**Produkte**
*Products*

TÜVRheinland®

# Prüfbericht - Nr.:
*Test Report No.:* 174010534/GZF/01-01



| | |
|---|---|
| **Auftraggeber:** *Client:* | ONWARD HARDWARE<br>800, Wilson Avenue Unit 2 Kitchener, ON, N2C 0A2 |
| **Gegenstand der Prüfung:** *Test item:* | ONWARD FULL EXTENSION BALL BEARING SLIDE 4501 |
| **Bezeichnung:** *Identification:* | 4501 |
| **Serien-Nr.:** *Serial No.:* | - |
| **Wareneingangs-Nr.:** *Receipt No.:* | 173066368-01-B01 |
| **Eingangsdatum:** *Date of receipt:* | June 28, 2012 |
| **Zustand des Prüfgegenstandes bei Anlieferung:** **Condition of test item at delivery:** | No visual damage before testing |
| **Prüfort:** *Testing location:* | Unit 201, NO.7 Caipin Road GZ Science City, Guangzhou 510663, P.R. China |
| **Prüfgrundlage:** *Test specification:* | Clause 4, 12, 13, 15.2.1 and 20 of BIFMA X5.9: 2004 with specific client's requirement |
| **Prüfergebnis:** *Test Result:* | **The test item PASSED the test specification(s).** |
| **Prüflaboratorium:** *Testing Laboratory:* | Furniture Testing Laboratory<br>TÜV Rheinland (Guangdong) Ltd. |

**geprüft**/ *tested by:*

May 15, 2013 Jason Rao / PE
(Updated on May 08, 2013, notice remark)

| **Datum** *Date* | **Name/Stellung** *Name/Position* | **Unterschrift** *Signature* |
|---|---|---|

**kontrolliert**/ *reviewed by:*

May 15, 2013 Waley Huang/ TC
(Updated on May 08, 2013, notice remark)

| **Datum** *Date* | **Name/Stellung** *Name/Position* | **Unterschrift** *Signature* |
|---|---|---|

**Sonstiges**/ *Other Aspects:*

Test period: June 29, 2012 to July 18, 2012
Test order: Test requirement for Mechanical character
The report was updated on May 07, 2013 for updating client's & sample information based on the report 173066368/GZF/01-01, dated on June 26, 2012, and 173066368/GZF/02-01, dated on July 19, 2012

| ***Abkürzungen:*** | | | | ***Abbreviations:*** | | | |
|---|---|---|---|---|---|---|---|
| | ***P(ass)*** | = | ***entspricht Prüfgrundlage*** | | ***P(ass)*** | = | ***passed*** |
| | ***F(ail)*** | = | ***entspricht nicht Prüfgrundlage*** | | ***F(ail)*** | = | ***failed*** |
| | ***N/A*** | = | ***nicht anwendbar*** | | ***N/A*** | = | ***not applicable*** |
| | ***N/T*** | = | ***nicht getestet*** | | ***N/T*** | = | ***not tested*** |

## Verwendete Meßgeräte/Prüfmittel/Equipmentlist

| Prüfmittel/Equipment | Gerätenummer/ Ident.-Nummer Barcode-Nummer Equipment number | nächste Kalibrierung/ Überwachung next calibration/ surveillance |
|---|---|---|
| Ruler (1m)/ Tape | 1.193U | 2014-12-21 |
| Electric Balance (20g) | 1.193P | 2013-04-25 |
| Digital force gauge (500N) | 1.193 | 2013-01-16 |
| Small linear tester | 3.070P.02 | Initial check only |
| Force gauge with a spring rate of 17.5N/cm | 3.067G | Initial check only |
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**Sample Information:**

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*Test Report No.*: 174010534/GZF/01-01

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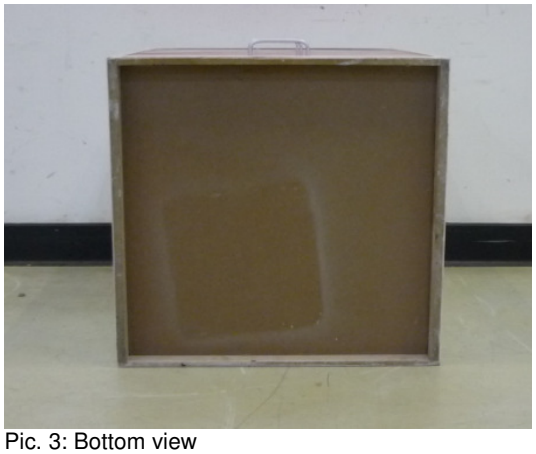
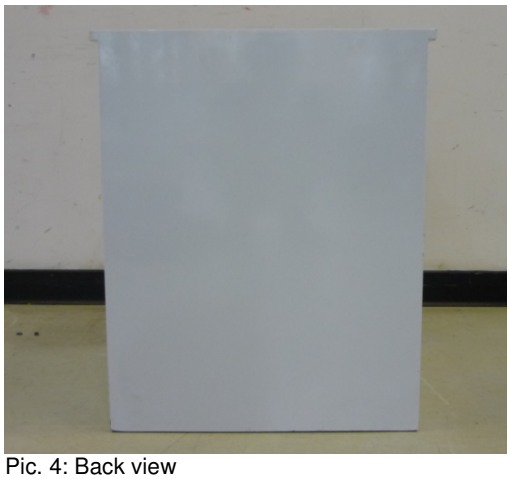
|---|---|
| Received on: | First sample: June 28, 2012<br>Updated sample: July 17, 2012 |
| Product Description: | ONWARD FULL EXTENSION BALL BEARING SLIDE 4501 |
| Testing is: | First Test Report #: 173066368/GZF/01-01<br>Retest Report #: 173066368/GZF/02-01 |
| Revised Report: | Yes ☐ No ☒ |
| Reason For Revision: | - |

## Product pictures:


Pic. 1: Front view


Pic. 2: Side view


Pic. 3: Bottom view


Pic. 4: Back view

## Dimensions:

| | | |
|---|---|---|
| Height: | 676 | mm |
| Width: | 560 | mm |
| Depth: | 500 | mm |
| Weight: | 35.6 | kg |

General tolerances: Unless otherwise specified the accuracy of the linear dimension is defined according to DIN 7168-g relating to old design and DIN ISO 2768 part 1 „c“ for new design. For all other physical dimensions the uncertainty of measurement shall have an accuracy of < 5 % of the nominal force. The tests are performed in common room climate.

