

# **Homelift DHM 500**

## The vertical platform lift for customized accessibility



Accessibility matters not only in old age but can be important during many situations in life. A Homelift makes it possible to continue moving freely around one's own home also with a handicap. By means of a Homelift also schools and other public buildings become barrier-free. The DICTATOR Homelift DHM 500 adapts to the space available on site and thanks to its compact and flexible dimensions can be integrated without expensive modifications into existing buildings.

## Functionality - Design - Comfort

A vertical platform lift, however, should not only be safe and reliable, but also offer its users comfort in everyday life and blend optically in the building. The custom-built Homelift DHM 500 offers many configuration and design options for meeting individual needs.

#### THE SYSTEM AND ITS ADVANTAGES

Like many other DICTATOR solutions, the Homelift DHM 500 is always custom designed and manufactured. This means that a lift can often be built even under the most unfavorable space conditions. With pit depths starting at only 80 mm and possible shaft head heights starting at approx. 2300 mm (each depending on the configuration), it only requires very minimal space.

As with all DICTATOR products, the focus is on a solid, robust design as well as reliable, durable and easy-to-maintain technology. Thus, the DHM 500 barely differs in its appearance from a full-fledged elevator system and thus stands out pleasantly from the otherwise commonly used platform lifts. When using the optionally available car doors, the system can even be operated by impulse (one push of a button is enough to reach the desired stop).

If there is no shaft available on site, the DICTATOR Homelift can be simply installed in the modular DICTATOR shaft system (for both indoor and outdoor installation).

#### **CERTIFICATION AND SAFETY STANDARDS**



The Homelift DHM 500 has been type-tested by TÜV Rheinland (notified certification body NB 0035) in accordance with the requirements of Article 12, Paragraph 3b of Directive 2006/42/EG for

Machinery, and approved with certificate registration no. 01/205/0971/20. Thanks to state-of-the-art manufacturing technology, DICTATOR Homelifts meet the highest quality standards. A wide range of safety features ensures the highest possible safety for users.



#### **TECHNICAL DATA**

Functional principle	hydraulic lift, indirect, rope reeving 2:1
Nominal load	250 kg per sqm of car surface area, max. 500 kg
Travel speed	0.15 m/s
Minimum height of pit	80 mm (depending on configuration)
Minimum height of shaft head	2300 mm (depending on configuration)
Conveying height	max. 17 m
Door types	hinged doors; telescopic sliding doors; folding car doors
Door width	400 - max. 1100 mm, depending on door type
Operation	Exterior calls with self-pro- pelled function, travel commands from the car with dead man's system, self-propelled function can also be implemented with optionally available car doors

# DICTATOR - YOUR PARTNER FOR AN APPROPRIATE SOLUTION

Following the slogan "Special solutions are our standard", DICTATOR has built a name for itself in the elevator industry for many years. We can still provide solutions, even where other manufacturers cannot. Together with architects and end customers, the engineers in our technical department work out suitable solutions for almost all spacial situations.



#### **FEATURES**

Compared to a normal lift (according to the lift standard) a lift according to the Machinery Directive has a few restrictions but also some important advantages.

### Operation

A Homelift is never intended for general use. It may only be used by users who have been instructed on how to use it. For this purpose it is normally equipped with a key switch, so that only people with a key can operate it. In its basic furnishing without car door the key of the desired floor has to be pressed during the whole travel. When reaching the chosen floor the lift stops on its own. When the key is released during travel, the lift stops. This is to ensure the safety of the people in the car.

In case the lift is called from one of the landings, the key has to be pressed only shortly. To operate the lift from inside the car by impulsion is always then possible if the car has door(s).

### Speed

The maximum speed allowed for a Homelift is 0.15 m/s. This relatively slow speed allows to do without car doors. This represents a big advantage if there is little space available.

#### Car

Every car of the Homelift DHM 500 is custom-built. The dimensions don't have to exactly meet the regulations, not like a lift according to the lift standards, but are always manufactured to fit in the given space. The car of the DHM 500 can be made with access from one side, through car, from adjoining sides or from three sides. This allows to adapt it in an optimal way to the situation on site, especially when being retrofitted.

The open car sides are secured by a light grid of the category II (standard). This means as soon as somebody triggers them the travel of the car is stopped. Apart from the open accesses the car of the DHM 500 is closed, i.e. it disposes of high walls and a ceiling.

#### Requirements of pit and headroom

Another advantage of the DHM 500, beside the customized cars, are its minimal requirements concerning the dimensions of the pit (space below the lowest stopping place) and the headroom (height above topmost floor level).

