

## **Test Report CSA Z259.2.2-2017**

Pure Safety Group, Inc. 607 East Sam Houston Pkwy S Suite 800, Pasadena, TX 77053

Test Report Number: 2024032610915CSA

Job Number: Test 1547
Product SKU#: 10915CSA

**Product Type:** Self-Retracting Device

Product Description: CSA certified Halo Series 30' galvanized cable retractable lifeline with swivel top/hook & carabiner

**Testing Standard:** CSA Z259.2.2-2017, Self-Retracting Devices

**Dates of Manufacture:** 9/01/2023, 12/01/2023,

Date(s) of Testing: 12/06/2023, 12/07/2023, 12/08/2023, 1/09/2024, 1/10/2024

### REQUIREMENT VERIFICATION

Requirement Description	<u>Clause/Section</u>	Result
Design Requirements	5. Design Requirements	Meets or Exceeds
Markings and Instructions	8. Markings and Instructions	Meets or Exceeds

### **QUALIFICATION TESTING**

Test Description	<u>Test Date</u>	Clause/Section	<u>Result</u>
Retraction Tension	12/06/2023	7.1.2 Test Procedure (all SRDs)	Pass
Dynamic Performance (Ambient)	12/08/2023	7.2.3 Test Procedure (all SRDs)	Pass
Dynamic Performance (Cold)	12/08/2023	7.2.3.3 Cold Conditioning	Pass
Dynamic Performance (Hot)	1/10/2024	7.2.3.4 Hot Conditioning	Pass
Dynamic Performance (Corrosion)	1/09/2024	7.2.3.5 Salt Spray Conditioning	Pass
Post-Dynamic Creep	12/08/2023	7.3.3 Test Procedure (all SRDs)	Pass
Static Strength	12/07/2023	7.4.2 Test Procedure (all SRDs)	Pass
Locking Performance	12/06/2023	7.6.2 Test Procedure (all SRDs)	Pass

This test report covers these additional products:

10912CSA, 10910CSA

Please contact quality@guardianfall.com for signed report.

Test Equipment			
Equipment	Model	Serial	
Load Cell	1210AF-10K-B	470679A	
Load Cell	1210AF-10K-B	444522A	
Load Cell	1220ACK-25K-B	367976A	
Measuring Tape (Pasadena)	TX1-25	20243699	
Test Weight	282 lb	GFP001	
Test Weight	18 lb	GFP002	
Test Weight	10 lb	7HME	
Environmental Chamber	S-8-8200	46336	
Environmental Chamber	SM-16-8200	49357	
Scale	Totalcomp	02314063019	
Salinity Tester	HI998319	LA02500060	
PH Meter	H18424	03370090101	
Salt Spray Chamber	SS600e	2018052202	

