

Product datasheet

Drawbridge leveler

ASSA ABLOY DB6050F / DB6050MZ / DB6050MC

ASSA ABLOY

Entrance Systems

Experience a safer
and more open world



Copyright and Disclaimer Notice

Although the contents of this publication have been compiled with the greatest possible care, ASSA ABLOY Entrance Systems cannot accept liability for any damage that might arise from errors or omissions in this publication. We also reserve the right to make appropriate technical modifications/replacements without prior notice.

No rights can be derived from the contents of this document.

Color guides: Color differences may occur due to different printing and publication methods.

No part of this publication may be copied or published by means of scanning, printing, photocopying, microfilm or any other process whatsoever without prior permission in writing by ASSA ABLOY Entrance Systems.

Copyright © ASSA ABLOY Entrance Systems AB 2006-2020.

All rights reserved.

ASSA ABLOY, Besam, Crawford, Albany and Megadoor as words and logo are trademarks belonging to the ASSA ABLOY Group.

Contents

Copyright and Disclaimer Notice	2
Contents	3
1. DB6050F drawbridge leveler	4
1.1 Application	4
1.2 Mode of operation	4
1.3 Dimensions.....	4
1.4 Operating handle	4
1.5 Building specifications.....	5
1.5.1 Dock edge preparation.....	5
1.5.2 Installation to the dock edge	5
2. DB6050MZ drawbridge leveler	6
2.1 Application	6
2.2 Mode of operation	7
2.3 Dimensions.....	7
2.4 Operating handle	7
2.5 Building specifications.....	7
2.5.1 Dock edge preparation.....	7
2.5.2 Installation to the dock edge	8
3. Selection guide	9
3.1 Load capacity according to EN 1398	9
3.1.1 Rated load	9
3.1.2 Axle load	9
3.1.3 Dynamic load	9
3.2 Select the load capacity	9
3.2.1 Example	9
4. Service you can rely on	10
Index	11

1. DB6050F drawbridge leveler

1.1 Application

The ASSA ABLOY DB6050F drawbridge leveler fix version is a fixed drawbridge, designed for the higher working range up to 300 mm level equalisation. Thanks to the aluminium segment lip construction there is safe contact between lip and lorry bed, even when the lorry bed is not in a horizontal line. With all steel parts being hot galvanised the ASSA ABLOY DB6050F drawbridge leveler fix version is very durable and ideally suited for hygienic applications.

The new features of this dock leveler ensure that it complies with the new European EN 1398 standards.

1.2 Mode of operation

The ASSA ABLOY DB6050F drawbridge leveler fix version is fixed in position by welding it to a cast-in channel on the dock wall. The counter balance springs reduce the weight when manually positioning the leveler, and allow it to adjust to varying vehicle heights during the loading/unloading operation. The aluminium alloy lip is segmented, which ensures it can accommodate a lateral deflection across the width of the docked vehicle. When not in use the leveler is stored vertically and can be padlocked to prevent unauthorised use.

1.3 Dimensions

NL	A*	B*
1500	225	295
1750	265	340
2000	310	390

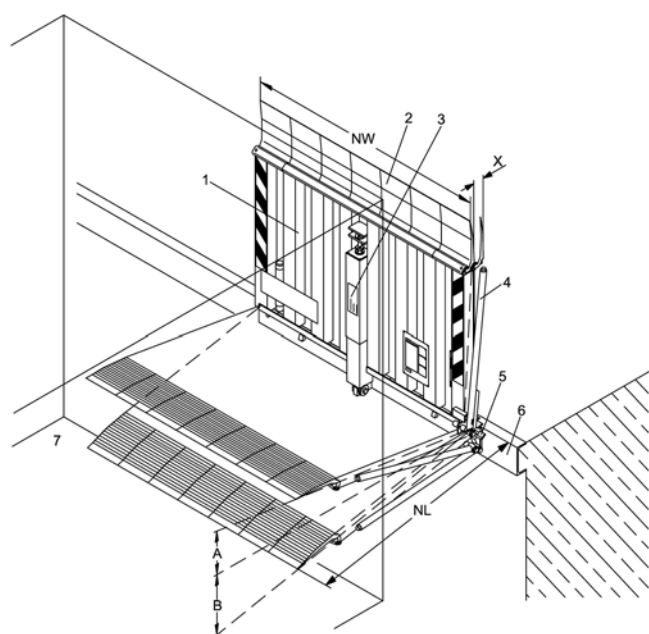
Available nominal width NW for nominal Length NL 1500, 1750 mm: NW 1500, 1750, 2000 mm

Available nominal width NW for nominal length NL 2000 mm: NW 1500, 1750 mm

Load capacity for all sizes: 60 kN

* Figures take into account the offset of the support segments.

