



A New ERA of SAFETY

2012



our organisation...

KARAM is a renowned name that spells & pronounces the Safety Story in a unique way. From a small group of 4 in the late Nineties to a team of more than 1500 today, we have been creating this planet, a safer place to work in. As a leading supplier to many Industries, KARAM has earned a reputation in the World of Safety of Trust and Reliability.

KARAM specializes in the field of Fall Protection, Head Protection, Safety Shoes, Safety Spectacles, Hearing Protection, Welding Protection and Rope-Access and Rescue. We manufacture the highest quality equipment conforming to IS, DGMS and EN norms, leading the way with new innovative products and solutions with every passing year.

KARAM Manufacturing set-up is spread over a span of around 2,50,000 square feet area, and is the only one in the world with complete vertical integration, giving us strong controls over quality at each step of manufacturing. All our systems & processes are assessed by SGS U.K. & registered to ISO 9001-2008.

Along with an extensive Distribution network, KARAM has its offices all over the country, manned by Trained and Technical Sales Personnel to provide the finest support and service required.

Collection 2012 by KARAM brings forward the commitment made in the last edition, with newer additions of products in its ever expanding range, emerging today as a one-stop solution in the field of Industrial Safety.

The journey at KARAM is never ending. There is a long way to go, many more dreams to accomplish and we believe in joining hands with our valued customers for a Safer World.

Let's define it the KARAM way.



Unit - I Metal Processing - Lucknow (U.P.)



Unit - II Textile Processing - Lucknow (U.P.)



Unit - III Helmet & Shoes Processing - Sitarganj (Uttarakhand)



operations at **KARAM®**

HYDRAULIC FORMING



HOT FORGING



HEAT TREATMENT



CNC VERTICAL MACHINING



KARAM is the only company in the world which has a vertically integrated manufacturing set up. Starting with yarn and processing it to make premium quality of Webbing and Rope, converting hot rolled coils, flats and extrusions of Steel and Aluminium Alloys into Fall Arrest Components, moulding granules into products, KARAM does it inhouse, making the entire safety gear from Head Protection to Foot Protection covering Fall Protection, Safety Spectacles & Protection of the Organ of Hearing. All are manufactured and assessed for quality before reaching the valued customers.



HELMET ASSEMBLY



SHOES STITCHING



WEBBING PRODUCTION



EAR PLUG PRODUCTION



PRODUCT DESIGN & DEVELOPMENT



KERNMANTLE ROPE PRODUCTION



TWISTED ROPE PRODUCTION



EFFLUENT TREATMENT PLANT



HELMET MOULDING



BLOCK MOULDING



SAFETY SHOE PRODUCTION



ASSEMBLY LINE



MENT



HARNESS STITCHING



EATMENT PLANT



RETRACTABLE FALL
ARRESTER ASSEMBLY LINE



KARAM is the only company in the world which has a vertically integrated manufacturing set up.

Starting with yarn and processing it to make premium quality of Webbing and Rope, converting hot rolled coils, flats and extrusions of Steel and Aluminium Alloys into Fall Arrest Components, moulding granules into products, KARAM does it inhouse, making the entire safety gear from Head Protection to Foot Protection covering Fall Protection, Safety Spectacles & Protection of the Organ of Hearing.

All are manufactured and assessed for quality before reaching the valued customers.

operations at **KARAM®**

Testing Procedures

Each and every step of manufacturing at KARAM follows adherence to strict quality parameters and focus lies on quality throughout the various stages involved. All raw as well as semi finished



Hardness Testing



100% Visual Inspection



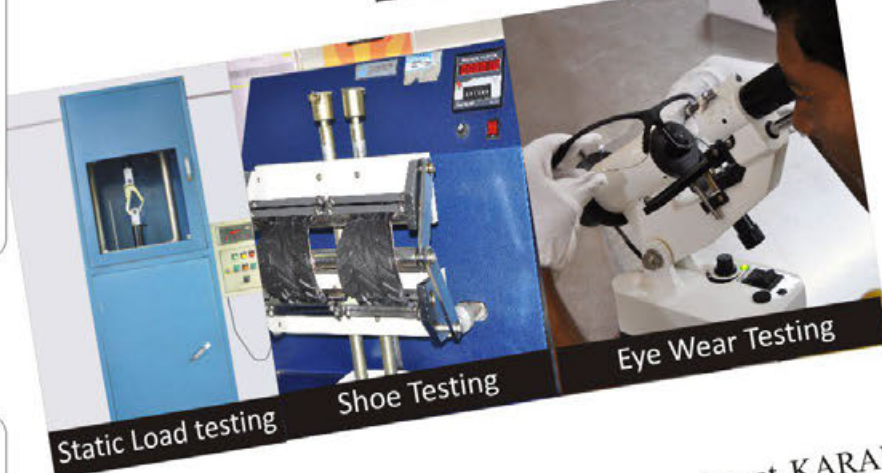
Proof Load Testing



Static Harness Load Testing



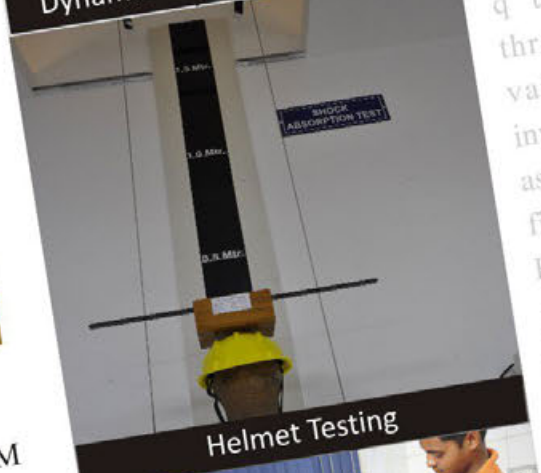
Dynamic Performance Testing



Static Load testing

Shoe Testing

Eye Wear Testing



Helmet Testing



Salt Spray Testing



Chemical Analysis

Each and every step of manufacturing at KARAM follows adherence to strict quality parameters and focus lies on quality throughout the various stages involved. All raw as well as semi finished goods at KARAM also pass through stringent quality norms as laid down in the Quality Manual of the Company.

The final product, at KARAM is then tested to fulfill the requirements which are set much above the EN Norms and ISI standards.

Each and every step of manufacturing at KARAM follows adherence to strict quality parameters and focus lies on quality throughout the various stages involved as well as finished goods at KARAM also pass through stringent quality norms as laid down in the Quality Manual of the Company.



C O N T E N T S

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FALL PROTECTION EQUIPMENT

OTHER PPE



Systems Certification (ISO:9001:2008)

Under this certification all processes and systems are stringently monitored to deliver quality product at each stage of manufacturing and service.

Product Certification (CE)

Nearly 100 products manufactured by KARAM are CE certified.

Our Certificates have been issued by Certifying Body SATRA-UK, in accordance with Article 10 of the PPE Directive 89/686/EEC. The Notified Body Number of SATRA is 0321.

Our on-going assessment body is SGS-UK which issues us our 11B certificate as per directive 89/686/EEC. The notified body number of SGS is 0120.

All our products are marked '0120'.

As per 11 B certificate all products marked CE 0120 must have a valid E.C. type examination certificate issued under Article 10.



Category	Norms
EN 358	Belt for Work Positioning, Restraint & Work Positioning Lanyards
EN 361	Full Body Harnesses
EN 813	Sit Harnesses
EN 362	Connectors
EN 354	Lanyards
EN 355	Energy Absorbers
EN 795	Anchorage Devices - Requirements & Tests.
EN 353-2	Guided type Fall Arrester including a Flexible Anchorage Line
EN 353-1	Guided type Fall Arrester including a Rigid Anchorage Line
EN 360	Retractable type Fall Arresters
EN 1496	Rescue Lifting Devices
EN 341	Descender Devices for Rescue
EN 1497	Rescue Harnesses
EN 397	Safety Helmet (Sheltek)
EN 166	Welding Shield & Spectacles
EN 175F	Helmet Attachable Welding Shield
EN 355-2	Ear Plugs
EN 352-1	Ear Muffs
EN 20 345	Safety Shoes
EN 2925	Safety Helmet (Shelmet)
IS 3521	Full Body Harnesses (E-con Series)
IS 15298	Safety Shoes



A Full Body Harness is the ideal body wear that should be worn by a worker, since it distributes the force of impact incurred in the event of a fall evenly on the thighs and torso region of the body.

The material of construction of the webbing of KARAM Harnesses is Polyester. Since this has the least elongation properties as compared to other materials, the Harness does not stretch dangerously when subjected to a fall. The Wearer hence does not risk slipping out of the Harness.



HARNESSES & BELTS

Before wearing a Harness it is important to Inspect the Harness for certain features

- ▶ Hold the Harness by the back D-ring, and allow the straps to fall in its place. The Harness has clear and separate colours for the shoulder and thigh straps, for them to be easily distinguished.
- ▶ Inspect the Harness webbing for any cuts, burns or damages.
- ▶ Check the stitches for their continuity.
- ▶ Carefully look for any evidence of corrosion on the metal parts.
- ▶ KARAM Harnesses also give an assurance that the Harness has not been subjected to a fall, if the unique Tell-Tale Indicator is still secure on the shoulder straps.



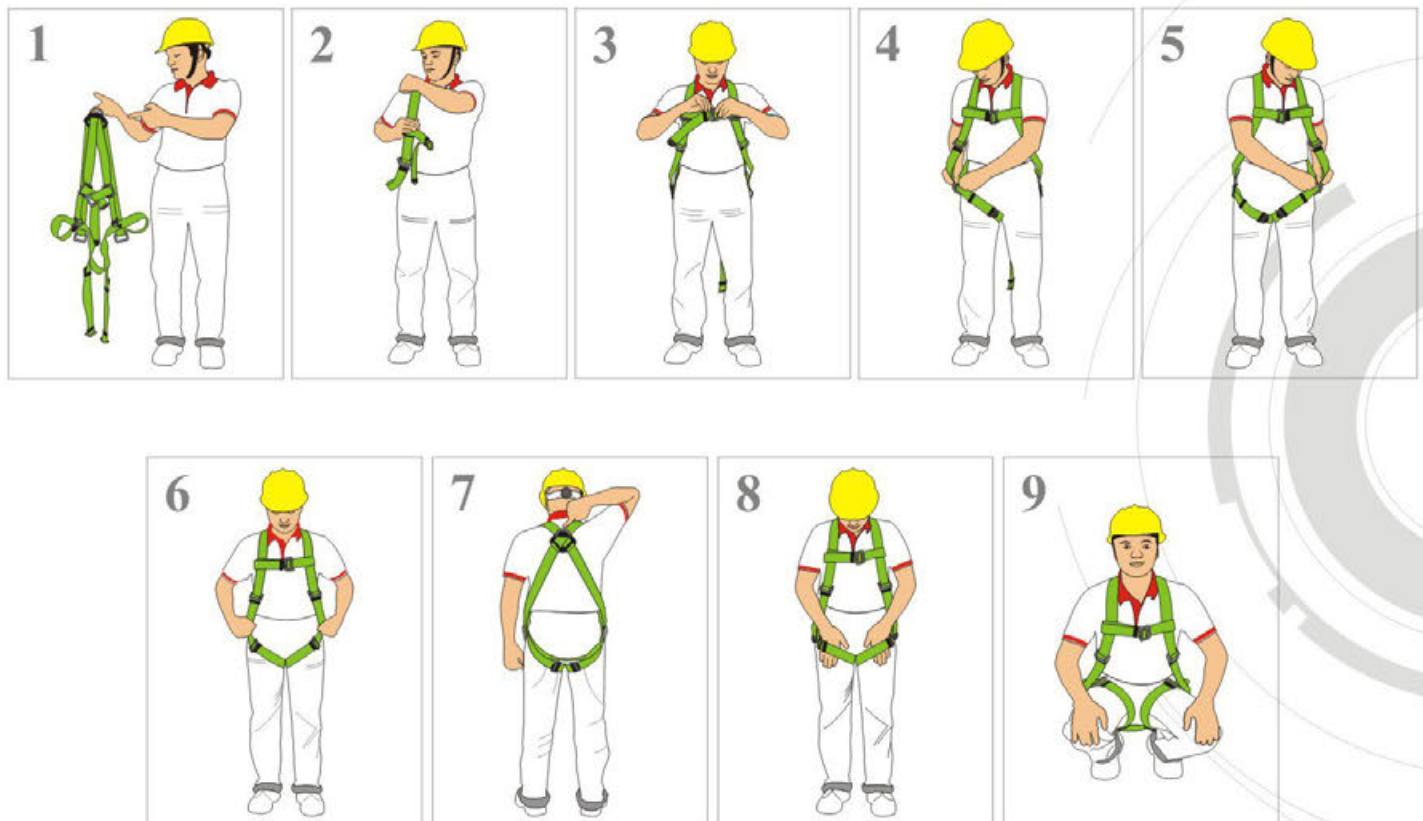
The Tell-Tale Indicator is a small label stitched to the back side of the shoulder strap, and it flies out of the Harness in the event of a fall.

**KARAM ADVANTAGE**

All KARAM Harnesses are made of Dope-Dyed high tenacity Polyester Yarn, imparting increased resistance to UV colour degradation.

HOW TO WEAR A HARNESS

the harness can be worn following these simple steps-



The Work Positioning System which comprises of a work positioning belt along with a work positioning lanyard enables the worker to work at heights in a well supported position, with both his hands free.

⚠ The Work Positioning Belts and Work Positioning Lanyards, however, should not be used for Fall Protection.

KARAM Work Positioning Belts have a sliding belt on the comfort pad, which enables the user to easily position the adjustment buckle of the belt at the center of his waist for smooth functioning.



Ref. PN01

- ▶ Wide comfort pad to provide lumbar support for long working hours
- ▶ Fully Adjustable
- ▶ Two Lateral D-Rings for Work Positioning
- ▶ Tool holding webbing loops
- ▶ Rings for tool holders, bolt bags, etc
- ▶ Available in sizes- Medium, Large, Extra Large
- ▶ Conforms to EN 358:2000



Ref. PN02

- ▶ Optimum width comfort pad to provide sufficient lumbar support
- ▶ Fully Adjustable
- ▶ Two Lateral D-Rings for Work Positioning
- ▶ Tool holding webbing loops
- ▶ Rings for tool holders, bolt bags, etc
- ▶ Available in sizes- Medium, Large, Extra Large
- ▶ Conforms to EN 358:2000



Ref. PN03

- ▶ Optimum width comfort pad to provide sufficient lumbar support
- ▶ Fully Adjustable
- ▶ Two Lateral D-Rings for Work Positioning
- ▶ Rings for tool holders, bolt bags, etc
- ▶ Available in sizes- Medium, Large, Extra Large
- ▶ Conforms to EN 358:2000



Adjust the lanyard length with the adjuster in order to be able to work comfortably with both hands free.

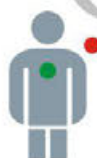
Magna is the Premium Series of KARAM Harnesses and comes with the highest features of Ergonomics, Comfort and Safety, Quick Connect Automatic Buckles, and a Tangle-Free Design.



Distinctive Features of **KARAM®** MAGNA Series



- 1 I D Plate :** Dorsal Webbing Holding Cross Plate maintains the D-ring in place even after a fall.
- 2 Ilastic Loops:** Specially designed to retain the excess strap while adjustment.
- 3 Shoulder Straps :** Fully padded Shoulder straps with Comfortable knitted mesh pads for better comfort, shock absorption and air circulation.
- 4 Automatic Buckles :** Extremely easy to use with single-hand operation.
- 5 Lanyard Keepers :** Specially designed keepers on both sides for safely attaching the free connector end of forked lanyard.
- 6 Metal Components:** All hardware used are Black Powder Coated to provide the highest degree of corrosion protection packed with high aesthetic appeal.
- 7 Stitching Pattern:** Unique aesthetic stitch pattern for enhanced stitching strength with smart styling.
- 8 Work Positioning Belt :** 2 lateral D-ring are provided additionally with knitted mesh pads for extra comfort. The belt is also provided with holding loops for attaching tools etc.
- 9 Combination Buckles :** With a unique pull-up grip, these buckles are very easy to use & can be tightened/ loosened with one hand. They provide very comfortable adjustment, keeping the Harness snug fit to the body.
- 10 Thigh Straps :** The distinctively placed fully padded straps with automatic buckles for easy adjustment. The knitted mesh net used in the pads maintains proper air circulation and provides better shock absorption.
- 11 Lateral D-Rings :** Specially designed to stand out, enabling easy attachment to work positioning Lanyard.



Ref. Magna - 1

- ▶ **Attachment Elements** - 2 Ideally Positioned Chest attachment textile loops and a Dorsal attachment D-Ring for Fall Arrest.
- ▶ **Adaptability** - Fully adjustable shoulder, chest strap & thigh-straps.
- ▶ **Convenience** - Shoulder straps have combination buckles & thigh straps are provided with automatic buckles for easy adjustment. Lanyard Keepers on shoulder straps have been provided for easy placement of free lanyards.
- ▶ **Ergonomics** - Specially cushioned mesh net has been used for better shock absorption & comfort of the user.
- ▶ **Compliance** - Conforms to EN 361:2002

Ref. Magna - 2

- ▶ **Attachment Elements** - 2 Ideally Positioned Chest attachment textile loops and a Dorsal attachment D-Ring for Fall Arrest. 2 lateral D-Rings for Work Positioning.
- ▶ **Adaptability** - Adjustable shoulder, thigh-straps and waist belt
- ▶ **Convenience** - Shoulder straps have combination buckles and thigh straps & waist straps are provided with automatic buckles for easy adjustment. 2 Tool holder loops are provided at the back. Lanyard Keepers on shoulder straps have been provided for easy placement of free lanyards.
- ▶ **Ergonomics** - Ideally positioned sit-strap for extended comfort. Specially cushioned mesh net has been used for better shock absorption & comfort of the user.
- ▶ **Compliance** - Conforms to EN 361:2002 and EN 358:2000



Ref. Magna - 3

- ▶ **Attachment Elements** - 1 Dorsal & 1 Sternal D- Ring for Fall Arrest, 1 Ventral D- Ring at waist level in front for Rope Access & 2 lateral D-Rings at waist level on the sides for Work Positioning
- ▶ **Adaptability** - Adjustable shoulder, thigh-straps and waist belt
- ▶ **Convenience** - Shoulder straps and thigh straps are provided with automatic buckles & waist strap has combination buckles for easy adjustment. 2 Tool holder loops & an extra bigger handle at the back for keeping extra karabiners and accessories. Lanyard Keepers on shoulder straps have been provided for easy placement of free lanyards.
- ▶ **Ergonomics** - Ideally positioned elasticated straps for extended comfort. Specially cushioned mesh net has been used for better shock absorption & comfort of the user.
- ▶ **Compliance** - Conforms to EN 361:2002, EN 358:2000 & EN 813



TECHNO SERIES

KARAM introduces Techno Series, which is a range of **SPECIAL-PURPOSE HARNESSES** designed for use in most challenging environment and application in the Industry.



NoSpark

Antistatic Full Body Harness

Ref. PN 22 (AS)

- ▶ This Harness has been designed to offer the perfect solution for safe work at height in explosive atmospheres. It is particularly suitable for Petrochemical and Mining Industry Environments.
- ▶ Compliance - Conforms to EN 361: Fall Arrest Harness Atex 94/9/CE, EN 13463-1(2001) and EN 136463-5(2006). Harness webbing also tested for surface resistance as per EN 1149-1: 2006
- ▶ Feature - The Anti-static material prevents the risk of an electrostatic discharge igniting the explosive atmosphere thus allowing the user to work in complete safety in these high risk environments.
- ▶ Comes with two front attachment textile loops in addition to the Forged Aluminium Dorsal D-Ring for Fall Arrest.
- ▶ Stainless Steel Buckles for excellent Corrosion Protection.



FLANIL

Flame Resistant Full Body Harness

Ref. PN 22 (FR)

- ▶ This harness has been specially designed for workers doing Welding Work at heights.
- ▶ The Webbing of the Harness can withstand flame of upto 700°F / 371°C without any damage or harm.
- ▶ The Harness is provided with adjustable shoulder & thigh straps, and comes with two front attachment textile loops in addition to the Dorsal D-ring for Fall Arrest.
- ▶ This harness conforms to EN 361. The Webbing is also tested in accordance with ISO 15025 : 2005 and assessed in accordance with EN ISO 11612 : 2008.



Dy-noc

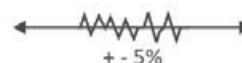
Dielectric Non Conductive Harness

Ref. PN 42 (DE)

- ▶ This Harness has been designed for workers working in conditions where there are possible electric hazards. Special Dielectric D-Rings and all metal adjustment buckles are equipped with insulated covers to make it completely electrically insulated.
- ▶ Consists of Non Conductive D-ring as Dorsal D-Ring attachment element for fall arrest along with two Non Conductive D-rings at waist level for Work Positioning. Also, equipped with two front textile loops for Fall Arrest.
- ▶ Shoulder straps are elasticated to provide flexibility to the user.
- ▶ Compliance - Conforms to EN 361:2002 and EN 358:2000



KARAM Elasto Series Constitutes Special stretchable Harnesses designed for total wearer comfort. Designed for users who are looking for high comfort, the Elastic Webbing used in these Harnesses provides great freedom of movement, allowing the wearer to twist and flex freely during long hours of work.



Ref. PN 74

- Attachment Elements - A Sternal attachment D-Ring and a Dorsal attachment D-Ring for Fall Arrest.
- Adaptability - Adjustable shoulder and thigh straps
- Convenience - Metal components made up of Stainless Steel for excellent corrosion protection.
- Ergonomics - Made of Elastic Webbing for more comfort.
- Compliance - Conforms to EN 361:2002



Ref. PN 94

- Attachment Elements - A Sternal attachment D-Ring and a Dorsal attachment D-Ring for Fall Arrest
- Adaptability - Adjustable shoulder and thigh straps
- To be used for both Work Positioning and Fall Arrest purposes
- Convenience - Metal components made up of Stainless Steel for excellent corrosion protection
- Ergonomics - Made of Elastic webbing for more comfort.
- Compliance - Conforms to EN 361: 2002 & EN 358: 2000



Ref. No.	Material	Standard	Application	Attachment Point				Weight	Breaking Strength
				Dorsal	Sternal	Lateral	Ventral		
PN 74	Polyester	EN 361:2002	FA	✓	✓			1300 gms	25 kN
PN 94	Polyester	EN 361:2002 EN 358:2000	FA + WP	✓	✓	✓		1800 gms	25 kN

FA - Fall Arrest / WP - Work Positioning

KARAM Rhino Series of Full Body Harnesses comes in the catchy combination of Green and Black. Equipped with all the unique features that provide full comfort and ergonomics to the wearer, this range of Harnesses withstands the highest test of Safety standards as laid out in the European Norms, and is CE Certified.



Features of KARAM® RHINO Series



1 Web Keepers : All End Straps equipped with unique plastic web keepers to give better grip while adjustment.

2 Label : All labels and markings of the Harness are enclosed within strong polyethylene tube to prevent the fading of printing due to sunlight and water thereby ensuring that the marking stays longer.

3 Dorsal Attachment Point: Is for attachment to Fall Arrest, enables straight upright position in the event of a fall.

4 Adjustment Buckles: All adjustment buckles provided with a unique "Pull Grip" to enable easy pull down with thumb and adjust all straps easily for a good fit.

5 Chest Strap Plates: In most of the models the chest strap is equipped with unique sliding chest strap plates to enable the user to bring chest strap in required position.

6 Marking A or A/2(two together): Denotes attachment point for Fall Arrest.

7 Metal Fittings : All metal fittings come with yellow passivation which offers better corrosion resistance, capable of taking salt spray test of minimum 72 hours as against 50 hours requirement as per the EN Norms.

8 Webbing Colour : Fluorescent green colour of the webbing is conspicuous and makes it easier for safety officers to locate workers.



All textile loops of harness covered with strong textile reinforcement to reduce abrasion of the webbing when in contact with the metallic connectors.

* EXTENSION BAND



Unique Optional Extension Band (made of 30cm Length webbing) on the Dorsal Attachment D-Ring may be provided on request.



This Extension Band allows the user to easily connect himself to the dorsal attachment D-Ring without any external help

** 'K' - SERIES

KARAM offers the convenient 'K' Series of Harnesses that come with the screw-lock karabiner PN 112(C) (With captive pin), permanently attached to the dorsal D-ring of the Harness.

This enables use of any lanyard with different termination hooks, by just connecting the loop end to the Dorsal D-ring of the harness with the help of the attached karabiner.

This range is available on all the KARAM Harness models and are referred to as Model Ref No. with 'K' eg : PN 12(K), PN 22(K) etc.



⚠ IMPORTANT - It is advisable to use lanyard of length less than 1.5m if an Extension Band equipped Harness is used.



Ref. PN 56

- ▶ Attachment Elements - 1 Dorsal and 1 Sternal D-Ring for Fall Arrest, 1 Ventral D-Ring at waist level for Rope Access work and 2 Lateral D-Rings for Work Positioning
- ▶ Adaptability - Adjustable shoulder, thigh-straps and waist belt
- ▶ Convenience - An ideal combination of Fall Arrest, Work Positioning, Rescue and Rope Access applications.
- ▶ Ergonomics - Soft padding on shoulder, waist and leg straps for an extended comfort
- ▶ Compliance - Conforms to EN 361:2002, EN 358:2000 & EN 813

★ ★ { See Page 09 for an Additional Option



Ref. PN 57

- ▶ Attachment Elements - 1 Dorsal D- Ring for Fall Arrest, 1 Ventral D- Ring at waist level in front for Rope Access & 2 lateral D-Rings at waist level on the sides for Work Positioning
- ▶ Adaptability - Adjustable shoulder, thigh-straps and waist belt
- ▶ Convenience - An ideal combination of Fall Arrest, Work Positioning, Rescue & Rope Access applications
- ▶ Ergonomics - Soft padding on waist and leg straps for an extended comfort
- ▶ Compliance - Conforms to EN 361:2002, EN 358:2000 & EN 813

KARAM ADVANTAGE The karabiner at the front of Harness PN 57 enables the wearer to easily wear or remove the Harness by detaching the shoulder straps.

★ ★ { See Page 09 for an Additional Option



Easy Seat

Ref. IMP 004

Design: To be used as an accessory with Harness having a Ventral D-ring at the waist level to which the karabiner is attached.