Notes		a.	
		1207 1207	

5.1	General	
5.1.1	General Requirements Self-retracting devices shall meet all design requirements, unless otherwise stated. Where a design requirement does not have an accompanying test, the manufacturer shall attest that the requirement has been met.	Meets or Exceeds
5.1.2	Locking Function  When subjected to accelerations associated with a fall, the mechanism that stops the extraction of the lifeline from a SRD shall engage automatically. The mechanism shall not be capable of being overridden	Meets or Exceeds
5.1.3	Integral Connectors All connectors integral to a self-retracting device shall	P. All
а	meet the requirements of CSA Z259.12, Class I;	Meets or Exceeds
b	be compatible with all other connectors or devices intended to be connected to them; and	Meets or Exceeds
С	contain a swivel unless the SRD housing incorporates a swivel connection.	Meets or Exceeds
5.1.4	Energy Absorbtion (all SRDs) An integral energy absorber and energy absorbing mechanism of a SRD shall function for all amounts of usable line extracted from the device. Note: Any SRD should have the capacity to control the deceleration of, and forces imparted on, its user in arresting a fall. In future editions of this Standard, this might include the provisions for performance factors and other requirements pertaining to energy absorption that are not contemplated with SRL class devices in this edition	Meets or Exceeds
5.1.5	Class SRL-LE and Class SRL-LE-R Energy Absorbtion The energy absorbing capability of Class SRL-LE and Class SRL-LE-R devices shall have a performance factor, P, of not less than 1.8, in accordance with the calculation specified in Clause 6.2.8 c) when tested in accordance with the dynamic leading edge test specified in Clause 6.2.7 and the aggregate energy absorption test specified in Clause 6.2.8	NA
5.1.6	Subsequent Fall Arrest A SRD shall be capable of locking up and fully paying line in and out subsequent to removal of the fall arrested load. This shall be accomplished by use of hands only, no tools can be allowed to aid in the retraction of the lifeline.	Meets or Exceeds
5.1.7	Fall-Arrest Indicator A SRD shall have a fall-arrest indicator that activates when subjected to the conditions of the performance tests specified in Clauses 6.2.2, 6.2.7, and 6.2.8. During the process of connecting the SRD to the full body harness, the worker shall be able to determine visually if a fall-arrest indicator has been deployed	Meets or Exceeds
5.1.8	Class SRL-R and Class SRL-LE-R Rescue Mode (Manual) Class SRL-R and Class SRL-LE-R shall	
а	require a deliberate action to switch between fall-arrest and rescue mode;	NA
b	be capable of switching between fall-arrest and rescue modes while holding a fall-arrested load;	NA
c	be capable of extracting and retracting the line in rescue mode while holding a fall-arrested load;	NA
d	require a deliberate action to extract or retract the line in rescue mode;	NA
e	have a steadying handle or be provided with a means of stabilizing the device to aid in the retrieval (recovery) function;	NA
f	have a minimum mechanical advantage of 3:1 in rescue mode; and	NA
g	be capable of holding steady the mass of the fall-arrested load if the rescue operation is stopped in rescue mode	NA

5.1.9	Class SRL-R and Class SRL-LE-R Rescue Mode (Powered) Class SRL-R and Class SRL-LE-R having a powered operation shall:	
a	not exceed 2.5 times its maximum capacity for lifting or lowering a weight;	NA
b	not exceed a speed of 610 mm/s (2 ft/sec) for lifting or lowering a weight;	NA
С	be provided with an integral manual function that will operate when the powered function does not; and	NA
d	have an integral mechanism that limits the lifeline tension to the value in Item a) of this Clause.	NA
5.1.10	Maximum Arrest Force A SRD shall not impose a maximum arrest force greater than 8.0 kN (1800 lbf) when used in accordance with the manufacturer's instructions	Meets o Exceeds
5.1.11	Averaged Arrest Force A SRD shall not impose an average arrest force greater than 6.0 kN (1350 lbf) when tested in accordance with Clauses 6.2.7 and 6.2.8.	
5.2	Materials	1
5.2.1	General Material specifications and design of all components shall ensure durability and reliability of operation in temperature ranges from –35 °C to +35 °C (–31 °F to 95 °F) and during handling encountered in normal field use. Where a design requirement does not have an accompanying test, the manufacturer shall attest that the requirement has been met.  Components made of materials which can degrade due to exposure to sunlight or other environmental factors, which are critical to the intended operation of the device, shall be protected against such degradation. Protection shall be provided by shielding of the components or other suitable means such that the components breaking strengths are maintained above 80% of their original values between revalidation services.  A lifeline for a SRD shall:	
a	be constructed of wire rope, synthetic rope, or webbing;	Meets o Exceeds
b	have strength, ageing, and abrasion resistance characteristics suitable for its intended applications; and	Meets o
С	comply with manufacturer's specifications, stranding, and construction	Meets o
5.2.2	Metal Elements and Corrosion When tested in accordance with Clauses 6.1.2 to 6.1.5, where applicable, all elements of a SRD shall be provided with a means of corrosion protection. At a minimum, this protection shall allow the device to operate as intended. All surfaces which can come in contact with lifeline materials or the worker shall be free of burrs, pits, sharp edges, or rough surfaces.	Meets o Exceeds
5.2.3	Webbing Webbing used as a line constituent of a SRD shall be made of virgin synthetic materials. The materials shall have strength, ageing, abrasion resistance, and heat resistance characteristics equivalent to or superior to polyamides. Polypropylene shall not be used.  Webbing shall have a minimum breaking strength of 20 kN (4500 lbf). Webbing shall have a maximum elongation of 20% of the maximum extracted length for dry conditions and 22% of the maximum extracted length for wet conditions when subjected to a load of 11.1 kN (2495 lbf).  The lifeline shall be free of knots, splices [other than end termination(s)], and other conditions that	Meets o Exceeds

