

FALL PROTECTION

EVERY DAY IN EUROPE, ONE PERSON DIES FROM A FALL FROM A HEIGHT

Health and Safety Legislation states that fall protection measures must be put in place by the employer of any person working at a height of 2 metres or more where a fall hazard exists. If it is not feasible to eliminate the hazard using a collective system, then a personal protective equipment system must be used, be it for restraint, work positioning or fall arrest purposes. This system consists of a full body harness, an intermediate attachment and an anchorage connector. The system can only be used if a suitable anchorage point is located close to the work area. The personal protective equipment manufactured by Honeywell includes fall protection systems designed to save the life of the worker (Category 3 – PPE against mortal or serious and irreversible danger). Each product conforms to the following European Standards.

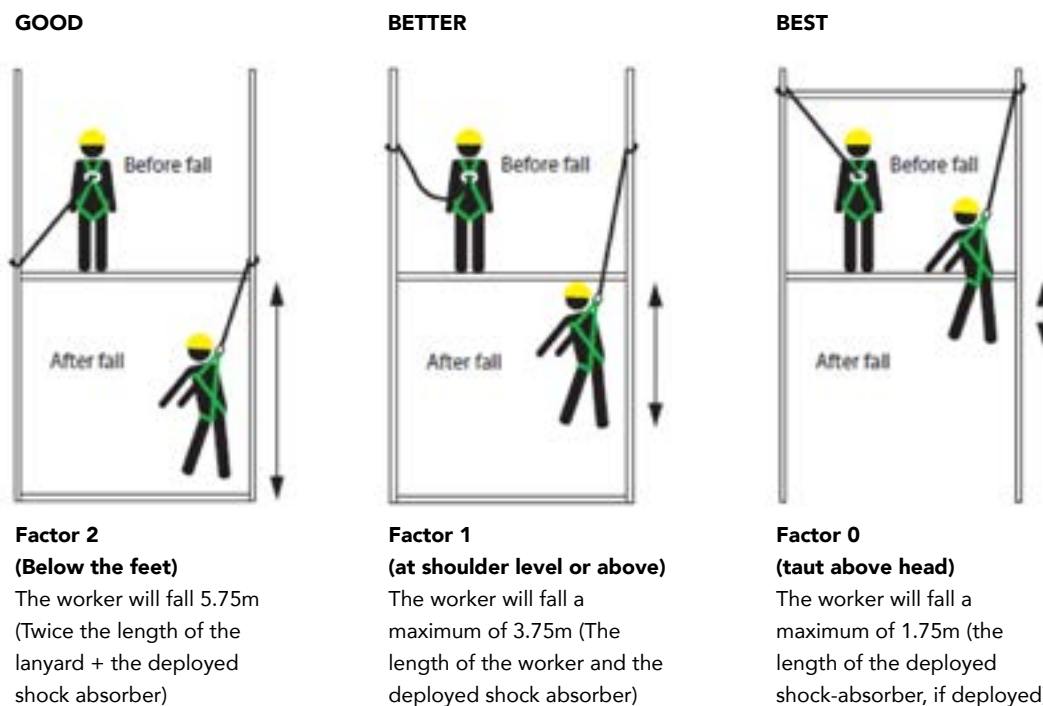
RISK ASSESSMENT

- EN 353-1** Guided Type Fall Arresters – Rigid Anchorage Line and Rails
- EN 353-2** Guided Type Fall Arresters – Flexible Anchorage Line
- EN 354** Lanyards
- EN 355** Shock Absorbers
- EN 358** Work Positioning Systems
- EN 360** Retractable Type Fall Arresters
- EN 361** Full Body Harness
- EN 362** Connectors
- EN 795 (b)** Anchorage Devices – Class B
- EN 363** Fall Arrest Systems

UNDERSTAND YOUR FALL FACTORS TO REDUCE THE RISKS!

There are three fall factors in fall arrest that relate to the position of the anchorage point. They are used to determine the potential fall distance of a worker and so ensure that there is no risk of contact with the lower level in the event of a fall. When possible, the worker should always use an anchorage point at shoulder level or above (Factor 1 or 0). A higher anchorage point will reduce the fall distance and therefore significantly reduce the risk of injury on the body due to the impact forces of a fall.

