5 pallets in one group of pre-fuses 3 x 16A slow, or safety cutout 3 x 16A, trigger characteristic K, G or C. Depending on type of installation and line lengths a larger conductor cross section may be required. Please follow DIN VDE 0100.
3. Lockable main switch per electric cabinet. The lockable main switch is to be mounted directly next to the control cabinet.
4. Floor design in accordance to the type sheet (recesses, tolerances for the evenness of the driving lane must adhere to DIN 18202, tab. 3, line 3).
5. Lower lining of the rails on the complete length (e.g. with cement floor).
6. Lower lining of the drive box for below-floor drive (e.g. with cement floor).
7. Ductwork Ø 4 cm with taught wire to the below-floor drive.
8. The supply lines to the electric cabinet must be provided by the customer during installation of the unit. The functionality can be checked on-site by our installation technicians together with the electrician. If this is not possible during installation because of existing conditions, an electrician must be commissioned.
9. Consecutive numbering of parking spaces.
10. Lighting, ventilation, fire extinguishing and fire alarm systems
11. Any additional yellow-black markings on the platform edges according to ISO 3864.

If the following are not included in the quotation, they will also have to be provided / paid for by the customer:

12. Costs for final technical approval by an authorized body

We reserve the right to make technical modifications. The Klaus company is free to use newer or other technologies, systems, techniques or standards than those now offered during construction according to technical advancements as long this does not result in disadvantages for the customer.