5.2.4	Wire Rope Wire rope shall:	6
а	be constructed of stainless steel or galvanized steel strand;	Meets o
b	have a minimum breaking strength of 15 kN (3370 lbf) when tested in accordance with ASTM E139; and	
С	have a minimum nominal diameter of 4.7 mm (0.19 in).	Meets o
	The lifeline shall be free of knots, splices [other than end termination(s)], and other conditions that could reduce the breaking strength of the lifeline by more than 10%.	Meets o
5.2.5	Synthetic Rope Synthetic rope used as a line constituent of a SRD shall be made of virgin synthetic materials having strength, ageing, abrasion resistance, and heat resistance characteristics equivalent to or superior to polyamides. Synthetic rope shall have characteristics that are consistent with ISO 1140 or ISO 1141. Polypropylene shall not be used.  Synthetic rope shall have a minimum breaking strength of 20 kN (4500 lbf) and shall have a maximum elongation of 10% for dry conditions and 14% for wet conditions when subjected to a load of 8 kN (1800 lbf) when tested in accordance with ISO 2307 or CI-1500A/CI-1500B, as applicable.  The lifeline shall be free of knots, splices [other than end termination(s)], and other conditions that	NA
	could reduce the breaking strength of the lifeline by more than 10%.	
5.3	Terminations	
5.3.1	Eye Splices  Eye splices in laid fiber rope shall consist of four tucks using all the yarns in the strands and two tapered tucks. The length of the splicing tails emerging after the last tuck shall be at least one rope diameter in length. Tails shall be whipped to the rope and protected with a rubber or plastic sleeve, or otherwise integrally finished to prevent the termination or splice from unraveling. Sealing compounds used shall be compatible with the rope material. Eyes shall be formed around a plastic or metal thimble of size and strength in accordance with the rope manufacturer's instructions.	
5.3.2	Stitched Eye Terminations Stitched eye terminations on webbing lifelines shall be sewn using lock stitching. Thread shall be compatible with the webbing material and shall be a contrasting color to facilitate inspection. Reinforcement or another method shall be used to protect terminations from concentrated wear at all webbing-to-metal fitting interfaces. Webbing ends shall be seared or otherwise prevented from unraveling.	NA
5.3.3	Eye terminations of wire rope Eye terminations of wire rope lifelines shall be manufactured either with	
а	a spliced eye with one compression swage with thimble; or	Meets of Exceed
b	a return eye with a minimum of two compression swages with thimble.	Meets of Exceed
5.3.4	Fitting Selections Selection of swage fitting, size, material type, compression die size/pressure, position of swage(s) on rope, and thimble size shall be carried out in accordance with the rope manufacturer's instructions. Aluminum swages should be used for steel wire ropes and copper swages should be used for stainless steel wire ropes	NA
5.3.5	Wire Rope Ends Wire rope ends shall be brazed, whipped, or have an equivalent finish to prevent unraveling. Brazing should be carried out prior to forming the eye	Meets of Exceed

