

DICTATOR Home Lift DHM 500

The Lift According to the Machinery Directive 2006/42/EC

Being mobile is one of the essentials of life today. The DICTATOR home lift DHM 500 is the ideal solution both for installation in a house under construction or for retrofit into existing houses in order

- to facilitate daily life
- to enable people to stay in their own home when being old and/or physically handicapped.

The DHM 500 has been tested according to the new Machinery directive 2006/42/EC which applies since Dec. 29, 2009 (certificate no. 01/205/0717/10 of TÜV Rheinland, Germany) and is based on the requirements of the standard prEN 81-41.

Like many other DICTATOR products every homelift DHM 500 is a bespoke installation being planned and manufactured individually. This procedure often allows to install a lift even if the available space is most unfavourable. An additional advantage is the small depth of the pit of only 80 mm and that the headroom of 2500 mm in the top floor may be reduced under certain circumstances to only 2300 mm.

The DICTATOR DHM 500 can be installed either in a lift shaft provided by the customer or be furnished complete with a DICTATOR steel lift shaft.



Technical Data

Rated load	500 kg
Max. cabin size	2 m ²
Speed	0.15 m/sec.
Travel	14 m
Depth of pit/Headroom top floor	min. 80 mm/ca. 2500 mm (min. ca. 2300 mm)
Power supply	400 VAC/2.2 kW (standard), 230 VAC (surcharge)
Type of lift	1:2 roped hydraulic drive
Operation	dead-man operation (cabin), impulsion (outside)



I. Technical Data / Features

Features

Compared to a normal lift (according to the lift standard) a lift according to the machinery directive has some restrictions but also some important advantages.

Operation

A homelift is never intended for general use. It may only be used by persons who have been instructed to use it. For this purpose it is equipped with a key switch so that only persons with a key can operate it. In the cabin 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 the travel, the lift stops. This is to ensure the safety of the persons in the cabin.

In case the lift is called from one of the landings the key has to be pressed only shortly.

Speed

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

Cabin

The cabin of the homelift DHM 500 can be furnished with maximum three open sides, i.e. access from maximum three sides. This allows to adapt it in an optimal way to the situation on site, especially when being retrofitted.

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

Requirements of pit and headroom

One of the main advantages of the DHM 500 are its minimal requirements concerning the dimensions of the pit and the headroom. Only 80 mm below the lowest stopping place are sufficient! At the top floor you need about 2500 mm above floor level. In some exceptional cases you may need only 2300 mm, however the height of the cabin may be reduced accordingly.

1. Cabin

- Floor space

In general the cabin measurements are chosen to the requirements of the client - taking into consideration the directives and the technical feasibility. Due to technical reasons measure Y (see drawing beside) can be 1200 mm maximum.

- Cabin height

Standard	2035 mm
Minimum	1800 mm (allowed only in the private sector or when the edificial situation permits nothing else)

2. Shaft

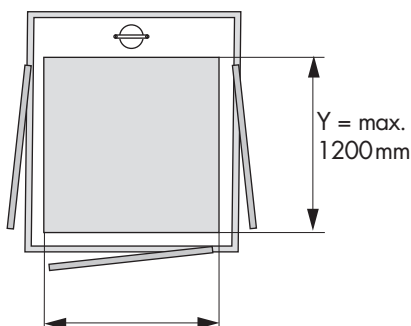
- Pit	min. 80 mm recommended are 200 mm (necessary with very large and heavy cabins, e.g. with glass wall)
- Headroom	2500 mm may be reduced on request to 2300 mm

3. Landing doors

Standard widths	500, 550, 600, 650, 700, 750, 800, 850, 900 mm
Height	Standard 2000 mm, min. 1800 mm

Dimensions

Rear wall = side of the cabin where the hydraulic cylindre and the rails are located.



II. Furnishing / Delivery

Cabin Furnishing



<i>Mirror:</i>	Standard (half the height of the cabin) at one cabin wall
<i>Walls:</i>	Melamine panels. Glass or stainless steel at an extra charge
<i>Floor:</i>	Anti-slip linoleum floor On request also prepared for floor by customers Skirting made of stainless steel
<i>Operating controls:</i>	Horizontal panel of stainless steel with push buttons (diameter 28 mm) in the cabin wall below the mirror (one button per landing, one alarm button, one stop button, one key switch)
<i>Cabin lighting:</i>	Standard: neon tubes integrated in the cabin ceiling On request also halogen lamps etc. Lighting is turned on automatically as soon as the landing door is opened and will not extinguish until the lift has been out of function for about 10 seconds. In case of power failure an emergency light is automatically turned on.
<i>Hand rail:</i>	at extra charge: chromeplated or in stainless steel Special executions on demand

Components Included or Available

1) Standard equipment of lift DHM 500

Cabin with walls and ceiling, interior furnishing see above, chassis, rails pre-assembled to crossbars (units of about 2.50 m), telephone (feeding cable to be supplied by customer)

Hydraulic cylinder, hydraulic unit with adjusting valve, shutoff valve, hand pump, emergency descent switch, 4 m hydraulic hose