* In accordance with the EN 1398 standard, the leveler must not be used beyond the permissible gradient range of $\pm 12.5\%$ (around $\pm 7^\circ$). The limits may only be exceeded if the operator ensures that the danger of slipping has been eliminated (e.g. due to dry and clean surfaces).



- 1 Leveler platform
- 2 Segmented aluminium alloy lip
- 3 Counter balance spring
- 4 Operating handle
- 5 Padlock
- 6 Cast-in channel
- 7 Vehicle bed
- NL Nominal length (pivot point of hinge to edge of lip)
- NW Nominal width
- A Level equalisation above dock
- B Level equalisation below dock
- X Clearance 250 mm

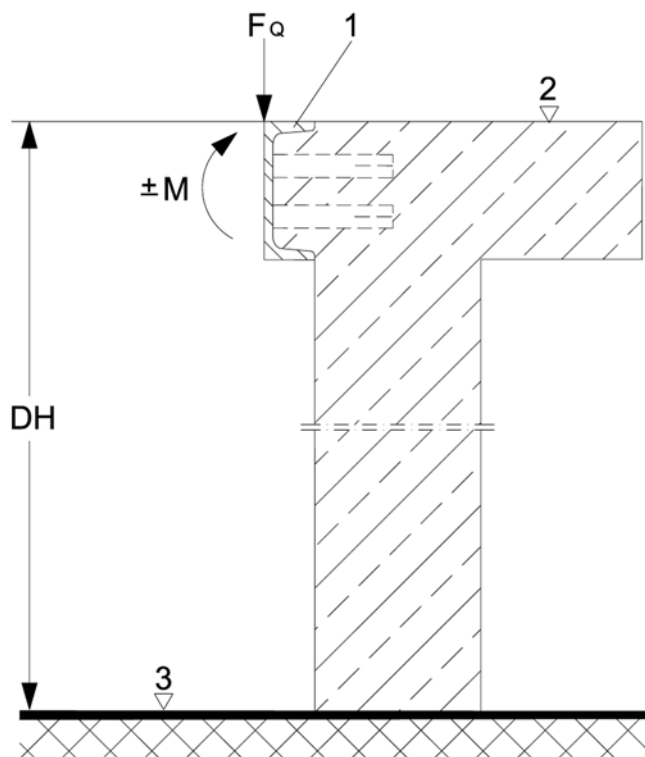
1.4 Operating handle

Standard

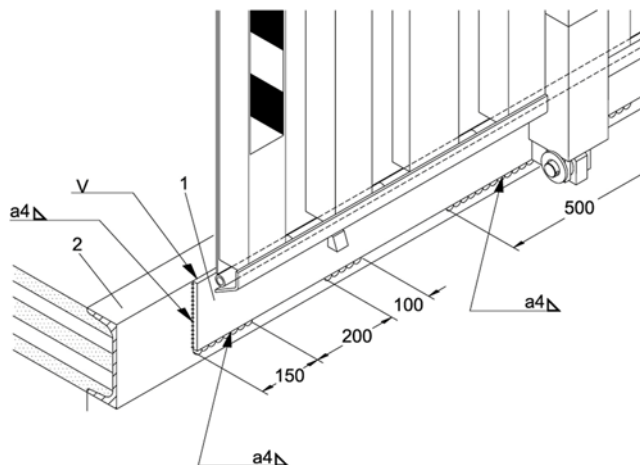
One operating handle for drawbridges of all sizes.