5.3.6	Knots Knots shall not be used to form lifeline terminations.	NA
5.3.7	Internal termination The internal termination of the lifeline to the lifeline drum or other shall be such that	SV
а	the lifeline cannot be separated from the drum in normal use, especially when the lifeline is at the maximum working length; and	NA
b	it does not reduce the strength of the lifeline by more than 10%	NA
8	Marking and Instructions	Q.) .
8.1	Markings and Instructions	
8.1.1	Markings The following shall be durably and legibly marked or labelled in both English and French	
а	the manufacturer's name or logo;	Meets or Exceeds
b	lifeline specifications including material and diameter;	Meets or Exceeds
c	model number if applicable;	Meets or Exceeds
d	lot, serial number, and date of manufacture;	Meets or Exceeds
e	the Standard designation and edition (CSA Z259.2.2); and	Meets or Exceeds
f	the device classification in accordance with Clause 4.	Meets or Exceeds
8.1.2	Additional Markings The following shall be durably and legibly marked or labelled in both English and French:	8
а	the range of worker mass;	Meets or Exceeds
b	a statement designating the SRD is for use by one worker;	Meets or Exceeds
c	the working length of the lifeline;	Meets or Exceeds
d	maximum arrest force in kN (lbf);	Meets or Exceeds
е	for Class SRL and Class SRL-R devices, the maximum deployment based on the results of the dynamic performance testing specified in Clause 7.2;	Meets or Exceeds
f	for Class SRL-LE and Class SRL-LE-R devices i: the average deployment force in kN (lbf) calculated from the manufacturer's published value of the deployment factor, Dm; ii: "When SRD is anchored overhead, maximum deployment = [deployment based on results of the dynamic performance testing specified in Clause 7.2]. When SRD is anchored so that free fall is possible, maximum deployment = [deployment based on results of the leading edge testing specified in Clause 7.3 or the aggregate energy absorption test specified in Clause 7.8.3, whichever is greater]"; iii: "Deployment factor, Dm = [Deployment factor for the maximum rated worker mass]. See instructions for further details on deployment." Dm shall indicate the mass for which the deployment factor is valid. (i.e., D140 would indicate the deployment factor for a 140 kg worker.) The published value for the deployment factor shall be, rounded to the nearest tenth. The published values for the deployment factor, Dm, and the average deployment force, Favg, shall be more conservative than the values as obtained from the test(s) without conditioning (i.e., highest deployment factor, lowest, Favg); iv: the maximum free-fall distance in m (ft); and v: the minimum horizontal distance in m (ft) that the anchorage point shall be setback from a fall hazard or edge as determined by the manufacturer	Meets or Exceeds

8.1.3	Instructions	
a	the manufacturer's name or logo;	Meets or Exceeds
b	lifeline specifications including material and diameter;	Meets or Exceeds
с	model number if applicable;	Meets or Exceeds
d	lot, serial number, and date of manufacture;	Meets or Exceeds
е	the Standard designation and edition (CSA Z259.2.2); and	Meets or Exceeds
f	the device classification in accordance with Clause 4.	Meets or Exceeds
8.1.4	Warnings	55 Y
8.1.4.1	All SRD's shall bear the following warnings: "WARNING: Follow all manufacturer's instructions included at time of shipping" and «AVERTISSEMENT: Suivre toutes les instructions du fabricant fournies avec le dispositif lors de sa livraison» and	Meets or Exceeds
	"WARNING: This device shall be removed from service when the visual load indicator is deployed" and «AVERTISSEMENT: Ce dispositif doit être retiré du service lorsque l'indicateur de chute du est activé»	
8.1.4.2	All Class SRL and Class SRL-R devices shall bear the following warnings:  "WARNING: Lifeline shall not contact edges or surfaces during fall arrest" and «AVERTISSEMENT: La corde d'assurance ne doit pas entrer en contact avec des bords ou des surfaces lors de l'arrêt de chute.»  and  "WARNING: Anchor above user's Dorsal D-Ring" and «AVERTISSEMENT: Ancrer au-dessus de l'anneau en D dorsal du harnais de l'utilisateur».	Meets or Exceeds
8.1.4.3	All Class SRL-LE and Class SRL-LE-R devices shall bear the following warning:  "WARNING: Leading edge device"  and	Meets or Exceeds
	«AVERTISSEMENT :Dispositif conçu pour les bords coupants ».	
8.1.4.4	All warnings shall appear on the body of the SRD. The word "WARNING" shall be a minimum of 18 point font.	Meets of Exceeds
8.2	Periodic Inspection and Revalidation All SRD's shall have periodic inspection and revalidation in accordance with Table 2.	Meets or

