

Products & Solutions for the Utility Industry



Complete Solutions for Utility Market Applications

The utility industry continues to evolve in response to regulatory updates, new technologies and changing consumer expectations. Working at heights presents potential hazards and necessitate safety precautions. Even short-distance falls can cause serious injury. MSA can help customers to navigate these utility sector challenges by providing products and solutions for many utility industry applications.

- Generation plants
- Substations
- Transmission
- Distribution

WE KNOW WHAT'S AT STAKE.

Generation

Working within power plants presents many potential hazards, including electrical shocks, burns, fires, explosions, and hazardous chemical leaks or spills. Providing your workers with proper safety products and training aids significantly in reducing and mitigating the effects of accidents.



Applications	Potential Hazards	MSA Solutions
TOWERS	Most towers don't provide mechanical lifts.	Horizontal lifelines are flexible, easy solutions to accommodate many safety needs for working at heights. Personal rescue devices (PRD) are to be used with a fall protection system or an anchor point. Power generation may present lone worker situations where rescue may be difficult.
FIXED LADDERS	Fixed ladders are vertical systems primarily used for accessing towers for maintenance.	Vertical lifeline systems provide temporary fall protection on ladders or when climbing. Systems can also provide secondary lifeline for suspended positioning systems.
BOILERS	Boilers include a heat source that allows water to be heated above its boiling point.	In confined spaces where boilers, electrical vaults and open pits are present, products such as XTIRPA™ System for confined space entry, portable gas detectors and respiratory protection may be necessary.
OVERHEAD OPERATIONS	Overhead hazards	MSA Latchways overhead lifeline systems offer Constant Force® technology housed within inline energy absorber.

Substations Fall Protection (Transformers)

Substations are located throughout electric power transmission and distribution systems and can present unique safety needs. Common scenarios including clearance, illumination, passageways, and evacuation routes require training, preplanning and safety equipment.



Applications	Potential Hazards	MSA Solutions
WORKING ON TOP TRANSFORMERS	Newer transformers provide attachment points but older versions may not. Work requiring use of ladders or scaffolding must be assessed to minimize risk.	Latchways WinGrip® Vacuum Anchor provides compact, lightweight, fully portable fall protection solutions requiring only one-person operation. WinGrip is intrinsically safe and is suitable for use within in both wet and dry conditions. Adjustable lanyards
BUCKET TRUCK OPERATIONS	Risk of injury or incident is high. Potential electrocution hazards exist.	Personal rescue devices are contained within a small backpack attached to full body harness to be used with fall protection system or anchor point. <ul style="list-style-type: none"> • ANSI-approved head protection • Eye protection • Fall restraint system/fall arrest system • Insulated gloves where electrocution risk is possible

Transmission Towers

Transmission tower work continues to present potentially hazardous situations within the power distribution industry. Falls from heights are the biggest cause of death and the major cause of serious injury. Be aware of key standards relating to fall protection and ensure that your workers not only use required safety products, but are also trained in the proper use of their PPE.



Applications	Potential Hazards	MSA Solutions
LINEMAN CLIMBING STRUCTURES NEW OSHA REGULATIONS 1910.269 & 1926 SUBPART V	Working at heights: 1910.269 requires 100% tie-off; no free climbing is allowed.	TowerLatch™ vertical fall protection system for retrofitting to overhead line tower climbing legs. TowerLatch SP attachment device incorporates built-in energy absorbing pack to reduce end load in event of a fall. System can be used by four workers simultaneously. Vertical system resembles free climbing while maintaining 100% tie-off.

Distribution

Distribution is the final stage in electric power delivery. Distribution substations connect to transmission systems and lower transmission voltage. Most utility pole work is performed from bucket trucks; very little pole climbing is necessary. Every bucket truck has a rescue unit, typically a step ladder that can be lowered over the bucket edge for workers to climb down to the ground.



Applications	Potential Hazards	MSA Solutions
BUCKET TRUCK OPERATIONS	Falling from bucket truck while working alone.	Personal rescue devices allow for self-rescue. With PRDs, training is intuitive and easier than training with ladder and tag line. Training may occur only annually.

All MSA Latchways systems are manufactured to the highest international standards using the best materials. In addition to rigorous in-house testing, all Latchways products undergo external verification to meet or exceed relevant industry standards.

MSA Solutions for Utility Industry Applications



**Latchways Personal
Rescue Device (PRD)**



**EVOTECH® Arc Flash
Harness**



**Gravity®
Harness**



**ArcSafe®
Lanyard**



**MSA XTIRPA™ System
for Confined Space Entry**



**Latchways
TowerLatch™ System**



**Latchways WinGrip®
Vacuum Anchor System**



**Latchways
Arc Flash PFL**

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.



