



PEAKWORKS®

Self-Retracting Lifelines



Certified to:

CSA Z259.2.2-17

Product Specific Name

SRL-73303-60 / V845643060

SRL-73303-96 / V845643096



**READ CAREFULLY
BEFORE USE**

A



Brand

surewerx.com

Canada:

SureWerx, 49 Schooner St.,
Coquitlam, BC V3K 0B3

Made in Germany

INTRODUCTION

This manual contains the Manufacturer's Instructions as required by CSA Z259.2.2 It should be used as part of the fall protection training program required by law. All PeakWorks® products are designed and engineered to meet or exceed applicable CSA and ANSI standards along with labour ministry requirements.

WARNING: All persons using this equipment must read and understand all the instructions and warnings contained in this manual. Failure to do so may result in serious injury or death. Do not use this or any other fall protection equipment unless you have been properly trained.

FALL PROTECTION

It is the employer's responsibility to provide fall protection and training for any worker deemed to be working at height. In Canada, any worker that is more than 3 meters from the ground or first obstruction must have fall protection.

SYSTEM COMPATIBILITY

PeakWorks equipment has been designed and approved for use only with PeakWorks connectors. Any substitution of components may result in compatibility issues. Users should always ensure that the connectors are properly selected and connected so as not to allow a load to be applied to the gate of the connector.

Failure to do so may result in serious injury or death. Do not use this or any other fall protection equipment unless you have been properly trained.

TABLE OF FALL PROTECTION STANDARDS

Fall protection equipment is governed in Canada by the Canadian Standards Association (CSA).

Canadian Standards Association Fall Protection Standards:

CSAZ259.1	Safety Belts and Saddles for Work Positioning and Travel Restraint
CSA Z259.2.2	Self-Retracting Devices for Personal Fall-Arrest Systems
CSA Z259.2.3	Descent Control Devices
CSA Z259.2.4	Fall Arrestor and Fixed Rigid Rails
CSA Z259.2.5	Fall Arrestor and Vertical Lifelines
CSA Z259.10	Full Body Harness
CSA Z259.11	Energy Absorbers and Lanyards
CSA Z259.12	Connecting Components for Personal Fall Arrest Systems
CSA Z259.13	Flexible Horizontal Lifelines
CSA Z259.14	Fall Restrict Equipment for Wood Pole Climbing
CSA Z259.15	Anchorage Connectors
CSA Z259.16	Design of Active Fall Protection Systems

TRAINING

All workers and their employer must be trained in the correct use, care, and maintenance of this and any other fall protection equipment used. It is the employer's responsibility to provide proper fall protection training for all workers using fall protection equipment. Both the worker and the employer must be aware of the correct and incorrect applications and use of this equipment.

Failure to do so may result in serious injury or death. Do not use this or any other fall protection equipment unless you have been properly trained.

RESCUE PLAN

A rescue plan is an integral and critical part of any fall protection plan and system. It is the responsibility of the employer to have a rescue plan prepared by a competent person. All workers using any fall arrest system must have a rescue plan prior to using the system.

REPAIR

Do not attempt to repair or alter this fall protection equipment. Repairs can only be performed by the manufacturer or its authorized agents.

ELECTRICAL HAZARD

Due to the highly conductive nature of the materials used in the construction of this SRL, use extreme caution when working near unprotected high voltage sources. If in doubt, ask!

SHARP EDGES, ABRASION & CUTTING

The wire rope or the webbing of the SRL should never be allowed to come in contact with sharp edges or abrasive surfaces. Such contact could prevent the SRL from arresting a fall.

Failure to do so may result in serious injury or death.

SRL OVERVIEW

All PeakWorks' SRLs have been designed and engineered to meet or exceed all applicable standards and Ministry of Labour requirements. This PeakWorks Self-Retracting Lifeline is intended for use as a Fall Arrest Block or Fall Recovery Block. It is not intended for use with work positioning, man-riding, goods lifting or moving/lifting materials.

