**Electric chain lift for passenger car transport**

**Type: Pegasos**

**Technical design in compliance with the Machinery Directive2006/42/EC**

You can adapt and fill in the cabin dimensions listed in point 1 "Technical Description" to your wishes with the help of the Pegasos planning guide. For the design of the Pegasos, all the information you need is listed in the planning guide and explained in detail.

1. **Technical description**

Payload: 3.000 kg

Axle load: max. 1.650 kg, no forklifts allowed

Lifting height: 3.500 mm

Lifting speed: 0,15 m/s

Number of stops: 2

Number of entrances: 2

Arrange of entrance: Through car loading

Cabin width: 2.800 mm

Cabin depth: 5.800 mm

Cabin height: 2.100 mm

Pit: 150 mm

Shaft doors: Electric sliding doors

Power: Rated output 8 kW, Rated current 16,8 A, Rated fuse current 20 A

1. **Lift shaft**

Construction-side reinforced concrete shaft with built-in parts according to Lödige plant planning. Components are provided by client. Building internal insulation possible, if necessary, change of shaft dimensions necessary.

Shaft pit: 150 mm or ramp instead of a pit

Shaft width: 3.400 mm

Shaft depth: 5.860 mm

Head room: 2.550 mm

1. **Power unit & supporting elements**

The two drives of the Pegasos are frequency-controlled flat gear motors with an output of 4 kW each. Both drives are mounted on the cabin.

The support equipment consists of two roller chains which are suspended on the side of the cabin with a 2:1 ratio. The load-bearing equipment is based on the Machinery Directive 2006/42/EC.

1. **Connection values & control box**

Power requirements: 3/N/PE AC 400 V 50 Hz

Power consumption: 12,5 kVA

Rated output: 8 kW

Nominal current: 16,8 A

Rated fuse current: 20 A

Cross-sectional area: max. 4,0 mm²

**Control box:**

Dimensions (W x H x D): 1.000 mm x 2.100 mm x 300 mm

Color: RAL 7035

Facilities: With main switch (main fuses on site), control unit, switchgear, automatic fuse, etc.

Position: The control cabinet is located in the immediate vicinity of the plant, directly at the concrete shaft.

1. **Shaft doors**

**GF & BMST – Electric sliding doors:**

The use of an electric slat sliding door is generally possible on each floor. This is an elevator door that meets all requirements with regard to the applicable elevator standards and regulations. The door is controlled by a microprocessor and is equipped with a controlled door drive as well as a door lock according to the dIN EN 81-20 elevator standard. The door opens centrally, which means that lower closing and opening hours are achieved compared to the roller door variants. Fire protection cannot be realized for this door variant. The standard surface is powder-coated according to RAL 9006. All RAL shades, except metallic, are basically possible. The advantages of the electric slat sliding door are: a high smoothness, robustness, a fast opening and closing process.

1. **Cabin**

Cabin floor: The cabin floor consists of aluminum extruded profiles with a cross-sectional profiled surface. These are inserted into the platform frame and screwed together.

Cabin walls: Lamellae construction made of 1.5 mm sheet steel, sendzimir galvanized.

Cabin lighting: Square energy-saving LED panels embedded in the car cover, light color is 840 - neutral white - color temperature 4000 K, power 18 W, 1200 lm

Ventilation: About cabin access, because no cabin doors are used

Cabin ceiling: Slat construction made of sheet steel, sendzimir galvanized, not accessible

Cabin frame: Galvanized steel sheets that are screwed together.

Entrances: Due to the absence of cabin doors, PEGASOS® safety light grilles are used in the door area of the car elevator, which causes the car lift to stop immediately when occupancy occurs.

Cabin tableau: Basically, two cabin tables are installed in the car elevator PEGASOS®. The cabin tables are made of stainless steel and integrated into the side walls of the cabin. Due to the diagonal arrangement, a convenient operation from the car is always possible. Furthermore, the position indicator, an overload indicator, light grid display, door-on button, emergency call button, a key switch [housemaster control] and an emergency stop shock button are installed as standard.

Positioning system: The positioning displays are integrated in our cabin tables by default. If one of the two direction arrows of the positioning indicator is lit, the vehicle must be moved in the direction indicated. When the correct position is reached, the direction arrow goes off and the "STOP" font box lights up. Now the doors close automatically, and the elevator goes to the respective stop selected by the operator. The position of the vehicle in the elevator cabin is recorded by several light barriers in the cabin side walls.

1. **Electric equipment**

* Suspension cables, all other electrical cables, control equipment, fastening material
* Emergency horn, cable hand lamp, shaft lighting
* 1 light curtain for each entrance

**Fully automatic ride:**

For systems with only two stops, the fully automatic journey is standard. This means that the driver does not have to dial the stop, but the desired stop is automatically approached after the doors have been closed.

**Cabin tableau**

In the cabin, a cabin tableau is integrated on each side wall.

**Level tableau**

In the car elevator PEGASOS® the floor tables are made of stainless steel and always to the left of the door. For use in external access, the function of the pick-up button is replaced by a key button. The elevator can also be picked up/called with hand-held transmitters as a radio remote control, ceiling pull switches or control columns in the respective parking floors. Outside, the tableaus are spray-proof.

