SELECTLOK®
DIVISION OF SELECTRIX GROUP

TEST REPORT

Report No#: EN1025L3104R
Report Date: 2025/01/02

EVOLUTION SERIES | SWITCH UP SWING HANDLES - ZINC, BLACK POWDER COAT / CHROME PLATED

Including: Evolution Series Integrated and Evolution Series Switch Up Modular Swing Handle

Sample Name: Swing Handle Lock
P/N Range: **1107S-EV2-SZBB0, 1107S-EV1-SZBB-0#, 1107S-EV2-SZCC0, 1107S-EV1-SZCC-0# - Zinc Alloy, Black PC / Chrome PLT**

Report No#: EN1025L3104R
Report Date: 2025/01/02
Test Item: Loading Test,
Torsional Stress Test (Lock),
Torsional Stress Test (Screw/Nut),
Protection Class Test (Waterproof)
Audited By: 黄志鑫
Approved By: 黄志鑫

Test Information

Sample Name	Swing Handle Lock	**Part Number**	1107S-EV2-SZBB0 1107S-EV2-ZB-IN01 1107S-EV2-SS-INPAD
Material	Zinc Alloy/SUS304	**Finish**	Power Coated
Sample Status	Finished product (in good condition)	**Quantity**	6
Entrusting Department	Process Department	**Production Date/ Batch Number**	2024/12/31
Commission Number	EN1025L3104	**Sample Reception Date**	2024/12/31
Test Date	2025/01/02		
Test Item	Loading Test, Torsional Stress Test (Lock), Torsional Stress Test (Screw/Nut), Protection Class Test (Waterproof)		

Test Conclusion

Test Item	Test Standard/ Judgment Basis	Test Requirement	Conclusion
Loading Test	GB/T 25293-2010 GB/T 228.1-2021	Handle opening (tripping) tension meets 23±5N; handle breaking tension: >520N	OK
Loading Test	GB/T 25293-2010 GB/T 228.1-2021	Test the minimum tensile force required to damage the padlock seat, which should be ≥1000N	OK
Torsional Stress Test (Lock)	GB/T 25293-2010	Test the minimum torque required to damage the handle, which shoule be ≥32N.m	OK
Torsional Stress Test (Screw/Nut)	GB/T 3098.1-2010 GB/T 16823.3-2010	Test the minimum torque required to damage the M22 thread of the housing, which should be ≥ 25N.m	OK
Torsional Stress Test (Screw/Nut)	GB/T 3098.1-2010 GB/T 16823.3-2010	Test the minimum torque required to damage the M6 thread of the shaft, which should be ≥ 10N.m	OK
Protection Class Test (Waterproof)	GB/T 25293-2010 GB/T 4208-2017/XG1-2024	After IPX6 waterproof test, it is required that no water can enter the box through the lock body	OK

See the following page for Test Results

Loading Test

Test Equipment Information

Device Name	Part Number	Serial Number	Calibration Date	Next Calibration Date
Push Pull Force Gauge Dynamometer	SN-500	YK-LAB-27-001	2024.8.8	2025.8.7
Servo Computer Universal Material Testing Machine	TH-82001S	YK-LAB-21-001	2024.8.8	2025.8.7

Sample Quantity: 1Pc

Test Method/Standard:

GB/T 25293-2010 Mechanical door lock for cabinets of electrotechnical and electronic equipment

GB/T 228.1-2021 Metallic materials—Tensile testing— Part 1 Method of test at room temperature

Test Requirement:

Handle opening (tripping) tension meets 23±5N; handle breaking tension: > 520N

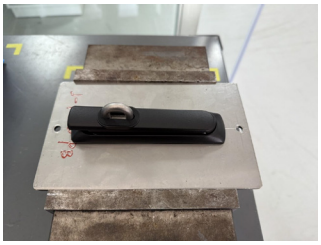
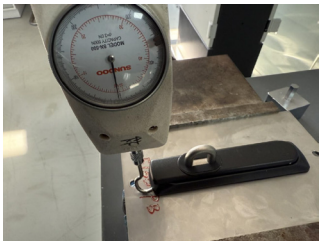
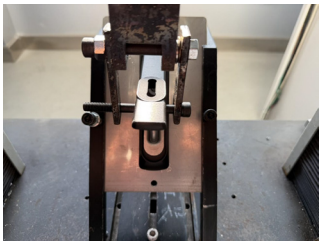
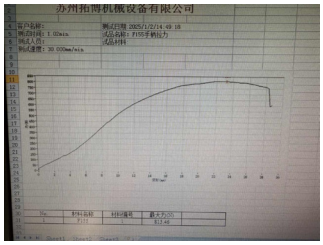
Experimental Environment:

Temperature: 22 , **Humidity: 57%RH, Atmospheric Pressure: /**

Test Results

Sample No.	Test Requirement	Conclusion
EN1025L3104-02	**The handle is opened (tripped) with a pulling force of 20N; The sample is bent and deformed after the handle is subjected to a pulling force of 813N.**	**OK**