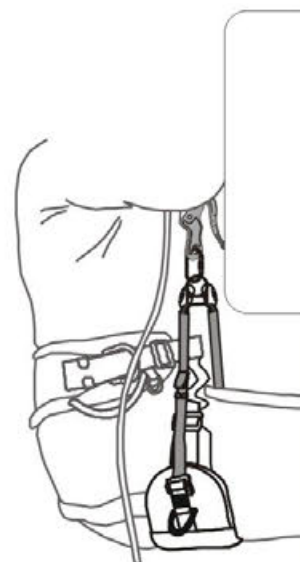
- ▶ Ergonomic & Comfortable working chair.
- ▶ Aluminium reinforcement inside

WEBBING

Material	: Polyester
Width	: 44±1mm
Breaking Strength	: 23kN

METAL COMPONENTS

Material	: High strength steel
Plating	: Zinc plated
Finish	: Golden Yellow Galvanized
Weight	: 1280 gm ± 1





Ref. PN 51 (Sit Harness)

- ▶ Attachment Elements - 2 Lateral Metallic D-Rings for Work Positioning. 1 front ventral attachment (Metallic D-Ring) for Rope Access
- ▶ Adaptability - Adjustable thigh-straps and waist belt
- ▶ Convenience - Ideal for Work Positioning, Restraint System and Rope Access work
- ▶ Ergonomics - The waist belt and the leg straps are provided with a soft padding for best possible comfort
- ▶ Compliance - Conforms to EN 358:2000 and EN 813

Ref. PN 41 (01)

Incorporated with our Work Positioning Belt PN 01

Ref. PN 41 (02)

Incorporated with our Work Positioning Belt PN 02

Ref. PN 41 (03)

Incorporated with our Work Positioning Belt PN 03

- ▶ Attachment Elements - 1 Dorsal attachment D-Ring for Fall Arrest and 2 Lateral D-Rings for Work Positioning
- ▶ Adaptability - Adjustable shoulder, thigh-straps and waist belt; Sliding Plates for easy adjustment of Chest-Strap
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme. Tool holder loops and rings at the back
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002 and EN 358:2000

* { See Page 09 for an Additional Option
**



Ref. PN 42 (01)

Incorporated with our Work Positioning Belt PN 01

Ref. PN 42 (02)

Incorporated with our Work Positioning Belt PN 02

Ref. PN 42 (03)

Incorporated with our Work Positioning Belt PN 03

- ▶ Attachment Elements - 2 Chest attachment textile loops and a Dorsal attachment D-Ring for Fall Arrest. 2 lateral D-Rings for Work Positioning
- ▶ Adaptability - Adjustable shoulder, thigh-straps and waist belt
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme. Tool holder loops and rings at the back
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002 and EN 358:2000

* { See Page 09 for an Additional Option
**



Ref. PN 43 (01)

Incorporated with our Work Positioning Belt PN 01

Ref. PN 43 (02)

Incorporated with our Work Positioning Belt PN 02

Ref. PN 43 (03)

Incorporated with our Work Positioning Belt PN 03

- ▶ Attachment Elements - 2 Chest attachment D-Rings and a Dorsal attachment D-Ring for Fall Arrest. 2 Lateral D-Rings for Work Positioning
- ▶ Adaptability - Adjustable shoulder, thigh-straps and waist belt; Sliding Plates for easy adjustment of Chest-Strap.
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme. Tool holder loops and rings at the back
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002 and EN 358:2000



* { See Page 09 for an Additional Option
**

Ref. PN 44 (01)

Incorporated with our Work Positioning Belt PN 01

Ref. PN 44 (02)

Incorporated with our Work Positioning Belt PN 02

Ref. PN 44 (03)

Incorporated with our Work Positioning Belt PN 03

- ▶ Attachment Elements - One Chest attachment D- Ring and a Dorsal attachment D-Ring for Fall Arrest. Two Lateral attachment D-Rings for Work Positioning
- ▶ Adaptability - Adjustable shoulder and thigh-straps
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002 & EN 358:2000



* { See Page 09 for an Additional Option
**



Ref. No.	Material	Standard	Application	Attachment Point				Weight	Breaking Strength
				Dorsal	Sternal	Lateral	Ventral		
PN 56	Polyester	EN 361:2002 EN 358:2000 EN 813:1997	FA + WP + RA	✓	✓	✓	✓	2000 gms	25 kN
PN 57	Polyester	EN 361:2002 EN 358:2000 EN 813:1997	FA + WP + RA	✓	✓	✓	✓	2440 gms	25 kN
PN 51	Polyester	EN 358:2000 EN 813:1997	WP + RA			✓	✓	1270 gms	25 kN
PN 41	Polyester	EN 361:2002 EN 358:2000	FA + WP	✓		✓		1720 gms	25 kN
PN 42	Polyester	EN 361:2002 EN 358:2000	FA + WP	✓	✓	✓		1780 gms	25 kN
PN 43	Polyester	EN 361:2002 EN 358:2000	FA + WP	✓	✓	✓		1780 gms	25 kN
PN 44	Polyester	EN 361:2002 EN 358:2000	FA + WP	✓	✓	✓		1800 gms	25 kN

FA - Fall Arrest / WP - Work Positioning / RA - Rope Access

Dorsal ● Sternal ● Lateral ● Belt ■ Ventral ●



Ref. PN 45 (01)

Incorporated with our Work Positioning Belt PN 01

Ref. PN 45 (02)

Incorporated with our Work Positioning Belt PN 02

Ref. PN 45 (03)

Incorporated with our Work Positioning Belt PN 03

- ▶ Attachment Elements - 1 Chest attachment D- Ring and a Dorsal attachment D-Ring for Fall Arrest; Two Lateral D-Rings for Work Positioning; Extension Rescue Strap with top D- Ring for Rescue.
- ▶ Adaptability - Adjustable thigh-straps and shoulder straps
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002, EN 358:2000 & EN 1497

The Extension Rescue Strap incorporated on the shoulder strap of the Harness has a D-ring which can be used to connect to the Rescue Equipment, when in need. It allows easy rescue of the worker, and minimizes his discomfort while being rescued. The Extension Rescue Strap otherwise lies attached to the shoulder strap with the help of velcro binding, when not in use.

* { See Page 09 for an Additional Option
**

Ref. PN 31 (01)

Incorporated with our Work Positioning Belt PN 01

Ref. PN 31 (02)

Incorporated with our Work Positioning Belt PN 02

Ref. PN 31 (03)

Incorporated with our Work Positioning Belt PN 03

- ▶ Attachment Elements - A Dorsal attachment D-Ring for Fall Arrest, 2 Lateral D-Rings for Work Positioning
- ▶ Adaptability - Adjustable thigh-straps and waist belt; Sliding Plates for easy adjustment of Chest-Strap
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme. Tool holder loops and rings at the back
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002 and EN 358:2000

* { See Page 09 for an Additional Option
**



Ref. PN 32 (01)

Incorporated with our Work Positioning Belt PN 01

Ref. PN 32 (02)

Incorporated with our Work Positioning Belt PN 02

Ref. PN 32 (03)

Incorporated with our Work Positioning Belt PN 03

- ▶ Attachment Elements - 2 Chest attachment textile loops and a Dorsal attachment D- Ring for Fall Arrest. 2 Lateral D- Rings for Work Positioning
- ▶ Adaptability - Adjustable thigh-straps and waist belt
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme. Tool holder loops and rings at the back
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002 and EN 358:2000

* { See Page 09 for an Additional Option
**





Ref. PN 21

- ▶ Attachment Elements - A Dorsal attachment D- Ring for Fall Arrest
- ▶ Adaptability - Adjustable shoulder and thigh-straps; Sliding Plates for easy adjustment of Chest-Strap
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002

*** { See Page 09 for an Additional Option

Ref. PN 22

- ▶ Attachment Elements - 2 Chest attachment textile loops and a Dorsal attachment D- Ring for Fall Arrest
- ▶ Adaptability - Adjustable shoulder and thigh-straps.
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002

*** { See Page 09 for an Additional Option



Ref. No.	Material	Standard	Application	Attachment Point				Weight	Breaking Strength
				Dorsal	Sternal	Lateral	Ventral		
PN 45	Polyester	EN 361:2002 EN 358:2000 EN 1497	FA + WP+R	✓	✓	✓		1900 gms	25 kN
PN 31	Polyester	EN 361:2002 EN 358:2000	FA + WP	✓		✓		1540 gms	25 kN
PN 32	Polyester	EN 361:2002 EN 358:2000	FA + WP	✓	✓	✓		1650 gms	25 kN
PN 21	Polyester	EN 361:2002	FA	✓				1100 gms	25 kN
PN 22	Polyester	EN 361:2002	FA	✓	✓			1200 gms	25 kN

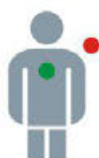
FA - Fall Arrest / WP - Work Positioning / R-Rescue



Ref. PN 23

- ▶ Attachment Elements - 2 Chest attachment D- Rings and a Dorsal attachment D- Ring for Fall Arrest
- ▶ Adaptability - Adjustable shoulder and thigh-straps; Sliding Plates for easy adjustment of Chest-Strap
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002

* { See Page 09 for an Additional Option
**



Ref. PN 24

- ▶ Attachment Elements - 1 Chest attachment D- Ring and a Dorsal attachment D- Ring for Fall Arrest
- ▶ Adaptability - Adjustable shoulder and thigh-straps.
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002

* { See Page 09 for an Additional Option
**

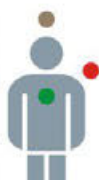


Ref. PN 25

- ▶ Attachment Elements - 1 Sternal attachment D- Ring and a Dorsal attachment D- Ring for Fall Arrest; Extension Rescue strap with top D- Ring for Rescue
- ▶ Adaptability - Adjustable shoulder and thigh-straps
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to EN 361:2002 and EN 1497

The Extension Rescue Strap incorporated on the shoulder strap of the Harness has a D-ring which can be used to connect to the Rescue Equipment, when in need. It allows easy rescue of the worker, and minimizes his discomfort while being rescued. The Extension Rescue Strap otherwise lies attached to the shoulder strap with the help of velcro binding, when not in use.

* { See Page 09 for an Additional Option
**





Ref. PN 11

- Attachment Elements - A Dorsal Attachment D-Ring for Fall Arrest
- Adaptability - Adjustable thigh-straps; Sliding Plates for easy adjustment of Chest-Strap
- Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- Ergonomics - Ideally positioned sit-strap for extended comfort
- Compliance - Conforms to EN 361:2002

*
** { See Page 09 for an Additional Option

Ref. PN 12

- Attachment Elements - 2 Chest attachment textile loops and a Dorsal attachment D-Ring for Fall Arrest
- Adaptability - Adjustable thigh-straps
- Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- Ergonomics - Ideally positioned sit-strap for extended comfort
- Compliance - Conforms to EN 361:2002

*
** { See Page 09 for an Additional Option



Ref. No.	Material	Standard	Application	Attachment Point				Weight	Breaking Strength
				Dorsal	Sternal	Lateral	Ventral		
PN 23	Polyester	EN 361:2002	FA	✓	✓			1300 gms	25 kN
PN 24	Polyester	EN 361:2002	FA	✓	✓			1210 gms	25 kN
PN 25	Polyester	EN 361:2002 EN 1497	FA + R	✓	✓			1405 gms	25 kN
PN 11	Polyester	EN 361:2002	FA	✓				800 gms	25 kN
PN 12	Polyester	EN 361:2002	FA	✓	✓			900 gms	25 kN

FA - Fall Arrest / R-Rescue

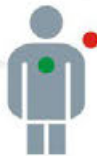
IS 3521:1999

The dangers of working at a height are apparent to all concerned. Not only do they result in some irreparable damage, they can also cost a valuable life. KARAM offers a wide range of Fall Protection Harnesses conforming to ISI standards, which comes with all the features of Safety to fight the fatalities of such events.

Manufactured from new advanced Polyester Webbing, and equipped with specially designed easy-to-use buckles for attachment, the KARAM Series of E-con Harnesses provide an easy solution to most fall hazard situations.

E-CON

S E R I E S


Ref. PN 14
Full Body Harness : For Controlled Descent (Class D)

- ▶ Attachment Elements - 1 Sternal D-Ring at the front is use in the event of controlled descent from a height. A Dorsal Attachment D-Ring for Fall Arrest.
- ▶ Adaptability - Adjustable thigh-straps.
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to IS 3521:1999

Ref. PN 16
Full Body Harness : For Basic Fall Arrest (Class A)

- ▶ Attachment Elements - A Dorsal Attachment D-Ring for Fall Arrest.
- ▶ Adaptability - Adjustable chest-strap & thigh-straps.
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to IS 3521:1999


Ref. PN 17
Full Body Harness : For Positioning (Class P)

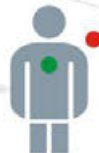
- ▶ Attachment Elements - A Dorsal attachment D-Ring for Fall Arrest. 2 Lateral D-Rings at the waist level, one on each side, help in positioning the worker so that he can work with both hands free.
- ▶ Adaptability - Adjustable chest-strap & thigh-straps.
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to IS 3521:1999



Ref. PN 18

Full Body Harness : For Tower Climbing (Class L)

- ▶ Attachment Elements - 2 Chest attachment D- Rings for Tower Climbing. A Dorsal Attachment D-Ring for Fall Arrest.
- ▶ Adaptability - Adjustable chest-strap & thigh-straps.
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to IS 3521:1999



Ref. PN 19

Full Body Harness : For Entry & Exit in Confined Spaces (Class E)

- ▶ Attachment Elements - 2 Sliding D-rings, one on each Shoulder Strap, this helps in easy entry into Confined Spaces. A Dorsal Attachment D-Ring for Fall Arrest.
- ▶ Adaptability - Adjustable chest-strap & thigh-straps.
- ▶ Convenience - Shoulder and thigh-straps differentiated by a dual colour scheme
- ▶ Ergonomics - Ideally positioned sit-strap for extended comfort
- ▶ Compliance - Conforms to IS 3521:1999



KARAM ISI Harness also comes with an option of an economy range Polypropylene Lanyard of 3m spliced at the back D-ring.

Ref. PP 204



Link Connecting Poly-propylene Rope Lanyard, One Side Loop & Other Side Hook PN 121

Ref. PP 206



Link Connecting Poly-propylene Rope Lanyard, One Side Loop & Other Side Hook PN 131

Ref. No.	Material	Standard	Application	Attachment Point				Weight
				Dorsal	Sternal	Lateral	Rescue	
PN 14	Polyester	IS 3521 : 1999	FA	✓	✓			1.000 kg
PN 16	Polyester	IS 3521 : 1999	FA	✓				0.850 kg
PN 17	Polyester	IS 3521 : 1999	FA + WP	✓		✓		1.200 kg
PN 18	Polyester	IS 3521 : 1999	FA	✓	✓			1.050 kg
PN 19	Polyester	IS 3521 : 1999	FA	✓			✓	1.050 kg

FA - Fall Arrest / WP=Work Positioning



Ref. STS 01

Suspension Trauma Relief Strap

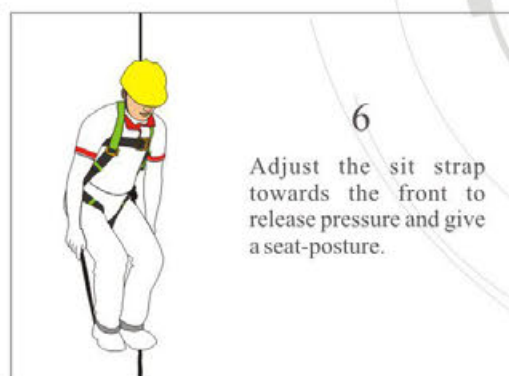
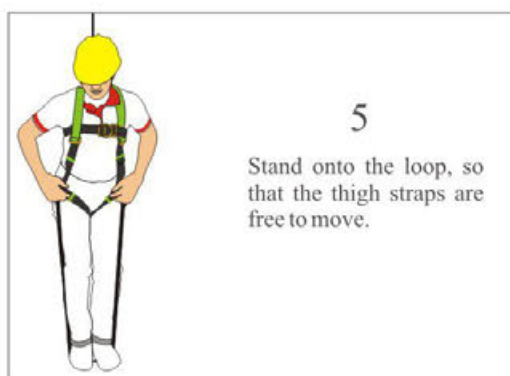
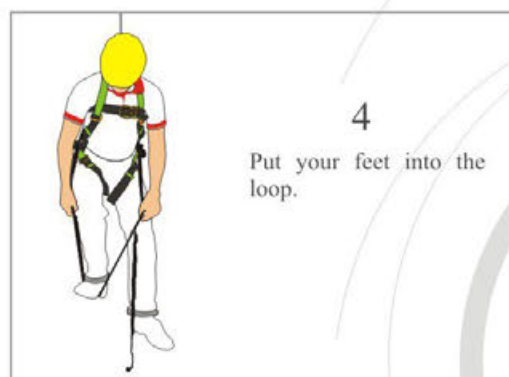
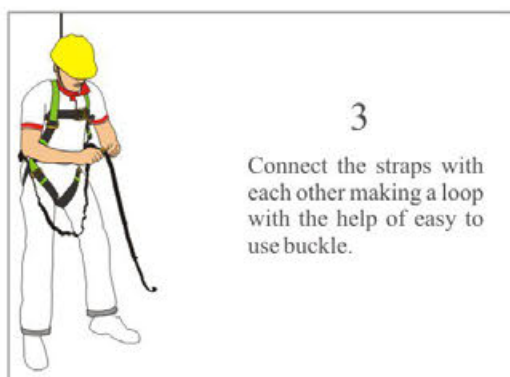
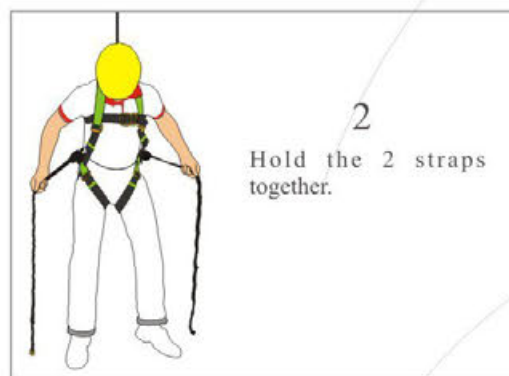
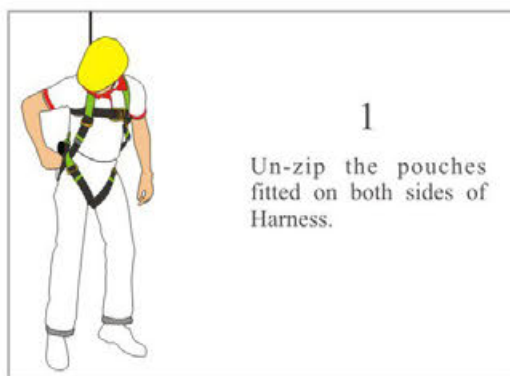
CARE BY KARAM EVEN AFTER A FALL!

Avoid the effects of Suspension Trauma with the use of KARAM Suspension Trauma Relief Straps.

- ▶ Extremely effective; specially designed to help relieve the negative effects of Suspension Trauma.
- ▶ Compact and Light-weight. Does not hamper the activity of worker while at work.
- ▶ Allows the suspended worker to stand up in his harness to relieve pressure.
- ▶ Easy to attach to the Harness with the help of the textile loop and velcro provided.
- ▶ Easy deployment; operation is fool-proof.

KARAM provides Harnesses fitted with the Suspension Trauma Relief Straps on request.

STEPS TO USE



The KARAM range of Hooks and Connectors come with the following special features:

- ▶ Are openable by minimum 2 deliberate consecutive manual actions.
- ▶ Range of double and triple locking connectors.
- ▶ Come with a minimum breaking strength of 23 kN.
- ▶ Tested for both Gate Function and Gate Resistance.
- ▶ Tested for corrosion resistance for min 72 hours of salt spray testing.



HOOKS & CONNECTORS

TESTS CARRIED OUT ON ALL CONNECTORS



Proof Load Testing



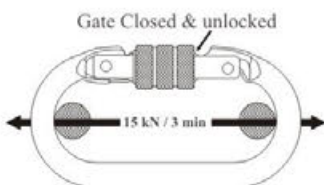
Hardness Testing



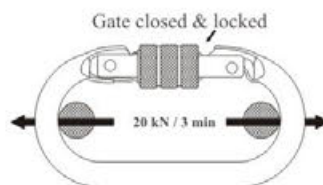
Salt-Spray Test



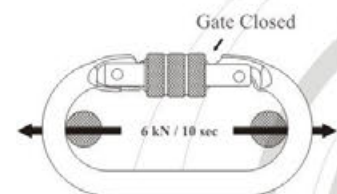
Static Load Testing



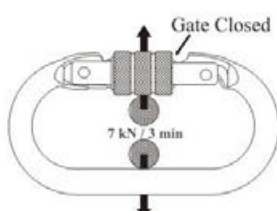
The Karabiner must not break



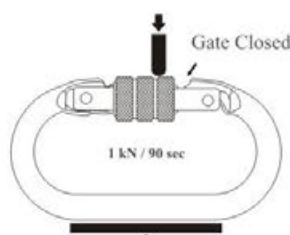
The Karabiner must not break



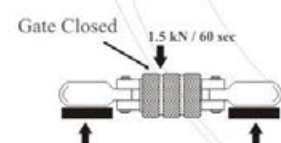
After the test, the gate shall open like new one.
(Gate Function)



The Karabiner must not break
(Minor Axis)



After the test, the gate shall open like new one.
Gate Resistance (Gate Face)



After the test, the gate shall open like new one.
Gate Resistance (Gate Side)

KARAM provides an exhaustive range of Hooks and Connectors

made of Alloy Steel



Quarter Turn-locking Steel Karabiner Ref. PN 111

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 16 mm
- ▶ Minimum Breaking Strength: 25 kN
- ▶ Tested as per EN 362:2004
- ▶ Finish Available: Silver/ Golden Yellow Galvanized
- ▶ Net Weight: 160.5 gms
- ▶ Conformity: EN 362:2004 Class B & Class M

* see the box below



Steel Screw-locking Karabiner Ref. PN 112

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 17 mm
- ▶ Minimum Breaking Strength: 25 kN
- ▶ Finish Available: Silver/ Golden Yellow Galvanized
- ▶ Net Weight: 160.5 gms
- ▶ Conformity: EN 362:2004 Class B & Class M

* see the box below



Steel Quater Turn-locking Karabiner Ref. PN 113

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 23 mm
- ▶ Minimum Breaking Strength: 25 kN
- ▶ Finish Available: Silver/ Golden Yellow Galvanized.
- ▶ Net Weight: 236.0 gms
- ▶ Conformity: EN 362:2004 Class B

* see the box below



* Also available with Captive Pin on request

This is an Additional Pin fitted to the Karabiner to prevent it from disengaging from the Harness. The code for the product is written as the Ref. No. of the product along with (C), for eg. PN 112 (C)



Steel Triple-Action Locking Karabiner Ref. PN 114

- ▶ Material: Alloy Steel
 - ▶ Gate Opening: 23 mm
 - ▶ Minimum Breaking Strength: 25 kN
 - ▶ Finish Available: Silver/ Golden Yellow Galvanized. Shot-blasted on request.
 - ▶ Net Weight: 233.4 gms
 - ▶ Conformity: EN 362:2004 Class B
- * see the box below

New!



Steel Quarter Turn-locking Karabiner Ref. PN 115

- ▶ Material: Alloy Steel
 - ▶ Gate Opening: 23 mm
 - ▶ Minimum Breaking Strength: 25 kN
 - ▶ Finish Available: Silver/ Golden Yellow Galvanized.
 - ▶ Net Weight: 210.0 gms
 - ▶ Conformity: EN 362:2004 Class B
- * see the box below

New!



Steel Tower Hook Ref. PN 134

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 50 mm
- ▶ Always comes fitted with a Captive Pin
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Silver or Golden Yellow Galvanized. Shot-blasted on request.
- ▶ Net Weight: 725.0 gms
- ▶ Conformity: EN 362:2004 Class T

New!



Steel Tower Hook Ref. PN 135

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 55 mm
- ▶ Always comes fitted with a Captive Pin
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Silver or Golden Yellow Galvanized. Shot-blasted on request.
- ▶ Net Weight: 745 gms
- ▶ Conformity: EN 362:2004 Class T



* Also available with Captive Pin on request

This is an Additional Pin fitted to the Karabiner to prevent it from disengaging from the Harness. The code for the product is written as the Ref. No. of the product along with (C), for eg. PN 115 (C)



Steel Snap Hook

Ref. PN 121

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 17 mm
- ▶ Minimum Breaking Strength: 25 kN
- ▶ Finish Available: Silver/ Golden Yellow Galvanized. Shot blasted on request
- ▶ Net Weight: 205.3 gms
- ▶ Conformity: EN 362:2004 Class T
- ▶ Process : **Stamped**



Pole Strap Snap Hook

Ref. PN 150

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 17 mm
- ▶ Minimum Breaking Strength: 25 kN
- ▶ Finish Available: Silver/ Golden Yellow Galvanized. Shot blasted on request
- ▶ Net Weight: 259.0 gms
- ▶ Conformity: EN 362:2004 Class T
- ▶ Process : **Stamped**



Steel Swivel Snap Hook

Ref. PN 122

- ▶ Material/ Composition: Alloy Steel
- ▶ Gate Opening: 11.5 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Silver/ Golden Yellow Galvanized. Shot blasted on request
- ▶ Net Weight: 334.9 gms
- ▶ Conformity: EN 362: 2004 Class T
- ▶ Process : **Forged**



Steel Swivel Snap Hook with Load Indicator

Ref. PN 123

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 11.5 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Silver/ Golden Yellow Galvanized. Shot blasted on request
- ▶ Net Weight: 345.5 gms
- ▶ Conformity: EN 362:2004 Class T
- ▶ The Load Indicator (shown in green colour) activates at a load of 270 to 320 kgf.
- ▶ Process : **Forged**



Steel Snap Hook

Ref. PN 124

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 21 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Silver/ Golden Yellow Galvanized. Shot blasted on request
- ▶ Net Weight: 274.0 gms
- ▶ Conformity: EN 362:2004 Class T
- ▶ Process : **Stamped**



Steel Scaffold Hook

Ref. PN 131

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 55 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Nickel Plated/ Silver or Golden Yellow Galvanized. Shot blasted on request.
- ▶ Net Weight: 473.0 gms.
- ▶ Conformity: EN 362:2004 Class T
- ▶ Process : **Forged**



Steel Tower Hook
Ref. PN 132

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 80 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available : Silver or Golden Yellow Galvanized. Shot blasted on request.
- ▶ Net Weight: 850.5 gms.
- ▶ Conformity: EN 362:2004 Class T

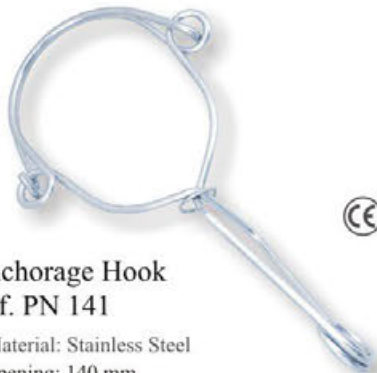


Steel Scaffold Hook
Ref. PN 133

- ▶ Material: Alloy Steel
- ▶ Gate Opening: 60 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Silver or Golden Yellow Galvanized. Shot-blasted on request.
- ▶ Net Weight: 490.0 gms.
- ▶ Conformity: EN 362:2004 Class T
- ▶ Process: Stamped

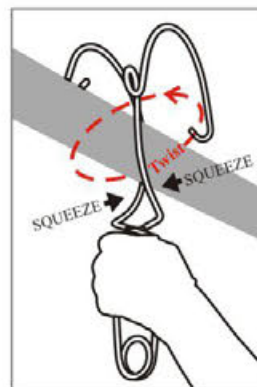
Anchorage Hooks

KARAM has a range of Anchorage Hooks made from Stainless Steel that are design to fit over or around large structural members, to provide secure Anchorage for Lanyards, Lifelines and other Connectors. They are fast and easy to install by slipping the large opening over the approved structure-like Railings, Small I-Beams, Angle Iron etc.