SRL SPECIFICATIONS

Description

Self-retracting devices (SRD) shall be classified as follows:

(a) Self-retracting lifeline (Class SRL):

A Class SRL device shall be suitable for applications where

- i) it is anchored at an elevation which limits the free fall to the activation distance of the device; and
- ii) the extracted lifeline cannot bear against an edge or surface during fall arrest.

(b) Self-retracting lifeline with integral rescue capability (Class SRL-R):

A Class SRL-R device shall be a Class SRL device that is provided with an integral means for assisted rescue.

Note: Assisted rescue via raising or lowering the rescue subject.

SRL-R Performance Data

Maximum Arresting Force:	1,350 lbF (8 kN)
Average Arresting Force:	926 lbF (4.12 kN)
Capacity:	310 lbs (140 kg) including tools
Lifeline:	Galvanised steel cable 0.21 in (5.5 mm)
Complies to:	CSA Z259.2.2-17

SRL CAPACITY

PeakWorks SRLs are designed for use by a single person with a combined weight (clothing, tools, etc.) of no more than 310 lbs. Make sure all of the components in your system are rated to a capacity appropriate to your application.

SRL COMPATIBILITY

All PeakWorks' SRLs come with a carabiner to connect to an anchor and a snap hook to connect to a full-body harness. PeakWorks equipment has been designed and approved for use only with PeakWorks connectors. Any substitution of components may result in compatibility issues. If you have any questions about component compatibility, please contact PeakWorks.

Warning: Do not connect to this SRL with form hooks or any other large opening

SRL GENERAL OPERATION

The mechanism in this device is activated by centrifugal force acting on the brakes. This action is produced by the inertia of a fall rapidly spinning the internal drum, which in turn causes the brakes to lock and arrest the fall. Slow reeling of the line will not activate the brake. If the brake locks—due to a fall—the mechanism will reset if the load is removed. In a fall arrest situation the mechanism will limit the force acting on the body to less than 8 kN. This device is designed to function vertically, at an angle of no more than 30° (see Figure 2).

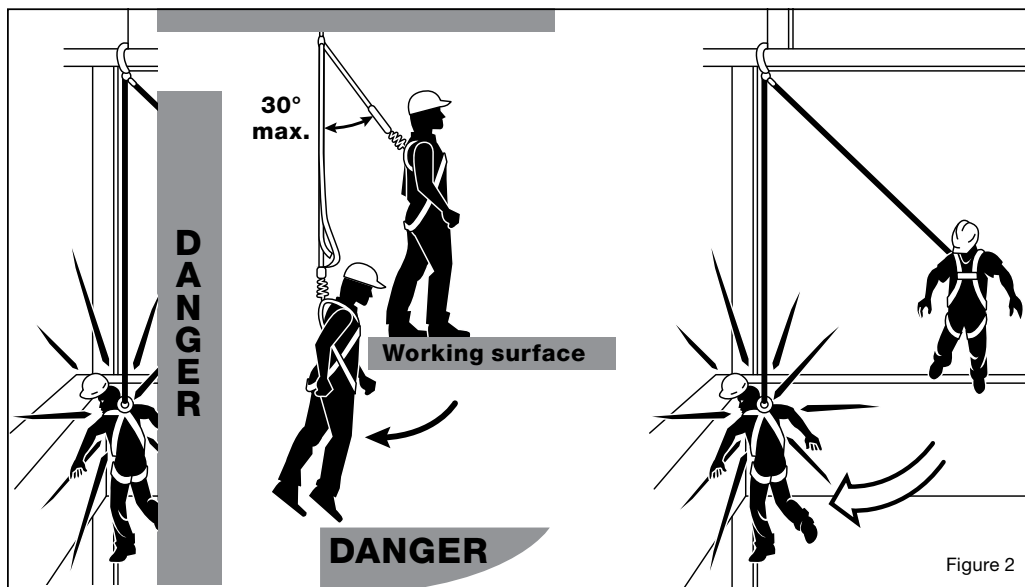


Figure 2

FALL CLEARANCE

Fall Clearance is the distance required to safely arrest the user's fall. It is the distance from the anchorage to the ground. A Fall Clearance Calculation must be done anytime this or any other fall protection equipment is used.