1.5 Building specifications

1.5.1 Dock edge preparation



1.5.2 Installation to the dock edge



- 1) Guide rail
- 2) Cast-in channel

F _Q	Transverse force = 84kN
M	Maximum bending moment (kNm)
DH	Dock height
1	U 200 DIN 1026 or 203 x 76 RSC (recommended)
2	Finished floor level
3	Yard level

NL	Maximum bending moment M exerted on the dock edge (kNm)		
	NW = 1500	NW = 1750	NW = 2000
1500	8,3	9,0	10,1
1750	11,4	12,3	13,6
2000	14,0	16,0	-

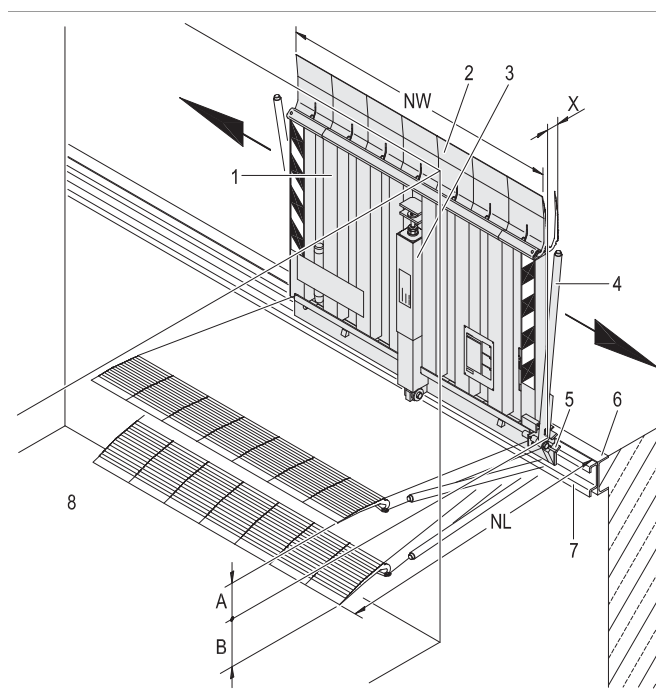
2. DB6050MZ drawbridge leveler

2.1 Application

The ASSA ABLOY DB6050MZ drawbridge leveler movable version is a drawbridge that moves sideways on guide rails, designed for the higher working range up to 300 mm level equalisation. Thanks to the aluminium segment lip construction there is safe contact between lip and lorry bed, even when the lorry bed is not in a horizontal line. With all steel parts being hot galvanised the ASSA ABLOY DB6050MZ drawbridge leveler movable version is very durable and ideally suited for hygienic applications. The drawbridge leveler is also available in a version without a guide rail.

Also available is the ASSA ABLOY DB6050MC. This model is identical, except for the guide rail. The ASSA ABLOY DB6050MZ drawbridge leveler movable version is designed for new installations with a simplified guide rail. The ASSA ABLOY DB6050MC is designed for replacement of existing drawbridge levelers, because the existing C-profile can then be re-used.

The new features of this drawbridge leveler ensure that it complies with the new European EN 1398 standards.



- | | |
|----|--|
| 1 | Leveler platform |
| 2 | Segmented aluminium alloy lip |
| 3 | Counter balance spring |
| 4 | Operating handle |
| 5 | Padlock |
| 6 | Cast-in channel |
| 7 | Guide rail |
| 8 | Vehicle bed |
| NL | Nominal length (pivot point of hinge to edge of lip) |
| NW | Nominal width |
| A | Level equalisation above dock |
| B | Level equalisation below dock |
| X | Clearance 250 mm |

2.2 Mode of operation

The ASSA ABLOY DB6050MZ drawbridge leveler movable version is installed on bearings in a guide rail (supplied separately) which must in turn be fixed in position by welding to a cast-in steel channel on the dock wall. The drawbridge leveler can then be finitely positioned by sliding it along the rail.

The ASSA ABLOY DB6050MZ drawbridge leveler movable version is operated manually by releasing the lock on the handle(s) and lowering the platform onto the vehicle bed. The counter balance springs reduce the weight when manually positioning the leveler, and allow it to adjust to varying vehicle heights during the loading/unloading operation.

The aluminium alloy lip is segmented, which ensures it can accommodate a lateral deflection across the width of the docked vehicle. When not in use the leveler is stored vertically and can be padlocked to prevent unauthorised use.