Anchorage Hook
Ref. PN 141

- ▶ Material: Stainless Steel
- ▶ Opening: 140 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Net Weight: 362.3 gms.
- ▶ Conformity: EN 362:2004 Class A



Anchorage Hook
Ref. PN 142

- ▶ Material: Stainless Steel
- ▶ Opening: 110 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Polished Stainless Steel
- ▶ Net Weight: 314.9 gms.
- ▶ Conformity: EN 362:2004 Class A



Anchorage Hook
Ref. PN 143

- ▶ Material: Stainless Steel
- ▶ Opening: 75 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Polished Stainless Steel
- ▶ Net Weight: 306.3 gms.
- ▶ Conformity: EN 362:2004 Class A

Where it is important to carry light-weight connectors at heights to provide the maximum comfort as well Safety to the user, this range of Aluminium Connectors by KARAM fulfills all the required needs, Manufactured from high quality Aluminium alloy, these Connectors come in highly engineered designs, conforming to all the clauses laid down in the EN norms.

KARAM provides an exhaustive range of Hooks and Connectors
made of Aluminium



Aluminium Screw-locking Karabiner

Ref. PN 116

- ▶ Material: Aluminium Alloy
- ▶ Gate Opening: 22.5 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured
- ▶ Net Weight: 74.6 gms.
- ▶ Conformity: EN 362:2004 Class B

* see the box below

Aluminium Screw-locking Karabiner

Ref. PN 116 F

- ▶ Material: Aluminium Alloy
- ▶ Gate Opening: 22.5 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured
- ▶ Net Weight: 74.6 gms.
- ▶ Conformity: EN 362:2004 Class B

* see the box below



Aluminium Quarter Turn-locking Karabiner

Ref. PN 117

- ▶ Material: Aluminium Alloy
- ▶ Gate Opening: 22 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured
- ▶ Net Weight: 84.0 gms.
- ▶ Conformity: EN 362:2004 Class B

* see the box below

Aluminium Quarter Turn-locking Karabiner

Ref. PN 117 F

- ▶ Material: Aluminium Alloy
- ▶ Gate Opening: 22 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured
- ▶ Net Weight: 84.0 gms.
- ▶ Conformity: EN 362:2004 Class B

* see the box below



Aluminium Triple Action-locking Karabiner

Ref. PN 118

- ▶ Material: Aluminium Alloy
- ▶ Gate Opening: 22 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured
- ▶ Net Weight: 79.0 gms.
- ▶ Conformity: EN 362:2004 Class B

* see the box below

Aluminium Triple Action-locking Karabiner

Ref. PN 118 F

- ▶ Material: Aluminium Alloy
- ▶ Gate Opening: 22 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured
- ▶ Net Weight: 79.0 gms.
- ▶ Conformity: EN 362:2004 Class B

* see the box below



* Also available with Captive Pin on request

This is an Additional Pin fitted to the Karabiner to prevent it from disengaging from the Harness. The code for the product is written as the Ref. No. of the product along with (C), for eg. PN 116 (C), PN 116 F (C)





Aluminium Screw-locking Snap Hook
Ref. PN 126

- ▶ Material/Composition: Aluminium Alloy
- ▶ Gate Opening: 24 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured.
- ▶ Net Weight: 80.0 gms.
- ▶ Conformity: EN 362:2004 Class B



Aluminium Quarter Turn-locking Snap Hook
Ref. PN 127

- ▶ Material/Composition: Aluminium Alloy
- ▶ Gate Opening: 22.5 mm
- ▶ Minimum Breaking Strength: 23kN
- ▶ Finish Available: Natural Silver/ Coloured.
- ▶ Net Weight: 87.4 gms.
- ▶ Conformity: EN 362:2004 Class B



Triple Action Locking Aluminium Snap Hook
Ref. PN 128

- ▶ Material/Composition: Aluminium Alloy
- ▶ Gate Opening: 22.5 mm
- ▶ Minimum Breaking Strength: 23kN
- ▶ Finish Available: Natural silver/ Coloured.
- ▶ Net Weight: 87.0 gms.
- ▶ Conformity: EN 362:2004 Class B



Aluminium Snap Hook
Ref. PN 129

- ▶ Material/Composition: Aluminium Alloy
- ▶ Gate Opening: 18.5 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured.
- ▶ Net Weight: 160.0 gms.
- ▶ Conformity: EN 362:2004 Class T
- ▶ Process: Stamped



Aluminium Rebar Hook
Ref. PN 136

- ▶ Material/Composition: Aluminium Alloy
- ▶ Gate Opening: 60 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver / Coloured
- ▶ Net Weight: 445.0 gms.
- ▶ Conformity: EN 362:2004 Class T



Aluminium Tower Hook
Ref. PN 139

- ▶ Material: Aluminium Alloy
- ▶ Gate Opening : 60 mm
- ▶ Minimum Breaking Strength: 23 kN
- ▶ Finish Available: Natural Silver/ Coloured
- ▶ Net Weight: 243.0 gms.
- ▶ Conformity: EN 362:2004 Class T

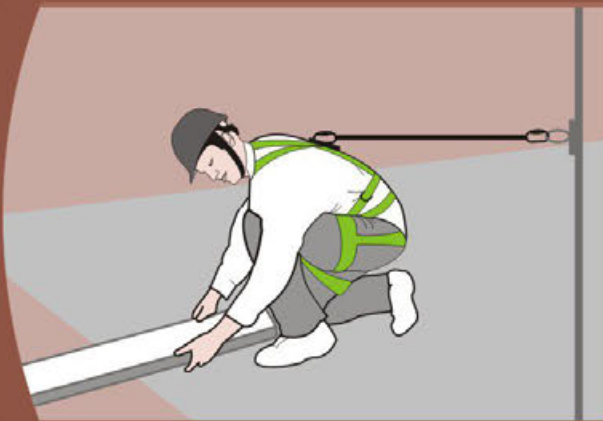
Depending upon the specific usage, Lanyards are classified differently as follows:

Work Positioning Lanyard - Used for work Positioning.

Restraint Lanyard - Used for Restraint.

Fall Arrest Lanyard - Comes incorporated with an Energy Absorber to reduce the impact of fall, and hence are used for Fall Arrest.

Forked Lanyard - KARAM also provides a range of Forked Lanyards that can be used to move up or down, or along the sides while remaining connected at all times.



LANYARDS

WORK POSITIONING LANYARDS

KARAM has a comprehensive and customized series of Work Positioning Lanyards. These Lanyards can be connected to the Lateral D-Rings on the Work Positioning Belts or Combination Harnesses and easily adjusted for their lengths to suit the application.

KARAM Work Positioning Lanyards are tested and CE certified as per EN 358:1999. Breaking Strength min 15 kN.



Work Positioning Lanyard with Ring type Adjuster

Ref. PN 241

- › Made of 14mm dia polyamide 3-strand Twisted Rope
- › Has a manual Ring-type adjuster of forged alloy Steel
- › Maximum length of 2.0 mtr.
- › Easy to connect Steel Karabiners PN 112 at both the ends for attachment
- › Conforms to EN 358:1999
- › Optional: Also available with a protective covering sleeve on request



Work Positioning Lanyard with Grip Adjuster

Ref. PN 242

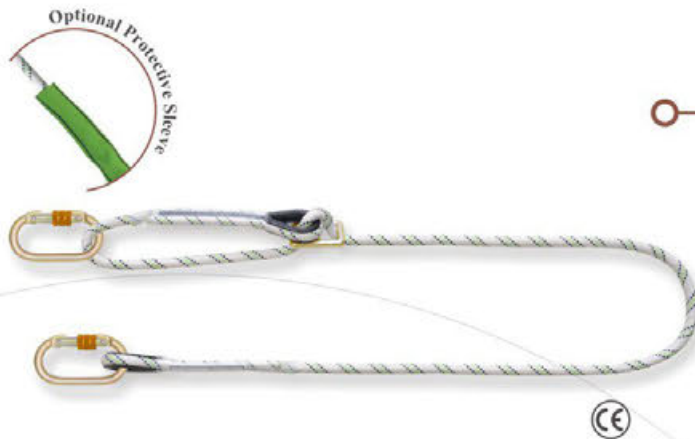
- › Made of 14mm dia polyamide 3-strand Twisted Rope
- › Has a convenient Rope-grab adjuster for easy length adjustment
- › Maximum length of 2.0 mtr.
- › Easy to connect Steel Karabiners PN 112 at both the free ends for attachment
- › Conforms to EN 358:1999
- › Optional: Also available with a protective covering sleeve on request



Webbing Work Positioning Lanyard

Ref. PN 243

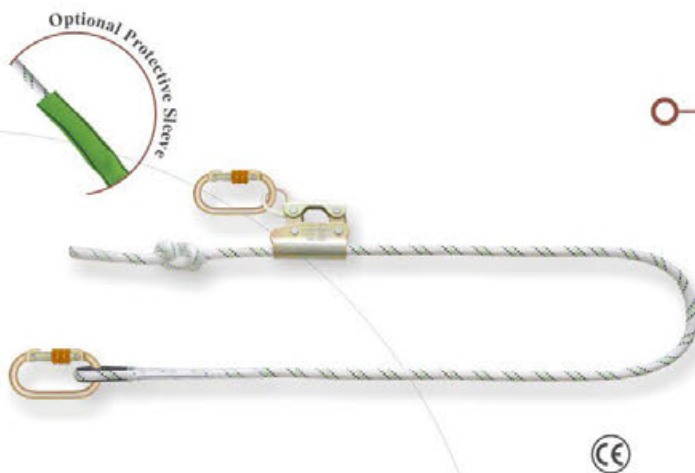
- › Made of 33mm wide polyester webbing
- › Manual Ring type adjuster of forged alloy steel
- › Easy to connect Steel Karabiner PN 112 at both the ends for attachment
- › Maximum length of 2.0 mtr.
- › Conforms to EN 358:1999



Work Positioning Lanyard with Ring Adjuster

Ref. PN 244

- ▶ Made up of 12mm dia for Kernmantle rope
- ▶ Easy to connect Steel Karabiner PN 112 at both the ends for attachment
- ▶ Manual Ring type adjuster made of forged alloy steel
- ▶ Maximum length of 2.0 mtr.
- ▶ Conforms to EN 358:1999
- ▶ Optional: Also available with a protective covering sleeve on request.



Work Positioning Lanyard with Grip Adjuster

Ref. PN 245

- ▶ Made of 12 mm dia for Kernmantle rope
- ▶ Has a convenient Rope-grab adjuster for easy length adjustment
- ▶ Maximum Length 2 mtr.
- ▶ Easy to connect Steel Karabiners PN 112 at both ends for attachment
- ▶ Conforms to EN 358:1999
- ▶ Optional: Also available with a protective covering sleeve on request.



Work Positioning Lanyard with Grip Adjuster

Ref. PN 246

- ▶ Made of 14 mm dia polyamide 3 strand Twisted Rope
- ▶ Has a convenient Stainless Steel Rope Grab Adjuster for easy length adjustment
- ▶ Maximum length of 2.0 mtr.
- ▶ Easy to connect Steel Karabiners PN 112 at both ends for attachment
- ▶ Conforms to EN 358:1999
- ▶ Optional: Also available with a protective covering sleeve on request.

RESTRAINT TWISTED ROPE LANYARDS

The Range of KARAM Restraint Twisted Rope Lanyards are provided with the following features :-






- ▶ They are made up of 12mm dia Polyamide Twisted Rope.
- ▶ The spliced end is protected with a strong transparent covering sleeve. This not only protects the splicing, but also makes the splicing visible for easy inspection prior to use.
- ▶ The loops at the end are protected by an abrasion resistant thimble. This prevents the rope from being damaged by the metallic contact of the connector.
- ▶ The rope also has a coloured tracer strand which loses its colour in due course of time, to show that the Lanyard is now unfit for further use.

KARAM offers a wide range of Twisted Rope Lanyards, having different configuration of connectors on the ends.

They are available in lengths 1.0m, 1.5m, 1.8m, and 2.0m.

Age Indicator

All Lanyards with different combinations of connectors mentioned below are individually certified as per EN 354 : 2002, and have a minimum Breaking Strength of 22 kN.

REF. NO.	ATTACHMENTS	RESTRAINT TWISTED ROPE LANYARDS
PN 201	Both side loops	
PN 202	One side loop Other side Karabiner PN 112	
PN 203	Both side Karabiners PN 112	
PN 204	One side loop Other side Hook PN 121	
PN 205	Both side Hooks PN 121	
PN 206	One side loop Other side Hook PN 131 *	
PN 207	One side Karabiner PN 112 Other side Hook PN 121	
PN 208	One side Karabiner PN 112 Other side Hook PN 131 *	
PN 209	One side Hook PN 121 Other side Hook PN 131 *	



*

Also available with Aluminium Hook PN 136 in place of Steel Hook PN 131. The Ref. No. of the lanyards will be PN 206(A), PN 208(A), PN 209(A)

RESTRAINT WEBBING LANYARDS (44 MM)

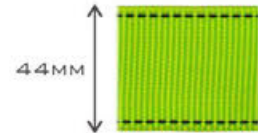
KARAM offers a wide range of Webbing Lanyards made from high tenacity polyester yarn, having different configuration of connectors at the ends.










- ▶ The Webbing Lanyards in this section are made up of 44 mm wide polyester webbing.
- ▶ The loops at the ends are protected by an abrasion resistant covering. This prevents the webbing from being damaged by the metallic contact of the connector.

All KARAM Lanyards are also supplied with any other hook on special request.

They are available in lengths 1.0m, 1.5m, 1.8m, and 2.0m.

All Lanyards with different combinations of connectors mentioned below are individually certified as per EN 354 : 2002, and have a minimum Breaking Strength of 22 kN.



REF. NO.	ATTACHMENTS	RESTRAINT WEBBING LANYARDS
PN 221	Both side loops	
PN 222	One side loop Other side Karabiner PN 112	
PN 223	Both side Karabiners PN 112	
PN 224	One side loop Other side Hook PN 121	
PN 225	Both side Hooks PN 121	
PN 226	One side loop Other side Hook PN 131 *	
PN 227	One side Karabiner PN 112 Other side Hook PN 121	
PN 228	One side Karabiner PN 112 Other side Hook PN 131 *	
PN 229	One side Hook PN 121 Other side Hook PN 131 *	



* Also available with Aluminium Hook PN 136 in place of Steel Hook PN 131. The Ref. No. of the lanyards will be PN 226(A), PN 228(A), PN 229(A)

RESTRAINT KERNMANTLE ROPE LANYARDS

This range of Lanyards is made from high quality Kernmantle Rope having the following features-





- ▶ They are made up of Polyamide Kernmantle Rope
- ▶ They are cross stitched and are protected with a strong transparent covering sleeve. This not only protects the ends, but also makes the stitches visible for easy inspection prior to use.
- ▶ The loops at the end are protected by an abrasion resistant thimble. This prevents the rope from being damaged by the metallic contact of the connector.
- ▶ The rope also has a coloured tracer strand which loses its colour in due course of time, to show that the Lanyard is now unfit for further use.

KARAM offers a wide range of Kernmantle Rope Lanyards, having different configuration of connectors on the ends.

All KARAM Lanyards are also supplied with any other hook on special request.

They are available in lengths 1.0m, 1.5m, 1.8m, and 2.0m.

All Lanyards with different combinations of connectors mentioned below are individually certified as per **EN 354:2002**, and have a minimum breaking strength of 22 kN.

REF. NO.	ATTACHMENTS	RESTRAINT KERNMANTLE ROPE LANYARDS
PN 281	Both side loops	
PN 282	One side loop Other side Karabiner PN 112	
PN 283	Both side Karabiners PN 112	
PN 284	One side loop Other side Hook PN 121	
PN 285	Both side Hooks PN 121	
PN 286	One side loop Other side Hook PN 131 *	
PN 287	One side Karabiner PN 112 Other side Hook PN 121	
PN 288	One side Karabiner PN 112 Other side Hook PN 131 *	
PN 289	One side Hook PN 121 Other side Hook PN 131 *	



* Also available with Aluminium Hook PN 136 in place of Steel Hook PN 131. The Ref. No. of the lanyards will be PN 286(A), PN 288(A), PN 289(A)

ENERGY ABSORBER

The Energy Absorber consists of a special white inner polyamide core which absorbs the arresting forces in the event of a fall. The coloured webbing serves as a back up. The clear protective covering helps in easy and fast visual inspection.

Ref. PN 300



KARAM Energy Absorber PN 300 is made up of 44mm wide webbing and is shrink wrapped. It reduces the impact of fall to less than 6kN, and conforms to EN 355:2002

Ref. PN 400



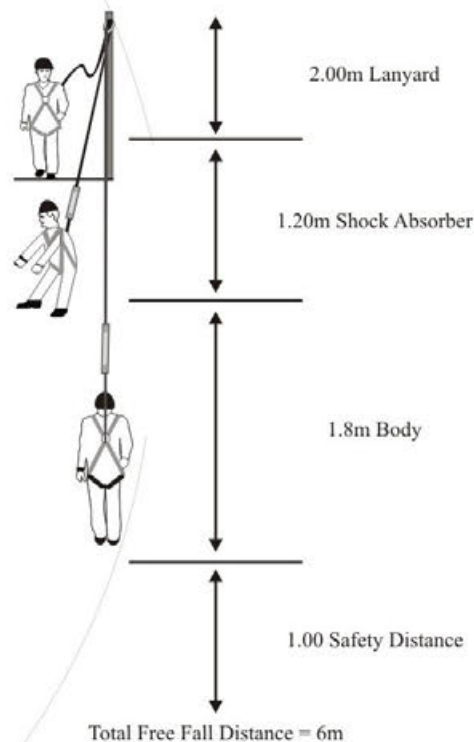
KARAM Energy Absorber PN 400 is made up of 35mm wide webbing and is shrink wrapped. It reduces the impact of fall to less than 6kN, and conforms to EN 355:2002

All KARAM Range of Fall Arrest lanyards can be provided with this Energy Absorber PN 400.

HOW DOES THE ENERGY ABSORBER WORK

In the event of a fall the special webbing inside the Energy Absorber opens up. This opening of the webbing takes up most of the jerk which is felt as an impact when a fall occurs. Hence finally very little jerk is felt on the body of the worker.

We can therefore imagine that if this Energy Absorber is absent from a fall protection system, the forces which are felt on the body of the worker can be very high and result in injury.



The energy absorber opens up to an additional length of about 110 cm, and hence the worker should always make sure that there is enough safe clear distance below his area of work.

(KARAM recommends a safe clear distance of 6m for a 2m Energy Absorbing Lanyard)

ENERGY ABSORBING TWISTED ROPE LANYARDS

- ▶ They are made up of Polyamide Twisted Rope & come incorporated with an Energy Absorber pack.
- ▶ The spliced end is protected with a strong transparent covering sleeve. This not only protects the splicing, but also makes the splicing visible for easy inspection prior to use.
- ▶ The loops at the end are protected by an abrasion resistant thimble. This prevents the rope from being damaged by the metallic contact of the connector.
- ▶ The rope also has a coloured tracer strand which loses its colour in due course of time, to show that the Lanyard is now unfit for further use.

All KARAM Lanyards are also supplied with any other hook on special request.

They are available in lengths 1.0m, 1.5m, 1.8m, and 2.0m.



All Lanyards with different combinations of connectors mentioned below are individually certified as per EN 355:2002 and have a minimum breaking strength of 22 kN.

Ref. No. if with Energy Absorber PN 300	Ref. No. if with Energy Absorber PN 400	ATTACHMENTS	ENERGY ABSORBING TWISTED ROPE LANYARDS
PN 301	PN 301(S)	Both side loop	
PN 302	PN 302(S)	One side loop Other side Karabiner PN 112	
PN 303	PN 303(S)	Both side Karabiners PN 112	
PN 304	PN 304(S)	One side loop Other side Hook PN 121	
PN 305	Not applicable	Both side Hooks PN 121	
PN 306	PN 306(S)	One side loop Other side Hook PN 131 *	
PN 307	PN 307(S)	One side Karabiner PN 112 Other side Hook PN 121	
PN 308	PN 308(S)	One side Karabiner PN 112 Other side Hook PN 131 *	
PN 309	Not applicable	One side Hook PN 121 Other side Hook PN 131 *	
PN 310	PN 310(S)	One side loop Other side Hook PN 141	
PN 311	PN 311(S)	One side Hook PN 112 Other side Hook PN 141	
PN 312	Not applicable	One side Hook PN 121 Other side Hook PN 141	



* Also available with Aluminium Hook PN 136 in place of Steel Hook PN 131. The Ref. No. of the lanyards will be PN 306(A) or PN 306(S)(A); PN 308(A) or PN 308(S)(A); PN 309(A)

FORKED LANYARDS WITH ENERGY ABSORBER

KARAM Forked Lanyards come in Twisted Rope, Kernmantle Rope and also in 44mm & 30mm wide Polyester webbing, and offer the facility to move in all directions while remaining safely anchored at all times.

Ref. PN 341

Made of	Length	Attachments	Conforms to
12 mm dia Kernmantle rope	1.5 m, 1.8 m, 2.0 m	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131 at other ends	EN 355:2002 + VG 11/ PFE 63 (Additional Static Strength Test)

* see the box below

Ref. PN 351

Made of	Length	Attachments	Conforms to
12mm dia 3 strands Twisted polyamide rope	1.5 m, 1.8 m, 2.0 m	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131 at other ends	EN 355:2002 + VG 11/ PFE 63 (Additional Static Strength Test)

* see the box below

Ref. PN 352

Made of	Length	Attachments	Conforms to
12 mm dia 3 strand polyamide twisted rope	1.5 m, 1.8 m, 2.0 m	PN 112 with Energy Absorber PN 300 at one end and two Steel Snap Hooks PN 121 at other ends	EN 355:2002 + VG 11/ PFE 63 (Additional Static Strength Test)



* Also available with Aluminium Hook PN 136 in place of Steel Hook PN 131. The Ref. No. of the lanyards will be PN 341(A); PN 351(A)



Ref. PN 361

Made of	Length	Attachments	Conforms to
44mm wide polyester webbing	1.5 m, 1.8 m, 2.0 m	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131 at other ends	EN 355:2002 + VG 11/ PFE 63 (Additional Static Strength Test)

The Energy Absorber pack used is PN 300 (However PN 400 also available on request) (Ref. PN 361 (S) when using PN 400 Energy Absorber pack)

* see the box below



Ref. PN 361(30)

Made of	Length	Attachments	Conforms to
30mm wide polyester webbing	1.5 m, 1.8 m, 2.0 m	PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131 at other ends	EN 355:2002 + VG 11/ PFE 63 (Additional Static Strength Test)

The Energy Absorber pack used is PN 300 (However PN 400 also available on request) (Ref. PN 361(30) (S) when using PN 400 Energy Absorber pack)

* see the box below

FORKED LANYARDS

Forked lanyards (or Y-shaped lanyards) provide 100% tie-off required during progressive movement from one anchor point to the next, upwards or side-ways.

While using an Energy Absorbing Forked Lanyard make sure that only the Energy Absorber end of the lanyard is connected to the Harness at its Dorsal attachment point. If this is not done so, the shock absorption element gets removed from the system, making it extremely dangerous in the event of a fall.



KARAM FORKED LANYARDS TESTED AS PER VG 11 OF PPE DIRECTIVE 89/686/EEC

KARAM Forked Lanyards are also subjected to the special 3-point testing as laid down in the VG 11 Procedure to make the Lanyards extra safe for use.



*Also available with Aluminium Hook PN 136 in place of Steel Hook PN 131. The Ref. No. of the lanyards will be PN 361(A); PN 361(30)(A)

EXPANDABLE LANYARDS

These Lanyards are ideal for usage in conditions where there are chances for the user tripping over the Lanyard. The Elastic nature of the Lanyard reduces the actual effective length of the Lanyard thereby reducing trip hazards.

Ref. PN 291



Made of	Length	Conforms to
44mm wide Tubular webbing	Expandable length 2.0 m Relaxed Length 1.4 m	EN 354:2002

Attachments : Any type of connector (see page for connector) can be supplied as per the request.

Ref. PN 371



Made of	Length	Conforms to
44mm wide Tubular webbing	Expandable length 2.0 m Relaxed Length 1.4 m	EN 355:2002 + VG 11/ PFE 63 (Additional Static Strength Test)

Attachments : PN 112 with Energy Absorber PN 300 at one end and two Steel Scaffold Hooks PN 131 at other ends

* see the box below

Ref. PN 391



Made of	Length	Conforms to
44mm wide Tubular webbing	Expandable length 2.0 m Relaxed Length 1.4 m	EN 355:2002 (with combination certification)

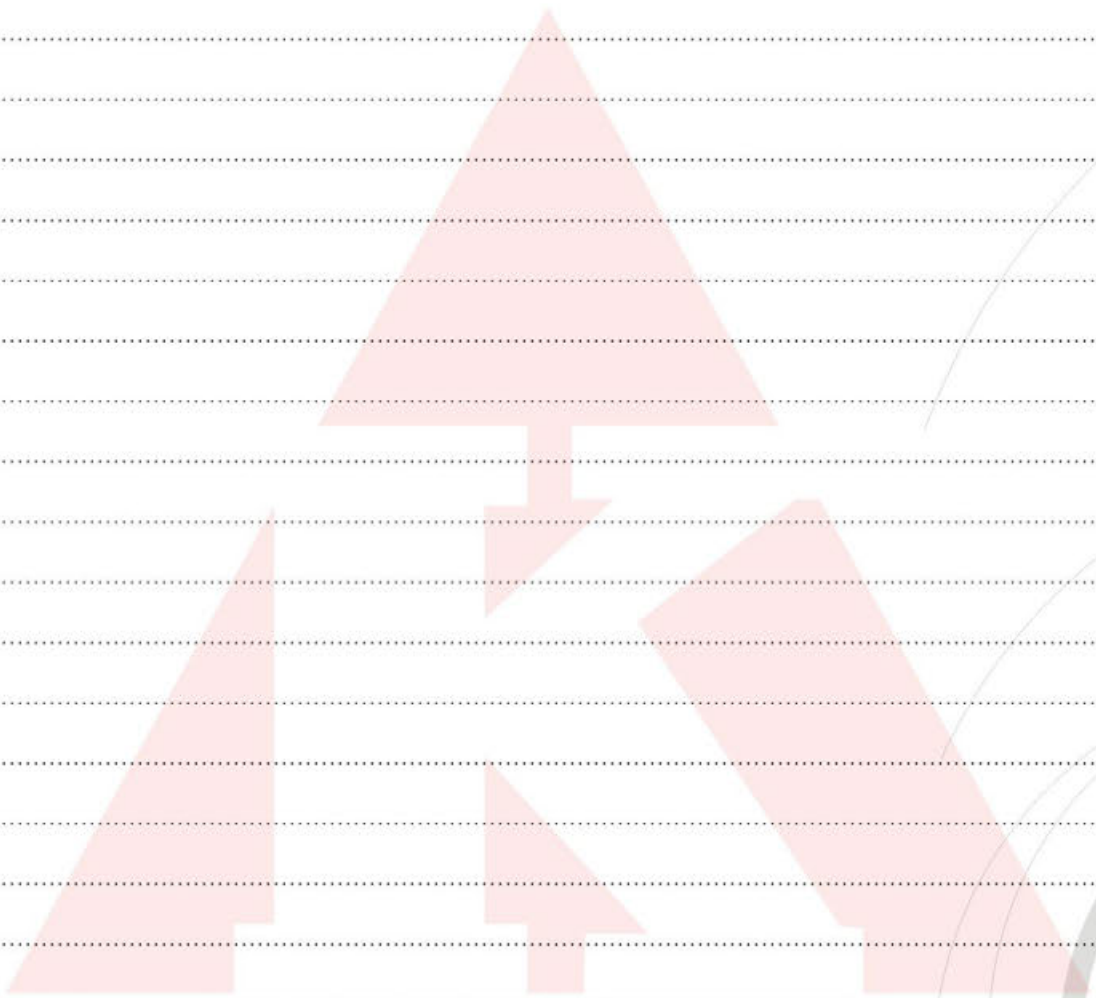
Attachments : Any type of connector (see page for connector) can be supplied as per the request



* Also available with Aluminium Hook PN 136 in place of Steel Hook PN 131. The Ref. No. of the lanyards will be PN 371(A)

NOTE

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KARAM offers a range of Webbing & Wire Rope Sling Anchorages and Metallic Anchors.