Step 1: Calculate Free Fall (FF)

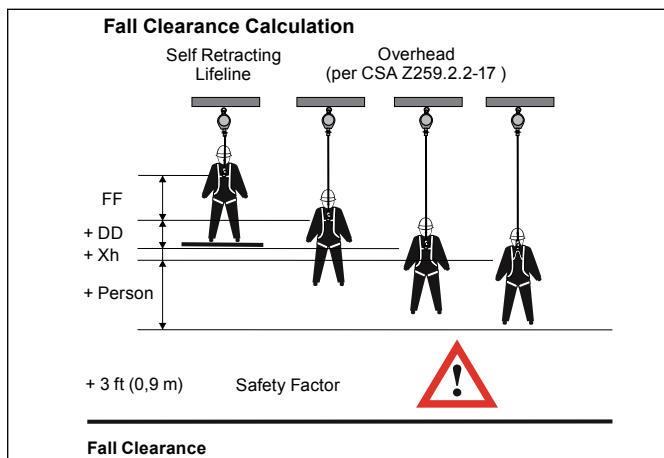
Step 2: Determine how much the connecting device deploys (DD)

Step 3: Determine the stretch of the harness (Xh)

Step 4: Determine person height from feet to harness connecting device

Step 5: Add a safety factor (typically is 3 ft)

Step 6: Fall Clearance $C = FF + DD + Xh + \text{Person} + SF$



CSA Z259.2.2-17 Deployment Calculation:

Deployment is equal to [deployment factor, Dm] times [free-fall distance, h] for a maximum worker mass, kg, or deployment based on the results of the dynamic performance testing specified in Clause 7.2, whichever is greater.

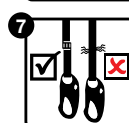
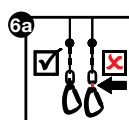
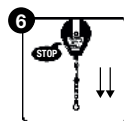
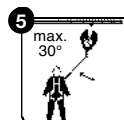
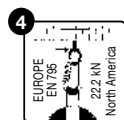
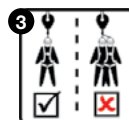
When SRL-R is anchored overhead Maximum Deployment Distance:

SRL-73303-60 / V845643060 = 0.80 m (32 in)

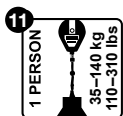
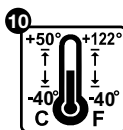
SRL-73303-96 / V845643096 = 1.10 m (43 in)

INSTRUCTIONS FOR USE—HAZARD AREA

1. A PeakWorks SRL device with recovery mechanism in accordance with CSA Z259.2.2-17 SRL-R is an automatic fall arrest system, part of a fall protection PPE with integrated fall restraint functions to serve as a fall arrest and recovery lifting device. In conjunction with a safety harness, this SRL device provides safety for persons carrying out work with a risk of falling (e.g., when moving in containers, vertical shafts, sewer systems). With the recovery mechanism, the lifeline is wound up to lift the casualty in an emergency. This device may only be used for the intended purpose.
2. The instructions for use are to be fully read and understood before use. Non-observance of the instructions for use will put lives at risk (1). In case of a fall, prolonged suspension of a person for more than 20 minutes must be avoided (risk of shock).
3. The recovery mechanism has only been approved for recovery purposes, not for lifting and lowering other material.
4. Only safety harnesses in accordance with CSA Z259.10, ANSI Z359.11 and EN361 are permitted for use with the fall arrest block with recovery mechanism (other harnesses are not permitted) (2).
5. One device can only protect one person at a time but can be used successively by several persons (3).
6. A rescue plan covering any rescue case that might occur during work must exist.
7. During the rescue operation, there must always be direct or indirect visual or communicative contact with the person to be rescued.
8. A suitable attachment point of sufficient carrying capacity must be chosen (e.g., anchorage point in accordance with EN 795 (for North America 22,2 kN) in accordance with CSA Z259.12 (4)).
9. This device should be in a perpendicular position above the head of the person to be rescued in order to prevent swinging (5). The suspension of the device must allow for compensating deviations in cable/webbing length. When the device has been attached to the anchorage point, attach the end of the connecting device (carabiner-type connector) to the ring attachment point of the safety harness.
10. This recovery block with winding handle can only be used as part of a fall arrest system in conjunction with the holders and support brackets of the PeakWorks anchor devices. The instructions for use of the anchor devices and their components must be observed.
11. Before every use, check the readability of the product label. If the label is illegible, then remove the SRL from service.
12. A visual inspection and functional test of this SRL must be performed before every use (6). To do so, attach the fall arrest block to a suitable anchor point: Pull the cable, the ratchets must lock audibly and the device must be locking. Firmly hold the cable and allow it to retract into the fall arrest block in a controlled manner. If the cable is released, it may cause injuries and damage by its quick and uncontrolled retraction into the housing. Check the swivel hook for proper functioning (self-closing, lockable). Check the retractable connecting device for proper condition. A recovery block with a damaged connecting element or device (6a and 7), e.g., cable with a kink or broken/torn strand, must not be used and removed from service.