### 7.1.2 Retraction Tension

Requirements per Section 6.2.1

- a) Suspend the SRD from a rigid anchor as specified in the manufacturer's instructions and as shown in Figure 1.
- b) When the SRD is in the fully retracted position, connect the lifeline clamp as specified in Clause 7.1.1.2 and the tension test gauge instrument as specified in Clause 7.1.1.1 to the lifeline
- c) Extract at least 1 m +/– 100 mm (39  $\pm$  4 in) of lifeline by pulling on the gauge
- d) Align the gauge load axis with the vertical and slowly allow the lifeline, including connectors, to retract at least 1 m (39 in) over a period of at least 10 seconds.
- e) Record the minimum force during retraction.
- f) Extract 100% of the lifeline, based upon the manufacturer's rated length of line of the SRD.
- g) Starting with reconnection of the lifeline clamp and gauge, repeat the procedure, with 100% of the lifeline extracted. The weight of the line constituent shall be accounted for by allowing it to suspend below the connection point of the lifeline clamp. The line may be secured into a coil below the lifeline clamp.
- h) Repeat this procedure for 80, 60, 40, and 20% extraction of the lifeline based on the manufacturer's rated length of line of the SRD. The tolerances for these values shall be +/- 100 mm (4 in).
- i) The tested samples shall comply with the requirements of Clause 6.2.1

<b>7.1.2 Retraction Tension</b> <i>Requirements per Section 6.2.1</i>		
Results	Sample #	
Retraction Tension at 1m (>4.5 N but <89 N) (N)	7.2	
Retraction Tension at 20% (>4.5 N but <89 N) (N)	5.4	
Retraction Tension at 40% (>4.5 N but <89 N) (N)	4.8	
Retraction Tension at 60% (>4.5 N but <89 N) (N)	5.4	
Retraction Tension at 80% (>4.5 N but <89 N) (N)	9.0	
Retraction Tension at 100% (>4.5 N but <89 N) (N)	10.4	
Assessment	Pass	

### **7.2.3 Test Procedure (All SRDs), Ambient** *Requirements per Section 6.2.2*

- a) The SRD to be tested shall be suspended from a connecting link, load cell, and connection point on the drop test structure as shown in Figure 3.
- b) The connecting link shall be connected to the SRD in accordance with the manufacturer's instructions.
- c) The lifeline shall be extracted from the housing such that the distance from the SRD cable outlet to the test mass load-bearing point is 61 cm (24 in). A lifeline clamp, as specified in Clause 7.1.1.2, shall be affixed to the lifeline to prevent retraction of the lifeline prior to the release of the test mass.
- d) The test mass specified in Clause 7.2.1.3, attached to the quick-release mechanism specified in Clause 7.2.1.1, shall be hoisted into a position adjacent to the SRD such that the test mass loadbearing point is positioned on the same horizontal plane as the point at which the lifeline enters the SRD cable outlet.
- e) If the fully-retracted distance from the SRD cable outlet to the test mass load-bearing point is greater than 61 cm (24 in), the test mass shall be hoisted to a position such that the free-fall distance is not less than 61 cm (24 in) without the use of the lifeline clamp.
- f) The end connector of the SRD shall be attached directly to the test mass.
- g) The horizontal distance between the quick-release mechanism and the SRD cable outlet shall not exceed 50 cm (20 in). See Figure 3.
- h) When the test is arranged as shown in Figure 3, the test mass shall be released and allowed to free fall before the lifeline begins to pay out.

