

## Certificate of Compliance

We declare that the following 5 pin sawn key cylinder has been successfully tested to: EN1303:2015.

With the following classification:

Category of use	Durability	Door Mass	Fire Resistance	Safety	Corrosion Resistance & Temperature	Key Related Security	Attack Resistance
1	6	-	B	-	C	3	0

And the following optional requirements:

Und den folgenden optionalen anforderungen:

### **Evidence of standards compliance:**

<input checked="" type="checkbox"/>	Type testing by Manufacturer	
<input type="checkbox"/>	Type testing by Manufacturer to EN 17025	
<input type="checkbox"/>	Type testing by Independent recognized laboratory	
<input type="checkbox"/>	Regular audit testing by Manufacturer	
<input type="checkbox"/>	Regular audit testing by Manufacturer to EN 45001	
<input type="checkbox"/>	Regular audit testing by independent recognized laboratory	
<input type="checkbox"/>	Other (specify)	

Signature:



Position:

Test Laboratory Manager

Date: 15.7.2021

### **Company Address:**

**ASSA ABLOY Opening Solutions CZ s.r.o.**

Strojnická 633

516 01 Rychnov nad Kněžnou

Czech Republic



# TEST REPORT

Product : Door lock cylinder LCC - 5 (Gemini)

Quotation : 20 pcs

Sponsor : MR Volf

## Request acc. EN 1303 - 1-6-0-B-0-C-3-0

Euro double cylinder



Euro single cylinder



Euro knob cylinder



### A) Key strength test (EN 1303 – point 6.2)

Requirement

Apply torque of 2,5 Nm

Key subsequently operation cylinder by <1,5 Nm.

Using equipment

Torque meter MOKL-14-0207-12

Findings

Samples No.1 – 2,5 Nm applied subsequently operates by 0,016 Nm

NOTTE: deformation of the key begins at applied the torque 5 Nm (Lock cylinder is after this test fully function).

Assessment - **Pass**

### B) Test of mechanism durability (EN1303 – point 6.3 – class 4)

Requirement

Grade 6 – 100 000 cycles

New original Key operates after test by <1,5 Nm.

Using equipment

Torque meter MOKL-14-0207-12

Durability test benches KOMA 3992, KOMA 3993 and FESTO 3483

Execution of test:

One cycles is combination of inserting key, key turning – 360°, key extracting, insert key, key turning – 360° backwards, key extracting. Cylinder lubricated before the durability test by Isoflex Topas.

Findings:

- 1) Euro double cylinder – after 100 000 cycles is lock cylinder fully functional. Operation torque with new key left 0,026 Nm / right 0,018 Nm.
- 2) Euro single cylinder – after 100 000 cycles is lock cylinder fully functional.

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Operation torque with new key left 0,016 Nm / right 0,018 Nm.

3) Euro knob cylinder – after 100 000 cycles is lock cylinder fully functional.

Operation torque with new key left 0,068 Nm / right 0,072 Nm.

Assessment – **Pass**

**C) Door Mass (EN1303 – point 6.4)**

Not applicable to cylinders, no tests required

**D) Fire Resistance (EN1303 – point 6.5 – grade B)**

Manufacturer's declaration of melting point greater than 840 ° C

Assessment - **Pass**

**E) Safety (EN1303 – point 6.6)**

Not applicable to cylinders, no tests required

**F) Corrosion and Extremes of Temperature (EN1303 – point 6.7 – grade C)**

F1) – Corrosion (data from test report No. 20210129)

Requirement

Grade C – 96 hours exposure subsequently operates with max torque of 1,5 Nm

Using equipment

Torque meter MOKL-14-0207-12

Corrosion chamber Weiss (test laboratory ALPHA Týniště)

