

User Instructions

V-TEC® EDGE Personal Fall Limiter (PFL)

Fall Protection



Order No.: 10242757/02

Print Spec: 10000005389 (F)

CR: 800000066768

⚠ WARNING!

These instructions must be provided to users before use of the product and retained for ready reference by the user. Read this manual carefully before using or maintaining the device. The device will perform as designed only if it is used and maintained in accordance with the manufacturer's instructions. Otherwise, it could fail to perform as designed, and persons who rely on this device could sustain serious injury or death.

The warranties made by MSA with respect to the product are voided if the product is not installed and used in accordance with the instructions in this manual. Please protect yourself and your employees by following the instructions.

Please read and observe the WARNINGS and CAUTIONS inside. For additional information relative to use or repair, call 1-800-MSA-2222 during regular working hours.

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The Safety Company

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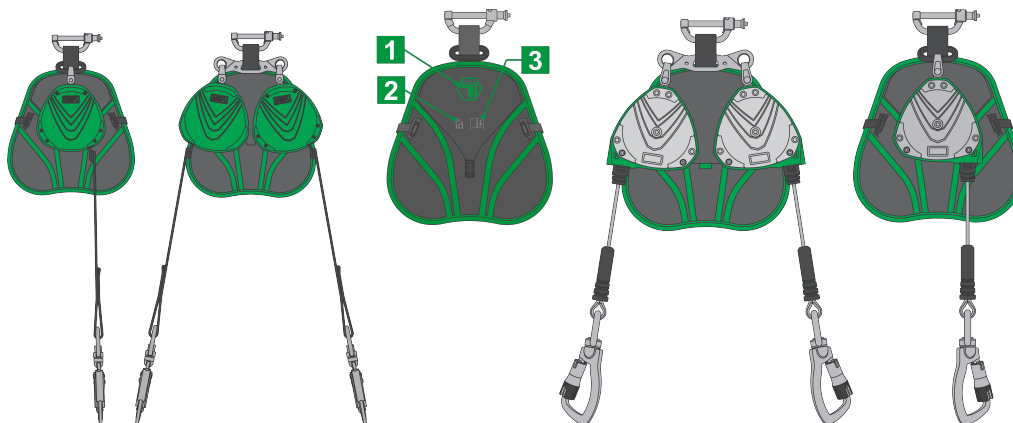
For your local MSA contacts, please go to our website www.MSAsafety.com

Contents

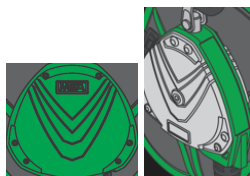
1	Labels, Icons and Warnings	4
1.1	Labels and Icons	4
1.2	Product Details and Warnings	5
2	Safety Regulations	5
3	Product Specification	8
4	Harness Attachment	8
4.1	Attach V-TEC EDGE PFLs to Harness Using V-TEC EDGE Pin Connector	9
5	Installation and Use	9
5.1	Intended Use	9
5.2	General Installation and Use	10
5.3	Leading Edge Installation and Use	11
5.4	Mobile Elevated Work Platform / Aerial Lift / Bucket Truck Installation and Use	12
6	Fall Clearances	13
6.1	V-TEC EDGE Fall Clearance Charts	13
6.2	V-TEC EDGE Tieback Fall Clearance Charts	17
7	Pre-Use Checks and Periodic Examinations	20
8	Cleaning and Storage	23
9	Warranty	24
10	Inspection Checklist	25

1 Labels, Icons and Warnings

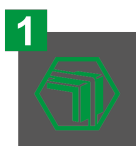
1.1 Labels and Icons



V-TEC EDGE PFLs - Leading Edge



Green Color Coding (Leading Edge)



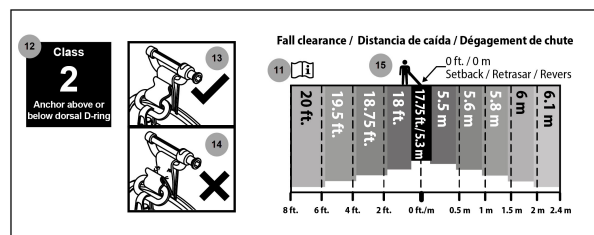
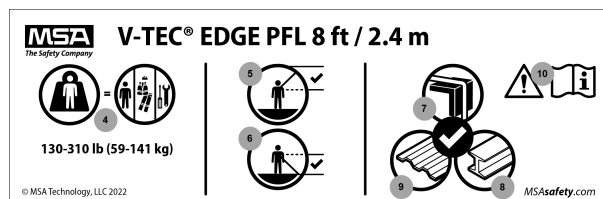
Leading Edge Icon



Scannable RFID



Labels located beneath flap indicated by "refer to instruction manual" icon.



4	Capacity including user, clothing, and tools.	10	WARNING! Read and understand instruction manual before use
5	Tie off above D-ring permitted.	11	Refer to instruction manual.
6	Tie off below D-ring permitted.	12	ANSI Class. ²
7	Tested for use over an edge. ¹	13	Load indicator NOT deployed.
8	Tested for use over steel edge. ¹	14	Load indicator deployed, DO NOT USE
9	Tested for use over corrugated steel edge. ¹	15	Fall clearance chart. ³

1 - See Section 5.3 Leading Edge Installation and Use for details and limitations.

2 - See Section 5 Installation and Use for details.

3 - See Section 6.1 V-TEC EDGE Fall Clearance Charts for details.

1.2 Product Details and Warnings

V-TEC EDGE Labels

Serial number Número de serie Número de série	1	Model number Número de modelo Número de modèle	5	Maximum arrest distance Distancia máxima de detención Distance maximale d'arrestation	XXXXXXXXXX
Part number Número de parte Número d'article	XXXXXXXXXXXX	Meets standards Cumple con los estándares Satisfait aux normes	6	Free fall limit Límite de caída libre Limite de chute libre	XXXXXXXXXXXX
Line material/width/length Material de línea/ancho/longitud Matériau/largeur de ligne/longueur	2	Maximum arrest force Fuerza máxima de detención Force d'arrêt maximale	3	Average arrest force Fuerza de arresto promedio Force d'arrestation moyenne	XXXXXXXXXXXX
Date made Fecha de fabricación Date de fabrication	4				XXXXXXXXXXXX

Do not remove these labels • No quite estas etiquetas • ne pas enlever ces étiquettes
Product of the United States
MSA - The Safety Company 1000 Cranberry Woods Dr., Cranberry Twp., PA 16066 U.S.A.



8	⚠ WARNING	⚠ ADVERTENCIA	⚠ AVERTISSEMENT
	Refer to user instructions for acceptable anchorage locations • Anchor device in a location to avoid swing fall hazards • Inspect device for locking and retraction before each use • For single user only • Follow all manufacturer's instructions included at time of shipping • This device shall be removed from service when the visual load indicator is deployed • Leading edge device • When SRD is anchored overhead, maximum deployment = 1.4 m. When SRD is anchored so that free fall is possible, maximum deployment = 2.21 m. Deployment factor, D ₁₁ = 0.9. See instructions for further details on deployment • Minimum 0m(0') setback distance • Failure to follow these warnings could lead to serious injury or death	Consulte las ubicaciones de anclaje aceptables en las instrucciones de uso • Anclaje el dispositivo en un lugar en el que se evite el riesgo de caída pendular • Inspeccione el bloqueo y la retracción del dispositivo antes de cada uso • Para un solo usuario • Siga todas las instrucciones del fabricante enviadas con el producto • Este dispositivo se debe poner fuera de servicio si el indicador visual de carga se ha desplegado • Dispositivo para trabajos en bordes • Cuando el dispositivo autorretráctil se ancla por encima, el despliegue máximo es de 1.4 m. Cuando el dispositivo autorretráctil se ancla de la manera que permita la caída libre, el despliegue máximo es de 2.21 m. Factor de despliegue, D ₁₁ = 0.9. Consulte los detalles sobre el despliegue en las instrucciones • Distancia de retracción mínima de 0 m (0 pies) • Hacer caso omiso de estas advertencias puede comportar lesiones graves o incluso la muerte	Consultez les instructions d'utilisation pour connaître les emplacements d'ancrage acceptables • Ancrer le dispositif à un endroit qui permette d'éviter les risques de chutes avec balancement • Inspecter les mécanismes de verrouillage et d'enroulement de la corde avant chaque utilisation • Pour un seul utilisateur uniquement • Suivre toutes les instructions du fabricant incluses à l'expédition • Ce dispositif doit être mis hors d'usage lorsque l'indicateur de charge visual est déployé • Dispositif pour bords non protégés • Quand le SRD est ancré au-dessus de la tête, le déploiement maximal est de 1.4 m. Lorsque le SRD est ancré de façon à permettre la chute libre, le déploiement maximal est de 2.21 m et le facteur de déploiement D ₁₁ = 0.9. Consultez les instructions pour obtenir plus de détails sur le déploiement • Distance de retrait minimale est de 0 m (0 pi) • Le non-respect des avertissements précisés peut entraîner des blessures graves ou mortelles.

