

Product datasheet

Dock leveler

Crawford DL6111SA

ASSA ABLOY

ASSA ABLOY Entrance Systems

The global leader in
door opening solutions



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Technical facts

Features

	100kN	150kN
Sizes – leveler height	800 mm	850 mm
Sizes – nominal length	2000, 2450, 3000 mm	2000, 2450, 3000 mm
Sizes – nominal width	3300, 3500, 3600, 3750 mm	3300, 3500, 3600, 3750 mm
Vertical working range - above dock	0 - 410 mm	0 - 390 mm
Vertical working range - below dock	0 - 310 mm	0 - 340 mm
Platform tear plate	8 mm (8/10)	10 mm (10/12)
Surface treatment:	Standard: Option:	RAL 5010 RAL 3002 RAL 6005 RAL 9005 Hot dip galvanised
Control Unit	Leveler control Door control Shelter control Fault & service indicator	

* Other sizes are available on request

Performance

	100kN	150kN
Load capacity:	10 tonnes	15 tonnes
Max. point load:	6,5 N/mm ²	6,5 N/mm ²
Motor hydraulic unit:	1,5 kW	1,5 kW
Mains supply:	400V 3-phase, 230V 3-phase	
Control unit protection class:	950-series IP54	
Allowable oil types:	ASSA ABLOY standard hydraulic oil (-20°C - +60°C) ASSA ABLOY low temperature hydraulic oil (-30°C - +60°C) ASSA ABLOY bio hydraulic oil (-20°C - +60°C)	
Magnetic valves:	24V/DC 18W S1	
Surface treatment paint class 1:	80 µm C2 M acc. DIN EN ISO 12944-2	
Surface treatment paint class 3:	160 µm C3 M acc. DIN EN ISO 12944-2	
Surface treatment galvanised:	Hot dip 80 µm C4 & C5-I M acc. DIN EN ISO 12944-2	

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1. Description

1.1 General

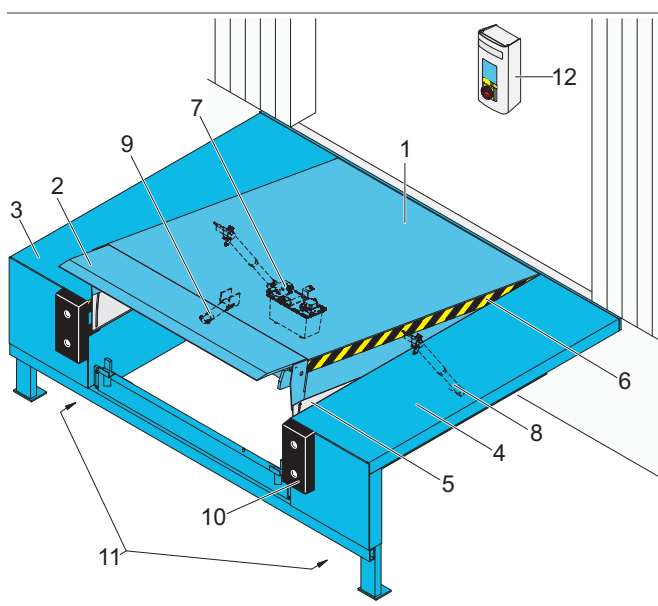
1.1.1 Application

The Crawford DL6111SA swingdock autodock is an externally installed and self-supporting dock leveler that is ideal for applications where there are insufficient installation possibilities within the building. The Crawford DL6111SA swingdock autodock system meets the standard demands of most loading operations and fully complies with rules and regulations of the European Standard EN 1398.

1.1.2 Mode of operation

The swing lip safely bridges the gap between the ramp and the lorry bed. When the dock leveler is raised, the lip swings out and the leveler lowers gently onto the lorry bed. After loading or unloading, the leveler is raised again, the lip swings down and the platform returns to its parking position, i.e. to ramp level.

1.1.3 Overview



- 1 Leveler platform
- 2 Swing lip
- 3 + 4 Leveler frame
- 5 Toe guards
- 6 Warning stripes
- 7 Hydraulic unit
- 8 Lift cylinders
- 9 Swing lip cylinder
- 10 Buffers (option)
- 11 Tail lift recess
- 12 Control unit

1.1.4 Standard

Load capacity	100kN
Surface	Painting RAL 5010
Hydraulic Equipment	Low noise hydraulic unit Two hydraulic lift cylinders One hydraulic lip cylinder
Lip	Lip length 500 mm Bevelled lip 40 mm Bent lip
Installation angle	90°

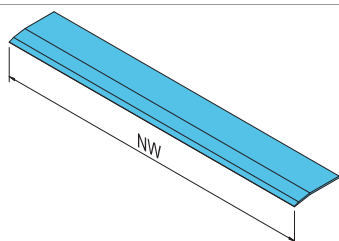
1.1.5 Options

Load capacity	150kN
Surface	Painting RAL 3002, RAL 6005 or RAL 9005 Hot dip galvanised
Hydraulic equipment	Low temperature oil Bio oil
Lip options	Straight lip Tapered lip s = 125 mm
Energy & Ergonomics	Slip protection / noise reduction

1.2 Swing Lip

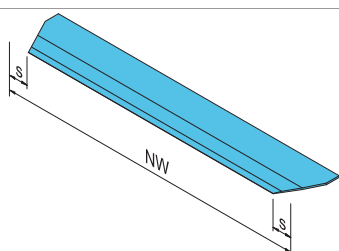
1.2.1 Lip shapes

1.2.1.1 Standard swing lip



The standard swing lip is a single rectangular lip for use with a fleet of vehicles that is a standard size.