ANCHORAGES

ANCHORAGES WEBBING SLING

KARAM provides anchorage made of webbing sling of various configurations, the length of which can be altered as per requirement.

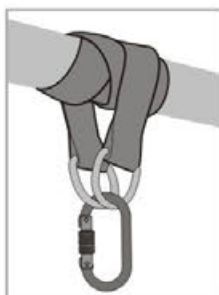


Anchorage Webbing Sling
Ref: PN 803

- ▶ Made up of 44mm wide Polyester Webbing
- ▶ Length : 1.2m or as requested
- ▶ Having a D-Ring at one end and textile loop at the other end
- ▶ Strength : Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996

Anchorage Webbing Sling
Ref: PN 804

- ▶ Made up of 44mm wide Polyester Webbing
- ▶ Length : 1.0m, 1.5m, 2.0m, or as requested
- ▶ Having a D-Ring on both the ends
- ▶ Strength : Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996

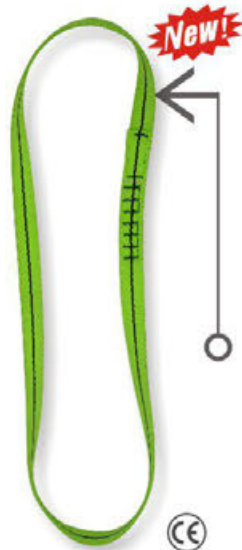
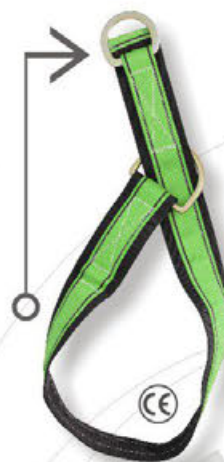


Concrete Anchor Strap
Ref: PN 805

- ▶ Made up of 44mm wide Polyester Webbing
- ▶ Length : 1.07m, or as requested
- ▶ Having a D-Ring at one end and textile loop at the other end. Also provided with a polyester covering on the load-bearing webbing
- ▶ Strength: Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996

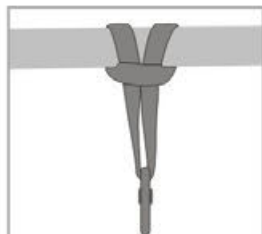
Concrete Anchor Strap
Ref: PN 806

- ▶ Made up of 44mm wide Polyester Webbing stitched with 70mm webbing on the back for extra protection.
- ▶ Length : 1.0m, 1.5m, 2.0 m, or as requested
- ▶ Having a small D-ring on one end & a bigger D-ring on the other.
- ▶ Strength : Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996



Anchorage Webbing Sling
Ref: PN 807

- ▶ Made up of 25mm wide Polyester Webbing
- ▶ Length : 0.6m, 1.0m, 1.5m or as requested
- ▶ Strength : Min 10 kN for 3 minutes
- ▶ Conforms to EN 795:1996



Anchorage Webbing Sling
Ref: PN 808

- ▶ Made up of 44mm wide Polyester Webbing
- ▶ Length : 0.5 mtr or as requested
- ▶ Strength : Min 10 kN for 3 minutes
- ▶ Conforms to EN 795:1996



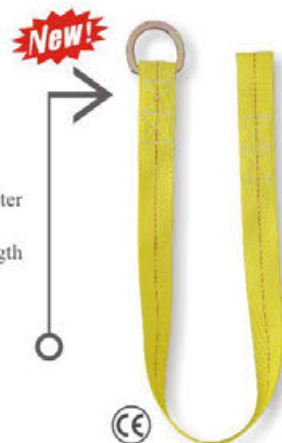


Anchorage Webbing Sling
Ref: PN 809

- ▶ Made up of 50mm wide Polyester Webbing
- ▶ Length : 3ft, 4ft or special length available on request
- ▶ Strength : Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996

Anchorage Webbing Sling
Ref: PN 811

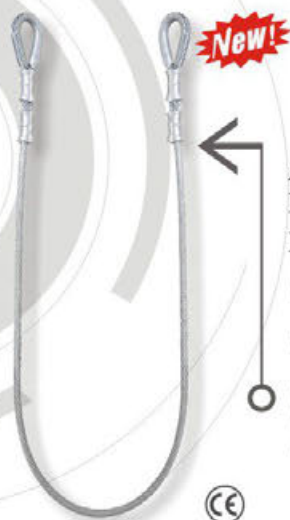
- ▶ Made up of 50mm wide Polyester Webbing
- ▶ Length : 3ft, 4ft or special length available on request
- ▶ Strength : Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996



Anchorage Webbing Sling
Ref: PN 812

- ▶ Made up of 50mm wide Polyester Webbing
- ▶ Length : 3ft, 4ft, 6ft or special length available on request
- ▶ Strength : Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996

ANCHORAGES WIRE ROPE SLING



Anchorage Steel Wire Rope Sling
Ref: PN 813

- ▶ Made of PVC coated 8.0mm G. I. Wire Rope
- ▶ Available Length : 1.0mtr., 1.5mtr., 1.8mtr. & 2.0mtr or as requested
- ▶ Having Steel thimbles at both sides
- ▶ Strength : Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996

Anchorage S.S. Wire Rope Sling
Ref: PN 814

- ▶ Made of 8.0mm S. S. Wire Rope
- ▶ Available Length : 1.0mtr., 1.5mtr., 1.8mtr. & 2.0mtr or as requested
- ▶ Having Steel thimbles at both sides
- ▶ Strength : Min 15 kN for 3 minutes
- ▶ Conforms to EN 795:1996



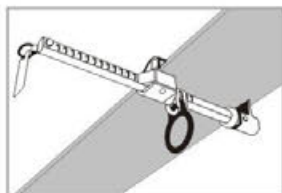
ANCHORS



Steel Anchor

Ref: SA 01

- ▶ Material: Galvanized Steel with Stamped D-Ring
- ▶ Minimum Breaking Strength: 5000 lbs/ 22.5 kN
- ▶ Finish: Powder Coated or Zinc Plated
- ▶ Net Weight: 1070.5 gms
- ▶ Conforms to ANSI Z 359.12:2009



New!



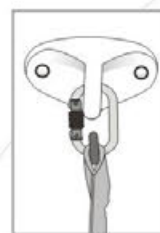
Beam Anchor

Ref: SA 08

- ▶ Material: Aluminium & Brass
- ▶ Net Weight: 1550gm ± 10gm
- ▶ Conforms: EN 795 : 1996 Class B.



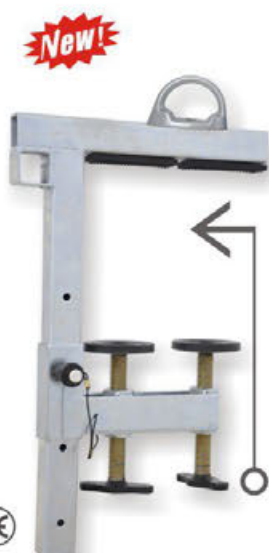
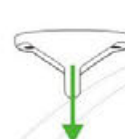
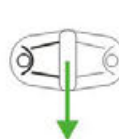
New!



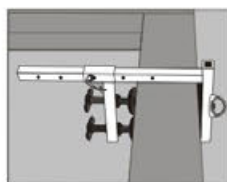
Aluminium Point Anchorage

Ref: SA 09

- ▶ Material: Aluminium Alloy
- ▶ Finish: Powder Coated
- ▶ Net Weight: 308.0 gms
- ▶ Conforms: EN 795 : 1996 + A1 : 2000 Class A



New!



Parapet Anchor

Ref: SA 11

- ▶ Material: High strength steel galvanized to provide corrosion protection.
- ▶ Net Weight: 8.575 kg ± 100 gms
- ▶ Conforms: EN 795 : 1996 Class B.

New!



Stainless Steel Point Anchor

Ref: SA 12

- ▶ Material: Stainless Steel.
- ▶ Net Weight: 300 gm ± 10 gms
- ▶ Conforms: EN 795 : 1996 + A1 : 2000 Class A

TEMPORARY HORIZONTAL LINE **EN 795 Class B**

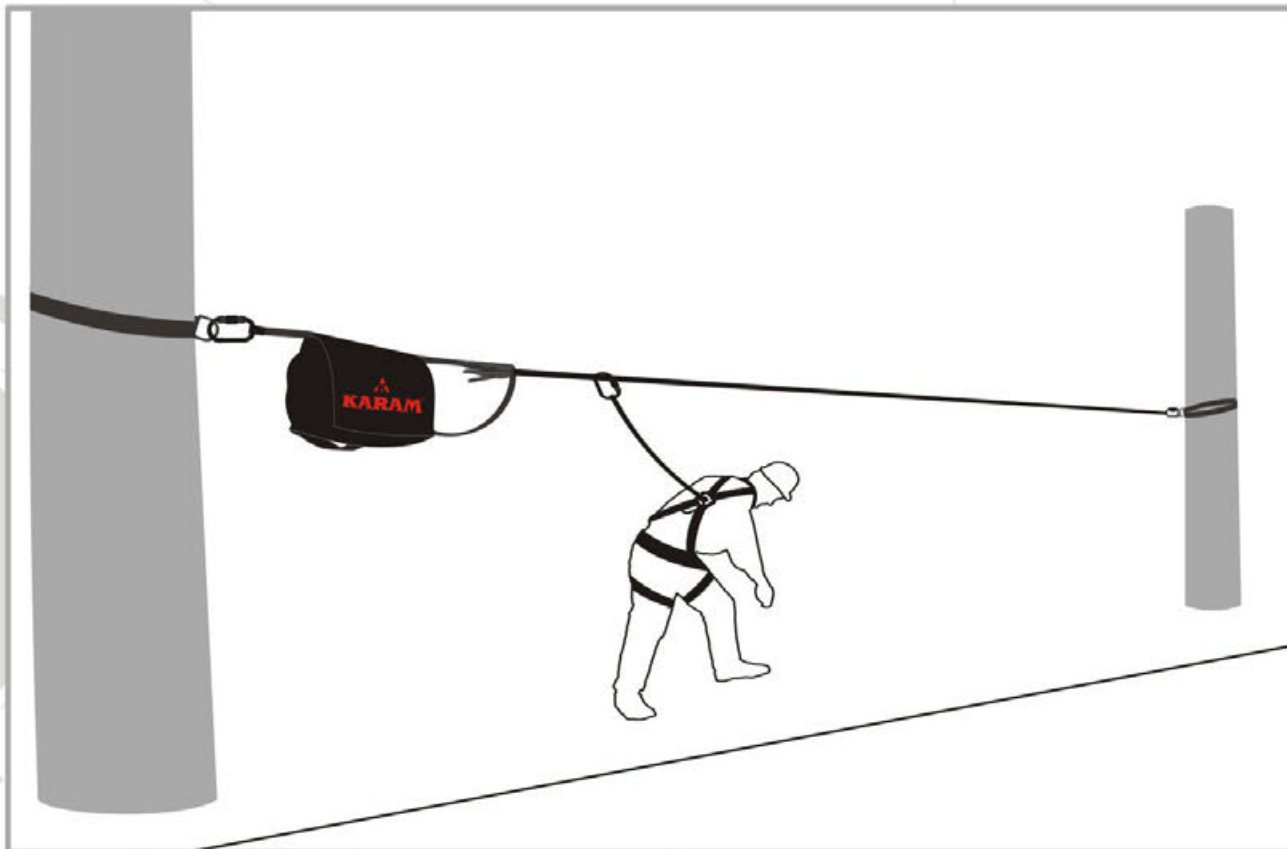
PN 3000

KARAM introduces the HORIZON range of Horizontal Anchorage Lifeline to provide a suitable and safe anchorage extending horizontally along a length.



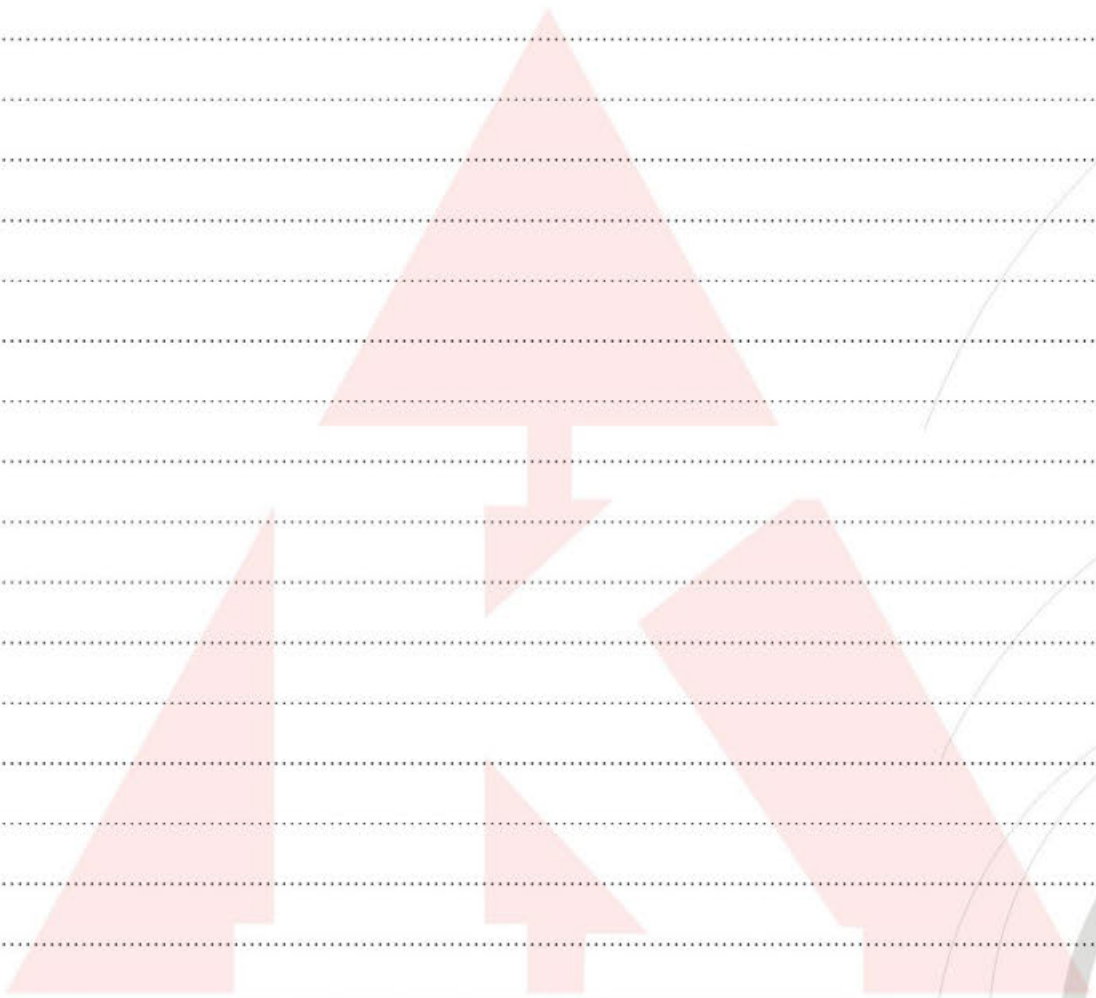
- ▶ The Horizon PN 3000 is a Horizontal Anchorage Life Line made up of 30 mm Polyester Webbing equipped with the KARAM Ratchet Tensioner that allows easy tensioning of the lifeline between two supports. Both the ends are provided with Auto Locking Steel Karabiners (Our Ref PN 113).
- ▶ The whole system is supplied in a bag, which is permanently attached to the assembly and also enables the user to easily carry the system with the help of the comfortable shoulder hanging straps provided in the bag.
- ▶ Once fitted, you can easily put back the extra webbing not deployed along the length, into the Bag.
- ▶ Complies to EN 795 Class B.
- ▶ Available Length of total 20m, thus the user can use it for a length ranging from 5m to 20m.
- ▶ Tested & Certified for use by two users simultaneously.

Once the Lifeline is fitted, the user can easily attach the Lanyard of his Harness to the Lifeline using a Karabiner. This allows movement along the length while keeping the user secured and safe at all times.



NOTE

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TEMPORARY & PERMANENT ANCHORAGE LINE SYSTEMS



KARAM provides a vast range of temporary as well as permanent Vertical & Horizontal Anchorage Line Systems incorporated with guided - type Fall Arresters. These systems provide easy solution for anchorage in industries like Telecommunications, Wind Energy etc.



TEMPORARY & PERMANENT
ANCHORAGE LINE SYSTEMS

GUIDED TYPE ROPE GRAB FALL ARRESTER ON TEXTILE ANCHORAGE LINE



Rope Grab Fall Arrester

Ref: PN 2000

The rope grab moves freely on the polyamide twisted rope anchorage line (14 mm-16 mm) attached at its eye with the user, while he moves up & down. The rope grab immediately 'Grabs' on to the anchorage line in the event of a fall, hence arresting the fall.



Features:

- ▶ Failsafe design ensures correct usage
- ▶ Arrests fall with very short fall distance
- ▶ Can be easily detached from the anchorage line.
- ▶ Has a double security locking system.
- ▶ Conforms to EN 353-2:2002

Product	Ref:	Specification	
	PN 2000 A	Fall Arrester with Karabiner	Steel Karabiner PN 112 (C) as an attachment element
	PN 2000 B	Fall Arrester with Energy Absorber	Energy Absorber PN 300 and Steel Karabiner PN 112 as an attachment element
	PN 2000 C	Fall Arrester with Spacing Strap	Spacing Strap and hook PN 121 as an attachment element

KARAM ADVANTAGE

KARAM Rope grab is provided with a unique Gravity Locking System that prevents incorrect usage. It is also equipped with a double security opening system, and hence will not open unless a deliberate action is done to do so.



Automatic Locking



Locked position allows Manual Locking



Only KARAM Fall Arrester comes with the unique Anti-Gravity Locking System



Twisted Rope Anchorage Line (to be used with KARAM Fall Arrester)

- ▶ Made of 3-Strand polyamide twisted rope of dia 14 mm
- ▶ One side loop; other side end stop knot (Also Available with Both Side Loops)
- ▶ Length
 - 10m Ref. Anchor PN 910
 - 20m Ref. Anchor PN 920
 - 30m Ref. Anchor PN 930
 - 40m Ref. Anchor PN 940
 - 50m Ref. Anchor PN 950
 - 100m Ref. Anchor PN 9100
 - 150m Ref. Anchor PN 9150
 - 200m Ref. Anchor PN 9200
- ▶ Longer lengths are also available on request
- ▶ Available with blue abrasion resistant sleeve of length 1.0 mtr.

GUIDED TYPE ROPE GRAB EN 353-2:2002 FALL ARRESTER ON TEXTILE ANCHORAGE LINE



Guided Type Fall Arrester On Flexible Anchorage Line Ref. PN 2003

- ▶ This Fall Arrester works on 12 mm dia Kernmantle polyamide rope anchorage line incorporated permanently on the anchorage line, and comes with an energy absorbing element
- ▶ The Anchorage line has one side connector PN 112 and the other side a knot
- ▶ The Anchorage line is available in lengths of 5m to 100m
- ▶ Conforms to EN 353-2:2002



Kernmantle Rope Anchorage Line (to be used with KARAM Fall Arrester)

- ▶ Made of polyamide kernmantle rope of dia 12 mm
- ▶ One side loop; other side end stop knot
(Also Available with Both Side Loops)
- ▶ Length
 - 10m Ref. Anchor PN 910 (K)
 - 20m Ref. Anchor PN 920 (K)
 - 30m Ref. Anchor PN 930 (K)
 - 40m Ref. Anchor PN 940 (K)
 - 50m Ref. Anchor PN 950 (K)
- ▶ Longer lengths are also available on request
- ▶ Available with blue abrasion resistant sleeve of length 1.0 mtr.

EN 353-1:2002 VERTICAL ANCHORAGE
LINE SYSTEM ON RIGID CABLE LINE

SYSTEM REF: VERTEX PN 6000



Mounting Bracket
Ref. PN 7000 (01)



Cable Extremity
Ref. PN 7000 (03)



Wire Rope (Cable Wire)
Ref. PN 9XXXS



Rope Grab
Ref. RG-02



Shock Absorbing Lanyard
Ref. PN 2001 (02)



Intermediate
Ref. PN 2001 (04)



Set of 2 U-bolts and 1 Thimble
Ref. PN 6000 (01)

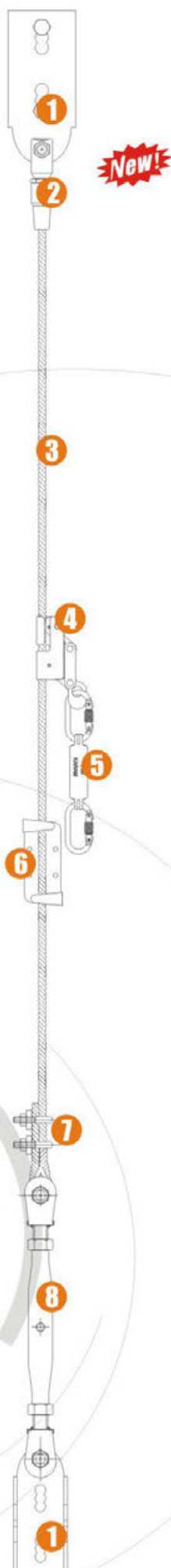


Tensioner
Ref. PN 7000 (05)

EN 353-1:2002

SYSTEM REF: VERTEX PN 6000

system specifications



Conforming to the Norm **EN 353-1:2002** this vertical Fall Arrest system is an integrated solution to arrest the fall of a user who has to constantly **climb up & down a ladder**.

The Vertical Anchorage Line is **made of Stainless Steel wire rope** & is maintained in the **rigid position** by use of **2 mounting brackets** one at the **top** & one at the **bottom**.

A stainless steel **Rope Grab moves up & down** the anchorage line accompanying the user who is connected to it with the **help of a small shock absorbing lanyard**.

To **maintain rigidity & tension** in the anchorage line, a **screw type mechanical tensioner** is provided at the end of the anchorage line at the bottom, connecting

it to the lower mounting bracket.

Intermediates are provided at regular intervals to prevent dislocation of the anchorage line from its mean position due to wind pressure or **mechanical movement**.

Connection of the wire rope at the 2 ends to the **Cable Extremity** and **tensioner**, making the installation easy & avoiding use of specialized machinery.

Sr. No.	Name of Component	Ref. No. of Component	Description
1	Mounting Bracket	PN 7000 (01)	Material: Stainless Steel 304 Breaking Strength > 23 kN Complies with EN 795 Class A1
2	Cable Extremity	PN 7000 (03)	Allows crimping of the cable wire at the desired length, and eliminates danger of any loose wire. Material: Stainless Steel 304 Feature: Swageless termination
3	Wire Rope (Cable Wire)	PN 9XXXX (Where XXX is the Length of the wire rope in meters)	Material: Stainless Steel 316 Diameter: 8mm Construction: 7x19
4	Rope Grab	RG-02	Material: Stainless Steel 304 Works on stainless steel wire rope.
5	Shock Absorbing Lanyard	PN 2001 (02)	Comprises of shock absorbing pack with Karabiners PN 112 at both the ends. Length: 30 cm
6	Intermediate	PN 2001 (04)	Material: Stainless Steel 304 Recommended Installation- every 10 m
7	Set of U-Bolts & Thimbles	PN 6000 (01)	U- Bolts: Qty- 2 nos; Material: Stainless Steel 304 Thimbles: Qty- 1 nos; Material: Galvanized Steel
8	Tensioner	PN 7000 (05)	Regulates tensioning of the cable. Material: Stainless Steel 304

EN 353-1:2002 VERTICAL ANCHORAGE
LINE SYSTEM ON RIGID CABLE LINE

SYSTEM REF: VERTEX PN 7000



Mounting Bracket
Ref. PN 7000 (01)



Shock Absorber
Ref. PN 7000 (02)



Cable Extremity
Ref. PN 7000 (03)



Wire Rope (Cable Wire)
Ref. PN 9XXXX



Rope Grab
Ref. RG-02



Connecting Lanyard
Ref. PN 7000 (07)



Intermediate
Ref. PN 2001 (04)



Set of 2 U-bolts and 1 Thimble
Ref. PN 6000 (01)



Tensioner
Ref. PN 7000 (05)

EN 353-1:2002

SYSTEM REF: VERTEX PN 7000

system specifications

New!



Conforming to the Norm **EN 353-1:2002** this vertical Fall Arrest system is an integrated solution to arrest the fall of a user who has to constantly climb up & down a ladder.

The unique feature of this system is a permanent installed **Stainless Steel Shock Absorber** at the top of the line which offers distinct advantages over the textile absorbers used in other lines in terms of **UV degradation or resistance to harsh climatic conditions**.

The Vertical Anchorage Line is **made of Stainless Steel wire rope** & is maintained in the **rigid position** by use of **2 mounting brackets**-one at the **top** & one at the **bottom**.

The **Stainless-steel Rope Grab** is **directly connected** to the user without any additional lanyard.

To **maintain the rigidity & high tension** in the anchorage line, a **screw type mechanical tensioner** is provided at the end of the anchorage line at the bottom, connecting it to the lower mounting bracket.

Sr. No.	Name of Component	Ref. No. of Component	Description
1	Mounting Bracket	PN 7000 (01)	Material: Stainless Steel 304 Breaking Strength > 23 kN Complies with EN 795 Class A1
2	Shock Absorber	PN 7000 (02)	Material: Stainless Steel 304 Limits the impact of force in the event of fall to less than 6 kN
3	Cable Extremity	PN 7000 (03)	Allows crimping of the cable wire at the desired length and eliminates danger of any loose wire. Material: Stainless Steel 304 Feature: Swageless termination
4	Wire Rope (Cable Wire)	PN 9XXXX (Where XXX is the Length of the wire rope in meters)	Material: Stainless Steel 316 Diameter: 8mm Construction: 7x19
5	Rope Grab	RG-02	Material: Stainless Steel 304 Works on stainless steel wire rope.
6	Connecting Lanyard	PN 7000 (07)	Comprises of webbing lanyard with Karabiners PN 112 at both the ends. Length: 30 cm
7	Intermediate	PN 2001 (04)	Material: Stainless Steel 304 Recommended Installation: Every 10 m
8	Set of U-Bolts & Thimbles	PN 6000 (01)	U- Bolts: Qty- 2 nos.; Material: Stainless Steel 304 Thimbles: Qty- 1 no.; Material: Galvanized Steel
9	Tensioner	PN 7000 (05)	Regulates tensioning of the cable. Material: Stainless Steel 304

SYSTEM REF: VERTEX PN 8000



Alu. Extension
Ref. PN 8000 (02)



Alu. Rail Intermediate
Ref. PN 5000 (01)



Vertical Trolley
Ref. PN 8000 (01)



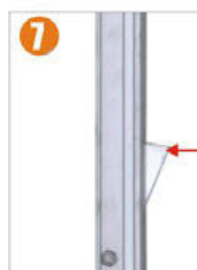
Karabiner
Ref. PN 111



Rung Clamp
Ref. PN 8000 (03)



Junction
Ref. PN 5000 (08)



Alu. Rail Exterimity
Ref. PN 5000 (02)

Trolley Lock

EN 353-1:2002

SYSTEM REF: VERTEX PN 8000

New!

system specifications

This Vertical fall Arrest Anchorage system (Conforming to **EN 353-1:2002**) is an integrated Fall Arrest solution **made of a Vertical Aluminium Alloy** Guide Rail over which glides a **Guided-Type Fall Arrest Trolley**. The line is constructed by attaching the Aluminium rail **Intermediates** of **length 3 mtrs.** in series using **Junction** to connect them to each other and Rung Clamps to affix them to the ladder rungs. The **trolley moves up and down** on the line accompanying the user who is connected to it with an **Auto-locking Steel Karabiner**.

