

Declaration of Conformity

In Accordance with ANSI/ISEA 125-2014 and ANSI/ASSP Z359.7-2019

Declaration #: DOC-UFS480020L

Declaration Date: 12/21/2023

Item #: UFS480020L

Description: KStrong® BRUTE-AL™ LE 20 ft. Aluminum Housing Cable SRL with swivel snap hook. Includes installation carabiner and tagline (ANSI)

Brand Name: KStrong

Manufacturer: KStrong

Address: 150 N. Radnor Chester Road, Suite F200, Radnor, PA 19087

**Additional Items Conforming
Under this Declaration (If Applicable):**

KStrong declares that the product(s) listed above is in conformity with the requirements of the following performance standard(s):

ANSI Z359.14-2021 Class 2

Conformity Assessment Method in accordance with ANSI/ISEA 125-2014



Level 1:

KStrong Lab Outside the Scope of ISO/IEC Standard 17025:2017



Level 2:

KStrong Lab Within the Scope of ISO/IEC Standard 17025:2017



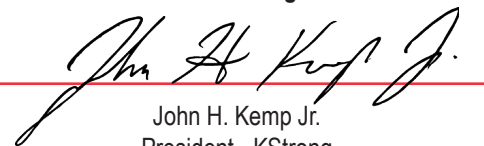
Level 3:

Independent 3rd Party Lab accredited to ISO/IEC Standard 17025:2017

Supporting Documentation: KS-Test-UFS480020L.pdf

This Certificate is a guarantee that the above standard(s) was met by the requirements of such standard. Testing was performed under normal operation mode. The results of testing apply only to the particular sample tested and the specific test carried out. This Certificate is only issued for products which have passed the testing requirements of listed standard(s).

Authorized Signature:


John H. Kemp Jr.
President - KStrong

ISO 17025 Accredited Test Laboratory

intertek
Total Quality. Assured.



Intertek Testing Services NA, Inc.
3933 US Rt. 11
Cortland, NY 13045
Tel: 1 607-753-6711
www.intertek.com

Accrediting Agency



A2LA
5202 Presidents Court, Ste 220
Frederick, MD 21703
Tel: 301.644.3248
info@A2LA.org

Test Verification of Conformity

Verification Number: 105663091CRT-004

On the basis of the referenced test report(s), sample(s) of the below product have been found to comply with the harmonized standards and Directives listed on this verification at the time the tests were carried out. Other standards and Directives may be relevant to the product. This verification is part of the full test report(s) and should be read in conjunction with it(them).

Applicant Name & Address: KStrong INC
150 N. Radnor Chester Rd.
Suite F200
Radnor, PA 19087
USA

Product Description: Self-Retracting Device

Models/Type References: UFS310025L, UFS310050L, UFS310018L, UFS310080L, UFS480020L, UFS480050L,
UFS480025L, UFS480018L

Brand Name: KStrong INC

Relevant Standards: ANSI/ASSP Z359.14-2021

Verification Issuing Office Name & Address: Intertek Testing Services NA, Inc.
3933 US Rt-11
Cortland, NY 13045
USA

Date of Tests: 10/24/22 – 10/28/22

Test Report Number(s): 105663091CRT-003

Signature:



Name:

Matthew Stevens

Position:

Team Leader

Date:

12/08/2023



This Verification is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Verification. Only the Client is authorized to permit copying or distribution of this Verification. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test/inspection results referenced in this Verification are relevant only to the sample tested/inspected. This Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

KSTRONG INC TEST REPORT

SCOPE OF WORKs

ANSI/ASSP Z359.14-2021 – SELF RETRACTING DEVICES

REPORT NUMBER

105663091CRT-003

ORIGINAL REPORT NUMBER

105376372CRT-009

ISSUE DATE

December 21, 2023

PAGES

9

DOCUMENT CONTROL NUMBER

GFT-OP-10a (6-March-2017)

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Total Quality. Assured.

TEST REPORT FOR KSTRONG INC

Report No.: 105663091CRT-003

Date: December 21, 2023

Address

3933 US rt. 11 Cortland, NY
13045

Telephone: 607-758-6246

www.intertek.com

KSTRONG Inc. 150 N. Radnor Chester RD. Suite F200 Radnor, PA 19087 USA	
Report Number..... :	105663091CRT-003
Signed Quote Number..... :	Qu-01405542
PO Number..... :	N/A
Name of Testing Laboratory Preparing the Report..... :	Intertek Testing Services NA Inc.
Test Specification:	
Standard..... :	ANSI/ASSP Z359.14-2021
Date(s) of Testing..... :	10/24/2022-10/28/2022
Product Description:	
Product Type:	Self-Retracting Lanyard
Brand Name:..... :	KSTRONG INC
Model Number(s):..... :	UFS310025L, UFS310050L, UFS310018L, UFS310080L, UFS480020L, UFS480050L, UFS480025L, UFS480018L
Model Share:..... :	N/A
Dates Samples Received:	9/26/2022