Findings

Sample no.1 – Door lock cylinder without plating 30 + 35

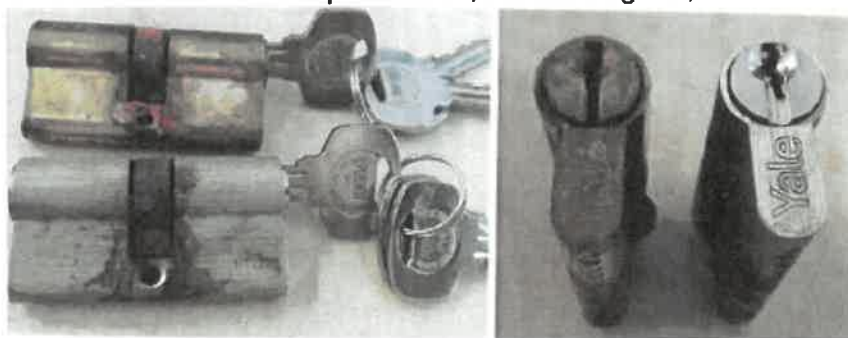
Side 30 mm - torque to left 0,136 Nm / right 0,098 Nm

Side 35 mm - torque to left 0,214 Nm / right 0,126 Nm

Sample no.2 – Door lock cylinder nickel-plating 30 + 35

Side 30 mm - torque to left 0,258 Nm / right 0,124 Nm

Side 35 mm - torque to left 0,096 Nm / right 0,164 Nm



Assessment - **Pass**

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F2) – Operation at extreme of temperatures

Requirement

Grade C – +65°C and – 25°C at each temperature the key will operate (within 5 attempts) and not exceed a torque of 1,5 Nm

Using equipment

Torque meter MOKL-14-0207-12

Climatic chamber Weiss KOM-1

Findings

Every samples could operation at 1<sup>st</sup> attempt by torque at table below

Type of door lock	+65°C		-25°C	
	Torque to left	Torque to right	Torque to left	Torque to right
30+30 without plating	0,020 Nm	0,016 Nm	0,016 Nm	0,024 Nm
30+30 nickel-plating	0,020 Nm	0,012 Nm	0,014 Nm	0,018 Nm
30+30 Knob without plating	0,034 Nm	0,042 Nm	0,034 Nm	0,028 Nm
35+40 Knob nickel-plating	0,036 Nm	0,056 Nm	0,042 Nm	0,046 Nm
35+40 without plating	0,026 Nm	0,026 Nm	0,014 Nm	0,018 Nm
35+40 Emergency clutch without plating*	0,096 Nm	0,048 Nm	0,044 Nm	0,042 Nm

\* Keys inserting into both side of cylinder lock

Assessment - **Pass****G) Key Related Security (EN1303 – point 6.8 – grade 3)****1 – min. number of effective differs (point 6.8.1)** – 15 000 differs – System provides 16 334 effective differs - Pass**2 – min. number of moveable retainers (point 6.8.2)** – 5 moveable retainers – System has 5 moveable retainers - Pass**3 – max. number of identical steps (point 6.8.3)** – 60% maximum identical steps with max 2 identical steps adjacent – system has 60% maximum identical steps with maximum 2 identical steps adjacent – Pass**4 – direct coding of key** – no coding on key – Pass**5 – operating of security mechanism** – before durability next closest key up and own shall not operate by max. torque of 1,5 Nm + 0,2 Nm  
Key code 37462 – before durability test

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Key code	Torque left 1,5 Nm	Torque right 1,5 Nm
2 7 4 6 2	OK - not operation	OK - not operation
3 7 4 6 3	OK - not operation	OK - not operation

Pass

**6 – Torque resistance of the plug / cylinder** – cylinder shall not operate with torque of 15 Nm applied via suitable tool - 15 Nm applied cylinder remained secure - Pass

Assessment - Pass

**H) Attack resistance – cylinder only (EN1303 – point 6.9 – grade 0)**

Without request

**CONCLUSION:**

Door lock cylinder LCC - 5 (Gemini) meet cod according EN 1303 - **1-6-0-B-0-C-3-0**

Date of processing: 13. 7. 2021

Test report processed by: Petr Sedlacek - head of test laboratory