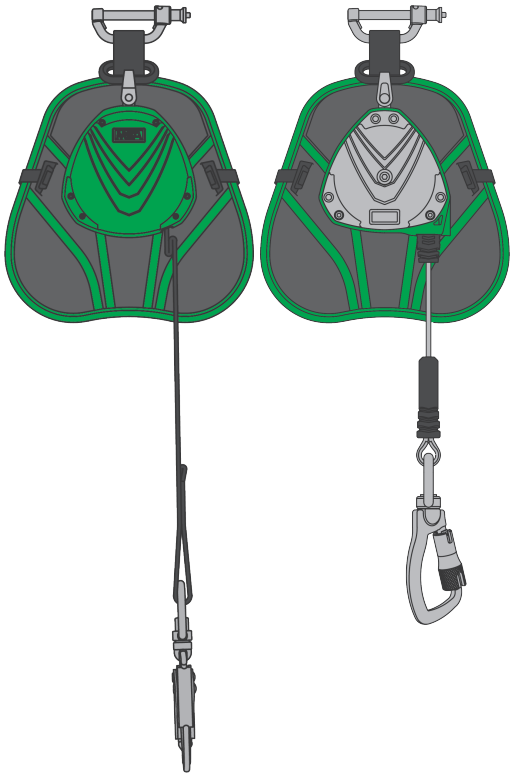
8	⚠ WARNING	⚠ ADVERTENCIA
	Follow and inspect per all manufacturer's instructions included at time of shipping • Anchor device in a location to avoid swing fall hazards • Refer to user instructions for acceptable anchorage locations • Adhere to hierarchy of controls in 2309.2 • Suitable for horizontal use (Leading Edge) • Suitable for use with approved horizontal lifelines • Inspect device for locking and retraction before each use • For single user only • This device shall be removed from service after a fall arrest or when the visual load indicator is deployed • Exposure to sharp or serrated edges could damage device, elevate anchorage to the extent possible to limit risk of damage • Do not expose line to sparks, flame, or heat above 185°F (85°C) • Minimum 0' (0 m) setback distance • Minimum clearance from working surface required for horizontal use 20' (6 m) • Failure to follow these warnings can result in serious personal injury or death.	Realice la inspección conforme a las instrucciones del fabricante enviadas con el producto • Anclaje el dispositivo en un lugar en el que se evite el riesgo de caída pendular • Consulte las ubicaciones de anclaje aceptables en las instrucciones de uso • Respete la jerarquía de controles indicada en la norma 2309.2 • Apto para aplicaciones horizontales (trabajos en bordes) • Apto para el uso con cables salvavidas horizontales aprobados • Inspeccione el bloqueo y la retracción del dispositivo antes de cada uso • Para un solo usuario • Este dispositivo se debe poner fuera de servicio tras la detención de una caída o si el indicador visual de carga se ha desplegado • La exposición a bordes afilados o dentados puede dañar el dispositivo, eleve el anclaje todo lo posible para limitar el riesgo de daños • No exponga la línea a chispas, flamas o a temperaturas de más de 185 °F (85 °C) • Distancia de retracción mínima de 0 pies (0 m) • Distancia mínima desde la superficie de trabajo requerida para el uso horizontal de 20 pies (6 m) • Hacer caso omiso de estas advertencias puede comportar lesiones graves o incluso la muerte.

Table 1 ANSI / OSHA / CSA Table Data

1	Serial Number	5	Model Number
2	Lifeline Construction	6	Standard
3	Length	7	Notified Body Number
4	Date of Manufacture (mm/yy)	8	Product Warning

2 Safety Regulations

V-TEC EDGE



WARNING!

User Requirements

- Users of Personal Fall Limiters (PFLs) shall be medically fit and suitably trained.
- PFLs shall not be used by pregnant women, minors or those under the influence of alcohol or drugs.
- For single user only, within the weight range 130–310 lbs (60–141 kg) for ANSI, 100–400 lbs (45–181 kg) for OSHA overhead applications, or 100–310 lbs (45–141 kg) for CSA, including user, clothing, and tools.

Anchor Requirements/Swing Fall/Fall Clearance

- The anchorage must be capable of supporting the required load. See Section [3 Product Specification](#) for details on anchorage strength.
- Ensure that the available fall clearance is equal to or greater than the fall clearance shown in Section [6.1 V-TEC EDGE Fall Clearance Charts](#).
- Remove any surface contamination such as, but not limited to, concrete, stucco, roofing material, etc. that could accelerate cutting or abrading of attached components.
- For use in accordance with acceptable locations as shown in Section [6.1 V-TEC EDGE Fall Clearance Charts](#). The user shall consider any risks posed by swing falls.
- Swing falls can increase fall distance. In overhead applications, work directly under the anchorage. In horizontal (leading edge) applications, minimize the horizontal offset. Increasing the horizontal offset will increase the amount of swing fall. Always remove obstructions in or adjacent to the fall path. Keep work area free from debris, obstructions, trip hazards, spills, or other hazards which could impair the safe operation of the fall protection system. For horizontal (leading edge) applications DO NOT use the device unless a qualified person has inspected the workplace and determined that the identified swing fall hazards have been eliminated or exposures to them prevented.

Product Use

- PFLs are only to be used for their intended purpose and within their limitations. DO NOT intentionally misuse this product. DO NOT use fall protection equipment for purposes other than those for which it was designed. DO NOT use fall protection equipment for towing, hoisting, or material handling.
- PFLs shall not be altered or added to. No unauthorized repairs, modifications, alterations and/or additions are permitted.
- RESCUE AND EVACUATION: the user must have a rescue plan and the means at hand to implement it. The plan must take into account the equipment and specific training necessary to affect prompt rescue under all foreseeable conditions. If the rescue must be performed in a confined space, the provisions of OSHA regulation 1910.146 and ANSI Z117.1 must be taken into account. It is recommended to provide means for user evacuation without assistance of others. This will usually reduce the time to get to a safe place and reduce or prevent the risk to rescuers.
- DO NOT rely on feel or sound to verify proper connector engagement. Ensure the connector is closed before use.
- Additional lanyard connectors shall not be added, as this would serve to lengthen the lifeline and increase free fall.
- Unsuitable for use on unstable surfaces, fine grain materials or particulate surfaces such as sand or coal, as insufficient speed may prevent lock-on in the event of a fall (possible engulfment hazard).
- DO NOT use where line may be exposed to abrasive edges. For leading edge guidance, see Section [5.3 Leading Edge Installation and Use](#).
- PFLs shall not come into contact with hot surfaces (such as hot pipes), become entangled with moving machinery, or come into contact with electrical hazards (such as high voltage power lines).
- PFLs shall be protected from fire, acids, caustic solutions, or temperatures outside the range -40°F to 130°F (-40°C to 54°C).

- DO NOT leave the PFL installed in environments which could cause damage or deterioration to the product. Refer to the care details in Section 8 [Cleaning and Storage](#) and inspection details in Section 7 [Pre-Use Checks and Periodic Examinations](#).
- Instructions shall be retained and provided to all users of PFLs in the language of the destination country, even when resold.
- DO NOT exceed the maximum fall arrest forces as specified by governing standards or subsystem components.
- Dual-connections shall only be made for the purposes of 100% tie-off transitions. If a dual connection is made for any other purpose, anchorages of different elevations must be utilized.
- Use of combinations of components or subsystems, or both, may affect or interfere with the safe function of the components or subsystems. Use only compatible components or subsystems, never add additional length to the system.