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V-TEC™ 10-ft. Personal Fall Limiter

Personal Fall Limiter—Impressive innovation in a compact size



WE KNOW WHAT'S AT STAKE.

V-TEC 10-ft. Personal Fall Limiter

Suitable for multiple applications, the V-TEC 10-ft. PFL is designed specifically for environments where close anchorage is available.

Compact and Versatile

The V-TEC PFL is the most compact and lightweight personal fall limiter ever developed, using multiple spring radial energy-absorbing technology. This new design eliminates the need for an external energy-absorber outside of the housing, making this unit the most compact 10-ft. PFL on the market.

Reliable and Reassuring

MSA Lifecycle Warranty means that users can work at heights with confidence that the Latchways PFL will continue to provide safety when it matters most. This product offers fall arrest and restraint for users weighing 130 to 400 lb. (60 to 181 kg) including tools.



V-TEC PFL

The world's first self-retracting lifeline with multiple spring radial energy-absorbing technology

- Integral energy absorber
- Requires zero recalibration or adjustment
- Energy absorber is completely sealed from external contaminants

Free range of motion

- Fully rotating attachment point for complete flexibility—both 360° and 180°

Precision engineering

- Structurally reinforced pawl mechanism

Highly durable

- Polycarbonate case houses the PFL; transparency allows for easy visual inspection of internal components

Superior materials

- Components manufactured from high-grade stainless steel and engineered plastics

Connectors

The V-TEC PFL offers a steel top carabiner and a range of available connectors.



AL36CL Snaphook

- Aluminum alloy
- ANSI- and CSA-compliant



36CL Snaphook

- High-tensile steel material
- Zinc-plated finish
- ANSI- and CSA-compliant



36CS Snaphook

- Double-action/self-locking gate
- High-tensile steel material
- Zinc-plated finish
- ANSI- and CSA-compliant



Aluminum Swivel Carabiner

- Triple-locking gate
- Aluminum alloy
- ANSI- and CSA-compliant

Standards

The V-TEC PFL has a highly durable polycarbonate clear casing that allows for easy visual inspection of critical internal components. Unit withstands temperatures ranging from -40° to +129°F (-40° to +54°C). High-performing, high-strength lifeline is manufactured to the highest standard in accordance with MSA's strict quality-control procedures, and meets the following standards:

- ANSI Z359.14 – 2012
- OSHA 1910.66
- OSHA 1926.502
- CSA Z259.2.2-98

Single-Leg 10-ft. PFL Ordering Information

Part Number	Web	Cable	Length	Lifeline Connection	PFL Connection	ANSI Z359.14	CSA Z259.2.2
63013-00A	■		10 ft. (3 m)	AL36CL	Steel carabiner	■	
63013-00C	■		10 ft. (3 m)	Aluminum swivel carabiner	Steel carabiner	■	
63013-00E	■		10 ft. (3 m)	36CS	Steel carabiner	■	
63013-00F	■		10 ft. (3 m)	36CL	Steel carabiner	■	
63203-00A		■	10 ft. (3 m)	36CS	Steel carabiner	■	
63203-00B		■	10 ft. (3 m)	36CL	Steel carabiner	■	
63013-00ACA	■		10 ft. (3 m)	AL36CL	Steel carabiner		■
63013-00CCA	■		10 ft. (3 m)	Aluminum swivel carabiner	Steel carabiner		■
63013-00ECA	■		10 ft. (3 m)	36CS	Steel carabiner		■
63013-00FCA	■		10 ft. (3 m)	36CL	Steel carabiner		■
63203-00ACA		■	10 ft. (3 m)	36CS	Steel carabiner		■
63203-00BCA		■	10 ft. (3 m)	36CL	Steel carabiner		■



63013-00A
63013-00ACA



63013-00C
63013-00CCA



63013-00E
63013-00ECA



63013-00F
63013-00FCA



63203-00A
63203-00ACA



63203-00B
63203-00BCA

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V-TEC™ Mini Personal Fall Limiter

Impressive Innovation in a Compact Size



Compact and Versatile

The V-TEC Mini PFL is the most compact and lightweight self retracting lanyard ever developed using radial energy-absorbing technology. The compact design eliminates the need for an exposed external energy-absorber outside of the housing, which improves wear and tear performance and decreases the replacement cycle, saving you money. Unit offers fall arrest and restraint for users 75* to 400 lbs. (34* to 181 kg) including tools.

