

Report



Report no.	18.00120-1 Rev A <i>This report replaces 18.00120-1 dated 26-09-2018</i>
Test date	9 April and 25 September 2018
Report date	23 October 2018
Applicant	B&B Locks BVBA Uilenbaan 88, unit 3 B-2160 / Wommelgem Belgium
Size report	This report consists of 15 pages
Subject	Testing of strength aspects of locks and latches according to EN 12209:2003 +AC:2005 of locks type: G1 and G1M
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1 PURPOSE OF THE INVESTIGATION

SKG-IKOB was commissioned by B&B Locks BVBA – Wommelgem (Belgium) to perform a test on strength aspects according to EN 12209:2003 +AC:2005 (hereafter referred to as EN 12209) on:

Locks and Keepers of types: G1 and G1M

2 PRODUCT TYPE AND DESCRIPTION OF THE EXAMINED LOCK

Type designation: G1 and G1M

Description: G1: Mechanical lock with electromechanical lock case
G1M: Mechanical lock with locking plate.

The locks are produced at the address of the applicant.

Remark:

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This report replaces 18.00120-1 dated 26-09-2018.

Drawn up at Geldermalsen, The Netherlands, on 23 October 2018



dr. ir. A. van Beek
Technical Manager

3 METHOD OF INVESTIGATION

The results were determined through tests according to EN 12209:2003 +AC:2005.

Test April 2018	paragraph
1. End load dead bolt (G1M)	§5.8.4.1
2. Pull load in combination with lock case (G1)	§5.8.5 i.c.w. §5.8.9.3
Test September 2018	
3. Side load on the deadbolt (G1M)	§5.8.2.1 (supported)

For photos of the test, see Annex 2.

4 SAMPLING

The samples were delivered by the applicant in April and August 2018 and marked by SKG-IKOB.

The samples were provided by the applicant. This investigation therefore only provides conclusions about the tested examples and cannot be considered representative for a larger consignment.