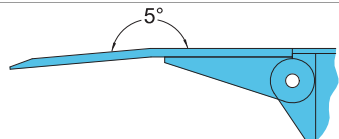
1.2.1.2 Tapered swing lip



A tapered swing lip ensures that the lip reaches the lorry bed, even when the lorry is not parked in the exact centre position. Avoids damage to the truck and interruptions of the dock-in procedure. $s = 125 \text{ mm}$

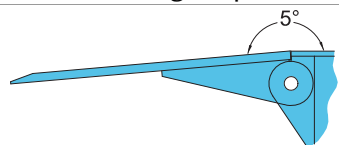
1.2.2 Lip angles

1.2.2.1 Bent lip



The standard bent steel swing lip ensures smooth transition to a lorry bed both above and below dock level. Avoids tripping hazards according to EN 1398.

1.2.2.2 Straight lip



A straight steel swing lip ensures smooth transition when the lorry bed is below or equal to dock level. Avoids tripping hazards according to EN 1398.

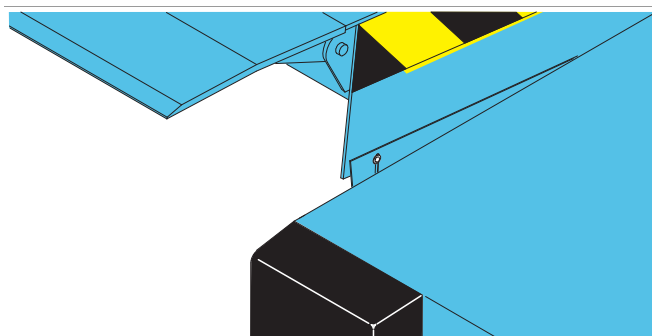
1.3 Platform

1.3.1 Platform tear-plate thickness

The 8 mm 8/10 tear-plate is designed for loading and unloading with typical 4 wheel pneumatic-tire fork-lift trucks and is also suitable for handling equipment with high point loads, such as electric pallet trucks.

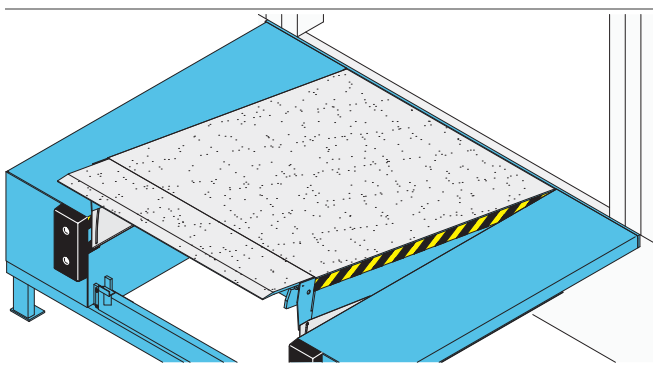
1.3.2 Toe guards

The leveler is as standard equipped with toe guards; steel plates between the platform and the frame. The toe guard prevents the pinching of feet when the leveler is lowered.



1.3.3 Slip protection / noise reduction

Applying a polyurethane slip protection coating on the lip and platform ensures a durable non-slip and noise reduction surface. The effect is a smooth and comfortable surface for handling equipment that is less receptive to wear and tear. The PU coating material is resistant to impact, to thermal impact and most types of chemicals and it has a high loading capacity.



1.4 Surface

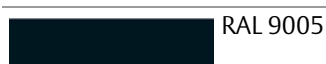
1.4.1 Painting

1.4.1.1 Colors

The dock leveler standard finish is painted. The standard color is:



Colours available as option are:



1.4.1.2 Standard paint class

If the dock leveler is to be used in a rural area, the standard finish is:

- Paint class 1; 80 µm factory painted for corrosive category C2 M

1.4.1.3 Paint classes

If the dock leveler is to be used in an urban or industrial atmosphere, or in a coastal area, it may be appropriate to select an alternative paint class with increased resistance to corrosion C3 M.

- Paint class 3; 160 µm factory painted for corrosive category C3 M

1.4.2 Hot galvanising

To increase corrosion protection to C4 for saline coastal areas or C5-I for aggressive or humid atmospheres, the dock leveler can be delivered with hot dip galvanised (80 µm) steel parts.