Test Record Pictures

Installation Status	Test Status	Tension Value	Installation Status
			
Tension Diagram	**Status After Test**		
			

Loading Test

Test Equipment Information：

Device Name	Part Number	Serial Number	Calibration Date	Next Calibration Date
Servo Computer Universal Material Testing Machine	TH-82001S	YK-LAB-21-001	2024.8.8	2025.8.7

Sample Quantity：1Pc
Test Method/Standard：

GB/T 25293-2010 Mechanical door lock for cabinets of electrotechnical and electronic equipment

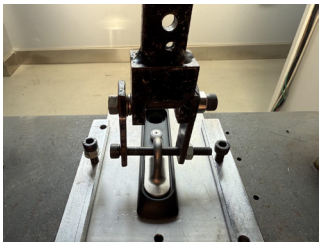
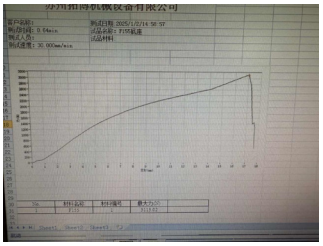
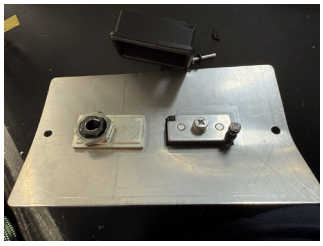
GB/T 228.1-2021 Metallic materials—Tensile testing— Part 1 ： Method of test at room temperature

Test Requirement
Test the minimum tensile force required to damage the padlock seat, which should be ≥1000N
Experimental Environment
Temperature: 22°C, Humidity: 57%RH, Atmospheric Pressure: /

Test Results：

Sample No.	Test Result	Conclusion
EN1025L3104-03	After the padlock seat was subjected to a tensile force of 3113N, the back cover of the lock was damaged and the sample plate was bent.	OK

Test Record Pictures：

Sample Picture	Test Status	Tension Diagram	Status After Test
			

Torsional Stress Test (Lock)

Test Equipment Information：

Device Name	Part Number	Serial Number	Calibration Date	Next Calibration Date
Dial Torque Wrench	SDB-200	YK-LAB-12-001	2024.8.19	2025.8.18

Sample Quantity：1Pc

Test Method/Standard：
GB/T 25293-2010 Mechanical door lock for cabinets of electrotechnical and electronic equipment 11.2

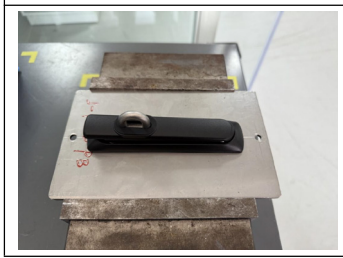
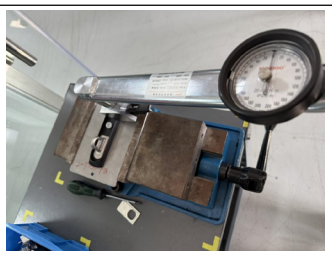
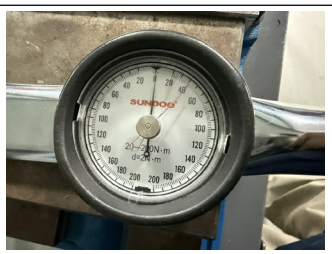
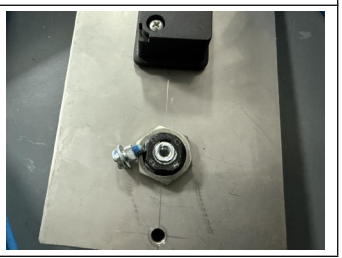
Test Requirement：
Test the minimum torque required to damage the handle, which shoule be ≥32N.m

Experimental Environment：
Temperature: 21℃, Humidity: 47%RH, Atmospheric Pressure: /

Test Results：

Sample No.	Test Result	Conclusion
EN1025L3104-04	After the handle was subjected to a torque of 42N.m, the connection between the handle and the shaft broke.	OK

Test Record Pictures：

Installation Status	Test Status	Torque Value	Status After Test
			

Torsional Stress Test (Screw/Nut)

Test Equipment Information：

Device Name	Part Number	Serial Number	Calibration Date	Next Calibration Date
Dial Torque Wrench	SDB-200	YK-LAB-12-001	2024.8.7	2025.8.6

Sample Quantity：1Pc
Test Method/Standard：

GB/T 3098.1-2010 Mechanical properties of fasteners— bolts, screws and studs
GB/T 16823.3-2010 Fasteners - Torque/clamp force testing

Test Requirement：

Test the minimum torque required to damage the M22 thread of the housing, which should be ≥ 25N.m