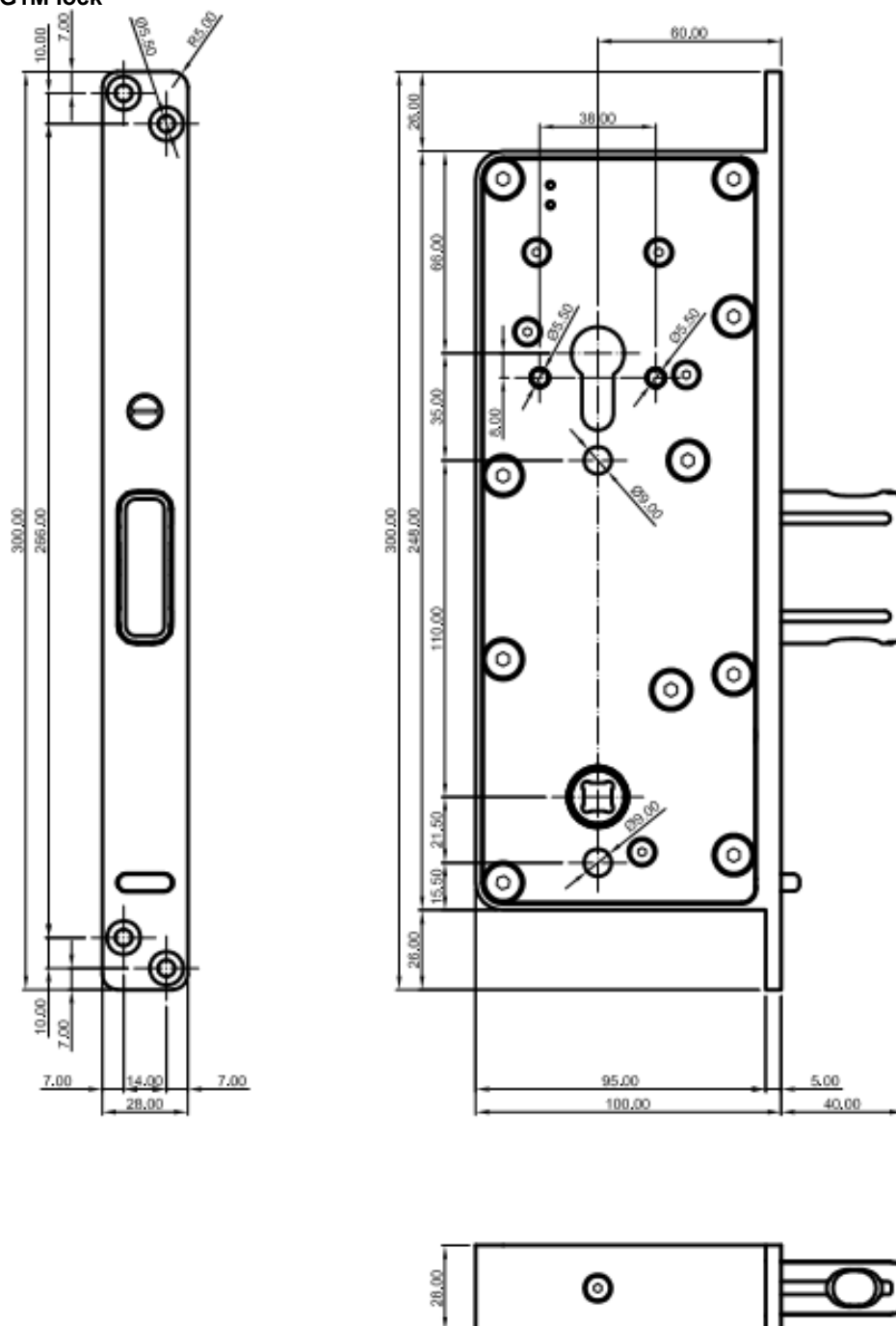
5 TEST RESULTS

Test	model	achieved value
1. End load dead bolt	(G1M)	59,0 kN
2. Pull load i.c.w. lock case	(G1)	45,2 kN
3. Side load on deadbolt	(G1M)	100 kN (supported)