Control system, distribution box on cabin roof with emergency stop button, retiring cam(s), ribbon cable, cable loom for the shaft wiring, position detector, magnets, emergency bypass switch, reset switch, floating battery for emergency descent, alarm and emergency lighting

Landing doors standard version, primary coat with DICTATOR door damper, closing spring, door handle, narrow wire-reinforced glass pane, control panel in the door frame, emergency unlocking with additional safety contact, door locking and door contact

Safety features:

- safety light grid of category II according to EN in the cabin openings
- mechanical gripping device on both rails
- integrated testing device for the gripping device
- pipe rupture valve
- emergency descent device, hand pump
- automatic emergency lighting in the cabin
- alarm siren and telephone
- safety prop in the pit for installation and maintenance work with device for folding out and folding to be operated from outside of the shaft, integrated safety contact

2) Additional equipment

Cupboard for hydraulic unit and control system (if there is no lockable machine room on site)

Intercom, when machine room/cupboard is not within calling distance

Non-standard design landing doors (see following page)

Electric door operator for landing doors

Cabin doors, non-standard furnishings for the cabin

III. Landing Doors - DICTATOR Lift Shaft System

Landing Doors

By default the landing doors of the DHM 500 are hinged doors. The following dimensions are available:

Width: 500, 550, 600, 650, 700, 750, 800, 850, 900 mm (other dimensions upon request)

Height: 2000 mm (if necessary also 1800 or 1900 mm)

Components of delivery:

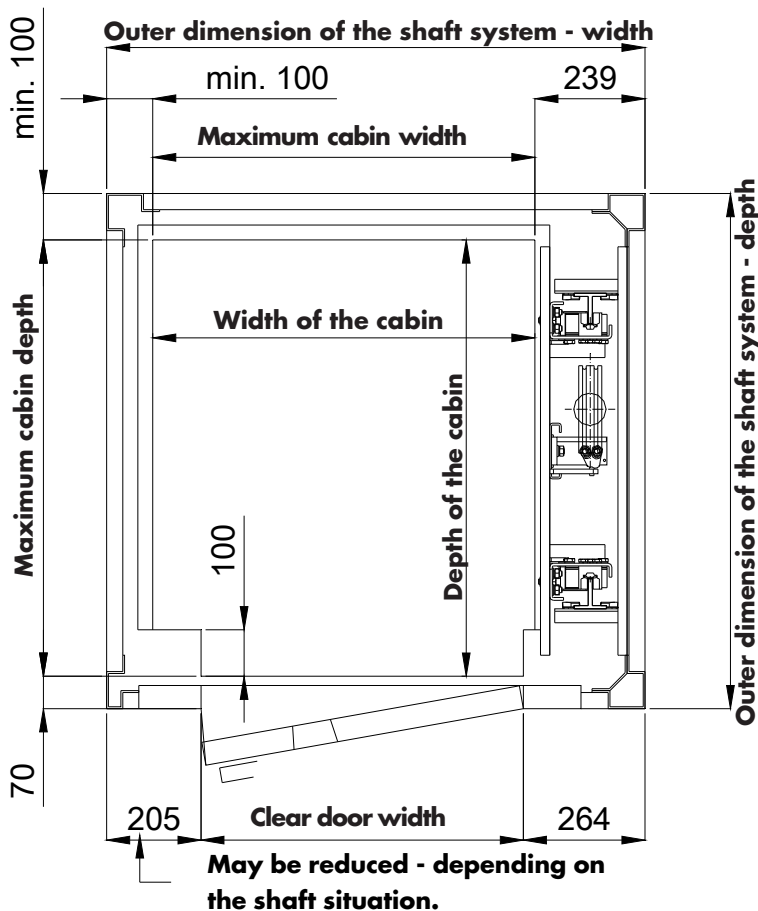
- semi-automatic metal door with primary coat, with closing spring and Standard door damper
- electromagnetic retiring cam and emergency unlocking
- wire-reinforced glass pane and door handle
- control panel in the door frame with call button and key switch

Non-standard design landing doors can

be supplied at an extra charge with large window (with a 900 mm wide door: 575 mm x 1299 mm), powder-coated and for exterior use corrosion protected and powder-coated. The doors can also be furnished with a door look and inside turning handle, so that unauthorised persons cannot enter the cabin.



DICTATOR Lift Shaft System



The DICTATOR lift shaft system offers a great number of advantages, due to its modular structure, the elements all screwed together and its great flexibility. The design and production of the DICTATOR lift shaft system is bespoke. Therefore no fixed dimensions exist. The dimensions indicated in the drawing are just an indication for any calculation. It enables you to calculate the approximate required space for the shaft with a determined cabin size or what cabin size might be achieved with a determined lift shaft.

Further detailed information is to be found starting on page 01.011.00.

Minimum dimensions of the Standard lift shaft with the hydraulic unit placed laterally:

The *minimum width* of the lift shaft is determined either by the desired cabin width or by the required width of the door (see drawing).

The *minimum depth* of the standard lift shaft is 1110 mm, being determined by the rail system. Depending on the door or shaft situation, this measure may be reduced.

Special designs with smaller dimensions can be realised on demand. Please ask us!