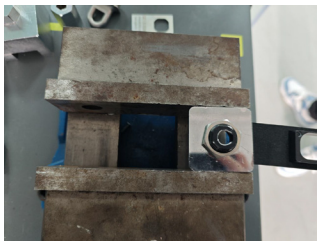
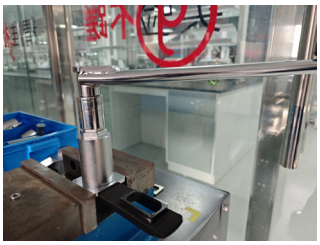
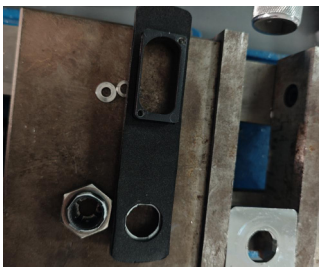
Experimental Environment：

Temperature: 22 °C, Humidity: 51% RH

Test Results：

Sample No.	Test Result	Conclusion
EN1025L3104-05	After the housing thread was subjected to a torque of 29 N.m, the housing broke.	OK

Test Record Pictures：

Installation Status	Test Status	Torque Value	Status After Test
			

Torsional Stress Test (Screw/Nut)

Test Equipment Information：

Device Name	Part Number	Serial Number	Calibration Date	Next Calibration Date
Dial Torque Wrench	SDB-20	YK-LAB-12-002	2024.8.7	2025.8.6

Sample Quantity：1Pc

Test Method/Standard：

GB/T 3098.1-2010 Mechanical properties of fasteners— bolts, screws and studs
GB/T 16823.3-2010 Fasteners - Torque/clamp force testing

Test Requirement：

Test the minimum torque required to damage the M6 thread of the shaft, which should be ≥ 10N.m

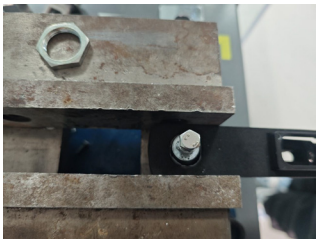
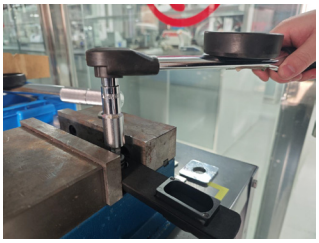
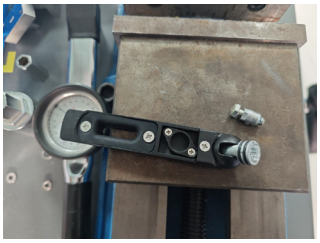
Experimental Environment：

Temperature: 22 °C, Humidity: 51% RH

Test Results：

Sample No.	Test Result	Conclusion
EN1025L3104-06	After the shaft thread was subjected to a torque of 12 N.m, the shaft broke.	OK

Test Record Pictures：

Installation Status	Test Status	Torque Value	Status After Test
			

Protection Class Test (Waterproof)

Test Equipment Information：

Device Name	Part Number	Serial Number	Calibration Date	Next Calibration Date
IPX3456 Rain Test Chamber	ZH-IPX3456-Q1000A	YK-LAB-02-001	2024.6.20	2025.6.19

Sample Quantity：1Pc

Test Method/Standard：

GB/T 25293-2010 Mechanical door lock for cabinets of electrotechnical and electronic equipment 11.11
GB/T 4208-2017/XG1-2024 Degrees of protection provided by enclosure (IP code)

Test Requirement：

After IPX6 waterproof test, it is required that no water can enter the box through the lock body

Experimental Environment：

Temperature: 16°C, Humidity: 42%RH, Atmospheric Pressure: 102.6kPa

Nozzle inner diameter:12.5mm

Distance between nozzle and lock surface/radius of swing pipe：2.5m

Total swing angle：/

Water-carrying Capacity：100±5L/min

Hydraulic Pressure：50kPa

Test Duration：3min

Test Results：

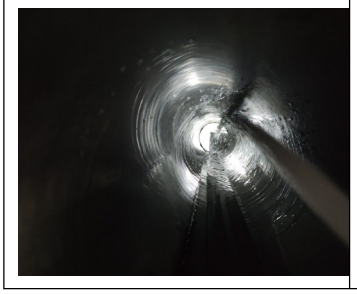
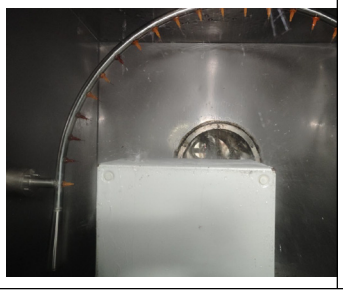
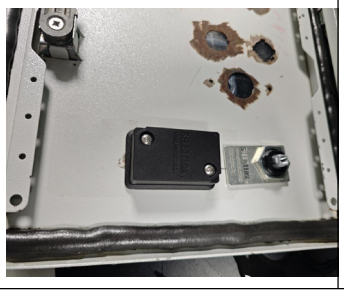
Sample No.	Test Requirement	Conclusion
EN1025L3104-01	No water stains behind door locks, no water stains inside cabinets	OK

Test Record Pictures：

Sample Picture	Installation Status	Control Panel	Water-carrying Capacity
			

TEST REPORT

Report No#: EN1025L3104R
Report Date: 2025/01/02

In Test	In Test	Status After Test	Status After Test
			

Opinions And Explanations：N/A

*** END OF REPORT ***