Leading Edge-Specific Product Use (V-TEC EDGE Products)

- Use in edge situations should only be as a last resort.
- Avoid working where the lifeline will continuously or repeatedly abrade against sharp, jagged, or abrasive edges.
- The V-TEC EDGE PFL anchorage point shall be at the user's foot level or above.
- Do not work on the far side of an opening opposite the anchorage point or around corners.
- Only use V-TEC EDGE PFLs for leading edge applications. Do NOT use V-TEC PFLs for leading edge applications.
- Leading edge configurations shall only be used after all other hierarchy of controls, including restraint systems and overhead anchorages, have been exhausted.
- Leading edge configurations shall only be used in accordance with local regulations.
- Leading edge configurations shall be used in accordance with the instructions, warnings and limitations in these User Instructions.
- In leading edge applications with 0 ft (0 m) setback, ensure that setup does not allow snaphook to contact leading edge in the event of a fall.

Inspection / Removing Product From Service

- PFLs that have arrested a fall or are unable to pass an inspection shall be tagged "UNUSABLE" and disposed of in accordance with local regulations.
- Due to the nature of some fall arrest events, it is possible for the load indicator to not deploy. In the event that a PFL is subjected to fall arrest forces and the load indicator does not deploy, the PFL still must be removed from service and marked as "UNUSABLE" until it has been destroyed.
- If the load indicator is deployed, immediately remove the PFL from service and mark it as "UNUSABLE" until it has been destroyed.

Failure to follow these warnings can result in serious personal injury or death.

3 Product Specification

System Requirements

Component	ANSI/OSHA	CSA
Anchorage Connector Standard	ANSI Z359.18/OSHA 1926.502, 1910.140	CSA Z259.14/CSA Z259.15
Harness Standard	ANSI Z359.11/OSHA 1926.502, 1910.140	CSA Z259.15
Connectors Standard	ANSI Z359.12/OSHA 1926.502, 1910.140	CSA Z259.12
Retractable Type Fall Arresters	ANSI Z359.14 - 2021/OSHA 1926.502, 1910.140	CSA Z259.2.2-17
Structure Strength(Anchorage Point)	3600 lbs (16 kN) certified 5000 lbs (22.2 kN) non-certified	5000 lbs (22.5 kN)

NOTE: The product may comply with standards shown. See product label for specific compliance information. Those designated with a certification mark are listed with the corresponding agency as compliant to the applicable standard.

PFL Materials

Component	Material - Cable
Case	PC-ABS / Stainless Steel
Drum	PC-ABS / Stainless Steel / Aluminum
Pawl, Swivel Assembly, Main Spring	Stainless Steel
Lifeline	Ø5.0mm (3/16") Galvanized Steel
Connectors	Steel OR Aluminum
Energy Absorber	Nylon
Energy Absorber Pouch	Polyester

PFL Materials

Component	Material - Web
Case	Polycarbonate
Drum	Polycarbonate / Aluminum
Pawl, Swivel Assembly	Stainless Steel
Main Spring	Steel
Lifeline	1.00" (25.4mm) wide / 0.14" (3.6mm) thick HMPE / para-aramid blend
Connectors	Steel OR Aluminum
Energy Absorber	Nylon
Energy Absorber Pouch	Polyester

4 Harness Attachment

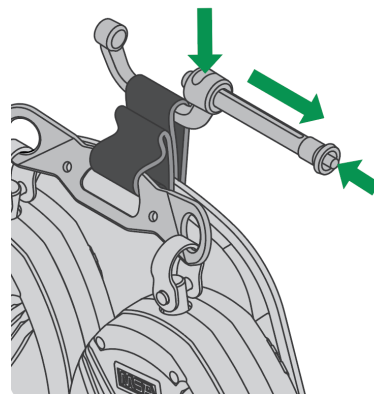
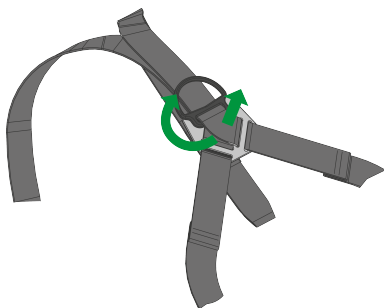
WARNING!

DO NOT rely on feel or sound to verify proper connector engagement. Ensure the connector is closed before use.

Failure to follow this warning can result in serious personal injury or death.

4.1 Attach V-TEC EDGE PFLs to Harness Using V-TEC EDGE Pin Connector

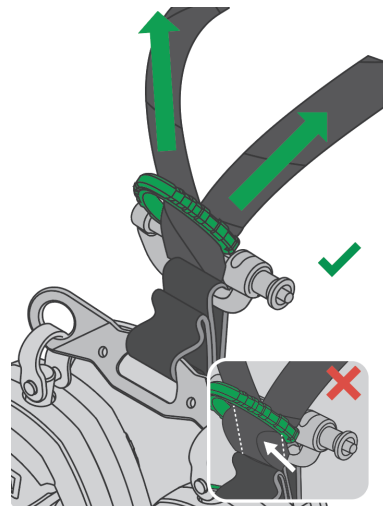
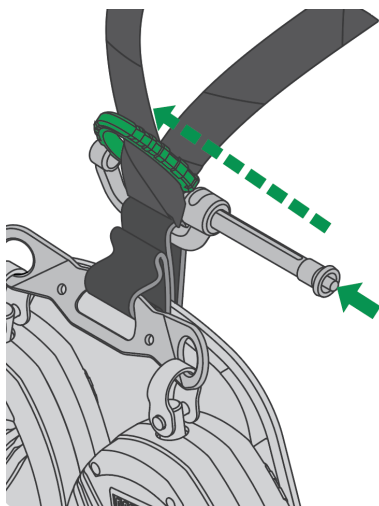
The V-TEC EDGE PFL pin connector allows connection to a full body harness just below the rear D-ring or through the PFL tunnel.



1. If harness has PFL tunnel—use PFL tunnel as connection point.

If harness does not have PFL tunnel—Lift D-ring on harness and pull straps through dorsal pad until V-TEC EDGE pin connector can feed between webbing straps and dorsal pad.

2. Press the button on right side of the pin and press the button on the top of the right side of the bracket. Pull the pin to the right to open the pin connector.



3. With the button on the pin depressed, feed the pin through PFL tunnel or behind both straps on harness to the left side of the bracket.
 - a. Release the button on the pin and pull on the end of the pin slightly to ensure it has locked into place.

4. If harness has PFL tunnel— Installation complete.
If harness does not have PFL tunnel— Pull harness straps back through dorsal pad to eliminate slack in webbing.

5 Installation and Use

5.1 Intended Use

PFLs are intended to be used as a connecting element between a full body harness and anchor point. See [Section 3 Product Specification](#). A full body harness is the only acceptable body holding device to be used with a PFL. If supplied as part of a complete system, components shall not be substituted.

5 Installation and Use

For ANSI users: Maximum Arrest force is 1800 lb (8 kN), Average Arrest Force is 1350 lb (6 kN), Maximum Arrest Distance is 3.5 ft (1.1 m).

WARNING!

- PFLs are only to be used for their intended purpose and within their limitations. DO NOT intentionally misuse this product. DO NOT use fall protection equipment for purposes other than those for which it was designed. DO NOT use fall protection equipment for towing, hoisting, or material handling.
- PFLs shall not be altered or added to. No unauthorized repairs, modifications, alterations and/or additions are permitted.
- RESCUE AND EVACUATION: the user must have a rescue plan and the means at hand to implement it. The plan must take into account the equipment and specific training necessary to affect prompt rescue under all foreseeable conditions. If the rescue must be performed in a confined space, the provisions of OSHA regulation 1910.146 and ANSI Z117.1 must be taken into account. It is recommended to provide means for user evacuation without assistance of others. This will usually reduce the time to get to a safe place and reduce or prevent the risk to rescuers.
- DO NOT rely on feel or sound to verify proper snaphook or carabiner engagement. Ensure that gate and keeper are closed before use.
- Additional lanyard connectors shall not be added, as this would serve to lengthen the lifeline and increase free fall.
- Unsuitable for use on unstable surfaces, fine grain materials or particulate surfaces such as sand or coal, as insufficient speed may prevent lock-on in the event of a fall (possible engulfment hazard).
- DO NOT use where line may be exposed to abrasive edges. For leading edge guidance, see Section [5.3 Leading Edge Installation and Use](#).
- PFLs shall not come into contact with hot surfaces (such as hot pipes), become entangled with moving machinery, or come into contact with electrical hazards (such as high voltage power lines).
- PFLs shall be protected from fire, acids, caustic solutions, or temperatures outside the range -40°F to 130°F (-40°C to 54°C).

