

3M™ DBI-SALA® Nano-Lok™ LE Self Retracting Lifelines

Technical Data Sheet



Description

Nano-Lok™ LE is specifically designed for foot level tie-off and sharp edge applications often found in construction. It is ergonomically designed for ease-of-use and is ideal for direct connection to most harnesses. The extremely compact and lightweight design is virtually unnoticeable on your back, staying out of the worker's way and making it ideal as a lanyard replacement. Whether your application requires single or twin leg configurations, mounting to an overhead anchor or for connection directly to harness, there are numerous models to choose from to suit almost any application. Nano-Lok™ locks quickly - stopping a fall within centimetres - providing more protection at low heights. In addition, tension is always kept on the lifeline, which reduces dragging, snapping and trip falls. Both features are key safety improvements.

Features

- **Designed for foot-level tie-off and sharp leading-edge applications**
An innovative combination of lifeline material, energy absorption, and harness connection reduce forces on both the worker and the edge.
- **Built-in connector for single leg SRL direct attachment to harness**
Installs to the webbing or EZ link connector of harness, leaving the dorsal D-ring open for other equipment or rescue. Designed to provide a snug fit to the worker's back, eliminating nuisance flopping.
- **2.4m single leg lifeline with 20mm Kevlar®/Dynema webbing**
Durable synthetic lifeline construction reduces overall weight and provides added field longevity.
- **Self-locking triple action karabiner on end of lifeline**
Automatically locks and closes for added safety, and the rugged construction is built to last.
- **Extremely compact, lightweight design**
The devices are virtually unnoticeable on your back, stay out of the way and can be easily used as a lanyard replacement.
- **Tough and impact resistant thermoplastic housing**
Compact and durable housings are designed to withstand the demands of challenging jobsites, they are built to last.
- **Swiveling anchorage loops**
Limits lifeline twisting for smoother operation and added worker satisfaction.



- **Quick activating speed sensing brake systems**
Stops a falling worker within centimetres, providing more protection at low heights. Designed for smooth consistent operation allowing the user to maintain normal work pace and not be interrupted with constant lock ups.
- **Integrated backpack style energy absorber**
Stays tight to the harness evenly dispersing the unit's weight and limits forces to protect against sharp edges.
- **Connected Safety equipped**
A built-in RFID identification tag helps the user record and store information on inspections.
- **Wide variety of configurations available**
There are 9 models to choose from to suit almost any application for complete jobsite versatility and flexibility.

Standards

Standards EN360 & AS/NZS 1891.3

Specifications

3M™ DBI-SALA® Nano-Lok™ LE Self Retracting Lifelines

Capacity	140kg
Brand	DBI-SALA®
Sub Brand	Nano-Lok™
Size	2.4m
Velocity Ship	No
Connected Safety Equipped	Yes
Lifeline Length	2.4m
Lifeline Hook	Zinc Plated Steel
Housing	Nylon Thermoplastic
Lifeline	5mm dia. 7×19 Galvanised cable; Webbing: 20mm Kevlar®/ Dyneema fibre webbing
Working Length	2.4m (average working lengths is 2.4m, but will vary slightly with differences in end connector options).
Minimum Edge Radius	Webbing models- 0.50mm, Cable models- 0.13mm
Harness Connector	Aluminium frame and steel locking pins
Energy Absorber	Yes
Webbing:	Vectran/polyester; Cover: Polyester and nylon fabric; Stitching: Kevlar dynema, Polyester thread
Karabiners/Hooks	- Double Action Snap Hook: 19mm gate opening, 16kN gate, 23kN body, Steel -Triple Action Karabiner with captive eye: 20mm gate opening, 16kN gate, 22kN body, Steel -Double Action Scaffold Hook: 63.5mm gate opening, 16kN gate, 22kN body, Aluminium
Components	- Super tough nylon, UV resistant; - Drum: Aluminium alloy; - Fasteners: Zinc plated alloy steel screws, stainless steel rivets; - Locking Pawls: Stainless Steel - Main Shaft: Stainless Steel - Motor Spring: Stainless Steel - Swivel: Zinc plated steel
Arresting Force/ Distance	Average Arresting Force: 4kN;
Maximum Arresting Force: 6kN	Shock Absorbing Lanyard Elasticated Webbing
Maximum Arresting Distance: 0.6m or less (when anchored overhead)	Drop forged steel, minimum break strength 20kN, internal diameter width- 45mm
Compatibility	For use with all 3M approved components and systems.
Country of Origin	USA
Instructions/ Conditions of Use	Reading user instruction manual prior to use is essential.