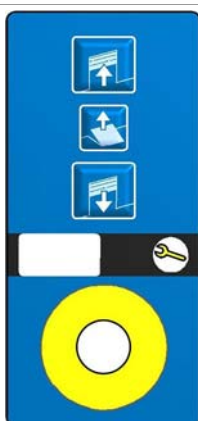
1.5 Docking control systems

1.5.1 950 Docking LA SD



- Hold-to-run button to position the lip on the truck bed.
- Impulse auto button to put the leveler back in parking position.
- Mains isolator or emergency stop button.
- Interface to incorporate ASSA ABLOY Eye and/or wheel chock.

1.5.2 950 Docking DLA SD



Designed to operate an overhead sectional door and an inflatable shelter in the docking station.

- Hold-to-run button to position the lip on the truck bed.
- Impulse auto button to put the leveler back in parking position.
- Mains isolator or emergency stop button.
- Interface to incorporate ASSA ABLOY Eye and/or wheel chock.

1.5.3 950 Docking LSA SD



Designed to operate an overhead sectional door and an inflatable shelter in the docking station.

- Hold-to-run button to position the lip on the truck bed.
- Impulse auto button to put the leveler back in parking position.
- Mains isolator or emergency stop button.
- Interface to incorporate ASSA ABLOY Eye and/or wheel chock.
- Designed to operate an inflatable shelter in the docking station.

1.5.4 950 Docking DLSA SD



Designed to operate an overhead sectional door and an inflatable shelter in the docking station.

- Hold-to-run button to position the lip on the truck bed.
- Impulse auto button to put the leveler back in parking position.
- Mains isolator or emergency stop button.
- Interface to incorporate ASSA ABLOY Eye and/or wheel chock.
- Designed to operate an overhead sectional door and an inflatable shelter in the docking station.

1.6 Monitoring systems

As an option on all our products, an ASSA ABLOY Monitoring System can be installed. This system helps to ensure efficiency and security in daily operations. All doors or docking stations are connected to the Monitoring System's server, which gives the opportunity to supervise, monitor and report a wide variety of aspects in a facility.



1.6.1 Saving energy

A monitoring system reduces energy costs and contributes to a better environment. Energy is lost every time a door is open. If a door is open when no truck is at the bay, even more energy is lost.

An ASSA ABLOY Monitoring System automatically ensures that no door will open unless there is a truck at the bay and even set it to close when there an activity is delayed.

1.6.2 Security enhancement

Closing and locking doors is an obvious daily routine. However, checking this manually can be time consuming in a busy facility.

An ASSA ABLOY Monitoring System can automatically ensure that all doors are closed and locked when they need to be. It can also activate all doors and locks from its remote location, and give a real-time overview of the building's situation.

1.6.3 Dock management

A good way to increase throughput and thereby efficiency at a logistics facility is to reduce the time of having no truck – or the wrong truck – at a loading bay.

An ASSA ABLOY Monitoring System makes visible – in real-time – which bays are occupied or free, and for how long. It makes it possible to reserve bays for docking activities and to inform drivers via SMS. Since it incorporates information from cameras and other inputs (RFID, card readers, etc.), the system stays updated in real-time.

1.6.4 Facility management

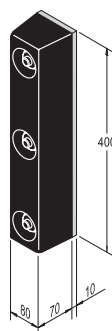
The ASSA ABLOY Monitoring System gives a real-time service status for all your door and docking equipment. If an error code occurs, the ASSA ABLOY Entrance Systems service organisation is automatically notified, and will respond quickly. Other maintenance information can easily be integrated, further reducing the overall costs.

1.7 Equipment

1.7.1 Buffers

Buffers placed in front of the dock leveler absorb the energy of a vehicle that accidentally or intentionally hits the building. Buffers are available in various sizes, in fixed or moving models, and with rubber finishing or steel plate and spring function.

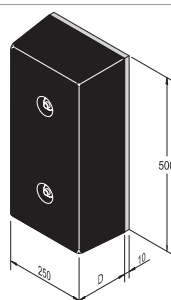
1.7.1.1 RS



Application

The RS buffer is the economical solution for docking stations where vehicles of equal sizes load and unload.

1.7.1.2 RB



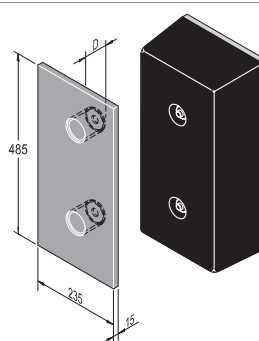
Application

The RB buffer is a large fixed rubber. It is the universal building and vehicle protection solution.

Available depths:

- 90 mm
- 140 mm

1.7.1.3 RB with steel front plate



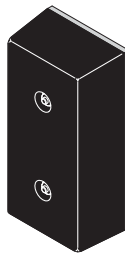
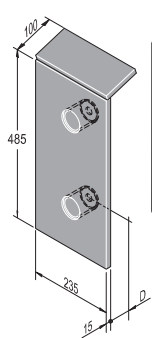
Application

The RB buffer with steel protection front plate increases the building protection and the buffer service life.