Failure to follow these warnings can result in serious personal injury or death.

5.2 General Installation and Use

Connectors: Ensure PFL connectors are compatible with the attachments to which they are connected (to prevent roll-out), and are fully closed and locked before use. See Section [3 Product Specification](#).

Anchors: Ensure the PFL is attached to a compatible anchor. Flexible anchors, such as anchor lines, horizontal lifelines, rail or cantilever structures can affect the ability of the PFL to lock-on in the case of a fall. For further clarification on compatibility specifications, refer to the user instructions of the flexible anchor product. Should compatibility information not be included in the flexible anchor user instructions, contact the flexible anchor manufacturer for clarification.

Retraction: In use, the PFL lifelines will extract and retract without hesitation. Do not allow the lifeline to pass through legs, under arms, or wrap around structures. If the lifeline does not retract in use, fully extract the lifeline and slowly allow it to retract. If the lifeline continues to hesitate in retraction, contact MSA.

Twin Leg Connection: The PFL twin-leg configuration is intended to give users 100% tie-off when moving around the work site. One of the legs must be attached to an appropriate anchorage connector while the user moves to the new location. At the new location, attach the second leg to an appropriate anchorage connector before disconnecting the original leg. Repeat this process until the final destination has been reached. Do NOT work with both legs connected to an anchorage connector.

WARNING!

Dual-connections shall only be made for the purposes of 100% tie-off transitions, if a dual connection is made for any other purpose, anchorages of different elevations must be utilized.

Failure to follow this warning can result in serious personal injury or death.

Tieback Connection: The PFL Tieback product is intended to give users the ability to anchor directly to structural members that have been suitably identified by a qualified person. To use: wrap the leg of the PFL around the identified structural member and connect the FP5K snaphook to the leg to create a closed loop. Be sure the snaphook gate is completely closed, locked, and captures the leg of the PFL. Inspect anchorage to assure the tie-back loop on the leg of the PFL cannot be accidentally disengaged from the anchorage during use.

Storage: When not in use, store with the lifeline fully retracted as prolonged periods of full extraction may weaken the retraction spring. Guide the lifeline back to the unit for full retraction. Do NOT release lifeline from a distance as it will retract at high speed, potentially damaging internal parts. The connector may also strike objects in its path, causing damage to those objects and to the connector. See Section 8 [Cleaning and Storage](#) for full cleaning and storage instructions.

5.3 Leading Edge Installation and Use

If a fall over an edge is possible, special rescue measures shall be defined and trained for. Consideration shall be given to accessing a suspended user without further loading or moving the lifeline over an edge.

WARNING!

- Only use V-TEC EDGE PFLs for leading edge applications. Do NOT use V-TEC PFLs for leading edge applications.
- Leading Edge configurations shall only be used after all other hierarchy of controls, including restraint systems and overhead anchorages, have been exhausted.
- Leading Edge configurations shall only be used in accordance with local regulations.
- Leading Edge configurations shall be used in accordance with the instructions, warnings and limitations in these User Instructions.

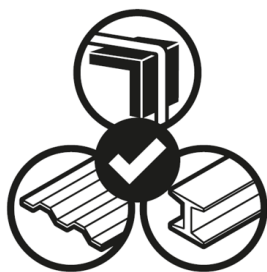
Failure to follow these warnings can result in serious personal injury or death.

Harness Connection: V-TEC EDGE PFL configurations shall be attached only using the PFL tunnel or below the D-ring as shown in Section 4 [Harness Attachment](#). Do not attach additional connectors between the bracket and harness, attempt to bypass the connecting bracket, or connect directly to the PFL mechanism.

Horizontal Offset: When using V-TEC EDGE Twin PFL configurations in a horizontal (leading edge) application, the horizontal distance between anchors shall be ≤ 8 ft (2.4 m). Large horizontal spans shall be avoided, as they can increase forces applied to the anchor and introduce swing falls.

Edge Types: The V-TEC EDGE PFL configurations have been tested for horizontal (leading edge) use over a steel edge without burrs using the methods in ANSI Z359.14-2021 (Class 2) and CSA Z259.2.2-2017 (Class SRL-LE).

Therefore, the V-TEC EDGE PFL may be used where a fall may occur over similar edges.



Additionally, while the ANSI Z359.14-2021 (Class 2) or CSA Z259.2.2-2017 (Class SRL-LE) standards do not address edges other than steel, the V-TEC EDGE PFL has been tested using the methods in ANSI Z359.14-2021 with the following edges:

A cold formed corrugated steel test edge. Edges used for testing were at thicknesses ranging from 22 gage (0.0295" / 0.7493 mm) to 16 gage (0.0598" / 1.5189 mm). Therefore, V-TEC EDGE PFL configurations may be used where a fall may occur over similar edges.

Edge Evaluation: Prior to use, leading edges must be evaluated by a qualified person. Use in these edge situations should only be as a last resort. Avoid working where the lifeline will continuously or repeatedly abrade against sharp, jagged, or abrasive edges. If the risk assessment indicates that an edge could damage the lifeline, then eliminate such contact or protect the edges using a pad or other means before starting work.

Anchorage Considerations: Horizontal (leading edge) use or anchoring at the feet of the user should be limited wherever possible to avoid the potential for swing fall and the possibility of the user striking a structure, potentially causing serious injury. To reduce the risk of a swing fall, anchor directly above the user.

Lateral movements to both sides of the center axis shall be limited to a maximum 8 ft (2.4 m) as shown in clearance charts. The V-TEC EDGE PFL anchorage point shall be at the user's foot level or above. Climbing above the anchorage point is not permitted. Measures shall be taken to prevent use over unintended edges. Do not work on the far side of an opening opposite the anchorage point or around corners.

WARNING!

- Anchor locations shall adhere to charts in Section [6.1 V-TEC EDGE Fall Clearance Charts](#), including a redirection angle $\geq 90^\circ$ and set back ≥ 0 ft (0 m)*.
** In leading edge applications with 0 ft (0 m) setback, ensure that setup does not allow snaphook to contact leading edge in the event of a fall.*
- Avoid working where the lifeline will continuously or repeatedly abrade against sharp, jagged, or abrasive edges. Use in these situations should only be as a last resort.
- The V-TEC EDGE PFL anchorage point shall be at the user's foot level or above.
- Do not work on the far side of an opening opposite the anchorage point or around corners.

Failure to follow this warning can result in serious personal injury or death.

For CSA users: Deployment is equal to $[D_{141} = 0.9 \text{ (web)}, D_{141} = 0.8 \text{ (cable)}]$ times $[5 \text{ ft (1.53 m)}]$ for a maximum worker 310 lbs (141 kg) or deployment based on the results of the dynamic performance testing specified in Clause 7.2, whichever is greater.

5.4 Mobile Elevated Work Platform / Aerial Lift / Bucket Truck Installation and Use

V-TEC EDGE 8 ft (2.4 m) PFL standard configurations (tieback configurations NOT permitted) are approved for use in mobile elevated work platforms, aerial lifts, and bucket trucks provided the hazards described below are considered. In addition, the user is advised to perform an evaluation by a competent person for other fall-related hazards unique to this application.

Hazards

- Avoid exposing the lifeline to working over an exposed sharp edge. Sharp edges may cut the line. However, the rounded bars of a guard rail are acceptable for the line to pass over.
- A fall out of the platform can result in a swing-fall hazard, with the potential for the worker to strike the boom of the aerial lift device or other objects in the path of the fall.

Requirements for Use

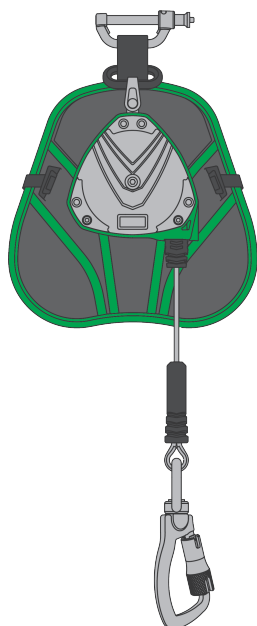
- The V-TEC EDGE 8 ft (2.4 m) PFL must be attached to a certified anchor point within the platform of the lift.
- User weight capacity, including clothing and tools, is 310 lbs (141 kg).
- Adhere to clearance charts. Clearance is calculated for a rigid anchor, if a non-rigid anchor is being used then a qualified person should evaluate for additional clearance considerations.