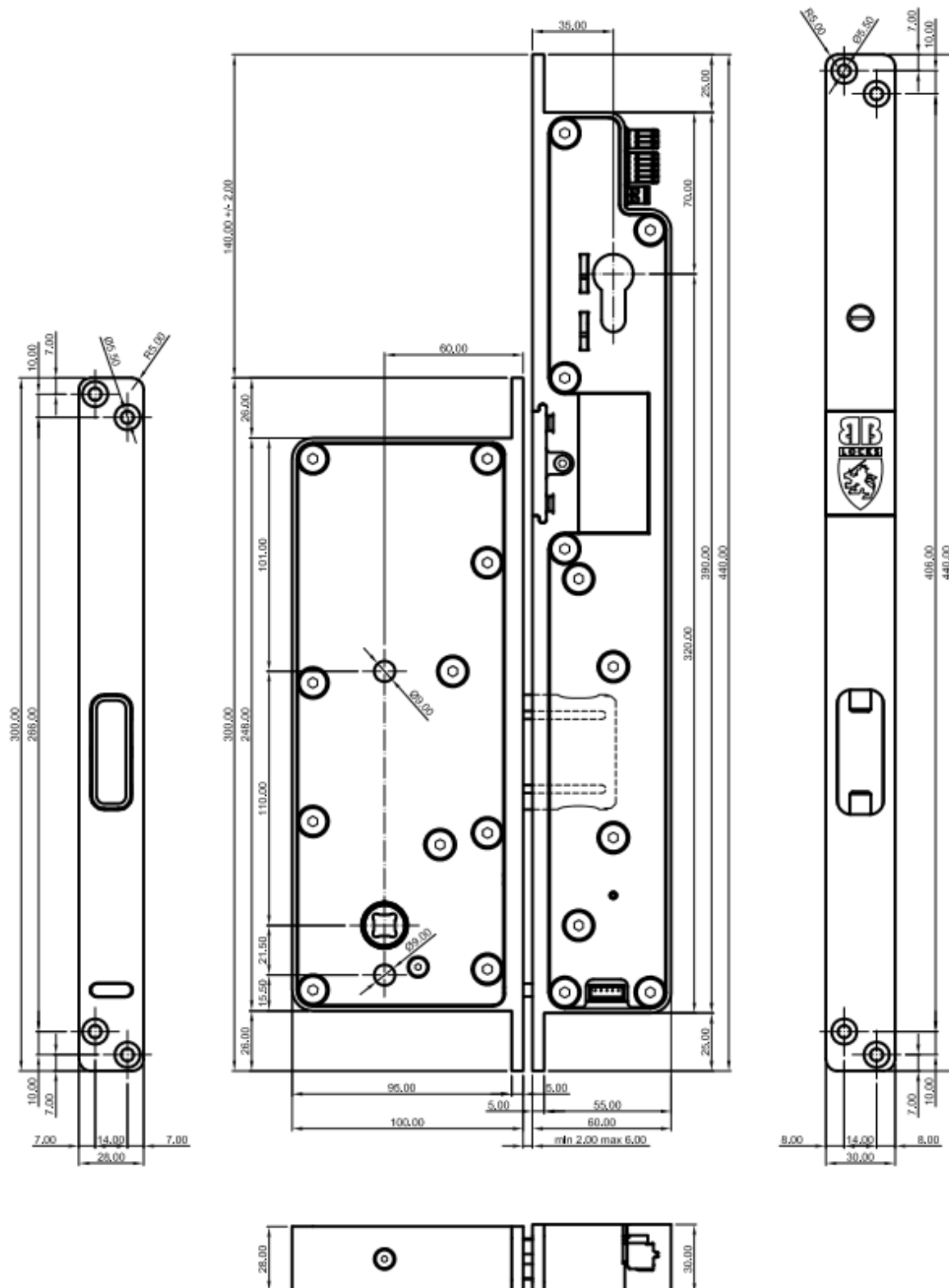
For pull-push diagrams of the results, see Annex 1.

6 DRAWINGS / PHOTOS LOCKS

G1M lock





G1 lock



Annex 1: Test results**G1****SKG - IKOB Certificatie**

Machine data

Control SN: 154863
Crosshead SN: 154863
Force SN: 154864 100 kN

Productgroup : Building hardware

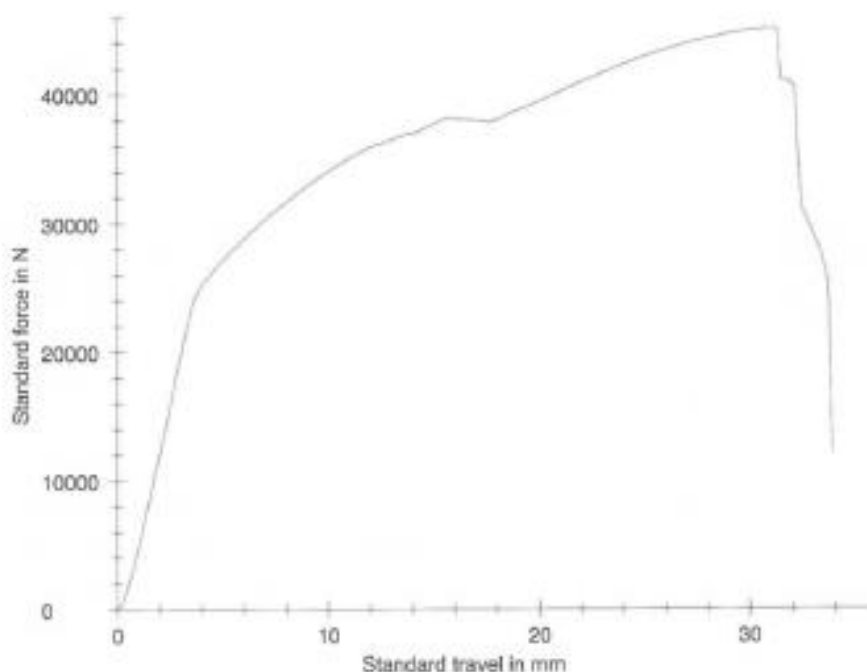
Product type : slot en sluitkast
Document : EN12209
Date(visit) : 9-4-2018
Tester : J.G. van de Wetering

Company(codenr.): B&B locks
Product number : G1
Investigation : onderzoek 18.00120

Remarks : hoofdschoot wordt uit slotkast getrokken bij Fmax.
voorplaat slotkast vervormt.