THE MAXIMUM FALL DISTANCE USING A 2M SHOCK ABSORBING LANYARD



MJSCANNELL SAFETY



CALCULATING FALL CLEARANCE

When using a shock-absorbing lanyard it is important to understand how to calculate the potential fall distance to avoid contact with the lower level.

The calculation below gives the minimum fall clearance required between the anchorage point of the lanyard (at Fall Factor 2) and the lower level.

- Twice the length of the lanyard (to allow for the length of the lanyard and the height of the worker)
- +1.75 deceleration distance to allow for the elongation of the shock absorber and any give in the lanyard.
- +1m safety margin

EXAMPLE

Using a 2m lanyard in fall factor 2:
 $2 \times 2\text{m} + 1.75\text{m} + 1\text{m}$.

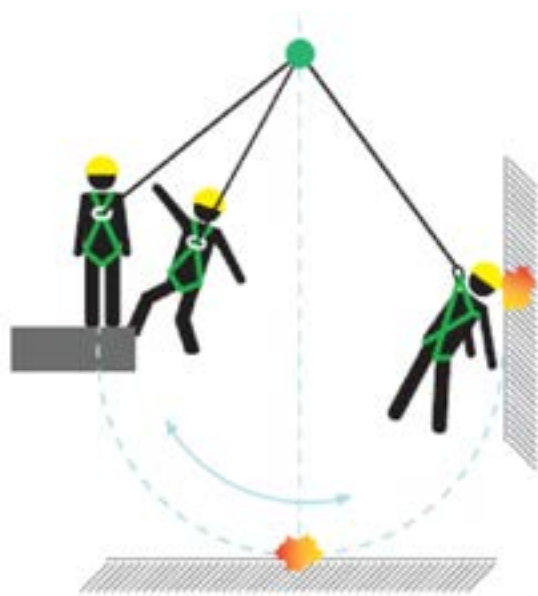
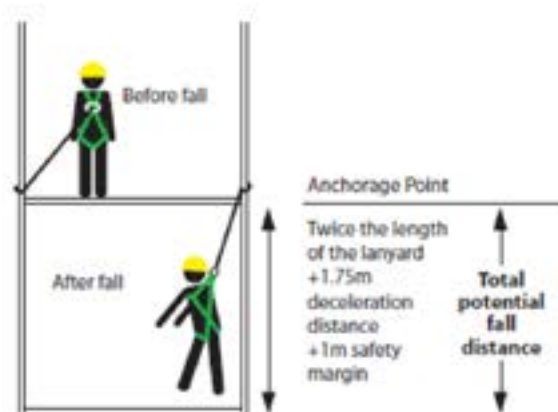
The required fall clearance = 6.75m

Using a 1.5m lanyard in a fall factor 2:
 $2 \times 1.5\text{m} + 1.75\text{m} + 1\text{m}$

The required fall clearance = 5.75m

IF IN DOUBT: FALL LIMITERS REDUCE FALL CLEARANCE < 3M

A fall limiter or self-retracting lanyard will stop a fall in centimetres and is therefore the ideal solution for low-level work where a shock-absorbing lanyard is unable to stop the worker from hitting an obstacle below.



THE SWING FACTOR

If the lifeline is not anchored vertically over the working place, the worker will swing laterally in the event of a fall and can injure himself by hitting either the ground below or an obstacle to the side of him. If it is not possible to use an anchorage point close to the work station, two anchorage points either side of the worker can be used to prevent any swing.

HOW TO PUT ON A HARNESS?

6 easy steps that could save your life!



Hold harness by back D-ring. Shake harness to allow all straps to fall in place. If straps are buckled, release straps and unbuckle at this time.



Put on the shoulder straps one after the other.



Pass the thigh straps between your legs, in order to lock them into the buckles on either side of your thighs. Be careful not to cross the thigh straps.



