FRONTLINE FALL PROTECTION RPG50

FRONTLINE FALL PROTECTION RPG Cable SRL with Steel Snap Hook End User Manual

Model: RPG50 | Brand: FRONTLINE FALL PROTECTION

1. Important Safety Information

This instruction manual provides essential information for the proper use, inspection, and maintenance of the FRONTLINE FALL PROTECTION RPG Cable SRL (Self-Retracting Lifeline). Failure to follow these instructions can result in serious injury or death.

- **Read and Understand:** Ensure all users read and fully understand these instructions before using the equipment.
- **Qualified Personnel:** This equipment must only be used by trained and competent persons.
- **Inspection:** Always inspect the SRL before each use. Do not use if any damage or malfunction is detected.
- **Compatibility:** Ensure all components of the fall protection system are compatible.
- **Capacity:** Adhere strictly to the maximum user weight capacity of 310 lbs (including tools and clothing).
- **Compliance:** This device meets or exceeds ANSI Z359.14-2021, OSHA 1926 Subpart M, and OSHA 1910 standards.

2. Product Overview

The FRONTLINE FALL PROTECTION RPG Cable SRL is a self-retracting lifeline designed to provide reliable fall protection. It features a durable thermoplastic housing and a 3/16" galvanized steel cable lifeline, suitable for various work environments, especially those involving sharp objects or exterior applications.

Key Features:

- **Durable Casing:** Made of high-impact strength polymer, designed to be nearly indestructible.
- **Galvanized Steel Cable:** High-strength 3/16" steel cable lifeline for enhanced security.
- **Swivel Anchorage Eye:** Includes a self-locking carabiner for secure attachment to an anchorage point.
- **Snaphook with Impact Indicator:** Located at the lifeline end for easy connection to a harness and visual fall

detection.

- **Internal Energy Absorption System:** Manages fall forces effectively.
- **Quick-Action Braking System:** Engages rapidly to arrest a fall.
- **Lightweight and Compact:** Designed for ease of transport and reduced user fatigue.





Image 2.1: The FRONTLINE RPG Cable SRL, showing the main unit, swivel anchorage eye with carabiner, and the steel snap hook end.

3. Components

The RPG Cable SRL consists of several key components working together to ensure fall protection.

- **Polymer Casing:** The outer housing protecting the internal mechanisms.
- **Swivel Steel Anchorage Eye:** The top connection point, allowing 360-degree rotation to prevent twisting.
- **Self-Locking Carabiner:** Attached to the anchorage eye for secure connection to an approved anchorage point.
- **Galvanized Steel Cable Lifeline:** The retractable cable that extends and retracts from the casing.
- **Swivel Connector End:** Connects the lifeline to the snap hook, enhancing mobility.
- **High Strength Alloy Steel Snap Hook:** The bottom connection point for attachment to a full-body harness.
- **Impact Indicator:** A visual indicator on the snap hook that deploys if the device has experienced a fall arrest event.



Image 3.1: Detailed diagram highlighting the main components and features of the RPG Cable SRL.

4. Setup and Installation

Proper setup is critical for effective fall protection. Follow these steps carefully.

1. **Select Anchorage Point:** Choose an anchorage point capable of supporting 5,000 lbs (22.2 kN) per worker attached, or meeting OSHA 1926.502(d)(15) requirements. The anchorage should be directly above the work area to minimize swing fall hazards.
2. **Connect to Anchorage:** Securely attach the SRL's swivel anchorage eye carabiner to the selected anchorage point. Ensure the carabiner gate is fully closed and locked.
3. **Connect to Harness:** Attach the SRL's steel snap hook end to the dorsal D-ring of a compatible full-body harness. Verify the snap hook gate is fully closed and locked.
4. **Clearance:** Ensure adequate fall clearance below the work surface. Consider the SRL's maximum arrest distance (42 inches), user height, and any potential sag in the system.
5. **Pre-Use Check:** Before commencing work, perform a thorough pre-use inspection as described in Section 6.

5. Operating Instructions

Once properly installed, the RPG Cable SRL operates automatically.

- **Normal Operation:** The lifeline will extend and retract freely as the user moves, maintaining tension and minimizing slack.
- **Fall Arrest:** In the event of a fall, the quick-action braking system will engage, arresting the fall within the specified maximum arrest distance.
- **Post-Fall:** If a fall occurs, the SRL must be immediately removed from service. Do not use it again. It must be inspected by a competent person and either recertified or replaced. Check the impact indicator on the snap hook for deployment.
- **Swing Fall Hazard:** Position the anchorage point directly overhead to minimize the risk of a swing fall, which can cause injury by striking objects.

6. Inspection and Maintenance

Regular inspection and proper maintenance are crucial for the longevity and safety of the SRL.

Pre-Use Inspection (Before Each Use):

- **Casing:** Check for cracks, deformation, heat damage, or any signs of impact.
- **Lifeline (Cable):** Inspect the entire length of the cable for cuts, fraying, kinks, corrosion, broken strands, or excessive wear. Ensure it retracts and extends smoothly.
- **Connectors (Carabiner & Snap Hook):** Verify that gates open and close freely and lock securely. Check for deformation, cracks, corrosion, or sharp edges.
- **Impact Indicator:** Confirm the impact indicator on the snap hook has not deployed. If deployed, the unit has experienced a fall and must be removed from service.
- **Labels:** Ensure all labels are present and legible.

Periodic Inspection:

A competent person, other than the user, must perform a thorough inspection at least annually, or more frequently based on usage and environmental conditions. Maintain inspection records.

Maintenance:

- **Cleaning:** Clean the SRL with a damp cloth and mild soap solution. Rinse thoroughly and allow to air dry completely away from direct sunlight or heat. Do not use harsh chemicals.
- **Lubrication:** Do not attempt to lubricate any internal components. This device is factory-sealed.
- **Repairs:** Only the manufacturer or a manufacturer-authorized service center may perform repairs or modifications. Unauthorized alterations will void the warranty and compromise safety.