7.2.3 Test Procedure (All SRDs), Ambient Requirements per Section 6.2.2		
Results	Sample # 01	
Test mass held above the ground?	Yes	
Maximum Arrest Force (<8 kN (1,800 lb)) (lb)	1342.03	
Initial Height (in.)	128.75	
Final Height (in.)	77	
Arrest Distance (<1,200 mm (47.24 in.)) (in.)	27.75	
Sample still functions correctly post-drop?	Yes	
7.3.3 Post Dynamic Creep (in.)	0	
Assessment	Pass	



### 7.2.3.3 Test Procedure (All SRDs), Cold

Requirements per Section 6.2.2

- a) A new and unused SRD shall be conditioned at  $-35 \pm 2$  °C ( $-31 \pm 3.6$  °F) for a minimum of 8 h.
- b) The SRD to be tested shall be suspended from a connecting link, load cell, and connection point on the drop test structure as shown in Figure 3.
- c) The connecting link shall be connected to the SRD in accordance with the manufacturer's instructions.
- d) The lifeline shall be extracted from the housing such that the distance from the SRD cable outlet to the test mass load-bearing point is 61 cm (24 in). A lifeline clamp, as specified in Clause 7.1.1.2, shall be affixed to the lifeline to prevent retraction of the lifeline prior to the release of the test mass.
- e) The test mass specified in Clause 7.2.1.3, attached to the quick-release mechanism specified in Clause 7.2.1.1, shall be hoisted into a position adjacent to the SRD such that the test mass loadbearing point is positioned on the same horizontal plane as the point at which the lifeline enters the SRD cable outlet.
- f) If the fully-retracted distance from the SRD cable outlet to the test mass load-bearing point is greater than 61 cm (24 in), the test mass shall be hoisted to a position such that the free-fall distance is not less than 61 cm (24 in) without the use of the lifeline clamp.
- g) The end connector of the SRD shall be attached directly to the test mass.
- h) The horizontal distance between the quick-release mechanism and the SRD cable outlet shall not exceed 50 cm (20 in). See Figure 3.
- When the test is arranged as shown in Figure 3, the test mass shall be released and allowed to free fall before the lifeline begins to pay out.

### **7.2.3.4 Test Procedure (All SRDs), Hot**Requirements per Section 6.2.2

- a) The SRD shall be conditioned at +35  $\pm$  2 °C (95  $\pm$  3.6 °F) for a minimum of 8 h.
- b) The SRD to be tested shall be suspended from a connecting link, load cell, and connection point on the drop test structure as shown in Figure 3.
- c) The connecting link shall be connected to the SRD in accordance with the manufacturer's instructions.
- d) The lifeline shall be extracted from the housing such that the distance from the SRD cable outlet to the test mass load-bearing point is 61 cm (24 in). A lifeline clamp, as specified in Clause 7.1.1.2, shall be affixed to the lifeline to prevent retraction of the lifeline prior to the release of the test mass.
- e) The test mass specified in Clause 7.2.1.3, attached to the quick-release mechanism specified in Clause 7.2.1.1, shall be hoisted into a position adjacent to the SRD such that the test mass loadbearing point is positioned on the same horizontal plane as the point at which the lifeline enters the SRD cable outlet.
- f) If the fully-retracted distance from the SRD cable outlet to the test mass load-bearing point is greater than 61 cm (24 in), the test mass shall be hoisted to a position such that the free-fall distance is not less than 61 cm (24 in) without the use of the lifeline clamp.
- g) The end connector of the SRD shall be attached directly to the test mass
- h) The horizontal distance between the quick-release mechanism and the SRD cable outlet shall not exceed 50 cm (20 in). See Figure 3.
- When the test is arranged as shown in Figure 3, the test mass shall be released and allowed to free fall before the lifeline begins to pay out.