**Emergency call system incl. GSM**

Intercom in the car via mobile phone - receiving module incl. antenna. Storage of up to 4 phone numbers possible. The device corresponds to the EN 81-28.

The following building requirements are required:

* Existing mobile network
* Provision of the corresponding SIM Card (no prepaid)
* Assumption of the monthly costs for the required SIM Card

**Traffic lights**

The availability of the elevator is visually simplified by LED traffic lights and avoids unnecessary maneuvering and traffic disturbances. The traffic light is installed in a clearly visible position in the respective stop in front of the shaft gates. Meaning of the different traffic light signals:

All signals are out — lift is “ready"

Lift is stationary at parking level.

The lift can be called at any time.

Signal light flashes red – lift “occupied”

Clear the entrance area/cabin occupied.

Signal light illuminates red – lift “coming”

Cabin is empty, call is being processed.

Signal light illuminates green – “Enter”

Door fully open, vehicle may enter.

1. **Technical documentation**

Upon delivery of the lift, you will receive a complete documentation of the system in the form of a test book. The documentation is created by our company's internal solution format. No customer-side equipment regulations are taken into account unless explicitly agreed otherwise.

This test book contains the following documents:

* Technical documentation
  + Description of the lift system
  + Electrical schematic
  + Hydraulic schematic
  + Operating and maintenance instructions (1-fold in English)
  + Descriptions of the lifting components
* CE – Declaration
* Signs
* Acceptance certificate / acceptance protocol
* Health and Safety test report

1. **Additional options (please mark with a cross)**

**( ) Hand remote control system**

The control system of the Carrico is additionally equipped with a radio remote control. The radio remote control can be carried directly in the car. Without leaving the car unnecessarily, the user can request the elevator.

**( ) TÜV fee for first acceptance**

From 3 m head of the ink, a TÜV approval is required for commissioning. This option includes the additional one-time TÜV fee for initial TÜV acceptance.

**( ) Load hook for dowels**

2 pieces load hook for doweling with rope incl. delivery and assembly.

**( ) Assembly equipment**

Assembly equipment with set-up shoes for dowels for one set-up level in each including delivery and assembly, dismantling and removal.

**( ) Preparation of plant planning**

At the customer's request, a plant planning can be created before the main order is ordered. This includes all relevant information for the implementation of the project or the transfer of the plant. You will receive the costs of plant planning when ordering the main order, fully credited.

The following points are taken into account/presented in the standard plant planning:

* Plant planning is created in Lödige format
* Schematic representation of the elevator shaft
* All elevator components in the shaft
* Raw construction relevant details and interfaces to other trades are presented schematically
* Consideration of thermal insulation in the shaft if necessary
* Load hook
* Door openings and doors
* Verbal reference to smoke-insifiersystems
* Acting Forces
* Engine room according to planning guide variant 1 to 5

A change/adjustment of the plant planning is incl. All further changes as well as the presentation of a higher level of detail are subject to a surcharge.

**( ) Pull switch**

* Pull switch with console for ceiling fastening
* Switch with pull rope 2m long
* Plastic pipe, electrical connection line\* 10m of terminal socket in the shaft

\*) max. cable length 10 m, pitch: 2m. If special fortifications are required due to the construction situation, these must be provided on the construction side.

**Gate variants in top stop – GF:**

**( ) GF – Sectional door:**

Alu roller door, double-walled, door width = cabin width, gate height = cabin height, surface: all RAL-Classic colors possible (no metallic), no fire protection possible, incl. drive.

Installation type: Only installation in the shaft head possible, required shaft head height: 2,900 mm

**( ) GF – Roll door in the head room:**

Alu roller door, double-walled, door width = cabin width, gate height = cabin height, surface: all RAL-Classic colors possible (no metallic), no fire protection possible, incl. drive.

Installation type: Only installation in the shaft head possible, required shaft head height: 2,650 mm

**Gate variants in the lowest stop – BSMT:**

**( ) UG – ceiling hinge gate:**

The use of a ceiling deflector is generally possible on each floor, but a floor ceiling is required for the attachment of the guide rails and the drive. Therefore, this door variant is mostly used in the lower and middle stops. The ceiling deflector looks like an automatic garage door. The drive unit and guide rails of the ceiling deflector protrude at a time 3550 mm into the floor level. The clear height of the gate always corresponds to the cabin height of 2100 mm. The total height of the gate in the wall is always 2100 mm + 180 mm. The ceiling deflector is particularly suitable in areas with a low ceiling height, below 2550mm.

**( ) Key tresor**

Complete. With 3 keys, fuse card: series 600 834 EFEFBF, with wall anchor

Dimensions: 145 x 46 mm

Internal dimensions: 78 x 36 mm

Construction services:

* Core hole bore for key vault
* Installation of the key vault

**( ) Standard maintenance lift system**

Maintenance cycle: 4x per year

According to DIN13015. Testing of safety functions and system functions, adjustment work, lubrication and cleaning of operational impurities.

Warranty: 2 years

**( ) Full maintenance lift system**

Maintenance cycle: 4x per year

According to DIN13015. Testing of safety and plant functions, adjustment work, lubrication maintenance and cleaning of operational impurities.

Spare parts and repair service (reasons for responsible only by Lödige)

Warranty extension: 5 years