Adjust the thigh straps by pulling or releasing the strap end, threading in excess strap. Thigh straps must be in a horizontal position on the legs.

A leg strap must not be too tight or too loose: you should be able to put your hand (not your fist) between the leg strap and your thigh.



Connect and adjust the chest strap horizontally by pulling on or releasing the end of the strap, or vertically by pulling the park points up or down (depending on the harness model).



After all buckles have been connected, tighten front straps so that the harness fits securely but allows movement. Pass excess strap through loop keepers.

PERSONAL FALL ARREST SYSTEM

When collective protective systems are not feasible on a work site, a personal fall arrest system is required. This equipment is designed **to secure a person to an anchorage point in such a way that a fall from height is either totally prevented or safely arrested**. Whilst a worker will hopefully never have a fall, the equipment should be comfortable enough for all day wear.



A ANCHORAGE POINT & CONNECTOR

Anchorage Point: Commonly referred to as a secure tie-off point (eg: a girder, scaffolding, lifeline) The anchorage point:

- must **have a static resistance** >10kN during 3 minutes (EN795b).
- should **be located high enough** to avoid contact with a lower level should the worker fall and be as vertical as possible to the working place.

Anchorage Connector: Used to join the intermediate attachment to the anchorage point (eg webbing strap, steel sling, girder grip).

- should **be adapted to the anchorage point** and have a minimum static resistance of 15kN for 3 minutes (EN362).

B BODY WEAR

Full Body Harness: The personal protective equipment worn by the worker.

- Its role is to **hold the worker if a fall occurs**, so that the worker will not be injured nor slip out of the harness.
- The safest form of body wear for use in fall arrest applications is the full body harness. Belts can be used for work positioning and restraint applications.
- It should be selected based on the work to be performed and the work environment.
- Each anchorage point on the harness should have a **static resistance >15kN for 3 minutes** (EN361 and EN358).

C CONNECTING DEVICE

Intermediate attachment: This is the critical link that joins the harness to the anchorage point or connector (eg. shock absorbing lanyard, fall limiters and self-retracting lifelines, rope grab).

- Its role is to **limit the free fall of the worker** and should be selected based on work to be performed and the work environment.
- **The potential fall distance must be calculated** to determine the type of intermediate attachment to be used (see previous 2 pages).

Individually these components will not provide protection from a fall. Used properly in conjunction with each other, however, they form a personal Fall Arrest System that becomes vitally important to safety on the jobsite and the overall fall protection programme.

MJ.SCANNELL SAFETY





MILLER H-DESIGN: DURAFLEX 1 POINT SAFETY HARNESS

SS1034982

The MILLER H-DESIGN Duraflex Harness has patented elasticated webbing that stretches for extra comfort. The Duraflex webbing improves safety and increases productivity as the harness is very comfortable to wear. 1 point rear anchorage. Webbing chest strap.

Standard **EN361**

Honeywell
MILLER



MILLER H-DESIGN: DURAFLEX 2 POINT SAFETY HARNESS

SS1032869

The MILLER H-DESIGN Duraflex Harness has patented elasticated rear and front anchorage 2 point safety harness that stretches for extra comfort, improved safety and increased productivity, front anchorage soft webbing loops for chest anchorage, webbing chest strap.

Standard **EN361**

Honeywell
MILLER



MILLER TITAN 1 POINT SAFETY HARNESS

SS1011890

Full body harness with one rear anchorage point. Standard webbing with superior breaking strength.

Standard **EN361**

Honeywell
MILLER



MILLER HI-VIS DURAFLEX VEST HARNESS

SS1032918

Two- point elasticated heavy duty vest harness with rear and front anchorage built into a comfortable and practical vest jacket. Harness is teflon coated. Yellow Hi-Vis outer is fully compliant,

Standard **EN361 ENISO 20471 Class 2**

Honeywell
MILLER

JSP FALL ARREST

SPARTAN 1 POINT HARNESS

SSSSH

Cost effective one point harness. Rated to 136kg.