In the event of a fall, the **trolley** immediately **locks** over the Rail, thus arresting the fall. Also, while not in use, the **Uni-directional locking system** of the Trolley prevents it from sliding down on its own.

The Rail comes with an **Extension Arm** that **curves** at the **Ladder-end** over the working platform. This allows the climber to be connected with the trolley

even at the Ladder termination, ensuring complete safety.

The bottom most section is the **Aluminium Rail Extremity** which is equipped at the **end** with a **lock** that prevents the trolley from moving out of the rail (see figure 7)

This system can be used on telecommunications towers, radio and TV masts, power supply and hydroelectric installations, wind power facilities, construction, chimney and industrial plants, buildings and facades, crane installations, shafts and manholes, aircraft hangars and for loading/unloading of trains and vehicles, petrochemical plants, on-shore and off-shore oil rigs and ship building.

Sr. No.	Name of Component	Ref. No of Component	Description
1	Alu. Extension	PN 8000 (02)	Material: Extruded Aluminium Alloy Length: 1.5 meter.
2	Aluminium Rail Intermediate	PN 5000 (01)	Material Extruded Aluminium Alloy Length: 3 meter.
3	Vertical Trolley	PN 8000 (01)	Material: Stainless Steel (304) Trolley with Brass wheel which provide frictionless movement.
4	Karabiner	PN 111	Quarter Turn Auto-locking Steel Karabiner
5	Rung Clamp	PN 8000 (03)	Material: Stainless Steel 304 Help to clamp the system onto the underlying ladder
6	Junction	PN 5000 (08)	Used to connect two rails together. Material: Stainless Steel 304
7	Aluminium Rail Extremity	PN 5000 (02)	Material: Extruded Aluminium Alloy Length: 3m

Trolley Lock

VERTICAL ANCHORAGE LINE SYSTEM ON RIGID ALUMINIUM RAIL

SYSTEM REF: VERTEX PN 9000



Alu. Extension
Ref. PN 8000 (02)



Alu. Rail Intermediate
Ref. PN 5000 (01)



Vertical Trolley
Ref. PN 8000 (01)



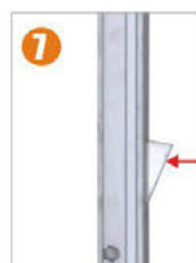
Karabiner
Ref. PN 111



Mounting Bracket
Ref. PN 5000 (06)



Junction
Ref. PN 5000 (08)



Alu. Rail Extermy
Ref. PN 5000 (02)

Trolley Lock



Ladder Rung Assembly
Ref. PN 9000 (01)

EN 353-1:2002

SYSTEM REF: VERTEX PN 9000

system^f specifications

New!

This is a complete Fall Protection Ladder System which consists of **Galvanized Steel Ladder Rungs** over which is fixed the Vertical **Anchorage Rail made of Aluminium Alloy**. This system is an ideal choice for use where there are no pre-fabricated ladders or climbing structures available for climbing and can be fitted over various structures using different types of fasteners.

The system conforms to **EN 353-1:2002**.

The **Rungs** of the **Ladder, made of Galvanized Steel**, are fitted at a suitable distance from the underlying structure/profile to allow **enough foot space**. The rungs also have a grooved surface that allows a **slip-free grip** while climbing.

The **Aluminium Anchorage Rail fitted** on to the **center of the Rungs** of the ladder is smooth and allows the Guided type **Fall-Arrest Trolley** to glide effortlessly over its length. This trolley **moves up and down** accompanying the user who is connected to it with the help of a **Auto-locking Karabiner**.

The **Trolley is made of Stainless Steel** and has **wheels made of Brass**, making the system

highly corrosion resistant and **extremely smooth** in working.

In the event of a fall, the **trolley immediately locks** over the Rail, thus arresting the fall. Also, while not in use, the **Uni-directional locking** system of the Trolley does not allow it to fall free down the Rail.

The system comes with an **Extension Arm** that **curves** at the **Ladder-end** over the **working platform**. This allows the climbers to be connected with the trolley even at the Ladder termination, ensuring complete safety.

The bottom most section is the **Aluminium Rail Extremity** which is equipped in the **end** with a **lock** that prevents the trolley from moving out of the rail (see figure 7)

This system can be used on telecommunication towers, radio and TV masts, power supply and hydroelectric installations, wind power facilities, construction, chimney and industrial plants, buildings and facades, crane installations, shafts and manholes, aircraft hangars and for loading/ unloading of trains and vehicles, petrochemical plants, on-shore and off-shore oil rigs, shipbuilding.

Sr. No.	Name of Component	Ref. No of Component	Description
1	Alu. Extension	PN 8000 (02)	Material: Extruded Aluminium Alloy Length: 1.5 m
2	Aluminium Rail Intermediate	PN 5000 (01)	Material: Extruded Aluminium Alloy Length: 3m
3	Vertical Trolley	PN 8000 (01)	Material: Stainless Steel (304) Trolley with Brass wheels which provide frictionless movement.
4	Karabiner	PN 111	Quarter Turn Auto-locking Steel Karabiner
5	Mounting Bracket	PN 5000 (06)	Material: Stainless Steel 304 Help to mount the ladder on to the underlying structure.
6	Junction	PN 5000 (08)	Used to connect two rails together. Material: Stainless Steel 304
7	Aluminium Rail Extremity	PN 5000 (02)	Material: Extruded Aluminium Alloy Length: 3m
8	Ladder Rung Assembly	PN 9000 (01)	Ladder Rung Material: Galvanized Steel Fasteners: Qty. 2 Nos Material Galvanized Steel

Trolley Lock

EN 795 CLASS C HORIZON ANCHORAGE LINE SYSTEM ON RIGID CABLE LINE

SYSTEM REF: HORIZON PN 4000



Shock Absorber
Ref. PN 4000 (07)



Cable Extremity
Ref. PN 7000 (03)



Wire Rope (Cable Wire)
Ref. PN 9XXXX



Tensioner
Ref. PN 4000 (03)



Corner Piece
Ref. PN 4000 (06)



Carriage body
Ref. PN 4000 (08)



Intermediate
Ref. PN 4000 (10)



Universal Extremity Plate
Ref. PN 4000 (09)



Roof Top Anchor
Post Extremity
Ref. SA 07A



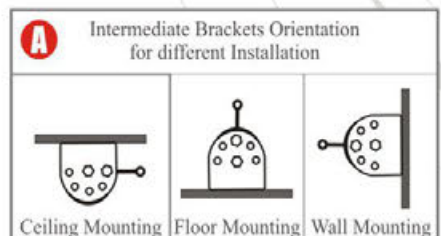
Roof Top Anchor
Post Intermediate
Ref. SA 07B



Roof Top Anchor
Post Extremity
Ref. SA 07C



Roof Top Anchor
Post Intermediate
Ref. SA 07D



New!

EN 795 CLASS C

SYSTEM REF: HORIZON PN 4000

system specifications

Horizon PN 4000 provides permanent anchorage to a user who has to constantly move along a horizontal line.

It comprises of a **Stainless Steel Wire Rope (SS 316)** of **8 mm dia** running all along the horizontal track, and is installed at the ends using special **Universal Extremity Plates**. The **Intermediate brackets** hold the wire in position all along the length of the wire, and are **installed at intervals of every 10m**. The line is maintained in tension with the help of **Tensioner** at one end, while the other end has a **swageless termination** on to the **Universal Extremity plate**.

The **Stainless Steel Carriage Shuttle connects** the user to the line with the

help of a **Lanyard/ Retractable Block** and moves **smoothly** without interruption along the entire length of the **Horizontal Line** and also through the **Intermediate Brackets**, thus ensuring **100% anchorage** of the user at all times.

The line also has a **Shock Absorber** at one end which **reduces the impact** of fall both on the user as well as on the extremities.

The System is versatile and can be installed on **Walls, Floors, Ceilings**, as well as on **Roof Tops**, using the same components by just altering the orientation of the **Intermediate Brackets** (see figure A).

KARAM provides special **Roof Posts**

for installation of the System on **Metal Roof-tops**, both **Pitched** and **Standing-Seam Roofs**. The special construction of these **Roof-Posts** allows **inbuilt shock-absorption** in the event of a fall.

Horizon PN 4000 has the unique distinction of being **certified by Sira** for **ATEX** to comply with use in potentially explosive atmosphere (as per **Potentially Explosive Atmospheres Directive 94/9/EC**), and **conforms to Norms EN 13463-1: 2009**, and **EN 13463-5: 2003**. The system is certified to be **Intrinsically Safe**, hence is an ideal choice for use in Industries like **Petroleum/ Petro-Chemical Plants** without fear of causing explosion due to any sparking.

Sr. No.	Name of Component	Ref. No of Component	Description
1	Shock Absorber	PN 4000 (07)	Material: Stainless Steel 304 Limits the impact of force in the event of fall to less than 6 kN
2	Cable Extremity	PN 7000 (03)	Allows crimping of the cable wire at the desired length, and eliminates danger of any loose wire. Material: Stainless Steel 304 Feature: Swageless termination
3	Wire Rope (Cable Wire)	PN 9XXXX (where XXX is the length of the wire rope in meters)	Material: Stainless Steel 316 Diameter: 8mm Construction: 7x19
4	Tensioner	PN 4000 (03)	Regulates tensioning of the cable. Material: Stainless Steel 304 Feature: Swageless termination of wire at the end.
5	Corner Piece	PN 4000 (06)	Material: Stainless Steel 304
6	Carriage body	PN 4000 (08)	Material: Stainless Steel 316 Feature: Friction Free movement
7	Intermediate	PN 4000 (10)	Material: Stainless Steel 304 Recommended Installation- every 10 m
8	Universal Extremity Plate	PN 4000 (09)	Material: Stainless Steel 304
9	Roof Top Anchor post Extremity	SA 07A	Material: Stainless Steel 304 Roof top Anchor post Extremity for Installation on Metal Pitched Roof.
10	Roof Top Anchor post Intermediate	SA 07B	Material: Stainless Steel 304 Roof top Anchor post intermediate for Installation on Metal Pitched Roof.
11	Roof Top Anchor post Extremity	SA 07C	Material: Stainless Steel 304 Roof top Anchor post Extremity for Installation on Standing Seam Roof.
12	Roof Top Anchor post Intermediate	SA 07D	Material: Stainless Steel 304 Roof top Anchor post intermediate for Installation on Standing Seam Roof.

EN 795 CLASS C HORIZON ANCHORAGE LINE SYSTEM ON RIGID ALUMINIUM RAIL

SYSTEM REF: HORIZON PN 5000



Alu. Rail Intermediate
Ref. PN 5000 (01)



Alu. Rail Extremity
Ref. PN 5000 (02)



Mounting Nut
Ref. PN 5000 (03)



Wall Mounting Bracket
Flush Type
Ref. PN 5000 (04)



Wall Mounting Bracket
with Recess
Ref. PN 5000 (05)



Ceiling Mounting Bracket
Ref. PN 5000 (06)



Junction
Ref. PN 5000 (08)



Curved Alu. Rail
(Outer Wall Mounted)
Ref. PN 5000 (09A)



Curved Alu. Rail
(Inner Wall Mounted)
Ref. PN 5000 (09B)



Curved Alu. Rail
(Ceiling / Floors)
Ref. PN 5000 (10)

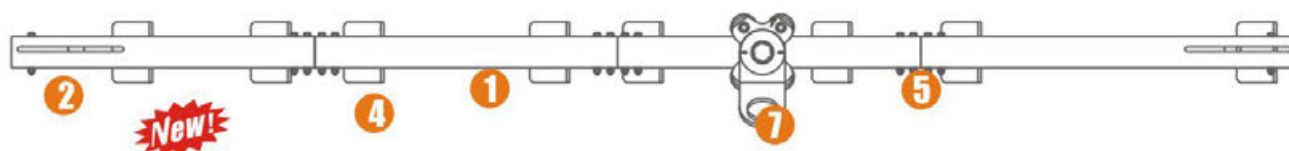


Trolley For Ceiling/floor
Ref. PN 5000 (13)



Trolley For Wall
Ref. PN 5000 (12)





SYSTEM REF: HORIZON PN 5000

system specifications



Wall Mounted Installation
(with Recess)



Wall Mounted Installation
(Flush Type)



Floor Mounted Installation



Ceiling Mounted Installation



**Different Installations using
Different types of Mounting Brackets**

This Anchorage Rail system complies with EN 795 and is designed to provide safe anchorage for horizontal movement while working at height. The worker wears a Full Body Harness and uses a Lanyard (or other connector compliant with EN 354/EN 355) to connect to the eye of the Trolley, which glides along the Aluminium Horizontal Rail. For overhead applications a Self Retractable Fall Arrestor can be used to provide the most effective means of fall protection.

The Aluminium Anchorage Rail can be fitted on to floors, Wall and on Ceilings using special mounting brackets. The Wall-mounting brackets can be flushed

along the surface of the wall; alternately special mounting brackets which allow a recess between the rail and the wall may be used so as not to interrupt underlying structures like pipes and wires.

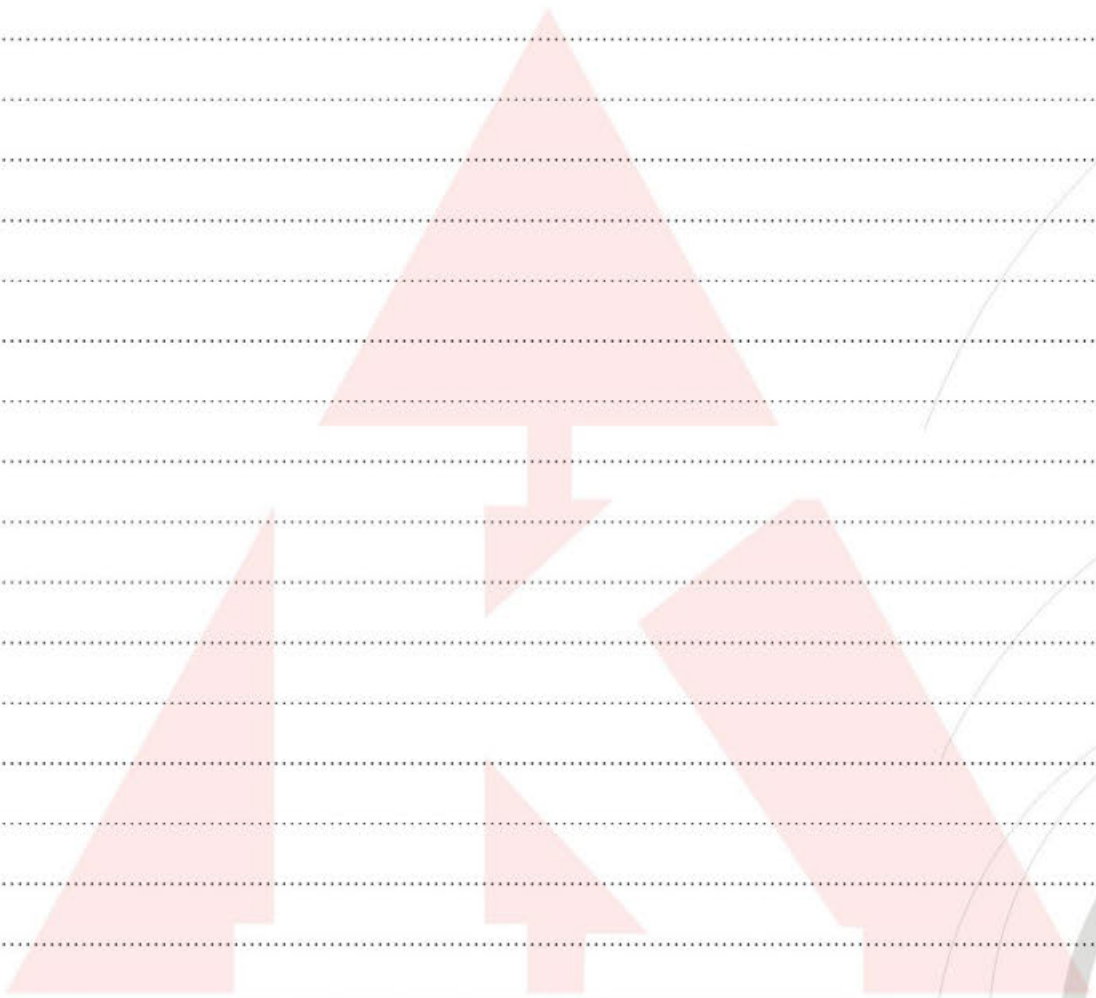
The rail is available in straight as well as curved forms (for corners and bends). The specially fixed junctions between different lengths of the rail allow an extremely smooth movement of the Trolley.

This system can be used on Flat roofs or steep roofs, Working platforms on masts and buildings, Hangars, Shipyards, Cranes, Industrial plants etc.

Sr. No.	Name of component	Ref. No of Component	Description
1	Alu. Rail Intermediate	PN 5000 (01)	Material: Extruded Aluminium Alloy Length: 3 Meter.
2	Alu. Rail Extremity	PN 5000 (02)	Material: Extruded Aluminium Alloy Length: 3 Meter.
3	Mounting Nut	PN 5000 (03)	Material: Stainless Steel 304 to connect the rail to the mounting Bracket.
4A	Wall Mounting Bracket Flush Type	PN 5000 (04)	Material: Stainless Steel 304 (for Flush type wall Mounting)
4B	Wall Mounting Bracket with Recess	PN 5000 (05)	Material: Stainless Steel 304 (for Wall Mounting with Recess)
4C	Ceiling Mounting Bracket	PN 5000 (06)	Material: Stainless Steel 304 (For Ceiling mounting)
5	Junction	PN 5000 (08)	Used to Connect Two rails together. Material: Stainless Steel 304
6A	Curved Alu. Rail (Outer Wall Mounted)	PN 5000 (09A)	Material: Extruded Aluminium Alloy
6B	Curved Alu. Rail (Inner Wall Mounted)	PN 5000 (09B)	Material: Extruded Aluminium Alloy
6C	Curved Alu. Rail (Ceiling/ Floors)	PN 5000 (10)	Material: Extruded Aluminium Alloy
7A	Trolley For Ceiling/ Floor	PN 5000 (13)	Material: Stainless Steel 304 Trolley with Brass wheels which provide frictionless movement.
7B	Trolley for Wall	PN 5000 (12)	Material: Stainless Steel 304 Trolley with Brass wheels which provide frictionless movement.

NOTE

Handwriting practice lines consisting of multiple horizontal dotted lines across the page.



RETRACTABLE FALL ARRESTER BLOCKS



KARAM offers an exhaustive range of Retractable Fall Arrest Blocks made of different casings having a retractable line webbing & G1 wire rope of varying lengths; and Mini Blocks.



RETRACTABLE FALL ARRESTER BLOCKS



KARAM Presents a Wide Range of Retractable Fall Arrester Blocks having different casing, in GI wire Rope & Webbing and in various Length.



Mini Block

Ref: PN 2002

- ▶ Having a Retractable Webbing of width 47mm
- ▶ Length : 2.5m
- ▶ Has a Protective Casing
- ▶ Incorporated with an Energy Absorber for Shock Absorption
- ▶ Supplied with 1 Steel Karabiner PN 112 at the Anchorage end and Aluminium Karabiner PN 116 at the Harness end as attachment elements
- ▶ **Conforms to EN 360:2002**



KARAM ADVANTAGE

Swivel Arrangement- prevents undue twist of webbing while working or in the event of a fall.

Load Indicator- indicates a red warning line when a fall has occurred.

Mini Block (Swivel)

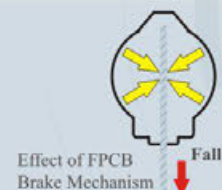
Ref: PN 2002 (SW)

- ▶ Having a Swivel arrangement at anchorage end with Fall Indicator
- ▶ Having a Retractable Webbing of width 47mm
- ▶ Length: 2.5m
- ▶ Has a Protective Casing
- ▶ Incorporated with an Energy Absorber for shock absorption
- ▶ Supplied with Steel Karabiner PN 112 at the Anchorage as well as at the attachment end
- ▶ **Conforms to EN 360:2002**



FEATURES OF KARAM RETRACTABLE FALL ARRESTER BLOCKS

Mechanism	Unique Centrifugal Braking Mechanism.
Applications	Ideal for Vertical use in various hazardous conditions for personnel weighing upto 136 kgs.
Impact Force	Reduces Fall Arrest Force to less than 6 kN.
Harness End Connector	Swivel Snap Hook with Load indicator PN 123 which indicates a warning line when a Fall has occurred.
Conformity	Tested and Certified. Conforms to EN 360:2002



PN 123

RETRACTABLE FALL ARRESTER BLOCKS



POLYMER CASING

The Special polymer casing which houses the reel of the rope or webbing, is extremely robust and can withstand the harsh conditions faced in most Industrial Environment.



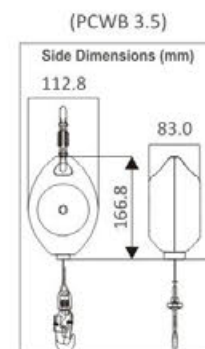
Mini Block

Retractable Block-Polymer Casing with Webbing

Ref: PCWB 3.5

- ▶ Casing made up of high impact strength Polymer, to prevent breakage and is nearly indestructible.
- ▶ Comes in 25 mm width webbing.
- ▶ PN 112 at anchorage end and Swivel Hook PN 123 at attachment end.
- ▶ Swivel Hook PN 123 with load indicator.
- ▶ Conforms to EN 360:2002

Model	Length of Webbing	Weight (Kg)
PCWB 3.5	3.5 mtr	1.6



Mini Block

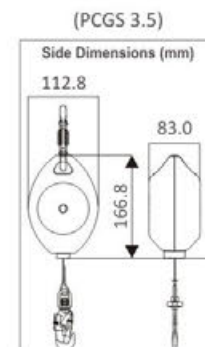
Retractable Block-Polymer Casing with G.I. Wire Rope

Ref: PCGS 3.5

- ▶ Casing made up of high impact strength Polymer, to prevent breakage and is nearly indestructible.
- ▶ Comes with Galvanized Steel Wire Rope of dia 4.5 mm
- ▶ PN 112 at anchorage end and Swivel Hook PN 123 at attachment end.
- ▶ Swivel Hook PN 123 with load indicator.
- ▶ Conforms to EN 360:2002

Model	Length of Wire Rope	Weight (Kg)
PCGS 3.5	3.5 mtr	2.2Kg

* Also available with the SS Wire Rope instead of GI. Respective references with SS Wire Rope shall be PCGS 3.5(SS)





Retractable Block Polymer Casing with 25 mm Wide Webbing

Ref: PCWB 05; PCWB 06; PCWB 7.5

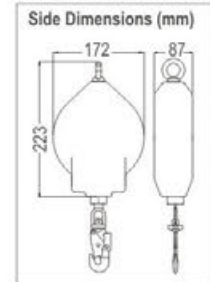
Unique Retractable Block also available in High-Tenacity Webbing, which makes the Block lighter in weight and more handy in use. Best suited for use in areas of Electrical Hazards.

Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

► Conforms to EN 360:2002

Model	Length of Webbing	Weight (Kg)
PCWB 05	5 mtr	3.25
PCWB 06	6 mtr	3.45
PCWB 7.5	7.5 mtr	3.70

(PCWB 05 to PCWB 7.5)



Swivel Snap Hook PN 123 with Load Indicator-
Indicates a red warning line when a fall has occurred.



Retractable Block Polymer Casing with G.I. Wire Rope

Ref: PCGS 05; PCGS 06; PCGS 7.5; PCGS 10

Casing made up of high impact strength Polymer, to prevent breakage and is nearly indestructible.

Comes with Galvanized Steel Wire Rope of dia 4.5 mm

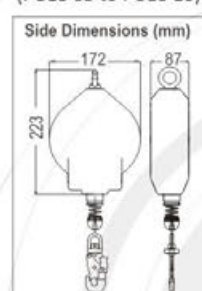
Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

► Conforms to EN 360:2002

Model	Length of Wire Rope	Weight (Kg)
PCGS 05	5 mtr	3.9
PCGS 06	6 mtr	4.0
PCGS 7.5	7.5 mtr	4.4
Now PCGS 10	10 mtr	4.6

* Also available with the SS Wire Rope instead of GI. Respective references with SS Wire Rope shall be PCGS 05(SS), PCGS 06(SS), PCGS 7.5(SS) & PCGS 10(SS)

(PCGS 05 to PCGS 10)



RETRACTABLE FALL ARRESTER BLOCKS



Retractable Block Polymer Casing with Webbing Ref: PCWB 10; PCWB 12

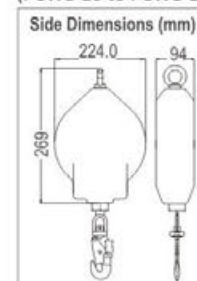
Unique Retractable Block also available in High-Tenacity Webbing, which makes the Block lighter in weight and more handy in use. Best suited for use in areas of Electrical Hazards.

Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

► **Conforms to EN 360:2002**

Model	Length of Webbing	Weight (Kg)
PCWB 10	10 mtr	5.75
PCWB 12	12 mtr	5.85

(PCWB 10 to PCWB 12)



Swivel Snap Hook PN 123 with Load Indicator-
Indicates a red warning line when a fall has occurred.



Retractable Block Polymer Casing with G.I. Wire Rope Ref: PCGS 12; PCGS 15; PCGS 18; PCGS 20

Casing made up of high impact strength Polymer, to prevent breakage and is nearly indestructible.

Comes with Galvanized Steel Wire Rope of dia 4.5 mm

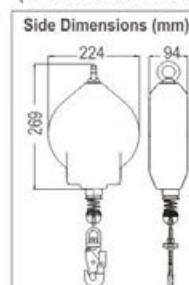
Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

► **Conforms to EN 360:2002**

Model	Length of Wire Rope	Weight (Kg)
PCGS 12	12 mtr	6.1
PCGS 15	15 mtr	6.4
NEW PCGS 18	18 mtr	6.7
NEW PCGS 20	20 mtr	6.9

* Also available with the SS Wire Rope instead of GI. Respective references with SS Wire Rope shall be PCGS 12(SS), PCGS 15(SS), PCGS 18(SS) & PCGS 20(SS)

(PCGS 12 to PCGS 20)





Retractable Block Polymer Casing with G.I. Wire Rope

Ref: PCGS 25; PCGS 30

Casing made up of high impact strength Polymer, to prevent breakage and is nearly indestructible.