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Date: December 21, 2023

SECTION 1**SUMMARY OF TESTING**

TESTS COMPLETED	ANSI/ASSP Z359.14-2021 CLAUSE	STATUS
General Requirements	3.1	PASS
Markings and instructions/User inspection, Maintenance	5.1, 5.2/6	PASS
Static Strength Testing of SRD's	3.2.1/4.2.1	PASS
Dynamic Performance (ambient)	3.3/4.3.1	PASS
Dynamic Performance (LE) (ambient)	3.3.3/4.3.3	PASS

SECTION 2

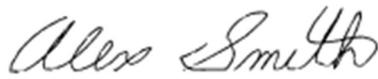
This test report concludes the work anticipated in the testing phase of your project. If there are any questions regarding this report please contact the undersigned at 607-753-6711.

**COMPLETED
BY:**

Alex Smith

TITLE:

Technician

SIGNATURE:**DATE**

12/21/2023

**REVIEWED
BY:**

Matthew Stevens

TITLE:

Team Leader

SIGNATURE**DATE:**

12/21/2023

Please see attached test data for details.

Date: December 21, 2023

SECTION 3

TESTING EQUIPMENT CALIBRATION INFORMATION

USED FOR TEST	DESCRIPTION	MANUFACTURER	CONTROL NO.	MODEL NO.	SERIAL NO.	CAL. DATE	CAL. DUE
X	Test Weight	NA	NA	310 lbs	-	VBV	VBV
X	Load Cell	PCB	N1392	-	-	8/30/22	8/23/2023
X	Tape Measure	Kobalt	H422	25'	-	5/13/2022	5/13/2023
X	Load Cell	Interface	L099	-	-	11/11/2021	11/11/2022

SECTION 4

Section (Test)	Requirement	Results	Compliance																																																																																																														
3	"Marking and Instructions"																																																																																																																
5.1.1	Shall be in English		PASS																																																																																																														
5.1.3	Self-Retracting Devices shall be marked with the following: <table><tr><td>Marking</td><td>Comments</td><td>YES</td><td>NO</td><td>NA</td></tr><tr><td>Part number and model designation</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Year of manufacture</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Manufacturer's name or logo</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Capacity Range</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Unique ID Number</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Standard Number (Z359.14)</td><td></td><td>X</td><td></td><td></td></tr><tr><td>How to inspect the visual indicator</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Warning to follow the manufacturer's instructions included with the equipment at time of shipment from the manufacturer</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Warning of the need for inspection in accordance with the manufacturer's instructions</td><td></td><td>X</td><td></td><td></td></tr><tr><td>The fiber or other materials used in the lanyard construction</td><td></td><td>X</td><td></td><td></td></tr><tr><td>The lanyard working length</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Average arresting force for the SRD class</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Arresting distance</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Proper installation means</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Warning on the need for testing the device for locking and retraction before each use</td><td></td><td>X</td><td></td><td></td></tr><tr><td>SRD class and arrest distance</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Warning of the need to avoid lanyard contact with sharp edges and abrasive surfaces (not required for LE devices)</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Free fall limit</td><td></td><td>X</td><td></td><td></td></tr><tr><td>Suitability for use with horizontal lifelines</td><td></td><td></td><td></td><td>X</td></tr><tr><td>Suitability for horizontal use</td><td></td><td></td><td></td><td>X</td></tr><tr><td>Suitability for Leading Edge capability</td><td></td><td>X</td><td></td><td></td></tr></table>		Marking	Comments	YES	NO	NA	Part number and model designation		X			Year of manufacture		X			Manufacturer's name or logo		X			Capacity Range		X			Unique ID Number		X			Standard Number (Z359.14)		X			How to inspect the visual indicator		X			Warning to follow the manufacturer's instructions included with the equipment at time of shipment from the manufacturer		X			Warning of the need for inspection in accordance with the manufacturer's instructions		X			The fiber or other materials used in the lanyard construction		X			The lanyard working length		X			Average arresting force for the SRD class		X			Arresting distance		X			Proper installation means		X			Warning on the need for testing the device for locking and retraction before each use		X			SRD class and arrest distance		X			Warning of the need to avoid lanyard contact with sharp edges and abrasive surfaces (not required for LE devices)		X			Free fall limit		X			Suitability for use with horizontal lifelines				X	Suitability for horizontal use				X	Suitability for Leading Edge capability		X			PASS
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5.2.1	Instructions shall be in English, and affixed to the equipment at time of shipment from the manufacturer		PASS																																																																																																														