Available depths:

- 90 mm
- 140 mm

1.7.1.4 RB with steel front and top plate



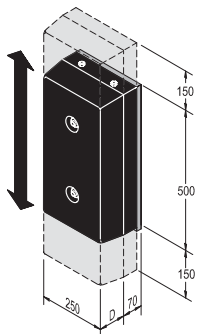
Application

The RB buffer with steel protection front and top plate is designed for vehicles with high lorry beds like interchangeable open bodies and containers.

Available depths:

- 90 mm
- 140 mm

1.7.1.5 EBF



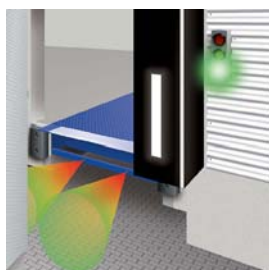
Application

The EBF buffer is the ideal solution for docking stations where vehicles are expected to make notable vertical suspension changes when loading or unloading. This buffer follows vertical movements of the vehicle.

Available depths:

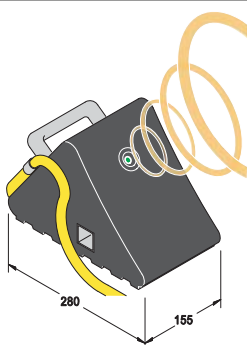
- 90 mm
- 140 mm

1.7.2 ASSA ABLOY DE6090E Eye



The ASSA ABLOY Eye is an electronic, sensor-based dock-in system, which measures the distance between the vehicle and the building. This makes it easier for the driver to complete the dock-in procedure, but also detects objects or people behind the vehicle.

1.7.3 ASSA ABLOY DE6090WC Wheel chock



The wheel chock has a sensor to detect the presence and position of the vehicle and is connected to the dock leveler control panel. If no vehicle is detected, the docking station is blocked for safety reasons. Furthermore, the wheel chock prevents the vehicle from moving during loading/unloading.

1.7.4 ASSA ABLOY DE6090TLS Traffic light system

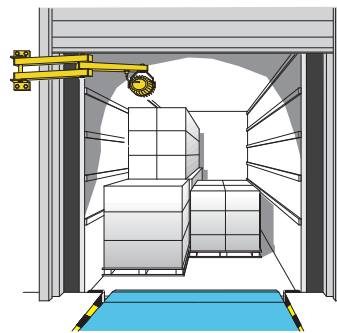


The traffic light system either has a sensor above the dock leveler that measures the presence of the vehicle or it is a wheel chock that detects the vehicle.

If there is no vehicle (dock leveler is free), the traffic light inside is red, outside is green.

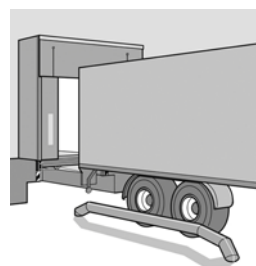
The traffic light can also be combined with a wheel chock, ASSA ABLOY Eye or door/leveler interlocking.

1.7.5 ASSA ABLOY DE6090DL Dock light Heavy Duty LED



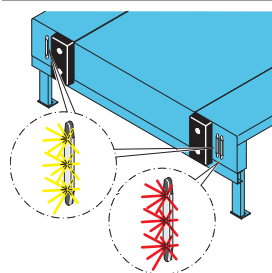
Where dock lights are often a vulnerable object in the docking area, the virtually indestructible Dock Light Heavy Duty LED is the perfect solution to bring light in the truck and docking area. It is designed for the most demanding environments and can withstand possible hard hits from a moving forklift without being damaged.

1.7.6 Parking guides



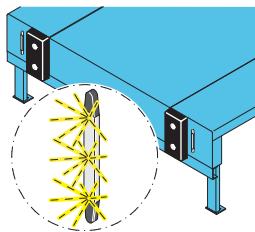
This visual aid makes it easier to park the vehicle and reduces the risk of collision. Especially advantageous for docking stations with wide leveler lips and cushion shelters. Parking guides can be bolted or cast in concrete on the floor before the leveler.

1.7.7 ASSA ABLOY DE6090DI Dock-IN Autodock



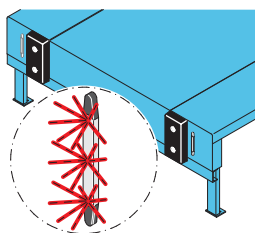
ASSA ABLOY Dock-IN offers a complete line of guide- and traffic lights that align the truck with the docking bay to make the dock-in procedure easy and safe. ASSA ABLOY Dock-IN is based on modern LED technology and stands for high reliability and low energy consumption.