6 Fall Clearances

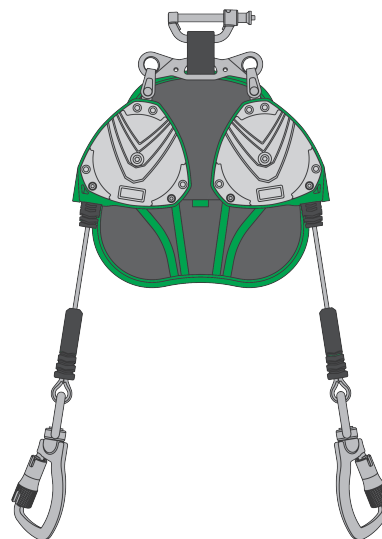
6.1 V-TEC EDGE Fall Clearance Charts

8 ft V-TEC EDGE Cable PFL: 8 ft / 2.4 m Length

V-TEC EDGE Cable Single PFL



V-TEC EDGE Cable Twin PFL



Product: V-TEC EDGE Cable PFL

Use: Leading edge applications

Capacity: ≤ 310 lbs (141 kg)

(A) Clearance values shown are based on 0 ft (0 m) anchorage setback from the leading edge. Anchorage connector may be used at setback distance of 0 ft (0 m)* from the leading edge or as far back as required. For every 1 ft (0.3 m) the anchorage location is set back from the leading edge, the user can subtract 0.5 ft (0.15 m) from the clearance provided in the chart based on the user's offset distance.

NOTE: Clearance chart anchorage location for illustrative purposes only.

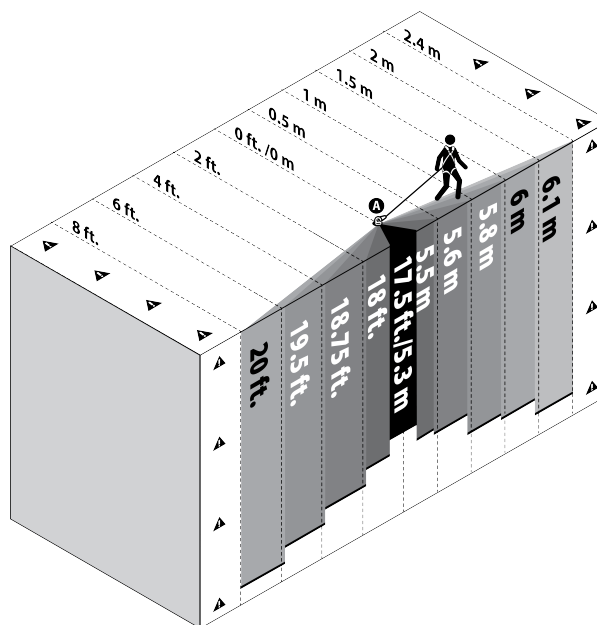


ILLUSTRATION NOT TO SCALE

WARNING!

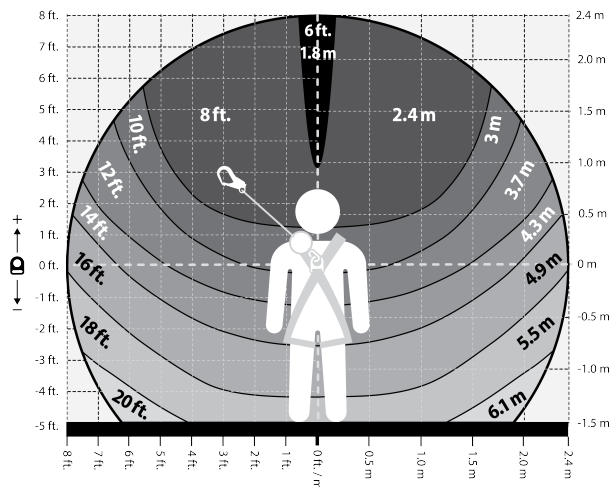
* In leading edge applications without setback, ensure that setup does not allow snaphook to contact leading edge in the event of a fall.

Failure to follow this warning can result in serious personal injury or death.

Product: V-TEC EDGE Cable PFL

Use: Non-leading edge applications

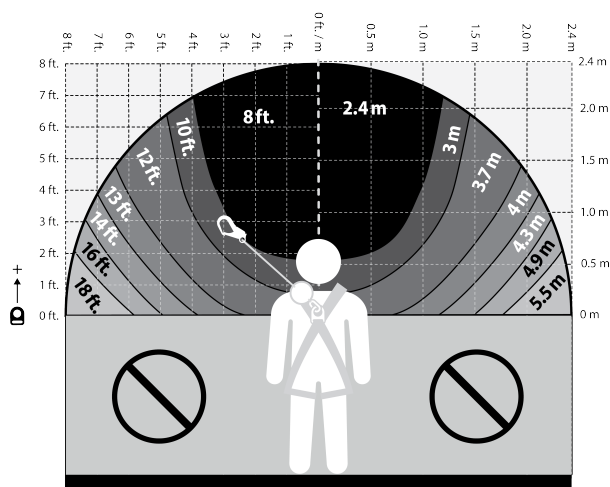
Capacity: ≤ 310 lbs (141 kg)



Product: V-TEC EDGE Cable PFL

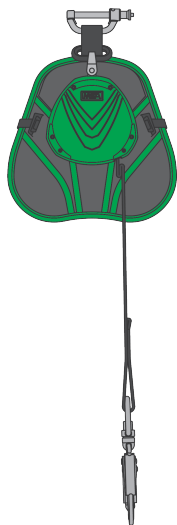
Use: Non-leading edge applications

Capacity: ≥ 310 lb (141 kg) and ≤ 400 lbs (181 kg)

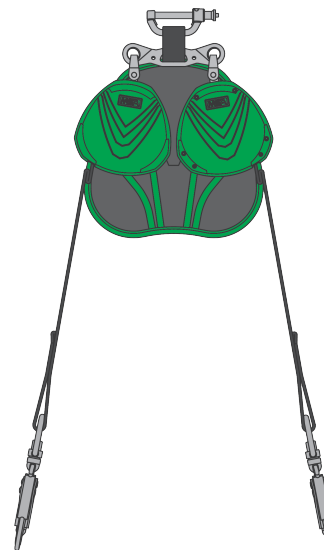


8 ft V-TEC EDGE Web PFL: 8 ft / 2.4 m Length

V-TEC EDGE Web Single PFL



V-TEC EDGE Web Twin PFL

**Product:** V-TEC EDGE Web PFL**Use:** Leading edge applications**Capacity:** ≤ 310 lbs (141 kg)

(A) Clearance values shown are based on 0 ft (0 m) anchorage setback from the leading edge. Anchorage connector may be used at setback distance of 0 ft (0 m)* from the leading edge or as far back as required. For every 1 ft (0.3 m) the anchorage location is set back from the leading edge, the user can subtract 0.5 ft (0.15 m) from the clearance provided in the chart based on the user's offset distance.

NOTE: Clearance chart anchorage location for illustrative purposes only.

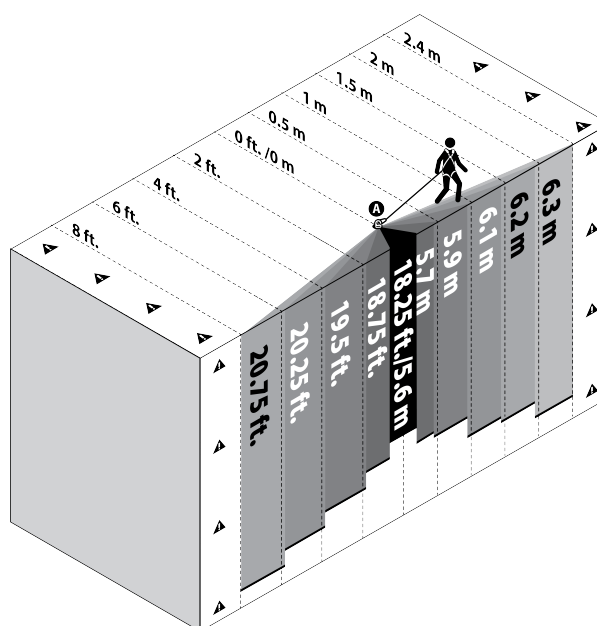


ILLUSTRATION NOT TO SCALE

⚠ WARNING!