## Objections:

None

## Recommendation:

None

## Remark(s):

1. Per client’s request, additional report holder was added & sample description was updated in this report, all test information & result were refer to previous reports 173066368/GZF/01-01, dated on June 26, 2012, and 173066368/GZF/02-01, dated on July 19, 2012.

## Reference test standard(s) for Mechanical tests

| | |
|---|---|
| ANSI BIFMA X5.9: 2004 | American National Standard For Office Furnishings —Storage Unit |

## Mechanical Character:

| Attribute | Test Method/Standard | Requirement / Limit | Results |
|---|---|---|---|
| Unit Strength Test | ANSI/BIFMA X5.9 Clause 4 | Functional Load:<br>a) Load all of the unit’s elements with the specified distributed functional top, shelf and component loads described in Table 1 plus the concentrated load for clothes rails, if applicable, as described in Section 18，Loads shall be allowed to remain for 60 minutes.<br>b) For units</= 965 mm (38 in.) high remove the distributed top load and replace with the concentrated functional top load. The concentrated load shall be applied through a 305 mm (12.0 in.) diameter disk 25 mm (1.0 in.) from the unit’s edge at its apparent weakest point (or centered front to back if the top is less than 356 mm [14 in.] deep). If the weakest point is not obvious, several load applications may be necessary to properly test the product. Allow the loads to remain for 60 minutes.<br><br>Proof Load:<br>a) Note: Continue Using the functionally loaded unit from 4.2 (Unit Functional Load Test).<br>b) Replace any top load with the distributed proof top load per Table 1. | Passed (proof load only: 150lbs) |

| Attribute | Test Method/Standard | Requirement / Limit | Results |
|---|---|---|---|
| | | c) If the unit is < 965 mm (38 in) high, allow the load to remain for 15 minutes. Then remove the distributed proof top load and replace with the concentrated proof top load. The loads shall remain for an additional 15 minutes.<br>d) If the unite is greater than 965 mm (38 in) high, allow the loads to remain for a total of 30 minutes.<br>e) Determine the storage component of each type with the largest available clear space. Replace the functional load of that component with the proof load per Table 1. If extendible, fully extend the loaded component. Allow the load to remain in/on the component for 15 minutes. Replace the proof load with the functional load and if extendible, close it. Repeat this procedure for the largest of each type of component. | |
| Rebound Test | ANSI/BIFMA X5.9 Clause 12 | The extendible member to be tested shall be uniformly loaded to 0.017 lb/in³. The extendible member shall be tested to and meet the pull force requirements of section 20.<br>a) Open the extendible member against the force gauge until the specified force is reached.<br>b) Release the extendible member allowing the force applied by the force gauge to close the extendible member. Record the at rest position of the extendible member after the rebound.<br>c) Reset the position of the load.<br>d) Repeat steps (a) through (c) for a total of 5 times.<br>Repeat steps (a) through (d) for each type and/or size of extendible member. | Passed (loaded 100lbs per client's request) |
| Out Stop Test (EE load capacity > 7 kg) | ANSI/BIFMA X5.9 Clause 13 | The extendible member to be tested shall be uniformly loaded to 0.017 lb/in³. The extendible member shall be tested to and meet the pull force requirements of section 20. A metallic cable shall be attached to the most rigid point of the vertical centerline of the extendible member. The opposite end of the cable shall extend horizontally to a pulley and then downward to an attached weight. Determine the minimum weight that will cause the extendible member to open to full extension and add an additional 2.3kg (5 lb) weight. Allow the extendible member to impact the out stop for:<br>a) 5 cycles with extendible element held in a position 38 mm (1.5 in.) from fully closed;<br>b) 15,000 cycle with extendible element held in a position 51 mm (2 in.) from fully open<br>After performing the Out Stop test, the extendible member shall meet the pull force requirements of section 20. | Passed (loaded 100lbs per client's request) |
| Members Deeper than Wide | ANSI/BIFMA X5.9 Clause 15.2.1 | Extendible members shall be uniformly loaded to 0.017 lb/in3. The extendible members shall be tested to and meet the pull force requirements of section 20. A cycling device shall be set to cause the extendible member to travel within 0 to ¼ inch of the closed position to 0 to ¼ inch of the fully extended position and return. One extendible member of each type and size shall be subjected to 50,000 cycles. Upon completion of the cycle test, perform the Pull Force Test in section 20. | Passed (loaded 100lbs per client's request) |
| Pull Force Test | ANSI/BIFMA X5.9 Clause 20 | Measure and record the maximum force that will open the extendible member or door from its fully closed position to its fully extended position. The force shall not exceed 50N (11.2 lbf) | Passed (loaded 100lbs per client's request) |

The tests were carried out in indoor ambient conditions at a temperature between 15℃ – 25℃.

**Note:** The test results exclusively base on the presented samples. Detailed information regarding measurement uncertainty is available in the test lab and could be shown on customer's request.

**- End of Test Report -**