TEST REPORT FOR KSTRONG

Date: December 21, 2023

Report No.: 105663091CRT-003

Section (Test)	Requirement	Results					Compliance
5.2.2	Instructions shall contain the following information:						PASS
	Instructions	Comments	YES	NO	NA		
	A statement that the manufacturer’s instructions shall be provided to the users		X				
	Manufacturers name, address, and telephone number		X				
	Manufacturer’s part number and model designation for the equipment		X				
	Intended use and purpose of the equipment		X				
	Proper method of use and limitations on use of the equipment		X				
	Illustrations showing locations of markings on the equipment		X				
	Reproduction of printed information on all markings		X				
	Inspection procedures required to assure the equipment is in serviceable condition and operating correctly		X				
	Anchorage requirements		X				
	Criteria for discarding equipment which fails inspection		X				
	Procedures for cleaning, maintenance, and storage		X				
	Reference to Z359 standards		X				
	Proper installation means and limitations on the type of anchorage connectors used		X				
	The fiber or other materials used in the lanyard construction		X				
	The lanyard length		X				
	The average arresting force when dynamically tested in accordance with the requirements of the standard		X				
	SRD class and arrest distance when dynamically tested in accordance with the requirements of the standard		X				
	How to determine fall clearance		X				
Testing the device for locking before each use		X					
5.2.3	Instructions shall require that only the equipment manufacturer, or persons or entities authorized in writing by the manufacturer, shall make repairs to the equipment						PASS
5.2.4	Instructions shall require the user to remove equipment from service if it has been subjected to the forces of arresting a fall or affecting a rescue						PASS
5.2.5	Instructions shall require the user to have a written rescue plan and the means at hand to implement it when using the equipment						PASS

Date: December 21, 2023

Section (Test)	Requirement	Results				Compliance
5.2.6	Instructions shall provide warnings regarding:					PASS
	Warnings	Comments	YES	NO	NA	
	Altering the equipment		X	X		
	Misusing the equipment		X			
	Using combinations of components or sub-systems, or both, which may affect or interfere with the safe function of each other		X			
	Exposing the equipment to chemicals, high heat, severe cold, or other harsh environments which may produce a harmful effect and to consult the manufacturer in case of doubt		X			
	Using the equipment around moving machinery and electrical hazards		X			
	Using the equipment near sharp edges or abrasive surfaces		X			
	Risk of striking an object or obstruction during a swing fall		X			
	That the consequences of improperly using the device, not following instructions or markings may cause serious injury or death		X			
6	User Inspection, Maintenance and Storage of Equipment					PASS

SUPPLEMENTAL TEST DATA

Section (Test)	Requirement	Results				Compliance
3.2.1/4.2.1	Static Strength: (ambient) shall withstand 3,600 lbs. when tested to: - apply a 3,600 lbs ,(+60/-0 lbs) load and maintain for 1-minute to the point of SRL line connection to the SRL drum (across the device)					PASS
			Sample: 1	Sample: 2	Sample: 3	
		Withstand load?	YES	YES	YES	