**V-TEC 1.8m units only*

Strong and Tested

The V-TEC Mini PFL has a highly durable polycarbonate, clear casing, allowing for easy pre-use inspection of critical internal components. Unit can withstand temperatures ranging from -40° to +130° F (-40° to +54° C). The V-TEC Mini PFL has been tested to these relevant standards:

- ANSI Z359.14, Class B
- OSHA 1910.66
- OSHA 1926.502
- CSA Z259.2.2-98
- EN360: 2002

WE KNOW WHAT'S AT STAKE.

V-TEC Mini PFL



Assured Safety

The world's first self retracting lifeline with multiple spring radial energy-absorbing technology

- Integral energy absorber
- Energy absorber is completely sealed from external contaminants



Precision engineering

Structurally reinforced pawl mechanism



Free range of motion

Fully rotating attachment point for complete flexibility—both 360° and 180°



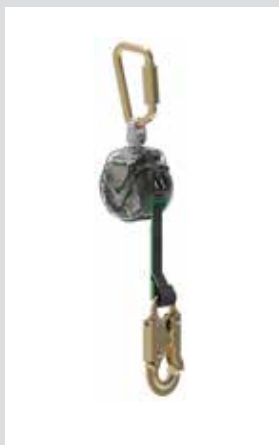
Highly durable

Polycarbonate case houses SRL; transparency allows for easy visual inspection of critical internal components



Superior materials

Components manufactured from high-grade stainless steel and engineered plastics



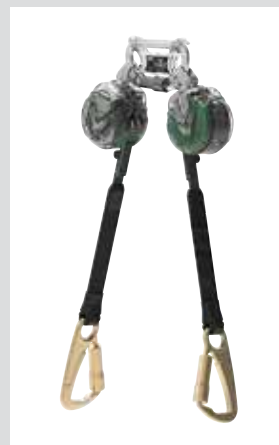
Single-leg



Twin-leg



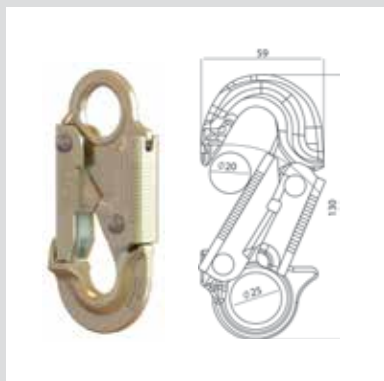
Single-leg Tie-back



Twin-leg Tie-back

Available Connectors

V-TEC Mini PFL offers choice of steel or aluminum top carabiner and variety of available connectors.



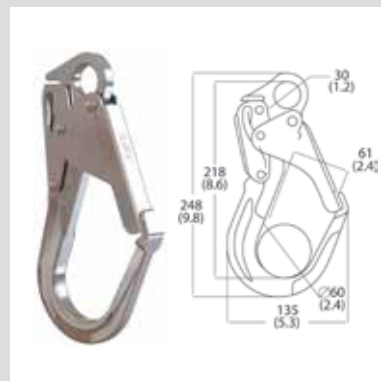
Forged Steel Snaphook (36C)

- Double-action/self-locking gate
- High-tensile steel material
- Zinc-plated finish
- EN-, ANSI- and CSA-compliant



Carabiner/Hook

- Triple-locking gate
- Aluminum alloy
- EN-, ANSI- and CSA-compliant



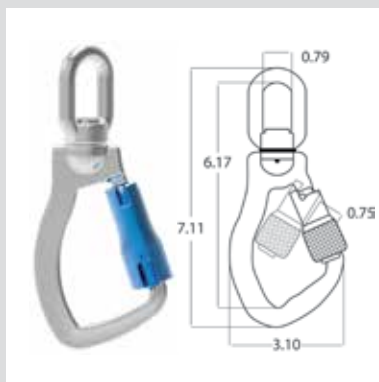
Aluminum Scaffold Hook (AL36CL)

- Aluminum alloy
- EN-, ANSI- and CSA-compliant



Forged Steel Swivel Snaphook (36CS)

- Double-action/self-locking gate
- High-tensile steel material
- Zinc-plated finish
- ANSI-, CSA- and EN-compliant



Swivel Carabiner/Hook

- Triple-locking gate
- Aluminum alloy
- ANSI-, CSA- and EN-compliant



Steel Scaffold Hook (36CL)

- High-tensile steel material
- Zinc-plated finish
- ANSI-, CSA- and EN-compliant