#### **DIMENSIONS**

#### 1. Car

- Floor space: In general, car measurements are chosen according to the requirements of the client - taking into consideration the directives and the technical feasibility. Due to technical reasons measure Y (see drawing below) may be max. 1200 mm.
- Car height: Standard approx. 2035 mm or approx. 2085 mm. Minimum 1900 mm (allowed only in private buildings or when there are no more options due to constructive reasons)

#### 2. Shaft

- Pit min. 80 mm (in case of standard dimensions and weights); recommended are 200 mm (necessary in case of large and/or heavy cars, e.g. with glass wall)
- Headroom 2500 mm may possibly be reduced to about 2300 mm

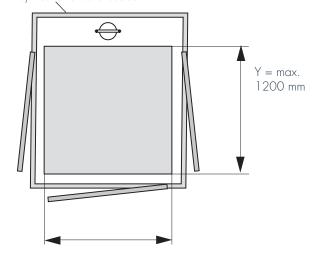
## 3. Hinged landing doors

- Standard widths 500, 550, 600, 650, 700, 750, 800, 850, 900 mm
- Clear heights 2000 mm (default); 1900, 2100 mm

# 4. Automatic sliding doors for landing and car doors (optional)

Standard widths 700, 800, 900 mm

**Back wall** = car side where hydraulic cylinder & rails are located





### **AREAS OF APPLICATION**



## Residential buildings

The Homelift DHM 500 is most frequently used in private residences in both detached houses and apartment buildings. It provides residents, such as senior citizens, ill people or people with disabilities, the necessary mobility to be able to continue living within their own four walls. It provides comfort and makes life easier, as stairs would no longer be an obstacle, e.g. for families with small children and baby strollers, or when carrying shopping bags or heavy items.



## Public buildings

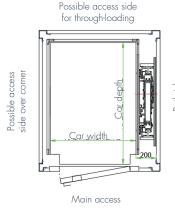
In addition, the Homelift is also used in public buildings. Changes in regulations now require that public administration buildings, schools, universities, health care facilities and church buildings, among others, must be accessible.



### Commercial buildings

Businesses are also required to make their buildings accessible for employees with disabilities. The Homelift DHM 500 is perfect for this purpose due to its adaptability and its closeness to a full-fledged elevator.

#### **DIMENSIONS**



The Homelift DHM 500 shows its unmatched flexibility in space usage wherever other systems cannot. This applies both to the excellent ratio of car size to shaft dimensions and to the minimal requirements placed on the shaft pit and shaft head, regardless of the great stability of the construction.

The production of the DICTATOR Homelift DHM 500 is always customer specific. In contrast to most competitor products, there are no predefined standard dimensions; rather, the system is tailor-made to suit the space available. This results in an optimal car size for each individual installation site.

### **Possibilities**

The achievable load capacity of up to 500 kg with car footprints up to 2 sqm leaves nothing to be desired. But DICTATOR finds the perfect solution for any space, no matter how small.

Depending on the desired dimensions and equipment, a shaft pit of only 80 mm and a shaft head starting at 2,300 mm are often enough. If necessary, we can adjust the width and depth of the car to the millimeter. And the fact that we can even provide access to the car from three sides at the same time, if necessary, is something that nobody else can match.

The standard booth height with suspended stainless steel louvered ceiling is 2,035 mm, without suspended ceiling it is 2,085 mm. Special heights between 1,900 mm and 2,300 mm can be easily accommodated - provided that the shaft dimensions are appropriate.

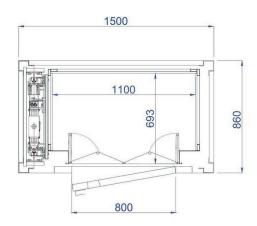
#### Limitations

However, there are some technical limitations that need to be observed. Unfortunately even DICTATOR cannot provide an all-in-one solution suitable for every purpose.

- For structural reasons, the maximum permissible dimension of the car, measured from the side where the rails are, is 1200 mm (in the drawing the width of the car). However, in this case usually a pit depth of at least 80 mm is necessary.
- The second car dimension, parallel to the rail side (in the drawing the depth of the car), can be up to 2000 mm, provided the measurements of the pit and shaft head allow it.
- The specified minimum dimensions for pit and shaft head can only be achieved for cars in basic designs and maximum possible dimensions of 1,100 mm x 1,400 mm. Larger cars or special equipment that increases the weight (e.g. car doors, glazed car walls, floorings supplied by the customer, etc.) require other specifications.

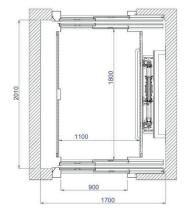


### **EXAMPLES OF CUSTOM SOLUTIONS**



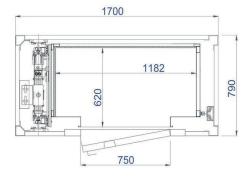
# Homelift DHM 500 for a very narrow stair well - with folding door in the car

A DHM 500 with DICTATOR shaft system was designed for retrofitting into an existing stairwell. Despite the very tight space, it was possible to implement the folding door requested by the customer. This enables the user to operate the car as self-propelled, i.e. the button for the desired floor only has to be pressed briefly - instead of the standard dead-man operation (the button for the desired floor has to remain pressed until the elevator has reached it).