Comes with Galvanized Steel Wire Rope of dia 4.5 mm

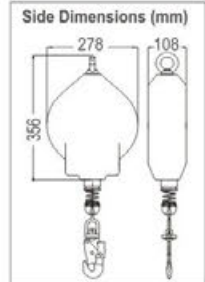
Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

► Conforms to EN 360:2002

Model	Length of Wire Rope	Weight (Kg)
PCGS 25	25 mtr	12.2
PCGS 30	30 mtr	12.5

* Also available with the SS Wire Rope instead of GI. Respective references with SS Wire Rope shall be PCGS 25(SS) & PCGS 30(SS)

(PCGS 25 to PCGS 30)



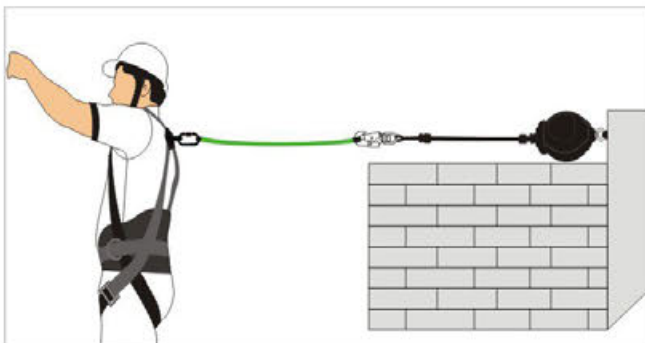
Swivel Snap Hook PN 123 with Load Indicator-
Indicates a red warning line when a fall has occurred.

Horizontal use of the Block :

KARAM Retractable Block can also be used horizontally. For such a use, it is recommended to attach additional Webbing Lanyard. Ref. PN 221 (TB) of 1.5m.



Ref: PN 221 (TB)



RETRACTABLE FALL ARRESTER BLOCKS



ALUMINIUM CASING



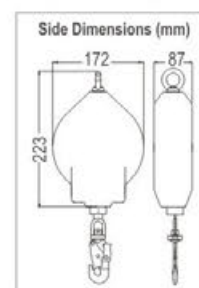
Retractable Block-Aluminium Casing with 25mm Wide Webbing Ref: ALWB 04; ALWB 05; ALWB 06; ALWB 7.5

Casing made up of light weight and sturdy Aluminium Alloy
Comes with Webbing of 25 mm wide.
Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

► Conforms to EN 360:2002

Model	Length of Webbing	Weight (Kg)
ALWB 04	4 mtr	3.30
ALWB 05	5 mtr	3.50
ALWB 06	6 mtr	3.60
ALWB 7.5	7.5 mtr	3.80

(ALWB 04 to ALWB 7.5)



Swivel Snap Hook PN 123 with Load Indicator-
Indicates a red warning line when a fall has occurred.



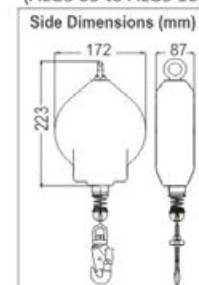
Retractable Block-Aluminium Casing G.I. Wire Rope Ref: ALGS 05; ALGS 06; ALGS 7.5; ALGS 10

Casing made up of light weight and sturdy Aluminium Alloy
Comes with Galvanized Steel Wire Rope of dia 4.5 mm
Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

► Conforms to EN 360:2002

Model	Length of Wire Rope	Weight (Kg)
ALGS 05	5 mtr	4.6
ALGS 06	6 mtr	4.7
ALGS 7.5	7.5 mtr	4.9
NEW ALGS 10	10 mtr	5.3

(ALGS 05 to ALGS 10)



* Also available with the SS Wire Rope instead of GI.
Respective references with SS Wire Rope shall be
ALGS 05(SS), ALGS 06(SS), ALGS 7.5(SS) & ALGS
10(SS)



Retractable Block-Aluminium Casing with 25mm Wide Webbing

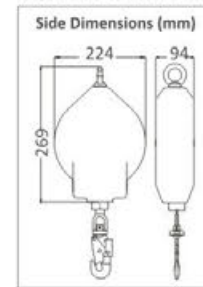
Ref: ALWB 10; ALWB 12

Casing made up of light weight and sturdy Aluminium Alloy
Comes with Webbing of 25 mm wide.
Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

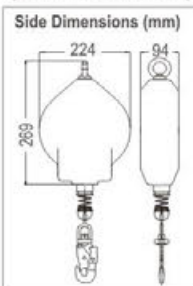
Conforms to EN 360:2002

Model	Length of Webbing	Weight (Kg)
ALWB 10	10 mtr	5.7
ALWB 12	12 mtr	5.8

(ALWB 10 to ALWB 12)



(ALGS 12 to ALGS 20)



Retractable Block-Aluminium Casing G.I. Wire Rope

Ref: ALGS 12; ALGS 15; ALGS 18; ALGS 20

Casing made up of light weight and sturdy Aluminium Alloy
Comes with Galvanized Steel Wire Rope of dia 4.5 mm
Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

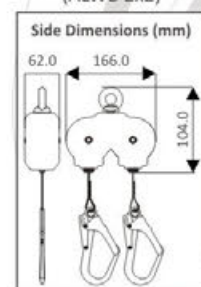
Conforms to EN 360:2002

Model	Length of Wire Rope	Weight (Kg)
ALGS 12	12 mtr	7.0
ALGS 15	15 mtr	7.4
ALGS 18	18 mtr	7.5
ALGS 20	20 mtr	7.6

* Also available with the SS Wire Rope instead of GI.
Respective references with SS Wire Rope shall be
ALGS 12(SS), ALGS 15(SS), ALGS 18(SS), ALGS 18(SS) & ALGS 20(SS)



(ALWB 2x2)



Twin Retractable Fall Arrester Block

Ref: ALWB 2x2

- Casing made up of aluminium alloy.
- Comes with a 25 mm polyester webbing.
- Include two Scaffold Hook PN 131 at anchorage end.
- Anchorage Eye with swivel action. Prevents undue twist of rope while working or in the event of a Fall.

USE : To be used wherever the user needs a greater freedom of movement and needs to pass obstacles while remaining secured permanently.

- Minimum breaking strength > 15kN
- Conforms to EN 360:2002

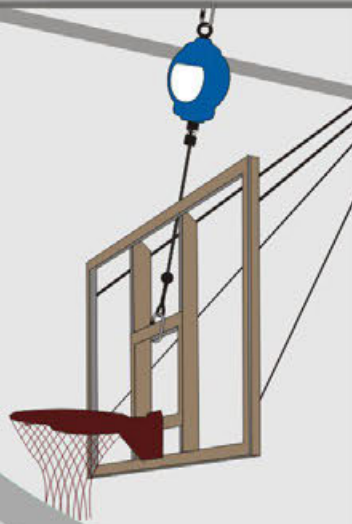
Model	Length of Webbing	Weight (Kg)
ALWB 2x2	2 mtr	2.63



KARAM introduces a range of Load Arresters for use in various applications like-material lifting, maintenance etc.

The Load Arresters are used to stop the fall of a load (example: ramp lighting for scenic, industrial machine), for a short distance in case of:

- ▶ A break of chain or cable for hoisting the load,
- ▶ A failure of the retaining elements of the load.



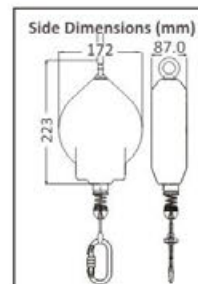
LOAD
ARRESTERS



Ref: LA0200-10

- ▶ Load arrester design to stop the fall of a weight max 200 kgf.
- ▶ Casing made up of high impact strength Polymer, to prevent breakage and is nearly indestructible.
- ▶ Galvanized Steel Wire Rope dia 4.8 mm
- ▶ Minimum breaking strength: 3 kN
- ▶ Conforms to 2006/42/CE

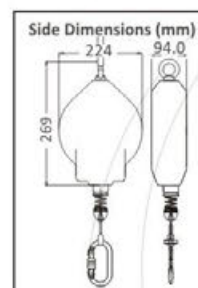
Ref:	Length	Weight	Load Capacity
LA0200-10	10 m	4.2 kg	200 kgf



Ref: LA0300-10; LA0300-15

- ▶ Load arrester design to stop the fall of a weight max 300 kgf.
- ▶ Casing made up of high impact strength Polymer, to prevent breakage and is nearly indestructible.
- ▶ Galvanized Steel Wire Rope dia 4.8 mm
- ▶ Minimum breaking strength: 4 kN
- ▶ Conforms to 2006/42/CE

Ref:	Length	Weight	Load Capacity
LA0300-10	10 m	6.1 kg	200 kgf
LA0300-15	15 m	6.5 kg	

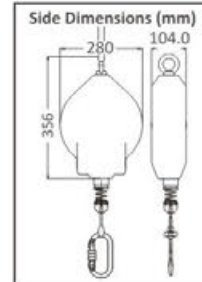




Ref: LA0400-10; LA0400-15; LA0400-20

- ▶ Load arrester design to stop the fall of a weight max 400 kgf.
- ▶ Casing made up of high impact strength Polymer to prevent breakage and is nearly indestructible.
- ▶ Galvanized Steel Wire Rope dia 5.8 mm
- ▶ Minimum breaking strength: 6 kN
- ▶ Conforms to 2006/42/CE

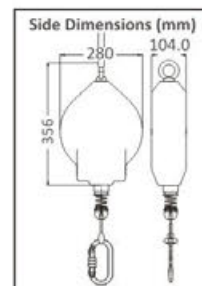
Ref:	Length	Weight	Load Capacity
LA0400-10	10 m	11.0 kg	400 kgf
LA0400-15	15 m	11.5 kg	
LA0400-20	20 m	12.0 kg	



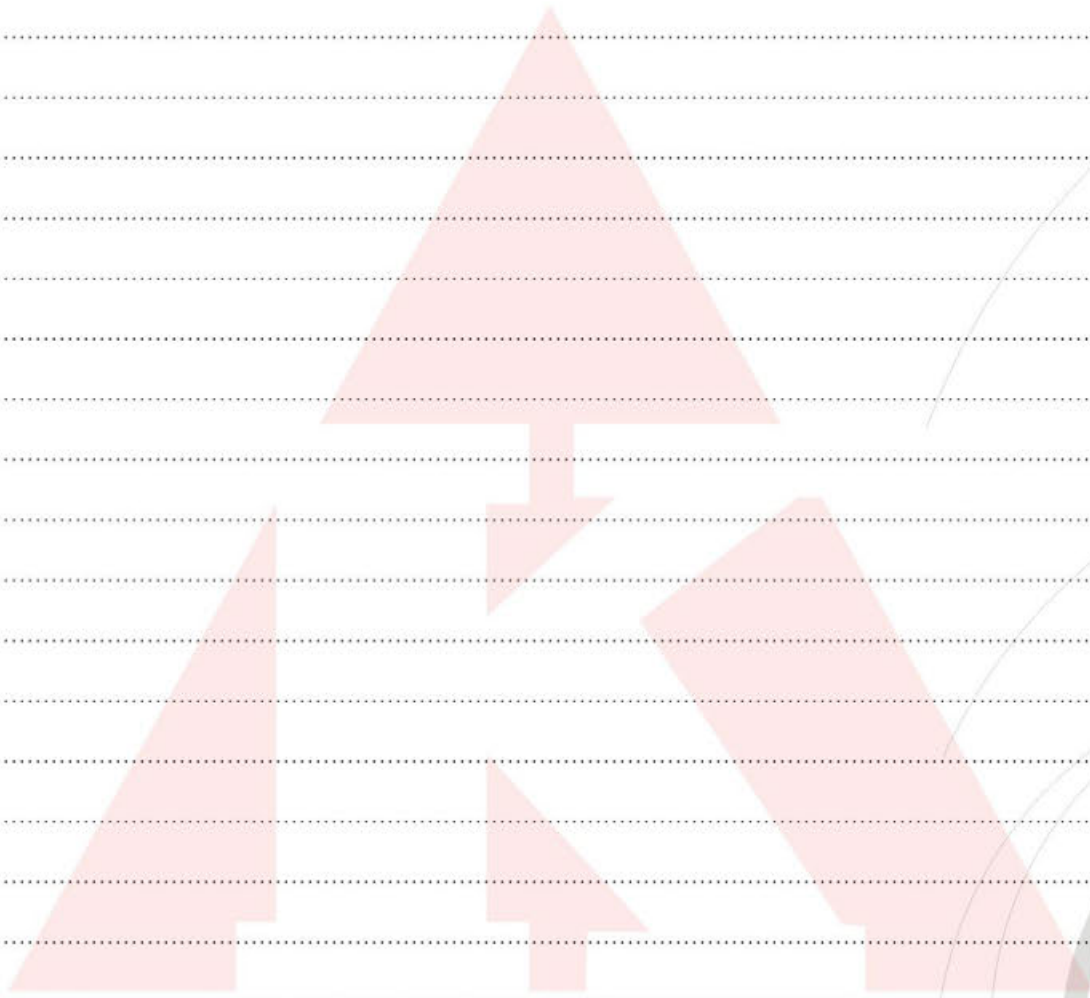
Ref: LA0300-10; LA0300-15

- ▶ Load arrester design to stop the fall of a weight max 500 kg.
- ▶ Casing made up of high impact strength Polymer, to prevent breakage and is nearly indestructible.
- ▶ Galvanized Steel Wire Rope dia 6.0mm
- ▶ Minimum breaking strength: 7 kN
- ▶ Conforms to 2006/42/CE

Ref:	Length	Weight	Load Capacity
LA0500-10	10 m	11.5 kg	500 kgf
LA0500-15	15 m	12.0 kg	



NOTE



A particularly challenging area of activity is when the worker is required to move into confined spaces. Not only is it required that descent into such a space is made smooth and safe, but incase the depth into such areas is large, it becomes almost equivalent to working at a height. Hence, to protect the worker from falling into deep and narrow confinement also becomes the focus of concern.



CONFINED SPACE ENTRY



KARAM Cantilever K-Pod

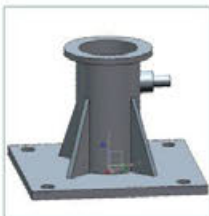
Ref: PN 900

- ▶ KARAM introduces the new K-Pod which provides a safe and sure system for easy access to confined spaces. The K-Pod is an ideal choice to provide overhead anchorage which can be mounted on different bases and it conforms to EN 795 Class B.
- ▶ The K-Pod is made of highly corrosion resistant Stainless Steel, and can swivel a complete 360 degrees on its mounted base, hence providing a versatile reach and access.
- ▶ The unique feature is that the height of the Cantilever arm of the K-Pod is adjustable at 3 defined points, with upper height adjustment of 2.3m, middle arm adjustment of 1.9m, and lowered arm adjustment at 1.5m. This enables the use of the K-Pod even in those areas where the roof height is small.
- ▶ The K-Pod can be easily mounted on the floor as well as on the wall through special floor and wall mounting brackets which are made available as per need. The K-Pod can also be mounted on the floor of heavy vehicles, hence making it extremely versatile in use.
- ▶ KARAM Winch PN 801 can also be easily mounted on to the K-Pod with the help of Stainless Steel fasteners.

Features :



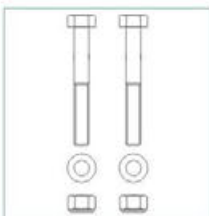
Accessories of KARAM K-POD :



Floor Mounting Bracket
Ref: PN 900 (01)



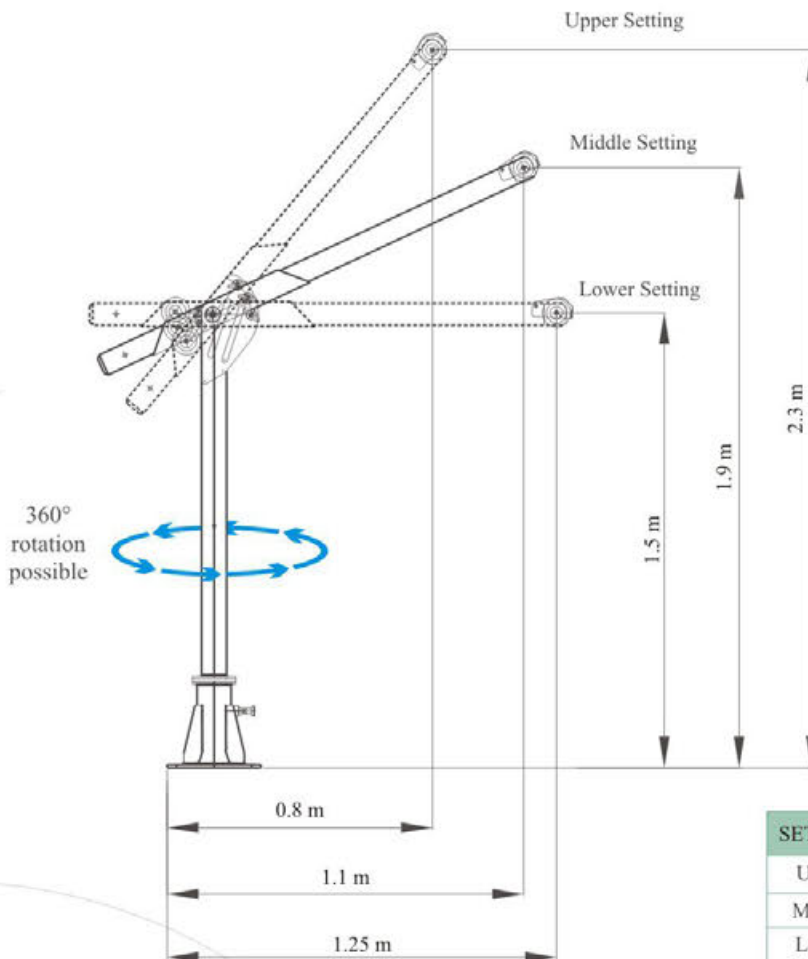
Wall Mounting Bracket
Ref: PN 900 (02)



Stainless Steel Fasteners
for Winch Mounting
Ref: PN 900 (03)



K-Pod Mounted on Floor of Vehicle



The KARAM Winch is used for raising or lowering personnel or material upto a capacity of 135 Kgs.

Winch Ref: PN 801

- ▶ To be used for raising or lowering of personnel or material into confined spaces.
- ▶ Equipped with bolting fixture for robust fitting on to the tripod PN 800.
- ▶ Lifting Load Capacity : 135 Kgs.
- ▶ Length: 20.0 m.
- ▶ Conforms to EN 1496:2006 Class A.
- ▶ To be used with a Retractable Fall Arrester when deployed for raising or lowering a person.
- ▶ Can also be fitted to KARAM K-Pod PN 900.



Related Product



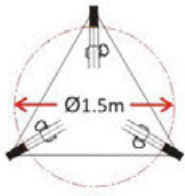
Ref: PCGS 15



Tripod

Ref: PN 800

- ▶ For access in Confined Spaces
- ▶ With two mounted pulleys at the head of the Tripod in the prolongation of the main leg for passing a cable
- ▶ Having two auxiliary eye bolts as anchorage points.
- ▶ Aluminum Alloy cast head, fully adjustable Aluminium telescopic legs
- ▶ Steel support-shoes provided with rubber sole to increase friction and impart more stability.
- ▶ Strength of anchorage point greater than 10 kN
- ▶ Every Tripod is provided with inbuilt fixture for attaching our winch PN 801 (can be supplied without this fixture on special request).
- ▶ Every Tripod is provided with Tripod Bag Ref. No. PN 904



PN 800 (7ft.)

LENGTH	SPECIFICATION	COMPLIANCE
7 ft.	<ul style="list-style-type: none"> ▶ Fully adjustable telescopic legs, adjustable height from 1.15m to 2.15m ▶ Wheelbase (Footprint) : 1.5m Diameter ▶ Weight : 13 kg ▶ Maximum load capacity : 500 kgf 	EN 795 CLASS B
10 ft.	<ul style="list-style-type: none"> ▶ Fully adjustable telescopic legs, adjustable height from 1.9m to 2.9m ▶ Wheelbase (Footprint) : 1.8m Diameter ▶ Weight : 15 kg ▶ Maximum load capacity : 500 kgf 	



PN 800 (10ft.)

Tripod Bag
(Ref. PN 904)





ROPE ACCESS & RESCUE

Rope Access



Grip Descender

Ref: PN 401

- ▶ Ideal for descent on a single rope.
- ▶ It is equipped with a unique Self Braking System which initiates the brake as soon as the handle is released, or clasped too tightly.
- ▶ Works on 10-11 mm diameter Kernmantle rope.
- ▶ Conforms to EN 341-Class A

Cows Tail

Ref: PN 401 (A)

This device is used to anchor a victim of fall to the Rescuer during rescue. It is made of Polyamide Twisted rope of length 0.5m having loops for attachment with screw locking karabiners at both end.



Figure of 8

Ref: PN 431

- ▶ Made up of Aluminium Alloy
- ▶ Inner dia Big - 52 mm, Small - 26 mm
- ▶ Height - 145 mm
- ▶ Minimum Breaking Load - 50 kN
- ▶ Anodized finish



PN 402 (L)

Rope Clamp

Ref: PN 402 (R)

PN 402 (L)

- ▶ Made up of Aluminium Alloy
- ▶ Height - 202 mm, Weight - 196 gms
- ▶ For use on single rope 9 to 11 mm
- ▶ Anodized finish.



PN 402 (R)



Adjustable Webbing foot loop

Ref: PN 402(A)

- ▶ Material : 44 mm Polyester Webbing
- ▶ Attached to the Ascending rope clamp for rope ascents
- ▶ Underfoot strap is abrasion -resistant and is slightly rigid to make it easier to step into
- ▶ Length easily adjusted with the Combination Buckles



Pulley



Single Anchorage Pulley Ref. AP001

- ▶ Material- Alloy Steel
- ▶ Minimum Breaking Strength- 15 KN
- ▶ Finish- Silver or Golden Yellow galvanized. Shot Blasted on request
- ▶ Net Weight- 412.0 gm
- ▶ Conforms to- ANSI Z 359.1 and EN 353:2002

Double Anchorage Pulley Ref. AP002

- ▶ Material- Alloy Steel
- ▶ Minimum Breaking Strength- 15 KN
- ▶ Finish- Silver or Golden Yellow galvanized. Shot Blasted on request
- ▶ Net Weight- 500.0 gm
- ▶ Conforms to- ANSI Z 359.1 and EN 353:2002



Single Aluminium Anchorage Pulley Ref. AP 011

- ▶ Made up of Aluminium Alloy
- ▶ For use on maximum 12 mm rope.
- ▶ Anodized finish
- ▶ Breaking load - 20 kN

Kernmantle Rope Semi Static

- ▶ Made up of Polyamide.
- ▶ Available in various lengths on request.
- ▶ Maximum Roll Size : 300mts
- ▶ Available in Dia of : 9mm, 10.5mm, 11mm



Twisted Rope

- ▶ Made up of Polyamide.
- ▶ Available in various lengths on request.
- ▶ Maximum Roll Size : 200mts
- ▶ Available in Dia of : 12mm, 14mm, 16mm



Dia	Length (in meters)		
	10m	20m	30m
9mm	PN 910K(90)	PN 920K(90)	PN 930K(90)
10.5mm	PN 910K(105)	PN 920K(105)	PN 930K(105)
11mm	PN 910K(110)	PN 920K(110)	PN 930K(110)

(Ref: No. in similar pattern for larger lengths)

Dia	Length (in meters)		
	10m	20m	30m
12mm	PN 910(120)	PN 920(120)	PN 930(120)
14mm	PN 910(140)	PN 920(140)	PN 930(140)
16mm	PN 910(160)	PN 920(160)	PN 930(160)

(Ref: No. in similar pattern for larger lengths)

**Edge Protector****Ref: ARC02**

KARAM provides a special accessory equipment- the angle shaped Edge Protector for use on façade or building edges. This prevents the rope from coming in contact with the sharp edges of the building and hence keeps it away from any abrasion.

- ▶ Made from Polished Stainless Steel
- ▶ Weight: 570 gms approx.

**Spreader Bar****Ref: IMP005 (01)**

Is available as an optional Accessory to the Pilot Chair, provided on request

**Evacuation Triangle****Ref: PN 852**

- ▶ To be used for rescue of injured personnel
- ▶ Contains 3 metallic D-Rings at attachment elements

**Pilot Chair****Ref: IMP005**

- ▶ Ergonomic and comfortable working chair
- ▶ For vertical ascent and descent
- ▶ Tested as per EN 1498
- ▶ Spreader Bar available as optional accessory

KARAM® RESPAC RECOVERY STRETCHER

KARAM introduces Respac Recovery Stretcher for safe carrying of the wounded

The backpack able Karam Respac Recovery Stretcher has been configured as an extremely flexible rescue system useable in any context where patient transport is needed and particularly useful in morphologic and difficult climatic situations where a fast recovery is desired.

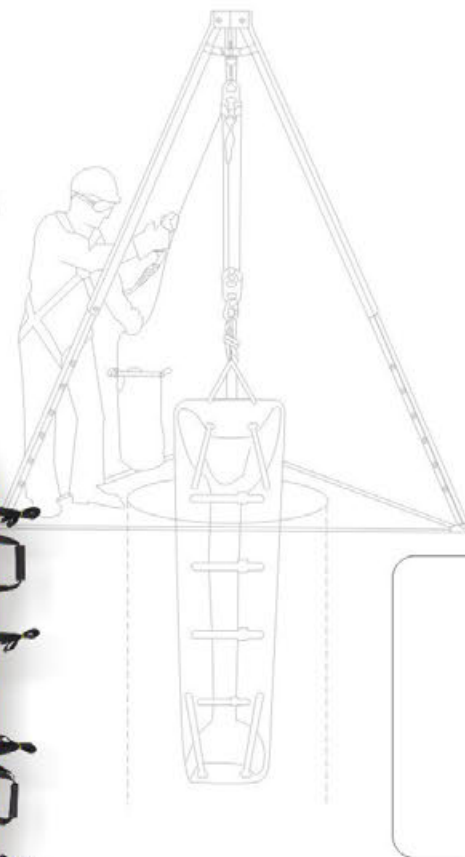


Respac Recovery Stretcher

Ref: PN 403

Salient Features:

- ▶ Inert to all conditions , body fluids & blood
- ▶ Safe carrying of the wounded
- ▶ Easy to use and store
- ▶ Combination of optimum support and function
- ▶ Extremely flexible rescue system
- ▶ Its compatibility give it an edge in undiluted terrain, for the trans-portational purposes
- ▶ Highly durable
- ▶ Can be used both vertically as well as horizontally



Model No. PN 403

Maximum load	: 200 kg.
Weight of device	: 5.5 kg.
Total weight with bag and belts	: 8 kg.

Loading Surface

Length	: 8 ft.
Width	: 3 ft.
Material	: Nylon
Hooks (Material)	: Alloy Steel

Rope

Length	: 9 m
Diameter	: Dia 10 mm

Lifting Belts

Length	: Feet zone 6.7 ft./ Head zone 6.4 ft.
Width	: Feet zone 5mm/Head zone 5mm
Maximum load belts	: 3000 kg
Maximum load Stitching	: 2000 kg.