2.3 Dimensions

NL	A*	B*
1500	225	295
1750	265	340
2000	310	390

Available nominal width NW for nominal Length NL 1500, 1750 mm: NW 1500, 1750, 2000 mm

Available nominal width NW for nominal length NL 2000 mm: NW 1500, 1750 mm

Load capacity for all sizes: 60 kN

* Figures take into account the offset of the support segments.

* In accordance with the EN 1398 standard, the leveler must not be used beyond the permissible gradient range of $\pm 12.5\%$ (around $\pm 7^\circ$). The limits may only be exceeded if the operator ensures that the danger of slipping has been eliminated (e.g. due to dry and clean surfaces).

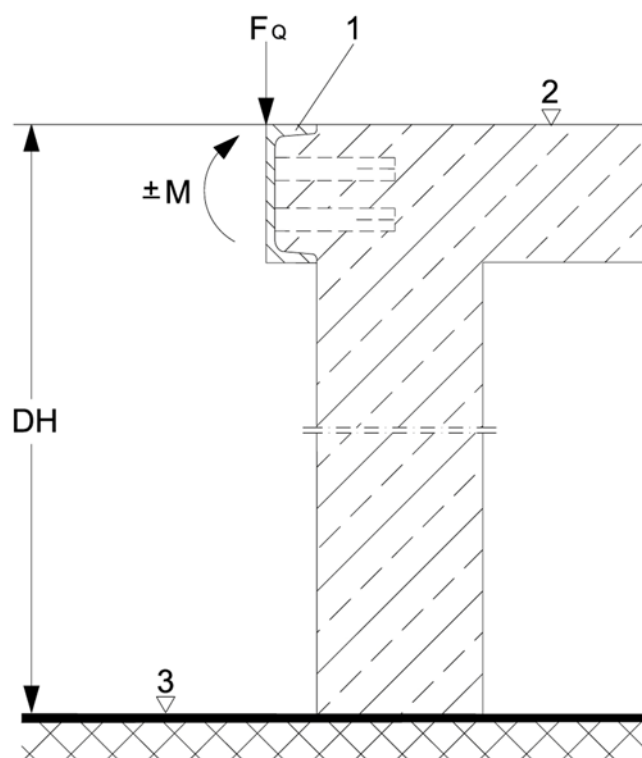
2.4 Operating handle

Standard

One operating handle for drawbridges of all sizes.

2.5 Building specifications

2.5.1 Dock edge preparation

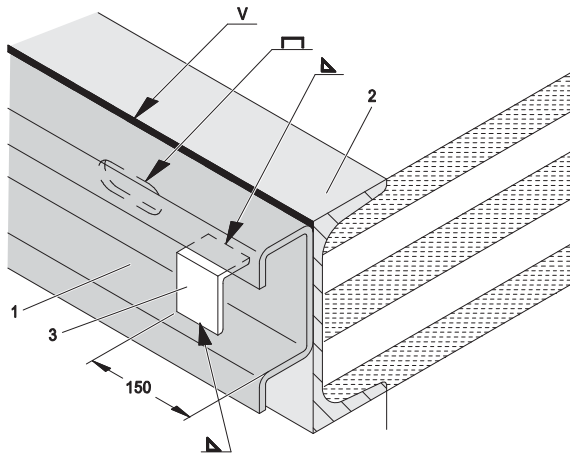


F _Q	Transverse force = 84kN
M	Maximum bending moment (kNm)
DH	Dock height
1	U 200 DIN 1026 or 203 x 76 RSC (recommended)
2	Finished floor level
3	Yard level

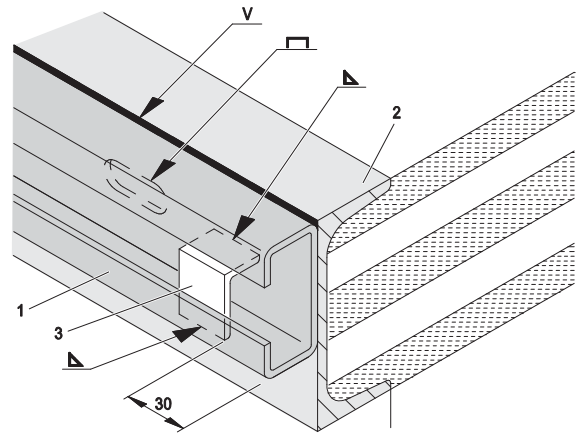
NL	Maximum bending moment M exerted on the dock edge (kNm)		
	NW = 1500	NW = 1750	NW = 2000
1500	8,3	9,0	10,1
1750	11,4	12,3	13,6
2000	14,0	16,0	-

2.5.2 Installation to the dock edge

DB6050MZ guide rail (new installation)



DB6050MC guide rail (already existing)



- 1) Guide rail
- 2) Cast-in channel
- 3) End stop

3. Selection guide

3.1 Load capacity according to EN 1398

The EN 1398 describes 3 key definitions about loads.