1.7.7.1 Dock-IN White



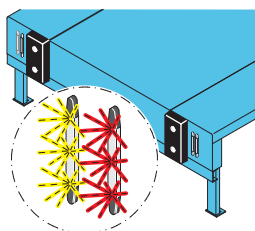
ASSA ABLOY Dock-IN White consists of two white LED light bars. It is designed to help guide a truck to the dock. ASSA ABLOY Dock-IN White offers much more visual aid than white stripes on the shelter or asphalt. Mounted on the wall they are always clearly visible, less exposed to wear and tear and not hidden by dirt and snow!

1.7.7.2 Dock-IN Red



ASSA ABLOY Dock-IN Red is a traffic light system consisting of one red LED light bar, a sensor for truck detection and a traffic light control box. The sensor detects the truck when it is in the right position, very close to the dock. The red LED turns ON to give the signal to the truck driver to break and let the truck roll against the buffer at the lowest speed, without the risk of damage. The system includes interlocking of the loading bay control box functions which are only released when the truck is in place and the red LED is ON.

1.7.7.3 Dock-IN White & Red



ASSA ABLOY Dock-IN White & Red is the optimum combination of both systems for easy and safe docking. The white LEDs provide the visual target and the red LED positions the truck at the right distance to the dock. The white guiding LEDs turn off when the truck is detected and at the same time the red LED turns ON. ASSA ABLOY Dock-IN White & Red guide the truck driver in the best possible way for an easy and safe docking.

1.7.7.4 Available Options

- Indication Light Inside, built into the 950 control box A Green LED light on the control box to indicate that the control box functions are released. The operator of the loading bay equipment knows exactly when he can start loading or unloading. The green LED light will help to save energy and to control the complete loading process.

- Second Red LED

A second Red LED bar can be added to have the red LED traffic light on both sides of the docking bay. This is an option for terminals with left and right hand drive international trucks.

- Wheel chock connection

To increase the safety it is possible to connect the ASSA ABLOY wheel chock to the traffic light function ASSA ABLOY Dock-IN Red or ASSA ABLOY Dock-IN White and Red. The control box will be interlocked until the truck is detected and the wheel chock is in place.

Note:

Make sure the LED bars will not be covered by the Dock shelter.

Lowest possible truck is max. 2000 mm below the sensor position.

2. Selection guide

2.1 Load capacity according to EN1398

The EN 1398 describes 3 key definitions about loads.

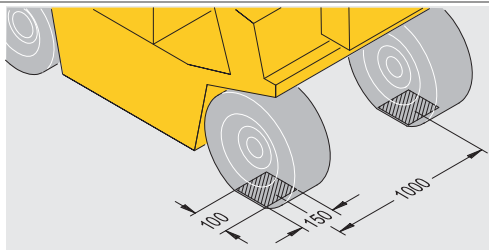
2.1.1 Rated load

The rated load is the total weight of the goods, the forklift truck and the driver.



2.1.2 Axle load

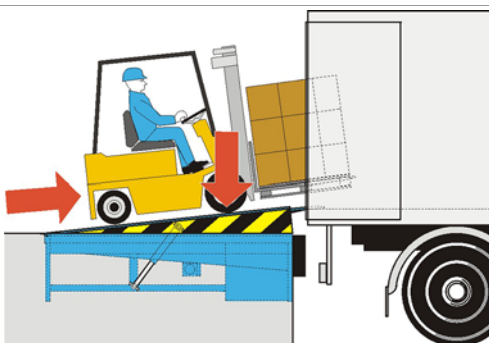
Axle loads shall be taken acting over two rectangular contact areas at 1 m lateral distance. These areas shall only apply if the actual conditions do not call for more severe loading. The size of the footprint [mm²] is derived from the wheel load [N] divided by 2 [N/mm²]. The ratio of the rectangular print is W:L = 3:2.



In the drawing measures for a leveler with a load capacity of 100kN or 150kN are shown.

2.1.3 Dynamic load

The dynamic load is the movement of the rated load and is the pressure on the leveler platform caused by the moving forklift truck.



2.2 Select the load capacity

The load capacity of a dock leveler must always be higher than the rated load.

2.2.1 Example

	100kN	150kN
Weight of forklift truck	5000 kg	8000 kg
Weight of goods	3500 kg	6500 kg
Weight of driver	100 kg	100 kg
Total weight/rated load	8600 kg	14600 kg
Suitable load capacity of the leveler	10000 kg/ 100kN	15000 kg/ 150kN

2.3 Select the leveler length

When determining the leveler length, measure the maximum height difference between the truck bed and the dock level. Next, determine which vehicles will be used and lookup the maximum gradient the vehicles are allowed to be used on.