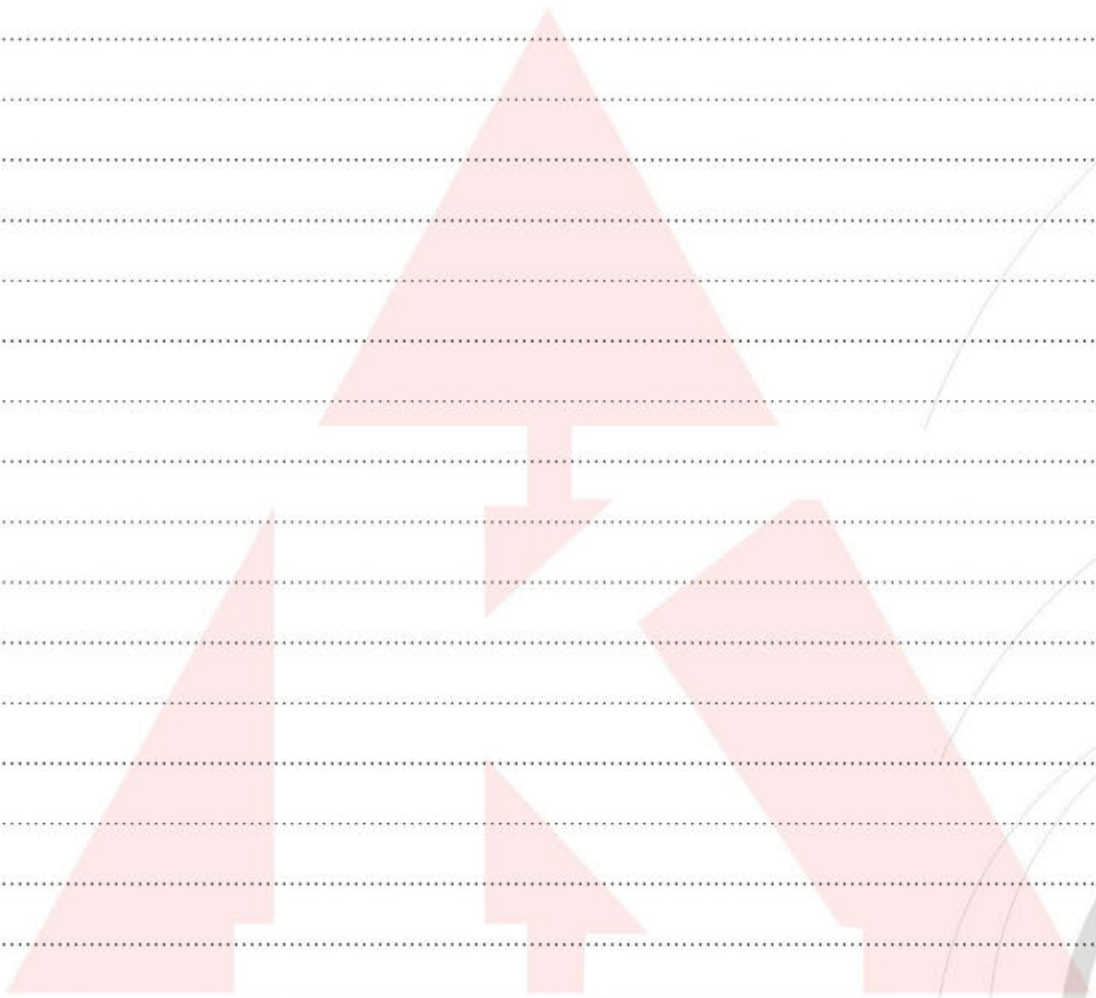
Handles

Material	: Nylon
Number of handles on every longitudinal side	: 2



NOTE

Handwriting practice lines (dotted lines) for notes.



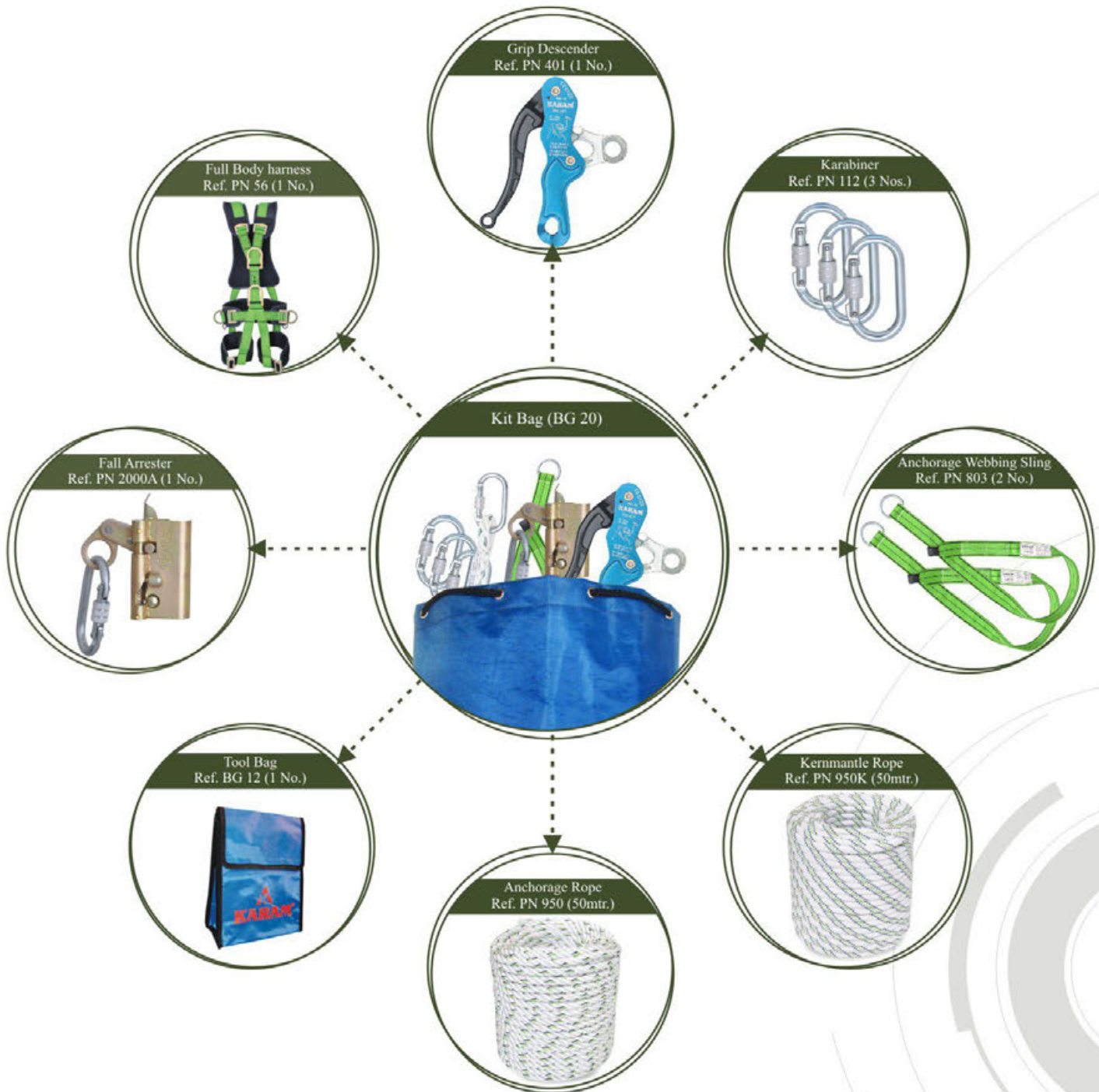
SELF CONTAINED SAFETY KITS



KARAM launches a comprehensive range of customized KITS suitable for work specific use as per the standardized needs. The design of all the equipments used in a KARAM KITS is inspired by the user's safety and comfort requirements.



**MAINTENANCE & WINDOW
CLEANING KIT
REF. PN 651**

CE 0120

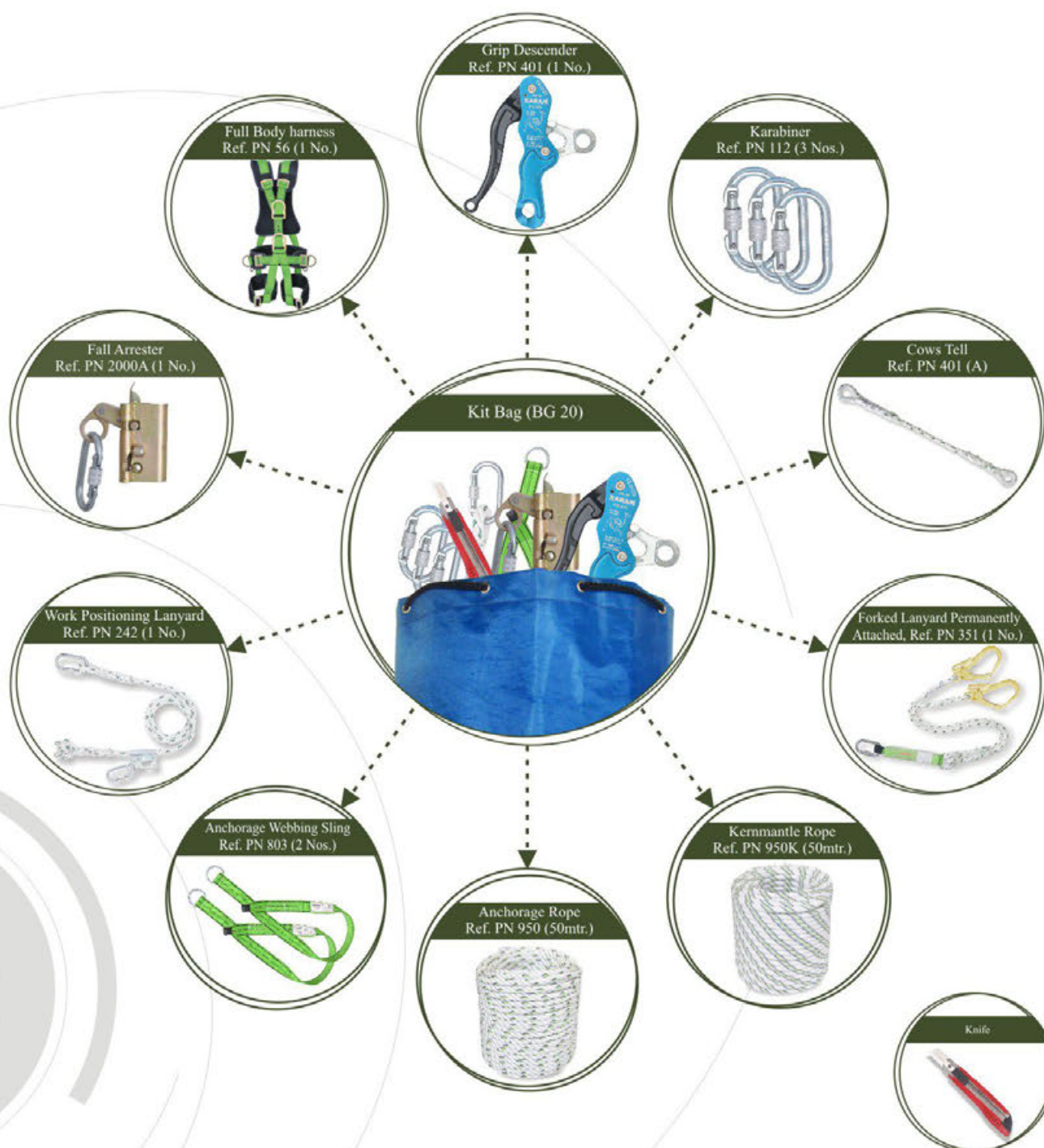
This Kit is meant to fulfill all the purposes and requirements of personnel engaged in maintenance jobs at height.

Provides ultimate comfort level to a personnel working at height thereby fulfilling all his needs.

The specialized rescue equipment used in this Kit enables immediate rescue of a personnel when suspended at height after suffering a fall.

RESCUE KIT REF. PN 652

CE 0120



This Kit contains equipment as per the requirement of the personnel engaged in working on height. Equipped with all the products that are required by the personnel for rescue as well as maintenance jobs.

**TOWER KIT
REF. PN 653****CE 0120**

This Kit is designed for the personnel engaged in working on high rise tower with an extra facility of bigger Hooks & easily adjustable Lanyards to suit the requirement of the working individuals.

CONFINED SPACE ENTRY KIT WITH TRIPOD REF. PN 654

CE 0120



This Kit is meant for personnel who are required to move into confined spaces.

The Kit seeks to protect the personnel from falling into deep and narrow confined spaces thereby securing full safety to a worker into such areas of an activity.

**CONFINED SPACE ENTRY
KIT WITH K-POD
REF. PN 655**

CE 0120



This Kit is meant for personnel who are required to move into confined spaces, using the KARAM Cantilever K-pod.

The Kit seeks to protect the personnel from falling into deep and narrow confined spaces thereby securing full safety to a worker into such areas of an activity.

KARAM offers Industrial Safety Helmets manufactured under strict quality surveillance and are certified as per CE, ISI and DGMS. The specially designed shells and the inner cradles of these helmets provide maximum protection to the wearer from the hazards of falling objects.



Sheltek is an evolutionary engineered product which has been designed by KARAM to conform to the strict standards as laid down in the norms of EN 397.



KARAM Sheltek

Ref. PN 561

KARAM introduces a specially designed Industrial Safety helmet with superior features and high impact resistance- Sheltek. PN 561

The Sheltek is CE certified and conforms to EN 397:1995 and A1:2000.

The Sheltek provides the finest levels of comfort to the user and comes with the following features:

- ▶ Unique 6-point cradle for reduction of point impact
 - ▶ Special grade Head-band made of fabric that conforms to EN 340:2003
 - ▶ Comes with a specially adjustable Band to allow easy adjustment.
- As Well comes with Ratchet-type adjustment for better and easy fit.

Features of the unique Head-Band and Foam:

- ▶ Allows good absorption of sweat
- ▶ Maintains a neutral pH, hence does not cause skin irritation
- ▶ Does not stain the skin through any release of colour
- ▶ Is safe and not known to cause any harmful effects to the skin.

Also conforms to ISI and DGMS



CE 0321



6-Point Cradle



Adjustable Nape-Band

Shelmet



KARAM Shelmet with Slide-Strap Adjustment Ref. PN 501

KARAM has a range of light weight high impact resistant safety helmets conforming to ISI Standards (also DGMS Certified) which can be used in the toughest of industrial use to provide the highest level of safety.

The unique features of KARAM Safety Shelmets are:

- ▶ Triple corrugation of the shell giving it an increased impact resistant quality.
- ▶ The Shelmet is made of specially formulated polymer which gives it an increased strength.
- ▶ The four point attachment of the cradle within the shell has a unique angular placement to provide optimum shock absorption.
- ▶ The head band is made of non-irritant and soft fabric to provide maximum comfort to the user.
- ▶ Shelmet is provided with an adjustable chin strap for universal adjustment.
- ▶ Comes with both Ratchet type and Manual adjustment to suit most head sizes.
- ▶ Conforms to IS 2925:1984



KARAM Shelmet with Ratchet-Type Adjustment Ref. PN 521

The ratchet adjustment can be set to the correct head size by pushing the hand-wheel in and turning it. The adjustment position is locked when the hand-wheel is released.

Conforms to IS 2925:1984



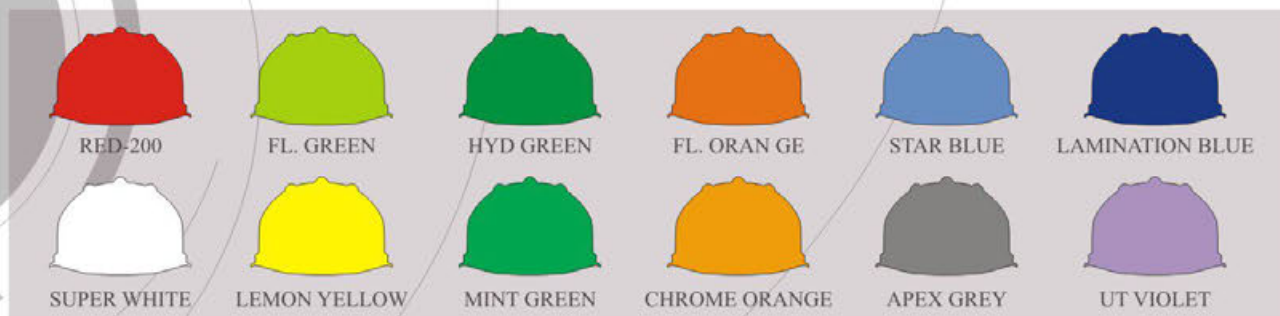
Special Sweat-Band



Unique Shock Absorption

The KARAM Helmet is provided in a vast range of colours which are stabilized against Ultra Violet degradation through appropriate UV Stabilizers. KARAM as well provides a unique Auto-Glow Model which has a distinctive property of Photo-Luminescence and hence glows even in the dark.

Shades of KARAM Safety Helmets



KARAM safety Helmet can be fitted with a variety of additional personal protective equipments such as:

- ▶ Helmet mountable ear defenders
- ▶ Welding screens
- ▶ Polycarbonate visors

WELDING SHIELDS

KARAM introduces an exhaustive range of welding shields & face protectors designed to protect the wearer eyes from the harmful radiations including visible light, UV/IR radiation resulting from certain welding processes.

Holding Bracket ES 51 (01)

Visor ES 51 (02)

Size - 8 inches x 15.5 inches
Thickness - 1.0 mm
Conformity: EN 166

Steel Mesh Visor ES 51 (03)

Material: Stainless Steel mesh fused with Poly Ethylene Terephthalate edge
Size: 8 inches x 15.5 inches
Mesh Size: 24 x 24
Weight: 83 gms
Conformity: EN 1731
Ergonomics: Changeable & Replaceable



Ref. ES 51

The **KARAM** face shield is economical and suitable for the following industries:

ES 51 (02)

Metal cutting operation
Carpentering
Chemical industry
Processing
Iron and steel industry, etc.

Spray painting
Petroleum industry
Grinding
Electric welding

ES 51 (03)

Flying Woodchips
Furnaces

Grinding
Grass Trimming

The special Adaptor provided offers easy mounting of the Face Shield assembly over the KARAM Shelmet, hence offering maximum protection.



Ref. ES 61

Welding Shield

Ref: ES 61

This face protector is extremely light in weight, providing comfort as well as protection during welding operations. It has a Flip Front Window which makes it easy for normal viewing even when the operations are not on and is provided with a protective lens made of clear high impact resistant Polycarbonate, conforming to EN 166 and ANSI Z87.1.

The features include a Polypropylene impact resistant shell with a high strength nylon ratchet headgear.

The welding shield is CE marked, Conforming to EN 175F

The IR lens is provided extra as per choice-

- ▶ ES 04/5: is an IR 5 lens
- ▶ ES 04/11: is an IR 11 lens



Ref. ES 71



Helmet Attachable Welding Shield

Ref: ES 71

Features:

When fitted, it will protect the wearer's face and ears due to the special the wrap-around design.

It fits most standard safety helmets which have a 30 mm slot, best used with KARAM Shelmet.

Easy to use in a variety of work situations

This Welding Helmet is certified to be used only in conjunction with a Safety Helmet, and should not be used independently.

It is provided, on request, by IR 5 or IR 11 Lens sandwiched between two protective lens made of clear high impact resistant Polycarbonate, conforming to EN 166 and ANSI Z87.1.

Conforms to EN 175 and ANSI Z 87.1

Available with both IR 5 and IR 11 Lens as an option.

Unlike other helmet attachable Welding Shields which have a spring that passes around the brim of the helmet, this Welding Shield has Adjustment Clips that fit into the side slot of the helmet, providing easy and quick mounting on the helmet. Additionally, this feature also prevents any damage of the helmet brim due to lack of compressive forces which otherwise normally develop in high temperature situations.



Ref. ES 81



Comes with all the Adjustment Harness features as provided in Welding Shield ES 61.

Auto Darkening Welding Shield

Ref: ES 81

This Welding Helmet has a High impact resistant Polypropylene shell and has a unique Auto Darkening feature.

Sensors are provided on the front of the lens which reacts the moment the welding arc is struck and cause the filter to darken. The filter switches back to the light shade as soon as the welding has stopped.

Protection from UV/IR radiations are continuous in all stages of the filter even when the battery is completely discharged, the welder still remains protected against harmful radiation accordingly to the darkest shade of the filter (shade 12).

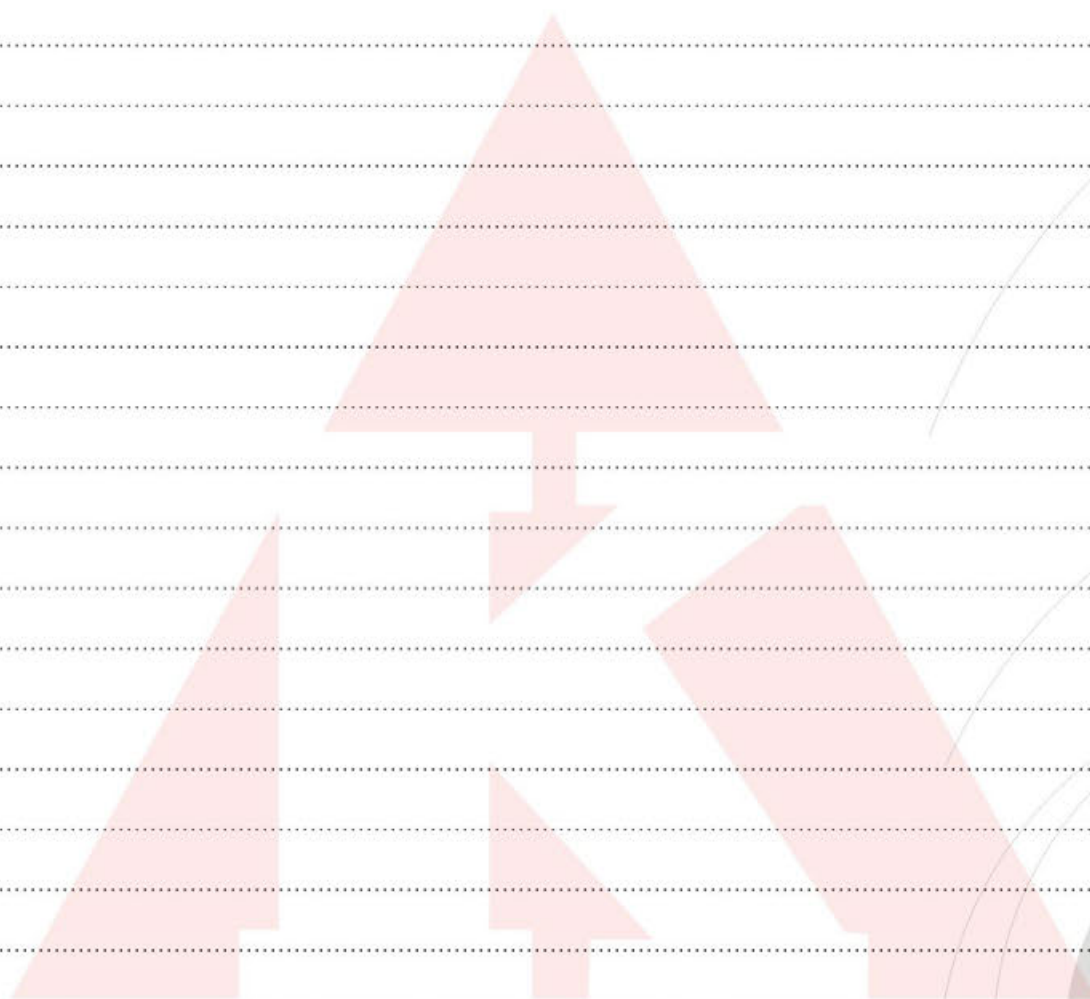
It can be fitted with a variety of harnesses, and it conforms to EN 175, EN 379 and also meets ANSI Z 87.1

Shade adjustment is made by adjustable potentiometer on outside of the helmet shell prior to the use. The shades can be adjusted from Nos. 8 to 12.

Features:

- ▶ Size of lens 100mm x 10 mm
- ▶ There are indicative buttons on the lens for various actions.
- ▶ Press test button before each use.
- ▶ Cartridge offers complete Ultra Violet/ Infrared protection lens means most indoor as well as outdoor welding requirements & can be used for arc as well as TIG welding operations.
- ▶ Helps in eliminating welder fatigue.
- ▶ Low battery situation
- ▶ The batteries can be easily replaced once the following indications appears
- ▶ Red light on the cartridge is activated
- ▶ Lens is in constant dark mode

NOTE





KARAM brings to you a complete range of Safety Spectacles to suit a variety of applications, from general industry to specialized welding jobs. KARAM range of Safety Spectacles are CE certified and conform to the standards as laid down in EN 166:2001

Eyewear Anatomy



What is our winning edge...

- ▶ Scratch-resistant Lenses- will maintain your clear vision.
- ▶ Anti-Fog Lenses- To make sure that no fogging appears on those models of Spectacles, that seal the face area.
- ▶ Anti-Static Lenses.
- ▶ Indoor/Outdoor Lenses - For use in all conditions of light modulations.
- ▶ Models of Spectacles that fit over your prescription glasses as well.
- ▶ Sleek and fashionable, offering all comfort features.
- ▶ Redefining the Ergonomics- Adjustable Models to fit one and all.

Critical Tests Which They Pass Through

- ▶ Drop Ball Impact test.
- ▶ High Velocity Impact test.
- ▶ Horizontal & Vertical
- ▶ Prismatic Refractive power.
- ▶ Astigmatic Refractive power.



Construction Worker's Choice

Ref. ES 001

Conforms to EN 166:2001

An Ultra light weight model and equipped with a flexible frame which virtually ensures a close snug fit on both large and small faces, the ES 001 offers the highest level of eye protection against high speed particles.

Area of Use

- ▶ Construction sites; areas where sand and large dust particles are blowing at high speed.
- ▶ Metal - processing shops.

Available Lens Option

- ▶ Smoked lens
- ▶ Clear lens
- ▶ Amber lens

Lens Features

- ▶ Optical Class 1
- ▶ Lens scale number: 2-1.2 (for clear lens);
- ▶ 5- 1.2 (for smoked lens)
- ▶ Material Polycarbonate
- ▶ Hard-coated lens for Scratch Resistance
- ▶ Smoked lens model also provides optimum protection against harmful UV radiation

Special Features

- ▶ Extremely light weight, weighing only about 26 gms, thus providing extreme comfort.
- ▶ Wrap-around design for better coverage.

ES 001 (SMOKED)



ES 001 (CLEAR)



ES 001 (AMBER)



ES 003 (IR-5)

Gas Welder's Choice

Ref. ES 003

Conforms to EN 166:2001

Containing all the inherent design, sporty and comfort features of the ES 002, the ES 003 has an additional protective quality to offer. It is fitted with a special IR-5 lens, making it an ideal choice for protection to the eyes during gas welding operations.

Area of Use

- ▶ Areas involving gas welding operations
- ▶ Areas where there is molten metal; furnaces, etc.

Available Lens Option

- ▶ Single lens option using IR-5 lens

Lens Features

- ▶ Optical class-1, IR-5 lens
- ▶ Lens scale number 4-5
- ▶ Lens material- Polycarbonate
- ▶ Hard-coated lens for Scratch-Resistance

Special Features

- ▶ Temple grips equipped with soft cushioning pads, making it more comfortable for all day use.
- ▶ Adjustable temple length to customize fit on the user's head. Length adjustable within a range of 13mm.
- ▶ Temple/side arms capable of tilting within a wide angle range (upto 60 degree) thereby adjusting to provide the best possible fit.



Electric-Arc Welder's Choice

Ref. ES 004

Conforms to EN 166:2001

Equipped with a special IR-11 lens and a broad, soft PVC body which provides the wearer a wider protective sealing area, the ES 004 is an ideal choice for a variety of electric arc welders.