Maintenance

Cleaning procedures for the SRL are as follows:

- Periodically clean the exterior of the SRL using water and a mild soap solution. Position the SRL so excess water can drain out. Clean labels as required.
- Clean the lifeline with water and mild soap solution. Rinse thoroughly air dry. Do not force dry with heat. The lifeline should be dry before allowing it to retract into the housing. An excessive buildup of dirt, paint, etc., may prevent the lifeline from fully retracting back into the housing causing a potential free fall hazard.

Service

SRLs are not repairable. If the SRL has been subject to fall force or inspection reveals an unsafe or defective condition, remove the SRL from service and discard.

Storage/Transport

Store and transport SRLs in a cool, dry, clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Thoroughly inspect the SRL after any period of extended storage.

Disposal

Dispose of the SRL if it has been subject to fall arrest forces or inspection reveals an unsafe or defective condition. Before disposing of the SRL, cut the lifeline in half or otherwise disable the SRL to eliminate the possibility of inadvertent reuse.

Warning

To reduce the risks associated with working with an SRL which, if not avoided, could result in serious injury or death:

- Before each use, inspect the SRL and check for proper locking and retraction.
- If inspection reveals an unsafe or defective condition, remove the device from service and repair or replace according to the User Instructions.
- If the SRL has been subjected to fall arrest or impact force, immediately remove the SRL from service and label the device 'UNUSABLE'.
- Ensure the lifeline is kept free from any and all obstructions including, but not limited to; entanglement with moving machinery or equipment (e.g., the top drive of oil rigs), other workers, yourself, surrounding objects, or impact from overhead objects that could fall onto the lifeline or the worker.
- Never allow slack in the lifeline. Do not tie or knot the lifeline.
- Attach the unused leg(s) of the Harness Mounted SRL to the parking attachment(s) of the harness if equipped.
- Do not use in applications that have an obstructed fall path. Working on slowly shifting material, such as sand or grain, or within confined or cramped spaces, may not allow the worker to reach sufficient speed to cause the SRL to lock. A clear path is required to assure positive locking of the SRL.
- Avoid sudden or quick movements during normal work operation. This may cause the device to lock up.
- Ensure that fall protection systems/subsystems assembled from components made by different manufacturers are compatible and meet
- The requirements of applicable standards, including the ANSI Z359, AS/NZS 1891.4 or other applicable fall protection codes, standards, or requirements. Always consult a Competent and/or Qualified Person before using these systems.

Configurations

NANO-LOK™ LE	3101639-75	3101638	3101488	3500254	3101641-75	3101640	3500255
Cable Lifeline				Single			Twin
Webbing Lifeline	Single	Single	Single		Twin	Twin	
Aluminium Scaffold Hooks			•			•	•
Steel Snap Hook		•		•			
Steel Triple Action Karabiner	•				•		
Approximate Weight	1.5kg	1.6kg	1.8kg	1.8kg	2.6kg	3.2kg	3.7kg

Ordering Information

3M Code	Model #	Description
70007951729	3101639-75	2.4m single webbing lifeline, steel triple action karabiner
70007446902	3101638	2.4m single webbing lifeline, steel snap hook
70007455689	3101488	2.4m single webbing lifeline, aluminium scaffold hook
70007462875	3500254	2.4m single cable lifeline, steel snap hook
70007940938	3101641-75	2.4m twin webbing lifelines, steel triple action karabiners
70007466910	3101640	2.4m twin webbing lifelines, aluminium scaffold hooks
70007456471	3500255	2.4m twin cable lifelines, aluminium scaffold hooks

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