Part Number	Type			Line Length	Anchorage Connection	Harness Connection	Standards		
	Single-leg	Twin-leg	Tie-back				OSHA	ANSI	CSA
63011-00A	■			6 ft. (1.8 m)	AL36CL	Steel carabiner	■	■	
63011-00ACA	■			6 ft. (1.8 m)	AL36CL	Steel carabiner			■
63011-00B	■			6 ft. (1.8 m)	36C	Steel carabiner	■	■	
63011-00BCA	■			6 ft. (1.8 m)	36C	Steel carabiner			■
63011-00C	■			6 ft. (1.8 m)	Aluminum swivel carabiner	Steel carabiner	■	■	
63011-00CCA	■			6 ft. (1.8 m)	Aluminum swivel carabiner	Steel carabiner			■
63011-00D	■			6 ft. (1.8 m)	Aluminum carabiner	Steel carabiner	■	■	
63011-00DCA	■			6 ft. (1.8 m)	Aluminum carabiner	Steel carabiner			■
63011-00E	■			6 ft. (1.8 m)	36CS	Steel carabiner	■	■	
63011-00ECA	■			6 ft. (1.8 m)	36CS	Steel carabiner			■
63011-00F	■			6 ft. (1.8 m)	36CL	Steel carabiner	■	■	
63011-00FCA	■			6 ft. (1.8 m)	36CL	Steel carabiner			■
63013-00A	■			10 ft. (3 m)	AL36CL	Steel carabiner	■	■	
63013-00ACA	■			10 ft. (3 m)	AL36CL	Steel carabiner			■
63013-00C	■			10 ft. (3 m)	Aluminum swivel carabiner	Steel carabiner	■	■	
63013-00CCA	■			10 ft. (3 m)	Aluminum swivel carabiner	Steel carabiner			■
63013-00E	■			10 ft. (3 m)	36CS	Steel carabiner	■	■	
63013-00ECA	■			10 ft. (3 m)	36CS	Steel carabiner			■
63013-00F	■			10 ft. (3 m)	36CL	Steel carabiner	■	■	
63013-00FCA	■			10 ft. (3 m)	36CL	Steel carabiner			■
63111-00A		■		6 ft. (1.8 m)	AL36CL (2)	Twin-Link Connector	■	■	
63111-00ACA		■		6 ft. (1.8 m)	AL36CL (2)	Twin-Link Connector			■
63111-00B		■		6 ft. (1.8 m)	36C (2)	Twin-Link Connector	■	■	
63111-00BCA		■		6 ft. (1.8 m)	36C (2)	Twin-Link Connector			■
63111-00C		■		6 ft. (1.8 m)	Aluminum swivel carabiner (2)	Twin-Link Connector	■	■	
63111-00CCA		■		6 ft. (1.8 m)	Aluminum swivel carabiner (2)	Twin-Link Connector			■
63111-00D		■		6 ft. (1.8 m)	Aluminum triple-lock carabiner (2)	Twin-Link Connector	■	■	■
63111-00E		■		6 ft. (1.8 m)	36CS (2)	Twin-Link Connector	■	■	
63111-00ECA		■		6 ft. (1.8 m)	36CS (2)	Twin-Link Connector			■
63111-00F		■		6 ft. (1.8 m)	36CL (2)	Twin-Link Connector	■	■	
63111-00FCA		■		6 ft. (1.8 m)	36CL (2)	Twin-Link Connector			■
63041-00A			■	9 ft. (2.7 m)	FP5K	Steel carabiner	■		
63141-00A			■	9 ft. (2.7 m)	FP5K (2)	Twin-Link Connector	■		

V-TEC Mini Twin-Link Connector

Part Number	Description
63900-04	Twin-Link Connector for V-TEC PFL

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MSA Competent Person Inspection Log: V-TEC® Mini PFL



Competent Inspector Name	Inspection Date
Part No.	Length
Date Made	Serial No.
User Name	ID/Job Title

COMPONENT	QTY/UNIT	OVERALL ASSESSMENT	COMMENTS
Labels			
Label Stickers			
Hardware			
Locking Pin Connector/ Twin-Link Clip/Carabiner			
Bracket			
Snaphook			
Fasteners			
Load Indicator Pin			
Webbing			
Lifeline			
Stitching			
Box Stitches			
Load Indicator Stitches			
Non-Load Bearing			
Housing			
Nozzle/Nozzle Rod			
Functionality Test			
Lock On (pull 3 times)			
Retraction/Extraction			

DISPOSITION (Check one)