Test results:

Nr	Maximum Force	Travel at Max. Force	Time at Max. Force
	N	mm	s
1	45250,81	30,90	394,42



SKG - IKOB Certificatie

Machine data

Control SN: 154863
Crosshead SN: 154863
Force SN: 154864 100 kN

Productgroup : Building hardware

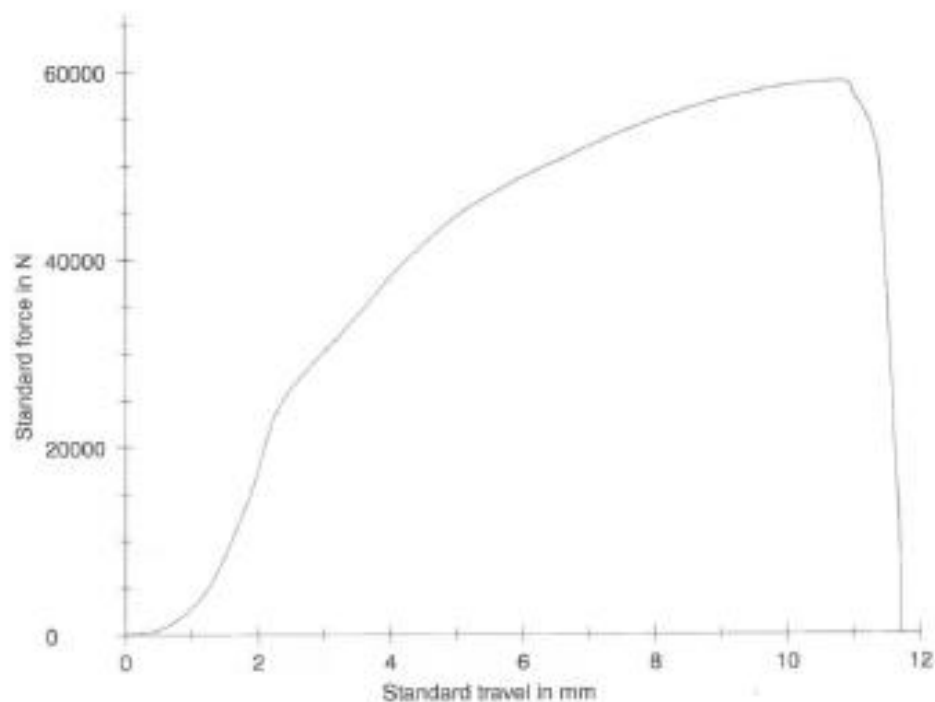
Product type : slot
Document : EN12209
Date(visit) : 9-4-2018
Tester : J.G. van de Wetering

Company(codenr.): B&B locks
Product number : G1
Investigation : primair

Remarks : schoot wordt door de vergrendeling gedrukt bij Fmax.

Test results:

Nr	Maximum Force N	Travel at Max. Force mm	Time at Max. Force s
1	59084,54	10,84	508,41