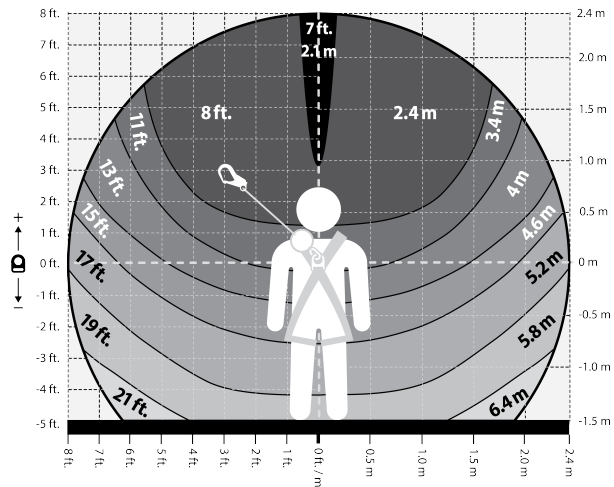
* In leading edge applications without setback, ensure that setup does not allow snaphook to contact leading edge in the event of a fall.

Failure to follow this warning can result in serious personal injury or death.

Product: V-TEC EDGE Web PFL

Use: Non-leading edge applications

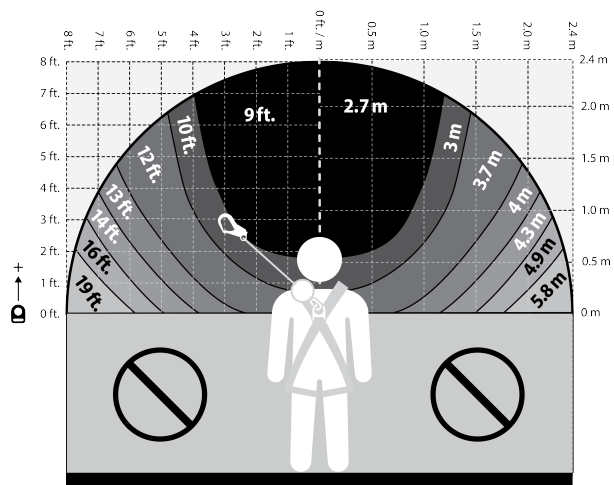
Capacity: ≤ 310 lbs (141 kg)



Product: V-TEC EDGE Web PFL

Use: Non-leading edge applications

Capacity: ≥ 310 lb (141 kg) and ≤ 400 lbs (181 kg)



6.2 V-TEC EDGE Tieback Fall Clearance Charts

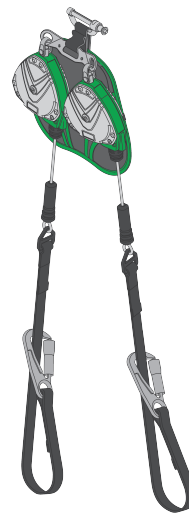
8 ft V-TEC EDGE Cable Tieback PFL: 8 ft / 2.4 m Lifeline + 2 ft / 0.6 m (Total Length: 10 ft / 3 m) *

* Tieback Section = 3 ft / 0.9 m

V-TEC EDGE Cable Tieback Single PFL



V-TEC EDGE Cable Tieback Twin PFL



Product: V-TEC EDGE Cable Tieback PFL

Use: Leading edge applications

Capacity: ≤ 310 lbs (141 kg)

(A) Clearance values shown are based on 2 ft (0.6 m) anchorage setback from the leading edge. Anchorage connector may be used at setback distance of 2 ft (0.6 m) from the leading edge or as far back as required. For every 1 ft (0.3 m) the anchorage location is set back from the initial 2 ft (0.6 m) setback, the user can subtract 0.5 ft (0.15 m) from the clearance provided in the chart based on the user's offset distance.

If the V-TEC EDGE Tieback PFL is anchored around a structural member that has been suitably identified by a qualified person, the initial setback of 2 ft (0.6 m) may be reduced by an amount equal to the circumference of the object, up to 2 ft (0.6 m).

NOTE: Clearance chart anchorage location for illustrative purposes only.

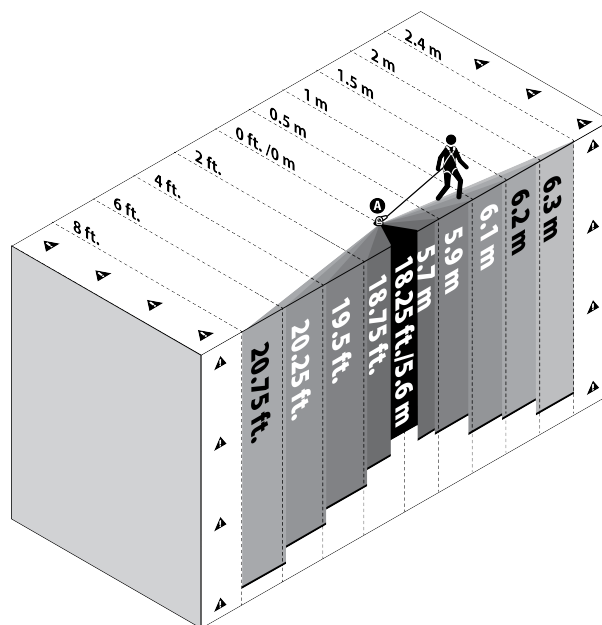


ILLUSTRATION NOT TO SCALE

⚠ WARNING!

In leading edge applications without setback, ensure that setup does not allow snaphook to contact leading edge in the event of a fall.

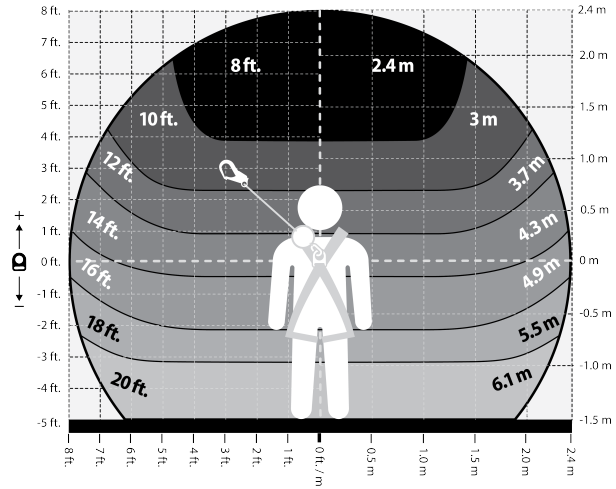
Failure to follow this warning can result in serious personal injury or death.

Product: V-TEC EDGE Cable Tieback PFL

Use: Non-leading edge applications

Capacity: ≤ 310 lbs (141 kg)

NOTE: If the V-TEC EDGE Tieback PFL is anchored around a structural member that has been suitably identified by a qualified person. It may be possible to reduce the fall clearance by an amount equal to the circumference of the structural member up to 2 ft (0.6m) at specific anchorage locations. A qualified person should be consulted before reducing the clearance.

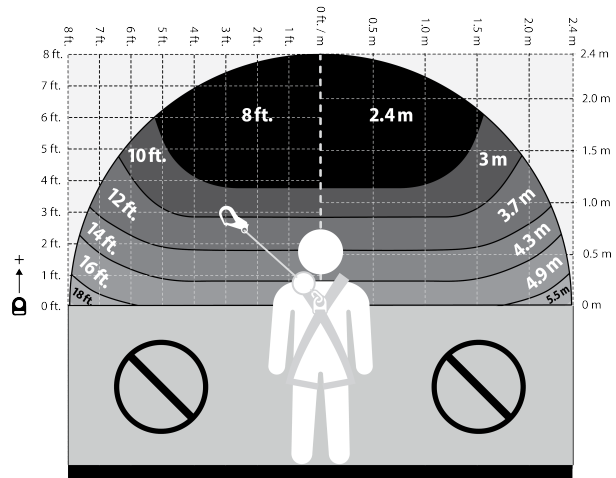


Product: V-TEC EDGE Cable Tieback PFL

Use: Non-leading edge applications

Capacity: ≥ 310 lb (141 kg) and ≤ 400 lbs (181 kg)

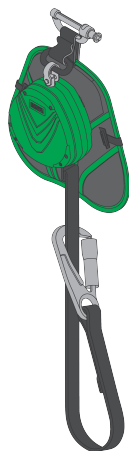
NOTE: If the V-TEC EDGE Tieback PFL is anchored around a structural member that has been suitably identified by a qualified person. It may be possible to reduce the fall clearance by an amount equal to the circumference of the structural member up to 2 ft (0.6m) at specific anchorage locations. A qualified person should be consulted before reducing the clearance.