7.2.3 Test Procedure (All SRDs), Cold Requirements per Section 6.2.2		
Results	Sample #	
Test mass held above the ground?	Yes	
Maximum Arrest Force (<8 kN (1,800 lb)) (lb)	1131.04	
Initial Height (in.)	129	
Final Height (in.)	66.75	
Arrest Distance (<1,200 mm (47.24 in.)) (in.)	38.25	
Sample still functions correctly post-drop?	Yes	
7.3.3 Post Dynamic Creep (in.)	0	
Assessment	Pass	

7.2.3.4 Test Procedure (All SRDs), Hot Requirements per Section 6.2.2		
Results	Sample # 03	
Test mass held above the ground?	Yes	
Maximum Arrest Force (<8 kN (1,800 lb)) (lb)	1392.79	
Initial Height (in.)	141.25	
Final Height (in.)	89	
Arrest Distance (<1,200 mm (47.24 in.)) (in.)	28.25	
Sample still functions correctly post-drop?	Yes	
7.3.3 Post Dynamic Creep (in.)	0	
Assessment	Pass	



### 7.2.3.5 Test Procedure (All SRDs), Corrosion

Requirements per Section 6.2.2

- a) The SRD shall be subjected to a salt spray test in accordance with ASTM B117 or ISO 9227 neutral salt spray (NSS) procedure for a 48 h exposure
- b) The SRD to be tested shall be suspended from a connecting link, load cell, and connection point on the drop test structure as shown in Figure 3.
- c) The connecting link shall be connected to the SRD in accordance with the manufacturer's instructions.
- d) The lifeline shall be extracted from the housing such that the distance from the SRD cable outlet to the test mass load-bearing point is 61 cm (24 in). A lifeline clamp, as specified in Clause 7.1.1.2, shall be affixed to the lifeline to prevent retraction of the lifeline prior to the release of the test mass.
- e) The test mass specified in Clause 7.2.1.3, attached to the quick-release mechanism specified in Clause 7.2.1.1, shall be hoisted into a position adjacent to the SRD such that the test mass loadbearing point is positioned on the same horizontal plane as the point at which the lifeline enters the SRD cable outlet.
- f) If the fully-retracted distance from the SRD cable outlet to the test mass load-bearing point is greater than 61 cm (24 in), the test mass shall be hoisted to a position such that the free-fall distance is not less than 61 cm (24 in) without the use of the lifeline clamp.
- g) The end connector of the SRD shall be attached directly to the test mass
- h) The horizontal distance between the quick-release mechanism and the SRD cable outlet shall not exceed 50 cm (20 in). See Figure 3.
- When the test is arranged as shown in Figure 3, the test mass shall be released and allowed to free fall before the lifeline begins to pay out.

7.4.2	Static	Strengt	h T	est	(All	SRDs	)
_			_		_		

Requirements per Section 7.4.2

- a) The lifeline shall be shortened to allow installation in the static tensile test equipment as specified in Clause 7.4.1.
- b) With the lifeline and any reserve fully extracted, the SRD shall be installed in the static tensile test equipment and a load of not less than 13.3 kN (2990 lbf) shall be applied across the device, at a rate not greater than 50 mm (2 in) per min.
- c) The load shall be maintained for a period of 1 min

Results	Sample # 04
Test mass held above the ground?	Yes
Maximum Arrest Force (<8 kN (1,800 lb)) (lb)	985.75
Initial Height (in.)	162
Final Height (in.)	108.25
Arrest Distance (<1,200 mm (47.24 in.)) (mm)	29.75
Sample still functions correctly post-drop?	Yes
7.3.3 Post Dynamic Creep (in.)	0
Assessment	Pass