Area of Use

- ▶ Best suited for electric arc welding, mig, tig and other electrical welding operations

Lens Features

- ▶ IR-11 lens
- ▶ Lens material Polycarbonate
- ▶ Hard-coated for Scratch-Resistance

Special Features

- ▶ It has a wide soft PVC body which provides the wearer excellent comfort.
- ▶ It is provided with a flip-up lens window to enable clear vision during those times while welding operation is not in progress.
- ▶ It is provided with Six Indirect Ventilation Caps two on top, two in bottom and one each in sides.
- ▶ It has a fully adjustable elastic head-band for a snug fit.



ES 004



ES 005 (SMOKED)



ES 005 (CLEAR)

Executive's Choice

Ref. ES 005

Conforms to EN 166:2001

When it comes to fashion and styling, combined with ultimate eye safety, the ES 005 becomes an ideal choice for the wearer.

Area of Use

- ▶ Construction sites; areas where sand and large dust particles are blowing at high speed.
- ▶ Metal-processing shops.

Available Lens Option

- ▶ Clear lens
- ▶ Smoked lens

Lens Features

- ▶ Optical Class 1
- ▶ Lens scale number: 2- 1.2 (for clear lens); 5- 1.2 (for smoked lense)
- ▶ Lens material- Polycarbonate
- ▶ Hard-coated lens for Scratch Resistance
- ▶ Smoked lens model also provides optimum protection against harmful UV radiation.

Special Features

- ▶ Combines safety with a fashionable look, enhancing user compliance
- ▶ Adjustable temple length to customize the fit on the user's head. Length adjustable within a range of 15mm.
- ▶ Equipped with specially designed flexible soft nose-pads to provide extra comfort.



Indoor/ Outdoor User's Choice

Ref. ES 006

Conforms to EN 166:2001

Designed for both indoor as well as outdoor usage, and fitted with light mirror coated lens, the ES 006 is an ultimate symbol of fashion and styling, coupled with complete eye safety.

Area of Use

- Used in areas where the light conditions change from normal to bright.

Available Lens Option

- Light mirror coated lens, also known as the indoor/outdoor lens
- Also available in clear lens

Lens Features

- Optical Class 1
- Lens Scale Number: 2- 1.2 (for clear lens)
- Material Polycarbonate
- Hard-coated for Scratch Resistance

Special Features

- Combines safety with a fashionable look, enhancing user compliance
- Adjustable temple length to customize the fit on the user's head. Length adjustable within a range of 14mm.
- Equipped with specially designed flexible soft nose-pads to provide extra comfort.



ES 006 (SMOKED)



ES 006 (INDOOR/ OUTDOOR)



ES 007 (CLEAR)



ES 007 (AMBER)



Prescription-Glasses Wearer's Choice

Ref. ES 007

Conforms to EN 166:2001

To provide safety to those who cannot directly put on a safety eye wear, as they have to wear prescription spectacles, the ES 007 easily fits over the prescription frames.

Area of Use

- Construction sites; areas where sand and large dust particles are blowing at high speed.
- Metal processing shops.

Available Lens Option

- Amber - yellow lens
- Clear lens

Lens Features

- Optical Class 1
- Lens Scale Number: 2- 1.2 (for clear lens)
- Lens material- 100% Polycarbonate
- The lens are not Hard coated, hence are not Scratch Resistant

Special Features

- It can easily fit over most prescription spectacles
- Amber lens provides for better contrast.



Chemical Environment User's Choice

Ref. ES 008

Conforms to EN 166:2001

Providing fail-proof protection against liquid and chemical splashes, the ES 008 comes with a unique wrap-around design and a specialized anti-fog lens.

Area of Use

- ▶ Areas exposed to splashes of chemicals.

Available Lens Option

- ▶ Smoked lens
- ▶ Clear lens

Lens Features

- ▶ Anti-fog coating on the lens
- ▶ Optical Class 1

Special Features

- ▶ It has a soft and wide PVC casing around the rim to ensure 100% sealing of the eyes against chemical and liquid splashes.
- ▶ It is provided with indirect ventilation slits on both the top and the bottom parts of the rim to allow for air circulation.
- ▶ It has a fully adjustable elastic head-band for a snug fit.



ES 008 (CLEAR)



ES 008 (SMOKED)



ES 009

Ventilation Cap



Chemical Environment User's Choice

Ref. ES 009

Conforms to EN 166:2001

KARAM introduces a new economy range eye wear model to keep your eyes safe at all times from Chemical and Liquid splashes in such an environment.

Area of Use

- ▶ Areas exposed to splashes of chemicals.

Available Lens Option

- ▶ Single clear lens

Lens Features

- ▶ Anti-fog coating on the lens
- ▶ Optical class 1

Special Features

- ▶ Has a soft PVC shroud which imparts increased comfort to the wearer.
- ▶ Lens is made of hard-coated Polycarbonate which makes it completely Scratch-Resistant.
- ▶ UV resistance of 99.9% for range 200 - 400nm.
- ▶ The frame has 4 ventilation caps, 2 on the top and 2 at the bottom of the frame. These are special one-way vents which allow air movement while keeping harmful liquid-splashes out.
- ▶ Comes with an adjustable elastic band.
- ▶ Light weight, weighing less than 70 grams.



Worker's Choice

Ref. ES 010

Conforms to EN 166:2001

A Unique combination of sporty look & an extended comfort, this range offers the highest level of eye protection against high speed particles. It comes in two lens shades - Clear lens & Smoked lens.

Area of Use

- ▶ Industrial, Construction sites & areas where sand & large dust particles are blowing at high speed.

Available Lens Option

- ▶ Light mirror coated lens, also known as the Indoor/Outdoor lens
- ▶ Also available in clear lens

Lens Features

- ▶ Optical Class-1
- ▶ Low Energy Impact Resistance
- ▶ Scratch Resistant Lens

Special Features

- ▶ Light weight Spectacles, thus providing long lasting comfort.
- ▶ Wrap around design for better coverage.
- ▶ The clear lens spectacles come with smart electric blue temples while the smoked spectacles come with blended black temples, hence giving an extremely stylish look.
- ▶ 100% Polycarbonate lens. The smoked lens model filters out more than 99.9% of harmful UV light.
- ▶ The lens is specially Hard-coated for Scratch-Resistance.
- ▶ It is best suited for protection against low impact energy from high speed particles at extreme temperatures.



ES 010 Clear



ES 010 Smoked



ES 012 Clear



ES 012 Mirror Finish



Dual Material Temple having a Quick-release design for easy detachment



Non Skin Irritant Elastic Band (provided within)

Premium Choice

Ref. ES 012

Conforms to EN 166 & ANSI Z 87.1.

Smart Executive Safety Spectacles with quick release design of temples. It combines the advantages of both spectacles and goggles and comes in two lens shades - Clear lens & Mirror finish lens.

Area of Use

- ▶ Manufacturing, Warehouse, Assembly, Lab, Medical, Construction, Woodworking, etc.

Available Lens Option

- ▶ Specialized Anti - Fog Clear & Mirror Finish Lens

Lens Features

- ▶ Optical Class-1
- ▶ Low Energy Impact Resistance
- ▶ Scratch Resistant Lens

Special Features

- ▶ Has a soft foam Padding frame for cushion fit & dust proof protection.
- ▶ Comes with Quick release design which allows user to change the temple/elastic band easily.
- ▶ Fully wrap around design with 8 base Polycarbonate & Specialized Anti-fog coating on the lens. Has superior impact protection & coverage.
- ▶ Unique temple design & dual injection temple tips (Polycarbonate & TPE) for all day comfort.
- ▶ Has outstanding seal with Splash Proof Protection.
- ▶ 100% Polycarbonate lens. The Mirror finish lens model filters out more than 99.9% of harmful UV light.
- ▶ Comes with an Elastic band which is fully adjustable & non-skin Irritant.



ES 013 Smoked



ES 013 Clear

Smart Choice

Ref. ES 013

Conforms to EN 166 & ANSI Z 87.1

Specially designed smart & fashionable Safety Spectacles perfect choice for both men & women.

Area of Use

- ▶ Industrial, Construction sites & in the areas where sand & large dust particles are blowing at high speed.

Available Lens Option

- ▶ Clear, Smoke, Amber, Silver Mirror, I/O Mirror, Blue Mirror & in various lens colors

Lens Features

- ▶ Optical Class-I
- ▶ Low Energy Impact Resistance
- ▶ Scratch Resistant Lens

Special Features

- ▶ Light weight Spectacles, which resembles sunglasses & provides long lasting comfort to the user.
- ▶ Close-fitting, unitary front with dual I/O base curved lens offers wide and unobstructed vision.
- ▶ Dual-material temples for comfortable fit.
- ▶ Soft nosepiece; universal & snug fit.
- ▶ 100% Polycarbonate lens that filters out more than 99.9% of harmful UV radiation

KARAM ALSO PROVIDES SPECTACLES ACCESSORIES ON REQUEST.

The Spectacle Belt-Carrying Case

Ref. ESA 01

- ▶ Has a band at the rear which can be easily looped over the trouser-belt of the wearer. This enables the wearer to keep his Spectacles safe and handy at all times when not in use.
- ▶ The inner lining of the case is soft and hence prevents any scratches to be formed on the lens of the Spectacle.
- ▶ The Case is also provided with a soft cotton Lens-Wipe.



ESA 01



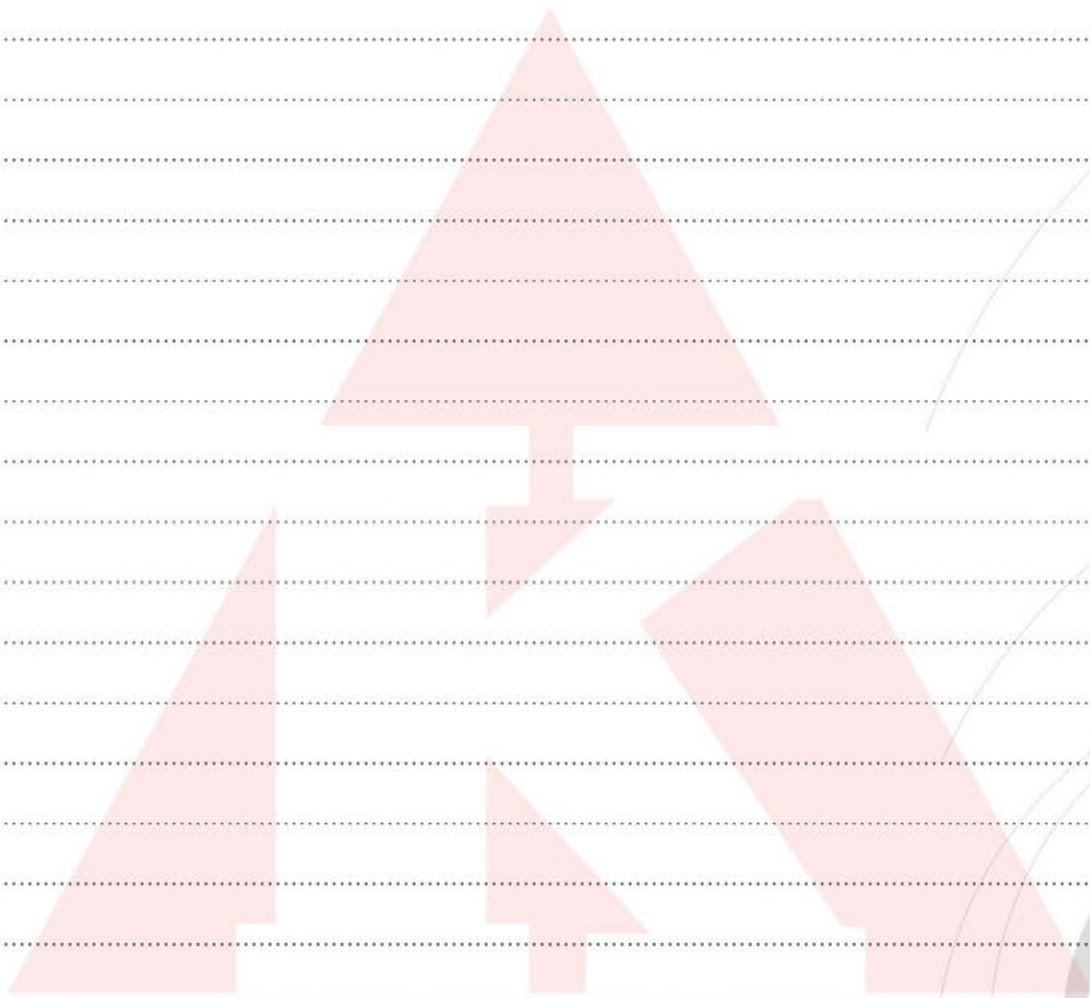
ESA 02

The Black Spectacle Neck-String

Ref. ESA 02

- ▶ Can be easily fitted to the temple-arms of the KARAM Spectacles and worn around the neck.

NOTE



KARAM offers a range of Ear-Protection equipment which provide appropriate attenuation of noise in various industrial settings.

The KARAM Ear-plugs are an ideal choice for ear-protection during long hours of exposure to high decibel sound.

The KARAM Ear-Muffs are versatile, apt for usage during shorter duration of exposure, and come with different features, like- helmet-mountable, foldable, etc.

EAR PROTECTION



Disposable Foam Ear Plugs

Ref: EP01 and EP02

NRR 32 dB

SNR 37 dB

Suitable for protection against long term exposure to medium noise levels.

- ▶ One size fits all Ear Canals.
- ▶ Made up of Non- Irritant and Allergy-free material.
- ▶ Uncorded in bright Yellow Green colour.
- ▶ Corded in Fluorescent Orange colour. Also available in cotton cord.
- ▶ Complies EN 352-2:2002



EP 01 (Uncorded)



EP 02 (Corded)



EP 03 (Uncorded)



EP 04 (Corded)



Reusable Ear Plugs

Ref: EP03 and EP04

NRR 21 dB

SNR 31 dB

Suitable for protection against long term exposure to medium noise levels.

- ▶ Washable and reusable.
- ▶ One size fits all Ear Canals.
- ▶ Special flange design for maximum comfort.
- ▶ Draped around the neck, the cotton corded ear plug rests secured with the user.
- ▶ Complies EN 352-2:2002, ANSI Z 3.19 & ANSI Z 12.6

Banded Replacable Foam Ear Plugs

Ref: EP 05 and EP 06

NRR 22 dB

SNR 31 dB

Ideal for hearing protection in intermittent Use throughout the day

- ▶ The band EP 05 is reusable and can be worn under the chin or behind neck with the special shaped Foam Ear Plugs EP 06.
- ▶ Band prevents Ear Plugs from touching dirty and contaminated surfaces.
- ▶ Plugs are available separately and are replaceable.
- ▶ One size fits all Ear Canals
- ▶ Complies to EN 352-2:2002



EP 05 (Band)



EP 06 (Accessories)



Ear Muff Classic

Ref : EP 21

NRR 23 dB

SNR 23 dB

- ▶ Light weight and extremely comfortable.
- ▶ Special ABS Ear Cups for durability.
- ▶ Three position Adjustable.
- ▶ Soft cushioned pads for good seal against noise.
- ▶ Conforming to EN 352-1:2002.
- ▶ Recommended Areas: Airports, Excavation Equipment, Generators & High Frequency Welding.



EP 21



EP 22



Ear Muff Foldable Deluxe

Ref : EP 22

NRR 26 dB

SNR 30 dB

- ▶ Plastic Head Bands Folds for dust free storage in pocket or a bag.
- ▶ Soft cushioned pads for good seal against noise.
- ▶ Conforming to EN 352-1:2002
- ▶ Recommended Areas: Industrial, Agricultural & Construction Machinery.

Ear Muff Helmet Attachable

Ref : EP 23

NRR 27 dB

SNR 27 dB

- ▶ Designed specially to use with Helmets.
- ▶ Spring loaded Stand-off function to press firmly to the ear for better seal against noise.
- ▶ Easy Snap-On/Off Mechanism for Helmet Mounting
- ▶ Conforming to EN 352-1:2002.
- ▶ Recommended Areas: Industrial, Agricultural & Construction Machinery.



EP 23



Ear Muff High Db Foldable

Ref : EP 24

NRR 29 dB

SNR 33 Db

- › Designed to provide High Db attenuation with extra thick protective Ear Cups.
- › Plastic Head Band Folds for dust free storage in pocket or a bag.
- › Conforming to EN 352-1:2002
- › Recommended Use: Medium to Heavy Industrial Applications.



EP 24
CE



EP 300

Dispenser for Ear Plug 01

Ref : EP 300

- › Light weight Plastic Dispenser
- › Used as a table top unit.
- › Allows easy access to the user.
- › Can contain 300 pairs at a time and be easily refilled.



Extremely easy to use KARAM Disposable Ear Plugs

Packing for Disposable Foam Ear Plugs

EP01/02

- 1 pair/ zipper polybag x 200 pairs.
- 10,000 pairs/ carton or duplex paper.
- Also available in Dispenser carton of 200 pairs.

Packing for Reusable Ear Pugs

EP03/04

- 1 pair/ zipper polybag x 200 pairs.
- 10,000 pairs/ carton or duplex paper.
- Also available in convenient carrying case EP 03 (CC)/ EP04 (CC).



EP 03 (CC)

The New KARAM GRIP Series of Safety Shoes come with a revolutionary sole design for excellent grip, comfort and slip resistance.

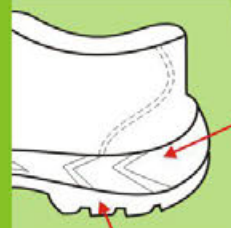


Protective Steel/
Carbon Composite
Toe Cap



Cushioned
Inner Lining

Unique Dual Density
Polyurethane Outsole



Inner Layer being
softer imparts Shock
Absorbing properties
hence provides
increased comfort

Outer layer (PU/TPU) is
denser and harder, hence
provides maximum
abrasion resistance thereby
greatly increasing the life
of the Sole.

FOOT PROTECTION

UNIQUE FEATURES



Special Injection Moulded Construction of the Shoe, for enhanced strength.



KARAM functional socks assist the transport of moisture and have high breathability and air-permeability, thus helping to keep the foot dry and sweat-free.



Depending on the model, the lining material used has been tested to withstand constant abrasion tests without fraying and damage.



The PU and TPU imparts the KARAM Safety Shoes with a high finish & sharper edges on the cleats without air bubbles, providing better slip resistance and an exceptional rear-foot stability.



Has a unique Shock-Absorption Impact System, which provides minimum Leg and Back Fatigue ideal for work for tough long hours.



The Sole has a unique Anti-Static property which minimizes the electrostatic build up by dissipating electrostatic charges, thus avoiding the risk of spark ignition.



KARAM Safety Shoes - GRIPP Series conform to ISI & CE Standards & provide S1 Category of Foot Safety.



- ▶ EN ISO 20345 : 2004
- ▶ EN ISO 20345/ A1:2007
- ▶ IS 15298 (Part 2) : 2002

	Anti-Static Shoes
	Shock Absorbant Heel
	Steel / Carbon Composite Toe Cap
	Anti-slip Sole
	Oil & Fuel Resistant Sole

CROSS-SECTION VIEW





Ref. FS 01

Smart Deluxe Workman's Shoe (Design A) for a complete foot safety. Ideal for use in Light and Heavy Industries.

Features :

Smart leather upper with soft breathable inner lining.

Sole : Double density PU Outsole for comfort and high abrasion resistance.

Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property.



Ref. FS 02

Deluxe Safety Shoe (Design A) providing safety with comfort.

Features :

Soft Inner Lining and contrast colour stitch for a smart look.

Sole: Single density PU Outsole for comfort.

Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property.

New Executive Choice



Ref. FS 04

New Executive-Choice Slip-On Shoe for the Smart Executive on the move

Features :

Slip-on hassle free and safe wear, having a soft and padded in-sock for a comfortable feel

Sole: Single density PU sole for comfort

Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property



Mid Knee Boot for Protection
on sites like Oil Rigs



Ref. FS 21

This model is a smart lace up boot providing a complete protection to the ankle and the toe.

Features :

Soft feel lining; Smart red stitch for a contrast and stylish eyelets for laces.

Sole: Double density PU Sole for extreme comfort and high abrasion resistance

Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property

New Quick Release Boot



Ref. FS 22

An ankle height Quick-Release boot; Extremely easy to remove in case of injury to the foot

Features :

Inner Lining having a high sweat adsorption properties, providing the extreme comfort feel to the wearer.

Sole: Double density PU Outsole for comfort & durability.

Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property.



Easy to pull out special
keeper to release the boot
without untying the laces



Ref. FS 51

A high mid-knee boot with Barton leather print ideal for protection from chemicals at sites like Oil Rigs, etc.

Features :

Extremely soft and padded in-sock for a comfortable feel.

Sole: Double density PU Outsole with soft inner lining.

Features- Antistatic, oil / acid resistant, anti slip and heat resistant with shock absorbing property.



NEW SPORTY RANGE OFFERING FEATURES OF SAFETY WITH STYLE



Ref. FS 61

Executive Sporty Safety Shoe equipped with all the features of sporty comfort, looks and safety.



Features :

Inner Lining with High Sweat adsorption property for a dry feel and an extra cushioned soft moulded in sock for extreme comfort.



Sole: Double density TPU Outsole for extreme comfort, high abrasion resistance and an extra grip.



Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property.



Ref. FS 62

Low Ankle Sporty Safety Shoe equipped with all the features of sporty comfort, smart looks and safety.



Features :

Inner Lining with High Sweat adsorption property for a dry feel and an extra cushioned soft moulded insock for extreme comfort.



Sole: Double density TPU Outsole for extreme comfort, high abrasion resistance and an extra grip.



Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property.



Ref. FS 63

Smart Sporty Safety Shoe, with all the features of sporty comfort, stylish looks and unmatched safety.



Features :

Inner Lining with High Sweat adsorption property for a dry feel and an extra cushioned soft moulded insock for extreme comfort.



Sole: Double density TPU Outsole for extreme comfort, high abrasion resistance and an extra grip.



Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property.



Suede-Leather Upper with perforations for enhanced sweat-free experience and comfort



Ref. FS 64

A unique designed perforated lace up shoe with Soft Suede leather...providing the highest features in safety and comfort.



Features :

Inner Lining with High Sweat adsorption property for a dry feel and an extra cushioned soft moulded insock for extreme comfort.



Sole: Double density TPU Outsole for extreme comfort, high abrasion resistance and an extra grip.



Antistatic, oil / acid resistant, cushioned top line, anti slip and heat resistant with shock absorbing property.

KARAM has been operating nationwide in providing the best Fall Arrest Safety Net solutions in the Construction industry, to enable the workers to work safely and effectively at heights.

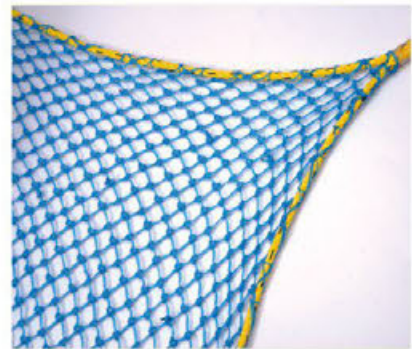
The Fall Arrest Safety Nets by **KARAM** prevent fatalities and serious accidents when working at height by providing a collective level of protection.

The fundamental principle governing the design and performance of **KARAM** Safety Nets are as follows-

- ▶ Made from high strength Polypropylene Ropes which are able to withstand the required load.
- ▶ Special Knotting of the meshes work towards effective Shock Absorption, hence minimizing any impact related injury on to the worker.

KARAM Fall Arrest Safety Nets are available in various sizes, as required. Some of the standard sizes are available as below-

Safety Net Size	Mesh Size	Mesh rope	Additional
10 m x 5 m	25 mm	2 mm Double Cord	-
10 m x 5 m	100 mm	4 mm	-
10 m x 5 m	100 mm	4 mm	With Overlay Net
6 m x 4 m	25 mm	2 mm Double Cord	-
6 m x 4 m	100 mm	4 mm	-
6 m x 4 m	100 mm	4 mm	With Overlay Net





It is a fact that nearly half of the fatal injuries at construction sites or in high-rise situations, are as a result of fall.

And, incidentally, most of these accidents could have been prevented if there was a proper implementation of safety measures in the area.

With the increasing awareness on the availability of Fall Protection equipment, the real challenge now is to understand the correct method of use of these products.

It certainly goes without saying- if used in the right manner, these life-saving products can go a long way in increasing the productivity and

confidence of a valuable personnel, working in hazardous conditions of height.

KARAM Training Cell (or KTC) aims towards this objective of imparting knowledge to the user of Fall Protection equipment, so that he can gain maximum protection from the available resources while working at heights.

Specially designed modules and a highly competent Training Faculty team up together with the mission to help you understand how you can be safe and confident at all times in your working environment on high rise situations.

KTC now stands committed to the

new found goal of achieving "excellence through training".

State of the Art Training facilities at KTC:

- ▶ Height Safety Simulation through specially built 10m Training Tower.
- ▶ Mock Confined Space Training area.
- ▶ Specially built Anchorages.
- ▶ Roof Access.
- ▶ Fully equipped Training Hall.
- ▶ Experienced and well articulated Training Faculty.

For more details, contact us at:
ktc@karam.in

RETRACTABLE FALL ARRESTER BLOCK SERVICING BY **KARAM**

KARAM provides in-house inspection servicing and repair facilities for all self-retracting lifelines that have experienced a fall. It is KARAM's endeavor to provide timely servicing of SRL at competitive prices to all its customers. Backed by competent expertise, we offer thorough internal /external examination of the device and its components, replacement of parts, rechecking the functioning and complete re-testing of the device at our in-house servicing facility equipped with state of art technology & equipment.

Contact us at karam@karam.in for more details



BRINGS TO YOU



KARAM®

INSPECTION

PERSONAL PROTECTIVE EQUIPMENT

ON YOUR SITE

Activities at height are inherently dangerous and may lead to severe injury or even death. Proper usage of PPE can hence play the most vital part in ensuring safety in such conditions. It therefore becomes mandatory to inspect PPE before each use.

Improper storage and sometimes misuse of these products may contribute to their safety performance.

Hence a regular, proper and systematic inspection carried out by trained personnel ensures that only the right equipment is put to use each time.

KARAM has formulated a highly systematic approach for the **Inspection of PPE**.

KARAM PPE INSPECTION enables timely detection of any kind of compromise on performance in the equipment which could lead to a dangerous situation, if unheeded.

All the procedures for Inspection are performed by authorized Inspectors trained by **KARAM**

SIGNIFICANT FEATURES

INSPECTORS

Trained and Competent Personnel.

Refresh Training for Inspectors - done on a scheduled and regular basis.

Unique Inspector Identification Code is allotted to each Inspector for complete traceability.

INSPECTION PROCEDURES

Well documented processes for detailed visual inspection.

Identified bays for 'Accepted' & 'Rejected' materials.

Proper "Inspection Checked OK" tagging on all Accepted products.

TEST REPORTS & CERTIFICATION

Detailed Test Reports for each product tested.

PPE Inspection Certificate provided after each Testing Schedule.

LABORATORY TESTING

Availability of Laboratory Strength Test through defined sampling procedures.

Detailed Test Reports with findings provided on request.

All Tests carried out in KARAM Testing Laboratory (in process for accreditation by SATRA, UK).



Register with KARAM for the Inspection of PPE and ensure complete Protection from Head to Toe.