Standard **EN361:2002**



SPARTAN KIT

SSFAR1102

2-Point Spartan™ Harness. 1.8m Fall Arrest Shock Absorbing Lanyard. JSP® woven draw-string bag.

Standard **EN 361 | EN355 | EN362**



MILLER SELF RETRACTING LIFELINES

MILLER TURBOLITE PERSONAL FALL LIMITER

SS1018014

The Miller Turbolite is the only Mini Block certified for Factor 2 anchorage (below the feet). Most other similar blocks are certified for Factor 1 anchorage only (shoulder level or above). Extremely lightweight and very durable. Length : 1.8mtr when the webbing is fully extended. Instantly arrests a free fall with a built in shock absorption system in the mechanism. Extra safety of a Twist-lock karabiners and a swivel system at the connectors prevents life-line twisting. Extra large Scaffold Hook.

Standard **EN360**

Length **2 Mtr**

Honeywell
MILLER



MILLER TWIN TURBO SYSTEM

SS1029716

New patent-pending Miller Twin Turbo™ G2 Connector and patented D-Ring Connector easily adapts two (2) lightweight Miller TurboLite™ for continuous 100% tie-off fall protection. Better alternative to double-leg lanyards – Reduces fall clearance requirements for use in more applications. PFLs swivel independently – Provides ultimate worker mobility and prevents webbing from twisting and binding in the unit.

Standard **EN360**

Honeywell
MILLER



**MILLER RHINO CABLE LIFELINE BLOCK**Standard **EN360**

SS1012410

Length **2.7 Mtr**

The Miller Rhino is the smallest and lightest 2.7m cable lifeline on the market, no annual recertification required, corrosion-resistant components, quick activating braking system in high strength stainless steel, integrated fall indicator and internal shock absorber, Aluminium housing and hub. Swivel Snap Hook and Karabiner.

SS1012392

Length **2.85 Mtr**

The Miller Rhino is the smallest and lightest 2.85m cable lifeline on the market, no annual recertification required, corrosion-resistant components, quick activating braking system in high strength stainless steel, integrated fall indicator and internal shock absorber, Aluminium housing and hub. Scaffold Hook and Swivel Snap Hook.

Honeywell
MILLER
**MILLER SCORPION FALL ARREST BLOCK**

SS1008588

Affordable compact and durable personal fall limiter. Karabiner on one end with a swivel snap hook on the other. 2.5m teflon coated webbing lifeline, built in shock absorber.

Standard **EN360**Length **2.8 Mtr**
Honeywell
MILLER
**MILLER FALCON BLOCK**

SS1016796

Lightweight Fall Arrest block with a highly visible fall indicator. High quality steel internal mechanism, lightweight webbing lifeline, double action snap hook.

Standard **EN360**Length **6 Mtr**
Honeywell
MILLER
**MILLER ECO FALCON BLOCK**Standard **EN360**

SS1012433

Length **6.2 Mtr**

SS1012434

Length **10 Mtr**

SS1012436

Length **15 Mtr**
Honeywell
MILLER

MILLER SELF RETRACTING LIFELINES

MILLER INERTIA REEL FALL ARRESTER

SS1002871

Instant locking block. Enables 2.5m of movement from the anchorage point. Features an integral shock absorber, 2 Karabiners and 48mm Polyamide webbing.

Standard **EN360**

Length **2.5 Mtr**

Honeywell
MILLER



MILLER RESTRAINT LANYARDS

MILLER KERNMANTEL ROPE RESTRAINT LANYARD

Standard **EN354**

The MILLER Kernmantel Rope Restraint Lanyard is designed to keep a person restrained in a set position to prevent a fall risk from occurring. Screwgate Karabiner on each end. Kernmantel is 2 times more resistant to abrasion than a standard rope.

SS1032333

Length **1 Mtr**

SS1032334

Length **1.5 Mtr**

SS1032335

Length **2 Mtr**

Honeywell
MILLER



MILLER KERNMANTEL ROPE RESTRAINT LANYARD C/W SCAFFOLD HOOK

Standard **EN354**

The MILLER Kernmantel Rope Restraint Lanyard is designed to keep a person restrained in a set position to prevent a fall risk from occurring. Twistlock Karabiner on one end and Steel Scaffold Hook at other end. Kernmantel is 2 times more resistant to abrasion than a standard rope.