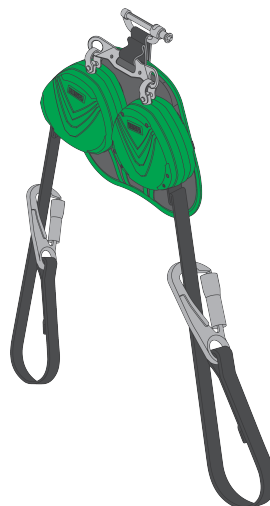
8 ft V-TEC EDGE Web Tieback PFL: 8 ft / 2.4 m Lifeline + 2 ft / 0.6 m (Total Length: 10 ft / 3 m) *

* Tieback Section = 3 ft / 0.9 m

V-TEC EDGE Web Tieback Single PFL



V-TEC EDGE Web Tieback Twin PFL



Product: V-TEC EDGE Web Tieback PFL

Use: Leading edge applications

Capacity: ≤ 310 lbs (141 kg)

(A) Clearance values shown are based on 2 ft (0.6 m) anchorage setback from the leading edge. Anchorage connector may be used at setback distance of 2 ft (0.6 m) from the leading edge or as far back as required. For every 1 ft (0.3 m) the anchorage location is set back from the initial 2 ft (0.6 m) setback, the user can subtract 0.5 ft (0.15 m) from the clearance provided in the chart based on the user's offset distance.

If the V-TEC EDGE Tieback PFL is anchored around a structural member that has been suitably identified by a qualified person, the initial setback of 2 ft (0.6 m) may be reduced by an amount equal to the circumference of the object, up to 2 ft (0.6 m).

NOTE: Clearance chart anchorage location for illustrative purposes only.

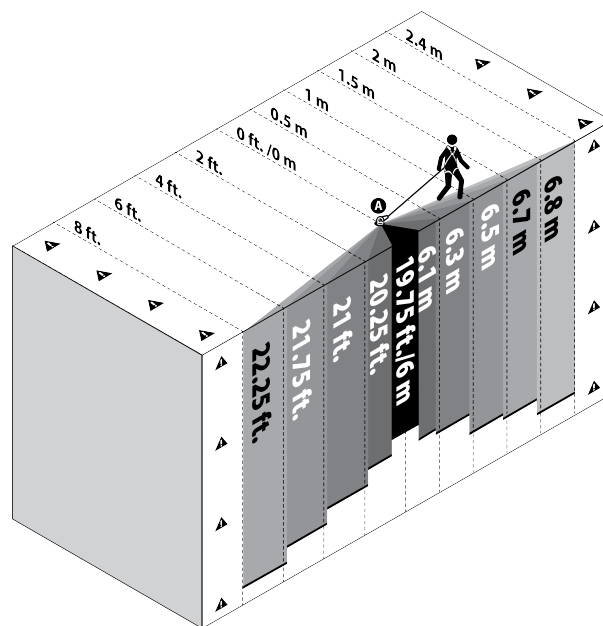


ILLUSTRATION NOT TO SCALE

⚠ WARNING!

In leading edge applications without setback, ensure that setup does not allow snaphook to contact leading edge in the event of a fall.

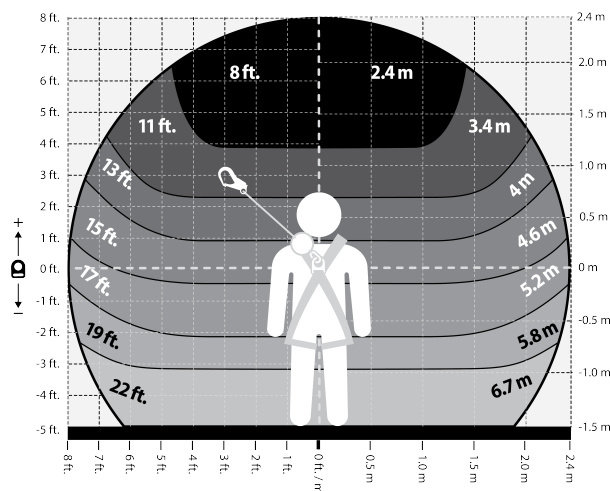
Failure to follow this warning can result in serious personal injury or death.

Product: V-TEC EDGE Web Tieback PFL

Use: Non-leading edge applications

Capacity: ≤ 310 lbs (141 kg)

NOTE: If the V-TEC EDGE Tieback PFL is anchored around a structural member that has been suitably identified by a qualified person. It may be possible to reduce the fall clearance by an amount equal to the circumference of the structural member up to 2 ft (0.6m) at specific anchorage locations. A qualified person should be consulted before reducing the clearance.

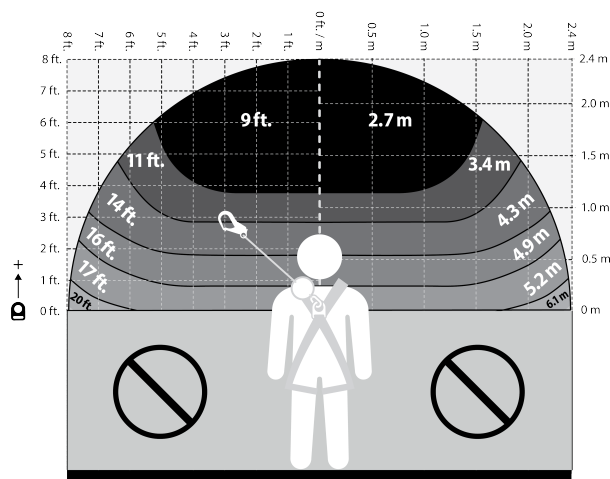


Product: V-TEC EDGE Web Tieback PFL

Use: Non-leading edge applications

Capacity: ≥ 310 lb (141 kg) and ≤ 400 lbs (181 kg)

NOTE: If the V-TEC EDGE Tieback PFL is anchored around a structural member that has been suitably identified by a qualified person. It may be possible to reduce the fall clearance by an amount equal to the circumference of the structural member up to 2 ft (0.6m) at specific anchorage locations. A qualified person should be consulted before reducing the clearance.



7 Pre-Use Checks and Periodic Examinations

The safety of the user relies upon the continued efficiency and durability of the equipment. Therefore, pre-use checks shall be completed before each use. See [Table 2 Pre-Use Checks](#) for pre-use check information. Periodic examinations shall be completed by a person, other than the user, competent in the examination of PFLs, in accordance with the manufacturer's instructions. The interval will be dictated by the usage, local regulations, and environmental conditions, and will be at least annually. See [Table 3 Periodic Examination Interval](#) for more information. A record shall be kept of the results of the examination.

Table 2 Pre-Use Checks

Pre-Use Checks	Method
Load Indicator	Ensure the load indicator has not been deployed. See the product label for examples of deployed load indicator.
Labels	Ensure labels are present and legible.
Examination Date	Ensure date of next examination has not elapsed. Ensure a periodic examination is not due as determined by a competent person. See Table 3 Periodic Examination Interval and product's inspection checklist. .
General Condition and Lifeline	Examine for signs of excessive damage, wear, corrosion or contamination to both web and cable lifeline PFLs. For Cable - Inspect entire length of the lifeline for kinks, bends, broken wires, birdcaging, corrosion, damaged splices or damaged thimbles. Damage to the cable can significantly impact the performance. Verify there are no reductions in diameter of the lifeline. Check all fasteners for loosening or damage, including center shaft. For Web - Inspect the full length of lifeline and verify that it has no broken, frayed, cut, abraded, or missing threads. Verify there are no reductions in width or thickness of the lifeline. Verify there are no smooth, discolored, shiny, hardened, or glazed areas of the lifeline that indicate exposure to heat or chemicals.
Energy Absorber	Check energy absorber for signs of cuts, abrasion, tears, burns, mold, discoloration, or chemical damage. Verify the white tear webbing is not significantly exposed through the energy absorber cover.
Extraction and Retraction	Inspect lifeline extraction and retraction by pulling the full length of the line out and letting it retract back into the housing in a controlled manner. Maintain a light tension on the lifeline while it retracts. The line operation must be smooth and unhesitant.
Lock-on	Pull sharply on the lifeline – ensure device locks. Repeat three times.
Housing / Fasteners / Swivel	Examine the housing and verify there are no cracks, excessive signs of wear, or extreme discoloration. Verify that all fasteners are in place and secure. Verify that all fasteners, the swivel, and metal components adjacent to the swivel are in place, are secure and do not show signs of excessive damage, wear or corrosion. Verify the swivel and adjacent components can move freely.
Connectors	Check for correct operation of connector and connector gate. Examine all connectors for signs of excessive damage, wear or corrosion. For Leading Edge units, ensure the harness connection pin is fully engaged, locked in place and properly routed under the harness webbing. Ensure no red marking is visible.