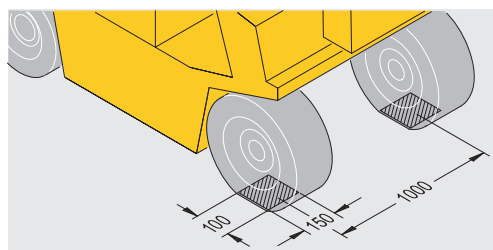
3.1.1 Rated load

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



3.1.2 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.

3.1.3 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.



3.2 Select the load capacity

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

3.2.1 Example

Weight of forklift truck	3600 kg
Weight of goods	1500 kg
Weight of driver	100 kg
Total weight/rated load	5200 kg
Suitable load capacity of the leveler	6000 kg/60kN

4. Service you can rely on



Gold

The ultimate protection

With full coverage, Gold Service enables you to plan and budget your expenses annually.

- Spare parts for emergency calls
- Labor and travel costs for emergency calls
- Replacement of components according to preventive maintenance schedule and to fulfill legislative and safety requirements

Silver

Added advantages

With cover for all service calls during business hours, Silver Service offers you peace of mind.

- Labor and travel costs for emergency calls
- Preventive maintenance

Bronze

Scheduled Service

With scheduled on site visits, Bronze Service means you know that your doors and docking systems will be regularly serviced and inspected.

- Preventive maintenance

Included in all packages

1-4 scheduled maintenance visits per year

24/7 priority service hotline and fast response

Safety, compliance and quality control checks

Documentation reports provided on site

Expert service you can rely on

A healthy business enjoys a steady flow of goods, services and people through its entrances every day. But heavy traffic puts entrances under pressure as every component works to keep them running.

ASSA ABLOY Entrance Systems offer the industry's most complete, flexible service solutions. Because even something as robust and well-engineered as an ASSA ABLOY door or docking system needs to be serviced to stay in great working order.

Pro-active care packages

An ASSA ABLOY service agreement gives you service you can rely on. We have specialized local service technicians on call to take care of your service needs. Equipped with a wide range of spare parts and expertise, to keep your industrial doors and docking systems running.

With an ASSA ABLOY service agreement you can ensure reliable, safe and sustainable operations at every entrance under your agreement, including doors and docking systems, independent of brand.

ASSA ABLOY e-maintenance™ (optional add-on)

For an online overview of your entrance systems and history, add ASSA ABLOY e-maintenance™ to your service package for:

- Easy access to real-time data on all your doors
- Planning, order and service information
- Overview that helps you control lifecycle costs

Index

A	
Application	4, 6
Axle load	9
B	
Building specifications	5, 7
C	
Copyright and Disclaimer Notice	2
D	
DB6050F drawbridge leveler	4
DB6050MZ drawbridge leveler	6
Dimensions	4, 7
Dock edge preparation	5, 7
Dynamic load	9
E	
Example	9
I	
Installation to the dock edge	5, 8
L	
Load capacity according to EN 1398 .	9
M	
Mode of operation	4, 7
O	
Operating handle	4, 7
R	
Rated load	9
S	
Select the load capacity	9
Selection guide	9
Service you can rely on	10

The ASSA ABLOY Group is the global leader in access solutions.
Every day, we help billions of people to experience a more open world.

ASSA ABLOY
Entrance Systems

ASSA ABLOY Entrance Systems provides solutions for efficient and safe flow of goods and people. Our offering includes a wide range of automated pedestrian, industrial and residential doors, loading dock equipment, perimeter fencing and service.

assaabloyentrance.com

2020-05



ASSA ABLOY Entrance Systems

assaabloyentrance.com