G1M**SKG - IKOB Certificatie**

Machine data

Control SN: 154863
Crosshead SN: 154863
Force SN: 154864 100 kN

Productgroup : Building hardware

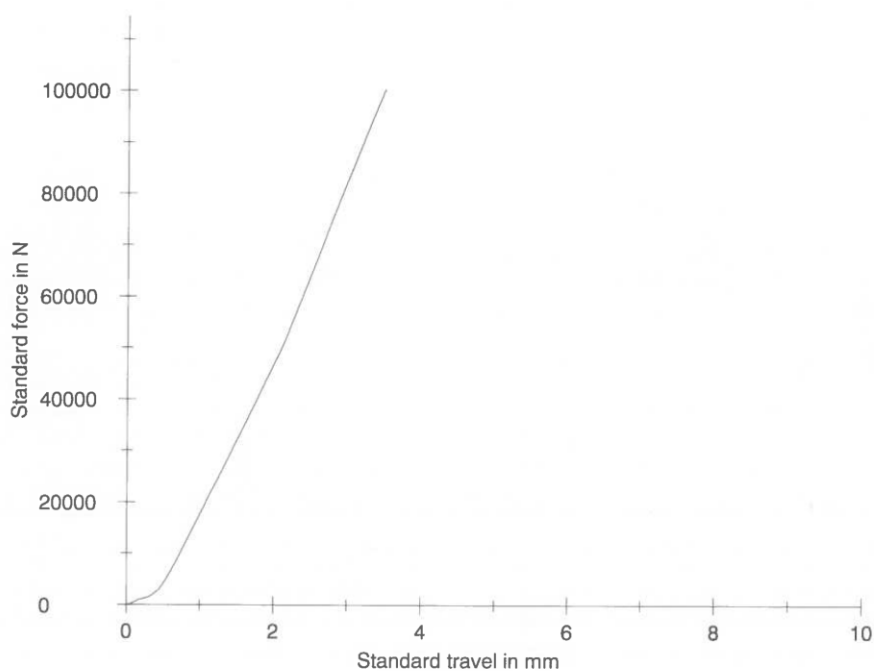
Product type : slot
Document : EN12209
Date(visit) : 25-9-2018
Tester : JWE

Company(codenr.): B&B Locks
Product number : G1M
Investigation : onderzoek 18.00120-1



Remarks : Slot nog intact en functioneel bij Fmax.
supported getest op 3 mm

Test results:


Nr	Maximum Force N	Travel at Max. Force mm	Time at Max. Force s
1	100372,81	3,50	860,21



Annex 2: Photos

 <p>A photograph showing a mechanical testing setup. A metal fixture is mounted on a large, heavy-duty metal base. A vertical rod with a circular end piece is positioned above the fixture. The setup is located in a laboratory or industrial setting with white cabinets in the background.</p>	<p>End load deadbolt, start §5.8.4.1</p>
 <p>A photograph showing a different mechanical testing setup. A metal fixture is mounted on a large, heavy-duty metal base. A vertical rod with a circular end piece is positioned above the fixture. The setup is located in a laboratory or industrial setting with white cabinets in the background.</p>	<p>Pull load deadbolt i.c.w. lock case, start test §5.8.5 i.c.w. §5.8.9.3</p>

	<p>Pull load deadbolt i.c.w. lock case, after test §5.8.5 i.c.w. §5.8.9.3</p>
	<p>Pull load deadbolt i.c.w. lock case, after test §5.8.5 i.c.w. §5.8.9.3</p>
	<p>Side load deadbolt i.c.w. lock case, start §5.8.2.1 i.c.w. §5.8.9.2</p>

 A close-up photograph of a metal deadbolt assembly mounted on a metal plate. A large, curved metal bracket is attached to the side of the deadbolt, and a vertical rod extends upwards from the top of the assembly.	<p>Side load deadbolt i.c.w. lock case, start §5.8.2.1 i.c.w. §5.8.9.2</p>
 A close-up photograph of the same metal deadbolt assembly after a test. The metal plate and bracket show signs of wear and deformation, particularly along the edges and the mounting points.	<p>Side load deadbolt i.c.w. lock case, after test §5.8.2.1 i.c.w. §5.8.9.2</p>
 A photograph of the deadbolt assembly mounted on a larger metal plate. A vertical rod extends upwards from the top of the assembly, and a horizontal rod extends from the side. The assembly is mounted on a metal plate with several holes.	<p>Side load deadbolt start §5.8.2.1 (supported)</p>



Side load deadbolt
after test
§5.8.2.1 (supported)