Date: December 21, 2023

Section (Test)	Requirement	Results	Compliance																																																												
3.3/4.3.1	<p>Dynamic Performance: "AMBIENT"</p> <ol style="list-style-type: none"> connect 310 lb. weight extract enough line for a 36-inch free fall per Fig 5 in Test Standard. release the test weight Max Arrest distance shall not exceed 42 inches. <table border="1"> <thead> <tr> <th></th><th>Sample: 1</th><th>Sample: 2</th><th>Sample: 3</th></tr> </thead> <tbody> <tr> <td>Conditioning in: (Ambient)</td><td></td><td></td><td></td></tr> <tr> <td>SN or ID:</td><td>4</td><td>5</td><td>6</td></tr> <tr> <td>Payout and retract the line per 3.3.1.2 following test</td><td>YES</td><td>YES</td><td>YES</td></tr> <tr> <td>Lock function shall operate per 3.3.1.1</td><td>YES</td><td>YES</td><td>YES</td></tr> <tr> <td>Visual indicator shall activate</td><td>YES</td><td>YES</td><td>YES</td></tr> <tr> <td>Max. Arrest Force: (lbs.) Class 1 & 2 < 1,800 lbs.</td><td>897</td><td>569</td><td>807</td></tr> <tr> <td>Avg Arrest Force (lbs.): Class 1 & 2 < 1,350 lbs.</td><td>615</td><td>532</td><td>623</td></tr> <tr> <td>Distance Initial (in): D1</td><td>83 ¼</td><td>83 ¼</td><td>83 ¼</td></tr> <tr> <td>Distance Final (in): D2</td><td>113 ½</td><td>108 ½</td><td>114</td></tr> <tr> <td>Arrest Distance (in): D2-D1 Class 1&2 < 42-inches</td><td>30 ¼</td><td>25 ¼</td><td>30 ¼</td></tr> </tbody> </table> <p>Retraction Strength: The weight of the line constituent, shall not be less than 1.25 lbs. (5.55N) or more than 25 lbs. (111.1N) at any point in the of range of motion provided by the line constituent when tested in accordance with 4.5.1.</p> <table border="1"> <thead> <tr> <th>Retraction</th><th>Sample 1</th><th>Sample 2</th><th>Sample 3</th></tr> </thead> <tbody> <tr> <td>Weight in lbs. at 1 ft</td><td>5.8</td><td>5.9</td><td>6.2</td></tr> <tr> <td>Weight in lbs at 50%</td><td>10.3</td><td>10</td><td>11.8</td></tr> <tr> <td>Weight in lbs at 100%</td><td>14.3</td><td>15.6</td><td>15.9</td></tr> </tbody> </table>		Sample: 1	Sample: 2	Sample: 3	Conditioning in: (Ambient)				SN or ID:	4	5	6	Payout and retract the line per 3.3.1.2 following test	YES	YES	YES	Lock function shall operate per 3.3.1.1	YES	YES	YES	Visual indicator shall activate	YES	YES	YES	Max. Arrest Force: (lbs.) Class 1 & 2 < 1,800 lbs.	897	569	807	Avg Arrest Force (lbs.): Class 1 & 2 < 1,350 lbs.	615	532	623	Distance Initial (in): D1	83 ¼	83 ¼	83 ¼	Distance Final (in): D2	113 ½	108 ½	114	Arrest Distance (in): D2-D1 Class 1&2 < 42-inches	30 ¼	25 ¼	30 ¼	Retraction	Sample 1	Sample 2	Sample 3	Weight in lbs. at 1 ft	5.8	5.9	6.2	Weight in lbs at 50%	10.3	10	11.8	Weight in lbs at 100%	14.3	15.6	15.9		PASS
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Date: December 21, 2023

SECTION (TEST)	REQUIREMENT	RESULTS				Compliance	
3.3.3/ 4.3.3	DYNAMIC PERFORMANCE: "AMBIENT"					PASS	
	5. Connect 310 lb. weight 6. Drop test weight from a level 5 feet +/- 1 inch 7. Allow weight to swing unrestrained for a period of not less than 10 seconds 8. Record the maximum and average arresting forces 9. Line must retain 1,000 lb. static load after drops						
	SRL Line Orientation: Perpendicular		SAMPLE: 4	SAMPLE: 5	SAMPLE: 6		
	Conditioning in: (4 hrs min)		24 Hr.	24 Hr.	24 Hr.		
	Lock function shall operate per 3.1.2		YES	YES	YES		
	Visual indicator shall activate		YES	YES	YES		
	Max. Arrest Force: (lbs.) Class A & B < 1,800 lbs.		1332	1114	1242		
	Avg Arrest Force (lbs.): Class A <1,350 lbs. Class B < 900 lbs.		839	797	918		
	Arrest Distance (in):		157 ½	157 ½	157 ½		
	Retain a minimum of 1,000 lbs of residual tensile strength following the test		YES	YES	YES		
	SRL LINE ORIENTATION: 5' OFFSET		SAMPLE: 7	SAMPLE: 8	SAMPLE: 9		
	Conditioning in: (4 hrs min)		24 Hr.	24 Hr.	24 Hr.		
	Lock function shall operate per 3.1.2		YES	YES	YES		
	Visual indicator shall activate		YES	YES	YES		
	Max. Arrest Force: (lbs.) Class A & B < 1,800 lbs.		1131	1202	1108		
	Avg Arrest Force (lbs.): Class A <1,350 lbs. Class B < 900 lbs.		849	796	819		
	Arrest Distance (in):		157 ½	157 ½	157 ½		
	Retain a minimum of 1,000 lbs of residual tensile strength following the test		YES	YES	YES		

SECTION 5**REVISION HISTORY**

REPORT NUMBER	DATE OF REVISION	DESCRIPTION OF CHANGE:	PROJECT OWNER	REVIEWED BY
105209482CRT-001	10/28/2022	Original Report	Steve Morey	Matthew Stevens
105376372CRT-009	3/27/2023	Report Revision	Alex Smith	Matthew Stevens
105663091CRT-003	12/08/2023	Report Revision: Added Model & Picture	Alex Smith	Matthew Stevens
105663091CRT-003	12/08/2023	Updated Page 4: (Yes) suitable for LE	Alex Smith	Matthew Stevens

SECTION 6**PHOTOGRAPH**

UFS480018L