SS1032339

Length **1 Mtr**

SS1032340

Length **1.5 Mtr**

SS1032341

Length **2 Mtr**

Honeywell
MILLER



**MILLER TITAN WORK POSITIONING LANYARD**

SS1008288

The 1008288 MILLER Titan Work Positioning Lanyard is ideal for construction and general maintenance. Comes with Loop and 2 Twist Lock Karabiners.

Standard **EN358**Length **2 Mtr**
Honeywell
 MILLER
**MILLER WORK POSITIONING LANYARD**

SS1002878

The 1002878 MILLER Work Positioning Lanyard is ideal for construction and general maintenance. Supplied with Karabiner and Alloy Snap Hook.

Standard **EN358**Length **2 Mtr**
Honeywell
 MILLER
**MILLER HANDZUP WORK POSITIONING LANYARD**

SS1032097

The new HandZup is a unique work positioning system that leaves the hands free and enables the operator to work in complete safety. Supplied with a twist lock Karabiner and Snap Hook and protective sheath.

Standard **EN358**Length **2 Mtr**
Honeywell
 MILLER
MILLER FALL ARREST LANYARDS**MILLER TITAN ROPE LANYARD**

SS1008281

Rope shock absorbing lanyard complete with a Scaffold Hook and a Karabiner. External shock absorber.

Standard **EN354 | EN355**Length **2 Mtr**
Honeywell
 MILLER
**MILLER TITAN DOUBLE WEBBING LANYARD**

SS1013431

Double webbing shock absorbing lanyard complete with a Karabiner and two Scaffold Hooks. Gives 100% tie off protection.

Standard **EN354 | EN355**Length **2 Mtr**
Honeywell
 MILLER

MILLER ANCHORAGE SLINGS

MILLER TITAN WEBBING ANCHORAGE SLING

Standard **EN795 (b)**

The Miller webbing anchorage sling is important to ensure a user does not anchor back onto their own lanyard. (i.e. choke the lanyard).

SS1008360	Length 0.6 Mtr
SS1008361	Length 0.8 Mtr
SS1008363	Length 1.2 Mtr
SS1008364	Length 1.5 Mtr

Honeywell
MILLER



MILLER STEEL ANCHORAGE SLING

SS1002897

Miller reinforced anchorage option. Steel sling with a loop on each end, protective plastic casing around steel wire, suitable for use around heavy girders. For use with retractable blocks.

Standard **EN795 (b)** Length **1 Mtr**

Honeywell
MILLER



MILLER CONNECTORS

MILLER ALUMINIUM SCAFFOLD HOOK

SS71161

Miller Anchorage Connector used for securing an intermediate attachment to an anchorage point, quick release action.

Standard **EN362**

Honeywell
MILLER



MILLER SCREWGATE STEEL KARABINER

SS1018960

Miller galvanised connector with keylock. Connector is found on most lanyards.

Standard **EN362**

Honeywell
MILLER





MILLER SERPENT HORIZONTAL TEMPORARY LIFELINE

SS1007610

For use by one person only. Fast and easy to install. Maximum working length 12 metres. Durable braided rope with two galvanised connectors. Fixes to either permanent anchorage points or temporary webbing anchorage slings. Supplied with two 1.5m webbing anchorage slings.

Standard **EN795**

Length **20 Mtr**

Honeywell
MILLER



MILLER DURAHOIST™ 3POD

SS1034430

Comprehensive solution for confined space situations. This system can be adapted to manholes from 1m, 1.5m to 2.5m. Tested for 2 persons up to 140kg each. Equipped with 4 anchorage points located on its head as well as 2 pulleys fixed on the legs. Easy to carry and move - when closed, the legs are fixed and the tripod can be easily transported by gripping just one leg.