Vehicle	Max gradient
Roll cage	3%
Hand pallet truck	3%
Electric pallet truck	7%
Forklift truck (battery)	10%
Forklift truck (gas / petrol)	15%

2.3.1 The calculation

Minimal leveler length = height difference / gradient (%)

2.3.2 Example

Vehicle:	Electric pallet truck (max 7% gradient)
Truck height:	1350 – 1000 mm
Dock height:	1150 mm

The difference between Truck height and Dock height = 175 mm

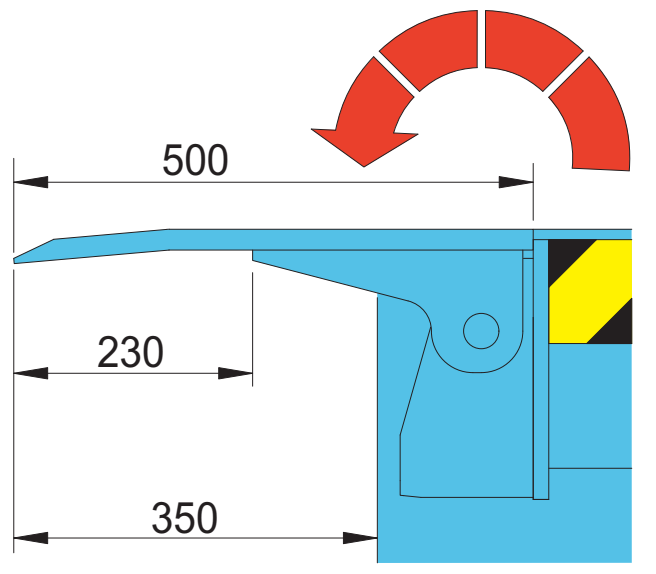
175 mm / 7% = 2500 mm leveler length

2.4 Nominal width

The Crawford DL6111SA swingdock autodock is available with a nominal width of 2000 mm or 2200 mm. The correct nominal width must exceed the widest loading vehicle by at least 700 mm.

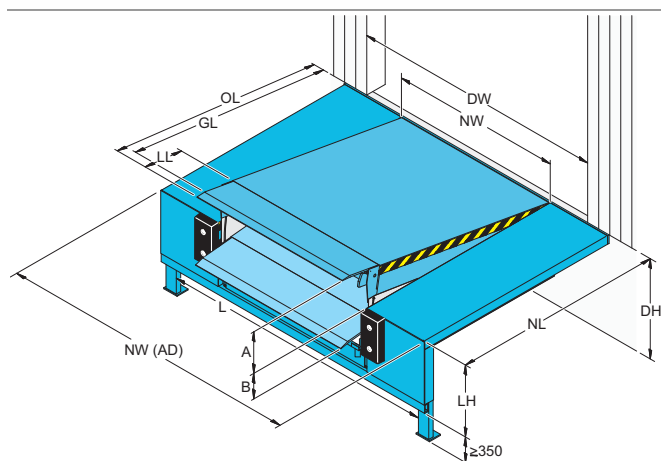
2.5 Free space under lip

2.5.1 Steel lip



3. Specifications

3.1 Dimensions



NL	Nominal length
OL	Overall length
GL	Gradient length
NW	Nominal width
LL	Leveler length
LH	Leveler height
A	Working range above dock level
B	Working range below dock level
DH	Dock height
DW	Door width
NW (AD)	Nominal width Autodock (incl. side thread panels)
L	Distance between plinths
OW (AD)	Overall width Autodock = NW(AD) - 20

Dimensions	Vertical working range 150kN
	LL 500 mm

NL	OL	GL	LH	A	B
2000	NL + 350	NL + 200	850 mm	270	270
2450	NL + 350	NL + 200	850 mm	340	340
3000	NL + 350	NL + 200	850 mm	390	340

Nominal Width (NW) : 2000, 2200 mm.

Nominal width NW (AD) 3300, 3500, 3600, 3750 mm

3.1.1 Platform thickness

Thickness	Max. point load
8mm (8/10)	6,5 N/mm ²
10mm (10/12)	6,5 N/mm ²

Dimensions	Vertical working range 100kN
	LL 500 mm

NL	OL	GL	LH	A	B
2000	NL + 350	NL + 200	800 mm	270	310
2450	NL + 350	NL + 200	800 mm	360	300
3000	NL + 350	NL + 200	800 mm	10	300

Nominal Width (NW) : 2000, 2200 mm.

Nominal width NW (AD) 3300, 3500, 3600, 3750 mm





3.2 Control units

3.2.1 Dimensions



950 Series

3.2.2 Functions

	LA SD	DLA SD	LSA SD	DLSA SD
				
Hold-to-run button	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Impulse auto button	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mains isolator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Emergency stop button	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
400 V	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
230 V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance indicator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3 Digit display	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Memory function	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Connection to ASSA ABLOY Monitoring System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BUS network interface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ASSA ABLOY eye	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wheel chock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Door control		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Shelter control			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> Standard			
	<input type="checkbox"/> Option / Available			