13. A fall arrest block must be withdrawn from use if damaged, loaded by fall, or if its safe condition is doubtful. It may only be used further and removed from service if tested and released in writing by an expert from or trained by the manufacturer.
*Check connector to ensure that the indicator has not been released.
14. Fall arrest blocks must not be used for securing persons working above bulk goods or similar substances in which people can sink (8).
15. As necessary, but at least every 12 months, fall arrest blocks with recovery mechanism must be inspected by the manufacturer or by persons trained and authorized by the manufacturer (9). This must be documented in the inspection logbook supplied with the product. The effectiveness and durability of the fall arrest block depends on regular inspection.
16. Guidance and legislation in the country of use must be followed.
17. Maximum deployment for SRL-73303-60/V845643060 is 0.80 m/32 in and for SRL-73303-96/V845643096 is 1.10 m/43 in.
18. The PeakWorks SRL with recovery mechanism can be used in a temperature range from -40° F to +122° F (-40° C to +50° C) (10).
19. The rated load is 310 lbs (140 kg) and 1 person (maximum) (11).
20. Fall arrest blocks with recovery mechanisms must be protected from the effects of welding flames and sparks, fire, acids, lye, solvents, and similar agents.
21. No modifications may be made on the device.
22. **Note:** Fall arrest blocks with recovery mechanism may only be used by persons who are appropriately trained or otherwise skilled. Users must be free from health impairments (alcohol, drug, medication, or cardiovascular problems).
23. The service life of the fall arrest block with recovery mechanism must be determined in the yearly inspection; it is approximately 10 years depending on load stress.
24. After every use of the fall arrest block, the device must be inspected by an expert trained by the manufacturer.
25. When this SRL is used, it must be ensured that the loaded lifeline does not pass over edges (12).



FUNCTION DESCRIPTION FOR SELF-RETRACTING LIFELINES WITH RESCUE LIFTING DEVICE THROUGH CRANK MECHANISM

Rescue Application:

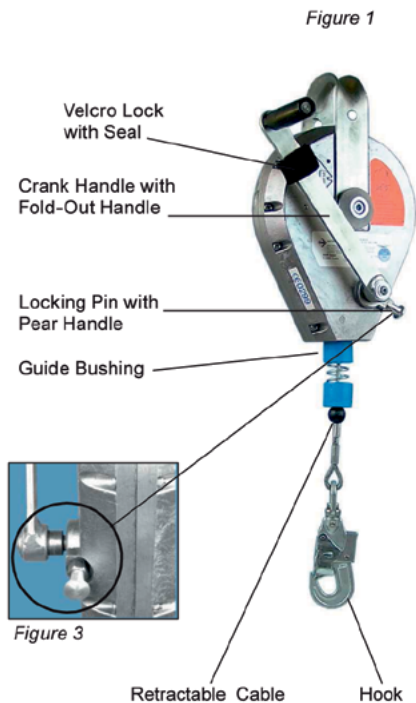


Figure 2

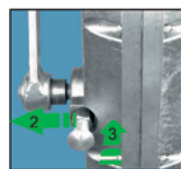


Figure 3

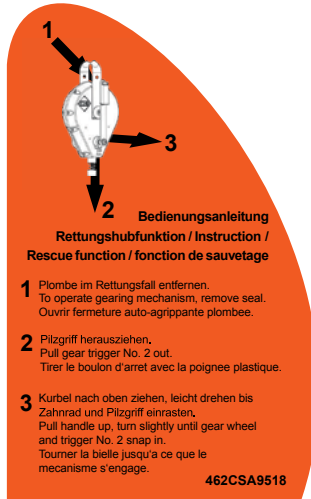
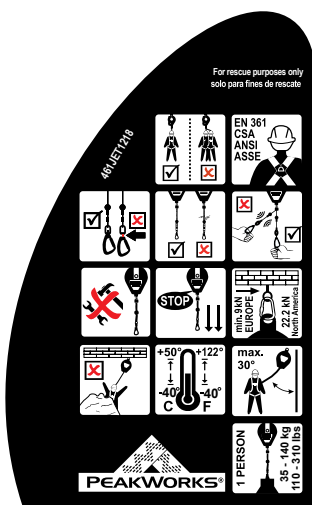
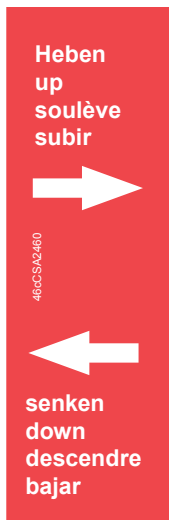
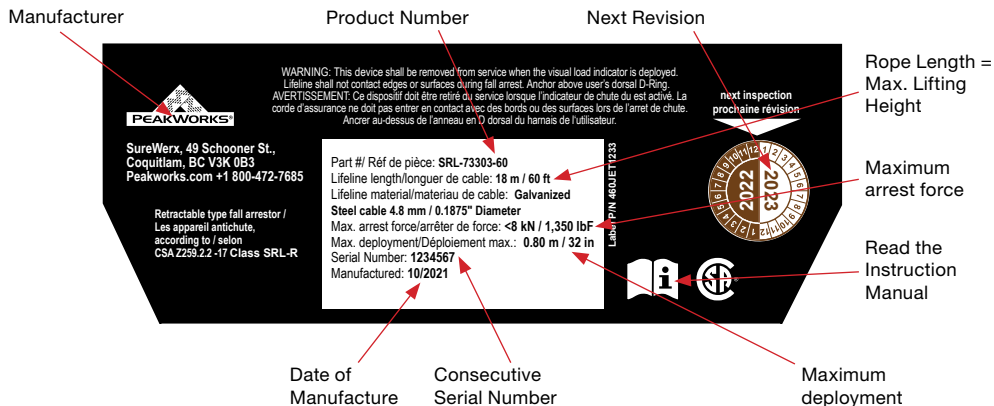
Required Operations:

1. Open the sealed Velcro lock; see Figure 1.
2. Unfold the crank handle; see Figure 1.
3. Pull out the locking pin with pear handle (see Figure 2), (Action 1), until the crank handle axis (Action 2) pops out audibly and visibly (Figure 3).
4. Rotate the crank handle back and forth until the gear has engaged. The locking pin jumps back into its initial position (Action 3).
5. The "rescue function" of the device is established.
6. The casualty can now be cranked up and down. Descending is only allowed to a maximum distance of 2 m (6.56 ft.).
7. **Note:** Devices with rescue hoisting crank may only be used with the corresponding holders (holding plates) for PeakWorks fastening facilities EN 795. After successfully using the rescue hoisting device, the device must always be checked by an expert trained by the manufacturer.

Figures 1 and 3 show the PeakWorks self-retracting lifeline with crank position set to the "self-retracting lifeline" function.