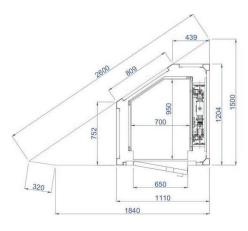
# Homelift DHM 500 with a base area of 2 sqm and a working load of 500 kg

Due to the overall stability of the Homelift DHM 500 and the robust supporting frame, the Homelift DHM 500 is suitable for loads of up to 500 kg for car floor areas of up to 2 square meters. In this case, the Homelift DHM 500 was additionally equipped with automatic doors to achieve the highest level of operating comfort.



# Homelift DHM 500 with glass car walls in extremely narrow stairwell

Despite the extremely narrow depth of this stairwell (790 mm!), the customer wanted a glazed car. The DICTATOR shaft system was used as the shaft, with glass panels, in order to keep the stairwell open and as airy as possible. To achieve the required stability, a third guide rail was used here.



## Homelift DHM 500 in triangular stairwell

The extremely high flexibility of the DICTATOR Homelift DHM 500 and shaft system is clearly illustrated by this solution. In order to be able to accommodate a car with enough space in the triangular stairwell, both the shaft system and the car were designed and manufactured in a pentagonal shape.



# Car design and interior

As a prominent part of a building, a lift solution should not only be functional, but should also look good. Unlike other types of lift, such as stair lifts, the home lift resembles a full-fledged elevator in its appearance. DICTATOR's customer-specific production offers many possibilities to fulfill individual wishes and thus ensure the satisfaction of the customer.

- The many different standard options offer a wide range of possibilities of configuration
- Numerous additional options for especially high-end components
- Completely custom design according to customer requirements

#### Car walls

Basic finish: melamine coated boards. At an additional cost: polished or linen stainless steel AISI 304 or glazing with either clear or tinted safety glass.



Mirror: As standard on the wall covering the hydraulic system (upper half)

#### Car floor

Basic: 2 mm plastic flooring. Optionally at additional cost: aluminum checker plate. Also special designs available upon request, as well as flooring provided by the customer.







Anthracite

Brown

Aluminum

# Car ceiling

Two options are available as standard:

- Without suspended ceiling, normal car height approx. 2,085 mm. Lighting by four LED spots integrated in the stainless steel ceiling.
- Suspended stainless steel louvered ceiling, normal car height approx. 2,035 mm. Lighting by fluorescent tubes integrated in the ceiling.

Other colors and ceiling design options available at an additional cost.



Stainless stell ceiling with integrated LED spots



Suspended stainless steel louvered ceiling

#### Doors

The standard version of the DICTATOR Homelift DHM 500 is designed without a landing door on the car; access to the car is screened by a category II safety light curtain.

In this case, the landing doors are semiautomatic hinged doors. There are different models available with a width between 400 and 1100 mm and a standard door clearance of 2000 mm. Special dimensions upon request.

As standard, the panels for the landing doors are integrated in the frame of the door, with calling key and key switch. Other options upon request.

#### **Options**

If the available shaft dimensions allow it (width, depth, shaft pit and shaft head), the installation can be furnished with automatic sliding doors. In this case, there is also a car closing door available.

In exceptional cases, a combination of the semi-automatic hinged landing doors with a folding car door might be useful. We will be happy to advise you on the different options and possible limitations of your specific application.

#### **Optional features:**

- Powder-coated in the desired RAL color
- Corrosion-resistant finish for exterior doors
- Lockable version
- Bespoke heights







Landing door with large window



Landing door without window



**Automatic** door



## Door panels





Standard door panel

Door panel with presence indication

### **OTHER CAR FEATURES**

## Operating panel



Horizontal control panel as standard on the rail side under the mirror, integrated in the stainless steel profile. With key switch, floor keys, alarm key and latching emergency-stop key.

## Indicator display



Upon request, the lift can be equipped with a display screen both in the car and at the landing. The color 2.8" LCD screen offers a wide range of setting options.

## Folding seat



If required, the car can be equipped with a stainless steel folding seat during production.

## Hand rail

A handrail on at least one side wall of the booth is required by DIN EN 81-41. Round tube handrails available either chrome-plated or in stainless steel.





## Emergency call system



In many applications, an emergency call system in the car is required in accordance with the German Ordinance on Industrial Safety and Health. This equipment is usually provided by the customer. DICTATOR can also provide an appropriate system if required.