7.4.2 Static Strength Test (All SRDs) Requirements per Section 7.4.2			
Results	Sample # 05		
Maximum Load Applied (≥13.3 kN (2,990 lb)) (lb)	3014.24		
Sample maintained load for period of ≥1 Minute	Yes		
Assessment	Pass		

### Notes

PSG-QUA-TRP-2024032610915CSA



### 7.6.2 Test Procedure (All SRDs)

Requirements per Section 6.2.6

- a) The SRD to be tested shall be suspended from the point of anchorage of the drop test structure in accordance with the manufacturer's instructions.
- b) The test mass attached to the quick-release mechanism specified in Clause 7.2.1.1 shall be hoisted into a position such that it is as near to directly below the SRD as possible and not more than 305 mm (12 in) offset horizontally.
- c) The connector of the SRD lifeline shall be attached directly to the test mass. The test mass shall be lowered until  $600 \pm 200$  mm ( $24 \pm 8$  in) of the lifeline is extracted from the SRD. The SRD locking mechanism shall not be locked prior to the test mass being released. See Figure 8.
- d) The test shall be arranged such that there will be no free fall of the test mass, other than lock-off of the device.
- e) The test mass shall be released.
- f) It shall be verified that the SRD locked off and held the load for a minimum of 1 min.
- g) The arrest distance, Xa, shall be recorded
- h) The tested samples shall comply with the requirements of Clause 6.2.6.

## Pictured: 10915CSA Represents all part #s

<b>7.6.2 Test Procedure (All SRDs)</b> Requirements per Section 6.2.6		
Results	Sample # 06	
Test mass held above the ground?	Yes	
Initial Height (in.)	111	
Final Height (in.)	95	
Arrest Distance (in.) <600 mm (24 in.) for nominal working length of less than 6 m <900 mm (36 in.) for nominal working length of more than 6 m	16	
Test mass held for >1 minute?	Yes	
Assessment	Pass	



# Labels Applicable to all part #s Class SRL Labels Class SRL Labe



### Labels Applicable to all part #s



Part #

Date of Manufacture

Serial #

10915CSA

MM YY

▲ WARNING Read supplied instructions before using. Failure to follow instructions may result in serious injury or death. Never modify product. Contact Manufacturer for repair process.

USE This device is only for use by one person as a fall arrester. Only make connections directly to dorsal attachment point on safety harness. Guard against swing-fall by keeping lifeline vertically overhead. Ensure that connection to anchorage is secured properly before use. Avoid lifeline contact with sharp or abrasive edges and surfaces. May be used as a component of a PFAS in HLL applications. Design, installation, and utilization of HLLs must be supervised by a Qualified Person. Not suitable for horizontal use. Competent Person must calculate fall clearance prior to use; fall clearance calculations must include considerations for swing fall. Clearance numbers specified based on lifeline installed vertically overhead and in-line with worker.

INSPECTION Prior to each use, check locking (pull sharply to test) and retraction function. Inspect for signs of deployment, defects or damage to housing, lifeline (inspect full length), connectors, or missing parts. Inspect impact indicator - see instruction manual. Ensure presence and legibility of all labels. Inspection by Competent

Person required at least every 12 months. Immediately remove from service in event of failed inspection, or if unit is subjected to a fall.

Date of First Use Initials Date

Lifeline Material: Galvanized Steel | Length: 30 ft (9,1 m)

Max. Arrest Force: 1,800 lb (8kN)

Avg. Deployment Force: 900 lb (4,4 kN)

User Capacity Weight Range (incl. tools and equipment): 100-310 lb (45-140 kg)

Min. Setback Distance From Edge: 0 ft

Max. Arrest Distance: 3 ft 11 in (1,2 m)

Max. Free Fall: Not Permitted

Min. Required Fall Clearance: 7 ft 5 in (2,3 m)

Designed and Tested in USA.

See manual for additional inspection grid.

Made in Taiwan.





DO NOT REMOVE

**HEIGHT SAFETY.** SIMPLIFIED.

guardianfall.com

**Notes** 