PASS

Remain in service

FAIL

Mark unusable and dispose

CORRECTIVE ACTION

Repair or clean

CORRECTIVE ACTION DESCRIPTION

CORRECTIVE ACTION DATE

OVERALL ASSESSMENT

If components exhibit any of the conditions listed below, mark the corresponding item as **failure** and/or **corrective action** if applicable

Labels	Webbing	Stitching
Missing	Abrasion	Broken
Not Legible	Burn	Loose Threads
Hardware	Chemical/UV	Missing
Burr	Cut	Non-Load Bearing
Change of Color	Fray	Brittle
Change of Shape	Melt	Burns
Cracks	Missing	Cracks
Dents	Non-Approved Marker	Cut/Broken
Excessive Wear	Separated	Faded
Malfunction	Tape	Missing
Missing	Tear	
Unauthorized Modification		



SERVICES & SOLUTIONS

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Scan for V-TEC Mini PFL Literature and Instruction Manual

MSA Inspection Recommendations

This inspection log can be used as a guide for pre-use User inspections but is not a replacement for the Instruction Manual. For additional warnings and product details, reference the Instructional Manual. The User must inspect the personal fall limiter (PFL) and check the fall arrest force indicator before each use. All PFLs must be formally inspected by a competent person prior to first use. MSA requires that all PFLs be inspected by a competent person other than the user at intervals of no more than one year per applicable standard or as specified by a formal fall protection program. The interval will be dictated by the usage, local regulations, and environmental conditions, and will be at least annually. Record formal inspections in the Inspection Log. Indelibly mark the inspection grid attached to the PFL. Do not use a PFL with a formal inspection date older than one (1) year unless under provision of formal inspection program.



Periodic Examinations

Periodic Examination Interval Table	
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.	

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.

Non-Leading Edge PFL															
6 ft. / 1.8 m								6.5 ft. / 2 m		10 ft. / 3 m					
V-TEC				V-SHOCK				V-TEC Arc-Flash		V-TEC				V-SHOCK	
Single-Leg (WEB)	Twin-Leg (WEB)	Single-Leg Tie-Back (WEB)	Twin-Leg Tie-Back (WEB)	Single-Leg (WEB)	Twin-Leg (WEB)	Single-Leg Tie-Back (WEB)	Twin-Leg Tie-Back (WEB)	Single-Leg (WEB)	Twin-Leg (WEB)	Single-Leg (WEB)	Twin-Leg (WEB)	Single-Leg Tie-Back (WEB)	Twin-Leg Tie-Back (WEB)	Single-Leg (GALVANIZED CABLE)	

Leading Edge PFL															
6 ft. / 1.8 m				8 ft. / 2.4 m								10 ft. / 3 m			
V-SHOCK EDGE				V-TEC EDGE								V-SHOCK EDGE			
Single-Leg (WEB)	Twin-Leg (WEB)	Single-Leg Tie-Back (WEB)	Twin-Leg Tie-Back (WEB)	Single-Leg (WEB)	Twin-Leg (WEB)	Single-Leg Tie-Back (WEB)	Twin-Leg Tie-Back (WEB)	Single-Leg (GALVANIZED STEEL CABLE)	Twin-Leg (GALVANIZED STEEL CABLE)	Single-Leg Tie-Back (GALVANIZED STEEL CABLE)	Twin-Leg Tie-Back (GALVANIZED STEEL CABLE)	Single-Leg (WEB)	Twin-Leg (WEB)	Single-Leg Tie-Back (WEB)	Twin-Leg Tie-Back (WEB)

Non-Leading Edge SRL															
20 ft. / 6 m				23 ft. / 7 m				30 ft. / 10 m				50 ft. / 15 m			
V-TEC				V-TEC				V-TEC				V-TEC			
(GALVANIZED STEEL CABLE)	(STAINLESS STEEL CABLE)			(SYNTHETIC ROPE)				(SYNTHETIC ROPE)	(GALVANIZED STEEL CABLE)	(STAINLESS STEEL CABLE)		(SYNTHETIC ROPE)	(GALVANIZED STEEL CABLE)	(STAINLESS STEEL CABLE)	

Leading Edge SRL											
20 ft. / 6 m				30 ft. / 10 m				50 ft. / 15 m			
V-TEC EDGE		V-SHOCK EDGE		V-TEC EDGE		V-SHOCK EDGE		V-TEC EDGE		V-SHOCK EDGE	
(GALVANIZED STEEL CABLE)		(GALVANIZED STEEL CABLE)		(GALVANIZED STEEL CABLE)		(GALVANIZED STEEL CABLE)		(GALVANIZED STEEL CABLE)		(GALVANIZED STEEL CABLE)	