Standard **EN795/B2012 (CN/TS 16415)**

Length **2.5 Mtr**

Honeywell
MILLER



MIGHTYLITE EVAC WINCH

Standard **EN360 | EN1496**

Used in conjunction with the DuraHoist 3pod and dedicated brackets to form the core of a stable and secure confined entry/rescue system. 4.8mm galvanised steel cable, quick activating retrieval winch mechanism, pressed steel housing and compact design, corrosion resistant components. Convenient heavy duty carrying handle, fall indicator. Available in 2 lengths

SS1005149-A

Length **15 Mtr**

SS1005160-A

Length **30 Mtr**

Honeywell
MILLER



MIGHTYLITE BRACKET FOR DURAHOIST 3POD

Standard **EN795**

Needed to fix winch onto the DuraHoist 3Pod.

SS1034431

Length **15 Mtr**

SS1034750

Length **30 Mtr**

Honeywell
MILLER

RELIEF STEP

MILLER RELIEF STEP

SS1100211

Designed to alleviate the symptoms of suspension trauma following a fall. The Relief Step is fitted to the harness and can be easily deployed for increased short term safety. Sold in pairs.

Standard **CE**

Honeywell
MILLER



CLIMBERS HELMET

MILLER CLIMBERS HELMET

SS1007048

Colour
Red



Protects impacts from above and side. Polypropylene climbers helmet with fully adjustable cotton lining and good air circulation reducing the build up of moisture. Comfortable skull webbing and chin strap. Fitted with attachment point for head torch.

Standard **EN397**

Honeywell
MILLER



SQUIDS LANYARDS:

LANYARD SERIES

DIFFERENTIATED BY DESIGN:

SHOCK ABSORBING PROPERTIES

Stretch cord models exhibit shock absorbing properties limiting the force the body or other anchoring points feel when a drop occurs.

DURABLE LANYARD BODY

Whether high tensile strength webbing, reinforced stitching, or aircraft cable, Squids Tool and Equipment Lanyards are made to hold up to the environment as well as a drop within it.

3RD PARTY CERTIFIED WEIGHT RATINGS

Squids Lanyards are dynamically drop tested and third party certified with a safety factor of 2:1.



KARABINER VARIETY AND SECURITY

A variety of Karabiner options give you what you need for your environment – lightweight aluminium, stainless steel, non-locking, and self-locking are some of the options available to give you jobsite flexibility.

CAPTIVE EYE KARABINERS

Karabiners are designed with captive eyes to catch and hold webbing so it doesn't interfere with the connector's gate and will never be removed.

ERGODYNE TOOL FALL ARREST SOLUTIONS



ERGODYNE SQUIDS DUAL KARABINER TOOL LANYARD

Standard CE

Tool Lanyard with Dual Karabiners. Tethers tools to help worker prevent injury, damage and lost productivity from dropped tools. Energy absorbing cord with tubular nylon webbing, Single action aluminum karabiners, Reflective accent for higher visibility, Lock stitching at both ends for extra security, Captive eye Karabiner, Maximum safe working capacity: 10lbs (4.5kg)



SSE3110-19022	Length 35"-42" (89cm - 110cm)	Colour Black
SSE3110-19032	Length 42"-54" (110cm-140cm)	Colour Black
SSE3110-19023	Length 35"-42" (89cm - 110cm)	Colour HV Lime
SSE3110-19033	Length 42"-54" (110cm-140cm)	Colour HV Lime

ERGODYNE TOOL FALL ARREST SOLUTIONS

ERGODYNE SQUIDS 3101 KARABINER TOOL LANYARD

Standard CE

Tool Lanyard with single stainless steel manual locking screw gate Karabiner for a secure connection in more corrosive environments. Energy absorbing cord with tubular nylon webbing, Manual locking stainless steel karabiners, Captive eye karabiner, Reflective accent for higher visibility, Lock stitching at both ends for extra security, Maximum safe working capacity: 15lbs (6.8kg).