Table 3 Periodic Examination Interval

Usage	Interval
Infrequent to light	Annually (12 months)
Moderate to heavy	Semi-annually to annually (6-12 months)
Severe to continuous	Quarterly to semi-annually (3-6 months)

Usage shall be determined by a competent person. A competent person is defined as a person, other than the user, competent in the examination of PPE in accordance with MSA instructions.

The V-TEC EDGE PFLs are not repairable. Maximum product life: Continued use is dependent upon passing pre-use checks and periodic examinations. Service life may be reduced by frequency and conditions of use or local regulations.

WARNING!

- PFLs shall not be altered or added to. No unauthorized repairs, modifications, alterations and/or additions are permitted.
- PFLs that have arrested a fall or are unable to pass an inspection shall be tagged “UNUSABLE” and disposed of in accordance with local regulations.
- Due to the nature of some fall arrest events, it is possible for the load indicator to not deploy. In the event that a PFL is subjected to fall arrest forces and the load indicator does not deploy, the PFL still must be removed from service and marked as “UNUSABLE” until it has been destroyed.
- If the load indicator is deployed, immediately remove the PFL from service and mark it as “UNUSABLE” until it has been destroyed.

Failure to follow these warnings can result in serious personal injury or death.

Hazards

WARNING!

- Use caution when working around moving machinery. Chemical hazards, heat, and corrosion may damage the PFL. Any chemical exposure should be avoided, if possible. All chemical hazards should be accounted for prior to beginning work.
- More frequent formal inspections are required in environments with chemical hazards, heat, and corrosion. As with all chemical exposures, consult the safety officer for review and recommendations for decontamination. Cleaning is strongly suggested - reference specific product cleaning guidance.
- Prior to use, the end user is responsible for testing the product in the environment and conditions in which it will be used.

Failure to follow these warnings can result in serious personal injury or death.

The below chart should only be used as general guidance for product selection and does not indicate all possible chemical exposures in the environment. Resistance ratings in the chart are determined for the materials relative to each other.

Chemical	Resistance			
	Nylon	Polyester	Stainless Steel (304)	Galvanized Steel
Strong acid (dilute)	Poor	Good	Fair	Poor
Strong acid (conc.)	Poor	Poor	Poor	Poor
Weak acid (dilute)	Poor	Good	Good	Poor
Weak acid (conc.)	Poor	Good	Poor	Poor
Strong alkali (dilute)	Good	Poor	Good	Poor
Strong alkali (conc.)	Fair	Poor	Fair	Poor
Weak alkali (dilute)	Good	Fair	Good	Fair
Weak alkali (conc.)	Good	Poor	Fair	Poor
Alcohol	Good	Fair	Good	Good
Aldehyde	Good	Poor	Good	Good
Ether	Good	Poor	Good	Good
Halogenated Hydrocarbons	Good	Good	Good	Good
Phenols	Poor	Poor	Good	Good
Bleaching agents	Poor	Good	Fair	Poor
Ketones	Good	Poor	Good	Fair
Lubricating Oils & Greases	Good	Good	Good	Good
Soaps & Detergents	Good	Good	Good	Good
Seawater	Good	Good	Fair	Poor
Aromatic Solvents	Good	Poor	Good	Good

8 Cleaning and Storage

If required, the PFL exterior and lifelines may be cleaned using a damp cloth and warm water (max 104°F or 40°C), and allowed to dry naturally before use. Excessive build-up of dirt, paint etc. can compromise both retraction and strength of the lifeline.

Store or transport the PFL in a cool, dry, clean environment, away from heat, steam, harmful fumes, corrosive agents, rodents, dust, oil, and direct sunlight. During transportation, the device shall be protected to prevent damage or contamination. Examine the PFL after long periods of storage prior to returning it to service.

Moving parts of snaphooks, carabiners, and the attachment bracket may require periodic lubrication with low viscosity penetrating oil. Follow lubricant manufacturer's instruction. Do not over-lubricate. Wipe excess with a clean, dry cloth.

9 Warranty

Express Warranty – MSA warrants that the product furnished is free from mechanical defects or faulty workmanship for a period of one (1) year from first use or eighteen (18) months from date of shipment, whichever occurs first, provided it is maintained and used in accordance with MSA's instructions and/or recommendations. Replacement parts and repairs are warranted for ninety (90) days from the date of repair of the product or sale of the replacement part, whichever occurs first. MSA shall be released from all obligations under this warranty in the event repairs or modifications are made by persons other than its own authorized service personnel or if the warranty claim results from misuse of the product. No agent, employee or representative of MSA may bind MSA to any affirmation, representation or modification of the warranty concerning the goods sold under this contract. MSA makes no warranty concerning components or accessories not manufactured by MSA, but will pass on to the Purchaser all warranties of manufacturers of such components. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AND IS STRICTLY LIMITED TO THE TERMS HEREOF. MSA SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Exclusive Remedy – It is expressly agreed that the Purchaser's sole and exclusive remedy for breach of the above warranty, for any tortious conduct of MSA, or for any other cause of action, shall be the repair and/or replacement, at MSA's option, of any equipment or parts thereof, that after examination by MSA are proven to be defective. Replacement equipment and/or parts will be provided at no cost to the Purchaser, F.O.B. Purchaser's named place of destination. Failure of MSA to successfully repair any nonconforming product shall not cause the remedy established hereby to fail of its essential purpose.

Exclusion of Consequential Damages – Purchaser specifically understands and agrees that under no circumstances will MSA be liable to Purchaser for economic, special, incidental, or consequential damages or losses of any kind whatsoever, including but not limited to, loss of anticipated profits and any other loss caused by reason of the non-operation of the goods. This exclusion is applicable to claims for breach of warranty, tortious conduct or any other cause of action against MSA.

For additional information, please use your local contacts on our website www.MSAafety.com.

10 Inspection Checklist

Inspection Checklist

Model Number: _____

Serial Number: _____

Date: _____

Inspector (Name / Signature): _____

Date of Manufacture: _____

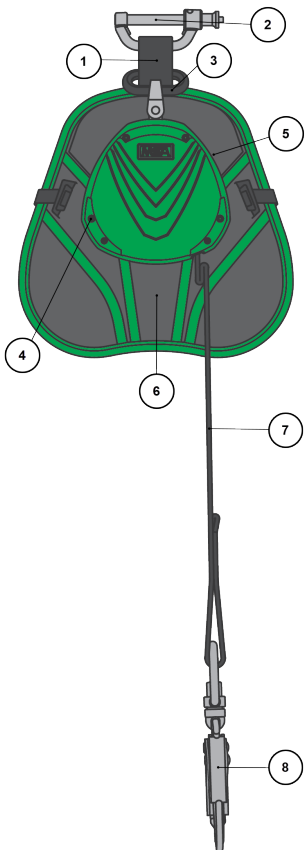
Date of Purchase: _____

Date of First Use: _____

Date Due for Next Periodic Inspection: _____

#	Description	Good— Safe for Use	Good— Safe for Use	Good— Safe for Use	Good— Safe for Use	Good— Safe for Use	Good— Safe for Use	Damaged, Worn, Altered, Missing— Remove from Service	Comments
1	Load indicator								
2	Pin connector								
3	Bracket								
4	Housing / Fasteners								
5	Labels								
6	Energy absorber pouch								
7	Lifeline								
8	Snaphook								
	Lock on (ensure device locks)								

V-TEC EDGE Web PFL



V-TEC EDGE Cable PFL