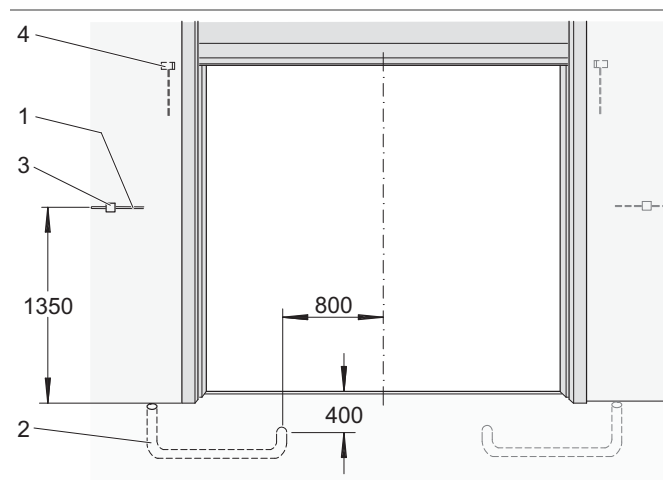
4. CEN Performance

4.1 Safety according to the European Standard EN 1398

- Emergency Stop Function.
 - Safety valves block lowering movement after max. 6% of the nominal length of the leveler.
 - Two lift cylinders make sure the leveler stops in a horizontal position.
- Free floating position.
- Platform torsion. Lateral deflection of at least 3% of nominal width.
- Toe guards cover gap between platform and pit in leveler's highest position.
- Working range gradient max. 12,5% (~7°).
- Warning stripes on side plates and on frame (black/yellow).

5. Building and space requirements

5.1 Electrical preparations

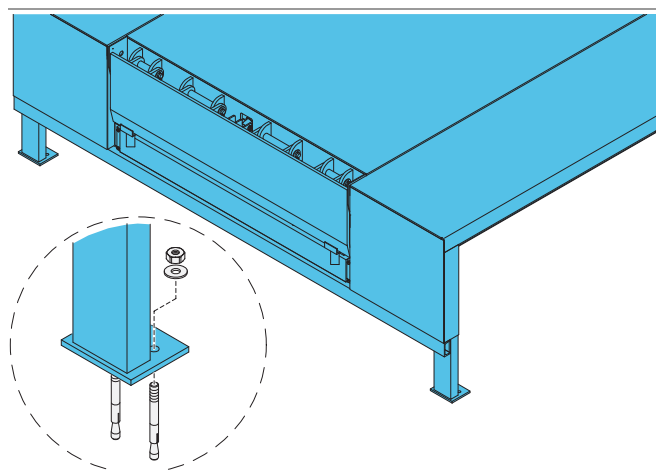


- | | | |
|---|--|--|
| 1 | Mains supply: | 3/N/PE AC 50 Hz
400V 3-phase, 230V 3-phaseV |
| | Mains fuse: | D0 10 A gL |
| | Motor power: | 1,5kW |
| 2 | Conduit for wiring internal diameter 70, angles <math><45^\circ</math> (by others) | |
| 3 | Mains isolator*: | Only for control box with emergency stop |
| 4 | Optional safety switch on sectional door to disable leveler when door is closed* | |

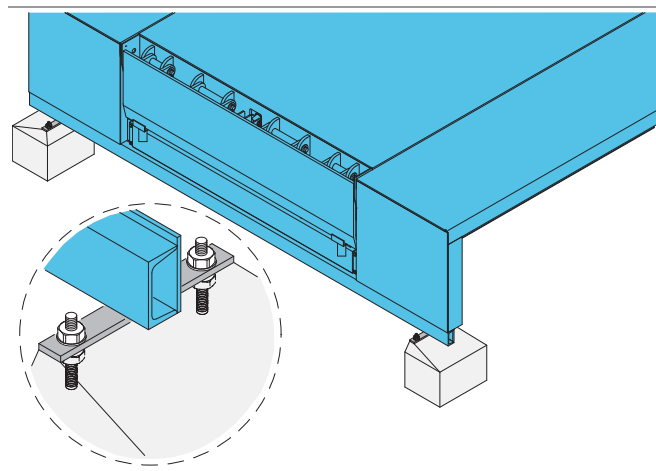
* non-standard

5.2 Ways of installation

5.2.1 Steel plinths



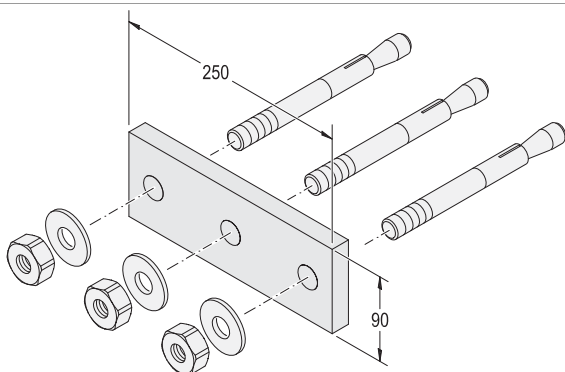
5.2.2 Concrete plinths



5.3 Additional equipment of installation

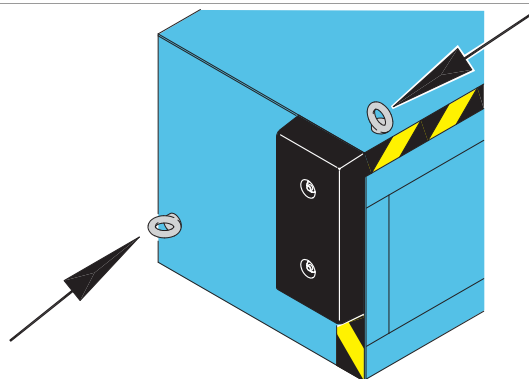
5.3.1 Support brackets

The optional brackets have to be used if it is not possible to weld the autodock side units on the whole width on the dock edge. The brackets support only the autodock side units. Chemical anchors M16 are delivered together with the brackets.



