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|---|--|---|--|--|
| Prüfbericht-Nr.: <i>Test Report No.:</i> | 174043808/GZF/01-01 | Auftrags-Nr.: <i>Order No.:</i> | 174043808 | Seite 1 von 6 Page 1 of 6 |
| Kunden-Referenz-Nr.: <i>Client Reference No.:</i> | N/A | Auftragsdatum: <i>Order date:</i> | 14.12.2015 | |
| Auftraggeber: <i>Client:</i> | | | | |
| Prüfgegenstand: <i>Test item:</i> | Soft closing hinge | | | |
| Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i> | C81 Series Soft-close Hinge with Integrated Damper / C81A676F+81H00YQ | | | |
| Auftrags-Inhalt: <i>Order content:</i> | Partial mechanical safety test for the domestic use and following the parameter "column 3" of Annex B, EN 15570:2008 with client's requirement | | | |
| Prüfgrundlage: <i>Test specification:</i> | EN 15570: 2008 | | | |
| Wareneingangsdatum: <i>Date of receipt:</i> | 09.12.2015 |  | | |
| Prüfmuster-Nr.: <i>Test sample No.:</i> | A000292748-001 | | | |
| Prüfzeitraum: <i>Testing period:</i> | 14.12.2015 – 30.12.2015 | | | |
| Ort der Prüfung: <i>Place of testing:</i> | Unit 201, NO.7 Caipin Road, Guang-zhou, P.R. China | | | |
| Prüflaboratorium: <i>Testing laboratory:</i> | TÜV Rheinland (Guangdong) Ltd. | | | |
| Prüfergebnis*: <i>Test result*:</i> | Pass | | | |
| geprüft von / tested by: | kontrolliert von / reviewed by: | | | |
| 31.12.2015 Kingsley He / PE <i>Date Name / Stellung</i> |  <i>Unterschrift</i> | 31.12.2015 Michael Zhang / Reviewer <i>Date Name / Stellung</i> |  <i>Unterschrift</i> | |
| Sonstiges / Other: | | | | |
| Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i> | | Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i> | | |
| * Legende: | 1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n) | 2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | 3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | 4 = ausreichend N/A = nicht anwendbar |
| Legend: | 1 = very good P(ass) = passed a.m. test specification(s) | 2 = good F(ail) = failed a.m. test specification(s) | 3 = satisfactory F(ail) = failed a.m. test specification(s) | 4 = sufficient N/A = not applicable |
| <p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</p> <p><i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p> | | | | |

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Produktbeschreibung
Product description

| | | |
|---|--|-------------------|
| 1 | Produktdetails <i>Product details</i> | See page 5 |
| 2 | Maße / Gewicht <i>Dimensions / Weight</i> | See page 5 |
| 3 | Bedienelemente <i>Operating elements</i> | Hinge with damper |
| 4 | Ausstattung / Zubehör <i>Equipment / Accessories</i> | N/A |
| 5 | Verwendete Materialien <i>Used materials</i> | Metal and plastic |
| 6 | Sonstiges <i>Other</i> | N/A |

Pic. 1: Overview of hinge (closed)



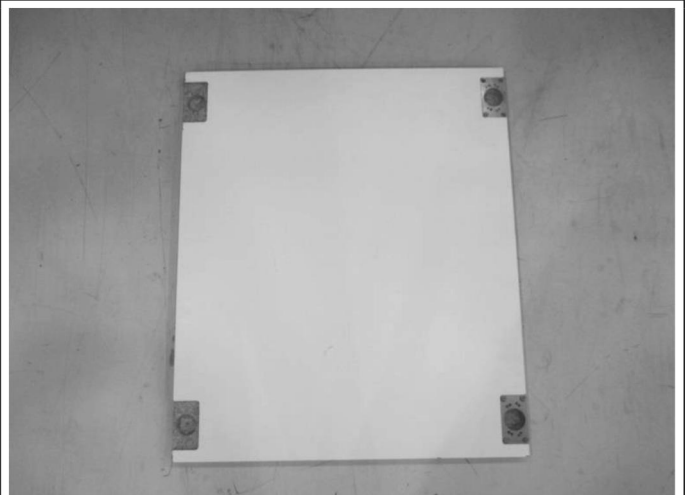
Pic. 2: Overview of hinge (disassembly)



Pic. 3: Brand marking



Pic. 4: Overview of door for test



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| Absatz | EN 15570: 2008 | Messergebnisse - Bemerkungen | Bewertung |
|--------|--|------------------------------|------------|
| Clause | Anforderungen - Prüfungen / Requirements - Tests | Measuring results - Remarks | Evaluation |