SSE3101-19007	Length 35"-42" (89cm - 110cm)	Colour HV Lime
SSE3101-19017	Length 42"-54" (110cm-140cm)	Colour HV Lime



ERGODYNE SQUIDS 3100 SINGLE KARABINER TOOL LANYARD

Standard CE

Tool Lanyard with a Single Karabiner. Tethers tools to help worker prevent injury, damage and lost productivity from dropped tools. Energy absorbing cord with tubular nylon webbing, Single action aluminium karabiner, Captive eye karabiner, Reflective accent for higher visibility, Lock stitching at both ends for extra security, Maximum safe working capacity: 10lbs (4.6kg).



SSE3100-19002	Length 35"-42" (89cm - 110cm)	Colour Black
SSE3100-19012	Length 42"-54" (110cm-140cm)	Colour Black
SSE3100-19003	Length 35"-42" (89cm - 110cm)	Colour HV Lime
SSE3100-19013	Length 42"-54" (110cm-140cm)	Colour HV Lime





ERGODYNE TOOL FALL ARREST SOLUTIONS

ERGODYNE SQUIDS 3102 DETACHABLE SINGLE KARABINER TOOL LANYARD Standard CE

Tool Lanyard - Detachable loops with single aluminum Karabiner. Adjustable barrel lock for tool attachment. Lock stitching at both ends for extra security. Compatible with Squids® 3103 Tool Tails™. 5lbs (2kgs)



SSE3102-19064	Length 35"-42" (89cm - 110cm)	Colour Black
SSE3102-19074	Length 42"-54" (110cm-140cm)	Colour Black
SSE3102-19065	Length 35"-42" (89cm - 110cm)	Colour HV Lime
SSE3102-19075	Length 42"-54" (110cm-140cm)	Colour HV Lime

EXTRA TAILS RE 3102 ABOVE

SSE3103-19068	Colour Black
SSE3103-19069	Colour HV Lime

ERGODYNE SQUIDS 3130M COILED CABLE TOOL LANYARD SSE3130M-19131

Coiled Cable Tool Lanyard which keeps the length of the lanyard close to the anchoring point, reducing snag hazards of traditional lanyards while preventing dropped objects. The patent pending swivelling design prevents tangles and headaches that the coiled design can cause and reduces recoil force preventing aggressive snap back. Constructed with PU covered aircraft cable, Stainless steel karabiners. Maximum safe working capacity: 5lbs (2kg).



Standard CE

**Coiled length 6.5in (16.5cm);
Extended length 50.0in (127cm)**

ERGODYNE TOOL FALL ARREST SOLUTIONS

ERGODYNE SQUIDS 3713 ELASTIC LOOP TOOL TAILS SSE3713-19765

Colour
HV Lime



Elastic Loop Tool Tails™ provide retrofit attachment points to a variety of tools and equipment up to 10lbs (4.6kg) using Squids® Tool Traps™. These Tool Tails can also be used as an anchor point on belt, harness or separate structure. Stretch cord surrounded by tubular nylon webbing, Plated swivelling connection, Adjustable barrel lock for tool attachment, Use as an anchor for belt, harness, or structure. Maximum safe working capacity: 10lbs (4.6kg).



Standard **CE**

Standard Length 11in (28cm).

ERGODYNE SQUIDS 3115 ADJUSTABLE WRIST LANYARD

Standard **CE**

Adjustable Wrist Lanyard. Tethers tools limit the distance of a dropped tool and reduce snag hazards. Polyester webbing cuff secures to wrist, Energy absorbing ribbed pull cord, Adjustable loop with barrel lock for tool attachment. Short length improves the drop clearance needed. Maximum safe working capacity: 2lbs (1kg).



SSE3115-19042 Length **S/M Wrist Size 5"-7" (13cm-18cm)** Colour **Black**

SSE3115-19052 Length **L/XL Wrist Size 7"-8.5" (18cm-22cm)** Colour **Black**

ELASTIC HARD HAT LANYARD CLAMP

SSE3155-19155

Colour
HV Lime



Comfortably secures a hard hat to a worker to prevent the item from falling. Quick connect clamp attached securely to fabric. Easily attaches to hard hats and other headwear. 2lbs (1kg)



Standard **CE**

Length **23" (58cm)**