LABELING OF THE FALL ARREST BLOCK WITH RECOVERY MECHANISM

For SRL: SRL-73303-60/V845643060, SRL-73303-96/V845643096



PRE-USE INSPECTION

If the Self-Retracting Lifeline is known to have arrested a fall, it must be removed from service immediately and returned for inspection and servicing.

Before each use, check

- (a) that the brake operates correctly
- (b) that the SRL is securely anchored level with or above the user (NEVER below)
- (c) that all components to be used in conjunction with this device are compatible and in good condition
- (d) avoid anchoring the device in such a position that could result in a "pendulum/swing fall"
(this may occur if the device is positioned at > 30° from the vertical in relation to the end user).

Extend the wire rope/webbing fully (wearing suitable protective gloves) and inspect along its length for damage, such as:

- (a) broken or frayed wires/webbing
- (b) soiling and/or corrosion
- (c) kinks and twists in the wire/webbing
- (d) inspect the swage/stitching for damage
- (e) check the connector(s) being used as per the User Instructions supplied with the connector
- (f) check that the Overload/Fall Indicator is not exposed.

Check the device housing for signs of mechanical deformation, cracks, or chemical contamination and/or other defects.

Retract the wire rope/webbing slowly; during retraction, give the wire rope a sharp sudden tug in order to activate the braking mechanism. This check should be carried out along the full length of the rope at approximately 20% increments.

If any of the above criteria fails, then the device must be removed from service. In the event of any doubt, consult a trained and competent person.

Warning: If this SRL or any fall protection device is known to have arrested a fall, it must be removed from service immediately.

SERVICE AND MAINTENANCE

1. The lifeline shall only retract under load. On no account may the lifeline be fully pulled out and released because the carabiner hook jolting against the device may cause the retraction spring to break.
2. For devices that are constantly exposed to the weather, it is recommended to grease the steel cable with acid-free oils or Vaseline at regular intervals.
3. PeakWorks SRLs with recovery mechanism should be stored in dry, dust-, and oil-free condition in a suitable container.
4. Components which have become wet during cleaning or use may only be dried naturally, not near a fire or similar heat sources.

INSPECTION

This equipment and any other fall protection equipment used in conjunction with it should be inspected by the worker every time it is used. This equipment must be inspected annually by a competent person. A competent person is defined by OSHA: “By way of training and/or experience, a competent person is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation and has the authority to correct them”. Details of how to inspect this equipment are discussed later in the manual.

Inspection Requirements for Self-Retracting Devices

Type of use	Application examples	Example of conditions of use	Worker inspection frequency	Competent person inspection frequency	Product revalidation frequency
Infrequent to light	Rescue and confined space, factory maintenance	Good storage conditions, indoor or infrequent outdoor use, room temperature, clean environments	Before each use	Annually	At least every 5 years, but not more than intervals required by the manufacturer
Moderate to heavy	Transportation, residential construction, utilities, warehouse	Fair storage conditions, indoor and extended outdoor use, all temperatures, clean or dusty environments	Before each use	Semi-annually to annually	At least every 2 years but not more than intervals required by the manufacturer
Severe to continuous	Commercial construction, oil and gas, mining, foundry	Harsh storage conditions, prolonged or continuous outdoor use, all temperatures, dirty environments	Before each use	Quarterly to semi-annually	At least annually but not more than intervals required by the manufacturer

Notes:

1. Failure of a worker to perform a “before each use” inspection or failure of an inspection by a worker shall initiate the requirements for inspection by a competent person.
2. Failure of a competent person to perform inspections as specified in this table, or failure of an inspection by the competent person shall initiate product revalidation or disposal.
3. Determination of the type of use category shall be determined by a competent person.
4. An SRD that is considered non-repairable, or not designed for disassembly such that internal inspection is not possible without rendering it unserviceable, is not subject to revalidation inspection. These SRDs shall have service life and other inspection requirements as provided by the manufacturer’s instructions.



PEAKWORKS®

INSPECTION LOG

	Inspection Date	Results	Corrective Action	Maintenance Performed	Inspection Conducted By
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					



PEAKWORKS®

NOTES



surewerx.com

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Made in Germany