EN 15570:2008 Hardware for furniture – Strength and durability of hinges and their components – Hinges pivoting on a vertical axis

| | | | |
|----------------|--|--|-----|
| 1 | Scope | | |
| 2 | Normative references | | |
| 3 | Terms and definitions | | |
| 4 | General test conditions | | |
| 5 | Test apparatus | | |
| 6 | Test methods and requirements | | |
| 6.1 | General | | / |
| 6.2 | Overload tests | Test parameter see Annex B (refer to Note #1) | / |
| 6.2.1 | Vertical static overload | | N/T |
| 6.2.2 | Horizontal static overload | | N/T |
| 6.3 | Functional tests | Test parameter see Annex B (refer to Note #1) | / |
| 6.3.1 | General | | |
| 6.3.2 | Operating forces | | / |
| 6.3.2.1 | General | | |
| 6.3.2.2 | Closing force, hinges with self-closing mechanisms ($\geq 0,5$ N) | | N/T |
| 6.3.2.3 | Opening and closing forces (< 20 N) | | N/T |
| 6.3.3 | 1 st vertical static load test | | N/T |
| 6.3.4 | 1 st horizontal static load | | N/T |
| 6.3.5 | Slam shut | | N/T |
| 6.3.6 | Determination of referent point for the door sagging | | / |
| 6.3.7 | Durability (0° to max. 130°) | Load and test rate used: 2kg, 5 cycles/min 100,000 cycles (refer to Note #2 & #3) | P |
| 6.3.8 | Deflection (sagging) test (≤ 0.5 % of width of the door) | | N/T |
| 6.3.9 | 2 nd vertical static load | | N/T |
| 6.3.10 | 2 nd horizontal static load | | N/T |
| 6.4 | Corrosion resistance (EN ISO 6270-2) Requirement: 3 cycles AHT | (refer to Note #1) | N/T |
| 7 | Test report | | |
| Annex A | (normative) Product Information system | (refer to Note #1) | / |
| A.1 | General | | |
| A.2 | Field of application | | N/T |
| A.3 | The mass and size of the door | | N/T |
| A.4 | Adjustment systems and spring and damper mechanisms | | N/T |

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| | | | | | | |
|---|-----------------------------------|-------------|-------------------------|----------------|----------------|----------|
| A.5 | Corrosion test | | | | N/T | |
| Annex B | (normative) Test parameter | | | | | |
| | Table B.2 – Overload tests | | | | | |
| | Clause / Test | | Unit | Loads | | |
| | | | | 1 | 2 | 3 |
| | 6.2.1 Vertical static overload | | kg | - | 20 | 30 |
| 6.2.2 Horizontal static overload | | N | - | 60 | 80 | |
| Table B.3 – Functional tests | | | | | | |
| Clause / Test | | Unit | Loads and cycles | | | |
| | | | 1 | 2 | 3 | |
| 6.3.3 and 6.3.9 Vertical static load | | kg | 10 | 15 | 20 | |
| 6.3.4 and 6.3.10 Horizontal static load | | N | 25 | 30 | 40 | |
| 6.3.5 Slam shut (m ₂) | | kg | 2 | 3 | 4 | |
| 6.3.5 Additional slam shut for doors with dampers (m ₃) | | kg | min. 1, max. 2 | min. 1, max. 2 | min. 1, max. 2 | |
| 6.3.7 Durability | | cycles | 20 000 | 40 000 | 80 000 | |

Note:

- #1. Only the durability test was performed per customer's request.
- #2. Additional 20,000 cycles (basic 80,000 cycles) of durability test were requested by client.
- #3. Self-closing duration and position:
 - Before test: 4 s without door, 8 s with door;
 - After test: 15 s without door, 36 s with door; 30° from fully closed.

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Dimensions:

| <u>Hinge</u> | | | <u>Door</u> | | |
|--------------------|-----------|----|-------------|------|----|
| Height: | 62 | mm | Height: | 700 | mm |
| Width: | 28 - 37 | mm | Width: | 600 | mm |
| Depth: | 132 - 100 | mm | Depth: | 19 | mm |
| Hinge cup diameter | Ø 35 | mm | Weight: | 5.96 | kg |
| Weight: | 125.5 | g | | | |

with damper

Remark:

- List of used test equipment could be traceable and provided separately upon request.
- Clause(s) with the symbol “ / ” in the result refers to the result(s) of its sub-clause(s).
- This test report does not give evidence of the compliance of relevant standard(s) by the submitted sample but only the requested test(s).
- Detailed information regarding measurement uncertainty is available in the test laboratory(s) and could be shown on client request. Deviation report in Simplified Chinese is available on client's request.

*** End of test report ***