7. Storage

Store the SRL in a cool, dry, clean environment, away from direct sunlight, corrosive chemicals, extreme temperatures, and mechanical damage. Ensure the lifeline is fully retracted before storage.

8. Troubleshooting

If the SRL exhibits any signs of malfunction, such as the lifeline not retracting or extending smoothly, unusual noises, or visible damage, immediately remove the device from service. Do not attempt to repair it yourself. Contact FRONTLINE FALL PROTECTION for assistance.

9. Specifications

Attribute	Value
Model	RPG50 (for 50' length)
Lifeline Material	3/16" Galvanized Steel Cable
Casing Material	High Impact Strength Polymer (Thermoplastic Rubber)
Available Lifeline Lengths	10', 20', 30', 50', 70'
Connector Strength	5,000 lbs
User Max Weight Capacity	310 lbs
Maximum Arrest Distance	42 inches
Average Arrest Force	1,350 lbs
Cable Minimum Breaking Strength	3,400 lbs
Compliance	ANSI Z359.14-2021, OSHA 1926 Subpart M, OSHA 1910
Item Weight (50' model)	16.57 pounds
Product Dimensions (50' model)	600"L x 0.18"W



Image 9.1: Cable specifications and material details for the SRL.

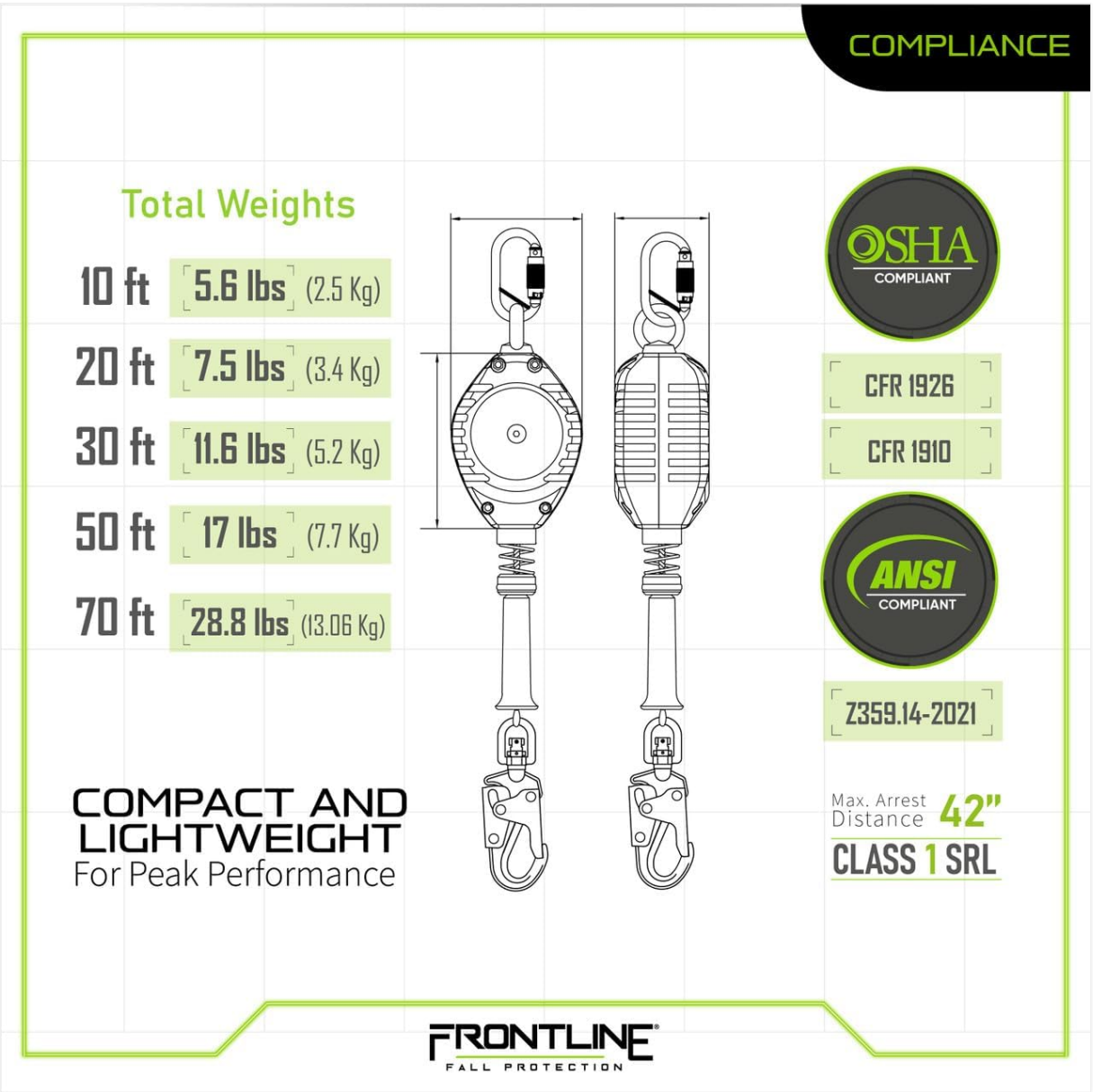


Image 9.2: Weight information for various SRL lengths and compliance standards.

10. Warranty and Support

For detailed warranty information, technical support, or service inquiries regarding your FRONTLINE FALL PROTECTION RPG Cable SRL, please contact the manufacturer directly. Refer to the product packaging or the official FRONTLINE FALL PROTECTION website for current contact details.

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Always prioritize safety. This manual is subject to change without notice.