5.3.2 Eye bolt

The optional eye bolts are used to secure a demountable container or any other truck at the autodock with the aid of a tension strap.



6. Service

Preventive Maintenance Program and Modernization Services

As your entrances are part of your business flow, there's every reason to keep them working well. ASSA ABLOY Entrance Systems offers you a maintenance and modernization expertise to rely on. Our Maintenance Programs and Modernization Services are backed by a extensive expertise for all types of industrial door and docking systems, independent of brand. At your disposal is a team of dedicated expert technicians, proven through decades of maintenance, service and satisfied customers.

Preventive Maintenance Programs

Minimizing lost time, lost energy and unexpected hassle is our team's constant objective. Our service organization can support you 24/7 in maintaining all industrial door and docking systems, independent of brand. If you want to be one step ahead of break-downs, explore our portfolio of Pro-Active Care plans. Naturally, we also offer entrance upgrades to suit your specific wishes and business needs.

Pro-Active Care - Maintenance plans to fit your business

Regular maintenance can extend the lifetime of your equipment and help prevent unexpected problems. Our technician arrives on-site equipped with the knowledge and tools to service all automatic entrances, independent of brand.

- **Pro-Active Bronze**

The base on which all Pro-Active Plans are built provides the security of knowing that your equipment is regularly inspected and certified for safety, as well as performing optimally. It includes a number of planned on-site visits depending on your needs. Any unplanned service calls required during the term of the contract (including labor, travel and parts) are billed at special Pro-Active Care prices.

- **Pro-Active Silver**

This plan provides all the benefits of Pro-Active Bronze with the added advantage of labor and travel being included for service calls during regular business hours. The only additional charge would be for any parts that may be needed throughout the term of the contract.

- **Pro-Active Gold**

This plan provides the ultimate protection for your automatic entrance investment. It includes all the benefits of Pro-Active Silver, plus replacement of any parts required during an unplanned repair or planned maintenance visit. Pro-Active Gold is an excellent way to budget your automatic door expenses annually.

- **Pro-Active Tailor-Flex**

Our most flexible maintenance and service offering. The Pro-Active Care plan is designed by you, our customer. The plan allows you to balance your maintenance expenses against your real-world budget and presents the option to add or delete a number of maintenance elements to suit your budget goals, while meeting your overall performance and safety needs.

Modernization

Your entrances are a long-term investment, from which you always want the best. Products develop over time, so do regulations and your business. Let us help you increase energy savings and meet today's standards. We provide advice and modernization kits for outdated installations, ensuring your investment meet requirements and performs optimally for many more years to come.

Re-Active Service		Pro-Active Care				
		Pro-Active Bronze	Pro-Active Silver	Pro-Active Gold	Pro-Active Tailor Flex	
		○	○	○	●	Other customized requests such as Response Time, Performance InfoPack and Advanced User Training
		○	○	●	○	Replacement of worn parts according to preventive Consumable Exchange Program
		○	○	●	○	Replacement of spare parts on breakdowns
		○	●	●	○	Travel and labor for additional call-out visits
		●	●	●	●	Preventive maintenance visits 1-4 times per year
		●	●	●	●	Travel and labor for preventive maintenance visits
		●	●	●	●	Response time and priority on call-outs <24h
		●	●	●	●	Preventive planned maintenance that meets the most demanding standards in the market
	●	●	●	●	●	Safety and quality checks according to applicable regulations and norms. Documentation of test results provided
●	●	●	●	●	●	Documentation of equipment status, assessment and service provided, all generated on site
●	●	●	●	●	●	Highly trained professional technicians with extensive knowledge, state-of-the-art tools and the right spare parts*
●	●	●	●	●	●	Dedicated Professional Customer Care Hotline
		●	●	●	●	

● = Included as standard
 ○ = Available at special prices
 * Well-stocked service vehicles with genuine and new spare parts

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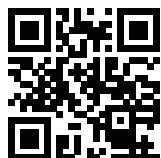
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ASSA ABLOY Entrance Systems is a leading supplier of entrance automation solutions for efficient flow of goods and people. With our globally recognized product brands Besam, Crawford, Albany and Megadoor, we offer products and services dedicated to satisfying end-user needs for safe, secure, convenient and sustainable operations.
ASSA ABLOY Entrance Systems is a division within ASSA ABLOY.

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